

**Cadent Gas Limited, National Grid  
Electricity Transmission plc,  
National Grid Gas plc, Northern Gas  
Networks Limited, Scottish Hydro  
Electric Transmission plc, Southern  
Gas Networks plc and Scotland Gas  
Networks plc, SP Transmission plc,  
Wales & West Utilities Limited  
vs  
the Gas and Electricity Markets  
Authority**

**Final determination  
Volume 2B: Joined Grounds B, C and D**

Issued: 28 October 2021

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The Competition and Markets Authority has excluded from this version of the final determination information which the inquiry group considers should be excluded having regard to section 23G Gas Act 1986 and section 11H Electricity Act 1989. The omissions are indicated by [✂].

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## 6. Joined Ground B: Outperformance wedge

### Introduction

- 6.1 Joined Ground B relates to GEMA's introduction of an outperformance wedge, which applied a reduction to the allowed cost of equity for RIIO-2 to reflect GEMA's view that companies would be expected to achieve operational outperformance during the price control period. All of the appellants (the Gas Distribution Networks (GDNs) and the Transmission Owners (TOs)) appealed the introduction of the outperformance wedge and requested that it be removed. We have joined all the grounds of appeal concerning the outperformance wedge and discuss all the appellants' arguments relating to it in this chapter.

### Background

- 6.2 The outperformance wedge is a new mechanism introduced by GEMA for RIIO-2 in response to concerns over past levels of outperformance (and its implications for expectations regarding operational outperformance in RIIO-2). Applying the outperformance wedge resulted in the allowed equity return being set 25 bps below GEMA's point estimate of the cost of equity. Alongside this, GEMA implemented a 'backstop' adjustment mechanism such that each licensee would receive a top-up equity return allowance (up to 25 bps) if its RIIO-2 outperformance was less than 25 bps.

### *The UKRN Report*

- 6.3 The UKRN Report, which covered a range of issues concerned with estimating the cost of capital when setting price controls, included a recommendation from three of its authors (Mason, Pickford and Wright, hereafter **MPW**) for the introduction of a form of outperformance wedge.<sup>1</sup> The authors of the report (which was commissioned by the UKRN),<sup>2</sup> were unable to agree on a number of the issues that it covered, and the fourth author (Burns) disagreed with the MPW recommendation to introduce an outperformance wedge.<sup>3</sup>
- 6.4 Central to the MPW recommendation was a decomposition of regulatory expected returns (which GEMA refers to as '**ER**') into two components: the regulatory allowed return (which GEMA refers to as '**AR**'), and an

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<sup>1</sup> [The UKRN Report](#), page 73.

<sup>2</sup> See Chapter 2, Background.

<sup>3</sup> [The UKRN Report](#), pages 86–88.

'informational wedge' (which GEMA refers to as the outperformance wedge) which captures expected outperformance.<sup>4</sup> MPW said that the information advantage firms possess over regulators would almost certainly always result in a positive informational wedge, if regulators wish to incentivise cost efficiency.<sup>5</sup> MPW said that on grounds of accountability and statutory obligations to the consumer, there was a strong case for setting a target value for the informational wedge, and that this should represent the regulator's best estimate of the impact of future outperformance on regulatory returns.<sup>6</sup> MPW recommended that regulators should assemble a systematic and comprehensive database of historical outperformance to enable them to make their best-informed forecast of the gap between expected return and allowed return.<sup>7</sup>

- 6.5 Burns said that the MPW proposal was likely to be detrimental to consumer interests by undermining efficiency incentives and/or increasing risk, and that regulatory action on outperformance should apply to cost and output targets and not to the allowed return.<sup>8</sup> Burns said that an arbitrary adjustment factor applied to the allowed return would only add to regulatory discretion and risk.<sup>9</sup>

### ***The National Infrastructure Commission report on strategic investment and public confidence***

- 6.6 In its October 2019 report on strategic investment and public confidence, the National Infrastructure Commission recommended that regulators should be more proactive in addressing financial risk to ensure that rewards reflect performance and risks that are genuinely taken by investors.<sup>10</sup> The National Infrastructure Commission said that in future price controls, regulators should take direct account of information asymmetries, and that with rapid technological change new information asymmetries can arise faster than regulators can offset them with the traditional approach.<sup>11</sup> The National Infrastructure Commission said that regulators should therefore seek to take direct account of the fact that their best estimate of costs, based on the information available to them, was likely to be biased in the interests of the companies, and 'aim off' for this effect.<sup>12</sup> The National Infrastructure

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<sup>4</sup> [The UKRN Report](#), page 69.

<sup>5</sup> [The UKRN Report](#), page 69.

<sup>6</sup> [The UKRN Report](#), page 73.

<sup>7</sup> [The UKRN Report](#), page 74.

<sup>8</sup> [The UKRN Report](#), pages 87–8.

<sup>9</sup> [The UKRN Report](#), page 88.

<sup>10</sup> [National Infrastructure Commission, Strategic investment and public confidence](#), page 51.

<sup>11</sup> [National Infrastructure Commission, Strategic investment and public confidence](#), page 15.

<sup>12</sup> [National Infrastructure Commission, Strategic investment and public confidence](#), page 15.

Commission said that if regulators overlook these asymmetries, they cannot regulate efficiently to reduce costs for consumers.<sup>13</sup>

### ***The NAO report on electricity networks***

- 6.7 In its January 2020 report on electricity networks, the National Audit Office (NAO) examined how effectively GEMA was using the RIIO electricity transmission and distribution network price controls to protect the interests of consumers and achieve the government's climate change goals.<sup>14</sup> The NAO found that network companies provide consumers with a good service, but that returns were high relative to comparable companies and GEMA's expectations, which were that the networks could make a real-terms return on regulatory equity of between roughly 2.5% and 10.5%.<sup>15</sup> The NAO said that GEMA expected only the best-performing companies to reach the high end of the range, but that in practice – based on the latest available information at the time of the report – three of the nine network companies were forecasting returns of around 10%, and the average forecast return was 9.2%.<sup>16</sup> The NAO said that network companies were able to exceed almost all the performance targets GEMA set, and that GEMA's unusually long price control in RIIO-1 locked consumers into paying higher costs for longer.<sup>17</sup>

### ***Company performance***

- 6.8 **Figure 6-1** shows the overall return on regulatory equity that GEMA forecasts network companies will have achieved over RIIO-1 relative to the equity return it allowed. The outperformance wedge relates only to operational outperformance, that is, totex and/or incentive scheme outperformance (not outperformance with respect to tax and financing cost allowances). As can be seen in **Figure 6-1**, all but two network companies achieved operational outperformance in RIIO-1.

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<sup>13</sup> National Infrastructure Commission, *Strategic investment and public confidence*, page 15.

<sup>14</sup> NAO, *Electricity networks*, paragraph 5.

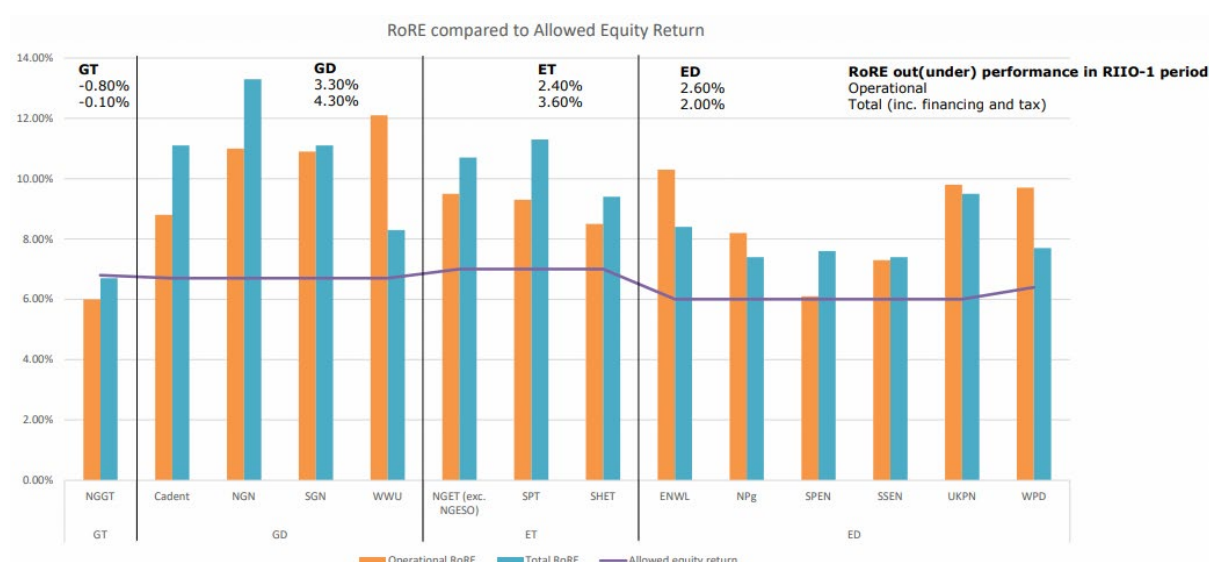
<sup>15</sup> NAO, *Electricity networks*, paragraphs 6–7.

<sup>16</sup> NAO, *Electricity networks*, paragraph 7.

<sup>17</sup> NAO, *Electricity networks*, paragraphs 9–10.



**Figure 6-1: RIIO-1 Return on Regulatory Equity (RoRE) outperformance**



Source: GEMA slide deck for the Teach-in on 9 April 2021, slide 12

6.9 GEMA identified company performance in other non-RIIO-1 price controls, and evidence on investor expectations of company performance, also as a part of the relevant background to its development of the outperformance wedge.<sup>18</sup> We provide an overview of GEMA's use of this evidence in paragraphs 6.68 and 6.71.

## The ground of appeal

6.10 The appellants all said that GEMA's decision to introduce the outperformance wedge was wrong within the meaning of section 23D(4) of GA86 or section 11E(4) of EA89 (whichever was relevant), for reasons that included the following:<sup>19</sup>

- a) GEMA had failed properly to have regard to, and failed to give appropriate weight to, factors including:<sup>20</sup>
  - (i) The interests of current and future consumers: including as a result of introducing a mechanism that distorted incentives carefully designed elsewhere in the price control and that ultimately risked disabling investment to the detriment of consumers.

<sup>18</sup> GEMA Response to PD, paragraph 43.

<sup>19</sup> WWU did not explicitly identify in its NoA under which of the allowable grounds it considered GEMA's decision to introduce the outperformance wedge was wrong within the meaning of section 23D(4) of GA86. We summarise WWU's views on why it considers GEMA was wrong to introduce the outperformance wedge in the section on appellants' submissions below and have considered those views in our assessment.

<sup>20</sup> Cadent NoA, paragraphs 5.71(a) – (e); NGET NoA, paragraph 4.143(a); NGN NoA, paragraph 310(ii); SGN NoA, paragraph 38(i); SSEN-T NoA, paragraph 5.30(c); SPT NoA, paragraph 57(1).

- (ii) Its financing duty: including by setting the cost of equity allowance below even GEMA's assessment of the required cost of equity; failing to properly take into account the impact of doing so; and failing to take account of the impact on financeability.
  - (iii) Its security of supply duty: in failing to give proper consideration to the long-term effects of under-remuneration on security of supply.
  - (iv) Its sustainability duty, the relevant Social and Environmental Guidance issued by the relevant Secretary of State, and the related Net Zero duty.
  - (v) Its efficiency and economy duty: in failing to give proper consideration to the impact of the outperformance wedge on efficiency incentives.
  - (vi) Its best practice duty (including the requirement for GEMA to have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted), including by introducing a novel mechanism (which represented a significant departure from regulatory precedent) that was entirely disproportionate and inapt,<sup>21</sup> and by failing to consider and adequately evidence its calibration of the outperformance wedge.<sup>22</sup>
- b) GEMA had committed a number of errors of fact by relying on flawed assumptions and evidence (including with respect to its interpretation of historical price controls and the application of GEMA's broader regulatory tools),<sup>23</sup> and by failing to adequately consider and evidence its calibration of the outperformance wedge.<sup>24</sup>
- c) GEMA had adopted modifications that failed to achieve, in whole or in part, the effect stated by GEMA, including because:
- (i) The outperformance wedge is not a transparent implementation of the UKRN Report, does not appropriately capture expected outperformance and is not necessary in order to address information asymmetry, and the ex-post adjustment mechanism does not remedy the concerns identified.<sup>25</sup>

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<sup>21</sup> NGN NoA, paragraph 310(ii).

<sup>22</sup> NGN NoA, paragraph 310(iii).

<sup>23</sup> Cadent NoA, paragraph 5.71; NGET NoA, paragraph 4.143(b); NGN NoA, paragraph 310(i); SGN NoA, paragraph 38(ii); SSEN, NoA, paragraph 57(3).

<sup>24</sup> NGN NoA, paragraph 310(iii); SSEN-T, NoA paragraph 5.30(b).

<sup>25</sup> NGET NoA, paragraph 4.143(c).

- (ii) GEMA failed to provide accurate remuneration for equity investors, contrary to GEMA's explanation of the purpose and benefits of its cost of equity allowance.<sup>26</sup>
  - (iii) GEMA's decision fails in the maintaining of high confidence in the regulatory regime, fairness for companies and investors, and fairness for consumers.<sup>27</sup> Contrary to regulatory best practice, the outperformance wedge does not achieve a balanced or fair framework for consumers because it disincentivises investment and outperformance while adversely affecting incentive-based regulation in the current and future price reviews.<sup>28</sup>
  - (iv) The outperformance wedge fundamentally undermines the principles of the RIIO framework.<sup>29</sup>
- d) GEMA's decision was based, wholly or partly, on errors of law, including because:
- (i) GEMA failed to take proper account of relevant considerations (such as the impact of its policy on the long-term interests of consumers, as required by its principal objective).<sup>30</sup>
  - (ii) GEMA took into account irrelevant considerations (such as political risk).<sup>31</sup>
  - (iii) GEMA acted disproportionately and/or in defiance of logic/irrationally.<sup>32</sup>
  - (iv) GEMA failed in its duty of inquiry to take reasonable steps to gather the information needed to take an informed decision.<sup>33</sup>
  - (v) GEMA reached conclusions without adequate supporting evidence, and placed reliance on evidence and assumptions which are flawed,<sup>34</sup> including in relation to the calibration of the outperformance wedge.<sup>35</sup>

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<sup>26</sup> [Cadent NoA](#), paragraph 5.71.

<sup>27</sup> [SGN NoA](#), paragraph 38(iii); [SSEN NoA](#), paragraph 5.30(a).

<sup>28</sup> [SSEN-T NoA](#), paragraph 5.30(a).

<sup>29</sup> [SSEN-T NoA](#), paragraph 5.30(a).

<sup>30</sup> [Cadent NoA](#), paragraph 5.71; [NGET NoA](#), paragraph 4.143(d); [NGN NoA](#), paragraph 310; [SGN NoA](#), paragraph 38(iv).

<sup>31</sup> [Cadent NoA](#), paragraph 5.71.

<sup>32</sup> [NGET NoA](#), paragraph 4.143(d); [NGN NoA](#), paragraph 310(i); [SGN NoA](#), paragraph 38(iv); [SSEN-T NoA](#), paragraph 57(4).

<sup>33</sup> [Cadent NoA](#), paragraph 5.71; [NGET NoA](#), paragraph 4.143(d); [NGN NoA](#), paragraph 310(i).

<sup>34</sup> [NGET NoA](#), paragraph 4.143(d); [NGN NoA](#), paragraph 310(i); [SGN NoA](#), paragraph 38(iv).

<sup>35</sup> [SSEN-T NoA](#), paragraph 5.30(b).

- (vi) GEMA failed to consult fairly on its policy,<sup>36</sup> including by disregarding the submissions of stakeholders (and the substantive evidence put forward that supported an alternative view) and failing to provide adequate reasons for dismissing such evidence.<sup>37</sup>
- (vii) GEMA failed to have regard to the principles of best regulatory practice.<sup>38</sup>
- (viii) The impact of the wedge is discriminatory for no good reason.<sup>39</sup>
- (ix) GEMA failed to comply with its statutory duty under section 5A of the Utilities Act 2000 to conduct an impact assessment on proposals which are important.<sup>40</sup>

6.11 The appellants' submissions identified a range of different ways in which GEMA was considered to have erred in its introduction of the outperformance wedge (which underpinned the appellants' views that the introduction of the outperformance wedge was wrong within the meaning of section 23D(4) of GA86 or section 11E(4) of EA89). We organise our consideration of those submissions below by reference to the following errors alleged by the appellants:

- a) The outperformance wedge is unnecessary.
- b) The outperformance wedge is not an appropriate or targeted way of addressing outperformance concerns.
- c) The outperformance wedge has been applied in an arbitrary and discriminatory way.
- d) The outperformance wedge undermines performance improvement incentives, including as a result of the 'backstop'.
- e) The introduction of the outperformance wedge dampens investment incentives, including by undermining regulatory integrity and increasing regulatory risk.

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<sup>36</sup> Cadent NoA, paragraph 5.71.

<sup>37</sup> NGN NoA, paragraph 310(i).

<sup>38</sup> NGN NoA, paragraph 310(i).

<sup>39</sup> NGET NoA, paragraph 4.143(d).

<sup>40</sup> NGET NoA, paragraph 4.143(d).

## The RIIO-2 Decision

6.12 In setting the allowed equity return, GEMA followed a three-step process:

Step 1: Estimate the cost of equity using the Capital Asset Pricing Model (**CAPM**).

Step 2: Undertake cross-checks of this estimate.

Step 3: Distinguish between allowed return and expected return.

6.13 The outperformance wedge was applied in Step 3 of this process, on the basis that GEMA considered there to be an expectation of operational outperformance in RIIO-2, such that expected return would exceed allowed return.

6.14 In its December 2018 Sector Specific Methodology Consultation (**SSMC**), GEMA proposed to set the allowed return by selecting a point estimate at the lower end of the cost of equity range that it had estimated based on Step 1 and Step 2, with this approach implying a 0.5% reduction associated with expected outperformance, given its working assumption at that time of a cost of equity range of 4% to 5%, with a midpoint of 4.5% (all CPIH real).<sup>41</sup>

6.15 In its DD, GEMA considered evidence on expected outperformance further, and decided that an outperformance adjustment of 0.25% should be applied, such that the allowed return would be set 25 bps below GEMA's estimate of the cost of equity based on steps one and two.<sup>42</sup>

6.16 In its FD, GEMA set the outperformance wedge at 0.25% (based on 60% gearing) in line with its DD.<sup>43</sup> This resulted in an allowed equity return (for the notional company, CPIH real) of 4.30%, which GEMA noted was within the range of 3.80% to 5.00% it had identified at FD.<sup>44</sup> GEMA's FD included the implementation of an ex-post adjustment mechanism such that each licensee would receive a top-up equity return allowance, up to 0.25%, if its outperformance was less than 0.25%.<sup>45</sup>

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<sup>41</sup> GEMA SSMD, paragraphs 12.53–12.54.

<sup>42</sup> GEMA DD Finance Annex, paragraph 3.139.

<sup>43</sup> GEMA FD Finance Annex, paragraphs 3.147 and Table 11.

<sup>44</sup> GEMA FD Finance Annex, paragraphs 3.147 and Table 11.

<sup>45</sup> GEMA FD Finance Annex, paragraph 3.147.

## Appellants' submissions

### *The outperformance wedge is unnecessary*

#### *Cadent's submissions*

- 6.17 Cadent submitted that GEMA had failed to consider properly whether the outperformance it expected and sought to address through the outperformance wedge would in fact be outperformance that is undesirable, rather than potential outperformance that could be legitimately earned by achieving outcomes deliberately incentivised by the price control.<sup>46</sup> Cadent submitted that incentives carefully designed by the regulator are included in a price control based on the fundamental premise that the cost/benefit balance to consumers is positive, such that the benefits consumers achieve from the actions undertaken by the companies outweigh the impact on bills of the costs required in order to incentivise companies to do them.<sup>47</sup> Cadent pointed to the overall conclusion in a KPMG report submitted with its NoA, that outperformance brings benefits to consumers and is consistent with incentive-based regulation, but that there is no reason to expect outperformance under a well-calibrated control.<sup>48</sup>
- 6.18 In its Reply, Cadent said that the question of whether GEMA was wrong to introduce the outperformance wedge did not turn on whether GEMA was able to produce evidence of outperformance in past price controls, and that – in line with this – its NoA had focused on flaws in GEMA's overall approach, including the inferences drawn by GEMA from its historical dataset.<sup>49</sup> Cadent said that, notwithstanding this, KPMG had found serious and obvious errors in GEMA's historical dataset:<sup>50</sup>
- a) The dataset showed significant outperformance for the 2002 gas distribution price control, with companies apparently underspending their allowances by 35%, but this had resulted from comparing five years of cost allowances with three years of expenditure. Cadent submitted that in the three years in which both allowances and actuals are shown, companies had in fact overspent.

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<sup>46</sup> [Cadent NoA](#), paragraph 5.10.

<sup>47</sup> [Cadent NoA](#), paragraph 5.13.

<sup>48</sup> [Cadent NoA](#), paragraph 5.14.

<sup>49</sup> [Cadent Reply](#), paragraph 118.

<sup>50</sup> [Cadent Reply](#), paragraph 119.

- b) The dataset omitted the last year of data from the PR14 water price control, such that it appeared that companies underspent on average when in fact they overspent.
- 6.19 Cadent submitted that while GEMA claimed to have controlled past outperformance data for RIIO-2 parameters, it had not controlled for the removal of the Information Quality Incentive (**IQI**) glide path in RIIO-2 – which Cadent said clearly affected performance – and GEMA had not sought to assess the effect of the new measures it had taken to reduce information asymmetry, including the Business Plan Incentive (**BPI**) and Price Control Deliverables (**PCD**).<sup>51</sup> Cadent pointed to KPMG’s review of GEMA’s claim that its approach was supported by equity analyst estimates and Market Asset Ratios (**MARs**), which concluded that there were multiple potential reasonable explanations of any premia due to different factors unrelated to potential outperformance, including private value factors that were not relevant to market-wide assumptions.<sup>52</sup>

#### *NGET/NGG’s submissions*

- 6.20 NGET/NGG submitted that there was no need to make a final, significant deduction from allowed returns given the extensive range of existing and new regulatory tools available, and used, in RIIO-T2 to address information asymmetry effectively.<sup>53</sup> NGET/NGG submitted that GEMA had not explained in any meaningful way why its extensive array of regulatory tools did not adequately address its concerns regarding information asymmetry,<sup>54</sup> and had offered no clear evidence on which to base an expectation that companies would outperform their regulatory settlements in RIIO-2 due to information asymmetry.<sup>55</sup> NGET/NGG submitted that GEMA’s restatement of RIIO-1 outperformance on a RIIO-2 basis did not provide evidence to support the introduction of the outperformance wedge, and showed that if a small number of design changes made in RIIO-2 had been applied in RIIO-1, the great majority of RIIO-1 outperformance would not have occurred.<sup>56</sup>
- 6.21 NGET/NGG stated that GEMA’s historical database provided evidence of symmetric performance, underperformance, and outperformance, and that this spread of outcomes was what regulators would typically aim for when setting price controls.<sup>57</sup> They submitted that GEMA’s historical database did not – and

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<sup>51</sup> [Cadent Reply](#), paragraph 120.

<sup>52</sup> [Cadent Reply](#), paragraph 121.

<sup>53</sup> [NGET NoA](#), paragraphs 4.44–4.51.

<sup>54</sup> [NGET NoA](#), paragraphs 4.52–4.59.

<sup>55</sup> [NGET NoA](#), paragraphs 4.69–4.59.

<sup>56</sup> [NGET/NGG Joint Response](#), paragraph 4.11.

<sup>57</sup> [NGET NoA](#), paragraphs 4.71–4.72.



could not – show that information asymmetry is driving any outperformance, and that the spread of outcomes would tend to suggest that it is not.<sup>58</sup> NGET/NGG submitted that outperformance could reflect the fact that there were risks held by network companies which were difficult to forecast and could turn out either positively or negatively due to external factors, and pointed to GEMA's approach to Real Price Effects (**RPEs**) in RIIO-1 as an example of this.<sup>59</sup> NGET/NGG submitted that numerous examples of recent price controls from other sectors and circumstances demonstrated that a fair price control could be achieved without recourse to final, significant lump-sum deductions if existing tools were used appropriately.<sup>60</sup>

### NGN's submissions

6.22 NGN submitted that no meaningful inferences could be drawn from GEMA's historical analysis of totex performance, that the significant range in outcomes it included strongly suggested that the specific circumstances had a significant bearing on the performance that it achieved, and that in this context applying the sample mean as a guide for future performance was essentially an arbitrary exercise.<sup>61</sup> NGN stated that experience across multiple recent price controls in various sectors clearly showed that regulators could set well-calibrated price controls where incentives were balanced, and provided the results of a review by First Economics (shown in **Figure 6-2**) which it said showed that there were more examples of underperformance than outperformance over the last 10-15 years of UK price regulation.<sup>62</sup>

**Figure 6-2: First Economics review of price control out- and under-performance**

|                        | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| CAA, Heathrow          |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| CAA, NATS              |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| CC/ CMA, Bristol Water |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| CC, NIE                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Ofgem, GDNs            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Ofgem, TOs             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Ofgem, DNOs            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Ofwat, water companies |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| ORR, Network Rail      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| UR, gas distribution   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| WICS                   |         |         |         |         |         |         |         |         |         |         |         |         |         |         |

Key: green = overall out-performance of the regulator's assumptions; grey = overall performance broadly in line with the regulator's allowed return; red = overall under-performance against the regulator's assumptions

<sup>58</sup> NGET NoA, paragraph 4.73.

<sup>59</sup> NGET NoA, paragraphs 4.75.

<sup>60</sup> NGET NoA, paragraphs 4.79–4.82.

<sup>61</sup> NGN NoA, paragraph 256.

<sup>62</sup> NGN Reply, paragraph 81.



6.23 NGN submitted that GEMA's analysis of RIIO-1 performance updated for certain facets of RIIO-2 was flawed as it did not account for the other major features of RIIO-2 that impacted on the extent to which companies were likely to under- or outperform.<sup>63</sup> NGN stated that the corollary of GEMA's position appeared to be that regardless of how stretching a price control was, information asymmetry would always give rise to expected outperformance (eg even if the cost allowance was set 50% lower).<sup>64</sup> NGN provided forward-looking Monte Carlo analysis<sup>65</sup> which it said showed that if neutral totex was assumed, the RIIO-GD2 was forecast to deliver material underperformance for the notional GDN.<sup>66</sup> NGN said that it was well established that inferences from MARs were not generally reliable.<sup>67</sup>

### *SGN's submissions*

6.24 SGN submitted that GEMA's statement that its evidence on historical performance was substantially unchallenged was manifestly untrue, and pointed to its response to GEMA's DD analysis.<sup>68</sup> SGN stated that, fundamentally, GEMA's database merely recorded performance across different price controls and sectors showing outperformance but also numerous examples of underperformance, but did not show (or seek to investigate) the reasons for outperformance.<sup>69</sup> SGN submitted that this evidence therefore did not support GEMA's inferences regarding information asymmetry, and that historical or future outperformance must be analysed within the context of both the applicable regulatory framework and broader industry trends that occurred or are expected to occur.<sup>70</sup>

6.25 SGN stated that GEMA's analysis of RIIO-1 performance that purported to adjust for the RIIO-2 framework made only relatively minor tweaks, and failed properly to take account of changes GEMA had made to the broader regulatory framework and other major features of RIIO-2, including the BPI, uncertainty mechanisms (**UMs**), benchmarking methods, business plan scrutiny, Price Control Deliverables (**PCDs**), price control duration and the use of asymmetric Output Delivery Incentives (**ODIs**).<sup>71</sup> SGN submitted that

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<sup>63</sup> NGN NoA, paragraph 258.

<sup>64</sup> NGN Reply, paragraph 85.

<sup>65</sup> Monte Carlo analysis involves running a large number of simulations in order to model the probability of different outcomes arising.

<sup>66</sup> NGN Reply, paragraph 86.

<sup>67</sup> NGN Reply, paragraph 88.

<sup>68</sup> SGN Reply, paragraph 72.

<sup>69</sup> SGN Reply, paragraph 72.

<sup>70</sup> SGN NoA, paragraph 364; SGN Reply, paragraph 72.

<sup>71</sup> SGN NoA, paragraph 363; SGN Reply, paragraph 72(ii) and Table 3.

GEMA drew unsupported inferences from MARs of two water companies and two energy companies with broader operations beyond GD2.<sup>72</sup> SGN stated that a number of factors could influence MARs, and that a single data point in a complex, strategic transaction in a different sector and price control (such as National Grid's acquisition of WPD, an electricity distribution network operator) said little about information asymmetry in RIIO-2, as many factors drove legitimate premia.<sup>73</sup>

- 6.26 SGN submitted that GEMA's concerns over information asymmetry, asymmetries in PCD design and asymmetries created by re-openers had not been substantiated and had failed to take due account of the broader regulatory framework.<sup>74</sup> SGN stated that GEMA had a number of tools available to it to address information asymmetry which it had already applied.<sup>75</sup> SGN submitted that RIIO-2 represented a shift towards ex-post regulation through re-openers and UMs which heavily reduced any perceived ex-ante information asymmetry as GEMA would be determining cost allowances based on observed outturn data.<sup>76</sup> SGN stated that given the regulatory framework around PCDs, GDNs had very little discretion as to whether to proceed with their commitments, and that re-openers represented an asymmetric risk against companies rather than being asymmetric in their favour.<sup>77</sup>

### *SSEN-T's submissions*

- 6.27 SSEN-T said that GEMA's decision to apply the outperformance adjustment was based on a number of empirical errors, including that GEMA had incorrectly assumed that performance in previous price controls was a good indicator of expected performance in RIIO-2. SSEN-T said GEMA had used flawed historical analysis of cost performance relative to regulatory allowances in price controls across energy, airports, air traffic control, and water sectors, that was of limited relevance to expected returns in energy networks in RIIO-2.<sup>78</sup> SSEN-T submitted that the adjustment for expected outperformance was particularly ill-suited in the context of an already challenging price control package, which incorporated novel UMs, tough cost reduction packages, and a range of other measures which made it considerably less likely that the

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<sup>72</sup> [SGN Reply](#), paragraph 72(iii).

<sup>73</sup> [SGN Reply](#), paragraph 72(iii).

<sup>74</sup> [SGN NoA](#), paragraph 372.

<sup>75</sup> [SGN NoA](#), paragraph 373.

<sup>76</sup> [SGN NoA](#), paragraph 373(iii).

<sup>77</sup> [SGN NoA](#), paragraphs 377 and 381.

<sup>78</sup> [SSEN-T NoA](#), paragraph 5.15.

licence holders would in practice be able to achieve any outperformance in the price control period.<sup>79</sup>

### *SPT's submissions*

6.28 SPT submitted that GEMA's assessment that historical totex outperformance was around 7% included very early price controls and sectors that bore little or no relevance to expected energy network performance over RIIO-2.<sup>80</sup> SPT submitted that necessary adjustments to the dataset demonstrated that historical realised performance was far lower.<sup>81</sup> SPT stated that although GEMA sought to justify its position by reference to claimed evidence of past outperformance across regulated sectors (which itself was unreliable), the relevant question was not how SPT or others had performed under past price controls, but how they would perform under this one.<sup>82</sup> SPT submitted that GEMA's 25 bps adjustment was not a reasonable expectation of performance over RIIO-T2, given the range of measures that GEMA had introduced, which significantly minimised the scope for outperformance, including more challenging efficiency and incentive targets, PCDs, the Return Adjustment Mechanism, the reduction of the price control period from eight to five years, and the assurance steps undertaken for business plans.<sup>83</sup> SPT submitted that these changes should be more than sufficient to reduce the scope for potential outperformance, mitigate the risk of systematic outperformance, and meant that SPT faced asymmetric downside risk for RIIO-T2.<sup>84</sup>

### *WWU's submissions*

6.29 WWU submitted that there was no reasonable basis on which to anticipate 25 bps outperformance by all relevant licensees, and that past outperformance was no guide to the future given: progressive improvements over time in estimating cost allowances and targets that aligned with the commercial reality; that GEMA had adopted a number of policy interventions limiting the ability to outperform in GD2; and that the ability of companies to achieve further efficiencies would naturally diminish over time as the network matured.<sup>85</sup> WWU submitted that GEMA's appeal to information asymmetry would need to be, but had not been, supported by evidence as to its existence and effect, and that as a mere unsupported assertion it did not provide a valid

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<sup>79</sup> [SSEN-T NoA](#), section 2.ii.

<sup>80</sup> [SPT Reply](#), paragraph 76.

<sup>81</sup> [SPT Reply](#), paragraph 76.

<sup>82</sup> [SPT NoA](#), paragraph 55(3).

<sup>83</sup> [SPT NoA](#), paragraph 55(3).

<sup>84</sup> [SPT NoA](#), paragraph 55(3).

<sup>85</sup> [WWU NoA](#), paragraph B6.4–B6.5.

reason for decision making.<sup>86</sup> WWU stated that since GEMA had access to substantial quantities of information about all regulated companies and had the benefit of being able to look across the entire industry, make comparisons between companies, and use these to drive each of them further towards the efficiency frontier, it was far from self-evident that there was systemic information asymmetry between industry and regulator.<sup>87</sup>

- 6.30 WWU stated that GEMA appeared to treat outperformance as an inherently negative outcome, and an unnecessary cost to consumers, whereas in fact over time a measure of outperformance was a desirable and necessary feature of economic regulation.<sup>88</sup> WWU submitted that if historical outperformance were materially due to information asymmetry rather than effort, then all regulated companies would have sustained levels of positive outperformance across all sectors, and that while GEMA's historical dataset suggested outperformance, this measure was an average, meaning there had also been a number of instances of significant underperformance.<sup>89</sup> WWU stated that this demonstrated that incentive-based regulation was not a 'one-way bet' in favour of companies.<sup>90</sup>

***The outperformance wthe headings are edge is not an appropriate or targeted way of addressing outperformance concerns***

*Cadent's submissions*

- 6.31 Cadent stated that the outperformance wedge mechanism was not an appropriate or targeted way of addressing potential undesirable outcomes, and that GEMA should have instead sought to calibrate individual price control components appropriately.<sup>91</sup> Cadent submitted that, in fact, GEMA appeared to have done so significantly to reduce the scope for any outperformance.<sup>92</sup> Cadent submitted that GEMA had a wide range of tools and policy alternatives at its disposal to set well-calibrated price controls and it had used them to overhaul the RIIO-2 price control framework, with this calling into question the basic justification for the outperformance wedge.<sup>93</sup>
- 6.32 Cadent stated that calibrating the price control at source in a transparent manner was a better policy alternative to the outperformance wedge. It

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<sup>86</sup> WWU NoA, paragraph B6.7.

<sup>87</sup> WWU NoA, paragraph B6.7.

<sup>88</sup> WWU NoA, paragraph B6.8.

<sup>89</sup> WWU Reply, paragraph B8.3(c).

<sup>90</sup> WWU Reply, paragraph B8.3(c).

<sup>91</sup> Cadent NoA, paragraph 5.34.

<sup>92</sup> Cadent NoA, paragraph 5.34.

<sup>93</sup> Cadent NoA, paragraph 5.38.

submitted that ensuring that a price control was appropriately calibrated, and that returns were ‘legitimate’, required careful consideration and finetuning of incentives, not simply cutting returns in an arbitrary manner.<sup>94</sup>

#### *NGET/NGG’s submissions*

6.33 NGET/NGG submitted that the introduction of the outperformance wedge was wrong as a matter of principle.<sup>95</sup> NGET/NGG stated that in all other aspects of its review, GEMA’s judgements were bounded by the evidence and reasoning that it was required to adduce for each and every adjustment that it made to business plans, but that GEMA effectively discarded these boundaries when it determined it was entitled to apply a final, unevidenced, lump-sum deduction to allowed returns at the very last stage in its price control calculations.<sup>96</sup> NGET/NGG submitted that GEMA’s action in introducing and applying the outperformance wedge was contrary to its overarching statutory duty to have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action was needed.<sup>97</sup>

#### *NGN’s submissions*

6.34 NGN submitted that there were sufficient alternative mechanisms which GEMA could use to address outperformance on totex and ODIs at source, avoiding the negative adverse consequences for consumer welfare and efficiency that were generated by an outperformance wedge, and that the use of such mechanisms represented much better regulatory practice.<sup>98</sup>

#### *SGN’s submissions*

6.35 SGN submitted that regulators had a range of alternative tools which could be used to appropriately calibrate the price control, that could be applied in a targeted manner to the building blocks giving rise to concerns over perceived asymmetries, and that did not suffer the same undesirable side-effects of the outperformance wedge.<sup>99</sup> SGN stated that by introducing an arbitrary overlay on its assessment of cost allowances through a reduction to the allowed

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<sup>94</sup> [Cadent NoA](#), paragraph 5.39.

<sup>95</sup> [NGET NoA](#), paragraph 4.31.

<sup>96</sup> [NGET NoA](#), paragraph 4.36.

<sup>97</sup> [NGET NoA](#), paragraphs 4.52–4.67.

<sup>98</sup> [NGN NoA](#), paragraphs 292–293.

<sup>99</sup> [SGN NoA](#), paragraphs 327 and 329; [SGN Reply](#), paragraph 76.

returns, GEMA had relied on a disproportionate and untargeted mechanism.<sup>100</sup>

### *SSEN-T's submissions*

- 6.36 SSEN-T submitted that GEMA's outperformance adjustment departed from established regulatory best practice and was an error in principle.<sup>101</sup> SSEN-T stated that it was a shared view among economic regulators that an unorthodox approach of adjusting for expected outperformance ex-ante is not well-suited to resolving any information asymmetries, and pointed to a study by Earwaker and Fincham who interviewed 32 former regulators in support of this view.<sup>102</sup> SSEN-T submitted that the regulatory tools GEMA had available were capable of being used to set an appropriately calibrated price control.<sup>103</sup>

### *SPT's submissions*

- 6.37 SPT stated that the outperformance wedge wrongly departed from the rigour of the process undertaken to assess costs and set incentives, and from longstanding regulatory policy to encourage cost reduction by permitting companies to retain the benefits of outperformance.<sup>104</sup> SPT submitted that the conceptually correct approach to any perception of likely systematic outperformance – as distinct from outperformance resulting from improved efficiencies achieved during the relevant period – was to correct the cost allowance framework.<sup>105</sup>

### *WWU's submissions*

- 6.38 WWU submitted that even if expected outperformance was what GEMA claimed it to be, the appropriate policy response would be to identify areas in which this was a result of the price control setting inappropriately low targets, and use targeted means to address them rather than imposing a blanket reduction to the cost of equity.<sup>106</sup>

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<sup>100</sup> SGN NoA, paragraph 331.

<sup>101</sup> SSEN-T NoA, section 2.i.

<sup>102</sup> SSEN-T NoA, paragraph 5.10.

<sup>103</sup> SSEN-T NoA, paragraph 5.14.

<sup>104</sup> SPT NoA, paragraph 55.

<sup>105</sup> SPT NoA, paragraph 55(2).

<sup>106</sup> WWU NoA, paragraph B6.6.

***The outperformance wedge has been applied in an arbitrary and discriminatory way.***

- 6.39 NGET/NGG submitted that the outperformance wedge would implicitly require some companies to outperform more than others for no obvious reason other than the size of their RAV in relation to totex, and that NGET/NGG would both need to underspend 3.6% of totex per annum in RIIO-2 to achieve the 25 basis points of outperformance assumed by the wedge, whereas for the GDNs between 1.9% and 2.2% and for the other TOs between 2.2% and 2.6% would be required.<sup>107</sup> NGET/NGG stated that GEMA had offered no explanation or justification as to why the effect of the outperformance wedge should differ so markedly across licensees, nor why NGET/NGG should bear such a disproportionately large impact relative to other companies.<sup>108</sup> NGET/NGG submitted that this was clearly unjustified as GEMA had already dealt with perceived views on cost confidence between sectors through the use of different sharing factors.<sup>109</sup>

***The outperformance wedge undermines performance improvement incentives, including as a result of the ‘backstop’.***

#### *Cadent’s submissions*

- 6.40 Cadent submitted that the outperformance wedge was a wrongly designed mechanism that distorted the incentive properties of the overall price control and was likely to have unintended, negative consequences, and that there was no clear evidence that GEMA had considered these consequences.<sup>110</sup>
- 6.41 Cadent submitted that GEMA’s policy effectively introduced a mechanism that would discourage outperformance because such outperformance would simply be ‘clawed back’ in the next price control period through the application of an outperformance wedge.<sup>111</sup> Cadent stated that this was very different from the usual way in which efficiencies from one price control were captured for consumers in the next period as part of the calibration of the relevant part of the price control.<sup>112</sup> Cadent submitted that the outperformance wedge would mean that the outperformance in the first price control was recovered for consumers in the next and would be clawed back without proper regard to the reason for outperformance or whether it had already been taken into

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<sup>107</sup> NGET NoA, paragraphs 4.101–4.103.

<sup>108</sup> NGET NoA, paragraph 4.104.

<sup>109</sup> NGET NoA, paragraph 4.104.

<sup>110</sup> Cadent NoA, paragraph 5.17.

<sup>111</sup> Cadent NoA, paragraph 5.21.

<sup>112</sup> Cadent NoA, paragraph 5.21.



account as part of the next price control, undermining the principle of incentive-based regulation.<sup>113</sup>

- 6.42 Cadent said that by removing the benefit of any outperformance up to 25 bps, the ‘backstop’ created a perverse incentive for companies that expected to perform within this deadband.<sup>114</sup> Cadent submitted that this materially reduced efficiency and quality of service incentives and might also encourage inefficient expenditure.<sup>115</sup>

#### *NGET/NGG’s submissions*

- 6.43 NGET/NGG said that the outperformance wedge would lead to a ‘double ratchet’ effect, as outperformance now brought not only tougher targets, but also lower returns.<sup>116</sup> NGET/NGG submitted that this would have the effect that companies would be disincentivised to innovate and (out)perform for fear of being penalised in the form of an enduring reduction in allowed returns in future that would persist over multiple regulatory periods.<sup>117</sup> NGET/NGG said that the backstop mechanism exacerbated the harmful properties of the outperformance wedge by creating perverse incentives for companies to no longer seek to outperform, and that GEMA had failed to assess the impact of the backstop mechanism.<sup>118</sup>

#### *NGN’s submissions*

- 6.44 NGN said that the outperformance wedge would have incentive-damaging properties, including by creating marginal disincentives to invest for companies that outperformed by more than 25 bps.<sup>119</sup> NGN submitted that the outperformance wedge might also create an expectation that the regulator would adjust future returns based on observed performance in the current control period, which would reduce incentives to improve efficiency and service.<sup>120</sup> NGN pointed to analysis which noted that productivity would have to fall by only 3% as a result of this effect for consumers to be worse off in net terms.<sup>121</sup>
- 6.45 NGN said that the ex-post adjustment mechanism had perverse incentive properties by creating a performance deadband, and that for a company that

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<sup>113</sup> [Cadent NoA](#), paragraph 5.21.

<sup>114</sup> [Cadent NoA](#), paragraph 5.19.

<sup>115</sup> [Cadent NoA](#), paragraph 5.19.

<sup>116</sup> [NGET NoA](#), paragraph 4.107.

<sup>117</sup> [NGET NoA](#), paragraph 4.108.

<sup>118</sup> [NGET NoA](#), paragraphs 4.126 – 4.138.

<sup>119</sup> [NGN Reply](#), paragraphs 91 and 92.

<sup>120</sup> [NGN NoA](#), paragraphs 285 and 289.

<sup>121</sup> [NGN Reply](#), paragraph 95.



had not outperformed in earlier years, the scale of outperformance needed to realise any financial benefit from doing so increased year-on-year.<sup>122</sup> NGN said that this created a very weak incentive to pursue efficiency for any company in that position, and that these properties would directly harm consumers.<sup>123</sup>

### *SGN's submissions*

6.46 SGN said that the deduction from allowed returns proposed by GEMA undermined incentives and the objectives of incentive-based regulation in both RIIO-2 and future price control periods, and would have a material negative impact on the interests of current and future consumers.<sup>124</sup> SGN submitted that, in changing the rules for price control calibration, the outperformance wedge might well logically create an expectation that any rewards gained in future price controls would be clawed back in part at the next price control through an increased outperformance wedge, with this reducing the incentive for companies to seek to outperform.<sup>125</sup> SGN said that this would move the regulatory approach away from a more incentive-based structure and towards rate of return regulation, which was widely acknowledged to be worse for consumers.<sup>126</sup> SGN also submitted that the outperformance wedge would make it unclear what level of performance was expected in each area by cutting across the price control calibration, and undermining the ability of companies to use this calibration to set internal staff performance benchmarks, and that this might encourage short-term investment strategies.<sup>127</sup>

6.47 SGN said that the ex-post adjustment mechanism would mean that licensees that outperformed between 0 and 25 bps would end up with the same level of outturn RoRE, and so provided no incentive for incremental effort by a company to improve outcomes within that outturn performance range, essentially creating a deadband.<sup>128</sup> SGN said that the negative effects of this would become particularly acute towards the end of the price control if a network company had a high likelihood of ending up in the deadband.<sup>129</sup>

6.48 SGN referred to GEMA's comment that licensees would have just a 7% probability of falling within the deadband as exhibiting spurious accuracy, and

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<sup>122</sup> NGN NoA, paragraph 287; NGN Reply, paragraph 96.

<sup>123</sup> NGN NoA, paragraphs 287–288.

<sup>124</sup> SGN NoA, paragraph 356.

<sup>125</sup> SGN NoA, paragraph 353.

<sup>126</sup> SGN NoA, paragraph 353.

<sup>127</sup> SGN NoA, paragraph 354.

<sup>128</sup> SGN NoA, paragraph 350.

<sup>129</sup> SGN NoA, paragraph 351.

that the figure was based on GEMA's historical database which was plainly uninformative of RIIO-2.<sup>130</sup> SGN submitted that networks would not know what their ultimate RIIO-2 performance would be when deciding whether or not to make efforts to improve performance, and that the potential risk of ending up in the deadband would distort incentives even if a company did ultimately end up outside the deadband.<sup>131</sup>

#### *SSEN-T's submissions*

- 6.49 SSEN-T said that GEMA's approach gave rise to increased (not decreased) costs to consumers because it would dampen incentives for companies to outperform in RIIO-2 and beyond.<sup>132</sup> SSEN-T submitted that, rationally expecting any outperformance during RIIO-2 could be considered by GEMA in estimating the size of the outperformance adjustment in RIIO-3, companies would be incentivised to act strategically so as not to display their performance capabilities.<sup>133</sup> SSEN-T said that the ex-post top-up arrangements also created reduced incentives.<sup>134</sup>

#### *SPT's submissions*

- 6.50 SPT said that the ex-post 'true up' did not cure the fundamental problem with GEMA's approach and the diminished incentives to outperform.<sup>135</sup> SPT submitted that under the new substantially tightened RIIO-2 framework, it was reasonable to expect a greater number of companies to find themselves facing no or materially blunted incentives to drive cost efficiency as a result of the backstop than GEMA identified based on its assessment of historical outperformance.<sup>136</sup>

#### *WWU's submissions*

- 6.51 WWU said that the outperformance wedge fundamentally undermined incentives that ought to be intrinsic to the RIIO-GD2 price control.<sup>137</sup> WWU submitted that the additional explicit downward adjustment to returns based on past performance would act as a further sector-wide disincentive to outperform regardless of the precise mechanics of how this adjustment was determined, and that GEMA had no way to separately identify and quantify

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<sup>130</sup> [SGN Reply](#), paragraph 86.

<sup>131</sup> [SGN Reply](#), paragraph 87.

<sup>132</sup> [SSEN-T NoA](#), paragraph 5.18.

<sup>133</sup> [SSEN-T NoA](#), paragraph 5.20.

<sup>134</sup> [SSEN-T NoA](#), paragraph 5.24.

<sup>135</sup> [SPT NoA](#), paragraph 55(4).

<sup>136</sup> [SPT Reply](#), paragraph 79.

<sup>137</sup> [WWU NoA](#), paragraph B6.13.

this incremental impact on incentives as ‘likely to be limited’ either now or in the future.<sup>138</sup>

- 6.52 WWU said that the ex-post adjustment mechanism revealed the inherent contradictions in GEMA’s adjustment policy, and undermined the fundamental, well-established and desirable incentive properties provided by the potential to achieve outperformance benefits.<sup>139</sup> WWU said that reducing incentives to outperform actively harmed consumer welfare in subsequent price controls, and accordingly, GEMA’s adjustment policy was contrary to the long-term consumer interest.<sup>140</sup>

***The introduction of the outperformance wedge dampens investment incentives, including by undermining regulatory integrity and increasing regulatory risk.***

***Cadent’s submissions***

- 6.53 Cadent said that the outperformance wedge resulted in an allowed cost of equity which was, even in GEMA’s view, below the required cost of equity.<sup>141</sup> It said that even though the ex-post adjustment ensured that on average a company’s return on equity was not below GEMA’s estimate, the marginal return on additional investment could be below GEMA’s estimate of the required return for companies expecting to outperform.<sup>142</sup> Cadent submitted that the impact for those companies would be particularly marked in the case of investment under re-openers.<sup>143</sup>
- 6.54 Cadent submitted that there were several ways in which the outperformance wedge was likely to affect regulatory confidence:
- a) The outperformance wedge interferes with the way in which allowed returns are set, which is fundamental to the UK regulatory model, and any change to this process affects the predictability and stability of regulation.
  - b) The poorly supported nature of this significant new mechanism in terms of evidence and justification, compounded by the approach GEMA has taken to matters it considers to be within the scope of its regulatory discretion, undermines confidence in the regulatory regime more generally.

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<sup>138</sup> WWU Reply, paragraph B8.4.

<sup>139</sup> WWU NoA, paragraph B6.17.

<sup>140</sup> WWU NoA, paragraph B6.17.

<sup>141</sup> Cadent NoA, paragraph 5.18.

<sup>142</sup> Cadent NoA, paragraph 5.18.

<sup>143</sup> Cadent NoA, paragraph 5.18.

- c) Whilst the outperformance wedge is explained as an adjustment for prospective outperformance, it may be perceived as being a retrospective ‘claw-back’ of outperformance in prior settlements periods and or past investment, in violation of the established regulatory presumption against retrospectivity.

6.55 Cadent said that the outperformance wedge was not consistent with the principles of good regulation or best regulatory practice and risked severely undermining regulatory confidence.<sup>144</sup>

#### *NGET/NGG’s views*

6.56 NGET/NGG submitted that the outperformance wedge would damage incentives to invest, and that in part this resulted from the same harmful impact as came from having an allowed equity return lower than the cost of equity.<sup>145</sup> NGET/NGG stated that the outperformance wedge created an additional negative impact on incentives to invest as it confused cost benefit analyses, for example in terms of the appropriate hurdle rate to use.<sup>146</sup> NGET/NGG submitted that the outperformance wedge would also cause harm by damaging investor confidence, by increasing both actual and perceived regulatory risk, and by increasing the cost of capital in the long-run.<sup>147</sup> NGET/NGG submitted that the outperformance wedge would also weaken the financeability of the sector.<sup>148</sup>

#### *NGN’s submissions*

6.57 NGN stated that the outperformance wedge would increase regulatory risk which would harm consumers in the longer term, including because it lacked a robust justification for its introduction and a clear basis for its calibration and is inconsistent with the design of the individual building blocks of the price control.<sup>149</sup> NGN submitted that there was a lack of rigorous cost benefit analysis in relation to the introduction of the outperformance wedge and that this was inconsistent with principles of best regulatory practice, particularly in relation to the damage to normal regulatory economic incentives.<sup>150</sup> NGN submitted that a survey of views related to the outperformance wedge provided compelling evidence that experienced economic regulators do not consider the outperformance wedge to be an appropriate use of regulatory

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<sup>144</sup> Cadent NoA, paragraphs 5.41–5.70

<sup>145</sup> NGET NoA, paragraphs 4.116–4.117.

<sup>146</sup> NGET NoA, paragraph 4.117.

<sup>147</sup> NGET NoA, paragraphs 4.119–4.123.

<sup>148</sup> NGET NoA, paragraph 4.124.

<sup>149</sup> NGN NoA, paragraph 290.

<sup>150</sup> NGN Reply, paragraph 98.

discretion.<sup>151</sup> In its response to our provisional determination, NGN pointed to a Moody's report as having welcomed our provisional conclusions, and said that the outperformance wedge risked undermining confidence in a well-established, stable and transparent regulatory regime.<sup>152</sup>

### *SGN's submissions*

- 6.58 SGN said that setting an allowed return below the true cost of equity dampened marginal incentives to invest, as the opportunity cost of making this marginal investment would be greater than the marginal return that would be earned.<sup>153</sup> SGN said that, as a result, a company that was well placed to outperform by over 0.25% would be incentivised to delay or not undertake the investment, and that this might also affect other companies who did not ultimately outperform by 0.25% given uncertainties over future performance levels.<sup>154</sup> SGN submitted that these negative effects would be particularly acute for investments associated with re-opener mechanisms, as it said there was generally no scope for outperforming the allowance where the expenditure had already been incurred before the re-opener request was made.<sup>155</sup> SGN said that disincentivising investment would have significant negative consequences for consumers, and that weakening incentives to invest would be particularly damaging in the context of investments to support Net Zero initiatives.<sup>156</sup> SGN submitted that ensuring the right incentives existed for investment should be a regulatory priority.<sup>157</sup>
- 6.59 SGN said that the introduction of a blanket reduction to allowed returns undermined consistency and transparency in the regulatory regime, ultimately to the detriment of consumers.<sup>158</sup> SGN said that it was entirely unclear how the mechanism was joined up with the rest of the calibrated price control, and that it was incoherent and confusing to deal with totex and ODI calibration issues through an adjustment to the allowed return.<sup>159</sup> SGN submitted that this undermined consistency in the price control regime.<sup>160</sup> SGN said that departing from the standard approach also undermined transparency, as it did not make clear what level of performance should be expected for each building block, and resulted in a lack of robustness and traceability in the price

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<sup>151</sup> [NGN Reply](#), paragraph 98.

<sup>152</sup> [NGN Response to PD](#), paragraph 23.

<sup>153</sup> [SGN NoA](#), paragraph 345.

<sup>154</sup> [SGN NoA](#), paragraph 345.

<sup>155</sup> [SGN NoA](#), paragraph 345.

<sup>156</sup> [SGN NoA](#), paragraph 346.

<sup>157</sup> [SGN NoA](#), paragraph 346.

<sup>158</sup> [SGN NoA](#), paragraph 332.

<sup>159</sup> [SGN NoA](#), paragraph 333.

<sup>160</sup> [SGN NoA](#), paragraph 333.

control parameters.<sup>161</sup> SGN submitted that the introduction of such a novel and conceptually flawed mechanism could only serve to increase regulatory risk and erode investor confidence in the stability of the regulatory regime, which would be ultimately to the detriment of consumers.<sup>162</sup>

### *SSEN-T's submissions*

- 6.60 SSEN-T said that GEMA had failed to consider the impact of the outperformance adjustment on investment decisions.<sup>163</sup> SSEN-T submitted that the top-up mechanism biased investment decisions in favour of lower risk projects, and that this distortion of investment incentives would harm efficiency and innovation.<sup>164</sup> SSEN-T said that GEMA had – without basis – prioritised the possibility of short-term bill reductions and overlooked the likely long-term negative impact on outcomes and bills as a result of delayed investments, especially those necessary to achieve the Net Zero target.<sup>165</sup>

### *SPT's submissions*

- 6.61 SPT said that GEMA's approach amounted to a policy of 'aiming down' and would damage incentives to invest, as well as diminishing incentives to outperform.<sup>166</sup> SPT submitted that GEMA had paid insufficient attention to the need to secure SPT's ability to finance its licensed activities by securing reasonable returns on capital.<sup>167</sup>
- 6.62 SPT said that the outperformance wedge was arbitrary and unprecedented and would damage long-term investor confidence.<sup>168</sup>

### *WWU's submissions*

- 6.63 WWU said that the outperformance wedge could only impair its financeability further.<sup>169</sup> WWU said that it was a fundamental error of principle to approach the setting of a price control on the basis that outperformance was inherently undesirable and must always be avoided, to the extent of taking anticipatory steps to remove the benefit of it before it has even taken place.<sup>170</sup> WWU submitted that Moody's was correct to consider that the novel policy approach

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<sup>161</sup> SGN NoA, paragraph 334.

<sup>162</sup> SGN NoA, paragraphs 337 and 341.

<sup>163</sup> SSEN-T NoA, paragraph 5.26.

<sup>164</sup> SSEN-T NoA, paragraph 5.26.

<sup>165</sup> SSEN-T NoA, paragraph 5.29.

<sup>166</sup> SPT NoA, paragraphs 55(4) and (5).

<sup>167</sup> SPT NoA, paragraph 56.

<sup>168</sup> SPT NoA, paragraph 55.

<sup>169</sup> WWU NoA, paragraph B6.18.

<sup>170</sup> WWU NoA, paragraph B6.12.

of introducing the outperformance wedge was a departure from regulatory best practice, and pointed to a comment from Moody's that the regulatory regime was not as stable and predictable as it once had been.<sup>171</sup>

## **GEMA's submissions**

- 6.64 GEMA said that, at its essence, this was a dispute about a limited category of evidence: the evidence of outperformance of regulated companies across price controls, across sectors, and over time, which was clear and compelling.<sup>172</sup> GEMA said it had acted on that evidence in accordance with its statutory duties and its principal objective, and had decided – in the exercise of its expert regulatory judgement – to adjust the allowed return on equity by reference to the weight of evidence of investor expectations of outperformance.<sup>173</sup>
- 6.65 GEMA said that the CMA should not be drawn into seeking to resolve the 'multitude of satellite issues' by which the appellants sought to obscure the clarity of the data.<sup>174</sup> GEMA submitted that those issues were complex, but ultimately irrelevant to the question before the CMA, which is whether GEMA's decision lay outside the bounds within which reasonable disagreement was possible.<sup>175</sup> GEMA submitted that its decision on the outperformance wedge lay well within those bounds.<sup>176</sup>
- 6.66 GEMA submitted that the principled distinction between expected returns and allowed returns was strongly grounded in economic evidence, that the weight of this evidence supported the view that information asymmetry was a structural feature of price controls, and that a degree of outperformance based on information asymmetry could not be excluded.<sup>177</sup>

'It is a fundamental feature of the system of regulation that the companies which are the subject of the regulation possess information which is not available to the regulator. The appellants cannot sensibly contend otherwise... To the extent that what is disputed is the degree of information asymmetry and its effects: GEMA has identified outperformance across sectors, regulators

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<sup>171</sup> [WU NoA](#), paragraph B6.11.

<sup>172</sup> [GEMA Response A](#), paragraph 283.

<sup>173</sup> [GEMA Response A](#), paragraph 283.

<sup>174</sup> [GEMA Response A](#), paragraph 284.

<sup>175</sup> [GEMA Response A](#), paragraph 284.

<sup>176</sup> [GEMA Response A](#), paragraph 284.

<sup>177</sup> [GEMA Response A](#), paragraph 286.



and over time, and its rigorous analysis has demonstrated that outperformance under RIIO-2 remains probable.<sup>178</sup>

- 6.67 GEMA said that its decision to make a modest adjustment to allowed returns was a rational and considered response to the evidence and in any event was well within the bounds of the regulator's judgement.<sup>179</sup> GEMA submitted that the risk of harm was low because the impact on incentives was minimal, and the ex-post adjustment would avoid any risk of undermining the incentive to invest or of jeopardising financeability.<sup>180</sup>

***The outperformance wedge is unnecessary: GEMA's submissions***

- 6.68 GEMA said that the weight of evidence supported its conclusions as to the structural nature of information asymmetry, with its database of 943 observations – that it had published with its DD (the **AR-ER dataset**)<sup>181</sup> – demonstrating a clear tendency towards underspending on totex, with an average underspend of approximately 7% across the energy, water and air transport sectors.<sup>182</sup> GEMA said that, upon rigorous testing, the data proved not to be sensitive to sector, time period, price control, licensee or company.<sup>183</sup> GEMA's assessment of historical evidence on totex outperformance (in past energy, water and air transport price controls) was summarised in the graph at **Figure 6-3**.

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<sup>178</sup> [GEMA Response A](#), paragraph 323.

<sup>179</sup> [GEMA Response A](#), paragraph 286.

<sup>180</sup> [GEMA Response A](#), paragraph 286.

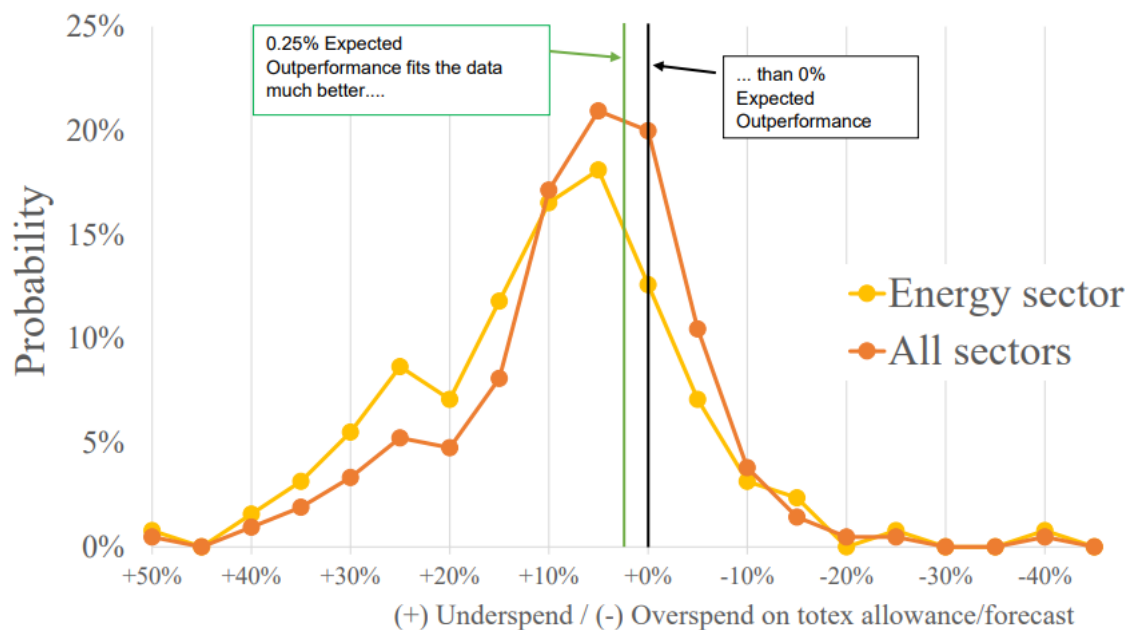
<sup>181</sup> This dataset seeks to compare allowed return and expected returns of companies in previous price controls, primarily by identifying the difference between historical levels of allowed and actual totex.

<sup>182</sup> [GEMA Response A](#), paragraph 310.

<sup>183</sup> [GEMA Response A](#), paragraph 310.



**Figure 6-3: GEMA's summary of the results of its historical dataset of totex performance**



Source: McCloskey 1 (GEMA), Figure 11, page 60.

Note: The commentary GEMA provided with **Figure 6-3: GEMA's summary of the results of its historical dataset of totex performance** said that a discrete probability distribution demonstrates marked underspending against totex allowances/forecasts. It said that expected outperformance of 0.25% (green line) would require only a small fraction of historical observations to be repeated, and that, by contrast, an assumption of 0% expected outperformance required a large body of evidence to be discarded (which would be very subjective).

- 6.69 GEMA said that its database had been subject to rigorous analysis by the licensees and the various consultants they commissioned, and that it was striking that the challenges made to the data (such as they were) were insubstantial and/or couched in generalities and platitudes.<sup>184</sup> GEMA said that the peripheral nature of these objections was telling and that the AR-ER dataset spoke for itself.<sup>185</sup> GEMA said that the justification for excluding early price controls from the dataset, and, in particular, DPCR1-3 and PCR2002,<sup>186</sup> which Frontier Economics had contended should be removed, was doubtful. GEMA submitted that even if this was assumed to be correct, the lower level of observed totex outperformance of 3.7% would still support its decision, as its analysis had shown that totex underspend of approximately 2 to 4% would deliver expected outperformance of 0.25% return on equity.<sup>187</sup>
- 6.70 GEMA said that it concurred with the NAO's assessment that consumers had paid more than they should have under RIIO-1, including because networks' performance targets had been set too low, and their cost budgets had been set too high. GEMA submitted evidence on the levels of outperformance

<sup>184</sup> GEMA Response A, paragraph 313.

<sup>185</sup> GEMA Response A, paragraph 313.

<sup>186</sup> DPCR1-3 refers to the three electricity distribution network price controls that applied over the period 1995-2005; PCR2002 refers to the gas distribution network price controls that applied over the period 2002-2007.

<sup>187</sup> GEMA Response A, paragraph 316.

observed in RIIO-1, including as set out in **Figure 6-3**, and pointed to returns in three out of the four sectors covered by RIIO-1 (and for the vast majority of companies) as having been much higher than expected (with gas transmission being the sole exception).<sup>188</sup> GEMA said that its 'residual outperformance' analysis which it presented at DD had not been substantially challenged, and had shown that even after correcting for known RIIO-1 issues and implementing new RIIO-2 rules, it was very likely that outperformance would still be expected in RIIO-2.<sup>189</sup>

- 6.71 GEMA said that its approach was supported by equity analyst estimates and MARs, and that its MAR analysis was brought into sharp relief by National Grid's proposed acquisition of WPD at a 61% premium to RAV.<sup>190</sup> In its response to the provisional determination GEMA said that its decision was based on a body of evidence that investors expected material outperformance in the energy network sectors.<sup>191</sup> GEMA submitted that if financial markets expected that returns had been set below the cost of capital under RIIO-2, one would have expected to have seen a persistent fall in share prices following FD. It said that this had not been seen and that this provided powerful contemporaneous evidence that investors continued to expect outperformance under the RIIO-2 framework.<sup>192</sup>
- 6.72 GEMA said it had given careful consideration over more than three years of policy development to the scope for other measures to address information asymmetry, and that in its expert regulatory view, information asymmetry could not be completely eliminated from the RIIO-2 package.<sup>193</sup> GEMA said that it was no answer for the appellants to say that RIIO-2 would be tougher overall than previous controls, as such complaints were often made during the development of a new price control, and the evidence showed that outperformance had almost inevitably followed, and that this was because information asymmetry was structural.<sup>194</sup> GEMA said it had concluded that a modest adjustment for outperformance was appropriate in light of the overwhelming evidence of systemic information asymmetry.<sup>195</sup>

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<sup>188</sup> *Kaul (GEMA)*, paragraphs 27, 36 and 37.

<sup>189</sup> [GEMA Response A](#), paragraph 314.

<sup>190</sup> [GEMA Response A](#), paragraph 317.

<sup>191</sup> *GEMA Response to PD*, paragraph 80.

<sup>192</sup> [GEMA Response A](#), paragraphs 317–318.

<sup>193</sup> [GEMA Response A](#), paragraph 320.

<sup>194</sup> [GEMA Response A](#), paragraphs 322–323.

<sup>195</sup> [GEMA Response A](#), paragraph 326.

***The outperformance wedge is not an appropriate or targeted way of addressing outperformance concerns: GEMA's submissions***

- 6.73 GEMA said that there was no general principle of regulatory theory or practice prohibiting a lump-sum adjustment to allowed returns on equity, nor was there any principled reason why an adjustment to reflect a systematic bias in the regulatory framework should not be made.<sup>196</sup> GEMA said that, on the contrary, where the evidence showed a clear tendency towards outperformance in spite of the regulator's best efforts to tighten cost and output targets and incentive rates, a modest adjustment to partially rectify that systemic imbalance was well within the regulator's margin of appreciation.<sup>197</sup> GEMA submitted that its comprehensive review of the evidence had allowed it to conclude with high confidence levels (above 90%) that an outperformance assumption of 0% would be unreliable, and that given this it would have been irrational to set the allowed return by reference to expected outperformance of 0%.<sup>198</sup>
- 6.74 GEMA said that as the three authors of the UKRN Report had recommended an adjustment to reflect investor expectations of outperformance, and the fourth disagreed, this was self-evidently a matter on which reasonable people may disagree.<sup>199</sup> GEMA submitted that in such circumstances it was not the role of the CMA to substitute its judgement for that of the regulator simply on the basis that the CMA might have taken a different view.<sup>200</sup>
- 6.75 In responding to the provisional determination GEMA said that, in the PR19 Redetermination, the CMA had considered the question of asymmetry of incentive outcomes and had offset the asymmetry of incentives by adjusting allowed returns ('aiming up'), rather than by changing the incentives 'at source'.<sup>201</sup> GEMA said that there are trade-offs involved in choosing a mechanism to protect consumers which include: minimising the harm to consumers from information asymmetry; diluting the incentive properties of the price control; and the overall operability and complexity of the price control.<sup>202</sup> GEMA said that, even if the outperformance wedge is imperfect, the need to protect consumers should take precedence, and that the outperformance wedge is a reasonable way to provide that protection.<sup>203</sup>

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<sup>196</sup> [GEMA Response A](#), paragraph 308.

<sup>197</sup> [GEMA Response A](#), paragraph 308.

<sup>198</sup> [GEMA Response A](#), paragraph 309.

<sup>199</sup> [GEMA Response A](#), paragraph 336.

<sup>200</sup> [GEMA Response A](#), paragraph 336.

<sup>201</sup> [GEMA Response to PD](#), paragraph 51.

<sup>202</sup> [GEMA Response to PD](#), paragraph 51.

<sup>203</sup> [GEMA Response to PD](#), paragraph 49.

***The outperformance wedge has been applied in an arbitrary and discriminatory way: GEMA's submissions***

6.76 GEMA said that the reference point NGET/NGG used in their assessment of the amount they would need to underspend their totex allowance by in order to achieve 0.25% above the allowed return on equity, compared to other GDNs and TOs, was baseline totex.<sup>204</sup> GEMA said that once totex uncertainty is factored in, the levels of totex underspend required to hit 0.25% were similar for all licensees across all sectors, in a range of 1.1% to 2.4%, and that the differences between licensees were negligible.<sup>205</sup> GEMA said that in any event totex underspend was only one variable that contributed to outperformance.<sup>206</sup> In its response to our provisional determination, GEMA said that both uncertainty related to the final level of totex allowance (which depends on the in-period use of UMs), and uncertainty related to differences between totex allowances and totex actuals, are larger for transmission companies than for gas distribution companies.<sup>207</sup>

***The outperformance wedge undermines performance improvement, including as a result of the 'backstop': GEMA's submissions***

6.77 GEMA said that the view that an outperformance wedge would lead to poorer overall performance did not stand up to scrutiny. It said it was striking that Citizens Advice and Centrica both supported the outperformance wedge and argued for a much more substantial deduction than 0.25%.<sup>208</sup> GEMA said that, based on its rigorous evaluation of the evidence, it considered outperformance of 0 to 0.25% to reflect information asymmetry rather than effort and that companies were likely to achieve 0.25% outperformance as a matter of course.<sup>209</sup> GEMA said that the appellants' arguments concerning a 'double ratchet' effect were unpersuasive, and that it was simply not plausible to suggest that licensees would no longer seek to outperform if they faced a downward adjustment of 0.25% and/or the possibility of downwards adjustments in future periods (as yet unknown).<sup>210</sup> GEMA said that the feedback loop was much weaker in relation to information asymmetry than it was for, say, cost targets which are licensee specific, and that to the extent there was any effect on incentives it was likely to be limited.<sup>211</sup> GEMA said it had concluded, based on its comprehensive review of the data, that there was

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<sup>204</sup> [GEMA Response A](#), paragraph 338.

<sup>205</sup> [GEMA Response A](#), paragraph 338.

<sup>206</sup> [GEMA Response A](#), paragraph 339.

<sup>207</sup> [GEMA Response to PD](#), paragraph 45.

<sup>208</sup> [GEMA Response A](#), paragraphs 345 and 349.

<sup>209</sup> [GEMA Response A](#), paragraph 350.

<sup>210</sup> [GEMA Response A](#), paragraphs 347–348.

<sup>211</sup> [GEMA Response A](#), paragraph 348.

only a very small probability (around 7%) that energy licensees will find themselves in the 0 to 0.25% range, and that arguments concerning the backstop should be assessed in that context.<sup>212</sup> GEMA said that any reduction in incentive properties within the 0 to 0.25% deadband was likely to be minimal because:<sup>213</sup>

- a) GEMA had concluded that outperformance of 0.25% reflected information asymmetry rather than effort and could be achieved as a matter of course.
- b) Incentives to outperform beyond 0.25% were unaffected and remained strong.
- c) In the event that one or more licensee did find itself in the 0 to 0.25% region towards the end of the price control, there would remain strong incentives because of the limited nature of the cap, ongoing monitoring of cost efficiency, and the exposure to benchmarking tests against peers.

***The introduction of the outperformance wedge dampens investment incentives, including by undermining regulatory integrity and increasing regulatory risk: GEMA's submissions***

6.78 GEMA said that the appellants had not pointed to any specific projects which would be uneconomic in the light of the 0.25% reduction to the allowed return on equity, and that in its considered view, the outperformance wedge was extremely unlikely to be a deterrent to investors more generally.<sup>214</sup> GEMA said it was ironic that the view that a reduction of 0.25% to allowed returns would damage incentives to invest was being advanced at the same time as National Grid's announcement of its acquisition of WPD at a 61% premium to RAV, and that the prospect of a possible outperformance adjustment in RIIO-ED2 was not a deterrent to that transaction.<sup>215</sup>

6.79 GEMA said that the appellants' view that the introduction of the outperformance adjustment had undermined the stability and predictability of the regulatory framework was wrong and dramatically overstated the significance of the measure. GEMA pointed to Moody's as having recently reaffirmed its positive view of GEMA's regulatory framework,<sup>216</sup> saying that the stability and predictability of UK network regulation remains on a par with other 'best in class' regimes.<sup>217</sup> GEMA said there was no merit in the view that

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<sup>212</sup> GEMA Response A, paragraph 355.

<sup>213</sup> GEMA Response A, paragraph 356.

<sup>214</sup> GEMA Response A, paragraphs 352–353.

<sup>215</sup> GEMA Response A, paragraph 353.

<sup>216</sup> GEMA Response A, paragraph 360.

<sup>217</sup> GEMA Response to PD, paragraph 109.2.

an outperformance adjustment was contrary to key regulatory principles and/or to best regulatory practice, and said its decision was grounded in detailed, painstaking analysis of the evidence and that it had acted transparently, consulting with stakeholders formally and informally over a three-year period.<sup>218</sup> In its response to the provisional determination GEMA said it was also conscious that regulatory integrity would be jeopardised if it were seen to ignore evidence on historical outperformance.<sup>219</sup>

## **Interveners' and third-party submissions**

### ***British Gas Trading Ltd (BGT)***

- 6.80 BGT submitted that the outperformance adjustment was required as it recognised the practical difficulties of perfectly calibrating each element of price control,<sup>220</sup> especially in the context of a structural information asymmetry between GEMA and GDNs.<sup>221</sup> BGT said that the network operators significantly outperformed in the previous price controls, and that as a result of the calibration of some incentives, the appellants would be able to earn rewards without improving their performance.<sup>222</sup> BGT submitted that the Energy Not Supplied incentive and The Quality of Connections Survey incentive in the electricity transmission price control were examples of this.<sup>223</sup> BGT submitted that if the outperformance adjustment was removed the appellants' revenues for the RIIO-2 period would increase by around £318 million and BGT's charges would increase by about £48 million.<sup>224</sup>
- 6.81 BGT submitted that there was a natural information asymmetry which led to systemic bias. It said that the appellants' arguments to the contrary seemed to ignore the fact that GEMA relied on information provided by network operators when setting price controls, and that without a genuinely and wholly independent view, which the network operators were unable to provide, a systemic bias existed.<sup>225</sup> BGT said that an example of this was the systemic bias arising from GEMA using (among other things) the network operators' views of forecast costs and volumes when setting expenditure allowances. BGT said that this meant that the allowed costs and volume information would be influenced by the information provided by network operators.<sup>226</sup> In

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<sup>218</sup> [GEMA Response A](#), paragraph 342.

<sup>219</sup> GEMA Response to PD, paragraph 108.

<sup>220</sup> [BGT Intervention Notice](#), paragraph 4.2.2.

<sup>221</sup> *Edwards (BGT)*, paragraph 34.

<sup>222</sup> *Edwards (BGT)*, paragraphs 35 and 38.

<sup>223</sup> *Edwards (BGT)*, paragraph 38.

<sup>224</sup> *Edwards (BGT)*, paragraph 39.

<sup>225</sup> *Edwards (BGT)*, paragraph 36.

<sup>226</sup> *Edwards (BGT)*, paragraph 37.



response to the provisional determination, BGT said that the ex-post checks within evaluative PCDs cannot provide an adequate degree of protection given information asymmetry, and that it is unlikely that the re-opener mechanism (as currently designed) would offer significant additional means that would guard against customer harms associated with asymmetric information.<sup>227</sup>

## **Citizens Advice**

### *The outperformance wedge is unnecessary: Citizens Advice submissions*

- 6.82 Citizens Advice submitted that GEMA's use of the outperformance wedge adjustment in its calculation of the allowed return on equity represented a significant improvement in the way regulators determine the level of profits network companies can earn.<sup>228</sup> Citizens Advice submitted that contrary to the appellants' arguments, the outperformance wedge was not an arbitrary deduction from an already 'correct' calculation of allowed returns.<sup>229</sup> It said that the outperformance wedge calculation provided a theoretically robust solution to a key failing of previous calculations of the allowed return on equity: that information asymmetry had enabled companies to persistently earn a higher level of profit than that required by investors to finance the companies, which has resulted in consumers paying 'billions' more than necessary.<sup>230</sup>
- 6.83 Citizens Advice submitted that by incorporating the real-world limitations of the CAPM resulting from information asymmetry, and using evidence of historical outperformance (in the same way that the CAPM used historical market data to inform estimates of future returns), the outperformance wedge represented a significant methodological improvement in the calculation of the allowed return on equity.<sup>231</sup> Citizens Advice said that companies had significantly outperformed on a persistent basis across multiple price controls, and that given the underlying strength of information asymmetry in an evidence-based regime, they would continue to do so.<sup>232</sup> Citizens Advice submitted that there was no reason to believe that the new tools employed by Ofgem on this occasion would be wholly successful, noting that the IQI had been introduced in RIIO-1 with the specific aim of addressing information asymmetry, but that the use of this tool had not stopped network companies generally

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<sup>227</sup> BGT Response to PD, paragraphs 2.13–2.14.

<sup>228</sup> [Citizens Advice Intervention Notice](#), paragraph 145.

<sup>229</sup> [Citizens Advice Intervention Notice](#), paragraph 168.

<sup>230</sup> [Citizens Advice Intervention Notice](#), paragraph 146.

<sup>231</sup> [Citizens Advice Intervention Notice](#), paragraph 163.

<sup>232</sup> [Citizens Advice Intervention Notice](#), paragraph 181.

underspending against expenditure allowances.<sup>233</sup> In response to the provisional determination, Citizens Advice said that, in its experience, Network Asset Risk Metrics (**NARM**) and ex-post evaluations were especially hard areas for stakeholders to engage with, and that the urgency of Net Zero delivery necessitates UMs that are progressed efficiently with limited accountability, making these areas particularly exposed to skewed outcomes.<sup>234</sup> Citizens Advice also said that the likelihood of outperformance occurring did not impact the suitability of the wedge, as it only applies above the level of allowed returns.<sup>235</sup>

*The outperformance wedge is not an appropriate or targeted way of addressing outperformance concerns: Citizens Advice submissions*

- 6.84 Citizens Advice submitted that, throughout the price control process, information asymmetry provided the energy companies with an absolute advantage over the regulator due to inherent advantages from better knowledge, greater financial resources, and the ability to make decisions to take advantage of the regulatory rules put in place.<sup>236</sup> Citizens Advice submitted that it was inevitable that the regulator could not fully and fairly eliminate information asymmetry disadvantages through the setting of allowances based on information provided by the companies (or otherwise available to it).<sup>237</sup> Citizens Advice said that resource constraints would mean that the regulator was unable to match the volume and quality of information provided by the regulated companies and that, in an ‘evidence based’ regulatory regime, this meant that the regulator was forced to make decisions based on evidence that was significantly biased in favour of the companies.<sup>238</sup>
- 6.85 Citizens Advice submitted that it was wrong to argue that the regulator could not introduce new approaches or methodologies in deciding how to achieve its objectives. Citizens Advice said that other regulatory tools were unable to address the impact of information asymmetry in the cost of capital, and that on that basis, GEMA’s use of the outperformance wedge was clearly in line with regulatory principles.<sup>239</sup>

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<sup>233</sup> [Citizens Advice Intervention Notice](#), paragraph 182.

<sup>234</sup> Citizens Advice Response to PD, paragraph 61.

<sup>235</sup> Citizens Advice Response to PD, paragraph 31.

<sup>236</sup> [Citizens Advice Intervention Notice](#), paragraph 158.

<sup>237</sup> [Citizens Advice Intervention Notice](#), paragraph 159.

<sup>238</sup> [Citizens Advice Intervention Notice](#), paragraph 160.

<sup>239</sup> [Citizens Advice Intervention Notice](#), paragraphs 175–176.



*The outperformance wedge has been applied in an arbitrary and discriminatory way: Citizens Advice submissions.*

- 6.86 Citizens Advice submitted that the appellants failed to recognise that the outperformance wedge was not an adjustment to individual building blocks of allowed revenue, rather it was an adjustment to the allowed cost of equity, to recognise outperformance generally. Citizens Advice said that the cost of equity was calculated for a notionally efficient company, and was not calibrated for individual companies, and that on that basis, it was sensible for the same adjustment to be calculated at an aggregate level and applied to all companies.<sup>240</sup>

*The outperformance wedge undermines performance improvement incentives, including as a result of the 'backstop': Citizens Advice submissions*

- 6.87 Citizens Advice said that the outperformance wedge did not eliminate the incentives or the ability of companies to generate additional returns to shareholders over and above the allowed return, rather it simply reflected the fact that investors expected companies to beat the targets set by the regulator.<sup>241</sup> Citizens Advice submitted that it was implausible that companies would not seek to operate efficiently in the current price control period for fear that the regulator would set a tougher target next time round, if for no other reason than that shareholders would be unlikely to accept such an approach that would lead to reductions in profits. Citizens Advice submitted that all the evidence indicates that incentive-based regimes did work, and that in practice the fact that future prices would be lower as a result of making improvements today did not mean that companies would not continue to seek out opportunities to reduce costs and improve profits in the short term.<sup>242</sup> Citizens Advice said in its response to the provisional determination that it did not think there was a credible argument for there being a significant effect of the deadband on incentives,<sup>243</sup> and that there is no clear reason to believe that any 'double ratchet' effect is significant (in a context where the impact of any 'double ratchet' effect would be far less certain than changes in cost sharing factors).<sup>244</sup>

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<sup>240</sup> [Citizens Advice Intervention Notice](#), paragraph 191.

<sup>241</sup> [Citizens Advice Intervention Notice](#), paragraph 187.

<sup>242</sup> [Citizens Advice Intervention Notice](#), paragraph 197.

<sup>243</sup> Citizens Advice Response to PD, paragraph 47.

<sup>244</sup> Citizens Advice Response to PD, paragraph 53. [

*The introduction of the outperformance wedge dampens investment incentives, including by undermining regulatory integrity and increasing regulatory risk: Citizens Advice submissions*

6.88 Citizens Advice noted that the companies' business plans appeared to show that no new equity funding was required or assumed over the period of the price control. It said that this demonstrated that the companies' claims that GEMA had set an unfairly low allowed return on equity such that companies will not be able to attract new equity finance, are not valid arguments.<sup>245</sup> Citizens Advice submitted that the appellants appeared to be confusing financeability with maximising shareholder returns.<sup>246</sup> Furthermore, it did not accept the suggestion that the outperformance wedge per se would mean that companies were not financeable. Citizens Advice submitted that the return allowed by Ofgem was clearly sufficient for the companies to finance current and future activities (as demonstrated by the observed MARs, for example).<sup>247</sup> Citizens Advice said it was clear that the ex-post adjustment mechanism effectively countered many of the companies' (in Citizens Advice's view invalid) arguments against the outperformance wedge relating to financeability and impact on investment incentives.<sup>248</sup>

*Citizens Advice submissions on relief*

6.89 Citizens Advice submitted that if the CMA did not consider it appropriate to include the outperformance wedge, it should consider how other assumptions should be adjusted to 'rebalance' GEMA's calculation.<sup>249</sup>

**Ofwat**

6.90 Ofwat said that there would always be information asymmetry that regulators had to address.<sup>250</sup> Ofwat submitted that the causes of systematic out- and underperformance were best addressed at source, but noted that issues which Ofgem was seeking to address were different from those arising in the water sector.<sup>251</sup> Ofwat submitted that Ofgem's approach, including an ex-post adjustment to reconcile for the outperformance if it did not materialise, could be argued to be a rational and proportionate approach that protected investors, while acknowledging the regulator was at an informational

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<sup>245</sup> Citizens Advice Intervention Notice, paragraph 201.

<sup>246</sup> Citizens Advice Intervention Notice, paragraph 211.

<sup>247</sup> Citizens Advice Intervention Notice, paragraph 212.

<sup>248</sup> Citizens Advice Intervention Notice, paragraph 216.

<sup>249</sup> Citizens Advice Intervention Notice, paragraph 221.

<sup>250</sup> Ofwat Hearing Transcript, 15 June 2021, page 42, lines 16–18.

<sup>251</sup> Ofwat Hearing Transcript, 15 June 2021, page 10, lines 2–4.

disadvantage.<sup>252</sup> Ofwat submitted that in addressing information asymmetry it strove to incentivise water companies to put forward business plans that were stretching and efficient.<sup>253</sup>

## Our assessment

- 6.91 We consider the overall extent of operational outperformance in RIIO-1 to have provided strong support for GEMA treating the scope for operational outperformance as an important risk area for RIIO-2, in relation to which significant changes might be required to protect consumers appropriately.
- 6.92 However, GEMA's introduction of the outperformance wedge was not intended to address specific issues that had arisen in RIIO-1; a range of other changes were introduced with that aim (some of which are discussed below). Rather, GEMA said its introduction of the outperformance wedge had been based on the view that information asymmetry is a structural feature of price controls.<sup>254</sup>
- 6.93 We provide our assessment of the outperformance wedge below in relation to each of the areas we have used to organise our consideration of appellant views, before providing an overall summary of our assessment. However, before doing this, we address two broader issues that we consider relevant to our assessment:
- a) The relationship between asymmetric information and asymmetric expected outcomes; and,
  - b) Circumstances in which operational outperformance may not benefit consumers.
- 6.94 In its response to our provisional determination, GEMA invited us to comment further and provide additional clarity concerning our views on a number of matters, including on aspects of the approach GEMA took,<sup>255</sup> and on what our conclusions implied for RIIO-2 outcomes and the future development of regulatory approaches related to outperformance.<sup>256</sup> We consider our assessment – as set out below – to provide an appropriately clear explanation of the basis for our determination in relation to this ground. We have not provided further, more specific comments in response to GEMA's requests

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<sup>252</sup> Ofwat Hearing Transcript, 15 June 2021, page 10, lines 9–13.

<sup>253</sup> Ofwat Hearing Transcript, 15 June 2021, page 42, lines 22–25.

<sup>254</sup> [GEMA Response A](#), paragraph 8.2.

<sup>255</sup> For example, GEMA Response to PD, paragraphs 68, 73, 76, 104 and 109.

<sup>256</sup> For example, GEMA Response to PD, paragraphs 44, 50, 51 and 88.

where we did not consider that appropriate or necessary as part of addressing the issues that were under appeal.

### *Asymmetry of information vs asymmetry of expected outcomes*

- 6.95 We consider GEMA's statement that companies which are subject to regulation will possess information which is not available to the regulator<sup>257</sup> to be uncontroversial (and we note the comments made by the appellants at the joint hearing that are consistent with this).<sup>258</sup> At the same time, GEMA (as with other regulators) has a range of ways it can seek to lessen, counter and otherwise guard against the effects of such information asymmetries. We note that the appellants pointed to the extensive set of regulatory tools that GEMA used to address information asymmetry in RIIO-2, including: cost benchmarking; output incentive benchmarking cost sharing factors and calibration of ODI incentive rate; annual stretch targets on cost allowances and ODI targets; caps and collars on individual incentives; input from a wide range of informed stakeholders, including User Groups and Challenge Groups; and reporting requirements and other information gathering powers.<sup>259</sup>
- 6.96 GEMA's justification for the outperformance wedge is based on its view that the net effect of these two factors (information asymmetries, and regulatory efforts to lessen, counter and otherwise guard against them) results in an asymmetry of expected outcomes ie that outperformance always remains probable.
- 6.97 We note, however, that GEMA can be viewed as having used the term 'asymmetry of information' to refer both to situations where companies subject to regulation can be expected to possess information which is not available to the regulator,<sup>260</sup> and to its view that an asymmetry of expected outcomes (and in particular, expected outperformance) arises as a result of underlying asymmetries of information, given the constraints GEMA faces when seeking to address them.<sup>261</sup>
- 6.98 We do not consider that being able to point to the existence of asymmetries of information should be regarded, in and of itself, as implying a 'problem' in terms of a regulator's ability to set a price control that is a 'fair bet' (ie where

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<sup>257</sup> [GEMA Response A](#), paragraph 323.

<sup>258</sup> Outperformance Wedge Joint Hearing Transcript, 22 June 2021, page 22 lines 4–5.

<sup>259</sup> For example, [NGET NoA](#), paragraph 4.45–4.46.

<sup>260</sup> For example, in [GEMA Response A](#), paragraph 323.

<sup>261</sup> For example, in [GEMA Response A](#), paragraph 320, where GEMA said that its expert regulatory view was that information asymmetry cannot be eliminated completely from the RIIO-2 package. We understand this to mean that GEMA considers that the effects of information asymmetry on the likely scope for operational outperformance cannot be completely eliminated.

there is a broadly equal chance of under-and out-performance). Rather, we consider it important when assessing this also to take account of the likely implications of the steps a regulator has taken, and may take,<sup>262</sup> that are relevant to expectations concerning operational performance.

### *Operational outperformance and benefits to consumers*

- 6.99 Incentive regulation can be viewed as being underpinned by the potential to achieve broad alignment between company and consumer interests, such that companies are rewarded for delivering improvements that are beneficial to consumers. From this perspective, some operational outperformance would typically be understood as ‘a good thing’, as it provides the scope for the benefits of cost and service improvements to be shared with consumers both within the price control period, and potentially in subsequent periods, when the improvements can be incorporated through the setting of tougher targets.
- 6.100 GEMA’s introduction of the outperformance wedge was rooted in concerns over the scope for companies to earn rewards that do not relate appropriately to improvements in performance. We note that in our assessment of evidence on the likely scope for outperformance below, we distinguish between two broad reasons why company rewards might not relate appropriately to improvements in performance:<sup>263</sup>
- a) Targets for cost and/or service performance might not be set stringently enough; and,
  - b) Deliverables and/or output targets might not be specified robustly enough.
- 6.101 We note that concerns over the stringency of targets ((6.100a)) above) need not be in conflict with the view that some operational outperformance is ‘a good thing’ for consumers. Rather, it reflects the view that the balance of risk and reward that companies face (and that consumers are subject to the effects of) is too generous. We note, however, that limitations regarding the robustness of the specification of deliverables and/or output targets (6.100b) above) can raise a substantively different form of concern, as they raise the prospect of rewards arising from operational outperformance that do not align with consumer benefits (for example, rewards may be achieved in a context where an indicator did not provide a reliable measure of relevant performance improvements). We consider the relevance of this difference further in

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<sup>262</sup> Where the likely effects depend on decisions that have not yet been taken, for example, where there is provision for a form of ex-post review to take place.

<sup>263</sup> A further potential reason concerns the scope for rewards to be achieved because of exogenous factors (and thus not as a result of company effort and/or performance). We consider this in paragraph 6.139 in relation to RPEs.

paragraphs 6.143 to 6.149. We note that in relation to both (6.100a) and (6.100b), seeking to understand and manage the potential effects of limitations in the approaches that have been adopted can be understood as central aspects of the design and calibration of price controls (see paragraphs 6.119 and 6.163 to 6.166).

### ***The outperformance wedge is unnecessary: our assessment***

#### *Evidence of historical outperformance*

##### *Evidence of totex outperformance in other (non-energy) sectors*

- 6.102 GEMA's historical dataset of totex performance included data from the water and air transport sectors (as well as the energy sector), and GEMA's analysis of that data underpinned its view that there was clear and compelling evidence of systematic outperformance of regulated companies across sectors. We do not consider this view to be well-founded, or GEMA's analysis to have provided a reliable assessment of historical evidence of totex performance in those non-energy sectors. We deal with the energy sector in the section below.
- 6.103 The First Economics review of operational performance, submitted with NGN's Reply, identified overall performance in the last two water price controls as being broadly in line with Ofwat's assumptions.<sup>264</sup> When questioned on this evidence, GEMA said that its database showed an average totex underspend in water since 2005 of around 2%, and that while this was not as large as had been seen in energy it was still significant.<sup>265</sup> In its response to our provisional determination, GEMA pointed to Ofwat data (which had also been submitted with NGET's and NGG's NoAs) that showed average totex underspend of 1.8% over the last four water price controls, and said that it had not seen any presentation of water sector performance which undermined the high level view that outperformance had dominated underperformance.<sup>266</sup>
- 6.104 We consider these responses to illustrate material limitations of the high-level nature of GEMA's analysis of its historical dataset, including in its reliance on incomplete data for the PR14 (2015-20) price control period and on the outcome of the PR99 (2000-2005) price control. We note that the Cadent and NGN Replies both pointed to Ofwat's assessment (once 2019-20 data was

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<sup>264</sup> Exhibit NGNREP1\_009 to NGN Response titled 'First Economics, Price Review Out- and Under-performance (6 April 2021).

<sup>265</sup> Outperformance Wedge Joint Hearing Transcript, 22 June 2021, page 41, lines 10–12.

<sup>266</sup> GEMA Response to PD, paragraphs 61–62.

included) that there had been totex overspend (rather than underspend) in the PR14 period.<sup>267</sup>

- 6.105 Given this, Ofwat's totex performance data shows there to have been neutral totex performance on average over the past three water price control periods (with average overspend of 0.2% in 2005-10, average underspend of 1.1% in 2010-15, and average overspend of 0.8% in 2015-20).<sup>268</sup> While there was average underspend of around 5% in 2000-2005 period, we do not consider GEMA's approach, of simply averaging this together with the three more recent price control periods, provides a reliable basis for drawing a broader inference concerning expectations of outperformance.<sup>269</sup>
- 6.106 Given these points, we do not consider there to be 'clear and compelling evidence' of totex outperformance by water companies over time. In line with this, Ofwat told us that it had seen a spread of performance, both upside and downside on cost and service performance, and that it had not felt the need to introduce an outperformance wedge.<sup>270</sup>
- 6.107 With respect to air transport, the review by NGN's economic advisers, First Economics, identified overall under-performance for three out of four of the CAA price controls it included (the last two Heathrow and NATS<sup>271</sup> controls).<sup>272</sup> On this, GEMA said that it understood the First Economics assessment to include the impact of aviation traffic volumes on performance, and that this was a unique exposure in the aviation sector, and was not what it was trying to capture in its totex database.<sup>273</sup> We considered this point to highlight the risk of drawing unreliable inferences when seeking to identify and interpret performance data under different controls, without more detailed consideration of the context within which that performance arose. It is also notable, however, that for NATS, GEMA's dataset was consistent with the view that the two controls it included resulted in broadly balanced outcomes (with one showing outperformance, and the other underperformance of a similar magnitude).

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<sup>267</sup> [NGN Reply](#), paragraph 80; [Cadent Reply](#), paragraph 119. Cadent provided Ofwat's assessment of PR14 totex performance with its Reply as Exhibit C2.

<sup>268</sup> The figures shown for 2005-2010, and for 2010-2015, are consistent with the Ofwat figures shown in Figure 1 of GEMA Response to PD. The figure shown for 2015-20 is consistent with the Ofwat figure shown in cell I72 of the 'Output|Totex' sheet in the Cadent Reply, Exhibit C2.

<sup>269</sup> We note also that even if this approach were to be adopted, the average underspend over the four price control periods would be around 1.2%.

<sup>270</sup> Ofwat Hearing Transcript, 15 June 2021, page 10, lines 5-6 and page 41, lines 12-13.

<sup>271</sup> National Air Traffic Services.

<sup>272</sup> Exhibit NGNREP1\_009 to NGN Response titled 'First Economics, Price Review Out- and Under-performance (6 April 2021).

<sup>273</sup> Outperformance Wedge Joint Hearing Transcript, 22 June 2021, page 9, lines 5-6 and page 40, lines 13-17.

6.108 Our view is that GEMA's evidence does not support the conclusion that there has been systematic operational outperformance in regulated sectors outside of energy.

*Historical evidence of totex outperformance in the energy sector*

6.109 As was noted in paragraph 6.68, GEMA identified there as having been an average totex underspend of around 7% across the energy, water and air transport sectors, based on the AR-ER dataset it had compiled.<sup>274</sup> For past energy sector price controls, GEMA's AR-ER dataset showed an average totex underspend that was higher than this.<sup>275</sup>

6.110 The appellants pointed to some examples of past GEMA price controls where there had not been material totex outperformance on average, including one for which GEMA's AR-ER dataset was said to contain an error. In particular:

- a) GD PCR 2002 (the price control for gas distribution businesses which ran from 2002-2007): the appellants pointed to an error in GEMA's AR-ER dataset, and said that correcting for this showed that GDNs overspent their totex allowances in that control (rather than underspent as had been shown in the dataset).<sup>276</sup> GEMA acknowledged that there was a formula inconsistency which affected the calculation of totex performance under this control,<sup>277</sup> and agreed that adjusting for this showed a totex overspend for that control.<sup>278</sup> GEMA said that taking this into account did not have a material impact on its overall assessment of average totex underspend (which reduced by around one percentage point).<sup>279</sup>
- b) DPCR4 (the control that applied to electricity distribution companies from 2005-10) was pointed to as an example of a 'tough' control.<sup>280</sup> GEMA said it considered DPCR4 to have had a neutral outcome,<sup>281</sup> and we note that the GEMA's AR-ER dataset shows there to have been average totex outperformance of 0.03% RoRE.<sup>282</sup>

6.111 However, beyond these examples, the appellants' comments on GEMA's identification of average overall historical levels of outperformance in its price

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<sup>274</sup> [GEMA Response A](#), paragraph 310.

<sup>275</sup> *McCloskey 1 (GEMA)*, page 58, showed a figure of 10%.

<sup>276</sup> [Cadent Reply](#), paragraph 119; [NGN Reply](#), paragraph 80.

<sup>277</sup> GEMA response to RFI GEMA 003, response to question 1(a).

<sup>278</sup> Outperformance Wedge Joint Hearing, 22 June 2021, page 31, line 23.

<sup>279</sup> GEMA response to RFI GEMA 003, response to question 1(b). Table 1 of this response shows average underspend of 6.9% in the initially submitted version of the AR-ER dataset, compared to 5.9% after including the corrected GDPCR2002 figures.

<sup>280</sup> NGET/NGG clarification Hearing Transcript, 18 May 2021, page 22, lines 6–8.

<sup>281</sup> Outperformance Wedge Joint Hearing, 22 June 2021, page 32, line 12.

<sup>282</sup> CMA derived figure using GEMA's AR-ER database.



controls focused on the relevance that evidence should be regarded as having to the assessment of expected performance in RIIO-2 (considered below), rather than on challenging evidence of past energy sector outperformance. Indeed, we note that the First Economics review of operational performance, submitted with NGN's Reply, identified overall outperformance of GEMA's assumptions for GDNs, TOs and for distribution network operators (**DNOs**) in each of the two previous sets of price controls introduced in those sectors since around 2007.<sup>283</sup>

- 6.112 We accept GEMA's assessment that, on average, there has been significant totex outperformance in previous energy price control periods and find that the appellants' submissions do not undermine that assessment.

*Interpreting evidence of historical average energy sector outperformance*

- 6.113 As was noted above, we consider the overall extent of operational outperformance in RIIO-1 to have provided strong support for GEMA treating the scope for operational outperformance as an important risk area for RIIO-2. We consider GEMA's dataset on historical energy sector totex performance to have provided further support for this, and – in broad terms at least – to have highlighted the importance of considering carefully the robustness of the protections that different measures would be likely to provide for under different potential circumstances. However, we do not consider the historical evidence in itself to provide a basis for drawing any firm conclusions with respect to the likely extent of operational outperformance in RIIO-2. We consider that such conclusions would need to be based on an assessment of likely effectiveness of the regulatory approaches and tools that GEMA used to address information asymmetries, and other sources of uncertainty,<sup>284</sup> in RIIO-2 given the circumstances that may be faced (which is considered further below).
- 6.114 In principle, historical evidence could form an important part of that forward-looking analysis, for example, by highlighting examples of risks that may be associated with the regulation of particular types of circumstances and/or with the use of different regulatory tools. However, we consider the high-level nature of GEMA's assessment of historical evidence (aside from RIIO-1 evidence) meant that its relevance was limited, particularly in a context where GEMA had introduced substantial changes to the arrangements for RIIO-2.

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<sup>283</sup> Exhibit NGNREP1\_009 to NGN Response titled 'First Economics, Price Review Out- and Under-performance (6 April 2021).

<sup>284</sup> For example, uncertainty over broader input price pressures that can be expected to affect network costs. We consider GEMA's approach to RPEs below.

6.115 In addition, we found the highly aggregated approach GEMA used when presenting its assessments of historical evidence as likely to obscure a range of relevant differences. For example, GEMA's approach when presenting an average totex underspend of around 7%<sup>285</sup> effectively gives equal weight to each licensee's totex performance in a given price control. This treats all price controls as equally relevant, irrespective of when they applied, and gives more weight to the outcomes of price controls that include more licensees. It also ignores differences in the policy priorities that may have guided price control design and calibration decisions over time and influenced thinking on matters including the appropriateness of using more and less high-powered incentives for improvement in different areas.

6.116 GEMA said that the historical data proved not to be sensitive to sector, time period, price control, licensee or company.<sup>286</sup> However, GEMA's own comments show that the data is sensitive to at least some of those factors. For example, GEMA has noted that if the early price controls of DPCR1-3 and PCR2002 were removed from the dataset, then average observed outperformance would reduce to 3.7%.<sup>287</sup> That is, it would be approximately half the level of the primary figure GEMA presented (7%). In its response to our provisional determination, GEMA said that while removing some price controls may reduce outperformance, it does not change the result that outperformance is dominant and significant.<sup>288</sup> However, our broader concern here is that GEMA's analysis of its historical dataset – with its focus on the overall average outcome across a wide range of controls and over time - took no account of the sources of past totex outperformance (aside from in the RIIO-1 analysis considered below), and therefore provides little basis upon which to draw inferences concerning the relevance of that outperformance to RIIO-2.

6.117 GEMA took a different view on the relevance of historical evidence, pointed to what it implied about 'unknown unknowns', and submitted that:

It would therefore be inappropriate to assume, as the appellants have suggested, that fixing the known errors in RIIO-1 will somehow remove the scope for average outperformance in future price controls including RIIO-2. This relies on the logical fallacy that regulators are able to determine with perfect foresight the

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<sup>285</sup> For example, in [GEMA Response A](#), paragraph 310.

<sup>286</sup> [GEMA Response A](#), paragraph 310.

<sup>287</sup> [GEMA Response A](#), paragraph 316.

<sup>288</sup> GEMA Response to PD, paragraph 65.

causes of systemic outperformance and eliminate them at source through careful regulatory design.<sup>289</sup>

6.118 GEMA said that it has no way of knowing for sure where outperformance opportunities may lie in RIIO-2, but that what it does know is that it and other regulators have tried their best in the past to tighten the targets in an attempt to ‘set a fair bet’, but companies have systematically and repeatedly exploited their structural information advantages to find opportunities to outperform, with the average company demonstrating a marked and material tendency towards positive outperformance.<sup>290</sup>

6.119 We do not consider GEMA’s comments on the difficulties of knowing where outperformance opportunities may lie in RIIO-2 to materially affect our assessment that GEMA’s historical dataset does not provide a basis for drawing any firm conclusions with respect to the likely extent of operational outperformance in RIIO-2.<sup>291</sup> As was set out in paragraph 6.108, our view is that GEMA’s evidence does not support the conclusion that there has been systematic operational outperformance in regulated sectors outside of energy. While regulators will inevitably face material limitations in terms of the information available to them when developing price controls, developing a reasonable understanding of those limitations, and determining how they should be taken into account, is central to the design and calibration of price controls. The scope for outperformance in RIIO-2 will, therefore, inevitably be affected by a range of design choices made in the development of RIIO-2. Given the extent of the changes introduced for RIIO-2, we consider that the likely implications of those changes for outperformance opportunities merited careful attention.

6.120 Our view is that GEMA’s analysis of its dataset of historical totex performance in the energy sector did not provide a basis for drawing any firm conclusions with respect to the likely extent of RIIO-2 operational outperformance. GEMA’s analysis took no account of the sources of past totex outperformance, involved the use of a highly aggregated and averaged approach (across a wide range of different controls over time), and provided little basis upon which to draw reliable inferences concerning the likely scope for outperformance in RIIO-2, particularly in a context where GEMA had introduced substantial changes to the regulatory arrangements.

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<sup>289</sup> GEMA response to RFI GEMA 003, paragraph 11.

<sup>290</sup> GEMA response to RFI GEMA 003, paragraph 13.

<sup>291</sup> We commented in paragraphs 6.102–6.108 on the reliability of GEMA’s descriptions of historical outperformance.

### *GEMA's residual outperformance analysis*

- 6.121 GEMA's residual outperformance analysis considered the extent to which observed RIIO-1 outperformance would remain after some RIIO-2 changes were taken into account (notably, the indexation of RPEs and the use of lower cost sharing rates). While we consider this was a useful exercise to have undertaken, our view is that it did not provide a sufficient basis for assessing the likely scope for RIIO-2 outperformance. In particular, as the appellants highlighted,<sup>292</sup> there were a wide range of other RIIO-2 changes that this analysis did not consider and that are highly relevant to the consideration of the likely scope for RIIO-2 operational outperformance.
- 6.122 More generally, we do not consider GEMA to have articulated sufficiently clearly what the purpose and significance of its residual outperformance assessment was intended to be, and we note that limited attention was given to this analysis in GEMA's Response. We note that the appellants argued that the effects of the IQI should be adjusted for as part of the residual outperformance analysis,<sup>293</sup> and that GEMA highlighted a number of difficulties associated with doing this.<sup>294</sup> We focus our attention below on potential sources of incentive outperformance in RIIO-2, and since the IQI was not applied for RIIO-2, we do not consider this adjustment question further.

### *GEMA's assessment of MARs and other market evidence*

- 6.123 In paragraph 5.706 we set out our conclusion that GEMA was not wrong to use MAR evidence as a cross-check for its cost of equity estimate, and agreed with GEMA's assessment that the MAR evidence available suggests that GEMA's allowed return on equity is not too low. While we regard GEMA's consideration of MAR evidence during the price review process to have provided further high-level support for it treating the scope for operational outperformance as an important risk area for RIIO-2, we are not persuaded that the MAR evidence submitted to us provides a basis upon which to make reliable inferences concerning the average levels of operational outperformance that could be viewed as expected in the transmission or gas distribution sectors.
- 6.124 In particular, while we consider that high observed MAR levels may suggest that the relevant investors expect there to be future opportunities for operational outperformance in the specific businesses to which the MARs

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<sup>292</sup> For example, [Cadent Reply](#), paragraph 120.

<sup>293</sup> For example, Frontier Economics Expert Report for NGET/NGG 'Reply to Ofgem's Response to RIIO-2 Appeals', pages 69–71.

<sup>294</sup> GEMA response to RFI GEMA 003, response to question 5(a).

relate, we are not satisfied that this provides a reliable basis for drawing broader conclusions concerning expectations of average operational outperformance levels in relation to the transmission and gas distribution companies to which these appeals relate. We note, for example, that observation of a MAR of around 1.4 in relation to the acquisition of Bristol Water relates to a sector in which Ofwat told us that it had seen a spread of performance, both upside and downside, and had not felt the need to introduce an outperformance wedge.<sup>295</sup>

6.125 In its Response, GEMA said that its analysis of share price movements following its DDs and FDs (and following the publication of - and publication of GEMA's response to - the CMA PR19 Provisional Findings) provided powerful contemporaneous evidence that investors expected outperformance under the RIIO-2 framework.<sup>296</sup> We note, however, that in its more detailed presentation of this analysis, GEMA pointed to the evidence as supporting the separate and more limited view that equity markets did not believe that GEMA had set allowances too low.<sup>297</sup> We consider there to be considerable challenges associated with the interpretation of relative share price movements in relation to such announcements, which involves trying to understand the relationship between the information content of an announcement and prior market expectations, and that these challenges are typically significantly greater than those faced when seeking to interpret the absolute level of market prices, both in transactions and over time (as in MAR analysis). We do not consider GEMA's analysis of share price movements to provide a basis upon which reliable inferences can be drawn concerning average expected levels of outperformance.

#### *Expectations of operational outperformance in RIIO-2*

6.126 For operational outperformance to be expected on average in RIIO-2 either or both of the following must hold:

- a) Average outperformance on ODIs is expected.
- b) Average totex outperformance is expected.

GEMA's views on expected ODI and totex outperformance in RIIO-2 are considered in turn below.

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<sup>295</sup> Ofwat Hearing Transcript, 15 June 2021, page 10, lines 5–6 and page 41, lines 12–13.

<sup>296</sup> [GEMA PR19 Response on Finance](#), paragraphs 317–318.

<sup>297</sup> *McCloskey (GEMA)*, paragraph 198.

### *GEMA's views on RIIO-2 ODI outperformance*

- 6.127 GEMA said that it considered ODI outperformance in RIIO-2 to be probable, notwithstanding the changes it had made to the RIIO-1 ODI arrangements. We do not consider GEMA to have identified sufficiently why this should be considered the case, or why a further regulatory response was merited.
- 6.128 We note that the scope for companies outperforming on ODIs only arises where ODIs have been applied that offer financial rewards, and that the likely level of any outperformance will depend on a range of factors, including:
- a) How an ODI has been specified (the metrics that have been used, etc);
  - b) The stringency of the target that has been set;
  - c) The incentive rate that applies when rewards are being earned;
  - d) The extent to which relevant ODI rewards are capped; and
  - e) The extent to which a deadband has been used, such that rewards can only be earned when the target is beaten by a defined margin.
- 6.129 We consider this to give GEMA a broad range of potential ways in which it can manage the risks to customers associated with ODIs, and note that GEMA has made a wide range of changes to its design and calibration of ODIs for RIIO-2 to reflect its assessment of those risks.
- 6.130 We asked GEMA to comment on the different sources of RIIO-1 ODI outperformance, and GEMA's response highlighted a number of points that we consider relevant to the consideration of the scope for RIIO-2 outperformance:<sup>298</sup>
- a) GEMA pointed to some performance improvements over time associated with ODI rewards that would become the new business as usual, and explicitly identified the Broad Measure of Customer Satisfaction (**BMCS**) which applied to GDNs as having successfully incentivised improvements.
  - b) For the Shrinkage Allowance Revenue Adjustment (**SARA**) and the Environmental Emissions Incentives (**EEI**) – which applied to GDNs – GEMA said that the targets set did not sufficiently reflect the leakage reductions that would result from the repex work that GEMA had funded the GDNs to deliver, resulting in consistent outperformance.

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<sup>298</sup> GEMA response to RFI GEMA 003, response to question 6(a).

- c) For some other ODIs, GEMA pointed to rewards as having resulted in part from factors outside of the control of the licensee, for example, the Network Reliability Incentive.

6.131 In response to our questions, GEMA identified the different ways in which it had tightened the ODI arrangements for RIIO-2.<sup>299</sup> While GEMA has described its RIIO-2 changes as ‘fixing the known errors in RIIO-1’,<sup>300</sup> we note that the RIIO-1 sources of ODI outperformance referred to above can be viewed as relevant to a number of underlying reasons why ODI outperformance may not be viewed as appropriately aligned with underlying company performance:

- a) Rewards may be viewed as too easily achievable: while GEMA identified the BMCS as having successfully incentivised improvements, it also noted that for the Customer Satisfaction Survey (which was part of the BMCS), the majority of GDNs were receiving the maximum reward possible by the end of RIIO-1.<sup>301</sup> Also, GDN rewards under the BMCS amounted to around 28 bps of RoRE on average in RIIO-1, which raises potential question marks over the appropriateness of the risk/reward balance that was provided for.<sup>302</sup>
- b) Metrics (and associated targets) may be defined in ways that are not robust to future circumstances: SARA and EEI provided GDNs with an average of around 31 bps of RoRE outperformance in RIIO-1,<sup>303</sup> and GEMA’s comments suggest that this arose from a lack of robustness in the way the underlying ODIs were specified,<sup>304</sup> as they did not take sufficient account of an important interaction that affected likely ODI performance.
- c) Outcomes may be viewed as unduly affected by factors outside of a company’s control: this can create scope for windfall gains and losses that may raise legitimacy concerns, although this does not appear to have been a material concern with respect to ODIs in RIIO-1.<sup>305</sup>

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<sup>299</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, Tables 2–6.

<sup>300</sup> GEMA response to RFI GEMA 003, paragraph 11.

<sup>301</sup> GEMA response to RFI GEMA 003, Table 8.

<sup>302</sup> CMA calculation based on GEMA response to RFI GEMA 003, Tables 6 and 7.

<sup>303</sup> CMA calculation based on GEMA response to RFI GEMA 003, Tables 6 and 7.

<sup>304</sup> GEMA response to RFI GEMA 003, Tables 7 and 8.

<sup>305</sup> GEMA response to RFI GEMA 003, response to question 6(a) does not raise particular concerns with respect to these factors.

- 6.132 We consider GEMA's description of its approach to the design and calibration of ODIs for RIIO-2 to be consistent with it having sought to address, and otherwise take account of these broader issues (to the extent relevant).
- 6.133 We note, for example, that GEMA has made the complaints metric – which had been part of the BMCS in RIIO-1 – financial penalty only for RIIO-2, locking in the RIIO-1 performance improvements for customers without providing any opportunity for further rewards.<sup>306</sup> For the Customer Satisfaction Survey (which was also part of the BMCS in RIIO-1), GEMA has made the target more stringent to reflect improved RIIO-1 performance improvements, included a cap (and collar) to limit the overall financial effect that could arise under the ODI, and included a deadband, such that companies would only start earning rewards when the target level is exceeded by a defined margin.<sup>307</sup> GEMA said that its view of the Customer Satisfaction Survey ODI was that licensees operating efficiently would be equally likely to exceed the targets during the RIIO-2 period as they would be to fall short.<sup>308</sup>
- 6.134 We note BGT's view (see paragraph 6.80) that outperformance is embedded in the calibration of some ODIs (in particular, the 'Energy not supplied' and 'Quality of connections survey' ODIs). However, we have not found GEMA's explanation of how it designed and calibrated these and other ODIs,<sup>309</sup> to raise material concerns over how observed RIIO-1 performance was taken into account when the stringency of RIIO-2 ODIs was determined, or in particular to support the view that the calibration of ODIs should be regarded as having embedded RIIO-2 outperformance.
- 6.135 We do not consider GEMA to have identified sufficiently why, given the approach it took to the design and calibration of ODIs and its own comments on the appropriateness of the level of challenge applied, ODI outperformance in RIIO-2 should be treated as probable, or why a further regulatory response was merited. Of course, there may be ODI outperformance on average in RIIO-2 in practice, but GEMA has not shown why – given the approach it has adopted – such an outcome should be viewed as problematic, rather than as the normal operation of incentive arrangements in a way that would benefit consumers, as it would result in better performance on the relevant outputs in

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<sup>306</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, Table 3.

<sup>307</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, Table 3.

<sup>308</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, Table 3, paragraph 4.

<sup>309</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, Tables 2–6.



RIIO-2 and flow through to tougher performance standards and/or lower prices than might otherwise have been expected in subsequent price controls.

*GEMA's views on RIIO-2 totex outperformance*

6.136 It is common ground between the parties that GEMA used a range of regulatory tools in its determination of RIIO-2 totex allowances aimed at addressing information asymmetry issues (including cost benchmarking and annual stretch targets on cost allowances), and that it sought to bolster its approach with the use of tools including the BPI, the use of more sophisticated and lower sharing factors, and the greater use of PCDs.<sup>310</sup> In addition, GEMA reduced the extent to which it needed to be able to reliably assess future totex requirements by applying a five-year price control period for RIIO-2, rather than the eight-year period used in RIIO-1, and through a greater use of UMs. In assessing GEMA's view that notwithstanding its use of these tools, asymmetry of information meant that outperformance was probable, we consider it important to distinguish between potential concerns related to:

- a) The stringency of the level of totex allowance that has been set; and,
- b) The robustness of the definition of what that totex allowance is intended to deliver.

We consider these concerns in relation to baseline totex and the use of UMs in turn.

- *Baseline totex allowances*

6.137 We note that the potential effects of information asymmetries may be more straightforward to address in relation to some aspects of cost assessment (for example, where there is greater scope for benchmarking) than others. GEMA's approach to setting totex incentives can be understood as explicitly recognising this through the distinction that was drawn between 'high confidence costs' and 'lower confidence costs'. GEMA used this distinction (and the share of the overall totex allowance for each company that it considered to fall within each category) in its setting of cost sharing factors. That is, GEMA's approach already includes a confidence-based mechanism for managing the risks that the totex allowances are not set sufficiently stringently.

6.138 GEMA pointed to technological change as a source of new information asymmetries and further associated challenges when seeking to set a

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<sup>310</sup> For example, [NGET NoA](#), paragraph 4.48–4.49.

sufficiently stringent totex allowance, and referred to comments from the National Infrastructure Commission on the relevance of this issue.<sup>311</sup>

However, we note that GEMA sought to address this issue through its approach to setting the Ongoing Efficiency (**OE**) assumption (which we consider to have involved some ‘aiming up’), and through greater use of UMs. Our assessment of the OE assumption is set out in chapter 7, and we consider information asymmetry issues related to UMs below.

6.139 Our consideration of baseline totex outperformance issues was informed by a consideration of the sources of RIIO-1 totex outperformance. As can be seen in **Table 6-1**, all of the GDNs and electricity TOs outperformed their RIIO-1 totex allowances, and for five (of the eight) GDNs and for NGET, actual RIIO-1 expenditure was more than ten per cent lower than the totex allowance. NGG was the only transmission company to underperform. However, a significant portion of the observed totex outperformance can be attributed to RPEs, with input price pressures having been much more muted than GEMA had forecast when setting RIIO-1 allowances.

**Table 6-1: RIIO-1 Totex underspend including after adjusting for RPE effects<sup>312</sup>**

|                                 | <i>Allowed Totex, £m</i> | <i>% Totex underspend</i> | <i>% totex underspend after adjusting for RPE effects</i> |
|---------------------------------|--------------------------|---------------------------|---|
| <b>Gas Distribution</b>         |                          |                           |   |
| Cadent East of England          | 2,813                    | 2%                        | -3%   |
| Cadent London                   | 2,500                    | 6%                        | 1%  |
| Cadent North West               | 2,098                    | 5%                        | 0%  |
| Cadent West Midlands            | 1,633                    | 11%                       | 6%  |
| NGN                             | 2,182                    | 12%                       | 8%  |
| SGN Scotland                    | 1,760                    | 18%                       | 14%   |
| SGN Southern                    | 3,568                    | 13%                       | 8%  |
| WWU                             | 2,217                    | 19%                       | 15%   |
| <b>Electricity Transmission</b> |                          |                           |   |
| NGET                            | 11,554                   | 15%                       | 10%   |
| SPT                             | 2,395                    | 5%                        | 1%  |
| SSEN                            | 3,391                    | 3%                        | -2%   |
| <b>Gas Transmission</b>         |                          |                           |   |
| NGG                             | 2,003                    | -19%                      | -30%  |

<sup>311</sup> *Kaul (GEMA)*, paragraph 35.

<sup>312</sup> The GEMA estimates of the impact of stripping out RPE effects shown in this table were provided in its response to question 3(c) of the RFI GEMA 003. GEMA said in that response that caution is needed when relying on these numbers, having noted some of the difficulties of determining how RPEs should be stripped out. We are not persuaded that these comments materially diminish the usefulness of GEMA’s estimates, and note that the estimates shown in the table already provide a more conservative view of the impact of RPEs than GEMA itself assumed in its residual outperformance analysis.

6.140 There is inevitable uncertainty over how input price pressures will evolve over a price control period, and regulators need to determine how the totex risks associated with that should be allocated. At RIIO-1, GEMA addressed this issue by setting fixed allowances for RPEs up-front based on available forecasts. For RIIO-2, GEMA has adopted a different approach with RPE indexation used such that broader changes in input price pressures - to the extent they are captured by the relevant indices - will not be a source of potential totex outperformance (or underperformance) in RIIO-2. Instead, GEMA's approach has effectively allocated these risks to consumers. As a significant portion of RIIO-1 totex outperformance was associated with how exogenous input price pressures had been allocated, when assessing how totex performance compares to GEMA's RIIO-1 assumptions, we consider it appropriate to strip RPE effects out.

6.141 GEMA's estimate of RIIO-1 totex outperformance with RPEs stripped out (which takes account of observed movements in relevant RPE indices over RIIO-1) is shown in **Table 6-1**. As can be seen in the table, when RPEs are stripped out: two of the transmission companies are shown to have outperformed on totex, but also two to have underperformed; six of the GDNs are shown to have outperformed, one to have had neutral performance, and one to have underperformed. While this data clearly shows material totex outperformance on average across all of the companies shown, the evidence looks more mixed (than before RPEs had been stripped out). A more disaggregated review of RIIO-1 totex outperformance data showed that a significant portion of the remaining totex outperformance (when RPEs had been stripped out) could be associated with two particular categories of expenditure:

- a) GDN repex: overall GDN repex was 10.5% (around £800 million) lower than had been assumed in RIIO-1 totex allowances (after adjusting for RPEs);<sup>313</sup> and,
- b) Non Load Capex: NGET's non load capex was around a third (almost £2 billion) lower than had been assumed in its RIIO-1 totex allowance (after adjusting for RPEs).<sup>314</sup>

6.142 We considered it important to understand GEMA's views on these sources of the totex outperformance in RIIO-1.

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<sup>313</sup> CMA calculations, based on GEMA's response to RFI GEMA 003A, response to question 1.

<sup>314</sup> CMA calculations, based on GEMA's response to RFI GEMA 003A, response to question 1.

6.143 GEMA said that it encountered two general problems in RIIO-1 related to asymmetry of information and the ability of licensees to defer or cancel asset health/replacement work that was funded through the price control:<sup>315</sup>

- a) where licensees changed the work mix or specification of the work for which the funding had originally been provided (for example, by focusing on less expensive work, and deferring work that may be more expensive until a later period); and
- b) where licensees simply deferred the spending to the next price control period without breaching RIIO-1 outputs.

6.144 As we noted in paragraph 6.101, we consider these work mix and deferral issues to raise important questions over the appropriateness of some sources of outperformance in a context where the price control specifies up-front outputs to be delivered but leaves flexibility in terms of how those outputs can be delivered. In particular, the general expectation that consumers will benefit from outperformance (such that company and consumer interests can be understood as broadly aligned) may be unreliable if companies are able to use flexibility in output definition to secure short-term savings (and associated outperformance) that do not benefit consumers in the longer term, for example, by deferring more expensive options that provide 'long' duration benefits, in place of less expensive options that provide shorter duration benefits.

6.145 We note that, in practice, the implications for consumers of these types of outperformance will depend in part on future regulatory decisions. That is, these approaches imply that costs in future periods will be higher than would otherwise have been the case, and therefore the implications for consumers will depend on the extent to which companies are able to secure funding for these higher cost levels at future price controls. While we note GEMA's comments on the difficulties that can be associated with identifying clearly what has been funded in previous controls,<sup>316</sup> we consider this to further highlight the importance of specifying what totex is intended to fund in sufficiently robust manner.

6.146 GEMA said that the RIIO-2 changes it had introduced – including the development of the NARM, and its use of evaluative PCDs<sup>317</sup> – meant that

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<sup>315</sup> *Kaul (GEMA)*, paragraph 40.2; GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, paragraph 7.

<sup>316</sup> Outperformance Wedge Joint Hearing Transcript, 22 June 2021, page 98, lines 4–16, page 101, lines 20–25, and page 102, lines 1–8.

<sup>317</sup> A description of these mechanisms is provided in Chapter 8.

baseline totex allowances would be better ‘protected’.<sup>318</sup> We note that these mechanisms introduce a form of ex-post check (with the potential for an ex-post totex adjustment) into the funding arrangement, and as such make a company’s ability to earn outperformance by using the delivery flexibility available to it, conditional on being able to satisfy those ex-post checks. We consider that, in principle, this provides a significant additional means of guarding against the risks of asymmetric information resulting in poor consumer outcomes. In particular, it can be understood as recognising the challenges GEMA faces in specifying deliverables up-front while allowing flexibility for an efficient response to emerge, in a context where the potential uses that could be made of the flexibility that is provided may be difficult for GEMA to anticipate.

6.147 We note that GEMA said that these changes to its use of PCDs did not eliminate the risk associated with work mix and deferral issues,<sup>319</sup> and that BGT and Citizens Advice raised concerns over the adequacy of the protection provided by PCDs.<sup>320</sup> However, we do not consider it appropriate to view the overall purpose of regulatory tools and actions aimed at addressing issues associated with information asymmetry as being to ‘eliminate’ relevant risks, and consider that the extent to which residual issues may arise and give rise to harmful effects is likely to be heavily affected by GEMA’s approach to regulatory decisions it has not yet made, including those associated with ex-post reviews of evaluative PCDs, and requests for funding in RIIO-3 and future price controls.

6.148 Our view is that GEMA has not identified sufficiently why the set of tools it used for RIIO-2 should be regarded as providing insufficient protection for customers in relation to baseline totex allowances. In forming this view, we note that GEMA has made extensive changes in order to seek to address its outperformance concerns with respect to baseline totex. While there will always be some residual risk that totex allowances have not been set stringently enough, or that what baseline totex allowances are intended to deliver has not been specified robustly enough, we do not consider GEMA to have demonstrated this as justifying the application of an outperformance wedge.

6.149 In addition, we consider that an outperformance wedge is likely to be particularly ill-suited to addressing residual concerns GEMA may have over

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<sup>318</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, paragraph 6.

<sup>319</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, paragraph 6.

<sup>320</sup> See paragraphs 6.81 and 6.83.

the likely effectiveness of NARM and evaluative PCDs. There are different ways in which companies can respond to flexibility in output definition, and we consider it important that GEMA's regulatory approach encourages the use of flexibility in ways that are consistent with delivering appropriate benefits to customers over the longer-term. We do not consider the outperformance wedge to provide an effective way of doing this as it involves treating all outperformance in the same way.

- *UMs*

6.150 While GEMA has pointed to information asymmetry and associated outperformance concerns related to its use of UMs,<sup>321</sup> we consider it important to recognise the extent to which GEMA's much greater use of UMs in RIIO-2 (than in previous controls, including RIIO-1) can be expected to improve its ability to set appropriately stretching and specified totex allowances. GEMA pointed to estimates of UMs being used to provide as much as an additional £10 billion in RIIO-2 (over and above baseline totex). GEMA's use of UMs helps to avoid the need for it to assess totex requirements as part of the price control, in contexts where the information available at the point in time when it makes its final determinations may be relatively limited. By deferring the point at which it needs to determine allowance levels (and any associated PCDs), GEMA has adopted an approach that should leave it much better placed to identify and respond to the relevant risks associated with its setting of totex allowances.

6.151 GEMA has noted that the BPI (which it used for the setting of baseline totex allowances) will not apply to allowances set using UMs, and that the scope for information asymmetry remains, particularly in a context where UMs may be associated with very large, bespoke projects.<sup>322</sup> We note that that BGT<sup>323</sup> and Citizens Advice<sup>324</sup> also raised concerns over the adequacy of UMs in addressing concerns associated with information asymmetry. However, we note that these concerns relate to projects, mechanisms and decisions that GEMA has not yet faced in circumstances that cannot yet be known. It is too early to assess the effectiveness of these mechanisms, and we do not accept that these mechanisms will not give GEMA the opportunity significantly to address the information asymmetry which it has relied on in justifying the outperformance wedge.

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<sup>321</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, paragraph 2.

<sup>322</sup> GEMA response of 1 July 2021 to the questions arising from the Outperformance Wedge Joint Hearing on 22 June 2021, paragraph 2.

<sup>323</sup> See paragraph 6.736.81.

<sup>324</sup> See paragraph 6.83.

6.152 Our view is that GEMA has not shown why its use of UMs during RIIO-2, and asymmetry of information issues associated with them, should be regarded as supporting the introduction of the outperformance wedge. We do not consider that the potential challenges these future regulatory decisions may pose provide an appropriate basis for the introduction of GEMA's outperformance wedge, and in our view GEMA should consider how best to address those challenges as part of its UM decision making process.

***The outperformance wedge is not an appropriate or targeted way of addressing outperformance concerns: our assessment***

6.153 We consider that GEMA has not shown why a downward adjustment to the allowed cost of equity (through the application of an outperformance wedge) is an appropriate and targeted way of addressing relevant concerns associated with operational (ie ODI and/or totex) outperformance.

6.154 As was set out in paragraphs 6.127 to 6.134, we consider the ODI arrangements to give GEMA a broad range of potential ways in which it can manage the risks to customers associated with outperformance, and note that GEMA has made a wide range of changes to its design and calibration of ODIs for RIIO-2 to reflect its assessment of those risks. We do not consider GEMA to have identified sufficiently why it considers ODI outperformance in RIIO-2 to be probable, or why a further regulatory response was merited. To the extent that a further regulatory response was considered appropriate, we do not consider GEMA to have shown why that could not be provided for within the design and calibration of the ODI arrangements.

6.155 We do not consider the application of a downward adjustment to the cost of equity to provide a targeted way of addressing totex outperformance concerns. As was set out in paragraph 6.137, the potential effects of information asymmetries will be more straightforward to address in relation to some aspects of cost assessment (for example, where there is greater scope for benchmarking) than others, and therefore we consider that careful attention to potential sources of totex outperformance is merited. GEMA's own assessment of work mix and deferral issues associated with the definition of required price control outputs in RIIO-1 highlighted one reason why this is important: because some totex outperformance may be achieved as a result of a lack of robustness in terms of the specification of what companies have been funded to deliver. We consider that GEMA has not shown that the introduction of the outperformance wedge represented an appropriately targeted response to the totex outperformance concerns it has identified.

6.156 We note GEMA's comments on the approach taken by the CMA in the PR19 Redetermination,<sup>325</sup> where an adjustment was made to allowed returns to reflect an identified asymmetry in incentive design, but consider the circumstances that arose in that context to differ in a range of material ways from that which GEMA faced. We note, in particular, that the issue faced in that context concerned asymmetries in Ofwat's incentive design (rather than broader concerns over information asymmetries), and that the CMA considered that a change to the structure of the extensive set of ODIs Ofwat had developed through its price control process would be very difficult for the CMA to implement effectively as part of the Redetermination process, including because of the significant practical challenges associated with testing and proposing alternatives within the timescale of the redetermination.<sup>326</sup>

6.157 In its response to our provisional determination, GEMA submitted that it is not possible to fully eliminate the risk of outperformance due to information asymmetry simply through calibration of ODIs and totex, as these rely upon information from network companies.<sup>327</sup> In line with our comments in paragraph 6.147, we do not consider it appropriate to view the overall purpose of regulatory tools and actions that may be used in this context as being to 'eliminate' relevant risks, and consider there to be a range of ways in which GEMA can (and indeed does) seek to lessen, counter and otherwise guard against the effects of information asymmetries that includes - but also goes well beyond - approaches to ODI and totex calibration. As we noted in paragraphs 6.128 to 6.129, for ODIs, GEMA has a broad range of potential ways in which it can manage the risks to customers associated with information asymmetry including through choices over metric definition and specification, the stringency of target setting, choice of incentive rates, and the use made of caps, collars and deadbands. We do not consider GEMA to have identified sufficiently why a further regulatory response was merited, given the availability of such options for addressing risks associated with outperformance through the design and specification of the ODI and totex arrangements.

***The outperformance wedge has been applied in an arbitrary and discriminatory way: our assessment***

6.158 Our view is that GEMA has not provided a sufficient basis to justify the different levels of effective challenge between licensees that resulted from the

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<sup>325</sup> See paragraph 6.75.

<sup>326</sup> [PR19 Redetermination](#), paragraphs 7.48 and 9.1343.

<sup>327</sup> GEMA Response to PD, paragraph 95.



application of the outperformance wedge. GEMA's primary justification in its Response for the differences between licensees was that they were 'negligible' once totex uncertainty is factored in.<sup>328</sup> In support of this, GEMA said that under a Net Zero 2 totex scenario<sup>329</sup> the level of totex outperformance that would be required in order to offset the outperformance wedge was similar for all licensees across all sectors, in a range of between 1.1% and 2.4%.<sup>330</sup>

- 6.159 We consider it to be plainly the case that the difference between licensees under the Net Zero 2 totex scenario pointed to by GEMA is not negligible, given that on GEMA's own assessment the effective totex challenge required of some licensees (in order to offset the effect of the wedge) is as much as 1.3% of forecast totex higher than that faced by some others. In its response to our provisional determination, GEMA said that drawing any inference from this kind of comparison would require a better understanding of the difference between forecast totex and the totex scenarios used by GEMA, and that neither GEMA nor licensees had provided an independent view of forecast totex across all licensees.<sup>331</sup> However, we consider this observation to further highlight the lack of adequate support for GEMA's stated view that the differences between licensees are negligible once totex uncertainty is factored in, in a context where there were material differences between licensees under both of the scenarios in relation to which evidence was presented.
- 6.160 When questioned on these differences at the joint hearing, GEMA said it thought that the scope to benefit from information asymmetry was probably positively correlated with uniqueness, that with an energy company like NGG that scope to benefit is probably higher, and pointed to that as giving it comfort with respect to the differences in effective totex challenge.<sup>332</sup> GEMA also said that it considered the backstop to deal with concerns over discriminatory effects, because the size of the true-up it provides for is aligned with the size of the wedge.<sup>333</sup>
- 6.161 We do not consider these points to provide sufficient justification for the differences in effective totex challenge that are implied by the approach GEMA has adopted. In line with our comments in paragraphs 6.137 and 6.150 to 6.151, we consider the uniqueness of projects and activities that companies undertake to be a relevant factor when considering both the likely extent of

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<sup>328</sup> [GEMA Response A](#), paragraph 338.

<sup>329</sup> A scenario for future energy sector developments that was considered as part of the totex assessment process.

<sup>330</sup> [GEMA Response A](#), paragraph 338.

<sup>331</sup> GEMA Response to PD, paragraph 100.

<sup>332</sup> Outperformance Wedge Joint Hearing Transcript, 22 June 2021, page 129, lines 3–7.

<sup>333</sup> Outperformance Wedge Joint Hearing Transcript, 22 June 2021, page 133, lines 18–25, and page 134 line 1.

information asymmetry, and the options a regulator has available when seeking to address it. However, we are not satisfied that GEMA's development of the outperformance wedge was based on, or otherwise aligns with, a reliable assessment of the likely implications of this issue for the probability or scale of outperformance (taking into account the other changes GEMA has introduced that aim to address this issue, including the use of lower cost sharing rates). Also, we do not consider the inclusion of the backstop arrangements removes the need for an appropriate justification for the differences in the scale of the effective totex challenge implied by the outperformance wedge.

- 6.162 Our view is that the outperformance wedge results in differences in the scale of the effective totex challenges faced by different licensees that appear to be arbitrary and discriminatory and that have not been sufficiently justified by GEMA.

***The outperformance wedge undermines performance improvement incentives, including as a result of the 'backstop': our assessment***

*The view that 25 bps of outperformance can be achieved as a matter of course*

- 6.163 We note that GEMA's assessment that performance incentives would be undiminished by the introduction of the outperformance wedge appears to rely, to a significant degree, on its view that outperformance of 0 – 25 bps RoRE reflects information asymmetry rather than effort such that companies are likely to achieve it as a matter of course.<sup>334</sup> We do not consider GEMA to have identified a reliable basis for holding that view.
- 6.164 We commented on the reliability of GEMA's assessment of historical evidence in paragraphs 6.102 to 6.120. We note, though, that GEMA's assessments of RIIO-1 outperformance referred to some circumstances where outperformance does appear to have been achieved as a matter of course. For example, as was noted in paragraph 6.131, the SARA and EEI ODIs provided GDNs with an average of around 31 bps of RoRE outperformance in RIIO-1, and GEMA's comments suggest that this (or least a material portion of this) was achieved without effort because the ODI targets did not sufficiently reflect the leakage reductions that would result from the repex work that GDNs had (separately) been funded to deliver.<sup>335</sup>

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<sup>334</sup> [GEMA Response A](#), paragraph 350.

<sup>335</sup> GEMA response to RFI GEMA 003, Tables 7 & 8.

6.165 We do not consider this to imply that the scope for such outperformance should be viewed as expected. Rather, we consider this example to highlight the importance of regulators assessing the risks that may be associated with applying financial incentives to such metrics, and putting in place appropriate protections where there look to be material risks of unanticipated and undesirable interactions arising (as may be particularly the case, for example, when a novel metric or approach is being used).

6.166 We note that this comment does not ignore the scope for ‘unknown unknowns’ that GEMA pointed to. Rather, it reflects the fact that both the likelihood, and the likely effects, of such unanticipated interactions arising will depend on the design of and calibration of the price control. We consider a number of the RIIO-2 changes that GEMA has introduced to provide a means of guarding against the effects of unanticipated circumstances, including the use that has been made of deadbands and caps and collars for ODIs, and the scope for ex-post review provided for by evaluative PCDs.

#### *The double ratchet effect*

6.167 We consider that it is to be expected that companies will seek to take into account the potential impacts of their actions on future regulatory decisions when developing their plans, and that means that companies would be expected to have at least some regard to the likely impact of their RIIO-2 performance on future decisions with respect to the application of an outperformance wedge. While we note GEMA’s view that the feedback loop would be weaker than it would be for cost targets, we nevertheless consider that companies would be likely to expect GEMA’s RIIO-3 decision in relation to the outperformance wedge (if it were to be introduced) to be affected by evidence of actual outperformance in RIIO-2, and for this to have some bearing on RIIO-2 performance incentives.

6.168 GEMA said that its approach had shown that it was not mechanically applying RIIO-1 outperformance when determining the outperformance wedge for RIIO-2.<sup>336</sup> However, given the novelty of the outperformance wedge, and the extent to which GEMA has emphasised its view that it is modest given historical evidence, we consider it likely that companies would expect both the level of the outperformance wedge and the role of the backstop arrangements to be reviewed in the light of RIIO-2 evidence. In line with this, our view is that the outperformance wedge would be expected to dampen performance improvement incentives because of the scope for observed RIIO-2 outperformance to influence GEMA’s approach to the calibration of the

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<sup>336</sup> Outperformance Wedge Joint Hearing Transcript, 22 June 2021, page 145, lines 24–25.

outperformance wedge, and use made of the backstop, in RIIO-3 and subsequent controls. We consider the risk of harmful effects on performance incentives arising to highlight the importance of seeking to address outperformance concerns in an appropriately targeted manner.

*The 'backstop' and the creation of an incentive deadband.*

6.169 We do not consider GEMA's view that there is only around a 7% chance companies will find themselves in the 0-0.25% deadband,<sup>337</sup> to be a reliable assessment. That view was based on the totex outcomes included within GEMA's historical dataset of energy price controls, and we commented on the interpretation of that evidence in paragraphs 6.113 to 6.120. The RIIO-2 changes have been designed to significantly limit the scope for outperformance relative to past controls, and we consider it important to take those changes into account if seeking to estimate the likelihood of companies ending RIIO-2 in the 0-0.25% range. We also consider it important to take account of uncertainty associated with price control outcomes, and that the existence of the deadband would be expected to affect the distribution of forecast outcomes when options are being assessed during the price control period.

6.170 The likely effect of the deadband on performance incentives is difficult to predict (including because of the existence of other incentive pressures, for example from the ongoing benchmarking of costs, as noted by GEMA).<sup>338</sup> We recognise that there are inevitably trade-offs associated with the introduction of this kind of measure, but consider the scope for it to dull performance improvement incentives to further emphasise the importance of regulatory responses being appropriately targeted.

*Our overall assessment in relation to performance incentives*

6.171 Our view is that the outperformance wedge could be expected to dampen performance improvement incentives, both because of the scope for observed RIIO-2 outperformance to influence GEMA's approach to the calibration of the outperformance wedge (and use made of the backstop) in RIIO-3 and subsequent controls, and because of the potential effect of the deadband. We consider the scope for these adverse effects to arise to highlight the importance of seeking to identify whether the underlying issues of concern could be addressed in better targeted and less harmful ways.

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<sup>337</sup> GEMA Response A, paragraph 355.

<sup>338</sup> GEMA Response A, paragraph 356.

***The introduction of the outperformance wedge dampens investment incentives, including by undermining regulatory integrity and increasing regulatory risk: our assessment***

*Marginal incentives to invest*

- 6.172 We were not persuaded that the introduction of the outperformance wedge would be likely to have a material impact on marginal investment incentives. We consider an adjustment to the cost of equity a poorly targeted way of addressing concerns over the scope for operational outperformance (in line with our comments in paragraphs 6.153 to 6.155), and note that GEMA's approach may mean that the cost of equity allowance provided for in relation to an additional discretionary project (funded through a UM) effectively assumes that 25 bps of operational outperformance is achievable in relation to that project.<sup>339</sup>
- 6.173 However, while that would give rise to a potential source of distortion to investment decisions, we were not persuaded that this would be expected to have a material impact, given the broader range of factors that can be expected to affect investment decisions. In forming this view, we note that GEMA's overall approach to setting the cost of capital (in line with that typically adopted in price controls) involves providing an appropriate allowance on average across the range of existing and potential new investments, and thus effectively relies on broader constraints and pressures for the provision of appropriate marginal investment incentives.
- 6.174 In response to our provisional determinations, the appellants submitted that we should revisit this assessment, and pointed to the scale of the investments that may be required to facilitate delivering Net Zero, and the scope for the outperformance wedge to materially delay the provision of such investments.<sup>340</sup> We do not consider the appellants to have demonstrated that material adverse effects on marginal investment incentives would be likely to arise, given the specific (outperformance) circumstances in which the potential for distortion might arise, and the extent to which other factors (including implications for future regulatory assessments) can be expected to affect investment incentives.

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<sup>339</sup> The extent to which this applies would depend on the overall expected outperformance of the relevant company (given the operation of the 'backstop').

<sup>340</sup> For example, NGN Response to PD, paragraphs 25–26.

### *Regulatory integrity and increasing regulatory risk*

- 6.175 We consider that GEMA's introduction of the outperformance wedge, as a new mechanism that would apply when determining the allowed cost of equity, should be viewed as a material change to the regulatory arrangements. However, we note that GEMA consulted extensively on its proposals, and developed and refined those proposals through its consultation processes. GEMA's development of the outperformance wedge stemmed from a recommendation by three of the authors of the UKRN Report, that regulators seek to arrive at their best estimate of the impact of future outperformance on regulatory returns (including through reviewing data on past outperformance), and reduce ARs to reflect this (as set out in paragraphs 6.3 to 6.4). We do not consider that GEMA's overall approach in seeking to assess and develop this recommendation should be regarded as having caused harm to regulatory integrity or regulatory certainty. Rather, we consider it important that regulators consider carefully the risks of consumers not being appropriately protected by price control arrangements and seek to develop effective responses to those risks where they have been identified as material.
- 6.176 We have, however, found there to be significant problems with the outperformance wedge, including that even if GEMA's concerns about the likelihood of operational outperformance in RIIO-2 (given the broader set of arrangements GEMA had put in place) had been substantiated, the outperformance wedge would be a poorly designed mechanism to address those concerns. Given these problems, our view is that there is a realistic possibility that the outperformance wedge, if introduced, would also undermine broader regulatory integrity and certainty, which could result in increased costs to consumers over time.

### *Financeability*

- 6.177 We note the appellants' submissions with respect to the impact the introduction of the outperformance wedge may have on financeability. Given our conclusions on other aspects of GEMA's decision to introduce the outperformance wedge, we have not considered it necessary to form a view on financeability issues.

### ***Our conclusions***

- 6.178 Our view is that the overall extent of operational outperformance in RIIO-1, and evidence on totex outperformance in previous energy price control periods, provided strong support for GEMA treating the scope for operational outperformance as an important risk area for RIIO-2.

6.179 We recognise that regulators will inevitably face information asymmetries, and that those asymmetries can make the setting of appropriately stringent and robust price controls challenging. We consider that this may be particularly so in relation to some areas of totex assessment, for example, where projects are more bespoke (such that GEMA is more reliant on information from the company whose allowance is being set), and/or where the associated deliverables (that allowances are intended to fund) provide long-term benefits and are difficult to specify (in line with the issues highlighted in paragraphs 6.136 to 6.145).

6.180 GEMA introduced a range of significant changes in RIIO-2 aimed at addressing its concerns over information asymmetry related to these and other areas of totex assessment, and to ODIs. The outperformance wedge was designed to achieve benefits for consumers in RIIO-2 based on GEMA's assessment that operational outperformance was probable, notwithstanding these changes.

6.181 Our view is that it was appropriate for GEMA, having defined and calibrated the totex and ODI arrangements, to take a step back and consider whether those arrangements overall could be expected to provide for an appropriately stringent and robust price control, and if not, to identify whether additional (and potentially novel), responses were appropriate. However, our view is that GEMA has not demonstrated sufficiently why the extensive set of tools it used for RIIO-2 should be regarded as providing insufficient protection for customers. Based on the evidence provided to us, we have found that:

- a) There were a number of errors in GEMA's analysis of the extent to which operational outperformance in RIIO-2 should be viewed as probable, including that:
  - (i) GEMA's assessment of totex performance in non-energy sectors was not reliable and did not support its view that there was clear and compelling evidence of operational outperformance across regulated sectors (see paragraphs 6.102 – 6.108).
  - (ii) GEMA's analysis of its dataset of historical totex performance in the energy sector did not provide a basis for drawing any firm conclusions with respect to the likely extent of RIIO-2 operational outperformance. It took no account of the sources of past totex outperformance, involved the use of a highly aggregated and averaged approach (across a wide range of different controls over time), and thus provided little basis upon which to draw reliable inferences concerning the likely scope for outperformance in RIIO-2, particularly in a context where GEMA had introduced substantial

changes to the regulatory arrangements (see paragraphs 6.109 – 6.120).

- (iii) Although we consider that asymmetry of information can be described as a structural feature of regulated sectors (in line with GEMA's comments), this in itself did not provide a sufficient basis for concluding that outperformance should be viewed as probable. Developing a reasonable understanding of the potential relevance of information limitations, and determining how they should be taken into account, is central to the design and calibration of price controls, and the likely scope for outperformance would inevitably be affected by the range of design choices made in the development of RIIO-2, the likely implications of which merited careful attention (see paragraphs 6.95 to 6.97, and 6.117 to 6.119).
- (iv) GEMA's residual outperformance analysis did not provide a reliable basis for assessing the implications of RIIO-2 changes on the likely scope for outperformance, as there were a range of other highly relevant RIIO-2 changes that this analysis did not take account of (see paragraphs 6.121 to 6.122).
- (v) GEMA did not demonstrate sufficiently why, given the stringent approach it took to the design and calibration of ODIs and its own comments on the appropriateness of the levels of challenge applied, ODI outperformance in RIIO-2 should be treated as probable (see paragraphs 6.127 to 6.134).
- (vi) GEMA did not demonstrate sufficiently why the extensive set of tools it used for RIIO-2 should be regarded as providing insufficient protection for customers in relation to the stringency of baseline totex allowances, including because its approach already involved the use of a confidence-based approach to setting cost sharing factors, and the application of a stretching OE target (see paragraphs 6.136 to 6.141, and 6.148).
- (vii) The scope for operational outperformance associated with totex allowances that are linked to evaluative PCDs, and/or that arise through the use of UMs, will depend on decisions by GEMA that it has not yet made (including ex-post evaluative PCD assessment, and future ex-ante UM assessments), and GEMA has not demonstrated sufficiently why outperformance in relation to these totex allowances should be viewed as probable notwithstanding the role of these future decisions (see paragraphs 6.141 to 6.152).



- b) Even if GEMA's concerns about the likelihood of operational outperformance had been substantiated, the outperformance wedge would be a poorly designed mechanism to address these concerns, including because:
  - (i) The design and calibration of the ODI arrangements gives GEMA a broad range of potential options through which it can manage the risks to consumers associated with unmerited ODI outperformance in a more targeted way, and GEMA erroneously concluded that these options should be viewed as insufficient in this respect (see paragraphs 6.127 to 6.134, and 6.154).
  - (ii) It is a poorly targeted way of addressing risks to consumers associated with totex outperformance, and results in differences in the scale of the effective totex challenges faced by different licensees that appear to be arbitrary and discriminatory and that have not been sufficiently justified by GEMA (see paragraphs 6.155 to 6.162).
  - (iii) It can be expected to dampen performance improvement incentives, both because of the scope for observed RIIO-2 outperformance to influence GEMA's approach to the calibration of the outperformance wedge (and use made of the backstop) in RIIO-3 and subsequent controls), and because of the potential effect of the deadband (see paragraphs 6.163 to 6.171).
- c) Given the problems identified in a) and b), there is a realistic possibility that the outperformance wedge, if introduced, would also undermine broader regulatory certainty which could result in increased costs to consumers over time (see paragraphs 6.175 to 6.176).

## **Our determination**

6.182 For the reasons given above, we determine that GEMA was wrong to introduce the outperformance wedge because:

- a) GEMA's assessment was based on errors of fact and law in its analysis of and conclusions on:
  - (i) The extent to which operational outperformance in RIIO-2 should be viewed as probable (see paragraph 6.181a)).
  - (ii) The scope for addressing risks associated with operational outperformance in more targeted ways (see paragraphs 6.153 and 6.181b)(i)).

- (iii) The extent to which the effects of the outperformance wedge differ between licensees, and the justification for those differences (see paragraph 6.162 and 6.181b)(ii)).
  - (iv) The likely effects of the outperformance wedge on performance improvement incentives (see paragraph 6.181b)(iii)).
  - (v) The scope for the outperformance wedge to have adverse effects on regulatory certainty and as a result increase costs to consumers over time (see paragraph 6.181c)).
- b) GEMA failed to give appropriate weight to its best practice duty, including in particular the requirement to have regard to the principle that its regulatory activities should be targeted (see paragraphs 6.153 to 6.155, and 6.181).

## Relief

- 6.183 Having found that GEMA was wrong to implement an outperformance wedge on the cost of equity for RIIO-2, our view is that the decision to introduce the outperformance wedge should be quashed. This was the relief sought by all the appellants, and our approach to implementing it is set out in chapter 17.
- 6.184 We considered whether any other approaches would be open to us which would address those of GEMA's concerns which we accepted as valid, and which would not have the disadvantages of the outperformance wedge. For example, we considered whether alternative approaches to sharing savings from totex outperformance might limit the ability of companies to benefit from information asymmetry without adversely impacting on incentives. However, as set out in paragraph 6.181, our view is that GEMA has not demonstrated sufficiently why the extensive set of tools it used for RIIO-2 should be regarded as providing insufficient protection for customers.
- 6.185 In addition, our view is that the scope for operational outperformance associated with totex allowances that are linked to PCDs, and/or that arise through the use of UMs, will depend on decisions by GEMA that it has not yet made, and that GEMA has not demonstrated sufficiently why outperformance in relation to these totex allowances should be viewed as probable notwithstanding the role of those future decisions.
- 6.186 In its response to our provisional determination, GEMA said that the separation of Joined Grounds A and B reflected the administration of the appeals, rather than the decision that GEMA had taken, and that GEMA may have set a lower allowed return on equity than 4.55% in the absence of its

closely related decisions on the expected outperformance adjustment and the ex-post true-up mechanism.<sup>341</sup> GEMA said that we should consider and address whether an allowed return on equity of 4.3% (ie the level GEMA had set after the application of the outperformance wedge) is wrong. Citizens Advice also submitted that it was important to consider this interlinkage.<sup>342</sup>

6.187 We note that in its response to the appellants' notices of appeal, GEMA explicitly identified its assessment of the allowed return on equity as having involved three separate steps, with its assessment of the outperformance wedge then treated as a distinct part of its approach to determining the allowed return on equity for RIIO-2.<sup>343</sup> GEMA said that its methodology allowed issues to be tackled separately,<sup>344</sup> and we note that – consistent with this – its decision to apply an outperformance wedge relied on reasoning, and an evidence base, that differs substantively from that which underpinned the other parts of its allowed return assessments that were appealed under Joined Ground A.<sup>345</sup> We do not consider our finding in relation to the outperformance wedge (Joined Ground B) to have any knock-on implications for our assessment of the other steps GEMA used to determine an appropriate allowed return on equity, submissions in relation to which were considered in our assessment of Joined Ground A.

## 7. Joined Ground C: Ongoing efficiency

### Introduction

7.1 Ongoing efficiency (**OE**) is a cost reduction applied by GEMA to account for expected productivity improvements in the sector.<sup>346</sup> OE represents the ability of even the most productive companies in the sector to increase their productivity over time through, for example, adopting new technologies. OE differs from catch-up efficiency gains, where companies lagging in efficiency catch-up with the performance of the industry leaders.<sup>347</sup>

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<sup>341</sup> GEMA Response to PD, paragraph 119.

<sup>342</sup> Citizens Advice Response to PD, paragraph 7.

<sup>343</sup> As described, for example, in *McCloskey (GEMA)*, paragraph 12.

<sup>344</sup> *McCloskey (GEMA)*, paragraph 13.

<sup>345</sup> We note that MAR evidence, which GEMA used in its cost of equity cross-checks, and as supportive of its views on expectations of operational outperformance, could be viewed as an exception to this. We assessed the relevance of MAR evidence to expectations of RIIO-2 outperformance in paragraphs 6.123–6.124, and its relevance to Joined Ground A issues in paragraphs 5.703 to 5.705.

<sup>346</sup> Productivity is commonly defined as 'a ratio of a volume measure of output to a volume measure of input use' Organisation for Economic Co-operation and Development (OECD) (2001), [Measuring Productivity OECD Manual](#), page 11.

<sup>347</sup> Catch-up efficiency is the gains less efficient companies make by learning from more productive companies. Catch-up and the efficiency benchmark are discussed in more depth in Chapter 12 (SGN Ground 4 – Efficiency benchmark).

- 7.2 Cadent, NGN, SGN, SPT and WWU submitted appeals related to the OE ground. We have joined these grounds and discuss all the appellants' arguments relating to OE in this chapter.

## Background to the RIIO-2 Decision

- 7.3 In its Decision, GEMA set the OE challenge at 1.15% per year for capex and repex, and 1.25% per year for opex for all network companies.<sup>348,349</sup>
- 7.4 We use the term OE challenge to refer to the sum of the core OE challenges of 0.95% for capex and repex and 1.05% per year for opex, and the innovation uplift of 0.2%, which was applied to capex, repex and opex. The GEMA innovation uplift increased the OE challenge to reflect the extra innovation funding companies received from consumers.
- 7.5 In coming to these decisions, GEMA aimed up within the range offered by its consultants, CEPA.<sup>350</sup> CEPA was commissioned by GEMA to provide advice on the topic of OE and produced three reports: the first in June 2019, a second in May 2020 and a third in November 2020. In the remainder of this background section we describe the evidence in the three CEPA reports and then explain how GEMA took account of that evidence when setting the OE challenge.

### ***CEPA June 2019 report***<sup>351</sup>

- 7.6 GEMA commissioned this report from CEPA to help address two issues. First, how GEMA might use growth accounting data to assess OE in RIIO-2. Second, what other evidence GEMA might consider.<sup>352</sup>
- 7.7 CEPA focused on four areas relating to the growth accounting data:
- (a) **Choice of dataset.** CEPA said that EU KLEMS (**EU KLEMS**) was the preferred source.<sup>353</sup> However, it need not be the only source that GEMA considered and there was value in supplementing EU KLEMS with cross-checks from other credible sources.<sup>354</sup>

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<sup>348</sup> [GEMA FD Core Document](#), paragraph 5.20.

<sup>349</sup> This was a reduction from the decision in the DD, where GEMA decided on an OE challenge of 1.2% for capex and repex and 1.4% per year for opex. [GEMA DD Core Document](#), paragraph 5.6.

<sup>350</sup> [GEMA FD Core Document](#), paragraph 5.21.

<sup>351</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019.

<sup>352</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019, page 5.

<sup>353</sup> The EU KLEMS provides data on measures of economic growth, productivity, employment, capital formation, and technological change at the industry level for all European Union member states, Japan, the United Kingdom and the United States. See: [Home - EU KLEMS release 2019](#).

<sup>354</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019, section 2.1.1.

- (b) **Choice of comparators.** CEPA said that GEMA should consider three principles when choosing comparator sectors. First, sectors that undertook similar activities to the cost area being examined were the most appropriate comparators. Second, sectors with limited competition may have more inefficient firms within them and so give less accurate estimates of what is achievable at the frontier. Third, sectors that had seen one-off productivity changes caused by atypical or exogenous events might be poor comparators for RIIO-2.<sup>355</sup>
- (c) **Choice of time period.** CEPA said that GEMA might find it appropriate to consider sensitivities across time periods and business cycle definitions to generate a range of estimates based on historical growth accounting data. CEPA said that there might be value in comparing the range of estimates produced from historical growth accounting data with Office of Budget Responsibility (**OBR**) and BoE productivity growth forecasts.<sup>356</sup>
- (d) **Choice of productivity metric.** CEPA identified two common measures of output used to measure productivity. First, gross output (**GO**), which is calculated using all the inputs that are used for production in a sector of the economy, including intermediate inputs purchased from other sectors. Second, value-added (**VA**), which only considers capital and labour as inputs. CEPA said that there was no consistent expert view on which productivity measure was more relevant for measuring OE.<sup>357</sup>

7.8 CEPA said that there were three additional issues that GEMA could consider alongside growth accounting data. First, GEMA should clearly understand the efficiency assumptions built into the companies' expenditure forecasts.<sup>358</sup> Second, information on historical performance should be interpreted with caution because it would be difficult to separate OE from catch-up efficiency. Third, an efficiency challenge based on historical data may not reflect what was currently achievable. For example, structural changes may enable companies to push towards a more challenging frontier that was not previously considered achievable. However, while an additional efficiency challenge might be conceptually valid, there were implementation challenges, including:

- (a) identifying a specific source of efficiency improvement that was not already captured in companies' forecasts nor captured in a more generic efficiency challenge based on growth accounting data;

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<sup>355</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019, section 2.1.2.

<sup>356</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019, section 2.1.3.

<sup>357</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019, section 2.1.4.

<sup>358</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019, section 2.2.1.

- (b) finding a sound approach to isolate and quantify the size of any such effects; and
- (c) establishing why any existing benefits would be expected to recur over time.<sup>359</sup>

### **CEPA May 2020 report<sup>360</sup>**

7.9 This CEPA report, which built on its earlier report, said that a range for the OE challenge could be based on considering four different types of evidence.

- a) Growth accounting data, based on EU KLEMS, with different approaches leading to different productivity growth estimates.
- b) Productivity growth forecasts for the UK economy.
- c) Historical performance of the companies.
- d) Sector-specific drivers of productivity improvements in the gas and electricity networks. For example, the innovation funding received by the network companies during RIIO-1.<sup>361</sup>

7.10 Based on analysis of EU KLEMS and the VA measures CEPA identified two reference ranges: 0.6% to 1.0% for capex and repex (total factor productivity)<sup>362</sup> and 1.0% to 1.2% for opex (labour productivity (**LP**) at constant capital).<sup>363</sup>

7.11 CEPA said that GEMA should consider three further pieces of evidence when deciding where to set the OE challenge:

- (a) Give some weight to the GO measures, which supported a lower bottom-end of the range for the OE challenge of 0.5%.<sup>364</sup>
- (b) OBR and BoE productivity growth forecasts, which supported a higher top-end of the range for opex and a lower value for capex/repex.<sup>365</sup>
- (c) Ensuring a reasonable return for consumers from the innovation funding provided in RIIO-1. This could support an innovation uplift of up to 0.2% depending on the extent to which GEMA believed that innovation benefits

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<sup>359</sup> CEPA, RIIO-GD2 cost assessment – frontier shift, June 2019, section 2.2.3.

<sup>360</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020.

<sup>361</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 5.

<sup>362</sup> Total factor productivity is a measure of productive efficiency which measures how much output can be produced from a certain amount of inputs.

<sup>363</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 5.

<sup>364</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 5.

<sup>365</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 6.

were already in the companies' RIIO-2 business plans.<sup>366</sup> CEPA said that its estimate involved judgements being made in multiple areas. Therefore, to avoid spurious accuracy, it had tried to keep the analysis simple and had tested the robustness of the overall conclusion to different assumptions.<sup>367</sup>

7.12 CEPA said that it had not included any adjustment to reflect Coronavirus (COVID-19) or Brexit.<sup>368</sup>

7.13 These considerations led CEPA to create a final range for GEMA to consider of 0.5% to 1.2% for capex and repex, and 0.5% to 1.4% for opex.<sup>369</sup>

### ***CEPA November 2020 report***<sup>370</sup>

7.14 This report discussed the responses to GEMA's DD proposals for the OE challenge and the issues raised in the CEPA May 2020 report.<sup>371</sup> CEPA said that respondents agreed that it was important to use a range of evidence to inform the OE challenge. There was also 'broad support' for the types of evidence that CEPA considered, although some respondents, particularly the GDNs and TOs, disagreed with the interpretation and weighting placed on different pieces of evidence. CEPA said that the innovation uplift was outside the scope of this November report.<sup>372</sup>

7.15 CEPA said that, in light of the levels of ambition set out by the companies, it seemed reasonable to set 0.5% as a lower bound for the OE challenge for capex/repex and opex.<sup>373</sup>

7.16 CEPA said that, in setting the OE challenge, GEMA should judge how much weight it placed on the following factors that CEPA considered would together support a more stretching OE challenge of up to 0.95% on capex/repex and 1.05% on opex:<sup>374</sup>

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<sup>366</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 6.

<sup>367</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 24.

<sup>368</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 6.

<sup>369</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 6.

<sup>370</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020.

<sup>371</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 4.

<sup>372</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 5.

<sup>373</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 7.

<sup>374</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, pages 7-8.

- a) Regulatory precedent, including the recent CMA PR19 Provisional Findings which set an OE challenge for totex of 1%.
- b) OE challenges suggested by most ambitious companies, such as 1% (totex) by SGN, 1% (totex) by SPT, and 1.1% (opex) by NGET and NGG.
- c) Placing greater weight on VA productivity measures, and/or economy-wide historical productivity improvements.
- d) Consideration of LP measures in setting the OE challenge for opex.
- e) Placing less weight on the wider productivity slowdown in recent years, which would effectively see the productivity puzzle as being less relevant for regulated utility sectors, eg because of greater revenue and investment certainty in the regulated sectors.
- f) Considering the large productivity decline in 2009 as an outlier, which excessively dragged down the 1997 to 2016 average for productivity growth.
- g) The benefits of innovation funding provided in RIIO-1 in improving the potential for the network companies to achieve productivity levels closer to those in the better performing competitive sectors.

7.17 CEPA, in a witness statement for GEMA, said that there were two main reasons for the changes between the figures in the May 2020 report and the November 2020 report. First, CEPA agreed with GEMA that to avoid any confusion, the top-end of the range set out in the CEPA report would be consistent with some consideration of GO productivity measures. Second, the CEPA approach was revised and the published EU KLEMS final figures were used, rather than using CEPA's original calculations, which were based on the published method.<sup>375</sup>

### **GEMA's FD**

7.18 GEMA used the methodology set out in the CEPA November report to set the OE challenge.<sup>376</sup> GEMA set OE challenges of 1.15% for capex and repex and 1.25% for opex.<sup>377</sup> These aggregate figures consisted of two components: the core OE challenge and the innovation uplift.

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<sup>375</sup> *Keane 1 (GEMA)*, paragraphs 124–128. The witness statement explains that the actual method used by the EU KLEMS providers to calculate the figures differed from the published method.

<sup>376</sup> [GEMA FD Core Document](#), paragraph 5.23.

<sup>377</sup> [GEMA FD Core Document](#), paragraph 5.20.



- a) Core OE challenge. GEMA set the core OE challenge at 0.95% for capex and repex and 1.05% for opex – the top of CEPA’s range. GEMA said that it had decided to set a stretching OE challenge that aimed up within the range considered by CEPA.<sup>378</sup>
  - b) Innovation uplift. GEMA set the innovation uplift at 0.2%, which was the estimate CEPA provided in its May 2020 report.
- 7.19 GEMA said that its decision to set the OE challenges at 1.15% and 1.25% was taken in the round, based on three important factors.
- a) First, a sense check which asked: if consumers were given some return on the funding they provided for innovation, what would that return be?
  - b) Second, the historical rate of improvement in RIIO-1, which was in excess of 1.2%.
  - c) Third, a comparative cross-check with the water sector. If the water industry could be expected to generate productivity improvements at 1% per year, without innovation stimulus, then the energy industry, which is technologically more dynamic and had more than ten years of innovation stimulus, should be able to do more.<sup>379</sup>
- 7.20 GEMA said that it had considered all the available evidence in the round and exercised judgement to determine a stretching but achievable OE target. It had considered the comparison with the historical productivity of competitive industries in the wider economy. It said that it had made a pragmatic comparison with the water sector. GEMA reasoned that if water companies, which had been given no innovation stimulus, had accepted a challenge to generate OE of 1.1% per year, then energy networks, which had been treated with ten years of innovation stimulus, should be able to do better. GEMA considered an overall challenge of roughly 1.2% per year reasonable from this perspective. It then cross-checked this number against the implied efficiency gains made by the frontier companies in RIIO-1 and satisfied itself that the target appeared an achievable one. GEMA said that its decision was well within the range of reasonable conclusions.<sup>380</sup>
- 7.21 We provide more detail on the individual parts of GEMA’s reasoning for its decision in the relevant subsections below.

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<sup>378</sup> [GEMA FD Core Document](#), paragraph 5.21.

<sup>379</sup> GEMA Clarification Hearing Transcript, 21 May 2021, page 149 line 14 to page 150 line 18.

<sup>380</sup> GEMA Closing Statement, Part I, paragraph 11.

## The grounds of appeal

- 7.22 Cadent, NGN, SGN, SPT and WWU all submitted appeals related to the OE challenge. Cadent, NGN, SPT and WWU appealed both the core OE challenge and innovation uplift. SGN appealed only the innovation uplift.
- 7.23 Cadent said that GEMA had erred in its determination of the OE challenge. It was wrong to rely exclusively on CEPA's highest estimate of productivity growth. GEMA was wrong to apply a 0.2% innovation uplift. In addition, GEMA had incorrectly assumed that Cadent's submitted costs embedded an OE challenge of 0.5%, when the correct value stated in Cadent's business plan was 0.94%.<sup>381</sup>
- 7.24 Cadent said that GEMA's decision in respect of Cadent's baseline totex allowance was wrong within the meaning of section 23D(4) of GA86. In particular, GEMA:<sup>382</sup>
- a) had failed properly to have regard to, and failed to give appropriate weight to, the interests of current, and in particular, future consumers and thereby its principal objective, by understating Cadent's efficient level of baseline totex;
  - b) had failed properly to have regard to, and failed to give appropriate (ie sufficient) weight to, its finance duty, by limiting Cadent's scope to recover costs that it necessarily and efficiently incurred in order to discharge its legal and regulatory obligations (including delivering the outputs);
  - c) had failed properly to have regard to, and failed to give appropriate (ie sufficient) weight to, its security of supply duty and its sustainability duty, in failing to consider the long-term effects of its failure to set Cadent's baseline totex allowance at an efficient level;
  - d) had failed properly to have regard to, and failed to give appropriate (ie sufficient) weight to, its best practice duty;
  - e) had given excessive, and therefore had failed to give appropriate, weight to its efficiency and economy duty;
  - f) had committed a number of errors of fact in respect of the evidence that was before it;

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<sup>381</sup> Cadent NoA, paragraph 1.4(a)(iii).

<sup>382</sup> Cadent NoA, paragraph 3.144.

- g) had adopted modifications that had failed to achieve, in whole or in part the effect stated by GEMA in respect of Cadent's baseline totex, which was to set baseline totex at an efficient level; and
- h) had erred in law, including as a result of:
  - (i) proceeding on the basis of no, or no adequate, evidential base in relation to a number of its conclusions;
  - (ii) failing in its duty of enquiry to take reasonable steps to gather the information needed to take an informed decision; and
  - (iii) assessing regressed costs in a manner that was discriminatory.

7.25 NGN said that the decision, regarding the core OE challenge and the innovation uplift for the gas distribution sector (both individually and in aggregate), was wrong on the following grounds:<sup>383</sup>

- a) By imposing an excessively stretching OE target (for the frontier company in particular), GEMA had failed under sections 23D(4)(a) and (b) of GA86 properly to have regard to and/or give appropriate weight to its principal objective under section 4AA(1) of GA86 and its statutory duties to:
  - (i) secure that licence holders were able to finance their licensed activities under section 4AA(2)(b) of GA86, given that the level of cost allowances set by GEMA undermined NGN's ability to recover its efficient costs; and
  - (ii) ensure that licence holders were granted appropriate incentives to increase efficiencies and that gas networks were secure, reliable and efficient. The level of cost allowances set by GEMA undermined the ability of GDNs (and the frontier company in particular) to deliver their outputs and also distorted their ongoing incentives for innovation.
- b) Further, with respect to the core OE challenge, by 'aiming up' within the range recommended by CEPA, and by failing to provide adequate reasons for dismissing evidence that supported a less stretching target, GEMA had failed under sections 23D(4)(a) and (b) of GA86 properly to have regard to and/or give appropriate weight to its duty under section 4AA(5A) of GA86 to have regard to the principles of best regulatory practice under which regulatory activities should be transparent, accountable and consistent. In its interpretation of CEPA's analysis of EU KLEMS, GEMA had also erred,

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<sup>383</sup> NGN NoA, paragraph 58.

wholly or partly in fact and in law by acting disproportionately, unfairly and/or in defiance of logic, failing properly to inquire, reaching conclusions without adequate supporting evidence and/or making mathematical or formula specification errors.

- c) By imposing an additional innovation uplift:
- (i) GEMA had departed from regulatory precedent in a way which failed, under sections 23D(4)(a) and (b) of GA86, properly to have regard to and/or give appropriate weight to its duty under section 4AA(5A) of GA86 to have regard to the principles of best regulatory practice under which regulatory activities should be transparent, accountable and consistent.
  - (ii) GEMA's assessment was also vitiated by a fundamental double-counting error. In introducing a 0.2% innovation uplift, GEMA had committed a number of material errors of assessment and disregarded or misrepresented relevant evidence, which led GEMA to err, wholly or partly in fact (section 23D(4)(c) of GA86), and in law (section 23D(4)(c) of GA86) (by failing to take into account relevant considerations, acting disproportionately, unfairly and/or in defiance of logic, failing properly to inquire, reaching conclusions without adequate supporting evidence and/or making mathematical or formula specification errors).

7.26 SGN said that GEMA had erred in its decision to apply an OE challenge of 1.2% in three respects.<sup>384</sup>

- a) Error 1 – the innovation uplift was unjustified.
- (i) GEMA had insufficient basis on which to conclude that historical innovation funding should lead to higher productivity in the sector relative to the wider economy, in comparator sectors, and beyond the range indicated by EU KLEMS.
  - (ii) GEMA had failed to assess the extent to which there was double-counting with the core OE challenge.
  - (iii) GEMA had failed to assess the extent to which there was double-counting with productivity improvements already captured in the company business plans used by GEMA to set allowances.

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<sup>384</sup> SGN NoA, paragraph 41.

- b) Error 2 – irrespective of Error 1, the methodology used to derive the level of the innovation uplift was wholly inadequate and based on a number of demonstrably false and/or inappropriate assumptions.
- c) Error 3 – the implementation of the innovation uplift resulted in an unjustified OE challenge.
  - (i) The innovation uplift was applied on top of an already stretching core OE challenge which was at the top of CEPA's range.
  - (ii) GEMA relied on inadequate and flawed reasoning to conclude that the resulting overall OE challenge of 1.2% was reasonable and achievable.

7.27 SGN said that the OE challenge applied by GEMA was wrong within the meaning of section 23D(4) of GA86. In particular, the SGN submitted the following:<sup>385</sup>

- a) GEMA had failed, within the meaning of sections 23D(4)(a) and (b) of GA86, to have due regard/give appropriate weight to the performance of its duties under:
  - (i) Section 4AA(1-1A) of GA86 (the duty to protect the interests of existing and future consumers) – robust, evidence-based regulation was in the consumer interest;
  - (ii) Section 4AA(2)(b) of GA86 (securing that licence holders are able to finance their activities) – the uplift underfunded GDNs' efficient costs;
  - (iii) Section 4AA(5) of GA86 (promoting efficiency and economy) – in light of the blunting of incentives to innovate; and
  - (iv) the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action was needed (section 4AA(5A) of GA86) – GEMA had failed to demonstrate either the need for an innovation uplift or that it was appropriate to set such an innovation uplift specifically at 0.2%.
- b) The innovation uplift was based on errors of fact within the meaning of section 23D(4)(c) of GA86: GEMA had double-counted productivity improvements already captured by the core OE challenge and in GEMA's baseline allowances derived from GDNs' business plans; CEPA's

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<sup>385</sup> SGN NoA, paragraph 44.

methodology to derive the level of uplift had been wholly inadequate; and GEMA's cross-check for the OE challenge had been flawed.

- c) The innovation uplift failed to achieve its stated effect within the meaning of section 23D(4)(d) of GA86 – at FD, GEMA indicated that the innovation uplift specifically was intended to reflect 'efficiency benefits over and above those achieved in the wider economy' arising from 'explicit and additional innovation funding over and above general allowances, and beyond any comparator sectors, including water'. However, the innovation uplift did not do this.
- d) GEMA had erred as a matter of law within the meaning of section 23D(4)(e) of GA86 – by breaching the duties identified above and by acting disproportionately and reaching conclusions without adequate supporting evidence.

7.28 SPT said that GEMA had made a series of errors in its analysis of the ongoing efficiencies which SPT was capable of achieving. In particular:<sup>386</sup>

- a) GEMA's OE challenge incorrectly included a 0.2% uplift for efficiencies supposedly to be derived from innovation funding allowances received in RIIO-T1.
- b) GEMA's calculation of the OE challenge relied solely on the VA productivity measure, failing to take into account in its calculations the established GO measure.
- c) GEMA's OE challenge was based upon the incorrect assumption that regulated network companies should be able to outperform the economy at large.
- d) GEMA's OE challenge calculation ignored the marked downturn in productivity growth since 2008 and instead erroneously based its productivity growth estimates solely on historical long-term productivity data.

7.29 SPT said that the decision was wrong in that:<sup>387</sup>

- a) GEMA had failed properly to have regard to the following matters referred to in section 11E(4)(a) EA 1989:

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<sup>386</sup> SPT NoA, paragraph 16.

<sup>387</sup> SPT NoA, paragraph 18.

- (i) the interests of existing and future consumers in Great Britain, including in particular their interests in: the reduction of electricity-supply emissions of targeted greenhouse gases; and the security of the supply of electricity to them;
  - (ii) the need to secure that all reasonable demands for electricity were met;
  - (iii) the need to secure that SPT as a transmission licence holder was able to finance the activities which were the subject of obligations imposed by its transmission licence (under section 6(1)(b) EA 1989) by securing reasonable returns on capital;
  - (iv) the need to contribute to the achievement of sustainable development;
  - (v) the effect on the environment of activities connected with the generation and transmission of electricity; and/or
  - (vi) best regulatory practice.
- b) Further or alternatively, GEMA had failed to give the appropriate weight to the matters listed above (section 11E(4)(b) EA 1989).
  - c) It was based on errors of fact (section 11E(4)(c) EA 1989).
  - d) GEMA's analysis was irrational (and accordingly wrong in law: see section 11E(4)(e) EA 1989).

7.30 WWU said that GEMA had erred in both policy and law by setting an OE challenge which was too high. The method used by GEMA to set the challenge contained a number of errors which meant that its analysis was incorrect both in principle and in application. These errors included taking account of irrelevant factors, ignoring relevant factors, building in inconsistencies and contradicting both empirical evidence and the purpose of GEMA's underlying totex approach.<sup>388</sup>

7.31 WWU said that the five grounds were that:<sup>389</sup>

- a) GEMA had failed properly to have regard to any matter which was mentioned in section 23D(2);

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<sup>388</sup> WWU NoA, paragraph 3.2(e).

<sup>389</sup> WWU NoA, Part II, paragraph 3.2.

- b) GEMA had failed to give appropriate weight to any such matter;
- c) the decision was based, wholly or partly, on an error of fact;
- d) the licence modifications failed to achieve, in whole or in part, the effect stated by GEMA; and
- e) the decision was wrong in law.

## **Structure of chapter/our approach**

7.32 The remainder of this chapter is structured in five parts.

- (a) First, we consider the core OE challenges of 0.95% for capex and repex and 1.05% for opex and the related errors alleged by the appellants.
- (b) Second, we consider the innovation uplift of 0.2% and the related errors alleged by the appellants.
- (c) Third, we consider the application of the OE challenges to the appellants' cost bases and the related errors alleged by the appellants.
- (d) Fourth, having considered all the errors in the first three sections, we give our decisions on whether GEMA erred.
- (e) Finally, we turn to the question of relief for those areas where we have identified GEMA has erred.

## **Core OE challenge**

7.33 In this section we consider the arguments that the appellants have raised in support of the alleged errors regarding the core OE challenge. We structure the discussion under ten questions.

- (a) Did GEMA err by using an inappropriate time period?
- (b) Did GEMA err in its use of the GO, VA and LP measures?
- (c) Did GEMA err by using inappropriate comparator sets?
- (d) Did GEMA err in its use of the companies' business plans?
- (e) Did GEMA err in its use of the historical productivity data?
- (f) Did GEMA err in its interpretation of regulatory precedents?



- (g) Did GEMA err when assessing the impact of Coronavirus (COVID-19) and Brexit?
- (h) Did GEMA err by double-counting innovation funding benefits in the core OE challenge?
- (i) Did GEMA err by relying on embodied technical change?
- (j) Did GEMA err when it decided to aim up?

7.34 We address the wider question of whether GEMA erred when it set the level of core OE challenge in paragraphs 7.763 to 7.801, where we consider the evidence on time period along with other factors.

### ***Did GEMA err and use an inappropriate time period?***

7.35 In this section we discuss the appellants' arguments that GEMA erred by using an inappropriate time period for the growth accounting analysis. We first summarise the evidence and then provide our conclusion.

#### ***GEMA's approach***

7.36 CEPA said that 1997 to 2016 was the appropriate time period to consider for the growth accounting analysis. This captured two complete business cycles, which was the maximum contained in EU KLEMS.<sup>390</sup>

7.37 CEPA said that one factor that would support a more stretching OE was considering the large productivity decline in 2009 as an outlier, which excessively dragged down the 1997 to 2016 average productivity growth.<sup>391</sup>

7.38 GEMA used the data from the 1997 to 2016 period and said that the CMA PR19 Redetermination had used 1990 to 2007 as that was the most recent full business cycle for which data was available. The CMA had also decided to place some limited weight on the lower productivity growth following the financial crisis. The CMA had also said regulated companies might be more insulated from the impact of economic downturns.<sup>392</sup>

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<sup>390</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 17.

<sup>391</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 8.

<sup>392</sup> [GEMA PR19 Response on Totex](#), paragraph 12(2).

## *Appellants' submissions*

- 7.39 Cadent said that GEMA had failed to take proper account of the period of lower productivity since 2008. Good regulatory and economic practice required the use of full business cycles and the GEMA decision had ignored evidence of a structural break in productivity growth since 2008.<sup>393</sup>
- 7.40 Cadent also said that the omission of 2009 as a negative outlier was inappropriate and constituted bad regulatory practice. This was because a large downward movement in productivity might be offset by prior or subsequent increases in productivity at other points during the business cycle in question.<sup>394</sup>
- 7.41 Cadent said that the CMA in the PR19 Redetermination had used the period 1990 to 2007. While this did represent a full business cycle, it meant the CMA period was based on data prior to the 2008 financial crisis. The slowdown in productivity had lasted 13 years and it was not reasonable to assume utilities could be insulated from this.<sup>395</sup> CEPA's report addressed this, in part, by using data from 1997 to 2016. Some weight should be placed on the period after the financial crisis, as it was unlikely that utility productivity growth could outperform the wider economy for long periods of time.<sup>396</sup> Had the CMA used a data period similar to GEMA, the CMA final target would have been around 0.85% per year, assuming the same 0.3 point increase to account for the qualitative factors.<sup>397</sup> Cadent said that any forecast of accelerated productivity growth should be afforded little weight.<sup>398</sup>
- 7.42 Cadent referred to GEMA's contention that Cadent was wrong to argue that GEMA had excluded 2009 as an outlier. Cadent said that CEPA had specifically recommended considering the large productivity decline in 2009 as an outlier.<sup>399</sup>
- 7.43 In its response to the provisional determination, Cadent said that it understood the CMA's provisional determination position to be that the evidence on the continuation of low productivity growth was inconclusive. Therefore, given the lack of any clear, strong evidence that the productivity puzzle would resolve itself for GDNs during GD2, Cadent asked the CMA to place no weight on this

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<sup>393</sup> [Cadent NoA](#), paragraphs 3.123–3.124.

<sup>394</sup> [Cadent NoA](#), paragraph 3.123. See also Cadent Main Hearing Transcript, 5 July 2021, page 53, line 18 to page 54, line 13.

<sup>395</sup> [Cadent PR19 submission](#), paragraph 17.

<sup>396</sup> [Cadent PR19 submission](#), paragraph 19.

<sup>397</sup> [Cadent PR19 submission](#), paragraph 20.

<sup>398</sup> [Cadent PR19 submission](#), paragraph 18.

<sup>399</sup> [Cadent Reply](#), paragraph 52(f). See also NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56(f).

qualitative factor to justify a core OE target above CEPA's quantitative evidence. Even if the CMA placed some weight on this qualitative factor in combination with others, it was clear that CEPA's unsupported conjecture could not alone justify a core target above CEPA's quantitative evidence.<sup>400</sup>

- 7.44 NERA, in a report for Cadent, said that omitting 2009 from the sample would lead to an understatement of productivity growth.<sup>401</sup> NERA said that BoE research suggested that the trend of lower productivity would continue and the most recent forecast was minus 0.25% over the next three years.<sup>402</sup> Furthermore, CEPA was already placing less weight on the recent years because the CEPA sample included 11 years (1997 to 2007) of pre-crisis data and nine years of post-crisis data (2008 to 2016).<sup>403</sup>
- 7.45 NGN said that GEMA had not taken adequate account of the extensive evidence that there had been a slowdown in economy-wide productivity growth since the financial crisis.<sup>404</sup>
- 7.46 NGN said that GEMA had mischaracterised NGN's views on the structural break in productivity post 2008. GEMA contended that the appellants were wrong to argue that GEMA had ignored the period of lower productivity after 2008. NGN did not argue that GEMA had disregarded the later period; rather, NGN argued that it was inappropriate for GEMA to downplay the productivity slowdown to justify a point-estimate at the top-end of CEPA's range.<sup>405</sup>
- 7.47 Frontier Economics, in a report for NGN and SGN, said that there was clear evidence of a productivity slump since the financial crisis, which had been continuing beyond 2016 (the last year in the data sample). Frontier agreed with CEPA that it was not necessary or appropriate to discount pre-crisis evidence of productivity growth. However, the ongoing productivity slump, which was likely to continue into GD2, should have given GEMA reason to exercise more caution when deciding on a point estimate within CEPA's recommended range.<sup>406</sup>
- 7.48 SPT said that GEMA had ignored the lower productivity growth since 2008 and erroneously based its estimates solely on historical long-term data.<sup>407</sup>

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<sup>400</sup> Cadent Response to PD, paragraph 10.9e.

<sup>401</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 400.

<sup>402</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 406.

<sup>403</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 414–415.

<sup>404</sup> [NGN NoA](#), paragraph 334(i). See also *Mills 1 (NGN)*, paragraph 38(i).

<sup>405</sup> [NGN Reply](#), paragraph 107.

<sup>406</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 6.2.16.

<sup>407</sup> [SPT NoA](#), paragraphs 16.4 and 62. See also SPT Closing Statement, paragraph 30.

- 7.49 In its response to the provisional determination, SPT said that the CMA appeared to have misunderstood its principal concern, which was not that GEMA had erred in its use of the entire 1997 to 2016 period. Rather, SPT's core claim was that CEPA had erred when it pointed to the wider productivity slow-down in recent years as a positive justification for its stretching target. CEPA's productivity estimates used data from 1997 to 2016, and hence already placed more weight on the period of higher productivity prior to 2008 (eleven years of the twenty year period are prior to 2008). The pre-2008 productivity period provided no justification at all for the stretching OE target given the step-down in productivity.<sup>408</sup>
- 7.50 In its response to the provisional determination, SPT said that it did not claim that CEPA excluded the 2009 data point. Rather SPT stated that CEPA (and therefore GEMA) were wrong to justify CEPA's stretching target by reference to the 2009 datapoint 'as an outlier, which excessively drags down the 1997-2016 average for productivity growth'. The period over the business cycle had to be used in full and the exclusion of the 2009 data point could not provide a reason for CEPA or GEMA's decision to set a stretching target. The CMA had not addressed this in its provisional determination.<sup>409</sup>
- 7.51 NERA, in a report for SPT, said that CEPA placed insufficient weight on the more recent productivity data. Furthermore:
- (a) omitting the impact of the large productivity decline in 2009 was wrong;<sup>410</sup>
  - (b) forward looking forecasts suggested that the productivity decline was likely to continue;<sup>411</sup> and
  - (c) CEPA had asserted that the productivity slowdown should not affect network companies but offered no evidence to support this.<sup>412</sup>
- 7.52 NERA said that GEMA was wrong to say there was no clear evidence of a structural break in productivity. GEMA had ignored evidence that supported lower productivity from reputable and credible organisations. Forward-looking evidence also suggested the productivity slowdown was likely to continue. Finally, given the marked drop in productivity indices since the financial crisis,

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<sup>408</sup> SPT Response to PD, paragraph 153.

<sup>409</sup> SPT Response to PD, paragraph 155.

<sup>410</sup> *Grayburn (SPT)*, Expert Report, paragraphs 73–86. See also SPT Main Hearing Transcript, 30 June 2021, page 9, line 1 to page 10, line 23.

<sup>411</sup> *Grayburn (SPT)*, Expert Report, paragraphs 87–92.

<sup>412</sup> *Grayburn (SPT)*, Expert Report, paragraphs 93–98.

more recent productivity data had greater relevance for setting the OE challenge.<sup>413</sup>

- 7.53 NERA said that GEMA had placed excessive weight on pre-2008 productivity data, and so had overstated the core OE challenge. GEMA had claimed that network companies were less likely to be affected by the productivity slowdown because of protected revenues. However, GEMA had provided no cogent reason why this meant networks would be insulated against clear trends in the wider economy.<sup>414</sup>
- 7.54 WWU said that analysis of EU KLEMS revealed there was only one cycle, 2007 to 2016, and this should be used instead of 1997 to 2016.<sup>415</sup>
- 7.55 WWU said that neither GEMA nor CEPA had responded to the submissions made by WWU that disputed the validity of CEPA's contention that the time period selected was representative of two complete business cycles.<sup>416</sup>
- 7.56 WWU said that it and Oxera had reviewed the evidence submitted by GEMA, which said that the use of 1997 to 2016 as the business cycle was consistent with the analysis carried out on behalf of the ORR (2012) and the CAA (2013) and was based on earlier HM Treasury analysis of evidence on the economic cycle.<sup>417</sup> WWU said that the consistency identified was irrelevant because the estimation from HM Treasury had been performed in 2005 and 2008 and was out of date and irrelevant to the consideration raised in WWU's appeal about whether 1997 to 2016 represented two business cycles. WWU said that HM Treasury in its report had clearly outlined the uncertainties in the National accounts data. This could be seen by comparing the OBR data used in CEPA's ORR report with the OBR data used in CEPA's November 2020 report. While the former data predicted a negative output gap from 2003 to 2005, the most recent data predicted a positive output gap for the same time period. The change in the output gap from negative to positive for the same time period explained why the most recent OBR data did not support the period 1997 to 2006 representing a completed business cycle.<sup>418</sup>
- 7.57 WWU said that GEMA had adopted an unbalanced application of regulatory discretion when it dismissed the evidence provided by the OBR that the recent productivity slowdown was persistent. The higher past productivity of the wider economy was an important part of the evidence informing GEMA's core OE

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<sup>413</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 83.

<sup>414</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 84.

<sup>415</sup> [WWU NoA](#), Section E4.

<sup>416</sup> [WWU Reply](#), paragraph E3.1.

<sup>417</sup> Referring to *Keane 1 (GEMA)*.

<sup>418</sup> [WWU Reply](#), paragraph E3.3. See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, pages 9–10.

challenge. However, GEMA and CEPA had provided no explanation as to why the wider economy was informative during historical periods while recent evidence on its slowdown and the persistence of this could be dismissed. GEMA had also not responded to and had ignored the evidence submitted by WWU on resilience to negative shocks, which contradicted GEMA's assertion.<sup>419</sup>

- 7.58 In its response to the provisional determination, WWU said that GEMA had placed insufficient weight on the post-2008 evidence and this must lead the CMA to being satisfied that GEMA had made an error. WWU asked the CMA to review the evidence again. WWU said that there were clear indications in GEMA's decision that GEMA must have placed more weight on the pre-2008 period in order to justify the higher figure. WWU said that it would be very helpful if in its final determination the CMA could specify what weight GEMA did apply to the post 2008 data and the evidential basis for that finding so that the CMA's conclusion that this was appropriate could be properly assessed given that this was a merits appeal.<sup>420</sup>
- 7.59 WWU said that the BoE forecast data did, in fact, produce a negative cumulative LP, around -0.3% per annum over the period 2021 to 2023, supporting a factual finding of low productivity over the first few years of GD2. The BoE also reported LP over the period 1998 to 2007 of 2.25% but only 0.5% for 2010 to 2019. Its forecast of -0.3% was a continuation, or even worsening, of this productivity slowdown. This data also suggested around 1.4% LP over these two historical periods (which excluded the financial crisis period of 2008 to 2009 and so would be upwardly biased in any event, but the period was similar to CEPA's chosen period of 1997 to 2016). Even with this upward bias it provided a useful data comparison, which the CMA had to consider to reach an appropriate conclusion. This was much higher than the cumulative 2021 to 2023 forecast LP by the BoE and thus there was factually clear data evidence of a continuation of the recent productivity slowdown over the GD2 period and relative to CEPA's main period of analysis (1997 to 2016).<sup>421</sup>
- 7.60 WWU said that the information in Table 7-1 implied 0.9% LP per year on average over the period 2021 to 2025. This was lower than CEPA's LP of 1.0% over the 1997 to 2016 period; materially lower than the 2.25% LP over 1998 to 2007, which was the period which CEPA appeared to have given the most weight to; and lower than the 1.4% for the combined BoE period. This data clearly demonstrated a slow-down which did not support the CMA's

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<sup>419</sup> WWU Reply, paragraph E4.1(b).

<sup>420</sup> WWU Response to PD, paragraphs E2.1–E2.2.

<sup>421</sup> WWU Response to PD, paragraph E2.3.

provisional finding. WWU said that Total Factor Productivity (**TFP**) represented the most appropriate productivity measures to apply to totex. For comparison LP was generally around 0.1% to 0.3% higher than TFP in CEPA's analysis, so an equivalent TFP figure for this forecast period may be around 0.6% to 0.8%.<sup>422</sup>

- 7.61 WWU said that it was concerned that neither CEPA's original period of 1997-2016 nor its more recently introduced period of 1990 onwards were correct when assessed against the methodology which CEPA had used. CEPA's own stated method (which involved looking at the output gap) using the most recent and thus most robust OBR data did not result in a full business cycle. Simply put, the CEPA evidence was inconsistent with its chosen period and neither CEPA in its evidence, nor the CMA in its provisional determination, had provided evidence based on other methodologies which supported the use of the period which GEMA had used.<sup>423</sup>
- 7.62 WWU said that CEPA had sought to provide some analysis from its old reports but the data which it used had now been superseded by more recent data. It was a well understood principle for the CMA to use the most recent data available in reaching its merit-based decision. WWU's view was that CEPA's approach, based on old reports and out of date data, was not robust and did not support the conclusions which it had reached and therefore could not support the finding which the CMA has reached in the provisional determination. The basis for the period being a business cycle was out of date as it was undertaken in 2005 and 2008. EU KLEMS and new OBR data, which on CEPA's evidence was originally stated at GEMA's FD to determine the period, showed the period to include growth periods and business cycles resulting in an upwardly biased result. Similarly, the period from 1990 onwards was also upwardly biased, compounding the upward bias in CEPA's analysis because an upwardly biased figure was being used to confirm another upwardly biased figure. More detail on this was found in Oxera's time period clarification note, which was not referenced in the CMA's provisional determination.<sup>424</sup>
- 7.63 WWU said that Oxera had also demonstrated that the result of using EU KLEMS was that CEPA's chosen period was wrong and was not a full business cycle.<sup>425</sup>

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<sup>422</sup> WWU Response to PD, paragraph E2.4. WWU also pointed out an error in the Table 7-1 in the PD, which we have corrected for the final determination.

<sup>423</sup> WWU Response to PD, paragraphs E3.2

<sup>424</sup> WWU Response to PD, paragraphs E3.3–E3.4

<sup>425</sup> WWU Response to PD, paragraphs E3.4



- 7.64 WWU said that it was the CMA role as an experienced regulatory body in its own right, and one which had significant experience in looking at productivity rates and business cycle analysis, to analyse what the appropriate period was. Without looking at the merits of what GEMA and its adviser CEPA was proposing, it was difficult for the CMA to reach a robust conclusion that GEMA had not erred. As much of this information was data driven and factually based WWU did not consider that this was something in which there was a margin of appreciation which should be afforded to GEMA. Clearly CEPA's analysis was not robust because the period which it chose was inconsistent with its own evidence and clearly demonstrated an error. In contrast, the evidence which WWU had put before the CMA was consistent, using one core period with a second period as a sensitivity cross-check.<sup>426</sup>
- 7.65 Oxera, in a report for WWU, said that the time period 2006 to 2016 matched the most recent business cycle using the OBR's data.<sup>427</sup>
- 7.66 Oxera said CEPA had not chosen two full business cycles. This resulted in an upwardly biased estimate.<sup>428</sup> In its response to the provisional determination, WWU said that the CMA asked the right question as to whether GEMA erred in using an inappropriate time period but did not follow that through in its analysis. What was important was that the methodology and the data must be internally coherent and that a 'mix and match' approach was economically unsound and should not be relied on by the CMA.<sup>429</sup>

### *GEMA's submissions*

- 7.67 GEMA said that it had had regard to the lower productivity growth after 2008 as CEPA's analysis used data from 1997 to 2016.<sup>430</sup> Therefore GEMA had placed weight on both the data before and after 2008.<sup>431</sup> This approach was aligned with that taken in the CMA PR19 Redetermination.<sup>432</sup> GEMA said that CEPA's view was that there was insufficient evidence to conclude that there had been a structural break in productivity growth.<sup>433</sup> Even if there was a structural break, GEMA thought that utilities were protected by their regulated revenue streams.<sup>434</sup>

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<sup>426</sup> WWU Response to PD, paragraphs E3.5

<sup>427</sup> Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 6.10. (Exhibit L.1 to WWU's NoA)

<sup>428</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraphs 3.20–3.21 and Oxera Time Period Clarification Note.

<sup>429</sup> WWU Response to PD, paragraphs E3.1

<sup>430</sup> [GEMA Response B](#), paragraph 114.

<sup>431</sup> [GEMA Response B](#), paragraph 116.

<sup>432</sup> [GEMA Response B](#), paragraph 118.

<sup>433</sup> [GEMA Response B](#), paragraph 115.

<sup>434</sup> [GEMA Response B](#), paragraph 117.



- 7.68 GEMA said that it had not excluded the 2009 data as an outlier and Cadent was wrong on this point.<sup>435</sup>
- 7.69 GEMA said that WWU had argued that the CEPA analysis was based on an incorrect analysis of business cycles, but the WWU results did not suggest the CEPA analysis was wrong.<sup>436</sup>
- 7.70 CEPA, in a witness statement for GEMA, said that the 1997 to 2016 time period was consistent with work it had done for the Office of the Rail Regulator (**ORR**) and the Civil Aviation Authority (**CAA**).<sup>437</sup> The time period was based on earlier HM Treasury analysis of evidence on the economic cycle.<sup>438</sup> CEPA accepted that there were uncertainties associated with the identification of the starts and ends of business cycles.<sup>439</sup>
- 7.71 CEPA, in a witness statement for GEMA, said that when setting the range based on this time period, there were two issues which suggested that the raw growth accounting values could represent an under-estimate. First, the wider productivity slowdown since 2009 could be less relevant for regulated utility sectors. Second, the fall in productivity growth in 2009 was an outlier.<sup>440</sup>
- 7.72 GEMA said that the CMA PR19 Redetermination had used 1990 to 2007 as that was the most recent full business cycle for which data was available at the time. The CMA had also decided to place some limited weight on the lower productivity growth following the financial crisis. The CMA had also said regulated companies may be more insulated from the impact of economic downturns.<sup>441</sup>
- 7.73 GEMA said that while the appellants stressed differences in certain respects between the GEMA decision and the CMA PR19 Redetermination, they did not establish that GEMA's approach was wrong.<sup>442</sup>
- 7.74 GEMA referred to Cadent's submission that, if the CMA PR19 Redetermination had used 1997 to 2016, the CMA's final target would have

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<sup>435</sup> [GEMA Response B](#), paragraph 119.

<sup>436</sup> [GEMA Response B](#), paragraph 120.

<sup>437</sup> CEPA said that neither the ORR nor the CAA had commented on the time period in their decisions, but both had adopted the OE challenges proposed by CEPA. In both of these cases these values were derived from a base case using the 1997 to 2006 data. See GEMA, RFI GEMA 021

<sup>438</sup> *Keane 1 (GEMA)*, paragraph 149.

<sup>439</sup> *Keane 1 (GEMA)*, paragraph 150.

<sup>440</sup> *Keane 1 (GEMA)*, paragraphs 114 and 174–178. See also CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 8.

<sup>441</sup> [GEMA PR19 Response on Totex](#), paragraph 12(2).

<sup>442</sup> [GEMA PR19 Response on Totex](#), paragraph 13.

been around 0.85% per year, assuming the same increase of around 0.3% to account for the qualitative factors listed. GEMA said this was speculation.<sup>443</sup>

7.75 GEMA said that a Frontier Economics report for Water UK<sup>444</sup> calculated productivity growth rates based on business cycles from 1994 to 2008 and 2009 to 2017 (ongoing).<sup>445</sup>

7.76 GEMA said that although it found the historical datasets were helpful and indicative, they were definitely not determinative of what the proxy should be for the energy utilities for the next five years. GEMA said that water, like energy, had been demand-protected.<sup>446</sup>

### *Our assessment and conclusions*

7.77 In this section we give our assessment and conclusions on three specific errors raised by the appellants:

(a) Did GEMA fail to give appropriate weight to the lower productivity levels since 2008 including forward looking forecasts? This error was alleged by Cadent,<sup>447</sup> NGN,<sup>448</sup> and SPT.<sup>449</sup>

(b) Did GEMA commit an error when it based its decision on the 1997 to 2016 time period? This error was alleged by WWU.<sup>450</sup>

(c) Did GEMA commit an error by excluding the 2009 data when calculating its averages and/or placing insufficient weight on this data point? This error was alleged by Cadent<sup>451</sup> and SPT.<sup>452</sup>

### *Did GEMA give appropriate weight to the post-2008 data?*

7.78 The appellants said that GEMA failed to give appropriate weight to the post-2008 data (see paragraphs 7.39, 7.45 to 7.49 and 7.58 to 7.60).

7.79 Figure 7-1 shows the decline in UK productivity growth since 2008.

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<sup>443</sup> GEMA PR19 Response on Totex, paragraph 13(5).

<sup>444</sup> Water UK members are UK water and wastewater service suppliers for England, Scotland, Wales and Northern Ireland. See <https://www.water.org.uk/>

<sup>445</sup> GEMA PR19 Response on Totex, paragraph 13(1) and Frontier Economics, Productivity Improvement in the Water and Sewerage Industry in England since privatisation, Figure 2.

<sup>446</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 84, lines 19–25.

<sup>447</sup> Cadent NoA, paragraphs 3.123 - 3.124 and Cadent Response to PD, paragraph 10.9e.

<sup>448</sup> NGN NoA, paragraph 334(i). See also Mills 1 (NGN), paragraph 38(i).

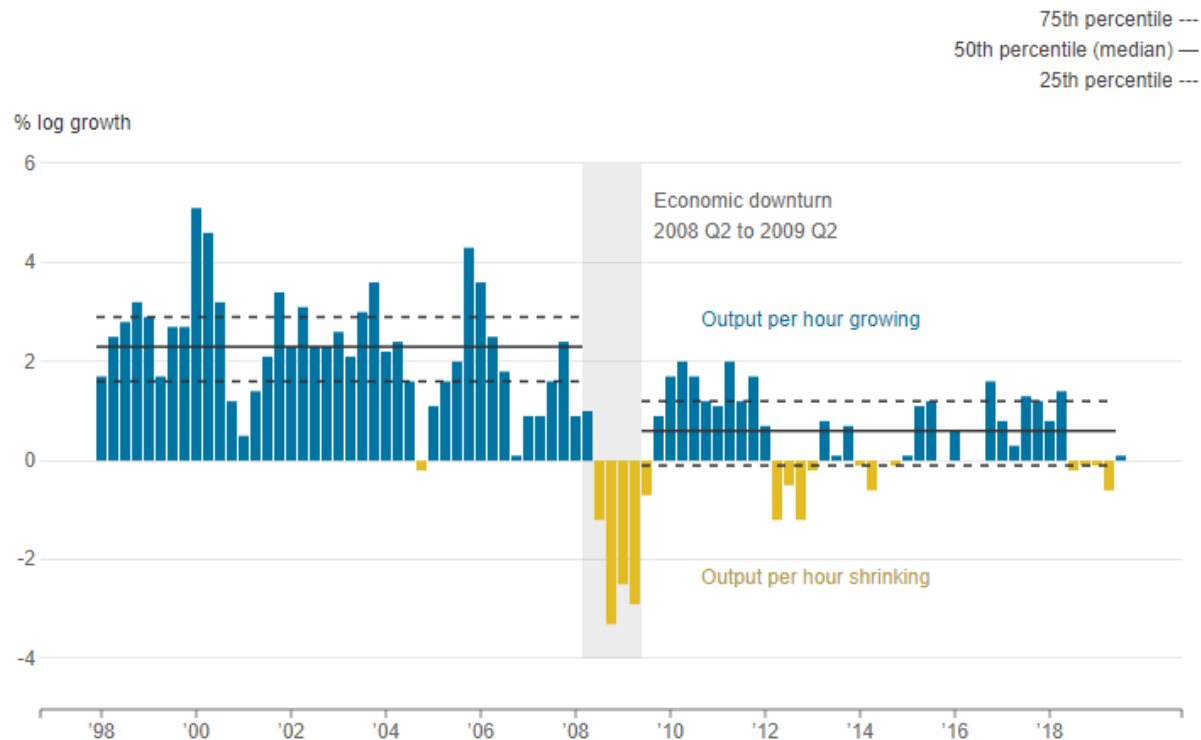
<sup>449</sup> SPT NoA, paragraphs 16.4 and 62 and SPT Response to PD, paragraph 153.

<sup>450</sup> WWU NoA, section E4. See also WWU Response to PD, paragraphs E3.2

<sup>451</sup> Cadent NoA, paragraph 3.123.

<sup>452</sup> Grayburn (SPT), Expert Report, paragraphs 76–78. See also SPT Main Hearing Transcript, 30 June 2021, page 10, lines 7–23 and SPT Response to PD, paragraph 155.

**Figure 7-1: Change in output per hour in the UK 1998 to 2019**



Source: ONS, Figure 1, [Productivity measurement](#).

- 7.80 Given the ONS data above, we agree with the appellants that an approach which placed insufficient weight on the lower productivity since 2008 could lead to an overestimate of the appropriate OE challenge.
- 7.81 CEPA took account of this lower productivity by calculating its averages over a time period from 1997 to 2016. CEPA also looked at the 1997 to 2006 and 2006 to 2016 time periods.<sup>453</sup> CEPA said that starting EU KLEMS analysis in 1997 did not lead to higher productivity estimates when compared to starting in 1990.<sup>454</sup> CEPA also discussed the lower productivity after 2008 in its November 2020 report.<sup>455</sup>
- 7.82 GEMA then used the methodology set out in the CEPA report, and GEMA's decision document specifically discussed the lower productivity rates after 2008.<sup>456</sup>

<sup>453</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 21.

<sup>454</sup> CEPA's further analysis of EU KLEMS (attached to email from GEMA to the CMA 'RE: Ongoing Efficiency hearing - follow-up actions', 30 June 2021).

<sup>455</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, pages 19–20.

<sup>456</sup> [GEMA FD Core Document](#), paragraph 5.23.

7.83 We also considered recent OBR and BoE forecasts of LP per hour. These are shown in Table 7-1.

**Table 7-1: Growth in LP per hour forecasts**

|     | 2021   | 2022 | 2023 | 2024 | 2025 |
|-----|--------|------|------|------|------|
| OBR | -0.6%  | 1.2% | 1.1% | 1.2% | 1.6% |
| BoE | -3.25% | 2%   | 0.5% |      |      |

Source: OBR, [Economic and Fiscal Outlook](#), March 2021; Table 2.9 Bank of England, [Monetary Policy Report](#), February 2021, Table 1.C

7.84 The BoE data is more variable than the OBR data, with productivity declining in 2021 and then increasing by 2% in 2022 and then 0.5% in 2023. However, we note the large differences between the OBR and BoE figures and the large variation over time in the BoE figures. These differences and variations lead us to place less weight on these forecast figures. Therefore, we find that the BoE and OBR data do not conclusively show that productivity growth will continue to be low.

7.85 In its response to the provisional determination, Cadent asked the CMA to place no weight on the productivity forecasts when justifying a core OE target above CEPA's quantitative evidence (see paragraph 7.43). We find that while the large differences between the OBR and BoE figure lead us to place less weight on these forecasts, we do not consider it appropriate to fully discount this evidence. We consider this evidence, along with other factors in paragraphs 7.763 to 7.801 when we consider whether the level of GEMA's core OE challenge was wrong.

7.86 In its response to the provisional determination, SPT said that the CMA appeared to have misunderstood its principal concern, which was not that GEMA erred in its use of the entire 1997 to 2016 period. Rather, SPT's core claim was that CEPA erred when it pointed to the wider productivity slowdown in recent years as a positive justification for its stretching target (see paragraph 7.49).

7.87 The wider productivity slowdown was one factor CEPA mentioned in its November report which may support a more challenging OE challenge – by placing less weight on the wider productivity slowdown in recent years.<sup>457</sup> We agree with CEPA that there are reasons why the energy companies may be less impacted than other sectors. For example, the comparative certainty provided by the regulatory regime could facilitate investment. We also note that placing less weight on the wider productivity slowdown in recent years is

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<sup>457</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 8.

consistent with the approach taken by the CMA in the CMA PR19 Redetermination.<sup>458</sup> Based on this evidence, we find that GEMA did not err when it took account of this issue. We address the wider question of whether GEMA decided on an appropriate level of the OE challenge in paragraphs 7.763 to 7.801.

- 7.88 In its response to the provisional determination, WWU said that it would be very helpful if in its final determination the CMA could specify what weight GEMA did apply to the post 2008 data and the evidential basis for that finding so that the CMA's conclusion that this was appropriate could be properly assessed given that this was a merits appeal (see paragraph 7.58).
- 7.89 We find that GEMA did not assign explicit weight to individual factors or time periods, and we would not necessarily expect it to do so. GEMA explained the pieces of evidence it used making an 'in the round' decision. This is a common and appropriate approach to regulation which provides sufficient transparency for other parties to understand the reasoning.
- 7.90 WWU said that, as an experienced regulatory body and one which had significant experience in looking at productivity rates and business cycles, the CMA's role was to analyse what the appropriate period was and that it should have looked at the merits of what GEMA and CEPA were proposing (see paragraph 7.64).
- 7.91 WWU's arguments are misplaced. While we agree that as an expert body, the CMA must not uncritically accept GEMA's assessment and weighting of the considerations before it simply because GEMA is an expert body, we do not accept that that means that GEMA has no margin of appreciation when these matters are appealed to us.<sup>459</sup> Furthermore, we reject WWU's contention that the decision was purely data driven and factually based (see paragraph 7.64). We consider that the decision as to the choice of time period also involved the exercise of regulatory judgement where GEMA was required to select amongst various alternative solutions. In such cases, and as set out further in our Legal Framework,<sup>460</sup> we will not substitute our own assessment or weighting of the evidence or reasoning for GEMA's unless we are presented with persuasive argument that GEMA's approach is wrong. As explained above and consistent with the relevant standard of review as set out in the Legal Framework,<sup>461</sup> we have tested the underlying evidence and reasoning

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<sup>458</sup> [CMA PR19 Redetermination](#), paragraph 4.537.

<sup>459</sup> See further paragraph 3.79.

<sup>460</sup> See further paragraph 3.78 of Chapter 3.

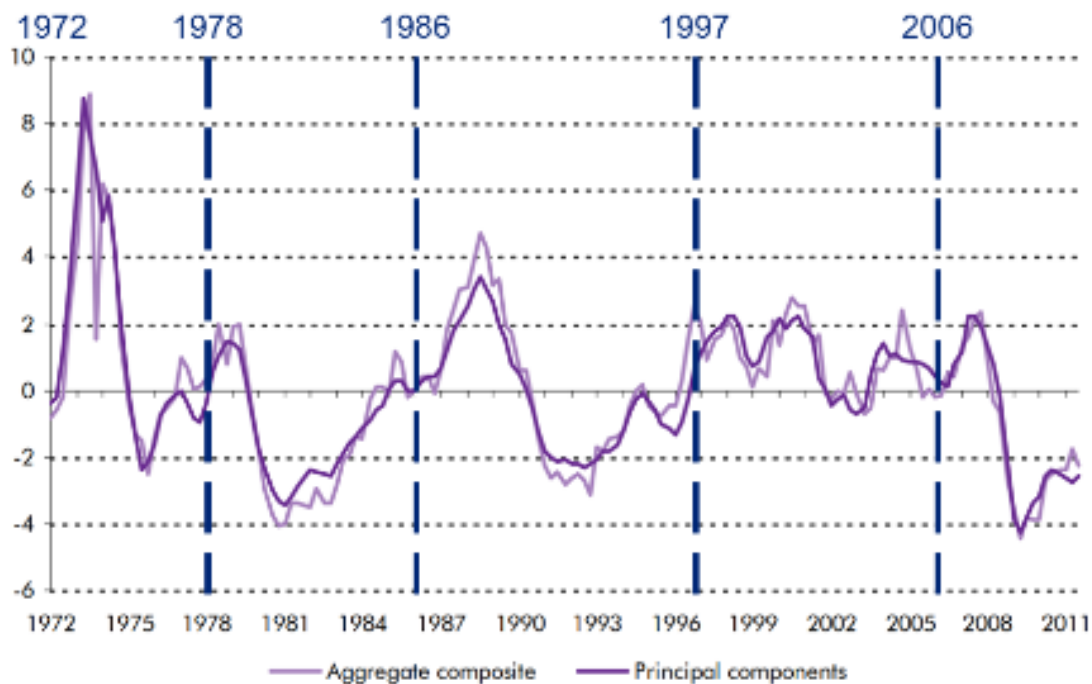
<sup>461</sup> As explained further in Chapter 3, the CMA is required to consider the merits of the decision under appeal, albeit by reference to the specific grounds of appeal laid down in the statute (see in particular paragraph 3.26).

ourselves and have not been persuaded by the appellants' arguments.<sup>462</sup> Accordingly, we have found GEMA not to have erred in assigning weight to the post-2008 period.

*Was 1997 to 2016 an appropriate time period?*

- 7.92 Estimating the precise beginning and end of business cycles is not an exact science and the methodology requires the application of judgement.
- 7.93 WWU said that the time period adopted by GEMA did not appropriately reflect business cycles (see paragraphs 7.54 to 7.56 and 7.65 to 7.66).
- 7.94 CEPA's analysis of the business cycles was based on Figure 7-2, which used OBR data from 2011.

**Figure 7-2: Output for the UK economy 1972 to 2011**



Source: CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, Figure 2.1. The original chart, without the dashed vertical lines, is Chart 3.1 in OBR, [Working Paper No1 Estimating the UK's historical output gap](#).

- 7.95 The dashed vertical lines were drawn on the chart by CEPA and represent CEPA's interpretation of the correct business cycles. From this chart CEPA concluded that 1997 to 2006 was an appropriate business cycle and that 2006 was the start of a second business cycle.<sup>463</sup>

<sup>462</sup> See paragraphs 3.77 and 3.79.

<sup>463</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, page 18. See also email from GEMA to the CMA 'Follow up to CMA question from 8 July 2021 Hearing - Ongoing Efficiency', 21 July 2021.

- 7.96 Oxera said that CEPA's claim, that the chosen time period corresponded to two full business cycles, was not supported by the data in Figure 7-2 and we discuss this below.<sup>464</sup>
- 7.97 First, WWU said that the period between 1997 and 2005 did not correspond to a full business cycle, as a business cycle should contain only one period with positive output gaps and one period with negative output gaps. WWU said that the data in Figure 7.2 showed that there was a positive output gap for 2003 to 2005.<sup>465</sup> Oxera said that there was a second business cycle in the latter half of this period, from 2002 to 2006.<sup>466</sup> This resulted in an upwardly biased estimate.<sup>467</sup>
- 7.98 Looking at Figure 7.2, if we assume that a second business cycle began in 2002, then it could be appropriate to say there was a prior business cycle which could have started in 1994 or 1995 as this would result in a period which contains one period with positive output gaps and one period with negative output gaps. Starting the business cycle earlier would include additional data from earlier years in the calculation of the average.
- 7.99 On this issue, CEPA submitted additional analysis of the period 1990 to 2006. This data showed that productivity estimates based on this 1990 to 2006 period were higher than those based on the 1997 to 2006 period. This shows that the exclusion of the earlier years results in a lower average productivity estimate. Including earlier years would involve placing less weight on the more recent, post-2008 data. Furthermore, we consider that the decision as to the choice of time period involved the exercise of regulatory judgement, where GEMA was required to select among various alternative solutions. Therefore we find that GEMA did not err in the assessment of the business cycle.
- 7.100 Second, WWU also said that analysis of EU KLEMS revealed there was only one cycle, 2007 to 2016, and this should be used instead of 1997 to 2016.<sup>468</sup>
- 7.101 While CEPA used EU KLEMS to assess productivity growth, this does not necessarily imply that EU KLEMS should also be used to assess the business cycles. CEPA's approach of using national output data is a valid approach and

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<sup>464</sup> Oxera (WWU), CEPA's error in predicting a business cycle, 13 July 2021.

<sup>465</sup> [WWU Reply](#), paragraph E3.3. See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, pages 9–10.

<sup>466</sup> Oxera (WWU), CEPA's error in predicting a business cycle, 13 July 2021, page 1. See also [WWU Reply](#), paragraph E3.1.

<sup>467</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraphs 3.20–3.21 and Oxera Time Period Clarification Note.

<sup>468</sup> WWU Response to PD, paragraphs E3.4



one that has been used by regulators in the past. Therefore we find that GEMA did not err when it did not use EU KLEMS to assess business cycles.

- 7.102 Third, Oxera, in a report for WWU, said that the time period 2006 to 2016 matched the most recent business cycle using the OBR's data.<sup>469</sup> We find, however, that using the data from 2006 to 2016 would unnecessarily restrict the dataset to a smaller time period. Defining business cycles is difficult in practice and therefore there are benefits to using multiple complete business cycles and therefore more data. Therefore we find that GEMA did not err when it did not restrict the data to a more recent business cycle period of 2006 to 2016.
- 7.103 Fourth, WWU said that it was the CMA's role to analyse what was the appropriate period.<sup>470</sup> It is not our role in this appeal to substitute our judgement for that of GEMA. Our role is to assess whether GEMA erred. We are required to consider the merits of the decision but only through the prism of the specific errors alleged by the appellants.<sup>471</sup> Furthermore, we consider that the decision as to the choice of time period involved the exercise of regulatory judgement where GEMA was required to select among various alternative solutions. Therefore, for the reasons explained above, we find that GEMA did not err when it used 1997 to 2016 as the time period.
- 7.104 In summary, there is a range of views on the exact timings of the business cycles and we agree with Oxera and GEMA that defining a business cycle is difficult in practice.<sup>472</sup> The data supplied by CEPA suggests that extending the time period backward, including years before 1997, leads to higher average productivity estimates. As noted above, where GEMA has exercised regulatory judgement in selecting among various alternative solutions to a regulatory problem, we will not substitute our own assessment or weighting of the evidence or reasoning for GEMA's unless we are persuaded that GEMA's approach is wrong. In this case, the appellants have failed to persuade us that GEMA's approach was wrong. Therefore, for this reason, and the reasons discussed above, we find that GEMA's use of the 1997 to 2016 time period was within its margin of appreciation and that it did not err.

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<sup>469</sup> Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 6.10. (Exhibit L.1 to WWU's NoA)

<sup>470</sup> WWU Response to PD, paragraphs E3.5

<sup>471</sup> See paragraph 3.31.

<sup>472</sup> Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.12. and Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 71, lines 7–10.



*Was insufficient weight placed on the 2009 data?*

- 7.105 The appellants said that insufficient weight was attached to the 2009 data (see paragraphs 7.40, 7.42, 7.44, and 7.50 to 7.51).
- 7.106 GEMA based its range on the work done by CEPA, and the spreadsheets underlying CEPA's calculations show that CEPA did not exclude data from 2009 when calculating its averages.<sup>473</sup> Based on this evidence, our conclusion is that GEMA did not exclude the 2009 data when calculating the averages. Therefore we find that GEMA did not commit an error by excluding the 2009 data.
- 7.107 The appellants later clarified their arguments, stating that they were also concerned that GEMA had placed insufficient weight on the 2009 data.<sup>474</sup> This was because CEPA said, in its November 2020 report, that considering the 2009 figure as an outlier could be a factor that, together with others, supported a higher OE challenge.
- 7.108 The evidence from GEMA suggests that it took account of multiple factors when deciding on the OE challenge and there is insufficient evidence from the appellants to suggest that GEMA treated the 2009 datapoint as an outlier which excessively dragged down average productivity growth. For this reason, our conclusion is that GEMA did not err. We consider the wider question of whether GEMA decided on an appropriate level of core OE challenge in paragraphs 7.763 to 7.801.
- 7.109 We note that in its response to the provisional determination, SPT said that the period over the business cycle had to be used in full and the exclusion of the 2009 data point could not provide a reason for CEPA or GEMA's decision to set a stretching target. The CMA had not addressed this in its provisional determination.<sup>475</sup>
- 7.110 We find that this point is addressed by the statements above. GEMA did not exclude the 2009 data point from its calculations and there was insufficient evidence that GEMA treated the 2009 datapoint as an outlier. We take account of this when we address the wider question of whether GEMA decided on an appropriate level of core OE challenge in paragraphs 7.763 to 7.801.

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<sup>473</sup> Email from GEMA to the CMA 'RE: GEMA - query re CEPA November 2020 report', 10 May 2021.

<sup>474</sup> Cadent Main Hearing Transcript, 5 July 2021, page 53, line 18 - page 54, line 13 and SPT Main Hearing Transcript, 30 June 2021, page 10, lines 7-23.

<sup>475</sup> SPT Response to PD, paragraph 155.

### ***Did GEMA err in its use of GO, VA and LP measures?***

7.111 In this section we discuss the appellants' arguments that GEMA erred in its use of the different productivity measures. We consider four types of error raised by the appellants.

- (a) First, did GEMA err by placing too much weight on the VA productivity measures and insufficient weight on the GO measures?
- (b) Second, did GEMA err in its consideration of the LP measure?
- (c) Third, did GEMA err by failing to account for the link between LP and real wage growth?
- (d) Fourth, did GEMA err by relying on a CEPA range which was inconsistent with CEPA's own evidence?

7.112 In each subsection we first summarise the evidence and then provide our conclusion.

#### ***Did GEMA place too much weight on VA?***

##### ***GEMA's approach***

7.113 CEPA said that good regulatory practice was to consider the information provided by both GO and VA measures.<sup>476</sup>

7.114 GEMA said that it had given some weight to GO productivity measures, which had reduced the level of efficiency challenge.<sup>477</sup>

7.115 GEMA said that it had, as the CMA had done in the PR19 Redetermination, given some weight to both GO and VA measures. Moreover, both the CMA and GEMA shared the same view that GO measures may be more prone to error.<sup>478</sup>

7.116 CEPA, in a witness statement for GEMA, said that the lower bound of the range of 0.5% was unchanged between the May 2020 and November 2020 reports. The upper bound of the proposed range in the November 2020 report was 0.05% lower for capex/repex and 0.15% lower for opex, relative to the comparable range in the May 2020 report. These adjustments to the upper bounds of the respective ranges reflected feedback from stakeholders and

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<sup>476</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 24.

<sup>477</sup> [GEMA FD Core Document](#), paragraph 5.22.

<sup>478</sup> [GEMA PR19 Response on Totex](#), paragraph 12(3).

updated evidence. One of the main changes in evidence from the growth accounting that was relevant for the top of the range was the treatment of GO measures. The network companies' responses to the DD expressed concern that by choosing a value at the top of the range, GEMA would not be placing any consideration on GO productivity measures when setting the OE challenge. Having discussed this feedback with GEMA, CEPA agreed with GEMA that to avoid any confusion, the top-end of the range set out in CEPA's November 2020 Report would be consistent with some consideration of GO productivity measures.<sup>479</sup>

### *Appellants' submissions*

- 7.117 Cadent said that GEMA was wrong to rely exclusively on the VA measure. CEPA's 'Upper Bound' estimate was based exclusively on, and exceeded, the VA estimate it observed in EU KLEMS for its chosen comparators. GEMA had afforded no weight to the GO measure. This was inconsistent with good economic and regulatory practice. In no previous case had the regulator relied solely, or even primarily, on VA.<sup>480</sup> Furthermore, neither CEPA's nor GEMA's analysis provided support for the contention that they had afforded weight to the GO as well as the VA measure.<sup>481</sup> GEMA should have placed equal weight on the VA and GO measures.<sup>482</sup>
- 7.118 Cadent said that GEMA had systematically prioritised (or relied exclusively on) the VA measures. In any event, GEMA's OE challenge was higher than any VA-based evidence could support.<sup>483</sup>
- 7.119 In its response to the provisional determination, Cadent said that the GEMA target was set at a level consistent with economy-wide VA, LP measures without a good reason for ignoring, for example, GO, total factor productivity (TFP) and targeted comparator sector evidence.<sup>484</sup>
- 7.120 Cadent further said that no weighting of VA vs GO or economy-wide versus targeted comparators sets could justify a core OE target above CEPA's range of quantitative evidence. Cadent said that neither GEMA nor CEPA had at any point explained why it would be correct to place additional weight on VA measures. GEMA's position was simply that such weightings could achieve a higher OE target and that it was entitled to opt for such higher target in its

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<sup>479</sup> *Keane 1 (GEMA)*, paragraphs 121–126.

<sup>480</sup> *Cadent NoA*, paragraphs 3.112–3.114.

<sup>481</sup> *Cadent NoA*, paragraph 3.115.

<sup>482</sup> *Cadent NoA*, paragraph 3.116.

<sup>483</sup> *Cadent Reply*, paragraph 52(e).

<sup>484</sup> *Cadent Response to PD*, paragraph 7.10cii.

regulatory discretion. This was clearly untenable and demonstrated the arbitrariness and lack of evidence underpinning GEMA's core OE target.<sup>485</sup>

- 7.121 NERA, in a report for Cadent, said that it was difficult to see how GEMA could credibly claim to have placed any weight on GO metrics when GEMA's target was higher than the CEPA VA measures.<sup>486</sup> Regulatory precedent supported placing weight on both the GO and VA measures.<sup>487</sup> There was also a strong theoretical rationale for placing some weight on the GO measure because intermediate outputs formed part of the GDNs' cost bases.<sup>488</sup> A reasonable approach would be to place equal emphasis on the GO and VA measures.<sup>489</sup>
- 7.122 NGN said that GEMA had failed to have proper regard to the GO measures and had given exclusive or wholly disproportionate weight to the VA measures.<sup>490</sup> NGN said that the CMA in the PR19 Redetermination had focused on the GO measure but gave some qualitative weight to the VA measure being higher. This supported NGN's submission that GEMA placed too much weight on VA measures.<sup>491</sup>
- 7.123 NGN said that GEMA had misconstrued its submission by arguing that GEMA was justified in not giving sole or greater weight to GO measures. NGN's submissions were clear that it considered that weight should be given to both GO and VA measures, and did not at any point state that sole or greater weight should be given to GO measures.<sup>492</sup>
- 7.124 In a response to an RFI, NGN clarified that its arguments related to the application of VA measures to totex. NGN said that even if GEMA had not solely taken into account VA measures and had placed some weight on GO measures, NGN's argument would still hold unless GEMA had placed sufficient and significant weight on GO.<sup>493</sup>
- 7.125 Frontier Economics, in a report for NGN and SGN, said GEMA appeared to have failed to have regard to GO measures and relied entirely on VA measures.<sup>494</sup> Frontier Economics said the following statement by GEMA was misleading:

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<sup>485</sup> Cadent Response to PD, paragraph 10.9a.

<sup>486</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 374.

<sup>487</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 379–382.

<sup>488</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 383.

<sup>489</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 386.

<sup>490</sup> [NGN NoA](#), paragraph 334(ii).

<sup>491</sup> [NGN PR19 submission](#), paragraph 25(ii).

<sup>492</sup> [NGN Reply](#), paragraph 107.

<sup>493</sup> NGN, RFI NGN 003, page 4.

<sup>494</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 1.1.11(b)(ii).

We do not think precedent suggests we must place equal weight on GO and VA, as other regulatory decisions (eg RIIO-ED1) have also placed more weight on VA.

- 7.126 This was because in RIIO-ED1 GEMA did not set its own productivity target, but accepted the values presented in company business plans.<sup>495</sup>
- 7.127 SPT said that GEMA's calculations relied solely on the VA measures and failed to take account of GO measures.<sup>496</sup>
- 7.128 SPT said that the CMA in the PR19 Redetermination focused on the GO measure, although it gave some weight to the VA measure. The correct approach was to place reliance on both measures. In contrast, GEMA had incorrectly relied exclusively on VA measures to support its assumptions and so could not credibly claim to have drawn on evidence from GO measures.<sup>497</sup> SPT said that the CMA PR19 Redetermination was based on a targeted sectoral analysis of productivity, focused on the TFP GO measure. The same methodological approach here would give an OE target of 0.2%.<sup>498</sup>
- 7.129 SPT said that GEMA had given no weight to the GO measure and only relied upon the very top end of the VA measure.<sup>499</sup>
- 7.130 In its response to the provisional determination, SPT said that it did not consider that CEPA's reconsideration of the range in November 2020 was consistent with a meaningful consideration of GO measures. The CMA cited the evidence of CEPA for GEMA saying that the top end of the range in the FD report would be consistent with some consideration of GO productivity measures. However, it was not enough to pay lip service to such a consideration: it needed to be meaningfully taken into account. In fact, the reduction in the top of the range between CEPA's May 2020 and November 2020 reports was only 0.05% for capex/repex and 0.15% for opex. Moreover, these changes were already explained entirely (or almost entirely) by changes to the underlying data between draft and final determinations. Specifically, CEPA's update to the way EU KLEMS was applied alone caused a reduction of around 0.1-0.2% in the estimated historical productivity improvements. With this one adjustment already sufficient to account for all (or nearly all) of the adjustment in the upper end of the range, it was implausible that the reduction could also be attributed to any meaningful factoring of the very different GO

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<sup>495</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, 6.2.26–6.2.27.

<sup>496</sup> [SPT NoA](#), paragraphs 16.2 and 60.

<sup>497</sup> [SPT PR19 submission](#), paragraph 39. See also SPT Closing Statement, paragraph 29.

<sup>498</sup> SPT Closing Statement, paragraph 33.

<sup>499</sup> [SPT Reply](#), paragraph 27(1).

measures into the top end of the range.<sup>500</sup> In any case, GEMA's stretching targets were still higher than the VA measures (which in turn were higher than GO measures). It was therefore difficult to understand how it could be said that the GO measure had been taken into account.<sup>501</sup>

- 7.131 NERA, in a report for SPT, said that economic theory did not support relying solely on VA measures. There was also a theoretical rationale for relying on GO measures of productivity improvement, because intermediate inputs formed part of TOs' cost bases, while VA measures assumed they did not.<sup>502</sup> NERA said that it would be wrong to set the OE challenge based primarily on VA evidence.<sup>503</sup> Previous regulatory decisions had placed weight on both VA and GO measures, but had noted that GO was theoretically preferable. In none of the previous cases had the regulator placed full or even primary weight on the VA measure.<sup>504</sup> NERA said that GEMA could not credibly claim to have placed weight on GO measures. This was because CEPA's upper bound estimate was higher than any of the VA estimates it presented, and the VA estimates were all higher than the GO estimates it presented. Therefore it was reasonable to conclude that GEMA had placed no weight on GO estimates.<sup>505</sup>
- 7.132 WWU submitted that GEMA had relied almost entirely on the VA measure and placed no or very minimal weight on the GO measure.<sup>506</sup> WWU said that CEPA had suggested that there was no consistent expert view on whether VA or GO was better. This was not the case. The OECD stated that VA measures were not a good measure of technology shifts at the industry or firm level. In fact CEPA had previously expressed a preference for the GO-based measure in the context of setting cost allowances.<sup>507</sup> It said that there was a clear conceptual difference between GO and VA measures, and it was important to ensure that the measure chosen aligned with the relevant context. Here, GEMA was applying the OE challenge to totex. Given that totex included intermediary goods and services, and VA measures excluded intermediary goods and services, a VA measure failed to align appropriately with the context.<sup>508</sup>

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<sup>500</sup> SPT Response to PD, paragraph 150.

<sup>501</sup> SPT Response to PD, paragraph 151.

<sup>502</sup> *Grayburn (SPT)*, Expert Report, paragraphs 68–71. See also NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraphs 85–86.

<sup>503</sup> *Grayburn (SPT)*, Expert Report, paragraph 61.

<sup>504</sup> *Grayburn (SPT)*, Expert Report, paragraphs 60–67.

<sup>505</sup> *Grayburn (SPT)*, Expert Report, paragraphs 119–124.]

<sup>506</sup> *WWU NoA*, section E5.2

<sup>507</sup> *WWU NoA*, paragraph E5.3. See also Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.24.

<sup>508</sup> *WWU NoA*, section E5.4

- 7.133 WWU said that GEMA had submitted that trying to identify a subset of expenditure that corresponded to VA spending would create the risk of spurious accuracy. However, not making any adjustment was clearly spurious and if no adjustment was attempted then GO TFP should be used instead.<sup>509</sup>
- 7.134 Oxera, in a report for WWU, said that GO should be the core measure and the CMA in the PR19 Redetermination had also considered GO as the core measure. Oxera said that if VA TFP was to be used to set an OE challenge for totex it should be adjusted.<sup>510</sup> Oxera said that there were no practical difficulties in estimating GO and EU KLEMS contained sufficient information to estimate GO TFP. CEPA had estimated GO TFP without any ‘practical difficulties’. The conversion of VA TFP to GO TFP was standard and academically rigorous.<sup>511</sup> Oxera said that it disagreed that the GO measures might underestimate total productivity gains as Oxera’s suggestion of 0.4% was very close to the WWU 0.5% figure.<sup>512</sup> Oxera said that the VA measure was far more sensitive to restructuring/outsourcing than the GO measure.<sup>513</sup>
- 7.135 Oxera said that GO and VA TFP measures were both valid productivity measures and the choice depended on context. Based on conceptional grounds, Oxera opted for GO. The Oxera report CEPA referred to was used for base expenditure, rather than totex efficiency assumptions and the VA TFP measure was used as it was the only measure published directly in EU KLEMS.<sup>514</sup> Oxera said that it had provided empirical evidence that among the chosen targeted sectors, there were relatively little intra-industry flows that could potentially bias estimates.<sup>515</sup>
- 7.136 In its response to the provisional determination, WWU said that the CEPA OE range changed between the CEPA May 2020 Report and the November 2020 report, based on a correction which CEPA made to a calculation error in their May 2020 report. The productivity estimates used to inform the OE range changed between the May and November reports based on this correction. The VA TFP and VA LP estimates presented in the May 2020 report were 0.6, 1.0, 1.0 and 1.2. Their equivalent estimates in the November 2020 were 0.5, 0.8, 0.9 and 1.0 respectively. This was an average reduction of 0.15 percentage points based solely on the correction of this calculation error and yet Ofgem’s FD OE challenge only decreased by 0.05 and therefore either did

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<sup>509</sup> [WWU Reply](#), paragraph E3.8. See also Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 11.

<sup>510</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 10.

<sup>511</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 10.

<sup>512</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 10.

<sup>513</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 11.

<sup>514</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, pages 11–12.

<sup>515</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 12.]



not decrease due to a re-consideration of GO TFP or did not fully correct for the calculation error which CEPA had made.<sup>516</sup>

- 7.137 Oxera, in a report for WWU, said that CEPA, in work for the Dutch regulator, had stated that the GO measure was preferred for setting cost allowances.<sup>517</sup> Oxera said that since GEMA had used the productivity measure to inform its efficiency challenge on totex including intermediary goods and services, GO TFP was clearly the more appropriate measure, as it considered all relevant production factors.<sup>518</sup> Oxera said that the outsourcing activities within gas distribution and the comparator sectors implied that there were substitution possibilities between labour and intermediaries. This was a clear indication that the assumption on the production technology applied to derive the VA TFP measure was violated. Therefore, VA TFP was a biased estimate for OE. GO TFP, in contrast, was more robust to outsourcing and therefore the better choice.<sup>519</sup> Oxera said that VA TFP was sometimes advocated to avoid the 'double-counting' problem, but this issue was less relevant in the current context as intra-industry flows were low.<sup>520</sup> Oxera said that conceptually, GO TFP provided a more reliable estimate for the OE challenge when it was applied to the totex cost base.<sup>521</sup> Oxera said that if VA TFP was to be used, then either further adjustments (scaled down by the share of intermediates in the cost base) would be required, or VA TFP should only be applied to a more narrowly defined cost base (ie excluding intermediaries).<sup>522</sup> Oxera said that the GO measures were the preferred estimates of productivity growth in regulatory totex contexts. GO measures could be estimated using EU KLEMS and there were no practical difficulties that limited placing higher weight on the GO measures compared to the VA measures. It was incorrect to place virtually all weight on the VA TFP result. Other regulators had placed focus primarily or exclusively on GO measures.<sup>523</sup>

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<sup>516</sup> WWU Response to PD, paragraph 4.3

<sup>517</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.25.

<sup>518</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.26.

<sup>519</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.26. See also WWU Response to PD, paragraph E4.4.

<sup>520</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.26.

<sup>521</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.27.

<sup>522</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.28.

<sup>523</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraphs 3.32 - 3.33.



## *GEMA's Response*

- 7.138 GEMA said that it had placed weight on the GO measures and reduced the level of the OE challenge as a result. GEMA said that consideration of the GO measure was one of the reasons why CEPA's upper bound was lower in the November 2020 report. To the extent that the appellants suggested that GEMA did not in fact place any weight on GO measures, the suggestion was incorrect.<sup>524</sup>
- 7.139 GEMA said that its decision not to consider GO measures solely was further well-justified. First, there were practical difficulties in estimating GO which limited the weight that could reasonably be placed on them. Second, the use of GO measures generated estimates which were in many cases lower than the lowest estimates which had been put forward by the network companies themselves. Third, VA measures had an advantage in estimating LP insofar as they were far less sensitive than GO LP measures to changes in the vertical structure of different firms in the sample set.<sup>525</sup> GEMA said that regulatory precedent supported placing weight on both measures and did not dictate that GEMA should put more weight on GO measures.<sup>526</sup>
- 7.140 CEPA, in a witness statement for GEMA, said that Oxera had stated that both measures were theoretically valid ways of measuring productivity and that while ideally both measures would be calculated, Oxera had used the VA TFP measure as this was the only one published in EU KLEMS.<sup>527</sup>

## *Our assessment and conclusion*

- 7.141 The appellants said that GEMA placed too much weight on the higher VA measures and insufficient weight on GO measures (see paragraphs 7.117 to 7.137).
- 7.142 Table 7-2 below shows the different productivity estimates in Table 1 of the CEPA November 2020 report. It is important to note that as well as basing its recommendation on the figures in Table 7-2, CEPA listed a set of factors that CEPA considered would together support a more stretching core OE challenge of up to 0.95% on capex/replex and 1.05% on opex.<sup>528</sup> These included consideration of the recent CMA provisional findings for PR19, which set a totex challenge of 1%, placing greater weight on VA productivity

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<sup>524</sup> GEMA Response B, paragraph 122.

<sup>525</sup> GEMA Response B, paragraph 123.

<sup>526</sup> GEMA Response B, paragraphs 124–125.

<sup>527</sup> Keane 1 (GEMA), paragraph 155.

<sup>528</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, page 7.

measures, and/or economy-wide historical productivity improvements and consideration of labour productivity measures.<sup>529</sup>

**Table 7-2: CEPA's set of productivity measures**

| Productivity measure  | Expenditure category | Targeted comparator set | Economy-wide comparator set |
|---|----------------------|-------------------------|-----------------------------|
| VA LP at constant capital   | opex                 | 0.8%                    | 1.0%                        |
| VA TFP  | capex, repex, opex   | 0.5%                    | 0.9%                        |
| GO Labour, Energy, Material and Services (LEMS) at constant capital | opex                 | 0.3%                    | 0.5%                        |
| GO TFP  | capex, repex, opex   | 0.2%                    | 0.4%                        |

Source: CEPA, RIIO-GD2 and T2: Cost Assessment –Advice on Frontier Shift policy for Final Determinations, November 2020, Table 1.

7.143 Table 7-2 shows the productivity growth estimates vary depending on which measure is used and whether the targeted comparator set or the economy-wide comparator set is used. The lowest figure is 0.2% for GO TFP using the targeted comparator set. The highest figure is 1% for VA LP using the economy-wide comparator set.

7.144 NERA, in a report for SPT, stated that CEPA's upper bound estimate was higher than any of the VA estimates it presented, and the VA estimates were all higher than the GO estimates it presented. Therefore, it said, it was reasonable to conclude that GEMA had placed no weight on GO estimates.<sup>530</sup>

7.145 We do not agree that this is an appropriate conclusion to draw from the evidence. The CEPA and GEMA evidence shows that the VA productivity measure was only one factor which influenced the decision to set the OE challenge. The CEPA November 2020 report (see paragraph 7.16) and the GEMA submissions (see paragraph 7.19) give other factors which influenced the decision, including the GO productivity measure.

7.146 The appropriate weighting to attach to the VA productivity measure and the GO measure is a matter of regulatory judgement and different regulators can take different views on this topic. Furthermore, as discussed above, the VA productivity measure was only one factor which influenced the OE decision.

7.147 As set out in our Legal Framework, we will apply appropriate restraint and, in principle, not question issues of judgement unless we are satisfied that GEMA's decision is wrong.<sup>531</sup> In our view, the appellants have failed to show that the weight GEMA placed on the VA and GO measures was wrong. For example, SPT said that GEMA applied no weight to the GO measure, while

<sup>529</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, page 8.

<sup>530</sup> *Grayburn (SPT)*, Expert Report, paragraphs 119–124.

<sup>531</sup> See paragraph 3.76.

the evidence shows that consideration of the GO measure was one of the reasons why CEPA's upper bound was lower in the November 2020 report.

- 7.148 We note that Cadent said that GEMA should have placed equal weight on the VA and GO measures.<sup>532</sup> We do not agree. The weight placed on GO and VA measures will depend on the facts of the case. For example, if a regulator has concerns about whether the assumptions underlying the calculation of VA measures are applicable to the industry it is regulating it would be appropriate to place less weight on VA measures.<sup>533</sup> There was no requirement in this case for GEMA to place equal weight on GO and VA measures.
- 7.149 We note the appellants' arguments on the changes between the CEPA May 2020 report and the CEPA November 2020 report and whether these changes involved any meaningful consideration of the GO measures.<sup>534</sup> GEMA explained the reasons for the change as follows.
- 7.150 GEMA said that the tops of the ranges were based on different approaches. The figures in the November 2020 report were based on the evidence considered at that time. The top of the range in the November 2020 report was not set as a delta from the top end of the range presented in the May 2020 report.<sup>535</sup>
- 7.151 GEMA said that the EU KLEMS reference range in CEPA May 2020 report was based on VA values calculated for the time period of 1997-2016.<sup>536</sup>
- 7.152 GEMA said that a different approach was taken for the CEPA November 2020 report. Paragraphs 121 to 132 of the First Witness Statement of Gary Keane discussed the factors linked to the change in the top end of the range. However, GEMA said that that discussion should be viewed in the context of two ranges being produced separately, and then being subsequently compared alongside a commentary of the main factors that would drive a difference between the top end of the two ranges. GEMA said that, for the avoidance of doubt, the top end of the range in the November 2020 report was not set by considering the overall impacts of the changes in evidence from the May 2020 report, and then applying those changes to the May 2020 range to produce the range in the November 2020 report.<sup>537</sup>

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<sup>532</sup> Cadent NoA, paragraph 3.116.

<sup>533</sup> For example, see Oxera's statements on outsourcing and the use of GO and VA measures. Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.26.

<sup>534</sup> For example, SPT Response to PD, paragraph 150.

<sup>535</sup> GEMA, Response to RFI 033, pages 2 and 5.

<sup>536</sup> GEMA, Response to RFI 033, page 2.

<sup>537</sup> GEMA, Response to RFI 033, page 2.

7.153 GEMA said that multiple factors had been taken account of:

- Putting some weight on the GO measure.
- The reduction in the EU KLEMS values due to the change in methodology.
- Consideration of factors in the CMA's PR19 Provisional Findings, particularly the views expressed in that report that water companies may have been less affected by the post-2009 slowdown in wider productivity growth and the potential impact of embodied technical change.<sup>538</sup>

7.154 We find that the evidence does not indicate that GEMA placed insufficient weight on the GO measures. The differences between the May 2020 and November 2020 reports were the result of different evidence bases and GO measures were only one factor. As discussed above, any reduction due to consideration of GO measures could have been offset by consideration of other factors, including consideration of the CMA's PR19 Provisional Findings.

7.155 Therefore, our conclusion is that GEMA did not commit an error by placing too little weight on the GO measures and/or too much weight on the VA measures.

#### *Did GEMA place too much weight on LP?*

7.156 In this section we discuss the appellants' arguments that GEMA erred by incorrectly considering the impact of LP on the OE challenge for opex. We first summarise the evidence and then present our conclusion.

#### *GEMA's approach*

7.157 CEPA said that consideration of LP measures could be a factor which supported a more stretching OE challenge for opex.<sup>539</sup>

7.158 GEMA said that the TFP and LP measures from sources like the EU KLEMS could underestimate the scope for efficiency gains within regulated sectors such as electricity and gas networks in Great Britain. This was because, not only were network companies less exposed to negative shocks, but also the lack of competitive pressure meant they should be able to place greater management focus on driving high efficiency gains.<sup>540</sup>

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<sup>538</sup> GEMA, Response to RFI 033, page 2.

<sup>539</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, pages 7–8.

<sup>540</sup> [GEMA FD Core Document](#), paragraph 5.21.

### *Appellants' submissions*

- 7.159 Cadent said that in the CMA PR19 Redetermination the CMA had placed no weight on LP estimates, which contrasted with the GEMA approach. Cadent said that the LP measures were less appropriate than TFP measures when setting OE challenges for utility companies.<sup>541</sup>
- 7.160 In its response to the provisional determination, Cadent said that it could accept that GEMA could use some regulatory discretion to place weight on LP measures of productivity in setting the OE target. However even placing a 100% weight on LP could not justify a core OE target of 1.05% for opex. The highest LP value in CEPA's quantitative evidence was 1% (VA), ie 0.05% lower than GEMA's decision to use 1.05% for opex. Neither GEMA nor the CMA had explained why it would be correct to place greater weight on the LP measure in setting an OE challenge for opex. Cadent urged the CMA to reconsider whether, consistent with the statutory grounds and its powers, the 'weighting' of measures such as LP/GO/VA could in fact be said to be fully within GEMA's discretion and therefore immune to scrutiny.<sup>542</sup>
- 7.161 NERA, in a report for Cadent, said that consideration of LP could not explain why CEPA's OE recommendation for opex was above the range of LP measures it had set out, because the top end of the range was already determined by LP measures. Moreover, LP did not provide a comprehensive assessment of the overall productivity gains achievable by GDNs as a whole. TFP measures provided a more appropriate assessment of the overall ability of companies to reduce their total costs, including capital and material, over time.<sup>543</sup>
- 7.162 NGN said that GEMA had mischaracterised NGN's submission on LP vs TFP metrics: GEMA had contended that it had considered both the LP and TFP estimates. It was unclear how GEMA could have had regard to this evidence when its point OE estimate was not based on this evidence.<sup>544</sup>
- 7.163 NERA, in a report for SPT, said that consideration of LP could not explain why CEPA's recommendation was above the range of TFP or LP measures it set out. This consideration did not even justify basing its recommendation on the top end of the range of LP measures it surveyed, as opposed to a more

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<sup>541</sup> [Cadent PR19 submission](#), paragraph 14.

<sup>542</sup> Cadent Response to PD, paragraph 10.9b.

<sup>543</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 416 - 417.

<sup>544</sup> [NGN Reply](#), paragraph 107(iii).

balanced reading of the evidence that would have used the middle of the range.<sup>545</sup>

- 7.164 WWU said that GEMA had failed to respond to WWU's evidence and submissions that no weight should apply to 'LP at constant capital' for a number of reasons, including that it was not consistent with the academic literature and it yielded biased results when combined with TFP estimates. While there was a lack of transparency in relation to what weight was placed on LP, it was evident that a high weight must have been given to LP as the opex OE was 0.1% higher than the capex/repex OE.<sup>546</sup>
- 7.165 Oxera, in a report for WWU, said that LP should not be used.<sup>547</sup> Oxera said that GEMA had not engaged with and had misrepresented Oxera's arguments. Oxera did not say that the chosen LP measures had not been considered in previous regulatory decisions but showed that this measure had no conceptional foundation, was not used in the academic literature and yielded biased results. Neither GEMA nor CEPA had responded to Oxera's points.<sup>548</sup>
- 7.166 In its response to the provisional determination, WWU said that the provisional determination said that because labour costs constituted a substantial proportion of the network utilities costs, it was appropriate to take into account LP measures when setting a productivity challenge. This was a finding that the CMA did not have to make (because GEMA had confirmed that it had not used LP to increase the overall productivity challenge) and this could set an unreliable precedent. Although LP had been used before and it could only be valid if LP was combined with capital productivity, producing a productivity benchmark consistent with TFP, WWU was concerned that the CMA had misunderstood the point in question and was at risk of setting an inaccurate precedent. Given that the effect of GEMA's evidence was that no weight was placed on LP in arriving at its overall OE challenge because it was based on a TFP benchmark of 1%, it was incoherent to find that it is appropriate to take into account LP measures when setting the overall productivity challenge when this was not what in fact had happened in this case. WWU asked the CMA to reach a finding on the evidence that LP was not in fact used rather than the conclusion which it had drawn.<sup>549</sup>

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<sup>545</sup> *Grayburn (SPT)*, Expert Report, paragraph 72.

<sup>546</sup> [WWU Reply](#), paragraph E3.4. See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 12.

<sup>547</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 11.

<sup>548</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 12.

<sup>549</sup> WWU Response to PD, paragraph E5.2

### *GEMA's submissions*

- 7.167 GEMA said that the CMA's PR19 Redetermination did not discuss the use of LP measures for opex or suggest that their use would be wrong. It said that GEMA had good reasons for using LP measures, including significant regulatory precedent for the use of LP measures when setting OE challenges for opex.<sup>550</sup>
- 7.168 CEPA, in a witness statement for GEMA, said that there was considerable regulatory precedent for applying LP measures when setting the OE challenge for opex. CEPA had suggested to GEMA that LP estimates should be considered by GEMA alongside TFP measures and other pieces of evidence.<sup>551</sup>

### *Our assessment and conclusion*

- 7.169 The appellants said that GEMA had placed too much weight on the LP measure (see paragraphs 7.159 to 7.166).
- 7.170 In a response to an RFI, NGN clarified its arguments and said that even if GEMA had not solely taken into account LP measures and had placed some weight on TFP measures, NGN's argument would still hold unless GEMA had placed sufficient and significant weight on TFP.<sup>552</sup> NGN also said that staff costs made up 49% of NGN's total opex costs.<sup>553</sup> WWU clarified that, following GEMA's explanations, it still thought there was an issue with the use of LP, but it had become irrelevant.<sup>554</sup>
- 7.171 We find that it is appropriate to take into account LP measures when setting an opex productivity challenge because labour costs constitute a substantial proportion of the network utilities' operating costs.<sup>555</sup>
- 7.172 We also note that the CEPA November 2020 report (see paragraph 7.16) and the GEMA submissions (see paragraph 7.19) give other factors which influenced the decision, so the LP measure was only one of multiple factors that GEMA consider when reaching a decision.
- 7.173 Finally, we note that LP has been explicitly considered in two previous regulatory decisions.

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<sup>550</sup> [GEMA PR19 Response on Totex](#), paragraph 13(2) and [GEMA Response B](#), paragraph 132.

<sup>551</sup> *Keane 1 (GEMA)*, paragraph 67.

<sup>552</sup> NGN, RFI NGN 003, page 4.

<sup>553</sup> NGN, RFI NGN 003, page 5.

<sup>554</sup> WWU Response to PD, paragraph E5.1.

<sup>555</sup> See NGN, RFI NGN 003, page 5.



- (a) The CC in its Northern Ireland Electricity Limited price determination considered that LP measures would be a more appropriate benchmark than TFP. This was because Northern Ireland Electricity Limited's opex costs were around 80% labour costs, compared with 50% labour for capex. This supported a marginally higher productivity assumption for opex than capex when using the EU KLEMS data.<sup>556</sup>
- (b) GEMA in RIIO-T1/GD1 set an opex efficiency challenge of 1% and drew upon labour, and labour and intermediate inputs partial factor productivity measures.<sup>557</sup>

7.174 In its response to the provisional determination, Cadent said that even placing a 100% weight on LP could not justify a core OE target of 1.05% for opex. Cadent said that the highest LP value in CEPA's quantitative evidence was 1% (VA), ie 0.05% lower than GEMA's decision to use 1.05% for opex. Neither GEMA nor the CMA had explained why it would be correct to place greater weight on the LP measure in setting an OE challenge for opex.<sup>558</sup>

7.175 As stated in paragraph 7.143, as well as basing its recommendation on the figures in Table 7-2, CEPA listed a set of factors that CEPA considered would together support a more stretching core OE challenge of up to 0.95% on capex/repex and 1.05% on opex.<sup>559</sup> Therefore Cadent's argument, which focuses on the impact of the LP measure, does not appropriately reflect the process GEMA adopted. Therefore our conclusion is that GEMA did not commit an error by placing too much weight on the LP measure.

7.176 Cadent urged the CMA to reconsider whether, consistent with the statutory grounds and its powers, the 'weighting' of measures such as LP/GO/VA could in fact be said to be fully within GEMA's discretion and therefore immune to scrutiny.<sup>560</sup>

7.177 We find that the weighting to be given to the LP measure is a matter of regulatory judgement and different regulators can take different views on this topic. However, this does not imply that regulators are immune from scrutiny. We have explained in the Legal Framework (see in particular paragraphs 3.73 to 3.79) our approach to matters of regulatory judgement and the circumstances in which we would find that GEMA had erred.

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<sup>556</sup> Competition Commission, [Northern Ireland Electricity Limited price determination](#), paragraph 11.19.

<sup>557</sup> GEMA, [RIIO-T1/GD1: Initial Proposals – Real price effects and ongoing efficiency appendix](#), paragraph 3.23.

<sup>558</sup> Cadent Response to PD, paragraph 10.9b.

<sup>559</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, page 7.

<sup>560</sup> Cadent Response to PD, paragraph 10.9b.



7.178 As part of our assessment of GEMA's exercise of its regulatory judgement in relation to this issue we have scrutinised multiple aspects of the GEMA decision. For example, we considered whether GEMA placed too much weight on the LP measure and whether the final figures GEMA arrived at were supported by the evidence base (see paragraphs 7.763 to 7.801). Therefore we do not find that GEMA's weighting of the LP, GO and VA measures are 'immune to scrutiny'.

7.179 WWU said that the provisional determination stated that because labour costs constituted a substantial proportion of the network utilities' costs, it was appropriate to take into account LP measures when setting a productivity challenge. This was a finding that the CMA did not have to make because GEMA had confirmed that it had not used LP to increase the overall productivity challenge, and this could set an unreliable precedent.<sup>561</sup>

7.180 We understand that WWU's argument relates to concerns regarding using LP when deciding on an overall productivity challenge rather than deciding on an opex productivity challenge. We have clarified the text in paragraph 7.171 to reflect this.

7.181 In summary, for the reasons set out above, we find that that GEMA did not commit an error by placing too much weight on the LP measure.

*Did GEMA fail to account for the link between LP and real wage growth?*

7.182 In this section we discuss the appellant's arguments that GEMA failed to account for the link between LP and real wage growth. We first summarise the evidence and then present our conclusion. Only WWU raised this point.

*GEMA's approach*

7.183 GEMA said that it had decided to set an ex-ante value for OE, while indexing RPEs. GEMA said that several respondents to its DD had argued that this approach was inconsistent. However, no respondent had been able to put forward an alternative methodology for indexing OE. GEMA said that doing so would add unnecessary complexity to the price control for little material gain, and without existing appropriate productivity indices, this may not even be possible.<sup>562</sup>

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<sup>561</sup> WWU Response to PD, paragraph E5.2

<sup>562</sup> [GEMA FD Core Document \(revised\)](#), paragraph 5.24.

7.184 GEMA's approach was to set an ex-ante OE challenge and then include a close-out procedure which would allow it to make adjustments when more information was available.<sup>563</sup>

#### *Appellant's submissions*

7.185 WWU said that GEMA had failed to account for the link between LP and real wage growth. This gave rise to an inherent inconsistency as the efficiency challenge was set ex-ante and was fixed thereafter, while RPEs were subject to annual indexation refreshes during a price control period. Unless addressed, this inconsistency would continue throughout GD2.<sup>564</sup>

#### *Our assessment and conclusion*

7.186 We agree with WWU that there is a link between real wage growth and LP. Nevertheless, we find that GEMA's approach, which will include a close-out procedure that will take account of multiple factors, including the potential impact of Coronavirus (COVID-19) (see paragraphs 7.375 to 7.397), is an appropriate approach which will allow it to account for any problems related to the link between real wage growth and LP. Therefore our conclusion is that GEMA did not err when it decided to set an ex-ante value for the OE challenge and that its approach was an appropriate exercise of regulatory judgement.

#### *Was CEPA's range inconsistent with its own evidence?*

7.187 In this section we discuss the appellants' arguments that GEMA erred by relying on a CEPA range that was inconsistent with CEPA's own evidence. We first summarise the evidence and then present our conclusion.<sup>565</sup>

#### *GEMA's approach*

7.188 CEPA's November 2020 report set out a range of estimates based on different productivity measures, comparator sets and time periods. These ranged from

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<sup>563</sup> [GEMA FD Core Document](#), paragraph 5.25. See also GEMA Main Hearing Transcript, 8 July 2021 (PM session), page 30, line 3 to page 31, line 24.

<sup>564</sup> [WWU NoA](#), section E9.5

<sup>565</sup> Some of the appellants' arguments in this section touch on the weight attached to specific productivity measures. See paragraphs 7.111 - 7.197 for more discussion of these issues.

0.2% to 1.0%.<sup>566</sup> CEPA's final recommended upper bound was 0.95% for capex/replex and 1.05% for opex.<sup>567</sup>

7.189 GEMA set an OE challenge that aimed up within the range set out by CEPA.<sup>568</sup>

#### *Appellants' submissions*

7.190 Cadent said in its response to the provisional determination that CEPA's and GEMA's quantitative evidence did not support a core OE target of 1.05% for opex and 0.95% for Capex/Repex. The quantitative evidence at most supported a 1% target for opex (VA, LP, Economy-Wide), and a 0.9% target for Capex/Repex (VA, TFP, Economy-Wide). While the CMA had not made a judgement on this specific point in its provisional determination, the fact that GEMA had set a target that went beyond the range of quantitative evidence presented by CEPA was obviously wrong.<sup>569</sup>

7.191 NERA, in a report for Cadent, said that CEPA's more stretching OE challenge was actually 0.05 percentage points higher than the highest productivity estimates it presented.<sup>570</sup>

7.192 NGN said that GEMA had claimed to have accounted for factors such as GO productivity measures and the targeted comparator set, but ultimately set an OE challenge that was higher than CEPA's estimates which gave no weight to those factors.<sup>571</sup>

7.193 SPT, in its response to the provisional determination, said that the relevant empirical evidence from the EU KLEMS database mathematically could not support the OE levels identified by GEMA. Assuming an equal weighing to the different measures, it supported an OE target of 0.5% for capex and 0.65% for opex.<sup>572</sup>

7.194 NERA, in a report for SPT, said that CEPA's upper bound figure was 0.05 percentage points higher than the productivity estimates it presented.<sup>573</sup>

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<sup>566</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, Table 1.

<sup>567</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 7.

<sup>568</sup> [GEMA FD Core Document](#), paragraph 5.21.

<sup>569</sup> Cadent Response to PD, paragraph 10.3 and 10.9ai.

<sup>570</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 360. See also [Cadent NoA](#), paragraph 3.110.

<sup>571</sup> [NGN Reply](#), paragraphs 9–10 and 103– 104.

<sup>572</sup> SPT Response to PD, paragraph 161.

<sup>573</sup> [Grayburn \(SPT\)](#), Expert Report, paragraph 52.

### *GEMA's submissions*

7.195 CEPA, in a witness statement for GEMA, said that the appellants' statements were incorrect. The appellants had overlooked the evidence in the CEPA November 2020 report that explained why the raw growth accounting values might not fully capture the potential for OE that could be achieved in RIIO-2. CEPA considered that its approach was similar to the approach taken by the CMA in its PR19 Redetermination Provisional Findings. In making these statements, the appellants had further failed to take account of the specific caveat set out in the Executive Summary of the CEPA November 2020 report that the proposed upper bound of the CEPA range 'should not be seen as being equivalent to using a single data even if by coincidence, 1.0% is the highest value shown in Table 1'.<sup>574</sup>

### *Our assessment and conclusion*

7.196 The appellants said that CEPA's and GEMA's quantitative evidence did not support a core OE target of 1.05% for opex and 0.95% for Capex/Repex (see paragraphs 7.190 to 7.194).

7.197 The CEPA upper bound of 1.05% was 0.05 percentage points higher than the highest figure in Table 1 in the CEPA November 2020 report. However, CEPA listed in the November 2020 report the factors that would together support a more stretching OE challenge (see paragraph 7.16). Consequently, CEPA's choice of 1.05% was based not only on the information in the table, but also other factors. Based on this evidence, our conclusion is that CEPA did not make an error and did not present a range that was inconsistent with its own evidence. Consequently, our conclusion is that GEMA did not commit an error when it relied upon the CEPA evidence.

### ***Did GEMA err and use inappropriate comparator sets?***

7.198 In this section we discuss the appellants' arguments that GEMA erred by using the wrong sets of comparator industries when setting the OE challenge. We first summarise the evidence and then provide our conclusion.

### *GEMA's approach*

7.199 CEPA recommended that GEMA should take account of EU KLEMS historical productivity measures using two comparator sets:

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<sup>574</sup> Keane 1 (GEMA), paragraphs 140–142.

- (a) A targeted comparator set containing construction; wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; and financial and insurance activities.<sup>575</sup> CEPA said that the sectors were not a perfect match for the network company activities as that was not possible to achieve – rather they represented a reasonable proxy. CEPA excluded manufacturing because of the high capital intensity of some manufacturing sectors. It said that productivity growth had been relatively high in manufacturing, so this decision reduced the productivity estimates for this set.<sup>576</sup>
- (b) An economy-wide comparator set based on a weighted average of all industries excluding real estate, public administration, education, health and social services.<sup>577</sup> CEPA said that there would be opportunities for energy network companies to learn from productivity improvements in other sectors and implement them in their own activities. This approach was also consistent with taking into account the economy-wide productivity forecasts from the BoE and OBR.<sup>578</sup>

7.200 GEMA used the methodology set out in the CEPA report and said that before its final report some stakeholders had said that GEMA had used a set of comparator industries that was too wide and used a weighting that was not reflective of costs. However, none had provided compelling evidence to lead GEMA to change its position.<sup>579</sup>

### *Appellants' submissions*

7.201 Cadent said that GEMA was wrong to rely exclusively on a dataset which included industries that were not good comparators for the gas distribution industry.<sup>580</sup> Cadent said that the CEPA upper bound was derived solely from the economy-wide comparator set. This approach was a material error because it was unsupported by any economic rationale or regulatory precedent and was contradicted by CEPA's own recommendations to GEMA.<sup>581</sup>

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<sup>575</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 14.

<sup>576</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 28.

<sup>577</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 15.

<sup>578</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 27.

<sup>579</sup> [GEMA FD Core Document](#), paragraph 5.23.

<sup>580</sup> [Cadent NoA](#), paragraph 3.117.

<sup>581</sup> [Cadent NoA](#), paragraph 3.118.

- 7.202 Cadent said that while regulators often considered economy-wide evidence when setting OE challenges, precedent showed that it was good regulatory practice to draw on evidence from comparable industries. That was the approach taken by GEMA at RIIO-GD1, Ofwat at PR19, and the CMA in its PR19 Provisional Findings. However, at RIIO-GD2 GEMA reversed course without justification by relying solely on an economy-wide set of industries that did not resemble gas networks.<sup>582</sup> Cadent said that CEPA had recommended to GEMA to use both the targeted and economy-wide comparator datasets when determining the OE challenge. GEMA had simply assumed without any supporting evidence or justification that GDNs would be able to replicate efficiency gains seen in the wider economy. That assumption defied economic logic: the economy-wide set included sectors that had benefitted from substantial technological leaps and globalisation to a much greater extent than GDNs could reasonably be expected to achieve.<sup>583</sup>
- 7.203 Cadent said GEMA's full reliance on the upper bound (and therefore on the economy-wide comparators only) overstated the productivity growth that was capable of being achieved by GDNs. As NERA explained, GEMA should instead have placed equal weight on both the 'targeted' and 'economy-wide' comparator sets.<sup>584</sup>
- 7.204 In its response to the provisional determination, Cadent said that neither GEMA nor CEPA had at any point explained why it would be correct to place additional weight on economy-wide measures. GEMA's position was simply that such weightings could achieve a higher OE target and that it was entitled to opt for such higher target in its regulatory discretion. This was clearly untenable and demonstrated the arbitrariness and lack of evidence underpinning GEMA's core OE target.<sup>585</sup>
- 7.205 Cadent's advisers, NERA, said that CEPA's more stretching OE challenge did not reflect the nature of the gas distribution industry. CEPA's more stretching OE challenge was higher than the productivity growth observed in the economy-wide comparator set, which suggested it had placed no weight on the targeted comparator set.<sup>586</sup> While regulators often considered economy-wide productivity evidence in setting OE challenges for utilities, regulatory precedent showed that it was good practice to draw on evidence from a range of industries comparable to the regulated industry, as GEMA, Ofwat and the

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<sup>582</sup> Cadent NoA, paragraph 3.119.

<sup>583</sup> Cadent NoA, paragraph 3.120.

<sup>584</sup> Cadent NoA, paragraph 3.121.

<sup>585</sup> Cadent Response to PD, paragraph 10.9a.ii.

<sup>586</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 387.

CMA had done in the past.<sup>587</sup> As well as contradicting regulatory precedent, at RIIO-GD2, GEMA had relied on the economy-wide definition of productivity improvement in industries which were very different in nature to the utilities sector. This approach likely overstated the rate of productivity improvement that was achievable for GDNs.<sup>588</sup> Many industries had benefitted greatly from globalisation and the growing use of the internet and computers.<sup>589</sup> GDNs were infrastructure businesses with long-lived assets and this limited their ability to incorporate new technology into their operations.<sup>590</sup>

7.206 NGN said that GEMA had erroneously placed too much weight on an economy-wide comparator set, which was less comparable to GDNs.<sup>591</sup> NGN said that the CMA in its PR19 Redetermination had accepted the use of a targeted comparator set, which aligned with NGN's view that GEMA had placed too much weight on the economy-wide comparator set.<sup>592</sup>

7.207 NGN said that GEMA had mischaracterised NGN's submissions. GEMA had contended that it had had regard to both the economy-wide and targeted comparators. It was unclear how GEMA could 'have regard' to this evidence when its point OE estimate was not based on this evidence.<sup>593</sup>

7.208 Frontier Economics, in a report for NGN and SGN, said that GEMA had placed most weight on an economy-wide comparator set, which included a large number of sectors that were not comparable to energy networks. This was inconsistent with GEMA's view that the economy-wide productivity slowdown did not apply to energy networks. This amounted to 'cherry-picking' of economy-wide evidence where it supported a higher OE challenge.<sup>594</sup>

7.209 SPT said that GEMA had calculated the OE challenge exclusively by reference to the range based on the economy-wide dataset. This was irrational for three reasons. First, CEPA had recommended against basing the OE challenge exclusively upon economy-wide data and instead had recommended using both targeted and economy-wide data sets. Second, GEMA had obtained and presented data from more targeted comparator sets and had identified construction as the closest comparator set. Third, in its calculations, GEMA, without explanation, had ignored the data from that subset of the economy that was most closely comparable to electricity

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<sup>587</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 389 - 391. ]

<sup>588</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 392.

<sup>589</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 393.

<sup>590</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 394.

<sup>591</sup> [NGN NoA](#), paragraph 55(iv). See also paragraphs 319(iv) and 334(iii).

<sup>592</sup> [NGN PR19 submission](#), paragraph 25(i).

<sup>593</sup> [NGN Reply](#), paragraph 107(iii).

<sup>594</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraphs 1.1.11(b)(iii) and 6.2.28–6.2.33.



transmission (in particular, construction) and instead calculated its OE challenge range exclusively on the basis of the economy-wide data set.<sup>595</sup>

7.210 SPT said that GEMA had not given weight to the targeted set of comparators, instead relying on economy-wide measures.<sup>596</sup>

7.211 NERA, in a report for SPT, said that CEPA's stretching OE challenge seemed to contradict CEPA's own recommendation that:

support[s] the use of multiple industry comparator sets, including targeted and economy-wide, to inform the OE challenge that Ofgem sets at FD, rather than directly using a point estimate for a single comparator set.<sup>597</sup>

7.212 NERA said that there was clear evidence that the targeted set had experienced lower productivity growth than the economy as a whole.<sup>598</sup> NERA said that GEMA's stretching target did not reflect the nature of the electricity transmission industry, as GEMA had relied exclusively on the economy-wide comparator set. GEMA had claimed that it had had regard to the targeted comparator set constructed by CEPA. However, this was not the case. GEMA's core OE challenge was above the economy-wide comparator set, therefore GEMA could not credibly claim to have had any real regard to its own lower targeted set.<sup>599</sup>

7.213 NERA said that CEPA had not explained why this recommendation to rely on multiple industry comparator sets did not apply when formulating its more stretching target, which was slightly above the economy-wide evidence and materially higher than productivity evidence from the targeted comparator set.<sup>600</sup>

7.214 NERA said that the economy-wide comparator set was a very broad benchmark and therefore did not consider the specific activities undertaken by TOs. While such a set could provide a useful estimate of the productivity growth of the economy as a whole, it might not provide an accurate guide to the productivity gains achievable by the TOs.<sup>601</sup> It was good practice to draw on evidence from a range of industries assessed by the regulators (or their advisers) to be comparable to the regulated industry.<sup>602</sup> Furthermore, as well

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<sup>595</sup> [SPT NoA](#), paragraph 63. See also SPT Closing Statement, paragraph 29.

<sup>596</sup> [SPT Reply](#), paragraph 27(2).

<sup>597</sup> *Grayburn (SPT)*, Expert Report, paragraph 99.

<sup>598</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 84.

<sup>599</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 87.

<sup>600</sup> *Grayburn (SPT)*, Expert Report, paragraph 99.

<sup>601</sup> *Grayburn (SPT)*, Expert Report, paragraph 100.

<sup>602</sup> *Grayburn (SPT)*, Expert Report, paragraph 101.



as contradicting regulatory precedent, CEPA's wide definition measured productivity improvements in industries which were very different in nature to the utilities sector. For example, many industries had benefitted greatly from technological transformation due to globalisation and the growing use of the internet, computing and automation. While the utilities sector might reap some of those benefits, eg through the automation of maintenance, ultimately TOs were infrastructure businesses and had a limited ability to incorporate new technology into their operations because their assets were extremely long-lived.<sup>603</sup> GEMA's approach therefore ignored the economic rationale for relying on productivity evidence only from relevant industries and relied solely on the 'wide' industry definition. GEMA also had provided no justification for doing so.<sup>604</sup>

7.215 WWU said that GEMA had erred in its decision to use an economy-wide comparator set to inform its OE challenge.<sup>605</sup> It said that the activities of the comparator industries must be sufficiently 'like' that of gas so as to avoid distorting the OE challenge.<sup>606</sup> WWU said that comparing GDNs with such dissimilar industries was like 'comparing apples with pears'. Goods, technologies and methods of productivity differed between sectors. For example, it would be unsustainable to hold GDNs to the standard of productivity that could be expected in the digital sector where advances in technology drove productivity in a way that could not be replicated in a 'pipes in the ground' industry.<sup>607</sup>

7.216 WWU said that CEPA's comparator set had failed to incorporate industries sharing the same characteristics as GDNs – natural monopoly regulated industries, such as water. This was because CEPA's comparator set criteria placed weight on competition which meant that the industries in the set were not comparable with network industries.<sup>608</sup>

7.217 WWU said that GEMA was wrong to focus solely on an economy-wide benchmark which had the effect of subjecting WWU to the same OE challenge as could be expected in an industry with completely different efficiency and productivity drivers. That error had produced an upwards bias to the resulting estimate, as economy-wide productivity had historically been higher than comparator sectors.<sup>609</sup>

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<sup>603</sup> *Grayburn (SPT)*, Expert Report, paragraph 102.

<sup>604</sup> *Grayburn (SPT)*, Expert Report, paragraph 104.

<sup>605</sup> *WWU NoA*, section E7.1.

<sup>606</sup> *WWU NoA*, section E7.3.

<sup>607</sup> *WWU NoA*, section E7.5.

<sup>608</sup> *WWU NoA*, section E7.7.

<sup>609</sup> *WWU NoA*, section E7.8.

- 7.218 Oxera, in a report for WWU, said that CEPA had inappropriately used the economy-wide productivity estimate.<sup>610</sup> CEPA had implicitly assumed that productivity differences were not persistent and that spill-over effects would cause productivity growth rates to converge.<sup>611</sup> The empirical literature documented productivity spill-over effects across firms that were close in geographic and technological senses, suggesting that any spill-over process was far from perfect. There was therefore no evidence that productivity growth rates across different industries had converged in the short or long term.<sup>612</sup> Therefore, an economy-wide productivity estimate should not be an ‘important’ piece of evidence – nor the only piece of evidence, as per GEMA’s approach – to inform the OE challenge for energy networks.<sup>613</sup>
- 7.219 Oxera said there were errors in the construction of the targeted comparator set. CEPA had selected the ‘targeted’ comparator set based on a number of criteria. However, CEPA’s selection criteria of comparability and competitiveness contradicted each other. Network industries were natural monopolies due to sunk investment, and the lack of actual or potential competition provided the economic justification for regulation. Other sectors sharing similar characteristics (such as water) were therefore also regulated. The fact that CEPA had not considered the energy and water sector in the targeted comparator set showed that CEPA had placed far more weight on the competitiveness of the sector than on its comparability.<sup>614</sup> Oxera said that there were errors in the selection of the sectors in the targeted comparator set and CEPA had not explained how the chosen sectors mapped to the most relevant activities. Oxera acknowledged some similarities. There was, however, no similar task between a network operator and the repair of motor vehicles and motorcycles or transportation and storage.<sup>615</sup> Furthermore, CEPA had used only a small number of comparator sectors, with only three of four chosen comparator sectors sharing some similarities with the network industry. However, the inclusion or exclusion of this sector had an immaterial impact on the estimated OE.<sup>616</sup> Oxera said that the TFP growth rates representing different activities should be weighted by their relevance in

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<sup>610</sup> Oxera (WWU), Review of GEMA’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.41.

<sup>611</sup> Oxera (WWU), Review of GEMA’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.42.

<sup>612</sup> Oxera (WWU), Review of GEMA’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.43.

<sup>613</sup> Oxera (WWU), Review of GEMA’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.44.

<sup>614</sup> Oxera (WWU), Review of GEMA’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.45.

<sup>615</sup> Oxera (WWU), Review of GEMA’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.47.

<sup>616</sup> Oxera (WWU), Review of GEMA’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.48.

representing the network activities, rather than giving each of the sectors the same weight.<sup>617</sup> CEPA had ignored that weights could be informed by the industry's cost shares dedicated to specific activities, as robust and validated data was available to derive these shares. Given that GEMA had detailed information on the industry's cost structure, the weighting scheme could be constructed without applying 'subjective assumptions'.<sup>618</sup> CEPA had also ignored that the weighted average approach would be consistent with regulatory precedent.<sup>619</sup>

- 7.220 Oxera said that GEMA's argument that using an economy-wide comparator set was consistent with taking into account BoE and OBR economy-wide productivity forecasts, was inconsistent with CEPA's statement that this evidence from forecasts was not used to determine the core OE figure. Oxera said that GEMA had not responded to Oxera's arguments on spill-overs.<sup>620</sup>
- 7.221 WWU said that WWU's submission and Oxera's evidence arguing for TFP from targeted sectors had been largely ignored by GEMA and CEPA.<sup>621</sup> WWU said that the economy-wide target imposed the risk that sectors that were totally irrelevant were included. Being not able to perfectly match targeted sectors was no excuse to include irrelevant sectors for the sake of simplicity. Moreover, CEPA was still not able to provide any empirical evidence supporting their view of spill-over effects. The evidence provided by WWU did not suggest that such spill-over effects existed on a large scale.<sup>622</sup>
- 7.222 In its response to the CMA's provisional determination WWU said that the CMA had not correctly referenced the point which WWU was making in its appeal. WWU's expert evidence from Oxera was not that regulated monopolies should be included in the comparator set, but that CEPA had two contradictory criteria for selecting sectors and placed most or all of the weight on competition as a criterion and little or no weight on sectors which had comparable activities.<sup>623</sup>
- 7.223 WWU said that it was disappointed that the extensive expert evidence which was set out by Oxera in its report regarding the economy wide productivity estimate was not considered sufficient by the CMA. WWU was not clear why

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<sup>617</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.49.

<sup>618</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.51.

<sup>619</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.53.

<sup>620</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 13.

<sup>621</sup> [WWU Reply](#), paragraph E3.7.

<sup>622</sup> [WWU Reply](#), paragraph E3.9 See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 13.

<sup>623</sup> WWU Response to PD, paragraph E7.1

this was considered not sufficient by the CMA, given that there was very limited useful information from an economy wide productivity estimate when setting an ongoing efficiency challenge for the GDNs. There was no explanation given in the provisional determination which assessed the evidence or why the evidence was not sufficient. The CMA's provisional determination merely stated the evidence without assessing the merits, which was inconsistent with a merits review.<sup>624</sup>

7.224 WWU said that it was concerned that the CMA's provisional determination did not address the lack of transparency in GEMA's decision making. That lack of transparency as to the weight that GEMA gave to any of these factors made it very difficult for both appellants in their appeals and the CMA in its determinations. One of the principles of regulatory best practice was transparency. It would be helpful if the CMA could set out in its final determinations the weight which it had found GEMA had placed on various matters, and if this could not be determined that the CMA made a finding that GEMA should be much more transparent in this and the future price controls as to the weight that it placed on various different elements. Where the CMA could not determine what weight GEMA placed on an individual element, it was open to the CMA to find that GEMA had erred.<sup>625</sup>

#### *GEMA's submissions*

7.225 CEPA, in a witness statement for GEMA, said that it did not agree that the top of CEPA's range was consistent with only considering the economy-wide comparator set and disregarding the narrow comparator set.<sup>626</sup> Equating the top of CEPA's range to being based on the highest value from the growth accounting analysis was a misrepresentation of the CEPA analysis in the November 2020 report.<sup>627</sup>

7.226 CEPA said that the appellants had failed to take account of the specific caveat set out in the Executive Summary of the November 2020 report that the proposed upper bound of CEPA's range should not be seen as being equivalent to using a single data point considered in the growth accounting analysis; even if by coincidence, 1.0% was the highest value shown in Table 1 in the November 2020 report.<sup>628</sup>

7.227 CEPA, in a witness statement for GEMA, said that the CEPA May 2020 report showed that the economy-wide comparator set was around the middle of the

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<sup>624</sup> WWU Response to PD, paragraph E6.1.

<sup>625</sup> WWU Response to PD, paragraph E6.2.

<sup>626</sup> *Keane 1 (GEMA)*, paragraph 160.

<sup>627</sup> *Keane 1 (GEMA)*, paragraph 161.

<sup>628</sup> *Keane 1 (GEMA)*, paragraph 142.

range of the industry sample groups that GEMA had considered in RIIO-GD1 and RIIO-T1.<sup>629</sup> Furthermore, the economy-wide productivity analysis was an important part of the overall evidence base for setting the OE challenge, alongside a more focused comparator set.<sup>630</sup> This reflected the fact that there was no perfect comparator set for the energy networks. There was no solid dividing line that could be drawn between the activities carried out in the energy network sector and some of the activities carried out in sectors that did not look like close comparators. There would be opportunities for energy network companies to learn from productivity improvements in other sectors and implement them in their own activities.<sup>631</sup>

7.228 GEMA said that it had as a matter of fact had regard to the targeted comparator set constructed by CEPA in addition to the economy-wide comparator set. In generating indicative values from the growth accounting analysis, CEPA had considered productivity estimates from both the unweighted average of certain comparable sectors and the weighted average of the entire economy (excluding certain sectors such as health). CEPA's growth accounting analysis informed GEMA's final decision.<sup>632</sup> Using an economy-wide comparator set was also consistent with taking into account economy-wide productivity forecasts from the BoE and OBR.<sup>633</sup>

7.229 GEMA said that WWU had made the further point that the targeted comparator set which CEPA had selected was in any event inappropriate insofar as it excluded other natural monopoly regulated industries such as water. This point was misconceived. The purpose of the growth accounting analysis was to provide an external benchmark from competitive sectors for productivity improvements which might be achievable in the energy sector. The OE challenge was intended to challenge the energy network companies to achieve the same productivity improvements that would be achievable in the wider competitive economy. It would be inconsistent with these objectives to include regulated monopolies such as water companies in the comparator set.<sup>634</sup>

### *Our assessment and conclusions*

7.230 In this section we give our assessment and conclusions on four errors raised by the appellants:

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<sup>629</sup> *Keane 1 (GEMA)*, paragraph 162.

<sup>630</sup> *Keane 1 (GEMA)*, paragraph 163.

<sup>631</sup> *Keane 1 (GEMA)*, paragraph 164.

<sup>632</sup> [GEMA Response B](#), paragraph 128.

<sup>633</sup> [GEMA Response B](#), paragraph 129(3).

<sup>634</sup> [GEMA Response B](#), paragraph 130.

- (a) Did GEMA err in the construction of the comparator set? This error was alleged by WWU.<sup>635</sup>
- (b) Did GEMA err by placing too much weight on the competition criterion? This error was alleged by WWU.<sup>636</sup>
- (c) Did GEMA err because insufficient weight was attached to the targeted comparator set? This error was alleged by Cadent,<sup>637</sup> NGN,<sup>638</sup> SPT<sup>639</sup> and WWU.<sup>640</sup>
- (d) Did GEMA err because there was a lack of transparency in its decision making? This error was alleged by WWU.<sup>641</sup>

*Was there an error in the construction of the comparator set?*

- 7.231 Oxera said there were errors in the selection of the sectors in the targeted comparator set and CEPA had not explained how the chosen sectors mapped to the most relevant activities (see paragraph 7.219).
- 7.232 CEPA said that the sectors for the targeted comparator set were the same as those Ofgem used for GDPCR and GD1. The four sectors captured the following activities of the energy networks – construction and installation of assets, repair and maintenance of assets, transporting and storing supply chain inputs for use across a geographical areas, and provision of business services to intermediaries (energy suppliers) and to end customers directly. CEPA acknowledged these sectors were not a perfect match for the network company activities as that was not possible to achieve – rather they represented a reasonable proxy. CEPA said that it had excluded manufacturing sectors from the targeted comparator set as there were concerns raised about the comparability of productivity improvements in manufacturing and energy networks. This reduced the historical productivity estimates for the comparator set.<sup>642</sup>

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<sup>635</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, section 3E.3.

<sup>636</sup> WWU Response to PD, paragraph E7.1

<sup>637</sup> [Cadent NoA](#), paragraphs 3.117.

<sup>638</sup> [NGN NoA](#), paragraph 55(iv).

<sup>639</sup> [SPT NoA](#), paragraph 63.

<sup>640</sup> [WWU NoA](#), section E7.1.

<sup>641</sup> WWU Response to PD, paragraph E6.2.

<sup>642</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 28.

- 7.233 The four sectors chosen by CEPA share similarities with the tasks undertaken by energy networks and therefore we agree with CEPA that they represent a reasonable proxy.
- 7.234 We note that in its analysis Oxera added extra sectors for opex activities, to 'better capture activities such as business support, grid metering, grid maintenance and planning' when building its comparator set.<sup>643</sup>
- 7.235 In Oxera's analysis the OE figure from the comparator set is 0.4%. This is a weighted average, which included the opex activities where the OE figure is 0.5%.<sup>644</sup> This suggests that the Oxera approach of adding sectors to reflect opex activities increases the OE challenge figure estimated by Oxera. Therefore the CEPA approach of not including these activities is likely to have reduced the average CEPA core OE challenge figure compared to adopting the Oxera approach.
- 7.236 Based on this evidence we find that GEMA's approach of relying on the targeted comparator set constructed by CEPA was within its margin of appreciation and GEMA did not err in the selection of the sectors in the comparator set.
- 7.237 Oxera also said that the TFP growth rates representing different activities should be weighted by their relevance in representing the network activities, rather than giving each of the sectors the same weight (see paragraph 7.219).
- 7.238 There are different methods of using the TFP growth rates from different industries. One approach is the Oxera approach, which weights the comparator industries according to their share of the companies' cost bases. This approach, however, would introduce additional complications, including how to link company costs to comparator industries and whether to use actual cost figures or the cost figures of the frontier company. An alternative approach is to use an average. For example, in the CMA PR19 Redetermination the CMA used an average, deciding that applying weights would introduce spurious accuracy and potentially result in some useful comparators being underweighted.<sup>645</sup> In summary, the different approaches each have different advantages and disadvantages and the best method will depend on the circumstances of the case.
- 7.239 We find that WWU's analysis fails to demonstrate that its proposed approach was clearly superior to GEMA's decision to rely on the CEPA approach, which

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<sup>643</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 6.2.

<sup>644</sup> Oxera (WWU), Review of GEMA's ongoing efficiency decision in the RIIO-2 Final Determinations, Table 6.3.

<sup>645</sup> [CMA PR19 Redetermination](#), paragraph 4.522.

gave equal weight to each industry. The GEMA decision falls within the margin of appreciation that should be afforded to regulators. Therefore, our conclusion is that GEMA did not err.

*Was too much weight placed on the competition criterion?*

7.240 WWU said that CEPA had two contradictory criteria for selecting sectors and placed most or all of the weight on competition as a criterion and little or no weight on sectors which had comparable activities (see paragraphs 7.216 and 7.222).

7.241 One use of growth accounting analysis is to provide an external benchmark using competitive sectors. This can be used to inform decisions on the appropriate OE challenge for the energy sector. Including regulated monopolies, such as water companies, in the comparator set would be inconsistent with this use of growth accounting analysis. Therefore, in these circumstances, placing weight on competition as a criterion is an appropriate approach. On this basis, our view is that GEMA did not err by placing too much weight on the competition criterion and not including regulated monopolies in the targeted comparator set.

*Was insufficient weight attached to the targeted comparator set?*

7.242 The appellants said that insufficient weight was attached to the targeted comparator set (see paragraphs 7.201 to 7.215 and 7.217 to 7.218, 7.221 and 7.223). As part of this, WWU said that CEPA was not able to provide any empirical evidence supporting CEPA's view of spill-over effects and WWU's evidence did not suggest that such spill-over effects existed on a large scale (see paragraphs 7.218 and 7.220 to 7.221).

7.243 It is important to note that GEMA's decision on the core OE challenge was based on multiple factors (see paragraphs 7.16 and 7.19). One of those factors was the economy-wide comparator set and another factor was the targeted comparator set.

7.244 There is no perfect targeted comparator set for the energy networks and no solid dividing line that can be drawn between the activities carried out in the energy network sector and some of the activities carried out in sectors that do not immediately appear to be close comparators. Therefore, we find that it is appropriate to place some weight on both the economy-wide comparator set and the targeted comparator set. Weight should not be placed exclusively on the targeted comparator set. This is consistent with the approach GEMA took.



7.245 With regard to the spill-over effects, it is likely that the energy networks will be able to learn and adopt improvements from other sectors. For example, they may adopt management techniques developed in other areas. Therefore, we find that it is appropriate to place some weight on both the economy-wide comparator set and the targeted comparator set.

7.246 Based on the evidence above, we find that the appellants did not provide sufficient evidence that GEMA's decision, which was based on multiple factors, placed insufficient weight on the targeted comparator set. Therefore our conclusion is that GEMA did not err in that regard.

*Was there error due to a lack of transparency in GEMA's decision making?*

7.247 WWU's said that there was a lack of transparency regarding the weight GEMA gave to individual factors in its decision making (see paragraph 7.224)

7.248 GEMA did not assign explicit weight to individual factors, including the specific weight attached to the targeted and economy-wide comparator sets, and we would not expect it to do so. GEMA explained the pieces of evidence it used making an in-the round decision. This is a common and appropriate approach to regulation which provides sufficient transparency for other parties to understand the reasoning. Therefore we find GEMA did not err due to a lack of transparency in its decision making.

***Did GEMA err by relying on embodied technical change?***

7.249 In this section we discuss the appellants' arguments that GEMA erred when it relied upon embodied technical change. We first summarise the evidence and then provide our conclusion.

*GEMA's approach*

7.250 GEMA said that the CMA in PR19 had determined that there was a valid conceptual basis for increasing its 0.7% starting point for the OE challenge to take account of embodied technical change. This reasoning applied equally to the OE challenge for RIIO-2. GEMA's consultants, CEPA, cited embodied technical change as a factor supporting a more stretching OE challenge.<sup>646</sup>

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<sup>646</sup> [GEMA PR19 Response on Totex](#), paragraph 12(4).

## *Appellants' submissions*

- 7.251 Cadent said that embodied technical change did not apply to the VA measures GEMA had relied upon, so could not be used to justify a higher OE challenge.<sup>647</sup>
- 7.252 NERA, in a report for Cadent, said that VA LP growth estimates captured the fact that the labour force had access to higher quality capital and intermediate inputs. VA LP measures, which defined the top end of CEPA's range, were calculated as the value of output per unit of labour inputs, so they would not be understated by computers becoming more powerful over time. According to Europe Economics (Ofwat's advisers in the CMA PR19 Redetermination), embodied technical change was especially prevalent for capital goods but also for intermediate inputs, suggesting that bias would be minimal for VA and especially LP measures. The impact of embodied technical change on productivity indices therefore provided no basis to deviate from the quantitative evidence, as it was already captured by CEPA's range of quantitative evidence.<sup>648</sup>
- 7.253 In its response to the provisional determination, SPT said that it continued to disagree that embodied technical change was relevant at all. However, it agreed with the CMA that, if embodied technical change was relevant, it was meaningfully relevant only to the GO measure of productivity. Therefore it could only be taken into account as an adjustment if and to the extent that the GO measure was also taken into account. It followed that, if the GO measure had no weighting (or only a partial weighting) in the determination of the core OE challenge, the effect of embodied technical change must be similarly limited. Even for the GO measures, it was clear that, if it were to be taken into account, it would warrant only a small upward adjustment to the various GO measures – and accordingly a proportionately even smaller adjustment to the overall core OE levels. SPT did not understand CEPA or GEMA to have carried out any work or produced any firm evidence on the size of adjustment that may be warranted, preferring instead to treat it as an overall qualitative adjustment (where the implicit size of the adjustment faced less scrutiny). However, it would be illogical and irrational for any such adjustment to be disproportionate to the underlying input it was adjusting.<sup>649</sup>
- 7.254 SPT said that although the CMA had noted the appellants' arguments on embodied technical change in the provisional determination, its response

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<sup>647</sup> [Cadent Reply](#), paragraph 52(d).

<sup>648</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56D(ii).

<sup>649</sup> SPT Response to PD, paragraph 136(6).

explained only that, because it has concluded the GO measure was taken into account, it followed that embodied technical change could be taken into account as well. However, the CMA had not engaged with the appellants' arguments as to why embodied technical change was not relevant, or not likely to be significant, even for the GO measure. For example, the arguments summarised in paragraph 7.406 did not appear to have been addressed.<sup>650</sup>

7.255 WWU said that GEMA was wrong to rely on the unsubstantiated hypothesis that embodied technical change was not included in the EU KLEMS. In any event, recent evidence illustrated that the impact of embodied technical change was negative and insignificant, and its relevance to energy networks was questionable.<sup>651</sup>

7.256 WWU said that GEMA had adopted an unbalanced application of regulatory discretion when CEPA argued that embodied technical change justified aiming up with no analysis or assessment. GEMA and CEPA had failed to acknowledge that network companies had improved quality of service significantly over GD1 and were planning to do so over GD2 for no additional cost. This represented a further OE challenge over and above GEMA's challenge. This also meant that embodied technical change did not provide a valid reason for any additional qualitative uplift as, if there were any quality improvements in the inputs that network companies used, it was highly likely that these were passed on to consumers in terms of quality improvements.<sup>652</sup>

### *GEMA's submissions*

7.257 CEPA said it had taken account of the fact that EU KLEMS may underestimate the scope for productivity improvements because it did not capture cost savings from quality improvements that were 'embodied' in the inputs used by the network companies.<sup>653</sup> This was consistent with the approach taken in the CMA PR19 Redetermination.<sup>654</sup>

### *Our assessment and conclusion*

7.258 The appellants said that GEMA erred when it relied on embodied technical change (see paragraphs 7.401 to 7.406).

7.259 For the reasons given by the appellants (see paragraphs 7.401, 7.403 and 7.404), the reliance on embodied technical change should be commensurate

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<sup>650</sup> SPT Response to PD, paragraph 147.

<sup>651</sup> [WWU NoA](#), section E9.4

<sup>652</sup> [WWU Reply](#), paragraph E4.1(e). See also WWU Main Hearing Transcript, 1 July 2021, page 121, lines 12–22.

<sup>653</sup> *Keane 1 (GEMA)*, paragraphs 117–119.

<sup>654</sup> *Keane 1 (GEMA)*, paragraph 171.

with the reliance on GO measures. For the reasons explained in paragraphs 7.141 to 7.155 we find that GEMA placed some weight on the GO measure and did not place too much weight on the VA measure. Therefore we find that it was appropriate for GEMA to place some weight on embodied technical change. We agree with SPT that the impact of embodied technical change on the OE challenge should be influenced by the weight placed on the GO measure (see paragraph 7.403).

7.260 We note SPT's and WWU's arguments on the relevance of embodied technical change and Oxera's reference to work by Economic Insights (see paragraphs 7.404 to 7.405). This work found that the impact of embodied technical change was negative and insignificant.<sup>655</sup> Europe Economics said that the report produced results which were not credible due to a methodological flaw.<sup>656</sup> Given the methodological issues, we do not place weight on the finding in the Economic Insight paper that the impact of embodied technical change could be negative or insignificant.

7.261 The evidence provided shows that GEMA took some account of embodied technical change in its decision making, which is consistent with GEMA's consideration of GO measures in its decision making. The appellants have failed to show that GEMA placed excessive weight on embodied technical change. Therefore our conclusion is that GEMA did not err when it considered embodied technical change as part of its decision making.

7.262 We note that SPT stated that the WWU arguments in paragraph 7.406, regarding the impact of improving quality of service were not addressed. We take this into account as a factor when we decide on the level of the appropriate core OE challenge in paragraphs 7.763 to 7.801.

### ***Did GEMA err in its use of the companies' business plans?***

7.263 In this section we discuss the appellants' arguments that GEMA erred when it compared the OE challenges with the companies' business plans. We first summarise the evidence and then provide our conclusion.

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<sup>655</sup> [Economic Insights, Frontier Shift for Dutch Gas and Electricity TSOs](#), 1 May 2020.

<sup>656</sup> [Europe Economics, Response to New Points on Frontier Shift and Real Price Effects \(RPEs\) made by Companies and their Consultants following CMA's Provisional Findings](#), page 1 and 6–8.

## *GEMA's approach*

7.264 GEMA said that the most ambitious companies had suggested they could achieve ongoing efficiencies of: 1% for totex by SGN and SPT, and 1.1% for opex by NGET and NGG.<sup>657</sup>

7.265 CEPA said that these business plan figures, when considered with other factors, could support a more stretching challenge.<sup>658</sup>

## *Appellants' submissions*

7.266 Cadent said that GEMA's advisers, CEPA, said that even if the business plans submitted to GEMA were not consistent with GEMA's efficiency targets, the clarifications in those business plans would not have changed the overall conclusion. GEMA's apparent inflexibility in the face of evidence was symptomatic of its problematic approach to OE.<sup>659</sup>

7.267 NERA, in a report for Cadent, said that the companies' business plan submissions did not justify an OE challenge at the top end of CEPA's range.<sup>660</sup> It could be challenging to separate OE from catch-up when examining the companies' own business plans.<sup>661</sup> GEMA had also assumed a lower level of embedded OE for SGN when 'stripping out' its embedded level. Instead of the 1% that CEPA had attributed to SGN, GEMA had used 0.7%. GEMA's assertion that the most ambitious energy companies suggested they could achieve 1% per year was not supported by GEMA's own analysis in the gas distribution sector.<sup>662</sup> Third, regarding SPT's business plan, it did not seem to target a 1% OE improvement.<sup>663</sup>

7.268 NGN said that GEMA had argued that it was entitled to have regard to the fact that its OE challenge was 'not out of step with the most ambitious OE assumptions' set out in companies' business plans. However, the GEMA response to the notices of appeal appeared to accept that the efficiency estimates of SGN and SPT in their business plans were lower than those used as the basis of GEMA's decision. Given that the most ambitious forecasts considered by CEPA were explicitly referenced in support of GEMA's

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<sup>657</sup> [GEMA FD Core Document](#), paragraph 5.29.

<sup>658</sup> CEPA RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 7.

<sup>659</sup> [Cadent Reply](#), paragraph 52(c). See also NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56(C).

<sup>660</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 364.

<sup>661</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 365.

<sup>662</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 366.

<sup>663</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 367.

approach in the FD, it seemed fanciful to argue that they had no impact on ‘the reasonableness of GEMA’s overall decision’.<sup>664</sup>

- 7.269 Frontier Economics, in a report for NGN and SGN, said that GEMA had mischaracterised the SGN rate of 1%. The SGN number was a simple average, while the GEMA number was a compound average. Restated as a compound average the SGN number became 0.83%.<sup>665</sup>
- 7.270 NERA, in a report for SPT, said that relying on company business plan submissions of ongoing productivity improvement was inherently unreliable. It risked conflating two factors. First, the ongoing productivity improvements that the OE challenge was intended to capture from improved working practices and technological change. Second, the ‘catch-up’ improvements some companies might expect to make because of known examples of inefficiency they expected to remove from their cost base during the following control period.<sup>666</sup> GEMA had also mischaracterised SPT’s business plan when GEMA had suggested that SPT proposed a 1% OE challenge.<sup>667</sup>
- 7.271 WWU said that GEMA had adopted an unbalanced application of regulatory discretion when it argued that the network companies’ forecasts represented one of the multiple pieces of evidence that GEMA had given regard to while determining the level of the OE challenge. However a subsequent clarification of these forecasts did not change GEMA’s OE challenge.<sup>668</sup>
- 7.272 Oxera, in a report for WWU, said that even if business plans were only one piece of GEMA’s evidence base, GEMA had used incorrect and contradictory evidence, which should not have been used at all.<sup>669</sup>

### *GEMA’s submissions*

- 7.273 GEMA said that it was entitled to have regard to the companies’ own OE challenge forecasts, as the CMA did in considering the OE challenge at the PR19 Provisional Findings. GEMA said that the companies’ own forecasts represented one among many pieces of evidence to which GEMA had regard in determining the level of the OE challenge.<sup>670</sup>

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<sup>664</sup> [NGN Reply](#), paragraph 113.

<sup>665</sup> Frontier Economics, Assessment of GEMA’s approach to setting ongoing efficiency at RIIO-GD2, paragraphs 4.5.10 to 4.5.12. See also [NGN NoA](#), paragraph 336.

<sup>666</sup> [Grayburn \(SPT\)](#), Expert Report, paragraphs 56 to 57 and NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 88.

<sup>667</sup> [Grayburn \(SPT\)](#), Expert Report, paragraph 59. See also SPT Closing Statement, paragraph 30.

<sup>668</sup> [WWU Reply](#), paragraph E4.1(c).

<sup>669</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 15.

<sup>670</sup> [GEMA Response B](#), paragraph 138.

7.274 CEPA, in a witness statement for GEMA, said that it agreed that SPT had not explicitly stated an OE challenge of 1% in its business plan documentation. However, the material submitted in its business plan suggested that the overall frontier shift should be expected to be zero as RPEs and efficiency improvements were expected to cancel out. As this was presented alongside an overall annual RPE assumption of 1%, CEPA had interpreted that as suggesting consistency with an implied annual OE of 1%. CEPA said that SPT had contested this saying that its statement on zero frontier shift was made with regard to a specific proposal for the treatment of RPEs. As RPEs had not been treated in this way in the FD, SPT had said that its statement on zero frontier shift was no longer valid.<sup>671</sup>

7.275 CEPA, in a witness statement for GEMA, said that there had been confusion in the presentation of SGN's OE assumptions. SGN's own commentary in its business plan and a subsequent statutory question referred to an average OE assumption of 1%. However, in its DD response, SGN noted that once factors such as compounding were taken into account, to be consistent with GEMA's presentation of the OE challenge, then this would re-state its OE assumption as being 0.83%.<sup>672</sup>

7.276 In its response to the provisional determination, GEMA said that it disagreed with the CMA's provisional determination that when considering the level of OE gains forecast by companies in their business plans, it was necessary for GEMA to account for catch-up efficiency improvements that the companies may have also incorporated in their business plan cost forecasts.<sup>673</sup>

7.277 GEMA said that it had asked that the companies provide evidence on the ongoing efficiencies embedded in their historic and forecast costs and had clarified to the companies that:

Ongoing efficiencies are productivity improvements expected by even the most efficient GDN. This should represent a GDN's forecast of reductions in input volumes that can be achieved whilst delivering the same outputs.<sup>674</sup>

7.278 GEMA said that these ongoing efficiencies gains were distinct from catch-up efficiency. Therefore the GEMA assessment of OE gains included by

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<sup>671</sup> *Keane 1 (GEMA)*, paragraph 77.

<sup>672</sup> *Keane 1 (GEMA)*, paragraph 78.

<sup>673</sup> GEMA Response to PD, paragraph 143.

<sup>674</sup> GEMA Response to PD, paragraph 144.

companies within business plans could not depend on an assessment of catch-up efficiencies.<sup>675</sup>

7.279 GEMA acknowledged that some companies, particularly Cadent, had made statements in their business plans and in subsequent engagement with GEMA that cast doubt on the precise figure that they had assumed for OE in developing their business plans. GEMA said that it had attempted to resolve this doubt through the Statutory Question process after its DDs. GEMA then came to its best view of the embedded OE assumptions made by each company based on the evidence available to it.<sup>676</sup>

7.280 GEMA said that it noted SGN's statement that its embedded OE figure of 0.83% did contain some catch-up. It was not clear to GEMA how SGN could have included some catch-up in its embedded OE assumption while still complying with the Business Plan Guidance (**BPG**). GEMA was not aware that SGN had made this point before its FDs.<sup>677</sup>

7.281 GEMA said that it accepted the CMA's provisional finding that GEMA had quoted an incorrect figure of 1% for SGN's OE assumption in GEMA's FD. However, GEMA did not believe that this issue on its own could support the CMA's provisional conclusion that GEMA was wrong in how it used the business plan information.<sup>678</sup>

7.282 GEMA said that the embedded OE assumptions that the companies provided as part of their business plan submissions were clearly defined as ongoing efficiencies and separate from any other efficiencies the companies may have embedded within their cost forecasts. GEMA used this information as one element of the evidence to support its OE challenge, and GEMA believed it was entitled to use company submissions in this way to inform its FDs.<sup>679</sup>

#### *Our assessment and conclusion*

7.283 The appellants said that GEMA erred in its use of the business plan data (see paragraphs 7.266 to 7.272).

7.284 To assess this we investigated the business plan figures that GEMA quoted in its FD: 1% for totex by SGN and SPT, and 1.1% for opex by NGET and NGG.

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<sup>675</sup> GEMA Response to PD, paragraphs 145–147.

<sup>676</sup> GEMA Response to PD, paragraph 148. We consider the topic of Embedded OE in more detail in paragraphs 7.649–7.737.

<sup>677</sup> GEMA Response to PD, paragraph 149.

<sup>678</sup> GEMA Response to PD, paragraph 150.

<sup>679</sup> GEMA Response to PD, paragraph 151.



- 7.285 SGN said that GEMA had mischaracterised the SGN rate of 1% GEMA had used in the FD (see paragraph 7.269). The 1% was a simple average and a compound average should have been used. Restated as a compound average the SGN number became 0.83%.<sup>680</sup>
- 7.286 GEMA accepted it had quoted an incorrect figure of 1% in the FD.<sup>681</sup>
- 7.287 SGN also said that its 0.83% per year figure did contain some catch-up.<sup>682</sup> We note that the figure GEMA actually used to strip out the embedded efficiencies from the SGN business plan was 0.7%, not the 1% figure quoted in the FD.<sup>683</sup>
- 7.288 SPT said that GEMA had mischaracterised SPT's business plan figure of 1% SPT also said that relying on company business plan submissions of ongoing productivity improvement risked including the 'catch-up' improvements some companies might expect to make because of known examples of inefficiency they expected to remove from their cost base during the following control period (see paragraph 7.270).
- 7.289 We asked SPT whether there were catch-up efficiencies in its business plan and SPT said that the proportion of catch-up and OE in its business plans was not something it had considered.<sup>684</sup>
- 7.290 We asked National Grid to provide more information on the figures contained in its business plans.<sup>685</sup> National Grid said that both NGET and NGGT business plans included 1.1% per year OE ambitions in internal workforce costs (including capitalised labour) and other operating costs. On a totex level this equated to a lower than 1.1% per year, for example around 0.4% per year for NGET. National Grid said that the 1.1% per year OE assumption did not include any element of catch-up efficiency challenge.<sup>686</sup>
- 7.291 These business plan forecasts were one of the factors GEMA used in its decision to set the OE challenge.<sup>687</sup> The evidence shows that GEMA relied upon an incorrect SGN figure.
- 7.292 We note GEMA's argument that it disagreed with the CMA's provisional determination that when considering the level of OE gains forecast by

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<sup>680</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraphs 4.5.10 to 4.5.12. See also [NGN NoA](#), paragraph 336.

<sup>681</sup> GEMA Response to PD, paragraph 150.

<sup>682</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 50, lines 13–19.

<sup>683</sup> SGN Response to RFI 006, paragraph 2.1.

<sup>684</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 51, lines 19–21.

<sup>685</sup> Request to National Grid under Rule 14.4(e) of the Rules.

<sup>686</sup> NGET and NGG, Response to Invitation to make representations on OE appeal, page 1.]

<sup>687</sup> [GEMA FD Core Document](#), paragraph 5.29.

companies in their business plans, it was necessary for GEMA to account for catch-up efficiency improvements that the companies may have also incorporated in their business plan cost forecasts (see paragraphs 7.276 to 7.280). We accept this point.

7.293 Therefore, based on the evidence above, while GEMA was entitled to use business plan information, our conclusion is that nonetheless GEMA erred because it used an incorrect SGN figure.<sup>688</sup>

7.294 We note that WWU said that GEMA had adopted an unbalanced application of regulatory discretion because a change in the information used to determine the level of the OE challenge did not result in a change in GEMA's OE challenge (see paragraph 7.271). We take account of this when we address the wider question of whether GEMA decided on an appropriate level of core OE challenge in paragraphs 7.763 to 7.801.

### ***Did GEMA err in its use of the historical productivity data?***

7.295 In this section we discuss the appellants' arguments that GEMA erred in its use of historical productivity data. The area of contention here is whether GEMA followed the advice written in the CEPA report. This said that GEMA should not consider the historical productivity performance of the companies to directly inform the OE productivity challenge. We first summarise the evidence and then provide our conclusion.

#### ***GEMA's approach***

7.296 CEPA, in a witness statement for GEMA, said that its May 2020 Report had considered the evidence on the historical productivity performance of the energy network companies from a specific study by Ajayi et al (2018). That study used an econometric technique called 'data envelopment analysis' to try to estimate historical productivity improvements. CEPA's conclusion in that section of the report was that because of issues that CEPA had identified with applicability, CEPA did not consider that the study should be used to inform the OE challenge. CEPA said that for a 'data envelopment analysis' approach to be used, a new study would need to be commissioned to address the issues that CEPA had identified.<sup>689</sup>

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<sup>688</sup> SGN said that the correct figure should be 0.7%. See SGN Response to RFI 006, paragraph 2.1.

<sup>689</sup> *Keane 1 (GEMA)*, paragraphs 190–191.

- 7.297 The CEPA November 2020 report said that CEPA had continued to advise that GEMA should not consider the historical productivity performance of the companies to directly inform the OE challenge for RIIO-2.<sup>690</sup>
- 7.298 CEPA, in a witness statement for GEMA, said that analysis of the historical efficiency performance of network companies was not one of the pieces of evidence that CEPA used to set the OE range in the CEPA November 2020 report.<sup>691</sup>
- 7.299 GEMA in its FD did not discuss the specific point raised in the CEPA November 2020 report. Instead GEMA explained its use of historical data. GEMA said that to cross-check the headline 1.2% OE challenge it had analysed data provided to it by network companies on efficiencies achieved to date in RIIO-1. GEMA's high-level assessment indicated that NGN, as the frontier GDN for RIIO-GD1, was able to realise ongoing efficiencies greater than 1.2% per year. The other GDNs had indicated that they believed they had got closer to NGN as the frontier company over the course of RIIO-GD1. This provided GEMA with further comfort that the headline 1.2% OE challenge for GDNs under RIIO-GD2 was not only reasonable but was achievable based on the RIIO-GD1 performance formally reported to GEMA by the GDNs. Similar high-level analysis indicated the same position for TOs and indeed NGET proposed 1.1% OE which was only marginally lower than the GEMA FD.<sup>692</sup>
- 7.300 GEMA said that its high-level assessment indicated that NGN was able to realise ongoing efficiencies above 1.2% which was in addition to the RIIO-GD1 OE challenge of around 0.85%. The combination of the two estimates resulted in a figure for OE improvements achieved by NGN of above 2%.<sup>693</sup>
- 7.301 GEMA said that the headroom between the NGN figure, which was above 2%, and the 1.2% target gave GEMA comfort that a 1.2% OE challenge was relatively conservative and likely to be achievable.<sup>694</sup>
- 7.302 GEMA said that although it found the historical datasets were helpful and indicative, they were definitely not determinative of what the proxy should be for the energy utilities for the next five years.<sup>695</sup>

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<sup>690</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 32.

<sup>691</sup> *Keane 1 (GEMA)*, paragraph 193.

<sup>692</sup> [GEMA FD Core Document](#), paragraph 5.27.

<sup>693</sup> Email from GEMA to the CMA 'RE: OE Comments on GEMA transcript', 11 June 2021, page 1.

<sup>694</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 86, lines 15–18.

<sup>695</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 84, lines 19–21.

## *Appellants' submissions*

- 7.303 Cadent said that in the PR19 Redetermination, the CMA had placed no weight on historical productivity estimates because the estimates were unlikely to be reliable for the purposes of projecting future productivity gains. This contrasted with the GEMA approach.<sup>696</sup>
- 7.304 NERA, in a report for Cadent, said that GEMA's comparison with the historical NGN rate of 1.2% was inconsistent with CEPA's advice that GEMA should not consider the historical productivity of the companies to directly inform the OE challenge for RIIO-2. This 1.2% figure could have been overstated by NGN's decision to fund £80 million of expenditure outside its totex incentive mechanism.<sup>697</sup>
- 7.305 NERA, in a report for Cadent, said that it was unreasonable for GEMA to conclude that its cross-check supported its view that the OE challenge was appropriate. This was for three reasons. First, the available evidence did not support the GEMA OE challenge, so a cross-check could not confirm it. Second, in a new regulatory regime such as RIIO-GD1, historical productivity improvements could exaggerate the scope for future productivity improvements. Third, it was challenging to disentangle OE from catch-up efficiency improvements, and GEMA did not appear to have done this.<sup>698</sup>
- 7.306 NGN said that GEMA was wrong to use the NGN historical productivity figure as a cross-check. The CMA PR19 Redetermination did not place weight on historical water sector productivity estimates.<sup>699</sup>
- 7.307 NGN said that GEMA had submitted that alleged outperformance at RIIO-GD1 could justify a stretching OE challenge. This was not a factor cited in GEMA's OE decision in the FD and appeared to be an ex-post facto rationalisation. GEMA had presented new analysis which converted all outperformance against RIIO-GD1 allowances into efficiency gains. This analysis was uninformative at best and misleading at worst.<sup>700</sup>
- 7.308 NGN said that GEMA had submitted that NGN, as the frontier company at RIIO-GD1, had realised ongoing efficiencies of over 1.2% per year and suggested that this represented a reasonable cross-check. NGN had not been able to review GEMA's empirical analysis behind this figure and could not

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<sup>696</sup> [Cadent PR19 submission](#), paragraph 13.

<sup>697</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 369 to 370. See also NGN Closing Statement, paragraph 47.

<sup>698</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56H.

<sup>699</sup> [NGN PR19 submission](#), paragraph 25(iii).

<sup>700</sup> [NGN Reply](#), paragraph 112.

comment on its accuracy. While NGN had made substantial efficiency improvements at RIIO-GD1, NGN did not consider that this presented a reasonable cross-check for the efficiency savings that it (or indeed the rest of the sector) could achieve at RIIO-GD2.<sup>701</sup>

7.309 NGN said that GEMA was misplaced to use NGN's 1.2% efficiencies at RIIO-GD1 as a cross-check to justify its target at RIIO-GD2.<sup>702</sup> It said that the target was not reasonable. NGN's efficiency improvements at RIIO-GD1 had been driven by three significant investments and business restructurings: the switch to a direct service provider model; the transformation of workplace terms and conditions; and investment in new IT systems. These were one-off changes which had enabled NGN to make significant improvements in efficiency in RIIO-GD1. The investments had already targeted the largest items in NGN's cost base. The initiatives to improve efficiency at RIIO-GD1 required significant investment from NGN's shareholders, who to date had invested around £80 million in the various projects and restructuring schemes required, with a significant proportion carried out outside of totex with no customer funding.<sup>703</sup>

7.310 In its closing statement NGN said that it was firmly of the view that GEMA's approach to estimating NGN's efficiencies at RIIO-GD1 remained fundamentally flawed and was reflective of GEMA's wider lack of empirical rigour in its assessment of the OE challenge.<sup>704</sup>

- a) First, GEMA's assessment suffered from a fundamental methodological flaw – it confused outperformance against regulatory allowances with productivity improvements. GEMA had acknowledged, with respect to the implied OE improvement of over 2%, that 'we actually in GEMA do not believe that'. This illogicality had driven GEMA to make a series of normalisation adjustments and assumptions that drove spurious results. NGN believed that this continued to be the case for GEMA's figure of 'over 1.5 per cent'.<sup>705</sup>
- b) Second, GEMA's approach was wholly unnecessary, as GEMA had access to a wealth of historical data on actual costs at a very granular level for each GDN. There was no 'information asymmetry' preventing GEMA from conducting a detailed bottom-up assessment of the movements in GDNs' actual costs and workloads to derive a reasonable estimate of productivity change. NGN had demonstrated a range of

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<sup>701</sup> [NGN Reply](#), paragraph 114.

<sup>702</sup> *Pearson 2 (NGN)*, paragraph 14.

<sup>703</sup> *Pearson 2 (NGN)*, paragraph 16.

<sup>704</sup> NGN Closing Statement, paragraph 44.

<sup>705</sup> NGN Closing Statement, paragraph 45.

productivity improvement of 0.7 to 0.9% at RIIO-GD1. GEMA had offered no substantiation for its suggestions that it could not verify this analysis and that NGN had ‘cherry-picked’ in its approach to the assessment.<sup>706</sup>

- c) Third, GEMA had argued that NGN’s submissions were inconsistent with public statements in NGN’s Annual Cost and Outputs Reporting and submissions by companies that ‘all their outperformance was down to efficiency gains’. This was another bad point. First, NGN had never submitted that all outperformance was due to efficiency gains. Second, GEMA had ‘cherry-picked’ quotes out of context. The reporting it had cited was mandated by GEMA’s reporting on performance against allowances and targets and concepts such as ‘genuine efficiency’ had to be read in that context.<sup>707</sup>
- d) Finally, NGN was confident that its estimates of genuine improvements in productivity lay in the range of 0.7% to 0.9% per year. This sat within the upper bound of efficiencies delivered in NGN’s mains replacement activity (1.2%), where the changes embedded during RIIO-GD1 had been the most significant. This range, coupled with the size and scope of the initiatives underlying that improvement at RIIO-GD1, illustrated the challenge of delivering that level of improvement on an ongoing basis in a mature, frontier business. This level of performance was not repeatable by NGN in RIIO-GD2 and its business plan proposal of a 0.5% per year remained an appropriate and very challenging target.<sup>708</sup>

7.311 NGN said in its response to the provisional determination that both CEPA’s May 2020 and November 2020 Reports concluded that historical outperformance should not be used to inform the productivity target for RIIO-GD2 for a wide variety of reasons.<sup>709</sup>

7.312 SGN said that GEMA had relied upon an assumption that all of the companies’ significant underspend was attributable to efficiency improvements. This assumption implied that the annualised efficiency gains were 3.14% for gas distribution and 4.35% for transmission. However, this assumption was demonstrably false and therefore irrelevant for the purpose of justifying the OE challenge.<sup>710</sup>

7.313 SGN said that the CMA had clearly stated in its PR19 Redetermination that it was inappropriate to rely on historical productivity growth estimates when

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<sup>706</sup> NGN Closing Statement, paragraph 46.

<sup>707</sup> NGN Closing Statement, paragraph 48.

<sup>708</sup> NGN Closing Statement, paragraph 49.

<sup>709</sup> NGN Response to PD, paragraph 76.

<sup>710</sup> [SGN Reply](#), paragraph 118.

setting OE challenges. GEMA's use of historical productivity to justify an unprecedentedly high challenge was clearly inconsistent with this.<sup>711</sup>

- 7.314 Frontier Economics, in a report for NGN and SGN, said that GEMA's comparison with the NGN's historical rates was problematic for three reasons. First, many of the efficiency gains achieved by NGN in GD1 were driven by changes that were not repeatable. Second, NGN's shareholders provided funding in GD1 outside of the totex allowances and regulatory regime. This funding might not be available in the future. Third, the approach was overly simplistic. For example, it wasn't clear if GEMA had controlled for input prices or work mix over time. GEMA's estimates might therefore be capturing a number of effects other than productivity growth.<sup>712</sup>
- 7.315 Frontier Economics, in a report for SGN, said that GEMA's reliance on past outperformance as a justification for building additional challenge into the price control should be disregarded.<sup>713</sup>
- 7.316 SPT said that the supposed reliance on frontier company improvement in OE did not bear scrutiny. Outperformance had only a weak connection with OE – there were many ways in which a company could outperform without generating efficiencies of the kind captured by the OE parameter.<sup>714</sup>
- 7.317 SPT said that the actual evidence from NGN was that it only obtained annual OE levels of 0.7% to 0.9% during RIIO-1, and that this performance was driven by 'three complex and transformative projects' affecting 70% of its cost base. This was unlikely to be replicated by NGN in RIIO-2, let alone by ET networks. In any event, the response to an apparent inconsistency in one network's explanations should not be to assume the worst and punish the whole GD, GT and ET sectors for one network's perceived wrongdoing by setting the OE parameters too high. SPT submitted that GEMA should have taken the time to investigate properly and rigorously, and understand the extent of genuine outperformance, and whether this was realistically replicable in RIIO-2 right across the sectors. SPT said that GEMA had looked at the wrong data and obtained a result that GEMA did not itself think credible, and seemed to have massaged the number down to 1.2% to get a figure that supported the conclusion it wanted to obtain, and then pointed to that. SPT said that this was not evidence-based regulation.<sup>715</sup>

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<sup>711</sup> [SGN Reply](#), paragraph 122.

<sup>712</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.5.14.

<sup>713</sup> Frontier Economics (SGN), Impact of GEMA's approach on future incentives, paragraphs 27 and 29.

<sup>714</sup> SPT Closing Statement, paragraphs 34–35.

<sup>715</sup> SPT Closing Statement, paragraphs 36–38.



- 7.318 In its response to the provisional determination, SPT said that GEMA's own advisers had cautioned against the use of historical data. The determination of productivity improvements required the use of long-term data over complete business cycles and careful adjustments to both outputs and cost data to calculate a productivity measure. It was wrong to rely on a single company estimate over a relatively short time-frame, and where it was problematic to separate efficiency improvements from other factors, eg output changes or real price effects. NGN calculated an improvement in productivity of 0.7–0.9% but considered the improvements in performance realised over RIIO-GD1 would not be repeatable over RIIO-2 with the improvements related to non-repeatable transformative projects.<sup>716</sup>
- 7.319 NERA, in a report for SPT, said that GEMA's comparison with the NGN figure of 1.2% was contrary to CEPA's advice that GEMA should not consider these historical productivity figures. Such comparisons were likely to be polluted by ongoing productivity improvement and catch-up efficiency improvement.<sup>717</sup>
- 7.320 WWU said that GEMA had relied on a high-level assessment which indicated that the frontier GDN had realised efficiencies of 1.2% per year in RIIO-GD1. However, there were no details of the high-level assessment mentioned, which undermined any opportunity to identify and critique the modelling assumptions it was based on. In addition, reliance on statements made by individual companies to inform an approach for all companies failed to address the importance of context to company assumptions and the way in which different companies may have accounted for innovation efficiency differently.<sup>718</sup>
- 7.321 WWU said that GEMA had adopted an unbalanced application of regulatory discretion when GEMA had not responded to WWU's submission that estimation of this complex modelling was not a simplistic analysis and required disentangling of different effects. GEMA's own commissioned research by a number of academics was unable to produce a historical productivity figure that was deemed reliable. The CMA had dismissed such qualitative arguments by Ofwat in the CMA PR19 Redetermination and even CEPA had claimed that analysis of the historical efficiency performance of network companies was not one of the pieces of evidence used to set the OE range in its report.<sup>719</sup>

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<sup>716</sup> SPT Response to PD, paragraph 146.

<sup>717</sup> *Grayburn (SPT)*, Expert Report, paragraphs 11–118.

<sup>718</sup> [WWU NoA](#), section E9.6.

<sup>719</sup> [WWU Reply](#), paragraph E4.1(d). See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, pages 15 - 16.



7.322 Oxera, in a report for WWU, said that GEMA had not provided any of the details of its ‘high-level’ assessment regarding how it had calculated the rate of OE of the leading networks. This was particularly important, as direct methods of OE estimation relied on disentangling the various components of cost reductions (including catch-up efficiency improvements, changes in input prices, changes in scale economies, etc) and certain modelling assumptions that might be invalid. It was impossible for third parties to validate or challenge the analysis undertaken by GEMA as the details of GEMA’s analysis had not been published. In addition, getting closer to the leading GDN would be driven by catch-up efficiency improvements, so this did not provide any insights on OE.<sup>720</sup>

7.323 Oxera, in a report for WWU, said that outperformance was not efficiency – it was due to any number of things. While some underspend could be attributed to efficiency improvements, this still needed to be split between catch up and OE. The CMA had dismissed similar qualitative arguments in the CMA PR19 Redetermination.<sup>721</sup>

#### *GEMA’s submissions*

7.324 GEMA said that it was notable that NGN itself did not dispute that it had achieved efficiencies of over 1.2% throughout RIIO-GD1, although it did suggest that the same efficiencies might not be achievable again. Accordingly, it did not appear to be seriously in dispute that GEMA’s high-level assessment of NGN’s past performance was correct.<sup>722</sup>

7.325 GEMA said that, regarding the appellants’ suggestion that GEMA’s cross-check was inconsistent with the advice given by CEPA that GEMA should not use the historical productivity performance of the network companies to inform the OE challenge, there was no such inconsistency. CEPA’s advice was that GEMA should not rely on ‘data envelopment analysis’. GEMA had not used such a method and the reference to NGN’s historical performance was no more than a cross-check.<sup>723</sup>

7.326 GEMA said that it had also considered the implied efficiency gains which would be achieved by the network companies under the extreme assumption that all of the companies’ underspend against RIIO-1 allowances was attributable to efficiency improvements. The annualised average was 3.14%

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<sup>720</sup> Oxera (WWU), Review of Ofgem’s ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 5.17.

<sup>721</sup> Oxera (WWU), Reply to Ofgem’s response and witness statements on ongoing efficiency, page 16.

<sup>722</sup> [GEMA Response B](#), paragraph 140 and subsequent corrected text in an email from GEMA to the CMA ‘RE: GEMA - query paragraph 140 totex response’ 3 June 2021.

<sup>723</sup> [GEMA Response B](#), paragraph 141.

for gas distribution and 4.35% for transmission. GEMA said that although it recognised that not all the underspend could be attributed to efficiency improvements, it was reasonable to suppose that some could be; and this was further consistent with the network companies' own statements to the effect that efficiency improvements had contributed to the underspend. This lent some support to the notion that a challenging OE target was appropriate.<sup>724</sup>

7.327 GEMA said that while the CMA PR19 Redetermination had placed limited weight on historical productivity growth, this did not establish that the GEMA approach was wrong.<sup>725</sup>

7.328 GEMA clarified that GEMA's high level assessment indicated that NGN was able to realise ongoing efficiencies above 1.2% per year, which was in addition to the RIIO-GD1 OE challenge of 0.85% per year. The combination of these two estimates resulted in an overall improvements figure above 2% per year for NGN.<sup>726</sup>

7.329 In its response to the provisional determination, GEMA said that its updated cross-check analysis, which accounted for the IQI adjustment and the uplift to the 75th percentile indicated that the correct implied OE achieved by NGN in RIIO-1 reached 1.5%, while an average for the GD sector amounted to 2.3%. The NGN analysis indicated a range of 0.8% to 1% which was not significantly below GEMA's figure of 1.2%. GEMA said that it had some concerns about this analysis, including the inconsistencies with the conclusions made in the Witness Statement of Mr Pearson.<sup>727</sup>

### *Our assessment and conclusion*

7.330 In this section we give our assessment and conclusions on four errors raised by the appellants:

- Did GEMA use historical data against the advice of its advisers CEPA and so commit an error? This error was alleged by Cadent,<sup>728</sup> NGN,<sup>729</sup> SPT<sup>730</sup> and WWU.<sup>731</sup>

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<sup>724</sup> [GEMA Response B](#), paragraph 142.

<sup>725</sup> [GEMA PR19 Response on Totex](#), paragraph 13.

<sup>726</sup> Email from GEMA to the CMA 'RE: OE Comments on GEMA transcript', 11 June 2021.

<sup>727</sup> [GEMA Response to PD](#), paragraphs 153–154.

<sup>728</sup> [Cadent PR19 submission](#), paragraph 13.

<sup>729</sup> NGN Response to PD, paragraph 76.

<sup>730</sup> SPT Response to PD, paragraph 146.

<sup>731</sup> [WWU Reply](#), paragraph E4.1(d). See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, pages 15 - 16.

- Did GEMA use incorrect NGN historical data and so commit an error? This error was alleged by Cadent,<sup>732</sup> NGN,<sup>733</sup> SPT,<sup>734</sup> and WWU.<sup>735</sup>
- Did GEMA adopt an approach which was different from that adopted in the CMA PR19 Redetermination and so commit an error? This error was alleged by Cadent,<sup>736</sup> NGN,<sup>737</sup> SGN,<sup>738</sup> and WWU.<sup>739</sup>
- Did GEMA use a single company performance estimate which was calculated over a short time-frame and might not be replicable and so commit an error? This error was alleged by Cadent,<sup>740</sup> NGN,<sup>741</sup> and SPT.<sup>742</sup>

*Did GEMA use historical data against the advice of its advisers CEPA and so commit an error?*

7.331 The appellants said that GEMA's decision to use historical data was against the advice of its advisers CEPA (see paragraphs 7.304, 7.311 and 7.318 to 7.319 and 7.321). We investigated this topic and established that the CEPA advice to GEMA was to not use the data envelopment analysis.<sup>743</sup> GEMA followed this advice.

7.332 The historical data GEMA did use was based on NGN. CEPA said that the GEMA historical analysis gave a figure of 1.3% and this headroom gave GEMA comfort when setting the OE challenge. CEPA said that it was comfortable with GEMA's use of the historical data.<sup>744</sup>

7.333 Consequently, our view is that the appellants have not demonstrated to us that GEMA went against the advice of its advisers. Therefore we find GEMA was not wrong in this regard.

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<sup>732</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 370 - 371.

<sup>733</sup> [NGN Reply](#), paragraph 114. See also NGN Closing Statement, paragraph 47 and Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.5.14.

<sup>734</sup> SPT Closing Statement, paragraphs 34–35.

<sup>735</sup> [WWU NoA](#), section E9.6.

<sup>736</sup> [Cadent PR19 submission](#), paragraph 13.

<sup>737</sup> [NGN PR19 submission](#), paragraph 25(iii).

<sup>738</sup> [SGN Reply](#), paragraph 122.

<sup>739</sup> [WWU Reply](#), paragraph E4.1(d). See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, pages 15 to 16.

<sup>740</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56H.

<sup>741</sup> *Pearson 2 (NGN)*, paragraph 16.

<sup>742</sup> SPT Response to PD, paragraph 146. and SPT Closing Statement, paragraphs 36 - 38.

<sup>743</sup> *Keane 1 (GEMA)*, paragraphs 190–191.

<sup>744</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 57, line 21 to page 58, line 9.

*Did GEMA use incorrect NGN historical data and so commit an error?*

- 7.334 The appellants said that GEMA erred when it based its decision on incorrect NGN data (see paragraphs 7.304, 7.305, 7.307 to 7.310, 7.312, 7.314, 7.317 to 7.318 and 7.322 to 7.323)
- 7.335 GEMA said that historical data was one of the factors that GEMA used in its ‘in the round’ decision to set the OE challenge.<sup>745</sup> This was referred to as a cross-check in the decision document.<sup>746</sup> In a hearing, GEMA said that its historical analysis of NGN’s performance gave a figure of well over 2% per year and the headroom between that figure and the OE challenge figure of 1.2% gave GEMA comfort when setting its OE challenge figure.<sup>747</sup>
- 7.336 We requested further information from GEMA on the approach it had adopted for the NGN historical analysis and GEMA supplied the details of its calculations.<sup>748</sup> We had two main concerns with the GEMA approach. First, the GEMA approach compared the NGN actual spend with the NGN allowance. Since NGN is the frontier company, its allowances would have been increased because the efficiency benchmark was not set at the frontier company. Second, NGN received an IQI uplift to the allowance. NGN said that these were material errors in the GEMA approach and there were other material errors.<sup>749</sup>
- 7.337 GEMA provided updated calculations which showed that, correcting for errors in its earlier method, the updated figure was 1.5%. In this updated analysis GEMA changed its methodology, correcting for i) the fact that NGN’s allowance would have been uplifted as the efficiency benchmark was not set at the frontier company and ii) NGN received an IQI uplift to the allowance.<sup>750</sup> GEMA also said that it had concerns about the NGN methodology as it did not cover all of totex and contained statements that appeared to be inconsistent with previous statements made by NGN.<sup>751</sup>
- 7.338 NGN, in response to the GEMA calculations, provided alternative calculations. NGN said that it had used two different approaches to assess its OE in RIIO-GD1. A top-down approach compared totex spend in 2014 and 2020 with the

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<sup>745</sup> [GEMA Response B](#), paragraph 107. See also GEMA Main Hearing Transcript, 8 July 2021 (PM session), page 26, lines 1–8.

<sup>746</sup> [GEMA FD Core Document](#), paragraph 5.27.

<sup>747</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 60, lines 9–24.

<sup>748</sup> GEMA, RFI GEMA 012.

<sup>749</sup> NGN, RFI NGN 003, page 1. See also Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 58, line 11 - page 63, line 15 and NGN Main Hearing Transcript, 30 June 2021, page 24, line 7 - page 26, line 13. See also Cadent Closing Statement, Table 3.

<sup>750</sup> GEMA Main Hearing Transcript, 8 July 2021 (PM session), page 23, lines 1–11. See also GEMA RFI GEMA 020, page 2.

<sup>751</sup> GEMA Main Hearing Transcript, 8 July 2021 (PM session), page 23, line 12 to page 24, line 21. See also GEMA Closing Statement, Part II, paragraphs 13 and 14.

number of customers and the kilometres of pipes in 2014 and 2020. When costs were normalised by the number of customers, the annualised reduction in unit costs was 1% per year between 2014 and 2020. When costs were normalised by kilometres of pipes the reduction was 0.9% per year.<sup>752</sup> A bottom-up approach compared the start of RIIO-GD1 to the end of RIIO-GD1 across disaggregated totex and resulted in an annualised reduction of 0.8% per year.<sup>753</sup>

7.339 The fact that GEMA has, during this process, updated its calculation method, and no longer disputes two important errors discussed in paragraph 7.336 leads us to find that GEMA made an error in the original calculation of the figure used in its FD. Therefore our conclusion is that GEMA used incorrect NGN historical information and therefore erred.

7.340 We take account of the updated NGN figures when we address the wider question of whether GEMA decided on an appropriate level of core OE challenge in paragraphs 7.763 to 7.801.

*Did GEMA adopt an approach which was different from that adopted in the CMA PR19 Redetermination and so commit an error?*

7.341 The appellants said that the CMA took a different approach in the CMA PR19 Redetermination (see paragraphs 7.303, 7.306, 7.312 and 7.321 and 7.323.)

7.342 In the CMA PR19 Redetermination the CMA decided not to rely on historical analysis produced by Frontier Economics for two reasons. First, the high productivity growth in the early years may have at least partially been explained by efficiency catch-up after privatisation, meaning the estimates would have been biased upwards. Second, quality improvements had not been fully accounted for.<sup>754</sup>

**7.343** That CMA conclusion, based on the facts of CMA PR19 Redetermination, should not be interpreted as implying that all historical analysis is uninformative when setting OE challenges. As set out above, the PR19 Redetermination is not binding on us nor is it the case that subsequent findings of a sector regulator are automatically (or even presumptively) wrong if they differ from it.<sup>755</sup> Consequently, our view is that the appellants have not demonstrated to us that GEMA erred by virtue of adopting a different

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<sup>752</sup> NGN, RFI NGN 003, page 2.

<sup>753</sup> NGN, RFI NGN 003, page 3. We note that on page one of this response NGN quotes a range of 0.7% to 0.9% while the analysis on pages 2 and 3 gives figures of 0.8%, 0.9% and 1.0%.

<sup>754</sup> CMA, [Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations](#), paragraph 4.570.

<sup>755</sup> See further paragraphs 3.87 and 3.88 as well as paragraph 5.5.

approach from that adopted in the CMA PR19 Redetermination. Therefore we find GEMA was not wrong in this regard.

*Did GEMA use a single company performance estimate which was calculated over a short time-frame and might not be replicable and so commit an error?*

7.344 The appellants said that GEMA should not rely on the NGN figure since it was from a single company over a relatively short time-frame and may not be replicable (see paragraph 7.305, 7.308 to 7.310, 7.314 and 7.317 to 7.318).

7.345 For the reasons explained in paragraphs 7.334 to 7.340, we found that GEMA erred when it used an incorrect NGN figure. This is sufficient to find that GEMA erred in the use of the NGN figure.

7.346 Regarding the related question of whether it is appropriate to rely on any single company performance estimate calculated over a short time-frame, we agree with the appellants that limited weight should be placed on any NGN historical figure. This is because the figure is from a single company, is estimated over a relatively short time frame and there is no guarantee that NGN's past performance is replicable in the future.

7.347 We take account of these factors when using the updated NGN figure when we address the wider question of whether GEMA decided on an appropriate level of core OE challenge in paragraphs 7.763 to 7.801.

***Did GEMA err in its interpretation of regulatory precedents?***

7.348 In this section we discuss the appellants' arguments that GEMA erred by setting an OE challenge that was higher than regulatory precedents. We first summarise the evidence and then provide our conclusion.

***GEMA's approach***

7.349 CEPA said that a more stretching OE challenge could be justified by regulatory precedent, including the 1% figure in the CMA PR19 Redetermination.<sup>756</sup>

7.350 GEMA said that its final decision was consistent with regulatory precedent, including the 1% figure in the CMA PR19 Redetermination.<sup>757</sup>

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<sup>756</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 7.

<sup>757</sup> [GEMA FD Core Document](#), paragraph 5.28.

## *Appellants' submissions*

- 7.351 Cadent said that 1% was the highest that precedent would support and was higher than the 0.7% (capex/repex) target set by GEMA in RIIO-GD1. Cadent said that in the Bristol Water Determination (***Bristol Water 2015***), where a 1% target was used, the CMA employed other mitigating measures to reduce the possibility of overstatement, for example setting the efficiency benchmark at the industry average<sup>758</sup>
- 7.352 Cadent said that the CMA PR19 Redetermination figure of 1% per year was not far above the 0.94% target Cadent proposed in its business plan, and materially below GEMA's target of 1.15% to 1.25% per year. The CMA PR19 Redetermination therefore supported Cadent's submissions on OE.<sup>759</sup>
- 7.353 Cadent said that in the Ofwat PR19 decision some companies had accepted a price control package that included the 1.1% parameter, while nearly a quarter appealed the parameter. There was no evidence to suggest that the non-appealing companies agreed with the parameter itself and the CMA decided that 1.1% was in fact erroneous.<sup>760</sup>
- 7.354 In its response to the provisional determination, Cadent said that regulatory precedent did not give GEMA the right to disregard the quantitative evidence available and the context of the price control in question. Even if regulatory precedent showed OE targets up to 1%, it would be bad practice to rely exclusively on this factor to support that target in a separate price control. In other words, if it were possible to use regulatory precedent as the only evidence to support an OE target, then regulators would continue to set the same target despite the updated and relevant quantitative evidence prevailing at the relevant time. Therefore, regulatory precedent alone could not be used to justify a core OE target above the quantitative evidence presented by CEPA. In any event, Cadent noted that the cost of equity outcome in the PR19 Redeterminations was insufficient to establish an error in the present appeals and it would therefore be inconsistent for the CMA to rely on this factor in the context of OE to set a target above the quantitative evidence.<sup>761</sup>
- 7.355 Cadent said that GEMA's claim that the energy sector was technologically more dynamic than water was unsupported and ignored the essential similarity of gas and water distribution.<sup>762</sup>

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<sup>758</sup> [Cadent NoA](#), paragraphs 3.128–3.129.

<sup>759</sup> [Cadent PR19 submission](#), paragraph 10.

<sup>760</sup> Cadent Closing Statement, Table 3.

<sup>761</sup> Cadent Response to PD, paragraph 10.9g.

<sup>762</sup> [Cadent Reply](#), paragraph 52(a). See also NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56(a).



- 7.356 NERA, in a report for Cadent, said that regulatory precedents suggested a challenge between 0.7% and 1%. An OE challenge of around 1% was the top end of the range supported by regulatory precedents.<sup>763</sup>
- 7.357 NGN said that the CMA PR19 Redetermination was consistent with NGN's NoA on choice of comparator set; choice of productivity measure; use of historical sector productivity; and the absence of an innovation uplift.<sup>764</sup>
- 7.358 NGN said that the water sector had more complex supply chains compared to GDNs and therefore the potential for incremental efficiency improvements in the GDN sector was comparatively more limited.<sup>765</sup>
- 7.359 NGN said that GEMA's OE challenge was higher than any regulatory precedent considered by GEMA's economic experts.<sup>766</sup>
- 7.360 NGN said that GEMA was inconsistent in its use of regulatory precedent. GEMA said that the 'CMA set an OE challenge of 1.0% at PR19 notwithstanding that water companies had not received analogous funding in the past.' This was inconsistent with GEMA's submission that there was 'no regulatory principle that 1.0% represents a hard ceiling on the permissible OE challenge. The specific circumstances of each price control must be considered.'<sup>767</sup>
- 7.361 NGN said that regulatory precedent was not binding on GEMA. However, since GEMA's overall OE challenge substantially exceeded past precedents, GEMA's decision should have been cogently evidenced.<sup>768</sup> NGN said that GEMA drew misleading comparisons to the water sector, noting that a similar challenge had been accepted by the water companies in the CMA PR19 Redetermination. This point was thoroughly flawed: the water sector was subject to a different appeals framework and those companies that did not seek redetermination accepted a whole price control package in the round.<sup>769</sup>
- 7.362 Frontier Economics, in a report for NGN and SGN, said that in the precedents considered by CEPA, an OE challenge greater than 1% per year had never been found to be justified.<sup>770</sup> It said that while GEMA's core OE challenge was in line with some past regulatory decisions, those decisions were taken in a

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<sup>763</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 362–363.

<sup>764</sup> [NGN PR19 submission](#), paragraph 25.

<sup>765</sup> [NGN PR19 submission](#), paragraph 26.

<sup>766</sup> *Mills 1 (NGN)*, paragraph 32(i).

<sup>767</sup> [NGN Reply](#), paragraph 19.

<sup>768</sup> [NGN Reply](#), paragraph 110.

<sup>769</sup> NGN Closing Statement, paragraph 43. ]

<sup>770</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.57.]



different economic context, when the productivity slowdown had not yet fully materialised in a sustained way.<sup>771</sup>

7.363 SGN said that the CMA PR19 Redetermination was consistent with SGN's position that GEMA's core OE challenge of approximately 1% was already stretching. SGN said that GEMA's overall OE challenge went far beyond all relevant practice, including that of the CMA.<sup>772</sup>

7.364 SGN said that GEMA's view that the CMA PR19 Redetermination supported GEMA's decision did not hold.<sup>773</sup>

7.365 NERA, in a report for SPT, said that an OE challenge of 1% was at the top end of the range that regulatory precedents could support.<sup>774</sup>

7.366 SPT said that GEMA used water sector CMA PR19 Redetermination productivity growth targets as a second comparator. However, giving high (or even any) weight to a water sector decision, seemingly on the basis that water was also regulated and GEMA considered it a relevant comparator for certain cost of capital components of the price control, simply elided the question of whether it was reasonable to expect both sectors to achieve similar underlying productivity improvements in their respective, very different, businesses. There was no evidence that GEMA had engaged in any robust analysis as to whether the two sectors ought to achieve similar levels of OE. GEMA acted on 'intuition'. This was just another way of saying that the assessment was not evidence-based.<sup>775</sup>

### *GEMA's submissions*

7.367 GEMA said that regulatory precedents were not binding. 1% was not a hard ceiling on the permissible OE challenge. The particular circumstances of RIIO-2 justified a stretching OE challenge above that set by other regulators in different contexts.<sup>776</sup>

7.368 GEMA said that its OE challenge could not be said to be excessive or wrong since the CMA had set a challenge of 1% per year in water and the energy sector was a technologically more dynamic sector.<sup>777</sup>

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<sup>771</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 1.1.11(b)(i).

<sup>772</sup> [SGN PR19 submission](#), paragraph 34.

<sup>773</sup> [SGN Reply](#), paragraph 120. See also SGN Closing Statement, paragraph 50.

<sup>774</sup> *Grayburn (SPT)*, Expert Report, paragraph 54.

<sup>775</sup> SPT Closing Statement, paragraph 32.

<sup>776</sup> [GEMA Response B](#), paragraph 144.

<sup>777</sup> [GEMA Response B](#), paragraph 75.

7.369 GEMA said that its decision was in line with recent precedent from UK regulators.<sup>778</sup>

### *Our assessment and conclusion*

7.370 The appellants said that GEMA erred in its interpretation of regulatory precedents (see paragraphs 7.351 to 7.366).

7.371 We looked at the evidence on recent past regulatory decisions.

- (a) The CMA in its decision on Northern Ireland Electricity Limited price determination set an OE challenge of 1% per year.<sup>779</sup>
- (b) GEMA's RIIO-T1/GD1 decisions set an OE challenge of 1% for opex and 0.7% for capex and repex.<sup>780</sup>
- (c) GEMA's RIIO-ED1 decision, where GEMA accepted the targets that the electricity companies set, which were mostly between 0.8% and 1% per year.<sup>781</sup>
- (d) The CC's 2014 RP5 decision for Northern Ireland Electricity set an OE challenge of 1% per year.<sup>782</sup>
- (e) Ofwat's 2019 PR19 decision for water companies in England and Wales, which set an OE challenge of 1.1%.<sup>783</sup> This decision was appealed, and the CMA PR19 Redetermination set an OE challenge of 1% per year for the appealing companies.<sup>784</sup>

7.372 We agree with the appellants that the differences between the water sector and the energy sector may lessen the relevance of water sector decisions to the energy sector (see paragraphs 7.355, 7.358, 7.360 and 7.366). However, while the decisions in the energy sector may have more relevance, the OE challenge should nevertheless be based on the relevant facts of the specific case.

7.373 Although 1.1% is the highest that has been set in the past (for the water companies which did not appeal PR19), that figure is not an upper bound for the setting of the OE challenge. Furthermore, it is also important to note that

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<sup>778</sup> *Wagner 2 (GEMA)*, paragraph 134.

<sup>779</sup> Competition Commission, 2014, [Northern Ireland Electricity Limited price determination](#), paragraph 11.27.

<sup>780</sup> GEMA, [RIIO-T1/GD1: Real price effects and ongoing efficiency appendix](#), Ofgem, 17 December 2012, paragraph 3.3.

<sup>781</sup> GEMA, [RIIO-ED1: Draft determinations for the slow-track electricity distribution companies – Business plan expenditure assessment](#), paragraph 12.63.

<sup>782</sup> Competition Commission, 2014, [Northern Ireland Electricity Limited price determination](#), paragraph 11.27.

<sup>783</sup> Ofwat, 2019, [PR19 final determinations](#), Table 22, pages 123–124.

<sup>784</sup> [PR19 Redetermination](#), paragraph 4.650.

the GEMA's decision on the core OE challenge was based on multiple factors (see paragraphs 7.16 and 7.19). Only one of those factors was the regulatory precedent.<sup>785</sup>

7.374 Therefore, our conclusion is that GEMA did not err in its interpretation of regulatory precedents.

***Did GEMA err when assessing the impact of Coronavirus (COVID-19) and Brexit?***

7.375 In this section we discuss the appellants' concerns that GEMA erred when assessing the impact of COVID-19 and Brexit on the OE challenge. We first summarise the evidence and then provide our conclusion.

***GEMA's approach***

7.376 CEPA said that the COVID-19 crisis did not change its view on using EU KLEMS to inform the OE challenge. It said that little, if any, weight should be put on economy-wide productivity forecasts given the scale and unevenness of economic disruption caused by COVID-19.<sup>786</sup> CEPA said that it was difficult to judge the impact of COVID-19 on productivity growth. It would have been a major challenge to implement an ex-ante adjustment as part of the FD process. Instead CEPA suggested that GEMA respond after more and better information was available.<sup>787</sup>

7.377 GEMA said that, based on CEPA's advice, it had decided not to make specific COVID-19 adjustments to its OE challenge. It would address this as part of the RIIO-2 close-out process, to ensure it had sufficient time series data and the evidence base to make a proper assessment of whether COVID-19 had had any impact on the trend level of OE.<sup>788</sup>

7.378 GEMA said that, like the CMA PR19 Redetermination, GEMA had decided not to make any reduction to the OE challenge to reflect the impact of COVID-19.<sup>789</sup>

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<sup>785</sup> [GEMA FD Core Document \(revised\)](#), paragraph 5.28.

<sup>786</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 59.

<sup>787</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 5.

<sup>788</sup> [GEMA FD Core Document](#), paragraph 5.25. See also GEMA Main Hearing Transcript, 8 July 2021 (PM session), page 30, line 3 to page 31, line 24.

<sup>789</sup> [GEMA PR19 Response on Totex](#), paragraph 12(6).

## *Appellants' submissions*

7.379 Cadent said that Brexit and COVID-19 could have a negative impact on productivity.<sup>790</sup>

7.380 NGN said that GEMA had disregarded the significant impact of COVID-19.<sup>791</sup> GEMA's decision to address COVID-19 issues at the RIIO-2 close-out process had left the costs with the companies for the next five years.<sup>792</sup> COVID-19 had increased costs by £1 million to £4 million per year. COVID-19 had:

- a) increased the need for personal protective equipment, which required additional time for employees to apply and dispose of;
- b) resulted in additional customer welfare requirements, including spending additional time with customers and delaying, rescheduling or cancelling planned work due to restricted access to customers' houses; and
- c) increased operational staff absences due to social-distancing and isolation rules.<sup>793</sup>

7.381 NGN said that, due to COVID-19, it had shifted lower customer impact workload from RIIO-2 into RIIO-1, and customer focused work into RIIO-2. Since the customer focused work was more costly, that left NGN with higher cost work in RIIO-2.<sup>794</sup> COVID-19 had also increased costs, including larger road closures to accommodate social distancing.<sup>795</sup> NGN was also concerned about whether the regulatory framework would be objective and recognise the additional costs.<sup>796</sup>

7.382 NGN said that COVID-19 made realising GEMA's stretching OE challenge more difficult. For example, NGN had lost 12,855 workdays, equivalent to 50 FTEs.<sup>797</sup> NGN said that GEMA had not taken account of COVID-19.<sup>798</sup>

7.383 NGN said that the impact of COVID-19 also made incremental efficiency improvements harder.<sup>799</sup>

7.384 Frontier Economics, in a report for NGN and SGN, said that GEMA had not taken account of the impact of COVID-19 on productivity growth. It said that

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<sup>790</sup> Cadent NoA, paragraph 3.139.

<sup>791</sup> NGN NoA, paragraphs 55(vi) and 337–341.

<sup>792</sup> NGN NoA, paragraph 341.

<sup>793</sup> NGN NoA, paragraph 339.

<sup>794</sup> NGN Main Hearing Transcript, 30 June 2021, page 19, line 23 to page 20, line 9.

<sup>795</sup> NGN Main Hearing Transcript, 30 June 2021, page 20, lines 16–23.

<sup>796</sup> NGN Main Hearing Transcript, 30 June 2021, page 21, lines 5–20.

<sup>797</sup> Horsley 1 (NGN), paragraphs 67–70.

<sup>798</sup> Mills 1 (NGN), paragraph 38(i).

<sup>799</sup> Pearson 2 (NGN), paragraph 16(v).

while it might not be possible to make a specific quantified ex-ante adjustment for COVID-19, GEMA setting such a challenging OE challenge did not represent a balanced judgement.<sup>800</sup>

7.385 SGN said that the GEMA decision did not take account of COVID-19.<sup>801</sup>

7.386 SPT said that it, like the CMA in the CMA PR19 Redetermination, thought that COVID-19 could have a negative impact on productivity growth.<sup>802</sup>

7.387 In its response to the provisional determination, SPT said that it had strong doubts that, at the close-out at the end of RIIO-2, GEMA would be able reliably to disentangle the specific impact of Brexit/COVID-19 on companies' OE, separate from all other drivers of OE and catch-up improvements. GEMA had been entirely unable to measure or disentangle the effect of certain innovation programmes on efficiency improvements for RIIO-1. If it was not credible or likely not to be possible for GEMA to adjust reliably for these factors at close-out, then it followed that this was not a valid justification to be given for excluding that evidence as part of setting the OE parameter. In addition, the approach of deferring until close-out all difficult matters that might point towards 'aiming down' on the OE parameter, while taking a maximalist approach to other, equally unquantified, factors to justify 'aiming up' to or beyond the very top end of the range (that was, overall aiming down on allowed expenditure), was fundamentally unbalanced and difficult to justify as rational or reasonable. Instead, the better place to take account of the potential impact of Brexit and COVID-19 on OE was in considering whether and where to 'aim up' or 'aim down' in the overall level of the core OE parameter. For example, they may offset in whole or part other factors that GEMA identified to try to increase the core OE parameter.<sup>803</sup>

7.388 NERA, in a report for SPT, said that COVID-19 would most likely have a detrimental impact on productivity levels.<sup>804</sup>

7.389 WWU said that there was uncertainty over how GEMA would deal with COVID-19. For example, GEMA may only deal with cost items, rather than the impact on productivity.<sup>805</sup>

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<sup>800</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraphs 1.1.11(e) and 6.4.1–6.4.16.

<sup>801</sup> [SGN NoA](#), paragraph 500.

<sup>802</sup> [SPT PR19 submission](#), paragraph 38.

<sup>803</sup> SPT Response to PD, paragraph 157–159.

<sup>804</sup> *Grayburn (SPT)*, Expert Report, paragraph 91.

<sup>805</sup> WWU Main Hearing Transcript, 1 July 2021, page 119, lines 9–18.

- 7.390 WWU said that GEMA had adopted an unbalanced application of regulatory discretion in relation to the impact of COVID-19.<sup>806</sup> Oxera, in a report for WWU, said that COVID-19 and Brexit were examples of GEMA's unbalanced approach to aiming up. GEMA had discounted issues, like COVID-19, that suggested a downward adjustment, while accepting other issues that might suggest an upward adjustment.<sup>807</sup>
- 7.391 In its response to the provisional determination, WWU said that it would be helpful if some further clarity could be provided by the CMA in terms of what issues GEMA should consider in its close-out. The CMA could require GEMA to examine the productivity performance of the UK economy and the comparator set post COVID and adjust the impact of the OE assumption in the light of that data.<sup>808</sup>

### *GEMA's submissions*

- 7.392 GEMA said that, given the uncertainties associated with the effect of COVID-19, GEMA had reasonably decided that it would be better addressed through the close-out mechanism. Any adjustment to the OE challenge, or conscious decision to aim-down, would have risked an arbitrary lowering of the OE challenge on the basis of insufficient evidence.<sup>809</sup>
- 7.393 CEPA, in a witness statement for GEMA, said that CEPA had looked in depth at the potential impact of COVID-19. The conclusion was that it was not appropriate to change the ex-ante OE challenge to take account of possible impacts of COVID-19 as GEMA would deal with any such impacts through other price control mechanisms when better evidence was available.<sup>810</sup> CEPA had also seen no evidence to contradict the view that it was difficult to confidently suggest a firm adjustment to reflect the impact of Brexit.<sup>811</sup>
- 7.394 In response to the provisional determination, GEMA said that it did not state that it would consider the impact of Brexit as part of the close-out of the RIIO-2 price control. GEMA said that the existing mechanisms within RIIO-2 were capable of adequately dealing with the potential impacts of Brexit through the inclusion of RPE indexation and risk/contingency allowances where applicable.<sup>812</sup>

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<sup>806</sup> [WWU Reply](#), paragraph E4.1(a).

<sup>807</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 63, line 23 to page 64, line 11, and Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 5.20.

<sup>808</sup> WWU Response to PD, paragraph E9.1.

<sup>809</sup> [GEMA Response B](#), paragraph 148.

<sup>810</sup> *Keane 1 (GEMA)*, paragraphs 182–184.

<sup>811</sup> *Keane 1 (GEMA)*, paragraph 187.

<sup>812</sup> GEMA Response to PD, paragraph 158.

## *Our assessment and conclusion*

- 7.395 The appellants said that GEMA erred when assessing the impact of COVID-19 and Brexit (see paragraphs 7.379 to 7.391).
- 7.396 There is currently uncertainty regarding the impact of COVID-19 and Brexit on the economy. This is consistent with the large variations in productivity growth shown in Table 7-1. However, we also note that NGN said that it did not model the impact of COVID-19 on its financeability. Instead COVID-19 was a risk which, combined with other risks, could impact its financeability.<sup>813</sup>
- 7.397 Given this uncertainty, we consider that GEMA's proposed close-out approach, which would allow GEMA to deal with issues when more data becomes available, is an appropriate approach.
- 7.398 We note SPT's doubts that, at the close-out at the end of RIIO-2, GEMA would be able reliably to disentangle the specific impact of Brexit/COVID (see paragraph 7.387). While it may be difficult to isolate the impact of these factors, we find it is likely to be easier for GEMA to deal with these issues ex-post, when more data becomes available, rather than make an ex-ante judgement based on less data.
- 7.399 Therefore our view is that GEMA did not err when it decided not to make an ex-ante adjustment.
- 7.400 We note SPT's and WWU's arguments that GEMA adopted an unbalanced approach, as factors like COVID-19, which suggested a downward adjustment should also be considered when setting the core OE challenge (see paragraphs 7.387 and 7.390). We take account of this when we address the wider question of whether GEMA decided on an appropriate level of OE challenge in paragraphs 7.763 to 7.801.
- 7.401 We note WWU's request that the CMA should provide further clarity on what issues GEMA should consider in its close-out process (see paragraph 7.391). This topic is outside the scope of this appeal.

### ***Did GEMA err by double-counting innovation funding benefits in the core OE challenge?***

- 7.402 In this section we discuss the appellants' arguments that GEMA erred by double-counting innovation funding productivity benefits in its core OE challenge. The area of contention here is whether GEMA followed the text in

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<sup>813</sup> NGN Main Hearing Transcript, 30 June 2021, page 23, lines 10–20.

the CEPA report, which the appellants interpreted as implying there could be a double-count of innovation benefits in the core OE challenge. We first summarise the evidence and then provide our conclusion.

### *GEMA's approach*

7.403 CEPA said that there was an impact of innovation funding, which supported a more stretching OE challenge. CEPA said that this was a different issue to whether innovation funding provided a specific top-up on productivity potential above those higher performing sectors. The responses to the DD had noted that one of the drivers for innovation funding was to encourage the sector to match investment in innovation that would be seen in other sectors, rather than necessarily investment in excess of those sectors. There would be multiple types of benefits from innovation, of which improved scope for cost savings was one.<sup>814</sup>

7.404 GEMA did not address this specific point in its FD. GEMA made a wider point related to innovation and said that its OE decision reflected GEMA's view that the innovation funding provided by consumers since 2007 should deliver efficiency benefits over and above those achieved in the wider economy, in comparator sectors, and beyond the range indicated by EU KLEMS.<sup>815</sup>

### *Appellants' submissions*

7.405 In its response to the provisional determination, Cadent said that if this factor was relied upon to set the core OE challenge it would lead to the core OE target double-counting innovation already accounted for in EU KLEMS and GDNs' business plans.<sup>816</sup>

7.406 SGN said that GEMA had failed to assess the extent of double-counting with the core OE challenge.<sup>817</sup>

7.407 NERA, in a report for SPT, said that CEPA in its November 2020 report had not explained its position (see paragraph 7.403) clearly. Therefore if GEMA had taken this factor into account this could have led to a double-counting of innovation benefits in the core OE challenge.<sup>818</sup>

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<sup>814</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, November 2020, page 8.

<sup>815</sup> [GEMA FD Core Document](#), paragraph 5.26.

<sup>816</sup> Cadent Response to PD, paragraph 10.8biii.

<sup>817</sup> [SGN NoA](#), paragraphs 444–454.

<sup>818</sup> *Grayburn (SPT)*, Expert Report, paragraphs 105 to 109. See also SPT Closing Statement, paragraph 30.



7.408 NERA, in a report for Cadent, said that GEMA had failed to explain why RIIO-1 innovation funding could be used as a qualitative factor when setting the core OE challenge ‘in the round’. This double-counted the separate innovation uplift.<sup>819</sup>

### *Our assessment and conclusion*

7.409 The appellants said that GEMA erred by double-counting innovation benefits in the core OE challenge (see paragraphs 7.405 to 7.408).

7.410 We asked GEMA to clarify its position on whether the positive impact of innovation funding had been used as an element in the decision to set the core OE challenges of 0.95% and 1.05%.

7.411 GEMA responded that it considered that innovation funding allowed network companies to make efficiency gains that went above and beyond what was seen in the competitive and other regulated sectors, and as such did not rely on innovation funding to inform the level of the core OE challenges of 0.95% and 1.05%.<sup>820</sup>

7.412 GEMA’s response stated that it did not rely on innovation funding to inform the level of the core OE challenge. Furthermore, the appellants have provided no evidence showing GEMA’s decision double-counted the innovation funding in the core OE challenge. Consequently, our view is that the appellants have not demonstrated to us that the core OE challenge included a double-count of innovation funding.

### ***Did GEMA err when it decided to aim up?***

7.413 In this section we discuss the appellants’ arguments that GEMA erred by deciding to aim up within the range given by CEPA. We first summarise the evidence and then provide our conclusion.

### *GEMA’s approach*

7.414 GEMA said that it had decided to aim up within the CEPA range because EU KLEMS could underestimate the scope for efficiency gains within regulated sectors. This was because, not only were network companies less exposed to negative shocks, but also the lack of competitive pressure meant that management should be able to focus more on driving high efficiency gains.

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<sup>819</sup> NERA (Cadent), Second Expert Report on Ofgem’s Approach to Cost Assessment at RIIO-GD2, paragraph 56G.

<sup>820</sup> GEMA, RFI GEMA 007.

GEMA said that its decision to aim up was consistent with Ofwat's approach in PR19.<sup>821</sup>

### *Appellants' submissions*

7.415 Cadent said that GEMA was wrong to proceed on the basis that regulated companies were less exposed to negative shocks and may therefore outperform the wider economy during a persistent slowdown in productivity.<sup>822</sup>

7.416 Cadent said that in the CMA PR19 Redetermination, the 0.3 percentage point uplift for qualitative factors was subjective. It would be reasonable to assume the limited future benefits identified by the CMA from the introduction of the totex/outcomes framework in the water sector would be lower in the gas distribution sector. In particular, the totex/outcomes framework had been implemented two years earlier in gas distribution than in water, allowing more time in the last control period for any resulting benefits to be realised.<sup>823</sup>

7.417 Cadent said that GEMA said that energy networks were less likely to be exposed to economic shocks or downturns in productivity. This ignored the fact that networks benefitted less during high growth periods. This factor lost any significance as the CEPA work was based on complete business cycles.<sup>824</sup>

7.418 NERA, in a report for Cadent, said that neither GEMA nor CEPA had presented any theoretical or empirical evidence that network companies could improve productivity more quickly than companies operating in the wider economy by way of being less exposed to macroeconomic fluctuations. GEMA's statement could also be read as implying that regulated monopoly sectors of the economy, like energy network companies, should achieve higher rates of cost reduction than competitive sectors of the economy. GEMA did not provide any evidence in support of either of these beliefs. Cadent's advisers saw no grounding in accepted economic theory or empirical evidence that productivity growth in regulated industries should be faster than in competitive sectors of the economy.<sup>825</sup>

7.419 NERA said that GEMA's argument that innovation in the energy sector might be less sensitive to economy-wide shocks was not supported by a House of

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<sup>821</sup> [GEMA FD Core Document](#), paragraph 5.21.

<sup>822</sup> [Cadent NoA](#), paragraph 3.125.

<sup>823</sup> [Cadent PR19 submission](#), paragraph 21.

<sup>824</sup> [Cadent Reply](#), paragraph 52(b). See also NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56B.

<sup>825</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 410 - 413.

Commons Library Briefing paper, which showed that R&D spending as a proportion of GDP was not sensitive to macroeconomic shocks.<sup>826</sup>

- 7.420 NERA said that the quantitative evidence led to a 0.5% OE challenge for capex/repex and 0.65% for opex. GEMA had failed to provide any justification for deviating from this quantitative evidence.<sup>827</sup>
- 7.421 NERA said that it agreed in principle with the CEPA recommendation against setting an OE challenge that was less ambitious than that indicated by the companies themselves. This supported NERA's view that 0.94% was an appropriate OE challenge.<sup>828</sup>
- 7.422 NGN said that GEMA's decision to aim up was based on flawed methodologies, inconsistent assumptions and factual errors. GEMA's rationale, that network companies were less exposed to negative shocks and less competitive pressure meant management could focus on cost reduction, was unevidenced and contrary to fundamental economic theory. Regulated companies could be more exposed to various shocks, including inflation, the knowledge that inefficient companies will fail drove innovation and productivity growth, and considerable management time was taken with reporting and compliance requirements.<sup>829</sup>
- 7.423 NGN said that GEMA had failed to give appropriate and proper weight to the evidence that CEPA assembled in its report. CEPA, as GEMA's consultant, had presented GEMA with a range for core OE of 0.5% to 0.95%/1.05% and very explicitly asked GEMA to work through eight important considerations before selecting a point estimate from its range. If GEMA had put any weight on the factors identified by NGN and CEPA's November 2020 Report, GEMA would have selected OE assumptions that sat below the top end of CEPA's range. However, GEMA's core OE assumption came out at the top of CEPA's range and higher than any of CEPA's EU KLEMS comparator benchmarks, including those based only on VA measures, the economy-wide comparator set, and (for the opex challenge) LP measures. It was therefore clear that GEMA had not given genuine weight to evidence pointing to lower productivity growth as its OE challenge was higher than CEPA's top-end estimates which, by definition, gave no weight to those factors. Beyond the bare assertion that it

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<sup>826</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 446.

<sup>827</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56E.

<sup>828</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 58.

<sup>829</sup> [NGN NoA](#), paragraphs 331–333.

considered this evidence, GEMA had failed to explain how these factors were assessed and weighted as part of a proper regulatory judgement.<sup>830</sup>

- 7.424 NGN said that GEMA had reaffirmed its unevidenced assumption that regulated network companies could achieve efficiency gains beyond competitive sectors. GEMA had not engaged with, nor disputed, NGN's argument that such an assumption ran contrary to economic theory. Furthermore, GEMA had reiterated that regulated networks were more resilient to negative shocks but provided no evidence for this bare assertion. GEMA had not engaged with the appellants' arguments that licence and other statutory obligations may limit the ability of regulated networks to respond to negative shocks, and GEMA's reasoning was asymmetric.<sup>831</sup>
- 7.425 NGN said that GEMA had mischaracterised NGN's submissions. GEMA had stated that 'any adjustment to the OE challenge, or conscious decision to aim-down, would have risked an arbitrary lowering of the OE challenge'. NGN said that, despite the fact that there was abundant evidence that could justify a decision to 'aim down', NGN had not argued that GEMA should aim down but rather that, taking the impact of COVID-19 together with a balanced consideration of the other evidence, GEMA's conscious decision to aim up was inappropriate.<sup>832</sup>
- 7.426 Frontier Economics, in a report for NGN and SGN, said that GEMA's logic implied that economic regulation would deliver better outcomes for consumers than free and competitive markets, which was contradictory to fundamental and well-established economic theory. Further, GEMA's assertion that companies in competitive markets could not place as much management focus on driving high efficiency gains due to competitive pressure had not been evidenced, nor was it credible. Competitive pressure drove managers of firms in competitive sectors to focus on efficiency gains.<sup>833</sup>
- 7.427 NGN said that GEMA had not taken a balanced view of the available evidence when it decided to set the OE at the top of the range recommended by CEPA.<sup>834</sup>
- 7.428 SPT said that GEMA was wrong to assume that regulated network companies could improve productivity faster than the wider economy.<sup>835</sup>

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<sup>830</sup> [NGN Reply](#), paragraphs 105–106.

<sup>831</sup> [NGN Reply](#), paragraph 109.

<sup>832</sup> [NGN Reply](#), paragraph 107(iv).

<sup>833</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.2.36.

<sup>834</sup> *Mills 1 (NGN)*, paragraph 38(i).

<sup>835</sup> [SPT NoA](#), paragraphs 16.3 and 61.

7.429 In response to the provisional determination, SPT said that the possibility of aiming up should not affect the conclusion on the appropriate OE challenge. First, GEMA was not aiming up. Aiming up was not an established regulatory practice designed to make some accommodation for uncertainty and asymmetrical risk. OE was a negative parameter in the price control, so choosing a higher level for OE was, in reality, aiming down. There was no established precedent supporting a practice of ‘aiming down’ in price controls. Doing so was unprecedented and doing so without good reason was arbitrary and irrational. Second, in its provisional determination the CMA had already provisionally rejected the limited reasoning GEMA had actually provided for aiming up. The replacement justification given by the CMA was that aiming up could be justified ‘based on its consideration of other factors’. But, all of those other factors considered as part of the core OE assessment had been either provisionally rejected by the CMA as invalid, or needed their significance scaled back to the weighting given to the evidence they adjusted. Third, GEMA did not appear to have provided a plausible basis for not taking into account the impact of Brexit and COVID-19. Accordingly, GEMA had erred in focusing only on factors that favoured aiming up, and not setting them off against factors pointing in the other direction. If those factors were taken into account, it would further support not making any adjustment for aiming up. In these circumstances, there appeared to be an absence of any reasoned basis for aiming up. The attempt to borrow the term aiming up away from its correct context did not give a basis for a movement to near or beyond the top end of the CEPA range.<sup>836</sup>

7.430 NERA, in a report for SPT, said that GEMA was wrong to aim up and had provided no evidence that, on average across a business cycle, companies operating in more stable environments should achieve higher productivity growth than companies operating in competitive sectors of the economy. GEMA’s approach was not supported by theoretical or empirical evidence.<sup>837</sup>

7.431 WWU said that GEMA was wrong to aim up for multiple reasons:

- (a) GEMA’s assertion that regulated sectors such as gas and electricity were less exposed to negative shocks was inaccurate.
- (b) GEMA’s assertion that the lack of competitive pressure should allow management to focus more on improving efficiency was incorrect.

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<sup>836</sup> SPT Response to PD, paragraph 141–144.

<sup>837</sup> *Grayburn (SPT)*, Expert Report, paragraphs 111–118.

(c) GEMA had failed to consider issues that might suggest the need to aim down.<sup>838</sup>

7.432 WWU said that GEMA's submissions and the witness statements had failed to address the lack of transparency on how the core OE value was derived by GEMA. WWU said that there must be transparent derivation of a core range or point estimate and clarity on the qualitative and quantitative overlays applied.<sup>839</sup> WWU said that the CMA would be unable to judge if the weight placed on the different factors was appropriate due to the lack of transparency in GEMA's/CEPA's approach.<sup>840</sup>

7.433 WWU said that Oxera had run a simulation exercise. In order to understand the weight that CEPA could have assigned to its various estimates for TFP (VA and GO TFP for the economy and the targeted sector using the time period from 1997 to 2006), Oxera had run a simulation, randomly assigning positive weights to CEPA's four TFP-measures to calculate a weighted average TFP (representing the core-target before further applying qualitative adjustments). This analysis had shown that it was only possible to arrive at very high core OE challenges, before applying any further qualitative adjustments (of 0.8% and higher), if an extremely high weight was placed on the VA TFP economy-wide measure, while all other estimates (particularly GO estimates or TFP estimates for targeted comparators) played only a minor role.<sup>841</sup> Therefore, CEPA had either incorrectly placed the vast majority of weight on VA measures and only a negligible weight on GO measures and still added some aiming up for qualitative reasons to reach a figure of 0.95%, or CEPA had placed a higher weight on GO and added an extremely high component of 'aiming up' to reach a figure of 0.95%, which was incorrect. In each case, GEMA had adopted an incorrect approach and committed errors in deriving the OE challenge.<sup>842</sup>

7.434 Oxera, in a report for WWU, said that GEMA's non-transparent approach was not consistent with the CMA's approach in the CMA PR19 Redetermination.<sup>843</sup> It said that the lack of transparency severely hampered the appellants' and the CMA's ability to assess the GEMA decision. It said that GEMA's lack of

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<sup>838</sup> WWU NoA, section E9.

<sup>839</sup> WWU Reply, paragraph E2.1.

<sup>840</sup> WWU Reply, paragraph E2.3.

<sup>841</sup> WWU Reply, paragraphs E2.4 to E2.6. See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, paragraphs 2.4–2.8.

<sup>842</sup> WWU Reply, paragraph E2.7.

<sup>843</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, paragraphs 2.9–2.11 and page 8.

transparency ran counter to the Better Regulation principles and the Regulators' Code.<sup>844</sup>

7.435 Oxera, said that GEMA was wrong to aim up. In particular, its reasoning on negative shocks and the lack of competition, was wrong. GEMA also had not considered any reasons for aiming down.<sup>845</sup> Oxera's own calculations suggested an OE challenge of 0.4% per year.<sup>846</sup>

#### *GEMA's submissions*

7.436 GEMA said that its decision was an exercise in regulatory judgement, in the round, involving a holistic and qualitative assessment of the evidence. GEMA said that it had properly had regard to the evidence which the appellants had alleged GEMA had failed to consider.<sup>847</sup>

7.437 GEMA said that the energy networks were more resilient to negative shocks because of the monopolistic nature of the sector. Monopolies did not face the same macroeconomic uncertainty and usually had good visibility of their investment. Demand for energy was also relatively inelastic. The network companies could therefore continue to invest in more productive ways of carrying out their activities with greater stability. GEMA denied this reasoning was contrary to economic theory.<sup>848</sup>

#### *Our assessment and conclusion*

7.438 In this section we give our assessment and conclusions on the errors related to aiming up raised by the appellants:

- a) Did GEMA err when it said that the networks were less exposed to negative shocks and therefore should outperform the wider economy? This error was alleged by Cadent,<sup>849</sup> NGN,<sup>850</sup> SPT,<sup>851</sup> and WWU.<sup>852</sup>

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<sup>844</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 8.

<sup>845</sup> Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraphs 5.1 - 5.23.

<sup>846</sup> Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraphs 6.1 - 6.16.

<sup>847</sup> [GEMA Response B](#), paragraph 74(1).

<sup>848</sup> [GEMA Response B](#), paragraph 136.

<sup>849</sup> [Cadent NoA](#), paragraph 3.125.

<sup>850</sup> [NGN NoA](#), paragraphs 331–333.

<sup>851</sup> [SPT NoA](#), paragraphs 16.3 and 61.

<sup>852</sup> [WWU NoA](#), section E9.

- b) Did GEMA err when it aimed up and failed to consider reasons to aim down? This error was alleged by SPT<sup>853</sup> and WWU.<sup>854</sup>
- c) Did GEMA err because there was a lack of transparency in its reasoning? This error was alleged by Cadent,<sup>855</sup> and WWU.<sup>856</sup>
- d) Did GEMA err by failing to take proper account of the evidence? This error was alleged by NGN,<sup>857</sup> and WWU.<sup>858</sup>
- e) Did GEMA err because its approach was inconsistent with the CMA PR19 Redetermination? This error was alleged by WWU.<sup>859</sup>

*Did GEMA err when it said that the networks were less exposed to negative shocks?*

- 7.439 The appellants said that GEMA erred because it decided to aim up within the CEPA range (see paragraphs 7.415, 7.417 to 7.420, 7.422 to 7.423, 7.426, 7.428, 7.430 to 7.431 and 7.435). In support of this, the appellants criticised the GEMA reasoning for aiming up, particularly that given in paragraph 5.21 of the FD: that network companies were less exposed to negative shocks and the lack of competitive pressure meant they should be able to place greater management focus on driving high efficiency gains.<sup>860</sup>
- 7.440 GEMA said that demand for energy was relatively inelastic.<sup>861</sup> We agree that this supports the view that the networks are relatively less exposed to macroeconomic fluctuations. However, this does not necessarily imply that the networks should be able to achieve higher productivity growth rates.
- 7.441 GEMA provided no evidence to support its view that management would be able to place greater focus on driving higher efficiency gains because of the lack of competitive pressure. The lack of competitors for each network may imply that management does not have to engage in some common business tasks, for example advertising for new customers. While this could lead to lower costs since there is no advertising department, GEMA did not explain why this should result in higher productivity growth. Furthermore, the lack of competitive pressure could reduce the incentives to improve efficiency. We

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<sup>853</sup> SPT Response to PD, paragraph 141.

<sup>854</sup> [WWU NoA](#), section E9.

<sup>855</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 56E.

<sup>856</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 8.

<sup>857</sup> *Mills 1* (NGN), paragraph 38(i).

<sup>858</sup> [WWU NoA](#), section E9.

<sup>859</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 8.

<sup>860</sup> [GEMA FD Core Document](#), paragraph 5.21.

<sup>861</sup> [GEMA Response B](#), paragraph 136.



therefore accept this part of the appellants' submissions on GEMA's reasons for setting the level of core OE challenge. However, as discussed below, this was one of a number of factors and we do not find that this factor on its own is sufficient to find that GEMA was wrong to aim up.

*Did GEMA err when it aimed up and failed to consider reasons to aim down?*

7.442 The appellants said that there was no precedent for aiming up on OE and doing so without good reason was arbitrary and irrational. GEMA should also have considered other reasons, like COVID-19, which should have resulted in aiming down (see paragraphs 7.423, 7.425, 7.429, 7.431 and 7.435).

7.443 GEMA said that its decision to aim up was an exercise in regulatory judgement. Consistent with this, the evidence in paragraphs 7.16 and 7.19 shows that GEMA took account of multiple factors when setting the core OE challenge. The range given by CEPA, of 0.2% to 1.0% was one of these factors, and GEMA decided not to choose a figure in the middle of that range and instead aim up, based on its consideration of the other factors. For example, GEMA mentioned the influence of embodied technical change.<sup>862</sup>

7.444 We are of the view that regulators should be afforded a margin of appreciation when setting the OE challenge to reflect the different evidence sources. We also consider it is normal regulatory practice to set relatively stretching efficiency targets, and GEMA has an obligation to promote efficiency.<sup>863</sup> Therefore on the specific question of whether GEMA was wrong to aim up our conclusion is that GEMA's decision to aim up was not an error. This is because GEMA was justified in taking into account various factors which led GEMA not to choose the mid-point of the EU KLEMS data.<sup>864</sup>

7.445 We note SPT's arguments on the CMA's reasoning in its provisional determination (see paragraph 7.429). We address these issues when we consider the wider question of whether GEMA erred when it set the level of the final core OE challenge, and the evidence sources it used in that decision, in paragraphs 7.763 to 7.801.

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<sup>862</sup> GEMA FD Core Document (revised), paragraph 5.28.

<sup>863</sup> <https://www.ofgem.gov.uk/publications/our-powers-and-duties>.

<sup>864</sup> See paragraphs 7.375–7.401 for further discussion of COVID-19.

*Did GEMA err because there was a lack of transparency in its reasoning?*

7.446 The appellants said there was a lack of transparency regarding the weight GEMA gave to individual factors in its decision making (see paragraphs 7.423, 7.432 and 7.434).

7.447 In these circumstances we find that basing a decision on multiple factors and taking account of those factors qualitatively rather than quantitatively is within the margin of appreciation that should be accorded to regulators. Introducing quantitative weightings for all decisions may lead to spurious accuracy. Therefore our conclusion is that GEMA did not err in this regard.<sup>865</sup>

*Did GEMA err because its approach was inconsistent with the approach in the CMA PR19 Redetermination?*

7.448 The appellants said the GEMA approach was inconsistent with the CMA PR19 Redetermination approach (see paragraphs 7.416 and 7.434).

7.449 In the CMA PR19 Redetermination the CMA arrived at an OE challenge figure of 1% by considering a number of factors. These included using an average figure of 0.7% for the GO measures across a range of relevant sectors and taking account of other factors, including embodied technical change.<sup>866</sup>

7.450 The approach taken by GEMA does not exactly follow the approach set out by the CMA. GEMA's approach did not involve choosing a point estimate from the EU KLEMS data and then adjusting that figure up or down. Instead GEMA used EU KLEMS as one factor in its decision.

7.451 As noted above,<sup>867</sup> while the CMA PR19 Redetermination is very recent and contains material highly relevant to these appeals, this does not mean that it sets down the unquestionable methodological best practice from which a sector regulator cannot depart and therefore the mere fact that GEMA did not follow the same approach as the CMA adopted in its PR19 Determination does not mean that GEMA's approach must be wrong. Regulators should be afforded a margin of appreciation when setting the OE challenge. They must exercise regulatory judgement in determining how to reflect the different evidence sources. We find that basing a decision on multiple factors and taking account of those factors qualitatively rather than quantitatively is within the margin of appreciation that should be accorded to regulators. Therefore

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<sup>865</sup> See paragraph 7.89 for further discussion of this topic.

<sup>866</sup> [CMA PR19 Redetermination](#), paragraph 4.616

<sup>867</sup> See the Introduction to Chapter 5.

we find GEMA did not err because its approach was different from that adopted by the CMA.

*Did GEMA err by failing to take proper account of the evidence?*

7.452 The appellants said that GEMA erred by failing to take proper account of the evidence (see paragraphs 7.420, 7.423, 7.427 and 7.433). As part of this, Oxera provided evidence from a simulation exercise it carried out, investigating the potential weights attached to different evidence sources (see paragraph 7.433). However, this Oxera analysis only took account of the different productivity measures and not the wider set of factors which GEMA considered in its decision. Therefore we placed limited weight on this evidence.

7.453 We address the wider question of whether GEMA erred and failed to take proper account of the evidence when it set the level of the final core OE challenge, and the evidence sources it used in that decision, in paragraphs 7.763 to 7.801.

## **Innovation uplift**

7.454 In this section we consider the appellants' arguments that GEMA erred in its approach to the innovation uplift and address the following issues:

- (a) Did GEMA err because the cost benefits were quantified incorrectly?
- (b) Did GEMA err when it assumed that innovation funding was incremental?
- (c) Did GEMA err because the approach double-counted savings already in the companies' business plans?
- (d) Did GEMA err because the innovation uplift distorts incentives to innovate?
- (e) Did GEMA err because its approach was inconsistent with the CMA's decision in *Northern Powergrid*?

7.455 We address the wider question of whether GEMA erred when it decided to impose an innovation uplift in paragraphs 7.802 to 7.807.

***Did GEMA err because the cost benefits were quantified incorrectly?***

7.456 In this section we discuss the appellants' arguments that GEMA erred because the cost benefits of the innovation funding were quantified incorrectly. We first summarise the evidence and then provide our conclusion.

## *GEMA's approach*

7.457 CEPA, in its May 2020 report, said that it had not yet identified robust evidence for establishing a firm quantitative relationship between innovation funding in RIIO-1 and the scope for efficiency improvements. It had therefore estimated that an annual OE improvement challenge of up to 0.2% could represent a reasonable return to consumers on the upfront funding they provided.<sup>868</sup> CEPA said that deciding how this 0.2% figure should be reflected in the OE challenge would be based on a judgement of how important the following factors might be:

- a) The importance of benefits to consumers other than cost savings – such as environmental benefits and quality of service.
- b) Whether the benefits from innovation funding in RIIO-1 would result in cost savings before the end of RIIO-2.
- c) Whether the benefits would last longer than 20 years.
- d) The degree of additional OE driven by innovation funding in RIIO-1 that was already embedded in the companies' business plans.<sup>869</sup>

7.458 When estimating the return for consumers on the innovation funding, CEPA said that the assumption of a 4.2% return for consumers was slightly lower than the proposed cost of equity of 4.55%.<sup>870</sup>

7.459 GEMA adopted the upper bound figure of 0.2% set out in the CEPA May 2020 report and used this figure for the innovation uplift.<sup>871</sup>

## *Appellants' submissions*

7.460 Cadent said that GEMA was wrong to assume that past innovation funding would produce future cost savings.<sup>872</sup> The innovation uplift was unevidenced and ignored CEPA's recommendations. GEMA had disregarded CEPA's acknowledgment that it had not identified a firm quantitative relationship between innovation funding and OE.<sup>873</sup> NERA's evidence showed that past innovation funding was not always associated with cost reductions.<sup>874</sup>

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<sup>868</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 35.

<sup>869</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, pages 35–36.

<sup>870</sup> *Keane 1 (GEMA)*, paragraphs 91 - 92 and 202.

<sup>871</sup> [GEMA Response B](#), paragraph 8(3).

<sup>872</sup> [Cadent NoA](#), paragraph 3.137.

<sup>873</sup> [Cadent NoA](#), paragraphs 3.135 to 3.136.

<sup>874</sup> [Cadent NoA](#), paragraph 3.137. See also *Moon 1 (Cadent)*, paragraph 80.

- 7.461 NERA, for Cadent, said that GDNs were required to contribute 10% of total costs to the Network Innovation Competition (**NIC**), so CEPA had overstated the level of investment funded by consumers.<sup>875</sup> The CEPA approach appeared to assume a fair return to consumers of 4.2% and then created an arbitrary set of assumptions that yielded an appropriate result.<sup>876</sup> The innovation funding was also not primarily intended to drive cost reductions.<sup>877</sup>
- 7.462 NERA, for Cadent, said that GEMA had failed to respond to evidence that past innovation funding would not increase the scope for productivity improvement during RIIO-GD2.<sup>878</sup> GEMA had also failed to explore the implications of the fact that companies contributed 10% of funding for National Innovation Allowance (**NIA**) projects.<sup>879</sup>
- 7.463 NGN said that GEMA's methodology was based on several flawed or unsubstantiated assumptions.<sup>880</sup>
- 7.464 In its response to the provisional determination, NGN said that the CMA should consider and address a principle-based objection to the innovation uplift in its final determination: the innovation uplift was based on an unevidenced assumption by GEMA that differences in R&D spending between network companies and comparator sectors could be used to infer differences in overall productivity that could be achieved in those sectors. As explained in Frontier's Ongoing Efficiency Report<sup>881</sup>, such an inference was wrong: there were multiple sources of productivity growth (of which R&D was only one). Different sectors spent different amounts on R&D and the same R&D spend could lead to very different impacts on productivity. NGN said that while the CMA had referred to this argument in its provisional determination, it did not appear to have provisionally concluded that GEMA's approach was wrong on this basis.<sup>882</sup>
- 7.465 NGN said that CEPA's analysis was underpinned by several other assumptions that the CMA had not assessed in the provisional determination. NGN assumed that, having found several assumptions to be in error, the CMA did not think it necessary to comment further on these additional assumptions. NGN said that several of these additional assumptions were either

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<sup>875</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 423.

<sup>876</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 424.

<sup>877</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 428–434.

<sup>878</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 60.

<sup>879</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 61.

<sup>880</sup> [NGN NoA](#), paragraphs 56, 319(ii) and 371 to 376. See also [NGN Reply](#), paragraph 118 and *Mills 1 (NGN)*, paragraph 38(i).

<sup>881</sup> *Roberts 1 (SGN)*, paragraphs 1.1.3 and 4.2.3–4.2.20.

<sup>882</sup> NGN Response to PD, paragraph 35.

demonstrably false (notably the assumption that no benefits from innovation funding were delivered during RIIO-GD1) or unevidenced, arbitrary and inappropriately simplifying.<sup>883</sup>

7.466 NGN said that GEMA accepted that the assumptions underpinning the uplift were ‘consciously simplifying’, ‘broad’ and lacked a ‘high degree of accuracy’. The evidence submitted by NGN showed that the decision to apply the uplift and the methodology and assumptions underpinning its quantification were flawed.<sup>884</sup>

7.467 NGN said that GEMA failed to engage with its submissions that the assumptions made by CEPA in quantifying the 0.2% innovation uplift were manifestly flawed and that equally plausible assumptions could yield radically different results.<sup>885</sup> NGN said that GEMA accepted that the quantification was not well evidenced.<sup>886</sup>

7.468 NGN said that the work with GEMA on the RIIO-GD2 Innovation Governance document made it clear that GEMA was aware that not all innovation drove cost savings.<sup>887</sup>

7.469 NGN said that the CMA had previously recognised the limits to GEMA's discretion to make cost adjustments and NGN submitted that GEMA's ‘intuition’ and colourful analogies to innovation funding functioning as a ‘performance-enhancing drug’ or ‘fertiliser’ could not substitute for the absence of robust and well-evidenced decision-making which characterised GEMA's approach.<sup>888</sup>

7.470 Frontier Economics, in a report for NGN and SGN, said that it was not possible to compare R&D spend across sectors and infer differences in the overall achievable productivity.<sup>889</sup> Furthermore, a significant proportion of the R&D spending would not lead to cost savings. Instead the main purpose of the innovation spending was tackling challenges related to energy transition, not achieving cost efficiencies.<sup>890</sup> It said that CEPA had listed ten assumptions in

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<sup>883</sup> NGN Response to PD, paragraph 41.

<sup>884</sup> [NGN Reply](#), paragraph 7(iii).

<sup>885</sup> [NGN Reply](#), paragraph 20(iii).

<sup>886</sup> [NGN Reply](#), paragraphs 116 to 120.

<sup>887</sup> *Pearson 2 (NGN)*, paragraph 13.

<sup>888</sup> NGN Closing statement, paragraph 38.

<sup>889</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.2.5.

<sup>890</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.2.18.

its method. Three were demonstrably false, two were entirely unevidenced and four were highly arbitrary and simplifying.<sup>891</sup>

7.471 Frontier Economics, in a report for NGN and SGN, said that it had looked at the gas distribution NIC projects approved from 2013 to 2020 and had categorised each by its primary focus: either to deliver environmental or cost benefits. 71% of NIC funding had a primary focus of delivering environmental benefits rather than cost savings.<sup>892</sup>

7.472 Frontier Economics, in a report for NGN and SGN, said that there were parallels between the lack of robust evidence supporting the 0.2% figure, and Ground 2B, 'The Non-Additionality Error', appealed by Firmus Energy in 2017. In that case, the CMA had concluded that the non-additionality rate applied by the Northern Ireland Authority for Utility Regulation was not sufficiently justified and robustly evidenced because it was consistent with various alternative approaches, which could give very different values for the non-additionality rate.<sup>893</sup> Frontier Economics said that different assumptions could result in different innovation uplifts. For example, assuming benefits lasted 45 years rather than 20 years implied an innovation uplift of 0.13%.<sup>894</sup>

7.473 NGN and SGN in their responses to the provisional determination said that CEPA, in its original assessment of the innovation uplift, tested the sensitivity of the results to a 45-year assumption while CEPA's underlying model tested the sensitivity of the results to a range of assumptions between 20 years and 45 years. While CEPA subsequently stated in its submissions to the CMA that 45 years was implausible, no evidence was provided in support of that assertion, and CEPA clearly recognised the need to test the sensitivity of the results to this assumption. This implied that no clear single, unequivocally correct assumption could currently be defined.<sup>895</sup>

7.474 SGN said that the method used by GEMA to derive the uplift was wholly inadequate and based on demonstrably false and/or inappropriate assumptions. Not all benefits would come in the form of cost reductions and not all benefits would be fully realised during RIIO-GD2.<sup>896</sup>

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<sup>891</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.3.6 to 4.3.9.

<sup>892</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.3.16.

<sup>893</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.3.37. Text clarified in later RFI response.

<sup>894</sup> Frontier Economics, MR1\_1\_026.xlsm, tab: Illustrative Model – v3.

<sup>895</sup> NGN Response to PD, paragraph 40. and SGN Response to PD, paragraph 203.

<sup>896</sup> [SGN NoA](#), paragraphs 468 to 483.

7.475 SGN said that the innovation stimulus package was primarily designed to drive low carbon and other environmental benefits.<sup>897</sup> It said that SGN expected that over 60% of NIA and NIC projects delivered over the course of the RIIO-GD1 price control period would have delivered non-financial benefits.<sup>898</sup>

7.476 In its response to the provisional determination, SGN said that the CMA had concluded in the provisional determination that CEPA had made assumptions when calculating the innovation uplift that were unsupported by evidence and SGN agreed with these conclusions. CEPA had also adopted a number of assumptions that were demonstrably false or were unevidenced. These included CEPA's assumptions that, inter alia:

- RIIO-1 innovation funding did not deliver any benefits during RIIO-1;
- the benefits of RIIO-1 innovation funding, in the form of increased OE, did not continue beyond RIIO-2;
- core OE was 1% per year; and
- 4.2% was a reasonable return to consumers from innovation funding.<sup>899</sup>

7.477 In its response to the provisional determination, SGN also said that the proportion of innovation funding that was spent on cost reductions was not necessarily the same as the proportion of benefits represented by any resulting cost reductions. For example, it may be that 30% of innovation funding was spent on projects seeking to deliver cost savings, but that the environmental benefits resulting from the remaining innovation spend were significant and represented 90% of the overall return to customers. If the CMA implicitly accepted the CEPA framework, which SGN did not consider that it should, it would be necessary to evaluate the non-cost benefits delivered to customers in order to determine whether customers had received a reasonable return.<sup>900</sup>

7.478 SGN said that even if it were possible to use data to estimate the differences in R&D spending between network companies and the wider economy, it was not necessarily possible to use those differences in R&D to infer differences in the overall level of productivity that was achievable.<sup>901</sup>

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<sup>897</sup> *Handley 1 (SGN)*, paragraph 11.

<sup>898</sup> *Handley 1 (SGN)*, paragraph 14.

<sup>899</sup> SGN Response to PD, paragraphs 198–199.

<sup>900</sup> SGN Response to PD, paragraph 202.

<sup>901</sup> SGN Response to PD, paragraphs 207 and 216.



- 7.479 SGN said that there was a further in-principle reason why an innovation uplift was unjustified but which the CMA had not commented on in its provisional determination. This was that the innovation uplift was based on an unevidenced assumption by GEMA that differences in R&D spend between the gas distribution sector and the economy-wide EU KLEMS data underpinning GEMA's core challenge could be used to infer differences in overall productivity that can be achieved. This was unlikely to hold because there were multiple sources of productivity growth (of which R&D was just one), different sectors spent different amounts on R&D, and the same R&D spend could lead to very different impacts on productivity.<sup>902</sup>
- 7.480 SGN said that GEMA had conceded that the level of the innovation uplift was unevidenced.<sup>903</sup> GEMA had not indicated that it had factored in customer returns in GD1, and had said that its decision to adopt the innovation uplift was predicated on the expectation of further savings which could neither be identified nor quantified.<sup>904</sup> GEMA had also failed to engage with the issues and assumptions underpinning CEPA's analysis.<sup>905</sup>
- 7.481 SGN said that GEMA had relied on irrelevant factors. GEMA had applied reasoning to the gas sector which was relevant only to the electricity sector. The purpose of innovation funding – and the impact of the energy system transition – in the gas sector was very different to in the electricity sector. Crucially, a material proportion of gas network funding was focused on trialling technologies which may be relevant in the future if gas networks were to have a role in the decarbonised energy system (eg through hydrogen). These were longer term issues which had no bearing on gas network costs during RIIO-2. In contrast, substantial changes in the electricity sector had already been observed and were progressing more rapidly. In the joint OE hearing, GEMA had referred to studies and technologies which only concerned the electricity sector. Therefore, to the extent GEMA had relied on these statements to support its decision for the gas distribution sector, it was incorrect to do so.<sup>906</sup>
- 7.482 SPT said that GEMA's assumption that innovation funding was used for cost savings was unwarranted.<sup>907</sup> SPT said that the fact that the water sector had not benefitted from years of innovation funding (a 'performance enhancing drug' that had already targeted projects with the most innovation potential)

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<sup>902</sup> SGN Response to PD, paragraph 216.

<sup>903</sup> [SGN Reply](#), paragraph 96–104.

<sup>904</sup> [SGN Reply](#), paragraph 96.

<sup>905</sup> [SGN Reply](#), paragraphs 98–103.

<sup>906</sup> SGN Closing Statement, paragraph 47.

<sup>907</sup> [SPT NoA](#), paragraph 59(2).

was irrelevant to the potential for future productivity improvements in electricity transmission, a very different sector.<sup>908</sup>

- 7.483 SPT said that there was no basis to expect that NIA and NIC projects should, or would, generate financial returns at the rate seen in venture capital. NIA and NIC investment decisions were not made by venture capitalists able to ‘cherry-pick’ the most promising projects across the global economy. Rather, they needed to be spent across a very limited pool of potential utility projects. There was no reason to think that GEMA (in contrast to other grounds of appeal, where it made a virtue of its ‘humility’) could set advance criteria or pick winners with anything like the track record of an experienced venture capitalist. And GEMA certainly did not require that an NIA or NIC investment would only occur if it would generate returns that a venture capital investor would expect.<sup>909</sup>
- 7.484 SPT said that GEMA erred because it assumed that of those cost benefits that did arise in electricity transmission, they all arose to the transmission operators. SPT evidence showed that the vast majority of the costs actually arose through Electricity Systems Operator (**ESO**) energy balancing mechanisms costs, so no benefit came through the TO at all, even though there were some cost benefits.<sup>910</sup>
- 7.485 In its response to the provisional determination, SPT said that, rather than the 52% figure in the provisional determination, a more likely figure for the proportion of expenditure that led to cost savings was closer to 10% to 15%. However, even this kind of analysis provided no indication of the level of cost savings expected ex-ante to be achieved in aggregate, or the level of cost savings actually achieved, if any, as a specific result of this innovation funding: it was just an approximate estimate of the proportion of projects that were focused on generating cost savings, to provide some very approximate cap on the innovation funding that was even potentially relevant.<sup>911</sup>
- 7.486 NERA, for SPT, said that innovation funding adjustment was not based on any evidence as to the scope of savings that could be achieved by an efficient TO.<sup>912</sup> It said the innovation funding was primarily aimed at achieving benefits other than cost reduction.<sup>913</sup> CEPA acknowledged that it did not have robust evidence for establishing a firm quantitative relationship between innovation

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<sup>908</sup> SPT Closing Statement, paragraph 33.

<sup>909</sup> SPT Closing Statement, paragraph 42. See also Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 39 lines 3–22.

<sup>910</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 47, line 22 to page 48, line 10. See also *McTaggart (SPT)*, paragraphs 46, 53, 58 and 67.

<sup>911</sup> SPT Response to PD, paragraph 175.

<sup>912</sup> *Grayburn (SPT)*, Expert Report, paragraphs 21 and 127–131.

<sup>913</sup> *Grayburn (SPT)*, Expert Report, paragraphs 22 and 132–140.

funding and the scope for frontier efficiency improvements in the energy network sector.<sup>914</sup> CEPA had overstated consumers' contribution as TOs only recovered 90% of NIC innovation costs from customers.<sup>915</sup>

7.487 NERA said that, of the £88.5 million in NIC funding awarded to transmission companies during RIIO-1, less than £10 million was directed to projects which were primarily focused on cost reductions that were remunerated via the TOs' price controls. A further £36.2 million was directed to projects where cost reductions were an ancillary benefit to the project. The remaining £41.8 million was directed to projects which might reduce whole-system costs but were outside of the scope of the RIIO revenue controls.<sup>916</sup>

7.488 SPT said that the innovation funding was never principally aimed at cost savings. It said that GEMA did not even pretend to provide justification for the quantification, saying that it was a high-level estimate based on simplifying assumptions.<sup>917</sup>

7.489 NERA, for SPT, said that the GEMA methodology to compute the innovation uplift was manifestly flawed.<sup>918</sup> NERA said that the innovation funding was not primarily intended to drive cost reductions. Instead, it was focused on quality improvements and wider energy system improvements to address key challenges such as the energy transition and net zero, as well as delivering carbon and wider environmental benefits. NERA's analysis demonstrated the much wider focus of the funding when it was deployed. On this basis alone it was wrong to determine that the innovation funding should provide a 0.2% per year improvement in network cost efficiency.<sup>919</sup>

7.490 WWU said that CEPA had failed to distinguish between process innovations (eg cost reductions) and product innovations (eg quality improvements). CEPA had assumed that innovation funding had resulted in process innovation only, resulting in an over-estimation of the cost reduction impact. CEPA had also failed to substantiate its choice of a 20-year duration.<sup>920</sup>

7.491 WWU said that GEMA had assumed all innovation was for cost reduction.<sup>921</sup>

7.492 WWU said that CEPA had estimated the uplift for innovation funding on the assumption that all funding delivered cost savings. However, this assumption

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<sup>914</sup> *Grayburn (SPT)*, Expert Report, paragraph 24.

<sup>915</sup> *Grayburn (SPT)*, Expert Report, paragraph 25.

<sup>916</sup> *Grayburn (SPT)*, Expert Report, paragraph 139.

<sup>917</sup> *SPT Reply*, paragraphs 27(4)-27(5).

<sup>918</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 94.

<sup>919</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 93.

<sup>920</sup> *WWU NoA*, paragraphs E8.7–E8.8. See also Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, section 4D.

<sup>921</sup> *WWU NoA*, paragraph E8.7.

was flawed as it ignored that R&D could also yield benefits through higher quality of services or different outcomes. GEMA had ignored the evidence that in GD1, 45% of the funding had been for product innovation and not for process innovation. Furthermore, the majority of the future funding in GD2 would not be for process innovation but for projects contributing to the achievement of net zero and energy system transition.<sup>922</sup> WWU said that GEMA and CEPA had failed to substantiate their choice of a 20 year duration when the lifetime of GDN assets was around 45 years. If a 45 year duration was considered and a 4.2% return on innovation funding during RIIO-1, then the annual improvement would be around 0.1% instead.<sup>923</sup> WWU said that it was notable that CEPA had not subsequently endorsed GEMA's approach to the innovation uplift.<sup>924</sup>

7.493 Oxera said that GEMA's failure to consider quality improvements as one way that R&D benefitted consumers violated GEMA's definition of OE.<sup>925</sup>

#### *GEMA's submissions*

7.494 GEMA said that the innovation uplift was a high-level estimate based on simplifying assumptions and could not be said to be wrong.<sup>926</sup>

7.495 GEMA said that it was correct to identify a link in principle between the substantial innovation funding which network companies had received during RIIO-1 and efficiency improvements. GEMA's conclusion was supported not only by academic evidence of a quantitative relationship between R&D spending and productivity improvements in production industries, but also by evidence from the companies themselves.<sup>927</sup>

7.496 GEMA said that it was justified in accepting the 'different perspective' from which CEPA considered the impact of innovation funding on OE – namely, what different assumptions on OE driven by innovation would mean for the return effectively received by consumers on the funding provided during RIIO-1 as quasi-investors.<sup>928</sup> CEPA had therefore made some simplifying assumptions to arrive at a reasonable figure.<sup>929</sup>

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<sup>922</sup> [WWU Reply](#), paragraph E5.3. See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 17.

<sup>923</sup> [WWU Reply](#), paragraph E5.4.

<sup>924</sup> [WWU Reply](#), paragraph E5.6.

<sup>925</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 17.

<sup>926</sup> [GEMA Response B](#), paragraph 162.

<sup>927</sup> [GEMA Response B](#), paragraph 154.

<sup>928</sup> [GEMA Response B](#), paragraph 155(4).

<sup>929</sup> [GEMA Response B](#), paragraph 155(5).

- 7.497 GEMA said that CEPA had not attempted to estimate with a high degree of accuracy the savings which would result from the innovation funding. GEMA's decision as to the final OE challenge was an exercise of regulatory discretion which considered various pieces of evidence in the round, including the level of efficiency gains which could be reasonably expected from innovation funding during RIIO-1.<sup>930</sup>
- 7.498 CEPA said that the assumption that benefits lasted 45 years was deemed implausible because of the pace at which innovation became obsolete and the extent that innovation funding brought forward innovation so that it happened earlier.<sup>931</sup>
- 7.499 CEPA said that it had not seen any compelling evidence from the appellants with superior alternative assumptions.<sup>932</sup> CEPA acknowledged that customers only contributed 90% of the funding but including this adjustment would not materially change the overall conclusion on the 0.2% figure.<sup>933</sup>
- 7.500 GEMA said that although the appellants had sought to attack the assumptions underpinning the innovation uplift sense-check on the OE challenge, they had failed to provide any reason that energy utilities treated with a decade of innovation stimulus should not be expected to outperform water utilities (which had not had this treatment).<sup>934</sup>
- 7.501 In its response to the provisional determination, GEMA said that it welcomed the CMA's provisional determination that the assumption that innovation funding represented 1% of totex was not inappropriate. As the CMA recognised, GEMA provided information showing that, across the years 2014 to 2019, innovation funding totalled £291.6 million, which was 1.2% of totex.<sup>935</sup>
- 7.502 GEMA said that it accepted the CMA's provisional determination that GEMA had erred by relying on an assumption that all innovation funding resulted in cost reductions. GEMA accepted that not all NIC and NIA funding was primarily targeted at cost reductions. While there remained some disagreement between GEMA and the appellants on the extent to which NIC and NIA funding should result in cost efficiency benefits, GEMA believed that the CMA's concerns could be addressed in a revision of the quantification of the innovation uplift.<sup>936</sup>

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<sup>930</sup> [GEMA Response B](#), paragraph 167.

<sup>931</sup> *Keane 1 (GEMA)*, paragraph 97.

<sup>932</sup> *Keane 1 (GEMA)*, paragraph 203.

<sup>933</sup> *Keane 1 (GEMA)*, paragraph 204.

<sup>934</sup> GEMA Closing Statement, paragraph 4(c).

<sup>935</sup> GEMA Response to PD, paragraph 166.1.]

<sup>936</sup> GEMA Response to PD, paragraph 166.2.

- 7.503 GEMA said that the CMA did not specifically comment in its provisional determination on the reasonableness of GEMA's assumption that the cost efficiency benefits of innovation would endure for 20 years. GEMA continued to think that 20 years was an appropriate common sense central case assumption.<sup>937</sup>
- 7.504 GEMA said that the CMA had provisionally found that there was no evidence to support the innovation uplift of 0.2%. However, as noted by the CMA in paragraph 7.369, the figure of 0.2% was an input to GEMA's analysis used to calibrate the model to produce a reasonable rate of return for consumers (such as the 4.2% rate of return used in the FD). GEMA said that reasonableness of the size of the uplift should be assessed by reference to the evidence supporting the other assumptions used in its analysis, including the rate of return.<sup>938</sup>
- 7.505 GEMA said that its innovation uplift was calculated from relatively conservative assumptions. For example it estimated a target financial return to consumers linked to the RIIO-2 cost of equity, rather than returns that were typically required by investors in higher risk R&D projects. This meant that the uplift was likely to be an underestimate of a reasonable return to consumers from innovation funding.<sup>939</sup>
- 7.506 GEMA said that it had used a relatively conservative return requirement of 4.17% when calibrating the original uplift of 0.2%. However, there was a significant body of evidence that could support the use of a higher rate of required return (in the range of 5% to 10%) for investments of a similar nature to R&D investment in the energy sector. This range could be even higher for venture capital funds. GEMA had reviewed academic and industry surveys regarding returns from venture capital funds which indicated an average fund return of 19.1% and a median return of 14.8%. A more recent review, using an improved database of US returns, gave an average net IRR of 14.8%. Recent examples of returns for British venture capital funds showed a return of 11.6%. The British Business Bank reported, in 2020, venture capital returns, for funds since 2002, of 17% with a range from difference sources of 9 to 19%.<sup>940</sup>

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<sup>937</sup> GEMA Response to PD, paragraph 166.3.

<sup>938</sup> GEMA Response to PD, paragraph 167.

<sup>939</sup> GEMA Response to PD, paragraph 199.

<sup>940</sup> GEMA Response to PD, paragraph 230.

### *Our assessment and conclusion*

7.507 The CEPA May 2020 report sets out assumptions behind the calculation of the 0.2% figure:

- Innovation funding (NIC and NIA) was assumed to have been equivalent to 1% of base revenue each year throughout RIIO-1.
- CEPA focused on the impact on totex directly rather than attempting to unpick the impact on allowed revenues specifically.
- CEPA considered consumers as a single group – ie not taking into account inter-generational equity issues which would recognise that the group of consumers that funded the innovation allowances would not be entirely the same as the group that received the later benefits.
- The innovation spend was entirely additional compared to what the companies would have done in the absence of the innovation mechanisms.
- The benefits of the RIIO-1 innovation funding were fully realised during the RIIO-2 period only, with the resulting reduction in costs persisting beyond RIIO-2.
- The annual OE assumption in the absence of innovation funding was 1%.
- The duration of benefits was 20 years.
- The only benefits that accrued to customers were cost savings. No account was taken of other benefits such as environmental benefits and quality of service.
- No additional OE driven by innovation funding in RIIO-1 was already embedded in the baseline spending plans submitted by the companies.
- There would be a 0.2% additional improvement in annual OE during RIIO-2 as a result of RIIO-1 innovation funding.<sup>941</sup>

7.508 The appellants criticised extensively these assumptions (see paragraphs 7.460 to 7.493).

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<sup>941</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, pages 24- 25. See also Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.3.7 to 4.3.9.

- 7.509 For the purposes of this determination, we focus on CEPA's assumption that all innovation funding was used to fund cost reductions.
- 7.510 The appellants provided information showing that not all innovation funding was spent on projects that would result in cost reductions. For example, the Cadent evidence showed that for £73.3 million of GDN NIC spending, only 27% of this was spent on projects which were primarily related to cost reduction.<sup>942</sup>
- 7.511 GEMA accepted that it had erred by relying on the assumption that all innovation funding resulted in cost reductions.<sup>943</sup> Furthermore, GEMA's responses showed that it generally agreed with the classifications of NERA and Frontier Economics regarding the proportions of projects that were focused on cost reduction.<sup>944</sup>
- 7.512 The size of the impact of this error, by itself, is sufficient for us to conclude that GEMA erred in the quantification of the benefits from the innovation funding. Therefore we do not find it necessary to discuss the supplementary arguments raised by the appellants regarding the other assumptions CEPA used and GEMA relied upon.
- 7.513 This approach is consistent with points raised by the appellants in their responses to the provisional determination. For example, NGN said that CEPA's analysis was underpinned by several other assumptions that the CMA had not assessed in the provisional determination. NGN assumed that, having found several assumptions to be in error, the CMA did not think it necessary to comment further on these additional assumptions.<sup>945</sup>

***Did GEMA err when it assumed innovation funding was incremental?***

- 7.514 In this section we discuss the appellants' arguments that GEMA erred when it assumed that the innovation funding received by the companies was incremental to the comparator sectors in EU KLEMS. We first summarise the evidence and then provide our conclusion.

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<sup>942</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 432A.

<sup>943</sup> GEMA Response to PD, paragraph 166.2.

<sup>944</sup> GEMA, RFI GEMA 010, pages 4–6 and GEMA, RFI GEMA 014, pages 2–9. See also Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 25, line 25 to page 26, line 4.

<sup>945</sup> NGN Response to PD, paragraph 41.



## *GEMA's approach*

7.515 CEPA said that EU KLEMS already took into account some of the productivity growth funded by R&D. Therefore, there could be scope for double-counting.<sup>946</sup>

7.516 GEMA in its FD said that the energy sector had enjoyed explicit and additional innovation funding over and above general allowances, and beyond any comparator sectors, including water. This funding had been totally unique to energy network companies.<sup>947</sup>

## *Appellants' submissions*

7.517 Cadent said that the CMA PR19 Redetermination had not applied any uplift for past innovation funding.<sup>948</sup>

7.518 Cadent said that GEMA had double-counted innovation driven productivity already included in EU KLEMS. Data showed that UK R&D expenditure had been between 1.5% and 1.7% in 2000 to 2008 and the effects of this were already captured in EU KLEMS.<sup>949</sup>

7.519 In its response to the provisional determination, Cadent said that the EU KLEMS data underpinning the core OE target already took account of R&D spend in comparator sectors and GDNs invested less in innovation compared to other sectors. While Cadent recognised that not all R&D spend in other sectors was directed at cost reduction, the analysis of NIA and NIC funding showed that this funding was also not entirely spent on cost reductions. Therefore, under any innovation uplift, there would be risk of double-counting with innovation spend accounted for in EU KLEMS.<sup>950</sup>

7.520 NGN said that the innovation uplift was based on double-counting efficiency improvements that were in the core OE challenge.<sup>951</sup> GEMA had assumed the innovation funding was incremental to R&D spending in comparator sectors.<sup>952</sup>

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<sup>946</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 22.

<sup>947</sup> [GEMA FD Core Document](#), paragraph 5.26.

<sup>948</sup> [Cadent PR19 submission](#), paragraph 15.

<sup>949</sup> [Cadent NoA](#), paragraphs 3.131 to 3.133. See also *Moon 1 (Cadent)*, paragraph 80 and NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 440–445 and [Cadent Reply](#), paragraph 52(g).

<sup>950</sup> Cadent Response to PD, paragraph 3.2b.

<sup>951</sup> [NGN NoA](#), paragraphs 56(i) and 359–360.

<sup>952</sup> [NGN NoA](#), paragraphs 56(ii) and 365–370.

- 7.521 NGN said that the CMA PR19 Redetermination had not included an innovation uplift and GEMA's approach was unprecedented.<sup>953</sup>
- 7.522 NGN said that GEMA's reasoning that GDNs had received innovation funding that was not present in the water sector was flawed. First, there was no basis for the innovation uplift. Second, Ofwat had introduced a £200 million innovation fund in PR19, which was recognised by the CMA's decision to set a 1% OE challenge in the CMA PR19 Redetermination.<sup>954</sup>
- 7.523 NGN said that GEMA had not explained clearly why the innovation funding was incremental to R&D spend in competitive sectors.<sup>955</sup> NGN said that innovation funding had been introduced, in part, to plug a gap relative to competitive sectors because monopoly network companies generally undertook less than optimal levels of innovation.<sup>956</sup> GEMA had provided no evidence that sharing of innovation would result in higher productivity growth relative to other sectors included in EU KLEMS.<sup>957</sup>
- 7.524 NGN said in its response to the provisional determination that there were strong caveats around using the GDN R&D spending figures provided by the appellants to the CMA to quantify the degree of double-counting with EU KLEMS. In the OE hearing, SGN explained that GDNs were not required to collect or submit data on R&D expenditure outside the network innovation funding as part of GEMA's regulatory reporting packs or company business plan data templates. SGN provided an estimate based on R&D tax credits, but caveated this data heavily, and explained that it was not possible to determine what proportion of the estimated R&D spend was focused on delivering cost savings. SPT stated that its equivalent R&D spending (outside the innovation funding) was probably even lower than the estimate provided by SGN. In any case, even if it were possible to use this data to estimate the difference in R&D spending between network companies and the wider economy, this difference could not necessarily be used to infer differences in the overall level of productivity that was achievable.<sup>958</sup>
- 7.525 In its response to the provisional determination, NGN and SGN said that in the BEIS 2019 UK Innovation Survey there were other factors which could relate to broader cost reductions, such as increasing value added (cited by 32% of respondents), improving production flexibility (cited by 24% of respondents) and replacing outdated products or processes (cited by 36% of respondents).

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<sup>953</sup> [NGN PR19 submission](#), paragraph 25(iv).

<sup>954</sup> [NGN Reply](#), paragraph 111.

<sup>955</sup> [NGN Reply](#), paragraph 127.

<sup>956</sup> [NGN Reply](#), paragraph 128.

<sup>957</sup> [NGN Reply](#), paragraph 129.

<sup>958</sup> NGN Response to PD, paragraph 44.

In addition, businesses cited multiple reasons for innovating, so it was possible that the majority of businesses cited one or more of these cost-related factors, alongside other non-cost factors such as improving product quality. NGN said that these figures represented the proportion of respondents that cited specific factors as highly important to their decision to innovate, not the proportion of R&D spending directed towards specific outcomes. Therefore it was not possible to conclude from this the proportion of spending directed towards cost reductions.<sup>959</sup>

7.526 Frontier Economics, in a report for NGN, said that the innovation funding was not incremental to comparator sectors. CEPA's May 2020 and November 2020 reports raised this concern. It was not clear how GEMA had arrived at the conclusion that the innovation funding was entirely incremental.<sup>960</sup>

7.527 SGN said that GEMA had insufficient basis on which to conclude that historical innovation funding should lead to higher productivity in the sector relative to the wider economy, in comparator sectors, and beyond the range indicated by EU KLEMS.<sup>961</sup> SGN said that GEMA had failed to establish that the funding received was entirely incremental to that R&D spend in comparator sectors.<sup>962</sup> SPT said that GEMA's innovation funding might double-count productivity gains in competitive sectors.<sup>963</sup>

7.528 SPT said that the innovation funding was already embedded in the economy-wide measures.<sup>964</sup>

7.529 NERA, in a report for SPT, said that the innovation uplift represented a double-count, as the effects of innovation spending were already reflected in EU KLEMS, the basis for GEMA's core OE challenge.<sup>965</sup>

7.530 NERA said that the innovation funding adjustment could double-count innovation spending that was already included in EU KLEMS and in competitive sectors.<sup>966</sup>

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<sup>959</sup> NGN Response to PD, paragraph 45. and SGN Response to PD, paragraph 208.

<sup>960</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraphs 4.2.21 - 4.2.36.

<sup>961</sup> [SGN NoA](#), paragraphs 43– 443.

<sup>962</sup> [SGN NoA](#), paragraph 444. See also SGN Closing Statement, paragraph 48 and [SGN Reply](#), paragraphs 110– 116.

<sup>963</sup> [SPT NoA](#), paragraph 59(4).

<sup>964</sup> [SPT Reply](#), paragraph 27(3).

<sup>965</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 90.

<sup>966</sup> *Grayburn (SPT)*, Expert Report, paragraphs 26 and 152 to 162.

- 7.531 WWU said that GEMA had double-counted innovation already in EU KLEMS.<sup>967</sup> WWU said that GEMA had no evidence to support its view that the innovation funding was incremental.<sup>968</sup>
- 7.532 WWU said that there were no conceptual grounds for GEMA's argument that an innovation uplift was justified because this was additional funding above any investment which companies in the competitive sector might make. The current RIIO-2 regulatory framework provided limited incentives to engage in risky innovation as the regulated firms could not fully enjoy the benefits from this risky investment. This was different from the competitive sectors where a firm could fully enjoy the benefits of a risky investment. The innovation funding should be considered a mechanism to overcome market failure rather than as additional R&D funding in comparison to the competitive sector.<sup>969</sup>
- 7.533 Oxera, in a report for WWU, said that GEMA had not provided any empirical evidence to support the argument that, in the absence of the R&D funding scheme, regulated network industries had about the same R&D spending as competitive comparator sectors. There was also no support for this argument on conceptual grounds: R&D spending in network industries was unlikely to be higher than in comparator industries. Oxera said it seemed illogical that the regulator would seek to achieve R&D levels for efficiency improvements beyond the optimal level determined in competitive markets.<sup>970</sup>

#### *GEMA's submissions*

- 7.534 GEMA said that the innovation funding provided to the energy network companies was entirely funded by consumers without risk to the relevant licensees. GEMA was therefore correct to say at FD that innovation funding had been entirely unique to the network companies and an additional resource.<sup>971</sup> GEMA said that the innovation funding was additional to the network companies' business as usual innovation investment, and so should deliver additional efficiencies.<sup>972</sup>
- 7.535 GEMA said that it had not overlooked the risks of double-counting efficiency gains from R&D spending, which were already captured in EU KLEMS. GEMA had been made aware of the risks by CEPA.<sup>973</sup> GEMA said that it had

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<sup>967</sup> [WWU NoA](#), paragraph E8.2.

<sup>968</sup> [WWU NoA](#), paragraph E8.3. See also Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, section 4B.

<sup>969</sup> [WWU Reply](#), paragraph E5.2. See also Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, pages 16 to 17.

<sup>970</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, pages 16 to 17.

<sup>971</sup> [GEMA Response B](#), paragraphs 155(1)–155(2).

<sup>972</sup> [GEMA Response B](#), paragraph 74(3).

<sup>973</sup> [GEMA Response B](#), paragraph 155.

considered the risks of double-counting but decided that the innovation uplift was justified.<sup>974</sup>

- 7.536 GEMA said that the purpose of the RIIO-1 innovation funding was to encourage licensees to pursue innovation that shareholders might not have funded themselves. GEMA strongly believed that this type of low-risk additional innovation funding allowed licensees to make cost savings and efficiency improvements that went above and beyond what was seen in other competitive sectors.<sup>975</sup> This additional funding was relatively unique among regulated sectors in the UK.<sup>976</sup>
- 7.537 GEMA said that while the CMA had not included an innovation uplift in its PR19 Redetermination, this did not establish that the GEMA approach was wrong. GEMA's decision was driven by the unique funding the companies had received.<sup>977</sup>
- 7.538 GEMA said that under the RIIO framework, network companies had strong incentives through the totex incentive and ODIs to seek efficiency improvements. Furthermore, the appellants had provided little or no evidence of regulatory or structural barriers to undertaking greater levels of self-funded R&D as seen in the wider economy. GEMA saw no reason to assume that energy networks were unable to benefit from self-funded R&D in line with comparator sectors. Consumers should be able to expect companies to invest in R&D given the incentives available rather than just focusing on short-term profitability.<sup>978</sup>
- 7.539 In its response to the provisional determination, GEMA said that it accepted that it had not sought to quantify the extent of any double-count between cost reduction benefits that consumers could reasonably expect from the RIIO-1 targeted innovation stimulus and the cost reduction benefits that might arise from self-funded R&D spending, whether in the energy networks or in the comparator sectors. Instead, GEMA saw no reason to assume that energy networks were unable to benefit from self-funded R&D in line with comparator sectors. Consumers should be able to expect companies to invest in R&D given the incentives available rather than just focusing on short-term profitability.<sup>979</sup>

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<sup>974</sup> [GEMA Response B](#), paragraph 74(3).

<sup>975</sup> *Wagner 2 (GEMA)*, paragraph 118. See also GEMA Response to PD, paragraph 170.

<sup>976</sup> *Wagner 2 (GEMA)*, paragraph 119. See also GEMA Response to PD, paragraph 175.

<sup>977</sup> [GEMA PR19 Response on Totex](#), paragraph 13(4).

<sup>978</sup> GEMA Closing Statement, Part II, paragraph 11.

<sup>979</sup> GEMA Response to PD, paragraph 171.

7.540 GEMA said that the appellants had provided no evidence to support the claim that GEMA was mistaken in its assumption that it was reasonable to expect energy networks to have a similar scope to benefit from cost savings from self-funded R&D as companies in the comparator sectors.<sup>980</sup>

7.541 GEMA said that the analysis provided by appellants that R&D spending as a proportion of totex for the energy networks was lower than R&D spending in the wider economy expressed as a ratio to GDP did not necessarily support the appellants' claims. In particular:

- The two sets of figures were not comparable. Specifically, the denominator in the two sets of figures relate to different concepts. Totex was a measure of expenditure, whereas GDP was a measure of the value of all final goods and services in the economy. GDP was significantly less than the sum of expenditure incurred in the economy.
- In any case, a substantial proportion of R&D spend was not spent on cost reductions and this acted as a countervailing factor to any conclusions that may be drawn from an observation that energy networks spent less on R&D than the wider economy (which itself might not be correct).<sup>981</sup>

7.542 The core OE challenge was set on the basis that the network companies already had the incentive to undertake 'business as usual' innovation through self-funded R&D, even without explicit innovation funding, in order to improve profitability by outperforming their cost allowances.<sup>982</sup>

7.543 In its response to the provisional determination, GEMA said that its lack of quantification of possible double-counting with R&D spending in the wider economy was not an error in itself. In any case the quantitative analysis put forward by the appellants did not support the conclusion that GEMA was incorrect to assume that the innovation uplift was entirely incremental. GEMA therefore disagreed with the CMA's provisional conclusion that GEMA made an error by assuming that the innovation uplift was entirely incremental.<sup>983</sup>

### *Our assessment and conclusion*

7.544 Frontier Economics produced a graphic which helps clarify the issues surrounding the question of whether GEMA erred because it assumed the innovation funding was incremental (see Figure 7-3).

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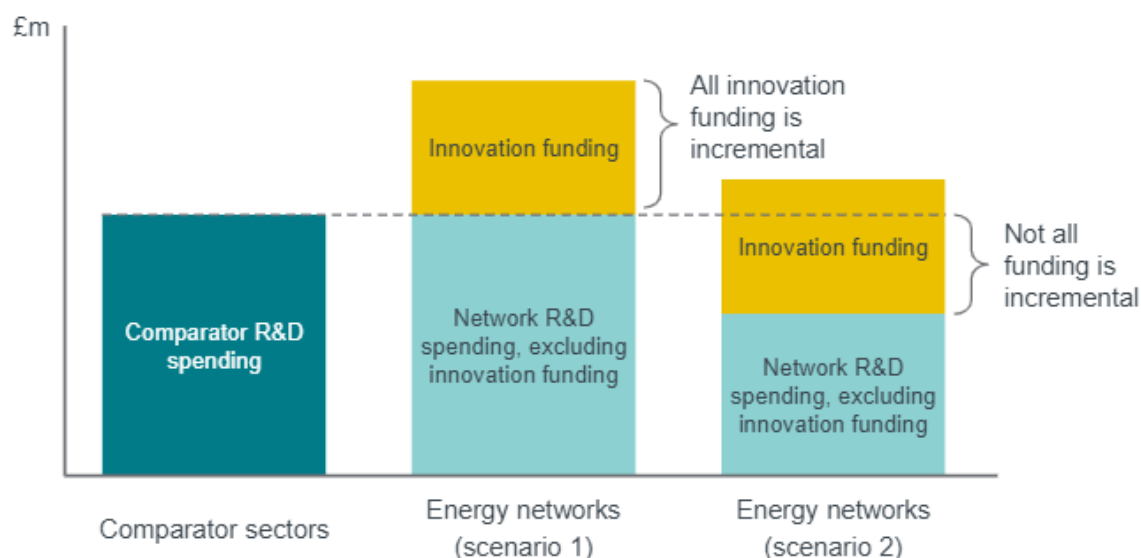
<sup>980</sup> GEMA Response to PD, paragraph 172.

<sup>981</sup> GEMA Response to PD, paragraph 173.

<sup>982</sup> GEMA Response to PD, paragraph 173.

<sup>983</sup> GEMA Response to PD, paragraph 176.

**Figure 7-3: Incremental vs non-incremental innovation funding**



Source: Frontier Economics, Assessment of GEMA's approach to setting OE at RIIO-GD2, Figure 3.

7.545 Consistent with this diagram, the evidence from SGN showed around [X] of its turnover was spent on R&D. This consisted of [X] for NIA and NIC and [X] for other spending outside of NIA and NIC,<sup>984</sup> although we recognise that SGN placed substantial caveats around the figure of [X].<sup>985</sup> SPT also said that its R&D spending was below [X].<sup>986</sup> The appellants said that ONS data showed that R&D spend was around 1.7% of GDP in 2018.<sup>987</sup>

7.546 GEMA said that there was no reason to assume R&D spending in the networks was not in line with other sectors (see paragraphs 7.539, 7.540 and 7.542). GEMA also said that the analysis provided by appellants that R&D spending as a proportion of totex for the energy networks was lower than R&D spending in the wider economy expressed as a ratio to GDP did not necessarily support the appellants' claims (see paragraph 7.541). In response, the appellants said that their figures were based on a proportion of turnover, not totex.<sup>988</sup>

7.547 The evidence above in paragraph 7.545 on comparative R&D spending levels, although based on only a few companies, supports the view that network companies invest less in innovation compared to other sectors.

7.548 An additional issue, which the Frontier Economics diagram does not account for, is the fact that not all comparator R&D spending will be spent on cost

<sup>984</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 9, line 20 and page 10, line 9.

<sup>985</sup> SGN Response to PD, paragraph 206.

<sup>986</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 11, lines 5–7.

<sup>987</sup> Joint Ongoing Efficiency Hearing, 25 June 2021, CMA RIIO-2 Hearing Joined Ground 3: Ongoing Efficiency Exhibits, slide 4.

<sup>988</sup> Joint OE Response, paragraph 6b.



reduction and GEMA agreed with this point.<sup>989</sup> Some of the spending in the comparator sectors may be on new product development, which may not lead to cost reductions. The appellants said that ONS data showed that R&D spend was around 1.7% of GDP in 2018, but that the data available did not show the proportions spent on cost reduction and product development.<sup>990</sup>

7.549 Evidence from BEIS shows that ‘improving the quality of goods and services’ was the top reason for innovating at 43% of respondents. ‘Reducing costs per unit produced or provided’ was seventh on the list, at 24% of respondents.<sup>991</sup> We agree with NGN and SGN that some other categories in the survey results, for example, improving production flexibility, may result in cost savings.<sup>992</sup> Nevertheless, it suggests that a substantial proportion of R&D spend is not spent on cost reductions. Therefore not all of the 1.7% spent in the wider economy is likely to be spent on cost reductions.

7.550 Consequently, there are two factors operating in different directions. On the one hand, R&D spending in the wider economy, at 1.7%, is potentially higher than R&D spending in the energy sector. On the other hand, not all of the 1.7% spent in the economy will be spent on cost reductions.

7.551 GEMA’s approach was to assume that the benefits from innovation funding were incremental, based on its view that this funding was unique to the energy network companies.<sup>993</sup> While GEMA says that it considered the risk of double-counting, GEMA did not submit evidence showing that it had sought to quantify the extent of the double-count nor compare the existing levels of R&D spending in the energy network companies with R&D spending in the comparator sectors or wider economy, nor the proportion of R&D that was spent on cost reduction. Furthermore, there is no evidence in the FD that GEMA took qualitative account of these factors.<sup>994</sup> GEMA said that its lack of quantification of possible double-counting with R&D spending in the wider economy was not an error in itself (see paragraph 7.543). While it would have been difficult for GEMA to precisely quantify the overlap, we find that GEMA should have at least taken account of this factor qualitatively.

7.552 Based on this evidence, our conclusion is that GEMA erred when it assumed that the innovation uplift was entirely incremental.

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<sup>989</sup> GEMA Response to PD, paragraph 173.

<sup>990</sup> Joint Ongoing Efficiency Hearing, 25 June 2021, CMA R110-2 Hearing Joined Ground 3: Ongoing Efficiency Exhibits, slide 4.

<sup>991</sup> BEIS, [UK Innovation Survey 2019: Headline findings covering the survey period 2016 to 2018](#), Table 5.

<sup>992</sup> NGN Response to PD, paragraph 45 and SGN Response to PD, paragraph 208.

<sup>993</sup> [GEMA FD Core Document](#), paragraph 5.26

<sup>994</sup> [GEMA FD Core Document](#), paragraph 5.26



***Did GEMA err because the approach double-counted innovation cost savings in the business plans?***

7.553 In this section we discuss the appellants' arguments that GEMA erred because the approach double-counted innovation cost savings already embedded in the appellants' business plans. We first summarise the evidence and then provide our conclusion.

***GEMA's approach***

7.554 CEPA said that one issue GEMA should consider was the extent to which additional OE driven by innovation funding in RIIO-1 was already embedded in the baseline spending included in the companies' business plans.<sup>995</sup>

7.555 GEMA said that, while companies would have baselined some savings from past innovation projects, this would only account for findings and benefits known at that point in time. GEMA expected to see additional benefits come to light over the course of RIIO-2, as the full benefits of past innovation continued to be realised and all benefits became known.<sup>996</sup>

***Appellants' submissions***

7.556 Cadent said that GEMA had been wrong to double-count the innovation savings already embedded in Cadent's business plan. GEMA had acknowledged that companies may have baselined some savings from past innovation projects but had failed to quantify this.<sup>997</sup>

7.557 Cadent said in its response to the provisional determination that any non zero innovation uplift would continue to suffer from double-counting because GEMA had not stripped out innovation savings from the companies' business plans. In any event, it would not be practical to approve and implement a common methodology for doing so for the GD2 price control and therefore the risk of double-counting would persist.<sup>998</sup>

7.558 NERA, in a report for Cadent, said that GEMA had not refuted that there may be benefits from innovation funding embedded in the GDNs' business plans, but instead blamed any double-counting on the companies' failure to provide clarity. This was not a reasonable position for GEMA to take. If companies had embedded past innovations into their business as usual ways of working, it

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<sup>995</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, pages 35–36.

<sup>996</sup> [GEMA FD Core Document](#), paragraph 5.26.

<sup>997</sup> [Cadent NoA](#), paragraph 3.134. See also [Cadent Reply](#), paragraph 52(g).

<sup>998</sup> Cadent Response to PD, paragraph 3.2a.

was not reasonable for GEMA to suggest that GDNs should retrospectively have estimated how much more they would have spent, if certain new working practices had not been adopted.<sup>999</sup>

7.559 NERA said that GEMA had claimed that, because its approach was deliberately simple, it could not be wrong even if there was some double-counting. This meant that GEMA had acknowledged the risk of double-counting but had claimed that its approach was not sufficiently precise to be discernibly wrong. This admission of imprecision further called into question the appropriateness of the innovation uplift.<sup>1000</sup>

7.560 NERA said that the GD2 business plans already included the results of innovation funding. However, both CEPA and GEMA had not made any attempt to quantify the level.<sup>1001</sup>

7.561 NGN said that the innovation uplift had been based on double-counting efficiency improvements that were already in the companies' business plans. GEMA, in its decision, had acknowledged that some innovation-driven efficiency improvements had already been built into the network companies' cost allowances. However, GEMA dismissed this risk by noting that 'the full benefits of past innovation continue to be realised and hence until all benefits become known the innovation uplift is warranted'. GEMA had not provided any evidence to substantiate this proposition, which was a novel and surprising approach to the setting of the OE challenge. In any event, as a matter of principle, NGN submitted that this did not correct the error given that the innovation uplift would inevitably lead to double-counting irrespective of whether further savings could also materialise throughout RIIO-GD2. NGN did not anticipate any further material cost savings in RIIO-GD2 from the main innovation projects that took place in RIIO-GD1.<sup>1002</sup>

7.562 In its response to the provisional determination, NGN said that there were several crucial limitations when seeking to use the £27.2 million figure, which was the appellants' estimate of the innovation savings already in the business plans, as a robust quantification of GEMA's double-count. In particular, given that GEMA had provided no consistent methodology or guidance as to how the GDNs should measure and report savings resulting from innovation projects, GDNs had inevitably taken different approaches to calculating these

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<sup>999</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 62.

<sup>1000</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 63.

<sup>1001</sup> NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 435–439.

<sup>1002</sup> [NGN NoA](#), paragraphs 56(i) and 361 to 364. See also NGN Closing Statement, paragraph 41.

values. The various figures that comprised the total of £27.2 million were not defined consistently across network companies, meaning they were not easily comparable.<sup>1003</sup>

7.563 NGN said that it would now be extremely difficult to gather additional data ex-post with respect to each GDN's cost-benefits. Determining the quantity of savings resulting from specific projects was a complex exercise. It required networks to define counterfactuals, make judgements about how to allocate savings to any given innovation project, and carefully track data from year-to-year. The lack of any consistent methodology across the companies for this exercise in RIIO-GD1, when this data needed to be collected, meant that the figures could not now be retrospectively compiled. Furthermore, the actual level of savings within the RIIO-GD2 plans was dependent on workloads. NGN submitted that GEMA would be unable to reliably correct for the double-counting in companies' business plans.<sup>1004</sup>

7.564 Frontier Economics, in a report for NGN, said that the innovation uplift had resulted in a double-count of the innovation funding in the companies' business plans.<sup>1005</sup> GEMA had removed the embedded OE figure before carrying out its benchmarking modelling to avoid double-counting. However, this removal of embedded future OE had not addressed the double-counting of savings arising from innovation funding which had already been made in GD1 and/or was built into the baseline costs.<sup>1006</sup>

7.565 NGN said that the innovation uplift double-counted innovation driven productivity improvements that were already included in the NGN business plan.<sup>1007</sup>

7.566 NGN said that GEMA had misunderstood NGN's argument on innovation in the business plans. NGN argued that the double-counting related to efficiency gains that were included in the GDNs' baseline cost forecasts in their business plans, rather than in their embedded OE assumptions.<sup>1008</sup>

7.567 NGN said that GEMA's argument that the companies should have provided clearer information was misplaced and unfair for three reasons. First, the innovation uplift was a new mechanism and was only proposed by GEMA at DD stage, subsequent to the business plan stage. Second, prior to business

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<sup>1003</sup> NGN Response to PD, paragraph 48.

<sup>1004</sup> NGN Response to PD, paragraphs 49-50.

<sup>1005</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraphs 4.2.37–4.2.46.

<sup>1006</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.2.42.

<sup>1007</sup> *Horsley 1 (NGN)*, paragraphs 71–73. See also *Mills 1 (NGN)*, paragraph 38(ii).

<sup>1008</sup> [NGN Reply](#), paragraph 123.

plan submission in December 2019, GEMA had not linked innovation to OE in any discussions with the appellants. Third, NGN and CEPA flagged the double-counting issue at DD stage, so GEMA had ample time to request further information at this stage and could have and should have done so.<sup>1009</sup>

7.568 NGN said that there was a direct parallel with the CMA's decision in *Northern Powergrid*. In that case GEMA had agreed that a methodology which removed double-counting was reasonable, while in the current case GEMA had made no attempt to remove double-counting.<sup>1010</sup>

7.569 NGN said that the joint report on Frontier Productivity Growth prepared by First Economics and submitted in response to the DD, had informed GEMA that the proposed innovation uplift had several conceptual and theoretical flaws, not least that it would result in a double-count of innovation benefits in their business plans. CEPA had also directed GEMA to consider the impact of this double-count. GEMA had had ample opportunity to ask companies to provide information prior to and following the DD stage in response to these submissions from network companies but had not done so.<sup>1011</sup>

7.570 NGN said that GEMA had not requested data on innovation savings, despite having had ample opportunity to do so once the double-count issue had been raised by companies. Prior to the business plan submission in December 2019, GEMA and the network companies had discussed OE assumptions and how they would be applied across the RIIO-GD2 price control during Cost Assessment Working Groups 4, 9 and 11. GEMA had not linked OE to innovation funding or raised the question of whether any efficiency benefits were captured within the network companies' OE assumptions or baseline costs. GEMA's RIIO-GD2 BPG did say:

The Business Plan should also describe the steps that they are taking to ensure that previously proven innovation is rolled out into BAU and how the benefits of these are reflected in the company's proposed expenditure for RIIO-2.<sup>1012</sup>

7.571 NGN said that this request was only high level and gave vague guidance. NGN had included the innovation savings in the business plan baseline, before layering on the embedded OE assumptions.<sup>1013</sup>

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<sup>1009</sup> NGN Reply, paragraph 124.

<sup>1010</sup> NGN Reply, paragraph 125.

<sup>1011</sup> Pearson 2 (NGN), paragraphs 11–12.

<sup>1012</sup> Pearson 2 (NGN), paragraphs 6–9.

<sup>1013</sup> Pearson 2 (NGN), paragraph 9.

- 7.572 SGN said that GEMA had failed to demonstrate that it had addressed the issue of double-counting with productivity improvements already captured in company business plans.<sup>1014</sup> GEMA had asserted it had addressed this issue by stripping out companies' embedded OE assumptions. However, this conflated two separate issues. While stripping out these assumptions might address any double-counting in relation to the companies' own OE assumptions, it did not address the double-counting of savings which had already been made in GD1 and were built into the baseline costs which companies submitted in their GD2 business plans.<sup>1015</sup>
- 7.573 SGN said that GEMA's suggestion that companies were requested to provide information on the extent to which planned efficiencies arising from RIIO-1 innovation funding had been included in their business plan forecasts was incorrect.<sup>1016</sup> The alleged shortcomings in companies' data submissions did not justify GEMA adopting a measure which lacked evidential basis.<sup>1017</sup>
- 7.574 SGN said that the statement in SGN's business plan that RIIO-1 innovation funding generated 'savings of over £125m in GD1 which will be passed on to customers in full in GD2' related to savings which were fully reflected in SGN's baseline cost projections, and were not included in SGN's headline 0.83% OE challenge. Some further savings from RIIO-1 innovation which were not yet implemented by the time of the appellants' business plan were incorporated in the embedded productivity figure of 0.83%.<sup>1018</sup>
- 7.575 SGN said that GEMA's BPG did not require companies to provide information on efficiencies arising from innovation funding. In its view, to suggest that GEMA requested companies to submit information on the extent to which planned efficiencies arising from innovation funding had been included in their business plan forecasts, only for companies to fail to provide it, was incorrect.<sup>1019</sup> SGN's business plan met the criteria around OE as set out in the BPG.<sup>1020</sup> SGN said that statements made by SGN had been taken out of context.<sup>1021</sup>

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<sup>1014</sup> [SGN Reply](#), paragraph 105.

<sup>1015</sup> [SGN Reply](#), paragraph 106.

<sup>1016</sup> [SGN Reply](#), paragraph 107.

<sup>1017</sup> [SGN Reply](#), paragraph 108. See also SGN Closing Statement, paragraphs 44– 45.

<sup>1018</sup> [SGN Reply](#), paragraph 109.

<sup>1019</sup> *Handley 2 (SGN)*, paragraphs 8– 14.

<sup>1020</sup> *Handley 2 (SGN)*, paragraphs 15– 20.

<sup>1021</sup> *Handley 2 (SGN)*, paragraphs 21– 26.

- 7.576 SGN said that GDN's baseline costs already captured productivity improvements.<sup>1022</sup> SGN said that the innovation benefits had been included in SGN's baseline costs in the final December 2019 business plan.<sup>1023</sup>
- 7.577 In its response to the provisional determination, SGN said that there were limitations to the £27.2 million figure which it was important to understand if it might be used in an attempt to quantify the double-count. No consistent methodology or guidance was ever provided by GEMA to establish how GDNs should measure and report cost savings resulting from innovation projects in their business plans. GDNs would therefore inevitably have taken different approaches to calculate these values, leading to inconsistency in terms of what they could be said to show.<sup>1024</sup> SGN said that it did not consider that GEMA could feasibly attempt, at this stage and with the information available to it, to correct for double-counting. Any attempt by GEMA to do so in response to the provisional determination would require substantial scrutiny and consultation.<sup>1025</sup>
- 7.578 SPT said that the innovation funding was already embedded in the business plans.<sup>1026</sup>
- 7.579 SPT said that GEMA's assumption that innovation funding was not included in the baseline business plans was unjustified.<sup>1027</sup> SPT said that SPT had included savings from innovation funding in its business plan. SPT said that GEMA had not sought evidence from SPT on this matter.<sup>1028</sup>
- 7.580 NERA, in a report for SPT, said that the innovation funding adjustment may double-count productivity savings built into SPT's business plan. In its response, GEMA had claimed that it had stripped out the companies' own embedded OE assumptions. GEMA had also claimed that to the extent that such benefits had not been stripped-out, this was the fault of companies. To properly remove such benefits, each company would effectively have had to prepare an alternative business plan assuming that past innovations had not taken place. It was clearly impractical to identify precisely what the counterfactual would be, ie what the state of technology would be in the absence of the separate innovation funding.<sup>1029</sup>

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<sup>1022</sup> [SGN NoA](#), paragraphs 484 - 485. See also SGN Closing Statement, paragraph 49.

<sup>1023</sup> *Handley 1 (SGN)*, paragraphs 18– 22.

<sup>1024</sup> SGN Response to PD, paragraph 210.

<sup>1025</sup> SGN Response to PD, paragraph 212.

<sup>1026</sup> [SPT Reply](#), paragraph 27(3).

<sup>1027</sup> [SPT NoA](#), paragraph 59.

<sup>1028</sup> *McTaggart 1 (SPT)*, paragraphs 68– 76 and 78.

<sup>1029</sup> NERA (SPT), Observations on GEMA responses to CMA on finance issues and efficiency, paragraph 92.

- 7.581 NERA said the savings from past innovation funding had already been factored into companies' business plans.<sup>1030</sup>
- 7.582 WWU said that GEMA had failed to account for the fact that WWU's business plan already included cost savings from past and ongoing innovation. This conflicted with the advice in the CEPA report.<sup>1031</sup>
- 7.583 Oxera, in a report for WWU, said that WWU's business plan clearly outlined that potential cost savings due to past and ongoing innovation were already included before applying a further 0.5% per year OE challenge. WWU had provided examples of innovation projects and how they impacted costs for GD2. GEMA had provided no explanation why the provided information was not sufficient and what further evidence was needed.<sup>1032</sup>

#### *GEMA's submissions*

- 7.584 GEMA said that it had acknowledged there might be double-counting. GEMA had asked the network companies to explain any embedded OE assumptions in their business plans, including how these were related to innovation funding. Although the companies indicated that some OE was attributable to past innovation funding, they did not explain how much. GEMA had stripped out the companies' own embedded OE assumptions for the purposes of normalising the companies' costs and added back its own OE challenge. Accordingly, any efficiency gains from past innovation funding which were included in the embedded OE assumptions had been removed from submitted costs prior to the addition of the OE challenge.<sup>1033</sup>
- 7.585 GEMA said that the network companies informed GEMA that they would achieve further efficiencies from innovation funding during RIIO-2. However, although GEMA requested companies to report on innovation impacts within their business plans, the companies had not provided clear information on the extent that these planned efficiencies had been included in their business plan forecasts. Accordingly, to the extent that there was any double-counting, this was a result of the companies' failure to provide clarity on the extent to which the benefits of innovation funding had been captured within their business plans.<sup>1034</sup>

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<sup>1030</sup> *Grayburn (SPT)*, Expert Report, paragraphs 23, 141 and 151.

<sup>1031</sup> [WWU NoA](#), paragraphs E8.4 to E8.5. See also Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, section 4C.

<sup>1032</sup> Oxera (WWU), Reply to Ofgem's response and witness statements on ongoing efficiency, page 17.

<sup>1033</sup> [GEMA Response B](#), paragraphs 159 - 160.

<sup>1034</sup> [GEMA Response B](#), paragraph 161 and subsequent corrected text in an email from GEMA to the CMA 'RE: GEMA - OE query (paragraph 161)', 5 July 2021.



- 7.586 GEMA said that CEPA's review of company business plans further showed that there was limited quantitative evidence to explain how the companies had taken account of efficiency gains arising from innovation funding in setting the OE assumptions that were embedded in their cost forecasts. However, GEMA considered that its approach to the application of the OE challenge, ie to apply the difference between companies' embedded OE assumptions and GEMA's OE challenge, adequately dealt with any overlaps with innovation-linked savings that the companies may have already included within their business plan forecasts.<sup>1035</sup>
- 7.587 GEMA said in its response to the provisional determination that it disagreed with the CMA's provisional conclusion that GEMA had erred because it had assumed that all cost reduction benefits from the targeted innovation stimulus had been removed from the companies' business plans. GEMA disagreed with both the CMA's provisional conclusion and its underlying premise.<sup>1036</sup>
- 7.588 GEMA acknowledged that there might have been double-counting of the NIA and NIC innovation funding benefits included in the companies' business plans. However, GEMA considered that (a) some or all of the companies had made unsubstantiated claims about the extent to which innovation benefits had been embedded within their business plan forecasts; (b) that GEMA had no means to remove the innovation benefits consistently across companies; and (c) that it was proportionate to assume that, to the extent that the companies had baselined efficiency savings from innovation funding (over and above that included in their embedded OE assumption), these savings were likely to be small. GEMA considered that the innovation uplift was calculated from relatively conservative assumptions which meant that the uplift was likely to be an underestimate of a reasonable return that consumers could expect from innovation funding.<sup>1037</sup>
- 7.589 GEMA said that any double-counting of the innovation benefits in the companies' business plans was sufficiently small to have been outweighed by the fact that GEMA had adopted a conservative approach to expected returns.<sup>1038</sup>
- 7.590 Responding to the figures on benefits embedded in business plans submitted by the appellants, GEMA said that it had, for the most part, not been able to reconcile the values referenced by the appellants in the joint OE hearing of 25 June back to any documentation previously made available to GEMA by the

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<sup>1035</sup> *Wagner 2 (GEMA)*, paragraph 88.

<sup>1036</sup> GEMA Response to PD, paragraph 177.

<sup>1037</sup> GEMA Response to PD, paragraphs 178–179 and 198.

<sup>1038</sup> GEMA Response to PD, paragraphs 199.



appellants prior to the FD. Slide 7 of the exhibits provided by the appellants did not reference its sources, which made it challenging to trace these values back to previous documents. GEMA made the following observations about information previously provided by the appellants.<sup>1039</sup>

- GEMA said that SGN had made substantial claims about embedded innovation-linked efficiency savings that were far in excess of the other appellants. SGN had claimed that it had delivered £19 million of efficiency savings in the last year of RIIO-1 across its two networks, and that these were baked into the RIIO-2 baseline. To the best of GEMA's knowledge, SGN had not provided this £19 million figure to GEMA before the FD, and as such this was new information. Prior to the FD, SGN had claimed that it had embedded £125 million of efficiency savings (around 4.6% of totex) from RIIO-1 innovation initiatives in its RIIO GD2 business plan. This did not appear to correspond to the £19 million it had cited in the joint OE hearing of 25 June.<sup>1040</sup>
- GEMA said that Cadent had made a less ambitious claim of £5 million per year across its four GDNs. This figure was not sourced, and GEMA had not been able to reconcile it with any previous statements that the company had made. It was not clear to what extent any efficiency savings from NIA and NIC funded innovation had been incorporated in Cadent's baseline spending, or in its embedded OE assumption, and how GEMA might adjust for that. In its response to GEMA's DD, Cadent had said that it considered that a degree of double-count existed but had not quantified the size of this double-count.<sup>1041</sup>
- GEMA said that WWU had claimed £1.6 million per year of cost savings. This figure was not sourced, and GEMA had not been able to reconcile it with any previous statements that the company had made. In its business plan, WWU had stated that it had made £9.7 million of cost efficiencies through innovation during RIIO-GD1. This was approximately £1.2 million per year on average – which was similar to the £1.6 million figure, but was not an exact match. The business plan implied that these cost savings flowed from NIA-funded projects, but this was not explicitly stated and therefore the £9.7 million could include 'business as usual' innovation. WWU's business plan had also compared the change from average totex during GD1 to forecast average totex during GD2, and attributed £1.7 million of the reduction to innovation. This reduction was not linked to the NIA or NIC explicitly. In its response to the GEMA DD, neither WWU nor

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<sup>1039</sup> GEMA Response to PD, paragraph 182.

<sup>1040</sup> GEMA Response to PD, paragraphs 183–184.

<sup>1041</sup> GEMA Response to PD, paragraphs 185–187.

its advisers had attempted to quantify the extent of any double-count of the innovation uplift with efficiencies already embedded in its business plan.<sup>1042</sup>

- GEMA said that NGN had also claimed £1.6 million per year. In NGN's business plan there was a reference to £6 million of financial savings achieved from £8.4 million of NIA funding. But it was not clear how GEMA should have interpreted this figure or what inferences it could have drawn on the extent of any double-count. In its response to GEMA's DD, neither NGN nor its advisers had attempted to quantify the extent of any double-count of the innovation uplift with efficiencies already embedded in its business plan.<sup>1043</sup>

7.591 GEMA said that it had found it difficult to trace the appellants' claims back to their original business plans and DD responses. Whilst some companies' business plans distinguished between innovation funding spent in the early years of RIIO-1 and innovation spent in later years, this was not true of all the companies. GEMA doubted that the appellants had provided sufficient and credible evidence to demonstrate that they had embedded material innovation-driven efficiency savings within their RIIO-2 business plans, that were additional to any embedded OE assumptions.<sup>1044</sup>

7.592 GEMA urged the CMA to be cautious about accepting the appellants' estimates of the amount of innovation-linked cost savings that had been delivered in the last year of RIIO-1. It was also important to note that SGN's claimed efficiency savings accounted for 70% of the £27.2 million total efficiency savings across the appellants. GEMA was not confident that SGN's figures had been produced on a comparable basis to the others. Simply excluding SGN's claimed efficiency savings from the total would reduce the total across the appellants from £136 million to £41 million.<sup>1045</sup>

7.593 GEMA said that the companies may have included some savings from past innovation projects in their cost forecasts, but this would only account for benefits known at the point of submission of their business plans. It was unlikely that the appellants would have complete knowledge of all ways in which past innovation projects could lead to cost savings in the future. In any case, since business plans were submitted in December 2019, not all of the RIIO-1 innovation projects would have been completed by then – let alone rolled out into 'business as usual' activities. It was plainly illogical to expect

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<sup>1042</sup> GEMA Response to PD, paragraphs 188–190.

<sup>1043</sup> GEMA Response to PD, paragraphs 191–192.

<sup>1044</sup> GEMA Response to PD, paragraphs 194–195.

<sup>1045</sup> GEMA Response to PD, paragraphs 196–197.

that the discovery of new and efficient ways of operating the network by learning from RIIO-1 innovation projects had come to a ‘full stop’ at the point at which RIIO-2 business plans were submitted.<sup>1046</sup>

7.594 GEMA referred to an independent evaluation commissioned by Ofgem of the benefits delivered through the Low Carbon Networks Fund (**LCNF**) in electricity distribution. This study indicated that innovation projects completed by that date offered opportunities for cost reduction over an extended period of time (until 2031), and that the majority of such savings were only likely to come to light in future price controls. The LCNF provided approximately £250 million of funding to projects sponsored by the six DNOs and the study estimated that as of 31 March 2016, the scheme had delivered benefits of £96 million, with additional £1 billion to £1.6 billion of net ‘future benefits’ expected to be realised between 2016-2031. While these estimates of financial benefits included benefits accruing to third parties (eg generators), the authors had found that in the longer-term, the estimated benefits from the LCNF projects were expected to accrue directly to the DNOs. GEMA said that this provided further support for its view that innovation funding driven benefits may be realised over a longer-term and the process of discovery of additional benefits could continue for multiple price control periods.<sup>1047</sup>

7.595 In its response to the provisional determination, GEMA provided an updated point estimate of the benefits from innovation funding which considered concerns about possible double-counting with innovation-linked cost reductions embedded within the companies’ business plans.<sup>1048</sup>

### *Our assessment and conclusion*

7.596 If the business plans included innovation benefits, then this would reduce the case for an innovation uplift because it could lead to a double count of the benefits. At the same time it may not eliminate the case for an uplift because the benefits in the business plans may not reflect all the benefits. In this section we consider the appellants’ and GEMA’s arguments on the extent to which the innovation benefits in the business plans reduces the case for an innovation uplift as it leads to double-counting.

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<sup>1046</sup> GEMA Response to PD, paragraph 201.

<sup>1047</sup> GEMA Response to PD, paragraphs 202–203.

<sup>1048</sup> GEMA Response to PD, paragraph 236.2. We discuss this updated estimate in paragraphs 7.858– 7.868.

- 7.597 The appellants said that GEMA erred because its decision on the innovation uplift double-counted innovation in the business plans. The appellants also said that CEPA had warned GEMA of this issue.<sup>1049</sup>
- 7.598 We reviewed the evidence from the appellants on the innovation savings already included in the business plans. This suggested that the benefits from RIIO-1 innovation delivered in the last year of RIIO-1 and baked into RIIO-2 baseline was £27.2 million per year across the eight GDNs.<sup>1050</sup>
- 7.599 GEMA expressed concerns about the £27.2 million figure. For example, GEMA said that it had not been able to reconcile the substantial SGN £19 million figure, the Cadent and WWU figures were not sourced, and that it was difficult to interpret the NGN number (see paragraphs 7.590 to 7.593).
- 7.600 The appellants also said there were limitations that should be recognised when using the £27.2 million per year figure (see paragraphs 7.562, 7.563, 7.567, 7.571, 7.577 and 7.580). For example, there were uncertainties regarding whether the estimation methodologies were consistent, and whether sufficient guidance had been given by GEMA. The appellants rejected GEMA's claims that their figures could not be traced back to the business plans.<sup>1051</sup>
- 7.601 We agree with GEMA and the appellants that there are substantial caveats which should be attached to these figures. These caveats imply that we cannot say with accuracy whether the savings are likely to be large or small, or whether the £27.2 million per year figure represents an over- or under-estimate. Nevertheless, the fact that some innovation funding was spent on projects which resulted in cost savings implies that the benefits in the business plans was above zero. This implies that the GEMA approach involved some double-counting of innovation benefits.
- 7.602 In its response to the provisional determination, GEMA acknowledged that there might have been double-counting of the NIA and NIC innovation funding benefits included in the companies' business plans (see paragraph 7.588).
- 7.603 GEMA said that it had no way to remove the benefits consistently (see paragraph 7.588). We accept that, given that it would be difficult to quantify precisely the benefits, it would be difficult to make precise adjustments.

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<sup>1049</sup> [NGN NoA](#), paragraph 318ii and CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 26.

<sup>1050</sup> Joint Ongoing Efficiency Hearing, 25 June 2021, CMA RIIO-2 Hearing Joined Ground 3: Ongoing Efficiency Exhibits, slide 7.

<sup>1051</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 4.

However, notwithstanding these difficulties, we find GEMA should have attempted to account for the savings already in the business plans.

- 7.604 GEMA said that these savings would be small (see paragraph 7.588). The evidence from the companies suggests that if the £27.2 million was to be repeated in each year this would be savings of £136 million, or 1.4% of the GDNs' totex allowances.
- 7.605 GEMA said that any double-counting was sufficiently small to have been outweighed by its conservative approach to assessing expected returns (see paragraph 7.589). However, for the reasons explained in paragraphs 7.507 to 7.513, we find that the assumption that all innovation funding was spent on cost reductions was likely to have over-estimated the benefits. Therefore we do not agree that GEMA's approach was conservative.
- 7.606 GEMA said that the savings from past innovation projects in their cost forecasts would only account for benefits known at the point of submission of their business plans. There would be additional benefits which would arise in the future (see paragraph 7.593). We accept that additional future savings may occur, but this does not negate the need to attempt to adjust for the savings already in the business plans.
- 7.607 Finally, GEMA said that it had removed the innovation benefits in the embedded OE (see paragraph 7.584). We accept, and the appellants do not dispute, that the GEMA approach did remove benefits from the embedded OE. However, this GEMA argument does not address the appellants' argument that GEMA did not remove the innovation benefits built into the companies' baseline assumptions.
- 7.608 Based on the evidence above, our finding is that GEMA erred because its approach double counted innovation cost savings already in the business plans. In reaching this conclusion, we place particular weight on the fact that CEPA, in its advice to GEMA, identified this as an issue.<sup>1052</sup>

### ***Did GEMA err because the innovation uplift distorts incentives?***

- 7.609 In this section we discuss the appellants' arguments that GEMA erred because the innovation uplift distorts the appellants' incentives to innovate. We first summarise the evidence and then provide our conclusion.

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<sup>1052</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, page 26.

## *GEMA's approach*

7.610 CEPA did not address this issue in its reports and GEMA did not address this issue in its FD.

## *Appellants' submissions*

7.611 NGN said the innovation uplift distorted companies' incentives to innovate.<sup>1053</sup>

The innovation uplift created a mechanistic interlinkage between innovation spending during one price control period and cost allowances in the next price control. This would reduce the companies' incentives to innovate because the use of innovation funding at RIIO-GD2 might lead to lower allowances in RIIO-GD3 if GEMA retained a similar mechanism in the next price control.<sup>1054</sup>

7.612 NGN said that the incentives would be to invest in cost-reduction innovation, rather than other types of innovation, such as innovation that helped vulnerable customers, or had environmental benefits.<sup>1055</sup>

7.613 NGN said that GEMA had failed to engage with NGN's submissions that the innovation uplift would have adverse incentive properties.<sup>1056</sup>

7.614 Frontier Economics, in a report for NGN and SGN, said that the uplift set a precedent and expectation that a similar uplift would be included at RIIO-3, based on innovation funding provided at RIIO-2. This weakened the incentives for companies to seek funding for innovation projects at RIIO-2. This was because they would anticipate that that spending would be used to justify reductions in allowances at RIIO-3. This was likely to have an adverse impact on present and future customers, by limiting the benefits (environmental, service quality and others), delivered by innovation funding.<sup>1057</sup>

7.615 SGN said that the innovation uplift blunted GDNs' incentives to innovate in the future because it put GDNs in a position where, if they undertook innovation projects that did not deliver productivity improvements, GEMA may nevertheless assume that productivity improvements had been achieved and reduce future cost allowances.<sup>1058</sup>

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<sup>1053</sup> NGN NoA, paragraph 56(iv).

<sup>1054</sup> NGN NoA, paragraphs 379–381. See also Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 1.1.14–1.1.16.

<sup>1055</sup> NGN Main Hearing Transcript, 30 June 2021, page 28, line 4 to page 29, line 5.

<sup>1056</sup> NGN Reply, paragraph 20(iii).

<sup>1057</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.6.1. See also Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 28, line 16 - page 29, line 25.

<sup>1058</sup> SGN NoA, paragraphs 42, 401 and 519.

## *GEMA's submissions*

- 7.616 GEMA said that it was entirely appropriate to seek to pass on to consumers the full benefits of the efficiencies revealed by companies through their past performance. Under the RIIO framework, companies were allowed to retain these savings for the duration of the price control. After this, GEMA's approach took advantage of the information revealed by these savings to set challenging targets for all companies at the next price control. This achieved an appropriate balance between providing incentives to licensees and the benefits to consumers.<sup>1059</sup>
- 7.617 GEMA said that licensees already had strong cost incentives to deliver environmental benefits during the price control period through the Totex Incentive Mechanism, Price Control Deliverables and Output Delivery Incentives. Consequently, GEMA did not accept SGN's argument that GEMA's approach distorted the licensees' incentives. GEMA re-emphasised that future price control decisions (RIIO-3) would be based on the evidence available at the time while considering relevant considerations, including any previous policy decisions and benefits consumers receive during RIIO-2.<sup>1060</sup>
- 7.618 In its response to the provisional determination, GEMA said that it did not agree with the CMA's provisional conclusion on the incentive effects of the innovation uplift. GEMA did not consider that the introduction of the innovation uplift led to harmful distortion of incentives, and therefore the level of detail at which it was considered by GEMA was appropriate and proportionate.<sup>1061</sup>
- 7.619 GEMA said that the size of the innovation uplift for any company was not mechanistically linked to the innovation expenditure of that company, nor was there a reasonable expectation that such a mechanistic link would exist in the future.<sup>1062</sup>
- 7.620 GEMA said that even if companies felt compelled to have some regard to the likely impact of their RIIO-2 investments on future decisions by GEMA, the possibility of a link between expenditure decisions made by companies in one price control period and subsequent allowances in the next price control was not new or unique to this mechanism. The benchmarking approach used by GEMA and other regulators (including the CMA) meant that companies that pursued cost savings in one price control period could reasonably expect those savings to lead to lower allowances in the next price control. While this was known to reduce the strength of the totex incentive compared to the

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<sup>1059</sup> *Wagner 2 (GEMA)*, paragraph 164.

<sup>1060</sup> GEMA Closing statement, Part II, paragraph 12.

<sup>1061</sup> GEMA Response to PD, paragraph 205.

<sup>1062</sup> GEMA Response to PD, paragraph 207.

headline cost-sharing rate, it was not clear that the existence of such a link across price control periods was harmful to consumers. It was possible to address the potential weakening of the totex incentive mechanism incentive strength by appropriately calibrating the cost-sharing rate, and there were significant benefits to consumers from using information revealed by companies in one price control period to set allowances in the next price control period.<sup>1063</sup>

7.621 GEMA said that, in much the same way, the possibility that companies may consider the potential impact of their RIIO-2 innovation investments on RIIO-3 allowances did not necessarily mean that it was wrong for GEMA to have drawn a link between innovation funding and the overall OE challenge.<sup>1064</sup> GEMA said that the totex incentive mechanism already provided strong incentives for companies to seek cost savings relative to their allowances. Any company that failed to take opportunities to invest in R&D activity aimed at cost reductions would be sacrificing current profits.<sup>1065</sup>

7.622 GEMA said that its approach to cost benchmarking meant that each company's allowances in the future were likely to be set based on a cross-sector view of efficient costs. Any company that gave up current opportunities for cost savings in the hope of higher allowances in the future might find that those higher allowances did not materialise, because other companies had taken those opportunities thereby bringing down the efficient cost benchmark.<sup>1066</sup>

7.623 GEMA understood that the CMA was concerned about the risk that the innovation uplift encouraged companies to focus on projects that were targeted at cost reductions rather than environmental improvements. At the margin, the size of the innovation uplift did not affect these incentives. The fact that companies claimed to have spent a significant proportion of their RIIO-1 innovation funding on initiatives that were not primarily targeted at cost reduction while they were exposed to strong totex incentive mechanism incentives to seek cost savings somewhat undermined the idea that the introduction of an innovation uplift distorted their incentives.<sup>1067</sup>

7.624 GEMA accepted that an excessive focus on cost reduction may be harmful. However, GEMA was confident that, to the extent possible, the RIIO-2 package had been calibrated appropriately, and it had no reason to believe that companies would shift their current focus away from projects that

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<sup>1063</sup> GEMA Response to PD, paragraph 208.

<sup>1064</sup> GEMA Response to PD, paragraph 209.

<sup>1065</sup> GEMA Response to PD, paragraph 210.

<sup>1066</sup> GEMA Response to PD, paragraph 211.

<sup>1067</sup> GEMA Response to PD, paragraphs 212–214.



delivered non-cost benefits towards those that were capable of delivering cost savings.<sup>1068</sup>

7.625 GEMA said that the aim of the innovation uplift to the OE challenge was to ensure that the companies faced an appropriate and stretching efficiency target, taking account of the additional scope for efficiency gains offered by the targeted innovation stimulus provided as part of the RIIO-1 price control. A stretching OE challenge was the most obvious and effective means for incentivising the companies to adopt more innovative technologies and management approaches, and to become more efficient over time.<sup>1069</sup>

### *Our assessment and conclusion*

7.626 The innovation uplift introduced by GEMA reduces the companies' allowances by creating an additional link between the amounts spent in RIIO-1 on innovation and the subsequent allowances in RIIO-2. GEMA said that the innovation uplift, as introduced by GEMA, did not create a mechanistic link between an individual company's innovation spending and its individual allowance (see paragraph 7.619). We agree with GEMA on this point.

7.627 However, it is to be expected that companies will seek to take into account the potential impacts of their actions on future regulatory decisions when developing their plans. That means that companies would be expected to have regard to the likely impact of their RIIO-2 investments on future decisions with respect to the application of an innovation uplift.

7.628 We note GEMA's statements that the benchmarking approach used by GEMA means that companies that pursue cost savings in one price control period can reasonably expect those savings to lead to lower allowances in the next price control (see paragraphs 7.616, 7.620 and 7.622).

7.629 We agree that benchmarking can be an appropriate approach to regulation. However, this GEMA argument does not directly address the question of whether the innovation uplift distorted the relative incentives to invest in projects which were focused on cost reductions, compared to projects which were not focused on cost reductions (eg environmental improvements).

7.630 GEMA also said that the totex incentive mechanism already provided strong incentives for companies to seek cost savings relative to their allowances. Any company that failed to take opportunities to invest in R&D activity aimed at cost reductions would be sacrificing current profits and other companies may

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<sup>1068</sup> GEMA Response to PD, paragraph 215.

<sup>1069</sup> GEMA Response to PD, paragraph 216.

take those opportunities to invest in cost reductions (see paragraphs 7.617 and 7.621).

- 7.631 We agree that the benchmarking approach means that companies will continue to have incentives to invest in projects which result in cost savings. These GEMA arguments, however, do not address the appellants' arguments that the innovation uplift distorts the networks' incentives to invest in projects which are focused on benefits other than cost savings. Given the existence of this innovation uplift, or the expectation that this innovation uplift could exist in the future, companies will have less incentive to invest in projects which result in non-cost benefits. This is because using innovation funding could lead to lower allowances, without any reduction in costs.
- 7.632 GEMA said that the companies claimed to have spent a significant proportion of their RIIO-1 innovation funding on initiatives that were not primarily targeted at cost reduction while they were exposed to well calibrated, strong totex incentive mechanism incentives to seek cost savings. GEMA said this undermined the idea that the introduction of an innovation uplift distorted their incentives (see paragraph 7.623 and 7.624)
- 7.633 However, when the companies were investing these innovation funds in the past they were not aware that GEMA would introduce an innovation funding uplift. Therefore the companies' past behaviour with respect to investment in projects not focused on cost benefits may not be a good predictor of their future behaviour.
- 7.634 In conclusion, the likely distortive effects of the innovation uplift are not straightforward to assess because they will depend on the specific methods adopted by GEMA and the companies' expectations of GEMA's future actions. Nevertheless, there is a realistic expectation that the introduction of an innovation funding uplift would affect the companies' incentives and we find that the potential distortive effects merited more detailed consideration by GEMA. In particular, GEMA should have considered the relative incentives for companies to invest in cost focused projects, compared to projects which are focused on other benefits, such as environmental improvements. One approach could have been for GEMA to have written to the companies clarifying that only funding which resulted in cost savings would be used in the calculation of the innovation uplift. Therefore, we find that GEMA erred to the extent that it did not consider sufficiently the potential incentive effects of the innovation uplift.

## ***Did GEMA err because its approach was inconsistent with the CMA's Northern Powergrid decision?***

7.635 In this section we discuss the appellants' arguments that GEMA erred because its approach was inconsistent with the *Northern Powergrid* decision.<sup>1070</sup> We first summarise the evidence and then provide our conclusion.

### ***GEMA's approach***

7.636 CEPA, in the May 2020 report, said that its interpretation of the lessons for GEMA from *Northern Powergrid* was the following:

- (a) The importance of establishing the extent to which innovation benefits have already been embedded in the companies' business plans.
- (b) The importance of a transparent and robust methodology for estimating innovation benefits.
- (c) Being able to show that GEMA had made a 'fair' assessment of the outcomes and risks when setting the OE challenge.
- (d) Providing the network companies with sufficient time and information to assess and, if necessary, challenge GEMA's data, modelling and conclusions.<sup>1071</sup>

7.637 GEMA did not mention the *Northern Powergrid* decision in the FD.

### ***Appellants' submissions***

7.638 NGN said that, as the CMA held in *Northern Powergrid* in relation to a similar adjustment to totex allowances to account for cost savings from implementing new technologies, GEMA must adduce evidence to support a 'specific adjustment'. The importance of a policy goal did not 'negate the need for decisions [...] to be justified and supported adequately by reasoning and evidence'.<sup>1072</sup>

7.639 SGN said that GEMA had failed to observe the principles set out by the CMA in *Northern Powergrid*.<sup>1073</sup> GEMA's economist, CEPA, had recognised the

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<sup>1070</sup> [Northern Powergrid](#).

<sup>1071</sup> CEPA, RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, May 2020, pages 28–29.

<sup>1072</sup> [NGN Reply](#), paragraph 121.

<sup>1073</sup> [SGN NoA](#), paragraphs 460.

significance of the decision and set out the principles GEMA should follow.<sup>1074</sup>  
In addition, SGN said that the CMA had found that:

Neither the evidence nor the reasons put forward by GEMA, at the time or subsequently, support GEMA's decision to make a specific SGB adjustment. In the absence of evidential support for the judgement, GEMA's discretion cannot, in our view, be treated as sufficient to justify the adjustment to NPG's totex that it made.<sup>1075</sup>

7.640 Frontier Economics, in a report for NGN and SGN, said that there were clear parallels between the GEMA approach to innovation uplift and *Northern Powergrid*.<sup>1076</sup>

#### *GEMA's submissions*

7.641 GEMA said that the CMA's reasoning in *Northern Powergrid* was not applicable to GEMA's decision on the OE challenge. In *Northern Powergrid*, the CMA had determined that there was no evidence to support GEMA's decision to make a smart grid benefit (**SGB**) adjustment because SGBs were already embedded in the companies' business plans. This was not the case for the innovation uplift. First, it was reasonable to assume that efficiency gains embedded in the network companies' embedded OE assumptions would have been stripped out. Second, if they were not, this was the network companies' failure to provide clarity on the extent to which innovation benefits were embedded in their OE assumptions.<sup>1077</sup>

#### *Our assessment and conclusion*

7.642 In *Northern Powergrid*, the CMA decided on whether GEMA's approach to estimating SGBs was appropriate. The CMA found that GEMA's decision was wrong.<sup>1078</sup>

7.643 We note that in this decision the CMA stated:

We explicitly recognise that in a context of future uncertainty created by technological innovation, the evidence base for decisions is likely to differ from, for example, an analysis of cost

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<sup>1074</sup> SGN NoA, paragraphs 465.

<sup>1075</sup> SGN NoA, paragraphs 431 and 462. Original text is *Northern Powergrid*, paragraph 4.140.

<sup>1076</sup> Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 4.4.1 to 4.4.20. See also SGN Main Hearing Transcript, 5 July 2021, page 35 line 8 to page 41, line 24.

<sup>1077</sup> GEMA Response B, paragraph 165.

<sup>1078</sup> *Northern Powergrid*, paragraph 4.143

outcomes in a particular category of expenditure from a previous price control. Our decision on this appeal ground is fact-specific.<sup>1079</sup>

7.644 We have considered the appellants' submissions; however we note that the Northern Powergrid decision was both fact specific and, in any event, not binding. The appellants have not demonstrated to us that the reasoning in Northern Powergrid must have been applied to the RIIO-2 decisions, nor that GEMA was wrong to adopt a different approach to the one taken in Northern Powergrid.

7.645 With regard to NGN's arguments that GEMA's decisions should be supported adequately by reasoning and evidence, we consider that this reflects a broader test of regulatory good practice rather than being specific to the CMA's *Northern Powergrid* decision. As such, we have considered the reasoning and evidence that GEMA provided in the relevant sections of this chapter as part of our assessment.

## **Application of OE challenge**

7.646 In this section we consider the appellants' arguments that GEMA erred in the application of the OE challenge. We address the following issues.

- a) Did GEMA incorrectly apply its chosen productivity measure?
- b) Did GEMA's final choice have a disproportionate impact on the frontier company?

### ***Incorrect application***

7.647 In this section we discuss the appellants' arguments that GEMA erred in its application of the OE challenge.

- a) Cadent said that GEMA employed the wrong figure for Cadent, using 0.5% when the correct figure was 0.94%.
- b) NGN, SGN and WWU said that GEMA had incorrectly applied the OE challenges to the companies' cost bases.

7.648 For each of these topics we first summarise the evidence and then provide our conclusion.

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<sup>1079</sup> [Northern Powergrid](#), paragraph 4.145.

### *Wrong figure for Cadent*

7.649 In this section we consider Cadent's argument that GEMA used the wrong figure when adjusting Cadent's business plan to account for assumed ongoing efficiencies. Cadent said GEMA should have used 0.94% to adjust its business plan figures. Instead, GEMA, based on Cadent's statements at the time, considered that 0.5%, rather than 0.94%, was the appropriate figure.

### *GEMA's approach*

7.650 GEMA said that this issue arose because its benchmarking used forecast information as well as historical information. GEMA said that if it did not make adjustments to the forecasts then the approach would not compare companies on an entirely fair basis because GEMA would be comparing different companies based on their different guesses about how the industry frontier was going to evolve over the next five years. Then, when GEMA applied its own OE target, GEMA may end up double-counting because GEMA would not have removed the companies' own embedded assumptions from their planned forecast.<sup>1080</sup>

7.651 GEMA said that it had taken a pragmatic decision for FDs to go back to Cadent's business plan, which had an initial 'benchmark for OE improvement of 0.53%', and set the embedded OE assumption at 0.5%. This was on the basis that this statement provided the only relatively clear indication of the embedded OE that Cadent had included in its business plan.<sup>1081</sup>

### *Appellant's submissions*

7.652 Cadent said that GEMA had adjusted the GDNs' submitted costs by applying a pre-modelling adjustment to their costs that 'added back' any amount of OE embedded in their business plans. GEMA had incorrectly assumed that Cadent had used 0.5% in its business plan. The correct value was 0.94%.<sup>1082</sup>

7.653 Cadent said that earlier in the process the outcomes of the benchmarking process were unclear. As Cadent identified errors, it became clear to Cadent that its networks would be setting the benchmark if the errors in GEMA's

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<sup>1080</sup> Innovation Uplift Hearing Transcript, page 14 line 23 to page 15 line 12.

<sup>1081</sup> *Wagner 2 (GEMA)*, paragraph 155. See also GEMA Main Hearing Transcript, 8 July 2021 (PM session), page 32, line 16 - page 34, line 18 and GEMA Response to PD, paragraphs 247–252 and 260–262.

<sup>1082</sup> *Cadent NoA*, paragraphs 3.140 - 3.143. See also NERA (Cadent), Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraphs 45– 464] and *Moon 1 (Cadent)*, paragraphs 82 - 86.

approach were corrected. This led Cadent to challenge the 0.5% figure GEMA had used.<sup>1083</sup>

- 7.654 Cadent said that in its business plans it could not realistically be expected to differentiate between OE challenge and catch-up efficiency as this depended on how it compared to other companies, which it could not know during its business plan preparations. In any event, since Cadent had set the upper quartile efficiency challenge for the industry, its embedded efficiency assumption must by definition represent OE improvement.<sup>1084</sup>
- 7.655 Cadent said that the errors in the GEMA approach supported its view that the OE assumption of 0.94% only contained OE.<sup>1085</sup> Cadent said it had been very clear that if the Cadent networks were setting the benchmark, then 0.94% should be viewed as only containing OE.<sup>1086</sup>
- 7.656 NERA, for Cadent, said that while GEMA claimed that the embedded OE challenge was parasitic on the London regional and LTS grounds, the reverse was true. After correcting the LTS error which GEMA had substantially conceded, Cadent's East of England and North West GDNs combined to set the 75<sup>th</sup> and 85<sup>th</sup> percentile efficiency challenge for the industry (see paragraphs 9.98 to 9.121 for discussion of the LTS error). Therefore, by definition, Cadent's embedded efficiency assumption must represent OE improvement rather than catch-up efficiency improvement, because GEMA's model suggested its business plan already achieved this level of efficiency.<sup>1087</sup>
- 7.657 Cadent said that GEMA had implied that Cadent had accepted an embedded OE assumption of 0.5% because it had notified GEMA of a formula error during the FD's errata process but had not also raised the 0.5% as an issue. Cadent said that this was misleading and disingenuous for the following reasons.
- a) Cadent did raise the issue in a bilateral meeting with GEMA's cost assessment team but was discouraged from pursuing it further. GEMA confirmed that it was a 'policy decision' to use 0.5% instead of 0.94% and therefore the issue was outside the scope of the errata process.
  - b) GEMA's totex process was chaotic in the extreme. It was dominated by GDNs repeatedly having to point out basic GEMA errors – a process of

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<sup>1083</sup> Cadent Main Hearing Transcript, 5 July 2021, page 54, line 19 to page 56, line 20.

<sup>1084</sup> [Cadent Reply](#), paragraph 54. See also Cadent, Exhibits for Cadent's Remedy Hearing on Ground 1A and 1C, slides 13-16

<sup>1085</sup> *Moon 2 (Cadent)*, paragraph 24.

<sup>1086</sup> *Moon 2 (Cadent)*, paragraphs 27 - 28. See also Cadent Closing Statement, Table 3.

<sup>1087</sup> NERA (Cadent), Second Expert Report on Ofgem's Approach to Cost Assessment at RIIO-GD2, paragraph 68.

correction which persisted right up to licence modification. The particular communication referred to by GEMA was one in which Cadent raised one of many spreadsheet errors in GEMA's modelling files. This in no way represented tacit acceptance of the 0.5%, as the outcome of the modelling was simply not known even at that late stage – in fact it was only clear well after the errata process had closed on 4 February 2021.

- c) In any event, GEMA's 'error strewn process' also prevented Cadent from knowing whether its networks set the benchmark. GEMA could now make any claim based on anything said by appellants during the process, including whether their cost reduction targets comprised catch-up. Cadent said such allegations were disingenuous in the extreme. Any confusion was entirely attributable to the poor quality of GEMA's process.<sup>1088</sup>

7.658 In its response to the provisional determination, Cadent submitted new evidence which it said showed that Cadent's East of England and North West networks set the benchmark irrespective of how the LTS Ground 1A error was corrected. Cadent's business plan was prepared with the same Embedded OE assumption for all of its networks. In addition, the catch-up efficiency target applied by the model to Cadent's West Midlands and London networks would, by definition, be in addition to Cadent's Embedded OE assumption that was common across its four GDNs. The costs submitted for Cadent's four networks all contained a 0.94% Embedded OE assumption and any inefficiency revealed by the modelling for the London and West Midlands networks was controlled for in the catch-up adjustment, not through amending the embedded OE assumption. Consequently, the CMA should direct that the correct level of Embedded OE for all of Cadent's networks was 0.94%.<sup>1089</sup>

7.659 Cadent said that all Cadent networks had an Embedded OE value of 0.94% because:

- The East of England and North West networks set the efficiency benchmark for the industry in any Ground 1A relief scenario. Therefore, the correct Embedded OE value for those networks was by definition 0.94% in any scenario.<sup>1090</sup>
- The correct Embedded OE assumption for the West Midlands and London networks was the same even if they did not set the benchmark. This was because any additional catch-up efficiency improvement that those networks would be required to make through the application of GEMA's

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<sup>1088</sup> Cadent Closing Statement, Table 3.

<sup>1089</sup> Cadent Response to PD, paragraph 12.

<sup>1090</sup> Cadent Response to PD, paragraph 2.2a and 2.3–2.4.



benchmarking model would be on top of the OE improvements identified by Cadent and included in its business plan for all its GDNs, and therefore formed part of the catch-up efficiency challenge.<sup>1091</sup>

7.660 Cadent said that although there was no reason to conclude that any of Cadent's networks – in particular East of England and North West which set the benchmark in every scenario – had an Embedded OE below 0.94%, Cadent nevertheless recognised that there would be limited opportunity to engage with the CMA on this issue following the provisional determination. Consequently, and out of an abundance of caution, Cadent had considered an alternative methodology that the CMA could use if it were to 'somehow' conclude that the West Midlands and London GDNs should not have an Embedded OE value of 0.94%. The methodology set West Midlands' Embedded OE by calculating the value using the London and West Midlands networks' gaps to the benchmark. This resulted in a figure of 0.868% for West Midlands, based on an assumption of 0.5% for Cadent London. Cadent clarified that it was not advocating this as the correct remedy. Relying on any modelling results to set the Embedded OE for the West Midlands GDN created a circular process: the model results determined the Embedded OE assumptions, which then influenced the model results. This was another reason why the FD should either simply use the correct 0.94% Embedded OE assumption embedded in Cadent's business plan for all four networks (consistent with GEMA's approach for all other GDNs) or rely on the Cadent analysis set out in paragraph 7.659, which reached the same conclusion.<sup>1092</sup>

7.661 Cadent, following a hearing on this topic, said that the BPG did not ask for the Embedded OE assumptions that could be achieved by a notionally efficient or frontier company. Cadent said there was no reading of the BPG which suggested that companies were asked to provide Embedded OE assumptions reflecting what could be achieved by a notionally efficient company. On the contrary, it was clear from the extract that the BPG asked companies to set out the Embedded OE assumption that they could achieve and that they actually applied to their business plan costs.<sup>1093</sup>

#### *GEMA's submissions*

7.662 GEMA said that it had used Cadent's 0.5% figure because Cadent had indicated that the other figure it had provided as an estimate of its overall efficiency (0.94%) included some catch-up efficiency. GEMA said that despite

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<sup>1091</sup> Cadent Response to PD, paragraph 2.2b and 2.5.

<sup>1092</sup> Cadent Response to PD, paragraphs 2.9–2.11.

<sup>1093</sup> Cadent accompanying note to Cadent relief hearing transcript of hearing on 17 September 2021, paragraphs 1–3.

having several opportunities to clarify its position, Cadent did not suggest that 0.94% was in fact the correct figure – on the contrary it asked that GEMA’s 0.5% figure be applied to all its licensees. Further, Cadent’s contention that 0.94% was the correct figure was parasitic on its London regional factors and LTS rechargeable diversions costs grounds: ‘once the errors in this appeal are corrected, Cadent’s GDNs set the efficiency benchmark for GD2 and therefore the entire 0.94% figure represents [OE]’. GEMA submitted that those grounds were without merit, and given that, Cadent’s argument in relation to embedded OE fell away.<sup>1094</sup>

7.663 GEMA said that there had been multiple discussions with Cadent on the use of the 0.94% figure, and in December 2020 Cadent had identified a technical error in a spreadsheet but had not disputed or challenged the 0.5% figure at that time.<sup>1095</sup>

7.664 In its response to the provisional determination, GEMA said that the question that GEMA faced at the time of making its decision was: what ongoing efficiencies had Cadent assumed when preparing its business plans? GEMA said that the answer to this question could not depend on:

- The outcome of GEMA’s econometric modelling and the size of any catch-up efficiency challenge that the CMA applied to Cadent. The outcome of the modelling was not available to Cadent at the time that it submitted its business plans, nor was it available to GEMA at the time of its decision on the level of embedded OE to be stripped out from its forecasts.
- The size of any catch-up gains assumed by Cadent and embedded within its business plan cost forecasts. Ongoing efficiencies were, by definition, different from catch-up efficiencies, and the amount of ongoing efficiencies assumed by Cadent could not reasonably depend on the amount of catch-up efficiencies that it had forecast.<sup>1096</sup>

7.665 GEMA said this was not simply a matter of timing. It was a matter of sequencing and logic. The embedded OE assumption was Cadent’s view of the efficiency gains that a notional efficient benchmark company could deliver. This view could not, and should not, be affected by Cadent’s view on where it stood (or might stand after GEMA’s models were run) relative to the other companies in terms of relative efficiency and the amount of cost savings that it might need to make to catch up to that notionally efficient company.<sup>1097</sup>

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<sup>1094</sup> [GEMA Response B](#), paragraph 169.

<sup>1095</sup> *Wagner 2 (GEMA)*, paragraphs 157–158.

<sup>1096</sup> GEMA Response to PD, paragraph 254.

<sup>1097</sup> GEMA Response to PD, paragraph 255.

7.666 GEMA said that the decision it had to make on the level of the adjustment for embedded OE in Cadent's plan could only be based on the evidence available to GEMA at the time the decision was made. That was the information contained within that plan and the responses to clarificatory questions asked by GEMA. Cadent had argued that GEMA's embedded OE assumption was wrong because once other areas of its appeal were remedied its networks would be at the efficiency frontier. However, in preparing its business plan, Cadent made an ex-ante assumption on the level of OE in its plan, and this could not be linked to the outcome of the benchmarking exercise or any catch-up assumptions that Cadent had made in preparing its business plans.<sup>1098</sup>

7.667 GEMA said that Cadent had set out how it had arrived at its efficiency assumption and the level of OE in the Appendix to its main business plan submission. The central column in Table 7 in this Appendix clearly indicated Cadent's views on OE assumptions and gave a figure of 0.5% per year.<sup>1099</sup>

7.668 GEMA said that it was concerned that the CMA's provisional determination on GEMA's use of the companies' business plans may have perverse and harmful consequences for future price control reviews.<sup>1100</sup> For example, if the CMA were to maintain its provisional position for its final determinations:

- Companies may be incentivised to introduce and/or maintain ambiguity about their business plan forecasts until after Ofgem's FD, so that they were able to argue for a more favourable interpretation of their submitted data on the basis that the modelling outcome was somehow incompatible with GEMA's original interpretation of their submissions.
- GEMA would not be able to rely on companies' business plan submissions in reaching its price control decisions, which could fundamentally undermine confidence in the regulatory process.
- GEMA would need in the future to use the business plan input data, run the regression model, rank the companies and then use this relative ranking to go back into the input data to modify the embedded OE assumptions. This would change the input cost data, which would alter the regression modelling, which could change the ranking of the companies. This would mean GEMA would again need to go back into the input data to modify the embedded OE assumptions. This potentially created an 'infinite circularity' in the benchmarking procedure from which there was

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<sup>1098</sup> GEMA Response to PD, paragraph 256–257.

<sup>1099</sup> GEMA Response to PD, paragraph 263–266.

<sup>1100</sup> In our provisional determination we said that the question of whether GEMA had erred in applying the 0.5% figure to Cadent depended on how close the four Cadent GDNs were to the efficiency benchmark. We have since changed our approach. See paragraph 7.691 for more detail.

no escape. If left uncorrected, this premise could create serious problems for cost benchmarking in future price controls.<sup>1101</sup>

7.669 GEMA submitted analysis of the Cadent efficiency scores (averaged across all four networks) and non-Cadent GDNs under different scenarios. GEMA said that the results showed that it was not necessarily the case that the Cadent GDNs (on average) were at the efficiency benchmark under any of the scenarios modelled. Moreover, increasing the embedded OE assumption from 0.5% to 0.94% moved the average efficiency score for Cadent further away from the efficiency benchmark. This was because increasing the assumption on embedded OE for Cadent resulted in Cadent's costs used as inputs to the model being higher, making the Cadent GDNs appear less efficient relative to the notionally efficient company. This increased the catch-up challenge applied to Cadent GDNs (on average), which according to the CMA's approach in provisional determination, would mean that GEMA's embedded OE assumption needed to be reduced – illustrating the problems with the CMA's position and the risk of infinite circularity.<sup>1102</sup>

7.670 GEMA said that it was inappropriate for the CMA to link the outcome of implementing the LTS remedy to the reasonableness of GEMA's assumption on Cadent's embedded OE. GEMA said that the reasonableness of GEMA's assumption on the level of embedded OE had to be assessed taking into account the information that GEMA had before it, and could reasonably have had before it, at the time of making that estimate.<sup>1103</sup>

### *Responses to consultation*

7.671 Having reviewed the submissions following our provisional determination, we decided that the evidence no longer supported the view that GEMA had erred and proposed to change our finding (see paragraphs 7.691 to 7.693 for more detail). We therefore sent out a consultation document to Cadent and GEMA which contained our updated views and invited responses. We summarise those responses below and take these additional responses into consideration when deciding whether GEMA erred.

- *GEMA's submission*

7.672 GEMA did not submit any new evidence in its response.<sup>1104</sup>

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<sup>1101</sup> GEMA Response to PD, paragraph 268.

<sup>1102</sup> GEMA Response to PD, paragraph 273–275.

<sup>1103</sup> GEMA Response to PD, paragraphs 269 and 276.

<sup>1104</sup> GEMA Response to the CMA's consultation on Cadent Embedded Ongoing Efficiency.

- *Cadent's submission*

7.673 Cadent said that there was no rational basis for the CMA to reverse its provisional determination position on Cadent embedded OE and to find that GEMA did not err in adopting 0.5% as Cadent's embedded OE assumption. A decision to use this figure would materially distort the benchmarking, by requiring Cadent to achieve the industry-wide OE target of around 1%, on top of a cost target that was already excessively stretching because it ignored 0.44% of the OE already built into Cadent's business plan. The key intent in stripping out GDNs' embedded OE in GEMA's modelling was precisely to avoid such double-counting when GEMA applied its own OE target. This serious error would have grave financial consequences for Cadent, causing it to be underfunded by at least £85 million.<sup>1105</sup>

7.674 Cadent said two other points were clear at the outset. First, the actual number Cadent embedded in its business plan was 0.94% and this was expressed to be for OE. Second, Cadent believed at the time of preparing its business plan that it would be setting the efficiency benchmark at the start of GD2. Cadent therefore expected to be the most efficient GDN meaning its entire 0.94% assumption was by definition OE.<sup>1106</sup>

7.675 Cadent said that the business plan stated repeatedly and in clear terms that Cadent's assumption of OE embedded in its costs was 0.94%. For example, the Executive Summary made clear in bold text that:

Our standalone RIIO2 efficiencies represent a 0.94% p.a. ongoing efficiency, ahead of Bank of England estimates of total productivity factor and the RIIO-1 benchmarks.<sup>1107</sup>

7.676 Cadent said that the consultation relied on a fundamental misreading of the appendix to Cadent's business plan. GEMA itself had acknowledged and accepted in its response to the provisional determination that the business plan identified the full 0.94% figure as Cadent's embedded OE assumption in its Business Plan Data Templates (**BPD**Ts). The statements from the appendix referred to one of several benchmarks considered by Cadent against which to compare Cadent's forecasts for OE. The benchmark in question, and the other benchmarks considered by Cadent, were plainly not intended to displace the 0.94% forecast but to test the stringency of that

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<sup>1105</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 1.

<sup>1106</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 3.

<sup>1107</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 6.

forecast, as expressly required by the BPG. Cadent responded to parts of the text in the consultation.<sup>1108</sup>

**Table 7-3: Cadent responses to statements in the consultation**

| Consultation statements which reference Cadent's business plan  | Cadent's view on correct analysis of business plan reference   |
|---|--|
| We looked externally to identify an external benchmark for ongoing productivity which we have taken as 0.5% per year during RIIO-2.   | <p>This statement clearly refers to the cross-check that Cadent used to validate whether the 0.94% OE assumption embedded in its costs was sufficiently stretching by reference to external economic evidence. It is important to recall how this crosscheck was derived. This was a check against BoE data for economy-wide growth and GEMA's RIIO-1 OE target estimated using EU KLEMS, based on analysis by First Economics.</p> <p>There is nothing here to suggest that the 0.5% was the OE assumption which Cadent applied to its costs. That assumption was 0.94%. The BPG expressly required Cadent to set out evidence of how embedded OE assumptions have been derived, and Cadent complied by presenting the 0.5% cross-check figure evidencing that its 0.94% embedded OE assumption was even more ambitious.</p>  |
| We have reviewed the benefits and identified further efficiency opportunities which we have now included in our plan and now seek overall ongoing efficiencies of 4.6% (0.94% per year) over the RIIO-2 period.   | <p>This statement is clear on its face: it confirms beyond doubt that Cadent included in its plan overall ongoing efficiencies of 0.94%.</p> <p>The Consultation, however, misconstrues the reference to 'further efficiency opportunities'. Those words clearly refer to 'further ongoing efficiency opportunities' identified by Cadent. This is made obvious by the subsequent reference to 'overall ongoing efficiencies' in the quotation set out.</p> <p>Moreover, price control cost efficiencies can only be 'ongoing efficiency' or 'catch-up'. Given Cadent's clear and explicit ex-ante assumption at the time of its business plan that it would be setting the benchmark at the start of GD2, the efficiencies that it considered itself capable of achieving were by definition to be viewed as ongoing efficiencies. This is because the benchmark GDN has zero catchup in its costs, and therefore the additional 0.44% efficiencies cannot be viewed as anything other than ongoing efficiencies.</p> |
| The CMA refers to Table 7 in the business plan which gave different OE benchmark figures based on different assumed scenarios. These were, 0.3% 0.5% and 0.8% per year.   | <p>Table 7 again refers solely to the 0.5% cross-check which is explained in the first row of this table, not the overall OE assumption which Cadent actually embedded in its costs.</p> <p>The purpose of Table 7 was to show the uncertainty around the range of external cross-checks considered by Cadent, and which were requested by GEMA in the BPG to demonstrate that the embedded OE assumption was sufficiently stretching.</p>   |
| Ongoing efficiency targets must be below the level assumed for the RIIO-1 determination – which was based on prerecession data. We have assumed a level of 0.5% per year, which is set between the BoE's forecast of 0.3% per year and the RIIO-1 assumption of 0.83% per year. | This statement clearly refers to the OE 'targets' which Cadent considered should be set by GEMA for the industry in view of the economic evidence, not the more stretching amount of OE that Cadent actually embedded in its costs.  |

Source: Cadent Response to Consultation document: Cadent embedded ongoing efficiency, pages 2-3.

<sup>1108</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 7.

- 7.677 Cadent said that the CMA had fallen into error by regarding an external top-down cross-check as equating to the OE embedded by Cadent in its plan. What mattered was the actual OE assumption used in the plan, as this was the methodology used by GEMA for all other GDNs. There was no rational basis for concluding that Cadent's business plan used an embedded OE assumption other than 0.94%, particularly given its express assumption that it would set the GD2 benchmark (as was now confirmed to be true). The passages referred to in the consultation did not show otherwise.<sup>1109</sup>
- 7.678 Cadent said that its approach to the 0.94% OE assumption embedded in its business plan was substantially consistent with the CMA's and GEMA's approach to setting the RIIO-2 OE target.<sup>1110</sup>
- 7.679 Cadent said that on the basis of a First Economics report relied upon by all GDNs in their plans, Cadent surveyed economy-wide economic evidence from sources like EU KLEMS, the BoE and the OBR, which suggested a cross-check value of OE of around 0.5%. The economic evidence surveyed by CEPA for GEMA also supported a similar value of 0.5% to 0.65%. Despite this evidence, Cadent and GEMA (as well as the CMA in the provisional determination) were aligned that additional ongoing efficiencies were possible, up to an overall value of around 1%.<sup>1111</sup>
- 7.680 Cadent said that it was no different from GEMA in having relied on external economic evidence as a cross-check on its proposed OE target. Both parties set the core OE target (GEMA) and embedded OE (Cadent) at a higher level, and the CMA's provisional determination supported this position by proposing a core OE target of around 1%.<sup>1112</sup>
- 7.681 Cadent said that communications with GEMA following DDs were irrelevant and should be disregarded. The consultation sought to rely on ex-post statements made by Cadent after the business plan and after DD benchmarking results were published. Given the CMA's stated position that this sub-ground was to be resolved by identifying the ex-ante OE assumption that Cadent set out in its business plan and applied to its costs, the consultation's extensive reliance on ex-post material was internally inconsistent and obviously flawed. If, however, the CMA ultimately departed from that stated position and wished to examine whether or not ex-post material could illuminate ex-ante statements, that later material had to be

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<sup>1109</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 8.

<sup>1110</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 9.

<sup>1111</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 10.

<sup>1112</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 11.

considered in its true and full context to determine whether it did or did not actually shed light on the ex-ante statements.<sup>1113</sup>

- 7.682 Cadent said that the consultation was wrong to state that Cadent had failed to clarify its position when responding to the Statutory Question. In fact, contrary to the consultation, Cadent was not asked to make any clarification regarding its ex-ante embedded OE assumption. It was critical to read carefully the question together with the sentence that immediately followed and which qualified it:

‘What is your embedded ongoing efficiency assumption you have used for your forecast expenditure? This should exclude any element of differential performance between you and other companies for RIIO-2, as this will be determined via the benchmarking.’<sup>1114</sup>

- 7.683 Cadent said that GEMA had requested Cadent to exclude from its ex-ante embedded OE assumption any catch-up (ie differential performance). While Cadent had clearly assumed in its business plan that it had no catch-up, at the time of its response this belief was (wrongly) contradicted by the hugely flawed DD benchmarking which had been published; and which (owing to errors by GEMA) wrongly indicated that Cadent was ranked bottom in terms of the comparative efficiency of its GDNs.<sup>1115</sup>

- 7.684 Cadent said that the Statutory Question therefore invited Cadent to conduct an inherently ex-post exercise on the basis of GEMA’s erroneous DD benchmarking results. As set out above, when submitting its business plan Cadent had expected to set the benchmark and, consequently, had proceeded on the basis that its 0.94% efficiency assumption was wholly OE. Cadent’s response to the Statutory Question was therefore an honest and transparent attempt to reconcile that expectation with the outcome of the DD benchmarking which wrongly indicated that all of Cadent’s networks were inefficient.<sup>1116</sup>

- 7.685 Cadent said that, in view of what Cadent was being asked to address in the Statutory Question, it was obvious that no reliance could be placed on its response for the purposes of illuminating the ex-ante ongoing efficiency assumption embedded in its business plan. In fact, until the Statutory Question introduced the ex-post exercise, GEMA itself had recognised that

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<sup>1113</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraphs 12–13.

<sup>1114</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 14.

<sup>1115</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 15.

<sup>1116</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 16.



Cadent's business plan embedded an OE value of 0.94%, as demonstrated by GEMA using that figure at DD. <sup>1117</sup>

- 7.686 Cadent said that the benchmarking validated Cadent's 0.94% ex-ante assumption and circularity did not apply. Cadent agreed that the issue to be decided rested primarily on a reading of its business plan. It was clear on the face of the business plan that Cadent embedded in it an OE assumption of 0.94%. Nothing in the consultation called that conclusion into doubt. <sup>1118</sup>
- 7.687 Cadent said that it was appropriate to have regard to the results of the benchmarking exercise based on the CMA's proposed conclusions in relation to the other grounds of appeal. The corrected modelling validated beyond any doubt that Cadent was right to assume ex-ante that its 0.94% efficiency improvement was wholly OE. Cadent's GDNs were now shown to set the benchmark from the start of GD2, as Cadent believed at the time of its business plan. <sup>1119</sup>
- 7.688 Cadent said that this conclusion did not give rise to any circularity: Cadent set the benchmark regardless of the embedded OE assumption used (0.5% or 0.94%). The issue, however, was that using 0.5% for Cadent, instead of 0.94%, distorted the benchmark and imposed an additional efficiency challenge of 0.44% for Cadent, leading to an artificial £85 million penalty for its networks. <sup>1120</sup>
- 7.689 Cadent said that GEMA's action was discriminatory against Cadent given that Cadent and SGN: <sup>1121</sup>
- Both embedded a similar amount of OE in their costs on the basis of a bottom-up assessment: 0.83% for SGN and 0.94% for Cadent for the RIIO-2 period.
  - Both provided a lower cross-check OE value based in part on analysis by First Economics of BoE data to demonstrate that the higher amount of OE assumed to be embedded in their costs was stretching. SGN referenced a cross-check figure of 0.3% (based on BoE data), while Cadent set out a cross-check value of 0.5% (calculated using the same BoE data with an increase to account for the precedential 0.83% RIIO-1 OE target).

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<sup>1117</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 17.

<sup>1118</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 18.

<sup>1119</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 19.

<sup>1120</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 20.

<sup>1121</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 21.]

- Both complied with the BPG when providing both above values to GEMA in their business plans.
- Both expressly assumed they would set the benchmark for GD2.
- Both assumed their higher embedded OE assumptions were fully OE, with zero catch-up.
- When faced with ex-post benchmarking results that contradicted their ex-ante efficiency expectations, both expressed understandable ex-post doubt as to whether their embedded OE assumptions were correct and, in fact, only Cadent was.

7.690 Cadent said that the above similarities demonstrated GEMA's discriminatory and inconsistent approach towards Cadent. Despite GEMA having also noted issues with SGN's Statutory Question response, GEMA nevertheless accepted the higher embedded OE assumption specified in SGN's plan (not its lower cross-check figure). Discrimination could only be avoided by accepting that GEMA was wrong not to do the same for Cadent. The discrimination was all the more acute since the ex-post modelling results showed that SGN's ex-ante assumption of setting the benchmark turned out to be incorrect, while Cadent's ex-ante assumption has been proven correct.<sup>1122</sup>

#### *Our assessment and conclusion*

7.691 In our provisional determination we said that the question of whether GEMA had erred in applying the 0.5% figure to Cadent depended on how close the four Cadent GDNs were to the efficiency benchmark. We wrote that after the Cadent Ground 1A error had been accounted for, if the four Cadent GDNs were all close to the efficiency benchmark then a substantial proportion of Cadent's 0.94% efficiency improvement would be OE improvements. If the four Cadent GDNs were far from the efficiency benchmark then a smaller proportion of the 0.94% would be OE improvements.<sup>1123</sup>

7.692 In their responses to the provisional determination both Cadent and GEMA said that this approach could lead to a circularity.<sup>1124</sup> This was because GEMA's econometric modelling used the costs forecasts as input variables. Thus, the outcome of the model could affect the inputs of the model, which would require running the model again, which could affect the inputs.

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<sup>1122</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 22.

<sup>1123</sup> Provisional Determination, 7.476.

<sup>1124</sup> Cadent Response to PD, paragraph 2.11. GEMA Response to PD, paragraph 268.

7.693 We accept Cadent's and GEMA's submissions that the approach described in the provisional determination could lead to a circularity. Both Cadent and GEMA said that the focus should be on the ex-ante assumptions that were included in the Cadent business plan.<sup>1125</sup> We have therefore changed our approach to assessing this issue and, as a result, in this determination we have focused on the ex-ante assumptions that were contained in the Cadent business plan, not ex-post analysis of benchmarking results.

7.694 Focusing on the ex-ante assumption should make the question of embedded OE straightforward, as it should be the figure used in the construction of the business plan. However, the evidence put to the CMA indicated that there was disagreement about what that figure was.

7.695 In the discussion below we focus on answering three questions:

- a) Was GEMA clear about the figure it required?
- b) Did Cadent demonstrate that 0.94% was the correct figure?
- c) Did GEMA err when it chose 0.5% instead of 0.94%?

7.696 We then provide our overall conclusion.

- *Was GEMA clear about the figure it required?*

7.697 Cadent said that the BPG provided by GEMA did not specify that the Embedded OE assumptions should be those achievable by a notionally efficient or frontier company.<sup>1126</sup> We have reviewed the relevant text in the BPG and agree with Cadent that this text does not itself use the term notionally efficient company.

7.698 However, RIIO-GD2 BPDT instructions and guidance, which gave the networks advice on how to fill in the business plan, stated:

This table requires GDNs to evidence the ongoing efficiencies embedded in their historic and forecast costs. Ongoing efficiencies are productivity improvements expected by even the most efficient GDN.<sup>1127</sup>

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<sup>1125</sup> GEMA Response to PD, paragraph 256-257. Embedded OE hearing transcript, 17 September 2021, page 20, lines 21–24.

<sup>1126</sup> Cadent accompanying note to hearing transcript, page 1.

<sup>1127</sup> RIIO-GD2 BPDT instructions and guidance.

7.699 Based on this evidence we find that Cadent, when filling in the business plan, should have understood what information was required by GEMA. Therefore we find that GEMA was clear about the figure it required.

- *Did Cadent demonstrate that 0.94% was the correct figure?*

7.700 We now turn to the question of whether Cadent demonstrated that 0.94% was the correct figure which GEMA should use. We first consider the Cadent response to the Statutory Question and the other statements in the Cadent documentation.

- *Cadent response to the Statutory Question*

7.701 GEMA sent Statutory Questions in October 2020 to Cadent and the other GDNs. In these Statutory Questions, GEMA asked Cadent and the other GDNs: what is your embedded OE assumption you have used for your forecast expenditure?<sup>1128</sup> In part of the response Cadent stated:

we do not know how much of our efficiency assumption of 0.94% pa is catch-up as the plan was not prepared on this basis (i.e. excluding ongoing efficiency).<sup>1129</sup>

7.702 We find that this statement does not demonstrate that 0.94% is the correct figure to use.

7.703 Cadent said that that this response should be interpreted against the backdrop of GEMA's DD modelling errors. Cadent had answered the GEMA question taking into account the incorrect results of the DD benchmarking. When the business plan was submitted Cadent had an embedded OE assumption of 0.94%. However, the results of GEMA's incorrect DD benchmarking had caused Cadent to question that assumption and Cadent had suggested on an 'ex-post' basis that, if its networks were indeed ranked fifth to eighth, there may be some catch up in its figure.<sup>1130</sup> Further, in its response to the consultation, Cadent said that it was wrong to state that Cadent had failed to clarify its position. Cadent said that it was not asked to clarify its ex-ante assumption and careful reading of the question Cadent was asked made this clear (see paragraphs 7.682 to 7.685).

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<sup>1128</sup> Cadent Response to GEMA Post Draft Determination Query on Embedded Ongoing Efficiency, page 1.

<sup>1129</sup> Cadent Response to GEMA Post Draft Determination Query on Embedded Ongoing Efficiency, page 2.

<sup>1130</sup> Cadent, Embedded OE, Cost Assessment Working Group Note, paragraph 3.

7.704 We disagree. A plain reading of the Cadent response text, which states ‘we do not know how much of our efficiency assumption of 0.94% is catch-up’, is that Cadent did not demonstrate that 0.94% was the correct figure. If Cadent’s view was that it had used an ex-ante Embedded OE assumption of 0.94% in its business plans, then we would have expected Cadent to have been much more definitive in its responses to GEMA at the time. Where Cadent’s GDNs were placed in any ex-post assessment derived from the benchmarking should not have influenced Cadent’s views on the ex-ante assumption in its business plan and should not have influenced its response to the question.

7.705 Cadent, in its response to the consultation document, also said that communications with GEMA following DDs were irrelevant and should be disregarded. Cadent said that the consultation sought to rely on ex-post statements made by Cadent after the business plan and after DD benchmarking results were published. Relying on ex-post material to assess the ex-ante assumptions was flawed (see paragraph 7.681).

7.706 We disagree with Cadent’s view that communication with GEMA following DDs were irrelevant and should be disregarded. Instead we find these Cadent statements informative because GEMA asked Cadent questions about its ex-ante approach and Cadent responded in the Statutory Question response about its ex-ante approach.<sup>1131</sup> Therefore we find it appropriate to take account of this document to assess whether Cadent demonstrated that 0.94% was the correct figure.

- *Cadent statements in documentation*

7.707 We also reviewed the statements in the Cadent documentation.

7.708 First, Cadent said that the business plan stated repeatedly and in clear terms that Cadent’s assumption of OE embedded in its costs was 0.94%. For example, the Executive Summary made clear in bold text that:

Our standalone RIIO2 efficiencies represent a 0.94% p.a. ongoing efficiency, ahead of Bank of England estimates of total productivity factor and the RIIO-1 benchmarks.<sup>1132</sup>

7.709 We recognise that this statement refers to 0.94%. However, this statement does not demonstrate that the whole of the 0.94% is Embedded OE.

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<sup>1131</sup> Cadent Response to GEMA Post Draft Determination Query on Embedded Ongoing Efficiency, and GEMA submission, containing letter from Cadent.

<sup>1132</sup> Cadent Response to Consultation document: Cadent embedded ongoing efficiency, paragraph 6.

Therefore we find that this statement does not show that Cadent demonstrated that 0.94% was the appropriate figure for GEMA to use.

7.710 Second, we identified the following statement:

We looked externally to identify an external benchmark for ongoing productivity which we have taken as 0.5% per year during RIIO-

2.<sup>1133</sup>

7.711 In its response to the consultation, Cadent said that this statement referred to a cross-check that Cadent had used to validate whether 0.94% was sufficiently stretching and there was nothing in this figure to suggest that 0.5% was the OE assumption which Cadent applied to its costs (see paragraphs 7.675 to 7.677 and Table 7-3).

7.712 However, we find that Cadent's use of the phrase 'external benchmark for ongoing productivity' could be interpreted as suggesting that 0.5% was Cadent's assumption of the OE that could be achieved by the frontier company, rather than 0.94%.

7.713 We agree with Cadent's submission that there is nothing in this figure to suggest 0.5% was the cost assumption figure Cadent applied to its costs. However, the relevance is not whether Cadent applied 0.94% or 0.5% to its costs. Cadent and GEMA both accept 0.94% was the figure applied. The relevant question is whether all of that 0.94% was Embedded OE.

7.714 Third, the 0.5% in the Cadent statement above can be compared with 'further efficiency opportunities' which appear to be included in a 0.94% figure further down the same page in the Cadent document:

We have reviewed the benefits and identified further efficiency opportunities which we have now included in our plan and now seek overall ongoing efficiencies of 4.6% (0.94% per year) over the RIIO-2 period.<sup>1134</sup>

7.715 In its response to the consultation, Cadent said that the CMA had misconstrued this text as these referred to further ongoing efficiencies. Cadent, when setting its business plan, assumed it would be setting the benchmark and the benchmark GDN had zero catch-up in its costs (see paragraphs 7.675 to 7.677 and Table 7-3).

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<sup>1133</sup> Cadent uses the term ongoing productivity here and we assume Cadent is referring to ongoing efficiency.

<sup>1134</sup> Cadent Resolving Our Benchmarked Performance Gap, p3, submitted as Exhibit CGL1, Volume B page 203.

- 7.716 Cadent, GEMA and the CMA agree that the focus should be on the ex-ante assumptions that were included in the Cadent business plan, not ex-post analysis of benchmarking results (see paragraphs 7.691 to 7.693). Therefore Cadent's ex-ante assumptions should not have been influenced by the benchmarking analysis and so we place limited weight on this Cadent argument. Further, if Cadent's view was that all of the 0.94% was Embedded OE, then we would have expected Cadent to have been much more definitive in its responses to GEMA at the time.
- 7.717 We find that this evidence is also consistent with the view that Cadent did not demonstrate that 0.94% was the correct figure.
- 7.718 Fourth, we considered the Cadent information on OE benchmark figures which was given in Table 7 of the Cadent business plan. This table gave different OE benchmark figures based on different assumed scenarios. These were, 0.3% 0.5% and 0.8% per year. 0.5% per year was the central estimate for the OE benchmark.<sup>1135</sup>
- 7.719 In its response to the consultation, Cadent said that this referred solely to the 0.5% cross-check, not the overall OE assumption which Cadent actually embedded in its costs. The purpose of these figures was to show the uncertainty around the external cross-checks (see paragraphs 7.675 to 7.677 and Table 7-3).
- 7.720 As we noted above, Cadent and GEMA both accept 0.94% was the cost assumption figure Cadent applied to its costs, not the 0.3%, 0.5% nor 0.8% figures. Cadent describes the 0.3%, 0.5% and 0.8% figures as cross-checks. We find this evidence is also consistent with the view that Cadent did not demonstrate that 0.94% was the correct figure.
- 7.721 Fifth, we considered the following statement, which provided more information on the 0.5% figure:

ongoing efficiency targets must be below the level assumed for the RIIO-1 determination – which was based on pre-recession data. We have assumed a level of 0.5% per year, which is set between the Bank of England's forecast of 0.3% per year and the RIIO-1 assumption of 0.83% per year.<sup>1136</sup>

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<sup>1135</sup> Cadent Resolving Our Benchmarked Performance Gap, Table 7 on page 16, submitted as Exhibit CGL1, Volume B page 216. See also GEMA Response to PD, page 54.

<sup>1136</sup> Cadent Resolving Our Benchmarked Performance Gap, p18, submitted as Exhibit CGL1, Volume B page 218.

7.722 In its response to the consultation, Cadent said that this statement referred to OE targets, not the OE figure that Cadent actually embedded in its costs (see paragraphs 7.675 to 7.677 and Table 7-3). Cadent said that its approach, relying on external economic evidence, was consistent with the approach of the CMA and GEMA (see paragraphs 7.678 to 7.680).

7.723 As we noted above, Cadent and GEMA both accept 0.94% was the cost assumption figure Cadent applied to its costs, not the 0.5% figure. Cadent's argument that the 0.5% figure referred to OE targets and was not the OE figure Cadent actually applied to its costs is consistent with this. We find Cadent's statements that its approach was similar to the CMA's and GEMA's, in that it relied on external evidence as a cross-check, unpersuasive when considering the specific question of whether Cadent demonstrated that 0.94% was the correct figure. Therefore we find this evidence is also consistent with the view that Cadent did not demonstrate that 0.94% was the correct figure.

7.724 Sixth, we reviewed a document sent from Cadent to GEMA in October 2020, which contains the following response:

The first row being our assumed frontier shift in GD2 (the 0.53%) which we used to test our plan and the second being the level of efficiency embedded in our RIIO2 plan (0.94%) which was deliberately ambitious.<sup>1137</sup>

7.725 As noted above, in its response to the consultation Cadent said that communications with GEMA following DDs were irrelevant and should be disregarded (see paragraph 7.681).

7.726 However, we disagree and find these Cadent statements informative. GEMA asked Cadent questions about its ex-ante approach and Cadent responded.<sup>1138</sup> Therefore we find it appropriate to take account of this document in our decision. We find the statement in the October 2020 document is consistent with the view that Cadent did not demonstrate that 0.94% was the correct figure.

7.727 In response to the consultation, Cadent made two further points related to the statements in its documentation: one related to benchmarking and one related to discrimination.

7.728 In relation to benchmarking, Cadent said that following the correction of the Cadent 1A LTS error, Cadent East of England and Cadent North West set the

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<sup>1137</sup> GEMA submission, containing letter from Cadent, page 2.

<sup>1138</sup> Cadent Response to GEMA Post Draft Determination Query on Embedded Ongoing Efficiency, and GEMA submission, containing letter from Cadent.



benchmark. This was consistent with Cadent's view that 0.94% was the appropriate Embedded OE assumption.<sup>1139</sup> In its response to the consultation, Cadent also said that the benchmarking validated its 0.94% assumption and circularity did not apply (see paragraphs 7.686 to 7.688).

7.729 While this evidence is consistent with Cadent's view, we accept Cadent's and GEMA's submissions that the focus should be on the ex-ante assumptions in the business plans. Both parties said that if embedded OE is included in the business plans in a way that it is to be excluded from the models before benchmarking, then the level of embedded OE cannot be directly related to the position of Cadent's GDNs in the benchmarking. Having accepted that point, the fact that Cadent owns a benchmark network is not a sufficient condition to imply that all of the 0.94% total efficiency assumption is Embedded OE. Consistent with this, we place little weight on Cadent's argument that its October 2020 letter should be interpreted against the backdrop of GEMA's benchmarking analysis.

7.730 Cadent said that GEMA's action was discriminatory as GEMA's approach treated Cadent differently from SGN (see paragraphs 7.689 to 7.690).

7.731 We find the Cadent comparison between GEMA's approach to Cadent and GEMA's approach to SGN unpersuasive. The relevant question here is not, as Cadent implies, whether Cadent and SGN have been treated differently, but whether Cadent demonstrated that 0.94% was the correct figure. In any event, GEMA said that the NGN and WWU responses were very clear on their assumptions and that with SGN there was a small issue associated with compounding. GEMA said that it was definitely Cadent that was the most involved response.<sup>1140</sup> Therefore the evidence supports the view that NGN, SGN and WWU did demonstrate to GEMA the correct figures that GEMA should use, while Cadent did not demonstrate that 0.94% was the correct figure. Therefore we find that the Cadent and SGN situations were not comparable.

7.732 In summary, for the reasons explained above, we find that the Cadent response to the statutory question and the statements in the Cadent documentation did not demonstrate that 0.94% was the correct figure. Therefore we find that GEMA did not err when it did not use 0.94% as the Embedded OE figure for Cadent.

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<sup>1139</sup> Cadent Response to PD, paragraph 2.2–2.5.

<sup>1140</sup> Embedded OE transcript, page 6, line 18 to page 7, line 6.

- *Did GEMA err when it chose 0.5% instead of 0.94%?*

7.733 Having rejected the 0.94% figure, GEMA had to choose an alternative figure.

7.734 GEMA said that it had used Cadent's 'central' target of 0.5% because Cadent indicated the 0.94% figure included some catch-up efficiency.<sup>1141</sup>

7.735 As discussed above, there are multiple references which suggest that 0.5% was an appropriate figure (see paragraphs 7.710, 7.718, 7.721 and 7.724). For example, 'our assumed frontier shift in GD2 (the 0.53%)' in paragraph 7.724). Furthermore, we find no evidence in the Cadent documentation which suggests an alternative figure more appropriate than 0.5%. Therefore we find that GEMA did not err when it used 0.5%.

### *Conclusion*

7.736 The GEMA method required that the companies' Embedded OE assumptions were removed from the business plans before GEMA applied its own OE challenge. We agree that deciding on the correct figure based on the outcome of the benchmarking could result in a circularity and therefore do not adopt this approach. As a result, in this decision, we have focused on the ex-ante assumptions that were contained in the Cadent business plan. We considered three questions:

- Was GEMA clear about the figure it required? For the reasons explained above in paragraphs 7.697 to 7.699, we find that GEMA was clear about the figure it required.
- Did Cadent demonstrate that 0.94% was the correct figure? For the reasons explained above in paragraphs 7.700 to 7.732, we find that Cadent did not demonstrate that 0.94% was the correct figure.
- Did GEMA err when it chose 0.5%? For the reasons explained above in paragraphs 7.733 to 7.735, we find that GEMA did not err when it chose 0.5%.

7.737 Therefore we find that GEMA did not err when it rejected 0.94% and used a figure of 0.5% for the Embedded OE assumption for Cadent. We note that an approach based on ex-ante information should address the concerns GEMA has expressed regarding the potential for the ex-post approach to have harmful consequences.

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<sup>1141</sup> [GEMA Response B](#), paragraph 169.

### *Incorrect application to cost base*

7.738 NGN, SGN and WWU said that GEMA had incorrectly applied the OE challenges to the companies' cost bases. For example, NGN said that GEMA had erred by applying a VA measure to totex.<sup>1142</sup>

### *GEMA's approach*

7.739 GEMA said that SGN's and NGN's arguments were premised on the incorrect contention that the OE challenge was based entirely on VA productivity estimates.<sup>1143</sup>

7.740 CEPA said that using an OE challenge that was based entirely on VA measures would raise application questions if it was directly applied to totex.<sup>1144</sup>

### *Appellants' submissions*

7.741 In its response to the provisional determination, NGN said that GEMA had made two substantial conceptual errors in the application of its OE challenge: first, applying VA productivity measures to the totex; and second, applying LP measures to opex.<sup>1145</sup> NGN said that it continued to believe that no weight, let alone sufficient weight, was placed on the GO and TFP measures.<sup>1146</sup>

7.742 WWU submitted that GEMA's approach of using different productivity measures for different categories of expenditure was wrong for three reasons:

- a) First the use of LP assuming constant capital was inconsistent with, and not found in, existing economic literature. Generally, TFP corresponded to the average of consistently and correctly applied partial productivity measures, but CEPA's proposed LP measure did not produce an outcome equal to the average of partial productivity measures or, therefore, TFP growth.
- b) Second, the application of different measures to different expenditure categories naturally resulted in errors. Where measures were applied inconsistently across components – characterised by a mixture of partial

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<sup>1142</sup> [NGN NoA](#), paragraph 335. See also Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 1.1.11(d)(i to ii) and 6.3.1–6.3.9.

<sup>1143</sup> [GEMA Response B](#), paragraph 126.

<sup>1144</sup> CEPA, RIIO-GD2 and T2: Cost Assessment –Advice on Frontier Shift policy for Final Determinations, November 2020, page 24.

<sup>1145</sup> [NGN NoA](#), paragraph 335. See also Frontier Economics, Assessment of GEMA's approach to setting ongoing efficiency at RIIO-GD2, paragraph 1.1.11(d)(i - ii) and 6.3.1–6.3.9.

<sup>1146</sup> NGN Response to PD, footnote 99.

and TFP – the average would not then also correspond to TFP (and, thus, the benchmark TFP performance of targeted sectors), regardless of the partial productivity definition being applied.

- c) Third, it was wrong to use LP measures for opex, as opex included non-labour costs. In addition, applying different incentives for certain types of expenditures undermined the basic intention of the totex framework, which was to support the removal of incentives which favoured one type of expenditure.<sup>1147</sup>

7.743 WWU said that the correct approach was to apply TFP uniformly to all cost components.<sup>1148</sup>

7.744 WWU said that GEMA was conceptually wrong or inconsistent to use LP measures for opex, and had failed to respond to WWU's evidence and submissions that no weight should apply to 'LP at constant capital' for a number of reasons. These included that it was not consistent with the academic literature and it yielded biased results when combined with TFP estimates. While there was a lack of transparency in relation to what weight was placed on LP, it was evident that a high weight must have been given to LP as the opex OE was 0.1% higher than that for capex/repex equivalent. Therefore, WWU said that WWU's submission and evidence on this issue remained unchallenged by GEMA/CEPA.<sup>1149</sup>

7.745 In its response to the provisional determination, WWU said that the CMA had not addressed the points which WWU raised about how the VA was applied to totex was wrong.<sup>1150</sup>

#### *GEMA's submissions*

7.746 GEMA said that SGN's and NGN's arguments were premised on the incorrect contention that the OE challenge was based entirely on VA productivity estimates.<sup>1151</sup>

7.747 GEMA said that there was considerable regulatory precedent for applying LP measures when setting the OE challenge for opex. CEPA suggested that LP

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<sup>1147</sup> [WWU NoA](#), section E6. See also Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations.

<sup>1148</sup> [WWU NoA](#), paragraph 6.9.

<sup>1149</sup> [WWU Reply](#), paragraph E4.3.

<sup>1150</sup> WWU Response to PD, section E4.

<sup>1151</sup> [GEMA Response B](#), paragraph 126.

estimates should be considered by GEMA alongside TFP measures and other pieces of evidence.<sup>1152</sup>

7.748 GEMA said that it had not considered only LP measures when setting an opex OE challenge. There were also regulatory precedents using LP measures for opex because of the high share of labour costs in opex. CEPA had said that LP estimates should be one of the factors taken into account alongside TFP measures and other pieces of evidence. GEMA had considered both the LP and TFP estimates contained in the CEPA reports.<sup>1153</sup>

### *Our assessment and conclusion*

7.749 The appellants have provided insufficient evidence to show that the opex measure was based almost exclusively on the LP measure and the capex and repex number was based almost exclusively on the VA measure. As discussed in paragraphs 7.763 to 7.801 GEMA and the CMA have taken account of multiple evidence sources, including GO, LP and VA measures. The evidence shows that the productivity measure applied to capex and repex was informed by the VA measure, but not based solely on the VA measure. Similarly, the productivity measure applied to opex was informed by the LP measures, but not based solely on the LP measure.

7.750 In its response to the provisional determination WWU said that the CMA had not addressed its points on how VA was applied to totex.<sup>1154</sup> As discussed above, our view is that GEMA did not apply a VA measure to totex. Instead GEMA applied productivity measures that were informed by VA, GO and LP measures to capex, repex and opex. Therefore the WWU argument is not applicable to the facts of this case.

7.751 WWU said that applying different incentives for certain categories of expenditures undermined the basic intention of the totex framework.<sup>1155</sup> We agree that applying different incentives to different expenditure types could create incentive problems. However, there are benefits from applying different productivity levels to different types of costs. For example, if labour productivity increases faster than capital productivity, it may be more appropriate to apply a higher productivity challenge to labour costs. These benefits could outweigh any incentive effects and WWU has provided no evidence that the incentive effects are substantial. We are therefore not persuaded that the scope for incentive effects undermines the basis for the

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<sup>1152</sup> *Keane 1 (GEMA)*, paragraph 67.

<sup>1153</sup> [GEMA Response B](#), paragraph 132.

<sup>1154</sup> WWU Response to PD, paragraph E4.1 and E4.8.

<sup>1155</sup> [WWU NoA](#), section E6. See also Oxera (WWU), Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paragraph 3.36.

approach that GEMA adopted. As set out in the Legal Framework (see paragraph 3.76), we should exercise appropriate restraint and not interfere with GEMA's exercise of regulatory judgement unless we consider that it was wrong. As we consider that GEMA made an appropriate exercise of its regulatory judgement in application of the productivity measures to the cost bases, we do not consider that GEMA erred in this respect.

7.752 For these reasons, our view is that GEMA did not err in the method it used to apply productivity measures to the appellants' cost bases.

### ***Frontier company impact***

7.753 In this section we discuss NGN's arguments that GEMA erred by setting an OE challenge that had a disproportionate impact on NGN – the frontier company. We first summarise the evidence and then provide our conclusion.

### ***GEMA's approach***

7.754 GEMA set the same OE challenge for all companies.<sup>1156</sup>

### ***Appellants' submissions***

7.755 NGN submitted that GEMA's OE target was disproportionately challenging for the frontier company. NGN said that its success in delivering efficiency improvements in RIIO-GD1 made it materially more difficult to obtain similar efficiencies in RIIO-GD2. For example, efficiency benefits realised at RIIO-GD1 stemmed in part from substantial structural changes which delivered one-off benefits that could not be replicated.<sup>1157</sup>

7.756 NGN said that the OE challenge set by GEMA was comparatively more difficult for a frontier company to achieve. This was supported by the CMA's view of the higher costs the frontier company in the water sector faced in investment and innovation compared to other companies in the sector.<sup>1158</sup>

7.757 Frontier Economics, in a report for SGN, said that GEMA's discretionary, arbitrary and unjustified toughening of the energy price controls, with a vague appeal to past performance as a convenient catch-all basis for doing so, if upheld, was likely to have a highly detrimental effect in the future. Companies would anticipate that future outperformance could similarly be used to justify otherwise unevidenced decisions. Companies could be expected to limit their

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<sup>1156</sup> [GEMA FD Core Document](#), paragraph 5.20.

<sup>1157</sup> [NGN NoA](#), paragraphs 342 - 346.

<sup>1158</sup> [NGN PR19 submission](#), paragraph 27.

ambition and performance as a result. The efficacy of incentives could be damaged in the long term, if companies perceived that outperformance was not necessarily in their best interests. This was ultimately harmful to consumers.<sup>1159</sup>

7.758 NGN said that GEMA had failed to consider that the OE challenge was significantly more challenging for the frontier company to achieve, given it was comparatively more challenging to make incremental efficiency improvements from a higher starting position.<sup>1160</sup>

7.759 NGN did not provide further evidence in response to our provisional determination but stated that, to the extent NGN had not addressed any arguments made or evidence referred to in the provisional determination, NGN should not be considered to accept those arguments and/or evidence.<sup>1161</sup>

### *GEMA's submissions*

7.760 GEMA said that the OE challenge was, by definition, the level of ongoing annual efficiency which GEMA considered even the most efficient company should be able to make. Accordingly, it was misconceived to assert that the OE challenge disproportionately affected the frontier company.<sup>1162</sup>

### *Our assessment and conclusion*

7.761 We agree with GEMA that, by definition, the OE challenge is the challenge which the most efficient company will face. We also note that NGN, as the frontier company, will receive extra funding as the catch-up challenge is not set at the level of the frontier company. Based on this evidence, our conclusion is that the OE challenge set by GEMA was not disproportionately challenging for NGN and therefore GEMA did not err in this regard.

## **Our determination**

7.762 In this section we present our determination on the level of the core OE challenge, the innovation uplift and the application of the OE challenge.

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<sup>1159</sup> Frontier Economics, Impact of GEMA's approach on future incentives, paragraphs 27–28.

<sup>1160</sup> *Mills 1 (NGN)*, paragraph 31(ii). See also NGN Main Hearing Transcript, 30 June 2021, page 30, line 15 - page 31, line 14 and *Horsley 1 (NGN)*, paragraphs 63–66.

<sup>1161</sup> NGN Response to PD, paragraph 2.

<sup>1162</sup> [GEMA Response B](#), paragraph 149.

## ***Level of core OE challenge***

7.763 In this section we set out our final determination on the level of the core OE challenge. We first summarise our provisional determination on the level of the core OE challenge, then the appellant and GEMA responses which related specifically to the level of the core OE challenge. We then address those responses, before setting out set out our final determination on the level of the core OE challenge set by GEMA.

### ***Provisional determination***

7.764 In our provisional determination on the level of the core OE challenge we took account of the fact that GEMA set the OE challenge on the basis of an in the round assessment of a range of different evidence. We found that GEMA had a broad evidence base in support of its decision to set the core OE challenge at 0.95% for capex and repex and 1.05% for opex. Set against this we accepted the appellants' arguments that GEMA erred in relying on two factors when setting the core OE challenge. First, GEMA used business plan information incorrectly. Second, GEMA used incorrect historical efficiency improvement information from the frontier company in RIIO-GD1, NGN, as part of its decision making. However, we found that the corrected NGN figure was still consistent with GEMA's core OE challenge. Assessing the evidence in the round, in spite of GEMA's misplaced reliance on the two factors noted above, we provisionally found that the level of GEMA's core OE challenge figures of 0.95% for capex/repex and 1.05% for opex were not wrong.

### ***Responses to provisional determination***

7.765 In this section we summarise the responses to our provisional determination that, taking the evidence together, the level of GEMA's core OE challenge figures were not wrong. These were largely new arguments, focusing on whether we were right to accept the level of the core OE challenge set by GEMA, given our findings on the distinct factors used by GEMA. We have grouped the arguments raised in the responses to the provisional determination under three areas:

- The corrected NGN historical improvement figure, which was taken into account in provisional determination, did not support GEMA's core OE challenge.
- The errors identified by the CMA meant there was insufficient evidence to support GEMA's core OE challenge.



- The CMA had failed to conduct a full merits assessment and/or afforded GEMA too wide a margin of appreciation.

*The corrected NGN historical improvement figure did not support GEMA's Core OE challenge*

7.766 In its response to the provisional determination, Cadent said that the CMA had noted that NGN's own analysis cited productivity improvements in the range of 0.8% to 1%, which were broadly consistent with GEMA's core OE target. Cadent said that the range provided by NGN did not support a core OE target above CEPA's range of quantitative evidence. In any event, historical productivity improvements for one firm over a short time period was not robust evidence and should not be used to inform any OE target, as CEPA had acknowledged.<sup>1163</sup>

7.767 NGN said that it disagreed with the CMA's provisional determination that the updated figures from NGN still indicated a range of 0.8% to 1%, and therefore were broadly consistent with a core OE challenge of 1%. While NGN agreed with the contention that it had achieved genuine improvements in productivity at RIIO-GD1 within the range of 0.7% to 0.9% per year, NGN was firmly of the view that this level of performance was not repeatable by NGN in RIIO-GD2. This performance was only achieved because NGN had delivered three complex and transformative projects in RIIO-GD1, which accounted for 70% of its cost base and therefore could not be duplicated in RIIO-GD2. Accordingly, NGN strongly disagreed that the level of efficiencies that it had achieved at RIIO-GD1 could serve as a cross-check to support the core OE challenge going forward in RIIO-GD2.<sup>1164</sup>

7.768 WWU submitted that none of the additional evidence in the provisional determination (eg historical GDN performance) was consistent with GEMA's ongoing efficiency assumption.<sup>1165</sup>

*The errors identified by the CMA meant there was insufficient evidence to support GEMA's core OE challenge*

7.769 In its response to the provisional determination, Cadent said that the quantitative evidence could at most support a 0.95% target (0.9% for capex and repex and 1% for opex). Regarding the qualitative evidence, Cadent said that none of the factors which the CMA relied upon could support CEPA's more stretching target of 0.95%/1.05% that went beyond the range supported

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<sup>1163</sup> Cadent Response to PD, paragraph 10.9f.

<sup>1164</sup> NGN Response to PD, paragraph 76.

<sup>1165</sup> WWU Response to PD, paragraph E10.3.

by the quantitative evidence. In any event, such aiming up precluded any further innovation uplift because GD1 innovation funding was one of the qualitative factors that allegedly supported going beyond the top of the range (which was denied). The CMA should therefore reconsider its provisional determination. Given the proximity of Cadent's 0.94% stretching business plan target to 0.95% no further OE adjustment should be applied to Cadent's costs.<sup>1166</sup>

7.770 Cadent said that given GEMA's insistence that it did not treat 2009 data as an outlier, and the CMA's conclusion that there was insufficient evidence to suggest otherwise, this factor could not have been used to justify a core OE target above the quantitative evidence.<sup>1167</sup>

7.771 In its response to the provisional determination, NGN said that the provisional determination had separately and correctly come to the conclusion that GEMA relied wrongly on several factors in setting the core OE challenge. For example, that:

- GEMA's use of the companies' business plan information was wrong (which undermined this factor).
- GEMA had made an error in its calculation of the historical NGN efficiencies and incorrectly used this information as a cross-check, which ruled out this factor.
- GEMA had provided insufficient reasoning to justify its decision to aim up within CEPA's range.
- GEMA did not rely on innovation funding to inform the level of the core OE challenge, meaning that GEMA did not place weight on this factor.<sup>1168</sup>

7.772 NGN said that it was clear that, once the factors above were excluded from the CMA's assessment of GEMA's decision, GEMA had an insufficient evidence base on which to set the core OE challenge at the level that it did, and that the CMA ought therefore to find GEMA had made an error in setting the core OE challenge at the level it did.<sup>1169</sup>

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<sup>1166</sup> Cadent Response to PD, paragraphs 28, 10.2, 10.9a and 10.10–10.11.

<sup>1167</sup> Cadent Response to PD, paragraph 10.8a.

<sup>1168</sup> NGN Response to PD, paragraph 74.

<sup>1169</sup> NGN Response to PD, paragraph 75.

7.773 NGN invited the CMA to reconsider its provisional conclusions for the core OE challenge and select an appropriate point within the lower half of the 0.5% to 0.8% range recommended by CEPA.<sup>1170</sup>

7.774 NGN said that although the provisional determination concluded that GEMA made an error in its reliance on certain evidence, the provisional conclusion was, nonetheless, that the core OE challenge of 0.95% for capex/repex and 1.05% for opex was not wrong. This finding was contradictory and inconsistent. NGN strongly disagreed with the CMA's provisional conclusion that the core OE assumption was nevertheless consistent with the majority of GEMA's data sources.<sup>1171</sup>

7.775 In its response to the provisional determination, SPT said that once the errors the CMA had identified in the provisional determination were taken into account, it was wrong to contend that there was a broad evidence base in support of the decision. Instead, the evidence that remained and carried any probative weight could only reasonably lead to the conclusion of a significantly lower core OE level than that set by GEMA.<sup>1172</sup>

7.776 SPT said that only three factors were valid evidence:

- EU KLEMS productivity measures based on the GO measure. These produced a range for capex and repex of 0.2% to 0.4%, and for opex of 0.3% to 0.5%. It was possible that these figures may be adjusted upward to account for possible embodied technical change not captured by this measure, but any such adjustment would have only a small impact on the measure.
- EU KLEMS productivity measures based on the VA measure. These produced a range for capex and repex of 0.5% to 0.9%, and for opex of 0.8% to 1.0%.
- The historical rate of improvement in RIIO-1, supposedly between 0.8% and 1% for the top performer. SPT said that this was not reliable evidence. However, if this remaining evidence was to be factored into the assessment of core efficiency, it appeared this could only rationally be given limited weight compared to the more robust EU KLEMS data. GEMA's own advisers cautioned against the use of historical data. The need for caution had to be even greater if the relevant evidence was now limited to the evidence of a single GDN during a single price control

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<sup>1170</sup> NGN Response to PD, paragraph 14i.

<sup>1171</sup> NGN Response to PD, paragraph 70.

<sup>1172</sup> SPT Response to PD, paragraph 132.

period, especially where there was clear evidence of idiosyncratic factors driving that performance.<sup>1173</sup>

7.777 SPT said that, as a matter of simple mathematics, therefore, there was no way to give these three pieces of evidence a plausible weighting that would produce an OE level of 0.95% for capex and repex, and 1.05% for opex. No weighted combination of the three capex inputs could give a level of 0.95%; and no weighted combination of the three opex inputs can give a level of 1.05%, let alone a plausible weighting that gave each of these factors meaningful weight.<sup>1174</sup> In these circumstances, it could not rationally be said that multiple other factors remained to allow GEMA's conclusion to be justified. The only rational approach for the CMA to take, in light of the remaining valid evidence, was to require that GEMA moved the core OE measures significantly downwards.<sup>1175</sup>

7.778 SPT said that the CMA's provisional determination had not identified any single reliable factor which would support GEMA's stretching target above the level of the highest values in CEPA's EU KLEMS data analysis.<sup>1176</sup> SPT said that there were no reasons to aim up within or above the EU KLEMS range. Rather, relevant factors identified by GEMA and the appellants – such as the general slow-down in productivity post-2008, COVID-19 and Brexit – demonstrated GEMA was wrong to do so.<sup>1177</sup>

7.779 In its response to the provisional determination, WWU said that the CMA had considered that so long as some of GEMA's evidence was valid then the overall outcome was valid, which WWU fundamentally did not agree with.<sup>1178</sup>

*The CMA had failed to conduct a full merits assessment and/or afforded GEMA too wide a margin of appreciation*

7.780 In its response to the provisional determination, Cadent said that the provisional determination had largely, and in Cadent's view excessively, deferred to GEMA's regulatory discretion without proper in-depth scrutiny of the evidence and justifications underpinning the exercise of discretion.<sup>1179</sup>

7.781 In its response to the provisional determination, NGN said that the provisional determination did not adequately engage with NGN's primary submission that, by picking a number at the top end of the range, GEMA had not weighed the

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<sup>1173</sup> SPT Response to PD, paragraph 137.

<sup>1174</sup> SPT Response to PD, paragraphs 138.

<sup>1175</sup> SPT Response to PD, paragraphs 139.

<sup>1176</sup> SPT Response to PD, paragraph 160.

<sup>1177</sup> SPT Response to PD, paragraph 161.

<sup>1178</sup> WWU Response to PD, paragraph E10.3.

<sup>1179</sup> Cadent Response to PD, paragraphs 10.5–10.6.

relevant evidence consistently with its statutory duties (and the explicit direction from CEPA to consider these factors) and had de facto disregarded evidence pointing towards the lower end of the range without good reason or explanation. Simply stating that it was within the margin of discretion of the regulator and/or that GEMA's decision was based on multiple factors was an insufficient basis to conclude that GEMA's decision was not in error.<sup>1180</sup>

7.782 NGN said that it strongly disagreed with the provisional determination's overall conclusion that the core OE challenge was within GEMA's margin of discretion, notwithstanding the clear errors the CMA identified. The provisional determination concluded that GEMA was entitled to a margin of appreciation when setting the OE challenge to reflect the different evidence sources and, as a result, chose not to evaluate further GEMA's selection of a point estimate at the very upper end of a 0.2% to 1.0% range. Where ranges were subject to such broad estimation, affording a regulator effective 'carte blanche' to pick any number within this range was likely to lead to materially different, and unpredictable, impacts on companies across price controls (with very different outcomes in terms of financeability, risk profile and incentives to invest), which would not only harm investors but also present and future customers.<sup>1181</sup>

7.783 In its response to the provisional determination, WWU said that the CMA had erred as to the standard of review required in this appeal.<sup>1182</sup>

### *Final determination*

7.784 In this section we provide our final determination. We first respond to the arguments raised by the appellants in response to the provisional determination on the level of the core OE challenge. We then provide our conclusion on the level of the core OE challenge.

#### *The corrected NGN historical improvement figure did not support GEMA's core OE challenge*

7.785 Cadent, NGN and WWU said that the corrected NGN historical productivity improvement figure was for one firm over a short time period and was not robust evidence and should not be used to inform any OE target and did not support a core target above CEPA's range (see paragraphs 7.766 to 7.768).

7.786 We agree that the NGN figure is only for one company and only covers a short time period. Therefore, we place limited weight on this data. We do not,

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<sup>1180</sup> NGN Response to PD, paragraph 72.

<sup>1181</sup> NGN Response to PD, paragraph 62 and 8i

<sup>1182</sup> WWU Response to PD, section 3.

however, agree that zero weight should be placed on this information. The updated historical data gives an indication of what has been possible in the past, which is one informative factor that can be used in an in the round assessment of whether GEMA erred.

*The errors identified in GEMA's assessment meant that there was insufficient evidence to support GEMA's core OE challenge*

- 7.787 Cadent, NGN, SPT and WWU said that the errors identified by the CMA meant that there was insufficient evidence to support GEMA's level for the core OE challenge (see paragraphs 7.769 to 7.779).
- 7.788 As discussed in paragraphs 3.50 to 3.54, if some elements of the reasoning underpinning a modification decision are wrong, that does not mean that the decision itself will necessarily be wrong if it can be supported on a basis other than that on which GEMA relied. In our decision on the level of the core OE challenge we assess whether, even if GEMA erred in some aspects of the decision, the level of the core OE challenge can be supported on the basis of the remaining evidence.
- 7.789 We disagree with the submissions of Cadent, NGN, SPT and WWU that the other items of evidence on which GEMA relied are not capable of supporting GEMA's core OE challenge decision. Our more specific reasons on these points follow below.
- 7.790 Cadent said that the quantitative evidence could at most support a 0.95% target, with 0.9% for capex and repex and 1% for opex (see paragraph 7.769). We agree that 1% for VA LP is the highest figure in Table 7-2. However, this is only one factor and other qualitative factors should be taken into consideration when deciding whether GEMA erred. For the reasons summarised in paragraphs 7.799 to 7.801 (and set out in more detail in the Core OE Challenge section above) we find that a wider set of factors influenced GEMA's decision on the level of the core OE challenge and that these were generally well supported and it was appropriate for GEMA to rely on them.
- 7.791 Cadent said that none of the qualitative factors which the CMA relied upon could support CEPA's more stretching target of 0.95%/1.05%, that went beyond the range supported by the quantitative evidence (see paragraph 7.769). We disagree with Cadent. For the reasons summarised in paragraphs 7.799 to 7.801 (and set out in more detail in the Core OE Challenge section above) we find that most of the factors support GEMA's core OE challenge.

7.792 SPT said that only three factors were valid evidence: the GO measures, the VA measures and the historical figure for NGN (see paragraph 7.776). We disagree that these are the only three valid factors. For the reasons summarised in paragraphs 7.799 to 7.801 (and set out in more detail in the Core OE Challenge section above) we find that a wider set of factors influenced GEMA's decision on the level of the core OE challenge and that these were generally well supported and it was appropriate for GEMA to rely on them.

7.793 SPT said that there were no reasons to aim up within or above the EU KLEMS range and the relevant factors identified by GEMA and the appellants – such as the general slow-down in productivity post-2008, COVID-19 and Brexit – demonstrated GEMA was wrong to do so (see paragraph 7.778).

7.794 We find that GEMA did not err in its consideration of productivity post-2008, COVID-19, Brexit and aiming up, for the reasons explained in paragraphs 7.78 to 7.110, 7.395 to 7.401 and 7.438 to 7.453. We further consider the impact of productivity post-2008, COVID-19 and Brexit when we assess whether GEMA erred when setting the level of the core OE challenge based on an in the round consideration of the evidence in paragraphs 7.799 to 7.801 below. As discussed in paragraphs 7.442 to 7.445, regulators should be afforded a margin of appreciation when setting the OE challenge to reflect the different evidence sources and the regulatory judgement involved in determining the level of the core OE challenge. As such, we exercise restraint and should not interfere unless we find that GEMA's decision was wrong. The appellants have failed to convince us that GEMA's decision to aim up was not an error.

*The CMA failed to conduct a full merits assessment and/or afforded GEMA too wide a margin of appreciation*

7.795 Cadent, NGN, and WWU said that in the provisional determination we had failed to assess the merits of the evidence and that we had erroneously deferred too much to GEMA's judgement (paragraphs 7.780 to 7.783).

7.796 We do not accept the contentions that we failed properly to assess the evidence or that we have shown undue deference when assessing GEMA's decision on the level of the core OE challenge. In line with the standard of review set out in the Legal Framework (Chapter 3), which involves a form of merits review, we recognise that we are required to act as an expert body and, as such, should not uncritically accept GEMA's assessment and weighting of the considerations before us simply because GEMA is an expert body. However, that does not mean that GEMA has no margin of appreciation. As set out in the Legal Framework, GEMA's margin of appreciation will be at its greatest where what is being impugned is GEMA's overall value judgement

based upon competing considerations in the context of a public policy decision.<sup>1183</sup> GEMA's decision on the level of the core OE challenge involved an assessment of a range of factors and a degree of regulatory judgement in determining where to set the level of the core OE challenge based on those factors and information. Accordingly, and in line with the relevant standard of review, it is appropriate for us to apply restraint and, in principle, not question issues of judgement by GEMA unless we are satisfied that GEMA's decision is wrong.<sup>1184</sup> That is the approach we have adopted in assessing GEMA's decision as to the level of core OE challenge. As is clear from the preceding analysis, we have engaged with the appellants' evidence. We have carefully scrutinised the various individual factors GEMA took into account in setting the core OE challenge (as set out in the section on Core OE challenge) as well as its in the round assessment (as set out in this section on the Level of core OE challenge) in order to assess whether the appellants have provided sufficient evidence to persuade us that GEMA's decision was wrong. Therefore we have carried out an appropriate assessment, one that is in consistent with the relevant standard of review, and not afforded GEMA too wide a margin of appreciation.

7.797 NGN said that we had given GEMA 'carte blanche' to choose any core OE challenge between 0.2% and 1.0%, which was inappropriate (see paragraph 7.782).

7.798 We disagree that we have given GEMA 'carte blanche' to choose any core OE challenge figure. In our decision we have assessed whether GEMA erred when setting the level of the core OE challenge based on an 'in the round' consideration of the evidence. If the consideration of that evidence base led us to the conclusion that it was not able to support the figure GEMA chose, then we would find an error. NGN also contended that GEMA had not weighed the relevant evidence consistently with its statutory duties. We disagree with this contention for reasons set out further in paragraphs 7.799 to 7.801 below.

#### *Decision on level of core OE challenge*

7.799 In reaching our determination on the level of the core OE challenge, we have taken into account the arguments set out in the relevant sections on this issue and that GEMA set the level of the core OE challenge on the basis of an in the round assessment of a range of different evidence:

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<sup>1183</sup> See paragraphs 3.76 and 3.78

<sup>1184</sup> See the section in the Legal Framework (Chapter 3) on regulatory judgement and in particular paragraphs 3.76 and 3.78.



- (a) We find that GEMA was not wrong to employ the CEPA EU KLEMS analysis, which gives a range of 0.2% to 1.0% (see Table 7-2), and to use the time period that it did (see paragraphs 7.35 to 7.110). As part of this evidence we considered the OBR and BoE forecasts but, due to the variation in forecasts, we placed less weight on this evidence. As a result, we did not find that the BoE and OBR data conclusively showed that productivity growth would continue to be low (see paragraph 7.84).
- (b) We find that GEMA was not wrong in its use of the GO, VA and LP measures (see paragraphs 7.111 to 7.197). In particular, we agree with GEMA's assessment that LP is higher than TFP, and that this is consistent with a higher figure for opex than capex and repex (see paragraphs 7.156 to 7.181).
- (c) We find that GEMA was not wrong in its use of the comparator sets and that WWU failed to demonstrate that its proposed alternative approach was clearly superior to GEMA's. As such it was within the margin of appreciation that should be afforded to regulators (see paragraphs 7.198 to 7.248).
- (d) We find that GEMA was not wrong in its interpretation of regulatory precedents, which are typically around 1% (see paragraphs 7.348 to 7.374).
- (e) We find that GEMA was not wrong when it decided it was not appropriate to adjust down for COVID-19 and/or Brexit as the impacts of these are unclear. GEMA has said it will address COVID-19 during its GD2 close-out (see paragraphs 7.375 to 7.401).
- (f) The appellants have not demonstrated that GEMA double-counted innovation benefits in the core OE challenge (see paragraphs 7.402 to 7.412).
- (g) We find that GEMA was not wrong to take account of embodied technical change (see paragraphs 7.399 to 7.412). In our decision we take account of the fact that the reliance on embodied technical change should be commensurate with the reliance on the GO output measure. Furthermore, to the extent that quality improvements are expected during the price control period, this should be considered when setting the core OE challenge.
- (h) We find that GEMA was not wrong to aim up: the OE challenge does not have to be set at the average of the figures provided by EU KLEMS, and regulators should be afforded a margin of appreciation to set challenging

efficiency incentives based on the specific facts they face (see paragraphs 7.413 to 7.453).

7.800 Set against this we accepted the appellants' arguments that GEMA erred in placing reliance on two factors when setting the level of the core OE challenge:

- a) GEMA used an incorrect figure of 1% for SGN as part of its decision, (see paragraphs 7.263 to 7.294).
- b) GEMA used incorrect historical efficiency improvement information as part of its decision making (see paragraphs 7.295 to 7.347). The updated figures from NGN indicate a range of 0.8% to 1.0%. We note that the NGN figure is only for one company over one price control period. We are therefore wary of placing too much weight on this one factor when coming to a view on whether GEMA erred in the setting of the core OE challenge.

7.801 As discussed in paragraphs 3.50 to 3.54, if some elements of the reasoning underpinning a modification decision are wrong, that does not mean that the decision itself will necessarily be wrong if it can be supported on a basis other than that on which GEMA relied. In our view, the many points highlighted in paragraphs 7.799, where we find GEMA did not err, are sufficient to support GEMA's decisions to apply a core OE challenge of 0.95%/1.05%. Although GEMA used an incorrect SGN business plan figure and an incorrect NGN historical figure, this did not undermine the other factors that supported the level of the core OE challenge set by GEMA. Regulators typically set stretching OE challenges. Furthermore, GEMA's principal objective is to protect the interests of existing and future consumers, and GEMA should carry out its functions in the manner which it considers is best calculated to promote efficiency and economy on the part of those licensed under the relevant Act.<sup>1185</sup> These reasons make it appropriate for GEMA to set a stretching, but achievable OE challenge. Therefore, for the reasons above, we find that GEMA did not err when setting the level of the core OE challenge.

### ***Innovation uplift***

7.802 We conclude that GEMA made errors in the following aspects of its decision to set the innovation uplift at 0.2%:

- (a) GEMA accepted that it erred when it assumed that all of the NIA and NIC funding should result in cost savings. This is sufficient to conclude that

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<sup>1185</sup> <https://www.ofgem.gov.uk/publications/our-powers-and-duties>

GEMA erred in the quantification of the benefits from the innovation funding (see paragraphs 7.456 to 7.513).

- (b) GEMA erred when it assumed that innovation funding was entirely incremental (see paragraphs 7.514 to 7.552).
- (c) GEMA erred when it double-counted the innovation cost savings that were already included in the companies' business plans (see paragraphs 7.553 to 7.608).
- (d) GEMA erred when it did not consider sufficiently the potential disincentive effect of the innovation uplift (see paragraphs 7.609 to 7.634).

7.803 Our conclusion is that GEMA did not err in any other part of the setting of the innovation uplift (see paragraphs 7.635 to 7.645). However, we found that the errors which we have identified related to important aspects of GEMA's evidence base, and without this evidence, GEMA could not have supported an innovation uplift of 0.2%.

7.804 When considering whether the above errors are sufficiently material to render GEMA's decision wrong, although an uplift of 0.2% may seem low in absolute terms, it represents a challenge which is clearly material. Taking, for example, the OE challenge for Cadent of £228 million, if one sixth (0.2/1.2) of this is due to the innovation uplift then this would represent £38 million or 0.8% of totex.<sup>1186</sup> The appellants' evidence on NIC and NIA projects (see paragraph 7.826) suggests that fewer than 50% of projects were primarily focused on cost reduction.

7.805 Whilst GEMA indicated that it took into account other factors in its 'in the round' approach, we were not persuaded that any of these factors supported any particular number and did not provide countervailing evidence in support of 0.2%.

7.806 Although we recognise that some past innovation funding is likely to result in cost reductions, we nevertheless conclude that the appellants have shown that GEMA's choice of 0.2% was a material error.

7.807 For the reasons set out above, our determination is that GEMA's decision to set the innovation uplift at 0.2% was wrong in that it was based on errors of fact, was wrong in law, and further was in breach of its best practice duty.<sup>1187</sup>

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<sup>1186</sup> GEMA, [RIIO-2 Final Determinations – Cadent Annex](#), Table 1 gives a totex figure of £4,708m.

<sup>1187</sup> We therefore conclude that the consequent licence modification was wrong in that it was based on errors of fact. To the extent that basing conclusions on flawed data or evidence also constitutes an error of law, we

## ***Application of OE challenge***

7.808 In the application of the OE challenge we determine that GEMA did not err when it used the figure of 0.5% as the embedded OE challenge figure for Cadent (see paragraphs 7.649 to 7.737).).

7.809 Our determination is that GEMA did not err in any other part of the application of the OE challenge (see paragraphs 7.738 to 7.761).

## **Relief**

7.810 Having set out our determination on OE above we now turn to the issue of relief. Since we found no error in the setting of the core OE challenge and the application of the OE challenge, the remainder of this section focuses on the innovation uplift. We first describe what we said in our provisional determination regarding relief. We then summarise GEMA's and the appellants' submissions. We then provide our final determination on relief.

## ***Provisional determination***

7.811 In the provisional determination we set out three options for relief. We considered the following options for directions to GEMA as part of a remittal:

- Option A: to direct GEMA to amend the OE challenge to remove the innovation uplift of 0.2%
- Option B: to direct GEMA to amend the OE challenge to replace the innovation uplift of 0.2% with a smaller innovation uplift which we would specify and which was above zero.
- Option C: to direct GEMA to reassess the innovation uplift to address any errors found in our final determination relating to the measurement of the innovation uplift.

7.812 We provisionally did not consider that Option B was appropriate. We had reviewed GEMA's assessment of the case for an innovation uplift. This illustrated the challenges in coming to a robust view on the size of any innovation uplift. We therefore did not have sufficient evidence to come to an alternative specification for the innovation uplift.

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conclude that the decision was wrong in law. We further conclude that the licence modification was based in part on an irrational conclusion and thus was wrong in law. To the extent that basing conclusions on flawed data or evidence, or reaching irrational conclusions, clearly falls below best regulatory standards, we conclude that the decision was wrong because GEMA was in breach of its duty to have regard to the principles representing best regulatory practice.

7.813 For similar reasons, we provisionally did not consider that Option C was appropriate. Our analysis of Joined Ground C suggested that remitting for a further review would not significantly change the evidence base available to GEMA, and therefore would not address our concerns about the limitations of the reasoning it used in determining the level of the innovation uplift as 0.2%.

7.814 Therefore we provisionally considered that Option A was likely to be most appropriate. While Option A would reduce the OE challenge by 0.2%, GEMA had already implemented a number of mechanisms intended to ensure that there were sufficient incentives for the companies to reduce costs. This included GEMA's decision to set the core OE challenge at 0.95% for capex and repex and 1.05% for opex, which we provisionally found was not wrong.

### ***GEMA's submissions***

7.815 In the provisional determination we set out our analysis of four assumptions which the innovation uplift was based: innovation funding was 1% of totex, all innovation funding was used to fund cost reductions, innovation funding increased the rate of cost reduction by 0.2%, and cost benefits would last for 20 years.<sup>1188</sup>

7.816 In its response to the provisional determination, GEMA said that it welcomed the opportunity to provide a revised analysis that addressed the concerns the CMA had expressed in the provisional determination. GEMA invited the CMA to adopt Option B, which was its preference, or Option C.<sup>1189</sup>

7.817 GEMA said that the CMA's substantive concerns around the evidence to support the underlying assumptions could be addressed in a re-quantification of the innovation uplift.<sup>1190</sup> GEMA provided updated calculations which estimated an innovation uplift of 0.11%.<sup>1191</sup> GEMA based its updated figure on five main assumptions.

- Innovation funding totalled 1.2% of totex.<sup>1192</sup>
- GEMA had two estimates. In the low case, GEMA assumed 20% of the NIC and NIA funding was spent on primarily efficiency related projects. In

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<sup>1188</sup> Provisional Determination, paragraphs 7.363–7.372. The provisional determination approach differs from our approach in the final determination. In the final determination we focused on the assumption that all innovation funding was used to fund cost reductions. See paragraphs 7.507– 7.513.

<sup>1189</sup> GEMA Response to PD, paragraph 225.

<sup>1190</sup> GEMA Response to PD, paragraph 168.

<sup>1191</sup> GEMA Response to PD, paragraph 11.

<sup>1192</sup> GEMA Response to PD, paragraph 166.1.

the high case, that 35% of NIC funding and 100% of the NIA funding was spent on primarily efficiency related projects, giving an average of 80%<sup>1193</sup>

- Baseline OE was 1% per year.<sup>1194</sup>
- 20 years was an appropriate assumption for the length of time that the benefits would endure.<sup>1195</sup>
- A figure of 4.17% for the return on innovation funding was relatively conservative and 10% was a conservative upper bound.<sup>1196</sup>

7.818 These assumptions led to estimates for the innovation uplift which ranged between 0.05% per year and 0.34% per year.<sup>1197</sup> GEMA said that it had considered the following factors when selecting a point estimate from this range.<sup>1198</sup>

- Concerns that GEMA had over-estimated the proportion of innovation funding that was targeted at cost savings.<sup>1199</sup>
- Concerns about possible double-counting with innovation-linked cost reductions embedded within business plan baseline cost forecasts.<sup>1200</sup>
- Countervailing factors that might push in the opposite direction. For instance, while the required return of 10% was a relatively conservative assumption given evidence from capital markets, it was potentially a more realistic figure than 4.2%. Furthermore, even innovation projects that were not primarily targeted at cost reduction may offer some opportunities for future cost savings or rewards under incentive schemes – and therefore GEMA had erred on the side of caution by assuming that such projects offer no scope for cost savings.<sup>1201</sup>

7.819 GEMA said that these factors comfortably supported an innovation range from 0.05% to 0.17%.<sup>1202</sup> GEMA said that it did not think there were strong grounds to give greater weight to the upper or lower end of this range and therefore the

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<sup>1193</sup> GEMA Response to PD, paragraph Tables 1 and 2.

<sup>1194</sup> GEMA Response to PD, paragraph Table 1.

<sup>1195</sup> GEMA Response to PD, paragraph Table 1.

<sup>1196</sup> GEMA Response to PD, paragraph 230 and Table 1.

<sup>1197</sup> GEMA Response to PD, paragraph Table 2.

<sup>1198</sup> GEMA Response to PD, paragraph 236.

<sup>1199</sup> GEMA Response to PD, paragraph 236.1.

<sup>1200</sup> GEMA Response to PD, paragraph 236.2.

<sup>1201</sup> GEMA Response to PD, paragraph 237.

<sup>1202</sup> GEMA Response to PD, paragraph 238.

mid-point of 0.11% was a prudent and conservative point estimate for the innovation uplift.<sup>1203</sup>

7.820 GEMA said that the 0.11% estimate addressed the CMA's concerns that:

- GEMA initially overestimated the proportion of innovation spending that was targeted at cost reductions.
- There was double-counting of innovation benefits embedded in baseline cost forecasts by being at the mid-point of the lower half of the range.<sup>1204</sup>

7.821 GEMA said that the reduction of 0.09% compared to its FD uplift of 0.2% was approximately equal to a reduction in the OE challenge of £40 million over RIIO-2 for the appellants.<sup>1205</sup>

### ***Appellants' submissions***

7.822 The appellants provided a joint submission in which they provided more specific comments on GEMA's updated method and the 0.11% estimate. In this submission the appellants said that the new approach proposed by GEMA was fundamentally flawed and should be rejected by the CMA for four reasons.<sup>1206</sup>

- GEMA's new proposal did not remedy two of the errors the CMA identified in its provisional determination, namely double-counting with business plan assumptions and double-counting with EU KLEMS.
- GEMA's new quantification contained new errors and failed to remedy other errors that were identified by the appellants but not commented on in the CMA's provisional determination.
- GEMA's new submissions in relation to the return expected by customers were wrong.
- GEMA's new approach created a different and more significant incentive problem, effectively exacerbating the incentive error identified by the CMA in its provisional determination.

7.823 The appellants said that, in relation to double-counting with business plans:

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<sup>1203</sup> GEMA Response to PD, paragraph 239.

<sup>1204</sup> GEMA Response to PD, paragraph 240.

<sup>1205</sup> GEMA Response to PD, paragraph 240.2

<sup>1206</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 2.

- GEMA had still made no attempt to evaluate the outcomes of innovation projects delivered during RIIO-1 or to assess the extent to which these projects actually generated RIIO-2 cost savings. The appellants maintained that the cost savings arising from innovation projects were included in their RIIO-2 business plans and GEMA had not proven otherwise. The effects of the savings were therefore already captured in RIIO-2 allowances (via GEMA's totex benchmarking), without the application of any innovation uplift.
- The appellants rejected GEMA's claims that the figures provided in the OE hearing could not be traced to the business plans, lacked credibility, or were 'extreme'. The figures, or derivations of them, that were presented at the OE hearing were stated in the business plans. GEMA had had ample opportunity through the Statutory Question process to clarify what was included in plans if it had any concerns. Any inconsistency in the method used to calculate the figures between the appellants was a result of the lack of guidance provided by GEMA on how to compile and report cost savings; and the lack of any substantive exploration of information on innovation savings in the business plan data by GEMA.
- GEMA had argued that double-counting with business plans was addressed under its new method by giving more weight to the lower end of its new range. However, this was an entirely unsubstantiated assumption and GEMA had not made any attempt to quantify the level of double-counting. GEMA's new range for the innovation uplift could not be justified. GEMA's point estimate was therefore not conservative, as there was no basis for assuming that any non-zero innovation uplift was not double-counted.<sup>1207</sup>

7.824 The appellants said that, in relation to the error of double-counting with EU KLEMS:

- The CMA had agreed with the appellants that there was significant R&D spending across other sectors of the economy, and that GEMA had made an error in assuming that the innovation spend by energy networks was 'entirely incremental' to the wider economy spend. The effect of that wider economy R&D spend on productivity would be captured in the EU KLEMS productivity benchmark. The appellants maintained that GEMA could not simply assume that energy network spend was incremental, without any evidence.

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<sup>1207</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 4.



- In the joint OE hearing, SGN had presented innovation spend values as a percentage of turnover (not totex, as GEMA alleged) which was not unreasonable to compare to economy-wide R&D as a percentage of GDP. In any case, the appellants noted in the hearing the need to be cautious about making direct comparisons. Ultimately the appellants had demonstrated that the level of R&D in the economy was significant and it was therefore unreasonable to assume, as GEMA had, that innovation funding was 'entirely incremental'.
- The appellants agreed with the CMA that R&D spend in the economy was not all targeted at cost reduction. However, this was also true of networks' self-funded R&D and the NIC and NIA spend.
- GEMA had also misrepresented the purpose of innovation funding.<sup>1208</sup>
- Ultimately GEMA's arguments amount to unevidenced assertions.<sup>1209</sup>

7.825 The appellants said that there were new and remaining errors in GEMA's revised quantification. CEPA's analysis contained a number of assumptions that the CMA did not opine on, and which GEMA had not addressed in its new analysis. For example, GEMA's method continued to assume that no cost savings from innovation funding were delivered in RIIO-1 – this was a false and material assumption.<sup>1210</sup>

7.826 The appellants said that GEMA's revised analysis also contained new errors:

- GEMA's high case assumed that 100% of NIA funding generated cost savings. This was demonstrably false – SGN reported around 34% of NIA related to cost, Cadent estimated 35%, NGN reported around 9%, and SPT estimated around 15%. GEMA's high case implied a blended NIA/NIC figure of 80% of total spend targeted at cost reductions, However, SPT had reported only 10-15% of its total NIA/NIC spending was related to cost reduction.
- GEMA argued that a 45-year duration of benefits was implausible. However, CEPA originally tested sensitivities from 20 to 45 years. Clearly no single, correct assumption existed or could be demonstrated. Notwithstanding the appellants' other concerns that the uplift should be rejected, it would be prudent to use 45 years (as well as 20 years) to inform a range.

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<sup>1208</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 6.

<sup>1209</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 7.

<sup>1210</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 8.

- GEMA incorrectly claimed that the ‘baseline OE’ assumption of 1% was not contested.<sup>1211</sup>

7.827 The appellants said that the very wide range for the innovation uplift that was produced by GEMA’s updated analysis reinforced their submissions that GEMA’s approach was highly arbitrary and sensitive to the assumptions used. The range would be wider still if the remaining and new errors outlined above were addressed. The method could not be a sound basis for imposing material cost reductions on the sector, particularly given the double-counting errors. It was notable that GEMA’s revised figures gave an estimate close to zero at the bottom end of the range, even before the double-counting and these other errors were corrected.<sup>1212</sup>

7.828 The appellants said that GEMA’s new submissions on expected returns were wrong. The errors identified by the CMA in its provisional determination did not relate to the assumed return, yet GEMA had made changes to that parameter in its revised analysis, presumably with a view to maintaining a material cut to allowances. It was illustrative of the arbitrariness of GEMA’s method that GEMA could make corrections to various assumptions ostensibly to respond to the CMA’s criticisms, but offset the effect of those corrections by modifying other assumptions in the framework.<sup>1213</sup>

7.829 The appellants said that CEPA initially described 4.17% as ‘a reasonable return’ without reference to any benchmark. GEMA’s DD or FD did not elaborate. The DD simply reiterated that this was reasonable, and the FD made no further mention of the return assumption. It was later noted that 4.17% was ‘slightly lower than the proposed cost of equity’ of 4.55%, which indicated that 4.17% was a ‘reasonable approximation’. It was unclear why GEMA now believed 4.17% would be an insufficient return to customers.<sup>1214</sup>

7.830 The appellants said that in response to the provisional determination, GEMA submitted two new sources of data.

- GEMA had referred to a study estimating the WACC for a wide range of electricity generation technologies, which GEMA described as ‘investments of a similar nature’, giving a range of 5% to 10%. These investments – all electricity generation, storage and demand-side response technologies – were not at all similar to the R&D projects under the network innovation funds and were simply not a relevant benchmark. For example, electricity generation technologies would operate with some

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<sup>1211</sup> Appellants’ joint response to CMA’s RFI on ongoing efficiency – innovation uplift, paragraph 9.

<sup>1212</sup> Appellants’ joint response to CMA’s RFI on ongoing efficiency – innovation uplift, paragraph 10.

<sup>1213</sup> Appellants’ joint response to CMA’s RFI on ongoing efficiency – innovation uplift, paragraph 11.

<sup>1214</sup> Appellants’ joint response to CMA’s RFI on ongoing efficiency – innovation uplift, paragraph 12.

exposure to market prices, input price risk, long-term competitive risk, and were subject to different Government support schemes (eg contracts for difference). The estimated WACCs were also for an entire business enterprise, over its lifetime. They did not reflect returns arising from expected cost savings on a sub-set of business expenditure, derived from a sub-set of R&D projects for those enterprises.

- GEMA had also referred to various sources for venture capital fund returns. There was simply no reason to view these returns as a relevant benchmark. The network innovation funds were not equity investments in small businesses with high growth potential. The scope of the funds covered in the papers referenced by GEMA was very broad and appeared to include sectors such as life science and technology, health, and pharmaceuticals.<sup>1215</sup>

7.831 The appellants said that GEMA still appeared to view the allowed RIIO-2 network cost of equity as the relevant benchmark yet, despite this, inconsistently used a value of 10% to support the top end of its range. GEMA's description of 10% as 'a conservative upper bound' lacked any credibility.<sup>1216</sup>

7.832 The appellants said that if GEMA was able to impose an innovation uplift and effectively guarantee a return to customers, then customers were clearly not taking on the level of risk that might be commensurate with an expected 10% return.<sup>1217</sup>

7.833 The appellants said that the incentive error had been exacerbated. GEMA's method effectively treated innovation funding as a loan from customers to companies. Under GEMA's method, customers would always get a guaranteed return on their 'investment', paid for by incremental reductions in allowances.<sup>1218</sup>

7.834 The appellants said that GEMA's revised range for the 'return requirement' expected by customers was 4.17% to 10%. At the same time, GEMA's price control had determined that companies could raise finance to undertake their activities at a WACC of 2.81% to 2.85%. It was inconsistent to assume that companies would accept a loan from customers at an interest rate of up to 10%, when companies could raise their own finance at a WACC of 2.81% to 2.85%. There would simply be no incentive for the companies to spend the innovation fund in these circumstances, particularly given the absence of any

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<sup>1215</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 13.

<sup>1216</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 14.

<sup>1217</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 15.

<sup>1218</sup> Appellants' joint response to CMA's RFI on ongoing efficiency – innovation uplift, paragraph 16.

assessment by GEMA of the cost savings actually expected to arise from the funded projects and which were included in business plans. There was a clear risk that companies would therefore be discouraged from spending the RIIO-2 innovation funding.<sup>1219</sup>

7.835 The appellants said that the incentive damage in this case was compounded by the fact that GEMA had never signalled to companies that innovation funding was going to be treated as, in effect, a loan with a guaranteed return to customers of up to 10%. GEMA had also stated that, in its view, even a figure of 10% was a ‘conservative upper bound’ – suggesting GEMA might consider it justifiable to guarantee an even higher return to customers on RIIO-2 innovation spend. Since GEMA had shown that it was willing to introduce these terms on the innovation funding ex-post, and despite the absence of any justification or evidence, the companies could be expected to proceed cautiously when it came to spending funds during RIIO-2.<sup>1220</sup>

7.836 In its response to the provisional determination, Cadent said that the CMA had invited the parties to comment on whether a non-zero innovation uplift could be determined. Cadent strongly believed that no uplift for previous innovation funding was appropriate and supported the view that removing the innovation uplift entirely was the only appropriate form of relief. Cadent said that any non-zero innovation uplift would continue to suffer from double-counting because:

- GEMA had not stripped out innovation savings from the companies’ business plans. In any event, it would not be practical to approve and implement a common methodology for doing so for the GD2 price control and therefore the risk of double-counting would persist.
- The EU KLEMS data underpinning the core OE target already took account of R&D spend in comparator sectors. As the CMA recognised, GDNs invested less in innovation compared to other sectors. While Cadent recognised that not all R&D spend in other sectors was directed at cost reduction, the analysis of NIA and NIC funding showed that this was also true for most innovation projects undertaken by GDNs. Therefore, under any innovation uplift, there would be risk of double-counting with innovation spend accounted for in EU KLEMS.<sup>1221</sup>

7.837 Cadent also endorsed the CMA’s view that GEMA had already implemented many mechanisms which ensured that companies were incentivised to reduce

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<sup>1219</sup> Appellants’ joint response to CMA’s RFI on ongoing efficiency – innovation uplift, paragraph 17.

<sup>1220</sup> Appellants’ joint response to CMA’s RFI on ongoing efficiency – innovation uplift, paragraph 17.

<sup>1221</sup> Cadent Response to PD, paragraph 3.2.

costs and therefore there was no need to apply an innovation uplift for that purpose.<sup>1222</sup>

7.838 In its response to the provisional determination, NGN said that the errors identified by the CMA clearly showed that the innovation uplift was conceptually flawed and therefore wrong in principle given that, for example, there was no evidence that innovation funding was incremental to comparator sectors in EU KLEMS. NGN said that each of the errors identified by the CMA was independently sufficient to vitiate GEMA's introduction of the innovation uplift. Therefore, it would be wrong to try and adjust the quantification methodology to address any individual error, since no such adjustment could overcome the fundamental problems that underpinned the innovation uplift.<sup>1223</sup>

7.839 NGN said that the only adequate way to address the errors underpinning the innovation uplift was to remove the innovation uplift in its entirety.<sup>1224</sup> NGN requested that the CMA implement this relief directly in its final determination.<sup>1225</sup> NGN set out in an annex how the CMA could implement this remedy.<sup>1226</sup> This is discussed in Chapter 17.

7.840 NGN said that the proportion of innovation funding spent on cost reductions should not be equated with the proportion of benefits represented by those cost reductions. Irrespective of the proportion of innovation spending which was targeted at cost reductions, the environmental and other benefits arising from the innovation funding were likely to represent a substantial proportion of the overall long-term 'return' to customers from their investment in innovation. To correct this assumption within the CEPA analysis, it would be necessary to evaluate all benefits (both cost and non-cost) delivered to customers and account for these, in order to determine whether customers had received a reasonable return when including those benefits.<sup>1227</sup>

7.841 NGN said that it would plainly be insufficient for GEMA, following the provisional determination, to seek now to correct its error by modifying its approach specifically with respect to the assumptions on which the provisional determination had commented, since GEMA would also need to re-evaluate and correct for the errors in the remaining assumptions on which the provisional determination had not commented.<sup>1228</sup>

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<sup>1222</sup> Cadent Response to PD, paragraph 3.3.

<sup>1223</sup> NGN Response to PD, paragraph 34 and 4iii.

<sup>1224</sup> NGN Response to PD, paragraphs 4.1iii and 32 and 53.

<sup>1225</sup> NGN Response to PD, paragraph 4.1iv.

<sup>1226</sup> NGN Response to PD, Annex III.

<sup>1227</sup> NGN Response to PD, paragraph 39.

<sup>1228</sup> NGN Response to PD, paragraph 41.

7.842 NGN strongly agreed with the CMA's provisional decision to rule out Options B and C. Both of these would be wholly inappropriate, given the fundamental errors identified above in relation to the introduction of any innovation uplift. NGN said that the removal of the innovation uplift was a straightforward relief and that it could readily be implemented without remitting the matter back to GEMA.<sup>1229</sup>

7.843 NGN said that it would be inappropriate and wrong for the CMA to select Option B or C because, based on: (i) the work carried out to date by the CMA; (ii) the evidence submitted by GEMA and its experts; and (iii) the evidence submitted by the appellants and their experts there was no evidence to support any innovation uplift at all.<sup>1230</sup>

7.844 NGN said that any relief other than option A would be inappropriate and inconsistent with the CMA's overarching duty to dispose of appeals fairly, efficiently and at a proportionate cost for the following reasons:

- GEMA had had ample time and numerous opportunities, including after the DD, FD and during this appeal process, to collect evidence and address the issues raised by CEPA and the appellants in relation to the innovation uplift. Despite this, GEMA had been unable to justify the need for any innovation uplift. Moreover, GEMA and CEPA had repeatedly recognised that it is very difficult to quantify any innovation uplift robustly. Given the inherent difficulties in quantifying such an adjustment (which NGN believed to be impossible in any case given the fundamental nature of the errors), there was no reason to expect that GEMA could do so robustly if the matter were remitted back to GEMA. NGN strongly agreed with the provisional determination's conclusion that remitting the matter to GEMA for further review would not significantly change the evidence base available to GEMA, and therefore would not address the CMA's concerns about the limitations of the reasoning it used in determining the level of the innovation uplift as 0.2%.
- In light of the above, it was clear that GEMA would be unable to justify any innovation uplift, if the matter were remitted to it. Accordingly, NGN would be very likely to commence a further appeal against any subsequent decision of GEMA to set any innovation uplift. This would, in effect, extend the current appeal process further and thereby place an additional burden on the NGN, GEMA, the CMA and ultimately on consumers. This would

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<sup>1229</sup> NGN Response to PD, paragraph 53.

<sup>1230</sup> NGN Response to PD, paragraph 54.

undermine the overriding objective for the CMA to dispose of appeals fairly, efficiently and at proportionate cost.

- The innovation uplift was a fundamentally flawed mechanism, in part due to its harmful incentive effects which the CMA had recognised. Accordingly, a smaller uplift would still create a direct link between innovation funding and an expectation of future cost allowances, and would therefore also create perverse incentives.
- Although the provisional determination found the core OE challenge to be within GEMA's margin of discretion, which NGN disputed, the provisional determination recognised that GEMA's core OE target was above relevant precedents and that GEMA has already implemented a number of mechanisms intended to ensure that there were sufficient incentives for the companies to reduce costs. Without prejudice to its arguments that the core OE challenge was wrong, NGN strongly agreed that any additional stretch on top of the overly stretching core OE challenge could not be justified.<sup>1231</sup>

7.845 NGN said that, without prejudice to its view that it would be wholly inappropriate for the CMA to direct GEMA to provide an alternative quantification of the uplift, the requirements of procedural fairness dictated that NGN should have the right to comment and make representations on any such methodology that is proposed prior to the final determination.<sup>1232</sup>

7.846 In its response to the provisional determination, SGN said that it fully supported the CMA's provisional decision to direct GEMA to remove the innovation uplift. SGN said that the steps required to remove the innovation uplift to derive updated totex allowances were straightforward, with only a minor set of adjustments to GEMA's totex modelling spreadsheets being necessary.<sup>1233</sup> This is discussed in Chapter 17.

7.847 SGN said that each of the errors identified by the CMA independently undermined the case for the implementation of an innovation uplift. Therefore any alternative uplift suggested by GEMA would need to address all of the errors that had been identified. Any solution that addressed only some of the errors that had been identified must necessarily be rejected.<sup>1234</sup>

7.848 SGN said that there was clearly a significant gulf between the evidence that was adduced by GEMA and the evidence that would have been required to

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<sup>1231</sup> NGN Response to PD, paragraph 55.

<sup>1232</sup> NGN Response to PD, paragraph 56.

<sup>1233</sup> SGN Response to PD, paragraph 222.

<sup>1234</sup> SGN Response to PD, paragraph 215.

support the imposition of an innovation uplift at any particular level in its decision. In the absence of compelling evidence that GEMA had addressed the issues impacting all of CEPA's assumptions, including those not investigated in the provisional determination, there could be no justification for implementing even a smaller uplift.<sup>1235</sup>

7.849 SGN said that, in addition to the lack of evidential support for the implementation of a smaller uplift, Options B and C would be inappropriate from a process perspective.<sup>1236</sup>

7.850 SGN said that in the case of Option B, the CMA had ruled this out on the basis that the evidence provided to it to date was insufficient to enable it to come to an alternative specification as to the appropriate level of uplift. As such, Option B would only become viable if GEMA were to submit new evidence in response to the provisional determination. Procedural fairness, however, dictated that in such a scenario, the appellants should have an opportunity to respond to any such evidence. It is unclear at what point in the CMA's timetable the appellants might have the opportunity to do this.<sup>1237</sup>

7.851 SGN said that, as regarded Option C, if GEMA had substantially made the case for the implementation of an innovation uplift and provided compelling evidence in support of its position, with any shortcomings being of a technical nature and/or limited to the precise manner of its implementation, then SGN recognised that there might be a case to be made for Option C. The reality, however, was that this was not the type of situation that the CMA was confronted with here. Rather, GEMA had sought to implement an uplift for which the CMA had recognised there was, quite simply, no robust supporting evidence. Remitting the matter to GEMA for further consideration in the manner envisaged in Option C was, therefore, simply not an appropriate solution.<sup>1238</sup>

7.852 SGN said that if the issue of the innovation uplift were to be remitted to GEMA in the manner envisaged in Option C, it would likely significantly elongate the process owing to the need for GEMA to 'go back to the drawing board' in terms of collecting evidence to identify the appropriate level of any alternative uplift. This would be disproportionate. Remitting the issue of the innovation uplift back to GEMA in this way also risked GEMA adopting poorly evidenced positions in future price controls in the belief that, if those positions were

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<sup>1235</sup> SGN Response to PD, paragraph 201.

<sup>1236</sup> SGN Response to PD, paragraph 217.

<sup>1237</sup> SGN Response to PD, paragraph 218.

<sup>1238</sup> SGN Response to PD, paragraph 219.



challenged, it would likely get a 'second bite at the cherry'. If it were to do this, it would represent a highly damaging precedent.<sup>1239</sup>

7.853 In its response to the provisional determination, SPT said that it agreed with the CMA's proposed remedy of Option A and that this already provided the parties with significant and sufficient incentives to reduce costs through the core OE parameters. SPT agreed with the CMA that neither Option B nor Option C would be appropriate: remitting the innovation uplift for a further review would not significantly change the evidence base available to GEMA, and would not address the CMA's well-founded concerns about the limitations of the reasoning GEMA used in determining the level of innovation uplift.<sup>1240</sup>

7.854 SPT said that it did not see how GEMA would be able to produce a revised analysis that would justify a revised non-zero innovation uplift. The entire exercise of GEMA trying to whittle down allowed returns by deriving some kind of hypothetical 'bonus' productivity benefit attainable to regulated networks, purely as a result of innovation funding that was mostly not targeted at cost savings in the first place, was speculative in the extreme. The few items of evidence that GEMA purported to point to had been rightly dismissed in the provisional determination.<sup>1241</sup>

7.855 SPT said that the NIC and NIA innovation programmes were not set up to produce potentially relevant financial evidence. There was no suggestion at the time of their establishment that GEMA would try to claw-back benefits attained through an innovation uplift. If this had been suggested, it was unlikely that the projects would have proceeded as they did. It was now likely to be impossible to assess ex-ante expected returns, or to disentangle actual returns derived from this funding from other productivity improvements already covered in the business plans or intended to be captured by the core OE challenge. GEMA appeared to recognise these difficulties. The CMA had further found that GEMA was wrong to assume innovation funding was incremental to that reflected in the economy-wide EU KLEMS data analysis, and GEMA double-counted the innovation cost savings that were already included in companies' business plans (including SPT's).<sup>1242</sup>

7.856 SPT said that there was no reason to think that GEMA could overcome any, let alone all, of these issues now. GEMA should be comfortable that the core OE parameters (at whatever level they are eventually set) already provided a

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<sup>1239</sup> SGN Response to PD, paragraph 220.

<sup>1240</sup> SPT Response to PD, paragraphs 166-167.

<sup>1241</sup> SPT Response to PD, paragraph 168.

<sup>1242</sup> SPT Response to PD, paragraph 169.

strong and sufficient efficiency challenge and gave real customer benefits in-period.<sup>1243</sup>

7.857 In its response to the provisional determination, WWU said that it agreed with Option A, which quashed the decision and amended the OE challenge to remove the innovation uplift, was the correct remedy. WWU said that was a very simple adjustment to the Licence, the Price Control Financial Handbook and the Price Control Financial Model, which could be agreed quickly between the CMA, the Respondent and the appellants in a remedies hearing.<sup>1244</sup>

### ***Our assessment***

7.858 We have reviewed the submission from GEMA, including its updated proposed figure of 0.11% for the innovation uplift, and the appellants' submissions. We recognise that GEMA has sought to address concerns set out in our provisional determination. For example, adjusting to account for the fact that not all innovation funding was spent on cost reductions.<sup>1245</sup>

7.859 Nevertheless, we still have concerns over important aspects of the approach.

7.860 First, the updated GEMA approach continues to assume that the innovation funding is incremental to any innovation funding in EU KLEMS.<sup>1246</sup> The appellants also raised concerns regarding whether the innovation funding was incremental (see paragraphs 7.822, 7.824, 7.836, 7.838, 7.847 and 7.855). For the reasons explained in paragraphs 7.544 to 7.552 we find that GEMA erred when it assumed that the innovation funding was incremental. Since the updated GEMA approach maintains this assumption we find that this continues to be an error in the GEMA approach.

7.861 Second, GEMA's approach to addressing any double-count with the innovation in the business plans was to choose a point estimate from the lower half of the range it has calculated.<sup>1247</sup> Concerns with double-counts of business plans were also raised by the appellants (see paragraphs 7.823, 7.836, 7.838, 7.847 and 7.855).

7.862 We note that the upper range in the GEMA analysis is based on the assumptions that 35% of NIC funding and 100% of NIA funding are spent on primarily efficiency related projects.<sup>1248</sup> However, these assumptions are inconsistent with the data supplied by the appellants (see paragraph 7.826).

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<sup>1243</sup> SPT Response to PD, paragraph 170.

<sup>1244</sup> WWU Response to PD, paragraph 6.4c.

<sup>1245</sup> GEMA Response to PD, paragraph Table 1.

<sup>1246</sup> GEMA Response to PD, paragraph 175.

<sup>1247</sup> GEMA Response to PD, paragraph 236.2.

<sup>1248</sup> GEMA Response to PD, paragraph Table 1.

Therefore, we find that the GEMA adjustment, which is to place less weight on figures which already should be given negligible weight, is insufficient to address concerns regarding double-counting innovation cost savings in the business plans.

7.863 Third, GEMA assumed rates of return of 4.17% and 10%.

7.864 The appellants raised concerns regarding the rates GEMA had used (see paragraphs 7.828 to 7.835). The appellants said that the GEMA approach took the innovation funding and assumed the return was given to customers through the RIIO-2 allowances. This suggested that customers were not incurring much risk. In this scenario, using rates of return for a network company or an investor in an R&D portfolio was not commensurate with the risk being incurred by customers. In these circumstances it may be more appropriate to look at rates in the Green Book<sup>1249</sup> or use the risk-free rate.<sup>1250</sup>

7.865 We agree with the appellants that the imposition of the innovation funding uplift effectively guarantees a return to consumers from the funding. In these circumstances, using a return of 4.2%, which reflects the risk involved in investing in the networks, is arguably inappropriately high, and there is certainly no good reason to include returns as high as 10%. In addition, we find that GEMA's assumption that the companies might achieve returns of 10% on the relevant investment is inconsistent with the objectives of innovation funding which is to encourage companies to invest in innovation opportunities which might otherwise not be financially viable.

7.866 For the reasons explained above we continue to have concerns about setting a positive innovation uplift which would add additional challenge to the companies on top of the core OE challenge and the cost savings from innovation funding already embedded in the business plans.

7.867 We conclude that the RIIO-2 framework, including the savings in the business plans and the approach to setting the core OE challenge, should provide customers with sufficient returns without the need for an innovation uplift. We therefore set the innovation uplift at zero and direct GEMA to amend the OE challenge to remove the innovation uplift of 0.2%. This is consistent with Option A in the provisional determination. Setting the innovation uplift at zero would also address concerns regarding the distortive impact of the innovation

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<sup>1249</sup> The [Green Book](#) contains HM Treasury guidance on how to appraise and evaluate policies, projects and programmes. The Green Book discount rate is set at 3.5% in real terms (paragraph 5.35).

<sup>1250</sup> Joint Ongoing Efficiency Hearing Transcript, 25 June 2021, page 39, line 14 - 22. See also Response to CMA on RFIs on OE – Innovation Uplift, paragraph 15

uplift in on incentives to use innovation funding, see paragraphs 7.626 to 7.634.

7.868 We consider the implementation of this relief in Chapter 17.

## 8. Joined Ground D: Licence modification process

### Introduction

- 8.1 This ground of appeal concerns GEMA's decision regarding the procedure to be used to manage uncertainty and contingent allowances during the RIIO-2 price control. GEMA introduced special conditions to the licences which provided GEMA with the power to modify the licence during the course of RIIO-2 by issuing directions. GEMA refers to this as 'self-modification'. SPT and SSEN-T both argued that in doing so GEMA had erred in law, in that it had acted ultra vires. WWU separately argued that GEMA's decision to include licence obligations in subsidiary documents which could be changed by issuing directions was wrong because GEMA had failed to have regard to its statutory duties under sections 4AA(2)(b) and (5A) of GA86.
- 8.2 All three appellants submitted that the use of the directions procedure denied them their statutory rights, specifically the right to appeal licence modifications to the CMA under section 11C of EA89 and section 23B of GA86 respectively – the Statutory Licence Modification Procedure (**SLMP**).
- 8.3 We granted permission for SPT, SSEN-T and WWU<sup>1251</sup> to appeal on condition that the grounds were joined for administrative purposes under one ground: Licence modification process.

### Background

- 8.4 In the RIIO-2 price control, GEMA set out a 'flexible package of uncertainty mechanisms' (**UMs**) to provide for additional funding during the price control to enable licensees to 'bring forward strategic network investments to help meet Net Zero'.<sup>1252</sup> The UMs employed by GEMA to manage uncertainty included bespoke UMs to enable some companies 'to manage specific uncertainties they face'.<sup>1253</sup> These bespoke UMs were included as special conditions in each company's licence.
- 8.5 A description of the special conditions was set out in each licensee's annex to the FD. The FD described the content of the special conditions including the process for issuing and amending requirements or documents in each case by

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<sup>1251</sup> [SPT NoA](#), Ground 4; [SSEN-T NoA](#), Ground 3; [WWU NoA](#), Ground D.

<sup>1252</sup> [GEMA FD Core Document](#), paragraph 1.3.

<sup>1253</sup> [GEMA FD Core Document](#), paragraph 7.3.

direction. The wording of the special conditions was then set out in GEMA's Decision to modify the licence conditions.

8.6 The special conditions also described the directions procedure, namely to publish on GEMA's website:

- a) the text of the proposed direction;
- b) the reasons for the proposed direction; and
- c) the consultation period of not less than 28 days.

8.7 GEMA refers to this modification procedure as 'self-modification' and relies on section 7 of EA89 and section 7B of GA86 for the power to do so. GEMA distinguishes self-modification from the statutory procedure set out in sections 11A-H of EA89 and section 23 of GA86, the SLMP.

8.8 The special conditions affected by GEMA's decision to use the directions power to modify are:

- a) Re-openers which enable a licensee or GEMA to propose an adjustment to allowed revenue, which GEMA described as 'usually with a very specific scope or an external trigger'.<sup>1254</sup> Re-openers that are the subject of this appeal include:
  - (i) Large Onshore Transmission Investment (**LOTI**) which allows licensees to apply for funding for large investment projects to meet Net Zero. Projects coming through the LOTI re-opener will not have been funded at the time of setting the RIIO-2 Price Control due to insufficient certainty regarding their need, scale and/or timing. GEMA may implement a new deliverable and associated allowance by direction, as opposed to the SLMP only if not 'significantly different' to the licensee's application.<sup>1255</sup>
  - (ii) Medium Sized Investment Projects (**MSIP**), a re-opener which allows GEMA to set allowances by direction at multiple times during the price control for projects with 'unusual characteristics' and a value of less than £100 million.<sup>1256</sup>
  - (iii) Net Zero, a re-opener designed to set new allowances and outputs in licences for projects related to Net Zero which are not funded elsewhere in the price control. It can also amend existing outputs

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<sup>1254</sup> *Zhu 1 (GEMA)*, paragraph 63.5 and [GEMA Response B](#), paragraph 187(2).

<sup>1255</sup> [GEMA Response B](#), paragraph 191(2).

<sup>1256</sup> [GEMA Response B](#), paragraph 191(3).

and allowances for existing Net Zero-related outputs set elsewhere in the licence.<sup>1257</sup>

- b) Network Asset Risk Metric (**NARM**), which is ‘a complex policy mechanism that aims to forecast long-term network asset risk and secure the risk reduction benefits associated with asset health. NARM sets requirements on licensees across all sectors to deliver an acceptable level of asset health across their networks’.<sup>1258</sup> The NARM Handbook is an Associated Document (see paragraph 8.9) that ‘sets out the methodology for calculating relevant funding adjustments and penalties to reflect a licensee’s performance relative to its Baseline Network Risk Outputs (a deliverable target metric) which are set out in each licensee’s Network Asset Risk Workbook’.<sup>1259</sup> It also provides guidance on NARM. The Handbook and the Workbook may be amended by GEMA by way of directions;
- c) Evaluative Price Control Deliverables (**Evaluative PCDs**) where the allowance for licensees is contingent upon the delivery of a consumer outcome for which they were funded. GEMA contended that this is ‘exactly the type of case for which the statutory power [self-modification] to provide an *alternative* to the [SLMP] was intended’;<sup>1260</sup>
- d) Price Control Financial Instruments (**PCFI**) which are documents containing ‘rules and processes and the methodology (the model) used to determine the value of Allowed Revenue’ and have the status of a licence condition; GEMA will apply a ‘significant impact’ test to determine if any proposed modification to the PCFI should be by way of self-modification (no significant impact) or the SLMP (significant impact).<sup>1261</sup>

8.9 GEMA provided in the FD that in addition to PCFIs, another category of subsidiary documents, Associated Documents, would be issued and modified by way of directions. Associated Documents are subsidiary documents designed, drafted, and published in accordance with the relevant licence conditions. Associated Documents supplement the special licence conditions and provide ‘information, requirements and guidance’.<sup>1262</sup>

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<sup>1257</sup> GEMA Response B, paragraph 191(6).

<sup>1258</sup> GEMA Response B, paragraph 191(4).

<sup>1259</sup> GEMA Response B, paragraph 191(4).

<sup>1260</sup> GEMA Response B, paragraphs 188 and 191(1) and *Zhu 1 (GEMA)*, paragraphs 75–79.

<sup>1261</sup> WWU NoA, paragraph D3.17, SSSEN-T NoA, paragraph 6.16, and GEMA Response B, paragraph 191(5).

<sup>1262</sup> WWU NoA, paragraphs D3.3 and D3.5.

## The grounds of appeal

8.10 Although all three appellants included grounds in their NoAs appealing the changes to the Licence Modification process, the alleged errors differed between SPT and SSEN-T, on the one hand, and WWU, on the other. As will be explained in detail below, SPT's and SSEN-T's appeals are concerned with whether in conferring upon itself the power to amend certain special conditions by direction (ie by way of self-modification) GEMA acted ultra vires section 7(5)(b) of EA89. By contrast, WWU's appeal is concerned with whether in relation to its use of Associated Documents GEMA complied with certain of its statutory duties. In our discussion of the ground and assessment we have therefore considered the SPT and SSEN-T grounds separately from those pleaded by WWU.

8.11 The licence conditions each appellant appealed are set out in **Table 7-4**.

**Table 7-4: Conditions appealed under this Ground**

| Licence condition  | Description   | Party appealing |
|--|---|-----------------|
| ET <a href="#">SpC 3.1</a> , NARM Expenditure  | Allows GEMA to calculate the Baseline Network Risk Outputs, and specify the value of the term $NARM_t$ (the Baseline Allowed NARM Expenditure term).  | SPT and SSEN-T  |
| ET <a href="#">SpC 3.2</a> , Cyber resilience operational technology Re-opener, PCD and use it or lose it adjustment | Allows GEMA to amend outputs, delivery dates and associated allowances by direction (on application by a licensee).   | SSEN-T          |
| ET <a href="#">SpC 3.3</a> , Cyber resilience information technology Re-opener and PCD                               | Allows GEMA to determine $CRIT_t$ (Cyber Resilience IT PCD term) and $CRITE_t$ (cyber resilience IT Re-opener term).  | SSEN-T          |
| ET <a href="#">SpC 3.4</a> , Physical security Re-opener and PCD   | Allows GEMA to determine $PSUP_t$ (the physical security PCD term) and $PSUPRE_t$ (the physical security Re-opener term).   | SSEN-T          |
| ET <a href="#">SpC 3.6</a> , Net Zero Re-opener  | Allows GEMA to amend the value of $NZ_t$ (annual Net Zero totex allowance) and the outputs, delivery dates and allowances by direction.   | SPT and SSEN-T  |
| ET <a href="#">SpC 3.9</a> , Wider Works PCD   | Allows GEMA to determine $WWR_t$ (the Wider Works PCD term) according to its assessment of a licensee's delivery.   | SPT and SSEN-T  |
| ET <a href="#">SpC 3.13</a> , Large Offshore Transmission Investments (LOTI)   | Allows GEMA to specify the value of the terms $LOTIA_t$ (the large onshore transmission investment allowance term) and $LOTIRE_t$ (the large onshore transmission investment Re-opener term) by direction (on application by a licensee). | SPT and SSEN-T  |
| ET <a href="#">SpC 3.14</a> , Medium Sized Investment Projects Re-opener and PCD                                     | Allows GEMA to specify the outputs, delivery dates and associated allowances by direction (on application from a licensee).   | SPT and SSEN-T  |
| ET <a href="#">SpC 3.15</a> , Pre-construction Funding (PCF) Re-opener and PCD                                       | Allows GEMA to set $PCF_t$ (the PDF term) and $PCFRE_t$ (the Re-opener term) by direction (on application by a licensee); and to set $PCFRA_t$ and $PCFRO_t$ (PCD terms).   | SSEN-T          |
| ET <a href="#">SpC 3.16</a> , Access Reform Change Re-opener   | Allows GEMA to make adjustments to totex to reflect the impact of an Access Reform Change   | SPT             |



| Licence condition   | Description   | Party appealing |
|---|---|-----------------|
| ET <a href="#">SpC 3.17</a> , Shared Schemes PCD  | Allows GEMA to direct a value for SSR <sub>i</sub> (the Shared Schemes PCD term) according to its assessment of a licensee's delivery.  | SSEN-T          |
| ET <a href="#">SpC 3.18</a> , Resilience and Operability PCD  | Allows GEMA to adjust totex according to its assessment of a licensee's delivery.   | SPT and SSEN-T  |
| ET <a href="#">SpC 3.28</a> , Subsea Cable Re-opener  | Allows GEMA to set allowances by direction, on application from the licensee.   | SSEN-T          |
| ET <a href="#">SpC 3.29</a> , Uncertain Non-Load Related projects Re-opener and PCD                     | Allows GEMA to specify the outputs, delivery dates and associated allowances by direction (on application from a licensee).   | SPT             |
| ET <a href="#">SpC 8.1</a> , Governance of the ET2 Price Control Financial Instruments                  | Allows GEMA to establish and amend the Price Control Financial Instruments.   | SSEN-T          |
| GT <a href="#">SSC A40</a> , Regulatory Instructions and Guidance (RIGs)                                | Allows GEMA to establish and amend the RIGs covering required systems, processes, procedures and ways for recording and providing Specified Information; standards of accuracy and reliability for Specified Information; definition of Specified Information categories; frequency and standard of reporting; requirements for audit where relevant; and other requirements. | WWU             |
| GT <a href="#">SSC A55</a> , Data Assurance Guidance  | Allows GEMA to set out the processes and activities the licensee must undertake to reduce the risk, and subsequent impact and consequences, of any inaccurate or incomplete reporting, or any misreporting, of information to the Authority.  | WWU             |
| GT <a href="#">SSC A57</a> , Exit Capacity Planning Guidance  | Allows GEMA to establish and amend the Guidance, requiring the licensee to have in place processes and to undertake activities for the purpose of managing its NTS exit capacity planning and ensuring its booking process is efficient, for all the parties involved, to a reasonable and proportionate extent.  | WWU             |
| GT <a href="#">SSC D21</a> , Fair treatment Guidance  | Allows GEMA to establish and amend the Guidance, to which licensees must have regard in their interactions with domestic customers.   | WWU             |
| GT, <a href="#">SpC 3.1</a> , NARM Baseline Network Risk Outputs Workbook and NARM Handbook             | Allows GEMA to establish and amend the Workbook and Handbook, which set out the method for calculating funding adjustments and penalties.   | WWU             |
| GT <a href="#">SpC 3.5</a> , Net Zero and Re-opener Development Fund Governance                         | Allows GEMA to establish and amend the Governance Document, with which licensees must comply, and which covers the definitions of allowable and unrecoverable expenditure, the eligibility criteria, and reporting obligations  | WWU             |
| GT <a href="#">SpC 3.9</a> , Net Zero Pre-Construction and Small Net Zero Projects Re-Opener Governance | Allows GEMA to establish and amend the Governance Document, with which licensees must comply  | WWU             |
| GT <a href="#">SpC 3.14</a> , Fuel Poor Network Extension Scheme Volume Driver Guidance                 | Allows GEMA to establish and amend the Guidance, with which licensees must comply, and which will set out eligibility criteria and requirements for the administration and delivery of the scheme.  | WWU             |
| GT <a href="#">SpC 5.2</a> , Network Innovation Governance Document                                     | Allows GEMA to establish and amend the Governance Document, which licensees must comply, and which will cover the definition of unrecoverable expenditure, eligibility criteria, approval requirements, arrangements for sharing learning, reporting requirements and arrangements for the treatment of intellectual property rights.   | WWU             |
| GT <a href="#">SpC 5.4</a> , Vulnerability and carbon monoxide allowance Governance Document            | Allows GEMA to establish and amend the Governance Document, with which licensees must comply, and which will cover eligibility criteria, information publication requirements, arrangements for learning capture and sharing, and reporting obligations.  | WWU             |

| Licence condition  | Description  | Party appealing |
|--|--|-----------------|
| GT <a href="#">SpC 8.2</a> , Annual Iteration Process: Price Control Financial Model (PCFM) Guidance | Allows GEMA to establish and amend the Guidance, with which licensees must comply, and will make provision about: instructions and guidance on how to populate the PCFM Variable Values for submission for an Annual Iteration Process; the process and timeframe for reporting and submitting the required data; and requirements for supporting information, documentation or commentary.                | WWU             |
| GT <a href="#">SpC 9.1</a> , Annual Environment Report Guidance                                      | Allows GEMA to establish and amend the Guidance, which licensees must comply, and will specify: the required engagement with stakeholders; the structure and level of detail, including some of the data metrics to be used; the environmental impacts, relevant Environmental Action Plan Commitments, business practices, existing obligations and activities that must be covered in the Annual Report. | WWU             |
| GT <a href="#">SpC 9.3</a> , PCD Reporting Requirements and Methodology Document                     | Allows GEMA to establish and amend the Document, with which licensees must comply and which will set out how licensees must prepare the required reports, and the methodology GEMA will use when deciding (a) whether to reduce allowances for PCDs that have not been Fully Delivered; and (b) the value of the reduction.  | WWU             |
| Gt <a href="#">SpC 9.4</a> , Re-opener Guidance and Application Requirements Document                | Allows GEMA to establish and amend the Document, with which licensees must comply, and which will set out: the Re-openers to which it applies; the level of detail required in the application; any publication requirements; redaction provisions; and any assurance requirements.  | WWU             |
| GT <a href="#">SpC 9.5</a> , Digitalisation Guidance and Best Practice Guidance                      | Allows GEMA to establish and amend the Guidance, with which licensees must comply, and which will make provision about: how a licensee should work towards digitalisation; the content of a licensee's Digitalisation Strategy and Digitalisation Action Plan; the form of the Strategy and Action Plan; and the required engagement with stakeholders.  | WWU             |

Sources: SPT's NoA, SSEN-T's NoA, WWU's NoA, and supporting documents. [SPT Special Conditions](#); [SSEN-T Special Conditions](#); [WWU Standard Special Conditions, Part A](#); [WWU Standard Special Conditions, Part D](#); [WWU Special Conditions Notes](#)

ET: Electricity Transmission Licence condition. GT: Gas Transporter Licence condition. SpC: Special Condition. SSC: Standard Special Licence Condition (used in Gas Transporter licences).

## ***SSEN-T and SPT***

8.12 SSEN-T and SPT said that GEMA's decision to include in special licence conditions the ability to modify the special licence conditions by issuing directions (SSEN-T refers to this as 'Reserved Powers') was wrong on the following grounds:

- a) wrong in law/ultra vires section 7 of EA89; and
- b) frustrated the statutory right to appeal.

8.13 SSEN-T also argued, in the alternative, that GEMA's use of its 'Reserved Powers' was unlawful in any event as such 'Reserved Powers' were exercised for an improper purpose. SSEN-T's alternative argument is that GEMA acted improperly by using its section 7(5)(b) of EA89 powers to circumvent the statutory provisions in section 11A of EA89.

8.14 SPT said that, in addition or in the alternative, the decision was wrong because GEMA had failed to have regard to the following statutory duties:

- a) the principles under which regulatory activities should be transparent and accountable; and
- b) best regulatory practice.<sup>1263</sup>

## **WWU**

8.15 Unlike SSEN-T and SPT, WWU did not appeal the decision to modify special licence conditions by issuing directions.<sup>1264</sup> Instead, WWU's case was that the decision by GEMA to include obligations in subsidiary documents and provide that those documents could be modified by issuing directions was wrong on the following grounds:

- a) GEMA failed to have regard to its statutory duties; and
- b) The licence modifications failed to achieve, in whole or in part, the stated effect.

## **SSEN-T's and SPT's grounds of appeal**

8.16 We set out the appellants' submissions that the decision by GEMA to include the power to make modifications to Special Licence Conditions by direction was wrong in law/ultra vires and removed statutory protections. We concentrate on what we consider to be the main points but we have taken account of all of the submissions made, both in writing and at the hearings.

## **SSEN-T**

8.17 SSEN-T submitted that GEMA's decision was wrong as it was contrary to the EA89, ultra vires and 'would unlawfully frustrate licensees' statutory right to appeal and the remedies provided to licensees by statute'.<sup>1265</sup> It submitted that EA89 set out 'a complete statutory code for the process to be followed when taking price control decisions [and the use of directions was] unlawful as it undermines and circumvents key features of the statutory scheme prescribed by Parliament'.<sup>1266</sup>

8.18 SSEN-T submitted that it was outside GEMA's explicit statutory duties and obligations to attempt to make Price Control Determinations (ie

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<sup>1263</sup> Although SPT contended, at paragraph 80(2) of its NoA, that GEMA had failed to have regard to these duties, they were not developed in its pleadings or orally. In any event, we reject this submission for the same reasons as we reject the equivalent submission advanced by WWU (see section **Our assessment and conclusions** on WWU's appeal below)

<sup>1264</sup> WWU Reply, D2.3.

<sup>1265</sup> [SSEN-T NoA](#), paragraph 6.28.

<sup>1266</sup> [SSEN-T NoA](#), paragraph 1.57.

implementation of, or material amendment to, a price control) outside the ‘complete statutory code’ in EA89. The use of directions to give effect to a Price Control Determination or any document integral to it or required for implementation or interpretation of it would be contrary to EA89, ultra vires, and would unlawfully frustrate the licensee’s statutory right to appeal and the remedies provided by statute.<sup>1267</sup> GEMA’s decision was therefore ultra vires as it circumvented and ran contrary to the purpose of the statutory regime and the inclusion of the ‘Reserved Powers [ie the power to modify special conditions by way of issuing a direction] and any purported “direction” issued under it is (or would be) unlawful’.<sup>1268</sup>

- 8.19 GEMA’s decision, SSEN-T said, also stood to be set aside as action taken for an improper purpose ‘since GEMA cannot lawfully use the licence modification powers granted to it by section 11A of EA 1989 in order to give itself a free hand to make future modifications of the significance of Price Control Determinations and thereby circumvent the rights and safeguards enshrined in statute, where to do so would plainly frustrate the clear legislative purpose’. In doing so, GEMA would be ‘in breach of its statutory duties which included acting consistently and transparently and would fail to meet the best practice standards expected of a regulator’.<sup>1269</sup>
- 8.20 SSEN-T said that the proper construction of section 7 of EA89 did not permit GEMA to implement a Price Control Determination by a section 7(3) direction or section 7(5) self-modification as these powers were general in nature and not capable of the implementation of a Price Control Determination and that section 11A provided ‘the exclusive mechanism by which any such decisions must be made’.<sup>1270</sup>
- 8.21 The proper use of section 7 and section 11A powers, SSEN-T submitted, was ‘reinforced by the well-established canon of statutory construction that general legislative provisions will not override more specific provisions’ known as ‘*generalia specialibus non derogant*’.<sup>1271</sup> The existence of a ‘bespoke licence modification process in section 11A’ precluded GEMA from relying ‘on more general provisions including in section 7’ to modify its licence conditions by direction.<sup>1272</sup>
- 8.22 SSEN-T submitted that the use of Reserved Powers frustrated its ‘mandatory rights of appeal to the CMA’ as any challenge to a direction would be by way

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<sup>1267</sup> SSEN-T NoA, paragraphs 6.27 and 6.28.

<sup>1268</sup> SSEN-T NoA, paragraphs 6.30 and 6.39.

<sup>1269</sup> SSEN-T NoA, paragraph 6.39.

<sup>1270</sup> SSEN-T NoA, paragraph 6.34.

<sup>1271</sup> SSEN-T NoA, paragraph 6.35.

<sup>1272</sup> SSEN-T NoA, paragraph 6.37.

of judicial review when Parliament, it submitted, had provided for a 'statutory right of appeal to the CMA in respect of Price Control Determinations' which permitted the CMA to substitute its own decision for that of GEMA.<sup>1273</sup> Its right to request suspension of licence modification decisions pending the determination of an appeal by the CMA would also be frustrated by the issuing of directions as these could not be appealed to the CMA.<sup>1274</sup>

8.23 SSEN-T noted that GEMA had included in two of the contested licence conditions that, notwithstanding the power to modify by issuing a direction, where there was a 'significant impact' or a 'significant difference', the SLMP would be used:

- a) For LOTI re-openers, if GEMA's decision was 'significantly different', as assessed by GEMA, from the application submitted by SSEN-T;
- b) For changes to the PCFIs, if GEMA's proposed change would have a 'significant impact', as assessed by GEMA, on licensees.<sup>1275</sup>

8.24 SSEN-T submitted that GEMA had provided no explanation of what power it was relying on for the introduction of the significance test, no definition of 'significant' and no explanation as to why its test of significance should apply only to the two stated mechanisms.<sup>1276</sup>

## **SPT**

8.25 SPT in its NoA said that GEMA's decision to retain for itself the ability to modify special licence conditions by way of future directions was wrong in law (section 11E(4)(e) of EA89) and that GEMA had failed properly to have regard to the principles under which regulatory activities should be transparent and accountable and consistent with best regulatory practice (section 11E(4)(a)).<sup>1277</sup>

8.26 It submitted that by using this procedure rather than the SLMP in section 11A of EA89, the circumstances in which the directions would be made were not specified, rendering the decisions 'materially uncertain' and denying SPT 'procedural protections which the legislator intended to confer'.<sup>1278</sup>

8.27 SPT submitted that the powers to include licence conditions providing for directions to be made at a future date were constrained. Section 7(5)(b)

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<sup>1273</sup> SSEN-T NoA, paragraph 6.41

<sup>1274</sup> SSEN-T NoA, paragraph 6.42

<sup>1275</sup> SSEN-T NoA, paragraph 6.23. *Alkirwi 1* (SSEN-T), paragraph 11.47.

<sup>1276</sup> SSEN-T NoA, paragraph 6.24.

<sup>1277</sup> SPT NoA, paragraph 80.

<sup>1278</sup> SPT NoA, paragraph 65.

required the conditions to specify the ‘circumstances and criteria by or under which GEMA will determine the future direction’.<sup>1279</sup> The reason for the limitations was to ensure that the effect of the licence was sufficiently certain on its face, otherwise the CMA could not properly exercise its appellate jurisdiction over the licence and the licensee would be deprived of its ability to plan and predict the effect of the licence.<sup>1280</sup> The special conditions ‘under consideration did not sufficiently specify the circumstances and criteria for future directions and so are ultra vires section 7’.<sup>1281</sup>

- 8.28 SPT also submitted that by seeking to modify licence conditions by direction, GEMA was ‘circumventing procedural protections’ provided for in sections 11A-H of EA89.<sup>1282</sup> It contended that the purpose of the procedural protections which include the right of appeal to the CMA was ‘to ensure that GEMA is held to account by a process capable of scrutinising factual issues of an economic/technical nature’.<sup>1283</sup> and ‘[b]y purporting to grant itself unilateral powers to amend licence conditions by direction, especially in situations involving sums material to the price control and likely to involve detailed factual and/or economic inquiry, GEMA is circumventing the procedural protections’.<sup>1284</sup>

### ***GEMA’s Response and appellants’ Replies***

- 8.29 GEMA responded to the grounds of appeal raised by the appellants saying they were ‘without merit’ as there are ‘express statutory powers that facilitate modifying of conditions and making of directions through the licence other than by recourse to the [SLMP]’ and the EA89 and GA86 ‘expressly recognises that these powers exist alongside the [SLMP]’.<sup>1285</sup> It said that ‘the regulatory flexibility these powers provide was ‘important in ensuring the price control remains workable and efficient’, and it had considered carefully when these ‘alternative powers should be implemented in licence conditions [and it] committed no error of law and its exercise of regulatory judgment in this manner is not otherwise apt to be interfered with’.<sup>1286</sup>
- 8.30 GEMA submitted that the use of directions was necessary and appropriate because:

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<sup>1279</sup> SPT NoA, paragraph 70

<sup>1280</sup> SPT NoA, paragraph 71.

<sup>1281</sup> SPT NoA, paragraph 72.

<sup>1282</sup> SPT NoA, paragraph 78.

<sup>1283</sup> SPT NoA, paragraphs 74 to 76.

<sup>1284</sup> SPT NoA, paragraph 78.

<sup>1285</sup> GEMA Response B, paragraph 172.

<sup>1286</sup> GEMA Response B, paragraph 172

- a) the drive to Net Zero was creating uncertainty about exactly what investment was required resulting in an increased number of UMs;
- b) it would allow GEMA to deliver outcomes more quickly during the price control and ensured 'up-to-date information was reflected on the face of the licence in a timely fashion'; and
- c) avoided 'the disproportionate administrative burden on both GEMA and stakeholders, of multiple Statutory Modification Procedures'.<sup>1287</sup>

8.31 On its approach to managing uncertainty GEMA submitted that:

- a) it had 'substantial discretion as to ... how to deal with uncertainties' and this included 'substantial discretion as to the balance that it chooses to strike between ex ante precision at the outset and responsiveness to matters that may change during the course of the price control';
- b) by the use of directions it had 'struck the right balance between certainty at the outside of the price control and responsiveness to matters that may change over the course of RIIO-2' and that it had suitably consulted with relevant stakeholders on how it will use these powers;<sup>1288</sup>
- c) the drive to Net Zero 'is creating unprecedented demand for investment ... [and] it is not currently clear exactly how or where that investment will be required' which accounts for the increased UMs;<sup>1289</sup>
- d) because of the increased number of PCDs and UMs 'the most suitable regulatory approach... is to set out in licence conditions at the outset how those adjustments will be made' ensuring 'the licence has capacity to respond to "known unknowns" while ensuring that principles of public law fairness... are adhered to' as the alternative would be to use the SLMP which was 'sub-optimal' and the better approach was the 'transparent, built in framework'.<sup>1290</sup>

8.32 On the use of 'the alternative process set out in the licence', GEMA submitted that:

- a) the use of 'self-modification' is 'not new to price controls' and had been used in RIIO-1;

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<sup>1287</sup> GEMA Response B, paragraph 173.

<sup>1288</sup> GEMA Response B, paragraph 185.

<sup>1289</sup> GEMA Response B, paragraph 187(3).

<sup>1290</sup> GEMA Response B, paragraph 189.



- b) where self-modification is used, licence conditions ‘have a consistent structure’ in that they provide:
  - (i) for the authority to modify the condition by direction and for the licensee to apply for a direction to adjust a term in the price control period;
  - (ii) the process GEMA will follow in making a direction, including a consultation period before the direction is made;
  - (iii) how the licence condition is to be modified; and
  - (iv) the scope, extent and circumstances in which the condition may be modified; and,
- c) it enabled a responsive, flexible price control with outcomes delivered more quickly ‘compared to the rigidity of the [SLMP]’ with up-to date information reflected on the face of the licence and ‘avoids a disproportionate administrative burden on GEMA and stakeholders of multiple [SLMPs] during the course of a price control’.<sup>1291</sup>

8.33 GEMA responded to each appellant’s grounds of appeal.

#### *Response to SSEN-T*

8.34 In its response to SSEN-T, GEMA said that:

- a) its appeal was wrong in law;<sup>1292</sup>
- b) the statutory provisions in EA89 (in section7(5)(b) that a licence condition could provide for conditions to be modified by direction and section7(6) that the section7(5)(b) provision has effect ‘in addition to’ other provisions with respect to licence modifications) showed ‘Parliament had expressly addressed the question of whether there was procedural exclusivity in the manner of modifying a licence condition and has confirmed that there is not’;<sup>1293</sup>
- c) there was no room for the general presumption [that general provisions do not override specific provisions] of statutory interpretation to operate where the legislative intent has been made clear;<sup>1294</sup>

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<sup>1291</sup> GEMA Response B, paragraph 190.

<sup>1292</sup> GEMA Response B, paragraph 206.

<sup>1293</sup> GEMA Response B, paragraph 207.

<sup>1294</sup> GEMA Response B, paragraph 209.



- d) it was inaccurate to characterise the power in section 7(5) of EA89 as the general power, and the [SLMP] as the specific power as '[t]hey are simply two alternative procedural routes';<sup>1295</sup>
- e) the CMA's decision in *SONI*<sup>1296</sup> showed that 'it was without legal merit to suggest that the mere existence of the statutory appeal right to the CMA in section 11C of EA89 means that GEMA is prevented from taking or implementing decisions in the course of a price control that would instead be subject to judicial review';<sup>1297</sup>
- f) 'judicial review is an adequate alternative remedy' and SSEN-T's characterisation of decisions subject to judicial review as being unappealable was misleading as 'any decision taken by GEMA during the course of the price control is amenable to judicial review';<sup>1298</sup> and
- g) any 'decision and Direction would be subject to GEMA's statutory duties in EA89 and GA86'.<sup>1299</sup>

### *SSEN-T's Reply*

8.35 In its Reply to GEMA's Response, SSEN-T said:

- a) 'price control decisions, including decisions which materially amend a price control or any part thereof (a Price Control Determination)... must be effected by way of the [SLMP] ... which has important attendant rights and safeguards for licensees, including the right to be consulted and to appeal to the CMA';<sup>1300</sup>
- b) 'GEMA has no power under EA 1989 to make such decisions by way of mere directions, and moreover has no power to amend SSEN Transmission's licence by way of the statutory licence modification procedure so as to confer upon itself such powers of direction';<sup>1301</sup> and
- c) Parliament 'plainly' did not intend that the SLMP would be entirely optional and used only if and when GEMA 'chooses to undergo a procedure which it evidently considers burdensome and inconvenient'.<sup>1302</sup>

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<sup>1295</sup> [GEMA Response B](#), paragraph 209.

<sup>1296</sup> CMA, 2017, *SONI Limited v Northern Ireland Authority for Utility Regulation, Final determination*, (**SONI**).

<sup>1297</sup> [GEMA Response B](#), paragraph 218.

<sup>1298</sup> [GEMA Response B](#), paragraph 219.

<sup>1299</sup> [GEMA Response B](#), paragraph 219.

<sup>1300</sup> [SSEN-T Reply](#), paragraph 5.2(a).

<sup>1301</sup> [SSEN-T Reply](#), paragraph 5.2(b).

<sup>1302</sup> [SSEN-T Reply](#), paragraph 5.4.

8.36 On GEMA's reliance on section 7 of EA89 for the 'self-modification' procedure as an alternative to the SLMP, SSEN-T submitted that:

- a) GEMA 'does not advance any submissions on the proper interpretation or relevance of this provision';<sup>1303</sup>
- b) 'sections 7(5)(b) and 7(3)(a) (whether singly or in combination) do not give GEMA the power to include licence conditions which incorporate a mechanism for future modification to the conditions by way of directions';<sup>1304</sup>
- c) '[t]he statute must be construed in a way that recognises a proper role for both the bespoke Statutory Modification Procedure (as the primary means of modifying licence conditions) and the general licensing provisions in section 7'.<sup>1305</sup>

8.37 SSEN-T submitted that the dividing line between the two powers was a test of materiality: between decisions which materially amend a price control and minor modifications which do not.<sup>1306</sup>

8.38 On the issue of the administrative burden of the SLMP and its suitability for in-licence modifications, SSEN-T submitted that:

- a) there was nothing onerous in the procedural requirements of the SLMP which were 'appropriate and proportionate in the context of decisions on which hundreds of millions of pounds of revenue may depend';<sup>1307</sup>
- b) '[t]here could be no objection to consultation per se, not least as even on GEMA's own approach it intends to consult for 28 days before making directions (ie the same period as is prescribed by section 11A(3))';<sup>1308</sup>
- c) the 56 day standstill period was 'a necessary feature of the statutory scheme in order to ensure that a licensee's appeal rights are effective';<sup>1309</sup> and
- d) it was 'not open to GEMA to choose to place very substantial elements of the revenue which licensees may stand to receive into the category of the various UMs or Evaluative PCDs, and then rely on the fact that GEMA will therefore need to make lots of decisions during the price control period as

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<sup>1303</sup> SSEN-T Reply, paragraph 5.10.

<sup>1304</sup> SSEN-T Reply, paragraph 5.11.

<sup>1305</sup> SSEN-T Reply, paragraph 5.21.

<sup>1306</sup> SSEN-T Reply, paragraph 5.21.

<sup>1307</sup> SSEN-T Reply, paragraph 5.27.

<sup>1308</sup> SSEN-T Reply, paragraph 5.27.

<sup>1309</sup> SSEN-T Reply, paragraph 5.27.

a basis for arguing that following the [SLMP] would be too burdensome'.<sup>1310</sup>

- 8.39 On the test of significance, SSEN-T submitted 'there is no definition of what this term means and it is evidently highly subjective. As a result, the applicability of the [SLMP] is wholly at GEMA's discretion. ... a licensee would first have to successfully challenge GEMA's decision as to significance by judicial review before securing to itself the rights and safeguards of the Statutory Modification Procedure, including the possibility of an appeal to the CMA. This cannot be what Parliament intended in enacting sections 11A to 11H'.<sup>1311</sup>

### *Response to SPT*

8.40 In its response to SPT, GEMA submitted that:

- a) SPT did not properly set out or otherwise explain its ground of appeal sufficiently;
- b) the drafting in each condition of the licence made sufficiently clear when the power in the condition can be used,<sup>1312</sup>
- c) 'there is no strict dividing line depending on sums involved and level of factual accuracy ... that renders the use of the [SLMP] mandatory';<sup>1313</sup>
- d) it had used its regulatory judgement as to the appropriate dividing line and could, therefore, only be challenged on 'Wednesbury' unreasonableness grounds;
- e) a 'significance threshold' was an appropriate mechanism to determine when a Direction could be used in licence, and when the SLMP must be followed and GEMA was entitled to develop the test and apply it when determining when it would use Directions and when a modification must be achieved through the [SLMP];<sup>1314</sup>
- f) the instances where modification may be achieved by direction were all 'circumstances where, as the expert regulator, [GEMA] formed the view that it [was] appropriate' for it to use that procedure and to challenge any one of those circumstances must also be done showing it had acted 'so

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<sup>1310</sup> [SSEN-T Reply](#), paragraph 5.29.

<sup>1311</sup> [SSEN-T Reply](#), paragraph 5.34.

<sup>1312</sup> [GEMA Response B](#), paragraph 221.

<sup>1313</sup> [GEMA Response B](#), paragraph 224.

<sup>1314</sup> [GEMA Response B](#), paragraph 226.

unreasonably such that no reasonable authority could have come to the determination’;<sup>1315</sup> and

- g) to use the SLMP for all such changes ‘would be impractical and unworkable for Ofgem’ and would also adversely impact on licensees, resulting in a slow, unresponsive regulatory process and undue regulatory burden.<sup>1316</sup>

### *SPT’s Reply*

8.41 In its Reply to GEMA’s Response, SPT submitted that:

- a) ‘unless the licence condition specifies the circumstances and the criteria by or under which GEMA will determine the future direction, the licence condition is ultra vires. GEMA simply has no power to make an open-ended licence condition with vague and uncertain consequences’;<sup>1317</sup> and

- b) ‘circumvention of the procedural protections in EA 1989 is unlawful’.<sup>1318</sup>

8.42 SPT replied regarding the interpretation of section 7 of EA89 that ‘Parliament’s intention in section 7 EA 1989 is primarily to be ascertained by reference to the text and context of the statute, not GEMA’s view today of how the system ought to have been designed for its convenience’<sup>1319</sup>

8.43 On the ‘administrative burden’ of using the SLMP to make modifications, SPT replied that:

- a) a CMA appeal may be speedier than judicial review as the CMA appeal must be commenced within 20 working days and judicial review in 3 months, and the CMA decision on permission period is fixed at 10 days following GEMA’s representations whereas there is no deadline for a court decision on permission to appeal. The CMA must make its decision within 5 months maximum whereas under judicial review there is no such deadline;<sup>1320</sup>
- b) the 56 day standstill required by section 11A(8) of EA89 before a licence modification could take effect, ‘is of no real adverse consequence’ within a 5 year price control;<sup>1321</sup> and

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<sup>1315</sup> [GEMA Response B](#), paragraphs 227 to 228.

<sup>1316</sup> [GEMA Response B](#), paragraph 229.

<sup>1317</sup> [SPT Reply](#), paragraph 31.

<sup>1318</sup> [SPT Reply](#), paragraph 33

<sup>1319</sup> [SPT Reply](#), paragraph 37

<sup>1320</sup> [SPT Reply](#), paragraph 43(3).

<sup>1321</sup> [SPT Reply](#), paragraph 40.

- c) GEMA's assessment of 'disproportion' was one sided as it meant inconvenience to the regulator. 'Disproportion is properly to be assessed also taking into account the countervailing benefits to licensee, consumer and other interested parties of maintaining the protections inherent in the licence modification scheme'.<sup>1322</sup>

8.44 On the significance test, SPT submitted that there was no statutory basis for this test and it was wholly subjective.<sup>1323</sup>

### ***Clarification hearings***

#### ***SSEN-T***

- 8.45 At its clarification hearing, SSEN-T said that GEMA's planned use of a 'significance' test under which it may decide to use section 7 rather than section 11A was ultra vires.<sup>1324</sup> It said that Parliament, in providing for the section 7 and section 11A processes, could not have 'intended for it to be possible to draw such an arbitrary line'.<sup>1325</sup> On the ability to modify PCFIs by direction, SSEN-T said that as these were treated as licence conditions, any modification should be under the SLMP and 'in the past GEMA would allow a statutory appeal and would allow the licensee to insist on that for modification such as this. That has been changed'.<sup>1326</sup>
- 8.46 In the clarification hearing, SSEN-T reiterated its view that GEMA lacked the statutory power to introduce licence conditions which it could modify by direction later.<sup>1327</sup> It said that the decisions to be taken under this process were of the exact same nature as those in the price control and what section 7(5)(b) had in mind was 'mechanical or mechanistic modification of the licence, where the way in which the licence will be modified is specified in advance and flows automatically from some incontrovertible, factual development'.<sup>1328</sup> The proper ambit of section 7(5)(b) it submitted, was 'mechanistic or automatic modifications where the criteria and effect on the licence is known in advance, and not complex, evaluative or discretionary decisions that have a material impact on the price control'.<sup>1329</sup> 'Any decision of an evaluative or discretionary nature that has a material impact, more than de minimis impact on the price control, is the kind of decision that Parliament has

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<sup>1322</sup> SPT Reply, paragraph 42.

<sup>1323</sup> SPT Reply, paragraph 44.

<sup>1324</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 53, lines 19–21 and line 26.

<sup>1325</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 25, lines 8–10.

<sup>1326</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 56, lines 20–24.

<sup>1327</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 22, line 23 to page 23, line 3.

<sup>1328</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 23, lines 23–26 and page 24, lines 1–2.

<sup>1329</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 51, lines 17–21 and page 52, lines 8–12.

intended should be done through modification of the licence and through using the statutory licence modification procedure'.<sup>1330</sup>

- 8.47 SSEN-T reiterated its statutory interpretation argument that the general power in section 7 could not override the specific power in section 11A to modify licences. It said that GEMA's reason of administrative convenience for adopting this method did not 'provide any cogent or valid basis for interpreting the statutory scheme ... to enable them, by way of exercise of discretion, decide not to use that scheme'.<sup>1331</sup> It commented that it was difficult to see where the administrative convenience lay as both processes provided for a consultation period and concluded that 'what GEMA particularly wants to avoid is the right of appeal to the CMA and it wants licensees instead to have to resort to challenge by judicial review if they are not happy with what is decided'.<sup>1332</sup>
- 8.48 SSEN-T drew support for this conclusion from the distinction that GEMA drew for applying a significance test for LOTI re-openers and PCFIs. It said 'there is no reason that we can discern why Parliament would have been intended for it to be possible to draw such an arbitrary line. It really, frankly, demonstrates that there is no principled basis for GEMA's approach which in effect would render the statutory modification procedure otiose, say [sic] in so far as GEMA decides to the contrary. That is not what Parliament had in mind'.<sup>1333</sup>
- 8.49 It also said if it were wrong on the vires point, 'in the alternative that any power GEMA had it exercised unlawfully... [w]hat it has done is contrary to what Parliament had in mind'.<sup>1334</sup>

## *SPT*

- 8.50 At its clarification hearing, SPT explained that there was 'no such thing' as self-modification in EA89 but there were powers to make conditions requiring compliance with directions and to make conditions that may be modified by direction. Section 7 required that conditions requiring compliance with directions must, 'specify with clarity the circumstances in which a modification will be triggered and the objective criteria by which the modification will then be determined' and it would be 'inconsistent with the language of the statute' to confer a right 'to make future directions or modify conditions on a basis that

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<sup>1330</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 50, lines 12–16.

<sup>1331</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 25 lines 5–7.

<sup>1332</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 25, lines 7–14.

<sup>1333</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 26, lines 9–14.

<sup>1334</sup> SSEN-T Clarification Hearing Transcript, 14 May 2021, page 26, lines 16–18.

is not specified in the original licence condition or in terms that are vague and unspecific'.<sup>1335</sup>

8.51 SPT said that for a direction to be 'lawful and within the scheme of the Act, at a minimum it must be possible to predict in advance the precise circumstances of when the direction will arise, what the trigger will be, and there must be clear objective criteria by which it will then be predictably determined, by which the change will be determined. So, that way, the licensee and others will know where they stand from the outset, and if they disagree with GEMA's advanced determination of those circumstances, or the criteria it proposes to use to modify, it can then appeal them to the CMA at the outset'.<sup>1336</sup> Where GEMA 'cannot stipulate in advance GEMA must use the statutory modification procedure'.<sup>1337</sup>

8.52 It explained that the statutory scheme required 'a sufficiently specified trigger for a modification in the licence' and criteria for how it would be modified. That would allow a licensee to appeal on the merits 'at the outset', ie when the licence condition was set. When the direction was made and the licensee thought there had been a misapplication of the criteria, then judicial review at that stage became appropriate.<sup>1338</sup>

8.53 SPT said that there 'might be circumstances in which a condition could have criteria which allowed for some discretion'.<sup>1339</sup>

8.54 In relation to Evaluative PCDs, SPT explained that because the methodology itself could be changed by direction and the assessment of 'fully delivered' was done on a case by case basis, PCDs were not really susceptible to being captured in mechanical guidelines.<sup>1340</sup>

8.55 For LOTI re-openers, SPT explained 'due to their nature, their size, their complexity and their unknown nature, there should really, we say, be a statutory consultation in respect of them, because that is in the interests not just of licensees but also of consumers. So whether you give the ability to determine significance to GEMA or to the licensee, it still does not make it really appropriate to circumvent the statutory process'.<sup>1341</sup>

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<sup>1335</sup> SPT Clarification Hearing Transcript, 20 May 2021, page 31, lines 2–21.

<sup>1336</sup> SPT Clarification Hearing Transcript, 20 May 2021, page 32, lines 8–15.

<sup>1337</sup> SPT Clarification Hearing Transcript, 20 May 2021, page 33, lines 11–16.

<sup>1338</sup> SPT Clarification Hearing Transcript, 20 May 2021, page 61, lines 10–20.

<sup>1339</sup> SPT Clarification Hearing Transcript, 20 May 2021, page 58, lines 23–25 and page 59, lines 1–3.

<sup>1340</sup> SPT Clarification Hearing Transcript, 20 May 2021, page 65, lines 23–24 and page 66, lines 1–2.

<sup>1341</sup> SPT Clarification Hearing Transcript, 20 May 2021, page 67, lines 16–21.

8.56 At its clarification hearing GEMA said that:

- a) Parliament gave GEMA express statutory powers to make in-period modifications or decisions, to create and revise Associated Documents from time-to-time, and these powers were expressly stated in this section to be in addition to the powers of sections 11A to H;<sup>1342</sup>
- b) the scope of the directions process was transparent in each of the licence conditions and enabled GEMA to identify at the outset of the price control how it intended to deal with known unknowns and set out a clear regulatory framework, 28-day consultation period, as well as prescribed triggers for the use of any particular power;<sup>1343</sup> and
- c) it understood that the powers in sections 7(5)(b) and section 11A of EA89 were two specific powers that GEMA could choose between rather than one general power in section 7 and one specific power in section 11;<sup>1344</sup>

8.57 GEMA said that the crux of the appellants' challenge was to have the right of appeal to the CMA for all GEMA's decisions but any decision that is taken during the course of the price control that did not attract a CMA right of appeal could be judicially reviewed. It said that judicial review enabled a court to overturn GEMA's decisions 'if they are clearly unreasonable on the facts and/or indeed, if it is based on clear error of fact' and that the CMA had already looked at this question in *SONI* where it said that judicial review was a flexible remedy.<sup>1345</sup>

8.58 GEMA explained that the drive to Net Zero required it to design a price control in a changing environment where it could not forecast accurately all the future network investments so it decided to use self-modification to make RIIO-2 an adaptable and agile price control. Self-modification enabled it to strike the right balance between certainty at the outset and responsiveness to changes, whilst being transparent on the treatment of known unknowns in the price control. GEMA explained that self-modification ensured quick delivery of outcomes with a reduced resource burden. The alternative would be to undertake many modifications using the SLMP 'each with a rigid consultation requirement, including the 56 day standstill periods, which would impose disproportionate administrative burden on Ofgem and stakeholders for the type of modification being made to the licence and would slow down the

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<sup>1342</sup> GEMA Clarification Hearing Transcript, 21 May 2021, Part 3 page.36 lines 5–13.

<sup>1343</sup> GEMA Clarification Hearing Transcript, 21 May 2021, Part 3, page 36, lines 19–25.

<sup>1344</sup> GEMA Clarification Hearing Transcript, 21 May 2021, Part 3, page 43, lines 8–11.

<sup>1345</sup> GEMA Clarification Hearing Transcript, 21 May 2021, Part 3 page 38 lines 8–35.



setting of important outputs and allowances'. Self-modification included consultation with licensees and decisions would be subject to judicial review.<sup>1346</sup>

- 8.59 GEMA gave the example of 35 PCD decisions to be taken during the price control to illustrate the administrative burden of using the SLMP.<sup>1347</sup>
- 8.60 GEMA explained that it was difficult to be prescriptive on the significance test, and, using LOTI as an example, explained 'we will be taking all the evidence from the network companies, from other stakeholders, getting all relevant views whether indeed we reached the point that the difference is significant enough for us to go for the statutory modification process'.<sup>1348</sup> It also explained LOTI and PCFIs were 'two areas ... more likely to be of significance and of complexity that we would believe to be proportionate to adopt the statutory consultation'.<sup>1349</sup>
- 8.61 GEMA explained under RIIO-1 the licence 'contained an additional provision that provided "[i]f the Licensee demonstrates in representations ... that it reasonably considers that the proposed modification would be likely to have a significant impact ... the Authority may not make the modification ...". This additional provision ... provided [the licensee] a veto over any proposed modification by GEMA by way of Self Modification'<sup>1350</sup> and it had removed in RIIO-2 the 'veto' rights because 'we just believe it is not right for GEMA, the independent regulator, the decision-maker, to be frustrated by a simple, automatic veto right by the network companies' but stressed it would not make the decision without any evidence from network companies and other stakeholders.<sup>1351</sup>

### ***Joint Hearings***

- 8.62 At the joint hearings, the legal arguments on this ground were further developed, as summarised in this section.

### ***SSEN-T and SPT***

- 8.63 The appellants' agreed position on self-modification was that it was something that was 'truly mechanical or automatic' and there was no scope for evaluative or discretionary decisions about when or the extent to which the licence would

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<sup>1346</sup> GEMA Clarification Hearing Transcript, 21 May 2021, Part 3 page 39 and page 40 lines 1–15.

<sup>1347</sup> GEMA Clarification Hearing Transcript, 21 May 2021, Part 3, page 51 lines 11–23.

<sup>1348</sup> GEMA Clarification Hearing Transcript, 24 May 2021, Part 3, page 52, lines 13–16.

<sup>1349</sup> GEMA Clarification Hearing Transcript, 24 May 2021, Part 3, page 55, lines 2–3.

<sup>1350</sup> *Zhu 1 (GEMA)*, paragraph 143.

<sup>1351</sup> GEMA Clarification Hearing Transcript, 24 May 2021, Part 3, page 55 lines 21–25.

be modified. They submitted this was based on both the wording of section 7(5)(b) and the policy and purpose and the wording of section 11.<sup>1352</sup>

- 8.64 Their agreed position was that section 7(5)(b) required that the licence ‘must spell out what the modification will be, how the modification will take place and what it will be’.<sup>1353</sup> The conditions must themselves ‘specify clearly and predictably the times and/or circumstances when the modification will be triggered or, at very least, the objective criteria by which such times and circumstances can be determined under the licence’.<sup>1354</sup> This was ‘crucially important in order for the licensee to have an effective right of appeal when the modification is introduced, because if you have the introduction by modification of a broad reserved power of the kind that Ofgem has sought to give itself here, but you do not as a licensee actually know what is going to happen if there is a modification, or indeed when or whether there will be one, you cannot meaningfully exercise your right of appeal against that modification’.<sup>1355</sup>
- 8.65 SSSEN-T submitted that section 11A which was inserted in 2011 enabled GEMA to make autonomous licence modifications where prior to the amendment it could only do so with licensee consent, but this was subject to the licensees’ right of appeal to a specialist body, initially the CC and then the CMA.<sup>1356</sup> SSSEN-T submitted, ‘[i]t would be very odd if section 7, which was there from the outset, could have been interpreted so as to completely undermine those strong protections that were at that time in place for the licensees’.<sup>1357</sup>
- 8.66 SPT added that ‘the natural meaning of section 7(5)(a) and (b) was that the licence conditions must themselves specify clearly and predictably both the times and the circumstances in which a modification would be triggered, and, also, what the future modification will be’.<sup>1358</sup> ‘It was not open to GEMA to take evaluative or discretionary judgements during a price-control period, either as to when the modification is triggered or as to how the modification is to be implemented’.<sup>1359</sup> SPT said ‘[t]hat is important. It is important both because it allows the licensee to plan and predict the effect of its licence. It is important because it preserves, the only way to preserve its meaningful right of appeal, since neither the licensee nor the CMA would be able to assess the

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<sup>1352</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 7–8.

<sup>1353</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 8, lines 8–10.

<sup>1354</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 8, lines 18–21.

<sup>1355</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 9, lines 3–9.

<sup>1356</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 10, lines 5–15.

<sup>1357</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 12, lines 21–24.

<sup>1358</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 14, lines 22–25.

<sup>1359</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 15, lines 17–22.

conditions, future operation, and effect, or therefore challenge it on the merits’.

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- 8.67 SPT said ‘the circumstances giving rise to these future licence modifications are just so vague and so flexible, the manner of any future modification is just completely at large, and there is nothing against which any appeal on the merits can meaningfully be made. We say ... that it would be contrary to the requirements of transparency and accountability, which are also enshrined in section 3A(5A) of the Electricity Act 1989’.<sup>1361</sup>
- 8.68 SPT and SSEN-T made submissions concerning the legislative history of EA89. SPT said that from inception, licensees had always had extensive protections from prejudicial modifications.<sup>1362</sup> Section 7(5) and its substantially similar predecessors had always been included along with provision that a licence condition could only be modified either with the consent of the licence holder or pursuant to a licence modification- reference which granted licensees extensive protections against potential prejudicial modifications which could not be imposed without licensee consent or without the intervention and scrutiny of an independent expert body.<sup>1363</sup> Sections 11A-11H were introduced with the legislative intention to ensure that GEMA could make autonomous licence modifications but preserving safeguards for licensees with a right to appeal those to the CMA on a merits basis.<sup>1364</sup>
- 8.69 SPT submitted that the regime in section 11A was ‘a detailed procedural framework for proposing, consulting on, and, where necessary, challenging modifications. That reflects Parliament’s intention that licensees, and certain others, should have a right to appeal modifications to the CMA, and that the Secretary of State should have a power of veto’.<sup>1365</sup> The regime in section 11A, SPT submitted, demonstrated that when ‘modification [by means of self-modification] does occur, it therefore will not involve any fresh exercise of any real discretion or any real exercise of evaluation. It will essentially be an implementation of a discretionary evaluation which has already been exercised and which has been, as it were, hardwired or baked into the terms of the self-modifying condition’.<sup>1366</sup>
- 8.70 SPT submitted that section 7(5)(b):

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<sup>1360</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 16, lines 3–5.

<sup>1361</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 16, lines 8–14.

<sup>1362</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 17, lines 19–20.

<sup>1363</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 16–20.

<sup>1364</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 9–11.

<sup>1365</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 15, lines 6–10.

<sup>1366</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 15, line 23 to page 16, line 2.

- a) provided for inclusion of a condition in the licence that contained a provision that the condition may be modified and ‘the licence must specify or determine both the circumstances in which the termination or modification takes effect – so in other words it must specify what might be called the trigger for the modification – and it must also specify or determine the manner of the modification’;<sup>1367</sup> and
- b) required that the licence condition specify ‘how it is going to be changed as a matter of substance’ and ‘all of the conditions under which the future modifications occur’.<sup>1368</sup>

8.71 SPT submitted that:

- a) when section 7(5)(b) was used properly, the protections under section 11A would be superfluous ‘because of the requirements that the trigger for the modification and the subsequent form of the modification are both specified in the licence itself, and that requirement for specification within the licence ensures that the protections granted by section 11A can be exercised when the self-modifying provision is first introduced’;<sup>1369</sup>
- b) the right to challenge that framework or structure at the inception of the self-modifying licence condition could only be meaningfully challenged if the framework and the structure were adequately specified;<sup>1370</sup> and
- c) ‘it must be the case for this scheme to hang together that the condition must set out both the trigger for the modification and the form of the future modification with sufficient specificity, with sufficient clarity and precision, that a meaningful challenge can be made when, on the merits, the condition is first introduced. And that requires that the trigger and the future modification must be described in the licence in a way that is sufficiently precise and fixed that they are predictable and clear. And if either the circumstances of the trigger or the manner of the future change is identified in a fashion that is so vague or devoid of meaning, devoid of real substance, or is so changeable that no meaningful challenge can be made to the substance of the condition when it is introduced, then it cannot meet the statutory standard of specificity’.<sup>1371</sup>

8.72 SPT submitted that the appellants’ position was that ‘to ensure that a meaningful right to appeal is not circumvented a particular degree of

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<sup>1367</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 19 lines 6–10.

<sup>1368</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 19, lines 13–14 and line 16.

<sup>1369</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 21, lines 17–20.

<sup>1370</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 21, lines 11–13.

<sup>1371</sup> Licence Modification Joint Hearing Transcript, 28 June 2021. Page 21, line 23 to page 22, line 7.

specificity is required. We say with SSEN that there can be no substantive exercise of discretion or evaluation pursuant to the criteria laid down in section 7 at all'.<sup>1372</sup>

8.73 In considering the specific licence conditions appealed, SPT submitted that:

- a) the developments that triggered the Net Zero modification 'are so vague as to be almost meaningless'<sup>1373</sup> and that there was 'no specificity at all in the licence conditions, or even cross referred- to in the licence conditions, as to which parameters will be changed, or on what grounds, or to what extent';<sup>1374</sup> and
- b) for other conditions such as 'the LOTI regime, the MSIPs, the NARMs, the uncertain non-load related projects and the PCDs – we acknowledge there is some guidance on the trigger and the manner, albeit that in many cases it was so late that it came after the licence itself, but in each case the problem is that the guidance is subject to change on the part of GEMA, and that change can be made by direction' at any time depriving the licensee of a meaningful appeal.<sup>1375</sup>

8.74 Giving the example of the wider works PCD, SPT submitted that the entire means of determining whether a downward adjustment would be made to the allowance was set out in documents which GEMA could change by direction and without recourse to the SLMP and any right of appeal to the CMA.<sup>1376</sup> It submitted that it was 'impossible to know in advance with any real confidence how an assessment would be undertaken, or by reference to which objective criteria, standards or expectations the output would be assessed'.<sup>1377</sup>

8.75 SPT submitted that self-modification in its view was not entirely mechanical or automatic because where there was 'clear, precise, objective criteria to identify the trigger for the change and the manner of the change, nevertheless those changes still, often at least, have to be verified or recognised or implemented' and 'there might be a judicial review of those very narrow implementation decisions' but 'that is a very different sort of beast to the kind of decisions that GEMA is intending to hold over for future substantive modifications'.<sup>1378</sup>

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<sup>1372</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 21, lines 17–20.

<sup>1373</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 22, lines 22–24.

<sup>1374</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 23, lines 9–12.

<sup>1375</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 23, pages 17–23.

<sup>1376</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 27, lines 19–25.

<sup>1377</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 29, lines 12–15.

<sup>1378</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 24, lines 23–25 and page 25, lines 3–6.

- 8.76 On the use of ‘significance’ SSEN-T submitted that there was no statutory basis for tests of significance or materiality or for introducing them regarding PCDs and LOTI. It was a question of licence modification, to which section 11A applied.<sup>1379</sup>
- 8.77 SSEN-T submitted that there was no basis in the statutory scheme for when ‘significance’ was to be used or not and GEMA’s restriction to its use in the case of LOTI and PCFI was ‘arbitrary and irrational’ because ‘however you define “significance”, all of the matters that are dealt with through the reserved powers that we challenge, on any view, fall to be classified as significant.’<sup>1380</sup>

## *GEMA*

- 8.78 GEMA, in responding, submitted that that the question in law was whether the licence conditions were within section 7 and whether that power had been exercised consistently with the principal objective and the duties in 3A of the EA89.<sup>1381</sup> It said it was ‘not right’ that section 7 and the SLMP were competing as they were two separate arrangements. It also said that section 7 should not be read down by reference to appellate mechanisms as the appellants were seeking to do.<sup>1382</sup>
- 8.79 GEMA said that Parliament intended that evaluative decision-making could be built into licence conditions and it was not wrong in law if the self-modification condition failed to set out the time or the circumstances. The proper approach was, it submitted, to consider if GEMA had proper regard to its statutory duties.<sup>1383</sup>
- 8.80 GEMA outlined the legislative history and submitted that EA89 provided a broad framework ‘for those putting in place the licence to do what is requisite or expedient having regard to those statutory duties’.<sup>1384</sup> It submitted that ‘[a] generality of licence conditions which plainly enables the possibility of evaluative conditions, where you can have provisions made for determining the terms of agreements, and there is no basis on which that will be said that it has to be spelled out what the terms must be in the licence condition, but those conditions can be included, it is difficult to understand how one can exclude evaluative considerations’.<sup>1385</sup>

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<sup>1379</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 24, lines 8–12.

<sup>1380</sup> Licence Modification Joint Hearing Transcript, 28 June 2021, page 11, line 16 to page 12, line 4.

<sup>1381</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 32, lines 21–24.

<sup>1382</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 33, lines 7–8, 15, 19–20 and page 48, lines 12–16.

<sup>1383</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 34.

<sup>1384</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 40, lines 4–6.

<sup>1385</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 40 lines 20–25.

- 8.81 GEMA submitted that section 7(5)(b) required that the time, manner and circumstances be set out but not the conclusion. Parliament it said had put in place a broad scheme for potential licence conditions as it recognised there would be known unknowns. It submitted that the question was whether the self-modification condition contained a sensible, transparent methodology built into it.<sup>1386</sup>
- 8.82 On the significance test, GEMA submitted that it was not in the statute but the relevant question was ‘whether or not, using that sort of condition in that self-modification provision concerned with those particular matters, was a sensible, proportionate, transparent methodology to build into the scheme of licence conditions’.<sup>1387</sup> It said the significance parameter was the ‘relevant consideration in the conscientious assessment of whether the scheme that we are putting forward in the licence condition is proportionate as well as being transparent in these circumstances’.<sup>1388</sup>
- 8.83 GEMA said that ‘nothing in the language of section 7(5) or indeed the structure or overall tone [and] purpose of 7’ suggested that it was confined to ‘mechanistic’ or ‘non-evaluative’ matters and an application of a purely mechanistic matter would not amount to a modification of the licence.<sup>1389</sup> It submitted that in order to determine if a modification complied with section 7(5)(b) it was not a matter of mechanistic or evaluative but whether it complied with the statutory duties set out in section 3A and was transparent.<sup>1390</sup>
- 8.84 GEMA submitted that section 7(5) should not be construed restrictively. It said the legislative scheme enabled licensees to appeal the licence conditions including those which allowed for self-modification to the CMA and section 11E enables the CMA to determine if, in setting the licence conditions, GEMA had proper regard to its statutory duties. It said that failure to specify time or circumstances could be challenged. It said that if the licence conditions were approved by the CMA the licensees had a further right of appeal through judicial review when the self-modification was implemented.<sup>1391</sup>
- 8.85 In terms of the content of a self-modifying condition, GEMA submitted that ‘a broad framework as to how it is you are thinking about these things and what the issues are and what the considerations are that are relevant to the self-modification’ was required and that would vary according to the subject matter. ‘How much you need to spell out in relation to manner in a provision

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<sup>1386</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 43, lines 8–10 and page 44 lines 11–14.

<sup>1387</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 44, lines 11–14.

<sup>1388</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 55, lines 17–19.

<sup>1389</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 46, lines 15–25.

<sup>1390</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 48, lines 2–11.

<sup>1391</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 49–50.

would depend on what you are talking about. If you are very uncertain about something then the extent to which you can describe what the parameters might be for the consideration and modification would be very different from the sort of parameters you could spell out in relation to a particular project or the adoption of a particular technology over time'.<sup>1392</sup>

8.86 GEMA submitted that *SONI* indicated that judicial review was accepted as being an adequate means of review for the purposes of the third energy package.<sup>1393</sup>

8.87 SSEN-T responded to the points that GEMA had made saying that:

- a) the appellants were not seeking to read down section 7(5), but their submission was based on the plain ordinary meaning in its context and having regard to the legislative intent of the 2011 amendments;<sup>1394</sup>
- b) theirs was not an issue of evading the appellate structure as the right of appeal in relation to the modifications currently being exercised, but that there was no right of appeal when the particular decisions that would lead to modifications were ultimately taken in the course of the price control period and because of that, 'it is fair to say that the effective right of appeal is being evaded';<sup>1395</sup>
- c) the other conditions in section 7 were not relevant as they were not concerned with self -modification;<sup>1396</sup> and
- d) there was a complete lack of clarity as to what is meant by 'significance' in the two instances where it used and in those it has been applied in significantly different ways.<sup>1397</sup>

8.88 SPT submitted that 'significance' was a wide and potentially subjective determination which was at odds with the specificity the statute requires as specificity indicates objective precision and it would be extremely difficult to formulate any objective test of significance which could be sufficiently precise and could be applied to different proposals and projects.<sup>1398</sup>

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<sup>1392</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 52, lines 18–25 and page 52, line 23 to page 43, line 3.

<sup>1393</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 54, lines 1–14.

<sup>1394</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 60, lines 5–9.

<sup>1395</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 60, lines 10–16.

<sup>1396</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 61, lines 17–19.

<sup>1397</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 66, lines 14–21.

<sup>1398</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 66, lines 24–25 and page 67, lines 1–4.



- 8.89 SSEN-T submitted that the issues in *SONI* did not concern licence modification but concerned a right of appeal to the CMA about a funding decision taken under the licence.<sup>1399</sup>
- 8.90 SPT submitted that *SONI* was not relevant as it concerned a decision made under the existing terms of the licence.<sup>1400</sup>
- 8.91 GEMA submitted that the self-modification procedure was more convenient as it was more efficient. It said that speed and convenience were legitimate considerations and self-modification ‘enables more rapid consultation and engagement. It enables an outcome to be put in place more quickly. Whereas of course with statutory modification you have to be coming forward with that output you have to consult in relation to it. There is then the decision on it, the standstill period and then the process through the CMA in order to get to the conclusion’.<sup>1401</sup> Judicial review could move quickly and interested stakeholders such as Citizens Advice could be heard both at the consultation stage before a self-modification direction was made and later as an interested party in any judicial review but the main benefit was the removal of the 56 day standstill period.<sup>1402</sup>
- 8.92 SPT submitted that the Net Zero self-modification was drafted in such vague terms that it was not certain when it would be applied. It also submitted that administrative convenience and efficiency were not relevant in the interpretation or the scope of section 7 and section 11A (which contained procedural protections for licensees) and that in the absence of ‘express words, the legislature cannot be taken to have intended that issues of administrative convenience should be permitted to override the express procedural protections which the statute provides’.<sup>1403</sup> SPT also submitted that judicial review would not be less burdensome than the SLMP.<sup>1404</sup>
- 8.93 On the issue of significance, GEMA submitted that it was a threshold that the CMA could scrutinise. However, in judicial review there would be a margin of discretion or appreciation in relation to what constituted significance. It submitted that ‘it makes sense for GEMA to be assessing whether or not something is significant given its expertise and given the importance of the self-modification process in relation to these matters’.<sup>1405</sup>

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<sup>1399</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 68, lines 5–20.

<sup>1400</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 72, lines 24–25, 73, and 74, lines 1–8.

<sup>1401</sup> Licence Modification Joint Hearing Transcript, 24 June 2021 page 76, lines 15–19.

<sup>1402</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, pages 77–78.

<sup>1403</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 80, lines 23–25.

<sup>1404</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 81, lines 12–13.

<sup>1405</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 83, lines 7–9.

8.94 GEMA submitted that: '[t]he reopener materiality threshold is relevant to submitting applications for new investments that Ofgem has not yet assessed. In contrast, the significance tests will take place after detailed review of the information and extensive engagement with licensees and wider stakeholders which will allow us to come to a more informed and a robust view regarding the impact on the licensee or indeed the wider stakeholders'.<sup>1406</sup>

### ***Individual hearings***

#### ***SSEN-T***

8.95 SSEN-T submitted that there was no evidence that GEMA had a policy to govern the choice between the section 7(5)(b) procedure and the SLMP which contained statutory protections for licensees.<sup>1407</sup>

8.96 SSEN-T submitted that GEMA had not explained or provided evidence on:

- a) the basis on which it chose a procedure which did not provide the same statutory safeguards as the SLMP;<sup>1408</sup>
- b) why it was proportionate or sensible to use the self-modification procedure and not the SLMP which provided licensees with statutory protections;<sup>1409</sup>
- c) how it had weighed proportionality and fairness considerations in deciding to use the self-modification process;<sup>1410</sup>
- d) how the self-modification conditions complied with its statutory duties;<sup>1411</sup> and
- e) the greater administrative convenience of using the self-modification process which only removed the 56 day standstill.<sup>1412</sup>

8.97 SSEN-T also submitted that 'significance' was not confined to the PCFIs and LOTI reopener as all the self-modification conditions proposed could have significant effects.<sup>1413</sup>

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<sup>1406</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 85, lines 1–6.

<sup>1407</sup> SSEN-T Main Hearing Transcript, 29 June 2021, page 15, lines 22–25.

<sup>1408</sup> SSEN-T Main Hearing Transcript, 29 June 2021, page 16, lines 16–19.

<sup>1409</sup> SSEN-T Main Hearing Transcript, 29 June 2021, page 17, lines 11–25.

<sup>1410</sup> SSEN-T Main Hearing Transcript, 29 June 2021, page 18, lines 11–25.

<sup>1411</sup> SSEN-T Main Hearing Transcript, 29 June 2021, page 19, lines 5–8.

<sup>1412</sup> SSEN-T Main Hearing Transcript, 29 June 2021, page 19, lines 9–16.

<sup>1413</sup> SSEN-T Main Hearing Transcript, 29 June 2021, page 21, line 16 to page 22, line 11.

## *SPT*

8.98 SPT submitted that:

- a) the self-modification conditions did not provide the specificity required by section 7(5)(b) as they had to be specified as to the circumstances or the trigger in which they arose, and also specified as to the manner and the form of the future modification and because the conditions which were appealed did not do that they were ultra vires;<sup>1414</sup> and
- b) the standstill period was the main procedural difference between the self-modification process and the SLMP but only provides that the licence modification does not take effect for 56 days and did not prevent the licensee from doing anything.<sup>1415</sup>

## *GEMA*

8.99 GEMA submitted that:

- a) the power in section 7(5) was additional to the SLMP and was ‘part of a set of powers conferred under section 7 which enables conditions to be set but involves evaluative judgments during the course of a price control’;<sup>1416</sup>
- b) the self-modification scheme spelled out the process for known unknowns and it could be appealed by looking at the conditions when they were introduced and judicial review was available if the licensee objected to the outcome when applied;<sup>1417</sup>
- c) the significance test in PCFIs and LOTI provided a proportionate and transparent limit and was an exercise of GEMA’s discretion;<sup>1418</sup> and
- d) as the common framework for PCDs indicated, all the self-modification conditions circumscribed the time, manner and circumstances of any potential directions.<sup>1419</sup>

8.100 GEMA clarified that the self-modification and SLMP processes were not alternatives, but GEMA had a choice. It said that in deciding between those two processes, it had considered whether it could set out the scope of the self-

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<sup>1414</sup> SPT Main Hearing Transcript, 30 June 2021, page 16, line 13 to page 17, lines 1–11.

<sup>1415</sup> SPT Main Hearing Transcript, 30 June 2021, pages 17, lines 17–25 and page 18, lines 1–6.

<sup>1416</sup> GEMA Main Hearing Transcript, 9 July 2021, page 7, lines 3–5.

<sup>1417</sup> GEMA Main Hearing Transcript, 9 July 2021, page 8, line 23 to page 9, line 5.

<sup>1418</sup> GEMA Main Hearing Transcript, 9 July 2021, page 9, lines 18–21.

<sup>1419</sup> GEMA Main Hearing Transcript, 9 July 2021, page 9, lines 21–24.

modification adequately in terms of either the licence condition provisions itself or the conditions with Associated Documents, or 'whether the nature of the concern they have is such that it would be better not to try to anticipate the scheme in relation to a self-mod condition but to leave it, push it down the road, wait until that sort of matter arises and deal with it under a statutory modification condition scheme'. That, it said, was 'effectively, a proportionality issue'.<sup>1420</sup>

8.101 GEMA submitted that the correct approach was to 'look at the statutory provision as a whole. There is not a reason to constrain the meaning of "manner" as somehow very limited and non-evaluatively judgmental. That is what we are saying. We say they are wrong in the way that they are trying to interpret the statute here. That is plainly reinforced by 7(6) which is saying that these powers you have in 7(5) are entirely in addition to what might happen through a subsequent statutory modification process. That is parliament emphatically saying that you have these broad powers here and, if you have built a licence, you still have other routes later down the line'.<sup>1421</sup>

8.102 It submitted that:

- a) in choosing to deal with known unknowns through self-modification, GEMA was furthering the principal statutory objective;<sup>1422</sup>
- b) the licensees' right of appeal to the CMA was not lost as they could and are now appealing the conditions which provide for self-modification and judicial review is available after implementation of the direction;<sup>1423</sup>
- c) the question in relation to administrative burden was whether GEMA had failed to have regard to or placed inappropriate weight on this issue in deciding on self-modification;<sup>1424</sup> and
- d) the judicial review mechanism has a flexibility that enables scrutiny and criticism of outturn processes following a putative self-modification change to be dealt with'.<sup>1425</sup>

### ***Closing statements***

8.103 The parties provided further reasoning in their closing statements.

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<sup>1420</sup> GEMA Main Hearing Transcript, 9 July 2021, page 12, lines 4–22.

<sup>1421</sup> GEMA Main Hearing Transcript, 9 July 2021, page 14, lines 15–23.

<sup>1422</sup> GEMA Main Hearing Transcript, 9 July 2021, page 27, line 24 to page 28, line 14.

<sup>1423</sup> GEMA Main Hearing Transcript, 9 July 2021, page 29, line 18 to page 31, line 6.

<sup>1424</sup> GEMA Main Hearing Transcript, 9 July 2021, page 34, line 16 to page 35, line 10.

<sup>1425</sup> GEMA Main Hearing Transcript, 9 July 2021, page 36, lines 8–10.

## SSEN-T

8.104 SSEN-T submitted in closing that the issue was the process by which licence modifications were to be made during the price control and whether GEMA could reserve to itself the power to set ‘around half of the price control through evaluative decisions made by directions instead of using the SLMP’.<sup>1426</sup> It submitted that, on GEMA’s approach, a licensee would have an appeal to the CMA ‘when it does not know what price control decisions may be taken or whether they are likely to be objectionable or on what grounds and by the time these decisions are made it is left with only a possible JR’.<sup>1427</sup>

8.105 It submitted that:

- a) GEMA was wrong to suggest that the only constraints on the exercise of the self-modification power in section 7(5)(b) were the duties in section 3A of EA89 as these were ‘have regard to’ duties satisfied by showing it had consulted and reached a conclusion, and GEMA had given no reason why Parliament would ‘prescribe the carefully calibrated SLMP’ with its safeguards for licensees and others and authorise GEMA to use the self-modification process provided it could show it had regard to these matters;<sup>1428</sup>
- b) No explanation had been given by GEMA on how the statutory duties had been complied with when deciding whether to use self-modification or the SLMP;<sup>1429</sup>
- c) The ‘existence of broad general objectives and duties’ in section 3A was irrelevant to the interpretation of section 7(5)(b) as were the preceding sub sections of section 7 as these ‘did not concern modification’;<sup>1430</sup>
- d) GEMA had given no meaning of the word ‘manner’ beyond saying that it meant a broad framework as to the issues and considerations relevant to the self-modification;<sup>1431</sup>
- e) Section 7(6) did not support a broad interpretation of section 7(5)(b) as GEMA contended: ‘s. 7(6) merely makes clear that if and to the extent that s. 7(5)(b) is lawfully relied upon as the basis for modifying the conditions

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<sup>1426</sup> SSEN-T Closing Statement on Ground D, paragraph 1.

<sup>1427</sup> SSEN-T Closing Statement on Ground D, paragraph 4.

<sup>1428</sup> SSEN-T Closing Statement on Ground D, paragraph 6.

<sup>1429</sup> SSEN-T Closing Statement on Ground D, paragraph 14.

<sup>1430</sup> SSEN-T Closing Statement on Ground D, paragraphs 5 and 10.

<sup>1431</sup> SSEN-T Closing Statement on Ground D, paragraph 7.

of a licence, such modification shall have effect in addition to the SLMP’;<sup>1432</sup>

- f) ‘Where s. 7(5)(b) has been properly exercised, with the trigger and the form of the modification both clearly specified in the relevant licence condition, the rights and safeguards in the SLMP will be unnecessary at the point when the “self-modification” (properly so called) actually takes effect. By contrast, if s. 7(5)(b) permitted GEMA to reserve to itself the power to make evaluative and discretionary decisions modifying price control conditions, Parliament would not have included s. 7(6) so as to exempt such modifications from the SLMP and its rights and safeguards’;<sup>1433</sup>
- g) GEMA had given no explanation of why it had decided to use the SLMP for LOTI and PCDs using a ‘significance’ test other than to say that significance provided a ‘sensible, proportionate, transparent methodology’;<sup>1434</sup>
- h) Other than giving ‘administrative convenience’ as the reason for using self-modification rather than the SLMP, GEMA had given no other reasons and ‘that the only material difference between modifications by the SLMP and by direction is that the latter do not attract a right of appeal to the CMA and can only be challenged by JR. GEMA’s assertions about differing speeds of the two routes have not been borne out’;<sup>1435</sup> and
- i) GEMA’s characterisation of convenience as efficiency was wrong in law as the section relied on, section 3A(5)(a), did not provide ‘any mandate for GEMA to avoid what it considers to be inconvenient or burdensome review of its decision making’.<sup>1436</sup>

## *SPT*

8.106 In its closing statement on Ground D, SPT submitted that:

- a) GEMA’s interpretation of section 7(5)(b) was contrary to the natural meaning of the words used which required the time, manner and circumstances of the modification to be clearly stated in detail and this would enable licensees, the secretary of state and others ‘to decide on the

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<sup>1432</sup> SSSEN-T Closing Statement on Ground D, paragraph 11.

<sup>1433</sup> SSSEN-T Closing Statement on Ground D, paragraph 12.

<sup>1434</sup> SSSEN-T Closing Statement on Ground D, paragraphs 14–15.

<sup>1435</sup> SSSEN-T Closing Statement on Ground D, paragraphs 16–17.

<sup>1436</sup> SSSEN-T Closing Statement on Ground D, paragraphs 18–19.

merits whether to exercise their rights of appeal or veto before they expire’;<sup>1437</sup>

- b) GEMA’s contextual arguments failed to address the key issues as sections 7(1) and (2) did not concern licence modifications but conditions that could be included in a licence when it was granted;<sup>1438</sup>
- c) GEMA’s argument that the framework of the self-modifying conditions could be challenged was circular as imprecision would not be grounds for a challenge and the imprecision would prevent licensees and others from challenging the substance of the changes which would only become apparent when the modification is made after the right to appeal had expired;<sup>1439</sup>
- d) The removal through self-modification of the secretary of state’s veto removed the modifications from political scrutiny and was unlawful as it was contrary to the drafting and purpose of EA89;<sup>1440</sup>
- e) GEMA’s assertion that Parliament intend by the self-modification power to ‘abridge procedural and political safeguards’ for administrative convenience had no principled basis and GEMA had conceded that there was ‘no practical difference’ in the consultation for section 11A modifications and directions under a self-modification;<sup>1441</sup>
- f) contrary to GEMA’s assertion that it had circumscribed the time, manner and circumstances of any potential directions, the conditions appealed by SPT did not and although some guidance has been provided for LOTI, MSIP, NARMS, Access Reform Change and Uncertain Non-Load Related Projects re-openers and PCDs, ‘it cannot securely be relied upon since it was issued, and can just as easily be altered or revoked, by direction without any of the protections in ss.11A-H’;<sup>1442</sup>
- g) ‘by introducing a test of “significance”, GEMA has added a further source of vagueness and subjective uncertainty into a regime that is meant to be transparent and accountable and ‘the threshold under s.7(5) is one of “specificity” not “significance”’; <sup>1443</sup> and

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<sup>1437</sup> SPT Closing Statement on Ground D, paragraphs 2 and 4.

<sup>1438</sup> SPT Closing Statement on Ground D, paragraph 6.

<sup>1439</sup> SPT Closing Statement on Ground D, paragraph 8.

<sup>1440</sup> SPT Closing Statement on Ground D, paragraph 10.

<sup>1441</sup> SPT Closing Statement on Ground D, paragraph 11.

<sup>1442</sup> SPT Closing Statement on Ground D, paragraph 12.

<sup>1443</sup> SPT Closing Statement on Ground D, paragraph 13.

- h) GEMA had failed to provide evidence that it had properly considered its duties and its evidence of consultation did not establish that it ‘brought into account and balanced the statutory factors’ but it had chosen to use self-modification for ‘administrative convenience at the expense of transparency and accountability’.<sup>1444</sup>

## **GEMA**

- 8.107 In its closing statement, GEMA reiterated its argument that the ‘statutory scheme includes power for licences to include provision for self-modification, expressly in addition to the statutory modification procedure, to be exercised in accordance with the statutory requirements and with regard to statutory duties. Any such condition is subject to an appeal to the CMA when introduced, ie there is no evasion of the CMA, and any exercise of the condition is thereafter subject to judicial review’.<sup>1445</sup>

## ***Our assessment and conclusions***

- 8.108 The question for the CMA is whether GEMA acted ultra vires, and was thus wrong, in providing for what it has termed ‘self-modification’ in the Special Conditions at issue, ie the ability to modify those conditions by way of direction rather than using the statutory modification scheme contained in section 11A of EA89. The Special Conditions at issue in SSEN-T’s and SPT’s appeals are listed in **Table 7-4**.
- 8.109 In short, SSEN-T and SPT submit that GEMA did not have the power to provide for self-modification pursuant to section 7(5) of EA89<sup>1446</sup> where such modification would entail evaluative decision-making, and thus erred in law in doing so. GEMA, by contrast, maintains that it was justified in relying on that provision.

## ***Interpretation of section 7(5) of EA89***

- 8.110 At least by the time of the main hearings, it was common ground that these grounds of appeal turn on the correct interpretation of section 7(5) of EA89.
- 8.111 Sub-sections 7(5) and (6), which are of central relevance here, read as follows (emphasis added):

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<sup>1444</sup> SPT Closing Statement on Ground D, paragraph 14.

<sup>1445</sup> GEMA Closing Statement, paragraph 20.

<sup>1446</sup> For convenience, we refer only to the EA89 provisions in our analysis, but the same analysis applies to the equivalent provisions in the GA86.



(5) Conditions included in a licence may contain provision for the conditions—

(a) to have effect or cease to have effect at such times and in such circumstances as may be determined by or under the conditions; or

(b) to be modified **in such manner as may be specified** in the conditions **at such times** and **in such circumstances as may be so determined**.

(6) Any provision included by virtue of subsection (5) above in a licence shall have effect in addition to the provision made by this Part with respect to the modification of the conditions of a licence.

8.112 It can thus be seen that a licence condition may contain a mechanism for its later modification, but that:

- a) The **manner** of such modification must be specified;
- b) The **time(s)** of such modification must be determined by or under the condition;
- c) The **circumstances** of such modification must also be determined by or under the condition.

8.113 The focus of the appellants' arguments was on the first of these conditions, ie that the **manner** of modification must be specified in the condition itself. The agreed position of the appellants on what a licence condition under section 7 (5)(b) must set out was that 'the licence must spell out what the modification will be, how the modification will take place and what it will be'.<sup>1447</sup> Accordingly, the key question is what is meant by the expression 'in such manner as may be specified'.

8.114 In formulating our approach to statutory interpretation here, we bear in mind the following:

- a) The text of an enactment must be read in its context, to include the context of the Act as a whole:

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<sup>1447</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 8, lines 8–10. See also SSEN-T Closing Statement on Ground D, paragraph 12 and SPT Closing Statement on Ground D, paragraph 2.

[t]he overall context of the Act provides the colour and background to the words used, and thus helps the interpreter to arrive at the meaning intended by the legislature.<sup>1448</sup>

- b) In *R v Secretary of State for the Environment, Transport and the Regions, Ex p Spath Holme Ltd* [2001] 2 AC 349 Lord Nicholls said:

... an appropriate starting point is that language is to be taken to bear its ordinary meaning in the general context of the statute.<sup>1449</sup>

- c) According to Bennion, Bailey and Norbury on Statutory Interpretation:

Where an enactment is grammatically capable of only one meaning (whether generally or in relation to the facts of the instant case) and, on an informed interpretation, the interpretative criteria do not raise any real doubt as to that meaning, the enactment is to be given its plain, grammatical meaning.

For the purposes of the plain meaning rule, a meaning is 'plain' only where no relevant interpretative criterion points away from that meaning. In other words, the plain meaning must be given, but only where there is nothing to modify, alter or qualify it.<sup>1450</sup>

8.115 The ordinary meaning of the word 'manner' is the way in which a thing is done or happens,<sup>1451</sup> a characteristic or customary mode of acting, or a mode of procedure or way of acting.<sup>1452</sup> However, this definition does not cast any further light on the meaning of 'manner' here: it could mean that the exact terms of the modification which may be made must be specified; or simply the process by which a modification will be effected; or something in between.

8.116 It is therefore necessary to consider the statutory context. The following are two aspects of the statutory context which appear to us to be relevant:

- a) First, looking at section 7 generally, we note that considerable discretion is vested in GEMA when it comes to the formulation of licence conditions. For example, pursuant to section 7(1), GEMA has a wide power to include in a licence such conditions as appear to it to be 'requisite or expedient', having regard to its statutory duties. Likewise, pursuant to section 7(3) GEMA has a broad power to require, under the licence condition, a

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<sup>1448</sup> Bennion, Bailey and Norbury on Statutory Interpretation, 7<sup>th</sup> ed, section 11.2.

<sup>1449</sup> *R v Secretary of State for the Environment, Transport and the Regions, Ex p Spath Holme Ltd* [2001] 2 AC 349 at 397.

<sup>1450</sup> Bennion, Bailey and Norbury on Statutory Interpretation, 7<sup>th</sup> ed, section 11.9.

<sup>1451</sup> Oxford English Dictionary.

<sup>1452</sup> Merriam-Webster.

licence-holder to comply with any direction given by GEMA as to matters either specified in the licence or of a description so specified. In its response to the provisional determination, SSEN-T took issue with the CMA's invocation of section 7 generally, contending that the self-modification power 'is in a wholly different category from the other sub-sections of section 7 precisely because it must be interpreted consistently with the SLMP'.<sup>1453</sup> We accept that section 7(5) is different from other sub-sections of section 7, because of the existence of the SLMP regime. As explained immediately below, that militates against an interpretation affording GEMA an open-ended ability to modify a licence condition, but it does not mean that section 7(5) is to be interpreted as narrowly as SSEN-T contends. In our view, it would not make sense of section 7 as a whole if section 7(5) were interpreted as denying GEMA any discretion at all as regards self-modification of licence conditions in circumstances where GEMA **would** have discretion to impose obligations on licensees through the issue of directions, as long as those directions do not involve (formally or in substance) any modification of the conditions themselves.

- b) Second, section 11A of EA89 contains a dedicated statutory regime for the modification of licence conditions – the so-called 'SLMP' scheme. Built into that regime are various protections for licensees, consumer bodies and the Secretary of State. One of those protections is the right of appeal to the CMA pursuant to section 11C on a wider set of grounds than is available in judicial review. Whilst the existence of this bespoke statutory regime does not preclude self-modification pursuant to section 7(5), it seems to us that it would be inconsistent with this regime for section 7(5) to be read as affording GEMA the power to provide itself with an open-ended ability to modify a licence condition during the lifetime of the licence.<sup>1454</sup>

8.117 With that context in mind, it seems to us that the purpose of section 7(5)(b) is to ensure that licence conditions can be suitably modified to adapt to changes of circumstance which may or may not be predictable at the outset of a price control of potentially long duration. It seems to us that the modification of a condition is inherently more likely to be necessary to address future

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<sup>1453</sup> SSEN-T Response to the PD, paragraph 4.10.

<sup>1454</sup> We note that the statutory modification scheme was introduced by the Electricity and Gas (Internal Market) Regulations 2011, whereas section 7(5) was introduced much earlier, by the Utilities Act 2000. However, even at that time there were considerable (indeed, even greater) protections for licensees in respect of modifications of licences, in that section 11 at that time required the Director General of the Office of Electricity Regulation (OFFER) to obtain the licensee's consent to any licence modifications which he proposed to make, failing which a modification could only be effected following a reference to the CC, pursuant to section 12.

uncertainties, because the response to predictable changes of circumstance may be provided for in the original licence conditions.

8.118 Although we do not consider that section 7(5)(b) requires GEMA to specify the full detail of the changes that may be made, equally we think that section 7(5) cannot be construed as merely requiring GEMA to set out the instrument or process by which the licence may be modified, and otherwise allowing GEMA to make at some future time any substantive change it wishes to direct. In our view that would be at odds with the SLMP which provides for a structured process for the modification of licences and which builds in statutory protections for the licensee.

8.119 Our attention was drawn to section 7(6) of EA89, which makes clear that a modification of a licence condition pursuant to section 7(5)(b) is ‘in addition to’ the process for modifying licence conditions under section 11A. GEMA submitted that section 7(6) expressly provides that there is no procedural exclusivity in the manner in which a licence condition may be modified and that, when Parliament introduced the SLMP pursuant to the 2011 Regulations, if it had wanted to make this the exclusive procedure for modifying licence conditions (or the exclusive procedure in certain circumstances), it would have amended section 7(6).<sup>1455</sup>

8.120 We accept GEMA’s response to SSEN-T’s ‘*generalalia specialibus non derogant*’<sup>1456</sup> argument that the presumption did not apply because the legislative intent has been made clear (see paragraph 8.34c)). However, we do not consider that the existence of section 7(6) means that section 7(5)(b) should be construed without regard to the remainder of EA89. It would in our view be inconsistent with the scheme of EA89 as a whole if section 7(5)(b) were to confer on GEMA a general and open-ended discretion to provide for the modification of the licence once a given set of circumstances occur.

8.121 We also note the use of the word ‘specified’ in section 7(5)(b), which stands in contrast to more broadly framed expressions which Parliament could have used, such as ‘in such manner as the Authority sees fit’. We agree with SPT’s submission that the natural meaning of ‘specify’ is to identify something clearly or to state it explicitly.<sup>1457</sup>

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<sup>1455</sup> [GEMA Response B](#), paragraphs 207 and 208

<sup>1456</sup> SSEN-T submitted that section 7(5)(b) was a general power and section 11A was a specific power, and a general power could not take precedence over a specific power: see paragraph 8.21 above. SSEN-T submitted that because it is a general power, section 7(5)(b) would only support mechanical modifications: see paragraphs 8.46 and 8.63 above.

<sup>1457</sup> SPT’s Closing Statement on Ground D, paragraph 2. We do not, however, accept the full extent of SPT’s submission as to the meaning of ‘specify’: we do not think that ‘specify’ necessarily requires a detailed statement,

- 8.122 In our view, a licence condition will properly specify the manner of its possible future modification where GEMA clearly sets out the nature and parameters of such modification in the condition itself with sufficient specificity to enable the licensee(s) to understand its potential scope. The condition must accordingly contain two types of criteria – criteria defining the scope of the potential modification and GEMA’s approach to the making of the modification (‘manner’), and criteria defining the time and circumstances in which the modification may be made, ie the ‘trigger’ for the modification (‘circumstances’). If such criteria are properly set out in the condition, the licensee in question should be able to understand the potential impact on it of a future modification and be in a position meaningfully to appeal the condition to the CMA at the outset of the price control, rather than be limited to a challenge based on an alleged breach of GEMA’s statutory duties, which, contrary to GEMA’s submissions, in our view would be insufficient (see paragraph 8.128).
- 8.123 Thus, we accept SPT’s submissions on the need for the licence conditions to specify clearly the circumstances in which a modification would be triggered. We also accept that the licence conditions must specify clearly the nature of the future modification.<sup>1458</sup>
- 8.124 We note in this context GEMA’s stated position that self-modification is the most transparent and certain approach for licensees in relation to uncertainty mechanisms and PCDs.<sup>1459</sup> However, that proposition holds only insofar as any condition properly sets out the scope of and criteria for any future modification by way of direction pursuant to section 7(5)(b).
- 8.125 By ‘potential scope’ and ‘potential impact’, noted in paragraph 8.122, we do not mean that a licensee must be able to assess, at the time the condition is introduced, the exact form or financial impact on it of a potential modification pursuant to section 7(5)(b). That would be unrealistic, bearing in mind that the purpose of this provision is to cater in particular for the uncertainty inherent in a multi-year price control. Instead, the condition must set out the criteria by which GEMA will assess any such future modification with sufficient specificity that a licensee is able to understand the framework within which GEMA will operate and can mount an effective challenge to the condition if it considers

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and nor do we think it necessarily requires something to be identified ‘definitely’. Nor do we accept the consequent submission in paragraph 2, namely that the word ‘specify’ requires ‘evaluative judgements as to whether, when and how a condition will be modified [to be] hardwired into the [self-modification provision] when it is first introduced’. That does not in our view follow from the meaning of ‘specify’.

<sup>1458</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 14, lines 22–25 and 28 June 2021, page 21, line 20 to page 22, line 3.

<sup>1459</sup> [GEMA Response B](#), paragraph 189.

that the criteria to be deployed by GEMA vitiate GEMA's decision in respect of the condition itself.

- 8.126 We should add that, in order for the criteria to be sufficient to meet the requirements of section 7(5)(b), they must be contained in the licence condition itself, or in a document which has the status of a licence condition. This is clear in section 7(5)(b). It is in our view insufficient for the criteria to be contained in a subsidiary document, which (i) may or may not be published at the time of the adoption of the licence conditions themselves, and (ii) is subject to change by direction at any point during the price control period. In that case, licensees may have no effective ability to challenge the criteria in an appeal under section 11C of EA89.<sup>1460</sup>
- 8.127 We note GEMA's submission that its use of self-modification here, pursuant to section 7(5)(b), does not preclude an appeal to the CMA, because licensees may appeal the licence modifications providing for self-modification on the basis that, for example, they are in breach of GEMA's statutory duties.<sup>1461</sup> We agree that, in principle, the use of the power contained in section 7(5)(b) does not preclude licensees from mounting an appeal at the point when the licence condition providing for self-modification is adopted. However, if the licence condition does not properly specify the criteria by which the condition might be modified by way of direction, it is likely to be impossible in practice for licensees (and others) to mount an effective challenge to the self-modification provision.
- 8.128 Contrary to GEMA's submissions,<sup>1462</sup> we do not consider a challenge pursuant to section 11C which is limited to compliance with GEMA's statutory duties to be a meaningful challenge. As GEMA has submitted in the context of WWU's ground of appeal (see paragraph 8.247c)), a challenge based on an alleged failure by GEMA properly to have regard to its statutory duties is a limited ground of appeal.<sup>1463</sup> If there is no specificity as to the criteria defining the scope of and GEMA's approach to any self-modification then it is difficult to see how a licensee could bring a challenge based on a failure to give sufficient weight to particular statutory duties, an error of fact or that a decision was wrong in law (notably, whether the condition is irrational and/or is contrary to the purposes of EA89).

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<sup>1460</sup> That is not to say that detailed guidance and operational requirements on licensees must be contained in the licence condition itself. It seems to us that it is legitimate, under section 7(5)(b), for these to be placed in subsidiary documents. To be clear, we address WWU's challenge concerning the imposition of obligations within subsidiary documents, which challenge is framed in terms of an alleged breach of GEMA's statutory duties, separately below.

<sup>1461</sup> See Licence Modification Joint Hearing Transcript, 24 June 2021, page 34, lines 4-9; page 49, lines 11-14.

<sup>1462</sup> For example, GEMA Main Hearing Transcript, 9 July 2021, page 15, lines 6-8.

<sup>1463</sup> [GEMA Response B](#), paragraph 234.

- 8.129 It follows that we do not fully accept GEMA's submissions on the degree of specificity required by section 7(5)(b). At the 24 June joint hearing, GEMA submitted that the degree of specificity required of GEMA 'would depend on what you are talking about. If you are very uncertain about something then the extent to which you can describe what the parameters might be for the consideration and modification would be very different from the sort of parameters you could spell out in relation to a particular project or the adoption of a particular technology over time'.<sup>1464</sup> Contrary to GEMA's submission, we consider that if the criteria defining the manner of the modification cannot be set out in the licence condition in any meaningful way, then GEMA simply has no power to proceed under section 7(5)(b). As explained at paragraphs 8.175 to 8.178 below, we consider that this applies particularly to the Net Zero Re-opener.
- 8.130 At paragraphs 8.151 to 8.242 below, we analyse whether the Special Conditions of which complaint is made by SSEN-T and SPT amount to valid exercises of GEMA's power under section 7(5)(b), in view of our conclusions on the construction of that provision.
- 8.131 Having set out what we consider to be the correct interpretation of section 7(5)(b), we now address the key arguments of the parties to the extent that they advocate in favour of a different conclusion and have not been addressed immediately above.
- 8.132 Contrary to the appellants' submissions, we consider that section 7(5)(b) does provide scope for some evaluative decision-making, albeit within the confines of the scope of potential self-modification, which must be set out in the condition itself. That may mean, as noted in paragraph 8.129, that for some evaluative judgements the criteria defining the scope of self-modification cannot be set out in the licence condition in any meaningful way, in which case GEMA simply has no power to proceed under section 7(5)(b). The requirement for such criteria ensures that there is a framework which defines the scope of the potential modification and that licensees have the possibility of a meaningful challenge to the CMA under section 11C of EA89 against the scope of the condition as a whole at the point at which the condition is adopted.
- 8.133 We therefore reject SSEN-T's contention that that only 'truly mechanical' modifications could be provided for in a section 7(5)(b) condition:

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<sup>1464</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 52, line 22 to page 53, line 1.

- a) First, we broadly agree with GEMA's submission that such purely mechanical 'modifications' would not, in substance, be modifications of the licence condition at all, because they would take place automatically upon some defined circumstance obtaining. We do not agree with SPT's and SSEN-T's answers to this issue, namely that mechanical modifications would not be automatic because the 'modification' would not take place until there has been verification by GEMA that the circumstance does in fact obtain.<sup>1465</sup> We recognise that, formally speaking, a modification may not be automatic, where the condition provides for GEMA to modify a condition where a given event occurs. However, any verification would be limited to whether the 'trigger' for the modification already provided for in the licence condition has happened. In substance, the condition would be constrained to apply to modifications which were both predictable and mechanical.
- b) Second, we consider SSEN-T's submission to be inconsistent with the underlying purpose of section 7(5)(b), which we have set out at paragraph 8.117 above. In our view, the purpose of the section is not merely to facilitate the making of such predictable and mechanical modifications, but to allow GEMA to respond to uncertainties which may require a level of discretion, albeit within the parameters of the section.

8.134 We also reject SSEN-T's submission that Parliament intended all 'price control' decisions to be subject to the regime contained in sections 11A-H of EA89, including the right of licensees (among others) to appeal to the CMA, such that GEMA was wrong to provide for self-modification pursuant to section 7(5)(b) of EA89.<sup>1466</sup> We accept GEMA's contention that this argument is irreconcilable with section 7(6) of EA89, which expressly provides for the power under section 7(5)(b) to be exercisable 'in addition to' the provision made in section 11A in respect of licence modification. Further and in any event, section 11C provides for appeals to be brought against decisions to proceed with licence condition modifications generally: there is no reference in section 11C to price control decisions.

8.135 In support of its submission, SSEN-T pointed to the CMA's remedial powers, pursuant to section 11F, and the longer time limit for determining appeals against price control decisions, pursuant to section 11G, submitting that these

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<sup>1465</sup> SPT Closing Statement on Ground D, paragraph 3 and SSEN-T Closing Statement on Ground D, paragraph 9; SSEN response to the PD, paragraph 4.14.

<sup>1466</sup> In its Reply, SSEN-T seemed to suggest that only decisions which 'materially' affected the price control had to be subject to the SLMP: see [SSEN-T Reply](#), paragraphs 5.2(a), 5.11 and 5.21. This submission was not further developed in the Reply or at the hearings. We do not accept this apparent variant on SSEN-T's principal submission. We note that this is not a distinction drawn by the statute, and we consider that the reasons set out at paragraph 8.134 above apply just as much to this variant as to the principal submission.



were strong indications that Parliament envisaged price control determinations being made solely under the SLMP.<sup>1467</sup> That submission is in our view misconceived. These provisions say nothing more than that where price control decisions **are** taken under section 11A, the CMA has a specific power to substitute its own decision for that of GEMA and has an extended period of time within which to complete the appeal. They do not say, either expressly or by necessary implication, that **all** price control decisions **must** be taken under the SLMP.

8.136 It follows that we also reject SSEN-T's (and SPT's) further submission, namely that in relying on section 7(5)(b) GEMA has taken action for an improper purpose: we do not accept that the legislative purpose behind the SLMP is frustrated by the invocation of section 7(5)(b) to provide for the future modification of licence conditions in respect of price control matters by means of directions.<sup>1468</sup>

8.137 For the same reason as set out in paragraph 8.134, we do not accept SSEN-T's contrast between section 7(5)(b), which it contends is a general power, and section 11A, which it contends is a specific power. It is clear from the language of section 7(6) ('in addition to') that Parliament intended section 7(5) to be used for the modification of licence conditions.<sup>1469</sup>

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<sup>1467</sup> [SSEN-T Reply](#), paragraph 5.20.

<sup>1468</sup> In response to the PD, SSEN-T submitted (at paragraphs 4.52 et seq) that the CMA had failed, in the PD, to address its alternative case that even if the CMA did not accept its case on the construction of section 7(5)(b), then the exercise of the power by GEMA in the circumstances of this case was unlawful in any event. We do not accept this submission. SSEN-T's alternative case was set out at paragraph 6.39 of its NoA. There, SSEN-T contended that the reserved powers of direction which GEMA had conferred on itself stood to be set aside as an action taken for an improper purpose. However, that argument was squarely predicated on its contention that GEMA could not lawfully use the section 11A licence modification powers to give itself a free hand to make future modifications of the significance of price control determinations and thereby circumvent the rights and safeguards enshrined in statute. We have already explained what the limits are on GEMA's powers under section 7(5)(b). To the extent that any licence conditions purport to confer on GEMA power which goes beyond those limits, they will be ultra vires, but not otherwise. To the extent that licence conditions impugned by SSEN-T are intra vires, GEMA is necessarily not seeking to give itself a 'free hand' in relation to self-modification or otherwise to circumvent statutory rights or safeguards. Paragraph 6.39 of SSEN-T's NoA concluded with a bare allegation that GEMA would, in giving itself such a free hand, be in breach of its statutory duties and would fail to meet best practice standards expected of a regulator. In response to the PD, SSEN-T noted that its case in this last respect was that GEMA had never explained how its duties in section 3A of EA89 were complied with when deciding which modification decisions would be made by SLMP and which by direction. It submitted that the clear inference was that a key driving factor was GEMA's desire to avoid the scrutiny of a CMA appeal. However, we explain at paragraph 8.146 below why we do not accept that GEMA's decision-making in this respect was arbitrary or irrational; we also set out our view that GEMA did not have to have a formal, detailed policy in respect of which special conditions to subject to a significance threshold. For completeness, we do not accept that in its decision-making here GEMA failed properly to have regard to its duties under section 3A of EA89 or frustrated the legislative purpose of EA89.

<sup>1469</sup> At [SSEN-T NoA](#), paragraph 6.35 SSEN-T referred to *R v Liverpool City Council ex p Baby Products Association* (2000) LGLR 689 in support of its submission. There, the local authority sought to rely on a power conferred in very general terms (a local authority could 'arrange for the publication within their area of information relating to the functions of the authority' and 'do anything ... which is calculated to facilitate, or is conducive or incidental to, the discharge of any of their functions') to issue a press release warning the public about certain models of baby walker which were alleged to fail standard safety tests. The authority's decision to proceed in this

- 8.138 In its Reply<sup>1470</sup> (building on the position taken in its NoA<sup>1471</sup>), SSEN-T argued that if GEMA could make a price control determination under section 7(5) of EA89, it would render the SLMP ‘entirely optional’. Again, we do not accept that submission. If GEMA proposes to proceed under section 7(5)(b), it must sufficiently specify the manner of any future modification which may be made by direction. There may be cases where it is simply impossible to provide such specificity, such that GEMA would have to proceed with a modification pursuant to section 11A of EA89.
- 8.139 In its response to the provisional determination, SSEN-T criticised the CMA’s proposed test as being circular and vague. It contended that ‘on the CMA’s approach, sufficiently specified criteria give rise to a meaningful appeal, and a meaningful appeal is all that is needed in order for criteria to be sufficiently specified’.<sup>1472</sup>
- 8.140 We do not accept that the interpretation set out above is either circular or vague. It does not follow from our interpretation that a meaningful appeal is all that is needed for criteria to be sufficiently specified. As we have explained, the criteria must define the **manner** of the potential modification and the **circumstances** in which it will be made. Thus, for example, where a condition provides for modification to the allowances set out in the condition to reflect an increase or decrease in costs faced by the licensee as a result of some defined circumstance pertaining, the nature and parameters of the modification will likely be sufficiently defined: in such a case, the licensee would know that any future modification under section 7(5) would concern allowances, and that there would be a limit on the extent to which such

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way was challenged by the applicants on the basis that it was ultra vires, given that there existed a specific, detailed statutory regime for product safety, with proper process safeguards built in for the suppliers in the event that it was alleged that their products were defective on safety grounds, including the right to appeal to a magistrates’ court for an order setting aside a notice on grounds that there has been no contravention any safety provision, and to seek compensation if there had not in fact been any contravention of the regulations. In his judgment, Lord Bingham described the product safety regime as comprising ‘a detailed and carefully-crafted code designed, on the one hand, to promote the very important objective of protecting the public against unsafe consumer products and, on the other, to give fair protection to the business interests of manufacturers and suppliers’. His Lordship understandably thought that the general power relied on by the council was far too general to be relied upon in circumstances where there was a detailed statutory code for precisely the situation which had arisen. Thus, *Baby Products* is a quite different case from the present one, where the statute expressly recognises a role for modification pursuant to section 7(5)(b) in addition to modification pursuant to section 11A. We consider that SSEN-T’s reliance on *R (VIP Communications Ltd v Secretary of State for the Home Department* [2020] EWCA Civ 1564 is similarly misplaced. SSEN-T relied on *VIP* for the proposition that ‘GEMA cannot use its general section 7 powers to exempt itself from its statutory duties under section 11A-11H’ ([SSEN-T Reply](#), paragraph 5.22), but GEMA has done no such thing.

<sup>1470</sup> [SSEN-T Reply](#), paragraphs 5.4 and 5.

<sup>1471</sup> At [SSEN-T NoA](#), paragraph 1.59 SSEN-T submitted that ‘... the statutory scheme sets out the process to be followed by GEMA in taking decisions on price control matters and provides a right of appeal to the CMA for licensees and third parties affected by such decisions. It does not confer any power on GEMA to use a ‘direction’ (or any process other than a statutory licence modification) to implement important elements of a price control. Moreover, issuing directions which cannot be appealed to the CMA to modify a price control decision would frustrate licensees’ and third parties’ statutory right to appeal...’.

<sup>1472</sup> SSEN-T Response to the PD, paragraph 4.18.

allowances could be modified, commensurate with the change of circumstance. Because the nature and parameters of the potential modification would be known at the outset, a licensee would have a meaningful right of appeal before the CMA. We do not consider that this reasoning is vague or circular or that it denies a licensee any meaningful right of appeal.

### *Circumvention of appeal rights*

8.141 We reject the appellants' argument that the modification of licence conditions under section 7(5)(b) has the effect of circumventing a licensee's appeal rights under section 11C of EA89. A licensee has such a right of appeal only to the extent that the modification cannot lawfully be made pursuant to section 7(5)(b), and in such case an appeal lies under section 11 at the outset and the modification itself must be made pursuant to section 11A. If the modification is properly made under section 7(5)(b), the licensee has no right of appeal to the CMA. Further, and as SPT and SSEN-T submitted,<sup>1473</sup> provided that a condition properly specifies the nature and parameters of a future modification, including the criteria by which a future modification will be decided upon, an aggrieved licensee will in our view be able to bring a meaningful challenge to that condition before the CMA at the point at which the condition is adopted. It will be able to argue that the decision to include the condition breaches GEMA's statutory duties or does not give appropriate weight to them, is based on an error of fact, or is wrong in law in that, for example, the criteria specified by GEMA are irrational or do not promote the policy and purposes of EA89.<sup>1474</sup> It seems to us that SSEN-T's submissions in response to the provisional determination, which take issue with this view,<sup>1475</sup> are predicated on its argument, addressed above, that **all** price control decisions should be the subject of an SLMP process.

### *Use of a significance test*

8.142 A further complaint made by SSEN-T and SPT related to GEMA's invocation of a 'significance' threshold for the use of the SLMP rather than self-

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<sup>1473</sup> SSEN-T Closing Statement on Ground D, paragraphs 11–12 and SPT Clarification Hearing Transcript, 20 May 2021, page 32, lines 8–15.

<sup>1474</sup> We are equally unpersuaded by SPT's argument that the possibility of evaluative judgement being exercised in a self-modification cuts across the Secretary of State's veto power contained in section 11A(5) EA89. As GEMA observed (GEMA Main Hearing Transcript, 9 July 2021, p 9, lines 1-3), the Secretary of State would still have the power to veto any condition providing for self-modification. We disagree with SPT's submission (Closing Statement on Ground D, paragraph 10) that 'The veto right cannot practically be used if GEMA reserves to itself broad, discretionary powers to be exercised after the veto date has passed.' We see nothing to prevent the Secretary of State, if so advised, from vetoing conditions which provide for self-modification if s/he is concerned about the 'strategic importance' of certain licence conditions and the modifications which might subsequently be made to them pursuant to section 7(5)(b).

<sup>1475</sup> SSEN-T Response to the PD, paragraph 4.19.

modification in respect of two of the Special Conditions at issue, namely the LOTI Re-opener<sup>1476</sup> and the PCFIs.<sup>1477</sup> The appellants contended that there was no statutory basis for such a threshold and that it was unacceptably vague and at odds with the specificity demanded by section 7(5)(b) itself.<sup>1478</sup> The appellants further complained that GEMA had not explained why the significance threshold applied to only two mechanisms – the LOTI Re-opener and the PCFI – given the scale of the totex that is at stake under the other licence conditions subject to potential self-modification.<sup>1479</sup>

8.143 We start with the question of whether a significance threshold is at odds with the specificity required by section 7(5)(b). In our view, the significance threshold is logically separate from the question of whether the condition sufficiently specifies the manner and determines the circumstances of a future self-modification such as to amount to a lawful exercise of the power in section 7(5)(b). If they are indeed properly specified, then the condition is compliant with section 7(5)(b). GEMA's decision to deploy a significance threshold does not affect the requirements of section 7(5)(b) itself. We do not consider that the application of a significance threshold is a substitute for ensuring that the conditions of section 7(5)(b) are met. Equally, however, the invocation by GEMA of a significance threshold is not in itself at odds with the specificity required by section 7(5)(b).

8.144 Provided that the requirements of section 7(5)(b) are met, we consider that GEMA is, in principle, entitled to put in place a policy limiting its own discretion to proceed with self-modification. Such a fetter does not risk removing procedural protections afforded to licensees; by definition, it merely limits the scope for GEMA to proceed by way of self-modification rather than using the statutory modification process. In our view, such a policy could only be challenged if it amounted to a decision that was wrong in law in that it was irrational or was contrary to the purpose of EA89.

8.145 SPT argued that it was arbitrary to deploy a significance test in respect of certain of the conditions but not others, and that on any view self-modification of any of the conditions to which self-modification applied could have a material impact on the licensee.<sup>1480</sup>

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<sup>1476</sup> SSEN-T and SPT SpC 3.13.

<sup>1477</sup> SSEN-T SpC 8.1.

<sup>1478</sup> See, for example, [SSEN-T NoA](#), paragraph 6.24 and Licence Modification Joint Hearing Transcript, 24 June 2021, page 66, lines 12–23.

<sup>1479</sup> See, for example, [SSEN-T NoA](#), paragraph 6.24.

<sup>1480</sup> See, for example, Licence Modification Joint Hearing Transcript, 24 June 2021, page 25, line 15 to page 26, line 4.

8.146 In our view, it was not arbitrary or otherwise irrational for GEMA to adopt a significance threshold in respect of the LOTI Re-opener and PCFIs but not in respect of other special conditions. The decision as to which special conditions should be subject to a significance threshold was quintessentially one for the exercise of GEMA's discretion, as the expert regulator, as is the decision whether any particular proposed modification of the conditions to which the significance threshold applies is in fact significant. Nor do we consider that GEMA is under a duty to adopt a formal, detailed policy in respect of which special conditions to subject to a significance threshold in circumstances where (i) it was under no duty to adopt such a threshold and (ii) the adoption of such a threshold does not purport to limit any rights enjoyed by licensees or others.<sup>1481</sup> For those reasons, we reject SSEN-T's and SPT's criticisms of GEMA's use of a significance test.<sup>1482</sup>

#### *Other issues raised by the parties*

8.147 Finally, we address two further matters which featured in the course of the parties' arguments but which do not in our view affect our conclusions on the interpretation of section 7(5)(b).

8.148 The first is GEMA's submission that the use of self-modification pursuant to section 7(5)(b) avoids the 'disproportionate administrative burden of multiple Statutory Modification Procedures during the course of the price control'.<sup>1483</sup> We did not understand GEMA to be arguing that such considerations, if valid, would affect the interpretation of section 7(5)(b): GEMA went no further than arguing that the allegedly more limited burden on it and stakeholders was an 'advantage' of the self-modification process.<sup>1484</sup>

8.149 To be clear, we do not see considerations relating to administrative convenience as relevant when it comes to the interpretation of section 7(5)(b). Further, and for completeness, we are not persuaded that the statutory modification process under section 11A is materially more burdensome than self-modification, particularly in the context of a long-running price control and

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<sup>1481</sup> We note that there exists a public law duty of transparency in the sense that a policy must be 'sufficiently clear to enable those affected by it to regulate their conduct ie to avoid being misled': *R (Justice for Health Ltd) v Secretary of State for Health* [2016] EWHC 2338 (Admin) at [141]. There is, however, no question of the licensees being unable to regulate their conduct without knowing why certain self-modifications are subject to a significance threshold but others are not.

<sup>1482</sup> For completeness, we reject SSEN-T's submission, at [SSEN-T Reply](#), paragraph 5.31, to the effect that in adopting a significance threshold GEMA was thereby choosing whether to abide by the rights and safeguards for licensees enshrined in the statutory modification process. By definition, if GEMA has complied with the requirements of section 7(5)(b), then it is permissible for it to proceed with self-modification rather than modify the condition pursuant to section 11A.

<sup>1483</sup> [GEMA Response B](#), paragraph 190(4).

<sup>1484</sup> [GEMA Response B](#), paragraph 190. See also Licence Modification Joint Hearing Transcript, 24 June 2021, page 76.

having regard to the totex allowances potentially at issue in respect of such licence condition modifications.

8.150 Second, we do not see that the CMA's *SONI* decision, which was relied on by GEMA in its written arguments, is of relevance here. As GEMA recognised at the joint hearing on Ground D, *SONI* simply did not concern GEMA's power under section 7(5)(b) to provide in a licence condition for its future modification.<sup>1485</sup>

### ***Applying the principles to the Special Conditions of which complaint is made***

8.151 Having set out our conclusions as to the correct interpretation of section 7(5)(b) of EA89, we now turn to assessing whether the Special Conditions challenged by SSEN-T and SPT constitute valid exercises by GEMA of the power contained in that provision.

8.152 We note that several of the impugned conditions are drafted in a materially similar fashion, such that they can be grouped together for the purposes of our analysis. We analyse the special licence conditions in the following order:

- a) LOTI Re-opener;
- b) Net Zero Re-opener;
- c) Other re-openers;
- d) The NARM regime;<sup>1486</sup>
- e) Evaluative PCDs; and
- f) PCFI.

8.153 As noted in Chapter 4, following responses to the provisional determination we carried out short, focused consultations on some specific points. In relation to this Ground, we asked SPT, SSEN-T and GEMA for further comments on the specific application of our principles to several Special Conditions. We did this through two consultations, on 12 and 20 October 2021.

### ***LOTI Re-opener***

8.154 The first three categories of condition are the so-called 'Re-opener' conditions. These conditions allow licensees, and in some cases GEMA itself, to 're-open'

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<sup>1485</sup> Joint hearing on Ground D, 24 June 2021, page 71, lines 11–13.

<sup>1486</sup> The licence condition title is 'Baseline Network Risk Outputs (NARM<sub>t</sub>)'. We refer to the appealed condition as 'NARM' or 'the NARM regime' in this chapter.

the price control to propose (or, in GEMA's case, impose) adjustments to allowed revenue (among other things), to enable new projects to be funded or to reflect increased or decreased costs relating to projects which were known about at the outset of, and built into, the price control.

8.155 The LOTI Re-opener provides electricity TOs with a route to apply for funding (or adjustments to funding) for large investments in the network which may be required during the period of the price control to meet (for example) decarbonisation or system reliability needs, but in circumstances where there is insufficient certainty as to their need, scale and/or timing at the outset of the price control. The LOTI Re-opener is for projects that are expected to cost more than £100 million.

8.156 The LOTI Re-opener is contained in Special Condition (**SpC**) 3.13.<sup>1487</sup> It provides, so far as material, as follows (emphasis added):

3.13.2 The effect of this condition is to: (b) establish a Re-opener for the licensee to apply for an adjustment to its allowed expenditure where there is a need for additional investment in the licensee's Transmission System;

3.13.3 This condition also sets out the process the Authority will follow when directing any changes as a result of the Re-opener ...

Part B: Costs within scope of this Re-opener and pre-application requirements

**3.13.6 The licensee may, in respect of any LOTI, apply to the Authority for a Project Assessment Direction specifying a LOTI Output, a delivery date and associated allowances in Appendix 2.**

**3.13.7 Before applying for a Project Assessment Direction, the licensee must: (a) obtain approval of eligibility to apply as provided for in Part D, unless relieved of this requirement by the Authority by direction; (b) submit an Initial Needs Case to the Authority for consideration as provided for in Part E, unless relieved of this requirement by the Authority by direction; and (c) obtain the Authority's approval of a Final Needs Case as provided for in Part F. ...**

Part C: LOTI Outputs

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<sup>1487</sup> The Special Condition number and wording is the same for SSEN-T and SPT.

3.13.8 The licensee must deliver the LOTI Outputs specified in Appendix 2 by the delivery dates specified in Appendix 2.

Part D: Approval of eligibility to apply for a LOTI Output

3.13.9 Not less than three months prior to the licensee's intended date for submitting an Initial Needs Case, approval of eligibility to apply must be sought by way of written submission to the Authority, unless the Authority relieves the licensee of this requirement by direction, including statements setting out: (a) why the investment is a LOTI; (b) a brief description of the LOTI; and (c) if the licensee considers that the timings for the assessment of the LOTI should be different to the timings set out in Parts E or F, proposed alternative timings.

Part E: Initial Needs Case

3.13.10 If the Authority approves the eligibility of the project, or the Authority has relieved the licensee of the requirement to obtain approval of eligibility to apply, the licensee may submit an Initial Needs Case to the Authority for consideration.

3.13.11 An Initial Needs Case must be submitted: (a) not less than twelve months prior to the licensee's intended date for issuing its Final Statutory Planning Consultation; or (b) by such other date as the Authority may direct.

Part F: Final Needs Case

3.13.12 If the licensee has submitted an Initial Needs Case to the Authority in respect of which the Authority has published a response, or the Authority has relieved the licensee of the requirement to submit an Initial Needs Case by direction, the licensee may seek the Authority's approval of the Final Needs Case.

3.13.13 Unless the Authority otherwise directs, approval may only be sought after the licensee has secured all material planning consents.

Part G: Cost And Output Adjusting Event

**3.13.14 The licensee may only apply to the Authority for a direction adjusting the LOTI Output, the delivery date or associated allowances in Appendix 2 where: (a) there has been**



**one or more Cost And Output Adjusting Events; and (b) if the following requirements are met: (c) the licensee could not have reasonably foreseen (d) the licensee could not have economically and efficiently planned a contingency for the event or events; (e) expenditure has been caused to increase or decrease by at least the percentage specified in, or in accordance with, paragraph 3.13.15, calculated before the application of the Totex Incentive Strength Rate, relative to the relevant allowance in Appendix 2 by the event, or, if there has been more than one event: - by each event; or - if the Authority has directed that the events in relation to the relevant LOTI Output should count cumulatively towards the percentage threshold, by the events; and (f) the increase or decrease in expenditure is expected to be efficiently incurred or saved.**

3.13.15 The percentage referred to in paragraph 3.13.14 is: (a) 20%; or (b) such other percentage as the Authority may specify by direction.

3.13.16 Unless the Authority otherwise directs, the licensee must make any application no later than before the end of the period of three months beginning with the delivery date for the LOTI Outputs.

3.13.17 An application under paragraph 3.13.14 must be made in writing and must: (a) include detailed supporting evidence that a Cost And Output Adjusting Event meeting the requirements set out in paragraph 3.13.14 has occurred; (b) set out any amendments requested to the LOTI Output, the delivery date or associated allowances in Appendix 2; (c) explain the basis of the calculation for any proposed adjustment to the allowances in Appendix 2, which must be designed to keep, so far as is reasonably practicable, the financial position and performance of the licensee the same as if the Cost And Output Adjusting Event had not occurred; and (d) include a statement from a technical adviser, who is external to and independent from the licensee, whether, considered in the context of the value of the LOTI Output, the proposed adjustments to the LOTI Output, the delivery date or associated allowances fairly reflect the effects of the Cost And Output Adjusting Event.

#### Part H: What process will the Authority follow in making a direction?

3.13.18 Before initiating a Project Assessment Direction, the Authority will assess whether the contents of the proposed Project

Assessment Direction are significantly different to the application submitted by the licensee under Part B.

3.13.19 In deciding whether the contents are significantly different, the Authority will have regard to the proposed LOTI Output, the delivery date and associated allowances.

3.13.20 If, having carried out the assessment in paragraph 3.13.18, the Authority considers that the proposed Project Assessment Direction is not significantly different to the application submitted by the licensee under Part B, **it will proceed with making a Project Assessment Direction in accordance with paragraph 3.13.21.** Otherwise, any amendments to the special conditions of this licence will be made under section 11A of the Act.

3.13.21 Before making a Project Assessment Direction or a direction under paragraph 3.13.14, the Authority will publish on the Authority's Website: (a) the text of the proposed direction; (b) the reasons for the proposed direction; and (c) a period during which representations may be made on the proposed direction, which will not be less than 28 days.

3.13.22 A Project Assessment Direction will set out: (a) any amendments to Appendix 2; and (b) any project-specific Cost And Output Adjusting Events. 3.13.23 A direction under paragraph 3.13.14 will set out any amendments to Appendix 2.

#### Part I: LOTI Guidance and Submissions Requirements Document

3.13.24 **The licensee must comply with the LOTI Guidance and Submissions Requirements Document when making an application under Part B or Part G, seeking approval under Part D or Part F or making a submission under Part E.**

3.13.25 The Authority will issue and amend the LOTI Guidance and Submissions Requirements Document by direction.

3.13.26 The Authority will publish the LOTI Guidance and Submissions Requirements Document on the Authority's Website.

3.13.27 The LOTI Guidance and Submissions Requirements Document will make provision about the detailed requirements for Parts B, D, E, F and G.

3.13.28 Before directing that the LOTI Guidance and Submissions Requirements Document comes into effect, the Authority will publish on the Authority's Website: (a) the text of the proposed LOTI Guidance and Submissions Requirements Document; (b) the date on which the Authority intends the LOTI Guidance and Submissions Requirements Document to come into effect; and (c) a period during which representations may be made on the text of the proposed LOTI Guidance and Submissions Requirements Document, which will not be less than 28 days.

3.13.29 Before directing an amendment to the LOTI Guidance and Submissions Requirements Document, the Authority will publish on the Authority's Website: (a) the text of the amended LOTI Guidance and Submissions Requirements Document; (b) the date on which the Authority intends the amended LOTI Guidance and Submissions Requirements Document to come into effect; (c) the reasons for the amendments to the LOTI Guidance and Submissions Requirements Document; and (d) a period during which representations may be made on the amendments to the LOTI Guidance and Submissions Requirements Document, which will not be less than 28 days.

8.157 It can be seen that the 'trigger' for a modification of SpC 3.13 pursuant to section 7(5)(b) is an application made by the licensee for new LOTI funding (pursuant to SpC 3.13.6) or an adjustment to existing LOTI funding (pursuant to SpC 3.13.14). An application for new LOTI funding can itself only be made once the licensee has obtained approval from GEMA of a Final Needs Case.

8.158 SpC 3.13 identifies the following processes for amendment of the licence in connection with such an application for LOTI funding:

- a) where GEMA concludes that the LOTI should proceed in a way which is not significantly different from the Final Needs Case proposed by the company, that it may make a Project Assessment Direction which specifies the allowed costs and associated outputs;<sup>1488</sup>
- b) where GEMA concludes that the LOTI should proceed in a way which is significantly different from the Final Needs Case proposed by the company, that it will follow the section 11A (SLMP) process in making licence modifications to implement the LOTI;<sup>1489</sup>

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<sup>1488</sup> As detailed in SpC 3.13.18.–3.13.22.

<sup>1489</sup> As detailed in SpC 3.13.18.–3.13.22.

- c) the licensee may only apply to the Authority for a direction adjusting the LOTI Output, the delivery date or associated allowances in Appendix 2 where the expenditure associated with the LOTI has increased or decreased by more than 20%.<sup>1490</sup>

8.159 As indicated in the wording of SpC 3.13, GEMA has set out a number of steps in the process to be followed before a Project Assessment Direction should be made, including in respect of a Cost and Output Adjusting Event. Part H specifies the process to be followed by GEMA before making any Direction. Part D and G also provide examples of the information which must be provided by the company in advance of any decision by GEMA to make a Project Assessment Direction.

8.160 However, while GEMA sets out the process by which it would proceed with self-modification, it does not specify the criteria defining the scope of the modification in question. The only constraints on GEMA's ability to modify the licence condition under section 7(5)(b) are that the direction must relate to a specific project (either one proposed by the licensee or one which has already been approved), must specify (or adjust) a LOTI Output, a delivery date and/or an associated allowance, and (in the case of a Project Assessment Direction relating to a new LOTI project) must not be significantly different from that proposed by the licensee. These limited constraints do not in our view properly circumscribe the scope of modifications which may be made. Nor is there anything on the face of the licence to indicate the criteria to be applied by GEMA when approving a Final Needs Case (or the subsequent application itself). While there is some indication in SpC 3.13.14 as to the criteria by which GEMA will determine a Cost and Output Adjusting Event, the wording of SpC 3.13 indicates that the criteria which GEMA intends to apply are set out in more detail in Associated Documents.

8.161 It is implicit that GEMA will determine any application in accordance with the LOTI Re-opener Guidance and Submissions Requirements Document (the **LOTI GSRD**),<sup>1491</sup> given that licensees are required to comply with it when applying for a Project Assessment Direction or an adjustment direction, as indicated in SpC 3.13.24. It might be said, therefore, that the criteria are contained in that document.

8.162 However, as we have explained at paragraph 8.126 above, the criteria must be contained in the licence condition itself, or in a document having the status

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<sup>1490</sup> As detailed in SpC 3.13.14.–3.13.17. SpC 3.13.15 also indicates that GEMA may also amend the 20% figure by direction.

<sup>1491</sup> GEMA (2021), [Large Onshore Transmission Investments Reopener Guidance and Submissions Requirements Document](#)

of a licence condition: it is insufficient that the criteria be contained in a document which sits outside the licence itself.

- 8.163 For that reason alone, we consider that GEMA has failed to meet the requirements of section 7(5)(b) in its formulation of SpC 3.13.
- 8.164 Further, and in any event, we note that the LOTI GSRD sets out a series of non-exhaustive criteria, in particular in paragraph 6.27, where GEMA explicitly states that it will also consider other criteria before making a decision on a Project Assessment Direction. It is insufficient, in our view, that the criteria to be used in applying the Direction powers are left at the discretion of GEMA. Thus, in addition to setting out the criteria in the licence condition itself (or in a document having the status of a licence condition), we also consider that GEMA should provide a definitive list of criteria.
- 8.165 As the criteria are not set out in the licence condition itself, it is unnecessary for us to express any definitive view as to whether the criteria contained in that paragraph of the LOTI GSRD would be sufficiently specific as regards the scope of and approach to any future modification of the licence, were those criteria to be set out in the licence condition. For completeness, however, our current views are set out immediately below.
- 8.166 The criteria listed in paragraph 6.27 of the LOTI GSRD for application when considering a Project Assessment Direction are as follows:
- Whether there is sufficient detail on the technical design to demonstrate that the costs are efficient and that any optional capabilities included in the proposal represent long-term value for money.
  - The robustness of the TO's process for procurement and selection, and whether this process had been efficiently applied and could be expected to lead to an efficient market outcome.
  - The efficiency of the proposed costs, taking into account the conclusions on the above and any additional detailed cost assessment including benchmarking of specific elements where comparable data is available.
  - The evaluation of risks, and the appropriateness of the proposed risk management strategy including the allocation of risks and the associated costs.

- The appropriateness of the construction programme and progress made towards being ready to proceed in the proposed timescales.<sup>1492</sup>

8.167 We consider that these criteria relate only to GEMA's proposed **approach** to assessing applications (and thus its approach to modifications under section 7(5)(b)). The criteria are in our view apt to guide the licensee in respect of the way in which GEMA will approach a Project Assessment Direction, but they are framed in very general terms and do not put any real limit on the **scope** of the modifications which might be made to the licence condition. The nature of such modifications will depend entirely on the particular projects which are proposed in future by licensees.

8.168 These criteria stand in contrast to the criteria set out in certain other conditions, discussed below, which circumscribe the scope of future modifications under section 7(5)(b).

8.169 Thus, without determining the issue, we consider (contrary to our obiter view at paragraph 8.162 of the provisional determination) that criteria of the sort set out in paragraph 6.27 of the LOTI GSRD would not be sufficient for the purposes of section 7(5)(b) of EA89 even if that document had the status of a licence condition and the criteria were said to be exhaustive.

8.170 Finally, it is worth adding that the inclusion of a significance gateway does not cure the defects we have identified: as we have already explained at paragraph 8.143 above, the introduction of a significance threshold in determining whether or not to make a Project Assessment Direction or using the section 11A process is logically separate from the question of whether, where the Direction process is used, the condition sufficiently specifies the manner and determines the circumstances of a future self-modification such as to amount to a lawful exercise of the power in section 7(5)(b).

8.171 In conclusion, we consider that GEMA has acted ultra vires section 7(5)(b) in its formulation of SpC 3.13.

### *Net Zero Re-opener*

8.172 This re-opener is designed to set new allowances and outputs in licences for projects related to Net Zero which are not funded elsewhere in the price control. It can also amend existing outputs and allowances for existing Net Zero-related outputs set elsewhere in the licence. The purpose of the re-

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<sup>1492</sup> GEMA (2021), [Large Onshore Transmission Investments Reopener Guidance and Submissions Requirements Document](#)

opener is 'to introduce an increased level of adaptability into the RIIO-2 Price Control by providing a means to amend the price control in response to changes connected to the meaning of the New Zero targets'; the re-opener envisages GEMA considering making adjustments to reflect matters such as changes in government policy, the successful trial of new technologies, and changes in the pace or nature of the uptake of low carbon technologies.

8.173 Pursuant to SpC 3.6.6:

The Authority will consider directing an adjustment to the value of the NZt term and the outputs, delivery dates and allowances established by the special conditions of this licence where in its opinion:

- (a) a Net Zero Development has occurred or is expected to occur;
- (b) the Net Zero Development has caused or is expected to cause the cost of Licensed Activity to increase or decrease during the Price Control Period;
- (c) the effect of the Net Zero Development on the cost of Licensed Activity is not otherwise provided for in this licence;
- (d) the effect of the Net Zero Development has not already been assessed under another Re-opener; and
- (e) the effect, or estimated effect, of the Net Zero Development on the cost of Licensed Activity exceeds the Materiality Threshold.

8.174 We consider that the circumstances in which a future modification may be made are provided for at (a)-(e), but the criteria are extremely broad. Specifically, the definition of 'Net Zero Development', which is contained in the table at SpC 1.1.16, is:

a change in circumstances related to the achievement of the Net Zero Carbon Targets that is:

- (a) a change in national government policy (including policies of the devolved national parliaments);
- (b) a change in local government policy;
- (c) the successful trial of new technologies or other technological advances;

(d) a change in the pace or nature of the uptake of low carbon technologies; or

(e) new investment arising from the agreement of a Local Area Energy Plan or an equivalent arrangement.

8.175 In our view, that is so broad that licensees can have no proper sense, at the outset of the price control, ie when the relevant Special Condition is adopted, what might trigger the Net Zero Re-opener. We therefore take the view that the circumstances leading to possible modification of this condition are not sufficiently determined by or under the condition itself.

8.176 Likewise, we do not consider that the manner of any future modification is sufficiently specified. The opening sentence of SpC 3.6.6 purports to give GEMA essentially open-ended discretion to modify the price control in any respect. There is no limit on which special condition(s) may be modified, and the potential modifications are very broad in scope.

8.177 In its written submissions, GEMA asserted that the Net Zero Re-opener has a 'prescribed scope'.<sup>1493</sup> In our view, that is an unrealistic characterisation of the condition, given the vague nature of the circumstances set out in the condition and the open-ended nature of the modifications that might be made.

8.178 We therefore take the view that in providing for SpC 3.6 GEMA has acted ultra vires section 7(5)(b) of EA89.

*Other re-openers which we consider to be ultra vires section 7(5)(b)*

8.179 We consider that the following Special Conditions are also problematic for one or more of the following reasons: (i) they do not sufficiently set out criteria specifying the scope of future modifications; or (ii) they do not sufficiently set out criteria indicating GEMA's approach to modifications, such that the conditions do not properly specify the manner of their future modification; or (iii) they do not sufficiently determine the circumstances in which modifications may be made.

*a) SpC 3.14 Medium-Sized Investment Projects Re-opener (MSIP).<sup>1494</sup>*

8.180 This re-opener provides, at SpC 3.14.6, for the licensee to apply to GEMA for a direction amending the outputs, delivery dates or associated allowances in relation to a list of activities. In our view, while it is clear that any modifications

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<sup>1493</sup> [GEMA Response B](#), paragraph 191(6).

<sup>1494</sup> To be clear, the fact that these projects are not as financially significant as LOTI projects does affect the requirement for specificity under section 7(5)(b).



to the condition in terms of allowances would, where an application is accepted by GEMA, be limited to additional costs which the licensee expects to incur on specific MSIPs, we are concerned that certain of the activities referred to in SpC 3.14.6 are insufficiently well-defined to enable the licensee to know from the wording of the licence condition whether it can make an application in respect of those activities. Further, it appears from SpC 3.14.9 that GEMA may reject applications on the basis that the MSIP in question will not in its view confer sufficient consumer benefit. To our mind, this very general wording also renders the trigger for a modification insufficiently clear. It is also unclear how GEMA would go about its assessment in this regard.

*b) SpC 3.28: Subsea Cable Re-opener*

8.181 This SSEN-T-specific re-opener is designed to provide for funding for additional costs associated with addressing Subsea Cable Faults that SSEN-T did not reasonably anticipate at the start of the Price Control Period, or with mitigating any material risk of a Subsea Cable Fault occurring in the future.

8.182 As with SpC 3.14, it seems clear that, where an application is accepted by GEMA, any modifications to the condition in terms of allowances would be limited to additional costs which the licensee expects to incur on specific Subsea Cable Projects. However, in our view, this condition does not sufficiently define the circumstances in which a modification may be made. The threshold issues of what it was 'reasonable' for SSEN-T to anticipate and what constitutes a 'material' risk of a fault occurring in the future are, in our view, too uncertain for SSEN-T to understand in advance from the wording of the licence condition what circumstances might permit it to seek to re-open funding provided under this condition. We also have concerns about the consumer benefit concept in SpC 3.28.6(a), for the reasons given above.

*c) SpC 3.29: Uncertain Non-Load Related Projects Re-opener*

8.183 This SPT-specific re-opener is designed to provide for funding in relation to six specific non-load related projects set out in Appendix 1 to the condition.

8.184 On balance, while it is again sufficiently clear that GEMA will modify the condition solely in line with the costs of any work on such projects which it accepts, in line with SpC 3.29.6, that there is a need to undertake, we are not satisfied that SpC 3.29.6 sufficiently determines the circumstances of any modification. The definition in SpC 3.29.6 of the circumstances in which GEMA will determine that SpC 3.29 applies is in our view too uncertain for licensees properly to understand when they will be able successfully to apply to re-open the outputs, delivery dates and allowances, particularly in view of

the same generalised consumer benefit test to be deployed pursuant to SpC 3.29.8(d).

*d) SpC 3.2 and 3.3: Cyber Resilience Operational and Information Technology Re-openers:*

- 8.185 These re-openers, which are in materially identical form, provide for the licensee to apply for amendments to outputs, delivery dates and associated allowances for cyber resilience in relation to operational technology (**OT**) and information technology (**IT**) respectively (and for GEMA to make amendments of its own motion in limited circumstances).
- 8.186 It seems to us that while SpC 3.2.8-3.2.16 set out a detailed (and exhaustive) set of criteria setting out the process by which applicants may seek amendments to the cyber resilience OT and IT PCD Tables (contained at Appendix 2 to SpC 3.2 and 3.3 respectively) which, to some degree, indicates the approach which GEMA will take to assessing any such applications, the criteria do not define the scope of any future modifications to those tables with any level of clarity.
- 8.187 Further, we consider that the circumstances in which a future modification under section 7(5)(b) would take place are not sufficiently determined under these conditions. For instance, pursuant to SpC 3.2.15 and 3.3.15, GEMA may of its own initiative direct amendments to the outputs, dates or allowances set out in the respective PCD Tables where, inter alia, 'circumstances exist that create an unreasonable degree of risk in relation to cyber resilience'. The expression 'unreasonable degree of risk' is in our view insufficiently specific: this is a matter of subjective judgment, unknowable to the licensee and capable of change over time.
- 8.188 We therefore accept SSEN-T's submission in response to the provisional determination<sup>1495</sup> that paragraph 8.173(a) of the provisional determination incorrectly reached the provisional view that the direction-making powers granted by these special conditions were intra vires section 7(5)(b).

*e) SpC 3.16: Access Reform Change Re-opener:*

- 8.189 This is a re-opener which can be triggered by GEMA, leading to reductions in licensees' totex allowances, in the event that GEMA's ongoing review into how aspects of network access and charging work in light of the changing nature of the energy system and networks leads to lower costs for network companies;

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<sup>1495</sup> SSEN-T response to the PD, paragraph 4.35.

this re-opener is designed as a mechanism for ensuring that such lower costs are passed on to consumers.<sup>1496</sup>

- 8.190 In our provisional determination, we set out our provisional view that both the manner and circumstances of potential modifications were sufficiently set out in SpC 3.16.4. Our view was based on the fact that the re-opener can only be triggered if an ‘Access Reform Change’ (an expression with a precise meaning<sup>1497</sup>) has occurred; and GEMA must have sufficient evidence to lead it to the conclusion that it is likely that the Access Reform Change will lead to a (material) reduction in costs.<sup>1498</sup>
- 8.191 In response to the provisional determination, SPT submitted that the scope of the downwards-only adjustment is unpredictable and essentially unlimited.<sup>1499</sup> SPT also noted that while the term ‘Access Reform Change’ has a defined meaning, the contours of the concept are far from precise. GEMA’s Significant Code Review has been ongoing since 2018 and is expected to continue until late 2021, with the potential for a number of (uncertain) changes to industry codes, at some unknown point in time, that will affect the electricity TOs. As such, the scope of the ‘trigger’ (ie the circumstances) was materially uncertain and unspecified.<sup>1500</sup> Similarly, SSEN-T submitted that the clause merely sets out the broad circumstances which may cause GEMA to consider making a direction reducing revenue.<sup>1501</sup>
- 8.192 Having considered further SPT’s submissions,<sup>1502</sup> we agree that although on the face of SpC 3.16 the trigger for a re-opener appears to be specified, there are a number of aspects of the process which are uncertain. In particular, the nature of the costs which GEMA might consider to be avoided as a result of an Access Reform Change is unclear. GEMA’s decision to implement the Access Reform Change reopener indicated that companies can expect to achieve savings following completion of its Significant Code Review, including ‘investment savings for networks, by driving down costs of delivering and accommodating new connections and supporting network investment through the identification of efficient alternative solutions to new capacity.’<sup>1503</sup> This is in our view a very broad description of the possible cost savings which might

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<sup>1496</sup> *Min Zhu* (GEMA) paragraph 163.

<sup>1497</sup> See the definitions table at [SpC 1.1.16](#).

<sup>1498</sup> We took the view that the word ‘likely’ in SpC 3.16.4(b) simply means that it is more likely than not that the Access Reform Change will lead to a reduction in costs. Such reduction in costs must meet the materiality threshold of £3.5m: see SpC 3.16.4(c) in combination with the definitions table at SpC 1.1.16.

<sup>1499</sup> SPT response to the PD, paragraph 205.

<sup>1500</sup> SPT response to the PD, paragraphs 212-213.

<sup>1501</sup> SSEN-T response to the PD, paragraph 4.38.

<sup>1502</sup> We note that although SSEN-T made submissions on this re-opener in response to the provisional determination, it did not appeal the Decision in respect of SpC 3.16. Accordingly, the CMA’s findings only apply to SPT.

<sup>1503</sup> [RIIO-2 Final Determinations Electricity Transmission System Annex, paragraph 4.62](#)

emanate from a review which has not yet been completed. To our mind, therefore, SpC 3.16.4 does not sufficiently determine the circumstances or specify the scope of any future modifications: it is unclear what sort of cost reduction would be included in a modification, and that issue is liable to be informed by the precise output of the Significant Code Review, which is ongoing. Further, we are concerned that there are no criteria in SpC 3.16 setting out GEMA's approach to identifying such cost reductions.

8.193 We note that at the response hearing on 28 September 2021, and in response to our 20 October 2021 consultation, GEMA acknowledged that the scope of a change under this condition could be made clearer.<sup>1504</sup>

8.194 Accordingly, our final assessment is that the direction-making power in SpC 3.16.4 is ultra vires.

#### *Other re-openers which we consider to be within GEMA's powers*

8.195 By contrast, we consider that the re-opener provisions in the following Special Conditions are within the powers afforded to GEMA by section 7(5)(b). We consider that these Special Conditions are distinguishable because, as per our assessment in paragraph 8.122, they both determine the circumstances in which the condition can be modified by direction, ie there is a defined 'trigger' for use of the re-opener which can be sufficiently well understood at the outset, and also that the manner of any modification is sufficiently clearly set out.

##### *a) SpC 3.4: Physical Security Re-opener:*

8.196 This re-opener provides for amendments to outputs, delivery dates and associated allowances where the scope of work the licensee is required to carry out under the Physical Security Upgrade Programme (**PSUP**)<sup>1505</sup> has changed: see SpC 3.4.7.

8.197 In our view, the (exhaustive) criteria by which GEMA will assess whether and in what way to modify the condition are set out in some detail, in SpC 3.4.9 and 3.4.10. Although framed in terms of the necessary contents of applications made by the licensee, it is in our view implicit, reading the clause as a whole, that GEMA will make its decision treating those matters as the relevant criteria, and that this decision involves a proper explanation of the

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<sup>1504</sup> Ground D Relief hearing, 28 September 2021, page 45, lines 16–17; GEMA response to 20 October consultation.

<sup>1505</sup> Defined as 'physical security investment at Critical National Infrastructure sites as mandated by government': see table at SpC 1.1.16.

basis of the calculations for any amendments to allowances.<sup>1506</sup> We consider that the scope of modifications to SpC 3.4 is implicitly limited to the costs which the applicant will incur (or save) in respect of the changes to the scope of work under the PSUP, and the outputs and delivery dates which the applicant has to meet under the PSUP.

8.198 We consider (contrary to SSEN-T's response to the provisional determination)<sup>1507</sup> that this condition is different from the conditions discussed at paragraph 8.179 above. SSEN-T told us that SpC 3.4 does not explain on what basis or by what criteria GEMA will grant or refuse an application, and therefore we should come to the same conclusion as with the MSIPs and Subsea Cable Re-openers.<sup>1508</sup> In our view, unlike SpC 3.14 and 3.28, the trigger for modifications is clear. Further, GEMA will assess applications by reference to whether the modifications requested relate to changes to the scope of work that the licensee is required to carry out and whether the licensee has properly explained the basis of the calculations for any amendments to allowances, rather than by reference to a very general concept such as consumer benefit.

8.199 We therefore reject SSEN-T's submissions and conclude that SpC 3.4 is *intra vires*.

*b) SpC 3.15: Pre-construction Funding Re-opener*

8.200 This re-opener permits the licensee to apply for a direction amending the outputs, delivery dates and associated allowances in Appendix 2 to the condition where (a) the licensee expects to incur costs for Pre-Construction Works<sup>1509</sup> that are not already specified as outputs in Appendix 2, or (b) the licensee expects the costs of Pre-Construction Works that are already specified in Appendix 2 will be more than double the allowance provided for those works.

8.201 It is again clear to us that any modifications to the condition in terms of allowances would be limited to additional costs which the licensee expects to incur on specific Pre-Construction Works, such that the scope of potential modifications is sufficiently certain. In addition, we are satisfied that SpC

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<sup>1506</sup> We also consider it implicit that GEMA would follow the same approach under SpC 3.4.11, i.e. where GEMA is considering directing amendments without an application having been made by the licensee.

<sup>1507</sup> SSEN-T response to the PD, paragraph 4.36.

<sup>1508</sup> SSEN-T response to CMA consultation of 12 October 2021, paragraphs 12–18.

<sup>1509</sup> Defined as various types of work 'undertaken for the purposes of developing a LOTI to the point where all material planning consents have been obtained and the project is ready to begin construction': see table at SpC 1.1.16.

3.15.7 sufficiently determines the circumstances in which the condition may be modified by direction.

8.202 In its response to the provisional determination,<sup>1510</sup> SSEN-T contended that SpC 3.15 does not explain on what basis or by what criteria GEMA will grant or refuse an application. We do not accept that contention. In the specific context of the Pre-Construction Funding re-opener, we consider that the criteria contained at SpC 3.15.9 are sufficient to guide licensees as to GEMA's approach to potential modifications: as with SpC 3.4, they do not include reference to generalised concepts. Instead, SpC 3.15.9 indicates that the assessment will be made against more predictable criteria, including a description of the work to be undertaken, the LOTI to which it relates and whether the applicant has properly justified why the Pre-Construction Works are required. Further - and again in common with SpC 3.4 - although framed in terms of the necessary contents of applications made by the licensee, it is in our view implicit, reading the clause as a whole, that GEMA will make its decision treating those matters as the relevant criteria.

8.203 We therefore reject SSEN-T's submissions and conclude that SpC 3.15 is *intra vires*.

#### *The NARM regime*

8.204 SpC 3.1 sets out (along with SpC 9.2) the network companies' obligations in respect of the Network Asset Risk Metric (**NARM**), a tool designed to allow GEMA to quantify the benefit to consumers of the companies' asset management activities. The NARM process is intended to provide additional flexibility to companies to amend the approach they take to asset management, and to amend outputs and allowances accordingly. The network companies' outputs, which are described as 'Baseline Network Risk Outputs' (also known as **BNRO**), are to be set out in the so-called NARM Workbook, which does not have the status of a licence condition. The outputs define what has to be delivered in return for the allowed expenditure. According to SpC 3.1.5, the NARM Workbook will be issued and amended by direction. The allowances are set out in Appendix 1 to SpC 3.1.

8.205 Whilst the outputs are not set out in SpC 3.1 itself, we note SpC 3.1.3, which provides as follows (emphasis added):

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<sup>1510</sup> SSEN-T response to the PD, paragraph 4.37.

By the end of the Price Control Period, **the licensee must deliver its Baseline Network Risk Outputs** in accordance with sheet '1.1. Baseline Network Risk Outputs' of the Network Asset Risk Workbook.

- 8.206 Likewise, SpC 3.1.4 provides that '[a]ny relevant funding adjustments and penalties to reflect the licensee's Outturn Network Risk Outputs and incurred costs of delivery will be calculated by the Authority in accordance with the NARM Handbook'. Like the NARM Workbook, the NARM Handbook does not have the status of a licence condition.
- 8.207 The circumstances in which a licensee's outputs can be 'rebased' upon the licensee's initiative are set out in SpC 9.2. According to SpC 9.2.3, the licensee must have in place a NARM Methodology which facilitates the achievement of the NARM Objectives as set out in SpC 9.2.5. Pursuant to SpC 9.2.6, the licensee must review its NARM Methodology at least annually to identify the scope for modifications to it which would better facilitate the achievement of the NARM Objectives. Where, as a result, the licensee proposes a modification to its NARM Methodology, it must (among other things) submit to GEMA a plan setting out how it intends to rebase its outputs if such rebasing is a necessary consequence of implementing the proposed modification of its NARM Methodology: SpC 9.2.8(j). To the extent that GEMA approves the proposed modification, it may also direct the date by which the licensee must submit rebased outputs.
- 8.208 Where a licensee proposes rebased outputs, GEMA will consider the proposal and, by direction, approve it, approve it with adjustments, or reject it: SpC 3.1.15. As noted above, GEMA has in addition sought to afford itself, by virtue of SpC 3.1.5, a general power to amend the NARM Workbook, which on its face includes amendments of GEMA's own initiative to the licensee's BRNO.
- 8.209 SPT's and SSEN's essential complaint is that the outputs should be contained in the licence condition itself, or at least in a document having that status. They contend that modifications to the outputs by direction would directly change the meaning and effect of the NARM licence conditions, such that in substance GEMA has sought to confer on itself the power to modify the conditions under section 7(5)(b).<sup>1511</sup>
- 8.210 We accept SPT's and SSEN's submission in relation to SpC 3.1.3. That clause contains an obligation on the licensee to deliver its Baseline Network Risk Outputs. Any modification of the outputs thus in substance modifies the obligation contained in the special condition and in effect amounts to a

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<sup>1511</sup> SSEN Response to the PD, paragraph 4.49; SPT response to the PD, paragraph 193.

modification of the condition. Thus, we consider that in providing for the modification of the NARM Workbook by direction, GEMA was seeking to use the power contained in section 7(5)(b).

8.211 SPT and SSEN-T submitted that the same analysis applies to modifications of the NARM Handbook pursuant to SpC 3.1.9. They contended that, by virtue of SpC 3.1.4, such modifications by simple direction stand directly to affect the allowances to which the licensee is entitled pursuant to Appendix 1 to SpC 3.1.

8.212 In response to our consultation dated 12 October 2021 on the application of our principles to NARM, among other Special Conditions, GEMA submitted that its ability to issue and amend the NARM Handbook did not afford GEMA a power to affect, adjust or modify allowances.<sup>1512</sup> GEMA's ability to set out a methodology in the NARM Handbook did not therefore modify the licence condition and the CMA's provisional determination to the contrary was a legal error. It added that SpC 3.1.4 was merely a description of the process that would take place for making funding adjustments and penalties. Furthermore, the funding adjustments referred to in SpC 3.1.4 would take place as part of RIIO-ET2 Close-out (**Close-out**<sup>1513</sup>)— and adjustments would be made only through a statutory modification process at the end of the price control (GEMA would calculate these adjustments in accordance with the NARM Handbook).

8.213 SPT and SSEN-T disagreed with GEMA's assessment of the effect of SpC 3.1.9.<sup>1514</sup> SPT submitted that it might well be the case that Close-out would be effected through a statutory modification process; however, as GEMA had itself noted, GEMA would calculate the adjustments in accordance with the NARM Handbook. SPT contended, therefore, that amendments to the NARM Handbook by direction under SpC 3.1.9 would directly affect the methodology for the calculation. It further submitted that by virtue of SpC 3.1.9 GEMA could make substantive changes to the NARM Funding Adjustment and Penalty Mechanism, which would in turn determine SPT's final allowances. SPT provided examples how, by making changes to inputs to this calculation such as deadbands or the penalty rates, which would be possible by direction using SpC 3.1.9, GEMA could change the working of the penalty/reward mechanisms, and consequently would change the price control allowances associated with RIIO-ET2 and implemented via Closeout.<sup>1515</sup>

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<sup>1512</sup> GEMA Response to 12 October consultation, 'Special Condition 3.1.9 – modifying the NARM Handbook'.

<sup>1513</sup> The RIIO-2 price control sets out what network companies must deliver, and the revenue they can collect to deliver this. As a result of these mechanisms, some areas of the RIIO-2 price control need to be settled ('closed out') once the price control has ended.

<sup>1514</sup> SSEN-T Response to GEMA comment on SpC 3.1.9; SPT Response to GEMA comment on SpC 3.1.9.

<sup>1515</sup> SPT Response to GEMA comment on SpC3.1.9, Annex 1.



- 8.214 SSEN-T similarly rejected GEMA's suggestion that it is sufficient for the Close-out adjustment procedure itself to be implemented by the SLMP. SSEN-T also referred to GEMA's statement that adjustments to allowances during that procedure would be made in accordance with the NARM Handbook, which, on GEMA's case, could be changed by direction at any time. SSEN-T said that, in its view, it was 'more than a speculative concern' that GEMA would make changes that affected allowances, based on its experience with the RIIO-1 closeout process.<sup>1516</sup>
- 8.215 In our view, the issue or amendment of the NARM Handbook, insofar as it sets out the methodology for calculating the relevant funding adjustments and penalties under the NARM Funding Adjustment and Penalty Mechanism, would in substance amount to a licence modification, albeit one which would formally be implemented at a later date. The issue of the Handbook or any such an amendment would have a direct impact on the allowances associated with RIIO-ET2 and therefore we consider that any direction to issue or amend the Handbook should be subject to the requirements of section 7(5)(b).
- 8.216 We do not accept as a sufficient answer GEMA's submission that adjustments to price control allowances associated with such a change to the Handbook would be made through a statutory modification process at the end of the price control. The examples of potential amendments to the Handbook which SPT has raised in its submission would have the effect of modifying the formula which defines the price control closeout calculation, and this change would affect the relevant companies during RIIO-ET2. This is because a change to the Handbook which would affect the NARM closeout calculation would result in a consequential change to the NARM-related allowances associated with the Handbook. These allowances and the associated incentive mechanisms are linked to the companies' investments and operational decisions during RIIO-ET2 relating to NARM. Given this link between the price control allowances associated with RIIO-ET2 closeout, and the output targets and incentives associated with RIIO-ET2, we consider any change to the formula for closeout also to amount, in substance, to a change to the RIIO-ET2 licence. Consequently, we consider that such modifications should be subject to the requirements of 7(5)(b).
- 8.217 We note that neither SpC 3.1.5 nor SpC 3.1.15 specifies the scope of modifications to the Workbook (or indeed the scope of that document, which has not yet been adopted, in its original form). Indeed, SpC 3.1.15 permits GEMA to make unspecified adjustments to the licensee's proposal in respect

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<sup>1516</sup> SSEN-T Response to GEMA comment on SpC 3.1.9.

of the rebasing of its outputs; and SpC 3.1.5 is entirely silent as to the manner in which the Workbook might be modified pursuant to that clause.

- 8.218 Likewise, SpC 3.1.9 provides for the issuance and amendment of the NARM Handbook by direction but without specifying the scope of any such amendments or the circumstances in which amendments may be made.
- 8.219 Thus, in substance, GEMA has sought to confer on itself the power to modify SpC 3.1 pursuant to section 7(5)(b) but without properly specifying the manner of any such modification or, at least in the cases of SpCs 3.1.5 and 3.1.9, the circumstances of any such modification. In so doing, it has acted ultra vires.
- 8.220 In summary, our assessment is that SpC 3.1 is ultra vires in that SpC 3.1.5, SpC 3.1.9 and 3.1.15 provide in substance for GEMA to modify the licence by direction without sufficiently specifying the manner (or, in the cases of SpC 3.1.5 and 3.1.9, sufficiently determining the circumstances) of such future modification. In so concluding, we have been persuaded by the various representations made by SPT and SSEN-T following the provisional determination, which had come to the provisional conclusion that the direction-making power in SpC 3.1 was intra vires section 7(5)(b).<sup>1517</sup>

#### *Evaluative PCDs*

- 8.221 The Special Conditions contain Evaluative PCDs.<sup>1518</sup>
- 8.222 Under the RIIO-2 price control, funding is linked to the delivery of outputs specified in the licence. The PCD framework provides for the adjustment of the level and timing of allowances in the event the output is not delivered, not delivered to the specification required, or delivered late.<sup>1519</sup>
- 8.223 PCDs can either allow allowances to be recovered mechanistically (ie allowances are automatically recovered in accordance with the relevant formula set out in the licence), or evaluatively (ie requiring GEMA to review the delivery of the PCD outputs). For Evaluative PCDs, the licence provides a power of adjustment (which can only be exercised should the PCD not be Fully Delivered, with the meaning of Fully Delivered and its constituent parts (output and delivery date) being specified in the licence condition), with the

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<sup>1517</sup> In addition to SSEN-T's and SPT's responses to the PD, these include the parties' responses to our consultation of 12 October 2021 and RFIs.

<sup>1518</sup> Evaluative PCDs variously contested by SPT and SSEN-T are listed in **Table 7-4**.

<sup>1519</sup> *Zhu 1 (GEMA)*, paragraph 69.

detailed methodology of the evaluation set out in the PCD 'Reporting Requirements and Methodology Document' (**PRMD**).<sup>1520</sup>

- 8.224 The PRMD sets out the principles GEMA will have due regard to when implementing the PCD framework. Each PCD is defined by an output specified in the licence that the licensee is expected to deliver, the date by which full delivery is expected and the price control allowances associated with that PCD.<sup>1521</sup>
- 8.225 Evaluative PCDs are set where there is some flexibility in the output to be delivered. These are assessed against delivery status: Fully delivered; Fully Delivered with Alternative Specification; Partially Delivered; Partially Delivered with Alternative Specification; Delayed; and Not Delivered.<sup>1522</sup>
- 8.226 Adjustments to allowances are made by way of self-modification and only where an output is Not Delivered, Delayed, Partially Delivered or Partially Delivered with Alternative Specification.<sup>1523</sup>
- 8.227 Each Evaluative PCD follows the same structure and contains materially identical wording. It is therefore sufficient to take just one – the Wider Works PCD, contained in SpC 3.9 – as an example.<sup>1524</sup>
- 8.228 SpC 3.9.7 provides that:

The Authority will, in accordance with the PCD Reporting Requirements and Methodology Document, consider directing a value for WWRt where the licensee has not Fully Delivered an output in Appendix 1.

- 8.229 Thus, the condition does not itself contain criteria setting out the scope of any modifications to the term (ie the allowances associated with projects identified in Appendix 1 to the condition) or for assessing whether to amend the term. To the extent that criteria exist, they are found in an Associated Document – the PRMD – which does not have the status of a licence condition and which is subject to amendment by GEMA by direction.

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<sup>1520</sup> *Zhu 1 (GEMA)*, paragraph 70.

<sup>1521</sup> *Zhu 1 (GEMA)*, paragraph 75.

<sup>1522</sup> *Zhu 1 (GEMA)*, paragraph 75.

<sup>1523</sup> *Zhu 1 (GEMA)*, paragraph 79.

<sup>1524</sup> For the avoidance of doubt, we consider that our analysis applies to all Evaluative PCDs because they take the same format and contain materially identical wording, but we make determinations only in relation to those pleaded in the appellants' NoAs. The PCD for pre-construction funding (3.15.10) does include some additional criteria (3.5.11) not included in other Evaluative PCDs, but these are in addition to the approach described below, and therefore the same analysis applies.

- 8.230 For that reason, the conditions (or clauses of conditions) providing for the PCDs are ultra vires section 7(5)(b) of EA89.
- 8.231 For completeness, we now consider whether the criteria contained in the PRMD would satisfy the requirements of section 7(5)(b) if included in the licence condition or in a document having that status.
- 8.232 The PRMD does provide an explanation as to how GEMA will assess whether something is Partially Delivered, and if so what changes it might make to the price control. This is set out at paragraphs 5.4 to 5.8 of the document:

5.4 In all other cases, the Authority will consider making adjustments to the value of allowances associated with the relevant PCD output, taking account of the particular characteristics of the PCD, factors outside of the licensees' control, and what was delivered by the licensee based upon the following principles:

5.4.1. Where the PCD is assessed by us as 'Not Delivered', we will reduce allowances by the entire amount associated with the PCD less the efficient costs of undertaking reasonable and necessary work up to the point of cancellation, eg upfront engineering assessments. It is the responsibility of the licensee to demonstrate that such costs were reasonable, necessary, incurred efficiently and not funded through other price control mechanisms.

5.4.2. Where the PCD is assessed by us as 'Delayed', we may re-profile allowances associated with the relevant PCD output to match the profile of actual delivery of work or expenditure with the updated timing for the outputs. Ofgem will only reprofile allowances where doing so would have a material impact upon current and future consumers. If appropriate, we will notify to the licensee an alternative submission date for the Basic PCD Report taking account of the licensee's updated delivery plan. The re-profiled allowances may be subject to an adjustment if the output delivered does not meet the requirements in paragraph 5.3 3.

5.4.3. Where the PCD output has been assessed by us as Partially Delivered, or Partially Delivered With Alternative Specification (and the licensee can robustly justify that any cost savings are attributable to Efficiency and/or Innovation), and where the proportion of the output or Consumer Outcome associated with the work delivered can be robustly estimated, the

value of any adjustments to allowances associated with the relevant PCD output may be determined by Ofgem as follows;

***Adjustment to allowances = ((1 – Proportion of output delivered) \* ex ante allowance***

5.4.4. Where paragraphs 5.3, 5.4.1 and 5.4.2 do not apply, and where the adjustment methodology set out in 5.4.3 is not appropriate, we will determine the value of any adjustments to allowances according to the actual work carried out. In doing so we may rely on benchmarking against historical cost data where these are available. Where reliable historical data are not available, we may use bespoke engineering and cost assessment and employ qualitative techniques to supplement technical methods to enable a determination of efficient costs.

5.4.5. The outcome of any adjustment to allowances will not be an increase in the total RIIO-2 allowance associated with the PCD output, as defined in the relevant licence condition or relevant confidential documents.

5.5 Where we make an adjustment to allowances, we will determine the proportion of the adjustment that should be attributed to each Regulatory Year of RIIO-2, on a pro-rata basis to match the profile of actual expenditure reported by the licensee.

5.6 Ofgem will determine the split between Fast Money and RAV additions for the value of the adjustment to allowances having regard to the original split of the allowance linked to the PCD.

5.7 Where applicable, further specifics are set out in the relevant appendices to this document (eg Cyber, GT- PAP).

5.8 In all cases, we will determine adjustments to allowances using a transparent approach, having consulted with licensees and other stakeholders. We will take account of any representations made by licensees and other stakeholders in line with our legal duties. Specifically, Ofgem will consult on the wording of its proposed direction for a period of not less than 28 days in accordance with the licence. Ofgem's consultation will include:

- Ofgem's proposed PCD output delivery status;
- the value of any adjustments to allowances associated with the relevant PCD output; and,

- the methodology and data used to determine the delivery status and the value of any adjustments to allowances associated with the relevant PCD output.

8.233 In addition, sections 6 and 7 of the PRMD set out in some detail the process to be followed. We note that paragraph 5.4 essentially limits the scope of modifications to costs expended or avoided and that GEMA's approach to its assessment is set out therein, albeit, in the case of sub-paragraph 5.4.4, at a high level.

8.234 It seems to us that if the process steps in sections 6 and 7 and the approach to GEMA's assessment in paragraphs 5.4-5.8 were all set out in the relevant Special Condition itself (or if the PRMD were given the status of a licence condition), there should be sufficient specificity to meet the requirements of section 7(5)(b). However, whether there is sufficient specificity is for GEMA to consider further in assessing each of the Evaluative PCDs.

#### *PCFIs*

8.235 Finally, we turn to the PCFI condition, contained in SSEN-T's SpC 8.1.

8.236 The PCFIs are the collective term in the licence for the ET2 Price Control Financial Handbook and the ET2 Price Control Financial Model (**PCFM**). In RIIO-2, the level of the price control is stated not on the face of the licence, but is calculated in the PCFIs, which are a spreadsheet (the PCFM) and accompanying handbook for completing the spreadsheet.

8.237 Relevantly, SpC 8.1 provides for the amendment of the two PCFIs, each of which is specific to the licensee.

8.238 By virtue of SpC 8.1.2, each of the PCFIs forms part of the condition itself. It follows that a modification made to either of the PCFIs constitutes a modification to the licence condition itself.

8.239 SpC 8.1.6 provides that if a proposed modification will be likely to have a significant impact on the licensee or certain other persons (having regard to the non-exhaustive list of factors set out at SpC 8.1.4), then GEMA will proceed by way of statutory modification under section 11A of EA89, but if such a significant impact is not likely, then it will modify the PCFI in question by direction.

8.240 However, neither SpC 8.1.6 nor any other clause in SpC 8.1 contains any criteria setting out the scope of any future modifications. Nor do they contain any criteria by which to assess whether and in what way GEMA should modify the PCFI(s) in question, if it determines that a significant impact is not likely,

other than by reference to correcting a manifest error in SpC 8.1.5. Nor does the condition refer anywhere to the circumstances which could trigger modifications to the PCFI(s).

8.241 As described above, we do not consider that the use of a significance threshold removes the need to ensure that the manner and circumstances of a future modification are adequately specified in the condition itself, for the purposes of section 7(5)(b).

8.242 We therefore consider that GEMA has acted ultra vires section 7(5)(b) of EA89 in providing for self-modification of the appealed PCFI.

## **WWU's ground of appeal**

8.243 WWU submitted that GEMA's decision to include licence obligations in subsidiary documents and to modify those documents by direction was wrong because GEMA had failed to properly have regard to its statutory duties and had created regulatory and revenue uncertainty.

8.244 WWU submitted that GEMA's decision was wrong on the following grounds:

- a) GEMA had failed properly to have regard to its statutory duty in section 4AA(2)(b) of GA86 to secure that licence holders are able to finance their licensed activities;<sup>1525</sup>
- b) GEMA had failed properly to have regard to the principles in section 4AA(5A)(a) of GA86 under which regulatory activities should be 'transparent, accountable, proportionate consistent and targeted' and other regulatory best practice in accordance with section 4AA(5A)(b);<sup>1526</sup>
- c) GEMA, through the extensive use of subsidiary documents that could be amended at any time, had departed from a well-established price control regulatory framework that was designed to provide a level of transparency, clarity, stability and certainty for WWU and best regulatory practice;<sup>1527</sup>
- d) GEMA had failed to have proper regard to or give sufficient weight to the fact that such an approach served only to create considerable levels of uncertainty and regulatory risk for licensees;<sup>1528</sup>

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<sup>1525</sup> WWU NoA, paragraph D1.1.

<sup>1526</sup> WWU NoA, paragraphs D1.2, D2.9 and D6.25.

<sup>1527</sup> WWU NoA, paragraphs D2.4 and D2.5.

<sup>1528</sup> WWU NoA, paragraph D2.6.

- e) GEMA had failed to have proper regard to or give appropriate weight ‘to the material impact its approach can have on investor confidence, licensees’ credit ratings and consequently on WWU’s financeability’;<sup>1529</sup> and
- f) the licence modifications ‘fail to achieve, in whole or in part, the effect that is stated by Ofgem in the notice published under section 23(7)(b) of the Gas Act’.<sup>1530</sup>

8.245 WWU submitted that setting out key aspects of the RIIO-GD2 price control framework in an unprecedented number of subsidiary documents created regulatory uncertainty, leading to regulatory risk and revenue uncertainty.<sup>1531</sup>

8.246 In relation to the manner in which PCFIs would be changed, WWU submitted that there was a fundamental difference between RIIO-1 and RIIO-2 which eroded licensees’ current rights. That difference was the removal of the right in RIIO-1 of a licensee to demonstrate that a proposed change would be likely to have a significant impact, meaning that the change could not be made by direction but only be made under the SLMP.<sup>1532</sup>

### ***GEMA’s Response***

8.247 In its response to WWU, GEMA submitted that:

- a) ‘[its] ground of appeal is, in substance simply a disagreement with GEMA’s approach’ and it is ‘a challenge to the process followed by GEMA’;<sup>1533</sup>
- b) it ‘had regard to its statutory duties in reaching its conclusion about the appropriate, efficient and proportionate implementations of the RIIO-GD2 price control’;<sup>1534</sup>
- c) a review of the duty to have regard to ‘involves a review of the process not the merits’ and it ‘consulted widely on its licence drafting principles and carefully considered the responses’;<sup>1535</sup> and

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<sup>1529</sup> WWU NoA, paragraph D2.7.

<sup>1530</sup> WWU NoA, paragraph D2.10.

<sup>1531</sup> WWU NoA, paragraph 3.2(d).

<sup>1532</sup> WWU NoA, paragraphs D4.14 and D4.15.

<sup>1533</sup> GEMA Response B, paragraphs 232 and 233.

<sup>1534</sup> GEMA Response B, paragraph 235.

<sup>1535</sup> GEMA Response B, paragraphs 234 and 236.



- d) its intention ‘was to create a power pursuant to which specific identified detail and/or guidance may be produced and amended pursuant to the licence condition’.<sup>1536</sup>

8.248 Regarding WWU’s submission on regulatory uncertainty created by the content and number of Associated Documents, GEMA responded that:

- a) ‘the setting out of guidance and detailed expectation in the price control makes regulation *more* predictable and transparent: [the Associated Documents] provide information, requirements and guidance that are not included in the licence conditions themselves’ and to include all details in those Associated Documents in the terms of the licence itself would ‘render the licence unwieldy, unworkable and inaccessible’;<sup>1537</sup>
- b) ‘the increase in the number of [Associated Documents] is a product of the fact that there are greater number of relevant mechanisms in the RII0-2 price control, requiring guidance’;<sup>1538</sup> and
- c) it ‘had determined the use of subsidiary documents is appropriate and important: they provide guidance, further clarity and transparency on how re-opener applications will be assessed, and help to ensure licensees justify any increase in their baseline allowances (in the interests of consumers)’.<sup>1539</sup>

8.249 GEMA also responded that:

- a) GEMA can only amend the Associated Documents in accordance with the process set out in the licence, including a 28-day consultation on any proposed change;<sup>1540</sup>
- b) although some Associated Documents may not be in final form, ‘the licence it makes clear to licensees what the purpose of each Associated Document is’.<sup>1541</sup>

8.250 In relation to PCFIs, GEMA submitted that:

- a) although ‘GEMA has not continued the power that licensees previously had to veto a decision by Ofgem to use the self-modification process ...

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<sup>1536</sup> GEMA Response B, paragraph 237.

<sup>1537</sup> GEMA Response B, paragraph 240.

<sup>1538</sup> GEMA Response B, paragraph 242(2).

<sup>1539</sup> GEMA Response B, paragraph 242(3).

<sup>1540</sup> GEMA Response B, paragraph 241.

<sup>1541</sup> GEMA Response B, paragraph 243.

the requirement to assess the significance of a modification has not been removed';<sup>1542</sup>

- b) a licensee could respond during the mandatory consultation if it did not agree with the proposed use of the self-modification process;<sup>1543</sup>
- c) regarding the introduction of PCFM Guidance, there was no legal error; it provided guidance and instructions how to calculate variable values as required by the licence and any changes would be subject to consultation and the eventual decision subject to judicial review;<sup>1544</sup>
- d) it had been transparent about the use and purpose of the PCFM Guidance as the purpose was explained in GEMA's Informal Licence Drafting Consultation in September 2020;<sup>1545</sup> and
- e) there was a clear hierarchy between the respective [PCFM] documents so there was no possibility of conflicting provisions.<sup>1546</sup>

### **WWU's Reply**

8.251 In its Reply, WWU clarified that it was not appealing GEMA's decision on the basis that it was wrong in law or that it was unlawful to make licence modifications by direction.<sup>1547</sup> Its appeal was 'about the matters that Ofgem took into consideration and/or failed to take into consideration in exercising its legal *vires* and making the decisions it has made on the licence modifications which provide for subsidiary documents'.<sup>1548</sup>

8.252 GEMA agreed with this proposition in the joint hearing, saying that 'what you are supposed to be doing is looking at whether or not we have had regard to and placed the relevant weight on the statutory obligations'.<sup>1549</sup>

8.253 In relation to GEMA's contention that its regulatory discretion and judgement enabled it to proceed the way it had, WWU replied that '[t]he question for the CMA is whether the decision is wrong on the grounds that Ofgem has not given proper regard and/or appropriate weight to the relevant statutory duties

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<sup>1542</sup> GEMA Response B, paragraph 246.

<sup>1543</sup> GEMA Response B, paragraph 247.

<sup>1544</sup> GEMA Response B, paragraphs 249-251.

<sup>1545</sup> GEMA Response B, paragraph 250.

<sup>1546</sup> GEMA Response B, paragraph 252.

<sup>1547</sup> WWU Reply, paragraph D2.3.

<sup>1548</sup> WWU Reply, paragraph D2.9.

<sup>1549</sup> Licence Modification Joint Hearing Transcript, 24 June 2021, page 54, lines 21-23.

[and] in order to do that it has to take the merits of the decision under appeal'.<sup>1550</sup>

8.254 WWU submitted that its appeal was not on procedural matters but the substantive decisions made by Ofgem to make licence modifications.<sup>1551</sup> In that regard, 'Ofgem has given no explanation as to how or why it considers it has struck the right balance between its duties; what matters it has had regard to in respect of the need for it to secure that WWU is able to finance its licence obligations relating to compliance with amended documents; the basis on which it asserts that the framework it has put in place 'makes regulation more predictable and transparent' and the evidence on which this assertion is based; the relevant weight it has given to each of the applicable duties and the reasons for doing so'.<sup>1552</sup>

8.255 In relation to GEMA's contention that it was necessary and appropriate to proceed the way it had because of the increased number of uncertainty mechanisms and therefore to make the licence responsive and workable, reflect up to date information and reduce administrative burden, WWU replied that none of these reasons explained why GEMA had chosen to make 'unilateral changes to subsidiary documents by Direction'.<sup>1553</sup>

8.256 Further, WWU replied that it did not accept the proposition put forward by GEMA that subsidiary documents could not be modified under the SLMP and to argue that to do so would create an administrative burden only indicated that it was GEMA's intention to make significant changes during the price control.<sup>1554</sup>

8.257 At the clarification hearing, WWU explained that:

- a) Its fundamental objection was 'that there is a really fundamental change in the way in which Ofgem 'does' a price control from GD1, where it was almost all on the face of licence conditions or documents which have the status of licence conditions, to GD2, where suddenly we have a core of licence conditions surrounded by this whole set of satellite documents which are not licence conditions and GEMA has not explained why this change was necessary';<sup>1555</sup>

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<sup>1550</sup> WWU Reply, paragraph D3.11.

<sup>1551</sup> WWU Reply, paragraph D4.7.

<sup>1552</sup> WWU Reply, paragraph D4.11.

<sup>1553</sup> WWU Reply, paragraph D5.2.

<sup>1554</sup> WWU Reply, paragraphs D5.3–D5.6.

<sup>1555</sup> WWU Clarification Hearing Transcript, 14 May 2021 page 72, lines 3–20.

- b) GEMA had not demonstrated that it had taken its statutory duties into account;<sup>1556</sup>
- c) GEMA had not shown ‘the audit trail which shows that in any of its published documents, its consultation, the reasons it gave when it made its decision’;<sup>1557</sup> and
- d) Its objection was not uncertainty mechanisms such as re-openers but ‘policy re-openers’ such as the PCFM Guidance.<sup>1558</sup>

8.258 At the clarification hearing, WWU also explained that:

- a) GEMA’s failure to have regard to the duty of financeability meant that WWU was unable to determine at the outset the amounts it would need in order to comply with the obligations created in the subsidiary documents saying ‘it is very difficult to estimate financial impact of something we do not know what might change’;<sup>1559</sup>
- b) it had looked at three reporting obligations (environmental, digitalisation and Network Asset Risk Metric) and estimated that the probable impact of these three alone was £23 million;<sup>1560</sup> and
- c) judicial review, the appeal mechanism open to challenging changes to Associated Documents, would not allow an appeal on a different view on cost implications.<sup>1561</sup>

### ***GEMA’s further submissions***

8.259 At the clarification hearing, GEMA submitted that:

- a) GEMA had undertaken a widespread consultation on the [Associated Documents] process and had formulated licence drafting principles and principles on use of Associated Documents<sup>1562</sup> that included ‘that associated documents should only be used where more detail and explanation is required beyond that which could proportionately be included in the licence condition itself’;<sup>1563</sup>

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<sup>1556</sup> WWU Clarification Hearing Transcript, 14 May 2021, page 72, lines 21–24, page 73 lines 1–9.

<sup>1557</sup> WWU Clarification Hearing Transcript, 14 May 2021, page 74, lines 9–11.

<sup>1558</sup> WWU Clarification Hearing Transcript, 14 May 2021, page 75, lines 9–17.

<sup>1559</sup> WWU Clarification Hearing Transcript, 14 May 2021, pages 68–69 lines 19–24 and 11–12.

<sup>1560</sup> WWU Clarification Hearing Transcript, 14 May 2021, page 69, lines 15–20.

<sup>1561</sup> WWU Clarification Hearing Transcript, 14 May 2021, page 71, lines 15–24.

<sup>1562</sup> GEMA (2021), [Decision on principles of use for RIIO-2 Associated Documents](#), 26 February 2021.

<sup>1563</sup> GEMA Clarification Hearing Transcript, 24 May 2021, page 37, lines 5–11.

- b) the Associated Documents provided clarity for network companies by setting out transparently and upfront aspects of RIIO-2 operation, and second, there was clear governance for Associated Documents, the licence conditions clearly set out the scope and the purpose of each Associated Document as well as the process Ofgem will follow for any amendment;<sup>1564</sup> and
- c) 'all the things that are set out in ADs [Associated Documents] are necessary for the operation of RIIO-2, but it is just not practical to include them in the licence conditions, and with such technical details, the length of them et cetera, so we chose, we decided, to put these things outside of licence conditions and called them "associated documents".'<sup>1565</sup>

8.260 At its individual hearing, GEMA submitted that:

- a) there was specific provision in GA86 at section 7B(6)(b) providing that 'references in the conditions to any document to operate as references to the document as revised or reissued from time to time';<sup>1566</sup>
- b) 'the duty to have regard to involves a review of the process not the merits';<sup>1567</sup> and
- c) 'that has been followed and it has been followed through this consultation';<sup>1568</sup>

8.261 GEMA outlined the process of consultation and submitted that it was a 'formal licence-drafting consultation, together with a list of intended associated documents and consultation on the principles of associated documents'<sup>1569</sup> and that 'each of the associated documents we are talking about was formulated in line with these principles'.<sup>1570</sup>

8.262 In relation to WWU's ground that GEMA had failed to have regard to transparency because the Associated Documents were not yet published at the time of the licence conditions, it submitted that timeliness of publication was consulted on and responded to and referred to principle (x) in its Decision on principles for Associated Documents.<sup>1571</sup> GEMA said there was not a

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<sup>1564</sup> GEMA Clarification Hearing Transcript, 24 May 2021, page, 41, lines 11–15.

<sup>1565</sup> GEMA Clarification Hearing Transcript, 24 May 2021, page 58, line 23 to page 59, line 1.

<sup>1566</sup> GEMA Main Hearing Transcript, 9 July 2021, page 19 lines 24–25.

<sup>1567</sup> GEMA Main Hearing Transcript, 9 July 2021, page 20 lines 9–10.

<sup>1568</sup> GEMA Main Hearing Transcript, 9 July 2021, page 21, lines 7–8.

<sup>1569</sup> GEMA Main Hearing Transcript, 9 July 2021, page 21, lines 13–15.

<sup>1570</sup> GEMA Main Hearing Transcript, 9 July 2021, page 21, lines 23–24.

<sup>1571</sup> GEMA Main Hearing Transcript, 9 July 2021, page 23, lines 3–5. GEMA (2021), [Decision on principles of use for RIIO-2 Associated Documents](#), 26 February 2021. We refer to these principles again in paragraph 8.279c)

requirement that all the documents had to be published before the licence conditions came out.<sup>1572</sup>

8.263 GEMA submitted that there was an Associated Document which showed that GEMA had ‘careful and specific regard to change processes within associated documents’ (‘principle (vi)’ of the document).<sup>1573</sup>

### ***WWU Closing Statement***

8.264 In its Closing Statement on Ground D, WWU reiterated that its primary grounds of appeal were that GEMA had failed properly to have regard to its statutory duties and failed to give appropriate weight to elements of its statutory duties, specifically section 4AA(2)(b) (the financing duty) and 4AA(5A) (the better regulation duty) of the Act when including obligations in subsidiary documents which could be altered by issuing directions.<sup>1574</sup>

8.265 It submitted that ‘there is absolutely no contemporaneous evidence that Ofgem addressed its mind to the duties adequately (if at all)’<sup>1575</sup> and that the consultation did not ‘provide sufficient explanation to enable intelligent and informed consideration of what is being consulted upon’.<sup>1576</sup> It also submitted that it was the role of the CMA ‘to consider whether Ofgem has placed the right weight on the different elements of its statutory duties’.<sup>1577</sup>

8.266 It further submitted that:

- a) ‘the key purpose of adopting and implementing a policy which enables Ofgem to make changes on a unilateral basis by way of direction, without any recourse available to the CMA, is to allow Ofgem easily to change the rules of the game while it is being played, to prevent out-performance and to stifle incentives’;<sup>1578</sup>
- b) ‘Ofgem’s focus on the principles for Associated Documents is a distraction. That Ofgem consulted on and determined certain principles does not: (i) constitute a reasoned explanation why it needs the ability to amend them unilaterally by direction; (ii) negate from the fact that it has failed to have proper regard or give appropriate weight to the statutory duties. Neither the principles nor the decision document setting out the

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<sup>1572</sup> GEMA Main Hearing Transcript, 9 July 2021, page 23, lines 18–19.

<sup>1573</sup> GEMA Main Hearing Transcript, 9 July 2021, page 23, lines 19–22.

<sup>1574</sup> WWU Closing Statement on Ground D paragraph 3.1.

<sup>1575</sup> WWU Closing Statement on Ground D, paragraph 3.6.

<sup>1576</sup> WWU Closing Statement on Ground D, paragraph 3.7.

<sup>1577</sup> WWU Closing Statement on Ground D, paragraph 3.12.

<sup>1578</sup> WWU Closing Statement on Ground D, paragraph 4.8.

principles nor the 'Principles Log' itself makes any reference to, or to Ofgem's consideration of, the applicable statutory duties';<sup>1579</sup> and

- c) This new approach had created regulatory uncertainty and risk at a material level because there was no constraint on the types of modifications that GEMA could make and these could have a material impact on WWU's costs and revenues.<sup>1580</sup>

8.267 WWU also submitted that GEMA had not given a credible justification for changing the approach from GD1 whereby WWU had the ability to demonstrate why a modification of the PCFIs had a significant impact on it.<sup>1581</sup>

8.268 WWU reiterated its arguments that under the new proposal it would lose its right to appeal the modifications to the CMA and the PCFI Guidance and Handbook were legally binding on WWU.<sup>1582</sup>

### ***Our assessment and conclusions***

8.269 WWU contends that GEMA has acted in breach of its statutory duties in section 4AA(2)(b) and (5A) of GA86 in placing obligations on WWU via a series of 'subsidiary documents' rather than under the licence conditions themselves and in providing for those documents to be modified by GEMA by direction at any time in the period of the price control.<sup>1583</sup>

8.270 The relevant provisions of the GA86 read as follows (emphasis added):

4AA The principal objective and general duties of the Secretary of State and the Authority.

(1) The principal objective of the Secretary of State and the Gas and Electricity Markets Authority (in this Act referred to as "the Authority") in carrying out their respective functions under this Part is to protect the interests of existing and future consumers in relation to gas conveyed through pipes....

...

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<sup>1579</sup> WWU Closing Statement on Ground D, paragraph 5.2.

<sup>1580</sup> WWU Closing Statement on Ground D, paragraphs 5.3 to 5.4.

<sup>1581</sup> WWU Closing Statement on Ground D, paragraph 5.5

<sup>1582</sup> WWU Closing Statement on Ground D, paragraph 5.8–5.10.

<sup>1583</sup> We note that at [WWU NoA](#), paragraph D2.10, WWU also contended that the licence modifications were wrong in that they failed to achieve the effect stated in the notice published under section 23(7)(b) GA86. However, this contention was not developed in the NoA or in subsequent submissions. We see no basis for this contention and so say no more about it.

(1B) The Secretary of State and the Authority shall carry out their respective functions under this Part in the manner which the Secretary of State or the Authority (as the case may be) considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes.

...

(2) In performing the duties under subsections (1B) and (1C), the Secretary of State or the Authority **shall have regard to** —

...

(b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part, the Utilities Act 2000, Part 5 of the Energy Act 2008 or section 4, Part 2, or sections 26 to 29 of the Energy Act 2010; ...

...

(5A) In carrying out their respective functions under this Part in accordance with the preceding provisions of this section the Secretary of State and the Authority **must each have regard to**—

(a) the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed; and

(b) any other principles appearing to him or, as the case may be, it to represent the best regulatory practice.

8.271 The two duties invoked by WWU in its appeal (contained in section 4AA(2) and (5A)) are duties ‘to have regard’ to certain matters.

8.272 In *R (Pharmaceutical Services Negotiating Committee) v Secretary of State for Health* it was alleged that the Secretary of State had breached his duty, contained in section 1C of the National Health Service Act 2006, to have regard to the need to reduce inequalities between people in England with respect to the benefits they can obtain from the health service.

8.273 In rejecting that submission, the Court of Appeal noted that the statute imposed ‘a number of different “high level” duties upon [the Secretary of State] to have regard to a wide and disparate range of factors and aims in exercising those functions, which are both complex and potentially conflicting’ and that ‘It



is self-evident that these various considerations are complex, socio-economic in nature and potentially in conflict. In balancing these factors, the functions allocated to the Secretary of State under the 2006 Act clearly involve the exercise of substantial discretion, judgment or assessment'.<sup>1584</sup>

8.274 The Court then observed that:

In performing that exercise, ...it is well established that any consideration by the court of compliance with a duty to "have regard" to a particular factor involves a review of the process and not the merits.<sup>1585</sup>

8.275 In *R (Hurley) v Secretary of State for Business, Innovation and Skills*,<sup>1586</sup> in which it had been alleged that the defendant had failed to comply with a duty to have 'due regard',<sup>1587</sup> Elias LJ (with whom King J agreed) made clear at [77] that it was not for the court to determine whether appropriate weight had been given to the duty.<sup>1588</sup>

8.276 Provided, therefore, that there is evidence that the decision-maker did not wholly disregard its 'have regard to' duties,<sup>1589</sup> then a public law challenge based on an alleged failure to have regard will only succeed if it can be shown that the decision was irrational.<sup>1590</sup> We note that in the present case an appellant is not confined to a rationality challenge, because it has the right to appeal on the grounds specified in section 23D(4). Those grounds include a right of appeal on the ground that 'the Authority failed to give the appropriate weight to any matter mentioned in subsection (2)'. This is however distinct from a challenge under section 23D(4)(a) to a failure properly to have regard to relevant matters.

8.277 In its Reply, WWU contended that the *Pharmaceutical Services Negotiating Committee* case was not on point, as it was 'concerned with the "public law"

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<sup>1584</sup> [2018] EWCA Civ 1925, [2019] PTSR 885 at [81].

<sup>1585</sup> [2018] EWCA Civ 1925, [2019] PTSR 885, at [82].

<sup>1586</sup> [2012] EWHC 201, [2012] Eq LR 447.

<sup>1587</sup> There is some case law to the effect that where the duty is expressed as a duty to have 'due' regard, (i) the decision-maker should consider the relevant factor with greater intensity than when the duty is simply expressed as a duty to have regard, or (ii) it may give the court some greater power to investigate the question of whether the regard that has been given was proper and appropriate in the circumstances: see *Pharmaceutical Services Negotiating Committee* at [86]. The duty here, however, is expressed as a duty to have regard and not to have 'due' regard.

<sup>1588</sup> WWU is thus wrong, at paragraph 3.3 of its NoA, to conflate the two. Specifically, WWU is wrong to contend that the first two permissible grounds set out in section 23D(4) of GA86 'can essentially be considered together as if they were a single ground of appeal, since there is in practice little difference between them'.

<sup>1589</sup> [2018] EWCA Civ 1925, [2019] PTSR 885 at [87] ('In our view, it cannot be said that the Secretary of State paid no regard to the section 1C duty.')

<sup>1590</sup> See, for example, the authorities referred to in [2018] EWCA Civ 1925, [2019] PTSR 885 at [82] of the Court of Appeal's judgment.

standard that needs to be met by public bodies' whereas here the question was whether GEMA had had proper regard to the relevant statutory duties.<sup>1591</sup>

8.278 We reject WWU's attempt to distinguish *Pharmaceutical Services Negotiating Committee*. In our view, it is squarely on point, in that it provides a clear exposition of the nature of a 'have regard to' duty, which is precisely the kind of duty at issue here. The question of whether GEMA has erred in the exercise of that duty must be assessed with reference to the nature and content of the duty, properly understood. We do not consider that the existence of an appeal on the grounds specified in section 23D(4) changes or heightens what is required to comply with that duty. In our view, the word 'properly' in section 23D(4)(a) merely confirms that the CMA must assess whether GEMA has taken sufficient steps to comply with that duty, correctly understood. We emphasise that section 23D(4)(b) provides for a distinct right of appeal on the ground that GEMA failed to give the appropriate weight to any matter mentioned in subsection (2). An appeal on the latter basis raises the question of the weight given to a particular matter, as distinct from the question of whether GEMA had regard to the matter in question as it was required to. In our view, the existence of this distinct right of appeal confirms that an appeal under section 23D(4)(a) does not have the wider scope that WWU submitted.

8.279 Our view is that WWU has not demonstrated that GEMA failed properly to have regard to the statutory duties which WWU has invoked. We note in particular the following:

- a) GEMA specifically consulted on its proposed approach to the use of Associated Documents: see Chapter 3 of the Informal Licence Drafting Consultation.<sup>1592</sup> GEMA specifically sought licensees' views on its principles for such documents.
- b) This provided WWU and other interested parties with the opportunity to express their views and, in particular, air any concerns they had with GEMA's approach. WWU and others made use of this opportunity. Further, one of the representations made by WWU was that 'Governance arrangements for amending Associated Documents are inequitable and give Ofgem far too much discretion to amend documents that contain obligations or requirements subject only to a consultation requirement. The only means of challenge to any such amendment is judicial review. This increases the risk to licensees which is not acceptable and is not in

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<sup>1591</sup> WWU Reply, paragraph D4.2.

<sup>1592</sup> GEMA (2021), *Informal Licence Drafting Consultation*, Chapter 3.

line with the principles of good regulatory practice'.<sup>1593</sup> In a later response to GEMA's formal consultation,<sup>1594</sup> WWU expressed the view that 'Ofgem's policy approach in relation to Associated Documents leads to increased regulatory risk and we have some concerns that the level of regulatory risk could potentially have an adverse impact on investor confidence and/or on a company's financeability.'

- c) We consider that GEMA did take these representations – which raised both of the duties invoked by WWU on this appeal – into account when coming to its final decision about the use of Associated Documents. GEMA's witness evidence states that GEMA carefully considered the consultation responses which it received,<sup>1595</sup> and at its individual hearing GEMA outlined in detail the consultation process it conducted on its approach.<sup>1596</sup> As part of that process, GEMA responded to representations made by consultees, including WWU. We consider that the principles on use of Associated Documents which GEMA subsequently adopted<sup>1597</sup> also demonstrate that it had regard to its statutory duties. For example, the principles make clear that licence conditions must set out the extent of the obligation which the Associated Documents will place on licensees (principle (ii)) and what the Associated Document will encompass (principle (iv)); and that Associated Documents must be published in a timely fashion bearing in mind the specifics of the Associated Document and the obligations in question (principle 10). This shows in our view that GEMA was conscious of its duty to have regard to better regulation principles. We accept GEMA's further submission that the use of Associated Documents serves to increase predictability and transparency rather than undermine those principles. Both the principles governing the use of such documents, and each Associated Document itself (or proposed amendment thereof), have been or will be the subject of a consultation process. Contrary to WWU's submissions, these documents cannot be amended at will and without good reason: they can only be amended in accordance with the process set out in the relevant

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<sup>1593</sup> WWU RIIO-2 Informal Licence Drafting Consultation Response, 28 October 2020 - Executive Summary, page 4. (Exhibit B.5.1 to WWU NoA)

<sup>1594</sup> WWU Response to Statutory consultation for RIIO-2 Transmission, Gas Distribution and Electricity System Operator licences, 19 January 2021 - Executive Summary, page 2. (Exhibit B.6.1 to WWU NoA)

<sup>1595</sup> *Zhu 1 (GEMA)*, paragraph 177. In addition, a letter from Jonathan Brearley (GEMA's Chief Executive) to Graham Edwards (WWU's Chief Executive) dated 26 November 2020, made it clear that GEMA was considering the responses received to the September informal consultation, including the points raised by WWU. (Exhibit B6.6 to WWU NoA)

<sup>1596</sup> GEMA Main Hearing Transcript, 9 July 2021, pages 20-23.

<sup>1597</sup> GEMA (2021), [Decision on principles of use for RIIO-2 Associated Documents](#), 26 February 2021.

condition, and GEMA must comply with its statutory duties in making any such amendments.<sup>1598</sup>

- d) We do not consider that the fact that GEMA did not, in its 'principles log', address head-on each and every representation made to it by the licensees (including those cited above) constitutes evidence that GEMA did not have regard to its duties. There was in our view no duty on GEMA to provide an exhaustive response to representations made by interested parties, and it cannot be inferred from the absence of a response to particular points that GEMA did not have them in mind in coming to its settled position.

8.280 Accordingly, our view is that WWU's challenge based on an alleged failure by GEMA to have regard to its statutory duties fails.

8.281 In response to the provisional determination, WWU essentially contended that there were two defects in the analysis above. The first was that we had wrongly treated the 'failure properly to have regard' ground of appeal as being procedural in nature. The second alleged defect is not stated in terms by WWU but is implicit in paragraph D2.2 of the response to the provisional determination. It is that we had overlooked the fact that WWU's challenge under Ground D was wider in scope than an allegation of a failure by GEMA to have proper regard to its statutory duties and extended to a challenge under section 23D(4)(b), ie that GEMA had failed to give the appropriate weight to the statutory duties, invoked by WWU.

8.282 We address each of these criticisms in turn.

8.283 First, WWU submitted that we were wrong to rely on the *Pharmaceutical Services Negotiating Committee* case as a basis for determining the standard of review to be applied. WWU submitted that in doing so the provisional determination effectively rendered the first ground of appeal in section 23D(4) meaningless. This was because, in WWU's submission, a procedural failure of the type referred to in *Pharmaceutical Services Negotiating Committee* renders a decision unlawful and capable of being appealed under section 23D(4)(e), ie on the basis that the decision was wrong in law.<sup>1599</sup> In WWU's submission, section 23D(4)(a) had to add something extra. WWU further contended that section 23D(4)(a) was designed to provide the basis for a substantive merits appeal, whereas the provisional determination reduced WWU's challenge to a procedural

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<sup>1598</sup> We note also GEMA (2021), [Decision on principles of use for RIIO-2 Associated Documents](#), 'principle (vii)', which specifically provides that '[t]he relevant licence condition must set out the change control process that applies to the relevant Associated Document'.

<sup>1599</sup> WWU response to the PD, paragraphs 3.29-3.31.

appeal.<sup>1600</sup> Finally, WWU contended that the CMA's approach in refusing to conduct an assessment of whether GEMA has gone substantively wrong was inconsistent with its finding elsewhere in the provisional determination that procedural deficiencies are an insufficient basis for a successful appeal unless they are so serious as to have generated a substantively wrong outcome.<sup>1601</sup>

8.284 We do not accept these criticisms of the provisional determination:

- a) We have addressed the scope of the right of appeal under section 23D(a) above. We do not accept that the appropriate ground of appeal for a 'procedural' complaint that GEMA has failed to have regard to its statutory duties is the error of law ground contained in section 23D(4)(e). Nor do we accept that section 23D(4)(a) is the appropriate basis on which to challenge the weight given to a matter to which GEMA had regard, as already explained. While it may be right to say that the concept of error of law can, in a general public law sense, be treated as encompassing compliance with a statutory duty to 'have regard', we are here concerned with the specific scheme of section 23D, where that is set out as a distinct head of challenge and where there is a separate head of challenge concerning the weight given by GEMA to its duties.
- b) The fact that this is not a judicial review case but rather a form of merits appeal<sup>1602</sup> does not mean that the specified heads of challenge must each take on a different meaning from a public law ground of challenge. The existence of a right to challenge the weight given to a particular matter is a central difference between an appeal under section 23D and judicial review proceedings; likewise the existence of a right to challenge a modification on the ground that it does not achieve its stated effect (section 23D(4)(d)).
- c) We reject WWU's argument that there is an internal inconsistency in the CMA's approach. At paragraph 3.54 above, we took the view that, in the context of the relevant standard of review that the CMA must apply in this appeal, 'our analysis should only take into account procedural deficiencies (including a flawed consultation process) if they are so serious that we cannot be assured that the Decision was not wrong'. If we were satisfied that GEMA had failed properly to have regard to the statutory duties invoked by GEMA, then that would in our view amount to a serious

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<sup>1600</sup> WWU response to the PD, paragraph 3.26.

<sup>1601</sup> WWU response to the PD, paragraph 3.33.

<sup>1602</sup> As explained further in Chapter 3, the CMA is required to consider the merits of the decision under appeal, albeit by reference to the specific grounds of appeal laid down in the statute (see in particular paragraph 3.26).

deficiency such that we would not be able to conclude that the impugned decision was not wrong. We see no inconsistency in these points.

- 8.285 Second, WWU submitted that the CMA's approach was 'based on a fundamental misinterpretation of the statutory grounds of appeal at sections 23D(4)(a) and (b) of the Act. WWU requested, and was entitled to, a detailed merits review of Ofgem's policy on the use of associated documents'.<sup>1603</sup>
- 8.286 It is implicit in this criticism that WWU takes the view that its appeal under Ground D is framed more widely, encompassing an allegation that GEMA had failed to give sufficient weight to the duties invoked by WWU. WWU is therefore contending, in effect, that the CMA failed in the provisional determination to address a core plank of its appeal.
- 8.287 This raises the question whether, as is contended, WWU did plead in its notice of appeal that GEMA had failed to give sufficient weight to the financeability duty in section 4AA(2)(b) or the duty to have regard to principles of good regulatory practice.
- 8.288 WWU's case is summarised in the executive summary section of Ground D. The two statutory duties invoked by WWU are set out at paragraphs D1.1 and D1.2. D1.3 then states as follows (emphasis added):

WWU submits that Ofgem has **failed to have regard** to these statutory duties with regard to the licence conditions which provide for –

(a) obligations (relating to price control matters) to be imposed on WWU under a wide range of different subsidiary documents; and

(b) for those subsidiary documents to be modified by Ofgem by direction at any time during the RIIO-GD2 period.

- 8.289 After stating, at paragraph D1.4, that at the date of the notice of appeal WWU did not know the full extent of the obligations it would be under during the price control, WWU then said, at paragraph D1.5:

Accordingly, Ofgem has failed to discharge its financing duty and its duty in respect of better regulation, in particular to be transparent, accountable, proportionate, consistent and targeted.

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<sup>1603</sup> WWU response to the PD, paragraph D2.2.

- 8.290 Those points are elucidated in the remaining paragraphs of the executive summary, at paragraphs D1.6-D1.8.
- 8.291 Thus, the overview of WWU's case under Ground D does not contain any allegation that GEMA failed to accord sufficient weight to particular duties nor articulate any ground of appeal under section 23D(4)(B). WWU's case is squarely put on the ground that GEMA failed to have regard to its duties.
- 8.292 The same pattern is apparent in section D2 of the notice of appeal, notably at paragraph D2.9 where, having summarised what it saw as GEMA's approach, WWU contended as follows (emphasis added):

It is WWU's position that, in adopting this approach, Ofgem has **failed to have proper regard** to [its duties in section 4AA(2)(b), (5A)(a) and (5A)(b)].

- 8.293 We acknowledge that at paragraphs D2.6 and D2.7 WWU refers to matters of weight. However, these allegations are not framed as separate heads of appeal, and in any event they do not allege a failure to give sufficient weight to particular duties; instead, the allegations are more general (emphasis added):

- a) Paragraph D2.6 alleges merely that GEMA has 'failed to have proper regard or give sufficient weight **to the fact that such an approach serves only to create** considerable levels of uncertainty and regulatory risk for licensees, including WWU'.
- b) Paragraph D2.7 alleges that GEMA 'failed to have proper regard or give appropriate weight to **the material impact its approach can have** on investor confidence, licensees' credit ratings and consequently on WWU's financeability'.

- 8.294 Neither of these paragraphs puts WWU's case in the language of section 23D(4)(b).

- 8.295 There are just two other references to 'weight' in the notice of appeal, but neither of these is framed in the terms of the statutory ground of appeal, either:

- a) At paragraph D4.18, following a discussion of GEMA's approach to PCFIs, WWU criticises one of GEMA's reasons for amending the self-modification process as 'not evidence[ing] that Ofgem has had proper regard to all the material facts or given due weight to the impacts that this would have on investor sentiment'.

- b) At paragraph D5.1 WWU criticises GEMA's approach as failing to have proper regard or give sufficient weight 'to the impact that this lack of clarity and certainty inherent in Ofgem's approach has on regulatory risk for WWU, its investors or the credit rating agencies'.

- 8.296 We acknowledge that matters of weight received greater prominence in WWU's Reply, but that is insufficient: the grounds of appeal must be set out clearly in the notice of appeal, not in subsequent pleadings.
- 8.297 Finally, and for the avoidance of doubt, we consider that it is no answer to the above that elsewhere in its notice of appeal WWU (wrongly) conflated the heads of appeal contained in section 23D(4)(a) and (b). As we have already explained,<sup>1604</sup> they are distinct heads of appeal, and must be treated as such.
- 8.298 We therefore reject WWU's criticism that the provisional determination overlooked part of its case under Ground D.
- 8.299 Nevertheless, for completeness, we briefly address below the main objections made by WWU to the use of Associated Documents. As will be seen, even if WWU's objections were treated as objections to the weight which GEMA gave to the statutory duties invoked by WWU, we would not have considered them to be well-founded.
- 8.300 First, WWU objects to the fact that Associated Documents can be amended at any time and at GEMA's 'absolute discretion'. We have already explained, at paragraph 8.279c), why that is a misplaced submission: GEMA must follow a process of consultation and act in accordance with its statutory duties. Further, as GEMA pointed out, the amendment of such documents during the price control is specifically provided for in the GA86 itself: see section 7B(6)(b) of GA86.
- 8.301 In response to the provisional determination, WWU contended that the foregoing analysis was incompatible with the CMA's analysis of SPT's and SSEN-T's appeals, which concerned 'equivalent powers of direction with substantively equivalent effect'.<sup>1605</sup>
- 8.302 We do not accept this criticism. The SPT and SSEN-T appeals are concerned with the limits of the direction-making power under section 7(5)(b) of EA89. By contrast, the extent of GEMA's direction-making power under section 7B(7)(b) GA86<sup>1606</sup> has not been put in issue in the WWU appeal. It does not follow from our findings on the extent of the power under section 7(5)(b) that, for the

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<sup>1604</sup> See paragraphs 8.277 and 8.279.

<sup>1605</sup> WWU response to the PD, paragraph D3.2(b).

<sup>1606</sup> This is the equivalent under the GA86 of section 7(5)(b) of EA89.



distinct purpose of compliance with its statutory duties, GEMA must include all obligations on licensees within the licence conditions. Further, the SPT and SSSEN-T appeals have not included (save in the case of NARM, which is addressed insofar as raised by WWU below) GEMA's use of Associated Documents in their grounds of appeal. For completeness, we do not consider that GEMA has failed to place appropriate weight on the matters raised by WWU in providing for Associated Documents to be capable of amendment during the price control.

8.303 Second, and relatedly, WWU objects to the fact that not all Associated Documents were published at the time of GEMA's FD, which (it contends) amounts to a lack of transparency. Whilst it is true that certain such documents were only in draft form at the time of the FD, and a limited number had not been published at all, we do not accept that GEMA was under a duty, whether as a matter of transparency or otherwise, to publish all such documents by the time of the FD. This is because:

- a) There is no statutory requirement to that effect.
- b) In any event, it is clear that GEMA does have regard to the principle of transparency in considering the date of publication of Associated Documents: 'principle (x)' in GEMA's 'Associated Documents principles' states in terms that 'Associated Documents must be published in a timely fashion bearing in mind the specifics of the Associated Document and the obligations in question.'<sup>1607</sup>
- c) Further, when adopting any Associated Documents subsequent to the FD, GEMA will be required to comply with its statutory duties, including the duties invoked by WWU in support of the present challenge.

8.304 We also accept GEMA's evidence that whilst it had intended to publish most of the Associated Documents in advance of the FD, the impact of Coronavirus (COVID-19) was such that it did not have sufficient operational resource to

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<sup>1607</sup> GEMA (2021), [Decision on principles of use for RIIO-2 Associated Documents](#), 26 February 2021. We note, for example, that while the NARM Workbook was not published at the time of GEMA's Final Determinations, the licensee-specific Annexes to the Final Determinations do provide figures for each licensee's BNRO. Paragraphs 2.5-2.6 of the WWU Annex explain why these are not final figures, including as follows: 'The data presented in Table 15 for Baseline Network Risk Output, Baseline Allowances and Unit Cost of Risk Benefit remain subject to update between the publication of Final Determinations and the implementation of RIIO-GD2. This is to ensure that the final targets we set for GDNs accurately reflect the decisions we have made at Final Determinations, including ensuring a consistent approach is taken across GDNs, where appropriate, as to which assets are included within the NARM. For example, the changes we have made to the Capital Projects PCD at Final Determinations may result in more assets being included in the NARM. Any changes we make to Baseline Allowances for NARM will only be updates to the share of totex attributable to asset interventions included within NARM and will not result in any changes to Final Determinations totex allowances.' Thus, although the final (opening) BNRO were left to be published in the NARM Workbook, GEMA published near-final output figures and identified the basis upon which they might be adjusted. We do not consider that this approach discloses a failure by GEMA to place appropriate weight on the matters on which WWU rely

achieve that. As a result, GEMA prioritised the FD and those Associated Documents which it considered to be of the greatest importance to the network companies.<sup>1608</sup>

8.305 We therefore do not accept that, in not publishing all Associated Documents at the time of the FD, GEMA has failed to give appropriate weight to its duty to have regard to better regulation principles, of which transparency is one.

8.306 In its response to the provisional determination, WWU claimed that our approach was ‘impossible to square’ with our assessment of the SPT and SSEN-T appeals, referring to paragraph 8.125 of the provisional determination.<sup>1609</sup> We reject that criticism. We have set out at paragraph 8.302 above why it is that our findings in respect of the SPT and SSEN-T appeals do not ‘read across’ to the appeal brought by WWU. We note that paragraph 8.125 of the provisional determination<sup>1610</sup> was part of our discussion of SPT’s and SSEN-T’s vires challenge and was specifically concerned with the criteria by which GEMA will assess any future modification of the licence condition. That issue does not arise on WWU’s appeal.

8.307 Third, WWU objects to the large increase in Associated Documents compared with RIIO-1, which it considers to be neither proportionate nor targeted. However, the increase in the number of such documents is not in itself informative as to whether GEMA’s approach is proportionate. GEMA makes the valid point that the increase reflects the fact that there is a greater number of mechanisms in the RIIO-2 price control requiring guidance and granular obligations on licensees than there were in RIIO-1.

8.308 In its response to the provisional determination, WWU contended that the increase triggered the need for a considered review by the CMA of whether the increase was justified by reference to the statutory duties.<sup>1611</sup>

8.309 In view of this submission, we have considered further whether in increasing the number of Associated Documents GEMA has failed to give appropriate weight to its duties to have regard to better regulation principles and the need to ensure that licence holders are able to finance themselves. We also consider, by reference to specific issues raised by WWU, whether the nature of the Associated Documents (specifically the fact that some of them contain obligations on licensees rather than pure guidance) is such that GEMA has failed to give appropriate weight to those duties.

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<sup>1608</sup> *Min Zhu* (GEMA), paragraph 60.

<sup>1609</sup> WWU response to the PD, paragraph D3.2(c).

<sup>1610</sup> Replicated at paragraph 8.126 above.

<sup>1611</sup> WWU response to the PD, paragraph D3.2(d).

- 8.310 First, we consider that the imposition of obligations on licensees in documents not having the status of licence conditions is not in itself problematic from the perspective of those duties. GEMA has a statutory power pursuant to section 7B(5) to include within licence conditions requirements for licence-holders to comply with directions given by GEMA. Thus, such directions are expressly contemplated by statute.
- 8.311 Second, we see some force in GEMA's evidence that the use of Associated Documents avoids making the licence conditions themselves unwieldy and unreadable and serves to provide additional predictability as to the operation of the regulatory regime. It is evident from our review of the list of Associated Documents that what they do is to provide additional specification on the meaning of obligations within the licence condition. In that sense, WWU's statement that they increase regulatory uncertainty and threaten financeability is misplaced as a general principle. If Associated Documents are properly constructed, they should have the opposite effect: they should reduce uncertainty about how GEMA will interpret the licence conditions and therefore reduce risks to financeability. We consider the specific challenges by WWU to particular Associated Documents below.
- 8.312 Third, we note that WWU said that the CMA has previously determined that it is wrong in principle for a price control framework to result in lack of clarity and uncertainty for the licensee, and pointed to our decision in *NATS* as providing support for this view. However, we consider that price control frameworks can be expected inevitably to leave some degree of uncertainty in relation to how a control will be applied. The appropriateness of different forms and levels of uncertainty can be expected to depend, among other things, on the benefits of providing flexibility for the price control arrangements to evolve within-period to reflect relevant changes in circumstances, and on the extent to which the process through which the price control may be adjusted over time has itself been developed and established. The assessment of these factors will depend on the specific circumstances under consideration. In the *NATS* case, we considered there to be insufficient clarity over how the CAA's proposed capex delivery incentive would be applied, and indeed over its underlying purpose, in a context where the resulting penalty could amount to the total notional equity return allowed for on the planned capital programme.<sup>1612</sup> We review the specific concerns identified by WWU below, but do not consider them to give rise to the sort of concerns expressed by the CMA in *NATS*. Also, in our view, the CMA's *NATS* decision is consistent with our views here, as it supported the use of documents comparable to the Associated Documents published by GEMA, and did not consider that it would increase uncertainty or risk for the

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<sup>1612</sup> [NATS](#), paragraphs 9.67 and 9.71.

CAA to provide guidance about how it would consider changes to NATS' investment programme during the price control period.

8.313 Fourth, we acknowledge that it is possible to envisage a situation in which, as a result of the use of Associated Documents, such large parts of the price control are subject to change or uncertain at the outset that network companies' financeability is seriously called into question, in turn raising a real issue as to whether sufficient weight has been placed on the duty to have regard to financeability issues (and, indeed, better regulation principles). However, we are not satisfied on the evidence we have seen from WWU that this is a situation which arises here.

8.314 At paragraph 3.14 of its notice of appeal, WWU refers to a report by KPMG (the **KPMG Associated Documents Report**<sup>1613</sup>) – commissioned by WWU for this appeal – as evidence of the potential impact on WWU of GEMA's approach to the use of Associated Documents.<sup>1614</sup>

8.315 We have carefully considered the KPMG Associated Documents Report. However, we do not consider that it provides robust evidential support for WWU's contention.

8.316 The KPMG Associated Documents Report describes so called 'key areas of the price control where Ofgem has given itself additional discretion in RIIO-2 through subsidiary documents' (page 6).<sup>1615</sup> KPMG states that the increased use of subsidiary documents in these areas 'could have an impact on the costs or regulatory compliance requirements for a GDN', such as new data processes or systems and new assurance processes.<sup>1616</sup> Our views on the points made by the KPMG Associated Documents Report are as follows:<sup>1617</sup>

- a) Annual Environmental Report Guidance: the KPMG Associated Documents Report accepts that the one example it gives of a requirement in this Associated Document imposing costs on WWU which were not included in WWU's business plan – 'material use reporting' – is 'relatively low value' (page 6). Beyond that, the KPMG Associated Documents Report speculates about possible amendments to the Associated

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<sup>1613</sup> KPMG for WWU, *Analysis of use of subsidiary documents in RIIO-2* (KPMG Associated Documents Report).

<sup>1614</sup> We note also WWU's submissions at D5.7-D5.10 of its NoA, concerning the Non Gas Fuel Poor Network Extensions Scheme in operation during RIIO-1. WWU presents this as a 'real world example of how a unilateral change by Ofgem can ultimately play out and have a detrimental effect on a licensee's revenues' (paragraph D5.7), but WWU does not put any figure on the alleged detrimental effect, still less adduce any evidence as to that alleged effect.

<sup>1615</sup> We appreciate that the three subsidiary documents are not an exhaustive list, but we assume that these are the three which KPMG considers to be most detrimental in terms of potential impact on WWU. KPMG Associated Documents Report, page 2.

<sup>1616</sup> KPMG Associated Documents Report, page 3.

<sup>1617</sup> We note that the KPMG Associated Documents Report refers also to the PCFM Guidance. We address the PCFM Guidance separately at paragraph 8.324 below.

Document in future, which ‘could’ have large cost implications. We do not consider that this shows (either by itself or in conjunction with other Associated Documents) that GEMA’s approach fails to put appropriate weight on its statutory duties. In relation to possible amendments, we note that if amendments are to be made to Associated Documents in the future, GEMA will have to comply with its statutory duties, including the financeability duty raised by WWU on this appeal.

- b) Digitalisation Strategy and Action Plan (**DSAP**) Guidance: the DSAP Guidance is an Associated Document issued pursuant to SpC 9.5.10. SpC 9.5.12 states that this document will make provision about how the licensee should work towards digitalisation; how the licensee should set out, in its Digitalisation Strategy and its Digitalisation Action Plan, how it intends to use Energy System Data to generate benefits for consumers and stakeholders and the specific actions it will take to achieve that outcome; the form of the Digitalisation Strategy and the Digitalisation Action Plan; and the engagement the licensee is required to undertake with stakeholders to help inform the development of its Digitalisation Strategy and its Digitalisation Action Plan. The KPMG Associated Documents Report states that ‘Ofgem could require networks to increase the scope of data that must be captured and be made available as the needs case becomes more apparent’ and that ‘Ofgem could require additional investment by networks into a joint UK-side [sic] system’. However, these points do not provide evidence that compliance with the DSAP Guidance will impose any (or at least any significant) unbudgeted cost on WWU. As for possible amendments to this document in future in line with KPMG’s speculation, we refer to what we have said at a) above. Again, therefore, we do not consider that this shows (either by itself or in conjunction with other Associated Documents) that GEMA’s approach fails to put appropriate weight on its statutory duties.
- c) NARM: the specific issue raised by the KPMG Associated Documents Report concerns SpC 3.1.18, which requires the licensee to provide a closeout report on or before 31 October 2026. One of the matters to be addressed in the report is ‘the costs incurred by the licensee in delivering its Outturn Network Risk Outputs and a breakdown of those costs in the manner specified by the Authority by direction under Standard Condition A40 (Regulatory Instructions and Guidance)’. KPMG states that ‘Ofgem could change its direction on the specified reporting breakdown during the course of the price control’ and that ‘there is a risk that Ofgem will provide a different direction without allowing networks sufficient time to ensure that cost recording is sufficient to meet the requirements’ (page 7). We note that these concerns again relate to possible future directions as to

reporting requirements. When issuing any such direction, GEMA will need to have regard to its statutory duties. Further, it seems to us that if GEMA were to make a direction which did not enable licensees sufficient time to meet the requirements which the direction sought to impose, the direction would be vulnerable to challenge on judicial review grounds, notably irrationality. Once again, therefore, we do not consider that the NARM issue raised by KPMG shows (either by itself or in conjunction with other Associated Documents) that GEMA's approach fails to put appropriate weight on its statutory duties.

- d) Finally, we note that the only references in the KPMG Associated Documents Report to any financial estimates of the supposed impact of GEMA's approach are on page 8 of the report. However, these are not KPMG's own estimates but rather figures which WWU provided to KPMG and which KPMG has not sought to interrogate. WWU has not provided us with any evidence of its own to support the estimates set out in the KPMG Associated Documents Report, and has itself noted that in its view, estimates can be speculative only.<sup>1618</sup> For that reason, we do not consider that we can place reliance on them. In any case, however, we do not consider that these estimates support the contention made in the notice of appeal that 'much of the price control framework' has been placed in subsidiary documents.<sup>1619</sup> Based on the high, medium and low case estimates set out in the KPMG Associated Documents Report, WWU said that it estimated potential additional costs for the three key areas considered in the KPMG report of the order of £23 million, in the context of a price control settlement of around £2 billion for WWU.<sup>1620</sup>

8.317 The KPMG Associated Documents Report contains, at section 3, 'a selection of views on the importance of stable regulatory frameworks from regulators and investors'.<sup>1621</sup> We do not, however, derive much assistance from this section of the report. The examples given in the report do not contain regulators' or investors' views on GEMA's approach as impugned by WWU,<sup>1622</sup> and we have not seen any evidence that either investors or credit ratings agencies' views of the GDN sector have altered since the publication of the Final Determinations. Further and in any event, KPMG's views on the 'implications for RIIO-2' (at the end of each example) are very largely

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<sup>1618</sup> WWU Main Hearing Transcript, 1 July 2021, page 83, lines 7–16.

<sup>1619</sup> WWU NoA, paragraph D6.22.

<sup>1620</sup> WWU Clarification Hearing Transcript, 14 May 2021, page 69, lines 15–20.

<sup>1621</sup> KPMG Associated Documents Report, pages 13–16.

<sup>1622</sup> We address more generally the absence of evidence of an impact on WWU's financeability at paragraphs 8.327 and 8.328 below.

expressed in tentative terms. We therefore do not consider that this takes matters any further.

8.318 Thus, overall, the evidence adduced by WWU does not persuade us that GEMA has failed to place appropriate weight on its statutory duties.

8.319 Finally, when considering whether WWU has established that GEMA has failed to give sufficient weight to its statutory duties, it is in our view relevant to consider what WWU's proffered alternative is. WWU does not contend that GEMA should not place on licensees any of the obligations contained in the Associated Documents of which they make complaint. Rather, it says that the Associated Documents should be given the status of licence conditions and that there should be a 'significant impact' test for each one, to determine whether any changes to it should proceed by way of SLMP or simple direction.<sup>1623</sup> However, this would not affect the possibility that changes could be made to those obligations within the period of the price control. Whilst it is true that any such changes might need to follow the SLMP, with the attendant right of appeal to the CMA rather than judicial review, we are not persuaded that this would materially improve the predictability of the regime or a licensee's ability to finance itself; and WWU has not pointed to any evidence that this particular distinction makes any difference to investors' (or credit ratings agencies') perceptions.

8.320 WWU raises two specific objections to the way in which GEMA has addressed PCFIs in its Final Determinations:

- a) It objects to the process for their potential modification by direction. It points to the process in RIIO-1 whereby if the licensee could demonstrate to GEMA that it reasonably considered that a proposed PCFI change would have a significant impact, then GEMA could only modify the PCFI(s) under the statutory modification procedure. WWU contends that GEMA has not given any clear explanation for its change of approach in RIIO-2 to one whereby it is GEMA which will decide whether a proposed change would have a significant impact on the licensee; according to WWU, GEMA has therefore not had regard to all of the material facts or given due weight to the impact of this change of approach on investor sentiment.
- b) WWU also claims that GEMA has created additional uncertainty by introducing a further document into the RIIO-2 price control, namely the PCFM Guidance.

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<sup>1623</sup> WWU NoA, paragraph D7.3.

- 8.321 We consider these criticisms to be misplaced. We address each of them in turn below.
- 8.322 With respect to the first objection outlined above (in paragraph 8.320a), we do not see that GEMA was under any obligation to retain its RIIO-1 approach of giving licensees an effective veto over the use of self-modification in respect of the PCFIs if they could show that they ‘reasonably considered’ that such modifications would have a significant impact on them.<sup>1624</sup> Although we have some concerns about the approach taken in relation to PCFIs based on a proper construction of section 7(5)(b) of EA89, discussed above in relation to SSEN-T’s appeal, it was open to GEMA to change the process and it was not wrong in failing to give reasons for doing so.
- 8.323 In its response to the provisional determination, WWU stressed that GEMA had to give reasons for its change of approach.<sup>1625</sup> We do not accept that GEMA was wrong simply because it did not provide a reason in its decision. In any case, we consider the reason given by GEMA on this appeal to be a sound one, namely that it is appropriate for the regulator itself to form a view as to whether the proposed modification would have a significant impact on the licensee, rather than limit itself to what the licensee reasonably considers to be the impact. We consider that an approach to the PCFIs which takes into account the significance of an impact on the licensee does not disclose any failure by GEMA to give appropriate weight to its duties under section 4AA(2)(b) and (5A) of GA86.
- 8.324 With respect to the second objection (see paragraph 8.320b), we do not see that the introduction of the PCFM Guidance has injected additional uncertainty into the price control. WWU SpC 8.2 sets out the way in which the Annual Iteration Process (**AIP**) for the GD2 PCFM will work. It explains the purpose of the PCFM Guidance, which is to assist licensees in using the PCFM to complete the PCFM Variable Values table with the PCFM Variable Values: SpC 8.2.4(a). GEMA has explained that previously GEMA has itself performed the AIP, whereas for RIIO-2 network companies will perform the first iteration of the AIP themselves and submit it to GEMA for approval.<sup>1626</sup> It is therefore unsurprising that the PCFM Guidance did not feature as part of the RIIO-1 price control.
- 8.325 Although WWU stressed that the PCFM Guidance introduces over 100 Variable Values, in practice the definition of these, and therefore any potential

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<sup>1624</sup> We have of course come to the provisional view, in the context of SSEN-T’s appeal, that the PCFI condition is ultra vires section 7(5)(b) EA89. However, WWU has not itself raised an ultra vires challenge and so we proceed on the basis that self-modification in relation to the WWU PFCI condition is permissible.

<sup>1625</sup> WWU response to the PD, paragraph D3.2(e).

<sup>1626</sup> *Zhu 1 (GEMA)*, paragraph 149.



disagreement over their value, is generally not included in the PCFM Guidance. We consider the PCFM Guidance to be a largely mechanistic list of the relevant values to be used in the PCFM, together with a description of where the source data for those values is to be found. We do not agree that such a document, which clarifies the source data for the calculation of the price control, introduces uncertainty into the process (or additional obligations on licensees). WWU further submitted that the provisional determination's lack of concern at the fact that the PCFM Guidance was not published at the time of the appeal is inconsistent with the approach taken in the provisional determination to the SPT and SSEN-T appeals.<sup>1627</sup> As we have already explained, however, our findings in respect of the SPT and SSEN-T appeals related specifically to the ambit of section 7(5)(b) of EA89, which is not the subject of WWU's appeal.

- 8.326 In its response to the provisional determination, WWU submitted that it was incorrect to characterise the PCFM Guidance as 'assisting' licensees; rather, it imposed legally binding obligations. We do not accept WWU's characterisation. While we acknowledge that the PCFM Guidance may also contain some obligations (to the extent that it contains procedural requirements or specifies the sources of values to be used in the PCFM), it is largely, as set out above, designed to provide clarification and the fact that it may have obligations does not prevent it also being of assistance. WWU further submitted that the provisional determination's lack of concern at the fact that the PCFM Guidance was not published at the time of the appeal is inconsistent with the approach taken in the provisional determination to the SPT and SSEN-T appeals.<sup>1628</sup> As we have already explained, however, our findings in respect of the SPT and SSEN-T appeals related specifically to the ambit of section 7(5)(b) of EA89, which is not the subject of WWU's appeal.
- 8.327 Finally, we note that WWU told us how financeability in general might be affected by GEMA's use of subsidiary documents, but has not provided us with evidence that its own financeability risks being adversely affected by the matters of which it complains under this ground of appeal.<sup>1629</sup> While this is not a matter on which our provisional decision rests, it reinforces our view that the ground is not made out.
- 8.328 In response to the provisional determination, WWU submitted that WWU's inability to identify a financeability impact with any greater specificity was a consequence of the very uncertainty of which it complains.<sup>1630</sup> We do not

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<sup>1627</sup> WWU response to the PD, paragraph D3.2(f).

<sup>1628</sup> WWU response to the PD, paragraph D3.2(f).

<sup>1629</sup> WWU Clarification Hearing Transcript, 14 May 2021, pages 68–69 and pages 76–77.

<sup>1630</sup> WWU response to the PD, paragraph D2.11(e).

accept that submission. In its NoA, WWU complained that GEMA's approach to the use of subsidiary documents served to create considerable levels of uncertainty, which WWU said could materially impact 'investor confidence, licensee's credit ratings and consequently on WWU's financeability'.<sup>1631</sup> In other words, it was the alleged uncertainty itself which was said to affect WWU's ability to finance itself. In support of that position, we would have expected to see, for example, evidence that WWU's own credit rating had worsened as a result of the final determination or internal documents discussing the impact of GEMA's approach on its financeability. Such evidence has not, however, been produced.

8.329 In response to the provisional determination, WWU made a more general criticism of our analysis. WWU claimed that the CMA's assessment was 'radically disconnected' from its assessment of the appeals brought by SPT and SSEN-T and that it was irrational not to read across the conclusions adopted in respect of those latter appeals when determining WWU's appeal.<sup>1632</sup> WWU contended that 'where appeals have been joined and heard together the arguments for each party also need to be considered together, there ought to be consistency of treatment across appellants, and conclusions that are reached in respect of one appeal should rationally be read-across and applied to the other appellants'.<sup>1633</sup>

8.330 We reject that criticism. We have dealt with specific complaints of alleged inconsistency as between our determination of SPT's and SSEN-T's appeals, on the one hand, and WWU's appeal, on the other, at paragraphs 8.10 and 8.301 to 8.302 above. This more general complaint is equally misplaced, in our view. The three parties' appeals were joined because they were related issues and joining them enabled the CMA to dispose of these grounds fairly, efficiently, and at proportionate cost, consistent with our overriding objective. As we have already explained, there is no basis for automatically reading across to WWU's appeal conclusions we have reached in respect of SPT's and SSEN-T's appeals, which were put on a different footing and (save for NARM) did not concern the use of Associated Documents. What we have found in the SSEN-T and SPT appeals is that GEMA was wrong in the way it sought to provide for self-modification pursuant to 7(5)(b) of EA89 in respect of certain licence conditions, with insufficient specification of the manner and/or circumstances of such self-modification. That was expressly not WWU's case.<sup>1634</sup> We are required in each case to review GEMA's decision

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<sup>1631</sup> WWU NoA, paragraph D2.7; see also paragraph D4.10.

<sup>1632</sup> WWU response to the PD, paragraph D2.7.

<sup>1633</sup> WWU response to the PD, paragraph D2.9.

<sup>1634</sup> See, for example, WWU Reply, paragraph D2.8.

through the prism of the specific errors that are alleged by the appellant (see paragraphs 3.27 and 3.28), and that is what we have done.

8.331 Accordingly, we dismiss WWU's ground of appeal.

## **Our determination**

8.332 For the reasons given above, we determine that GEMA was wrong in law and acted ultra vires section 7(5)(b) of EA89 in the way it provided for self-modification of the following special licence conditions appealed by SSEN-T:

- (i) Special Condition 3.1 NARM
- (ii) Special Condition 3.2 Cyber resilience operational technology Re-opener
- (iii) Special Condition 3.3 Cyber resilience information technology Re-opener
- (iv) Special Condition 3.6 Net Zero Reopener
- (v) Special Condition 3.13 Large onshore transmission investment Re-opener
- (vi) Special Condition 3.14 Medium Sized Investment Projects Re-opener
- (vii) Special Condition 3.28 Subsea Cable Re-opener
- (viii) Special Condition 8.1 Governance of the ET2 Price Control Financial Instruments.

8.333 For the reasons given above, we determine that GEMA was wrong in law and has acted ultra vires section 7(5)(b) of EA89 in the way it provided for self-modification of the following PCDs appealed by SSEN-T:

- (i) Special Condition 3.2 Cyber resilience operational technology Price Control Deliverable
- (ii) Special Condition 3.3 Cyber resilience information technology Price Control Deliverable
- (iii) Special Condition 3.4 Physical security Price Control Deliverable
- (iv) Special Condition 3.9 Wider works Price Control Deliverable
- (v) Special Condition 3.14 Medium Sized Investment Projects Price Control Deliverable
- (vi) Special Condition 3.15 Pre-Construction Funding Price Control Deliverable

(vii) Special Condition 3.17 Shared schemes Price Control Deliverable

(viii) Special Condition 3.18 Resilience and operability Price Control Deliverable

8.334 We determine that GEMA was not wrong in the way it provided for self-modification for the following special licence conditions appealed by SSEN-T:

(i) Special Condition 3.4 Physical security Re-opener

(ii) Special Condition 3.15 Pre-Construction Funding Re-opener

8.335 For the reasons given above, we determine that GEMA was wrong in law and has acted ultra vires section 7(5)(b) of EA89 in the way it provided for self-modification of the following special licence conditions appealed by SPT:

(i) Special Condition 3.1 NARM

(ii) Special Condition 3.6 Net Zero Re-opener

(iii) Special Condition 3.13 Large Onshore Transmission Investments Re-Opener

(iv) Special Condition 3.14 Medium Sized Investment Projects Re-Opener

(v) Special Condition 3.16 Access Reform Change Re-opener

(vi) Special Condition 3.29 Uncertain Non-Load Related Projects Re-opener

8.336 For the reasons given above, we determine that GEMA was wrong in law and has acted ultra vires section 7(5)(b) of EA89 in the way it provided for self-modification of the following PCDs appealed by SPT:

(i) Special Condition 3.9 Wider Works Price Control Deliverable

(ii) Special Condition 3.14 Medium Sized Investment Projects Price Control Deliverable

(iii) Special Condition 3.18 Resilience and operability Price Control Deliverable

(iv) Special Condition 3.29 Uncertain Non-Load Related Projects Price Control Deliverable.

8.337 For the reasons given above, we provisionally determine for WWU's grounds of appeal that GEMA did not fail to have regard to its statutory duties and

therefore was not wrong to include obligations in subsidiary documents and provide that those documents could be modified by issuing directions.

## Relief

8.338 Based on the determination above, we have decided to:

- a) Quash the decision to the extent that each of the following licence conditions provides for modification of the condition itself:
  - (i) Special Condition 3.1, NARM;<sup>1635</sup>
  - (ii) Special Condition 3.2, Cyber Resilience Operational Technology Re-opener, and Price Control Deliverable;
  - (iii) Special Condition 3.3, Cyber Resilience Information Technology Re-opener, and Price Control Deliverable;
  - (iv) Special Condition 3.4, Physical Security Re-opener Price Control Deliverable;
  - (v) Special Condition 3.6, Net Zero Re-opener;
  - (vi) Special Condition 3.9, Wider Works Price Control Deliverable;
  - (vii) Special Condition 3.13, Large Onshore Transmission Investment Re-opener;
  - (viii) Special Condition 3.14, Medium-sized Investment Projects Re-opener and Price Control Deliverable;
  - (ix) Special Condition 3.15, Pre-construction Funding Re-opener and Price Control Deliverable;
  - (x) Special Condition 3.17, Shared Schemes Price Control Deliverable;
  - (xi) Special Condition 3.18, Resilience and Operability Price Control Deliverable;
  - (xii) Special Condition 3.28, Subsea Cable Re-opener;
  - (xiii) Special Condition 3.29, Uncertain Non-Load Related Projects Re-opener; and

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<sup>1635</sup> As we have found at paragraph 8.220 above, we have come to the conclusion that SpC 3.1.5, 3.1.9 and 3.1.15 provide in substance for the modification of the licence condition, even if not in form.

(xiv) Special Condition 8.1, Governance of the ET2 Price Control Financial Instruments; and

- b) Remit the matter back to GEMA for reconsideration and determination. We anticipate that GEMA will reconsider and determine the wording of the special conditions in issue in the light of this determination.

8.339 We describe the form of relief, the process we propose to follow, and our proposed directions to GEMA in the interim in Chapter 17, Relief.