



Home Office

**CONFIDENTIAL**

## **Mobile Radio Network Services Market Investigation**

The Home Office's Submission and response to the CMA's working papers: (1) Profitability modelling and results; (2) Cost of Capital; (3) Issues relating to benchmarking; (4) Approach to Assessing Motorola's Dual Role, (5) Airwave Network Contracts; (6) The role of the 2016 change control negotiations; (7) Scope for Competition and Market Definition; (8) Potential Remedies; and (9) Transfer Charges.

24 May 2022

## Glossary

Party	Meaning
<b>Airwave Solutions</b>	Airwave Solutions Limited (ASL), owner and operator of the Airwave Network
<b>Motorola</b>	Motorola Solutions, Inc., the ultimate parent company of Airwave Solutions Limited, Motorola Solutions UK Limited (MSUK) and Kodiak Networks
<b>MSUK</b>	Motorola Solutions UK Limited, supplier under the ESN Lot 2 contract
<b>Kodiak</b>	Kodiak Networks, subcontracted supplier of the Kodiak MCPTT service to ESN
<b>ESMCP</b>	Emergency Services Mobile Communications Programme
<b>Home Office</b>	The Secretary of State for the Home Department, as part of the Crown, acting via the Home Office

Term	Meaning
<b>3GPP</b>	Third Generation Partnership Project
<b>AEC</b>	Adverse Effect on Competition
<b>Alt-MCPTT</b>	Alternative MCPTT service intended to be procured by the Home Office
<b>ARP</b>	Ambulance Radio Programme
<b>CAN</b>	Change Approval Notice
<b>CCN</b>	Contract Change Note
<b>DoR</b>	Deed of Recovery dated 17 February 2016
<b>ESN</b>	Emergency Services Network
<b>LMR</b>	Land Mobile Radio
<b>Lot 2</b>	One of the lots forming part of the ESN, covering services and including the provision of an MCPTT service, of which Motorola Solutions UK Limited is the current supplier
<b>LTE</b>	Long Term Evolution (4th generation mobile technology)
<b>MCPTT</b>	Mission Critical Push-To-Talk
<b>NBV</b>	Net Book Value
<b>NRV</b>	Net Realisable Value
<b>P25</b>	Project 25 standards for interoperable LMR systems
<b>PTT</b>	Push-To-Talk
<b>TETRA</b>	Radio technology (upon which Airwave Service is based)
<b>UCCN</b>	Umbrella Contract Change Note
<b>VTB</b>	Value to the Business
<b>WACC</b>	Weighted average cost of capital
<b>Wave 7000</b>	Motorola's original MCPTT solution, replaced by Kodiak

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## A. Introduction and Summary

### Introduction

1. The Home Office is grateful to the CMA group and the group's supporting staff for the thoroughness with which the CMA has approached this market reference; and welcomes the opportunity to provide this submission and responses to a number working papers published or otherwise shared with the Home Office.
2. This submission provides the Home Office's views of the market, including the features of the market that give rise to adverse effects on competition (AECs) and the harms that result. It also provides, where possible, the Home Office's views on the remedies the Home Office believes would appropriately address the features of the market giving rise to AECs and harm. Primarily the paper does this through responding to each of the working papers that the CMA has published or shared with the Home Office.
3. In due course the Home Office will provide a further response to the charge control and financial transparency sections of the CMA's Potential Remedies working paper.
4. In drafting this submission and response, the Home Office has taken advice from and obtained input from Oxera Consulting LLP, in particular, sections D. Assessing Airwave's Profitability and E. Estimating a cost of capital for Airwave.

### Summary

5. The Home Office believes that there are features of the market that give rise to adverse effects on competition; these features are primarily that:
  - (a) Airwave Solutions<sup>1</sup> is the owner and operator of the Airwave network and the only supplier LMR network services for public safety in Great Britain; and

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<sup>1</sup> Airwave Solutions Limited (03985643), a private limited company registered in England (Airwave Solutions).

- (b) Airwave Solutions is owned by Motorola<sup>2</sup> which is also the parent company of MSUK<sup>3</sup>, a key supplier into the replacement for the Airwave network, the ESN.
6. As a result of these features:
- (a) Airwave Solutions holds unilateral market power, such that it can resist price reductions; and
  - (b) Motorola has both the incentive and ability to delay the ESN, extending the period over which it can earn a return from the Airwave network. Even with a significant price reduction, resulting from a charge control based on a fair WACC, the imbalance in Motorola's earnings between Airwave and ESN, Motorola would still be incentivised to delay ESN, rather than replace the Airwave network.
7. Additionally, the return that Airwave earns from the Airwave Network is unfairly high, and considerably above that which it would earn in a competitive market.

## B. Background

### *Mobile Radio Communication in Great Britain*

8. Mobile radio electronic communications are a mission critical service vital for Great Britain's emergency services. Our modern emergency services, as we know and rely on them, cannot function without high quality mobile radio electronic communications. They are vital for all of our emergency and support services, primarily our police services, ambulance services and fire & rescue services and, as such, are a vital part of our nation's critical national infrastructure.
9. Airwave is currently the only provider of these mission critical services, using a network designed specifically for the police over 20 years ago. That network – the Airwave network – is a bespoke system enabling secure, private mobile radio communications based on TETRA technology.

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<sup>2</sup> Airwave Solutions is wholly owned by Guardian Digital Communications Limited (06143540), which is ultimately wholly owned by Motorola Solutions, Inc, (789650) a public corporation registered in Delaware, USA (Motorola).

<sup>3</sup> Motorola Solutions UK Limited (00912182) a private limited company registered in England

10. Key differentiating factors between the Airwave network and other mobile radio electronic communications networks include security and encryption and, very importantly, call functionality that enables users to push a button on a terminal device, e.g. a police officer's radio handset, and immediately be able to communicate with that officer's control room or other officers (or groups of officers) in the vicinity. This functionality, and associated functions, is known as Mission Critical Push-To-Talk (MCPTT) and is vital for emergency service users' safety and public safety.
11. The Airwave network and the services provided over that network have generally performed well; however, the Airwave network is based on legacy TETRA technology and the network itself is approaching the end of its design life. Compared to more modern technologies, the Airwave network has significant limitations, especially in respect of data: data services are low bandwidth and limited to the equivalent of short text message services found on legacy 2G mobile phones.
12. BT built the Airwave network, having won a PFI agreement to provide land mobile radio services to Great Britain's police services in 2000. The PFI agreement is a framework arrangement (the Framework Arrangement). The original duration of this Framework Arrangement was tied to the last to expire of the service contracts agreed between the Home Office, Airwave Solutions, and individual police authorities, agreed under the framework arrangement (the Service Contracts). The duration of the Service Contracts could be extended by the Home Office and the relevant police authority. Over the next few years, Airwave Solutions won contracts to additionally provide services to the ambulance services and the fire & rescue services. These police, ambulance and fire & rescue contracts were variously due to expire between the end of 2019 and early 2020.
13. In 2007, Airwave Solutions was purchased by an investment fund<sup>4,5</sup> and subsequently sold to Motorola in 2016.<sup>6</sup> Since then, Airwave has remained part of the Motorola group.

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<sup>4</sup> Macquarie Communications Infrastructure Group, a Macquarie Group fund listed on the Australian Stock Exchange, and Macquarie European Infrastructure Fund II, a Macquarie Group unlisted investment fund.

<sup>5</sup> See, Completed acquisition by Macquarie European Infrastructure Fund II and Macquarie Communications Infrastructure Group (via Guardian Digital Communications Limited) of Airwave Safety Communications Limited, The OFT's decision on reference under section 22(1) given on 8 August 2007, 15 August 2007.

<sup>6</sup> On 19 February 2016, Motorola Solutions Inc. (through its direct subsidiary, Motorola Solutions Overseas Limited) acquired Guardian Digital Communications Holding Limited (the parent company of Airwave Solutions Limited).

14. At the time of Motorola's acquisition of Airwave Solutions, it was anticipated by the Home Office that the PFI agreement (and other associated public contracts) would end in 2019. The Home Office understood, for example through Motorola's ESN proposals and commitments, that this was also Motorola's view. However, Motorola may have harboured an anticipation that ESN would be delayed, and that Airwave Solutions' services would be provided beyond 2019.
15. In anticipation of the need to replace the Airwave network, the Home Office started a programme to develop a modern replacement service known as the Emergency Services Network, or ESN.<sup>7</sup> The ESN was designed to utilise commercial mobile radio networks and technology to provide comparable voice services to those offered by Airwave, including MCPTT services, and additionally to provide high availability broadband data services.
16. ESN will be considerably cheaper than the Airwave network, due to it 'piggy-backing' on an existing commercial mobile network, rather than being a bespoke dedicated network, and, due to its significantly increased data capability, will enable new and innovative services. The components of the ESN were split into several lots. The most important of these lots were Lot 2 and Lot 3. Lot 2 covered services and included the provision of an MCPTT service, and Lot 3 concerned networks and included the provision of the mobile network service.
17. Lot 2 was won by MSUK<sup>8</sup> and Lot 3 was won by EE Limited (EE). The contracts were signed and the awards announced in early December 2015. Around this time Motorola also purchased Airwave Solutions, exchanging on a share purchase agreement on 3 December 2015, but not at this stage completing. Subject to its acquisition of Airwave Solutions completing, Motorola had procured a position where its subsidiaries were both the provider of the only legacy services, i.e. services provided over the Airwave network, and the provider of a key functionality to the replacement for the Airwave network, i.e. the ESN's MCPTT service, known as Wave 7000, and other supporting infrastructure and services.

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<sup>7</sup> The programme got going in earnest in 2012

<sup>8</sup> Motorola Solutions UK Limited, a wholly owned subsidiary of the Motorola Solutions, Inc.

18. Concerned that Motorola may take advantage of its dual role, the Home Office took steps to protect Britain's emergency services and the public purse. Initially, the Home Office obtained Motorola's agreement not to complete the acquisition of Airwave Solutions without the Home Office's consent. Subsequently, the Home Office and Motorola agreed for Motorola to complete the acquisition in return for Motorola agreeing that if it delayed ESN's delivery, Airwave's charges would be reduced. This agreement is called the Deed of Recovery.
19. At the same time as agreeing that Motorola could complete its acquisition of Airwave Solutions, Motorola and the Home Office also agreed to align the expiry date of the PFI Framework Arrangement and other contracts (the FireLink contract and Ambulance contracts) to 31 December 2019 and that the Home Office could further extend those contracts' expiry by giving Airwave Solutions one year's notice.
20. Motorola completed the acquisition of Airwave Solutions on 19 February 2016.
21. Shortly after the signing the Lot 2 contract, problems and delays arose. Motorola and the Home Office worked together with EE to resolve these problems; however, further problems and delay arose, throughout 2017 and into 2018. These problems included issues with Motorola's MCPTT solution Wave 7000. To remedy the issues existing in 2018, at Motorola's suggestion, the Home Office and Motorola agreed to reset the Lot 2 deliverables, replacing Motorola's Wave 7000 MCPTT service with a new Motorola solution, Kodiak MCPTT. The Home Office and Motorola also agreed to a new delivery timetable, moving to an incremental delivery approach.
22. As the same time as agreeing the reset of the Lot 2 Contract and the move from Wave 7000 to Kodiak, the Home Office also extended the Airwave contracts to 31 December 2022.
23. Unfortunately, despite the reset and the move to the Kodiak MCPTT in place of the Wave 7000 MCPTT, delays and issues continued, with the consequence that Motorola [redacted]. The original mobilisation complete date for Wave 7000 was 15 September 2017; following the reset, the agreed date for ESN V1.0 was the end of [redacted], but that date has slipped, [redacted], but the last plan showing a delay of [redacted].



24. As a result of the continuing delays, the Home Office was forced to extend the Airwave contracts in December 2021, to expire on 31 December 2026.

*The harm caused by delay*

25. The Framework Arrangement was designed to provide Airwave Solutions with an appropriate return over the life of the original contract given the operating costs and the capital costs required to build and subsequently maintain the network. The Home Office believes that not only has Airwave Solutions significantly beaten the predicted return over the original anticipated life of the PFI agreement, but this very high return has been exacerbated by the Framework Arrangement's extension. This excessive return is far and away above the return that was envisaged at the time the agreement was signed, even after considering the early risk of deploying the Airwave network.
26. On top of the increasing very high returns that Airwave and, in turn Motorola, are earning, the Home Office is also paying for a network which should have been replaced. The ESN was designed to be significantly cheaper to both build and operate than the Airwave network; therefore, each day that the ESN is delayed the public purse must continue to pay for the Airwave network, meaning the public do not benefit from the costs savings that the ESN will bring.
27. In addition to providing greater value for money for the provision of MCPTT voice communications, the ESN was also designed enable the use of innovative application requiring broadband data, for example, video, picture and document sharing; solutions enabling the emergency services to more effectively carry out their duties. For example, data service would enable the police to share a picture and other information about a person, for example, a missing child, to a group of police officers in that child's last known location. The delay to the ESN is depriving the emergency services, and in turn citizens, of the efficiency and other benefits that integrated data solutions, using priority and pre-emption, will bring.<sup>9</sup>

## C. Motorola's submissions

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<sup>9</sup> The Home Office notes that many emergency services are using data services provided run on commercial mobile phones and serviced by commercial mobile carriers.

28. Motorola has made submissions<sup>10</sup> to the CMA, submissions which contain information that the Home Office considers is inaccurate, misleading or deliberately selective, a number of which errors the Home Office considers sufficiently significant to correct. Annex 1 identifies these significant errors and provides the Home Office's view of the correct position. However, that the Home Office has not specifically commented on all or any information or arguments contained in Motorola's submissions should not be taken as the Home Office's acceptance that such information or argument is correct.

## D. Assessing Airwave's Profitability

### Introduction

29. This section sets out the Home Office's response to the CMA's working paper on the profitability modelling and results.<sup>11</sup>

30. Overall, the Home Office considers the CMA's analysis to be thorough and believes that they followed the approaches outlined in their earlier profitability working paper.<sup>12</sup> The Home Office welcomes the analysis undertaken in line with its response to the first profitability working paper—for example, the Home Office agrees with the CMA focusing on the 'extension period' (i.e. the period from 2020 to 2026).<sup>13</sup> However, the Home Office finds it concerning that the CMA are unsure about certain information received from Motorola—for example, the different CAPEX forecasts—and hopes that this will be clarified ahead of the provisional decisions.

31. The Home Office is also unable to provide more in-depth comments on the details of the analysis due to the redactions in that working paper. Therefore, in this section, the Home Office provides comment on a few methodological choices made by the CMA in their profitability analysis, including comments around the scope of the analysis and asset valuation.

### Scope of the analysis

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<sup>10</sup> For example, 'Motorola's Response to the CMA's Final Report and Decision on Market Investigation Reference', 15 November 2021, and 'Motorola's Response to the CMA's Issues Statement', 10 January 2022

<sup>11</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May.

<sup>12</sup> CMA (2021), 'Land mobile radio network services: Profitability methodology approach', 13 December.

<sup>13</sup> Home Office (2022), 'Home Office's response submission to the CMA's Profitability methodology working paper', 11 January.

32. The CMA has excluded two software business lines (Pronto and CCCRS) and revenues associated with the Department of Health (as was) Bundle 2 contract from Airwave's profitability.
33. The Home Office agrees with the exclusion of the two software business lines if it can be done in a robust manner—that is, both revenues and equivalent costs (including a share of common costs) should be removed.
34. However, the CMA's reasoning for excluding the Department of Health Bundle 2 contract was unclear to the Home Office. These services are provided together with the core Airwave network services, there is a significant proportion of common costs between the Department of Health Bundle 2 contract and other services offered by Airwave to the Home Office,<sup>14</sup> and identifying all the relevant costs could be challenging. As such, the Home Office considers that it would be more robust to include both revenues and costs associated with the Department of Health Bundle 2. In addition, Motorola previously argued that the services that Airwave outsources should be excluded from the assessment.<sup>15</sup> The Home Office does not consider that outsourcing a contract is a sufficient justification for excluding it from the scope of the analysis. The Home Office has a contract with Motorola to deliver these services and it is Motorola's choice whether to deliver these services with its own resources or outsource.
35. Furthermore, the CMA are proposing to remove interworking revenues and costs on the basis that interworking does not form part of Airwave network operations.<sup>16</sup> The Home Office disagrees with this approach and considers the analysis would be more robust if interworking revenues and costs were included for two main reasons.
36. Firstly, there is no conceptual basis to exclude interworking activities. Just as Motorola's ownership of Airwave provides it market power in terms of the delivery of the original core services of the PFI agreement, it also provides Motorola market power in terms of the provision of interworking services—nobody else has control and direct access to the Airwave infrastructure, therefore, nobody else can provide interworking service.

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<sup>14</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paragraph 43.

<sup>15</sup> See Motorola (2022), 'Motorola's Response to the CMA's Working Paper on Profitability', paragraph 11.

<sup>16</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paragraph 53.

Motorola's ownership of Airwave is, therefore, likely to have enabled it to charge a disproportionately high price for the interworking service compared to the costs needed to deliver the service. Therefore, to fully understand the extent to which Motorola has market power over the Home Office, it is relevant to include revenues and costs associated with interworking in the profitability analysis. In fact, as explained by the CMA, the provisions to provide interworking (i.e. originally the SiteLink provisions) have been added to the core services of the PFI agreement:

“The SiteLink provisions were therefore inserted into the PFI Agreement via Contract Change Notices. Those new provisions effectively expanded the definition of Core Services in that agreement so as to include the interoperability technology.”<sup>17</sup>

37. Secondly, attempting to do so may result in errors. While the Home Office understands that the CMA has made some adjustments for the costs of delivering the interworking service, it is possible that not all costs relating to interworking arrangements have been removed. Interworking costs are part of the core operating costs of the Airwave network and share common overheads. For example, there is no separate division delivering the interworking services, and it is delivered by the same people who deliver the remaining services to the Home Office. Identifying a fair allocation of staff costs between interworking services and other Airwave services, may not be straightforward, and if only some costs are removed, but all revenues, this would understate Motorola's true profitability of operating Airwave. Thus, the Home Office requests that the CMA includes interworking in their analysis.

## Asset valuation

38. As a substantial portion of the detail in this working paper has been redacted, the Home Office has commented only on high-level principles employed in the CMA's assessment. The Home Office considers the CMA's principles are sound and that they follow them thoroughly, albeit conservatively.

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<sup>17</sup> CMA (2022), 'LMR Network Services Market Investigation: Airwave Network Contracts', paragraph 187.

39. The CMA previously suggested using the net book value (NBV) as a method to estimate the value to the business (VTB).<sup>18</sup> In the second working paper on profitability, the CMA have dropped this assumption, in favour of the following considerations:
- “a credible well-functioning market benchmark is one in which the customer would have the right to request the extension of the contract on an incremental cost plus basis [i.e. zero valuation]”;<sup>19</sup>
  - “at the start of the extension period, the assets should be valued at their net recoverable amount [which is the higher of the value in use and the net realisable value (NRV)] rather than their replacement cost (or a zero valuation)”;<sup>20</sup>
40. In the end, the CMA rely on the NRV (estimated by calculating the selling price of certain tower sites) as the lower bound and the depreciated replacement cost (as estimated by Deloitte in 2016, and adjusted for timing between 2016 and 2019) as the upper bound for the opening value of the assets in the extension period.<sup>21</sup>
41. The Home Office understands that the CMA’s preliminary choices are driven by the intention to be conservative—an approach that the Home Office accepts for demonstrating that the conclusions are not sensitive to the assessment assumptions (which is the case in this profitability analysis). may have direct implications for the charges ultimately passed on to the taxpayers — in their working paper on potential remedies, the CMA notes that the assessment of Airwave’s asset value as of 2020 within their profitability analysis could be used as an input to the charge control.<sup>22</sup> While the conclusions of the profitability assessment may not be sensitive to assumptions around the asset valuation in 2020, the charges of the potential charge control would be impacted by these assumptions — with a higher asset valuation leading to higher charges.

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<sup>18</sup> CMA (2021), ‘Land mobile radio network services: Profitability methodology approach’, 13 December, paragraph 82.

<sup>19</sup> CMA (2022), ‘LMR Network Services Market Investigation: Profitability modelling and results’, 6 May, footnote 56.

<sup>20</sup> CMA (2022), ‘LMR Network Services Market Investigation: Profitability modelling and results’, 6 May, paragraph A-50 (b).

<sup>21</sup> CMA (2022), ‘LMR Network Services Market Investigation: Profitability modelling and results’, 6 May, paragraph 78.

<sup>22</sup> CMA (2022), ‘LMR Network Services Market Investigation: Potential remedies’, 16 May, paragraph 42.

42. For the same reason, the Home Office requests that the CMA clarify the following aspects of the analysis:

- The CMA note that the assumption of Analysys Mason to use TETRA as a replacement technology may inflate the cost base materially.<sup>23</sup> At the same time, the CMA do not appear to address this reservation for Deloitte's replacement cost estimate.<sup>24</sup>
- The CMA adjusted Deloitte's asset valuation to account for the changes between 2016 and 2019—namely, for any additions to, and depreciation of, the asset base. The Home Office notes that these adjustments lead to an increase in the asset value in 2019 relative to 2016.<sup>25</sup> The Home Office would appreciate additional transparency on this, as the information available to it points towards a decrease in value. In particular, total CAPEX over this period was £89m, while accounting depreciation on network equipment alone was over £240m.<sup>26</sup>

43. The Home Office requests clarification of the CMA's position on the treatment of decommissioning costs. As outlined by the CMA, the pricing of the original contract built in the assumption that decommissioning would commence in 2019.<sup>27</sup> In other words, the decommissioning costs (at least partially) have been paid for by the Home Office as part of the original PFI agreement, as they were factored in, even though Airwave has not paid any of these costs yet.<sup>28</sup> This created an obligation to decommission the assets

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<sup>23</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paragraph A-21(a).

<sup>24</sup> Deloitte's estimate appears to be relying on the TETRA technology as well. See *ibid.*, paragraph A-31.

<sup>25</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paragraph A-46.

<sup>26</sup> The Home Office understands that the £89m CAPEX figure quoted by the CMA includes additions to all assets between 2016 and 2019 (i.e. network equipment, assets under construction and other equipment, fixtures and fittings). It has compared this to the accounting depreciation of network equipment over the same period. Accounting depreciation of network equipment amounted to £92m in 2016, £82m in 2017, £39m in 2018 and £31m in 2019. See Airwave Solutions Limited (2017), 'Annual report and Financial Statements – Year ended 31 December 2016', p. 26, Airwave Solutions Limited (2018), 'Annual report and Financial Statements – Year ended 31 December 2017', p. 25, Airwave Solutions Limited (2019), 'Annual report and Financial Statements – Year ended 31 December 2018', p. 26, Airwave Solutions Limited (2020), 'Annual report and Financial Statements – Year ended 31 December 2019', p. 26, CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paragraph A-28.

<sup>27</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paragraph A-40.

<sup>28</sup> The reason that not all decommissioning costs may have been paid for is if incremental decommissioning costs arise as a result of the contract extension.

that were built in the original PFI period, i.e. it is a liability that is inseparable from Airwave's asset base at the end of the original PFI period.

44. The Home Office explained previously that the profitability of the original PFI period from 2000 to 2019 would be overstated if there is no adjustment for the cost of decommissioning obligations that accrued within this period.<sup>29</sup> Similarly, the extension period profitability would be underestimated if the full charge of the decommissioning costs is solely allocated to this period, even though the cash outflow occurs in 2026. To apportion the decommissioning cost between periods, the opening asset value at the beginning of the extension period (and equivalently the closing asset value at the end of the original PFI period) should be adjusted downwards to recognise the fact that the asset base comes with a liability to pay decommissioning costs that the Home Office has already paid for in the original PFI period. However, the CMA does not seem to be undertaking any adjustments to the asset value.

#### Other comments

45. The Home Office also wishes to make a several additional comments on the approach followed by the CMA.
- **Confusion over CAPEX estimates.** The Home Office is concerned that Motorola has provided the CMA with multiple CAPEX projections, without sufficient explanation of what drives the different forecasts.<sup>30</sup> The Home Office believes that these CAPEX forecasts should be subject to further scrutiny or sensitivity analysis. This is all the more pertinent given that Motorola had previously over-estimated its CAPEX forecasts by [£] for the period 2018–20. That is, in previous forecasts given to the Home Office, for the years 2018–20, Motorola forecasted that it would spend £[£], but ultimately spent £[£].
  - **Redundancy costs.** Based on the estimates for decommissioning costs that the Home Office received from Motorola, the Home Office understands that its

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<sup>29</sup> Home Office (2022), 'Home Office's response submission to the CMA's Profitability methodology working paper', 11 January, paragraph 16.

<sup>30</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paragraph 73.

decommissioning estimate may include £[£] related to redundancy payments. The Home Office believes that this estimate is too high, as it implies a cost of c. £[£] per employee.<sup>31</sup> The Home Office could not see any adjustment of this value made by the CMA.<sup>32</sup>

- **Headcount.** The Home Office would once again like to draw the attention of the CMA to the increase in Airwave's headcount between 2018 and 2019, from 482 employees to 572 employees,<sup>33</sup> that was mentioned in the Home Office's previous response.<sup>34</sup> There does not appear to be any adequate justification of this significant increase in headcount.
- **Inflation.** The Home Office was not able to match the latest actual inflation and the latest forecasts by the Office for Budget Responsibility (OBR) from March 2022 with those relied upon by the CMA.<sup>35</sup> In particular, the Home Office would draw the CMA's attention to the higher short-term wedge between RPI and CPI implied by the latest actual inflation rates (e.g. year-average CPI of 2.6% and RPI of 4.0% in 2021 or the latest April 2022 12-month change of CPI of 9.0% and RPI of 11.1%)<sup>36</sup> and OBR forecasts (e.g. CPI of 7.4% and RPI of 9.8% for 2022).<sup>37</sup> Given that Motorola's revenues are linked to RPI, and the CMA believes costs will grow in line with CPI, the CMA's assumed wedge of 1% between RPI and CPI would lead to an underestimation of profitability.<sup>38</sup> Given that future inflation and the RPI–CPI wedge are uncertain, the CMA should estimate Airwave's profitability under a range of inflation scenarios and test the sensitivity of the results.

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<sup>31</sup> This is based on a 20% contractors assumption out of 580 employees, see Airwave Solutions Limited (2021), 'Annual report and Financial Statements – Year ended 31 December 2020', p. 26.

<sup>32</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paras. 60–62 and 92.

<sup>33</sup> See Airwave Solutions Limited (2019), 'Annual Report and Financial Statements – Year ended 31 December 2018', p. 21; Airwave Solutions Limited (2021), 'Annual Report and Financial Statements – Year ended 31 December 2020', p. 26.

<sup>34</sup> Home Office (2022), 'Home Office's response submission to the CMA's Profitability methodology working paper', 11 January, paragraph 35.

<sup>35</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, Table 1.

<sup>36</sup> ONS (2022), 'Inflation and price indices', available at: <https://www.ons.gov.uk/economy/inflationandpriceindices> (last accessed 19 May 2022).

<sup>37</sup> See OBR (2022) 'Economic and fiscal outlook', available at: [https://obr.uk/docs/dlm\\_uploads/CCS0222366764-001\\_OBR-EFO-March-2022\\_Web-Accessible-2.pdf](https://obr.uk/docs/dlm_uploads/CCS0222366764-001_OBR-EFO-March-2022_Web-Accessible-2.pdf) (last accessed 16 May 2022), p. 72.

<sup>38</sup> CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', 6 May, paras. 45–49.



- **Discount factor.** The CMA mention that a discount factor was needed to discount the real cashflows to a present value of cashflows as at the beginning of 2020.<sup>39</sup> However, they reference the nominal cost of capital that is estimated in the corresponding working paper, rather than a real one, which if applied to the real cash flows would introduce an inconsistency.
- **Transfer charges.** The Home Office understands that the CMA has carried out a number of adjustments to the ‘MSI engineer (maintenance) costs’ and ‘Management charges’. While the Home Office agrees with the adjustment in principle and has previously asked the CMA to undertake them, it cannot comment on whether the scale of the adjustment is appropriate given the redactions.
- **Profits benchmarking.** The Home Office agrees with the CMA that this benchmarking is not the priority due to the difficulty in carrying out such an exercise. However, if the CMA decide to undertake some analysis with respect to this exercise, they could follow the suggestions shared in the Home Office’s previous response.<sup>40</sup>

## E. Estimating a cost of capital for Airwave

### Introduction

46. This section sets out the Home Office’s comments on the CMA’s preliminary estimates of the nominal pre-tax weighted average cost of capital (WACC) for the Airwave network.<sup>41</sup>
47. Overall, the Home Office agrees with the CMA’s approach to estimating the cost of capital at two moments in time—at the start of the original PFI period (around April 2001) and at the start of the extension period (end of 2019).

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<sup>39</sup> CMA (2022), ‘LMR Network Services Market Investigation: Profitability modelling and results’, 6 May, paragraph 95.

<sup>40</sup> Home Office (2022), ‘Home Office’s response submission to the CMA’s Profitability methodology working paper’, 11 January, paras.36–37.

<sup>41</sup> CMA (2022), ‘LMR Network Services Market Investigation: Cost of Capital Working Paper’, 6 May.

48. The Home Office also agrees in principle with the CMA using the capital asset pricing model (CAPM) to estimate the cost of capital. The Home Office does, however, have a few comments on the methodology employed by the CMA, which are outlined below. Given that the Home Office agrees with the CMA focusing the analysis on the extension period, no comments have been made on the use of hurdle rates during the original PFI period.

#### Identification of comparator companies

49. To set an appropriate asset beta and gearing assumptions for its WACC estimates, the CMA use a set of comparator companies.
50. The Home Office agrees with the CMA that UK utilities are suitable comparators to Airwave. Namely, in its cost of capital working paper, the CMA outline that, similar to Airwave, utilities are natural monopolies, have limited revenue risk, and the main risk faced is keeping costs down while retaining service levels.<sup>42</sup> Furthermore, similar to Airwave, utilities generally have high asset intensity. The length of the initial PFI agreement of nearly 20 years is longer than typical utilities' regulatory periods, and on the one hand, it could be argued to introduce greater potential for cost fluctuations. On the other hand, a longer contract implies no regulatory resets and no regulatory risk. Therefore, on balance, the Home Office considers that the risks are similar.
51. In terms of which UK utilities to include in the comparator set, the Home Office agrees with the CMA's exclusion of Centrica due to its activity in upstream oil and gas exploration and energy market trading.<sup>43</sup> However, the Home Office considers that less weight should be placed on SSE as a comparator, given the different risks it faces from pure-play regulated utilities. As noted by the CMA, SSE has a large proportion of its revenues generated from unregulated activities, which results in a materially higher beta than other UK utilities.<sup>44</sup> This can signify that SSE faces different risks to the pure-play regulated utilities, and thus is not as suitable a comparator.

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<sup>42</sup> CMA (2022), 'LMR Network Services Market Investigation: Cost of Capital Working Paper', 6 May, paragraph 29.

<sup>43</sup> CMA (2022), 'LMR Network Services Market Investigation: Cost of Capital Working Paper', 6 May, paragraph 28.

<sup>44</sup> CMA (2022), 'LMR Network Services Market Investigation: Cost of Capital Working Paper', 6 May, paragraph 51.

52. While the CMA have outlined three clear reasons as to why UK utilities can be considered to have similar risk to Airwave, the Home Office does not see an equivalent justification for the inclusion of other UK contractors (Serco and BAE) and other concession-based businesses outside of the UK (Atlantia, Ferrovial, and VINCI). The Home Office has assessed the five additional comparators selected by the CMA which operate outside the utility sector, and does not consider them suitable comparators to Airwave, for the reasons outlined below.

53. In terms of the selected **UK contractors** (Serco and BAE), while it is understood that the risk of individual contracts held by Serco and BAE may happen to be similar to the risk of the Airwave contract, the Home Office fails to see why the risk of a business based on bidding and winning multiple contracts would be comparable to the risk of a single project. In other words, one of the largest factors driving revenue of these contractors would be their ability to win new contracts or renew the existing ones – this is distinct from the revenue risk of a single contract such as Airwave, which has inflation-indexed revenue and limited exposure to changes in demand. Indeed, until ESN is delivered, absent technology failure, there is no risk to the Airwave contracts. In particular, there are a number of differences between Serco and BAE, and Airwave, which do not make them suitable comparators.

- **Serco.** Serco has a number of contracts with different governmental organisations across different sectors and geographies. For example, in the UK, these range from holding over 70 military contracts with the Ministry of Defence to the provision of waste and recycling services for local authorities.<sup>45</sup> The need to bid for and renew material contracts is listed by Serco in its annual report as one of the principal strategic risks faced.<sup>46</sup> This was illustrated by the Financial Times reporting that Serco's share price fell 12% after it lost a contract to manage facilities that develop the warheads for Britain's nuclear-armed submarines.<sup>47</sup>

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<sup>45</sup> See, for example, Serco (2022), 'Defence', available at: <https://www.serco.com/uk/sector-expertise/defence> (last accessed 12 May 2022) and Serco (2022), 'Waste and recycling' <https://www.serco.com/uk/sector-expertise/citizen-services/waste-and-recycling> (last accessed 12 May 2022).

<sup>46</sup> See Serco (2022), 'Annual Report and Accounts 2021', available at: <https://www.serco.com/media/7711/serco-annual-report-and-accounts-2021.pdf> (last accessed 12 May 2022), p. 96.

<sup>47</sup> See Financial Times (2020), 'Serco hit by loss of nuclear submarine contract' available at: <https://www.ft.com/content/d68e8c72-f459-484a-bac2-583ae3575298> (last accessed 12 May 2022).

- **BAE.** BAE Systems plc is another company in the CMA’s comparator set which focuses on global defence contracts. Similar to Serco, BAE faces a significant risk that it might not win contracts. For example, in its annual report, BAE commented that,

“The Group’s profits and cash flows are dependent, to a significant extent, on the timing of, or failure to receive, award of defence contracts and the profile of cash receipts on its contracts.”<sup>48</sup>

Furthermore, as BAE is specifically focused on the defence sector, it noted in its annual report that another major risk faced is that defence spending may fluctuate due to changing governmental priorities, something which would not affect the Airwave contract.<sup>49</sup>

54. The **concession-based comparators** selected by the CMA—VINCI, Ferrovial and Atlantia—are mainly focused on concessions related to highways and airports.<sup>50,51,52</sup> The transport sector faces different risks to those of Airwave, namely due to more significant volume risks, also making them unsuitable comparators. For example, in VINCI’s annual report, it comments that,

“The main risks on the operation of concession assets relate to changes in traffic or passenger numbers, the level of toll charges and collection, as well as the operating, maintenance and repair costs set in the concession contract. Traffic levels on motorway concessions are correlated to economic activity and are generally affected by changing fuel prices”.<sup>53</sup>

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<sup>48</sup> BAE (2022), ‘Annual Report 2021 BAE Systems plc’, available at: <https://investors.baesystems.com/~media/Files/B/Bae-Systems-Investor-Relations-V3/PDFs/results-and-reports/results/2022/bae-ar-complete-2021.pdf> (last accessed 12 May 2022), p. 107.

<sup>49</sup> BAE (2022), ‘Annual Report 2021 BAE Systems plc’, available at: <https://investors.baesystems.com/~media/Files/B/Bae-Systems-Investor-Relations-V3/PDFs/results-and-reports/results/2022/bae-ar-complete-2021.pdf> (last accessed 12 May 2022), p. 107.

<sup>50</sup> See VINCI (2022), ‘Essentials’, available at: <https://www.vinci.com/vinci.nsf/en/page/essentials.htm> (last accessed 2022) and VINCI (2022), ‘Core businesses’, available at: <https://www.vinci.com/vinci.nsf/en/item/finance-results-core-businesses.htm> (last accessed 12 May 2022).

<sup>51</sup> See Ferrovial (2022), ‘Business Lines’, available at: <https://www.ferrovial.com/en-gb/business> (last accessed 12 May 2022).

<sup>52</sup> See Atlantia (2022), ‘The Group’, available at: <https://www.atlantia.com/en/about-us/the-group> (last accessed 12 May 2022).

<sup>53</sup> See VINCI (2022), ‘2021 Universal Registration Document’, p. 160.

55. In addition to transport, VINCI and Ferrovial are also involved in the construction industry which has risks different from those of Airwave. Importantly, similar to the revenue risks faced by BAE and Serco, VINCI and Ferrovial would need to bid for and win new construction contracts, which is substantially different to the revenue risk faced by Airwave.
56. In conclusion, the Home Office considers that the selected UK contractors and the other concession-based businesses are unsuitable comparators to Airwave and, for the reasons set out above, and recommends that the CMA should remove them from the comparator set. In fact, in a study undertaken for HM Treasury in 2002, a comparator set consisting solely of UK utilities was used to assess the value for money of PFI projects.<sup>54</sup> If the CMA does wish to use a larger comparator set, the Home Office considers that the sample could instead be expanded to European utilities.
57. Limiting the comparator set to utility companies would affect the asset beta as well as the gearing assumptions.

#### Risk free rate

58. The CMA's choice of the CPI-real risk free rate range from -1% to -2%, is not entirely transparent. However, the Home Office wishes to make the following methodological observations.
59. The Home Office considers that the CMA should use the higher estimate of the range (i.e. -1%) for the upper bound and the lower estimate of the range (i.e. -2%) for the lower bound of the risk free rate.
60. The CMA's use of index-linked gilts is consistent with UK regulatory practice.
61. The maturity of the gilts should match the expected duration of the Airwave contract. For the risk free rate in 2001, it is consistent to use gilts with a maturity of between 10 and 25 years, as that broadly matches the expected duration of the contract. However, in respect of the maturity of index-linked gilts that the CMA have selected for the 2019

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<sup>54</sup> PwC in association with Professor Julian Franks (2002), 'Study into the rates of return on PFI projects', October.

estimate of the risk-free rate, and while the Home Office understands the CMA's observation that equities, in general, have indefinite maturity, the Home Office makes the point that the Airwave network will at some point be shut down, and only the residual value may be redistributed back to shareholders.<sup>55</sup> At the end of 2019, it was expected that shutdown would take place after three years (as at the time the contract was extended only until December 2022), therefore the Home Office recommends the CMA alternatively consider index-linked gilts of a shorter-term maturity than 10 to 25 years.<sup>56</sup>

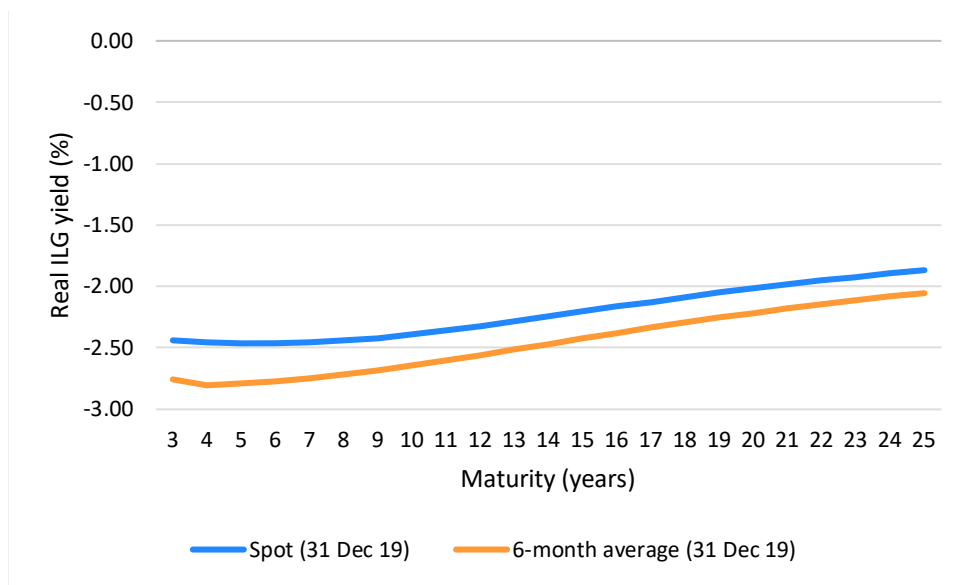
62. The figure below shows the spot rate yields on UK index-linked gilts for maturities between 3 and 25 years. Shorter maturities have significantly lower yields than longer-term gilts, which suggests that the CMA's risk free rate range is too high.
63. For example, the average spot yield on index-linked gilts with maturities between three and seven years was -2.5% on 31 December 2019, while the average spot yield on index-linked gilts with maturities between 10 and 25 years was -2.1%.<sup>57</sup> This means that using shorter-term maturities to inform the risk free rate would lead to the risk free rate decreasing by around 0.4%.
64. The CMA could also avoid the risk free rate being affected by the volatility of the spot yields on a specific date and could use a 6-month average instead. This is particularly important since the CMA do not provide detailed justification for the exact chosen cut-off dates—for example, spot rates as of 2 January 2001 are used to inform the risk free rate in 2001, even though the start of the original PFI period is assumed to be April 2001.
65. The figure below shows that the 6-month averages of yields on UK index-linked gilts are notably lower than spot yields as of 31 December 2019. In particular, the 6-month average of index-linked gilts with maturities between three and seven years was 0.3% lower than the spot yields. Thus, using a 6-month average of yields rather than the spot rate would lead to a lower risk free rate being estimated.

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<sup>55</sup> This is on the basis that the residual value of Airwave at the end of the contract life is solely the sale price of certain tower sites, and thus Airwave will no longer be a going concern once the network is shut down. See CMA (2022), 'LMR Network Services Market Investigation: Profitability modelling and results', paragraph 81.

<sup>56</sup> CMA (2022), 'LMR Network Services Market Investigation: Airwave Network Contracts', 6 May, paragraph 194.

<sup>57</sup> Three years is chosen as the extension period was initially for three years from 2020 to 2022, while the second extension was for an additional four years from 2023 to 2026 (i.e. seven years in total).



66. Based on the above, the Home Office submits that the range of the risk free rate should be lower than that proposed by the CMA. Adjusting the range proposed by the CMA downwards by 0.7% (i.e. accounting for shorter maturities and using 6-month averages rather than spot rates) would lead to a risk free rate range of between -2.7% and -1.7%, rather than between -2% and -1%.

## Betas

67. As explained above, the Home Office considers that only utility companies should be included in the comparator set for Airwave. If this were the case, this would mean that the upper bound for the asset beta set by the CMA is too high.

68. In addition, as the CMA commented, SSE has a larger proportion of its revenue coming from unregulated operations over the last 10 years, which may mean it is not as close as a comparator as Severn Trent, National Grid and United Utilities may be. Thus, the Home Office would suggest excluding SSE from the comparator set, and estimating the range of possible asset betas based on the remaining UK utilities (i.e. Severn Trent, National Grid and United Utilities). Following the CMA's approach of using only daily and weekly beta estimates to inform the range (which is conservative, i.e. in favour of Motorola, given that monthly betas are materially lower than daily and weekly betas for

UK utilities), this would lead to an asset beta range of 0.30–0.37, instead of the CMA's range of 0.40–0.55.<sup>58</sup>

## Gearing

69. The CMA sets gearing estimates based on the gearing levels of the comparator companies.
70. The Home Office agrees with this approach for the 2001 estimate, when the level of Airwave's expected gearing is unclear. If the comparator set changes to include only UK utilities, as suggested by the Home Office above, the adopted gearing range will also change. In particular, for the 2001 estimate, the gearing of UK utilities, excluding SSE, would be around 50% (rather than a range of 35–50%).
71. However, in respect of the use of the gearing level of the comparator set for the 2019 estimate, the Home Office observes that there was no debt on the balance sheet of Airwave in 2019. The Home Office therefore considers there is no reason to believe that not having debt on the balance sheet is an inefficient choice of capital structure.<sup>59</sup> In fact, the remaining contract length in 2019 was relatively short (as it had only been extended until 2022), and it is not expected that the banks would give loans for longer than the remaining contract length.<sup>60</sup> Therefore, having fully equity-financed operations may be expected and can give Airwave flexibility to respond to any further extensions in the PFI agreement without having to re-adjust its capital structure. Therefore, the Home Office considers that it is appropriate to use the actual fully equity-financed capital structure for the 2019 estimation of cost of capital. Indeed, in the profitability methodology paper, the CMA stated that they would be considering actual levels of gearing when setting the parameters for the cost of capital.<sup>61</sup>

## Cost of debt

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<sup>58</sup> The range is driven by the daily asset beta estimate for United Utilities as the lower bound (0.30), and the daily asset beta estimate for National Grid as the upper bound (0.37). See CMA (2022), 'LMR Network Services Market Investigation: Cost of Capital Working Paper', Table 2.

<sup>59</sup> See, for example, Airwave (2020), 'Airwave Solutions Limited – Annual report and financial statements, Year ended 31 December 2019', p. 27.

<sup>60</sup> CMA (2022), 'LMR Network Services Market Investigation: Airwave Network Contracts', 6 May, paragraph 194.

<sup>61</sup> CMA (2021), 'Land mobile radio network services: Profitability methodology approach', 13 December, paragraph 48(a).



72. The Home Office agrees with the CMA's approach of looking at the yields on UK corporate bonds with investment-grade credit ratings, and with the overall assessment of the cost of debt in 2001.
73. For the 2019 estimate of cost of debt, the Home Office sees no reason to include any debt within the capital structure, as explained above.
74. However, if the CMA still consider it appropriate to include a level of gearing within the capital structure, it is the Home Office's view that the debt maturity should match the remaining length of the Airwave contract, as it would be unexpected for banks to be willing to lend to the company for longer than the remaining term of the contract.<sup>62</sup>
75. For example, as shown in the table below, the average yields on the iBoxx indices with 1–3 and 3–5 year maturities in 2019 are significantly lower than the yields calculated by the CMA. This implies that the cost of debt estimated by the CMA for the extension period (2.5%) may be too high, and, if Airwave is assumed to have debt in its capital structure during the extension period, a lower cost of debt should be used.

	iBoxx Corp A	iBoxx Corp BBB	iBoxx Utilities
<b>CMA estimate (Av yield 2019 to 2020)</b>	2.1%	2.7%	2.5%
<b>Average of 1-3 year index in 2019</b>	1.4%	2.1%	1.7%
<b>Average of 3-5 year index in 2019</b>	1.6%	2.4%	1.7%

Note: Average for the period from 1 January 2019 to 31 December 2019.

Source: iBoxx data extracted from Markit.

## Summary impact on WACC estimates

<sup>62</sup> It is unclear what maturity the CMA has assumed for debt in 2019.

76. The changes that are proposed by the Home Office to the WACC estimation methodology are summarised in the table below.

	<b>PFI estimate</b>	<b>Extension period estimate</b>
<b>Risk free rate</b>	No change	Use a shorter maturity
<b>Asset beta</b>	Placing weight only on UK utilities, excluding SSE	Placing weight only on UK utilities, excluding SSE
<b>Gearing</b>	Placing weight only on UK utilities, excluding SSE	No gearing in 2019
<b>Cost of debt</b>	No change	No debt in 2019, but if included, match maturity to the expected contract length

77. The changes proposed above will decrease the estimated cost of capital in the PFI period from 7.9–9.6% to 7.4–8.5% and the estimate for the extension period from 4.9–6.8% to 2.0–4.2%, as shown in the following tables.

	<b>CMA estimate for PFI period</b>		<b>Adjusted estimate</b>	
	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
RFR (CPI-real)	2.5%	3.0%	2.5%	3.0%
Asset beta	0.40	0.55	0.30	0.37
Equity beta	0.68	0.76	0.51	0.63
ERP	3.70%	4.50%	3.70%	4.50%
TMR	6.20%	7.50%	6.20%	7.50%
CPI Inflation	2%	2%	2%	2%
Tax	30%	30%	30%	30%
Gearing	50%	35%	50%	50%
Kd pre-tax	6.50%	6.50%	6.50%	6.50%
Kd post-tax	4.55%	4.55%	4.55%	4.55%
Ke post-tax (nominal)	7.1%	8.5%	6.5%	7.9%
Ke pre-tax (nominal)	9.3%	11.3%	8.4%	10.5%
<b>WACC pre-tax (nominal)</b>	<b>7.9%</b>	<b>9.6%</b>	<b>7.4%</b>	<b>8.5%</b>

	<b>CMA estimates for extension period</b>		<b>Adjusted estimate</b>	
	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
RFR (CPI-real)	-1%	-2%	-2.7%	-1.7%
Asset beta	0.40	0.55	0.30	0.37
Equity beta	0.712	0.781	0.30	0.37
ERP	7.20%	9.50%	8.90%	9.20%
TMR	6.20%	7.50%	6.20%	7.50%

CPI Inflation	2%	2%	2%	2%
Tax	22%	22%	22%	22%
Gearing	50%	35%	0%	0%
Kd pre-tax	2.50%	2.50%	n.a.	n.a.
Kd post-tax	1.95%	1.95%	n.a.	n.a.
Ke post-tax (nominal)	6.2%	7.5%	2.0%	3.7%
Ke pre-tax (nominal)	7.4%	9.1%	2.0%	4.2%
<b>WACC pre-tax (nominal)</b>	<b>4.9%</b>	<b>6.8%</b>	<b>2.0%</b>	<b>4.2%</b>

Note: The assumed CPI Inflation rate, tax rate, TMR and ERP are the same as the CMA's estimates (TMR = Total market return, ERP = equity risk premium).

## F. Benchmarking

78. [X]<sup>63 64 65</sup>

79. [X]

80. [X]

81. [X]

82. [X]

83. [X]

84. [X]<sup>66 67 68 69 70 71</sup>

85. [X]<sup>72</sup>

86. [X]

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63 [X]

64 [X]

65 [X]

66 [X]

67 [X]

68 [X]

69 [X]

70 [X]

71 [X]

72 [X]

- 87. [REDACTED]<sup>73 74 75 76</sup>
- 88. [REDACTED]
- 89. [REDACTED]<sup>77 78</sup>
- 90. [REDACTED]
- 91. [REDACTED]
- 92. [REDACTED]<sup>79</sup>
- 93. [REDACTED]
- 94. [REDACTED]<sup>80 81 82 83 84 85 86 87</sup>
- 95. [REDACTED]
- 96. [REDACTED]
- 97. [REDACTED]

## G. Motorola's Dual Role

### Introduction

- 98. On 6 May 2022 the CMA published a working paper setting out the CMA's framework for thinking about whether Motorola's dual role, as both the owner of Airwave Solutions and the supplier of the Kodiak MCPTT service to ESN,<sup>88</sup> is a market feature that prevents, restricts or distorts competition.<sup>89</sup> Separately, the Home Office understands

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73 [REDACTED]  
74 [REDACTED]  
75 [REDACTED]  
76 [REDACTED]  
77 [REDACTED]  
78 [REDACTED]  
79 [REDACTED]  
80 [REDACTED]  
81 [REDACTED]  
82 [REDACTED]

84 [REDACTED]  
85 [REDACTED]  
86 [REDACTED]  
87 [REDACTED]

<sup>88</sup> For the avoidance of doubt, Motorola Solutions, Inc. is the ultimate parent of Airwave Solutions Limited (the owner and operator of the Airwave Network), Motorola Solutions UK Limited (the supplier under the ESN Lot 2 contract) and of Kodiak Networks (the subcontracted supplier of the Kodiak MCPTT service to ESN).

<sup>89</sup> CMA (2022), 'Approach to Assessing Motorola's Dual Role Working Paper', 6 May 2022, paragraph 5.

that the CMA have provided a working paper to Motorola setting out the evidence gathered by the CMA and the CMA's emerging thinking on Motorola's dual role.<sup>90</sup>

99. Given the confidentiality of the evidence that the CMA have obtained, resulting in information asymmetry, the Home Office's views and observations on Motorola's dual role are limited to information which is in the public domain, including information shared by the CMA in their Approach to Assessing Motorola's Dual Role working paper.
100. At a high-level, Motorola's earnings from Airwave Solutions' charges, the vast majority of which are paid for from the public purse, massively outweigh the earnings that Motorola has received or will receive from the ESN. Therefore, the value of other benefits would need to be considerable to level or tilt the balance in favour of Motorola rolling out ESN. Such benefits are not immediately obvious to the Home Office, and as such the Home Office believes there is a clear incentive for Motorola to delay ESN to maximise the returns it earns from Airwave. Further, it is also extremely challenging to create an environment where Motorola is incentivised to deliver ESN, given the vast majority of Motorola's earnings are linked to the Airwave network and not ESN.
101. Turning to the CMA's Approach to Assessing Motorola's Dual Role working paper, the Home Office considers the CMA's approach and structure to analysing Motorola's dual role is sensible.

#### The CMA's approach to assessing the effect of Motorola's dual role on competition

102. The Home Office agrees that, looked at in isolation and ignoring any wider factors external to the bid, and under circumstances where bidding for Lot 2 was a competitive process, Motorola's subsequent delivery of Lot 2 could have been expected to be incentivised solely by the short- and long-term financial rewards that it could derive from the effective and efficient delivery of its Lot 2 obligations.
103. As such, the Home Office also agrees that it is appropriate that the CMA examine those wider factors, in particular Motorola's decision to acquire Airwave Solutions before Motorola won the Lot 2 contract, and whether those factors distort the expectation that

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<sup>90</sup> Ibid, paragraph 4.

Motorola would deliver its Lot 2 obligations effectively and efficiently. The Home Office also agrees that this assessment requires the weighing of the short-term and long-term, direct and indirect, financial benefits that Motorola may derive from the operation of the Airwave network compared to the benefits it would derive from Lot 2.

104. The Home Office further agrees it is sensible to: (a) first consider the direct financial incentives that would be generated for Motorola from the Airwave network and from ESN respectively, before (b) turning to consider Motorola's wider financial incentives to either extend the operation of the Airwave network or efficiently and effectively deliver Lot 2. By being direct and therefore, more certain, the former (direct financial impact) is likely to be more influential on Motorola's ultimate decision as to whether it will deliver on its ESN Lot 2 commitments in a timely manner, than the latter (wider financial impact).
105. Clearly, Motorola's business strategy, as it has developed over time, will be an important source of information to understand Motorola's incentives to deliver ESN in a timely manner, particularly in terms of understanding wider financial incentives.

#### *Motorola's direct financial incentives*

106. The Home Office agrees with the CMA's general approach to understand whether Motorola's ownership of Airwave Solutions affects its direct financial incentives to the deliver on its ESN commitments effectively. Comparing the relative profitability to Motorola of its two competing services will be informative in understanding Motorola's incentives to undertake the required investment to deliver ESN in a timely manner.
107. The Home Office assumes that the CMA's chosen 6-year time-period, of 2019-2024, was selected to reflect the anticipated expiry of the Lot 2 contract. However, should Motorola not deliver on its ESN commitments by 2024, and [REDACTED], the financial benefits that it derives from the Airwave network could extend for a number more years, [REDACTED].
108. In the early part of Motorola's Lot 2 contract, Motorola's incentives to deliver on its ESN commitments can be expected to have an equal impact on the time for which it gains Airwave profits and forgoes ESN profits (or minimises ESN losses). However, near the end of the Lot 2 contract, Motorola will be aware that it may take additional

time for the Home Office to find a replacement provider, and then further time for that replacement provider to deliver the ESN service that the Home Office requires. Thus, in, for example, 2023, should Motorola do nothing on its ESN commitments it would only forgo ESN profits for one-year, but could expect to earn multiple additional years of Airwave profit.

109. The Home Office would also suggest that the CMA focus on profit, as opposed to revenue. By delaying ESN investment, although Motorola would forgo ESN revenues, it would (of course) also not incur the costs of such investment.

*Motorola's wider financial incentives*

110. While the Home Office agrees that the CMA should fully assess the wider financial incentives for Motorola to effectively and efficiently deliver Lot 2, and in particular the Kodiak MCPTT solution, and in particular the extent to which Motorola's failure to deliver its obligations may lead to a loss of future profits, the Home Office is concerned that the CMA's proposed assessment appears asymmetric and overly focused on LTE and the Kodiak MCPTT solution.<sup>91</sup>
111. In taking the approach that it is proposing, such an assessment would potentially over estimate the value to Motorola of the Kodiak MCPTT solution, versus, for example, the value to Motorola of protecting current and future revenue from its worldwide Land Mobile Radio (LMR) Networks business, primarily based on TETRA technology (or its equivalent).
112. The Home Office notes that, including the Airwave network, Motorola has 13,000 LMR networks worldwide, from which it derives a significant proportion of its revenue and profit.<sup>92</sup> Further, the Home Office observes that Motorola's 'notable wins and achievements' detailed in its First-Quarter 2022 Financial Results, under 'Products and Systems Integration' listed 5 'wins' of which 4 were TETRA or P25 related with a total value in excess of \$105m and specifically call out as a headline that Motorola closed the acquisition of TETRA Ireland, the country's National Digital Radio Service provider.<sup>93</sup>

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<sup>91</sup> See for example, the list (a) through (e) at paragraph 19 of the working paper, although the Home Office notes that for 'global opportunities', at paragraph 21, the CMA the CMA is looking to compare LTE and LMR.

<sup>92</sup> See for example, Motorola Solution, Investor Overview, May 2022.

<sup>93</sup> Motorola Solutions Reports First-Quarter 2022 Financial Results.

113. Given the continuing importance of LMR based services to Motorola, the Home Office encourages the CMA to ensure they consider the wider financial incentives symmetrically and holistically, including, but not limited to, the effect on Motorola's revenue and profitability, both in the short- and long-term, of a successful replacement of the Airwave network by ESN, and whether this may erode or accelerate the erosion of earnings derived from TETRA / P25 technologies due to increased and earlier replacement by MCPTT over LTE solutions, and whether such effects may incentivise Motorola to delay ESN (even if this may come with reputational harm).

*Reputation as a driver of choice*

114. The Home Office urges the CMA to be cautious and prudent in the weight that they apply to the incentive effect that damage to Motorola's reputation due to a failure of ESN may have on its future profitability, in the short- and long-term. The CMA should also consider the extent to which Motorola's reputation may be conversely bolstered by its continued supply of LMR based on TETRA technology in Great Britain and the incentive to delay ESN that may arise as a result.

*Competition faced by Kodiak*

115. The Home Office agrees that the CMA should assess the extent to which there are viable and attractive alternatives to the Kodiak MCPTT application to in turn assess the extent to which damage to Motorola's reputation arising as a result of the failure to deliver Lot 2 may affect its ability to win business in the short- and long-term. However, the CMA should be careful to ensure that they apply appropriate weight to this factor, as, for example, reputation may play no or only a minimal role in supplier selection depending on the structure and scoring of tenders and / or any harmful reputational effects may be short lived.
116. Further, the CMA should assess the size of the relevant addressable market, Motorola's share of that market, and the potential for Motorola to win or maintain share, either with or without reputational damage (whether through a global or Great Britain lens), so that in turn the CMA may assess the value of any harm and in turn the incentive effect to deliver Lot 2 or delay ESN.



### *Observable Motorola Performance*

117. The ability of Motorola's customers to observe its performance is a factor that feeds the assessment of whether reputational harm may harm Motorola's ability to compete; if customers have no or only limited visibility of a failure, then that failure will carry no, or only limited weight (subject to, amongst other things, how a customer scores a tender).
118. [REDACTED].
119. Further, the Home Office suggests the CMA also consider the extent to which Motorola may effectively control the narrative around failure, to minimise the impact of such an event on its ability to compete.
120. As such the Home Office would urge the CMA to be cautious as to the weight that being able to observe Motorola's performance may have on its customers and in turn Motorola's ability to compete.

### *Incremental impact of further ESN delays on Motorola's reputation*

121. Again, the Home office would urge the CMA to be cautious in finding that there has been any significant reputational damage caused to Motorola as a result of delay to Lot 2; however, as delay to the delivery of ESN is known, to the extent (if at all) that Motorola's customers may attribute the cause of the delay to Motorola, the Home Office agrees that it is sensible to assess whether further delays may give rise to an incremental impact, although the Home Office repeat its observations and caveats expressed in paragraphs 114 through 120 above.

### *Motorola's business strategy*

122. In addition to considering Motorola's internal contemporaneous documents, the Home Office would encourage the CMA to also consider Motorola's published documents, for example presentations to investors, press-releases, annual and quarterly trading statements, that describe or indicate Motorola's strategy and the importance the

company places on LMR versus MCPTT over LTE in the short- and long-term, as well as Motorola's statements to the Home Office about its strategy for MCPTT over LTE.

### The CMA's approach to assessing Motorola's ability to act on incentives

123. The Home Office agrees that the CMA's approach, in focusing on: (a) Motorola's ability to delay the delivery of ESN through its delivery of Lot 2; and (b) whether Motorola's ability to behave in such a way is constrained by the Deed of Recovery or any other contractual mechanisms. The Home Office also agrees that it is sensible to focus on Motorola's role as a key supplier of two critical components or aspects of ESN: the Kodiak MCPTT application and the infrastructure and testing environment; however, as the CMA note, there are other aspects of the delivery of Lot 2 that should not be ruled out as having an effect, or may potentially have an effect, on the delivery of ESN. Further, there are other routes that may be used by Motorola to delay the delivery of ESN, for example through delaying the upgrade of control rooms, both those supplied by Motorola and those supplied by third-parties, and through seeking to influence user organisations' transition timing choice through leveraging relationships and the provision of information encouraging delay or the provision of discounted Airwave terminal devices, which should not be ignored.
124. The Home Office would observe that the Deed of Recovery has been ineffective in reducing or preventing delay caused by Motorola, as have other contractual mechanisms. As the CMA will note, the delivery of the ESN is [REDACTED]<sup>94</sup>.
125. Following the reset of the Lot 2 contract in 2018, resulting in a move from Wave 7000 to Kodiak MCPTT and an incremental delivery approach, it is the Home Office's view that Motorola has consistently been the cause of delay. Motorola's failures are documented, for example, through [REDACTED]<sup>95</sup> [REDACTED] In advance of the 3 June 2022 deadline for submissions, the Home Office proposes that, if the CMA would find it helpful, the Home Office provide the CMA with:
- a. an explanation of the key Milestones that are delayed and the reasons for the delays; and

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<sup>94</sup> [REDACTED]

<sup>95</sup> [REDACTED]

- b. the relevant and open correspondence passing between the Home Office and Motorola.

## Observable Outcomes

126. The Home Office agrees that it is sensible for the CMA to consider observable outcomes in relation to the delivery of the ESN. The Home Office also agrees that the CMA would need to consider whether, and if so to what extent, the outcomes could be indicators of distortions of competition. Further, as part of the CMA's assessment the Home Office agrees that the CMA's proposed three questions, provide an appropriate framework:<sup>96</sup>

*(a) What might be expected from Motorola, if it is trying to meet its customers' needs in the manner that would be expected in a well-functioning market.*

127. If the market was functioning well, the Home Office would have expected Motorola to deliver its Lot 2 obligations or, where, problems arise, to work constructively with the Home Office and other suppliers, to resolve those problems efficiently and effectively, to reduce the impact on the overall delivery of the ESN.

128. These behaviours, expected in a well-functioning market, have been limited or not displayed by Motorola. [REDACTED].

*(b) What are the outcomes observed by third-party experts that have reviewed the programme and examined Motorola's delivery of Lot 2?*

129. The Home Office agrees that the CMA should consider the views of third-party experts who have reviewed the programme, in particular where those experts consider whether Motorola's behaviour and approach is what would (or would not) be expected in the market. For example, the Home Office would refer the CMA to [REDACTED] report<sup>97</sup> and the [REDACTED] Remedial Adviser report.

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<sup>96</sup> Paragraph 36 of the CMA's dual role working paper.

<sup>97</sup> [REDACTED]

130. In addition to the outcomes observed by third-party experts, the CMA should consider outcomes more generally, in particular, that the delay in delivery of the Lot 2 obligations, leading to delay in ESN replacing the Airwave network, has and will continue to enable Motorola to earn significant earnings from the Airwave network over an extended period.

*(c) Are these outcomes consistent with concerns about Motorola's ability and incentives in relation to delivery of ESN?*

131. The Home Office agrees that it is appropriate for the CMA to consider whether the outcomes, i.e. Motorola's approach to delivery of the Lot 2 obligations (and the extended earnings that Motorola has and will continue to derive from the Airwave network) are consistent with concerns about Motorola's incentives to deliver (or not) ESN.

132. Put simply, unless the cause of the relevant delays were entirely caused by third-party action, which Motorola could do nothing to correct, the nature of causes of the delays are such that it is difficult to conceive of a reason for such delay, other than that there were and are insufficient incentives on Motorola to ensure delivery. Further, the insufficiency of incentive is, the Home Office believes, clearly a result of the dual role and the overwhelming benefits derived from the Airwave network and which are sustained by delay.

## H. Airwave Network Contracts

133. [REDACTED]<sup>98</sup>

134. [REDACTED]

135. [REDACTED]

136. [REDACTED]

137. [REDACTED]

138. [REDACTED]

139. [REDACTED]<sup>99</sup>.

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<sup>98</sup> [REDACTED]

<sup>99</sup> [REDACTED]

- 140. [X]
- 141. [X]<sup>100</sup>
- 142. [X]<sup>101</sup>
- 143. [X]<sup>102</sup>
- 144. [X]<sup>103 104</sup>
- [X]<sup>105</sup>
- 145. [X]
- 146. [X]
- 147. [X]<sup>106</sup>
- 148. [X]<sup>107</sup>
- 149. [X]<sup>108 109</sup>
- 150. [X]
- 151. [X]
- 152. [X]
- 153. [X]
- 154. [X]<sup>110 111</sup>
- 155. [X]
- 156. [X]
- 157. [X]
- 158. [X]
- 159. [X]
- 160. [X]
- 161. [X]
- 162. [X]

- 100 [X]
- 101 [X]
- 102 [X]
- 103 [X]
- 104 [X]
- 105 [X]
- 106 [X]
- 107 [X]
- 108 [X]
- 109 [X]
- 110 [X]
- 111 [X]

- 163. [X]
- 164. [X]
- 165. [X]
- 166. [X]
- 167. [X]
- 168. [X]<sup>112</sup>
- 169. [X]
- 170. [X]
- 171. [X]
- 172. [X]
- 173. [X]<sup>113</sup>
- 174. [X]
- 175. [X]
- 176. [X]
- 177. [X]
- 178. [X]
- 179. [X]
- 180. [X]
- 181. [X]
- 182. [X]<sup>114</sup>
- 183. [X]
- 184. [X]
- 185. [X]<sup>115</sup>
- 186. [X]
- 187. [X]
- 188. [X]<sup>116</sup> 117 <sup>118</sup>

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112 [X]  
113 [X]  
114 [X]  
115 [X]  
116 [X]  
117 [X]  
118 [X]

189. [REDACTED]

190. [REDACTED]

191. [REDACTED]

192. [REDACTED]

## I. The role of the 2016 change control negotiations

193. [REDACTED]<sup>119</sup>

194. [REDACTED]<sup>120</sup>

195. [REDACTED]<sup>121</sup>

196. [REDACTED]

197. [REDACTED]<sup>122</sup>

198. [REDACTED]

199. [REDACTED]

200. [REDACTED]<sup>123</sup>

201. [REDACTED]

202. [REDACTED]<sup>124</sup>

203. [REDACTED]

## J. Scope for Competition

### Introduction

204. This section provides the Home Office's response to the Scope for Competition section of the CMA's 'Scope for Competition and Market Definition' working paper.

205. The Home Office agrees with the CMA's overarching emerging conclusion that when seeking to identify how the features of the market may impact competition and

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<sup>119</sup> [REDACTED]

<sup>120</sup> [REDACTED]

<sup>121</sup> [REDACTED]

<sup>122</sup> [REDACTED]

<sup>123</sup> [REDACTED]

<sup>124</sup> [REDACTED]

outcomes, the CMA should consider the competitive processes which exist over time, i.e. on a dynamic basis, as well as competition at the point the tender took place.<sup>125</sup>

206. It is also sensible to assess the scope for competition, as the CMA proposes, by analysing in turn, the following three competitive processes: (a) tenders; (b) competition by investing in ESN; and (c) post tender negotiations.

## Tenders

207. Again, the Home Office agrees with the CMA's emerging view that, whilst – as Motorola has pointed out – tenders are clearly a form of competition that is relevant in this market, there is also scope for other forms of competition to exist over the life of the contract, once the initial tender competition has concluded. The tender and the resulting contract are clearly an important feature, that may well inform future negotiations; however, the Home Office further agrees with the CMA that for the purpose of assessing the operative features of the market that may give rise to adverse effects on competition, including understanding the nature of competitive constraints, the more recent competitive interactions are likely to be more informative.

208. The CMA carefully considers the competitive processes which can exist in bidding markets. In particular the CMA, correctly, points out that “*there may be price or non-price factors which were not agreed within the original tender*”<sup>126</sup> and that “*it is generally accepted that in practice most contracts are incomplete*”.<sup>127</sup> This clearly presents an opportunity for competitive interaction or, at least, should do.<sup>128</sup>

## Competition by Investing in ESN

209. The Home Office agrees with the CMA's emerging view that there is competitive interaction between Motorola and Airwave Solutions – or there would be but for the dual

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<sup>125</sup> CMA (2022), 'LMR Network Services Market Investigation: Scope for Competition and Market Definition', 6 May, paragraph 87.

<sup>126</sup> CMA (2022), 'LMR Network Services Market Investigation: Scope for Competition and Market Definition', 6 May, paragraph 26(a).

<sup>127</sup> CMA (2022), 'LMR Network Services Market Investigation: Scope for Competition and Market Definition', 6 May, paragraph 54.

<sup>128</sup> The CMA helpfully references that there is significant economic literature setting out the challenges of complete contracting (see paragraph 54, footnote 22 of the working paper), including providing the example “Incomplete contracts: where do we stand?, Jean Tirole (1999), *Econometrica*, Vol. 67, No. 4 (Jul 1999)”, and which summarise the debate about the economic implications of incomplete contracts.



role that Motorola plays – and that the potential for competitive interaction and the scope for competition through investing in ESN is not eliminated by the factors that Motorola has identified.

### (Post tender) Negotiations

210. The Home Office agrees with the CMA's emerging view that (post tender) negotiations are a relevant mechanism through which price and non-price outcomes are finalised.

## K. Market Definition

211. The Home Office agrees with the CMA's emerging view that the market is the supply of communications network services for public safety and ancillary services in Great Britain,<sup>129</sup> and further agrees that both the existing TETRA Airwave service and the LTE network services for public services (i.e. ESN) should be within the market as well as ancillary services.

## L. Remedies

### Introduction

212. This section of the Home Office's submission explains the Home Office's position on remedies, should the CMA find that there are features of the market that give rise to adverse effects on competition and responds to the CMA's 'Potential remedies' working paper.<sup>130</sup>

213. On 29 April 2022 the Home Office provided to the CMA a submission describing why, should there be adverse effects on competition, the CMA should consider imposing a remedy requiring Motorola to provide an interworking service to the Home Office, any third-party MCPTT provider's application, and others.

### Price / charge controls

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<sup>129</sup> CMA (2022), 'LMR Network Services Market Investigation: Scope for Competition and Market Definition', 6 May, paragraph 116.

<sup>130</sup> CMA (2022), 'LMR Network Services Market Investigation: Potential Remedies', 16 May.

214. As set out in the working paper, in addition to an interworking / interoperability remedy, the Home Office considers that a charge control and associated transparency remedies are necessary. Such remedies are necessary to address Airwave Solutions' unilateral market power, although not necessarily the dual role that Motorola holds – albeit a reduction in Airwave's price would, to an extent, marginally reduce but not remove, the incentives on Motorola to delay ESN.
215. The Home Office considers a charge control, in addition to transparency measures, as a necessary remedy, along with the necessary interworking remedy. The Home Office will provide a further submission to the CMA on this topic, including its form, in response to the corresponding working paper on or before 30 May 2022.<sup>131</sup>

## M. Transfer Charges

216. This section deals with transfer charges. Unfortunately, due to the confidential nature of the information contained in the CMA's 'Transfer charges' working paper this paper has neither been published nor shared with the Home Office.
217. The Home Office agrees with the CMA that Airwave Solutions is not a standalone firm transacting exclusively with third parties, including third party suppliers, but rather it is part of the Motorola corporate group and that it transacts or internally trades with other businesses and functions within that group. A significant proportion of the services, goods and other resources that Airwave Solutions requires to run the Airwave network and provide its services, are sourced from and provided internally by the group.
218. The Home Office also agrees that resources provided to Airwave Solutions by the group may not be transfer charged at a rate that reflects the true economic (commercial) cost or price of those resources. Indeed, the Home Office is concerned about the high-level of transfer charges and the lack of visibility in respect of these charges.
219. Although the statutory financial statements may provide a starting point, the Home Office does not consider that such accounts would provide a sufficient level of transparency or detail to enable the CMA to carry out an effective assessment of what services are

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<sup>131</sup> Unless the CMA extends the time period for submissions on its Potential remedies working paper and the Home Office requires such additional time.

provided intra-group to Airwave Solutions at what transfer charge and whether such transfer charge represents the true economic value of the service. The Home Office would therefore encourage the CMA to seek such additional financial information from Motorola to ensure that the CMA has adequate information on which to complete its assessment.

## Information Transparency

220. The Home Office believes that information transparency may, as a standalone remedy, contribute in some small part, to addressing the harm caused by adverse effects on competition, through erosion of benefit to Motorola of the current information asymmetry that exists, enabling the Home Office to negotiate on the basis of some additional knowledge. However, such benefits would be marginal, and the Home Office agrees that information transparency remedies – viewed on a stand-alone basis – would not provide an effective means of addressing the harms caused by the adverse effects on competition. The Home Office further agrees, that information transparency would not be a suitable or effective alternative to a charge control, rather information transparency is required to support a charge control.
221. The exact nature and extent of the information transparency remedy required will depend on the nature, form and scope of the charge control remedy. As such, the Home Office will provide further submissions on the type of information transparency required, when the Home Office provides its further charge control remedy submission.

## Structural separation remedies

222. The Home Office agrees that requiring Motorola to divest Airwave Solutions or other activities it carries out that relate to the roll-out of ESN could provide an effective remedy if, for example, an adverse effect on competition were found in relation to Motorola's ability and incentive to hamper the roll-out of ESN, with the effect of prolonging the operation of the Airwave network.
223. Before imposing a structural separation remedy, requiring Motorola to divest Airwave Solutions, the Home Office would encourage the CMA to investigate and consider the potential risks that may arise as a result of such divestiture, in particular any risks that may erode or diminish the quality of service provided by the Airwave network. As the

CMA will appreciate, a primary concern for the Home Office is to ensure the continuity of mobile radio communications for Great Britain's emergency services and in turn their safety and the safety of the general public.

224. Additionally, at this point in time, [REDACTED]. Further, Motorola have warned [REDACTED], at least while there is a threat of divestiture. [REDACTED]

225. The Home Office is further concerned that even if Motorola's ability to delay ESN through its late delivery of Lot 2, and in particular the Kodiak MCPTT application, falls away, Motorola is still able to hamper the roll-out of ESN through other means. For example, amongst other things, the Home Office believes Motorola is [REDACTED]

**24 May 2022**

## Annex 1

### Home Office correction of errors in the submissions made by Motorola to the CMA in the Consultation and Market Investigation phases

#### A. Motorola's Response to the CMA's proposal to make a market investigation into the Mobile radio network for the police and emergency services dated 18 August 2021

Para ref.	Motorola statement, which the Home Office considers is inaccurate or misleading	Home Office correction
Paragraph (3) Bullet point 9	"Furthermore, the CMA makes no acknowledgement of the fact that the Home Office preferred [X] the Benchmarking Process in order to [X] in the extension negotiations of 2016 and 2018. The Home Office was satisfied by both the price discounts and overall contractual arrangements, including additional capital investments executed in those agreements. [X]"	<p>The 2016 negotiations did not extend the Framework Arrangement. They did, however, extend the FireLink contract and the Department of Health ARP contract, but this was simply to align them with the Home Office Agreement for the purposes of transition.</p> <p>Benchmarking had been undertaken in 2014 and repayments, as a result of this exercise, were a feature of the 2016 negotiations and subsequent UCCN. The 2018 negotiation was an "extension negotiation" but it would be wrong to suggest that the Home Office preferred the discount achieved to the ability to use benchmarking. Neither would it be right to say that the Home Office was satisfied by the arrangements. It was the best that the Home Office could seek to achieve with Motorola in light of the circumstances.</p>

Paragraph (3) Bullet point 13	“If Airwave is extended on current terms until 2026, the service will have been provided on terms that are vastly more favourable to the Home Office than initially envisaged and agreed by the parties.”	This is an unfit comparison as it was never envisaged that there would be a need for any significant extension beyond the original term. It was always possible that there may be a need to extend some of the ragged edge force transition dates due to potential stragglers, and indeed the Framework Arrangement made provision for such, but the impact of this was considered to be months rather than years. It is therefore wrong to make any comparison between what was agreed for extensions beyond the original PFI term and what was agreed when the Framework Arrangement was first signed in 2000.
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B. Motorola’s submission on delays in response to the CMA’s proposal to make a market investigation into the Mobile radio network for the police and emergency services prepared by its lawyers, Winston & Strawn dated 2 September 2021

<b>Para ref.</b>	<b>Motorola statement, which the Home Office considers is inaccurate or misleading</b>	<b>Home Office correction</b>
Paragraph (4)	It is incorrect [✖] for the Home Office to claim that delays by Motorola in its delivery of ESN are resulting in significant additional cost to the Government. The attempted attribution of liability to Motorola for the delays to the delivery of ESN ignores [✖] the many factors which have contributed to the delays in the roll-out of ESN,	<p>The significant additional cost of the delays to ESN is well documented so the question of how much UK Government has incurred is well understood. Similarly, the reasons for such delays are also well documented and for Motorola to state that the delays are in no way attributable to them is entirely incorrect.</p> <p>The summary provided by Motorola alleges that delays resulted in the most part from historic complaints relating to coverage of landmass by EE and/or provision of handsets, without any credible explanation of how those issues could possibly</p>

	<p>including most notably the Home Office’s own failures in respect of the delays.</p> <p>In order to assist the CMA to understand the full picture, [redacted], this document sets out a chronology of the factors surrounding the delays in the roll-out of ESN (the “Chronology”). The Chronology has been prepared using the information available from public sources (including Governmental sources), as well as information taken from the [redacted]. The Chronology therefore provides an exclusively objective overview of the various facts surrounding the delays in the roll-out of ESN, and is set out in Table 1 below.</p>	<p>have delayed Motorola’s delivery of the Kodiak software releases required under the Lot 2 contract.</p> <p>In fact, from the outset, the software proposed by Motorola did not have some of the key mission critical functionality required and its delivery was beset by delays [redacted]</p>
<p>Paragraph (7) (ii)</p>	<p>Regardless of whether Motorola’s responsibilities under Lot 2 of the Programme have been delivered in accordance with the timescales envisaged in the Home Office’s full business case of 2016, as well as the reasons for any delays which are inevitably multifaceted, ESN still would not have been delivered by December 2019 due to the fact that prior to this date, the following aspects of the Programme had not been completed, amongst others:</p>	<p>Due to the multi-faceted nature of the programme, some of the listed activities, such as (e) and (g), were dependent on the work undertaken by Motorola under Lot 2 and therefore were impacted by the progress or lack of progress that Motorola made against its own Key Milestones.</p>

	<p>(a) the network coverage to be provided by EE was not available in all areas required;</p> <p>(b) the Home Office had not completed its commission of the 292 masts that it was responsible for;</p> <p>(c) the Home Office had not awarded contracts for parts of the ESN system, such as air-to-ground communications with emergency service aircraft;</p> <p>(d) aspects of the Home Office's plans for ESN relied on technological solutions that were not yet available, such as how aircraft would receive an ESN signal and direct communication between devices without the need for a network signal;</p> <p>(e) the Home Office did not have an integrated plan for how and when each emergency service would deploy ESN;</p> <p>(f) network coverage on the London Underground had not been achieved; and</p> <p>(g) the handsets to be provided by Samsung were not yet available.</p>	
Paragraph (8)	It is therefore abundantly clear that Motorola is not the cause of ESN delay. To attribute, or even to	See response to paragraphs 4 and 7 in the rows above.



	<p>seek to attribute, blame to Motorola for the Home Office's need to extend the Airwave network (due to the delayed roll-out of ESN) is an unfair, unreasonable and irrational departure from clearly established and objectively reported facts.</p>	<p>It is incorrect for Motorola to state or even infer that it was in any way not to blame for the Home Office's need to extend the Airwave network. [REDACTED]</p> <p>The non-delivery of Motorola's software is and has consistently been a contributor to the delays in the roll-out of the ESN. [REDACTED]</p>
<p>Paragraph (9)</p>	<p>The "incentive" risk that the CMA highlights was recognised and fully dealt with in 2016 as part of the [REDACTED] negotiations between Motorola and the Home Office. Those negotiations culminated in the execution of the Deed of Recovery, which was also seen by the CMA as part of the merger clearance in 2016. The Deed of Recovery does not permit the Home Office to make Motorola pay for delays caused by others. [REDACTED]. Otherwise, Motorola is not liable for ESN programme delays. That was, and should remain, the eminently fair way to proceed in a multifaceted programme. For the CMA [REDACTED] to take the position that Motorola should be liable for the delays of others when Motorola has not itself caused the delays to the ESN programme would be grossly disproportionate and discriminatory against Motorola.</p>	<p>The Home Office agrees that Motorola should not be liable for the delay of others but this highlights why the Deed of Recovery was never likely to be an effective vehicle for addressing any "incentive risk" in the context of the multi-faceted nature of ESN, and has never been applied.</p>

Paragraph (10)	Equally, to suggest, or even to seek to suggest, that Motorola has an ability to prolong such delays by virtue of its ownership of the Airwave network is hopeless. Even if Motorola did have such an incentive (which Motorola strenuously denies), the extremely complex, multi-faceted and disaggregated nature of the Programme, the constituent parts of which are almost all in significant delay, renders it impossible for Motorola to act successfully on any such incentive. Given the Chronology, the CMA must now conclude that based on the overwhelming weight of evidence, any hypothetical notion of Motorola having “incentives” to delay ESN is wholly unsupported by any ability to act on such incentives. The “incentive” theory is nothing more than a harmful, baseless, theory that is entirely divorced from reality.	See responses to paragraphs 4.7, 8 and 9 in the rows above.  As the owner of Airwave Solutions, Motorola does have a financial incentive to delay ESN: Motorola earns more from the Airwave network than from ESN; delays to ESN increase Motorola’s earnings from the Airwave network.  Motorola is able to act on the financial incentive to delay ESN by simply delaying the delivery of the final Kodiak PTT software release: unless and until Motorola delivers the final Kodiak software release with all of the functionality and performance required by the Lot 2 contract, transition from the Airwave network cannot take place.  [✂]
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C. Motorola’s economic assessment submission in response to the CMA’s proposal to make a market investigation into the Mobile radio network for the police and emergency services prepared by DotEcon Ltd dated August 2021

Para ref.	Motorola statement, which the Home Office considers is inaccurate or misleading	Home Office correction
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	<p>Observation 3: There is no evidence of a failed procurement process.</p> <p>Indeed, by comparison with many other large scale public procurement projects of a comparable nature, the Airwave project appears to be a success, being on time and on budget – which is more than can be said for the ESN project.</p>	<p>This is incorrect. There are National Audit Office, Parliamentary Accounts Committee and other committee reports (including the 7/7 Committee report) that clearly show that this was not the case. All are in the public domain. There are also publicly available reports, some at a local level (i.e. specific Police and Fire services) that identify key elements of functionality are yet to be delivered.</p>
	<p>Accordingly, the potential for extensions was certainly understood, fully negotiated by all parties, and disclosed to the CMA at the time of its merger investigation.</p>	<p>The potential for extensions to the FireLink contract and the Department of Health ARP contract was understood and negotiated at the time of the merger investigation, but this was to align them with the Framework Arrangement for the purposes of transition. At the time of the investigation transition was expected to occur without any need for an extension to the Framework Arrangement.</p>

D. Motorola’s response to the market investigation reference dated 15 November 2021

<b>Para ref.</b>	<b>Motorola statement, which the Home Office considers is inaccurate or misleading</b>	<b>Home Office correction</b>
Paragraph (4)	<p>Contrary to the CMA’s understanding, the terms of any extension sought by the Home Office were already agreed in 2016, following extensive negotiations and as part of a whole suite of</p>	<p>The 2016 negotiation never envisaged an extension as already indicated in this submission. The promise from Motorola and the expectation from the Home Office in 2016 was to roll out ESN by 2020.</p>

	<p>arrangements entered into between the Home Office and Motorola (as purchaser of the Airwave network). The key element of that deal, for these purposes, is the unilateral contractual right for the Home Office to extend the Airwave service at agreed pricing for as long as it is needed while the Home Office transitions its 300,000 users to ESN which, in turn, requires Motorola to invest over £300 million in capital expenditure to ensure the continuity of service of the Airwave network, without any expectation of additional returns. There is, therefore, nothing that “needs” to be agreed by the end of 2021. The only “negotiations” that have been taking place since 2016 [✂]. This simple yet crucial factual error on the part of the CMA has profound implications for the correct analysis of the Airwave contracts.</p>	<p>It is not correct to say that there is “nothing that needs to be agreed by the end of 2021 or in fact for any extension beyond the original term”. By the end of 2021 Blue Light contract holders were required to advise ASL what their intentions were with regard to the National Shut Down Target Date (NSDTD) of 31.12.2022 agreed in UCCN2.</p> <p>As the lead Authority and with agreement from the other Blue Light contract holders, the Home Office wrote to ASL on 1 December 2021 with a Change Request advising them of the need to extend the Blue Light contracts for another four years to a new NSDTD of 31 December 2026 and advising that contractual Change Control provisions would be used to agree prices for the four year extension period as UCCN2 only agreed prices for the 2020 – 2022 three year extension period defined in UCCN2.</p> <p>ASL replied to the Home Office letter on 3 December 2021 saying that they could agree to the Change Request but only if the Home Office waived its contractual right to benchmarking until 1 January 2027 and that the Home Office would have to immediately agree to paying existing Contract Charges for the four-year extension period.</p> <p>[✂]</p> <p>The Home Office disagrees that nothing “needs to be agreed” and refers to Schedule 8 Charging Structure of the Framework Arrangement, a copy of which has already been provided to the CMA. Please see Part F commencing on page 10.</p>
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		<p>[redacted]. Accordingly, the Home Office considers that the Airwave charges for 2023-6 inclusive are to be agreed as a variation to the Contract Charges in accordance with Part F of Schedule 8.</p> <p>This is also supported by the actions of Motorola since 2016: in 2018 when a [redacted] % discount and a reprofile was agreed; and in 2021 when Motorola tried to impose a significant increase on the prices agreed for the period 2020 to 2022.</p>
<p>Paragraph (49)</p>	<p>Motorola’s Lot 2 ESMCP contract has evolved significantly from its inception in December 2015. Leaving aside the major structural and scope changes that the 2018 / 2019 “ESMCP Reset” brought about, the delivery has been characterised by consistent requests by the Home Office to increase the core scope prescribed by the Home Office at the outset of the ESMCP. Often this has been as a result of the Home Office receiving feedback from its key user groups that the Home Office’s mandated requirements (against which Motorola is required to deliver its solution) are not fit for purpose or have been interpreted inconsistently. Some examples of user driven changes both before and following the ESMCP Reset are as set out below.</p>	<p>It is denied that the Home Office has changed its requirements to any material degree. The requirements have remained materially the same throughout, [redacted].</p> <p>[redacted]</p>

Paragraph (50)	<p>Prior to the original reset which culminated in the enactment CR110 a number of material scope changes (amongst others) that have been included:</p> <ul style="list-style-type: none"> <li>(a) High Level Design - 3GPP Release 10 to Release 12 alignment;</li> <li>(b) Permanent RRC;</li> <li>(c) Group Management;</li> <li>(d) REGA Replication of DGNA Functionality;</li> <li>(e) Audio Cut-in;</li> <li>(f) Video;</li> <li>(g) Location Based Collaboration; and</li> <li>(h) High Level Design - APN and Bearer Configuration.</li> </ul>	<p>It is not correct to say that the changes listed in this paragraph were material scope changes.</p> <p>It is also important to stress that Motorola were responsible for end- to- end design at the time these changes were raised and processed. They were only agreed by the Home Office due to the potential benefit that they could provide to all parties in the design and development of the ESN solution.</p>
Paragraph (53)	<p>The Home Office's approach to obtaining these significant scope changes has, particularly in the post-ESMCP Reset period, often involved [✂] Motorola to start work, at its cost and risk on the technical scope changes it sets out in its contractual "Change Request" [✂] to "work out the commercials" at a later date or "in the round". Motorola has frequently acceded to these [✂] in order to keep its element of the Programme on</p>	[✂]

	<p>track [✂] make arrangements to be compensated for the work involved in meeting the additional requirements with its customer. Very often that aspiration has not been realised and Motorola's losses continue to increase despite its commitment to deliver to its contractual commitments.</p>	
Paragraph (55)	<p>Temporary working arrangements were also agreed under Heads of Terms in September 2018 with both EE and Motorola to allow work on the Programme to continue during the renegotiations of those supplier's ESMCP contracts. Although the contract renegotiations were due to be agreed by December 2018, these too were delayed in their conclusion until May 2019 (in respect of Motorola's renegotiated contract) and July 2019 (for EE's), and this affected the progress of the Programme reset.</p>	<p>The Home Office disagrees with the final point as this infers that the Home Office was in some way responsible for the delay in the progress of the Programme reset.</p> <p>The Home Office was not responsible for delaying the conclusion of the negotiations or for any delay in delivery. The negotiations were extremely complex in nature and the re-set required prolonged negotiations with both ESN suppliers (Motorola and EE) as well as a need to move to an incremental delivery model. The negotiations also had to address and resolve a considerable number of historic disputes.</p> <p>Assure was delayed, but not because CAN500 was not agreed by Dec 2018.</p>
Paragraph 56 (b)	<p>Prior to CAN500 (Change Authorisation Note 500 in relation to the Lot 2 contract which reset the ESN programme) Motorola's planning activities and those of other suppliers took place in</p>	<p>It is incorrect to say that planning activities took place in isolation.</p>

	<p>isolation. Through the course of negotiations of the CAN500 reset of the commercial aspects, Motorola suggested and facilitated workshops for suppliers and led the development of an integrated programme plan to increase alignment and understand mutual dependencies whilst continuing to deliver on Motorola's own contractual obligations under Lot 2.</p>	<p>There has been an Integrated Programme Plan in place since the award of the ESN contracts which in the early stages of the programme was contributed to by Motorola and EE through the joint planning sessions that they regularly held.</p>
<p>Paragraph 56 (d)</p>	<p>Over the past year, despite the parties believing that clarity on user requirements had been resolved in the ESMCP reset, the Home Office consistently reported that it wanted a number of additional or different features that were not contained within the scope of the agreed contract. Motorola has had to agree access into all its testing reference environments, has tripled testing from that envisaged by CAN500 and the breadth of testing has been expanded significantly. This has all be done by Motorola free of charge, not on a quid pro quo basis, in order to maintain the programme. Motorola has also taken on costs which the Home Office has offered to pay, [X].</p>	<p>It is disputed that Motorola has been forced to undertake further testing due to changes or additions by the Home Office to the features sought. The Home Office has not mandated changes and additional testing by Motorola is purely the result of a combination of factors including failure to deliver the agreed upon solution.</p> <p>Motorola is contractually obligated to test to demonstrate that requirements are met and, in many cases, has had to repeat testing to meet the standards necessary to achieve Test Certificates and Milestones.</p> <p>It is also misleading to claim that Motorola is undertaking testing on a "free of charge" basis; Motorola is paid for achieving milestones for which they need test certificates in line with contractual obligations. The need to demonstrate compliance in order to receive payment in respect of these milestones is not unusual nor can it be surprising to a sophisticated commercial entity like Motorola.</p>



<p>Paragraph (57)</p>	<p>Motorola's costs in the mobilisation phase of the ESMCP have been much higher than anticipated due to the need to do development work and accelerate delivery in a way which was not anticipated from the contractual framework. In addition, Motorola has often been required to work without a Change Request from the Home Office, placing a burden on Motorola and increasing its risk. As a business, Motorola offers public safety solutions. It develops its products and solutions with, at its core, a deep understanding of the practical needs of frontline users developed over the best part of 100 years of service to these communities all over the world. Therefore, as part of its work and due to the importance of preserving its reputation, Motorola has gone above and beyond its contractual requirements and without commercial cover in order to deliver what the UK's emergency services need. Motorola has been forced to react flexibly and proactively to the Home Office's failures as a contracting body responsible for delivering the ESMCP.</p>	<p>This is denied. [✂]</p>
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E. Motorola's response to the CMA's Statement of Issue dated 10 January 2022

Para ref.	Motorola statement, which the Home Office considers is inaccurate or misleading	Home Office correction
Paragraph (16)	<p>The CMA’s description of the contractual position is incorrect and misleading. Motorola’s Response to the MIR Decision presents a factual overview of the contractual position. Briefly, the CMA is wrong to state that there is a “need” to “agree” an extension to the contract(s) in order for the Airwave service to be continued beyond 2022. It is similarly wrong to state that there is a “need” to “agree” the terms (including as to pricing) that will apply to the period beyond 2022. This has been demonstrated conclusively by the Home Office [redacted]. This continuation mechanism was put in place and agreed by Motorola and the Home Office in 2016 specifically to avoid the “need to agree” as the Home Office insisted upon the absolute right to continue the Airwave contracts as long as the Home Office needed the service.</p>	<p>The Home Office disagrees with the Motorola statement. The 2016 negotiation never envisaged an extension as already indicated in this submission. The promise from Motorola and the expectation from the Home Office in 2016 was to roll out ESN by 2020.</p> <p>It is not correct to say that there is “nothing that needs to be agreed by the end of 2021 or in fact for any significant extension beyond the original term.</p> <p>The continuation mechanism that Motorola refer to in their submission i.e. the unilateral right to serve an NSD Notice to extend the NSDTD, was put in place purely to safeguard service continuity, if any problems relating to transition arose, even though the view at the time was that it wouldn’t be needed as transition was expected to be complete by the end of 2019. It was therefore an insurance policy not an easy and convenient means for the parties to turn the PFI Agreement into an evergreen contract.</p> <p>The value of the NSD Notice mechanism as an insurance policy was proved in December 2021: [redacted], the Home Office served a NSD Notice so that there could be no dispute that the NSDTD had been extended to 31 December 2026, safeguarding service continuity.</p> <p>Both UCCN and UCCN2 were intended to be short-term, finite arrangements, where the UCCN agreed a target common end date of December 2019 for all the</p>

		<p>Blue Light contracts and UCCN2 extended all the Blue Light contracts for a further three years by agreeing a new NSDTD of 31 December 2022. Neither UCCN or UCCN2 gave commitments that Contract Charges would continue as agreed in either of them beyond December 2019 or December 2022 respectively.</p> <p>UCCN and UCCN2 recognised that there might be a few police force/FRS/Ambulance Trust stragglers that might not be ready for NSD on either the December 2019 or December 2022 dates, and therefore agreed a charge of £[redacted] per region per month for those not ready for NSD. It is wrong to suggest that either UCCN or UCCN2 agreed charges beyond their respective envisaged terms of December 2019 or December 2022. If this were true, there would have been no need to agree UCCN2.</p> <p>This is also supported by the actions of Motorola since 2016: in 2018 when a [redacted]% discount and a reprofile was agreed; and in 2021 when Motorola tried to impose a significant increase on the prices agreed for the period 2020 to 2022.</p>
Paragraph (49)	<p>Inefficient purchasing choices. A powerful Government customer does not have the same budgetary constraints as a private sector business that is accountable to its shareholders, especially in the context of critical national infrastructure. There are moreover many instances of Home Office purchasing inefficiencies and the Group is respectfully invited to seek evidence from</p>	<p>This is not correct. DCS was only required because ESN was late, not because Airwave Solutions suggested it.</p> <p>DCS has now become a mandatory upgrade due to the delays to ESN, as per the chronology below. If ESN had been available by the end 2022, DCS capability would not have been required. The procurement of DCS capability “just in case” would have been a waste of money. The DCS interface was only defined in June 2020.</p>

	<p>stakeholders on this. As an isolated example, Airwave sought to assist the Home Office in relation to control room procurement by suggesting that ESN-ready control rooms procured by user organisations should also have DCS capability (DCS is a required Airwave protocol) in case ESN roll out was delayed. The Home Office [✂] this suggestion with the result that user organisations have had to reprocure control rooms at substantial and unnecessary additional cost.</p>	<p>The DCS interface replaces the legacy Centracom / Vortex interfaces. Centracom was retired as a product by Motorola (before its acquisition of Airwave Solutions) in 2006 with Motorola software support ending 2010 and hardware repair ceasing 2013. Vortex (V1 as deployed in UK 3ES) was also retired by Motorola 2011/2012.</p> <p>Under the Framework Arrangement to the end of 2019, Airwave Solutions' intention was to continue using existing spares stock etc until NSD [✂].</p> <p>When, in 2018, there were discussions around the Framework Arrangement being extended to the end of 2022, Airwave Solutions advised that the risk inherent in continued use of these obsolete interfaces meant that replacement was required. Airwave Solutions then announced that, as a part of the Airwave Network Upgrades programme, all Centracom and Vortex interfaces would be replaced by the end of 2022. At that point, it was possible that some user organisations could elect to move straight to ESN. However, with subsequent shifts of the ESN programme, migration to use Airwave from control rooms via the new DCS interface has become unavoidable and is now seen as part of the control room technology roadmap to take a user organisation from Airwave to ESN.</p> <p>For a user organisation, moving to use of the DCS interface necessitates upgrade of their control room systems but some user organisations have coincided the migration with a planned change of these systems. For some user organisations the scope, and thus cost, of the upgrade required has been greater than others</p>
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		<p>due to the age of the technology currently deployed. All ICCS providers have offered a path for their products to be upgraded for the use of the DCS interface.</p> <p>There has been no instance of a User Organisation having to completely replace a control room system solely to provide DCS capability (although in some cases the upgrade to DCS has coincided with a replacement control room system which was required either way), rather in general they have had to pay to upgrade existing systems to add DCS capability. The move to DCS has not mandated the replacement of the control room system.</p>
Paragraph (52)	<p>Refusal to pay. A refusal to pay can be evidence of unilateral market power. The Group is respectfully invited to consider the Home Office's refusal, at times, to make certain significant payments due under its contracts with Airwave. [REDACTED]. This behaviour has continued in the ESMCP with, by way of example, Motorola currently [REDACTED] undertaken.</p>	<p>In terms of ESN Lot 2, there has been a number of disputes in respect of payments/invoices that Motorola believed were due, even though the Authority disagreed and questioned the validity of such.</p> <p>Any claim for payment received from Motorola is automatically reviewed by the relevant ESMCP teams to confirm whether payment is actually due in accordance with the contract. If the invoice / payment is disputed then Motorola is notified accordingly.</p> <p>The Authority has always paid all undisputed invoices. The Authority has always followed the contracted procedure when dealing with disputed invoices / payments and has gone out of its way to accommodate Motorola. It has also been very reasonable, reaching compromises on many disputed milestone payment claims.</p>

<p>Paragraph (53)</p>	<p>Requiring work with no contractual certainty. Similarly, the Home Office has required work to be done but without committing to payment terms. During 2020 and 2021 Motorola was working on over £[redacted]m in change requests while prolonged negotiation on pricing for such requests took place. These negotiations did not conclude until December 2021.</p>	<p>[redacted]</p>
<p>Paragraph (54)</p>	<p>Obstructive conduct. In the period after October 2020 the Home Office adopted a pattern of obstructive behaviour towards Motorola’s delivery efforts. This was in stark contrast to the progress of the mobilisation phase in the period between September 2018 and August 2020 in which Motorola secured 22 milestone achievement certificates. This included the critical on time delivery of Motorola’s Kodiak 9.0 software release which was important to the Home Office’s plans to deliver the then “ESN Prime” product to its users. Although the Motorola personnel and delivery methodology remained consistent through this period the Home Office approach from October 2020 became [redacted]. By way of example, having previously agreed a [redacted] plan for its ESN solution</p>	<p>Put simply, the Home Office is not in a position to “obstruct” Motorola. Motorola has to deliver its Kodiak-based PTT solution, which meets the requirements of the Lot 2 contract. The Home Office cannot, has not, and in fact has no incentive to obstruct Motorola’s delivery.</p> <p>Looking back towards the start of the programme it is clear that from the outset, the Kodiak software did not have the key mission critical functionality required by the Home Office and its users; however, Motorola’s subsequent decision to discontinue further releases of Wave 7000 and to migrate all customers to Kodiak left the Home Office and its users with no real option but to accept a Kodiak-based solution on the understanding that future updates would address these gaps.</p> <p>Some (but not all) of the missing mission critical functionality needed by the Home Office and its users was introduced in subsequent Kodiak releases, starting with Kodiak release 9.0 in 2019. It was expected that all of the features</p>

	<p>the Home Office changed personnel and then proceeded to use every opportunity [✂].</p>	<p>required to transition to ESN from Airwave would be included in Kodiak release 10. No Kodiak release has so far delivered the mission critical functionality required by the Home Office or its users</p> <p>[✂]</p> <p>Accordingly, Kodiak 10 (part of the previous “ESN Prime” product) was removed from the plan and Kodiak 11 (part of a new “ESN Beta” product) was introduced. Unfortunately, as set out in the following section, [✂]</p>
Paragraph (83)	<p>The Group will no doubt recognise at the outset that Airwave was delivered on time, on budget, and meets (and typically exceeds) the requirement of users and its contracted performance levels.</p>	<p>This is incorrect. There are various NAO, PAC and Committee reports (including the 7/7 Committee report) that clearly show that this was not the case. There are also reports, some at a local level, that show that key elements of functionality were never delivered.</p>
Paragraph (94)	<p>The Issues Statement is silent on whether the Group intends to take account of the benchmarking provisions agreed between the parties, yet this may have a significant bearing on profitability [✂] when the [✂] to invoke these provisions. In addition to carefully drafted provisions on pricing, the contract with the Home Office contains an independent third-party referral</p>	<p>The statement that the Home Office was satisfied by both the price discounts and overall contractual arrangements in those agreements is not correct.</p> <p>The Home Office has never been satisfied with the price discounts and overall contractual arrangements for the Airwave services but has had to accept, what was perceived to be, at the time, the best possible “deal” that Motorola were prepared to offer. This is also true of the capital investment made as the Home Office has no visibility of actual capital investment in the network.</p>

	<p>process (the “Benchmarking Process”) to ensure that prices are fair, which has already been used by the parties. Indeed, the Home Office preferred to [REDACTED]. The Home Office was satisfied by both the price discounts and overall contractual arrangements, including additional capital investments executed in those agreements. The Benchmarking Process was used on two occasions to verify the fairness of pricing, and on both occasions the third party found no excessive pricing for the Airwave service.</p>	<p>Similarly, the statement relating to the benchmarking process is not correct either. The first time that a benchmarking exercise was undertaken was in 2008, with Airwave Solutions instructing Accenture, but without Airwave Solutions providing the necessary underlying data / information; it is unsurprising, therefore, that it was inconclusive. The second time that this exercise was carried out was in 2014 with Airwave Solutions instructing Gartner. The conclusion of this second exercise did indicate excessive pricing (at least in respect of the ongoing operational element of the Airwave services) and despite being predicated on very generous tolerances [REDACTED].</p>
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