



## Home Office's Response to the CMA's Provisional Decision Report

Note: Information confidential to the Home Office, Motorola and / or a third party has been redacted and is shown as follows: [ X ].

22 November 2022

## Executive Summary

The CMA Inquiry Group and case team have clearly diligently and carefully considered this market, for which the Home Office is grateful.

The Home Office agrees with the CMA's provisional view that Motorola and Airwave solutions have unilateral market power resulting in charges well above a level that would be expected in a competitive market, allowing them to make and sustain supernormal profits.

These considerable supernormal profits have been earned at the expense of the UK's Home Office, Department for Health and Social Care, Scottish Government, Great Britain's hard pushed emergency services, and ultimately UK taxpayers; harming Great Britain's citizens and others in need and all of us who rely on our emergency services. The Home Office is further grateful for the proposed remedies, remedies that will contribute to alleviating the future harm Motorola and Airwave Solutions unilateral market power will cause.

Significant damage has, however, already been done; the failure to deliver an MCPTT application suitable for the Great Britain's emergency services, has caused and will continue to cause significant delay to the Airwave network's replacement, ESN. This delay continues, while the Home Office necessarily retenders for a new supplier of this service, which will need developing, testing and implementation; delay that has and will continue to benefit Motorola, and reduce the effectiveness of our blue light workers.

Even with a charge control, there remains a continuing incentive on Motorola to seek to cause further delay to ESN. In particular, the need for an effective interworking solution involving Motorola and Motorola's position in the provision of control rooms services, both provide Motorola with the opportunity to act on this incentive. As such, the proposed interworking remedy may require enhancing and an additional remedy may be required for control rooms.

In respect of the proposed charge control remedy, the Home Office provides suggestions for improvement; importantly, the Home Office is concerned about how the charge control may reduce Airwave Solutions incentive to provide a good quality of service, with proposals to protect against such quality reduction.

While the CMA's proposed remedies go a long way to mitigate the future harm that will be caused by Motorola's and Airwave Solutions' unilateral market power, I do not believe that they address the very significant harm already caused, and the supernormal profits from which Motorola's shareholders and other investors have benefited and will continue to benefit, until the charge control comes into force next year. The Home Office would therefore wish to explore how these earned supernormal profits can be recovered for the benefit of Great Britain's Emergency Services and UK taxpayers.

The Home Office looks forward to continuing to engage constructively with the CMA as the CMA progress to its Final Report early in the New Year.

**Simon Parr**  
**Senior Responsible Owner**  
**Emergency Services Mobile Communication Programme**  
**Public Safety Directorate**  
**Home Office**

## Contents

1.	<b>Summary of the Home Office's Submissions</b>	4
2.	<b>Scope for competition, market definition and competitive assessment</b>	8
	Introduction	8
	Scope for competition and market definition	8
	Competitive assessment: market features and the Airwave Network	8
	Competitive assessment: market features relating to Motorola's dual role	9
3.	<b>Assessing Airwave's profitability</b>	9
	Introduction and overall comments	9
	The scope of the profitability analysis	10
	Motorola's revenue forecasts adopted by the CMA	10
	Decommissioning and redundancy costs	11
	CAPEX	11
4.	<b>Transfer charges</b>	12
5.	<b>Identification and valuation of fixed assets</b>	12
6.	<b>Cost of capital</b>	13
	Gearing	13
	Cost of debt	14
	Selection of comparators and betas	14
7.	<b>Charge Control</b>	15
	Summary	15
	Scope of the charge control	16
	Treatment of non-core services	16
	Treatment of 2020-2023 excess profits	17
	Role for service quality and resilience protections	18
	Form of control	19
	Balancing the concerns	20
	Necessary complementary measures	22
	<i>a) An enhanced service performance package</i>	23
	<i>b) Asset stewardship and clawback provisions</i>	27
	<i>c) Measures to secure the financial resilience of Airwave</i>	28
	Calibration of the charge control	29
8.	<b>Interworking</b>	33
	Introduction	33
	The proposed interworking remedy	34
	Negotiation of interworking solution (or input to an interworking solution)	36
9.	<b>Recommendation to the Home Office</b>	40
	Commercial and technical aims	40
	Broader considerations	41
	Additional specific observations	42
	Other relevant factors	44
10.	<b>Control Rooms</b>	46
11.	<b>Other remedies</b>	47
	Divestiture	47
	Improvements to benchmarking arrangements	47
	<b>Appendix A: Suggested clarifications and corrections</b>	48
	Introduction	48
	Section 2: Industry Background	48
	Appendix B: Additional background information	50
	Appendix C: Key Airwave Solutions Contracts	50
	Appendix D: The role of the charge of control negotiations	51

## 1. Summary of the Home Office's Submissions

- 1.1. This submission (the **Submission**) provides the Home Office's first response to the CMA's Provisional Decision Report (the **Report**).
- 1.2. In the interests of brevity and avoiding repetition of points that the Home Office has made in previous submissions, the Home Office focuses in this Submission on addressing only those points or issues where the Home Office considers it would be of assistance to the CMA Inquiry Group (the **Group**) for the Home Office to provide a specific observation or additional information, for example, where the Home Office believes the CMA may have misunderstood the Home Office's position or where the Home Office considers the CMA should consider an alternative approach.
- 1.3. Defined terms used in this Submission shall, unless otherwise stated, have the same meaning as those used by the CMA in the Report.
- 1.4. Generally, the Home Office agrees with the CMA's overall provisional decision, including its analysis leading to its provisional finding that

*“features of the market for the supply of communications network services for public safety, individually or in combination, prevent, restrict or distort competition in connection with the supply of LMR network services for public safety in Great Britain”<sup>1</sup>*

and that this gives rise to an adverse effect on competition (**AEC**) in that market.<sup>2</sup>

- 1.5. In particular, the Home Office agrees that the features identified by the CMA mean that Motorola (including Airwave Solutions) has unilateral market power and is able to charge prices above the level that would be expected in a competitive market and to make supernormal profits.
- 1.6. The Home Office further agrees that this is due to the existence of the following features:
  - a. the Airwave Network being a critical piece of infrastructure on which Great Britain's emergency services, and ultimately lives, depend;
  - b. the Airwave Network is the only network in Great Britain that is able to provide the land mobile radio communication services required by Great Britain's emergency services;
  - c. Airwave Solutions, which owns the Airwave Network, is a monopolist;
  - d. the Airwave Network assets did not transfer to the Home Office under the terms of the Framework Arrangement at the end of the original contract term. Airwave Solutions continues to own the assets and therefore the Home Office is unable to retender or even threaten to retender their use by alternative provider;

---

<sup>1</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', Summary, para 33.

<sup>2</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', Summary, para 34.

- e. the delay in the delivery of the ESN, the replacement for the Airwave Network (the Home Office confirms that the ESN will not replace the Airwave Network before 2026, and it is possible that it will not replace the Airwave Network before [ 2026 ]);
  - f. the Home Office and Great Britain's emergency services are 'locked in' with Motorola (including Airwave Solutions), beyond the period over which its prices were originally agreed (and during which Airwave Solutions recouped its investment and earned a reasonable return);
  - g. the Home Office has very weak bargaining power, likely since 2014, if not before;
  - h. there is significant asymmetry of information between Motorola (including Airwave Solutions) and the Home Office (and Great Britain's emergency services) to Motorola's benefit;
  - i. the lack of effective constraints provided by the terms of the Framework Arrangement on the price of the provision of the network after 2019, including the benchmarking provisions, which are ineffective in constraining Motorola's market power;
  - j. Motorola's dual role which has dulled its incentive to perform its part in the delivery of ESN effectively and efficiently, and which gives it the ability to prolong the operation of the Airwave Network by delaying the delivery of ESN; and
  - k. the need for interworking during the transition of users from the Airwave Network to the ESN which maintains and potentially strengthens Motorola's (including Airwave Solutions') market power, by enabling Motorola to hamper, obstruct or prevent transition and / or make transition more costly.
- 1.7. The Home Office notes that the CMA considers that the latter two features (paragraphs 1.6.j and 1.6.k) are additive to the provisional AEC assessment, and agrees they are not in and of themselves determinative of an AEC; although in the case of interworking, the Home Office would emphasise the role that interworking will play in enabling Motorola to sustain the Airwave Network and therefore the AEC.
- 1.8. The Home Office agrees with the CMA's provisional view that Motorola (including Airwave Solutions) has made and will continue to make very significant supernormal profits between 1 January 2020 and 31 December 2026, likely in excess of £1.1 billion. Additionally, as the Home Office expects ESN's replacement of the Airwave Network to now not be until [ 2026 ] (or later), the level of supernormal profits earned over that extended period would be very much higher, potentially a further £0.5 billion or more. The Home Office sets out its view of Motorola's (Airwave Solutions') profitability in Section 3 below.
- 1.9. These supernormal profits are clear evidence of Motorola's ability to maintain prices substantially above the competitive level, resulting in the Home Office and Great Britain's emergency services paying much more than they should for the Airwave services. The Home Office agrees that the supernormal profits transfer welfare from the UK state, Great Britain's emergency services and UK taxpayers to Motorola's shareholders and other investors, resulting in a very significant detrimental effect on customers resulting from the AEC that the CMA have provisionally found.

- 1.10. The Home Office accepts that due to a number of features of the market, including the criticality of the Airwave Network and its provision by a single, effectively monopoly, supplier and the Home Office's and Great Britain's emergency services' absolute dependence on the Airwave Network until it is replaced by ESN, that it is not possible for the CMA to fully address or remove the features of the market that give rise to the AEC, and that the CMA are therefore right to focus on those remedies that mitigate the detrimental effects of the AEC that the CMA have provisionally identified.
- 1.11. The Home Office agrees that, at the very least, it is appropriate to impose:
- a. a charge control on the price for which Airwave Solutions provides the Airwave Network and Services. The Home Office's detailed comments on the proposed charge control remedy are in Section 7; and
  - b. obligations on Motorola (including Airwave Solutions) to deliver, and / or facilitate the development and delivery of, an alternative interworking solution in a timely and effective manner, and to provide the services involved in doing so on a cost-plus basis. The Home Office's detailed comments on the proposed interworking remedy are in Section 8.
- 1.12. The Home Office also notes that the CMA are proposing to supplement these two remedies (paragraphs 1.11.a and 1.11.b) recommending to the Home Office that it
- “should, as soon as possible, implement a plan to ensure that the supply of communications network services for public safety in Great Britain is subject to competitive pricing arrangements, or measures to similar effect, by not later than the end of 2029”<sup>3</sup>*
- 1.13. As the CMA will appreciate, the Home Office has a plan to ensure the supply of communications network services for public safety in Great Britain is, as far as is possible, subject to competitive pricing arrangements, and is in the process of implementing that objective. The Home Office therefore welcomes the recommendation. The Home Office's more detailed observations on the CMA's proposed recommendation are in Section 9.
- 1.14. However, the Home Office believes that the remedies that the CMA have suggested may need to be supplemented with specific additional remedies or adaptations to the proposed remedies:

*Quality-of-service*

- a. Currently the CMA are not proposing to include provisions relating to service quality as part of the charge control remedy given the absence of submissions *“pointing to material deficiencies in existing contractual provisions related to service quality”<sup>4</sup>*; however, the Home Office has since developed its thinking in this area. Further measures to protect against a deterioration in service are necessary, to formalise the existing standards of service.
- b. In the same way that Motorola's unilateral market power provides it with an ability to charge prices that are above the competitive level, it also has the

---

<sup>3</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', Summary, para 42.

<sup>4</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', Annex K, para 23.

ability to lower service quality. Moreover, Motorola's incentive to do so could be exacerbated through a pure charge cap.<sup>5</sup> To provide some context, the existing Airwave contractual service requirements were developed over 20 years ago, and the sanctions applicable if these are not met are trivial relative to Motorola's revenues, even after taking account of the charge control.

- c. The Home Office's concerns are more fully explained in Section 7 and the Home Office's suggestions for the addition of proposed service quality provisions to the charge control are set out in paragraphs 7.40 to 7.78;

*2029 charge control review*

- d. the Home Office notes that the charge control is expected to take effect from the first half of 2023 and will remain in force until the end of 2029, with a review to be undertaken in 2026. The Home Office further notes that the CMA expect (as outlined in the CMA's proposed recommendation to the Home Office) that the Home Office will have implemented a plan to deliver ESN (or another replacement network) that is subject to competitive pricing arrangements (or measures to similar effect) by the end of 2029. However, the Home Office is concerned that action (or inaction) by Motorola, for example in respect of the provision of vital interworking services (or inputs into interworking) and services associated with interworking, may delay transition. Therefore, while the Home Office accepts that there should be a presumption that the charge control end in 2029, the Home Office would ask that there be a review at this time to consider whether that presumption should be rebutted, and the control extended for a further limited period.

*Recovery of supernormal profits earned 2020 to 2023*

- e. While understanding the CMA's proposed charge control approach, the Home Office is concerned that the measure will leave Motorola, its shareholders and other investors with over £0.5 billion of value earned through supernormal profits. The Home Office would wish for a remedy that recovers this value for, ultimately, the benefit of UK taxpayers and citizens. The Home Office discusses this further in Section 7, paragraphs 7.14 and 7.15.

*Framework Arrangement exit and transferable assets*

- f. On 25 October 2022, [X], for Motorola Solutions, Inc. wrote to [X], the Home Office's [X] for the ESMCP, to explain Motorola's high-level position in respect of the CMA's Report. The letter was [X] (which was not unexpected), and included a comment that:

"[X]"

- g. Noting that this letter is, admittedly, an early reaction to the Report, given the criticality of the Airwave Network to Great Britain's emergency services and the sophistication of its supplier, the Home Office is treating the comment as a clear warning from Motorola that it may:

---

<sup>5</sup> It is also possible that under a cost-of-service approach, Motorola might neglect service quality (for example, Motorola could undertake inefficient expenditure that does nothing to maintain service quality but, for example, results in higher transfer charges to the parent group). As such, even under a cost-of-service regime additional safeguards might also be appropriate.

- (i) [REDACTED];
- (ii) [REDACTED]
- (iii) [REDACTED],

so as to [REDACTED] in Airwave Solutions or [REDACTED].

- 1.15. While the latter point (paragraph 1.14.g(ii)) may be partially addressed by the inclusion of quality-of-service provisions as part of the charge control, should Motorola take more aggressive action, it may be necessary for the Home Office (as a last resort and only if all else fails) to seek to terminate the Airwave Network, to acquire the transferable assets, and tender the running of the network to a third-party. The Home Office therefore requests that the CMA consider a remedy that addresses the challenges of the Framework Arrangement's exit clauses; in particular, in respect of the Service Transfer Plan and which assets are transferable on termination and on what basis.

## 2. Scope for competition, market definition and competitive assessment

### Introduction

- 2.1. This section briefly comments on the CMA's provisional views on: (1) the scope for competition and market definition<sup>6</sup>, and (2) the CMA's provisional assessments on (a) whether there are features of the market for the supply of communications network services for public safety that distort competition<sup>7</sup> and (b) the competitive effects of Motorola's dual role as the provider of the Airwave Network and services and in the delivery of ESN.<sup>8</sup> The Home Office considers the competitive effect of Interworking in Section 8 of this Submission.
- 2.2. As explained in the Introduction section of this Submission, the Home Office focuses on addressing only those points or issues where the Home Office considers it would be of assistance to the Group, for example, where the Home Office believes, for example, the CMA may have misunderstood the Home Office's position, where there has been a development for which an update is prudent, or where the Home Office believes the CMA should consider an alternative approach.

### Scope for competition and market definition

- 2.3. The Home Office agrees with and supports the CMA's provisional conclusions on the scope for competition and market definition.
- 2.4. In respect of whether ancillary services should be included within the same product market as the Airwave Network services, while the supply of *some* ancillary services to *some* forces may be subject to competition and not necessarily purchased from Airwave Solutions, the *majority* of ancillary services purchased by the *majority* of Airwave network users can only be purchased from Airwave Solutions.<sup>9</sup>

### Competitive assessment: market features and the Airwave Network

<sup>6</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', Section 3.

<sup>7</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', Section 4.

<sup>8</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', Section 5.

<sup>9</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', para 3.117.



- 2.5. The Home Office agrees with the CMA's provisional assessment of whether there are features of the market for the supply of communications network services for public safety which distort competition. In particular, the Home Office agrees with the CMA's provisional conclusions on what would be expected in a well-functioning market<sup>10</sup>, and the CMA's preliminary judgement on the features of the market that give Motorola (including Airwave Solutions) market power and distort competition.<sup>11</sup> The Home Office also concurs with and supports the CMA's concluding comments.<sup>12</sup>
- 2.6. The Home Office would wish to clarify one definition used by the CMA; the CMA refers to "LMR technology"<sup>13</sup>, and the Home Office understands this to be a reference to trunked radio systems such as those based on the European Telecommunications Standards Institute (**ETSI**) TETRA standard.

### **Competitive assessment: market features relating to Motorola's dual role**

- 2.7. The Home Office agrees with the CMA's provisional assessment that: Motorola's incentives to deliver ESN effectively and efficiently are dulled by the profits that Motorola makes from the continued operation of the Airwave Network; that Motorola is able to act on such incentives by virtue of its central role in the delivery of ESN and the limited counter-incentives created by the effects of the Deed of Recovery and the ESN contractual framework; and that observable outcomes in the delivery of ESN are consistent with such incentives and ability.<sup>14</sup>
- 2.8. As the CMA are aware, negotiations between Motorola and the Home Office, with a view to agreeing an early termination of the ESN Lot 2 Agreement, continue. Irrespective of the result of those negotiations, the failure of the delivery of the ESN to date and the fact that there is [ X ] of the ESN (based on Kodiak) before the end of 2024 and Motorola has said that it intends to play no part in the ESN beyond 2024 means that the 'damage is done'. Even if Motorola ceases to have a 'dual role' in ESN, whether due to an agreed compromise, an early termination or through it playing no role post 2024, ESN will not now be delivered before 2026 and, indeed, the replacement of the Airwave Network may not finally happen until [ X ] or later.

## **3. Assessing Airwave's profitability**

### **Introduction and overall comments**

- 3.1. This section sets out the Home Office's response to the CMA's preliminary assessment of the profitability of the Airwave network.<sup>15</sup> The section includes comments on both Section 6 of the main Report and the corresponding profitability appendix (Appendix G). The CMA's provisional findings in relation to the cost of capital, transfer charges and asset valuation are dealt with separately in sections 4, 5 and 6 below.
- 3.2. Overall, the Home Office agrees with the CMA's approach to assessing the profitability of the Airwave network. As per its previous submissions, the Home Office also supports splitting the profitability analysis between the original PFI period

---

<sup>10</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', para 4.2 and paras 4.5 - 4.21.

<sup>11</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', para 4.3.

<sup>12</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', paras 4.214 - 4.216.

<sup>13</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', para 4.28.

<sup>14</sup> CMA (2022), 'Mobile radio network services - Provisional Decision', para 5.105.

<sup>15</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G.

and the extension period, with the CMA's focus being on the extension period (that being the period from 2020 to 2026).<sup>16</sup>

- 3.3. As a consequence, the Home Office agrees with the conclusions drawn by the CMA from its profitability analysis, i.e. that Motorola was able to derive supernormal profits in the extension period,<sup>17</sup> and the Home Office's comments provided below do not change this conclusion. Moreover, if the comments made by the Home Office in the following sections are taken into account in the CMA's profitability analysis, this should lead to a further increase in the amount of estimated supernormal profits made by Motorola within the extension period.
- 3.4. The rest of this section provides comments on the following areas:
- a. the scope of the profitability analysis;
  - b. Motorola's revenue forecast adopted by the CMA;
  - c. decommissioning and redundancy costs; and
  - d. CAPEX forecasts used by the CMA.

### **The scope of the profitability analysis**

- 3.5. The Home Office wishes to point the CMA to a potential inconsistency between the scope of the profitability assessment and of the charge control. In particular, radio terminals (except where part of a managed service) are excluded from the charge control but included within the profitability assessment. The CMA's rationale for excluding radio terminals from the charge control, with which the Home Office agrees,<sup>18</sup> is the extent of competition that already exists in relation to those services; however, this would suggest that the services are sufficiently separable from the provision of the Airwave network and, therefore, may need to be excluded from the profitability analysis as well. Nevertheless, the Home Office does not think the inclusion or exclusion of radio terminals from the profitability assessment would alter the CMA's conclusions, as it corresponds to a relatively small part of the business.

### **Motorola's revenue forecasts adopted by the CMA**

- 3.6. Within its revenue forecasts, Motorola has assumed that revenues from Ambulance Bundle 2 are reduced by 50% in 2023 and 100% in 2024, while menu services are reduced by 5% from 2023 onwards as customers transition over to ESN. The CMA have accepted these two assumptions for its profitability assessment.<sup>19</sup>
- 3.7. [REDACTED]. The CCN for this extension is drafted and is currently going through governance. The revised end date for the contract will be [REDACTED]. However, the [REDACTED]. Thus, the Home Office recommends that the CMA adjusts their assumption that Ambulance Bundle 2 revenues will reduce by 50% in 2023 and 100% in 2024 – revenues in 2023 should not be reduced (given the [REDACTED]) and revenues in 2024 may be reduced by 50% to reflect the uncertainty around a [REDACTED].
- 3.8. With respect to menu charges, the Home Office also wishes to reiterate that the current expectation is that the transition to ESN will not start until after 2023, and thus applying a 5% reduction to revenues from menu services in 2023 is overly

<sup>16</sup> Home Office (2022), 'Home Office submission and response to working papers', May 2022, para 30.

<sup>17</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, para 105.

<sup>18</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, paras 11 and 16.

<sup>19</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, paras 25 - 27.

conservative. The Home Office considers that applying no reduction to revenues from menu services in 2023 is a more accurate approach.

### **Decommissioning and redundancy costs**

- 3.9. The Home Office welcomes the CMA's adjustment for the timing of the decommissioning and redundancy costs.<sup>20</sup> The CMA assume that these costs were paid for in the original PFI period and unless there is evidence for incremental decommissioning and redundancy costs due to the extension, allocate no corresponding costs to the extension period. The Home Office considers this approach effective in ensuring that there is no understatement of profitability in the extension period.
- 3.10. The Home Office would also like to reiterate that the redundancy cost estimate included by Motorola, which was adopted by the CMA in their assessment, appears to be too high. The CMA have agreed that the costs seem high but did not adjust the estimate downwards on the basis that there might be less opportunity for Motorola to redeploy Airwave Solutions staff to ESN.<sup>21</sup> However, the Home Office's previously mentioned concerns were not based on the assumption of significant staff redeployment.<sup>22</sup> In particular, according to its statutory accounts, Airwave Solutions had 580 employees in 2020.<sup>23</sup> Assuming 20% of them do not require a redundancy payment (e.g. because they are on temporary contracts which may be over by the time of the NSD), the redundancy cost included in the profitability assessment (i.e. £[><]m) equates to c. £[><] per employee – a significant cost which should be scrutinised further. Moreover, the Home Office has previously expressed concerns about the efficiency of Airwave Solutions' headcount, which affects the total redundancy costs.<sup>24</sup>

### **CAPEX**

- 3.11. The Home Office previously expressed its concerns around the uncertainty of CAPEX estimates provided by Motorola,<sup>25</sup> which the CMA have accounted for in their provisional assessment. The Home Office agrees with the CMA putting more weight on the May 2021 forecast than the April 2022 forecast, as the latter was prepared during this investigation.
- 3.12. The Home Office agrees with the CMA's logic that the current forecasts provided by Motorola already have a degree of risk built into the projections,<sup>26</sup> and thus considers that it is reasonable to make a downwards adjustment to the CAPEX forecasts by the amount of the CAPEX risk provision. In particular, the forecasts provided by Motorola must be considered in light of the previous forecasts compared to the outturn spend. For the years 2018–20, Motorola's forecast was to spend £[><]m, but they ultimately spent £[><]m.<sup>27</sup> Similarly, the CMA have pointed out that for 2021, Airwave spent a total of £45m compared to an earlier forecasted £73m, even though

---

<sup>20</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, para 54.

<sup>21</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, para 51.

<sup>22</sup> Home Office (2022), 'Home Office submission and response to working papers', May 2022, para 45.

<sup>23</sup> Airwave Solutions Limited (2021), 'Annual report and Financial Statements – Year ended 31 December 2020', p. 26.

<sup>24</sup> Home Office (2022), 'Home Office submission and response to working papers', May 2022, para 45.

<sup>25</sup> Home Office (2022), 'Home Office submission and response to working papers', May 2022, para 45.

<sup>26</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, paras 91 - 92.

<sup>27</sup> Home Office (2022), 'Home Office submission and response to working papers', May 2022,

para  
45.

the forecast spend for 2021 was made in May 2021, i.e. the forecast horizon was very short.<sup>28</sup>

- 3.13. In addition, the Home Office is concerned that the cost of any internally sourced equipment might be overstated, which is discussed in section 4 on transfer charges.

## 4. Transfer charges

- 4.1. Overall, the Home Office agrees with the approach taken by the CMA with respect to transfer charges and appreciates the level of detail in which the CMA have considered these.
- 4.2. In particular, the Home Office considers the approach taken with respect to MSI field engineers, the level of strategic support and SG&A to be reasonable. In relation to the guarantee fee, the Home Office agrees that it should be based on Airwave's expected probability of default rather than that of Motorola, given that the value to the Home Office is driven by the protection offered to Airwave via the guarantee.
- 4.3. However, the Home Office would ask the CMA to clarify why some of the management fees remained in the profitability assessment after the removal of the transfer charge. In particular, the CMA's adjustment removes £[ X ] of management fees per year, which reduces the value of the management fees in 2019 to [ X ], but the remaining balance [ X ] from [ X ] to almost £[ X ] by 2022, with the CMA expressing concern that "it is not clear that our [CMA's] approach has fully removed the transfer, despite the fact that our review of it suggests that it is unjustified". Given that the CMA did not consider management fees to be an appropriate transfer charge, the CMA should remove [ X ] management fees.
- 4.4. Furthermore, although equipment costs are an important cost item, there are no adjustments to the equipment costs. The CMA have robustly found that Motorola has overstated its transfer charges in relation to the majority of other elements—including the strategic support, guarantee fee, and the charge relating to MSI field engineers. In relation to the equipment costs, the CMA notes that it had difficulty in finding robust evidence to show that equipment charges were not on an arm's length basis and that the evidence it found (which suggested an overcharge) was not sufficiently robust. The Home Office notes that even if the CMA do not consider its evidence particularly robust, there is equally no reason to believe that the transfer charge for equipment is truly estimated on an arm's length basis, when the majority of other transfer charges analysed by the CMA are overstated. Thus, this can be seen as a conservative assumption by the CMA.

## 5. Identification and valuation of fixed assets

- 5.1. In general, the Home Office agrees with using the residual value as an opening value of the Airwave network for the extension period. As per the CMA's reasoning, setting a value above this amount would imply that the taxpayer would need to pay twice for the network.
- 5.2. However, the Home Office would like to point the CMA towards a potential error in the calculation of the depreciated replacement cost using Deloitte's estimate for the sensitivity analysis.

---

<sup>28</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, paras 73 - 74.

- 5.3. In particular, the CMA have assumed that the assets in 2016, with a value set by Deloitte, would have an economic life of ten years, which implies the use of a straight-line depreciation profile. The CMA have also assumed that any new CAPEX between 2016 and 2019 is depreciated over a ten-year period. The CMA's calculations lead to a closing asset value in 2019 of £[ X ] (see the details below).

(£m)	2016	2017	2018	2019
Opening asset value	[ X ]	[ X ]	[ X ]	[ X ]
CAPEX	[ X ]	[ X ]	[ X ]	[ X ]
Depreciation	[ X ]	[ X ]	[ X ]	[ X ]
Closing asset value	[ X ]	[ X ]	[ X ]	[ X ]

Source: CMA, Final profitability model October 2022, tab: Capex, cells AM34–AR39.

- 5.4. Home Office would like to note that there may have been an error in the calculation of depreciation. Instead of using a straight-line depreciation profile as suggested by the description, the depreciation charges for each year are calculated on a reducing balance basis – i.e. dividing the opening asset value and any CAPEX made in the year by ten in each year. Correcting this – that is, applying a ten-year straight-line depreciation to both the opening value and new CAPEX – would lead to a lower closing asset value in 2019 (£[ X ]m instead of £[ X ]m, as shown below).

(£m)	2016	2017	2018	2019
Opening asset value	[ X ]	[ X ]	[ X ]	[ X ]
CAPEX	[ X ]	[ X ]	[ X ]	[ X ]
Depreciation	[ X ]	[ X ]	[ X ]	[ X ]
Closing asset value	[ X ]	[ X ]	[ X ]	[ X ]

## 6. Cost of capital

- 6.1. This section sets out the Home Office's comments on the CMA's preliminary decision around the nominal pre-tax weighted average cost of capital (WACC) for the Airwave network.<sup>29</sup>

### Gearing

- 6.2. As set out in the response to the CMA's working paper, the Home Office believes that assuming no gearing is a reasonable assumption. However, if the CMA do keep a non-zero gearing assumption in one of the estimates that form the WACC range for the purpose of the profitability assessment, it needs to be applied to the 'high' rather than 'low' estimate—swapping the CMA's gearing assumptions would give a higher 'high' estimate as well as a lower 'low' estimate. Applying this change would also imply an overall lower mid-point of the cost of capital from 5.5% to 5.1% (without any further changes to the CMA's methodology suggested below).

	CMA provisional decision		Swapped gearing, as proposed by the Home Office <sup>1</sup>	
	Low	High	Low	High
RFR (CPI-real)	-2%	-1%	-2%	-1%
Asset beta	0.35	0.55	0.35	0.55

<sup>29</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix J.

In Confidence  
**Public Version**

Equity beta	0.623	0.55	0.35	0.98
ERP	8.20%	8.50%	8.20%	8.50%
TMR	6.20%	7.50%	6.20%	7.50%
CPI Inflation	2%	2%	2%	2%
Tax	22%	22%	22%	22%
<b>Gearing</b>	<b>50%</b>	<b>0%</b>	<b>0%</b>	<b>50%</b>
Kd pre-tax	2.50%	2.50%	2.50%	2.50%
Kd post-tax	1.95%	1.95%	1.95%	1.95%
Ke post-tax (nominal)	5.2%	5.7%	2.9%	9.5%
Ke pre-tax (nominal)	6.1%	6.8%	3.1%	11.6%
<b>WACC pre-tax (nominal)</b>	<b>4.3%</b>	<b>6.8%</b>	<b>3.1%</b>	<b>7.0%</b>
<b>WACC pre-tax (nominal) mid-point</b>		<b>5.5%</b>		<b>5.1%</b>

Note: <sup>1</sup>The figures show the impact of swapping the gearing and thus still retaining a non-zero gearing assumption in one of the estimates, although the Home Office considers that assuming no gearing is more appropriate. These figures also do not account for other recommendations by the Home Office, including changing the cost of debt and the selected comparators for beta estimation.

### Cost of debt

- 6.3. The Home Office wishes to reiterate the points previously made around matching the maturity of the cost of debt to the contract length (or the life of the asset).<sup>30</sup> The Home Office notes that the CMA agree with matching the maturity of the bonds used to estimate the risk-free rate to the lifetime of the assets, but has not followed the same approach for the cost of debt. This would lead to a decrease in the cost of debt.

### Selection of comparators and betas

- 6.4. The CMA have mentioned that they have put more weight on the utilities comparators (excluding SSE) than the other comparators selected. While the Home Office still disagrees with the inclusion of non-utilities comparators, the Home Office would like to mention that the current approach applied by the CMA gives a disproportionate weight to non-utilities companies in its upper bound estimate solely due to the number of comparators in the sample.
- 6.5. In the upper bound estimate of the asset beta, a simple average of all the nine comparators amounts to an asset beta of 0.57 when measured on a daily or weekly basis and 0.52 when measured on a monthly basis. The CMA appear to take an average of these three estimates to arrive at 0.55, which is used as the upper bound unlevered beta.<sup>31</sup> The use of a simple average, however, implies that the non-utilities comparators have a greater weight in the average simply because there are more of them than utilities comparators. To avoid having an estimate that depends on the number of utilities and non-utilities comparators, the CMA could instead take a mid-point between betas for the two groups. This would result in an asset beta of 0.51 if measured on a daily and weekly basis and 0.46 if measured on a monthly basis – which is 0.49 on average – while still giving some weight to the non-utilities

<sup>30</sup> Home Office (2022), 'Home Office submission and response to working papers', May 2022, p. 25.

<sup>31</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix J, Table J-3 and para 67.

comparators if the CMA consider that to be appropriate. The table below summarises these estimates.

	Daily	Weekly	Monthly	Average
<b>Simple average of comparators' unlevered betas</b>	0.57	0.57	0.52	0.55
<b>Mid-point between utilities (excl. SSE) and non-utilities (incl. SSE) groups' unlevered betas</b>	0.51	0.51	0.46	0.49

- 6.6. Implementing this change alone would lead to a decrease in the CMA's mid-point estimate of the nominal pre-tax WACC from 5.5% to 5.2%. This would increase the estimated amount of excess profits made by Airwave in the extension period, as well as reduce the allowed revenues within the proposed charge control.

## 7. Charge Control

### Summary

- 7.1. The CMA's provisional conclusion that the features of the market identified as giving rise to an AEC have enabled Motorola to charge prices above a competitive level and make supernormal profits is correct,<sup>32</sup> as is the CMA's provisional conclusion that transparency requirements alone are insufficient to remedy this and that a charge control (of some form) is required.
- 7.2. In what follows, the Home Office provides its response to Appendix K of the Report. Appendix K sets out the CMA's views on applying a charge control remedy (which the CMA also discusses in summary form in Section 8 of its main report).<sup>33</sup> The Home Office recognises the careful consideration that the CMA have given to each of the various options for a charge control and is broadly supportive of the CMA's proposals. However, for the reasons explained in the rest of this section, the Home Office draws different conclusions regarding the following:
- a. Scope of the charge control;
  - b. Treatment of non-core services;
  - c. Treatment of Motorola's excess profits between 2020 and start of the price control; and
  - d. Role for service quality and resilience protections.
- 7.3. The rest of this submission is structured according to these themes, with considerable explanation regarding the role for additional service quality protections for the Airwave Network.
- 7.4. The Home Office's view as to whether the CMA have calibrated the charge control appropriately is also set out at the end of this section. Broadly speaking, the Home Office finds this to be the case. One material exception is the treatment of the £[ <

<sup>32</sup> The Home Office responds in full to the CMA's profitability analysis in section 3.

<sup>33</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K; CMA (2022), 'Mobile radio network services - Provisional Decision', Section 8.

£m undepreciated CAPEX between 2019 and 2022. Given Motorola earned excess profits of c. £480m during this period, it is appropriate to exclude this from the RAB.

### **Scope of the charge control**

- 7.5. The CMA's provisional conclusion is that the proposed charge control should apply to the products and services provided by all Airwave Solutions' business lines, subject to a small number of exceptions. The CMA identify these exceptions as Ambulance Bundle 2, Pronto, CCCRS, Radio terminals (except where part of a managed service) and services associated with the development and provision of a new alternative interworking solution.<sup>34</sup> However, the Home Office considers that the charge control should have a broader scope, as explained below.
- 7.6. The Home Office agrees with the exclusion of Pronto and Radio terminals (except where part of a managed service) from the charge control remedy. However, in the case of the Ambulance Bundle 2, the Home Office recommends that this is included within scope of the charge control.
- 7.7. The Ambulance Bundle 2 contract was due to expire on 31 December 2022, but due to the delays in ESN roll-out, it has been necessary to extend this contract with Airwave. Owing to Motorola's position of market power, the Department of Health & Social Care will likely be unable to negotiate competitive rates and, therefore, to mitigate the harm arising from Motorola's position of market power. Accordingly, the Home Office recommends that Ambulance Bundle 2 is also included within the scope of the charge control. The Home Office would encourage the CMA to engage with the Department of Health & Social Care for more information in respect of extensions to the Ambulance Bundle 2 contract.
- 7.8. In terms of CCCRS, the Home Office is concerned that without any intervention by the CMA, Motorola may leverage its ownership of Airwave Solutions to compete at an unfair advantage and foreclose rivals from the delivery of control room solutions. The Home Office requests that effective transparency and access regulation requirements are placed on Airwave to preserve the contestability for CCCRS. The Home Office's concerns in respect of control rooms are discussed further at Section 10, and the Home Office intends to provide a further submission in due course.

### **Treatment of non-core services**

- 7.9. The CMA propose to reduce only the revenue related to core services and leave the charges for non-core services unchanged, while capping the total allowed revenue across all services.<sup>35</sup> In contrast, the Home Office considers that the charge control should be directly applied to non-core charges as well as core charges. This would not change the overall allowed revenue of Airwave, but would rebalance the savings between core and non-core users. The rationale for this is explained below.
- 7.10. The rates agreed on non-core services suffer from the same AEC as the charges for core services, and therefore the same remedy – a reduction in charges – would be appropriate. The CMA's proposal to cap the total allowed revenue but allow Airwave to keep non-core charges at prevailing levels would allow Airwave to continue to earn more than required for non-core services (i.e. to continue to earn excess profits) but earn less than required on core charges, such that no excess profits are made on the overall operations of Airwave.<sup>36</sup> Given that core and non-

---

<sup>34</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 14.

<sup>35</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 82.

<sup>36</sup> Assuming the excess profits are distributed evenly across core and non-core services.



core charges are paid by different parties, those purchasing a higher proportion of core services will underpay, while those purchasing a higher proportion of non-core services will overpay – different purchasers would cross-subsidise each other.

- 7.11. Instead, it would be more appropriate to also impose a charge control on non-core services. For example, the CMA could reduce the core and non-core charges proportionately to achieve the target reduction in the overall revenue. I.e., reduce both core and non-core charges by [X] % to reduce forecast revenue from £[X] m p.a. to £225m p.a. in 2023.<sup>37</sup> This imple adjustment will avoid the cross-subsidisation among the purchasers while still allowing Airwave to earn the same overall revenue.
- 7.12. The CMA propose to keep the allowed revenue constant despite some non-core charges currently being volume-dependent.<sup>38</sup> The Home Office sees two options for this.
- a. Removing the volume-dependency of the relevant non-core service charges (i.e. making their charge fixed), as the CMA suggests. There is a reason to do so in addition to the CMA's consideration that the difference between the forecast and actual volumes is likely to have a limited impact on Airwave's financial performance.<sup>39</sup> It came to the ESMCP's attention that with the negotiation of the extension of the Menu Services (which are non-core) post December 2022, Airwave Solutions imposed one-sided terms in relation to the charges' flexibility. In particular, in the event that the user organisations' needs change so as to require *lower* amounts of service, then Airwave Solutions maintains the originally agreed charges, while if the needs change to require greater amounts of service, Airwave Solutions can increase the charges. Removing any volume-dependency from the charges structure is a practical way around this asymmetry.
  - b. Keeping the current volume-dependence. At the same time, it would be more accurate to allow Airwave to recover higher revenue if a greater volume of service is purchased and lower revenue if a lower volume of service is purchased. In practice, this could be achieved by keeping the current structure of the non-core charges unchanged but reducing their level proportionately to overall Airwave's revenue, i.e. if the charge is currently specified on a per unit basis, it can be still specified on a per unit basis but would be lower. In this case, however, the CMA should ensure that there is no asymmetry in relation to volume-dependency arrangements, as described above.
- 7.13. The Home Office's preferred approach is keeping the current volume-dependence in the charges. Even if the difference between the forecast and actual volumes is unlikely to have a major impact on Airwave (as the CMA observe), this difference for individual user organisations may be significant, and they would appreciate maintaining this flexibility. This flexibility is even more important as users start the transition to ESN and as a result may be less certain about the required volume of service.

### **Treatment of 2020-2023 excess profits**

---

<sup>37</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 167(a).

<sup>38</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 80.

<sup>39</sup> Ibid.

- 7.14. Like the CMA, the Home Office is of the view that the charge control should take effect as soon as possible, and therefore agrees with the CMA that this should be put in place from the first half of 2023 and remain in force until the end of 2029.<sup>40</sup> Unless the Airwave Network is shut down before 2026, a review in 2026 would be appropriate. The Home Office also observes that 2026 is a turning point in Motorola's projections of future CAPEX, i.e. Motorola expects lower Airwave CAPEX after 2026.
- 7.15. However, the Home Office requests that the CMA consider whether it should impose a tighter charge control, or a one-off reimbursement, which has the effect of recovering the overcharge to taxpayers that has already occurred since January 2020, or at least since the Home Office wrote to the CMA expressing its concerns about Airwave Solutions' profitability in April 2021, which led to the opening of this investigation.<sup>41</sup>
- 7.16. The CMA's provisional finding is that, since January 2020, Motorola has been able to earn substantial excess profits to the cost of UK taxpayers and the AEC arising from Motorola's position of market power would be better mitigated if all such excess profits were returned to UK taxpayers. Between 2020 and 2023, the Home Office estimates that Motorola has earned £477m and would have earned a further £1.1bn in the period 2023 to 2029, absent the CMA's proposed charge control remedy.<sup>42</sup> This means that, although the charge control will prevent further harm to UK taxpayers of c. £1.1bn,<sup>43</sup> Motorola's shareholders get to keep the £477m they have already unfairly forced the Home Office and other users of Airwave to pay.

### **Role for service quality and resilience protections**

- 7.17. Motorola's unilateral market power gives rise to broader risks than only excessive profitability and pricing. The inability of the Home Office to switch to an alternative network means that there is little the Home Office can do to incentivise Motorola to maintain the Airwave Network and continue to deliver the necessary high-level of service. The service level agreements currently in place impose standards negotiated before the network was created, were developed over two decades ago when the requirements of the emergency services, in particular policing, were less demanding, and the sanctions are trivial relative to Motorola's revenues, even after taking account of the proposed charge control.
- 7.18. In the past, the Airwave service has, operationally speaking, been satisfactory, but the Home Office has concerns about material amounts of CAPEX, referred to in previous charge negotiations, that, have not been spent by Motorola. While services may not have deteriorated to date, the situation is due to change – assuming that the CMA implement their proposed charge control, Motorola's ability to earn supernormal profits from Airwave will have been removed and its ability to delay the roll-out of ESN diminished – thus its interest in maintaining the network so it can keep earning supernormal profits will be diminished.

---

<sup>40</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, paras 48, 94, 96.

<sup>41</sup> The Home Office notes that the CMA may wish to consider an alternative date from which Motorola supernormal profits should be recovered, for example the date on which the CMA opened the investigation (25 October 2021) or the date the CMA published its consultation on whether to launch a market investigation (8 July 2021).

<sup>42</sup> Calculated as £159m supernormal profit per year, multiplied by the number of years. See CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, para 105.

<sup>43</sup> Noting the Home Office's concern for a review in 2029 (see para 1.14.d).

- 7.19. To address this, the Home Office has identified three small changes that would complement the asset stewardship CAPEX disclosure remedies the CMA have already proposed. To summarise, these changes are as follows:
- a. An enhanced service performance package;
  - b. Asset stewardship and clawback provisions;
  - c. Measures to secure the financial resilience of Airwave.

Further details on these additional remedies are set out in paragraph 7.40 onwards.

- 7.20. First, the Home Office discusses the options for the form of charge control, and the various concerns that need to be balanced in the current context.

### **Form of control**

- 7.21. There are various options for the form of charge control. Although the Home Office favoured a cost-of-service form of control in its previous submission,<sup>44</sup> which is different from the CMA's preferred option in the Report, the Home Office appreciates the CMA's analysis and conclusion that a charge cap form of control, with information provisions, can potentially be more effective. The Home Office accepts this general approach, which would work best when complemented by some additional measures that would limit Motorola's ability and incentives to degrade its service.
- 7.22. The Home Office discussed the advantages and disadvantages of charge caps versus cost-of-service regulation (and hybrid approaches) in detail in its earlier submission.<sup>45</sup> In this response, the Home Office presents a shorter summary.
- 7.23. The appropriate form of control will depend on the objectives of the control, the nature of costs (uncertainty, controllability), and the quality of information.
- 7.24. The Home Office remains of the view that, in order of importance, the main objectives of a charge control (of whatever form) should be to:<sup>46</sup>
- a. reduce Airwave charges to a fair level to deliver cost-savings to taxpayers (reduce profitability, while encouraging OPEX efficiency and prudent CAPEX);
  - b. secure service and asset stewardship, to ensure delivery of what is an essential service for the remainder of its life (in particular through ongoing CAPEX); and
  - c. if possible, deliver transition to ESN (a cheaper alternative with greater functionality and better service).
- 7.25. With regard to the first objective, *ex ante*, any form of charge control (charge cap or cost-of-service, or in-between) will have the effect of eliminating monopoly profits and bringing charges down in line with a competitive level. In this regard, all approaches determine the allowed revenues based on the value of the regulatory asset base (RAB) and apply a fair return on capital (derived from an appropriate weighted average cost of capital or WACC).

---

<sup>44</sup> Home Office (2022), 'Remedies: Charge control and transparency', response to CMA potential remedies working paper.

<sup>45</sup> Ibid. paras 16 – 39.

<sup>46</sup> Ibid. para 17.

- 7.26. Moreover, contrary to Motorola's assertions that a charge control would be too tight, preventing Motorola from undertaking the necessary investments, the Home Office observes that:
- a. allowed revenues are based largely on Motorola projections of required CAPEX, and therefore are not too stringent; and
  - b. the CMA have assumed an OPEX efficiency of only 1% per annum, which is very modest for such an IT-heavy business as Airwave Solutions.<sup>47</sup>
- 7.27. With regard to the second objective above, the key question is: what happens once the baseline revenue allowance has been set? Under a charge cap regime, any underspend is kept by the firm, creating an incentive to cut costs. While costs can be reduced by genuine efficiency, they can also be reduced by not undertaking some activities that were planned when forecasts were provided, hence potentially putting security of service and asset stewardship under risk.
- 7.28. In relation to CAPEX that may be delayed or avoided, the past behaviours of Motorola are instructive, given that Airwave has the same cost-cutting incentive without the charge control. As previously noted in the Home Office's response to the CMA profitability results working paper, Motorola has persistently under-delivered on its CAPEX plans. For the years 2018–20, Motorola forecast CAPEX of £[ X ], but only spent £[ X ]<sup>48</sup> Similarly, as pointed out by the CMA in its Provisional Decision, Motorola spent only £45m in 2021 compared to a forecast of £73m, even though the forecast spend was made in May 2021, i.e. the forecast horizon was very short.<sup>49</sup>
- 7.29. Keeping the cost reduction incentive in mind, the Home Office recommends that additional safeguards with respect to service quality and asset stewardship are introduced; these are explained in the following sub-section.

### **Balancing the concerns**

- 7.30. The cost reduction incentive that Airwave would face is not a new risk introduced by the charge cap regime proposed by the CMA. Motorola currently has the same incentive under the prevailing arrangements where it continues to charge excessive fees, unrelated to its true costs, but tied to the irrelevant outdated original PFI contract. As provisionally found by the CMA, Motorola's conduct means that it benefits from excess supernormal profits.
- 7.31. The ability and incentive for Motorola to charge prices that are above the competitive level stem from its unilateral market power. In a similar vein it also has the ability and incentive to lower service quality or neglect its asset stewardship obligations to cut costs.
- 7.32. A charge cap may address the first issue. However, the incentive to cut costs and take risks regarding the health of the asset is stronger with a charge cap because of a significant decrease in charges, particularly where information asymmetries mean the Home Office, or third-party regulator, cannot detect when prudent, planned expenditure is not undertaken. This issue is less of a concern under a cost-of-service approach where Motorola would not get to keep any underspend and therefore will

---

<sup>47</sup> See para 7.86 below for further details.

<sup>48</sup> Home Office (2022), 'Home Office submission and response to working papers', May 2022, para 45.

<sup>49</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix G, paras 73 - 74.

not have a strong incentive to reduce its costs (see also Figures 1 and 2 of the previous Home Office submission).<sup>50</sup>

- 7.33. The solution might be regarded as two sides of the same coin, and would be to either use:
- a. a cost-of-service approach, but with safeguards to ensure efficient expenditure and to avoid “gold-plating” of CAPEX; or
  - b. a price cap approach, but with safeguards to ensure service standards are maintained and to secure asset stewardship.
- 7.34. The CMA favour the charge cap approach (with additional safeguards), whereas in its previous submission the Home Office favoured a cost-of-service approach (with additional safeguards). In particular, the CMA do not regard the latter approach as adequately addressing concerns around inefficient CAPEX and transfer charging risks (both compounded by Airwave’s internal sourcing of Motorola equipment).<sup>51</sup>
- 7.35. At the same time, the CMA acknowledge the Home Office’s concerns about asset stewardship. The CMA also have concerns around CAPEX forecasting uncertainty. Some important adjustments are therefore made to the charge control approach it favours.
- a. Cost sharing—while the CMA are not in favour of introducing cost sharing for *all* CAPEX due to gold plating and transfer charging concerns, they make a distinction between internal CAPEX (Motorola-supplied equipment) and external CAPEX (non-Motorola sourced equipment provided by third parties). The latter would be subject to a cost-sharing mechanism, to mitigate the CMA’s concern that the charge control might contain CAPEX allowances that are too high. For external CAPEX, the CMA suggest a symmetric cost-sharing mechanism<sup>52</sup> in a 75%/25% (Motorola/users) proportion.<sup>53</sup>
  - b. Information reporting and assurance requirements—to provide the Home Office, CMA and users with information on the CAPEX plan evolution over time. This addition to the charge cap is focused on the concerns regarding CAPEX monitoring and asset stewardship.<sup>54</sup>
- 7.36. In its previous submission the Home Office noted that, if a charge cap were to be adopted, it could be paired with measures related to the capital programme—CAPEX reopeners and charge control deliverables. However, in its provisional decision the CMA states that this would require “detailed upfront specification” of what the charge control should provide for in terms of asset stewardship. The CMA state that this is “not likely to be feasible”, and that it would not be appropriate “to seek to specify up-front the deliverables that the proposed charge control CAPEX allowances should be understood as providing for”.<sup>55</sup>

---

<sup>50</sup> Home Office (2022), ‘Remedies: Charge control and transparency’, response to CMA potential remedies working paper, pages 7 and 9.

<sup>51</sup> CMA (2022), ‘Mobile radio network services - Provisional Decision Appendices’, Appendix K, paras 51 – 52, 62.

<sup>52</sup> Although the mechanism is not 50%/50% it is considered symmetric because whether Airwave’s costs are above or below the forecast, Airwave bears the consequences in the same way, i.e., 75% of underspend and 75% of underspend.

<sup>53</sup> CMA (2022), ‘Mobile radio network services - Provisional Decision Appendices’, Appendix K, paras 62 – 72.

<sup>54</sup> Ibid, paras 58 – 60.

<sup>55</sup> Ibid, paras 57 – 59.

- 7.37. The Home Office suffers an information asymmetry but does not accept that linking CAPEX to deliverables is infeasible. As discussed later,<sup>56</sup> in this section, it is practical to identify, for example, milestones within the critical workstreams associated with retirement and withdrawal of the BT MegaStream services, against which some claw-back could occur in the event of delay or non-delivery.<sup>57</sup>
- 7.38. Instead, as noted in para 7.35.b above, the CMA propose information reporting and assurance requirements around the evolution of the CAPEX programme over time. This would include an obligation on Airwave to provide information to the Home Office and the CMA on material changes to its CAPEX plans (including deviations from CAPEX allowed for within the charge control), an explanation of why such changes have occurred, and an assessment of the future impact on service provision risks and cost requirements.<sup>58</sup> This is better than the status quo but is not adequate.
- 7.39. The Home Office's thinking on proportionate complementary measures that the CMA should impose to incentivise the timely delivery of the CAPEX programme over the remainder of the life of the Airwave Network is set out below.

### **Necessary complementary measures**

- 7.40. The Home Office places significant weight on security of service and asset stewardship as a key objective (in addition to removing excess profits) of any form of charge control. It accepts that information remedies such as those proposed by the CMA are *part* of the solution of augmenting a charge cap. However, the Home Office considers that additional steps are required, given that the incentives for Motorola to underspend or delay CAPEX are material under a charge control. For every £1 that Motorola does not spend, it receives £1 of profit for OPEX and internal CAPEX, and £0.75 for external CAPEX (due to the CMA's proposed cost-sharing mechanism for external CAPEX).
- 7.41. Additional safeguards the Home Office recommends that the CMA include are:
- a. enhancing the requirements such that current levels of service, at both the site level and locally/nationally, are safeguarded and incentivised as business-as-usual, thereby protecting end users (i.e. critical emergency services).
  - b. requiring the provision of regular (half-yearly or quarterly) updates on asset health indicators, and milestone reporting for large, key projects, to complement the CMA's CAPEX monitoring regime, and requesting a clawback of the CAPEX allowances if delivery milestones are not met and CAPEX is not spent.
- 7.42. The Home Office recommends that the CMA consider applying both of these adjustments.
- 7.43. Furthermore, the Home Office recommends additional provisions to improve Airwave's financial resilience by placing the business on a ringfenced standalone basis. Such provisions are commonplace in the context of regulated utilities and, given [redacted], are of particular importance.<sup>59</sup>

---

<sup>56</sup> See paras 7.64 to 7.68 below.

<sup>57</sup> The Home Office notes that the MegaStream programme is but one of several Airwave upgrade programmes.

<sup>58</sup> Ibid, para 59.

<sup>59</sup> [redacted]

- 7.44. We discuss these three proposed measures in turn below.
- a) *An enhanced service performance package*
- 7.45. In its provisional decision, the CMA have decided not to include within the charge control additional provisions related to service quality, given the lack of material issues identified to date (by either the Home Office or Motorola). Indeed, the Home Office noted in its earlier response to the CMA that it was unlikely that such requirements would be needed. Rather, the existing contractual provisions were likely to be sufficient going forward, albeit potentially with some modifications.<sup>60</sup>
- 7.46. However, the Home Office did note that formal quality of service regulation may be needed if, at some future point, there was a significant deterioration in service (for which the control may need to be reopened).<sup>61</sup> The Home Office has since developed its thinking in this area. Further measures to protect against a deterioration in service are necessary, to formalise the existing standards of service.
- 7.47. As noted above, in the same way that Motorola's unilateral market power provides it an ability to charge prices that are above the competitive level, it also has the ability to lower service quality. Moreover, Motorola's incentive to do so could be exacerbated through a pure charge cap.<sup>62</sup>
- 7.48. To provide some context, the existing Airwave contractual service requirements (SLAs) were developed over 20 years ago. There are two key aspects to the existing service monitoring and incentive regime, which cover network outages:<sup>63</sup>
- a. Service Levels—for each emergency service (Police, Fire and Ambulance), these are agreed and measured parameters within which Airwave must provide Network Services at each base station site. Service Levels specify a downtime (or Service Unavailability) threshold for sites, measured in minutes. If Airwave fails to meet these Service Levels, the Home Office is entitled to payment from Airwave in the form of pre-specified Service Credits. The regime for Service Credits varies across the emergency services (i.e. Police, Fire and Ambulance). Harsher penalties can accrue for repeat failures.
  - b. Service Targets—these refer to Service Availability (an overall %) for the various services provided. Separate Service Targets for Radio Voice Services are specified for Police, Ambulance and Fire. Airwave's performance against the target is assessed over a three-month period (for Police) or a one-month measurement period (for Fire and Ambulance). Unlike Service Levels, a failure to meet the Service Targets does not attract Service Credit payments.
- 7.49. Under the Service Level arrangements, Service Credits payable depend on site minutes lost. For example, for Radio Voice Services for Police, Service Credits accrue in three stages, according to site downtime: SC1 [ X ] hours in three months), SC2 [ X ] hours in three months) and SC3 [ X ] hours in three months).

<sup>60</sup> Home Office (2022), 'Remedies: Charge control and transparency', response to CMA potential remedies working paper, para 10.

<sup>61</sup> Ibid.

<sup>62</sup> It is also possible that under a cost-of-service approach Motorola might neglect service quality (for example, Motorola could undertake inefficient expenditure that does nothing to maintain service quality but for example, results in higher transfer charges to the parent group). As such, even under a cost-of-service regime additional safeguards might also be appropriate.

<sup>63</sup> PSRCP Model Services Contract [ X ] Home Office (2022) [ X ], slides.

Total payments due under the Service Credits also depend on the number of sites affected by outages (as a proportion of total area sites), Contract Charges (e.g. charges over 24 hours for SC1), and on the Service Weighting Factor assigned to Radio Voice Services ([redacted]).<sup>64</sup>

- 7.50. Service Targets provide a more macro picture of performance, in the case of Police at the national and force level. The Police service availability target is set at [redacted]% (which equates to a [redacted]-hour outage for a site within a three-month period). However, there is a tighter availability target for GBNR, Fire and Ambulance, of [redacted]% (equivalent to a four-hour outage for a site over a three-month period).
- 7.51. The existing service quality arrangements have been sufficient *to date*. As shown in Figure 7.1, over the past year Airwave's availability performance against the Service Targets (SLAs) over each three-month period has typically exceeded [redacted]%. It has outperformed both the national service availability target and that for the above subset of services. There are occasional major outages and weather challenges that can cause a deterioration in performance (in each case post-incident reviews are undertaken to ensure that lessons are learned).<sup>65</sup>

Figure 7.1: Airwave recent performance against national SLAs

[redacted]

Source: Home Office (2022) [redacted] slides.

- 7.52. Prevailing standards of service expected (and needed) by users are now much higher than those agreed over 20 years ago. As might reasonably be expected given their age, Airwave is generally exceeding the original standards. This naturally raises the question of whether standards (and penalties) set over 20 years ago (in respect of a service that should have already transitioned) remain fit for purpose in terms of representing the level of performance actually required from the service by users currently. Indeed, were service standards to drop to the levels specified in the existing contracts, users (i.e. critical emergency services) would notice an immediate and [redacted] service degradation.
- 7.53. If Airwave fails, officers who might otherwise be on mobile patrol would have to return to the station and wait to be verbally directed to attend an incident, unless the control room were able to use mobile phones. However, mobile phones do not provide a Group Call or red button emergency function required for officer safety, which Airwave provides. Mobile phones will also not be an option when mobile phone networks are overloaded (e.g. New Year's Eve). Therefore, even short periods of Airwave service unavailability can significantly impede critical emergency services. Where there have been wider failures affecting control rooms and sites, such as that which occurred on 22 November 2021 in the Midlands and London, there were very significant impacts on user operations such as [redacted] and using mobile phones as back-up [redacted].
- 7.54. As noted above, the charge control removes considerable excess profit that Motorola has previously benefited from but does nothing to protect service standards. This is because the existing Service Target and Service Level regimes would not deter Motorola from cutting corners as, from its perspective, the costs of doing so (Service Credits paid) would be outweighed by the benefits of cost-cutting (additional profits earned). At present, breaches of Service Targets do not lead to

<sup>64</sup> PSRCP Model Services Contract [redacted].

<sup>65</sup> Home Office (2022) [redacted], slides.



financial penalties and the Service Credit regime (applied to individual sites) results in very modest payments relative to contract value.

- 7.55. For example, the PSRCP contract provides the following examples of penalty amounts (with the actual amounts being formulaically linked to the total charges and hence vary): for an outage of at least [ X ] hours in one base station (SC1), for West Mercia Constabulary, Motorola would be penalised £[ X ], for Lancashire Constabulary the penalty would be £[ X ] and for Greater Manchester Police it would be £[ X ].<sup>66</sup>
- 7.56. In 2020, the Home Office was not in a position to negotiate improvements to the contractual service quality regime, due to Motorola's strength of bargaining power. Going forward, a formal service quality control remedy is required (in a similar way to a charge control remedy being required). This needs to address two issues:
- a. Current sanctions do not provide adequate deterrence. The penalties are far too small compared to the costs of running Airwave and the total annual Contract Charges value (breaches of force or national Service Targets do not result in financial sanctions; Service Credit payments for breaches of Service Levels are very modest); and
  - b. Current sanctions are unfair to users. The potential Service Credits paid are also small relative to the cost to users of outages in critical emergency communications infrastructure (now and in the future).
- 7.57. The Home Office welcomes the CMA's proposal to not allow the absolute amounts of Service Credits payable (where service performance fall short) to lessen as a result of the introduction of its proposed charge control remedy.<sup>67</sup> In the following paragraphs, the Home Office also sets out practical proposals for how Airwave's SLA standards should be recalibrated such that they serve as an adequate safeguard within the charge cap regime. The measures proposed below are aimed at maintaining *existing* standards of service.
- 7.58. In terms of Service *Levels* (for which there is currently a Service Credit regime, applied on an individual force-by-force basis), the Home Office proposes the following:
- a. To retain the current Service *Levels* – i.e. current service unavailability time thresholds would remain at present levels, no requirement to raise the standard;
  - b. Once Service Credits are calculated following the methodology currently specified in the agreement and linked to the allowed revenue under the charge control, apply a factor of 1.8x<sup>68</sup> to keep the level of penalty unaffected by the introduction of the charge control, as per the CMA's intention, but avoid having to calculate the previously expected level of charges;
  - c. In addition to the point above (para. b), to increase the Service Credit 1 amounts by a multiple of 3x in addition to that applied to all other charges, i.e. by a total multiple of 5.4x. The current SC1 is calculated as a 24-hour

<sup>66</sup> PSRCP Model Services Contract [ X ].

<sup>67</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 24.

<sup>68</sup> Calculated as £[ X ]£225m based on the expected revenue in 2023 pre and post charge control applied to the full year. CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 167(a).

equivalent of the annual charges that could be associated with the corresponding base station (i.e. the total charge of the relevant Police force, divided by the number of base stations), adjusted for the service weighting factor that is at most 1x.<sup>69</sup> In other words, even after multiplying it by 1.84, as per para. 7.58.b, this is at most 0.5%,<sup>70</sup> of the corresponding Airwave's revenue, 0.7% of OPEX,<sup>71</sup> or [ X ]% of RAB<sup>72</sup> – a very modest payment however one measures it.

- 7.59. In terms of Service *Targets* (for which there is currently no Service Credit regime i.e. no penalty for not reaching them), the Home Office proposes:
- a. To upgrade targets for Police ([ X ]%) to those currently required for Fire and Ambulance ([ X ]%). Note that this is lower than what is currently being achieved across services (which is closer to [ X ]%).
  - b. To keep the assessment period, (i.e. three-month in the case of Police, or one-month in the case of Fire and Ambulance), unchanged.
  - c. To upgrade all targets to a Service Level, with an associated Service Credit payable in the event that this is not achieved. For Police, this would be assessed on a force-by-force basis, with payments made to the relevant force when the target is not met.
- 7.60. The Home Office proposes that the new Service Target regime should have a “sliding scale” Service Credit where the value of the service credit increases the greater the percentage availability figure is below the new [ X ]% target for Police force services. For example, for each 0.01% loss of availability below [ X ]%, the Service Credit value could be related to the current Stage 1 Radio Voice Services Service Credit (SC1) payments. The details of this mechanism are still being explored by the Home Office, and further information will follow.
- 7.61. These changes to ensure that existing standards are maintained will not require further investment funding allowances. In a well-functioning competitive market, it would be expected that service standards would improve over time. In the case of monopoly network infrastructure, while additional funding may initially be needed to improve performance, over time the established level of performance will become “business as usual”.
- 7.62. In the case of Airwave, existing observed service availability standards – which outperform the current Service Targets – are indeed now business as usual. These standards are what the Police, Fire and Ambulance services have come to expect and which need to be maintained for an operationally acceptable service. If service standards drop to the currently contracted level, there would be [ X ] on service as perceived by end users (i.e., the Emergency Services).
- 7.63. The CAPEX required to deliver what are now the prevailing observed standards has been funded in the past. Only the Police service target is increased as part of these measures (to [ X ]%). This new target for the Police service will also continue to be assessed on a quarterly basis, thereby smoothing out any shocks (such as extreme

---

<sup>69</sup> PSRCP Model Services Contract [ X ].

<sup>70</sup> Calculated as 1.8/365.

<sup>71</sup> Calculated based on 2023 proposed OPEX, £164m (£139m + £25m). CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 122 and Table K-3.

<sup>72</sup> Calculated based on 2023 proposed allowed revenue, £225m, and 2023 opening RAB, £[ X ]m (£[ X ]m + £[ X ]m). CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, paras 152 and 165.

weather events). Therefore, the above measures would not lead to a need for additional investment.

*b) Asset stewardship and clawback provisions*

- 7.64. It is for Motorola to develop and manage its investment programme, in order to deliver the required service over the remaining life of the Airwave Network. Ideally a purely output-based regime, as described above, would be sufficient to protect against underinvestment and to maintain asset health under a charge cap regime.
- 7.65. However, some form of input monitoring may also be needed. There is an information asymmetry in terms of monitoring whether the activities of the business places service at risk. While cuts to OPEX that risk service quality will feed into network outages fairly rapidly, reductions in CAPEX may only have a delayed effect on asset health, with service impacts in the future.<sup>73</sup>
- 7.66. The Home Office acknowledges that the CMA's proposed adjustment to its proposed charge cap regime—to introduce information reporting and assurance requirements around the CAPEX programme—is an important part of the solution. Where there is variation against planned CAPEX, Motorola must provide an “...assessment of the implications the deviations may have on future service provision risks and cost requirements”.<sup>74</sup>
- 7.67. This information requirement could be enhanced through further specification and agreement on what a “clear and timely” manner is, and what are “material levels” and “material changes”.
- 7.68. However, the Home Office is of the view that the informational remedy proposed by the CMA could be supplemented with two additional measures:
- a. reporting and monitoring on asset health – Airwave is a critical piece of national infrastructure and parts of the infrastructure are also over 20 years old. It is important that Motorola undertakes the activities required to maintain asset stewardship (including discretionary investment). The Home Office recommends that the CMA require Motorola to provide the Home Office with documentation that explains how it monitors and reviews the health of the Airwave Network. It expects Motorola to have such a policy already in place – in particular, the existing engineering forum between the Home Office and Airwave, which is currently run twice-yearly, presents as example of that. This forum could be built upon to cover such issues. Asset health reporting could be a twice-yearly exercise or, alternatively, could be quarterly.
  - b. project milestone monitoring and incentives – there are certain large elements of the Airwave CAPEX programme that have already been specified by Motorola in some detail upfront. These include work associated with the MegaStream retirement and replacement (the largest CAPEX item), switch upgrades and transmission changes. If, for example, the MegaStream-related CAPEX is not undertaken before the MegaStream service is switched off (expected in 2025), this will seriously impede Airwave's service.

---

<sup>73</sup> Home Office (2022), 'Remedies: Charge control and transparency', response to CMA potential remedies working paper, paras 11, 25.

<sup>74</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 59.

- 7.69. On the latter, in its Provisional Decision, the CMA were not in favour of introducing charge control deliverables in relation to the levels of asset stewardship provided for.<sup>75</sup> However, the Home Office is of the view that it would be feasible and appropriate to link remuneration to key milestones in the case of large capital programmes, i.e. if milestones are not met and CAPEX is delayed or not spent, the relevant CAPEX allowance should be clawed back.
- 7.70. The Home Office proposes that such milestones are monitored and, where these are not met, remedial actions by Airwave would be required at the relevant time. The potential for clawback would be assessed in the 2026 charge review, based on the achievement (or not) of milestones, any remedial actions taken, and the associated outturn CAPEX versus that allowed for in the charge control.
- 7.71. In the event that, for the particular capital programme concerned, the identified CAPEX underspend has implications for future CAPEX requirements from 2026 onwards, the relevant funding would be ring-fenced until the next review (currently set for 2029) and would be subject to the same milestone and clawback provisions discussed above.

*c) Measures to secure the financial resilience of Airwave*

- 7.72. Airwave is a monopoly provider of essential services. In the case of UK monopoly network utilities (such as water, energy networks and rail infrastructure), providers of these essential services are subject to various licence conditions. These include ring-fencing provisions to protect the regulated business. The precise ring fence licence conditions vary from regulator to regulator. Generally speaking, the measures are designed to ensure that the company has sufficient financial and managerial resources to carry out its activities (including the CAPEX programme).
- 7.73. Licence conditions include provisions related to activity, corporate governance and resources; as well as provisions to isolate the essential business from financial difficulties at the parent level, and to ensure sufficient capitalisation of the essential business.
- 7.74. A recent UKRN report, published in July 2022, summarised the provisions typically adopted by sector regulators. These include:<sup>76</sup>
- a. Restrictions on disposal of assets;
  - b. Restrictions on activity and financial ring fencing;
  - c. Requirement to annually provide certification of availability of resources and at each dividend declaration;
  - d. Ultimate holding company undertakings;
  - e. Requirement to maintain an investment grade credit rating;
  - f. Restrictions on indebtedness;
  - g. Independent licensee directors;
  - h. Restrictions on granting of security over network assets;
  - i. Insolvency provisions.
- 7.75. Not all of these requirements are of relevance. While Airwave does not have debt on its balance sheet, which means that the concept of an investment grade credit rating does not apply in a literal sense, the concept can be adjusted in the case of

---

<sup>75</sup> Ibid, paras 57 – 59.

<sup>76</sup> UKRN (2022), 'Cost of Capital – Annual Update Report', Information Paper.

Airwave through a metric scaled to some other measure to ensure financial resilience.

- 7.76. In particular, to secure its ability to finance its functions going forward, there will need to be a commitment for Airwave to maintain an adequate equity buffer to ensure financial resilience to shocks and to facilitate the necessary investment. Airwave should be ring-fenced as a standalone entity, and if needed would require an equity injection into the business to protect it in the event of overspend. There is also the potential to limit distributions back to Motorola through lock-up provisions. For example, the CMA could place a requirement on Airwave's level of equity compared to its operational needs, e.g. require Airwave to maintain a book equity level equivalent to at least six months of its OPEX.
- 7.77. This is particularly important given that Airwave may benefit from unspent CAPEX allowances – under the approach proposed by the Home Office, those benefits will be clawed back at the end of the charge control, and to ensure that the funds are available for that clawback, they need to be ring-fenced.
- 7.78. This is all the more urgent given the [redacted] as a consequence of the Provisional Decision, despite the charge control legitimately setting an allowed return at the competitive level. In a recent letter to the Home Office the [redacted] of Motorola states: [redacted].<sup>77</sup>

#### **Calibration of the charge control**

- 7.79. This subsection sets out the Home Office's review as to whether the CMA have calibrated the building blocks of the charge control correctly.
- 7.80. Overall, the Home Office agrees with the CMA's approach to determining the revenue allowance baseline, which, the Home Office observes, is based on the standard building block approach adopted by a number of regulators. The CMA have taken as a starting point the OPEX and CAPEX requirements as projected by Motorola. The CMA have then carefully considered these forecasts, making adjustments where these are in its view justified—for example, it adjusted the level of OPEX to ensure that transactions between Airwave and Motorola reflect their economic cost.<sup>78</sup>
- 7.81. While OPEX feeds directly into the revenue allowance, CAPEX is reflected in allowed revenues using the standard RAB/WACC approach. Total allowed revenues reflect the sum of OPEX, depreciation and a benchmarked fair return on capital.<sup>79</sup>
- 7.82. While the Home Office generally agrees with the calibration of the charge control proposed by the CMA, there are a number of refinements suggested below that would lead to a decrease in allowed revenues.<sup>80</sup>
- a. The Home Office believes the OPEX allowance to be generous given that Airwave has already achieved a lower level of OPEX in 2018 (when compared in 2021-CPIH-real terms).

---

<sup>77</sup> [redacted].

<sup>78</sup> CMA (2022), 'Mobile radio network services—Provisional Decision Appendices', Appendix H and Appendix K, Table K-2.

<sup>79</sup> CMA (2022), 'Mobile radio network services—Provisional Decision Appendices', Appendix K, Figure K-3.

<sup>80</sup> These comments are limited to the description of the charge control provided in the Provisional Decision Appendix K, as the Home Office did not have access to the charge control model produced by the CMA.

- b. The efficiency assumption of OPEX is more similar to efficiency assumptions set in the water and energy sectors, rather than efficiency assumptions set in the telecoms sector—thus giving further evidence that the OPEX allowance is generous.
- c. The OPEX allowance should not include the costs related to the (existing) interworking solution.
- d. The opening RAB set by the CMA includes undepreciated CAPEX between 2019 and 2022. Given that the CMA have determined that Airwave has earned excessive profits between 2020 and 2022—which were large enough to write off any CAPEX in the year it was incurred—including this CAPEX in the opening RAB effectively allows Airwave to recover these amounts for a second time from the taxpayer.
- e. The level of working capital assumed by the CMA is not well justified and is higher than supported by the level of working capital in Airwave’s financial statements.

**OPEX**

- 7.83. As indicated above, given that OPEX allowances are based on actual OPEX levels of Airwave – after making adjustments for transfer charges adjustments and out of scope activities – the Home Office believes that these are likely to be more than adequate and certainly not too tight.
- 7.84. The Home Office notes that, based on the CMA’s analysis, there was a jump in OPEX (after removal of transfer charges and out of scope activities) between 2018 and 2019 of over £15m (c. 12%).<sup>81</sup> This may have been linked to the considerable increase in headcount that the Home Office has already pointed towards in the previous submission, which remains unjustified.<sup>82</sup>
- 7.85. The level of OPEX in 2021, based on which the CMA have provisionally set the OPEX allowance for the charge control, is closer to the 2019 than to the 2018 level. This is true even if comparing the levels in real terms (e.g. in 2021 CPIH-real prices), as shown in Table 7.1 below. The Home Office does not see any reason why the 2018 level of OPEX would be unattainable for Airwave from 2023. Therefore, the Home Office believes that CMA’s OPEX allowance is quite generous.

Table 7.1 Airwave’s OPEX

(£m)	2018	2019	2020	2021
OPEX after transfer charging and out of scope activities	129	145	148	142
CPIH Inflation <sup>1</sup>	n.a.	1.7%	1.0%	2.5%
OPEX (2021 CPIH-real terms)	136	150	152	142

Source: <sup>1</sup> ONS (2022), ‘CPIH Annual Rate 00: All Items 2015=100’, available: <https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/155o/mm23>

<sup>81</sup> CMA (2022), ‘Mobile radio network services - Provisional Decision Appendices’, Appendix K, Table K-2.  
<sup>82</sup> Home Office (2022), ‘Home Office submission and response to working papers’, May 2022, p. 16.

- 7.86. The OPEX efficiency assumption of 1% is also conservative (i.e. generous to Airwave). For context, Ofwat and Ofgem set the efficiency targets slightly higher than that set by the CMA for Airwave, at 1.1% and 1.25% in PR19 and RIIO-2 respectively, even though the sectors to which these apply are mature, have been working on their cost efficiency for decades and therefore may have relatively little room for efficiency improvements.<sup>83</sup> Furthermore, in Ofcom's cost model for copper, they set efficiency assumptions related to OPEX considerably higher, between 3% and 5%.<sup>84</sup> Put differently, starting from an OPEX base of £142m, it would take around four years of the assumed efficiency (1%) to reach a similar OPEX level to that which Airwave already attained in 2018 (£136m).<sup>85</sup> This further reflects that the current efficiency assumption set by the CMA is not too tight.
- 7.87. The Home Office would also like to point out that the current allowed revenues for OPEX include the current cost of providing the interworking solution. In the case that the alternative interworking solution replaces the current one, Airwave should no longer be remunerated for the costs of the current interworking solution, and the allowed OPEX provision should decrease as a result.
- 7.88. In addition, the Home Office has concerns about the illustrative example given by the CMA in relation to the indexation of OPEX. The CMA explain that the OPEX allowance for 2023 is set at £139m in 2021 prices, and may increase by c. £25m when expressed in nominal terms, based on applying an inflation rate of 8.2% twice, which was the 12-month inflation rate up to June 2022.<sup>86,87</sup> The Home Office requests the CMA to confirm whether, in practice, the average inflation rate for calendar years 2022 and 2023 will be used to index the OPEX allowance. For example, if the average outturn inflation for 2022 and 2023 is 8.5% and 4% respectively, then the 2023 OPEX allowance inflation adjustment should be £18m rather than £25m.<sup>88</sup>

#### *Allowed return*

- 7.89. The Home Office's comments on the cost of capital are discussed separately in section 6 and would all apply to the cost of capital set for the charge control.
- 7.90. The Home Office agrees with the CMA's view of assessing the cost of capital for the charge control with no gearing, as this most closely follows the actual structure of Airwave. The Home Office also agrees with the CMA's use of the cost of capital estimated as at 2019. Setting the WACC as at 2019 is correct given that this is when Motorola made the financing decision to fund Airwave for the extension period. This approach is also consistent with the approach taken for the profitability assessment.

#### *RAB*

- 7.91. The Home Office notes that the CMA have included a proportion of CAPEX between 2019–22 in the opening RAB value of Airwave. In particular, the CMA say that there was £[ X ] of undepreciated CAPEX at the end of 2022 that must be added to the

<sup>83</sup> Ofgem (2020), 'RIIO-2 Final Determinations - Core Document', 8 December, p. 48.

Ofwat (2020), 'Reference of the PR19 final determinations: Cost efficiency – response to common issues in companies' statements of case', May 2020, p. 79.

<sup>84</sup> Ofcom (2021), 'Promoting investment and competition in fibre networks: Whole Fixed Telecoms Market Review', 18 March, para A14.103.

<sup>85</sup>  $£142m * (1-1\%)^4 = £136m$ .

<sup>86</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 122 and Table K-3.

<sup>87</sup>  $£25m = (£139m * (1+8.2\%) * (1+8.2\%)) - £139m$ .

<sup>88</sup>  $£18m = (£139m * (1+8.5\%) * (1+4\%)) - £139m$ .

opening RAB, leading to an annual payment of £[ X ] in the allowed revenues to allow Motorola to recover this CAPEX.<sup>89</sup>

- 7.92. This approach effectively charges the taxpayer twice for CAPEX spent in this period. Airwave was already paid (excessively) for the CAPEX between 2020–22 – it generated excessive profits of c. £480m during this period – and by including the undepreciated CAPEX in the RAB, the taxpayer will be charged again.
- 7.93. The CMA also propose including £[ X ] of working capital in the opening RAB. This value does not affect the depreciation allowance but adds to the allowed return to reflect the financing costs associated with working capital. The CMA then deduct it from the closing value. While the CMA note that £[ X ] is the closing working capital provision used in their profitability modelling – calculated as the sum of all changes in working capital over the extension period – the Home Office has concerns about this representing an efficient level of working capital.
- 7.94. As shown in Table 7.2 below, between 2018 and 2020, Airwave’s working capital – if simply defined as current assets less current liabilities based on statutory accounts – ranged between £19m and £80m. However, a significant proportion of this is cash, which is often removed from the calculation of the working capital or at least is adjusted for the amount of excess cash, i.e. removing everything above the level that is strictly required for operating the business. If cash is removed, then the working capital is, on average, close to zero between 2018 and 2020, suggesting the CMA’s estimate of the working capital is likely to be above the efficient level. Finally, Airwave also has large intergroup balances but, as per the CMA’s assessment of the transfer charge between Airwave Solutions and Motorola, they are not always undertaken on an arms’ length basis and intergroup balances also may be affected by that. Removing these internal balances and relying only on the external balances to ensure robustness of the estimates decreases the working capital further, such that the working capital is negative between 2018 and 2020.

Table 7.2 Airwave’s working capital

(£m)	Calculation	2018	2019	2020
<b>Current assets less current liabilities</b>	<b>[A]</b>	19	51	80
Cash	<b>[B]</b>	38	29	76
<b>Current assets less current liabilities (excl. cash)</b>	<b>[C] = [A] – [B]</b>	(19)	22	3
Group balances (Group debtors less group creditors)	<b>[D]</b>	16	51	16
<b>Current assets less current liabilities (excl. cash and group balances)</b>	<b>[E] = [C] – [D]</b>	(35)	(29)	(13)

- 7.95. While some level of working capital may be relevant, the CMA should take care in ensuring that the level of working capital that is funded is actually necessary for the operation of Airwave. As demonstrated above, £[ X ] used by the CMA appear to be above the required level.

<sup>89</sup> CMA (2022), ‘Mobile radio network services - Provisional Decision Appendices’, Appendix K, Table K-7 and para 154.



## CAPEX

- 7.96. The Home Office's comments on the adjustments to the level of CAPEX can be found in the profitability section [X]. In this sub-section, the Home Office comments on CAPEX in the context of the mechanics of the charge control.
- 7.97. Overall, the Home Office agrees with the CMA's proposal to evenly spread the recovery of the total amount of CAPEX allowed for recovery under the charge control between 2023 and 2029.<sup>90</sup>
- 7.98. However, the Home Office would like to clarify the approach to the indexation of new CAPEX. The Home Office assumes that the CAPEX forecast provided by Motorola is already in nominal terms, as the CMA describes this forecast as reflecting "relevant outturn costs".<sup>91</sup> The Home Office would like to point out that if these (nominal) CAPEX amounts are added to the RAB and are subsequently indexed, then the CMA will double count inflation related to CAPEX. In other words, the value of the corresponding depreciation allowance, if meant to be expressed in real terms (currently estimated by the CMA to be £33m<sup>92</sup>), should be based on the CAPEX forecast expressed in real terms.

## 8. Interworking

### Introduction

- 8.1. An interworking remedy is an essential contribution to the resolution of the features of the market giving rise to AECs and harm. Absent an effective interworking remedy, Motorola will remain free to act on its continuing incentive to delay the transition of Airwave Network Users to the ESN. The Home Office therefore agrees with the CMA's provisional decision to impose an interworking remedy.
- 8.2. As the CMA notes,
- "[a]n interworking solution is required to enable the transition from the Airwave Network to ESN and Motorola has a key role in delivering it."*<sup>93</sup> and that *"[i]f Kodiak is to be replaced with an alternative MCPTT application, an alternative interworking solution is required for the transition to ESN."*<sup>94</sup>
- 8.3. The circumstances around the delivery of the ESN Lot 2 services, including the MCPTT application, Kodiak, are developing and the factual position is likely to change. As the CMA is aware:
- a. Motorola has stated that it will not take part in ESN beyond 2024, when the current ESN Lot 2 contract expires;<sup>95</sup>
  - b. [ X ]
  - c. The Home Office has concluded that if ESN is to proceed, then the Home Office has no alternative other than to procure an alternative supplier of the

<sup>90</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 163.

<sup>91</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, para 142.

<sup>92</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Appendices', Appendix K, Table K-8.

<sup>93</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Report', para 5.107.

<sup>94</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Report', para 5.109(a).

<sup>95</sup> See, for example, [ X ] letter [ X ] of 16 November 2021, where [ X ] commented that Motorola "[ X ]." That position was caveated, "[ X ]." However, the Home Office understands that since that letter, Motorola's position has hardened and Motorola has no intention to take part in ESN, whether or not Airwave divestiture ceases to be a potential remedy.

ESN Lot 2 services. In this respect, the CMA is aware that the Home Office has published a Procurement Information Notice and is currently gathering information from potential vendors in advance of commencing a procurement process in 2023; and

- d. As the CMA is aware, the Home Office and Motorola, at Motorola's instigation, have been discussing and continue to discuss, [ X ]. Those discussions include, amongst other issues, [ X ];

8.4. Against this uncertain backdrop, in this section the Home Office provides:

- a. its views on the CMA's proposed interworking remedy, including responding to the CMA's two specific questions in respect of the interpretation of the words "*timely*" and "*effective*" in the CMA's proposed interworking remedy; and
- b. should the Home Office and Motorola, [ X ], agree the provision of certain interworking measures by Motorola or a Motorola input into an interworking plan provided by the Home Office or a third-party supplier to the Home Office, before the CMA's Final Report and an interworking remedy Final Order, an explanation as to why the Home Office remains of the view that there remains a real need for such a remedy.

8.5. Given the Home Office [ X ] the Home Office reserves the right to provide further submissions to the CMA in respect of the need for an interworking remedy [ X ].

#### **The proposed interworking remedy**

8.6. The Home Office notes that the CMA is proposing a two-part interworking remedy:

*"(a) [a]n obligation on Airwave Solutions and Motorola to deliver, and/or facilitate the development and delivery of, an alternative interworking solution in a timely and effective manner, and in line with requirements identified by the Home Office, if requested to do so by it; and*

*(b) a requirement to provide the services involved in the development and use of the alternative interworking solution on a cost cost-plus basis."<sup>96</sup>  
[Emphasis added.]*

8.7. Subject to the Home Office's comments that follow, the Home Office agrees that this is a sensible and pragmatic approach to ensure the provision of an interworking solution, and that understandably avoids the need for the CMA to make technical decisions about the form the interworking solution should take, decisions that the parties may be best placed to make.

#### *The obligation to provide an interworking solution*

8.8. The Home Office understands that, under the proposed remedy:

- a. it would be for the Home Office (or a third-party acting on the Home Office's behalf) to request a particular form of interworking from Motorola (including Airwave Solutions); and

---

<sup>96</sup> Ibid, para 8.69.

- b. then Motorola would be required to discuss the interworking request, with Motorola additionally being required to provide all information reasonably necessary for such discussions to progress and an agreement to be reached.

However, the Home Office understands that provided the interworking request is reasonable – including considering the timing required to enable transition of users from the Airwave Network to the ESN and the complexity of the interworking solution – that Motorola would be required to provide the solution (or input into the solution).

- 8.9. However, the Home Office is concerned that it may be necessary for any agreed interworking solution (or input into a solution) to be changed, modified or replaced; for example, if technical difficulties arise that cause delay or prevent the delivery of the intended solution, such that it becomes undeliverable. The Home Office would therefore ask that the interworking remedy include a requirement for any reasonable change, modification, extension, or replacement to an agreed solution (or agreed input into such solution) to also be provided by Motorola.
- 8.10. The CMA invites views on how “*timely*” and “*effective*” should be interpreted in the context of the CMA’s proposed remedy.
- 8.11. In respect of “*timely*”, the Home Office considers that it would be difficult to stipulate a specific date by when the remedy should be available and a specific date by which the remedy should end. The Home Office is just at the start of the process of letting a new Lot 2 contract to replace Motorola, including (if necessary) obtaining an alternative third-party vendor to provide a new interworking solution (utilising Motorola inputs) in the event Motorola does not provide the full solution. While the Home Office has an indicative timeline for completion of the Lot 2 services re-lotting exercise and subsequent delivery of the ESN, such that transition can commence, it is not possible at this stage to say with any accuracy when transition will start and when it will complete.
- 8.12. In the circumstances described in paragraph 8.11, the Home Office considers it would be appropriate to define “*timely*” as meaning,
- “that the alternative interworking solution (or input(s) to that solution) is in place so as to enable and not delay the transition of users from the Airwave Network to the ESN and remains in place until the transition is complete.”
- 8.13. Turning to “*effective*”, the Home Office considers that this should be defined by reference to the desired outcome and considers that the example given by the CMA would be suitable, that is,
- “*as meaning that the alternative interworking solution [or input to that solution] should deliver the function of connecting the Airwave Network to the ESN [or the ESN Gateway (for example)] enabling the transition between networks.*”<sup>97</sup>
- 8.14. The Home Office agrees with the CMA’s provisional view that,

“*the obligation should be treated as obliging Airwave Solutions and Motorola to take all steps necessary to facilitate the delivery of a solution, including deploying resources, making key personnel available, and incurring costs associated with the provision (or facilitating the provision) of*

---

<sup>97</sup> Ibid, para 8.71(b).

*the solution, within such timetable as the Home Office reasonably requests.”<sup>98</sup>*

However, the Home Office considers that such a list should not be regarded as an inclusive and complete list of those things that are required to be provided for the solution (or input) to be effective (see, for example, paragraph 8.9 above and paragraph 8.15 below **Error! Reference source not found.**).

- 8.15. Further, since an interworking solution may be provided by a third-party vendor, under contract to the Home Office, and by Motorola, the Home Office considers that it will be necessary to make clear that the “*obligation should require Airwave Solutions and Motorola to cooperate with that party as necessary regarding the relevant interfaces and connectivity within the same timetable.*”<sup>99</sup> This is particularly important noting there may be a need for licences and other support from Motorola (for example, as described in paragraph 8.12). And / or the need for access to the fully supported and documented APIs and the associated test and reference capabilities (for example, as described in paragraph 8.20).

#### *Cost basis and transparency*

- 8.16. The Home Office agrees with the CMA’s provisional view that cost-plus in the context of an interworking solution (or an input(s) into the solution) should be interpreted in line with the following principles:
- a. The recoverable costs should be limited to those incurred in the delivery of the interworking solution (or the input to the solution) that are incremental to the costs otherwise included in the charge control covering Airwave Solutions other services and products.<sup>100</sup>
  - b. In addition to the costs not recoverable under sub-paragraph a above, to avoid double-recovery, the Home Office would also seek to exclude from the recoverable costs any cost that are or should reasonably be recovered as part of the ICCS (control room) product / service or by PRONTO.
  - c. The Home Office also agrees with the CMA’s provisional view that where services and / or equipment is sourced from other parts of Motorola, that these are charged on a basis consistent with an arms-length transaction and consistent with the CMA’s provisional transfer charging requirements<sup>101</sup>, and the return on capital should be consistent (i.e., the same) as that used in the proposed charge control.<sup>102</sup>
- 8.17. The Home Office further agrees with the CMA’s provisional view that Motorola should be subject to annual reporting and transparency requirements.<sup>103</sup>

#### **Negotiation of interworking solution (or input to an interworking solution)**

- 8.18. The CMA’s provisional assessment is based on two distinct scenarios: (1) Kodiak remaining the MCPTT application used by the ESN; and (2) an alternative third-party

---

<sup>98</sup> Ibid, para 8.72.

<sup>99</sup> Ibid, para 8.71.

<sup>100</sup> Ibid, para 8.74(a).

<sup>101</sup> Ibid, para 8.74(b).

<sup>102</sup> Ibid, para 8.74(c).

<sup>103</sup> Ibid, para 8.75.

MCPTT application being used by ESN.<sup>104</sup> This section, so far as the Home Office is currently able, provides the Home Office's view on the continuing negotiations between Motorola and the Home Office and thus the second of these two scenarios.

*Interworking contractual arrangements*

- 8.19. The original Framework Arrangement did not include terms for the delivery of an interworking solution as part of contractual arrangements for migration of Airwave Network Users to that network's replacement at the end of its life. The absence of such terms was identified by the Home Office as a risk as part of the development of ESN. The Home Office subsequently sought from Motorola a detailed proposal for interworking in 2016 and, again, as part of the ESN Reset, in 2018.<sup>105</sup> However, these arrangements focused on interworking between two Motorola services, i.e. between the Airwave Network and Motorola's MCPTT inputs into ESN, initially WAVE 7000 and, subsequently Kodiak, but not a third-party MCPTT provider (as now envisaged in scenario 2).
- 8.20. The only contractual basis for an interworking solution is set out at paragraph 21 of the Home Office's Interworking Submission of 28 April 2022.

*Interworking negotiations*

- 8.21. Following the CMA Board's ordinary reference of 25 October 2021, the publication of the CMA's Issues Statement on 13 December 2021 and the failure of Motorola's application to review the ordinary reference on 2 February 2022, Motorola suggested to the Home Office that the parties should [REDACTED].
- 8.22. [REDACTED].
- 8.23. The Home Office [REDACTED] sought from Motorola an interworking solution that would replicate the solution built by Motorola and that enabled the interworking between the Airwave Network and Kodiak.
- 8.24. On 30 September 2022, Motorola proposed an alternative 'managed service' and a very different way to achieve interworking.<sup>106</sup>
- 8.25. [REDACTED].

*Motorola's interworking proposal*

- 8.26. Essentially, Motorola is proposing to supply a managed service to the Home Office whereby [comments on the ongoing negotiations] [REDACTED]<sup>107</sup>
- 8.27. [REDACTED]<sup>108</sup>; [REDACTED].
- 8.28. [REDACTED].<sup>109</sup> [REDACTED]<sup>110</sup>

*The Home Office's view of Motorola's proposal*

---

<sup>104</sup> Ibid, para 8.58.

<sup>105</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Report', paras 5.114 - 5.116.

<sup>106</sup> Proposal for Interface towards ESN v1.docx, pdf (30 September 2022), para 1.7

<sup>107</sup> [REDACTED].

<sup>108</sup> [REDACTED].

<sup>109</sup> Proposal for Interface towards ESN v1.docx, pdf (30 September 2022), para 1.3.

<sup>110</sup> Ibid.

- 8.29. In an ideal world Motorola would provide a full interworking solution into which the ESN can simply connect, using public standards. However, Motorola's [REDACTED]. The Home Office explained in its Interworking Submission what it considered was necessary for an effective solution.
- 8.30. To connect the Airwave Network to the ESN, it is necessary to develop a 'gateway' that enables communications passing between the two networks to be effectively processed and managed, i.e. translated. In the case of Kodiak, Motorola is responsible for providing the whole interworking solution, including the gateway.<sup>111</sup> [REDACTED].<sup>112</sup>
- 8.31. It is currently unclear [REDACTED]<sup>113</sup> [REDACTED].<sup>114</sup>
- 8.32. [REDACTED].<sup>115</sup> [REDACTED].
- 8.33. [REDACTED].<sup>116</sup> [REDACTED].<sup>117</sup>
- 8.34. Motorola is proposing to [REDACTED].<sup>118</sup>
- 8.35. Motorola's proposal explains,  
[REDACTED]<sup>119</sup>  
The Home Office, concerned that [REDACTED] Further, the Home Office is concerned as to whether [REDACTED].<sup>120</sup>
- 8.36. Finally, Motorola highlights [REDACTED].<sup>121</sup>  
*The need for an interworking remedy notwithstanding PIMS*
- 8.37. [REDACTED], the Home Office believe that an interworking remedy remains essential for the following reasons:  
It is unclear whether [REDACTED] will work, or work well enough
- 8.38. While the Home Office is reassured by Motorola's comment that,  
"[REDACTED]"<sup>122</sup> [REDACTED].<sup>123</sup>  
the Home Office is nonetheless concerned that [REDACTED].
- 8.39. The Home Office considers therefore that there is a significant risk that any [REDACTED] may even need to be replaced with either an alternative interworking solution

---

<sup>111</sup> CCN171 (as amended).

<sup>112</sup> [REDACTED].

<sup>113</sup> [REDACTED].

<sup>114</sup> [REDACTED].

<sup>115</sup> Para 1.5, Motorola's proposal.

<sup>116</sup> [REDACTED].

<sup>117</sup> Ibid, para 1.6.

<sup>118</sup> Ibid, para 1.7.

<sup>119</sup> Ibid, para 1.8.

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

<sup>121</sup> Ibid, para 1.9.

<sup>122</sup> Ibid, para 2.13.

<sup>123</sup> Ibid.

provided by Motorola, or an alternative input provided by Motorola into an alternative interworking solution provided by the Home Office, and that without an interworking remedy, Motorola may refuse to do so. It is also unclear how much assistance or support services will be required from Motorola to [REDACTED] by the Home Office.

- 8.40. Therefore, the Home Office considers that an interworking remedy is required to ensure that, if required, there is a mechanism to ensure that the Home Office can obtain any future necessary interworking solution (or input into an alternative interworking solution) from Motorola. There is a further risk that Motorola could withdraw [REDACTED] or a necessary part of it.

Costs basis for [REDACTED]

- 8.41. Additionally, the Home Office has been [REDACTED] [REDACTED], however, Motorola has not provided any costing information to confirm that the pricing would not exceed the control provisionally proposed by the CMA. As such, the Home Office requires the protection that the proposed interworking remedy would provide from overcharging for the [REDACTED] by Motorola.

Motorola's continuing incentive to delay

- 8.42. Further, notwithstanding, the proposed charge control remedy, there remains a clear incentive (albeit reduced) for Motorola to continue to delay the transition of Airwave Network users to the ESN, in order to continue to earn revenue and the associated return from Airwave.

- 8.43. [REDACTED] would also provide a mechanism – should Motorola wish to act on its continuing incentive – to delay the transition. This could be through, for example, Motorola:

- a. [REDACTED];
- b. [REDACTED]; or
- c. [REDACTED].

- 8.44. Indeed, the Home Office notes the CMA's provisional view that,

*"[i]f Airwave Solutions' and/or Motorola's cooperation is required to facilitate the development of an alternative interworking solution, this would provide them [i.e. Motorola and Airwave Solutions] with an ability to extract a supernormal profit for an alternative solution and/or delay or hamper its delivery, thereby delaying the transition from the Airwave Network to ESN and prolonging the operation of the Airwave Network."<sup>124</sup>*

- 8.45. Therefore, for these additional incentive and mechanism reasons, the Home Office considers that an interworking remedy remains essential to address the continuing interworking market features that would sustain the AEC and cause harm, even if the parties were able to agree an input into an interworking solution [REDACTED] or other interworking measures.

- 8.46. Additionally, if the provision of [REDACTED], for the above reasons, it also follows that simply because Motorola has offered [REDACTED] an interworking solution, such offer would also

---

<sup>124</sup> CMA (2022), 'Mobile radio network services - Provisional Decision Report', para 5.126(b).

not remove the need for an interworking remedy, especially as the Home Office considers the proposal is [ X ].

## 9. Recommendation to the Home Office

- 9.1. The Home Office remains committed to putting in place a plan to support a more competitive market landscape in the longer term, noting the 2029 end of the price control period proposed by the CMA as well as its interim review in 2026.
- 9.2. This aligns with the Home Office's (and Emergency Services') aim to secure the supply of communications services for public safety through a well-functioning market environment and competitively tendered contractual agreements that should deliver value for money.
- 9.3. At the same time, other critically important factors – for which the Home Office and the Emergency Services are also accountable – must be considered, alongside other potential market realities. These additional accountabilities, which will come as no surprise to the CMA, include the following:
  - a. Public safety and the safety of Emergency Services personnel, and their confidence in the relevant service and its effectiveness.
  - b. The mission critical nature of the service, which necessitates strong assurances on:
    - (i) continuity and security of service;
    - (ii) enhanced functionality and quality of service; and
    - (iii) full and uninterrupted coverage.

### **Commercial and technical aims**

- 9.4. With these considerations in mind, while the Home Office's approach to a better long-term solution for the ESMCP may evolve, including to reflect market developments, it will inevitably focus on a range of guiding principles that place the public interest and the Emergency Services at its heart. This will be achieved, for example, by:
  - a. seeking contractually to minimise service disruption, adverse impacts on users, and the risks of time and cost overruns as part of any service transition or transformation;
  - b. without compromising on security, focusing on achieving the lowest lifetime cost for services, while providing long-term value through the application of more flexible and effective commercial levers;
  - c. being cognisant of the risks of longer-term reliance on a single network and taking steps to minimise these risks where prudent and feasible;
  - d. giving careful consideration to solutions which play to the different strengths of different suppliers in the market, while avoiding, where possible, the creation of multiple and complex integrations;



- e. fostering more open, standards-based solutions which support greater (but reliable) interoperability between suppliers (including potential new entrants), which should not only facilitate the more competitive sourcing of key equipment (user devices, control room equipment etc.) from competing vendors and more innovation and choice for end users, but also allow more scope for re-competing network and software services in future and easier transitions;
- f. increasing flexibility and agility through the deployment of new apps and upgraded devices while embracing proven technologies that will inspire user confidence in terms of security and reliability as well as delivering the necessary functionality and flexibility to support future service needs; and
- g. setting realistic objectives in light of anticipated market developments and past performance to ensure that commercial and lotting strategies align to the structure of and capabilities existing within the market, or those that are reasonably predictable

### **Broader considerations**

- 9.5. At the same time, it is important to recognise that the ESN involves a complex set of considerations (in an evolving market) as well as interdependencies between its constituent parts, including the mobile network, the MCPTT application, user devices and dedicated core network, all of which need to be carefully integrated. It follows that in assessing and deciding on any future commercial strategy that supports greater competition, certain guiding principles, at least in the shorter to medium term, may need to be prioritised over or recalibrated against others.
- 9.6. At its core, ESN aims to provide a secure modern capability to integrate voice, video, data, and various other useful applications into a single communication device that meets the current and anticipated needs of Emergency Services users. It focuses on enabling increased productivity and capability to make the most of modern technology and innovation to deal with prevention and intervention in an emergency situation. The Home Office does not consider that a TETRA-based solution such as Airwave can address these growing requirements sustainably.
- 9.7. Airwave, like other TETRA solutions, relies on a dedicated private mobile radio network, which has various shortcomings, aside from its cost, including low spectral efficiency and limited data transport capabilities, which render it a largely voice-focused service. Additional (and increasingly essential) data and communication needs have to be met by carrying additional devices connected to other networks, which may not have mission critical features.
- 9.8. It follows that there are financial, functional and time-based imperatives to provide an alternative to Airwave that is fit for purpose and meets the evolving needs of Emergency Services users more effectively and as quickly as possible. Indeed, existing delays in transitioning to ESN mean that, according to the evidence available to the Home Office, if transition does not complete until [ X ], we will be within a few short years of the point at which critical components of the Airwave network are likely to become obsolete.
- 9.9. These imperatives provide a challenge insofar as the swiftest way to move to Airwave's more effective replacement - ESN - is to use the fastest commercial

methods, which can include direct awards.<sup>125</sup> In other words, making sure the essential new solution is delivered as soon as practically and safely possible may necessitate the consideration of certain compromises within the constraints of any existing procurement and a party's ability to deliver. There may, for example, be a need to balance achieving the best Value for Money in the short term with mitigating the risk of lock-in in the longer term or vice versa.

#### **Additional specific observations**

9.10. Taking the above considerations into account, the Home Office would like to make the following observations in relation to the CMA's suggested areas of intervention:

##### **(a) A new network offering enhanced functionality replacing the Airwave Network**

- 9.11. This is the Home Office's main plan of delivery. The Home Office is strongly committed to delivering the ESN, and HMG is resourcing the programme accordingly with the aim of delivering a sustainable and adaptable replacement solution to Airwave in the form of ESN.
- 9.12. Existing government commercial processes requires the Home Office, like any other government department, to direct appropriate focus and resources to any mission critical programme, particularly one such as ESN, to ensure that the replacement solution operates, as far as possible, on competitive terms and in competitive circumstances.
- 9.13. In view of the increasing importance of transitioning swiftly to ESN (as indicated above) and the acute problems and delays already encountered in the delivery of this programme, the Home Office is focused, in the short term, on removing any potential conflict of interest for suppliers involved in the delivery of the new solution. For this reason, a reliable solution to enable Interworking between Airwave and ESN must be secured, and the removal of any dependency on Motorola (that is likely to reinforce Airwave's lock-in and cause further delay) must be prioritised. This is discussed further in section 8 of our response.
- 9.14. At the same time, the Home Office is aware that by being the UK's "first mover" mobile network operator into MCX over LTE, EE's ability to offer Public Safety Communications Services (PSCS) is more advanced than other providers. It follows that by the time that any re-competition of ESN takes place (anticipated in [ X ] at the earliest), EE may have built up some 4G coverage advantages in places where required by the Emergency Services over its three main rivals.
- 9.15. The Home Office is aware that simply creating an alternative network to replace Airwave and TETRA – even one offering a more effective service - is not an adequate solution to issues similar to those identified by the CMA. The Home Office is keen to avoid simply re-creating another monopoly, whether broadly or on separate elements of the service, of a type which has allowed Motorola to sustain Airwave's advantage for so long.
- 9.16. From a structural and technical perspective, the ESN infrastructure may be divided for simplicity into some major building blocks:
- a. the main coverage area;

---

<sup>125</sup> Noting, as far as practicable in the present circumstances, past CMA observations (albeit in the rail sector) on the use of direct awards.

- b. the extended coverage areas;
  - c. the MCX solution;
  - d. the devices ecosystem;
  - e. the ancillary services (e.g., service desk, billing, etc.); and
  - f. the system integration.
- 9.17. While the nature of providing a secure and reliable emergency service solution requires an element of customisation or enhancement in each of the above building blocks, in the Home Office's view, the main risks in terms of less competition are possibly found in the main coverage area and the MCX solution.
- 9.18. In particular, given the ESN-focused investments to date by EE and the Home Office in EE's network (coverage, resilience, MCPTT prioritisation, etc.), stimulating broader competition in the main coverage area for the ESN might need to be seen as a longer-term objective. That said, this assumption may be too cautious in light of any other network operator's appetite to invest or technological advances, or the strong progress already achieved by any such network operator.
- 9.19. As far as any MCX solution is concerned, such a solution requires 'blue-lights' features and functionalities that can be achieved, in the short-term, only through enhancement of an off-the-shelf application until the market is capable of providing those features more widely. Inevitably, the stringent 'mission critical' nature of ESN may, at least in the shorter term, narrow the marketplace to a more limited number of suppliers able to meet the exacting performance standards required for migration and the delivery of a safe and reliable service.
- 9.20. Having recognised the shorter-term challenges, and while still developing its approach, the Home Office remains committed to seeking an environment where there is the opportunity for:
- a. The use of multiple networks based on common standards,<sup>126</sup> which could involve re-tendering on a multi-vendor basis, for both MCX and LTE, thus addressing the entrenched position represented currently by Airwave.
  - b. The introduction of roaming across different networks or having different elements of any coverage requirements delivered by different partners. Another option is to ensure that the use of any ESMCP specific masts can be shared (possibly through regulatory change).<sup>127</sup> All of these options have technical challenges that may require a longer-term outlook for implementation; however, they are all subject to Home Office consideration.
  - c. The fostering of an ecosystem of certified devices that different manufacturers are able to supply, which should allow the integration of other applications within ESN.

---

<sup>126</sup> OFCOM has a role in promoting greater collaboration and in defining and encouraging the development and adoption of standards in certain areas, such as roaming, where more collaboration between MNOs might be useful.

<sup>127</sup> Extended Areas Sites and TfL coverage should allow for the installation of third-party equipment, which could, in principle, also be used for commercial purposes, reducing pressure on costs.

- d. Standards-based applications that are based on Commercial Off-The-Shelf offerings allowing the Emergency Services to benefit from the innovation and development of secure applications globally, while not having to fund the entire development cycle of those applications. The software itself might be designed to allow access in a platform-agnostic way to ensure consistent operation and development and to allow inter-operability between systems. The most important feature of the strategy regarding the MCX app is that the Home Office should take every opportunity to drive up, and formally verify, 3GPP compliance.
- 9.21. These measures could be accompanied by dedicated commercial measures to demonstrate the delivery of Value for Money, which might include:
- a. Greater transparency (open book accounting) and better verification of costs facilitated by the obligation for the service elements to be broken down into distinct, more granular components, in conjunction with better (prompt and more complete) access to supplier financial data.
  - b. Obligations on providers to share automation and technology advances/efficiencies in hardware and tools (including remote capabilities) to ensure that productivity gains offset any increases in costs of labour as part of any periodic price review.
  - c. The obligation for maintenance of clear (and current) documentation to include, but not be limited to, design documents, system architecture, transition plans, risk management plan, process flows, training guidance, evaluation reports and benefits assessment.
  - d. Seeking to ensure that necessary parts of the infrastructure like coverage in special locations (where owned by HMG) can be re-used and re-equipped with competitors' network equipment.

#### **Other relevant factors**

- 9.22. While these options are being considered, it is also important to recognise that whilst the current process might provide, initially at least, for single suppliers for elements of the network, ESN will differ from Airwave in certain important ways (which ought to make it less susceptible to the competition issues associated with Airwave):
- a. Significantly, ESN will not be a bespoke network – nor will its components. It will use existing industry standards for the network provider for 4G/5G, modern applications that have international standards with which any successful bidder will have to comply, and time limited contracts.
  - b. Each of these elements mean that once the ESN is in place and Airwave is no longer being used by the Emergency Services, the component elements should be able to be and will be re-competed. The standards-based approach to using commercial components means that, whilst previously there was no competition either for or within the market, both elements ought to be features of the market in the future, at least in the longer term.
- 9.23. ESN will need all four UK mobile network operators to continue to comply fully with 3GPP standards and continue to support 4G services with their replacement services being fully backwards-compatible with 4G to create opportunities to competitively tender core network services. From a commercial perspective, this is

should be noted as a possible risk due to the lack of any credible customer other than HMG requiring this levelling due to the need to adhere to the 3GPP standards.

- 9.24. That process has already begun with market engagement for a re-procurement of Lot 2 attracting wide-scale interest from a number of different companies; and whilst the initial contracts will be lengthy, as required by the need to develop, test, deliver, transition and bed-in, they will eventually be re-competed.
- 9.25. There is also scope for the Shared Rural Network (SRN) programme to allow a greater levelling of coverage capabilities across telecom operators by reducing the entry cost for any non-incumbent players. This model should therefore become increasingly relevant and useful as the SRN programme gets delivered.
- 9.26. The Home Office is also committed to work with Ofcom to establish the appropriate environment where the market can be guided in the definition of suitable standards and flourish by allowing inter-operability of solutions. The Home Office would require the CMA to provide the flexibility in the application of the investigation's remedies to be reviewed periodically and tailored around the market capability timelines. As the CMA will no doubt appreciate, the Home Office remains acutely concerned about the risk of undue interference in any re-procurement process or other opportunities (even in respect of seemingly ancillary aspects of the service<sup>128</sup>) to delay delivery further, which need to be considered and mitigated where possible to allow the prompt delivery of the first generation of ESN and the safe shutdown of Airwave.

**(b) a competitive process that may result in changes to the ownership and operation of the Airwave Network and/or its assets taking place; or**

- 9.27. While this is not the Home Office's preferred plan of delivery, because of the historical difficulties in delivering ESN and the asymmetry of information in the marketplace, the Home Office cannot exclude that a future option to retender the operation of Airwave may be pursued.
- 9.28. Clearly the current contractual weakness identified in the Report does not allow the Home Office to exercise an option to procure and transfer the infrastructure to a different operator. The Home Office, therefore, would request the CMA to consider a remedy to enable the above capability in similar way to the normal operation of a PFI agreement as a last resort option.

**(c) putting in place a regulatory function to safeguard against the risk of anti-competitive outcomes resulting from a continuing monopoly position in the provision of all or part of the Airwave Network beyond 2029.**

- 9.29. The government governance structure requires a number of entities to review and assure the contractual construct of ESN for competitiveness and Value for Money delivered to the taxpayer. This includes the Financial and Investment Committee in the Home Office, the Government Major Contracts Portfolio (GMCP) in Cabinet Office and the Major Programme Review Group (MPRG) across government.
- 9.30. The Home Office continues to review the requirements for future contracting to guarantee Value for Money and effective Benchmarking to ensure that pricing does not exceed the level that would be appropriate for market conditions then prevailing, particularly in view of difficulties with past definitions and suitable comparators.

---

<sup>128</sup> Please see comments on Control Rooms set out in section 10 below. Indeed, the scope for Motorola to frustrate transition beyond 2029 through its participation in other aspects of the service should not be underestimated.

- 9.31. In light of the historical difficulties in interpreting contractual commitments around scope and pricing, the Home Office is looking into a more effective process for dispute resolution and final arbiter.
- 9.32. As far as the implementation of any regulatory function to address potential concerns in respect of competition for specific ESN components is concerned (such as network coverage and MCX), the Home Office has considered the possibility, for example, of extending or clarifying existing regulations to capture a broader range of public safety procurement matters; however, this may require legislative change and so would need to be subject to further review.
- 9.33. The Home Office would welcome the CMA's input into all of these processes.

## 10. Control Rooms

- 10.1. Control Rooms and the associated Integrated Communication and Control Services (**ICCS**) software used in control rooms are provided by a range of suppliers, including Motorola.<sup>129</sup> Motorola's control room services are provided through its Command Central Control Room Solutions (**CCCRS**) business.
- 10.2. In its response to the CMA's potential remedies working paper, the Home Office raised concerns in respect of Motorola's CCCRS business and how Motorola may be incentivised to use that business to delay the transition of Airwave Network users to the ESN.
- 10.3. Control rooms form a vital part of the overall emergency services mobile land radio environment as they enable either police, ambulance or fire service control rooms to communicate with individual police officers, ambulance personnel or fire personnel, to manage dispatch and incidents.
- 10.4. Before transition can start, it is necessary for each control room to be upgraded to work with both the Airwave Network and the ESN.
- 10.5. Recently Motorola has, the Home Office understands, been winning control room business by offering 'keen' prices. The effect of these wins is that Motorola has increased its share of the control room market in Great Britain.
- 10.6. [ X ].
- 10.7. As Motorola's share of the control room business increases so does its market power and its ability to significantly impact and delay transition, enabling Motorola to act on its incentive to delay.
- 10.8. The Home Office continues to investigate this concern with the Airwave User community and will provide a further submission in due course. However, the Home Office remains concerned that a remedy may be necessary, for example, to impose clear information and decision-making barriers between Motorola's CCCRS business and others parts of Motorola or, potentially, as a last resort, for Motorola to divest itself of its CCCRS business.

---

<sup>129</sup> The CMA is likely to have better information than either the Home Office or Motorola about the suppliers of services and products to the control room market, and their market share and products and services provided, as a result of the continuing NEC Software Solutions UK / Capita Secure Solutions and Services merger inquiry.

## 11. Other remedies

### **Divestiture**

- 11.1. The Home Office has no further submissions to make in relation to a possible divestiture remedy (save in respect of CCCRS – see paragraph 10.8 above) and agrees with the CMA that a remedy of this kind, in respect of Airwave Solutions, would not be the most proportionate or effective way of addressing the AEC that the CMA have found, and that requiring the divestiture of Airwave Solutions in particular may risk the erosion of the quality of service of the Airwave network.

### **Information transparency requirements (as a separate, stand-alone remedy)**

- 11.2. While the Home Office agrees that an information transparency requirement remedy on its own would not be sufficient to effectively address the AEC that the CMA have provisionally found, the Home Office has considered whether there would be merit in imposing a remedy of this kind in addition to the CMA's other proposed remedies. However, it considers that transparency requirements are needed primarily to ensure that the other remedies imposed by the CMA are effective. As the CMA's current proposal is to include transparency requirements as part of the charge control remedy and the interworking remedy (through annual reporting requirements) the Home Office does not consider that a separate stand-alone transparency remedy is required.

### **Improvements to benchmarking arrangements**

- 11.3. The Home Office agrees with the CMA's assessment that the exercise of benchmarking the price of the Airwave Network is subject to inherent weaknesses which cannot be remedied (primarily the lack of appropriate comparators), such that it will always be an ineffective exercise in the current market. In the Home Office's view, the charge control proposed by the CMA is the only effective and proportionate way of addressing the supernormal profits currently being made by Airwave Solutions for the provision of the Airwave Network and services.

**22 November 2022**

## Appendix A: Suggested clarifications and corrections

### Introduction

- 1.1. The Home Office is grateful to the CMA Inquiry Group and the case team for their thorough breakdown of the history of the emergency network industry, which the Home Office considers helpful context for the remainder of the provisional decision report. Notwithstanding this, the Home Office takes the opportunity to provide clarifications in relation to the factual sections of the MA's provisional decision report PDR and those sections' supporting appendices, with the view to providing the CMA with a rounded and accurate picture of the background.

### Section 2: Industry Background

- 1.2. Beginning at paragraph 2.18, the Home Office does not have complete visibility on matters such as "menu charges" and so would ask the CMA to note that it cannot verify the submission that *"further charges are payable by individual police constabularies if they choose to purchase additional services from Airwave Solutions (referred to as 'menu services') .... (which) totalled [ X ] million in 2021."*
- 1.3. In addition, the Home Office considers that the reference at footnote 57 to *"other sources including interworking, Pronto and service credits"*, which consisted of [ X ] million per annum in 2021, should also include catalogue charges for radio terminals. In 2018, ASL advised catalogue sales to be in the order of £[ X ] million per year (albeit this included £[ X ] million for ambulance catalogue sales, which now appear to be part of Ambulance Bundle 2). That would leave [ X ] million for Police and Firelink catalogue sales and £[ X ] million for *"other sources including interworking, Pronto and service credits"*.
- 1.4. Paragraph 2.28 reports that specific issues with the network that need to be addressed include: "(c) access to spectrum in the 1.4 GHz band will be withdrawn in 2024;" [Emphasis added]. The Home Office considers it important to clarify that the change described in (c) will take place from the end of 2024.
- 1.5. The Home Office hopes it will be helpful to clarify that another minor correction ought to be made at paragraph 2.34. It is suggested that if 99.74% voice call availability is not achieved by the police services, a service credit ensues. This is not the case - in accordance with paragraph 6.1 of Schedule 10 of the Model Service Contract (MSC), "[ X ] 99.74%, as specified by Table 10\_6.1.1, is a service availability target only. The Home Office suggests that the sentence should be amended to read: *"For example, for the police services, the voice call service availability target is 99.74%."*
- 1.6. Paragraph 2.54 states that *"The Police Service Contracts are the individual contracts between Airwave Solutions and relevant police forces, concerning access to the Airwave Network, and charges for such access. The PFI Agreement contains a 'Model Services Contract' setting out standard terms for the Services Contracts into which individual police forces enter"*. The Home Office would like to clarify that the Police Services Contracts are tri partite between ASL, an individual police force and Home Office (or PITO at the time the MSC was drafted). By way of suggested amendment, the second sentence of this paragraph ought to be: *"The PFI Agreement contains a 'Model Services Contract' setting out standard terms for the Services Contracts into which individual police forces, Airwave Solutions and the Home Office enter into by way of a tri-partite agreement."*



- 1.7. Paragraph 2.66 confirms that *“the majority of sharer organisations access the Airwave Network on standard terms and conditions which are not typically negotiated”*. The Home Office agrees with this generalisation, but considers it helpful to remind the CMA that there are some arrangements that are dealt with under CCS Frameworks i.e. Ministry of Defence and HM Revenue and Customs (HMRC).
- 1.8. The Home Office considers that paragraph 2.68 may also benefit from additional clarification. The PFI Agreement is reported to *“require the benchmarking exercise to take place within an initial six-year period and then is repeated at least every five years.”* However, Clause 3 (*Frequency*) of the PSRCP Framework Agreement mandates that the Network Services shall be benchmarked initially after 6 years from the Pilot RFS Date and thereafter at periods **of no less than** every 5 years. This is an important distinction that the Home Office considers should be corrected as the CMA’s current summary of this term of the PFI Arrangement suggests that there is a maximum period of time that is allowed to pass before a benchmarking exercise must be undertaken, which is indeed not the case.
- 1.9. The Home Office notes the reference to the Gartner Study at footnote 107, which is confirmed as being commissioned by the Home Office in July 2013. The Home Office would be grateful if the CMA would inform the Home Office whether this reference is in fact intended to be to the *‘Benchmark of Airwave Services Final Report’* dated 1 July 2014, and if so, amend the date of this reference.
- 1.10. The Home Office considers that paragraph 2.79, which specifies that the Home Office invited prospective suppliers to submit proposals to supply ESN on 18 April 2014, requires modifying. There were four lots issued to the relevant suppliers (as opposed to the three lots suggested), which is set out in ESN OJEU. The fourth lot was cancelled by the Home Office in Autumn 2014 and brought in house to form Extended Area Services (EAS).
- 1.11. Paragraph 2.102 states that the 2018 negotiations resulted in an extension of the period of operation of the Airwave Network to 31 December 2022 and had the effect of varying certain of the matters set out in the 2016 Heads of Terms. In commercial terms, this involved an additional [ X ]% discount to core service charges and the continuation of the discount credits given in 2016 (amounting to £[ X ] million). The Home Office would like to clarify that £[ X ] million per annum of existing discounts was also maintained (referred to as the Benchmarking Discount); however, this discount was previously paid/credited to the Home Office at the end of each contract year, and as part of the extension it was rolled into the price.
- 1.12. The paragraph goes on to indicate that, *“As part of the negotiations, Motorola modelled prices on two bases, neither of which was taken up by the Home Office ... (one of these was made) (I)n June 2018, following a request from the Home Office to consider an 18-month rolling extension, Motorola proposed another [ X ]year extension with breaks and a minimum period of [ X ] years. This ... also transferred the cost of the decommissioning of the assets to the Home Office if the early break option was exercised.”* The Home Office notes that, in actuality, the transfer of decommissioning costs to Home Office diminished the longer the contract ran (i.e. [ X ]% if terminated after 6 years, [ X ]% after 8 years and [ X ]% after 10 years).
- 1.13. Paragraph 2.105 describes that *“although TETRA is likely to be in use in some locations around the world beyond 2030, there is a move towards LTE to support mission-critical broadband communications in many comparator countries.”* The Home Office considers that this submission is slightly (albeit unintentionally) misleading to any reader - it downplays the Home Office’s understanding of

Motorola's strategy to sustain TETRA and P25 LMR technologies over the mid to long term by supplementing those LMR technologies with LTE broadband based data service overlays, including through dual mode / service handsets. This strategic approach is designed to preserve TETRA and P25 revenue and, for example, avoid cannibalisation of the lucrative TETRA and P25 services, through the introduction of a pure MCPTT/X service over LTE.

- 1.14. The Home Office considers that paragraphs 2.106 and 2.108 present a similar issue – the omission of relevant external factors means Motorola's investment in the dual mode and hybrid approach is overstated. By way of example, paragraph 2.106 confirms that "*Motorola nonetheless told us that ... they are willing to invest significant sums of money in order to maintain that technology in the future ... [and] has invested significantly in developing products that facilitate the 'hybrid' operation of both LMR and broadband networks (including the development of dual mode devices, while such transition takes place, or even on a longer basis)*". Dual mode / service devices were proposed in 2014/2015. This may have been a workable solution technically; however, the cost of the devices was prohibitively expensive. Motorola now likely make large margins on these dual mode / service devices so this mode of working now is back on the table. Similarly, the hybrid approach described above and further in paragraph 2.108 was also proposed in 2014/15 - if the cost of the TETRA network had come down, then this may also have been feasible. The Home Office is reluctant to allow Motorola to portray its involvement in the provision of the emergency services network as motivated by anything other than commercial.

#### **Appendix B: Additional background information**

*The decision to procure ESN onwards (pages 28-30):*

- 1.15. The Home Office would like to make one minor clarificatory point in relation to the CMA's summary of the three principal drivers for the move to ESN at paragraph 82 of Appendix B. At paragraph 82(b), the CMA notes that the 2013 Outline Business Case says that one of these drivers was that "*current contracts with Airwave Solutions did not represent lowest cost for the taxpayer*". Instead of asserting that there were lower cost alternatives available in the UK market that would save the UK taxpayer money, the 2013 Business Case in fact notes that the Airwave service was "*significantly more expensive when compared with similar public safety systems in Europe and price trends for publicly-available mobile telephony.*" The Home Office would therefore propose that paragraph 82(b) was reworded as follows: "*current contracts with Airwave Solutions did not represent best value for money when compared with similar public safety systems in Europe*".
- 1.16. The Home Office would also like to highlight a possible error in the CMA's characterisation of the financial case in the 2013 Outline Business Case at paragraph 84 of Appendix B. The CMA concludes that both the option of financing the new network via capital-based funding and using a resource-based approach had the same financial cost, of £[ × ] [ × ]. However, the Home Office has reviewed the underlying document and considers that this is incorrect; in particular, the affordability conclusion at section 1.4.2.3 of the 2013 Outline Business Case concludes that a service payment option (i.e. taking a resource-based approach) [ × ].

#### **Appendix C: Key Airwave Solutions Contracts**

- 1.17. The Home Office considers that the CMA group (and the group's supporting staff) have a thorough understanding of the arrangements between the Home Office and Airwave Solutions. Notwithstanding this, the Home Office welcomes the opportunity to provide the following clarifications on several paragraphs within Appendix C, with the view to maximising clarity for all parties in respect of the key contracts.
- 1.18. Firstly, the Home Office can confirm that the parties agreed to extend the end date for the PFI Agreement and the services contracts, and the shutdown of the Airwave Network, to 31 December 2022 (as stipulated at paragraph 20). However, the Home Office considers that it may be helpful for the CMA to indicate that, as part of the same negotiations, the Home Office also waived its right to benchmark until January 2023.
- 1.19. Secondly, the Home Office considers it would be helpful to expand on paragraph 133, which states that "*the sharers are subject to pre-requisite obligations before entering*". It would be beneficial for both parties to note that this does not apply to those such as the Ministry of Defence and HMRC who do not enter into standard form arrangements i.e. CCS Framework terms.
- 1.20. Lastly, The Home Office has identified that there are a few minor amendments that may be helpful to make throughout the remainder of the Appendix.
- a) At paragraph 65, the statement that "... by giving the appropriate notice (in accordance with [ X ])" should instead read "... by giving the appropriate notice (in accordance with [ X ])".
  - b) At paragraph 80, the first line should read "[ X ] provides that services provided ..." (and not [ X ] The Home Office would also be grateful if the CMA could confirm whether the reference to [ X ] was intended to be to the same within [ X ], and if so, to amend the text to specify this.
  - c) At paragraph 81, the first line should read "[ X ] sets out the Charges ..." (and not [ X ]).
  - d) At paragraph 95, the reference to [ X ] should be amended to [ X ].
  - e) At paragraph 96, the Clause references should be amended to [ X ].
  - f) The reference to "[ X ] at paragraph 175 should be amended to [ X ].

#### **Appendix D: The role of the change of control negotiations**

- 1.21. The Home Office does not have any substantive submissions to make in response to Appendix D. However, it has noticed some minor corrections and clarifications that it considers are required, which are set out below.
- 1.22. At paragraph 45, footnote 210 appears to have been inserted in place of the initialism "[ X ]", which is missing from the quote that the CMA have reproduced in this paragraph.
- 1.23. At paragraph 50(a), the information cited has been taken from a Home Office document (see footnote 218). Therefore, the figures, which are currently highlighted in green, are known to the Home Office and are not confidential to Motorola as the highlighting would suggest.

- 1.24. While the CMA have made reference elsewhere in the Report to the fact that Motorola would have been aware of the Home Office's concerns with Macquarie's ownership of Airwave Solutions, given that these were well documented, the Home Office considers that this should be further highlighted at paragraph 51; as well as not having any concerns about losing out to another potential buyer of Airwave Solutions, as emphasised at paragraph 51(b), Motorola would also have been cognisant of the fact that their position was made more secure by the Home Office's reluctance for Airwave Solutions to stay under the ownership Macquarie.
- 1.25. At paragraph 56, the CMA refers to a briefing prepared in February 2016. There is currently no footnote providing the details and appropriate reference for this document. The Home Office understands that the document referred to is a briefing dated 11 February 2016, titled "*HMG2759: Acquisition of Airwave Solutions Limited by Motorola Solutions Inc.*", and that the information at paragraph 56(a) has been taken from Appendix C to this briefing, the information at paragraph 56(b) from Appendix D to this briefing, and the information at paragraph 56(c) from Appendix E.
- 1.26. In paragraph 56(a), it appears that there are some words missing after "[ X ]". The Home Office considers that this should read "*In relation to the settlement agreements, [ X ]*" (suggested additions shown in bold text).
- 1.27. We understand that in Appendix D to the 11 February 2016 briefing, the Home Office set out the various ways in which areas of concern with regards to the transaction had been considered and, where possible, addressed. To aid the reader's understanding of the CMA's summary of this Appendix, the Home Office would therefore suggest the addition of the following words formatted in bold at paragraph 56(b): "*In terms of giving consent to the transaction, three areas of concern were highlighted to have been considered and, where possible, addressed.*".
- 1.28. The Home Office would also propose the following clarificatory additions to paragraph 56(b)(I):
- (I) [ X ].
- 1.29. With regards to paragraph 56(b)(II), it is not entirely clear to the Home Office the point that the CMA wishes to draw from this part of the 11 February 2016 submission. The Home Office has assumed that the CMA may be pointing to the fact that one area of concern in consenting to the change of control was the "[ X ]" that MSI may be presented with "[ X ]". In Appendix D of the briefing note referenced by the CMA, the ESMCP made clear to the Cabinet Office that [ X ]
- 1.30. In Table 1.1 (Table D-1), the Home Office considers that, in relation to the first bullet in the right-hand column of the second row, the CMA could go further in its conclusion and highlight that (as is reflected in the 11 February 2016 briefing) the Home Office did not want to have to commit to making full year extensions in the event of delay (as under previous contracts), referring to the increased flexibility being offered by Motorola as being a "*substantial improvement*" – and reflecting the Home Office's expectations that the Airwave network would not need to be extended more than a matter of months.
- 1.31. The Home Office wishes to make a minor elaboration to the point made by the CMA in the right-hand column of the fourth row of Table 1.1 to aid the reader's understanding. While the amount of the payments under the VOP settlement were not changed by the change of control negotiations, the Home Office said in its 11

February 2016 briefing that “As part of the overall position, Motorola have agreed to simplify this arrangement and offered to provide a straight price reduction of £[ < ]m in FY 2016/17 and £[ < ]m in both FY 2017/18 and FY 2018/19.”

- 1.32. For the sake of completeness, the Home Office has also noticed that in the right-hand column in the first row of the table there is duplication of the words “and in”. There appear to be some other minor typographical errors throughout this table which the CMA may wish to correct.