



Additional Submission: Control Rooms

Note: Confidential redacted information is shown [§<].

1 Introduction

- 1.1 The Home Office is concerned that Motorola has the ability and incentive to delay the transition from the Airwave Network to the Emergency Services Network (**ESN**) by delaying necessary control room upgrades, required to enable transition. The Home Office notes that, as set out in the CMA's Provisional Decision Report (**PDR**), this is a concern shared by EE, which has identified a need to ensure that the timely development of control room software can be guaranteed so as not to delay transition.¹
- 1.2 If even one control room is not upgraded as required, transition completion will be delayed; this means that the Home Office will have no choice but continue to pay for the Airwave Network, to the benefit of Motorola and harm to Great Britain's emergency services and British taxpayers.
- 1.3 Although the Home Office has previously raised concerns over control rooms, the Home Office appreciates that this submission, coming as it does at this stage of the market investigation, complicates the CMA's task. However, the Home Office makes the submission to record its concerns including that if control rooms do become a factor that delay transition completion, at least the risk will have been considered. That said, if possible, the Home Office would ask for the risk presented by control rooms to be addressed by an appropriate remedy.
- 1.4 In preparing this submission, the Home Office has engaged with senior user representatives (from Police, Fire and Ambulance) of the Airwave network (the **Senior Users**) to canvass their views on the issue of Motorola's ability to delay transition completion through its control rooms business, and information obtained from this engagement is referred to throughout this submission.
- 1.5 The Home Office has also obtained input from the Operational Communications in Policing (**OCiP**) team, a small team of police officers and staff working inside the Home Office representing national policing and assisting in the delivery of operational requirements and associated benefits of national IT Programmes.
- 1.6 OCiP supports a number of Programmes including the Emergency Services Mobile Communication Programme (**ESMCP or the Programme**) responsible for the development and delivery of the ESN. Additionally, the Airwave network, and the police use of it, is nationally managed through an existing and trusted governance structure, via several strands that OCiP leads on or is part of.

2 Background

- 2.1 Control rooms form a vital part of the overall emergency services mobile land radio environment as they enable either police, ambulance or fire services control room to communicate with individual police officers, ambulance personnel or fire personnel, to manage dispatch and incidents.
- 2.2 Control rooms and the associated Integrated Communication and Control Systems (**ICCS**) services are provided to the Airwave network user organisations by a range of suppliers, the

¹ CMA Provisional Decision Report, paragraph 8.78.

main suppliers being as follows: APD (now part of NEC), Frequentis, Saab, SSS², Systel and Motorola.

- 2.3 Motorola's Command Central Control Room Solutions (**CCCRS**) business currently has contracts for the provision of control rooms and associated ICCS services with five Police forces (two of which are live and three of which are being implemented) and six Fire and Rescue services (five of which are live and one that is being implemented). These services are provided under contracts with the user organisations.
- 2.4 Before user organisations can transition to the ESN, it is necessary for each control room to be upgraded so that it can interface with (i.e. talk to) both the Airwave network and the ESN. If even one control room is not ESN compatible (by way of ICCS ESN upgrade), no Police organisation is able to transition onto ESN (not just the customers of the supplier of that control room) due to the National mutual aid requirements which require resources to be able to be deployed into UK forces at time of demand and criticality.
- 2.5 In addition to the services contracts with user organisations, all key control rooms suppliers (identified at paragraph 2.2 above), with the exception of Motorola, have agreed (in the context of Kodiak) additional 'ESN ready' / delivery obligations with the Home Office, by way of a development contract.³ Through these arrangements, the Home Office has been able to support suppliers with development of their ICCS solutions, as well as manage delivery timelines and ensure that adequate testing has been carried out.
- 2.6 Motorola CCCRS refused to enter into any such agreement with the Home Office, [§<].
- 2.7 In the context of an interface with Kodiak, the Programme has seen considerable delay and lack of engagement from Motorola (more particularly described below), which is thought to be approximately [§<] months behind in the development of its ICCS solution than other suppliers. This past behaviour may be an indicator of how Motorola may behave in future.⁴
- 2.8 The Home Office's concern is, therefore, that, in the context of the new interface that will be required with the alternative MCPTT application (once procured), Motorola has the ability and incentive to delay the development of its ICCS solution, and both the absence of a contract between Motorola and the Home Office [§<].
- 2.9 The consequences of any such delay to the necessary upgrades to enable Motorola's control rooms to interface with ESN is that transition from Airwave to ESN is unable to take place. Until transition is complete the Airwave network cannot be switched off and Motorola is therefore able to sustain the revenue, and associated profit, it earns from supplying the Airwave network.
- 2.10 This delay may be exacerbated if Motorola CCCRS is to win more control rooms services contracts. Motorola has been increasingly winning Airwave network user organisations' business for the supply of control room services. It appears it has been doing so by offering its services at a lower price than its competitors, as well as offering to provide integration to the new DIMETRA Dispatch Communication Server (**DCS**) more quickly and cheaply than other ICCS providers (which is required for the continued use of Airwave services).
- 2.11 It should be emphasised that Motorola would have the ability to delay transition even if it had only one ICCS contract with one Airwave blue light user organisation, and therefore it is not essential for Motorola to win additional business to be able to delay transition.
- 2.12 However, there is concern that as Motorola gains an increased share of the control room services market, it will have the ability to cause greater disruption to the transition from Airwave to ESN. [§<]. Given Motorola's past approach and behaviour, this would potentially require [§<] requiring significant resource and, importantly, time.

² Secure Solutions and Services, previously known as Capita.

³ These obligations relate specifically to an interface between the control room and the Kodiak MCPTT application which, as the CMA is aware, is no longer being delivered as part of ESN and an alternative MCPTT application is being procured by the Home Office to replace it.

⁴ It is possible that Motorola CCCRS, through its relationship with Airwave, may have known that Motorola would not deliver Kodiak (which has not happened) and therefore chose not to develop its ICCS solution.

3 Motorola's ability to delay transition to ESN through CCCRS

- 3.1 The concern that is held by the Home Office and the Senior Users is the ability, and possible incentive, that Motorola has to use its position as provider of essential ICCS services to delay user organisations' transition to the ESN, thereby maintaining its ability to benefit from its provision the existing Airwave network for longer.
- 3.2 In particular, Motorola does not have the same obligations as other rival suppliers to ensure its product is 'ESN ready' and has a history of delay in the development of its CCCRS product. These two aspects of examples of Motorola's past behaviour are explained in the following paragraphs.

a) Lack of [redacted]

- 3.3 As a consequence of the move from the Wave 7000 (the original push-to-talk application offered by Motorola) to Kodiak MCPTT application in 2018, the Home Office decided to contract with a number of existing ICCS suppliers to provide software development services in order to improve the integration and interoperability of the MCPTT application with their control room systems. This would ensure that emergency services users could continue to use the ESN without suffering from any diminished quality of service. The Home Office entered into development agreements⁵ with four ICCS suppliers in December 2019: APD, Frequentis, Saab and Capita. A fifth supplier, Systel, entered into an equivalent agreement on 7 May 2020. These contracts include obligations on the suppliers to [redacted].
- 3.4 Despite its efforts, the Home Office was unable to agree an equivalent contract with Motorola; [redacted].
- 3.5 Motorola also only agreed its contracts with customers after the announcement of the Kodiak solution, meaning that the original justification for central commissioning of Control Room development did not apply to Motorola CCCRS. [redacted] [redacted].⁶
- 3.6 Additionally, there was some concern within the Home Office that, [redacted] [redacted]. Therefore, in the summer of 2020, the Programme accepted Motorola's position, and it was agreed that the Programme would help Motorola with planning and monitoring [redacted] in alignment with the ESN plan.
- 3.7 This means, however, that the obligations on Motorola to ensure its CCCRS product is compatible with the ESN, enabling users to be able to transition from Airwave to the ESN without delay or a diminished level of service, are [redacted]. Additionally, the continuing benefits of delay to the completion of transition to ESN would [redacted].

b) History of delay in developing CCCRS solution to be 'ESN ready'

- 3.8 Motorola's CCCRS solution is currently⁷ [redacted] months behind other suppliers' solutions as a result of continual delays in development, as detailed below.
- 3.9 For the 12 months following discussions with Motorola about entering into an ESN development contract, the Programme expected Motorola to have been developing its solutions to integrate with the ESN (as was the case with the five Home Office-contracted providers). However, Motorola was only able to demonstrate extremely limited progress to its customer base during this period, which raised concerns within the Programme.⁸ Motorola CCCRS was invited to present its development pathway to an ESN ready solution on 4 March 2020, which it declined to attend.

⁵ These agreements were for the development and technical pilot test of a Kodiak 9.1 compatible upgrade for the ICCS only, i.e. the re-work needed due to the change from Wave 7000 to Kodiak. They do not cover the subsequent installation, commissioning, configuration, system acceptance testing, roll-out, user testing and acceptance by User Organisations.

⁶ It should be noted that the NFCC has received mixed messages from Motorola as to the requirements for its solution to be 'ESN Ready'. [redacted].

⁷ The ESMCP having compared Motorola's progress to that of other suppliers as part of its role co-ordinating technical readiness across all of the ICCS suppliers.

⁸ For example, Fire and Rescue services have reported a lack of clarity from Motorola around the path of the development to meet the ESN goals.

- 3.10 As a result, in April 2021, [redacted](ESMCP), [redacted], jointly with [redacted](OCiP) and [redacted] (Fire), wrote to Motorola expressing concerns about its lack of progress, requesting the provision by Motorola of a pathway for the delivery of an ESN ready solution and inviting Motorola to engage in the supplier and customer forums set up by the Programme to discuss and ensure delivery of the required plans (with which Motorola had previously declined to engage).⁹
- 3.11 Following this correspondence, the Programme did see an initial improvement in engagement from Motorola, with a number of workshops with the Programme and CCCRS customers scheduled to start in July 2021. However, the Programme's concerns about lack of progress remained and discussions were reignited as to whether Motorola should enter into a development agreement with the Home Office.
- 3.12 By November 2021, the Programme was of the firm belief that without contractual obligations requiring Motorola's CCCRS product to be 'ESN ready', there was a distinct risk that Motorola would delay transition.¹⁰ Therefore, the Programme asked Motorola whether, [redacted].¹¹
- 3.13 The Programme shared [redacted].¹²
- 3.14 [redacted].¹³
- 3.15 As a result of this, following a proposal by the Programme (and following input from Motorola CCCRS' customers on the Programme's draft document), in August 2022, Motorola [redacted].¹⁴
- 3.16 For context, at a very high level, the Programme considers that, for ESN based on Kodiak, the following is required to ensure that a suppliers' control room solution is ready to enable transition to commence. This is a Programme definition [redacted].¹⁵
- 3.17 Suppliers are required to develop a new interface based upon 3GPP standards and the Kodiak interface design. They are then required to put this through a multi-stage assurance process to ensure it is fit for purpose. This includes:
- [redacted].
- 3.18 It is noted that an alternative standards-based MCPTT application is being procured in the place of Kodiak, but the requirements are likely to be very similar for a new MCPTT solution.
- 3.19 All suppliers except for Motorola CCCRS have completed assurance steps [redacted] above at least [redacted] up to at least Kodiak 10 capability. No supplier has been able to achieve stage 6 as Motorola (as the current ESN Lot 2 provider) has not delivered a suitable ESN production environment.
- 3.20 In contrast, Motorola CCCRS has not completed steps [redacted] above for any of its product (and the Home Office is not able to verify whether it has completed Step [redacted]). Motorola CCCRS has demonstrated some features of an ESN integrated product in public forums. However, these are broadly equivalent to features that the Programme were witnessing from other suppliers approximately [redacted] ago.

4 Motorola's ability to cause further delay through the winning of new ICCS contracts

- 4.1 Motorola's share of the ICCS market has been increasing over recent months, and it is expected to increase further over the next two years or more. As mentioned above, while Motorola has the ability to cause delay to transition (for all users) through its existing ICCS contracts, the Home Office is concerned that an increased share of the emergency services control room services market would give Motorola the ability to cause further disruption. This is because this would increase the number of control rooms [redacted].

⁹ Letter from [redacted](ESMCP)[redacted](Motorola), April 2021.

¹⁰ Attachment to email from [redacted] dated 12 November 2021: Document titled "[redacted]".

¹¹ Email from [redacted] dated 29 November 2021 with subject line [redacted].

¹² Letter from [redacted] Motorola [redacted] dated 24 March 2022.

¹³ Email from [redacted] (ESMCP) to user representatives dated 14 April 2022 with subject line [redacted].

¹⁴ [redacted].

¹⁵ [redacted].

- 4.2 There are currently five (out of a total 45¹⁶) police forces that have ICCS contracts with Motorola (two of which are live and three of which are being implemented). These are Lincolnshire, West Yorkshire, Kent and Essex¹⁷, and Dyfed Powys. Four out of five of these contracts have been won in the last 24 months. Forces have indicated that Motorola is also in negotiations with at least six other police forces for the supply of ICCS services.
- 4.3 For the Fire and Rescue Service (**FRS**), the NFCC has confirmed that there are also five services that are currently contracting with Motorola for ICCS services. These are Durham and Darlington, Cleveland, Shropshire, Hereford and Worcester, and Bedfordshire. A further service (Essex) is currently implementing its contract with Motorola and expects for the provision of ICCS services by Motorola to be live in Spring 2023.
- 4.4 It is anticipated by Senior Users that Motorola is likely to continue to increase its share in the ICCS market over the next couple of years, for the reasons below. Of 45 police forces, approximately [redacted] are due for re-procurement of ICCS services in the next two years. It is also anticipated that [redacted] Fire and Rescue Services / Consortia¹⁸ will be reprocurring their ICCS solutions in the next two to three years.
- 4.5 The Home Office does not have access to the prices at which Motorola has won its recent ICCS contracts with the emergency services; however, the Home Office is concerned that Motorola has been offering significantly lower prices than its competitors.
- 4.6 As Motorola sends its business relationship managers out to engage with forces on a monthly or three-monthly basis – to determine whether there are any other services that it can sell to those forces (e.g. PRONTO, a suite of applications that delivers mobile information services) – it is able to engage early with forces when their ICCS needs change.
- 4.7 One such need is the upgrade to the DCS compatibility. The DCS control room interface (as mentioned above) replaces legacy Centracom and Vortex interfaces. These interfaces are necessary to connect a control room to the Airwave network. DCS will be the only control room interface supported by Airwave post 2023, and will be common across all customers including Police, Fire and Ambulance. It is therefore essential for these upgrades to take place sooner rather than later. The speed at which some non-Motorola ICCS providers [redacted] have been able to upgrade to the DCS has been slower than anticipated.
- 4.8 Motorola was able to develop and test its interface to DCS and obtain Airwave Network Connection Certification in 2019, well before testing was available to other ICCS suppliers. The DCS interface specification was only published to the other suppliers in June 2020, and this was required to enable other suppliers to commence their development against DCS.
- 4.9 Motorola has therefore been able to demonstrate to users that it is able to upgrade them to the DCS [redacted] giving it a commercial advantage when tendering for control room contracts.
- 4.10 In addition, the Motorola product can currently offer a new control room ICCS system to a customer more quickly and cheaply than other suppliers as Motorola has opted for a “hosted” offering, which means that user organisations do not have to pay for expensive and space-consuming server hardware at their own premises as the main server hardware and software has already been installed at Airwave’s host data centres.
- 4.11 For the reasons set out above, the Home Office suspects that Motorola will be able to leverage its market power, that it has obtained from its exclusive position in delivering the Airwave contract, to distort conditions of competition with ICCS providers in other downstream or related markets. That leveraging will give it an unfair advantage, making it more likely that it will win

¹⁶ 44 geographical Police Forces plus British Transport Police.

¹⁷ [redacted].

¹⁸ Prior to 2010 there had been the national FiReControl Programme (initiated in 2004) which aimed to deliver control capabilities regionally, but the Programme was cancelled in late 2010 before reaching maturity, prompting a flood of procurement activity as individual FRS control systems were already reaching obsolescence by that point. As a result, some FRSs worked collaboratively to deliver next generation control system capabilities, and thus there isn’t necessarily one control system per FRS as there is with policing. [redacted].

significant new ICCS contracts with Airwave user organisations over the next 12-24 months, gaining a much larger share of this market than it currently holds.

5 Possible remedies

- 5.1 As a result of the delays in the development of Motorola's ICCS solution experienced to date, Motorola CCCRS' lack of engagement with the Programme and resistance to contractual obligations to ensure its product is 'ESN ready' and Motorola's increasing share of the ICCS market, the Home Office is concerned that Motorola has the ability to cause significant delays to the transition from the Airwave Network to the ESN, should it wish to do so.
- 5.2 The Home Office, therefore, asks the CMA to consider whether, as part of its ongoing market investigation, it would be appropriate to impose a remedy to guard against the risk of any such delay.
- 5.3 The Home Office asked the CMA to consider enhanced remedies such as information barrier protocols and a possible fallback divestment remedy in its response to the Report to address the concerns more particularly discussed in this Submission.¹⁹
- 5.4 The Home Office would also suggest that obligations on Motorola CCCRS to provide a timely interface with ESN, on a cost-oriented basis, may help to address the concerns raised by the Home Office.
- 5.5 In relation to a remedy designed to ensure that the Motorola CCCRS and Airwave businesses are kept separate, the Home Office considers that the following may be appropriate:
 - introducing measures such as ringfencing,
 - measures to ensure separate cost accounting and the avoidance of any cross subsidy,
 - information barriers,
 - measures to ensure the avoidance of conflicts of interests and/or functional separation of the businesses.

14 December 2022

¹⁹ Home Office Response to the CMA Provisional Decision Report dated 22 November 2022, paragraph 10.8.