

Mobile radio network for the police and emergency services

Proposal to make a market investigation
reference

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The Competition and Markets Authority has excluded from this published version of the consultation on proposed market investigation information which it considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. [Some numbers have been replaced by a range. These are shown in square brackets.] [Non-sensitive wording is also indicated in square brackets.]

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Summary

1. The Airwave network is a secure private mobile radio communications network for organisations involved in public safety in Great Britain. Currently, there is no alternative method for the police, fire and emergency services staff to communicate securely with each other when in the field.
2. The Airwave network was commissioned by the Home Office in 2000 under a Private Finance Initiative framework arrangement (the PFI Agreement) that was due to end in December 2019. At this point the network was expected to be shut down and a different secure communications solution using EE Limited (EE)'s commercial 4G mobile network was to become operational (referred to as the Emergency Services Network or ESN).
3. Motorola Solutions, Inc. (Motorola) won one of the key contracts for the delivery of ESN in 2015 and purchased Airwave Solutions Limited (Airwave Solutions, the owner and operator of the Airwave network) in 2016. The merger was cleared by the CMA, in part because of the expectation (and assurances of both Motorola and the Home Office) that the Airwave network would be shut down by 2019.
4. In the last two years, there have been increasing concerns about the delays to the roll-out of ESN and costs to the British taxpayer of the continuing operation of the Airwave network. Government officials and other stakeholders (in particular the National Audit Office and the Public Accounts Committee) have expressed concerns regarding Motorola's position and incentives to deliver ESN, given the on-going high profitability of the Airwave network. It is now expected that the Airwave network will continue until the end of 2026, with the terms of the extension needing to be agreed by the end of 2021. Negotiations between Motorola and the Home Office are on-going.
5. Our current view, based on the available information, is that the market for the supply of the Airwave network in Great Britain is not working well for the following reasons:
 - a. the highly differentiated and bespoke nature of the Airwave network, requiring it to be designed, built and operated under a long-term exclusive contract,
 - b. the dual role of Motorola, as owner of Airwave Solutions and key supplier in the roll-out of ESN since 2016, with the incentives such a position creates,

- c. the absence of competitive tension in the award of the original contract, with only one supplier taking part in the bidding process and the resulting likely uncompetitive pricing structure, and
 - d. delays in the roll-out of ESN that have necessitated the extension of the Airwave network by three years to 2022 and now require a further extension until the end of 2026, thereby prolonging the likely uncompetitive pricing structure well beyond the original term of the PFI Agreement.
- 6. This has resulted in significant detriment for customers, as evidenced by the persistently high and increasing returns achieved by Motorola in the 4-5 years to 2019. The harm in this market and the burden of any excess profits made by Motorola (around £700 million as at 2019) ultimately falls to the British taxpayer. This customer detriment will also continue for as long as the Airwave network remains in place; end of 2026 is the latest expected shut down date and our calculations suggest that a further £1.2 billion in excess profits may be expected to be extracted by Motorola from 2020 to 2026.
- 7. For the reasons set out in paragraphs 5 and 6 above, we are now proposing to launch a market investigation reference (MIR) relating to the Airwave network and are consulting accordingly.
- 8. We have identified two potential remedies at this stage:
 - a. A form of rate of return regulation typically employed by regulators setting price caps for natural monopoly networks. The price control would fall away as soon as ESN is operational, and the Airwave network is turned off. This would address the adverse effects resulting from the exercise of market power by Airwave Solutions.
 - b. Divestiture of the Airwave network. This would address the incentives identified in paragraph 5.b.

1. Background and competitive assessment

The market and companies involved

- 1.1 In Great Britain, the police, fire and rescue and ambulance services personnel operating in the field communicate with each other securely, using a private mobile radio network called Airwave. The Airwave network was commissioned by the Home Office (through the Police Information Technology Organisation, PITO) in 2000 under a private finance initiative (PFI) framework arrangement and is based on digital terrestrial trunked radio (TETRA) technology (the PFI Agreement).¹
- 1.2 The Airwave network is expected to be shut down when a different secure communications solution using EE's commercial 4G mobile network becomes operational (referred to as ESN). Although it was originally expected that this would coincide with the end of the PFI Agreement in 2019, it is currently expected that the Airwave network will continue to operate until the end of 2026,² because of delays in the delivery of ESN.
- 1.3 The Airwave network involves a dedicated infrastructure of radio masts and base stations that was built by British Telecommunications plc (BT). Airwave Solutions,³ the owner and operator of the Airwave network, was sold as a standalone business, first to Macquarie Communications Infrastructure Group (Macquarie) in 2007, and then to Motorola in 2016. In addition to owning Airwave Solutions, Motorola is also one of the main companies responsible for the delivery and roll-out of ESN, through the contract⁴ it won in late 2015. See Appendix B, paragraphs 21 to 33 for more detail on the ESN roll-out.
- 1.4 In 2019, Airwave Solutions served over 470 organisations (comprising 107 police, fire and ambulance services and 363 other organisations)⁵ and generated revenues of £424 million.⁶ The company achieved an estimated

¹ The open standard for digital trunked radio technology was developed by public safety and two-way radio industry experts together with the European Telecommunications Standards Institute (ETSI) to provide secure, reliable and instant voice and data communications in mission critical, operations critical and business critical environments (Source: https://www.motorolasolutions.com/en_xu/solutions/what-is-tetra.html).

² Subject to negotiations about the terms of any further extension to the PFI Agreement. A three-year extension was agreed in 2018.

³ Airwave Solutions was incorporated in 2000 to design, build, finance and operate a public safety network under the contract won by BT.

⁴ This is the Lot 2 contract that covers customer and service support, developing new specialist public safety applications, providing some of core network functions and providing an app-store and device approval service (the Lot 2 Contract). EE won the Lot 3 contract and Kellogg Brown & Root Limited (KBR) won Lot 1.

⁵ NAO 2019: [Progress delivering the Emergency Services Network](#): paragraph 1.

⁶ [Airwave Solutions Limited 2019 accounts](#).

average annual return on capital employed (ROCE) of 117% in the five years to 2019.

- 1.5 In the last two years, there have been increasing concerns about the delays to the roll-out of ESN⁷ and costs to the British taxpayer of the continuing operation of the Airwave network. In particular, in its 2019 report, the Public Accounts Committee commented: “Given its previous negotiation to extend Airwave achieved only a 5% discount, and given Motorola, which is a key supplier to ESN, has a monopoly position as Airwave’s owner, we are concerned that the Department [Home Office] has limited leverage to secure value for money in any future extension of Airwave contract”.⁸
- 1.6 On 14 April 2021, the Home Office, at the request of the Cabinet Office, wrote to the CMA, expressing concerns about Airwave Solutions’ profitability and the extent to which this might impact Motorola’s incentives in the roll-out of the replacement solution, ESN. A similar point had been made publicly by the National Audit Office (NAO) in 2019.⁹
- 1.7 In considering these issues, the CMA has focused on the potential for the current market realities to give rise to adverse effects on competition (and the potential harms resulting from such competition issues). While constituting relevant context for the CMA’s assessment, this consultation is not concerned with the effectiveness or otherwise of the historical policy and procurement decisions that resulted in the creation of the Airwave network.
- 1.8 In the following paragraphs, we first consider:
 - (a) The nature of competition in relation to the supply of the Airwave network, and
 - (b) Profits made by Airwave Solutions.
- 1.9 We then set out the CMA’s rationale for proposing to make a market investigation reference relating to the provision of the Airwave network in Great Britain.

⁷ NAO 2019 – [Progress delivering the Emergency Services Network](#); paragraph 21; PAC (2019) - [Emergency Services Network: progress review](#).

⁸ PAC (2019) - [Emergency Services Network: progress review](#), paragraph 5.

⁹ NAO 2019 – [Progress delivering the Emergency Services Network](#); paragraph 3.20.

Competitive assessment

Introduction

- 1.10 The Airwave network is a private mobile radio network¹⁰ covering Great Britain that is based on TETRA technology. Such a network includes two layers:
- (a) the infrastructure (e.g. masts, transmitters/antennas and associated technology, such as control centres), and
 - (b) air-time capacity (spectrum).
- 1.11 Airwave Solutions¹¹ operates under licences¹² issued by the Office of Communications (Ofcom) that restrict it to offer services on the Airwave network to the British emergency services (referred to as blue light customers). It can also offer network services to designated sharer organisations, i.e. other organisations that are involved in public safety related activities and have a need to communicate with the blue light customers in emergency situations. Sharer organisations can only have access to the network if they have been approved by Ofcom and obtained security clearance from the Home Office for a sub-licence. Ofcom may also seek advice and guidance in relation to granting approval to potential sharer organisations from the Emergency Services Sharer Advisory Group which is comprised of representatives from the police, fire and ambulance services. The list of sharer organisations is controlled and managed by Ofcom¹³ and includes organisations such as the Coastguard Services, Environment Agency Enforcement Officers, HM Prison Service, London Underground, etc.
- 1.12 The services provided to blue light customers and associated charges are driven by the PFI Agreement and associated contractual arrangements that were entered into following the PFI procurement process that was completed

¹⁰ Services provided alongside the network may include the provision of related maintenance and integration services. However, there is no link between the provision of network access and managed services (for example Airwave Solutions is a relatively small player in managed services, but a significant player in the provision of network access). There are numerous alternative providers, including systems integrators, specialist managed service providers and other IT or communication providers who can by themselves or, more usually, as part of a consortium provide the varied set of managed services each customer may require. Source: [Macquarie/Airwave merger report](#).

¹¹ Airwave Solutions carries out other activities that account for a very small proportion of its turnover. We refer to these other activities where relevant in this document.

¹² The use of radiocommunications equipment in the UK requires a licence from Ofcom issued under the Wireless Telegraphy Act 2006 (unless the use of such equipment is exempt from the requirement to hold a licence). Airwave holds various licences which authorise Airwave to provide electronic communications services over its network using radio frequencies that have been allocated for emergency services applications and assigned to Airwave by Ofcom.

¹³ https://www.ofcom.org.uk/__data/assets/pdf_file/0024/88242/Airwave-Sharers-List-Process.pdf.

in 2000.¹⁴ As such, they were predetermined for the duration of the original PFI Agreement (19 years). Services and expenditure (over the 19 years) were broken down into two parts:¹⁵

- (a) Estimated £1,180 million for the "Core Service": all police forces receive, and the Home Office pays for, a guaranteed level of radio coverage and other key services.
- (b) Estimated £290 million for "Menu Exclusive" Services: police forces need to purchase services over and above those provided under the Core Service to maintain or enhance their existing capabilities. As a number of these services, such as extra radio coverage and capacity, are integral to the network to be built under the Core Service, Airwave Solutions offers them to police forces at national prices negotiated with PITO/the Home Office.¹⁶

1.13 Pricing under the PFI Agreement consists of three elements: a Core Service Charge (CSC), a Menu Service Charge (MSC) and TUPE adjustment charge.¹⁷ The CSC is the largest proportion and is paid centrally by the Home Office; whereas, the MSC is paid for locally by each customer (or police force) for the menu services provided to that customer. The CSC is set by reference to a baseline figure which is then multiplied by an indexation multiplier to derive the Indexed Relevant Baseline Figure (IRBF) for that contract year. The indexation multiplier applies a weighting to various contractor costs (labour, assets, etc.) and multiplies these by the change in retail price index (RPI) and average earning index.

1.14 In the sections below, we first examine the nature of the Airwave network and the level of competition during the process that led to the award of the PFI Agreement (competition 'for the market').

1.15 We then examine the in-contract negotiations that have taken place between the Home Office and Airwave Solutions within the PFI Agreement and later in

¹⁴ The services were initially only for the police forces, with the scope widened later on as other blue light customers joined the Airwave network.

¹⁵ In addition, BT and other potential suppliers would be invited to tender for the provision of "Menu Competitive" Services, including items such as handheld terminals and control room equipment. Each police force would determine the quantity of equipment and the prices paid would depend on the outcome of locally organised competitions. Expenditure was estimated to be £280 million overall over the course of the PFI Agreement. This is not included in our analysis, as these services are subject to different competitive constraints (and may therefore fall in different economic markets).

¹⁶ Source: NAO [Public Private Partnerships: Airwave](#) report, 2002, paragraph 3.

¹⁷ The PFI Agreement notes that, in certain years, there will be a need to take account of additional, unplanned payroll and other employment-related costs incurred by the contractor as a result of the operation of the Transfer of Undertakings (Protection of Employment) regulations (TUPE Regulations). A "Relevant TUPE Transfer" means the transfer of employees under the TUPE Regulations from a Relevant Police Authority (or a third-party contractor of a Relevant Police Authority) to the contractor on the commencement of any Services Contract.

relation to extensions to that agreement, to inform our view on how competitive outcomes may have evolved since 2000. In this latter context, we examine the incentives that the ownership of the Airwave network and the Lot 2 Contract may together give Motorola in relation to the roll-out of ESN.

Competition ‘for the market’

Characteristics of the Airwave network

- 1.16 The Airwave network is currently the only secure communications network for emergency services and blue light organisations (and sharer organisations who want to work closely with these organisations) in Great Britain. There is no alternative method for the police, fire and emergency services staff to communicate securely with each other when in the field.¹⁸ The Home Office told us that the extremely high geographical coverage, high level of security and capability to provide priority over other customers are the main factors differentiating it from other networks.
- 1.17 The Airwave network was described in 2015 by its then owners as a dedicated network for emergency services, which is differentiated from the commercial mobile networks by offering:
- (a) a unique service: mission critical services that include [REDACTED];
 - (b) nationwide interoperability and 100% geographical coverage across Great Britain;
 - (c) encrypted secure communication; and
 - (d) outstanding resilience and reliability on its own national infrastructure ([REDACTED]).
- 1.18 The same document refers to “unparalleled network capabilities, with c.99% geographic coverage of Great Britain, 24/365 customer service, [REDACTED], proven resilience, interoperability and fully encrypted secure signal”.
- 1.19 As is apparent from the above, the Airwave network is a highly differentiated and bespoke offering that was purposefully designed to meet the very specific needs of one customer group. Under such circumstances, one would expect competition to be ‘for the market’, i.e. to involve a process through which a long-term contract is awarded to one of a few suppliers and the main competitive interaction occurs when contracts are awarded and/or extended. Once the contract is in place, competitive constraints within the contract would

¹⁸ [Motorola/Airwave](#) merger report, paragraph 51.

be expected to be minimal at best.¹⁹ Although there may be some scope for customers to exercise some level of bargaining power at the point of negotiating contract extensions, in the absence of ‘outside options’, this would be expected to have a limited impact on the conduct of the incumbent supplier.

The PFI procurement process

- 1.20 The long-term contract for the provision of a nationally procured radio service for the police and emergency services (later to be named Airwave) was the subject of a bidding process in 1998. This was considered necessary, as the radio communication systems, that had previously been procured locally, were based on obsolete technology. A key benefit of the approach was that it was a nationwide service, with the added benefit that it could be shared by the police and fire services, along with other public safety organisations.
- 1.21 In markets characterized by bidding and tendering processes firms bid on the basis of the service they can offer to supply customers with bespoke products. The competitive constraint on firms in these markets comes from a customer’s willingness to award a contract to a rival rather than to switch to a different bespoke product.²⁰ In some markets, prices are determined by the relative bargaining power of sellers and buyers. The presence of large buyers relative to the size of the suppliers does not however necessarily guarantee that the buyers can exert countervailing buyer power. The relative importance to each buyer and supplier of its business with the other party is a key factor, and the strength of the buyers’ ‘outside options’, ie their alternative strategies in relation to the relevant product, is often the crucial determinant of countervailing buyer power.²¹
- 1.22 Although, in principle, a competitive outcome can be achieved through an effective bidding process, in this case, there is evidence that the bidding process that led to the PFI Agreement failed to create competitive tension, as briefly explained below and in more detail in Appendix B (paragraphs 12 to 15).

¹⁹ Unlike blue light customers, sharer organisations, in principle, could have a choice of suppliers: use of the Airwave network is discretionary for them; Airwave is not obliged to contract with them under the PFI agreement; and the price for their use of the Airwave network is not set in the PFI Agreement. However, OFCOM explained to us that only organisations that have a need for instant and direct communication with blue light customers would apply for, and be granted access to Airwave, and there is no other way in which they could get such access. Therefore, there are no substitutes available to sharer organisations when they have the specific need that leads them to apply for access to the Airwave network.

²⁰ CC3 (Revised), footnote 76.

²¹ CC3 (Revised), paragraph 176.

- 1.23 The bidding process was initiated in 1995, with 70 companies expressing an initial interest in the project. Although three potential bidding consortia were formed after the publication of the project advertisement in January 1996, by the time the actual tender process started, only one consortium, led by BT, remained in the running. Other potential bidders had dropped out for various reasons including that there were few companies committed to what was then an emerging technology and that only a few companies had the financial strength to take on such a large project. As existing radio systems were not meeting operational requirements, 'do-nothing' was not considered an option and the solution had to avoid delaying implementation of a new service. After wide consultation, PITO concluded that continuing with the BT consortium as a single bidder posed the least risk of delay.
- 1.24 With only one bidder, the tender process was therefore not a competitive one (as documented by the NAO at the time²²) and although PITO took a number of actions to mitigate the situation, such actions did not address the fundamental lack of competition for the contract and there is currently no reason to believe that, in the absence of any outside option, PITO was able to negotiate a price that was at the competitive level (we examine outcomes further in paragraphs 1.43 to 1.54).

In-contract negotiations between the Home Office and Airwave Solutions

- 1.25 In this section, we examine the evolution of the relationship between Airwave Solutions and its customers since 2000, starting with the period of growth from 2001 to 2010; before discussing the deterioration of its relationship with the Home Office, once the Airwave network had reached maturity, at which point the Home Office decided to seek a new communications solution (ESN). We finally describe the contract negotiations that have taken place recently due to delays to the roll-out of ESN. A timeline of events is provided in Appendix A.
- 1.26 We have limited information about the relationship between Airwave Solutions and its customers in the period from 2002 to 2010. However, the design and build part of the contract appears to have been delivered successfully with full national coverage completed and services delivered to all police forces by 2005, in line with expectations.²³ Between 2005 and 2009, the services were deployed to ambulance trusts and fire and rescue services, while in 2010, the network was further expanded to include the London Underground. It

²² NAO [Public Private Partnerships: Airwave](#) report, 2002, paragraphs 2.10 to 2.15.

²³ NAO [Public Private Partnerships: Airwave](#) report, 2002, paragraph 1.18.

therefore appears to us that by 2010, the Airwave network had reached maturity and acquired a stable, largely captive, customer base.²⁴

- 1.27 In 2010 and in the context of the broader austerity measures being rolled out across public services, the Government sought to negotiate a discount with Airwave Solutions but failed to come to an agreement, one reason among others being that the Government was not prepared to offer an extension in return for a discount.²⁵ The Government and Airwave Solutions also failed to agree a list of assets that the Government would own once the contracts entered into under the PFI Agreement expired, and this limited the Government's control over the use and cost of the assets in future (thus tying the Government to Airwave Solutions beyond the duration of the original PFI Agreement, unless it could procure a new communications solution). Recognising the high cost of the Airwave network (and other issues)²⁶ and in the face of a deteriorating commercial relationship, the Government decided to commission a replacement communications solution (ESN) that would enable all emergency services to switch to a 4G network by the time the PFI Agreement came to an end: following a review of options that had started in 2011, the Government put contracts for the delivery and roll-out of ESN out to tender in 2014 and awarded them in 2015; the transfer of customers to ESN was expected to start in 2017 and be completed by around 2019. The Airwave network was expected to be shut down once the switching process was completed, and therefore any market power Airwave Solutions may have had until then, would have been extinguished at that point.
- 1.28 In any event, delivery of ESN was delayed, and in September 2018, the PFI Agreement and associated contracts (see paragraph 2 of Appendix B) were extended to a revised switch-off date of December 2022. As part of the negotiation, a 5% price decrease (effective from 1 January 2020) was agreed by the Home Office and Airwave Solutions. By Spring 2021, it became clear that the contract would need to be further extended (to December 2026). The Home Office told us that the terms of this extension are still to be agreed, and that negotiations with Motorola are on-going.
- 1.29 Currently, it appears to us from the above developments that since 2010, Airwave Solutions has behaved in a way that is consistent with the exercise of unilateral market power (as would be expected, see paragraph 1.19): first, between 2010 and 2014, negotiations with Airwave Solutions' then owner, Macquarie, failed to deliver a satisfactory outcome and led to the Home Office

²⁴ Following several years of consistent growth, revenues plateaued broadly at the current level of over £400m from around 2008.

²⁵ NAO: [Upgrading emergency service communications: the Emergency Services Network \(2016\)](#), paragraph 4.3.

²⁶ See paragraph 24 of appendix B.

deciding to commission a new communications solutions that would take time and significant cost to implement; second, in the more recent negotiations relating to the extension of the original PFI Agreement, Motorola agreed a modest price discount (relative to the level of the profits that are now being made). In considering the outcome of these negotiations, we draw a distinction between the period from 2010 to 2017, during which pricing was defined by the original PFI Agreement, and later negotiations that reflect the current balance of negotiating power between the Home Office and Motorola.

- 1.30 Given that ESN is not expected to become operational before the end of 2026 and the Airwave network is now expected to continue to be used until then, we are concerned that Airwave Solutions may have a high level of market power for a considerable period of time.

Motorola's acquisition of Airwave Solutions

- 1.31 In this section, we describe the circumstances and potential impact of the acquisition of Airwave Solutions by Motorola in 2016, including: the merger clearance decision made by the CMA, partly based on the expectation (and assurances made by Motorola and the Home Office) that the Airwave network would be shut down by 2019 (i.e. the end of the PFI Agreement); the incentives that the merger may have created; and the extent to which Motorola may have acted on these incentives.
- 1.32 On 3 December 2015, Motorola agreed to purchase Airwave Solutions from Macquarie (subject to approval by the Home Office). A few days later the Home Office and Motorola entered into the Lot 2 Contract to deliver ESN.
- 1.33 [To reduce the extent to which Motorola could benefit from delays in delivering ESN and thereby exploit its position], the Home Office agreed a Deed of Recovery (DoR) with Motorola on 17 February 2016. The DoR contained a number of provisions setting out [redacted]. We understand from the Home Office that this remedy was not intended to curb the exercise of market power by Airwave Solutions but rather to avoid delays to the ESN roll-out.
- 1.34 Once the DoR was agreed, the Home Office agreed to the acquisition of Airwave Solutions by Motorola, which completed on 19 February 2016. In the course of the subsequent review of the merger by the CMA,²⁷ Motorola argued that as a result of the DoR, “if the Airwave service remains operational by reason of Motorola’s delay the Home Office is entitled to [redacted]”, adding that “in the event that any delay is incurred with regard to the transition to the new

²⁷ Motorola/Airwave.

ESN programme – whether such delay is caused by Motorola or otherwise – there are no remotely reasonable hypotheses under which Motorola could benefit financially in net terms from any extension of the Airwave contracts beyond 2019” and that “the broader market opportunities for Motorola in relation to the ESN programme are considerably greater than the opportunities that would otherwise arise should the ESN programme be delayed.” The Home office did not express any concerns about possible delays to ESN. On 1 July 2016, the CMA cleared the merger.

- 1.35 In its September 2016 report, the NAO identified the risks associated with the ownership of Airwave Solutions by Motorola, stating that: *“This purchase carries significant commercial risk for the programme as Motorola Solutions is now both a supplier on ESN and the main incumbent supplier.”* It also noted the incentives and potential upsides identified by the programme officials, who considered that the purchase *“should help with the overall delivery of ESN and both the programme and Motorola agree that the relationship between government and Airwave is now much better. In considering Motorola’s purchase of Airwave, programme officials [have] agreed a flexible basis on which Airwave can be extended, a firm price for this, re-use of some of Airwave’s radio masts for ESN, and a simpler solution for working across ESN and Airwave during transition than had previously been planned. The programme also negotiated a deed of undertaking to reduce the extent to which Motorola Solutions could benefit from delays in delivering ESN and thereby exploit its position.”*
- 1.36 By 2017, the Home Office was publicly reporting delays of nine months in delivering ESN and commissioned an independent review, which found that the transition from the Airwave network to ESN was not likely to happen on time for a variety of reasons and that the ESN programme needed to be reset. The Home Office announced the reset on 21 September 2018. On the same date, the Home Office extended the PFI Agreement with Motorola to supply Airwave network services from December 2019 until December 2022, with the option for the PFI Agreement to be further extended.
- 1.37 By 2019, the roll-out of ESN was subject to significant delays. In its 2019 report, the NAO estimated that under a potential ‘near worst-case’ scenario, the Airwave network shut-down could be delayed by a further four years, from December 2022 to December 2026. It again commented on Motorola’s incentives stating that: *“The Home Office will need to manage carefully the commercial consequences of renewing Airwave before changes to the Motorola contract have been agreed. Motorola will benefit from the successful development of ESN, but it also receives large revenues from the continued use of Airwave.”*

- 1.38 The Home Office told the CMA that despite the delays to date, the DoR mechanism has never been applied for a number of reasons:
- (a) The DoR is only applicable once [REDACTED].
 - (b) The principle underlying the DoR was that the recovery charge would [REDACTED]. The priority of the programme has been to motivate delivery, rather than punish Motorola – [REDACTED].
 - (c) The amount [REDACTED] if applied would not be a sufficient deterrent to Motorola, for two main reasons:
 - (i) the reduction [REDACTED]. If the delay was longer than that [REDACTED]; and
 - (ii) the imbalance between the revenues/profits earned by Motorola from the Airwave network and ESN, which creates incentives for Motorola to prioritise the former which is far more profitable.²⁸
- 1.39 In relation to the above point, the Home Office told the CMA that Motorola’s annual revenue from its Lot 2 ESN contract is around £[REDACTED] per annum (with an expected profit margin of [REDACTED]%). We note that this is in sharp contrast with the scale of excess profits that we estimate Motorola stands to make from the extension of the PFI Agreement (see paragraphs 1.43 to 1.54).
- 1.40 The Home Office also told the CMA that delays by Motorola in its delivery of ESN is resulting in significant additional cost to the Government as use of the Airwave network has to be extended to ensure continuity of communications by emergency services. [REDACTED].
- 1.41 Based on the analysis of Airwave Solutions’ profitability (see paragraphs 1.43 to 1.53), the CMA recognises the potential for tension between Motorola’s commitments and rewards as a key supplier to the roll-out of ESN and the high profits it derives from the continuation of the Airwave network. It also appears that the DoR may not be effective in constraining the incentives that have been created by Motorola’s ownership of Airwave Solutions and the Lot 2 Contract delivery. We note that at the point in time when the DoR was signed, Airwave Solutions’ profits were significantly lower than they are today, although Motorola, unlike the Home Office, could have been expected to know what their future trajectory would be (based on confidential information provided by Macquarie, as part of the Airwave Solutions sales process).

²⁸ [REDACTED] was considered suitable at the time as (i) the Home Office did not predict that Airwave Solutions would be making excess profits in 2016 or 2018; and (ii) Airwave’s 2018 and 2019 accounts were published in 2020 (which is when the profitability of the Airwave network became evident).

1.42 While the CMA has not to date reached a view on Motorola's part in the delays to the ESN roll-out, it considers that this merits further investigation, given the incentives created by Motorola's dual role in the roll-out of ESN and operation of the Airwave network.

Outcomes

1.43 Evaluating outcomes of the competitive process in their different forms in a market – eg prices and profitability, levels of innovation, product range and quality – helps the CMA determine whether there are competition problems and, if so, the extent to which customers may be harmed by them. Prices and profits are among the more observable and measurable outcomes and an analysis of these may be useful in understanding the extent and nature of competition and can be helpful in measuring customer detriment.²⁹ Given that the Airwave network is a highly differentiated and bespoke offering, we have focused our analysis of outcomes on the profitability of Airwave Solutions.

1.44 The CMA guidelines state that:

'Firms in a competitive market would generally earn no more than a 'normal' rate of profit – the minimum level of profits required to keep the factors of production in their current use in the long run, i.e. the rate of return on capital employed for a particular business activity would be equal to the opportunity cost of capital for that activity.'³⁰

1.45 Return on capital can be based on cash flows (internal rate of return (IRR)) or profits (return on capital employed (ROCE)). Ordinarily, where data permits, we use ROCE, as this can be computed annually and thus provides greater insights into trends over time and the drivers of profits above the 'normal' level. The opportunity cost of capital is the weighted average return on capital,³¹ which investors expect for providing capital to firms undertaking the in-scope activities.

1.46 The extent to which the results of profitability analysis indicate limitations in the competitive process may depend on both the size of the gap between the level of profitability and the cost of capital and the length of the period over which the gap persists. The appropriate time period over which to examine

²⁹ CC3 (Revised) paragraphs 103 and 104.

³⁰ CC3 (Revised), paragraph 116.

³¹ Specifically, the mean ex ante expected return on capital of debt and equity holders, weighted by gearing.

the persistence of the gap between profitability and the cost of capital may therefore vary according to the specific market.³²

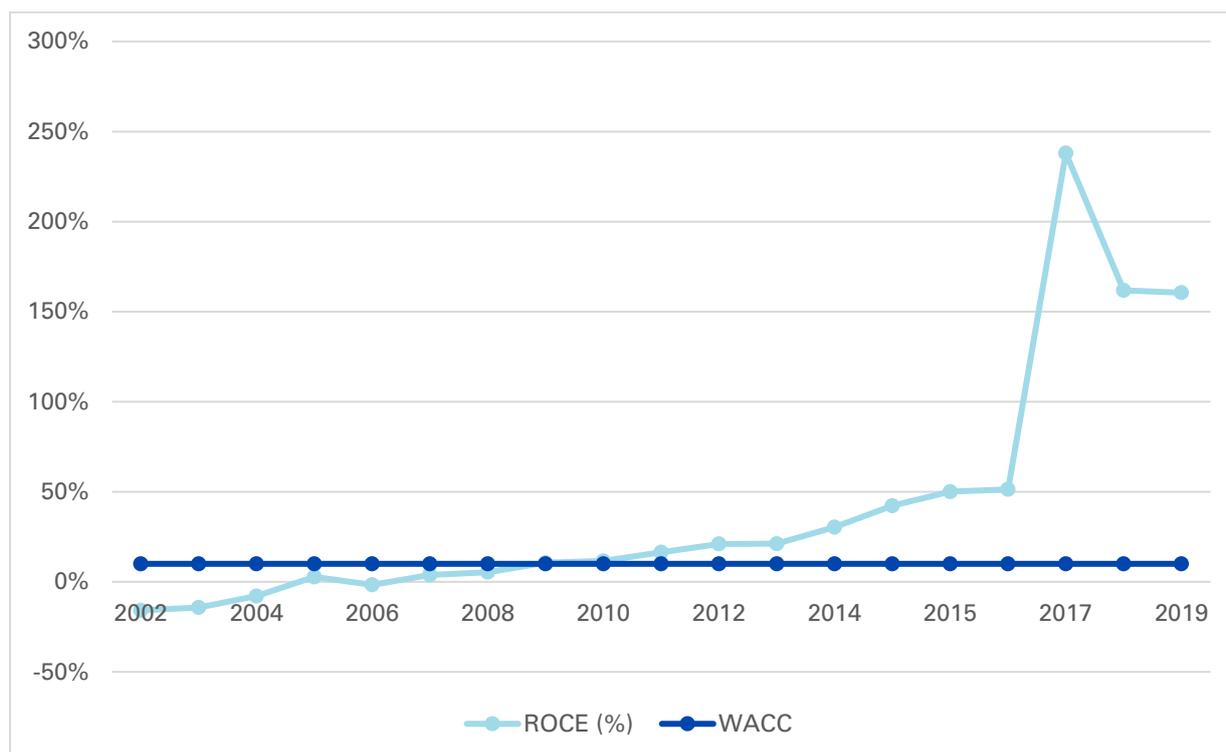
- 1.47 In this case, as the activities of Airwave Solutions have been carried out under a long-term contract spanning the period from 2000 to 2019, we have sought to understand how profitability has evolved over that period. As Airwave Solutions was a dormant company in its first year, in practice our analysis of its profitability based on published accounts spans the period from April 2001 to December 2019. Given that the network build started in late 2001, we consider this to be an appropriate period over which to carry out the analysis. In addition, we understand³³ that the vast majority of revenue and costs recorded in Airwave Solutions' accounts are incurred in relation to the provision of access to its radio network and related services, and therefore consider that published financial information is suitable for current purposes.
- 1.48 Our provisional estimate for a reasonable rate of return on capital to apply in this case is based on past estimates of the weighted average cost of capital (WACC) used for the purpose of regulating businesses that appear to have a similar risk profile to Airwave Solutions, ie firms in the telecoms and water sectors. We have used an estimate of 10% (nominal, post-tax) WACC, which is consistent with an Ofcom decision taken during the relevant period,³⁴ and reflects the fact that WACCs were generally higher towards the beginning of the relevant period than at the end due to declining interest rates and an evolution in terms of how certain elements of the capital asset pricing model (CAPM) are calibrated.
- 1.49 As we do not have cash flow information for the early years, i.e. we could not calculate the IRR, we have calculated the Airwave Solutions ROCE.

³² [CC3 \(Revised\)](#), paragraphs 120 and 121.

³³ Most of Airwave Solutions' revenues, about 98% in 2015-16, come from selling its network to the public sector. (source: NAO: [Upgrading emergency service communications: the Emergency Services Network \(2016\)](#)). Although this may have changed since then, the 2019 statutory accounts state: "turnover predominantly arises from the Company's principal activity, being the provision of managed service solutions to customers on the Airwave network".

³⁴ For example, see [Consultation \(ofcom.org.uk\)](#). Ofcom set a WACC of 10.1% nominal for Openreach (wholesale line rental) in 2009. In the recent PR19 water redetermination, the CMA used a nominal WACC of around 6.5%. However, we would expect an estimate that is appropriate for the 2001 to 2019 period as a whole would be higher than this.

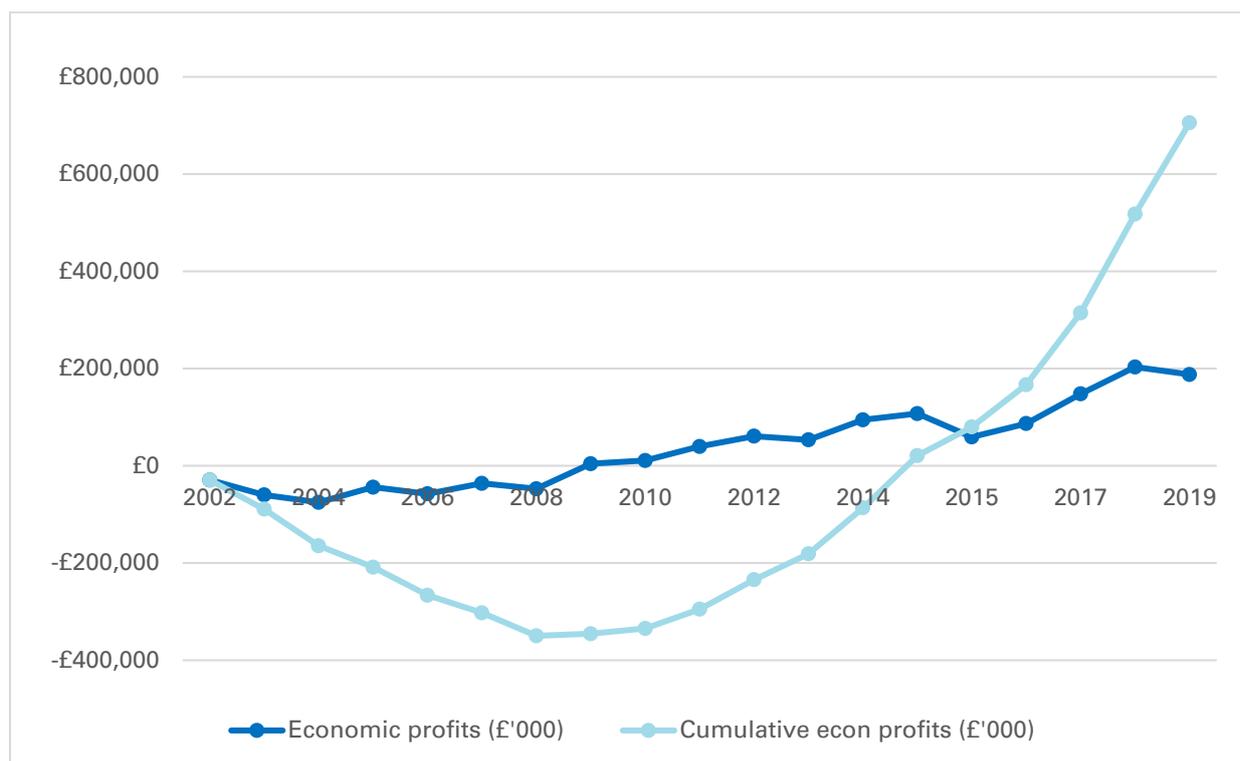
Figure 1 – Airwave Solutions’ annual ROCE (vs estimate of WACC) from 2002 to 2019



Notes: ROCE calculated as EBIT divided by capital employed and weighted by number of months in each financial reporting period. EBIT is earnings before interest and tax, excluding amortisation of goodwill and management fees; capital employed is fixed assets plus current assets less current liabilities, but excluding goodwill, investments, deferred tax assets, cash and borrowings, and excluding certain debtors and creditors.
 Source: CMA analysis of Airwave’s statutory accounts

- 1.50 Figure 1 above shows that the firm’s ROCE has increased materially over the period, falling below the WACC for the first six to seven years of the contract and then exceeding the WACC. From 2012 onwards, returns have materially exceeded the WACC. Over the period as a whole, the firm has earned an average ROCE of 19%, which is approximately twice our provisional estimate of its WACC, suggesting that the price paid may have been significantly above the competitive level, when looking at the entire period of the PFI Agreement.
- 1.51 We then calculated Airwave Solutions’ economic profits over the period, i.e. the profit earned by the firm after the providers of capital have been paid a market-based return on their investment, equal to WACC. This tells us in pound terms how much more customers paid for the services they received, compared with the total cost-base (including a reasonable level of return, or profit) of the firm. As stated in paragraph 1.48, we have used a WACC estimate of 10%.

Figure 2 Airwave Solutions' economic profits from 2002 to 2019



Notes: Economic profits weighted by number of months in each financial reporting period.
Source: CMA analysis of Airwave's statutory accounts

1.52 Figure 2 indicates that by late 2014, Airwave Solutions had recouped the economic losses made in the early years of the PFI Agreement and that in the last five years of the original contract duration (i.e. 2015 to 2019), excess profits averaged around £148 million per year.

1.53 This analysis therefore implies that the prices charged under the PFI Agreement have been above the competitive level overall, with this becoming particularly clear in the last 4 or 5 years of the original contract duration.

1.54 Further, there is currently no reason to believe³⁵ that there will be a significant change to Airwave Solutions' cost structure or levels of revenue and profitability it can achieve until ESN becomes operational and the Airwave network is turned off, although there is likely to be some level of investment to refresh the network, which we have estimated and taken into account in our calculation. We note that the Home Office was able to negotiate a discount of

³⁵ We understand from the Home Office that [redacted] Motorola said that a total investment of £[redacted] in the Airwave network would be needed. Given the overall context in which this comment was made and absence of supporting evidence, we have not given material weight to this at this stage. We note that even if we were to accept that this level of investment was needed to keep the Airwave network in operation until 2026 for the sole purpose of serving the blue light and sharer customers, Airwave Solutions would still appear to be making returns well above its cost of capital going forward (in the region of £[redacted]).

5% on the CSC in 2019, applicable from 2020 until 2022 and [X],³⁶ and that this discount will make a relatively small difference to the levels of apparent excess profits that can be expected over the remaining years of operation of the Airwave network – a reduction of approximately 10%. As indicated above, we understand from the Home Office that the terms of a further extension to 2026 are still to be agreed with Motorola. This means that, based on the information we currently have, and the assumptions we have made,³⁷ by the end of 2026, the company may stand to achieve excess profits of around £1.9bn overall (of which around £700m was achieved by 2019 and a further £1.2bn is expected from 2020 to 2026, inclusive).³⁸ Ultimately any excess profits generated by Airwave Solutions will be borne by the British taxpayer.

Provisional views on the competitive assessment

1.55 We consider that, due to the combination of the factors set out below, there are reasonable grounds to suspect that Airwave Solutions has unilateral market power in relation to the supply of the Airwave network in Great Britain.

- Firstly, the Airwave network – a highly differentiated, bespoke piece of critical infrastructure – was established following a PFI procurement process that attracted only one bid. Given the critical nature of the network, the Home Office considered that its only viable option at that stage was to proceed regardless. As the procurement process failed to create competitive tension, we consider that there are reasonable grounds to suspect that the resulting pricing level and indexation mechanism were uncompetitive³⁹.
- Secondly, the replacement of the Airwave network is now very significantly delayed:
 - By 2010, it became evident that the Airwave network was a costly solution and that the Home Office had limited bargaining power within the terms of the existing arrangement. Its decision to replace the Airwave network was made in 2011 and following a tender

³⁶ We note that Motorola's [2020 SEC filings](#) refers to a "\$31 million decrease in capital expenditures in 2020 compared 2019 due to lower expenditures for the Airwave and ESN networks".

³⁷ We have assumed further investment to refresh the network of £[X] and a WACC of [X]% for the period 2020 to 2026, which we believe were the assumptions made by Motorola when it acquired Airwave Solutions.

³⁸ Estimated excess profits of £2bn, including excess profits achieved by 2019 together with excess profits expected to be achieved between 2020 and 2026, were netted off with losses made in the period from the start of the PFI Agreement to 2015, totalling £33m.

³⁹ As reflected by the level of ROCE (which we estimate to be around 20%) over the original term of the PFI Agreement.

process started in 2014, it was expected that the roll-out of a new technological solution, ESN, would be complete by 2019.

- However, this target was not achieved with the result that the Home Office had no realistic option but to extend the contract with Airwave Solutions beyond 2019, initially to 2022. As part of that extension (agreed in 2018), the original, likely uncompetitive, pricing structure was largely carried forward, rather than reset to reflect the fact that the original pricing was calculated on the assumption of a 19-year contract during which a large upfront investment would need to be recouped.
- It is now apparent that due to further delays to the roll-out of ESN, a further extension until the end of 2026 will be required (and we are not aware of any reason the resulting prices would be more competitive than those agreed in 2018).
- Thirdly, the acquisition of Airwave Solutions by Motorola in 2016 may have changed the combined entity's incentives, which in turn may have impacted the way the market has developed since the merger was completed: given the relative size of the profits made by Motorola from the continued operation of the Airwave network compared to the revenue (and consequently, the profits) it can expect to make from the delivery of ESN, it is plausible that Motorola's approach to the delivery of its contractual obligations in relation to ESN may have been influenced by the incentives created by its ownership of the Airwave network.⁴⁰

1.56 In light of the above factors, there are reasonable grounds to suspect that the current pricing of the Airwave network reflects the significant level of market power that Airwave Solutions and its owner, Motorola, are able to exercise, and may be able to continue to exercise until the Airwave network is switched off. Such pricing appears capable of resulting in very high levels of excess profits going forward: our preliminary calculations indicate that Airwave Solutions may be able to extract around £1.9 billion in excess profits overall, largely as a result of the continuation of the PFI Agreement well beyond its original term.

1.57 The CMA therefore is provisionally of the view that the situation originally established through an ineffective procurement process, exacerbated by the unexpected lengthy extension of the Airwave network and potentially also by

⁴⁰ While the Home Office sought to address this issue through financial disincentives for non-delivery, the mechanism through which the financial disincentives are triggered and the agreed level of redress (as set out in the DoR signed in 2016) appear to be ineffective. We note that they were negotiated at a time when the Home Office (unlike perhaps Motorola) could not foresee the future upward trajectory of Airwave's profits.

the incentives resulting from Motorola's dual role as owner of Airwave Solutions and key supplier to ESN, and as a result of which Airwave Solutions appears to be able to derive significant excess profits, is likely to continue until the end of 2026, if not longer, given the risk of further delays to the roll-out of ESN.

2. The case for a market investigation reference

- 2.1 The CMA may decide to make a market investigation reference (MIR) when it has reasonable grounds for suspecting that a feature or combination of features of a market or markets in the UK prevents, restricts or distorts competition, and a market investigation reference appears to be an appropriate response.⁴¹
- 2.2 For the reasons set out in section 1 of this report, our current view is that the market for the supply of the Airwave network in Great Britain is not working well and that this has resulted in significant detriment for customers, as evidenced by the persistently high and increasing returns that have been achieved by Airwave Solutions in the 4-5 years to financial year end 2019 (see paragraphs 1.50 to 1.53).
- 2.3 In this section we set out our proposed decision as to whether to make a MIR in relation to the supply of the Airwave network in Great Britain.
- 2.4 We first set out the legal framework that the CMA uses when deciding to exercise its discretion as to whether to make a MIR before assessing the present case against the four criteria set out as part of that framework.

The legal framework

- 2.5 As set out above, the reference test is a ‘reasonable grounds to suspect’ test and does not require the CMA to have concluded that there are, in fact, features of a market which prevent, restrict or distort competition.⁴²
- 2.6 Where the reference test is met, the CMA can exercise its discretion, to make an MIR. In our guidance on making MIRs, we set out four criteria which help to guide our exercise of that discretion:
- (a) The scale of the suspected problem is such that a reference would be an appropriate response.
 - (b) There is a reasonable chance that appropriate remedies would be available.

⁴¹ [Section 131](#) (2) of the Enterprise Act 2002 sets out what is to be construed as a feature for the purposes of Part 4 of Enterprise Act 2002.

⁴² This point was made clear by the [Competition Appeal Tribunal in *Association of Convenience Stores v OFT*](#), [2005] CAT 36, paragraph 7.

- (c) It would not be more appropriate to address the concerns through undertakings in lieu of a reference (UILs).
- (d) It would not be more appropriate to address the competition problems through alternative powers available to the CMA or through the powers of sectoral regulators.⁴³

2.7 In considering these factors, we recognise that a MIR leads to significant costs, both to the CMA itself (and the public purse) and to the parties involved.

The reference test

The market

- 2.8 In making a MIR, the CMA must specify the goods or services in relation to the supply or acquisition of which there may be an adverse effect on competition (AEC). This will require some consideration of the definition of the relevant market (or markets) and will usually comprise two dimensions: the product dimension and the geographic dimension.⁴⁴ We set this out below. However, as stated in the guidance on the making of MIRs, the CMA is not obliged to provide a precise definition of the market or markets to which any MIR relates.
- 2.9 Without needing to reach a firm conclusion, the CMA's 2016 assessment of the acquisition of Airwave Solutions by Motorola considered the Airwave network to represent a distinct frame of reference for the purposes of the assessment of the impact of that merger on competition.⁴⁵ The CMA found that the Airwave network is the only secure communications network for emergency services and blue light organisations and that there is no alternative method for emergency services to access this network without contracting with Airwave Solutions. It also considered that the geographic frame of reference was Great Britain because "the network provides coverage across Great Britain and is provided to user organisations based in Great Britain". The CMA therefore assessed the impact of the merger on the "supply of the Airwave network in Great Britain" as a separate frame of reference.

⁴³ [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.1.

⁴⁴ [Market Investigation References guidance](#), OFT511 paragraphs 4.8 and 4.9.

⁴⁵ [Motorola / Airwave merger inquiry - GOV.UK \(www.gov.uk\)](#).

- 2.10 To our knowledge, there have not been any significant changes to the supply of these services since the merger was considered. We therefore have reasonable grounds to believe that the above considerations still apply.
- 2.11 For the avoidance of doubt, we consider that any ancillary service to the Airwave network for which customers have no alternative supplier to Airwave Solutions, should be included in the terms of reference. For example, as explained in the Motorola/Airwave decision, in order for radio terminals and software to be used on the Airwave network they have to be tested to ensure they will not damage the service received by other users. Airwave Solutions' testing facility is [redacted]. We therefore consider that Airwave Solutions may also be able to exert unilateral market power in its supply of testing services and any other such ancillary services. We therefore propose that the terms of reference for any MIR should include all relevant Airwave network ancillary services, including the testing facility.
- 2.12 In conclusion we consider the appropriate market for the purposes of any MIR, to be the supply of the Airwave network (including all relevant ancillary services) in Great Britain.

The features in this market

- 2.13 Based on the evidence and our analysis set out in section 1, our provisional view is that there are reasonable grounds for suspecting that one or more of the following features, alone or in combination prevent, restrict or distort competition in the supply of the Airwave network (and ancillary services) in Great Britain:
- (a) the highly differentiated and bespoke nature of the Airwave network, requiring it to be designed, built and operated under a long-term exclusive contract,
 - (b) the dual role of Motorola, as owner of Airwave Solutions and key supplier in the roll-out of ESN since 2016, with the incentives such a position creates,
 - (c) the absence of competitive tension in the award of the original contract, with only one supplier taking part in the bidding process and the resulting likely uncompetitive pricing structure, and
 - (d) the delays in the roll-out of ESN that have necessitated the extension of the Airwave network by three years to 2022 and now require a further extension until the end of 2026, thereby prolonging the likely uncompetitive pricing structure well beyond the original term of the PFI Agreement.

- 2.14 We have reasonable grounds for suspecting that the above features, alone or in combination, give rise to unilateral market power for Airwave Solutions, as evidenced by the apparent high level of profits that it has been able to make in recent years and our reasonable expectation that it may be able to continue making profits well in excess of its cost of capital until the end of 2026.

Provisional view on the ‘reference test’

- 2.15 For the reasons set out above and in paragraphs 1.55 to 1.57 of this consultation, the CMA’s provisional view, is that there are reasonable grounds to suspect that one or more features (alone or in combination) in relation to the supply of the Airwave network (and ancillary services) in Great Britain prevent, restrict or distort competition and that the reference test is met. Based on the evidence set out in paragraphs 1.43 to 1.54, the CMA also has reasonable grounds to suspect that any adverse effect on competition resulting from the features that it has identified may lead to significant customer harm.
- 2.16 Having reached this provisional view, we now go on to consider the factors relevant to the exercise of the CMA’s discretion to make an MIR.

Views on the appropriateness of a reference

First criterion: scale of the suspected problem

- 2.17 The CMA recognises that a MIR may impose a burden on the businesses concerned and, in addition, requires a significant commitment by the CMA itself. It will only make a MIR when it has reasonable grounds to suspect that the adverse effects on competition of features of a market are significant.⁴⁶
- 2.18 In determining the scale of the suspected problem, our guidance identifies three factors of particular significance:
- a) the size of the market,
 - b) the proportion of the market affected by the features, and
 - c) the persistence of those features.⁴⁷

⁴⁶ [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.27.

⁴⁷ [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.28.

The size of the market

- 2.19 As set out in paragraph 1.4, Airwave Solutions' revenue was £424 million in 2019, nearly all of which was accounted for by the provision of its Airwave network to blue light customers and sharer organisations.
- 2.20 When deciding whether the suspected adverse effect on competition is of a sufficient scale to justify the cost of a MIR, the CMA has taken account of the particularly high economic profits that it has reasonable grounds to suspect Airwave Solutions will be able to generate before the Airwave network is switched off. The estimate that the CMA has calculated based on publicly available information points towards possible excess economic profits of around £1.9 billion overall.

The proportion of the market affected by the features

- 2.21 As the Airwave network appears to be a monopoly, the entirety of the market is affected by the features set out in paragraph 2.13.

The persistence of those features

- 2.22 At this stage, and based on the evidence we have obtained so far, we expect that the features will persist until the end of 2026 and possibly longer, given that there is currently no reason to believe that the dynamics that have led to significant delays in the roll-out of ESN will change fundamentally in the short to medium term.

Provisional conclusion on first criterion: scale of the suspected problem

- 2.23 The CMA therefore considers that the suspected AEC in the supply of the Airwave network (and ancillary services) in Great Britain and associated harm are sufficiently large and persistent to justify the burden of a MIR. The CMA notes that in this case, the burden of any excess profits made by Airwave Solutions falls to the British taxpayer and that this burden far outweighs the cost of a CMA MIR.
- 2.24 Finally, in deciding whether a MIR is justified, we consider it highly relevant that the Airwave network is critical to the effective operation of emergency and police services.

Second criterion: availability of appropriate remedies through a MIR

- 2.25 The availability of remedies and the prospective value of a market investigation is part of the CMA's assessment when considering whether to

make an MIR. This is not however an assessment of the appropriateness of such remedies.

2.26 At this stage, the CMA considers that there may in principle be two remedies to the potential AEC and resulting detrimental effects identified in paragraphs 2.13 and 2.14:

(a) a form of rate of return regulation typically employed by regulators setting price caps for natural monopoly networks. The price control would fall away as soon as ESN is operational and the Airwave network is turned off. This would address the adverse effects resulting from the exercise of market power by Airwave Solutions.

(b) Divestiture of the Airwave network. This would address the incentives identified in paragraph 2.13(b).

Provisional conclusion on the second criterion: availability of appropriate remedies through an MIR

2.27 Therefore, the CMA provisionally considers that appropriate remedies are likely to be available.

Third criterion: the availability of undertakings in lieu of a reference

2.28 The CMA has the power under section 154 of the Enterprise Act 2002 to accept undertakings in lieu of a reference (UILs) instead of making a MIR. Before doing so, the CMA is obliged to: *'have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the adverse effect on competition concerned and any detrimental effects on customers so far as resulting from the adverse effect on competition'*.⁴⁸ As the CMA's guidance notes, such UILs are 'unlikely to be common', but *'where an adverse effect on competition arises from the conduct of a very few firms there may be more scope for accepting undertakings in lieu'* than *'when the adverse effects on competition arise from market features involving several firms or industry-wide practices'*.⁴⁹

2.29 At this stage, we cannot exclude the possibility that UILs may be offered by Motorola, following publication of this consultation. If this were the case, the CMA would consider them. However, given the considerable gap between

⁴⁸ [Section 154\(3\) of the Enterprise Act 2002](#).

⁴⁹ [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.21.

Airwave Solutions' ROCE and our estimate of its WACC, we consider the prospect of Motorola offering acceptable UILs to be low at this stage.

Provisional conclusion on the third criterion: the availability of undertakings in lieu of a reference

2.30 For the reasons set out above, the CMA provisionally considers that it cannot be confident that UILs could provide as comprehensive a solution as is reasonable and practicable to the adverse effect on competition concerned and any resulting detrimental effects on customers.

Fourth criterion: alternative powers available to the CMA or to sectoral regulators

Alternative powers available to the CMA

2.31 Finally, we have carefully considered what actions the CMA should take to address the concerns we have identified. This has included whether we should launch a market investigation and/or use our Competition Act 1998 enforcement powers.

2.32 For the reasons set out in this document, we have provisionally decided that a MIR is the most appropriate tool to address the concerns we have identified, in particular given its focus on remedying AECs and/or their adverse effects in the future, rather than seeking redress for past conduct.

2.33 Nevertheless, at this stage, we have not ruled out the possibility of using our powers under Competition Act 1998 in the future. The CMA will keep this option under review as any MIR progresses.

Powers available to Ofcom

2.34 Under the Communications Act 2003, Ofcom regulates the TV and radio sectors, fixed line telecoms and mobiles and the airwaves over which wireless devices operate. Ofcom has concurrent powers with the CMA to investigate suspected infringements of the Competition Act 1998 resulting from agreements or conduct relating to activities connected to electronic communications, broadcasting and postal services matters. It also has the power to investigate and, where merited, determine that a provider of an electronic communications service has significant market power (SMP) in an identified services market. Where that is the case, the Communications Act 2003 enables Ofcom to impose SMP conditions and such conditions include, where appropriate, price control measures.

2.35 In considering the most appropriate way to address the concerns that we have provisionally identified, we have taken account of the broader remit and flexibility of a MIR, compared to other options. In particular, a market investigation would enable the CMA inquiry group to consider not only Airwave Solutions' current conduct within the market in which it operates but also assess the potential significance of Motorola's interest in the ESN for the features giving rise to a potential AEC. We also note in this context that the range of remedies available in the MIR context is wider than would be available to Ofcom as SMP conditions.

Alternative forms of resolution

2.36 Lastly, we have also considered whether any other routes are available to the Home Office to address the concerns we have provisionally identified. In principle, it may be possible for the Home Office to seek to address some of the identified concerns by way of contractual dispute resolution and/or stand-alone litigation. However, this is not necessarily the case for all identified concerns and may require a number of separate actions (with the added risk of divergent or inconsistent outcomes). In light of the above, we consider that the broader remit and flexibility of a MIR to take into account all the elements giving rise to the potential AEC means that it would be better suited to address the identified concerns.

Provisional conclusion on the fourth criterion: alternative powers available to the CMA or to sectoral regulators

2.37 In light of the foregoing, the CMA provisionally considers that it would not be more appropriate for it or another regulator to address the identified features using alternative powers to a MIR.

Provisional conclusion on the appropriateness of a reference

2.38 For the reasons set out above, the CMA provisionally considers that it is appropriate to exercise its discretion to make a MIR.

2.39 Further, in deciding whether to intervene in this market, we considered the circumstances that have led to some of the suspected features, namely the acquisition of Airwave Solutions by Motorola in 2016. There was at the time a general expectation that the Airwave network would be turned off by 2019 (i.e. at the end of the PFI Agreement). However, as events did not unfold as predicted, now with the reference test being met, there are reasonable grounds for the CMA to consider further how the market is operating.

Provisional Conclusion

2.40 In light of the foregoing, the CMA therefore proposes to make an 'ordinary'⁵⁰ MIR within the meaning of section 131(6) of the Enterprise Act 2002 in respect of the supply of the Airwave network (and ancillary services) in Great Britain.

⁵⁰ As opposed to a cross market reference.

3. Consultation

3.1 The CMA may make a MIR where:

- (a) The CMA has reasonable grounds to suspect that any feature or combination of features of a market in the UK for goods or services prevents, restricts, or distorts competition in the connection with the supply or acquisition of any goods or services in the UK or a part of the UK (the reference test); and
- (b) The CMA considers it is appropriate to exercise its discretion to make a MIR.

3.2 As set out in section 2 the CMA has provisionally concluded that the reference test is met and that it would be appropriate to make a reference in relation to the supply of the Airwave network (and ancillary services) in Great Britain.

3.3 Accordingly, the CMA is now commencing a period of consultation in relation to its proposal to make such a reference. We attach at Appendix C draft terms of reference. We would welcome respondents' comments on that draft.

3.4 The CMA welcomes representations from interested parties on the proposed reference decision set out in this document. The CMA wishes to stress the importance of the consultation process in assisting the CMA's decision making and urges interested parties to engage with the consultation. In doing so, respondents may wish to consider the following questions:

- Do you consider that the CMA's analysis is correct with respect to the suspected features of concern in the supply of the Airwave network (and ancillary services) in Great Britain?
- Do you consider that the CMA's analysis is correct with respect to the reference test being met in relation to the supply of the Airwave network (and ancillary services) in Great Britain?
- Do you agree with the CMA's proposal to exercise its discretion to make a reference in relation to the supply of the Airwave network (and ancillary services) in Great Britain?
- Do you consider the proposed scope of the reference, as set out in the draft terms of the reference in Appendix C would be sufficient to enable any adverse effect on competition (or any resulting or likely detrimental effects on customers) caused by the features referred to in paragraph 2.13 to be effectively and comprehensively remedied?

- Do you consider that the adverse effect on competition (or any resulting or likely detrimental effects on customers) caused by the features referred to in paragraph 2.13 are capable of being effectively and comprehensively remedied by undertakings in lieu of a MIR?
- Do you have any views on our current thinking on the types of remedies that a MIR could consider (see paragraph 2.26 above)? Are there other measures we should consider?

3.5 The CMA would particularly welcome any specific evidence from respondents in support of their views.

Such comments should be provided no later than **5:00pm on 2 September 2021** by emailing:

MRN@cma.gov.uk

3.6 Our intention is to publish on the CMA's website an aggregated and anonymised summary of submissions from individuals, although if you prefer, you can indicate that you would prefer for your response to be published in full.

3.7 We intend to publish all responses from businesses and other organisations on the CMA's website, except those responses marked as confidential. Respondents may request that their response be kept confidential. If you would like your response to remain confidential, clearly mark it to that effect and include the reasons for confidentiality. Please restrict any confidential material to the appendices to your response.

3.8 We will redact, summarise or aggregate information in published reports where this is appropriate to ensure transparency whilst protecting legitimate consumer or business interests. While the information you provide will primarily be used for the purposes of the consultation on whether a reference should be made, and if so in what form, where appropriate we may also use information you provide in relation to the CMA's other functions. For example, we may use the information you provide in connection with enforcement action using our consumer or competition enforcement powers, or we may share your information with another enforcement authority (such as local Trading Standards Services) or with another regulator for them to consider whether action is necessary.

3.9 Personal data received in the course of this consultation will be processed in accordance with our obligations under the UK GDPR, the Data Protection Act 2018 and other legislation designed to protect individual privacy.

- 3.10 Our use of all information received (including personal data) is subject to Part 9 of the Enterprise Act 2002 and the Freedom of Information Act 2000. Further information on the CMA's obligations under this legislation can be found in the CMA guidance: 'Transparency and disclosure: statement of CMA's policy and approach (CMA6).⁵¹
- 3.11 Following careful consideration of the responses to this consultation, the CMA will publish a final decision on whether or not to make an MIR in respect of the supply of the Airwave network in Great Britain.

⁵¹ See [Transparency and disclosure](#): Statement of the CMA's policy and approach, CMA6.