

# LMR Network Services Market Investigation

## Approach to Assessing Motorola's Dual Role

**6 May 2022**

This is one of a series of consultative working papers which will be published during the course of the investigation. This paper should be read alongside the issues statement and the other working papers which accompany it. These papers do not form the inquiry group's provisional findings. The group is carrying forward its information-gathering and analysis work and will proceed to prepare its provisional findings, which are currently scheduled for publication in June, taking into consideration responses to the consultation on the issues statement and the working papers. Parties wishing to comment on this paper should send their comments to [MRN@cma.gov.uk](mailto:MRN@cma.gov.uk) by 20 May 2022.

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The Competition and Markets Authority has excluded from this published version of the working paper information which the inquiry group 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 [Some numbers have been replaced by a range.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.]

## Introduction

1. On 25 October 2021, the Competition and Markets Authority (CMA), in exercise of its power under sections 131 and 133 of the Enterprise Act 2002 (the Act) made a reference for a market investigation into the supply of land mobile radio (LMR) network services for public safety (including all relevant ancillary services) in Great Britain.
2. Shortly after the reference, on 13 December 2021, we published an Issues Statement, which set out our initial hypotheses concerning which features of the market for the supply of LMR network services for public safety (including all relevant ancillary services) in Great Britain, if any, may be adversely affecting competition.
3. In our Issues Statement, we said that we would examine whether Motorola Solutions' control of both the Airwave network through Airwave Solutions and key elements of the design and roll-out of the new network (ESN) (ie the dual role of Motorola Solutions) may be a feature that prevents, restricts or distorts competition in the market for the supply of LMR network services.
4. The evidence we have gathered to date and our emerging thinking are set out in a Working Paper, which has been provided to Motorola. The focus of that Working Paper is on examining whether and how Motorola's ownership of Airwave Solutions (and associated profits) has the potential to affect Motorola's approach to the delivery of the elements of ESN that it is responsible for as part of the ESMCP programme (referred to as Lot 2) in a way that could amount to a prevention, restriction or distortion of competition.
5. The purpose of this paper is to set out our framework for thinking about Motorola's dual role. This paper does not provide a full discussion of all the relevant evidence (for confidentiality reasons), rather it builds on the Issues Statement and aims to provide transparency in relation to the nature of the evidence we are considering and the analysis we are carrying out. We welcome views and comments on our current thinking and approach by 20 May 2022.
6. Our analysis as set out in the Working Paper and described below is structured in four sections as follows:
  - (a) First, we consider the background to ESN and award of Lot 2.
  - (b) We then consider evidence of where Motorola's incentives lie, focusing on an assessment of its current and forecast revenues and profits.

- (c) We then consider Motorola's ability to act on such incentives through its delivery of Lot 2, which in turn could increase the likelihood that Airwave Solutions (and associated profits) continue for longer, and in particular, whether such ability is in any way constrained by the contractual provisions that the Home Office put in place, including the Deed of Recovery (DoR).
- (d) Finally, we consider observable outcomes in relation to the delivery of ESN, to the extent that these could be indicators of distortions of competition in the relevant market.

## Background to ESN and Lot 2

- 7. We are examining the process of procuring the ESN contracts, in particular Lot 2, and considering the extent to which Lot 2 could generally be regarded as having been subject to competition.
- 8. We note that, for Lot 2:
  - (a) the Home Office received 17 expressions of interest but not all these resulted in bids due to the demanding technical requirements;
  - (b) the Home Office narrowed the competition down to five bidders and two bidders were invited to submit a best and final offer; and
  - (c) the report by the Committee of Public Accounts notes that *"...one of the final two suppliers withdrew leaving the Department exposed to a potentially uncompetitive single-supplier situation. The Department told us that in one of these cases supplier withdrawal came so late that the winning bid, submitted by Motorola, was effectively prepared under competitive pressure."*<sup>1</sup>
- 9. Under circumstances where bidding for Lot 2 was a competitive process, the conduct of Motorola in its delivery of Lot 2 could have been expected to be incentivised solely by the short- and long-term financial rewards that it could derive from the effective and efficient delivery of its Lot 2 obligations.

## Incentives

- 10. We are examining whether the incentives of Motorola to deliver Lot 2 effectively and efficiently may be distorted by its ownership of Airwave Solutions. This is essentially based on the weighing of the short-term and

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<sup>1</sup> [Upgrading emergency service communications \(parliament.uk\)](https://www.parliament.uk), page 6

long-term, direct and indirect, financial benefits that Motorola may derive from the operation of the Airwave network compared to Lot 2.

11. The relevant evidence and analysis in the Working Paper are structured as follows:
  - (a) first, we are considering the direct financial incentives, focusing on the comparison of profits generated, and forecast to be generated, by Motorola Solutions from the operation of the Airwave network, against the profits from its involvement in Lot 2; and
  - (b) we are also considering Motorola's wider financial incentives<sup>2</sup> to the extent that these might incentivise it to prolong operation of the Airwave network or deliver Lot 2 effectively and efficiently.
12. We expand on the way we are considering these below.
13. In considering Motorola's incentives, we are also reviewing evidence relating to Motorola's business strategy.

### ***Direct financial incentives***

14. Given that ESN will replace the Airwave network, it is obvious that the profits derived from Airwave Solutions will be directly eroded and eventually eliminated by the roll-out of ESN. There is therefore a clear financial trade-off for Motorola deriving from its involvement in both the incumbent technology and its replacement.
15. We are therefore undertaking a comparison of the revenue and profits that Motorola derives (or will derive) from Airwave Solutions, to the revenue and profits which it derives from supplying Lot 2. This provides evidence on the profitability of delays to ESN to Motorola's operations and whether its incentives to deliver Lot 2 effectively and efficiently may be dulled.
16. We are looking at Airwave's revenues and profitability contained in Airwave's financial statements, and forecasts provided by Motorola. We are also looking at ESN's revenues and profitability contained in ESN's management forecasts provided by Motorola.
17. We are comparing the financial performance and forecast over the six-year period from 2019 to 2024 for Airwave Solutions with the Lot 2 financial

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<sup>2</sup> For example, it may be that Motorola is not focussed on short term margins but is pursuing other objectives (with wider costs and benefits) to maximise its long-run profitability.

forecast over the same six-year period. This analysis allows us to compare Airwave Solutions' profits to Motorola's ESN profits forecast.

### ***Wider financial incentives***

18. We are considering Motorola's wider financial and strategic incentives, and in particular the extent to which these might incentivise it to deliver Lot 2 effectively and efficiently. We are considering the extent to which any failure to deliver Lot 2 effectively and efficiently could negatively impact Motorola's reputation and the potential future profits and revenue streams which it can earn within other markets.
19. The magnitude of any incentive Motorola may have to protect its global reputation and generate future profits in other markets will be affected by a number of factors, including:
  - (a) the size of global opportunities for LTE (and the Kodiak MCPTT application) and/versus Land Mobile Radio (LMR);
  - (b) the relative importance of reputation as a driver of choice;
  - (c) the extent of competition faced by the Kodiak MCPTT application globally;
  - (d) the extent to which Motorola's performance can be observed by customers; and
  - (e) the incremental impact of further ESN delays on Motorola's reputation.
20. We are considering the likely magnitude of these factors and expand on our thinking below. For this assessment we have primarily focused on Kodiak, the mission critical push-to-talk (MCPTT) application which Motorola is developing.

#### *The size of global opportunities*

21. Our current thinking is that on the one hand, the larger the value of any global opportunities for LTE, the greater the incentive this would create for Motorola to protect its reputation by effectively delivering ESN. On the other hand, the larger the global opportunities for LMR are, the lesser the likely strength of such reputational incentives.
22. We are therefore considering the size of the global and European opportunities that are related to Kodiak MCPTT application and LMR. We are considering the extent to which the development of the Kodiak MCPTT application follows a specific roadmap that is not dependent on ESN (ie whether the UK's requirements differ from those of other customers) which, if true, would undermine the importance of ESN to Motorola's future commercial success

### *Importance of reputation as a driver of choice*

23. Our current thinking is that the greater the relative importance which global customers place upon reputation when selecting a supplier as compared to other factors, the greater the incentive on Motorola to deliver Lot 2 effectively and efficiently.
24. We are therefore considering the extent to which reputation is a factor that is important to customers when selecting a supplier of MCPTT technology. Our starting point is that we would expect this to be an industry where reputation plays a key role. The product in question represents a significant investment for customers and, given it is used by police and emergency services in critical situations, any issues with performance or quality would have significant implications for customers and society. We also recognise that customers must commit to a supplier for a long period of time, but often cannot 'observe' quality before making that commitment and therefore may rely on reputation as a proxy for quality.
25. To the extent that reputation appears to be an important factor which drives customers' choice of provider, we are also considering whether factors other than reputation appear to receive important weight, and therefore a negative impact on reputation could be offset to an extent by these other factors.

### *The extent of competition faced by Kodiak globally*

26. Our current thinking is that, to the extent Motorola's Kodiak MCPTT application faces many strong competitors, this will strengthen any reputational incentive on Motorola to deliver Lot 2 effectively and efficiently in order to gain an advantage over competitors. In contrast, to the extent Motorola enjoys market power in other tenders, this may reduce the strength of any reputational incentives on Motorola in Great Britain.
27. We therefore consider that, in principle, the scope for a reputational impact arising from Motorola's performance in Great Britain to be a significant determinant of global customers' choices of provider arises if those customers have many viable providers to select from. We are therefore considering the extent to which there are viable and attractive alternatives to the Kodiak MCPTT application.

### *The extent to which Motorola's performance can be observed by customers*

28. Our current thinking is that the easier it is for customers to assess Motorola's performance relating to ESN, the more likely it is that Motorola would have strong incentives to deliver Lot 2 effectively and efficiently to protect and

enhance its reputation. In contrast, if Motorola's performance is opaque or difficult to disentangle from other factors that might affect outcomes relating to the Kodiak MCPTT application and ESN, the weaker the disciplining effect reputation would have on Motorola in relation to delivering ESN in Great Britain. We are therefore considering the extent to which Motorola's performance is likely to be easily observed by customers. We consider that any barriers that reduce the ability of customers to assess Motorola's performance in relation to the Kodiak MCPTT application and ESN will tend to reduce the scope for reputational effects to have an impact on Motorola's incentives to effectively and efficiently deliver Lot 2 to protect its global reputation.

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

29. Our current thinking is that the greater the impact of further ESN delays on Motorola's reputation, the more likely reputation would incentivise Motorola to deliver Lot 2 effectively and efficiently. The impact of further ESN delays on Motorola's reputation will depend on factors such as the extent to which any reputational damage due to delays has already been incurred by Motorola as well as the extent to which Motorola is able to build its reputation in countries outside Great Britain.
30. We note that ESN has already been significantly delayed and, to the extent any reputational damage has resulted as a consequence, this may already have been incurred by Motorola. We are therefore considering the likely incremental impact of further delays to Lot 2 on Motorola's reputation.

#### ***Motorola's business strategy***

31. In considering incentives, we are reviewing internal contemporaneous documents setting out Motorola's business strategy and thinking by its senior management. An analysis of the strategic intentions can be informative when considered alongside an analysis of direct financial benefits to see if they are consistent (and, if not, why not).

#### **Ability**

32. We are also examining Motorola's ability to act on the incentives to deliver Lot 2 effectively and efficiently (as described above), focusing in particular on whether:
  - (a) Motorola has the ability to have a material effect on the overall delivery of ESN, through its delivery of Lot 2, and thus on the likelihood that Airwave Solutions (and associated profits) continue for longer; and



- (b) Motorola's ability to act on the incentives described above is in any way constrained by the contractual provisions that the Home Office put in place, including the DoR.
33. In relation to the delivery of ESN, we are currently focusing on Motorola's role as a key supplier of two critical components or aspects of ESN: Kodiak MCPTT application and infrastructure and testing environment. It is important to note that focusing on these aspects does not rule out the possibility that Motorola's delivery of other aspects of Lot 2 may have affected, or have the potential to affect, the delivery of ESN.
34. In relation to the contractual provisions, the acquisition of Airwave Solutions by Motorola shortly after it had been awarded the ESN contract was recognised by the Home Office as having the potential to dull Motorola's incentives to deliver Lot 2 effectively and efficiently and a mechanism, referred to as the Deed of Recovery (DoR), was put in place in early 2016 in the hope that this would mitigate the issue. The DoR contained a number of provisions setting out financial consequences for Airwave Solutions in the event that delays in the shutdown of the Airwave network were solely attributable to Motorola. We are therefore considering the extent to which the contractual mechanisms that are in place (ie the DoR and other contractual provisions aimed at incentivising suppliers to deliver the programme to the best of their abilities) are sufficient to counteract the incentives that we have described earlier.

### **Observable outcomes (Indicators)**

35. In addition to Motorola's incentives and ability, we are considering observable outcomes in relation to the delivery of ESN, to the extent that these could be indicators of distortions of competition in the relevant market. We are looking in particular at whether those outcomes are consistent with our emerging concerns based on Motorola's ability and incentives or should alleviate those concerns.
36. We are undertaking this assessment as a sense-check of any concerns we have on Motorola's ability and incentives. In doing so, we are considering three questions:
- (a) What might be expected from Motorola, if it is trying to meet its customers' needs in the manner that would be expected in a well-functioning market

(e.g. by improving quality, introducing better products, innovation and supplying the products customers want<sup>3</sup>)?

(b) What are the outcomes<sup>4</sup> observed by third-party experts that have reviewed the programme and examined Motorola's delivery of Lot 2?

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

37. In considering these questions, we take into account that, in a complex project like ESN, there are a number of factors liable to contribute to the outcomes. We are therefore looking at whether there are a range of indicators consistent, or not inconsistent, with our emerging concerns and what they suggest about those concerns.

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<sup>3</sup> See [CC3 \(Revised\), Guidelines for market investigations: Their role, procedures, assessment and remedies \(publishing.service.gov.uk\)](#), paragraph 10, 12. '*Competition is a process of rivalry as firms seek to win customers' business. It creates incentives for firms to meet the existing and future needs of customers as effectively and efficiently as possible—by cutting prices, increasing output, improving quality or variety, or introducing new and better products, often through innovation; **supplying the products customers want** rewards firms with a greater share of sales.'* [...] '*Vigorous competition between firms also fosters economic growth, as firms respond to competitive pressure by striving for efficiency and **directing their resources to customers' priorities.***'

<sup>4</sup> [CC3 \(Revised\), Guidelines for market investigations: Their role, procedures, assessment and remedies \(publishing.service.gov.uk\)](#), paragraph 127. As noted in the Markets Guidance, '*prices and costs are not the sole indicators of the level of competition in a market. Poor quality, lack of innovation, or limited product ranges are prominent among other indicators of weak competition in a market. Evidence about this kind of indicator tends to be qualitative, coming particularly from surveys, questionnaires or discussions with customers, investors, or other market observers. In several past market investigations, such analysis has spotlighted various negative non-price factors as important indicators of weak competition.*'