

Mobile radio network for the police and emergency services

Proposal to make a market investigation reference

Motorola is not responsible for the delays in the roll-out of ESN

2 September 2021

1. Introduction and Summary

- (1) This submission has been prepared on behalf of Motorola¹, and is in response to the CMA's proposal to make a market investigation reference in relation to the mobile radio network for the police and emergency services² (the "Proposed MIR"), as set out in the consultation of 8 July 2021 (the "Consultation"). This submission is supplementary to Motorola's response to the Proposed MIR dated 18 August 2021 (the "18 August Response"), and makes reference to the 18 August Response where appropriate.
- (2) In the 18 August Response, Motorola set out its position as to why the features identified by the CMA (alone or in combination) do not prevent, restrict or distort competition in the supply of the Airwave network (and ancillary services) in Great Britain. Notwithstanding Motorola's view that the CMA's provisional stance lacks internal logic, that the features identified do not constitute features of a market and that in any event, the features do not prevent, restrict or distort competition in the supply of the Airwave network, Motorola wishes to make the following submissions regarding the statements within the Consultation concerning delays to the Emergency Services Network ("ESN").
- (3) The CMA in its Consultation states that "The Home Office also told the CMA that delays by Motorola in its delivery of ESN is [sic] 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]." (at paragraph 1.40 of the Consultation).
- (4) It is incorrect [REDACTED] for the Home Office to claim that delays by Motorola in its delivery of ESN are resulting in significant additional cost to the Government. The attempted attribution of liability to Motorola for the delays to the delivery of ESN ignores [REDACTED] the many factors which have contributed to the delays in the roll-out of ESN, including most notably the Home Office's own failures in respect of the delays.
- (5) The CMA goes on in its Consultation to note that "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." (at paragraph 1.42 of the Consultation).
- (6) In order to assist the CMA to understand the full picture, [REDACTED], this document sets out a chronology of the factors surrounding the delays in the roll-out of ESN (the "Chronology"). The Chronology has been prepared using the information available from public sources (including Governmental sources), as well as information taken from the [REDACTED]. The Chronology therefore provides an exclusively objective overview of the various facts surrounding the delays in the roll-out of ESN, and is set out in Table 1 below.

¹ "Motorola" is used in this document to refer collectively to the entities involved in the delivery of the Airwave service together with their relevant affiliates.

² Competition and Markets Authority, 'Mobile radio network for the police and emergency services: Proposal to make a market investigation reference' (July 2021) <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1000278/Final_Version_Airwave_MIR_Proposal_.pdf>.

- (7) The CMA suggests throughout the Consultation that Motorola is not merely to blame (on its own) for the delays in the delivery of ESN (which the Chronology shows is clearly not the case), but is in fact incentivised to prolong such delays in the Programme by virtue of its ownership of the Airwave network. However, even if Motorola were incentivised to delay the introduction of ESN (a suggestion which Motorola has strongly refuted), Motorola would not be in a position to delay the Programme, as is self-evident from the information contained within the Chronology:
- (i) Motorola's responsibilities under the Programme represent one element of the work that is necessary to deliver ESN overall, such delivery also being dependent on the completion of work by parties that are wholly outside of Motorola's control, such as EE (building the network), Samsung (building the devices), Control Room Suppliers (upgrading the emergency services command and control systems), Cobham (building the "Air to Ground Solution") and the Home Office itself (integrating and delivering the entire ESN system to its end users).
 - (ii) Regardless of whether Motorola's responsibilities under Lot 2 of the Programme have been delivered in accordance with the timescales envisaged in the Home Office's full business case of 2016, as well as the reasons for any delays which are inevitably multi-faceted, ESN still would not have been delivered by December 2019 due to the fact that prior to this date, the following aspects of the Programme had not been completed, amongst others:
 - (a) the network coverage to be provided by EE was not available in all areas required;
 - (b) the Home Office had not completed its commission of the 292 masts that it was responsible for;
 - (c) the Home Office had not awarded contracts for parts of the ESN system, such as air-to-ground communications with emergency service aircraft;
 - (d) aspects of the Home Office's plans for ESN relied on technological solutions that were not yet available, such as how aircraft would receive an ESN signal and direct communication between devices without the need for a network signal;
 - (e) the Home Office did not have an integrated plan for how and when each emergency service would deploy ESN;
 - (f) network coverage on the London Underground had not been achieved; and
 - (g) the handsets to be provided by Samsung were not yet available.
- (8) It is therefore abundantly clear that Motorola is not the cause of ESN delay. To attribute, or even to seek to attribute, blame to Motorola for the Home Office's need to extend the Airwave network (due to the delayed roll-out of ESN) is an unfair, unreasonable and irrational departure from clearly established and objectively reported facts.

- (9) The “incentive” risk that the CMA highlights was recognised and fully dealt with in 2016 as part of the [REDACTED] negotiations between Motorola and the Home Office. Those negotiations culminated in the execution of the Deed of Recovery, which was also seen by the CMA as part of the merger clearance in 2016. The Deed of Recovery does not permit the Home Office to make Motorola pay for delays caused by others. [REDACTED]. Otherwise, Motorola is not liable for ESN programme delays. That was, and should remain, the eminently fair way to proceed in a multi-faceted programme. For the CMA [REDACTED] to take the position that Motorola should be liable for the delays of others when Motorola has not itself caused the delays to the ESN programme would be grossly disproportionate and discriminatory against Motorola.
- (10) Equally, to suggest, or even to seek to suggest, that Motorola has an ability to prolong such delays by virtue of its ownership of the Airwave network is hopeless. Even if Motorola did have such an incentive (which Motorola strenuously denies), the extremely complex, multi-faceted and disaggregated nature of the Programme, the constituent parts of which are almost all in significant delay, renders it impossible for Motorola to act successfully on any such incentive. Given the Chronology, the CMA must now conclude that based on the overwhelming weight of evidence, any hypothetical notion of Motorola having “incentives” to delay ESN is wholly unsupported by any ability to act on such incentives. The “incentive” theory is nothing more than a harmful, baseless, theory that is entirely divorced from reality.

Table 1: Delays in the Roll-Out of ESN

Date	Event
October 2015	This was the target date for awarding the main contracts for the provision of ESN. However, as of 15 September 2016, certain of these contracts were still to be awarded. ³
December 2015	Motorola signed the Lot 2 contract and EE signed the Lot 3 contract as part of the Programme. ⁴ At the same time, the end date for the Programme was brought forward to reduce the time available for the emergency services to transition to the new service from 30 months to 27 months. ⁵ This timetable was subsequently described as ambitious and over-optimistic. ⁶
March 2016	This was the target date for completion of the ESN designs. However, the ESN designs were not fully complete until August 2016. ⁷
June 2016	By this date, ESN did not feature on the list of risks escalated to the Home Office's management board. This was because the Home Office had downgraded the risk of not delivering ESN twice since the beginning of 2016, as the Home Office considered the risks associated with the roll-out of ESN to be under control. ⁸
July 2016	<p>At this stage, the percentage of landmass covered by EE's network was 70%. It was anticipated that sufficient coverage (i.e., 97%) would be available by September 2017.⁹ However, this date was extended by the Home Office twice. As of 17 July 2019, the requisite coverage was still not available everywhere it was needed, and was expected to be completed in 2020.¹⁰</p> <p>At the same time, there were no devices (such as mobile phones) that could be used with ESN, as ESN used software standards that had only recently come into existence. These devices were required by the end of 2016 to enable ESN to be tested.¹¹</p>
15 September 2016	The Programme (i.e., the Home Office) ¹² had delivered detailed designs three months late, and had delayed the delivery of some elements of functionality by eight months. The Home Office was

³ National Audit Office, 'Upgrading emergency service communications: the Emergency Services Network' (15 September 2016) <<https://www.nao.org.uk/wp-content/uploads/2016/09/Upgrading-emergency-service-communications-the-Emergency-services-Network.pdf>>.

⁴ *ibid.*

⁵ Public Accounts Committee, 'Upgrading Emergency Service Communications' (18 January 2017) <<https://publications.parliament.uk/pa/cm201617/cmselect/cmpubacc/770/770.pdf>>.

⁶ House of Commons Public Accounts Committee, 'Emergency Services Network: further progress review' (17 July 2019) <<https://publications.parliament.uk/pa/cm201719/cmselect/cmpubacc/1755/1755.pdf>>.

⁷ (n 3).

⁸ *ibid.*

⁹ *ibid.*

¹⁰ Public Accounts Committee, 'Emergency Services Network: Further Progress Review' (10 July 2019) <<https://publications.parliament.uk/pa/cm201719/cmselect/cmpubacc/1755/1755.pdf>>.

¹¹ (n 3).

¹² The Programme is part of the Home Office, but is co-funded by the Department of Health, Scottish Government and Welsh Government.

Date	Event
	<p>therefore between five and ten months behind the Full Business Case at this stage.¹³</p> <p>At the same time, technical oversight of the Programme was found to be insufficient. Although the Programme had a technical steering group, this met infrequently and did not provide a robust technical challenge function. In addition, at this point, it was found that the Home Office's Chief Technology Officer had only attended the Programme's main board twice since the beginning of 2014.¹⁴</p>
16 November 2016	<p>The percentage of landmass covered by EE's network had increased to 74%, but EE noted that it still had a considerable amount of further coverage to achieve.¹⁵</p> <p>The Home Office and Transport for London had not yet agreed a means by which to deliver the Programme in the London Underground. The Home Office indicated that negotiations were ongoing at this stage, and that the business case for providing this coverage would not be complete until June or July 2017. The process of delivering the Programme in the London Underground could not be commenced until this agreement was reached.¹⁶</p> <p>The Home Office reported that it was pushing back the date on which emergency services would commence transition to ESN from September 2017 to July 2018. This was to allow sufficient time for the new system to be tested.¹⁷</p>
October – December 2016	<p>A report into the problems facing ESN was commissioned by the Programme's team. The resultant report was not shared with the Programme's Senior Responsible Owner. The Home Office subsequently stated on 22 May 2019 that had those responsible for the Programme been made aware of the report, it was likely that they would have initiated an independent review of the Programme at an earlier stage.¹⁸ The Home Office also admitted that problems such as those identified in the report were not escalated properly, which meant that the Home Office missed opportunities to correct its approach to ESN at an earlier stage.¹⁹</p>

¹³ (n 3).

¹⁴ *ibid.*

¹⁵ Public Accounts Committee, 'Oral Evidence: Emergency Services Communications, HC (16 November 2016) <<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/public-accounts-committee/emergency-services-communications/oral/43448.pdf>>.

¹⁶ *ibid.*

¹⁷ *ibid.*

¹⁸ Public Accounts Committee, 'Oral Evidence: Emergency Services Network: Progress Review, HC 1755' (22 May 2019) <<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/public-accounts-committee/emergency-services-network-further-progress-review/oral/102447.html>>.

¹⁹ (n 5).

Date	Event
February 2017	The Home Office reported that ESN would be completed nine months late. ²⁰
April 2017	The Home Office's Accounting Officer commissioned an independent review of ESN. The independent review identified five causes of delay to the Programme: (a) the failure of Kellogg Brown and Root ("KBR") to deliver planning and collaboration between the other ESN contractors; (b) the fact that Motorola and EE had prepared solutions based on differing technical standards; ²¹ (c) the lack of agreement between the Home Office and Motorola as to Motorola's role in integrating ESN systems "end-to-end"; (d) challenges in locking down the specification for software and user services, as there was no effective process for signing off software developed by Motorola in a timely manner; and (e) the late delivery of the related projects for which the Home Office itself controlled, such as the handsets and vehicle equipment that the emergency services would use, providing ESN on the London Underground and providing an air-to-ground service for helicopters and aeroplanes. ²²
August 2017	Motorola purchased the Kodiak push-to-talk product, which was compatible with telecommunication standards used by EE. At this stage, the system required further development and testing, and was anticipated to meet user requirements in 2020. ²³
October 2017	An independent review of the Programme found that the Home Office had not yet been provided with a complete software solution by Motorola. ²⁴
Mid-2018	<p>The Home Office was increasingly using its own and sub-contracted staff for management and integration work relating to the Programme due to the shortfalls in KBR's performance.²⁵</p> <p>The Home Office commenced the renegotiation of its contracts with EE and Motorola. Temporary working arrangements were agreed under Heads of Terms with both EE and Motorola so as to allow work on the Programme to continue during the renegotiations. The contract renegotiations were due to be agreed by December 2018, but were delayed in their conclusion until 2019, and this affected the progress of the Programme reset.²⁶</p>

²⁰ National Audit Office, 'Progress delivering the Emergency Services Network' (10 May 2019) <<https://www.nao.org.uk/wp-content/uploads/2019/05/Progress-delivering-the-Emergency-Services-Network.pdf>>.

²¹ The Home Office subsequently admitted that it had been aware that there was a discrepancy in Motorola and EE's technical standards at the time, but that it had not appreciated the problems, and resultant delays, that this would cause (n 18). The Home Office also admitted that problems such as this could have been avoided with better integration and coordination between the different ESN suppliers (n 5).

²² (n 20).

²³ *ibid.*

²⁴ *ibid.*

²⁵ *ibid.*

²⁶ *ibid.*

Date	Event
June 2018	The Home Office realised that the existing ESN contracts were not deliverable. ²⁷
21 September 2018	The Home Office announced that the Programme was being reset. ²⁸
2019	The Home Office was due to prepare a re-worked Full Business Case, but the Public Accounts Committee found on 10 September 2020 that this had been delayed until March 2021 due to COVID-19. The Public Accounts Committee noted that this would cause further delays to the delivery of ESN. ²⁹
March 2019	<p>By this date, only two of the 292 masts that the Home Office was responsible for commissioning under Extended Area Services (“EAS”) were live.³⁰</p> <p>The Home Office identified six concerns amongst potential users of ESN, which were: (a) overall coverage; (b) coverage on the London Underground; (c) network resilience; (d) upgrades to systems in control rooms; (e) air-to-ground coverage; and (f) the timeframe for the adoption of ESN within 27 months was unrealistic. The Home Office anticipated that these concerns would be addressed in full by December 2022.³¹</p>
30 April 2019	The Home Office’s contract with KBR was terminated. ³² KBR was the Home Office’s ‘delivery partner’, and was to support the Programme in implementing ESN. ³³ KBR’s performance had been noted to be unsatisfactory as early 2016. ³⁴
10 May 2019	<p>The Home Office was yet to award contracts for parts of the ESN system, such as air-to-ground communications with emergency service aircraft.³⁵</p> <p>Aspects of the Home Office’s plans for ESN were based on technological solutions that were not yet available, such as how aircraft will receive an ESN signal and direct communication between devices without the need for a network signal.³⁶</p> <p>The Home Office did not have a plan for running ESN as a live service, despite the fact that the Home Office would be responsible for running</p>

²⁷ (n 5).

²⁸ Home Office, ‘New strategic direction for the Emergency Services Network (ESN)’ (21 September 2018) <<https://www.gov.uk/government/news/new-strategic-direction-for-the-emergency-services-network-esn>>.

²⁹ Public Accounts Committee, ‘Oral Evidence: Home Office Recall, HC 678’ (10 September 2020) <<https://committees.parliament.uk/oralevidence/820/pdf/>>.

³⁰ (n 20).

³¹ *ibid.*

³² Letter from Meg Hillier MP to the Chair of the Committee of Public Accounts (4 June 2019) <<https://www.parliament.uk/globalassets/documents/commons-committees/public-accounts/Correspondence/2017-19/Corresp-Home-Office-to-Chair-re-ESN-190604.pdf>>.

³³ (n 3).

³⁴ *ibid.*

³⁵ (n 20).

³⁶ *ibid.*

Date	Event
	<p>ESN upon the completion of its roll-out. In addition, although the Home Office had received a recommendation to set up a new Government-owned organisation to manage ESN once live in September 2018, the Home Office had not yet decided whether to implement this approach.³⁷</p> <p>The Home Office's failure to manage the risks associated with the Programme was found to have led to delays in bringing the intended benefits of ESN to the emergency services.³⁸</p>
22 May 2019	<p>The Home Office had yet to further progress the commissioning of masts under EAS, as it was identified at this point that the Home Office had still only built two of the 292 masts that it was responsible for. The Home Office was unable to state when the rest of the mobile phone sites would be going live.³⁹</p> <p>At this stage, the Home Office admitted that it had been aware that Motorola and EE had been working on different technical criteria, but that the Home Office had not realised how major the impact of this fact would be. In addition, the Home Office conceded that it should have co-located Motorola and EE, or teams within Motorola and EE, so that the two suppliers could liaise with each other as to the technical criteria employed.⁴⁰ This had previously been identified as an issue in an independent review of ESN commissioned by the Home Office in April 2017, which noted that Motorola and EE had prepared solutions based on differing technical criteria.⁴¹</p>
17 July 2019	<p>It was found that the Home Office did not have an integrated plan for how and when each emergency service would deploy ESN at this stage, and technology for some parts of ESN were still not ready.⁴² This included work to build a network to enable aircraft to use ESN, and the provision of coverage on the London Underground.⁴³</p>
18 May 2020	<p>At this stage, delays were identified in relation to the [REDACTED].⁴⁴</p>
10 June 2020	<p>[REDACTED] there was a delay to the delivery of the. [REDACTED]⁴⁵</p>
10 September 2020	<p>The Home Office reported that there was a lot more work required in order to have in place the core infrastructure needed to deliver the Programme in the London Underground, and that work had been paused due to COVID-19.⁴⁶</p>

³⁷ *ibid.*

³⁸ *ibid.*

³⁹ (n 18).

⁴⁰ *ibid.*

⁴¹ *ibid.*

⁴² (n 5).

⁴³ *ibid.*

⁴⁴ [REDACTED]

⁴⁵ [REDACTED].

⁴⁶ (n 29).

Date	Event
	The Home Office stated that the provision of handsets by Samsung was taking longer than originally planned, and that the Home Office and Samsung were having commercial discussions in this regard. ⁴⁷
15 December 2020	[REDACTED]. Further delays were also announced [REDACTED], and it was anticipated at this stage that this would be achieved by [REDACTED]. ⁴⁸
8 February 2021	The Minister of State for Crime and Policing stated that the Programme expected to appoint contractors to allow the execution of network coverage in rural areas, as it was noted that there were still coverage issues in areas such as mid-Wales. ⁴⁹
19 May 2021	Further delays to ESN were announced, and the plan date was pushed back [REDACTED]. ⁵⁰
16 June 2021	[REDACTED] had been delayed from [REDACTED]. ⁵¹

⁴⁷ *ibid.*

⁴⁸ [REDACTED]

⁴⁹ House of Commons, 'Emergency Services Network, Volume 689' (8 February 2021) <<https://hansard.parliament.uk/Commons/2021-02-08/debates/AE5777B7-E5C4-467A-8886-44017023A4F1/EmergencyServicesNetwork>>.

⁵⁰ [REDACTED]

⁵¹ [REDACTED]