



House of Commons
Public Accounts Committee

Upgrading emergency service communications – recall

Fifty-second Report of Session
2016–17

*Report, together with formal minutes
relating to the report*

*Ordered by the House of Commons to be printed
29 March 2017*

The Committee of Public Accounts

The Committee of Public Accounts is appointed by the House of Commons to examine “the accounts showing the appropriation of the sums granted by Parliament to meet the public expenditure, and of such other accounts laid before Parliament as the committee may think fit” (Standing Order No. 148).

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Powers

Powers of the Committee of Public Accounts are set out in House of Commons Standing Orders, principally in SO No. 148. These are available on the Internet via www.parliament.uk.

Publication

Committee reports are published on the [Committee's website](#) and in print by Order of the House.

Evidence relating to this report is published on the [inquiry publications page](#) of the Committee's website.

Committee staff

The current staff of the Committee are Dr Stephen McGinness (Clerk), Dr Mark Ewbank (Second Clerk), Darren Hackett (Senior Committee Assistant), Sue Alexander and Ruby Radley (Committee Assistants), and Tim Bowden (Media Officer).

Contacts

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Summary

In the event of an emergency, including a terrorist attack, the need for the emergency services to communicate is an essential part of keeping the public safe. We are greatly concerned that the start date for the new system for communication (the Emergency Services Network) is not only delayed but is not likely to be deliverable. The Home Office was running the planned programme to ambitiously tight deadlines which have now slipped. The Department's contingency measure to manage the transition to the new system was to extend Airwave month by month until the new system was in place. The news that part of the existing Airwave system will be taken out of service early strikes a major, potentially catastrophic, blow to the ability of our emergency services to carry out their job and keep citizens safe. In addition, it now seems inevitable that taxpayers will also be paying substantial additional sums, with no certainty of delivery. The change of leadership with a new Permanent Secretary at the Home Office adds to our concerns.

Introduction

The government is planning to replace the Airwave system currently used by police, fire and ambulance services in Great Britain (the emergency services) with a new Emergency Services Network (ESN). ESN is a high-risk programme that aims to roll out new technology, untried anywhere else in the world, to an ambitious timetable across all emergency services. We published a report in January 2017 that concluded it was unlikely that the December 2019 target date for delivering ESN would be met and that the Department needed to reassess its timescales. It also concluded that the Department had not budgeted for delays, nor put in place detailed contingency plans to manage them. Following our evidence session in November 2016 the Department told us that ESN will be delayed by nine months until September 2020. It has also now come to light that extending the Airwave contracts, the Department's sole mitigation against delay in putting the new system in place, might not be possible. In January, Motorola informed us that Vodafone, a key supplier to Airwave, will from March 2020 stop providing an important piece of infrastructure that Airwave requires to function, essentially turning it off. This raised the possibility that emergency services may not be able to communicate with each other after March 2020 until transition to ESN is complete in September 2020. We therefore recalled the Department to give further evidence in February 2017.

Conclusions and recommendations

1. **The “little slippage” in delivering the ESN programme that the Department told us about in November has now become a delay of nine months.** At our November 2016 evidence session the Home Office (the Department) told us that there would be “a little slippage” in delivering the Emergency Services Network (ESN). The Department told us subsequently that it was pushing back the date on which emergency services would start transitioning to ESN from September 2017 to July 2018. This would allow more time for testing of the new system to assure emergency services that it can be relied on before Airwave is switched off. At our February evidence session the Department reiterated its commitment to us that emergency services would not be forced onto ESN and that it would not be compressing the 27-month transition period any further. Consequently, the transition period for ESN now runs to September 2020, nine months later than originally planned. Airwave contracts will therefore need to be extended to provide emergency services with the ability to communicate without an interruption in service. To facilitate this extension Motorola need to know, by the end of 2018, which regions will require the Airwave service after the end of 2019 to ensure the necessary logistics are in place. This means that the Department will have to identify any regions needing dual-running just six months into the 27-month transition period. The Department acknowledged that it was still firming up its transition plans but said that it expects these to be complete long before the end of 2018.

Recommendation: *The Department should ensure it is in a position to know which regions require an extension of Airwave by the end of 2018. Motorola must confirm that receiving notice at the end of 2018 will give it enough notice to carry out the work required to extend Airwave from December 2019.*

2. **With ESN delayed until September 2020, it is not clear how emergency services communications will be provided from March 2020, given that it might not be possible to extend Airwave beyond that date.** Motorola told us previously that it had the ability to extend Airwave beyond December 2019, on both a monthly and regional basis, as long as it received notification by December 2018. In late January 2017, however, Motorola informed us that extension beyond March 2020 may not now be possible. This is because Vodafone, a key supplier to Airwave, plans to withdraw a core network Time Division Multiplexing (TDM) service, without which Airwave cannot run. The Internet Protocol (IP) based service that Vodafone will replace it with after March 2020 will not be compatible with Airwave. Extra investment is therefore needed to upgrade the infrastructure either to make Airwave work with the new system or work without it. This cost is in addition to the £475 million annual cost of extending Airwave nationally as previously estimated by the National Audit Office (NAO). The Department agreed a fixed price for extending Airwave with Motorola in February 2016, as a condition for approving its purchase of Airwave. Motorola therefore has a contractual obligation to provide the Airwave service post March 2020, but the Department told us that enforcing that obligation could damage supplier relationships. Instead, it would prefer to negotiate first with Vodafone and Motorola to find a solution. The Department is due to meet with the suppliers to discuss options and conceded that while it is very confident that this issue can be overcome, extra work will be needed.

Recommendation: *The Department must urgently engage in conversations with Motorola and Vodafone to explore the full range of options for resolving this issue and provide us with regular updates on progress and estimates of any additional costs.*

3. **It is extremely disappointing that the Department’s risk management and assurance arrangements did not pick up earlier the risk that emergency services communications could be unsupported from April to September 2020.** The NAO concluded last year that the Department appeared to be under-rating the seriousness of the risks to delivering ESN, a judgement that the Department disagreed with at the time. In our November evidence session, however, the Department acknowledged that ESN was a high-risk programme and the Permanent Secretary assured us he had scrutinised this programme more than any other in his time at the Home Office. The Department has had since 2000 to plan for Airwave’s replacement and Motorola conducted due diligence ahead of its purchase of Airwave in February 2016. A general risk of Airwave not being able to function beyond 2020 was on the Department’s risk register but it told us it had no knowledge before January 2017 of the specific issue that emerged concerning supporting Airwave after March 2020. The Department only found out about the issue around the same time as Motorola told this Committee, which does not reflect well on either its risk management arrangements or the quality of relationships with its suppliers.

Recommendation: *Given the warning to the Department that it was underestimating the risks, it must review all the current risks to the programme and be realistic and open about these. The Department cannot afford to be caught off-guard again. The suppliers must accept their share of responsibility and ensure they are upfront about problems in delivering the network.*

4. **Providing emergency services communications underground is a significant and imminent risk to this programme but the Department has not yet finalised how ESN will work underground.** EE will provide ESN network coverage and is currently expanding its 4G network coverage to match that of Airwave. The Department is separately working with Transport for London (TfL) on how to extend coverage into the London Underground. TfL is currently leading negotiations with potential providers and will be responsible for approving the final technical and commercial arrangements. The Department told us in November 2016 that there would be an announcement in the next couple of months on how coverage will be provided for the London Underground, but a business case for providing this coverage will not now be complete until June or July 2017. The current transition timetable has London as one of the first regions to begin transitioning to the new system, in November 2017, which would mean going from business case to roll-out in just six months. The Department told us that the timetables for regional transition are flexible and that it would discuss with the Metropolitan Police Service exactly when they want to start transitioning to ESN.

Recommendation: *TfL and the Department must, as a matter of urgency, work together to ensure that there will be coverage that enables the emergency services to contact each other underground. It needs to ensure that there are no delays to*

reaching an agreement with suppliers as this may have knock-on effects on the programme. We expect regular updates on progress in resolving this issue. The Department should work with regions to review the existing transition roll-out plan so that those regions that are best prepared move first.

1 Ensuring continuity in emergency service communications

1. We published a report in January 2017 examining the Home Office’s (the Department) progress with the Emergency Services Mobile Communications programme.¹ After receiving new evidence in December 2016 from the Department and in January 2017 from Motorola, we recalled the Department to give further evidence in February.

2. The 105 police, fire and rescue and ambulance services (the emergency services) in Great Britain currently communicate using the Airwave system. The Airwave contracts were due to expire in 2019 and in 2011 the Government set up the programme to look at options to replace Airwave. The chosen option was the Emergency Services Network (ESN). This replaces the dedicated radio-based infrastructure of Airwave with 4G mobile-data technology, which should save money by sharing a network with EE’s other customers. In December 2015, the programme signed contracts with Motorola and EE to deliver the main components of ESN.²

3. Our January 2017 report found that the technology for ESN is unproven and such a system has not been implemented anywhere else in the world. We concluded that ESN will therefore require extensive independent testing to ensure it works under pressure, in a live environment, and to assure the emergency services that it will be at least as good as Airwave. We found that it was unlikely that the December 2019 target date for transitioning to ESN and switching off Airwave would be met and we recommended the Department reassess its delivery timescales and milestones. We also noted that, despite the high likelihood of delay, the Department has not put in place detailed contingency arrangements, or made budgetary provisions, for delay.³

4. The milestone dates for ESN in the 2015 full business case allowed 21 months for designing, building and testing the network and 30 months for all emergency services to transition to ESN from Airwave.⁴ The Department’s progress against this timetable slipped soon after finalisation of the business case with contracts signed two months later than planned and detailed designs finalised three months later than expected.⁵ The National Audit Office estimated, therefore, that the programme to deliver ESN was running five to ten months behind schedule.⁶ At our November 2016 evidence session, the Department conceded there would be a “little slippage”.⁷

5. In December 2016, the Department notified us that these delays had grown and it had pushed back the start date for transition by nine months, from September 2017 to

1 Committee of Public Accounts, 35th report of session 2016–17, [Upgrading emergency service communications](#), HC 770, 25 January 2017

2 Committee of Public Accounts, 35th report of session 2016–17, [Upgrading emergency service communications](#), HC 770, 25 January 2017, paras 2–3

3 Committee of Public Accounts, 35th report of session 2016–17, [Upgrading emergency service communications](#), HC 770, 25 January 2017, conclusions 1–3

4 Committee of Public Accounts, 35th report of session 2016–17, [Upgrading emergency service communications](#), HC 770, 25 January 2017, figure 1

5 C&AG’s report, [Upgrading emergency service communications: the Emergency Services Network](#), Session 2016–17, HC 627, 16 September 2016, paragraph 2.22

6 [C&AG’s report](#), paragraph 2.22

7 Oral evidence taken on 16 November 2016, HC 770, [Q74](#)

July 2018.⁸ In turn, all emergency services would therefore finish transitioning onto ESN in September 2020.⁹ The Department confirmed that it would consequently be seeking an extension to Airwave and that it had started discussions with Motorola over the commercial arrangements for doing so.¹⁰

6. The Department’s decision to push back the end date for the transition period is a reversal of the Department’s earlier decision to bring forward the end date of transition to December 2019, from March 2020, compressing the transition period.¹¹ Emergency services have a strong preference for a gradual roll-out, so the additional time gives more opportunity to learn from early adopters, rather than have all services switch to the new system simultaneously.¹² The current timetable allows all regions, except London, 12 months to transition and regions starting earlier will therefore have a longer period of dual-running.¹³ At our November evidence session, emergency services told us that before switching off Airwave they will require an extended period to test the end-to-end ESN network and ensure it can run for a sustained period trouble-free.¹⁴ The Department repeatedly told us that emergency services will not be forced to use ESN if it does not meet their requirements.¹⁵

7. In November, Motorola told us that in order to extend Airwave past December 2019 it would need notification one year in advance, by December 2018, so it could ensure the necessary staff and logistics were in place for continued service.¹⁶ With transition not now starting until July 2018, this means the Department will have to identify any extension requirements just six months into the transition period, and before any single region has completed its transition. The Department acknowledged this but said the plans could be adapted and that it was looking to firm up the transition schedule over the next couple of months. It expects to know which regions will need an extension long before the end of 2018.¹⁷

8. In February 2016, Motorola purchased Airwave, meaning it is now responsible for providing both Airwave and elements of ESN. As a condition of the sale, the Department secured an agreement with Motorola to extend Airwave on a monthly and regional basis, at a fixed cost, if they required it.¹⁸ In November, Motorola confirmed to us that it will honour this commitment, subject to the Department providing the necessary advance notifications.¹⁹ The possibility of extending Airwave gave the Department the safety net required to proceed with ESN quickly. It told us: “essentially, the risk is a financial risk rather than an operational one. If the roll-out timetable were to slip to the right, we would run Airwave for longer and we would be in parallel for longer. We probably wouldn’t be

8 Letter to the Committee from the Home Office, January 2017

9 [Q23](#)

10 Letter to the Committee from the Home Office, January 2017

11 Committee of Public Accounts, 35th report of session 2016–17, [Upgrading emergency service communications](#), HC 770, 25 January 2017, figure 1

12 Oral evidence taken on 16 November 2016, HC 770, [Q137](#)

13 Committee of Public Accounts, 35th report of session 2016–17, [Upgrading emergency service communications](#), HC 770, 25 January 2017, figure 2

14 Oral evidence taken on 16 November 2016, HC 770, [Qq5–7](#)

15 Oral evidence taken on 16 November 2016, HC 770, [Qq 82–84](#), [88–93](#)

16 Oral evidence taken on 16 November 2016, HC 770, [Qq25, 49–51](#)

17 [Qq26–27](#)

18 [C&AG’s report](#), paragraph 3.15

19 Oral evidence taken on 16 November 2016, HC 770, [Qq45–49](#)

countrywide. As the Chair said at the beginning, there are significant costs but the ones identified are essentially a full-year cost if the entire programme slipped everywhere for a year, and that is not what we would expect. It is essentially a financial risk”.²⁰

9. However, in January 2017 Motorola and the Department informed us that it may no longer be possible to extend Airwave as expected. Vodafone, which provides the critical Time Division Multiplexing (TDM) service that Airwave requires to function, plans to turn off this system in March 2020 and replace it with a new Internet Protocol (IP)-based service.²¹ This is in line with technological developments in the telecoms sector, and other suppliers are withdrawing similar services.²² Airwave, an older system, is not currently compatible with the new IP-based service that Vodafone plans to introduce.²³ Airwave will therefore need to be upgraded to work with the new Vodafone system, or reconfigured to work without it. Motorola told us in January that, “as it stands today [...] Airwave (including London Underground) will cease to work after March 2020 unless there is a major two year programme of upgrade in this core network infrastructure (beginning in 2017)”.²⁴ Any investment would be on top of the £475 million the National Audit Office previously estimated as being the cost of extending Airwave nationally for a year.²⁵

10. The Department told us, in February 2017, that it was due to meet with Motorola and Vodafone later that month to discuss options and that it was confident the issue would be resolved. The Department confirmed that Motorola remained contractually obliged to supply Airwave for a fixed price, however it told us that requiring it to absorb high additional unexpected costs may damage relationships. Instead it would prefer to negotiate to find a solution and believed it had at least a year to do this. The Department conceded that “extra work will be required, we will have to have commercial discussions about the terms of it, and we will have to talk to the users about any operational implications, but I am confident that that can be dealt with”.²⁶ The Department promised it would provide us with regular updates on progress resolving this issue and the scope of any additional cost.²⁷

11. The Department has also yet to firm up arrangements to provide network coverage in some remote areas. ESN coverage will be provided by EE, which is currently expanding its 4G mobile network to cover all of the UK, bar some remote areas where coverage will be provided directly by the programme.²⁸ Underground service in other cities is being provided as part of the main ESN contracts. Coverage in the London Underground however is being developed separately, with the Department working with Transport for London (TfL) to provide it. TfL is taking the lead role in developing plans and negotiating with suppliers, with partial funding from the Department.²⁹ The Department told us that contributions were still being negotiated and that there is a financial hole that will need to be plugged, depending on the solution chosen.³⁰

20 Oral evidence taken on 16 November 2016, HC 770, [Q83](#)

21 Letter to the Committee from Motorola, January 2017; letter to the Committee from the Home Office, January 2017

22 [Q9](#)

23 Letter to the Committee from the Home Office, January 2017

24 Letter to the Committee from Motorola, January 2017

25 [Qq7-12](#)

26 [Qq1, 10, 29, 33, 35](#)

27 [Q61](#)

28 Committee of Public Accounts, 35th report of session 2016-17, [Upgrading emergency service communications](#), HC 770, 25 January 2017, paragraph 11

29 [Qq71-74](#)

30 [Q76](#)

12. At our previous evidence session in November the Department had told us it hoped there would be an announcement “in the next couple of months” from TfL and the Home Office on how ESN will work on the London Underground.³¹ In February, however, the Department told us that a business case for providing coverage will not be complete until June or July 2017.³²

13. According to the current transition timetable, emergency services in London will start to transition to ESN in November 2017.³³ It seems doubtful that coverage on the London Underground will be available by then, as the business case will only be approved five or six months earlier.³⁴ Emergency services in London are unlikely to want to start transitioning to ESN without this essential coverage. The Department told us that transition timetables are driven by the original Airwave contract endpoints, but there is now more flexibility to change them. It also said it will discuss with the Metropolitan Police Service the optimum time to transition.³⁵

31 Oral evidence taken on 16 November 2016, HC 770, [Qq207–208](#)

32 [Q71](#)

33 Committee of Public Accounts, 35th report of session 2016–17, *Upgrading emergency service communications*, HC 770, 25 January 2017, Figure 2

34 [Q73](#)

35 [Qq78–83](#)

2 Risk identification and management

14. The National Audit Office (NAO) concluded last year that the Emergency Services Network (ESN) was an inherently high-risk programme that warranted the highest levels of senior oversight, but that the Home Office (the Department) appeared to be under-rating the extent of risks to delivering ESN. The Department disagreed with the National Audit Office’s judgement, stating that, “the Home Office does not agree with the NAO’s judgement about the Department’s acknowledgement of the programme’s risk”.³⁶ At our November 2016 evidence session, however, the Department accepted that ESN was a high-risk programme and assured us that the programme was subject to expert scrutiny by its portfolio and investment committee.³⁷ Indeed the Permanent Secretary assured us that he had “scrutinised this programme more than any other in my four years in this job, right the way through, through the formal mechanisms but informally as well”.³⁸ The Department also believed Motorola’s purchase of Airwave in February 2016 had helped de-risk the programme and brought the overall level of risk down to amber.³⁹

15. We questioned the Department on how this intensive level of oversight squared with the fact that the issues with supporting Airwave after March 2020 were not identified sooner. The Department confirmed that Motorola only informed it about the issue on 16 January, eight days before Motorola told this Committee.⁴⁰ Motorola itself was only notified of the issue by Vodafone on 6 December 2016.⁴¹ The Department told us that its risk registers did include a general risk around extending what was ageing equipment but it did not anticipate the specific issue that has emerged.⁴² The Department has had since 2000, when the original Airwave contract was signed, to identify this issue, and this programme to replace it began in 2011. It is also surprising that this issue was not identified by Motorola when it conducted due diligence ahead of its purchase of Airwave in February 2016.⁴³ The Department told us that, “one of the things that we will have to explore—this will be part of the discussions—is the exact due diligence process you described.”⁴⁴

16. We asked the Department whether it was possible that Motorola raised the issue almost simultaneously with the Committee and the Department in order to strengthen its position ahead of commercial discussions and add pressure to the Department to invest in Airwave. The Department did not consider that to be the case, stating that Motorola notified it of the issue as it arose. The Department has long-standing relationships with the ESN suppliers and said it believed the fact the issue originated in a sub-contractor meant it went unnoticed.⁴⁵ The Department said it would have expected to have had the opportunity to work through the issue before reporting it to the Committee, but thought Motorola were simply trying to be open by raising it immediately. It also believed that

36 [C&AG’s report](#), paras 18, 22–23

37 [Qq125–126, 223](#)

38 [Q126](#)

39 [Q125](#)

40 [Home Office \(ESR 02\)](#)

41 Letter to the Committee from the Home Office, January 2017

42 [Qq15–16](#)

43 [C&AG’s report](#), page 5; para 3.15

44 [Q40](#)

45 [Qq35–40](#)

suppliers were concerned about maintaining their reputations, and that from what it has seen to date Motorola has behaved well.⁴⁶ The Department said that “I don’t think we should exaggerate the impact of this notification. We have been given it early, we will work through whether it has a material effect, and if it does, we will mitigate it”.⁴⁷

46 [Qq17, 40, 41](#)

47 [Q35](#)

Formal Minutes

Wednesday 29 March 2017

Members present:

Meg Hillier, in the Chair

Philip Boswell

Nigel Mills

Chris Evans

Karin Smyth

Kwasi Kwarteng

Mrs Anne-Marie Trevelyan

Draft Report (*Upgrading emergency service communications – recall*), proposed by the Chair, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 16 read and agreed to.

Introduction agreed to.

Conclusions and recommendations agreed to.

Summary agreed to.

Resolved, That the Report be the Fifty-second of the Committee to the House.

Ordered, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[Adjourned till Thursday 30 March 2017 at 9.30am

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

Wednesday 1 February 2017

Question number

Mark Sedwill, Permanent Secretary, Home Office, and **Stephen Webb**, Senior Responsible Owner, ESMC Programme, Home Office

[Q1–85](#)

Published written evidence

The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

ESR numbers are generated by the evidence processing system and so may not be complete.

- 1 BHV Broadcast ([ESR0001](#))
- 2 Home Office ([ESR0002](#))

List of Reports from the Committee during the current Parliament

All publications from the Committee are available on the [publications page](#) of the Committee's website.

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2016–17

First Report	Efficiency in the criminal justice system	HC 72 (Cm 9351)
Second Report	Personal budgets in social care	HC 74 (Cm 9351)
Third Report	Training new teachers	HC 73 (Cm 9351)
Fourth Report	Entitlement to free early education and childcare	HC 224 (Cm 9351)
Fifth Report	Capital investment in science projects	HC 126 (Cm 9351)
Sixth Report	Cities and local growth	HC 296 (Cm 9351)
Seventh Report	Confiscations orders: progress review	HC 124 (Cm 9351)
Eighth Report	BBC critical projects	HC 75 (Cm 9351)
Ninth Report	Service Family Accommodation	HC 77 (Cm 9351)
Tenth Report	NHS specialised services	HC 387 (Cm 9351)
Eleventh Report	Household energy efficiency measures	HC 125 (Cm 9351)
Twelfth Report	Discharging older people from acute hospitals	HC 76 (Cm 9351)
Thirteenth Report	Quality of service to personal taxpayers and replacing the Aspire contract	HC 78 (Cm 9351)
Fourteenth Report	Progress with preparations for High Speed 2	HC 486 (Cm 9389)
Fifteenth Report	BBC World Service	HC 298 (Cm 9389)
Sixteenth Report	Improving access to mental health services	HC 80 (Cm 9389)
Seventeenth Report	Transforming rehabilitation	HC 484 (Cm 9389)

Eighteenth Report	Better Regulation	HC 487 (Cm 9389)
Nineteenth Report	The Government Balance Sheet	HC 485 (Cm 9389)
Twentieth Report	Shared service centres	HC 297 (Cm 9389)
Twenty-first Report	Departments' oversight of arm's-length bodies	HC 488 (Cm 9389)
Twenty-second Report	Progress with the disposal of public land for new homes	HC 634 (Cm 9413)
Twenty-third Report	Universal Credit and fraud and error: progress review	HC 489 (Cm 9413)
Twenty-fourth Report	The sale of former Northern Rock assets	HC 632 (Cm 9413)
Twenty-fifth Report	UnitingCare Partnership contract	HC 633 (Cm 9413)
Twenty-sixth Report	Financial sustainability of local authorities	HC 708 (Cm 9429)
Twenty-seventh Report	Managing government spending and performance	HC 710 (Cm 9429)
Twenty-eighth Report	The apprenticeships programme	HC 709 (Cm 9413)
Twenty-ninth Report	HM Revenue & Customs performance in 2015–16	HC 712 (Cm 9429)
Thirtieth Report	St Helena Airport	HC 767 (Cm 9429)
Thirty-first Report	Child protection	HC 713 (Cm 9429)
Thirty-second Report	Devolution in England: governance, financial accountability and following the taxpayer pound	HC 866 (Cm 9429)
Thirty-third Report	Troubled families: progress review	HC 711 (Cm 9429)
Thirty-fourth Report	The Syrian Vulnerable Persons Resettlement programme	HC 768 (Cm 9429)
Thirty-fifth Report	Upgrading emergency service communications	HC 770 (Cm 9433)
Thirty-sixth Report	Collecting tax from high net worth individuals	HC 774 (Cm 9433)
Thirty-seventh Report	NHS treatment for overseas patients	HC 771 (Cm 9433)
Thirty-eighth Report	Protecting information across government	HC 769 (Cm 9433)
Thirty-ninth Report	Consumer-funded energy policies	HC 773 (Cm 9433)

Fortieth Report	Progress on the Common Agricultural Policy Delivery Programme	HC 766 (Cm 9433)
Forty-first Report	Excess Votes 2015–16	HC 954 (Cm 9433)
Forty-second Report	Benefit sanctions	HC 775
Forty-third Report	Financial sustainability of the NHS	HC 887
Forty-fourth Report	Modernising the Great Western Railway	HC 776
Forty-fifth Report	Delivering Restoration and Renewal	HC 1005
Forty-sixth Report	National Citizen Service	HC 955
Forty-seventh	Delivering the defence estate	HC 888
Forty-eighth	The Crown Commercial Service	HC 889
Forty-ninth	Financial Sustainability of Schools	HC 890
Fiftieth Report	UKTI and the contract with PA Consulting	HC 772
Fifty-first Report	HMRC’s contract with Concentrix	HC 998
First Special Report	Protecting the Public’s Money: First Annual Report from Chair of Committee of Public Accounts	HC 835

Public Accounts Committee

Oral evidence: Upgrading Emergency Services Communications, HC 997

Wednesday 1 February 2017

Ordered by the House of Commons to be published on 1 February 2017.

Watch the meeting: <http://www.parliamentlive.tv/Event/Index/833f4285-58f5-4e98-938f-4f7c2eabe21b>

Members present: Meg Hillier (Chair); Mr Richard Bacon; Philip Boswell; Caroline Flint; Nigel Mills; Anne Marie Morris; Bridget Phillipson; John Pugh; Mrs Anne-Marie Trevelyan.

Sir Amyas Morse, Comptroller and Auditor General, Adrian Jenner, Director of Parliamentary Relations, National Audit Office, Louise Bladen, Director, National Audit Office, and Marius Gallaher, Alternate Treasury Officer of Accounts, Her Majesty's Treasury, were in attendance.

Questions 1-98

Witnesses

I: Mark Sedwill, Permanent Secretary, Home Office, and Stephen Webb, Senior Responsible Owner, ESMC Programme, Home Office.



Examination of witnesses

Mark Sedwill and Stephen Webb.

Q1 Chair: Good afternoon and welcome to the Public Accounts Committee on Wednesday 1 February 2017. We are now in public session and talking to the Home Office about the Emergency Services Network. This is a recall because we have had some further information since our last session, and Report, about the future of the very important communications network for our emergency services, which is replacing the Airwave contract.

We welcome back Stephen Webb, who is the senior responsible owner for this and has been with the programme since the beginning, and Mark Sedwill, the permanent secretary at the Home Office.

Mr Sedwill, you wrote to us on 27 January to confirm information that we had received that Vodafone will be switching off Airwave from 31 March 2020, which is a critical issue for the programme you are responsible for. Can you give us a bit more information about when you found out about it and what it means for the programme?

Mark Sedwill: As I said in the letter, we were notified of this by Motorola on 16 January, which I think was around the same time that they wrote to the Committee. We have been working over the last couple of weeks, and will work over the next few weeks, to work out the exact implications. It is clearly a significant issue if it proceeds as stated.

Of course, what we need to do—we have plenty of time; we are talking about March 2020—is to investigate all the options for mitigating this, both technical and financial and so on. We are doing that at a meeting with Motorola and Vodafone, which I think is in the next three weeks, to try to work through all those options and then determine how material this issue is.

Q2 Chair: In your letter you said you wanted an urgent meeting. Three weeks away does not seem like you're treating it with any urgency. Have you had any conversations with Motorola since this letter?

Mark Sedwill: Of course; Mr Webb and his team have spoken to them. The meeting is essentially one to which we would expect them to bring some propositions for us to address with them. Inevitably, they need a little bit of time to work through that. It is essentially the next significant milestone. Of course there has been contact with the companies.

Q3 Chair: What is the deadline for making a decision about this?

Mark Sedwill: Perhaps Mr Webb can help you with that.

Stephen Webb: It depends which option we ultimately take. If we decided we needed to reconfigure part of the Airwave network to enable it to continue once this particular Vodafone service is withdrawn, we may need a couple of years' notice before 2020, so we probably have at least a



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year. That is the option involving the most significant re-work. There are other options that do not have a particular deadline.

- Q4 **Chair:** I gather that an extension has already been negotiated by Motorola with Vodafone to extend from the end of 2019—the original end date they were notified of—to 31 March 2020. That is obviously going to cost money. Who is paying for that?

Stephen Webb: No, the reason why it is the end of March 2020 is that that was the original contract they have always had with Airwave; that was the original end of the PFI. What Vodafone are basically saying is that it will be turned off at the end of the existing contract.

- Q5 **Chair:** So no extension has been negotiated?

Stephen Webb: No. That is already in the contract.

- Q6 **Chair:** So as it stands at the moment, until you have the negotiations, no extra taxpayers' money has been spent on extending the Airwave system?

Stephen Webb: No.

- Q7 **Chair:** But there is now a possibility that taxpayers' money will be spent on extending the Airwave system, depending on how the negotiations go?

Stephen Webb: Yes. There are two issues. There is the overall extension of the Airwave system, which may be required as a result of the time that police users will need to transition from Airwave to ESN. Then there is the specific issue of what we might need to do on this particular Vodafone service, which is really a sub-component of the Airwave system, with which we do not have the commercial relationship—they are a subcontractor of Airwave, of Motorola.

- Q8 **Chair:** I am going to bring in the Comptroller and Auditor General before I continue.

Sir Amyas Morse: Very quickly, just on a point on the lead time for having these modifications to the Airwave platform in place. I am looking at the Motorola email to the Committee, which mentions: "a major two year programme of upgrade in this core network infrastructure (beginning in 2017)." That is what they say—

Stephen Webb: I haven't seen that email. They talked about two years—

Sir Amyas Morse: They are telling us that it needs to begin very, very soon.

Mark Sedwill: If that's the option that we choose—as Mr Webb says, we haven't seen the email.

Sir Amyas Morse: I am just trying to make sure that what goes into the record is accurate, that is all.

- Q9 **Chair:** Vodafone bid to run the new service, which EE won. They are commercial rivals. Have you had any indication about the degree to which



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service provision might be reliant on industry competitors and whether that has had any impact on this decision by Vodafone?

Stephen Webb: Obviously, it is a commercial decision for Vodafone. The context is that it is a technology that is end-of-life. A number of people who previously provided it are looking gradually to withdraw. It is something Vodafone acquired when they bought Cable & Wireless a few years ago, so I understand that they are looking to retire it.

Obviously, as you saw from the letter there, they are retiring it from many of their other customers from the end of 2019, so I do not think that there is any suggestion of special treatment for Airwave, or that that has been particularly motivated by—

Q10 **Chair:** Part of the deal going into this, when you were replacing Airwave and going with the Emergency Services Network, was that Airwave would continue for the length of time you needed to get this programme through. You wrote to us on 22 December, Mr Sedwill—one of the reasons why you are in front of us today—to say that that there was this nine-month delay in the final roll-out of the programme.

We were already alarmed about the joint running and that it was going very fast—the transition period was getting very, very short. So you had that. What due diligence did you have in place to make sure that the length of time that Airwave was going to run would be enough for you to get this programme?

We heard from the previous NAO Report that it would cost £475 million a year if you had to extend it for a year across the whole country. You were perhaps not overconfident but reasonably confident that you would meet that deadline. You have now extended it by nine months and you have got this problem. Isn't this a perfect storm that is putting the emergency services' future communications at risk?

Stephen Webb: We are very confident that this issue that Vodafone raised can be overcome. We are aware of a number of options. I cannot go into too much detail. We will have a better sense when we meet them. There is a range of reconfigurations of the network that we could do, or some alternative ways of keeping the existing system going for a little longer. Extra work will be required, we will have to have commercial discussions about the terms of it, and we will have to talk to the users about any operational implications, but I am confident that that can be dealt with.

On the extension, if you want to talk about that—

Chair: Briefly.

Stephen Webb: We are talking about a nine-month potential delay from the period we originally talked about. The reason for much of the delay is that bits of the software are a bit later than we would like and, largely, we have built in a lot more testing time, but have also left the transition period where it is at the 27 months.



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So we have not compressed the transition, as some Members were concerned about; we have left it there, and we have built in more testing. We are much more confident—this new timescale is a lot more robust, with a lot more testing and trials time and the same amount of transition that we have always promised the users.

- Q11 **Chair:** You were talking about various options available to you to extend Airwave. You have said that so far no additional taxpayers' money has gone because of this, but is there a risk that more taxpayers' money will be spent to prop up an obsolete system?

Stephen Webb: We always said, as we did when we were here last that if we needed further extensions beyond national shutdown we would take as much as law enforcement and the emergency services needed before they were comfortable about being ready to turn it off. We knew what price they would take. We had a price by month, by region—we knew how much that would cost.

I fully anticipate that we will take up some of that. I cannot yet say just how much, but there will need to be some, just to give law enforcement the transition.

- Q12 **Chair:** So there will be some taxpayers' money going on it.

Stephen Webb: There will be some.

- Q13 **Chair:** Mr Sedwill, the last time you were in front of us you said you had scrutinised this more closely than any of the other projects in your Department in the four years you have been in post.

- Q14 **Mark Sedwill:** Yes.

- Q15 **Chair:** Yet it was a surprise to you when you got the letter on 16 January about Vodafone switching the system off. Is there something that you missed when you were examining this programme?

Mark Sedwill: We don't know exactly what Motorola knew, but Motorola informed us and, it would seem, the Committee at about the same time of what they knew at that time.

Mr Webb can talk in more detail about this, but the risk register for the programme always had within it the possibility of having to extend what we know is ageing equipment—this is an old system now—and having to put the Airwave system into care and maintenance as we go. This is essentially crystallising that risk. It is a risk that the programme has had within its compass for some time, but I did not know that Vodafone were going to make this particular decision.

- Q16 **Chair:** That is the bit that worries me. When we got the letter, we were surprised because it was not reflected in the hearing that we had that it would be quite so stark, so cliff edge. It was almost an ultimatum from Vodafone via Motorola that the system would be cut off. Was that bit a surprise to you? If so, why?



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Mark Sedwill: Again, Mr Webb may be able to answer in more detail, but I was not aware of the Vodafone decision in advance. I was not aware of it until I was notified of it. That said, as Mr Webb was explaining, this kind of issue around the ageing of the infrastructure and the fact that we might have to take mitigating action to keep some of the old Airwave infrastructure going if we did need to extend, which we have always acknowledged was a possibility, has been within the programme's compass. We did not know about the specific example, but we did know that.

Just to be clear, we do not yet know how material this will be. It will depend on either cost or timing, let alone operations. We will not take any risks with the operation or effectiveness of this. We need to work that through with Vodafone and Motorola and then determine what is going to be required to enable the Airwave system to continue to provide what the emergency services need until we can shut it down and put a new system in place.

Q17 **Chair:** But we found out on the same day as you. As the customer for this very important system, you found out at the same time as the Public Accounts Committee. It does not sound like there was a good dialogue going on between you and the provider.

Mark Sedwill: We will need to talk to Motorola. I think Motorola emailed you at the same time. We need to talk to them about that email, which we have not seen the detail of. This is one of the issues I would have expected to report to you once we had worked it through. We have agreed a regular update. Of course, the nature of that report would depend on how material it was once we had worked through the mitigation.

Q18 **Chair:** It wasn't very friendly of them to tell us at the same time as you. We are pleased on one level because we like to know things as soon as we can.

Mark Sedwill: Madam Chairman, the last time I tried to explain to you my commitment to open government, I think you laughed at me, so I will not try and pursue that point.

Q19 **Chair:** I think the Home Office's track record has gone backwards since I was a freedom of information Minister. Say no more. Nigel Mills might want to come in at this point.

Q20 **Nigel Mills:** Can we talk through the timetable again, Mr Webb? You said there was still a 27-month transition period, but I thought it was decided that the first round of transitions would not be until 2018, rather than 2017. Is that right?

Stephen Webb: Yes.

Q21 **Nigel Mills:** So when do you think the forces will start transitioning?

Stephen Webb: That is the time—

Q22 **Nigel Mills:** Will it be at the start of 2018?



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Stephen Webb: It's sort of mid-June/July 2018. The mobilisation should be completed. The aim is for major operation trials to be completed then. The transition process can then begin.

Q23 **Nigel Mills:** So it is 27 months from, say, 1 July 2018. That puts us at the end of September 2020.

Stephen Webb: As opposed to the end of the 2019 shutdown that was previously envisaged.

Q24 **Nigel Mills:** But this is material because that means that you are planning for there to be six months' further running than this technology currently is available for.

Stephen Webb: That is currently available, yes. Obviously, every region will have started their transition process and will have ESN at that stage, but they would still be using Airwave to an extent. If we cannot bring the transition forward, we will need to ensure that we have the capability that Vodafone currently provides for at least another six months.

Q25 **Nigel Mills:** And you need to give notice of that by the end of 2018.

Stephen Webb: We will need to give notification of the overall Airwave extension by the end of 2018.

Q26 **Nigel Mills:** So within six months of starting to transition, you will need to be able to tell Motorola which regions you will need to have the extended running in for.

Stephen Webb: Yes.

Q27 **Nigel Mills:** You will be hard pressed to know that you won't need it in any region, won't you? Aren't you almost bound now to be saying, "We're going to need this for the whole of 2020 for the whole country"? It would have to be a very good transition starting in July for you to be confident that you didn't need parallel running somewhere, wouldn't it?

Stephen Webb: It's the same 27 months, which is something we've been working on with users for a number of years. We are looking over the next few months to firm up transition plans quite considerably, so we would expect to know long before the end of 2018 what our transition—

Q28 **Nigel Mills:** But any region that you do not give the notice to by the end of 2018 won't have the capacity to extend after March 2020. Is that right?

Mark Sedwill: Sorry, by March 2020?

Q29 **Nigel Mills:** Yes, so if you don't say by the end of next year, "The east midlands needs to extend," if you get to the end of March 2020 and it is not working, it will be too late; that region will not have had the capacity extended.

Stephen Webb: We have to tell Motorola by the end of 2018 which regions we want to extend and for how long, so we need to give a year's notice. The March 2020 issue is a separate issue with Vodafone, and for



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that, under some options, we could just manage it and we don't need to give any particular notice.

If we decide to do some significant investment to reconfigure the network to enable us to replace the current Vodafone service, we would probably need to have decided that by the end of this year or early 2018. I am sorry; it is a little complex.

- Q30 **Nigel Mills:** I am just trying to understand it contractually. Effectively, you would have to ask Motorola to agree with Vodafone some kind of ability to extend in regions just in case you might subsequently need to extend, even though they are not the ones that you have told Vodafone about by the end of 2018. That seems like a slightly convoluted set of conversations.

Stephen Webb: It is a complex supply chain. We need to understand how the system will be able to operate into 2020. We need to see whether we can extend with Vodafone the period they are prepared to support the technology for, or alternatively find a way of replacing it. That is really what the discussions will be kicking off.

- Q31 **Chair:** You talked about us paying for an extension beyond March 2020 if necessary. Have you put some figures on what that might cost the taxpayer? We recognise there is a risk balance here: there is a financial risk, but there is also the risk of it not working, which is a pretty heavy risk.

Stephen Webb: The extensions for the overall Airwave service—we have a price schedule and we know how much that costs. That is with Motorola. Any additional investment required to replace the Vodafone subset, which is a component of that, we will have to have some commercial discussions about with Motorola, because they are a subcontractor of Motorola and we would have a strong commercial position about who should bear the cost of that.

- Q32 **Chair:** Okay, so you are trying to negotiate hard so the taxpayer's bill is minimised.

Stephen Webb: Yes.

- Q33 **Mr Bacon:** On that point, Mr Webb, you said, "We have to see for how long Vodafone is prepared to support the existing technology." What surprises me about this, apart from the fact that I remember when Airwave was a brand new system and it was a 19-year long PFI contract, so you have had 19 years to prepare for the fact that this was going to be replaced—and yes, I understand technology moves on in this space, sometimes very quickly, but even so. What I do not understand is this: how can you get to a position where Vodafone can say, for something that is critical for national security—for the civilian policing of this country—that they may or may not choose to support it and you have to go on bended knees to them?

At the moment, Airwave works. It will work in seven months' time. It will work in 17 months' time. Across this planet, there is plenty of old



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technology that is working and made to work. There are countries that have very old aircraft carriers; they are probably not as good as new ones, but they do work. Why can't you start throwing HMG's weight around—you are a pretty big and important customer—and say, "This is what we expect from you, and if necessary, we will legislate to make it happen"? Why can't you have that conversation? Why does it sound like you are a supplicant?

Mark Sedwill: I don't think we are a supplicant, Mr Bacon. We are not at the point where we need to bring out the big guns. Mr Webb has referred to the fact that there will be a commercial element to this negotiation. Our contract is with Motorola—Airwave, now owned by Motorola—to maintain this service into 2020, and there is a price for doing that.

If one took a very purist view, the obligation is entirely on them to make sure that their subcontractors are providing that. That isn't the way we want to work through this. As you know, given the number you have looked at, you don't run these programmes effectively if you end up in a whole load of very difficult commercial negotiations. It might come to that, but there is not sign of it so far. Vodafone notified early and are willing to engage in finding a solution, and Motorola are willing to engage in finding a solution. That has got to be the way that we try to move ahead.

Q34 **Mr Bacon:** Believe it or not, I am not actually interested in the subcontractors. It is sounding preciously like Deepwater Horizon or Texas City. I am much more interested in national security and in this country having a civilian police force and emergency services that can communicate with each other, and it is ultimately the Home Office's responsibility to make sure that happens. Everything else—

Mark Sedwill: With due respect, Mr Bacon, I spent 25 years working on national security.

Q35 **Mr Bacon:** Yes, I know you did; you were in the Foreign Office. Why are we in this position? It sounds like you are over a barrel because Vodafone made a decision that they are not going to support some technology in the future.

Mark Sedwill: I just don't think that is an accurate characterisation. We have been given notification at this point, and we have not worked through it with them yet. I think we should not speculate at this stage about how that is going to proceed, even over the next few weeks. Whether it will be genuinely material or not—operationally, financially or in terms of the timeline—is something we will work through.

Obviously, we will update the Committee once we know that, but we don't yet know, Mr Bacon, whether it is material. I don't think we should exaggerate the impact of this notification. We have been given it early, we will work through whether it has a material effect, and if it does we will mitigate it.

Q36 **Nigel Mills:** This is pretty much the same point. I think what you are saying is that you have a schedule of how much each region costs per



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month to extend. I am trying to understand whether that is how you would choose to price this.

If you are going to have to do the whole country for a year, say, wouldn't you be trying to agree a global deal, rather than let them add up 11 regions, or whatever it is, and try to multiply the cost up? At some point, don't you just want to say, "Actually, let's be certain here. How much would it cost us to have it for another year or nine months for the whole country, so we are quite protected?"

Stephen Webb: That is quite possible. We have a binding commitment for contract extensions in the way that the plan works at the moment. Motorola are very open to discussing longer-term extensions, as you can well imagine, and if it came to that we would have those discussions.

All this brings home to us just why we went for as fast a timescale as we possibly could. On top of the costs, we were always very conscious that this is an outdated technology and that these risks are out there. What has happened is not unusual with old technology. People withdraw support, and you have to do all sorts of risk mitigation. I don't think anyone has behaved in a way that is particularly unexpected. We have now started a commercial discussion, and at the end of it—

Q37 **Chair:** But the letter you got was unexpected.

Mark Sedwill: I think that is more about the behaviour. What Mr Webb is pointing out is that the behaviour was not unexpected. We weren't aware that this particular issue was going to arise when it did but, as Mr Webb said, there are a range of programmes—

Q38 **Chair:** There is this close working relationship—in fact, to the credit of the Home Office, somebody was responsible for it all the way through. Presumably, Mr Webb, you had relations with all these contractors. You know people; it is not like they are just procedural relationships—you have not got personal relationships, in that sense, but you know people.

So why was it such a cliff edge to get that letter? That is what worries us. Aren't you disappointed with the way the contractor dealt with it? They could have given you some notification before that.

Stephen Webb: As I say, they are a subcontractor.

Q39 **Chair:** Nevertheless, Motorola let you down.

Mark Sedwill: I don't think Motorola have, because they notified us of an issue that has arisen. We presume that, as they became aware of it, Vodafone were making this decision, and they wanted to work through the implications of it with us. I don't think it would be fair to say that Motorola let us down.

Chair: Well, maybe Vodafone has, as Mr Bacon said.

Mark Sedwill: That is yet to be determined.

Q40 **Chair:** I am going to bring in the Comptroller and Auditor General, and



then go back to Mr Mills, if he has any further questions.

Sir Amyas Morse: I will just rehearse the circumstances. First, Motorola bought Airwave last year. It was quite a big transaction—in fact, they paid a lot of money for it. Therefore, it is reasonable to suppose that they did due diligence, so they should have found out whether there was likely to be, in the short term—we are talking about only a short time—an announcement like this coming forward. If they didn't, they should have known that.

Frankly, this was not discussed privately with you, and they didn't say, "We are going to work through it together," or anything like that. It was put forward to the Committee simultaneously to put the maximum public pressure on you, quite frankly. It quite clearly must be considered to be a purpose of handling it in this way. We need to understand the implications of that. I know you want to keep your options open, because you are going to have a discussion and we do not want to spoil your position, but you cannot blame the Committee for taking it pretty seriously when you look at the events and evidence they are looking at. This looks like it might be a hold-up of some kind.

Stephen Webb: I very much doubt that they intended it to have anything like the impact it has had. I think they probably thought they were helpfully being open about what was going on in Motorola, but I take your point.

Mark Sedwill: One of the things that we will have to explore—this will be part of the discussions—is the exact due diligence process you described. For us, the due diligence was around Motorola and whether it was a company that we could confidently work with as it took over Airwave. Given the very difficult situation we were in with the previous owners, Macquarie, and given the difficulties they were in, having Motorola come in—we worked through all the details of that with them—was very positive news, as we acknowledged in the last hearing. It has enabled us to manage this.

Sir Amyas Morse: Because you felt that you could rely on them to get it right and do the necessary training.

Mark Sedwill: It is not for us to comment on what they did, but we would need to work through with them—

Sir Amyas Morse: Actually, it is for you to comment, because you were relying on them to have the right package of rights from Vodafone to enable them to deliver the service that they were undertaking to you to deliver. It is for you to ask questions about it.

Mark Sedwill: And of course, that obligation remains. Our contract is with them to maintain this service. It is then their contract with Vodafone. What we are talking about, for the reasons Mr Bacon set out—because this is a very important service, it cannot just be a commercial negotiation—is how we manage that to mitigate all the risks.

Q41 **Chair:** Mr Sedwill, we have talked about the legal relationship, but



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Motorola know that they could tie up the Government in legal knots. In the end, you have got a hard deadline to deliver—an increasingly hard deadline. As Mr Bacon said, they have got you over a barrel, haven't they?

Mark Sedwill: I don't think they have, for the reason Mr Bacon said, because in the end we are a big customer. We are a big customer in a whole range of other areas of these companies, too. Let us not forget that Motorola, Vodafone, EE—all these big companies—are doing a great deal of business with Government, and their reputations matter to them. From what we have seen so far, they are behaving well. They have the obligation to deliver this service to us. We could end up in a series of legal conversations. We would rather not, but if we have to, we will.

Q42 **Chair:** Can I go back briefly to the relationships? Then I will bring Mr Mills back in, if he wants to come back in. Mr Webb, you have got these relationships working for a long time with these contractors. My experience with this sort of thing is that there would normally be at least a conversation with a contractor before they wrote to a parliamentary Committee, because you would have that kind of relationship. Did they have a conversation with you before they sent the letter to us?

Stephen Webb: No, but as I say—

Chair: No is fine. Mr Boswell, do you want to come in on this point?

Q43 **Philip Boswell:** SPT runs the Glasgow subway, and it shares the same concerns. It released a report into the public domain on the subway secure communication network. I have some specific questions.

Chair: We should perhaps explain for those not from Scotland that SPT is the Strathclyde Partnership for Transport.

Philip Boswell: This is a safety-critical service. It is provided by a sole supplier with single negotiations, which is similar to other arrangements already discussed. The sole source procurement deliverable was provided by Airwave. Under the circumstances, the provider has a very strong negotiation position, as covered by my colleagues. Whether that is the best procurement option has been covered, I want to ask a specific question. Are you aware of any terms or conditions limiting price increases now that a sole supplier is engaged, particularly with regard to future contract extensions as a safety net?

Mark Sedwill: In Airwave?

Philip Boswell: In the master agreement, quite often you can constrain price increases in future years by mitigating them. Once you have a sole supplier and the system is in place, it is an extremely expensive option to switch it all out. Typically, you would have mechanisms. What safety mechanisms do you have in place for contingency, going beyond your contingency? Because it is a risk issue that should have been identified.

Mark Sedwill: I think this is about the pricing mechanism for the extension—



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Q44 **Philip Boswell:** To constrain any extensions or future extensions.

Stephen Webb: This is presumably for the Glasgow—

Philip Boswell: No, for the master agreement.

Stephen Webb: We know the prices for Scotland and for every other region. We are confident that that is under control.

Q45 **Philip Boswell:** And what about beyond 2020?

Stephen Webb: Yes, that is what I mean by the extensions. We have agreed national shutdown, so the entire network will continue until the end of 2019. Beyond that we have the ability to extend region by region at understood prices. That would cover all the services that Airwave provides in that, whether it is standard above ground or the special services in places like the metros.

Q46 **Philip Boswell:** As a previous contracts manager for contractors, designed obsolescence is a convenient mechanism to squeeze money out of customers—mobile phone users will be completely familiar with that, and clients alike. The contractor having moved the goalposts by saying they are going to withdraw their support, what can you possibly do about this? Do you think it gives them a stronger position if you want to extend beyond? You are just figuring out what you need at the moment.

Mark Sedwill: Just one point of context: this was a severe risk when Macquarie were the owners of Airwave—and we spent quite some time on this at the previous hearing—because they had essentially been telling the market that they were going to be able to charge us pretty much any price they liked after the end of the PFI 2020.

With Motorola taking over and agreeing a much more reasonable set of price extensions, we have already mitigated that financial risk very substantially. As Mr Webb says, it is Vodafone not Motorola who have issued the notification about the support for this particular part of the infrastructure. There is a question between them as well as between us and Motorola but, as Mr Webb says, we have a price agreement with Motorola for those extensions that is firm. Is that fair?

Stephen Webb: *indicated assent—*

Q47 **Philip Boswell:** Okay. How detailed and how open are you? Are the variation rates agreed specifically, for example, if they continue the service? Usually there is not a lot of detail in this type of thing, although there can be. If you have a mechanism by which you have, for example, additional handsets, which may have a mechanical breakdown quite easily, you may require a list, a schedule of rates for whatever. Are the mark-ups on the variation 200% over standard contract rate or are we talking about comparable with existing contracts?

Stephen Webb: It is broadly a rolling forward of the existing contract with abatements in certain circumstances.

Q48 **Chair:** Just to be clear, we talked about the nine-month delay, and you



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said that just gives you more testing time, that it is not cutting into the transition time, so you have not overlapped them. Are you confident that you will deliver on time in what is, for the record, your expected point for delivery UK-wide?

Stephen Webb: I think it is a very robust plan. As I said last time, there are huge numbers of moving parts in here and many of these things have to land together, but I think it is a plan we can have a lot of confidence in.

Q49 **Chair:** So, you don't think the nine-month delay will cause any further extensions? That's it, you think now.

Stephen Webb: I think the nine months has given us an enormous amount of time, particularly on a lot of the related projects, to get much more done than we had previously. Those are things such as the air to ground and the vehicle fitting; there are a lot of things. It has now taken a lot of pressure off those programmes. I am standing by it and am confident that we can achieve it. It may be that in two years' time it will slip a month or two.

Mark Sedwill: To help the Committee, it might be worth pointing this out. There are two deadlines you might be interested in, Madam Chair. One is the time at which we roll out the new system, which is well within the period we have been discussing. Then for how long there is the dual running by which we switch off the old system. It might be useful for the record that there are two dates in a sense.

Q50 **Chair:** So when is the new system, which you are so confident about, going to be rolled out?

Stephen Webb: The date for the new system to be in place is now June 2018. That is the point at which we expect the new system to be ready for service, having gone through trials.

Q51 **Chair:** Is that the switch-on date?

Stephen Webb: That is the switch-on date. Then, as the permanent secretary said, there is the final switch-off date for Airwave, which is the end of transition, which will now be—

Q52 **Chair:** March 2020.

Stephen Webb: No, that is in September 2020. The March date is that subcomponent of the existing Airwave, and structure support.

Q53 **Chair:** We talked a lot last time about when emergency services will have to switch off Airwave and be exclusively on ESN. You were really clear—when they are ready. But with these extra challenges now in the timetable is there going to be a point where we are going to have this quite hard deadline of Airwave switching off, unless potentially there is more taxpayers' money going in? So will emergency services be forced to transition even if they are not content at any point?

Stephen Webb: That comes down to the point you were mentioning earlier. There is now a gap between March 2020 and September 2020 in



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which we think we need Airwave to continue, so that will require the discussions we were talking about earlier with Vodafone and Motorola. I am still very confident that we can give them the full 27 months. I also personally think we can make a case for them to reduce that, but at the moment the users are very clear they want 27 months; and that is all we are committed to give them. Particularly the users, towards the end of it, will have seen other regions going on to this new system completely. They will have experienced the first few months of it. I would have thought the regions at the end might well be prepared to bring it forward a few months and therefore finish a little earlier.

Q54 **Chair:** It could be the corollary; if things go badly wrong they could think they want more.

Stephen Webb: Indeed.

Q55 **Chair:** Have you planned for that possibility?

Stephen Webb: We have now planned huge amounts of testing—user acceptance testing, trials, pilots in every region. There will be a huge amount of opportunity to learn from it. Certainly in some of the key areas, the actual experience for a user is going to be very similar to using a smartphone. It should not be a difficult bit of technology to operate, in any way.

Q56 **Mr Bacon:** You said you have planned a huge amount of testing. How much testing—in weeks?

Stephen Webb: There is a sort of system testing. There is a whole range of different testing. A lot of it is—

Q57 **Mr Bacon:** For all the testing, in total, how many weeks?

Stephen Webb: I am sorry, but I will need to come back to you with a precise—

Q58 **Mr Bacon:** Next question: when should we expect to hear that the testing timetable has been compressed?

Chair: Mr Bacon is being cynical.

Mr Bacon: It happens regularly. I am not cynical. A cynic is somebody who has given up but not shut up. I am just sceptical.

Chair: Years of experience.

Mr Bacon: Yes. Years of experience suggest that the compression of the testing timetable is a big red flag. It happens all over the place in lots of different areas—as well as, by the way, foisting on people who do not want it immature technology to replace stuff that works.

Stephen Webb: We are testing now. The software is coming in what is known as feature packs. Feature pack 3 came before Christmas. We are just doing a series of testing now. Feature pack 4 is due at the end of March, I think—then, again, a whole series of testing on that.



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Q59 **Mr Bacon:** So do you have to have a testing timetable that takes you right out to 2019-20?

Stephen Webb: Yes.

Q60 **Mr Bacon:** Can you give us a note summarising that testing timetable, with how many weeks of testing are involved?

Mark Sedwill: I saw just this week, Mr Bacon, some examples of the handsets, with a push-to-talk facility, which I know, again, was a concern of the Committee at the last hearing. It is like a mobile phone with a big rubber case on it, because it needs to be ruggedised. The screen is just like a mobile phone screen—a smartphone screen—but it also has this push-to-talk facility on it. If you see it, it begins to feel quite real. Again, if the Committee is interested we can show you some.

Q61 **Chair:** Okay. We have asked for this particular update; we have also previously asked, of course, for regular updates. I was wondering if you would undertake to come back to us to explain any commitments after these negotiations to pay more, either for an upgrading of Vodafone capability or extension costs, or both.

Mark Sedwill: Of course.

Stephen Webb: May I add to the permanent secretary's point? The interworking solution is absolutely essential for this transition to happen. So, basically, people can have a group call with some of the people working on Airwave and some working on the ESN. A couple of weeks ago we had a successful test of that. There are a few bugs that need to be fixed but we have got eight months in the plan to do that. We have seen a product. So we are seeing stuff coming through that is giving—

Chair: Mr Webb, very often SROs are not as confident as you, or are without such depth of knowledge; so we will be holding you to that. I am going to bring in Anne-Marie Trevelyan, and then I want to get on to some of the issues around underground services.

Q62 **Mrs Trevelyan:** This is on behalf of my colleague the MP for Torbay, who was concerned last year that the south-west is at the end of the programme and really did not have any time lag capacity. The assumption was that everyone else, as you have just said, would find it was all working, and they would therefore just pick up and get on with it. Surely that is now under real pressure, and if there are problems there that is an immediate cost to the programme, because you will have to extend, because of the distance. What is your view? Will the south-west cause a block in that final roll-out?

Stephen Webb: I do not think so. If the south-west needs a little more time to build contingency, the best thing to do would be to bring forward the start of their transition period and do it that way rather than doing it at the end. As I said last time, it is a region that has put in a huge amount of effort. In many ways it is already one of the best prepared, so it may well want to shift its period and where it sits in the transition timescale anyway. We are discussing with the users. I was just talking to the senior



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police user this morning. We are looking at a major review of all the user readiness and transition plans and will want to pick all these things up.

Chair: I think a lot of colleagues, not just those in this room on this Committee, are interested in what is happening in their area. When we do have you back, we will want to know about those.

Philip Boswell: This is specifically on risk management impact, probability matrices and what risk management process you are using. Can you give us a brief description of who is involved, how much detail you go into with risk management and what tools you use? Very briefly, who is involved?

Stephen Webb: We use the normal tools of risk management—the risk registers and so on. We have built in a lot of the contingency on the financial side. We follow the usual Green Book rules of optimism bias and then quantified risk assessment for things that are a little more—

Q63 **Philip Boswell:** Monte Carlo probability analysis as well?

Stephen Webb: Not really on this area.

Q64 **Philip Boswell:** For schedule and cost?

Stephen Webb: We have not used that.

Q65 **Philip Boswell:** Who is we?

Stephen Webb: Obviously the programme, primarily. We have a delivery partner that helps us in preparing a lot of this material and then the programme board will discuss it. We had a meeting just yesterday about—

Q66 **Philip Boswell:** So it is planners, cost engineers, quantity surveyors, project managers and hands-on management that are used to understanding the problems?

Stephen Webb: Yes.

Q67 **Chair:** I want to cover the issue around the London Underground, and I know colleagues have issues around other metro systems as well. Last time you came in front of us Mr Webb, in November, you said that in the next couple of months an announcement would be imminent. I think Liam Maxwell said the roll-out on the underground was one of the things that kept him awake at night. Could you update us on progress and where you are in rolling this out on the London Underground?

Mark Sedwill: I have a couple of sentences first, and then Mr Webb can come in. We have picked this up. I spoke to Mike Brown, the commissioner, just before Christmas. Coincidentally, we have a meeting tomorrow and we have said that we want a joint proposition from our two teams on roll out in the underground. From what I have seen of the papers for that meeting, it looks like it is in good shape and the relationship feels like it is where it needs to be. I feel more confident now than I did at the hearing. There were some issues there and I think we are working through them.



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Q68 **Chair:** I should explain that between when you came to us and now there has been some press coverage suggesting that the Mayor is still negotiating with the providers about the cost. Mr Webb, do you want to give us a more detailed update?

Stephen Webb: Yes. We are doing a lot of detailed design work and the trials are commencing. Equipment is being put in to one particular part of the network to test the new approach that we are looking to do to deliver ESN over this. We need a firm sign-off. There are certain technical complexities. We need to have the finance sorted and the commercial arrangements with the mobile operators.

Q69 **Chair:** Who is that? Who is having that arrangement with the mobile operators? Is it TfL?

Stephen Webb: That is TfL.

Q70 **Chair:** So you are relying on Transport for London to make sure that it has got its negotiations right with the providers. You have this meeting tomorrow. Is that the end of it or the beginning?

Stephen Webb: No, it is an ongoing process.

Q71 **Chair:** You talked about a couple of months and you did say it was not an imminent decision. What is your timescale for having sealed the deal with Transport for London over the underground?

Stephen Webb: As I understand it, it is probably going to be June or July for a final business case and for them to sign this off. That is from internal TfL governance. Up to that point, there is nothing—the work that is necessary for the critical path is proceeding. As I said, we are doing the work on the trials. All the work we need to do is proceeding. At that point they need to have finalised their designs for how they are going to do it and sorted out the finance.

Q72 **Chair:** This will be both the deep underground and the sub-surface—

Stephen Webb: The stations and the tunnels. Obviously anything above ground is going to be covered anyway. Indeed, all the other regional metros—Glasgow, Tyne and Wear and so on—are covered in the main contract anyway, so there is no problem with that.

Q73 **Chair:** We are going to bring those in. Just to be clear, you are having this meeting tomorrow with the London transport commissioner, you are convinced that things are progressing and we will know by the summer. If you were in front of us in the summer, you would be able to give us more detailed answers to our questions. I am just worried that this is butting up against the timetable. You gave us a fairly clear timetable in November. It sounds like it is overrunning a bit.

Stephen Webb: The period at which we will get certainty and definite commitment is likely to be a little later, as I understand it now, but all the work that would be necessary anyway is progressing, so we are not losing any time from the critical path. I suppose it can't come too soon from my point of view—getting actual certainty that this is definitely happening.



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Q74 **Chair:** Just to be clear, Transport for London has got to pay for some aspects of this—is that right?

Stephen Webb: We are or will be making a contribution for our part. There is potential TfL support and potential support from elsewhere and indeed negotiations with the mobile operators.

Q75 **Chair:** So in terms of the contribution, is that negotiable? Is that something that you are still wrestling with with Transport for London? I know that the Mayor has some stiff challenges with that budget. That was what was recorded in the newspaper coverage.

Stephen Webb: It has been pretty much agreed, our share, so the question is how then—

Q76 **Chair:** Pretty much agreed, your share? So they might come back and negotiate?

Stephen Webb: It is not completely agreed, but I would be pretty confident and we have budgeted for what we need. The question is the gap between that and the rather more expensive solution that they are looking at. There is a financial hole that needs to be plugged, either from their own resources or from agreements with the mobile operators.

Q77 **Chair:** But not from the central Government taxpayer-funded pot?

Stephen Webb: Well, I guess that is all to be discussed.

Q78 **Chair:** Okay. That is something else to plot for when you come to see us later. Louise Bladen from the National Audit Office wanted to come in, then I'm going to go to Bridget Phillipson and then Phil Boswell.

Louise Bladen: Looking at figure 12 in our original report, which shows the transition activity by region and month, London is a pretty early one to go. So if the business case isn't going to be signed off until June this year, what is the impact on transition for London? Are they going to be at a point of transitioning, but not having something fully working on the underground, if the technology is going to take a while to put in place? You suggested earlier that there was room to negotiate the ordering of the transitions, but London does look very early.

Stephen Webb: As I say, all the transition timescales were driven at the point when we were tied to the original Airwave contract endpoints and so there was much less flexibility. There is a lot more now. We will discuss with the Met what the optimum times in the year are that they want to transition in London. All these times can potentially change.

Q79 **Bridget Phillipson:** Mr Webb, you talked about the regional roll-out and the impact on metro systems. I wondered if you could provide an update on that, particularly with reference to the Tyne and Wear Metro, which is used by many of my constituents.

Stephen Webb: Indeed. Coverage in those metro systems is part of the core Airwave contract and that has been rolled forward as part of the core ESN, so there are not the same issues as there are with London. That will



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be provided. There will be 4G coverage in the same way that there is Airwave coverage now.

- Q80 **Bridget Phillipson:** I accept that there aren't the same challenges as with the underground system, but there are some of the same challenges in terms of the coverage. Could you just make clear what will happen around ensuring that we have a system that works effectively and that makes sure that there is no risk to public safety?

Stephen Webb: Yes, it will need to go to the full area. The coverage assurance uses the acceptance that there will be a whole range of testing in every force, so in the Northumbria force or whatever, they will no doubt be wanting to test and ensure this. Then there will also be discussions about the extent to which that is going to be extended to the general public.

Mark Sedwill: May I just clarify a point? The difference between London Underground and the other metros is that the other metros were in the contract anyway for the provision of the infrastructure to enable the full 4G coverage. The reason London Underground was not in that was the expectation at the time, for purely commercial reasons, that just having mobile phone coverage on the tube was going to happen anyway. That is why London Underground is in a different position. The others are part of the network requirements that are part of the EE infrastructure contract. The same is true in Glasgow for example.

- Q81 **Bridget Phillipson:** Can you just give an assurance that there will be no switchover or sign-off on this unless the emergency services and Northumbria Police, who take a lead on this, are absolutely confident that this is a system that will work and will keep the public safe?

Stephen Webb: Absolutely. We have to demonstrate to their section that this is a safe system.

- Q82 **Bridget Phillipson:** So will Northumbria Police have final sign-off? What is the process by which it will be determined that we are confident that it is working and it is safe?

Stephen Webb: On the main police governance, there is a reference group that each region sends a representative to, including the north-east, and which is chaired by Francis Habgood, who is the chief constable of Thames Valley. We will largely be looking for a collective view from police about whether it works, but we will obviously need—particularly on matters like coverage—some quite intense local work as well, to guarantee that people are satisfied that it is there. The good thing about coverage is that it is something we can start testing now and can demonstrate to people over quite a long period that it is there and it is reliable.

Mark Sedwill: Of course, it is not just policing, it is fire and ambulance and so on.

- Q83 **Bridget Phillipson:** This is a slightly wider point, but in terms of the extent of the coverage, as I understand it, it will be at least as good as or better than existing coverage. Is it ambitious enough to want it to be just



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as good as we have?

Mark Sedwill: Coverage is pretty good now.

Stephen Webb: If you look at roads, for example, by bringing ESN over 4G to the road network, we will cover 5,000 kilometres of roads that are not covered at the moment. That means people will be able to make 999 calls. When the eCall technology in cars comes in from April 2018, cars will automatically make a call to emergency services when there has been a crash. There will be a substantial improvement in coverage. You can always go further—the programme is ambitious enough. We could always decide to go further on coverage later on if there was a case for it. We are talking about very remote areas that are not going to be covered by this.

Mark Sedwill: With mobile repeaters, if there is an operation in a remote area—your area of the country, like mine, has quite a large expanse of lightly populated areas—we will have the ability to extend the coverage into those areas.

Chair: Which we covered last time, so I don't want to go through that.

Q84 **Bridget Phillipson:** The coverage is still pretty rubbish, even in parts of the relatively urban area that I cover. Finally, what will be the process by which you will hear from police forces, for example, or other emergency services, that there are difficulties? What would be the mechanism by which you would be involved in understanding what is perhaps not working and what needs to be done?

Stephen Webb: Do you mean during the trials and transition period, or once we have actually gone live?

Bridget Phillipson: Indeed.

Stephen Webb: We are going to be working incredibly closely. As I say, we have regional teams and we have the police governance. There is going to be area-by-area sign-off for the process.

Mark Sedwill: We have a deputy chief constable within the programme who is part of ensuring that. We have a senior fire officer as well. We also have the reference group that Mr Webb already described, which is chaired by the chief constable of Thames Valley, Frances Habgood. There are plenty of formal mechanisms and, in any case, we have regular contact with chief constables for a range of other reasons. If ever they have a concern, they tend to raise it pretty swiftly.

Louise Bladen: Just for the record, when we spoke to police forces about the kind of testing that is being done, a lot of them said they planned to do their own testing on top of that. I think they were taking that very seriously.

Q85 **Chair:** My final question, to Mr Webb and Mr Sedwill, is what is keeping you awake the most now? Perhaps the Motorola thing, possibly, but apart from that?



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Stephen Webb: It is still the combination of the number of related projects we have to deliver at the same time, I suppose, and the underground, simply because it is a risk that is not under my control. I probably worry a bit more about that. I am relatively confident that we will find a way around the Vodafone-Motorola thing.

Chair: We will be watching that closely because it is obviously critical to the taxpayer and to the success of the programme.

Mark Sedwill: As you can imagine, this week it is not this programme for the Home Office, for obvious reasons. On this programme, it is just the scale, complexity and pace—and ensuring that we are able to manage all of that effectively. I think we have a great team to do it, but of course, as we have always said, it is a high-risk, high-return programme. That is the issue that is always most on my mind.

Chair: Okay. Thank you very much for coming in front of us. We will be watching this closely because it is of interest to us. Is critical to public safety and, as you say, quite high risk. The transcript will be available on the website in the next couple of days.

Public Accounts Committee

Oral evidence: Upgrading Emergency Services Communications, HC 997

Wednesday 1 February 2017

Ordered by the House of Commons to be published on 1 February 2017.

Watch the meeting: <http://www.parliamentlive.tv/Event/Index/833f4285-58f5-4e98-938f-4f7c2eabe21b>

Members present: Meg Hillier (Chair); Mr Richard Bacon; Philip Boswell; Caroline Flint; Nigel Mills; Anne Marie Morris; Bridget Phillipson; John Pugh; Mrs Anne-Marie Trevelyan.

Sir Amyas Morse, Comptroller and Auditor General, Adrian Jenner, Director of Parliamentary Relations, National Audit Office, Louise Bladen, Director, National Audit Office, and Marius Gallaher, Alternate Treasury Officer of Accounts, Her Majesty's Treasury, were in attendance.

Questions 1-98

Witnesses

I: Mark Sedwill, Permanent Secretary, Home Office, and Stephen Webb, Senior Responsible Owner, ESMC Programme, Home Office.



Examination of witnesses

Mark Sedwill and Stephen Webb.

Q1 Chair: Good afternoon and welcome to the Public Accounts Committee on Wednesday 1 February 2017. We are now in public session and talking to the Home Office about the Emergency Services Network. This is a recall because we have had some further information since our last session, and Report, about the future of the very important communications network for our emergency services, which is replacing the Airwave contract.

We welcome back Stephen Webb, who is the senior responsible owner for this and has been with the programme since the beginning, and Mark Sedwill, the permanent secretary at the Home Office.

Mr Sedwill, you wrote to us on 27 January to confirm information that we had received that Vodafone will be switching off Airwave from 31 March 2020, which is a critical issue for the programme you are responsible for. Can you give us a bit more information about when you found out about it and what it means for the programme?

Mark Sedwill: As I said in the letter, we were notified of this by Motorola on 16 January, which I think was around the same time that they wrote to the Committee. We have been working over the last couple of weeks, and will work over the next few weeks, to work out the exact implications. It is clearly a significant issue if it proceeds as stated.

Of course, what we need to do—we have plenty of time; we are talking about March 2020—is to investigate all the options for mitigating this, both technical and financial and so on. We are doing that at a meeting with Motorola and Vodafone, which I think is in the next three weeks, to try to work through all those options and then determine how material this issue is.

Q2 Chair: In your letter you said you wanted an urgent meeting. Three weeks away does not seem like you're treating it with any urgency. Have you had any conversations with Motorola since this letter?

Mark Sedwill: Of course; Mr Webb and his team have spoken to them. The meeting is essentially one to which we would expect them to bring some propositions for us to address with them. Inevitably, they need a little bit of time to work through that. It is essentially the next significant milestone. Of course there has been contact with the companies.

Q3 Chair: What is the deadline for making a decision about this?

Mark Sedwill: Perhaps Mr Webb can help you with that.

Stephen Webb: It depends which option we ultimately take. If we decided we needed to reconfigure part of the Airwave network to enable it to continue once this particular Vodafone service is withdrawn, we may need a couple of years' notice before 2020, so we probably have at least a



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year. That is the option involving the most significant re-work. There are other options that do not have a particular deadline.

- Q4 **Chair:** I gather that an extension has already been negotiated by Motorola with Vodafone to extend from the end of 2019—the original end date they were notified of—to 31 March 2020. That is obviously going to cost money. Who is paying for that?

Stephen Webb: No, the reason why it is the end of March 2020 is that that was the original contract they have always had with Airwave; that was the original end of the PFI. What Vodafone are basically saying is that it will be turned off at the end of the existing contract.

- Q5 **Chair:** So no extension has been negotiated?

Stephen Webb: No. That is already in the contract.

- Q6 **Chair:** So as it stands at the moment, until you have the negotiations, no extra taxpayers' money has been spent on extending the Airwave system?

Stephen Webb: No.

- Q7 **Chair:** But there is now a possibility that taxpayers' money will be spent on extending the Airwave system, depending on how the negotiations go?

Stephen Webb: Yes. There are two issues. There is the overall extension of the Airwave system, which may be required as a result of the time that police users will need to transition from Airwave to ESN. Then there is the specific issue of what we might need to do on this particular Vodafone service, which is really a sub-component of the Airwave system, with which we do not have the commercial relationship—they are a subcontractor of Airwave, of Motorola.

- Q8 **Chair:** I am going to bring in the Comptroller and Auditor General before I continue.

Sir Amyas Morse: Very quickly, just on a point on the lead time for having these modifications to the Airwave platform in place. I am looking at the Motorola email to the Committee, which mentions: "a major two year programme of upgrade in this core network infrastructure (beginning in 2017)." That is what they say—

Stephen Webb: I haven't seen that email. They talked about two years—

Sir Amyas Morse: They are telling us that it needs to begin very, very soon.

Mark Sedwill: If that's the option that we choose—as Mr Webb says, we haven't seen the email.

Sir Amyas Morse: I am just trying to make sure that what goes into the record is accurate, that is all.

- Q9 **Chair:** Vodafone bid to run the new service, which EE won. They are commercial rivals. Have you had any indication about the degree to which



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service provision might be reliant on industry competitors and whether that has had any impact on this decision by Vodafone?

Stephen Webb: Obviously, it is a commercial decision for Vodafone. The context is that it is a technology that is end-of-life. A number of people who previously provided it are looking gradually to withdraw. It is something Vodafone acquired when they bought Cable & Wireless a few years ago, so I understand that they are looking to retire it.

Obviously, as you saw from the letter there, they are retiring it from many of their other customers from the end of 2019, so I do not think that there is any suggestion of special treatment for Airwave, or that that has been particularly motivated by—

Q10 **Chair:** Part of the deal going into this, when you were replacing Airwave and going with the Emergency Services Network, was that Airwave would continue for the length of time you needed to get this programme through. You wrote to us on 22 December, Mr Sedwill—one of the reasons why you are in front of us today—to say that that there was this nine-month delay in the final roll-out of the programme.

We were already alarmed about the joint running and that it was going very fast—the transition period was getting very, very short. So you had that. What due diligence did you have in place to make sure that the length of time that Airwave was going to run would be enough for you to get this programme?

We heard from the previous NAO Report that it would cost £475 million a year if you had to extend it for a year across the whole country. You were perhaps not overconfident but reasonably confident that you would meet that deadline. You have now extended it by nine months and you have got this problem. Isn't this a perfect storm that is putting the emergency services' future communications at risk?

Stephen Webb: We are very confident that this issue that Vodafone raised can be overcome. We are aware of a number of options. I cannot go into too much detail. We will have a better sense when we meet them. There is a range of reconfigurations of the network that we could do, or some alternative ways of keeping the existing system going for a little longer. Extra work will be required, we will have to have commercial discussions about the terms of it, and we will have to talk to the users about any operational implications, but I am confident that that can be dealt with.

On the extension, if you want to talk about that—

Chair: Briefly.

Stephen Webb: We are talking about a nine-month potential delay from the period we originally talked about. The reason for much of the delay is that bits of the software are a bit later than we would like and, largely, we have built in a lot more testing time, but have also left the transition period where it is at the 27 months.



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So we have not compressed the transition, as some Members were concerned about; we have left it there, and we have built in more testing. We are much more confident—this new timescale is a lot more robust, with a lot more testing and trials time and the same amount of transition that we have always promised the users.

- Q11 **Chair:** You were talking about various options available to you to extend Airwave. You have said that so far no additional taxpayers' money has gone because of this, but is there a risk that more taxpayers' money will be spent to prop up an obsolete system?

Stephen Webb: We always said, as we did when we were here last that if we needed further extensions beyond national shutdown we would take as much as law enforcement and the emergency services needed before they were comfortable about being ready to turn it off. We knew what price they would take. We had a price by month, by region—we knew how much that would cost.

I fully anticipate that we will take up some of that. I cannot yet say just how much, but there will need to be some, just to give law enforcement the transition.

- Q12 **Chair:** So there will be some taxpayers' money going on it.

Stephen Webb: There will be some.

- Q13 **Chair:** Mr Sedwill, the last time you were in front of us you said you had scrutinised this more closely than any of the other projects in your Department in the four years you have been in post.

- Q14 **Mark Sedwill:** Yes.

- Q15 **Chair:** Yet it was a surprise to you when you got the letter on 16 January about Vodafone switching the system off. Is there something that you missed when you were examining this programme?

Mark Sedwill: We don't know exactly what Motorola knew, but Motorola informed us and, it would seem, the Committee at about the same time of what they knew at that time.

Mr Webb can talk in more detail about this, but the risk register for the programme always had within it the possibility of having to extend what we know is ageing equipment—this is an old system now—and having to put the Airwave system into care and maintenance as we go. This is essentially crystallising that risk. It is a risk that the programme has had within its compass for some time, but I did not know that Vodafone were going to make this particular decision.

- Q16 **Chair:** That is the bit that worries me. When we got the letter, we were surprised because it was not reflected in the hearing that we had that it would be quite so stark, so cliff edge. It was almost an ultimatum from Vodafone via Motorola that the system would be cut off. Was that bit a surprise to you? If so, why?



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Mark Sedwill: Again, Mr Webb may be able to answer in more detail, but I was not aware of the Vodafone decision in advance. I was not aware of it until I was notified of it. That said, as Mr Webb was explaining, this kind of issue around the ageing of the infrastructure and the fact that we might have to take mitigating action to keep some of the old Airwave infrastructure going if we did need to extend, which we have always acknowledged was a possibility, has been within the programme's compass. We did not know about the specific example, but we did know that.

Just to be clear, we do not yet know how material this will be. It will depend on either cost or timing, let alone operations. We will not take any risks with the operation or effectiveness of this. We need to work that through with Vodafone and Motorola and then determine what is going to be required to enable the Airwave system to continue to provide what the emergency services need until we can shut it down and put a new system in place.

Q17 **Chair:** But we found out on the same day as you. As the customer for this very important system, you found out at the same time as the Public Accounts Committee. It does not sound like there was a good dialogue going on between you and the provider.

Mark Sedwill: We will need to talk to Motorola. I think Motorola emailed you at the same time. We need to talk to them about that email, which we have not seen the detail of. This is one of the issues I would have expected to report to you once we had worked it through. We have agreed a regular update. Of course, the nature of that report would depend on how material it was once we had worked through the mitigation.

Q18 **Chair:** It wasn't very friendly of them to tell us at the same time as you. We are pleased on one level because we like to know things as soon as we can.

Mark Sedwill: Madam Chairman, the last time I tried to explain to you my commitment to open government, I think you laughed at me, so I will not try and pursue that point.

Q19 **Chair:** I think the Home Office's track record has gone backwards since I was a freedom of information Minister. Say no more. Nigel Mills might want to come in at this point.

Q20 **Nigel Mills:** Can we talk through the timetable again, Mr Webb? You said there was still a 27-month transition period, but I thought it was decided that the first round of transitions would not be until 2018, rather than 2017. Is that right?

Stephen Webb: Yes.

Q21 **Nigel Mills:** So when do you think the forces will start transitioning?

Stephen Webb: That is the time—

Q22 **Nigel Mills:** Will it be at the start of 2018?



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Stephen Webb: It's sort of mid-June/July 2018. The mobilisation should be completed. The aim is for major operation trials to be completed then. The transition process can then begin.

Q23 **Nigel Mills:** So it is 27 months from, say, 1 July 2018. That puts us at the end of September 2020.

Stephen Webb: As opposed to the end of the 2019 shutdown that was previously envisaged.

Q24 **Nigel Mills:** But this is material because that means that you are planning for there to be six months' further running than this technology currently is available for.

Stephen Webb: That is currently available, yes. Obviously, every region will have started their transition process and will have ESN at that stage, but they would still be using Airwave to an extent. If we cannot bring the transition forward, we will need to ensure that we have the capability that Vodafone currently provides for at least another six months.

Q25 **Nigel Mills:** And you need to give notice of that by the end of 2018.

Stephen Webb: We will need to give notification of the overall Airwave extension by the end of 2018.

Q26 **Nigel Mills:** So within six months of starting to transition, you will need to be able to tell Motorola which regions you will need to have the extended running in for.

Stephen Webb: Yes.

Q27 **Nigel Mills:** You will be hard pressed to know that you won't need it in any region, won't you? Aren't you almost bound now to be saying, "We're going to need this for the whole of 2020 for the whole country"? It would have to be a very good transition starting in July for you to be confident that you didn't need parallel running somewhere, wouldn't it?

Stephen Webb: It's the same 27 months, which is something we've been working on with users for a number of years. We are looking over the next few months to firm up transition plans quite considerably, so we would expect to know long before the end of 2018 what our transition—

Q28 **Nigel Mills:** But any region that you do not give the notice to by the end of 2018 won't have the capacity to extend after March 2020. Is that right?

Mark Sedwill: Sorry, by March 2020?

Q29 **Nigel Mills:** Yes, so if you don't say by the end of next year, "The east midlands needs to extend," if you get to the end of March 2020 and it is not working, it will be too late; that region will not have had the capacity extended.

Stephen Webb: We have to tell Motorola by the end of 2018 which regions we want to extend and for how long, so we need to give a year's notice. The March 2020 issue is a separate issue with Vodafone, and for



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that, under some options, we could just manage it and we don't need to give any particular notice.

If we decide to do some significant investment to reconfigure the network to enable us to replace the current Vodafone service, we would probably need to have decided that by the end of this year or early 2018. I am sorry; it is a little complex.

Q30 **Nigel Mills:** I am just trying to understand it contractually. Effectively, you would have to ask Motorola to agree with Vodafone some kind of ability to extend in regions just in case you might subsequently need to extend, even though they are not the ones that you have told Vodafone about by the end of 2018. That seems like a slightly convoluted set of conversations.

Stephen Webb: It is a complex supply chain. We need to understand how the system will be able to operate into 2020. We need to see whether we can extend with Vodafone the period they are prepared to support the technology for, or alternatively find a way of replacing it. That is really what the discussions will be kicking off.

Q31 **Chair:** You talked about us paying for an extension beyond March 2020 if necessary. Have you put some figures on what that might cost the taxpayer? We recognise there is a risk balance here: there is a financial risk, but there is also the risk of it not working, which is a pretty heavy risk.

Stephen Webb: The extensions for the overall Airwave service—we have a price schedule and we know how much that costs. That is with Motorola. Any additional investment required to replace the Vodafone subset, which is a component of that, we will have to have some commercial discussions about with Motorola, because they are a subcontractor of Motorola and we would have a strong commercial position about who should bear the cost of that.

Q32 **Chair:** Okay, so you are trying to negotiate hard so the taxpayer's bill is minimised.

Stephen Webb: Yes.

Q33 **Mr Bacon:** On that point, Mr Webb, you said, "We have to see for how long Vodafone is prepared to support the existing technology." What surprises me about this, apart from the fact that I remember when Airwave was a brand new system and it was a 19-year long PFI contract, so you have had 19 years to prepare for the fact that this was going to be replaced—and yes, I understand technology moves on in this space, sometimes very quickly, but even so. What I do not understand is this: how can you get to a position where Vodafone can say, for something that is critical for national security—for the civilian policing of this country—that they may or may not choose to support it and you have to go on bended knees to them?

At the moment, Airwave works. It will work in seven months' time. It will work in 17 months' time. Across this planet, there is plenty of old



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technology that is working and made to work. There are countries that have very old aircraft carriers; they are probably not as good as new ones, but they do work. Why can't you start throwing HMG's weight around—you are a pretty big and important customer—and say, "This is what we expect from you, and if necessary, we will legislate to make it happen"? Why can't you have that conversation? Why does it sound like you are a supplicant?

Mark Sedwill: I don't think we are a supplicant, Mr Bacon. We are not at the point where we need to bring out the big guns. Mr Webb has referred to the fact that there will be a commercial element to this negotiation. Our contract is with Motorola—Airwave, now owned by Motorola—to maintain this service into 2020, and there is a price for doing that.

If one took a very purist view, the obligation is entirely on them to make sure that their subcontractors are providing that. That isn't the way we want to work through this. As you know, given the number you have looked at, you don't run these programmes effectively if you end up in a whole load of very difficult commercial negotiations. It might come to that, but there is not sign of it so far. Vodafone notified early and are willing to engage in finding a solution, and Motorola are willing to engage in finding a solution. That has got to be the way that we try to move ahead.

Q34 **Mr Bacon:** Believe it or not, I am not actually interested in the subcontractors. It is sounding preciously like Deepwater Horizon or Texas City. I am much more interested in national security and in this country having a civilian police force and emergency services that can communicate with each other, and it is ultimately the Home Office's responsibility to make sure that happens. Everything else—

Mark Sedwill: With due respect, Mr Bacon, I spent 25 years working on national security.

Q35 **Mr Bacon:** Yes, I know you did; you were in the Foreign Office. Why are we in this position? It sounds like you are over a barrel because Vodafone made a decision that they are not going to support some technology in the future.

Mark Sedwill: I just don't think that is an accurate characterisation. We have been given notification at this point, and we have not worked through it with them yet. I think we should not speculate at this stage about how that is going to proceed, even over the next few weeks. Whether it will be genuinely material or not—operationally, financially or in terms of the timeline—is something we will work through.

Obviously, we will update the Committee once we know that, but we don't yet know, Mr Bacon, whether it is material. I don't think we should exaggerate the impact of this notification. We have been given it early, we will work through whether it has a material effect, and if it does we will mitigate it.

Q36 **Nigel Mills:** This is pretty much the same point. I think what you are saying is that you have a schedule of how much each region costs per



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month to extend. I am trying to understand whether that is how you would choose to price this.

If you are going to have to do the whole country for a year, say, wouldn't you be trying to agree a global deal, rather than let them add up 11 regions, or whatever it is, and try to multiply the cost up? At some point, don't you just want to say, "Actually, let's be certain here. How much would it cost us to have it for another year or nine months for the whole country, so we are quite protected?"

Stephen Webb: That is quite possible. We have a binding commitment for contract extensions in the way that the plan works at the moment. Motorola are very open to discussing longer-term extensions, as you can well imagine, and if it came to that we would have those discussions.

All this brings home to us just why we went for as fast a timescale as we possibly could. On top of the costs, we were always very conscious that this is an outdated technology and that these risks are out there. What has happened is not unusual with old technology. People withdraw support, and you have to do all sorts of risk mitigation. I don't think anyone has behaved in a way that is particularly unexpected. We have now started a commercial discussion, and at the end of it—

Q37 **Chair:** But the letter you got was unexpected.

Mark Sedwill: I think that is more about the behaviour. What Mr Webb is pointing out is that the behaviour was not unexpected. We weren't aware that this particular issue was going to arise when it did but, as Mr Webb said, there are a range of programmes—

Q38 **Chair:** There is this close working relationship—in fact, to the credit of the Home Office, somebody was responsible for it all the way through. Presumably, Mr Webb, you had relations with all these contractors. You know people; it is not like they are just procedural relationships—you have not got personal relationships, in that sense, but you know people.

So why was it such a cliff edge to get that letter? That is what worries us. Aren't you disappointed with the way the contractor dealt with it? They could have given you some notification before that.

Stephen Webb: As I say, they are a subcontractor.

Q39 **Chair:** Nevertheless, Motorola let you down.

Mark Sedwill: I don't think Motorola have, because they notified us of an issue that has arisen. We presume that, as they became aware of it, Vodafone were making this decision, and they wanted to work through the implications of it with us. I don't think it would be fair to say that Motorola let us down.

Chair: Well, maybe Vodafone has, as Mr Bacon said.

Mark Sedwill: That is yet to be determined.

Q40 **Chair:** I am going to bring in the Comptroller and Auditor General, and



then go back to Mr Mills, if he has any further questions.

Sir Amyas Morse: I will just rehearse the circumstances. First, Motorola bought Airwave last year. It was quite a big transaction—in fact, they paid a lot of money for it. Therefore, it is reasonable to suppose that they did due diligence, so they should have found out whether there was likely to be, in the short term—we are talking about only a short time—an announcement like this coming forward. If they didn't, they should have known that.

Frankly, this was not discussed privately with you, and they didn't say, "We are going to work through it together," or anything like that. It was put forward to the Committee simultaneously to put the maximum public pressure on you, quite frankly. It quite clearly must be considered to be a purpose of handling it in this way. We need to understand the implications of that. I know you want to keep your options open, because you are going to have a discussion and we do not want to spoil your position, but you cannot blame the Committee for taking it pretty seriously when you look at the events and evidence they are looking at. This looks like it might be a hold-up of some kind.

Stephen Webb: I very much doubt that they intended it to have anything like the impact it has had. I think they probably thought they were helpfully being open about what was going on in Motorola, but I take your point.

Mark Sedwill: One of the things that we will have to explore—this will be part of the discussions—is the exact due diligence process you described. For us, the due diligence was around Motorola and whether it was a company that we could confidently work with as it took over Airwave. Given the very difficult situation we were in with the previous owners, Macquarie, and given the difficulties they were in, having Motorola come in—we worked through all the details of that with them—was very positive news, as we acknowledged in the last hearing. It has enabled us to manage this.

Sir Amyas Morse: Because you felt that you could rely on them to get it right and do the necessary training.

Mark Sedwill: It is not for us to comment on what they did, but we would need to work through with them—

Sir Amyas Morse: Actually, it is for you to comment, because you were relying on them to have the right package of rights from Vodafone to enable them to deliver the service that they were undertaking to you to deliver. It is for you to ask questions about it.

Mark Sedwill: And of course, that obligation remains. Our contract is with them to maintain this service. It is then their contract with Vodafone. What we are talking about, for the reasons Mr Bacon set out—because this is a very important service, it cannot just be a commercial negotiation—is how we manage that to mitigate all the risks.

Q41 **Chair:** Mr Sedwill, we have talked about the legal relationship, but



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Motorola know that they could tie up the Government in legal knots. In the end, you have got a hard deadline to deliver—an increasingly hard deadline. As Mr Bacon said, they have got you over a barrel, haven't they?

Mark Sedwill: I don't think they have, for the reason Mr Bacon said, because in the end we are a big customer. We are a big customer in a whole range of other areas of these companies, too. Let us not forget that Motorola, Vodafone, EE—all these big companies—are doing a great deal of business with Government, and their reputations matter to them. From what we have seen so far, they are behaving well. They have the obligation to deliver this service to us. We could end up in a series of legal conversations. We would rather not, but if we have to, we will.

Q42 **Chair:** Can I go back briefly to the relationships? Then I will bring Mr Mills back in, if he wants to come back in. Mr Webb, you have got these relationships working for a long time with these contractors. My experience with this sort of thing is that there would normally be at least a conversation with a contractor before they wrote to a parliamentary Committee, because you would have that kind of relationship. Did they have a conversation with you before they sent the letter to us?

Stephen Webb: No, but as I say—

Chair: No is fine. Mr Boswell, do you want to come in on this point?

Q43 **Philip Boswell:** SPT runs the Glasgow subway, and it shares the same concerns. It released a report into the public domain on the subway secure communication network. I have some specific questions.

Chair: We should perhaps explain for those not from Scotland that SPT is the Strathclyde Partnership for Transport.

Philip Boswell: This is a safety-critical service. It is provided by a sole supplier with single negotiations, which is similar to other arrangements already discussed. The sole source procurement deliverable was provided by Airwave. Under the circumstances, the provider has a very strong negotiation position, as covered by my colleagues. Whether that is the best procurement option has been covered, I want to ask a specific question. Are you aware of any terms or conditions limiting price increases now that a sole supplier is engaged, particularly with regard to future contract extensions as a safety net?

Mark Sedwill: In Airwave?

Philip Boswell: In the master agreement, quite often you can constrain price increases in future years by mitigating them. Once you have a sole supplier and the system is in place, it is an extremely expensive option to switch it all out. Typically, you would have mechanisms. What safety mechanisms do you have in place for contingency, going beyond your contingency? Because it is a risk issue that should have been identified.

Mark Sedwill: I think this is about the pricing mechanism for the extension—



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Q44 **Philip Boswell:** To constrain any extensions or future extensions.

Stephen Webb: This is presumably for the Glasgow—

Philip Boswell: No, for the master agreement.

Stephen Webb: We know the prices for Scotland and for every other region. We are confident that that is under control.

Q45 **Philip Boswell:** And what about beyond 2020?

Stephen Webb: Yes, that is what I mean by the extensions. We have agreed national shutdown, so the entire network will continue until the end of 2019. Beyond that we have the ability to extend region by region at understood prices. That would cover all the services that Airwave provides in that, whether it is standard above ground or the special services in places like the metros.

Q46 **Philip Boswell:** As a previous contracts manager for contractors, designed obsolescence is a convenient mechanism to squeeze money out of customers—mobile phone users will be completely familiar with that, and clients alike. The contractor having moved the goalposts by saying they are going to withdraw their support, what can you possibly do about this? Do you think it gives them a stronger position if you want to extend beyond? You are just figuring out what you need at the moment.

Mark Sedwill: Just one point of context: this was a severe risk when Macquarie were the owners of Airwave—and we spent quite some time on this at the previous hearing—because they had essentially been telling the market that they were going to be able to charge us pretty much any price they liked after the end of the PFI 2020.

With Motorola taking over and agreeing a much more reasonable set of price extensions, we have already mitigated that financial risk very substantially. As Mr Webb says, it is Vodafone not Motorola who have issued the notification about the support for this particular part of the infrastructure. There is a question between them as well as between us and Motorola but, as Mr Webb says, we have a price agreement with Motorola for those extensions that is firm. Is that fair?

Stephen Webb: *indicated assent—*

Q47 **Philip Boswell:** Okay. How detailed and how open are you? Are the variation rates agreed specifically, for example, if they continue the service? Usually there is not a lot of detail in this type of thing, although there can be. If you have a mechanism by which you have, for example, additional handsets, which may have a mechanical breakdown quite easily, you may require a list, a schedule of rates for whatever. Are the mark-ups on the variation 200% over standard contract rate or are we talking about comparable with existing contracts?

Stephen Webb: It is broadly a rolling forward of the existing contract with abatements in certain circumstances.

Q48 **Chair:** Just to be clear, we talked about the nine-month delay, and you



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said that just gives you more testing time, that it is not cutting into the transition time, so you have not overlapped them. Are you confident that you will deliver on time in what is, for the record, your expected point for delivery UK-wide?

Stephen Webb: I think it is a very robust plan. As I said last time, there are huge numbers of moving parts in here and many of these things have to land together, but I think it is a plan we can have a lot of confidence in.

Q49 **Chair:** So, you don't think the nine-month delay will cause any further extensions? That's it, you think now.

Stephen Webb: I think the nine months has given us an enormous amount of time, particularly on a lot of the related projects, to get much more done than we had previously. Those are things such as the air to ground and the vehicle fitting; there are a lot of things. It has now taken a lot of pressure off those programmes. I am standing by it and am confident that we can achieve it. It may be that in two years' time it will slip a month or two.

Mark Sedwill: To help the Committee, it might be worth pointing this out. There are two deadlines you might be interested in, Madam Chair. One is the time at which we roll out the new system, which is well within the period we have been discussing. Then for how long there is the dual running by which we switch off the old system. It might be useful for the record that there are two dates in a sense.

Q50 **Chair:** So when is the new system, which you are so confident about, going to be rolled out?

Stephen Webb: The date for the new system to be in place is now June 2018. That is the point at which we expect the new system to be ready for service, having gone through trials.

Q51 **Chair:** Is that the switch-on date?

Stephen Webb: That is the switch-on date. Then, as the permanent secretary said, there is the final switch-off date for Airwave, which is the end of transition, which will now be—

Q52 **Chair:** March 2020.

Stephen Webb: No, that is in September 2020. The March date is that subcomponent of the existing Airwave, and structure support.

Q53 **Chair:** We talked a lot last time about when emergency services will have to switch off Airwave and be exclusively on ESN. You were really clear—when they are ready. But with these extra challenges now in the timetable is there going to be a point where we are going to have this quite hard deadline of Airwave switching off, unless potentially there is more taxpayers' money going in? So will emergency services be forced to transition even if they are not content at any point?

Stephen Webb: That comes down to the point you were mentioning earlier. There is now a gap between March 2020 and September 2020 in



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which we think we need Airwave to continue, so that will require the discussions we were talking about earlier with Vodafone and Motorola. I am still very confident that we can give them the full 27 months. I also personally think we can make a case for them to reduce that, but at the moment the users are very clear they want 27 months; and that is all we are committed to give them. Particularly the users, towards the end of it, will have seen other regions going on to this new system completely. They will have experienced the first few months of it. I would have thought the regions at the end might well be prepared to bring it forward a few months and therefore finish a little earlier.

Q54 **Chair:** It could be the corollary; if things go badly wrong they could think they want more.

Stephen Webb: Indeed.

Q55 **Chair:** Have you planned for that possibility?

Stephen Webb: We have now planned huge amounts of testing—user acceptance testing, trials, pilots in every region. There will be a huge amount of opportunity to learn from it. Certainly in some of the key areas, the actual experience for a user is going to be very similar to using a smartphone. It should not be a difficult bit of technology to operate, in any way.

Q56 **Mr Bacon:** You said you have planned a huge amount of testing. How much testing—in weeks?

Stephen Webb: There is a sort of system testing. There is a whole range of different testing. A lot of it is—

Q57 **Mr Bacon:** For all the testing, in total, how many weeks?

Stephen Webb: I am sorry, but I will need to come back to you with a precise—

Q58 **Mr Bacon:** Next question: when should we expect to hear that the testing timetable has been compressed?

Chair: Mr Bacon is being cynical.

Mr Bacon: It happens regularly. I am not cynical. A cynic is somebody who has given up but not shut up. I am just sceptical.

Chair: Years of experience.

Mr Bacon: Yes. Years of experience suggest that the compression of the testing timetable is a big red flag. It happens all over the place in lots of different areas—as well as, by the way, foisting on people who do not want it immature technology to replace stuff that works.

Stephen Webb: We are testing now. The software is coming in what is known as feature packs. Feature pack 3 came before Christmas. We are just doing a series of testing now. Feature pack 4 is due at the end of March, I think—then, again, a whole series of testing on that.



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Q59 **Mr Bacon:** So do you have to have a testing timetable that takes you right out to 2019-20?

Stephen Webb: Yes.

Q60 **Mr Bacon:** Can you give us a note summarising that testing timetable, with how many weeks of testing are involved?

Mark Sedwill: I saw just this week, Mr Bacon, some examples of the handsets, with a push-to-talk facility, which I know, again, was a concern of the Committee at the last hearing. It is like a mobile phone with a big rubber case on it, because it needs to be ruggedised. The screen is just like a mobile phone screen—a smartphone screen—but it also has this push-to-talk facility on it. If you see it, it begins to feel quite real. Again, if the Committee is interested we can show you some.

Q61 **Chair:** Okay. We have asked for this particular update; we have also previously asked, of course, for regular updates. I was wondering if you would undertake to come back to us to explain any commitments after these negotiations to pay more, either for an upgrading of Vodafone capability or extension costs, or both.

Mark Sedwill: Of course.

Stephen Webb: May I add to the permanent secretary's point? The interworking solution is absolutely essential for this transition to happen. So, basically, people can have a group call with some of the people working on Airwave and some working on the ESN. A couple of weeks ago we had a successful test of that. There are a few bugs that need to be fixed but we have got eight months in the plan to do that. We have seen a product. So we are seeing stuff coming through that is giving—

Chair: Mr Webb, very often SROs are not as confident as you, or are without such depth of knowledge; so we will be holding you to that. I am going to bring in Anne-Marie Trevelyan, and then I want to get on to some of the issues around underground services.

Q62 **Mrs Trevelyan:** This is on behalf of my colleague the MP for Torbay, who was concerned last year that the south-west is at the end of the programme and really did not have any time lag capacity. The assumption was that everyone else, as you have just said, would find it was all working, and they would therefore just pick up and get on with it. Surely that is now under real pressure, and if there are problems there that is an immediate cost to the programme, because you will have to extend, because of the distance. What is your view? Will the south-west cause a block in that final roll-out?

Stephen Webb: I do not think so. If the south-west needs a little more time to build contingency, the best thing to do would be to bring forward the start of their transition period and do it that way rather than doing it at the end. As I said last time, it is a region that has put in a huge amount of effort. In many ways it is already one of the best prepared, so it may well want to shift its period and where it sits in the transition timescale anyway. We are discussing with the users. I was just talking to the senior



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police user this morning. We are looking at a major review of all the user readiness and transition plans and will want to pick all these things up.

Chair: I think a lot of colleagues, not just those in this room on this Committee, are interested in what is happening in their area. When we do have you back, we will want to know about those.

Philip Boswell: This is specifically on risk management impact, probability matrices and what risk management process you are using. Can you give us a brief description of who is involved, how much detail you go into with risk management and what tools you use? Very briefly, who is involved?

Stephen Webb: We use the normal tools of risk management—the risk registers and so on. We have built in a lot of the contingency on the financial side. We follow the usual Green Book rules of optimism bias and then quantified risk assessment for things that are a little more—

Q63 **Philip Boswell:** Monte Carlo probability analysis as well?

Stephen Webb: Not really on this area.

Q64 **Philip Boswell:** For schedule and cost?

Stephen Webb: We have not used that.

Q65 **Philip Boswell:** Who is we?

Stephen Webb: Obviously the programme, primarily. We have a delivery partner that helps us in preparing a lot of this material and then the programme board will discuss it. We had a meeting just yesterday about—

Q66 **Philip Boswell:** So it is planners, cost engineers, quantity surveyors, project managers and hands-on management that are used to understanding the problems?

Stephen Webb: Yes.

Q67 **Chair:** I want to cover the issue around the London Underground, and I know colleagues have issues around other metro systems as well. Last time you came in front of us Mr Webb, in November, you said that in the next couple of months an announcement would be imminent. I think Liam Maxwell said the roll-out on the underground was one of the things that kept him awake at night. Could you update us on progress and where you are in rolling this out on the London Underground?

Mark Sedwill: I have a couple of sentences first, and then Mr Webb can come in. We have picked this up. I spoke to Mike Brown, the commissioner, just before Christmas. Coincidentally, we have a meeting tomorrow and we have said that we want a joint proposition from our two teams on roll out in the underground. From what I have seen of the papers for that meeting, it looks like it is in good shape and the relationship feels like it is where it needs to be. I feel more confident now than I did at the hearing. There were some issues there and I think we are working through them.



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Q68 **Chair:** I should explain that between when you came to us and now there has been some press coverage suggesting that the Mayor is still negotiating with the providers about the cost. Mr Webb, do you want to give us a more detailed update?

Stephen Webb: Yes. We are doing a lot of detailed design work and the trials are commencing. Equipment is being put in to one particular part of the network to test the new approach that we are looking to do to deliver ESN over this. We need a firm sign-off. There are certain technical complexities. We need to have the finance sorted and the commercial arrangements with the mobile operators.

Q69 **Chair:** Who is that? Who is having that arrangement with the mobile operators? Is it TfL?

Stephen Webb: That is TfL.

Q70 **Chair:** So you are relying on Transport for London to make sure that it has got its negotiations right with the providers. You have this meeting tomorrow. Is that the end of it or the beginning?

Stephen Webb: No, it is an ongoing process.

Q71 **Chair:** You talked about a couple of months and you did say it was not an imminent decision. What is your timescale for having sealed the deal with Transport for London over the underground?

Stephen Webb: As I understand it, it is probably going to be June or July for a final business case and for them to sign this off. That is from internal TfL governance. Up to that point, there is nothing—the work that is necessary for the critical path is proceeding. As I said, we are doing the work on the trials. All the work we need to do is proceeding. At that point they need to have finalised their designs for how they are going to do it and sorted out the finance.

Q72 **Chair:** This will be both the deep underground and the sub-surface—

Stephen Webb: The stations and the tunnels. Obviously anything above ground is going to be covered anyway. Indeed, all the other regional metros—Glasgow, Tyne and Wear and so on—are covered in the main contract anyway, so there is no problem with that.

Q73 **Chair:** We are going to bring those in. Just to be clear, you are having this meeting tomorrow with the London transport commissioner, you are convinced that things are progressing and we will know by the summer. If you were in front of us in the summer, you would be able to give us more detailed answers to our questions. I am just worried that this is butting up against the timetable. You gave us a fairly clear timetable in November. It sounds like it is overrunning a bit.

Stephen Webb: The period at which we will get certainty and definite commitment is likely to be a little later, as I understand it now, but all the work that would be necessary anyway is progressing, so we are not losing any time from the critical path. I suppose it can't come too soon from my point of view—getting actual certainty that this is definitely happening.



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Q74 **Chair:** Just to be clear, Transport for London has got to pay for some aspects of this—is that right?

Stephen Webb: We are or will be making a contribution for our part. There is potential TfL support and potential support from elsewhere and indeed negotiations with the mobile operators.

Q75 **Chair:** So in terms of the contribution, is that negotiable? Is that something that you are still wrestling with with Transport for London? I know that the Mayor has some stiff challenges with that budget. That was what was recorded in the newspaper coverage.

Stephen Webb: It has been pretty much agreed, our share, so the question is how then—

Q76 **Chair:** Pretty much agreed, your share? So they might come back and negotiate?

Stephen Webb: It is not completely agreed, but I would be pretty confident and we have budgeted for what we need. The question is the gap between that and the rather more expensive solution that they are looking at. There is a financial hole that needs to be plugged, either from their own resources or from agreements with the mobile operators.

Q77 **Chair:** But not from the central Government taxpayer-funded pot?

Stephen Webb: Well, I guess that is all to be discussed.

Q78 **Chair:** Okay. That is something else to plot for when you come to see us later. Louise Bladen from the National Audit Office wanted to come in, then I'm going to go to Bridget Phillipson and then Phil Boswell.

Louise Bladen: Looking at figure 12 in our original report, which shows the transition activity by region and month, London is a pretty early one to go. So if the business case isn't going to be signed off until June this year, what is the impact on transition for London? Are they going to be at a point of transitioning, but not having something fully working on the underground, if the technology is going to take a while to put in place? You suggested earlier that there was room to negotiate the ordering of the transitions, but London does look very early.

Stephen Webb: As I say, all the transition timescales were driven at the point when we were tied to the original Airwave contract endpoints and so there was much less flexibility. There is a lot more now. We will discuss with the Met what the optimum times in the year are that they want to transition in London. All these times can potentially change.

Q79 **Bridget Phillipson:** Mr Webb, you talked about the regional roll-out and the impact on metro systems. I wondered if you could provide an update on that, particularly with reference to the Tyne and Wear Metro, which is used by many of my constituents.

Stephen Webb: Indeed. Coverage in those metro systems is part of the core Airwave contract and that has been rolled forward as part of the core ESN, so there are not the same issues as there are with London. That will



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be provided. There will be 4G coverage in the same way that there is Airwave coverage now.

- Q80 **Bridget Phillipson:** I accept that there aren't the same challenges as with the underground system, but there are some of the same challenges in terms of the coverage. Could you just make clear what will happen around ensuring that we have a system that works effectively and that makes sure that there is no risk to public safety?

Stephen Webb: Yes, it will need to go to the full area. The coverage assurance uses the acceptance that there will be a whole range of testing in every force, so in the Northumbria force or whatever, they will no doubt be wanting to test and ensure this. Then there will also be discussions about the extent to which that is going to be extended to the general public.

Mark Sedwill: May I just clarify a point? The difference between London Underground and the other metros is that the other metros were in the contract anyway for the provision of the infrastructure to enable the full 4G coverage. The reason London Underground was not in that was the expectation at the time, for purely commercial reasons, that just having mobile phone coverage on the tube was going to happen anyway. That is why London Underground is in a different position. The others are part of the network requirements that are part of the EE infrastructure contract. The same is true in Glasgow for example.

- Q81 **Bridget Phillipson:** Can you just give an assurance that there will be no switchover or sign-off on this unless the emergency services and Northumbria Police, who take a lead on this, are absolutely confident that this is a system that will work and will keep the public safe?

Stephen Webb: Absolutely. We have to demonstrate to their section that this is a safe system.

- Q82 **Bridget Phillipson:** So will Northumbria Police have final sign-off? What is the process by which it will be determined that we are confident that it is working and it is safe?

Stephen Webb: On the main police governance, there is a reference group that each region sends a representative to, including the north-east, and which is chaired by Francis Habgood, who is the chief constable of Thames Valley. We will largely be looking for a collective view from police about whether it works, but we will obviously need—particularly on matters like coverage—some quite intense local work as well, to guarantee that people are satisfied that it is there. The good thing about coverage is that it is something we can start testing now and can demonstrate to people over quite a long period that it is there and it is reliable.

Mark Sedwill: Of course, it is not just policing, it is fire and ambulance and so on.

- Q83 **Bridget Phillipson:** This is a slightly wider point, but in terms of the extent of the coverage, as I understand it, it will be at least as good as or better than existing coverage. Is it ambitious enough to want it to be just



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as good as we have?

Mark Sedwill: Coverage is pretty good now.

Stephen Webb: If you look at roads, for example, by bringing ESN over 4G to the road network, we will cover 5,000 kilometres of roads that are not covered at the moment. That means people will be able to make 999 calls. When the eCall technology in cars comes in from April 2018, cars will automatically make a call to emergency services when there has been a crash. There will be a substantial improvement in coverage. You can always go further—the programme is ambitious enough. We could always decide to go further on coverage later on if there was a case for it. We are talking about very remote areas that are not going to be covered by this.

Mark Sedwill: With mobile repeaters, if there is an operation in a remote area—your area of the country, like mine, has quite a large expanse of lightly populated areas—we will have the ability to extend the coverage into those areas.

Chair: Which we covered last time, so I don't want to go through that.

Q84 **Bridget Phillipson:** The coverage is still pretty rubbish, even in parts of the relatively urban area that I cover. Finally, what will be the process by which you will hear from police forces, for example, or other emergency services, that there are difficulties? What would be the mechanism by which you would be involved in understanding what is perhaps not working and what needs to be done?

Stephen Webb: Do you mean during the trials and transition period, or once we have actually gone live?

Bridget Phillipson: Indeed.

Stephen Webb: We are going to be working incredibly closely. As I say, we have regional teams and we have the police governance. There is going to be area-by-area sign-off for the process.

Mark Sedwill: We have a deputy chief constable within the programme who is part of ensuring that. We have a senior fire officer as well. We also have the reference group that Mr Webb already described, which is chaired by the chief constable of Thames Valley, Frances Habgood. There are plenty of formal mechanisms and, in any case, we have regular contact with chief constables for a range of other reasons. If ever they have a concern, they tend to raise it pretty swiftly.

Louise Bladen: Just for the record, when we spoke to police forces about the kind of testing that is being done, a lot of them said they planned to do their own testing on top of that. I think they were taking that very seriously.

Q85 **Chair:** My final question, to Mr Webb and Mr Sedwill, is what is keeping you awake the most now? Perhaps the Motorola thing, possibly, but apart from that?