

Meg Hillier  
Chair, Public Accounts Committee  
House of Commons  
London  
SW1A 0AA

By email

13 October 2020

Dear Chair,

Thank you for your letter dated 16 September on ESN following the Public Accounts Committee hearing held on 10 September. I have already written on 25 September providing details of the follow up points requested at the hearing.

You asked for further information on a number of points.

- **The annual cost of extending Airwave further, beyond the currently expected date of December 2022**

Subject to commercial negotiation, the annual cost of extending Airwave beyond December 2022 could be in excess of £450m, taking into account local Airwave costs.

- **The annual cost of delay to the ESN programme, including Airwave extension**

The annual cost of delay to the ESN programme is likely to be in excess of £650m, taking into account the Airwave extension but also including programme costs and delayed benefits.

- **How many handsets will be available to the emergency services users by the end of the nine-month period of operational trials.**

We currently have 5,000 handsets, of which 1,106 have been allocated to ESN end users. The majority of the handsets will be allocated to end users by end-December 2020. We are working with our user representatives to allocate the remaining 3,006 handsets which will be distributed during Q1 2021. The breakdown of handsets:

Allocated to	Purpose	Number
ESN Suppliers	Testing	768
ESN Programme Team	Demos and Training	120
ESN End Users	Testing / D2 Validation	1,106
Handsets remaining for allocation		3,006
<b>Total</b>		<b>5,000</b>

- **Whether additional funds will be made available to the emergency services under the Spending Review, because of the need to renew Airwave as well as taking up ESN**

We are working closely with HMT colleagues preparing for the forthcoming Spending Review. The Department's bid takes into account the refreshed ESN business case. We obviously do not yet know the outcome of the Spending Review but can provide further details when we do.

- **What you now expect the total cost of the ESN programme to be, based on the business case which you expect to finalise in the coming months;**

The total forecast spend for the programme at the P50 (most likely level) is £10.3bn through to 2036/37. This includes £2.6bn of sunk costs, including £1.7bn for existing contracts, mainly Airwave.

The ESN business case sets out the full cost of emergency services communications over the life of the business case. This comprises the cost of the ESN core network, including necessary refreshes and non-core costs which are met by users locally. These non-core costs include areas like devices, both the initial purchase and subsequent refreshes. Finally, the case includes the cost of current communications. This spend is dominated by Airwave but also includes local mobile communication costs.

The table below shows the spend broken down between investment and run costs and profiled over the life of the programme:

£'m, P50 Costs	Sunk Cost	Programme										Live 2029/30 - 2036/37	Total
		2015/16 - 2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29		
Programme Delivery Subtotal	444	234	411	220	18	-62	-	-	-	-	-	-	1,264
Central Programme (Core) Costs	390	191	284	130	7	-65	-	-	-	-	-	-	937
Local User (Non-Core) Costs	54	43	128	90	11	3	-	-	-	-	-	-	328
Ongoing Costs Subtotal	464	206	226	579	364	211	212	240	250	281	2,247	5,280	

Financial Year	Sunk Cost 2015/16 - 2019/20	Programme									Live 2029/30 - 2036/37	Total
		2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29		
Central Programme (Core) Costs	464	212	219	210	178	166	148	153	148	164	1,346	3,408
Local User (Non-Core) Costs	-	-5	7	369	185	45	64	87	102	117	900	1,872
<b>Total ESN Costs (net of Income)</b>	<b>907</b>	<b>440</b>	<b>637</b>	<b>799</b>	<b>382</b>	<b>149</b>	<b>212</b>	<b>240</b>	<b>250</b>	<b>281</b>	<b>2,247</b>	<b>6,544</b>
Legacy Costs (inc. Airwave)	1,715	431	572	557	458	37	1	-	-	-	-	3,772
<b>Aggregate of ESN and Legacy Costs</b>	<b>2,622</b>	<b>871</b>	<b>1,209</b>	<b>1,356</b>	<b>840</b>	<b>186</b>	<b>214</b>	<b>240</b>	<b>250</b>	<b>281</b>	<b>2,247</b>	<b>10,316</b>

With regards to the March 2021 date to finalise the business case, the date allows time for the business case to go through governance and have it fully agreed by all Funding Sponsor Bodies (Home Office, Department of Health and Social Care, Scottish Government, Welsh Government).

- Your revised expectation on when Airwave will be switched off;**

The current incremental delivery of ESN has an Airwave shut down date of June 2025. However, we are working with the users to come up with plans for an early shutdown date of February 2024, where the base case of Airwave shut down for this option is June 2023.

We obviously want to minimise the period in which the users and taxpayers are paying both for ESN and for the legacy Airwave system. We will not take risks and users will need to be confident that the system meets their vital operational needs.

- How the revised business case will change the Net Present Value of the ESN programme and the point at which benefits will outweigh costs.**

The table below shows the overall current Net Present Value (NPV) of the programme based on the revised business case:

£m real terms, 2020/21 to 2036/37	Option 1	Option 2	Option 3a	Option 3b
Core Costs	445	3,119	3,248	3,264
Non-Core Costs	22	1,092	1,752	1,849
Legacy Costs (inc. Airwave)	8,444	5,140	2,678	1,991
<b>Total Costs</b>	<b>8,911</b>	<b>9,351</b>	<b>7,678</b>	<b>7,104</b>
<b>Total Costs (Discounted)</b>	<b>6,973</b>	<b>7,624</b>	<b>6,546</b>	<b>6,058</b>
<b>Total Benefits</b>	<b>-</b>	<b>(880)</b>	<b>(1,520)</b>	<b>(1,557)</b>
<b>Total Benefits (Discounted)</b>	<b>-</b>	<b>(584)</b>	<b>(1,100)</b>	<b>(1,131)</b>
Net Present Social Value (Compared to Option 1)	-	(67)	1,527	2,046

The options are:

**Option 1:** Do nothing

**Option 2:** Stopping ESN, extending Airwave and starting a new Programme to replace it from April 2022.

**Option 3a:** Incremental delivery of ESN, with a risk-based expected Airwave Shut Down date of June 2025. The base case of Airwave shut down for this option is November 2024.

**Option 3b:** Incremental delivery of ESN, with a risk-based expected Airwave Shut Down date of February 2024. The base case of Airwave shut down for this option is June 2023.

Options 3a and 3b are founded on the same route to completing the end-to-end solution, with service acceptance baselined for February 2022 plus 7.5 months contingency for P50. The difference between the two options is the time assumed for user deployment. The work to date with users is seeking to finalise a plan which, if successful, would deliver 3a. However, both the programme and the user organisations understand the financial imperative to switch off Airwave as soon as possible and are committed to exploring options to assess the feasibility of achieving option 3b.

The business case demonstrates that the case for continuing with the programme is compelling under all plausible scenarios given the very significantly lower cost and higher functionality of ESN compared to Airwave. The NPSV for continuing with ESN remains higher than the 'do minimum' option even if Airwave shut down slips well beyond the current dates, always assuming that the option of continuing with Airwave throughout the current business case period is a credible one technically, which we do not believe it is.

This NPV calculation is based on the current business case which assumes ESN will run until 2036/37. In practice we would expect it run for significantly longer, and each additional year of life for ESN adds over £250m of benefits compared to the alternative of continuing with Airwave.

I hope this clarifies the outstanding questions concerning ESN.

I thought that you might also be interested to see a short video detailing user testing of the Direct 2 product which moved into operational testing at the end of August 2020. You can view the video via this link <https://vimeo.com/454030786>.

With regards to this letter, I am also sending a copy to the Comptroller and Auditor General and to the Treasury Officer of Accounts.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Matthew Rycroft", with a long horizontal flourish extending to the right.

**Matthew Rycroft**  
**Permanent Secretary**