

EAST SUSSEX FIRE AND RESCUE SERVICE

Panel: Scrutiny & Audit Panel

Date 22 July 2021

Title of Report Emergency Services Mobile Communications Programme Update

By Assistant Chief Fire Officer

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Background Papers Local Government Association Fire Service Management Committee update Mar 21 V1

Appendices Appendix A. National Indicative Timelines – June 2021

Implications

CORPORATE RISK	✓	LEGAL	✓
ENVIRONMENTAL		POLICY	
FINANCIAL	✓	POLITICAL	✓
HEALTH & SAFETY		OTHER (please specify)	
HUMAN RESOURCES		CORE BRIEF	

PURPOSE OF REPORT To provide the Panel with the latest information in relation to the Emergency Services Mobile Communication Programme (ESMCP)

EXECUTIVE SUMMARY The Emergency Service Mobile Communications Programme (ESMCP) will provide the next generation of mission critical communications for the emergency services in Great Britain.

ESMCP is a cross Government Programme involving the Home Office, Department for Health and Social Care, Scottish Government and Welsh Government, but run by the Home Office as the lead Government Department.

The Service has both strategic and delivery boards set up to provide the assurance and governance of the ESN/ ESMCP programme, these boards provide an oversight of the national, regional and local impacts, risks, required outcomes

and deliverables to enable successful transition from Airwave to Emergency Services Network (ESN).

Despite the publication of the Full Business Case there remain a number of uncertainties and risks, including delivery timescale and cost / funding.

This report seeks to advise the Panel of the latest position of the National programme.

RECOMMENDATION

The Scrutiny & Audit Panel is recommended to:

- (i) Note the contents of the report.
 - (ii) Consider whether there is any additional assurance or information required from officers.
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1 INTRODUCTION

- 1.1 The Emergency Service Mobile Communications Programme (ESMCP) will provide the next generation of mission critical communications for the emergency services in Great Britain. This will in part replace the current Firelink [Airwave] provision, as well as providing secure and resilient mobile broadband capability with near universal coverage across the country. ESMCP is a cross Government Programme involving the Home Office, Department for Health and Social Care, Scottish Government and Welsh Government, but run by the Home Office as the lead Government Department.
- 1.2 The product of ESMCP, the Emergency Services Network (ESN), uses, in the main, the EE mobile network, along with other provision in areas where there is no EE coverage. Motorola provide the application that users will interface with, along with the data centres that process the information.
- 1.3 Contracts for EE and Motorola were awarded in 2015 with subsequent contracts for supporting components such as handheld and vehicle devices, connections to control rooms etc. awarded subsequently.

2. BACKGROUND

- 2.1 The National Fire Chiefs Council (NFCC) has a full time ESMCP Business Change Lead (BCL) / Senior User leading a small team of Fire Service secondees working full time at the centre on ESN on behalf of the Fire sector. Separate, but complimentary, arrangements exist for Wales and Scotland. Each English FRS region has a Regional Programme Manager working solely on ESMCP, providing co-ordination between FRSs in regions and the NFCC's ESN central team, as well as reporting into a regional lead, who is an FRS senior officer.
- 2.2 Regional leads, along with representation from Wales and Scotland, in the main form the NFCC's ESMCP Fire Customer Group (FCG) which is chaired by the NFCC's lead for Operational Communications, Chief Fire Officer Darryl Keen from Hertfordshire. The LGA is represented on FCG by Cllr David Norman, from Gloucestershire. There is currently a vacancy on FCG for a second LGA member.
- 2.3 FCG is the Fire Sector's strategic body singularly focussed on ESN and provides the link into wider NFCC governance through the FCG Chair and NFCC Operations Coordination Committee.
- 2.4 Locally, arrangements are in place for ESMCP governance that vary according to circumstance and need but include leadership within FRSs by means of a sponsor or senior responsible owner (SRO).

3. CHANGE IN LEADERSHIP

- 3.1 Since March 2020 there have been some significant changes in the ESMCP Programme leadership. The previous Programme Director left the Programme in March 2020 and his successor, John Black, was appointed in August 2020. Stephen Webb, the Home Office Senior Responsible Owner (SRO), who had overseen the Programme from its inception in 2011 stood down in October 2020.
- 3.2 In addition to the direct leadership changes, ESMCP changed its reporting line in the autumn of 2020 and now comes under the remit of the Crime, Police and Fire Group of the Home Office. This move is designed to better enable closer working and engagement between the Programme, Home Office and a larger number of key stakeholders within the user communities.
- 3.3 As part of internal Government scrutiny and control of major programmes, ESMCP was the subject of a Project Assurance Review (PAR) and a review by the Major Projects Review Group (MPRG) in October 2020. Both reviews made a number of similar recommendations, which included:
- Appointing a full time SRO as ESN takes greater prominence
 - Revising the Full Business Case (FBC) to provide better clarity in a number of areas
- 3.4 Simon Parr was appointed as the new full time SRO in early to mid-March. Simon was formerly Chief Constable of Cambridgeshire Constabulary between 2010 and 2015 and has been involved with Policing technology Programmes at a national level since.
- 3.5 As the current NFCC strategic lead for operational communications Daryll Keen is due to retire from Hertfordshire Fire and Rescue Service on 31st July 2021, following the advert published in March, Ben Norman from Lancashire FRS has agreed to take on the role. Ian Taylor in his main role as Business Change Lead for the ESMCP has agreed to continue as Ben's nominated deputy.

4. FULL BUSINESS CASE (FBC) REVIEW

- 4.1 The FBC agreed in 2015 had a value of £5.1 Billion over a 15-year life of ESN. Work to revise the FBC has continued, including the need to factor significant changes in technical delivery. This FBC review draft is recognised as work in progress and portrays greater realism and pragmatism towards the overall achievement of ESN than has previously been delivered, this new FBC seeks to realign the project and reduce the previous challenges the Programme has faced to date.
- 4.2 One of the biggest challenges for Fire Authorities and Services is having sight of realistic and credible delivery dates for ESN and clear financial information with which to plan and budget against. Senior Users have held workshops and maintained a constant dialogue with Programme leaders providing relevant

information on user led activities, risks and finance which all have a bearing on the overall plan and FBC.

- 4.3 The NFCC ESMCP team have been working with Programme finance colleagues to aid in the production of a tool with which individual organisations can better estimate and predict ESN costs over its lifetime covering both implementation and in life costs.
- 4.4 This tool is reliant upon financial information from the FBC. It has been impressed upon the Programme that the release of such a tool alongside each iteration of the FBC is an imperative for the Fire sector and will influence the progress of the FBC through governance channels.
- 4.5 The Programme's ambition is that the FBC will proceed through the various streams of governance within the three emergency services (3ES), Devolved Administrations and Funding Sponsor Bodies (FSB) by the end of May. From here the FBC should go formally into the Government's approval processes in June.
- 4.6 NFCC's Fire Customer Group, has historically provided technical and operational assurance of the FBC, with formal sign off being a matter for Government Departments. It is not anticipated that this will change, however the project moves closer to ESN delivery, the aspect of cost and finance as it impacts at local level will take greater prominence and the Fire Authority as part of the LGA may wish to consider a position.
- 4.7 The timeline for FBC governance and approval in the Government Major Project Review Group approval cycle is late July 2021. An NFCC response aligned to the views of the LGA in response to the FBC will be provided to the Home Office on completion of the final draft. The NFCC is firmly of the view that ESN represents the right technology and direction of travel for next generation and future emergency services communications, and that it is achievable.
- 4.8 The FBC identifies 3 Options for consideration:
1. Stop ESN and continue with Airwave indefinitely (do minimum)
 2. Stop ESN, extend Airwave and start a new programme to replace it from April 2022.
 3. Deliver ESN incrementally, with risk-based expected Airwave Shut Down (ASD) date December 2026.

Option 3 has been selected as the preferred option following review by the ESMCP Independent Assurance Panel into alternative methods of critical communications.

- 4.9 The programme have identified the lower and upper range spread for delivery of ESN within the FBC. P50, 50% confidence to deliver ESN nationally and P90, 90% confidence to deliver ESN Nationally. This spread within the FBC provides the programme with the approximate earliest and latest achievement

of ASD whilst ensuring the delivery of the network and the realisation of published benefits.

Programme confidence level P50 identifies an ASD of December 2026, however the P90 level of confidence would move the ASD into the first half of 2027.

4.10 The Service's ESMCP Strategic Board identified 2 areas of concern arising from the FBC.

1. ESFRS costs for operating ESN are not clearly set out and actual costs may exceed current Airwave annual expenditure. (Airwave grant will cease once all 3ES transition to ESN.)
2. ESN Coverage may not be acceptable across the county, especially in P50. (an additional £100m for coverage has been identified as necessary to achieve P90)

The Service has raised these areas of concern when responding to the FCG regarding User acceptance of the FBC and progression through the governance process.

5. ESMCP NATIONAL PROGRESS

5.1 The adoption of early ESN products by FRS assists learning and aids the Programme develop products and support packages. In doing so it demonstrates that the Fire sector is well engaged and willing to take ESN products once they are fit for purpose, and consequently the national fire sector is considered to be fully engaging.

5.2 Progress is being made with early products and versions of ESN along with supporting components and early Fire Service users in 2019 having commenced with ESN Connect, a very early system tool which provides a data only based communication product on their frontline appliances. Other Services have adopted a later product (2020) and implemented it as a fall back for any mobilisation of fire stations. ESN connect has offered FRS' the ability to utilise a product and undertake the background trials to support the introduction of ESN.

5.3 Merseyside and West Yorkshire FRS's have formally become Assurance Partners of the Programme to assist with the development, testing and assurance of ESN products ahead of mainstream roll out. In both instances they are the only emergency services organisations that have so far implemented ESN Direct 2, an early iteration of the product that will deliver mission critical voice communications.

5.4 The adoption of early ESN products by FRS assists learning and aids the Programme develop products and support packages. In doing show it demonstrates that the Fire sector is well engaged and willing to take ESN products once they are fit for purpose, and consequently the fire sector is considered to be fully engaged. FRS's involved in early adoption ensures the Programme identify early lessons from which others can learn from and improvements can be applied ahead of mainstream transition. A number of

Police and Ambulance Services have also committed to being Assurance Partners and will implement ESN products in the future.

- 5.5 SLT were advised that dates were not included within the FBC, it is unlikely that transition onto the new ESN will commence in earnest until 2023 at the earliest. This is as a consequence of a number of challenges and delays within the technical delivery arena.
- 5.6 Assurance around coverage for ESN is a high priority for users as most people are inherently aware of coverage from their own experiences as users of mobile phone technology. A product to aid coverage assurance, ESN Assure 1.1, was rolled out in 2020 and is now being used by the 3ES to assess all aspect relating to coverage. This is a fundamental cornerstone of the ESFRS delivery board actions.

6. **FUNDING**

- 6.1 The Fire Sector's core costs for ESMCP, which represent current spend for upfront and development costs, are being paid by the Home Office.
- 6.2 At the very outset of the ESMCP journey the FRSs, through Fire Customer Group, agreed a set of funding principles with Government Department, (DCLG), to ensure that Fire Authorities would not be disadvantaged in the transition from Airwave to the new ESN technology. With the change of Government Department to the Home Office in 2016 the policy towards these has not changed, and the principles are:
- Funding will be available for equipment to be replaced on a like for like basis
 - No additional costs to be borne by FRSs for dual running
 - Reasonable costs for transition will be provided by Government Department
- 6.3 ESFRS was awarded £1.467m Section 31 grant funding specifically determined for infrastructure expenditure (approximately half allocated to control room costs of SCC and half to East Sussex internal system connectivity) of which £1.425m remains unspent. The team have reviewed the requirements post SCC and P21 and identified a revised requirement of approximately £0.730m. A meeting between East Sussex, West Sussex and Surrey Fire & Rescue Service is being organised including the finance officers to agree funding position. It is proposed, subject to HO approval, that a case should be submitted that reflects the costs of ESMCP implementation for the tri-partite control and the local costs to each Service, against the grant held by each Service. All ESMCP expenditure requires approval of a business case submitted to the HO programme finance team.
- 6.4 A model for English Local Transition Resource (LTR) has been agreed with the HO for some time to enable staffing for transition to ESN and any necessary preparation funding in line with the above principles. This was revised in early 2020 to provide for £21.6m for resourcing at local and regional

level up to and including the 2024/25 financial year. Funding previously issued by Government for ESMCP work has been by means of S31 grant.

- 6.5 From April 2021 the Home Office introduced changes to the finance monitoring returns and have asked that future LTR grant monitoring returns are sent directly by Section 151 Officers of each individual Fire and Rescue Authority instead of from the Regional Programme Managers.
- 6.6 Financial implications should be noted that the Local Transition Resource (LTR) model will require greater accountability to the Home Office via Section 151 Officers and FSMC members should be aware that this may raise the profile of ESMCP funding through Fire Authority and FRS governance. A broad concern exists across the sector that, in the absence of grant support going forward, ESN may cost Fire Authorities more than they currently pay for Airwave.
- 6.7 The In Life Cost Model tool has been used to identify a range of costs for ESFRS as an average of an 11 year period from 2026/27. If ESFRS were to use equipment number directly in line with the Airwave devices currently used the average cost per annum would be approximately £0.214m.

To maximise the potential offered by the new technology and also increase firefighter and public safety the operating annual costs for additional equipment would rise from £0.214m to an average of £0.230m over 11 years. All costs will be borne by the FRS, the Airwave grant will cease. The current average cost of airwave to ESFRS is approximately £0.240m, however it can fluctuate depending on usage. Accepting that nationally concerns have been raised from the sector regarding the forecasted costs over the life of the ESN programme, initial estimates conclude that the costs will be broadly similar for ESFRS (airwave versus ESN). It should be noted that additional clarification from the Home Office regarding the forecasted costs will be needed before the required assurance is secured. The risk therefore remains that ESMCP implementation could result in an ongoing revenue budget pressure.

- 6.8 NFCC representatives have responded to the ESMCP full business case following the June FCG meeting.

The NFCC identified 11 key points within the technical requirement which must be addressed prior to Transition to ESN. Also, concern was raised regarding: Network Coverage and Resilience of the Network, In-Life Cost may exceed those identified in June 2021, the sharing of the cost of remaining on Airwave as emergency service transition to ESN, and some of the P50 percentage confidence funding envelopes have already been exceeded.

7. REGIONAL PROJECT MANAGEMENT

- 7.1 Kent, West Sussex, East Sussex and Surrey Fire and Rescues services make up the south eastern region with Area Manager Chris Else (KFRS) designated as the SE Regional FRS Lead. Chris reports directly into the Fire Customer Group.

- 7.2 At present each FRS provides a senior responsible officer along with a service strategic project lead, within ESFRS this is reflected with the ACFO as the SRO and the Assistant Director OSR as the strategic lead. With each service supporting the RPM and the Regional Lead Officer at both regional and Fire Customer Group meetings.
- 7.3 The Regional Programme Manager (RPM) role is currently vacant (previously directly employed by ESFRS). Opportunities are being explored to improve efficiency and reduce duplication of effort across the region prior to recruiting a replacement RPM. A real opportunity exists to review our combined shared resource, consider much closer and efficient practice to ensure the introduction of ESN into the region is fully supported.
- 7.4 The complexities that have been overcome with shared P21 project objectives, 4F operational alignment and the regional approach to national operational guidance, can be used as the basis for a smaller yet more efficient team across the region and JFC in considering the transition to ESN.

8. ESFRS CURRENT PROJECT MANAGEMENT

- 8.1 ESFRS and WSFRS currently share 50/50 the role of service project manager. This is not replicated across the region in the remaining two services who have a single dedicated contact, as previously discussed a review of the resourcing for the whole region will seek to design an efficient team.
- 8.2 The Service has two governance boards in order to assure the relevant phases of the project and ensure the project and team objectives compliment that of the central programme. The boards are set up as Tactical Delivery Board and the Strategic Board for oversight and assurance. The ACFO chairs the Strategic Board with the Assistant Director OSR chairing the tactical level. The Assistant Director OSR also attends the regional ESMCP meetings.
- 8.3 Both Strategic and Delivery Boards review Local and National risk logs. Currently this Service's risk is rated low overall. Highest level of Risk relates to ensuring that the Service takes full advantage of the technology and enhances Operational Ways of Working where possible.
- 8.4 The Service currently supports the programme with a number of staff as additional roles to their day jobs with a proportion of their time afforded to the project which is reconciled from draw down of grant funding.
- 8.5 The Joint Fire Control partnership is currently reviewing governance and project management structure which will ensure alignment across the 3 FRS (including East Sussex) and reduce duplication of effort.
- 8.6 The scope of the current Service project team is to:

Move away from Airwave to the Emergency Services Network (ESN), in doing so we seek to replace all Airwave devices with ESN, vehicle, control room and handheld devices, whilst considering any potential change to current ways of working, for example the increase of handheld device use.

- 8.7 Surrey Fire & Rescue through the JFC partnership with support from the Service Station Manager Control will deliver ESN v1 into the Joint Fire Control.
- 8.8 As part of our regional commitment and 4F collaboration, alignment is sought wherever possible. The project will deliver a replacement for Airwave, therefore ESFRS will collaborate across the South East region with all partner emergency services.
- 8.9 As part of the transition and adoption the project seeks to ensure device and user profile management capability within ESFRS working with ITG and partners.
- 8.10 A primary enabler to assure that the adoption of a new network is feasible is the wholesale review of ESN coverage provision across the county and neighbours to ensure that sufficient network coverage is in place.
- 8.11 In order to achieve this project scope the delivery team have adopted and number of work streams as follows:
- Coverage – this group analyses and assures the provision of network attributed to the area.
 - Devices and IT – this work is supported by ITG (Information Technology Governance Team) and seeks to provide the IT functionality along with the oversight of the compatibility of equipment to enable ESMCP.
 - Fleet – Engineering Manager supports the introduction and design to integrate our current and future fleet of vehicles.
 - Control rooms – Station Manager at Control supports the workload to enable full transition to ESN on a regional and local level as required by the P21 project.
 - Operations – this is supported by the Group Manager for Ops with the remit of reviewing and specifying the end-user design and policy for introduction into service.
 - Finance – supported by the Finance Manager and the AD Resources / Treasurer as the S151 officer supported by RPM to ensure the robust compliance with draw down from the grant.
 - Training – to be stood up to encompass the introduction, and delivery of training to end users.

These areas are the basis for performance management and exception reporting to the Strategic Board.

Appendix A

National Indicative Timelines June 2021.

Activity	Description	2021				2022				2023				2024				2025				2026				2027			
		2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Tech Delivery - ESN Beta	Release required to start final phase of testing	█	█	█	█																								
Tech Delivery - ESN 1.	Full function release required for transition from Airwave to ESN.	█	█	█	█	█	█	█	█																				
Operational Validation	National Testing of release in scripted operational scenarios	█																											
Operational Evaluation	National final phase of testing - real world operational trials									█	█	█	█																
Service Acceptance and Pilot start.	First Use of ESN instead of Airwave by User Organisations.													█															
Mobilisation of 3ES	Preparation for Transition	█																											
Transition period	User moving to ESN																												
Post transition period	All users transitioned to ESN																												
Airwave Shut Down	3ES move away from Airwave (commercial service will remain.																												

6 months assumed post transition before Airwave Shut Down

Deployment plans not fully developed.

