



HUMBERSIDE FIRE AND RESCUE SERVICE

# Service Delivery Support

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## Airwave Policy

<b>Owner</b>	<b>Director of Service Delivery Support</b>
<b>Responsible Person</b>	<b>Head of ICT</b>
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## **1. INTRODUCTION**

The Airwave Network is based on the specialist Terrestrial Trunked Radio Specification (TETRA) which provides a secure mobile communications system for the emergency services and other public safety organisations with whom they need to communicate.

Airwave was established in 2000 by BT specifically for the supply of a Professional Mobile Radio (PMR) communication service to the Police and other 'blue light' services. It was introduced into the UK Fire Services in 2007 by the Communities and Local Government (CLG) department as part of the FireLink project with the contract managed by Mott MacDonald. Original Airwave contract expired on 31 December 2016.

In February 2016 Airwave was acquired by Motorola solutions, and as part of the re-organisation of government departments, UK Fire Services transferred from CLG into the Home Office.

Original Airwave contract expired on 31 December 2016 with all ongoing hardware procurement and product support being transferred to local FRSSs.

Continued access to the Airwave Network for the UK Fire Services was secured by the Home Office, through its Emergency Services Mobile Communication Programme (ESMCP). The Home Office secured an extension of the original Network Access contract until 31 December 2019 to support transition of UK Emergency Services across to Emergency Services Network.

In September 2017 the management of the FireLink contract transferred from Mott MacDonald to the Home Office.

## **2. EQUALITY AND INCLUSION**

HFRS has a legal responsibility under the Equality Act 2010, and a commitment, to ensure it does not discriminate either directly or indirectly in any of its functions and services nor in its treatment of staff, in relation to race, sex, disability, sexual orientation, age, pregnancy and maternity, religion and belief, gender reassignment or marriage and civil partnership. It also has a duty to make reasonable adjustments for disabled applicants, employees and service users.

## **3. POLICY STATEMENT**

Humberside Fire and Rescue Service is committed to compliance with the "Airwave Service Code of Practice".

This policy applies to all employees of the Service engaged in handling, storage and maintenance of Airwave equipment or services.

Employees of and external service or agency that conduct installation or de-installation work on behalf of the Service will be expected to have read, understood and comply with this Policy.

## **4. SECURITY AND ENCRYPTION**

### **Security**

The Airwave communications system forms an essential component of the Critical National Infrastructure. To provide assurance to Government, the public and users of the system it will be formally accredited by the Home Office Lead Accreditor against Government security standards.

A key requirement of accreditation is that the responsibilities for security are clearly defined and assigned, and the principles accepted by the senior management of the user community.

The Fire Service Lead Accreditor has established a Firelink Security Working Group (SWG) to coordinate security across all FRS's and ensure a consistent oversight of security matters is maintained nationally. The Firelink SWG also provides a common interface with the Airwave security organisation to both disseminate Airwave security policy and report back to them.

The Firelink SWG is chaired by the Home Office Lead Accreditor with user representatives from England, Scotland and Wales as well the Airwave Security Manager appointed for the Supplier.

### **Licensing**

Airwave's Radio Licence does not permit the use of Airwave Radio Terminals outside England, Wales and Scotland unless covered by formal inter-agency agreements. Any terminal taken abroad could be impounded and retained by foreign national authorities as an unlicensed radio transmitter or, in some instances, as an unapproved cryptographic device. FRS personnel must not take Airwave Radio Terminals outside the United Kingdom, unless covered by a formal inter-agency agreement.

### **Encryption**

The TETRA standard uses encryption to protect the vulnerable air interface between mobile radio terminals and fixed base stations. The encryption algorithm is owned by the European Technical Standards Institute (ETSI) and its use is strictly controlled under the terms of the 1998 Wassenaar Agreement which stipulates that it may only be used for public safety systems in designated countries. In the UK the Cabinet Office is the holder of the User Licence for the TEA2 Air Interface Encryption Algorithm for the Airwave Service, and therefore guarantees the proper usage and protection of the TEA2 Encryption Algorithm in the UK. User organisations must agree to handle their radio terminals in a secure manner by applying for a sub-licence.

### **Decommissioning / Disposal**

Disposal of Airwave equipment and any other equipment that have stored or handled the TEA2 algorithm must be carried out by Airwave, or other approved organisation.

This also applies to all Airwave equipment that is sold or passed on to another user for re-use. At the very minimum all encryption keys and the TEA2 algorithm must be securely erased from the equipment before disposal or re-use.

## **5. SECURE HANDLING and STORAGE OF AIRWAVE RADIO TERMINALS**

The Home Office produces an “***Airwave Service Code of Practice***” which details the compliance requirements associated with the secure handling and storage requirements for Airwave Radio Terminals used by the Fire & Rescue Services, and any other radio terminals or devices connected to the Airwave Service that may be obtained from other sources.

Whilst every effort has been made to minimise the secure handling requirements of Airwave radio terminals, provided under the original FireLink contract effective security is required to protect the interests of other Airwave users, such as Police users, who routinely use the system to communicate sensitive information.

Non-compliance with these requirements will increase the vulnerability of attack or compromise the information carried by the system. Issues of non-compliance will be investigated and reported to the Airwave Accreditation Panel. This may result in the Chief Fire Officer being contacted directly and, if the non-compliance issue is not resolved, this could result in the subsequent revocation of a TEA2 sub-licence.

Such revocation would prevent an FRS from managing, handling, or using radio terminals on the Airwave service irrespective of any contractual obligations.

Ultimately the responsibility for secure handling of Airwave radio terminal equipment belongs to the users of the system. The key principle is that there must be clearly defined roles and responsibilities for the management and use of Airwave equipment embedded into the normal day to day operations within each FRS.

## **6. ROLES AND RESPONSIBILITIES**

A range of roles and responsibilities exist to meet local requirements for the secure management and use of Airwave radio terminals deployed within Humberside FRS.

### **Specific Responsibilities**

#### **Chief Fire Officer and Chief Executive (CFO)**

The Chief Fire Officer and Chief Executive (CFO) has overall responsibility for the Service’s compliance with the Airwave Service Code of Practice. associated with use of Airwave Radio Terminals. Specific responsibilities include:

- Appointing a Local Airwave Terminal Custodian (LATC) and for notifying the Firelink Security Network Group (SWG) of this and any future appointments.
- Ensuring that the LATC and all potential users meet identify base check requirements and are aware of their duties under the ACOP.

## Local Airwave Terminal Custodian (LATC)

The Firelink Terminal Custodian is responsible for the implementation of operational procedures for the secure management and use of radio terminals deployed in their area. These procedures, and all security related documentation should be subject to version control, regular review, and updated. Key responsibilities include:

- Undertake Service Management of all Airwave related matters. With the exception of ILO radios, liaise with suppliers to facilitate software upgrade and promulgate associated release notes or guidance related to change in functionality or use.
- Manage and monitor, issue, use, security, quality of service, network performance and compliance with Airwave Service Code of Practice.
- Ensure an appropriate level of access connectivity is secured and maintained in line with the “Firelink Code of Connection”.
- Maintain the Service’s Airwave Asset Register and provide annual updates for external audit purposes
- Develop Policies, Procedures and Technical Guidance relating to operational use of equipment and Airwave service.
- Ensuring approved change control systems are followed.

## Control Room Personnel

Locally the Control Room is the 24/7/365 central contact point for Humberside FRS. As such, they perform an additional support role for in-life management of the systems. Key responsibilities include:

- Reporting faults associated with all Control Room equipment directly to system maintainers as directed.
- Providing Airwave Service Desk with of information on lost radios or stolen radios. In event of suspect theft, report matter to police and obtain crime number.
- Accessing Airwave System Management Terminal / Airwave Service Desk to initiate ‘stun’ or “un-stun” of any affected Airwave Terminals used by Humberside FRS.
- Provide limited out of hours support to maintain Airwave provision within the service. i.e. Issue of SAN J radios from buffer stocks.
- Alerting and supporting activity of ESFM personnel out of hours to remedy Airwave radio faults.
- Notifying LATC of any change to central Firelink asset register.
- Escalating any Airwave issue to duty ICT technician as deemed appropriate.
- Initiating arrangements for “Operation Soundwave” as required.

## **Incident Liaison Officers (ILO's)**

The nature of the ILO role determines a higher level of security access to the Airwave network. All ILO's are issued with portable SAN J radios. ILO's are required to comply with any specific security arrangements relating to use and issue of their Airwave terminal. They must also ensure that any software upgrades associated with these radios are conducted by the designated authority.

## **General Responsibilities**

### **Internal Users**

Individual users of Airwave Radio Terminals are especially responsible for the following:

- Using their best endeavours to protect the terminals.
- Reporting loss or suspected theft of an Airwave radio terminal to either LATC or Service Control and initiate action in line with associated procedures.
- Locking doors and other building entry points whenever the station is unattended.
- Ensuring vehicles are secured.
- Complying fully with any other security instruction that may be issued by the LATC.
- Preventing unauthorised use by engaging the terminal keypad lock when the terminal is left unattended.
- Those personnel with Service issue vehicles which contain Airwave equipment should prevent unauthorised use by powering down the radio terminal when off-site/duty and ensure the vehicle is parked in as secure a location as possible.
- Those personnel with portable issue devices should prevent unauthorised use by not leaving the device unattended, powering down the radio terminal when off duty and storing in a secure location.
- Maintaining radio discipline.

### **External Users**

Humberside Fire & Rescue Service contract two external agencies to conduct vehicle repairs and scheduled maintenance. These are:

- Humberside Emergency Service Fleet Management (ESFM), and
- Emergency 1

## **Humberside Emergency Service Fleet Management (EFSM)**

As well as general repair and maintenance activity, EFSM personnel are also contracted to undertake all Airwave equipment vehicle install and de-installs, in line with approved Vehicle Design Packs and provide first line fault management on vehiclemounted radio terminals and associated vehicle wiring looms.

Therefore, EFSM services personnel are responsible for the following:

- Complying fully with use, storage and security instructions that may be issued by the Humberside FRS LATC.
- Reporting loss or suspected theft of an Airwave radio terminal to either LATC or Service Control and initiate action in line with associated procedures
- Providing an engineer to attend the location of the vehicle to conduct on-site repair, or replacement of the defective Airwave Radio Terminal or associated equipment.
- Supporting the temporary (“stun/unstun”) or permanent (“kill”) mobile device management arrangements associated with Airwave Radio Terminals.
- Ensuring suitable data records relating to vehicle / terminal installation and de-installation work are provided to the LATC to support update of central Firelink asset register.
- Advising Humberside FRS Fleet Manager of any risks or issues associated with vehicle installation.
- Remove terminals from any vehicle before it leaves the control of HFRS (e.g. return to manufacturer. Once removed it must be locked within a secure area.
- In exceptional circumstances where the removal of an Airwave terminal is not possible, it must be disabled (i.e. stunned) before leaving the jurisdiction of HFRS.

## **Emergency 1 – (E1)**

Under the FireLink contract, E1 are contracted to conduct annual vehicle maintenance on those vehicles considered national assets, namely New Dimension vehicles. E1 personnel are responsible for the following:

- Contacting Humberside FRS Control of any off-site service or return to service arrangements.
- Reporting loss or suspected theft of an Airwave radio terminal to either LATC or Service Control and initiate action in line with associated procedures.

## **Airwave/Motorola**

Airwave/Motorola are contracted to conduct in-life maintenance of all Control Room related equipment.

Airwave/Motorola are responsible for managing contracted or sub-contracted Personnel ensuring they:

- Comply fully with use, storage and security instructions that may be issued by the LATC.
- Reporting loss or suspected theft of an Airwave radio terminal to either LATC or Service Control.

## **7. LOST, STOLEN or MISSING RADIO TERMINALS**

Lost, stolen or missing Airwave radio terminals must be reported immediately in order to minimise any security threat or risk of unauthorised access to Airwave Service that supports Emergency Service activity throughout the UK.

The Service has developed procedures to ensure all users, handlers and installers do not delay reporting loss or suspected theft of an Airwave radio terminal to either LATC or Service Control and initiate action in line with associated procedures.

## **8. CORE COMPONENTS of an AIRWAVE RADIO TERMINAL**

Airwave Coverage and connectivity was secured for the Fire Service under the terms of the Firelink contract. UK Fire Services are contracted to minimum national road-based coverage of 98.9%. Airwave is a Digital communications system therefore everything that connects into the network must have a number.

Core components to support operational use are:

- Fleetmap: determines how each user group is controlled to ensure trunked radio resources are used efficiently. By controlling communications between different user groups and between individuals within a group, the network, radio terminals and control room equipment can deliver the desired user functionality. The Fleetmap combined with the Terminal configuration make up the device “Code Plug” that lists a range of menus reflecting the available Talkgroups.
- Talkgroups: are the equivalent to a traditional radio “channel”. Each Radio terminal holds a range of folders that list the Talkgroups available for use.

A typical folder fill for England is as follows:

- FavS FRS and FavS Interop
- A to Z English FRS listing
- Wales
- Scotland
- National
- Interoperability (incl Ambulance Sharers)
- Home FRS Support.

## 9. FIRE and RESCUE SERVICE VOICE COMMUNICATION TALKGROUPS

A range of Fire Operational Talkgroups are configured in each radio terminal. The following are available in every terminal in England, Wales and Scotland:

FRS Operational 13 x FRS operational talkgroups (FHUM-OPS01 – 13) are available for day-to-day operational use.

FRS MTM 2 x Mobile to Mobile talkgroups (FHUM-MTM01 – 02) are available to support resource – resource communications.

FRS Mutual Aid 3 x Mutual Aid talkgroups (FHUM-MA01 - 03) are available to support over the border communications from assisting FRSs who do not have access to the full range of affected FRS Ops talkgroups.

FRS National Each FRS has 1 x National Talk Group (FHUM-NTG) that can be used anywhere in the country.

FRS Hailing Each FRS has 1 x National Hailing Group (FHUM-NHG) Any resource can make direct contact with an FRS control room Only if this Talkgroup is monitored 24/7. This also supports national interoperability resilience arrangements. Each FRS monitors its NTG 24/7/365 and other EAs have a national agreement to utilise the Fire NTG.

The following Fire Operational Talkgroups are only available in the terminals of the home FRS.

FRS General Each FRS has 2 x General Talkgroups (FHUM-GEN01 - 02). These are available for general use determined by local FRSs.

FRS Training Each FRS has 2 x Training Talkgroups (FHUM-TRG01 – 02). These are available for use during training events/scenarios

FRS Null Each FRS has a single Null Talkgroup (FHUM–NULL). This Talkgroup is used in Humberside FRS to support data communication to resources on Fire Stations. The use of the Null Talkgroup allows the terminal to be switched on and affiliated to the Airwave network without incurring any voice traffic usage.

The following Operational Talkgroups are only available in the terminals of Inter Agency Liaison Officers.

Inter-Agency LOs Each FRS has been allocated 2 x ILO Talkgroups (FHUM-ILO01 – 02) for exclusive use of those trained and accredited to perform the role. These radios also contain the 10 x National ILO Talkgroups (FNTG-ILO01 – 10).

## **Talkgroup allocation within Humberside FRS**

Due to limitation within the Control Room ICCS only limited Talkgroups can be monitored by Service Control. These are:

- HFRS day to day voice communications is supported by two Airwave Talkgroups
- Operation Channel (FHUM-OPS1)
- Incident Channel (FHUM-OPS2)

As part of national resilience arrangements and local JESIP arrangements, HFRS Control utilise desk mounted SAN B radios to monitor:

- National Haling Group (FHUM-NHG)
- Police Sharers Group (PHUM-SHG)

**Note:** Police equivalent of Fire National Hailing Group

Additional SAN J radios are available in Control to enhance local JESIP and resilience arrangements. These terminals monitor:

- Ambulance Sharers Group (AHUM-SHG)

**Note:** Ambulance equivalent of Fire National Hailing Group

## **10. OPERATIONAL USE of AIRWAVE RADIO EQUIPMENT**

### **OPERATIONAL USE – CONTROL ROOM**

#### **Control Room - Voice Communication System (SAN I)**

The FireLink contract provides Humberside FRS with an air-based interface to access the Airwave Network to support mission critical Push-to-talk Voice messaging.

The primary operating equipment is a SAN I. SAN I's are located in the HQ Data Centre. Each radio is connected into an Aerial Combiner which is fed directly to an external Aerial. The User interface (CYFAS touchscreen) is available on each Control Room Operator workstation. This enables Control Room users to manually select and deselect operational talk groups.

#### **Control Room - Voice Communication System (SAN B)**

The secondary operating equipment is a SAN B (MTH800 Terminal). Two fixed SAN B radios are available within the Primary and Secondary Control. Fixed SAN B radios have direct link into Aerial combiners to support Air Based connectivity.

## **Control Room - Voice Communication System (SAN J)**

The Fallback/Resilience operating equipment is supported by SAN J (MTH800 Terminal). Two portable SAN J radios are available for use within the Primary Control Room.

## **Control Room – Joint Emergency Service Interoperability (SAN B & J).**

Recent developments in this area have resulted in one of the fixed SAN B radios and a further two SAN J radios being allocated specifically for Control JESIP purposes.

## **Provisioning of Equipment and Services**

ICT manager is responsible for ensuring an appropriate type and range of Airwave equipment is provisioned in both Primary and Secondary Control Rooms to meet organisational requirements and support resilience arrangements.

## **Operational Requirements**

Operational requirements are determined and maintained by Control Room users within Control Room ways of working arrangements.

## **OPERATIONAL USE – INCIDENT SUPPORT ROOM**

### **Incident Support Room – Voice Communication System**

A bespoke solution, **outside of the FireLink contract** provides an air-based interface to access the Airwave Network to support mission critical Push-to-talk Voice messaging.

The primary operating equipment is two SAN A (MTM800E terminal) radios. These radios are connected via a portable aerial situated in the roof space. These are local installations and therefore **are not** covered by the FireLink contract. Therefore, any faults affecting this equipment should be directed to ICT during normal working hours, and EFSM out of hours. Reporting this equipment via SAN I and SAN B arrangements will result in a Chargeable Event being raised.

## **Provisioning of Equipment and Services**

ICT manager is responsible for ensuring an appropriate type and range of Airwave equipment is provisioned in the Major Incident Room to meet organisational requirements and support resilience arrangements.

## **Operational requirements**

Operational requirements are determined and maintained by Operational users within Incident Command arrangements.

## **OPERATIONAL USE – FIELD COMMUNICATIONS**

The FireLink contract provides Humberside FRS with an air-based interface to access the Airwave Network to support mission critical Push-to-talk Voice messaging to support our Concept of Operations.

Fixed radio terminals and portable radio terminals are available for this purpose.

### **Fixed Radio Terminal (SAN A)**

The primary operating equipment within Fire Service Vehicles to support voice communication is a SAN A (MTM800E) Terminal.

There are two key components with any vehicle installation. These are the user interface (SAN A radio head) and the vehicle interface, which provides the wiring harness that connects up aerials, pump bay voice terminals, power supply and range of peripheral devices, i.e. printers, speakers, hands free PTT.

The user interface is located above the seat of the OIC appliance or fixed within the dashboard of an FDS vehicle.

The vehicle interface control unit is located within the vehicle cab of appliances and in the boot of FDS vehicles.

The primary operating equipment within Fire Appliances to support data communication is a Mobile Data Terminal connected into the Airwave radio via a PEI (interface cable).

### **Provisioning of Equipment and Services**

ICT manager is responsible for ensuring an appropriate type and range of Airwave equipment is provisioned for installation in designated vehicles to meet organisational requirements and support resilience arrangements.

Humberside FRS Fleet manager is responsible for ensure new appliances are procured with an appropriate wiring looms and managing the activity of external suppliers and maintainers.

### **Operational requirements**

Operational requirements are determined and maintained by Operational uses to meet agreed Concepts of Operation.

### **Portable Airwave Radio Terminals (SAN J)**

This portable SAN J (MTH800) terminal looks and feels the same as a conventional FireGround radio which have been issued in accordance with operational requirements i.e. to FDS Officers, Falls teams, Boats, Control JESIP and resilience arrangements.

Each SAN J enables operational users to manually select and deselect operational talk groups to send and receive voice radio messages within any given operational scenario.

**Note: NILO (SAN J)** radios have a separate code plug due to the nature of the role. NILO's have specific rules and regulations around issue, use and fault reporting due to nature of the role. NILO's are made aware of these responsibilities upon taking up the role.

### **Provisioning of Equipment and Services**

ICT manager is responsible for ensuring an appropriate type and range of Airwave equipment is provisioned to meet organisational requirements and maintain an appropriate buffer stock of radios and ancillary equipment required to support operational use and deployment.

### **Operational requirements**

Operational requirements are determined and maintained by Operational users to meet agreed Concepts of Operation.

### **OPERATIONAL USE – DATA COMMUNICATIONS**

The Airwave solution supports a bespoke product, **outside of the FireLink contract**, which provides end-to-end two-way data communication between Control Room and mobile resources. It delivers mobilisation data to mobile resources and receives status messages and AVLS from appliances only to support dynamic mobilising and resource management within the Control Room.

This solution is presented into the Northern Data Centre and connects via Short Data Router and Kilostream link directly into the Airwave Network (Capital Cluster).

### **Provisioning of Equipment and Services**

ICT manager is responsible for ensuring an appropriate type and range of Airwave equipment is provisioned within Humberside FRS data centre to meet organisational requirements and support resilience arrangements.

### **Operational requirements**

Operational requirements are determined and maintained by Control Room users and operational users in conjunction with ICT technical personnel to ensure full range of operational requirements is understood and configured.

## **11. MAINTENANCE of AIRWAVE RADIO EQUIPMENT**

Contractual arrangements for the maintenance of Airwave radio equipment can be found in the Airwave Service Manual.

## **Control Room installations**

Details of support arrangements are available within Service Control.

Day to day responsibility for in-life management, testing and maintenance of this equipment rests with Control Room users.

First line support is available internally through the ICT section during normal working hours.

## **Incident Support Room Installations**

Details of support arrangements are available within Service Control.

Day to day responsibility for in-life management, testing and maintenance of this equipment rests with Operational & Control Room users.

First, Second and third line support is available internally through the ICT section 24/7/365.

## **Fixed Vehicle Installations – Fire Appliances**

Details of support arrangements are available on Fire Stations and for information in Service Control.

Day to day responsibility for in-life management, testing and maintenance of this equipment rests with Operational users.

EFSM are contracted to support in-life maintenance 24/7/365 of Airwave Radio Terminals and associated equipment within HFRS vehicle fleet.

First line support is available internally through the ICT section during normal working hours.

## **Fixed Vehicle Installations – FDS / Support Vehicles**

Details of support arrangements are made available to vehicle owners, and for information in Service Control.

Day to day responsibility for in-life management, testing and maintenance of this equipment rests with Operational users.

EFSM are contracted to support in-life maintenance 24/7/365 of Airwave Radio Terminals and associated equipment within HFRS vehicle fleet and retain a “buffer stock” to support this activity.

First line support is available internally through the ICT section during normal working hours.

## **Portable Airwave Radio Terminals (SAN J)**

Day to day responsibility for in-life management, testing and maintenance of this equipment rests with Operational users.

ICT are responsible for the upkeep of buffer stocks to EFMSM are contracted to support in-life maintenance of Airwave Radio Terminals and associated equipment within HFRS vehicle fleet.

First line support is available internally through the ICT section during normal working hours.

## **Chargeable Repairs**

Not all faults reported to the Airwave Service Desk will be covered under the existing support contract. If a Telent engineer attends site and finds one of the following conditions, HFRS will be liable for costs incurred. Chargeable Events have been agreed as:

- An engineer is despatched to repair a fault but finds the unit to be in normal working operation.
- An engineer is despatched to repair a fault, but the vehicle is not available for the engineer to repair the fault.
- An engineer is despatched to repair a fault, but the fault rectification requires the removal of Fire equipment, the equipment is still in place and there is not a customer representative available to undertake this task: hence the repair has to be abandoned and rescheduled.
- Any faults arising from improper use of the equipment (i.e. not resulting from Fair Wear and Tear under Normal Operational Use) shall be deemed as a chargeable items.
- Any faults arising or costs for abortive site visits / work that is incurred due to the equipment not being used or operated in accordance with the instructions issued by Airwave from time to time.

Airwave will document all such events on the incident case and will provide the FRS with a monthly summary.

## **Return of Faulty Equipment**

To minimise risk of incurring a chargeable event, prior to return of any faulty equipment to Airwave it will be assessed to determine if it is covered by the Service maintenance contract.

When an EFMSM mechanic identifies a faulty part that is required to be returned to Motorola for repair, a Motorola Fault Label shall be completed and returned with the faulty part.

## 12. AUDIT PROCEDURE

A national audit of all Airwave Radio Terminals held by HFRS will be conducted at least once every 12 months. LATC is responsible for ensuring and up-to-date asset register is maintained.

## 13. MOBILE DATA TERMINALS (SAN E)

With the exception of the MDTs installed within the New Dimension vehicles, the Motorola MW810 hardware originally provided under the “FireLink” contract has been de-installed and placed in safe storage area pending return to Airwave.

A Blanco sweep of the software has been made thus removing any local software applications returning the devices to its default MDT1a Operating System.

## 14. GLOSSARY of TERMS

Accreditation	Formal assessment, by a designated approving authority, that a system is approved to operate in a particular security mode using a prescribed set of safeguards. (The role of Airwave Lead Accreditor is carried out within <b>CSIA</b> .)
Air interface	The communications link between a radio terminal and a base station.
Airwave	Integrated digital, mobile radio communications service
ART	Airwave Radio Terminal
Audit	To carry out and document a systematic examination of Airwave Service radio terminals or records within the <b>accounting system</b>
Cryptographic device	<b>Radio terminals</b> are deemed to be cryptographic items as they contain <b>operational user keys</b> and the <b>TEA2</b> method of encryption.
ETSI	European Telecommunications Standards Institute – produces globally applicable standards for Information & Communications Technologies including fixed, mobile, radio, broadcast, internet and several other areas.
FireControl	A project that will see the existing 46 locally based FRS control rooms in England amalgamated to become 9 regionally based centres.
Firelink	A project to provide a national digital radio network (Airwave) enabling interoperation with all other emergency services.
LATC	Local Airwave Terminal Custodian
PIN Code	A Personal Identification Number that needs to be entered when the radio is powered up and before it can be used.
SAN A	Vehicle Radio
SAN B	Desk Top Radio (Control)
STUN	To temporarily disable a radio terminal. This command is reversible

SWG	Security Working Group established by Central & Local Government
Talk groups	Virtual groups programmed into a radio terminal and the Airwave infrastructure that allow groups of users to communicate with each other. Similar to radio channels
Third Party Service Providers	An organisation that has been sponsored by an existing <b>Sharer</b> , and authorised by <b>OFCOM</b> , to use the Airwave Service for a specific purpose.
EA2	TETRA Encryption Algorithm No.2 – a mathematical function contained within a radio terminal, which is used with <b>cipher keys</b> to provide security/protection up to and including the HMG level of <b>RESTRICTED</b>

Encrypted	Radio communications converted into incomprehensible code for transmission.
Encryption keys	Encryption keys (or cipher keys) provide encryption and protect <b>RESTRICTED</b> data to a sufficient level of security.
End-to-end encryption	Encryption over the whole communications link – not just over the air interface – which provides a greater degree of security.
Hand portable radio terminal	A handheld radio terminal which is not fixed to a vehicle – the inclusion of <b>operational user keys</b> and the <b>TEA2</b> method of encryption makes it a <b>cryptographic item</b> .
HMG	Her Majesty's Government.
ICCS	Integrated Communications Control System – system that provides efficient control and management of an organisations communications.
<b>Integrity</b>	Ensuring the accuracy and completeness of assets.
Interoperability	Authorised communication between two or more Airwave user organisations.
ISSI	Individual Short Subscriber Identity – this is used to identify an individual terminal within the Airwave network. This number is used for making point to point calls.
Mobile radio terminal	A radio terminal permanently installed in a <b>vehicle</b> – the inclusion of <b>operational user keys</b> and the <b>TEA2</b> method of encryption makes it a <b>cryptographic item</b> .
NPIA	National Police Improvement Agency – an agency created to support police forces in improving the way they work across many areas of policing.
OFCOM	Office of Communications – the independent regulator and competition authority for the UK communications industries.

Operational (user) keys	Operational (user) keys are <b><i>cipher keys</i></b> used by specific <b><i>talk groups</i></b> .
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**If you require further guidance on this document, please contact the Head of ICT**