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# **HM Fire Service Inspectorate**

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**The Scottish Fire and Rescue Service  
Operations Control Room in Dundee,**

**and**

**Service Delivery and Support in Highland,  
Western Isles, Orkney Islands and  
Shetland Islands**



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**Integrity, Objectivity, and Fairness.**

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## Acknowledgements

We are grateful to the SFRS Strategic Leadership Team, Dundee Control staff, the Local Senior Officers for Highland and for Western Isles, Orkney and Shetland Islands (WIOS), and staff within these areas and all those other members of staff who provided us with information and contributed constructively to interviews.

The Inspection team members were:

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A Quality Assurance Panel helped us by challenging a draft of the report. The team was:

Des Tidbury QFSM, Chief Advisor for Wales  
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All the members of the inspection team contributed to the development of this report and the quality assurance panel provided a professional challenge to the contents, assumptions and conclusions made. However, the Chief Inspector takes sole responsibility for the report, its contents and conclusions.

Our report reflects the circumstance at the time of our visits and interviews which were undertaken during February and March 2017. The SFRS is continuing to change and evolve, consequently material changes may have occurred since then.

During the inspection, HMFSI provided feedback to the Minister for Community Safety and Legal Affairs, Chief Officer, Assistant Chief Officer (Response and Resilience), other Officers of SFRS, and SFRS Board Members via the SFRS Board's Audit and Risk Assurance Committee, so that emerging issues and themes could be acted upon at the earliest opportunity.

Laid before the Scottish Parliament by HM Chief Inspector of the Scottish Fire and Rescue Service under section 43C(5) of the Fire (Scotland) Act 2005 SG/2017/106

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# 1 Introduction and Background

This report looks at the operation of the Scottish Fire and Rescue Service (SFRS) Operations Control in Dundee, the way that the SFRS mobilised to certain incidents, and some delivery and support arrangements in Highland, Western Isles, Orkney Islands and Shetland Islands.

The Scottish Fire and Rescue Service was formed on 1 April 2013 from the eight legacy services of Dumfries and Galloway, Strathclyde, Lothian and Borders, Central, Fife, Tayside, Grampian, and Highlands and Islands.

Board members of the SFRS, appointed by Scottish Ministers, have the statutory responsibility of governing the fire and rescue service. On 26 September 2013, the SFRS agreed, as part of wider Strategic Intent proposals to rationalise its inherited property estate, and to reduce the number of Fire Controls from eight to three. Following further consideration of a business case and options appraisal developed by officers of the Service, Board members approved, in January 2014, a new delivery model with three Controls to be based at Johnstone, Tollcross in Edinburgh, and Dundee. The Command and Control Futures (CCF) project was developed to implement this new model.

The CCF project adopted a phased approach to the delivery of Strategic Intent objectives. These phases included the migration of controls in the West into Johnstone, the East into Tollcross, the North into Dundee and the final stage (split into parts) is to migrate all three Controls onto a single operating system.

The migrations in the West and East have occurred without incident or any significant adverse public interest.

Migration of the control room in Aberdeen (the legacy Grampian Fire and Rescue Service control room) to Dundee took place on 8 November 2016 and the control in Inverness (the legacy Highlands and Islands Fire and Rescue Service control room) took place on 6 December 2016.

The migration of three controls into a single operating system is still to be procured.

The legacy Highlands and Islands Service was inspected by Her Majesty's Fire Service Inspectorate (HMFSI) between September and October 2002<sup>1</sup> and again in November 2012<sup>2</sup>, the latter inspection was conducted at the direction of Scottish Ministers.

The Controller of Audit for the Audit Commission levelled significant criticism at the Highlands and Islands FRS during its 2011 Best Value review of the service. Audit Scotland's report on Best Value was published in March 2012<sup>3</sup>.

The Highlands and Islands FRS faced considerable challenges over a prolonged period of time. The latest of the HMFSI reports makes the point that:

*It is widely accepted that the fundamental issue within HIFRS is a structural one. The Service is trying to provide an extensive network of fire stations across a large geographical area with insufficient supporting resources.*

<sup>1</sup> HM Fire Service Inspectorate Report of the Principal Inspection of Highland and Islands Fire Brigade 2002 <http://www.gov.scot/Resource/Doc/47021/0025180.pdf>

<sup>2</sup> Chief Inspector of Fire and Rescue Authorities Report on an Inspection of Highlands and Islands Fire and Rescue Service <http://www.gov.scot/Resource/0041/00412188.pdf>

<sup>3</sup> Audit Scotland Highlands and Islands Fire and Rescue Best Value <http://www.audit-scotland.gov.uk/report/highlands-and-islands-fire-and-rescue-best-value>

In 2012 it was estimated by the Highlands and Islands Fire Board that the level of capital investment required to ensure HIFRS's asset base is fit for purpose, which includes the operational fleet and property, is substantial. It was also facing significant challenges across a number of other areas which included training, legislative fire safety enforcement, human resource management, adequate and suitable personal protective equipment, safe systems of work and suitable equipment.

In the 2002 inspection report, comments were made in relation to control staffing.

*Control Room staffing remains a difficult area, with a minimum complement of two staff being on duty.*

This level of minimum staffing was still in existence prior to control migration in 2016.

## A summary of our findings

In reading this high level summary of our findings, it should be recognised that any area of service can be improved with the benefit of reflection, however given this, our findings are generally positive.

We found that the CCF programme, on the whole, was well managed. It had been inspected by the SFRS internal audit and now by HMFSI during this inspection and our findings align. The programme has been broadly managed in line with Prince 2 methodology, has dedicated and appropriately qualified staff, and is well linked into the Service's governance arrangements. The programme is phased in a way to allow risk to be managed. The control room transition plan has improved as a result of learning from each control migration, this is an indicator that the CCF programme has a learning process.

Dundee Operations Control's mobilising system 'Vision 3' is set up in a way that is similar to systems operating in other UK Fire and Rescue Services from the same manufacturer. The systems in the SFRS's three control rooms differ from each other and the next phase of the CCF project is to migrate them all onto one system platform, which still has to be procured.

The number of vacancies and the number of supervisory managers in 'development' within the Dundee OC presents a risk to the organisation. The Service finds it challenging to maintain minimum staffing levels at all times within the control room, but plans are in place to rectify this position. The Service is in this position as a consequence of employment protection rights of staff from the legacy controls: some staff chose not to take up redeployment. We have made recommendations on this area which we would encourage the SFRS to adopt.

The management, training and corporate systems in place for the Highland area and WIOS are predominantly the same as in the rest of Scotland. However, the geography influences the delivery of services.

The SFRS is still facing some of the challenges highlighted in previous reports into the Highlands and Islands legacy service. It has prioritised and made considerable investment in this area of Scotland and progress has been made. There are systemic issues which are creating increasing risk to the Service from the fleet arrangements and the Retained Duty System. The latter is not unique to Scotland, but is particularly acute in some island communities. We have made recommendations on these matters and have prioritised Thematic Inspections on the SFRS fleet and RDS training arrangements for later in 2017/18.



We have looked at a number of incidents where it was alleged that the Service did not respond appropriately. Emergency callers reporting incidents to fire control are often and understandably in a distressed state, which can lead to partial or inaccurate information being passed. We have examined the underlying records, interviewed staff and listened to tapes of the events. We have concluded that the Service responded in line with its policies and procedures. The OC adapts to the changing circumstances of each incident and additional information as it becomes known. The Service has learnt from each experience and when the outcome was not as the Service would have wished, it has been quick to admit this. The Minister and the public can have confidence in the Service's response to specific areas of concern when they are raised, we have seen evidence that it does learn from events and changes processes in the light of that learning.

## 2 About the Inspection

Her Majesty's Fire Service Inspectorate in Scotland is a body that operates within, but independently of, the Scottish Government. Inspectors have the scrutiny powers specified in section 43B of the Fire (Scotland) Act 2005 (the 2005 Act). These include inquiring into the state and efficiency of the SFRS, its compliance with Best Value, and the manner in which it is carrying out its functions.

This inspection is conducted under the powers conferred on the Chief Inspector under sections 43B and 43C of the 2005 Act and was initiated by the Chief Inspector on his own volition.

The terms of reference for this inspection were consulted upon and agreed with parties that the Chief Inspector deemed relevant.

This inspection is a 'fact finding inspection' into the issues raised within correspondence to Scottish Ministers and others, which were widely reported in the press. These issues relate to the way the Dundee Control had been functioning between November 2016 and 10 January 2017, the way the Service mobilised to specific incidents, and delivery and support provided by the SFRS in the Highlands and WIOS areas.

The intention of this report is to set out the facts and then to present the Chief Inspector's independent view of the situation, and if appropriate make recommendations to the Service for adoption in the future.

### Methodology

The methodology used to conduct this inspection is similar to other inspections that HMFSI conducts. We requested relevant information from the Service via a data request followed by field work where members of the inspection team visit locations and conduct interviews with relevant staff to obtain evidence of current practice.

The Chief Inspector along with GM Samwell visited Dundee Control to talk to staff and examine records related to the control room, incidents and the CCF project.

With regard to delivery and support in the Highlands and WIOS areas, HMFSI conducted visits, interviews and sample inspections of stations in the Orkney Islands and Shetland Islands. HMFSI had previously conducted a local area inspection of the Western Isles in 2015<sup>4</sup>. A local area inspection of Highland is planned for the summer of 2017, so some provisional sampling work was conducted along with an interview of the Local Senior Officer (LSO).

The Chief Inspector also conducted interviews with employee representative bodies, and SFRS fleet and property managers. In addition electronic records were sampled in all areas of interest.

Whilst this is not an in-depth audit of all aspects of the control room or service delivery support to the Highlands and Islands, it has established to the Chief Inspector's satisfaction the facts needed to draw conclusions and make recommendations where needed.

<sup>4</sup> HM Fire Service Inspectorate *Local Area Inspection Western Isles* <http://www.gov.scot/Resource/0049/00490844.pdf>

## 3\_Dundee Control

### 3.1\_Command and Control Futures Programme

#### 3.1.1 Arrangements in Place

The Command and Control Futures Programme (CCF) was established to deliver a modern, resilient, scalable command and control communication system and supporting structure. The CCF programme's overarching objective is to meet the priorities of the organisation in terms of improving firefighter and community safety and improving the equity of access to resources for all communities of Scotland.

The programme is expected to deliver two key outcomes:

- The staged rationalisation of the existing (*legacy*) control room portfolio to its agreed end state structure.
- The procurement, delivery and installation of a standardised and resilient command and control technical platform.

The CCF project has 23 dedicated members of staff all of whom carry relevant qualifications or experience. The project operates to an amended Prince 2 methodology that has been adopted by the Service and the Scottish Government. The CCF programme reports to both the SFRS Strategic Intent Programme Board (SIPB) and Service Transformation Programme Board (STPB) on progress. The STPB in turn reports progress to the Service Transformation Committee of the SFRS Board. There is also increased budget scrutiny through the Capital Monitoring Group, chaired by the SFRS Director of Finance and Contractual Services.

Regular stakeholder engagement takes place through a series of structured meetings with regular communication on progress towards key milestones.

The first objective was planned to occur in three stages, the first stage being the integration of legacy Strathclyde and Dumfries & Galloway Controls in Johnstone. The second stage was to combine the East legacy control rooms into Tollcross, and the final stage was to combine the Aberdeen, Inverness and Dundee controls into an extended OC in Dundee. The same control migration methodology was used on each occasion, each stage benefitted from the lessons learned in the earlier stage.

The CCF project has been the subject of an SFRS Internal Audit report where a reasonable level of assurance was given along with five recommendations. The recommendations predominantly related to programme documentation.

#### 3.1.2 HMFSI's comments on the arrangements

Our fact finding inspection briefly touched on CCF arrangements. It is not our intention to duplicate the work conducted by other scrutiny organisations. We would confirm that we found in place a Prince 2 project management structure, relevant project plans, risk registers, communication structures and governance arrangements. We have seen good engagement and leadership from the Board and the Senior Management of the Service. We observed that there was a logical progression to the work, based on risk, around the three areas, and that there is learning as the project progresses.

The final stage of the first key outcome is now almost complete with the migration of Aberdeen and Inverness controls onto the Dundee site into temporary accommodation. This stage will be fully complete once the permanent accommodation building work has been completed and the OC moves in.

### 3.2\_Control Structure

#### 3.2.1 Arrangements in Place

With the staged rationalisation of the eight legacy controls into the three new Operations Controls (OC) centred on Johnstone, Tollcross and Dundee nearly complete, the SFRS now has three standalone controls which are not electronically joined or capable of mobilising for each other. The Johnstone control works on a 'ProCAD' mobilising system, Tollcross on 'Vision 3' with a local gazetteer, whilst Dundee operates on 'Vision 3' with a new national gazetteer. Each of the three controls has its own fall-back arrangements in case the primary control room becomes unavailable for any reason.

The Dundee OC is at Macalpine Road Fire Station, in the north of Dundee and the backup is at Blackness Road Fire Station in Dundee.

The accommodation at Macalpine Road Fire Station is currently temporary, sited within the fire station yard whilst the existing control room complex is altered to accommodate a larger number of staff within a modernised facility. The migration to the new facility adjoining the station is due to occur in June 2017.

The next phase of the CCF programme is to procure and migrate all three controls onto a single command and control technical platform. This will achieve a fully integrated technical solution. The procurement process is being conducted with Northern Ireland Fire and Rescue Service.

The mobilising and supporting IT solutions are explored further in section 3.3 below. The mobilising and other systems in Dundee does have the ability to record and date/time stamp every call or action taken on the mobilising, telephony or radio system.

The SFRS has not yet fully integrated all the legacy services' policies and procedures. In order to remain resilient and comply with employee terms and conditions of employment, the Service has undertaken to continue with legacy arrangements until the SFRS's procedures have been developed. This is an issue that is far wider than the OC operations, as it affects many other aspects of the Service like operational firefighter terms and conditions of employment, health and safety, training and incident operational procedures, with some of these having to be negotiated at UK employer level.

Each of the three SFRS control rooms has its own management and support arrangements in place, due to geographical distances between them and the different mobilising systems in use. This makes it difficult to achieve resilience, by interchanging staff, without considerable training, transport and welfare support arrangements being in place.

All fire service control rooms rely on team work to function effectively and each team will do it slightly differently. These differences come from different management styles, different individual personalities and different organisational systems, policies, procedures and practices. The three SFRS controls and the watches that make them will all work slightly

differently due to the individuals, the mix of SFRS and varying legacy service policies and procedures and the nationally accepted call handling processes. The watches within the Dundee control are new and are only just forming into effectively working teams.

The SFRS is planning to migrate all operational and control watch based staff, including those in the Dundee OC, onto a common duty system, working to an annualised hours contract of employment (due, April 17). For Dundee OC, there will be five watches with eight people on each watch, along with two flexible duty managers and four support posts covering 'learning and development', and 'systems and data'. This will involve expanding the number of staff within the Dundee OC from 42 to 46.

The internal staffing structure is discussed under the staffing section in 3.4.

The level of scrutiny that Dundee OC personnel are under is also greater than elsewhere in the Service. This is not only due to the accountability that comes from the mobilising system's recording processes, but also because of the political and press interest into many incidents that have occurred during and after the migration of Aberdeen and Inverness controls.

Call handling procedures are covered in section 3.5.

Training provided for personnel in Control is covered under section 3.6.

Personnel in Control also have access to all the welfare arrangements provided for other members of staff. Whilst staff have expressed opinions on these to HMFSI during this inspection, we have deemed these to be outwith the scope of this inspection as they are not Dundee control specific.

Representation of staff is provided by the Fire Brigades Union (FBU), members of which we have interviewed as part of this inspection. The FBU has been actively involved in representing its members throughout the CCF programme and the migration of the control rooms.

### **3.2.2 HMFSI's comments on the arrangements**

We are impressed by the determination, resilience and professionalism of all Dundee OC employees.

The fire service operations control sits at the centre of all operational response/support and is potentially a single point of failure for the Service. All calls from the north of Scotland come into Dundee, information is gathered by the control operator from callers, who can be very distressed, and ultimately a response is then dispatched. Due to the legacy arrangements from the three historical service areas, control room staff are faced with selecting the correct response depending on the historical or new SFRS procedure, whichever currently applies. The Service is working towards a single set of practices and procedures for the whole of Scotland and has made progress but there is still more work to do.

It is common practice for people to question control room decisions based on hindsight and a full understanding of the situation. However, Control room operators at the time of a call do not have the benefit of hindsight, and often have to work with incomplete information obtained from people who can be very distressed by the situation that they are in or have witnessed. It is important that the control room adapts to a changing situation as more information becomes available.

Dundee OC employees have already faced a lot of change and there is a lot more to come which will include the move to the new common duty system, migration to the new control room complex, the move to a new mobilising system and continuous change to operational practices as the Service moves towards a single operating model.

Dundee OC staff, in our opinion, have been working under elevated levels of pressure and scrutiny from press and political interest initiated by a retired officer, at a time when they are still going through the early stages of team formation. Control room staff are used to working under scrutiny as everything they do is recorded, but the level of additional pressure is unhelpful and could have a detrimental effect. The SFRS Board, the Chief Officer and other senior managers have been actively engaged in supporting their personnel in order to ensure their welfare and communicating the position to the public and other stakeholders in order to provide reassurance, we support those actions. We have been monitoring the Service's public statements, where we can, and those we have observed have been accurate.

## **3.3 Mobilising and Supporting Systems**

### **3.3.1 Arrangements in Place**

Dundee OC is operating on a 'Vision 3' system with a national gazetteer (mapping and geographical information system) which is configured in a way that is consistent with other Vision systems operated by other Fire and Rescue Services.

Emergency 999 or 112 calls are initially received by the telephone company operators who will ask which of the emergency services is required. If the fire service is requested by the caller then the call is put through to the fire service OC. The telephone company operator directs the call to the OC that they believe is the most appropriate to the caller's location, but this is difficult given mobile phone technology. It is not unknown for a call to be put to a Control that is not the one covering that area. The Service's OC never identify where they are located and will always take the call and the request for assistance, the details would then be passed on.

Control room operators utilise a standard fire service call taking procedure of asking questions in order of priority (what is the address of the incident, what is the incident, is there any additional information). This call taking procedure is designed to minimise risk and allow a response to be dispatched, even if the call is disconnected. It is possible, using this procedure, to take a call for any part of the UK and then pass it on to the correct control room for subsequent mobilisation. These occurrences are fairly rare, with telephone company operators generally selecting the correct fire service OC. However no one making an emergency call wants to feel that a mistake has been made, what they want is assistance to resolve the issue and SFRS is able to achieve this.

The mobilising system is designed to support the call handling process. The system will match the address, or other geographic feature, to the gazetteer. The system takes the entered details of the incident type and compares it with the SFRS procedures in order to come up with a Pre-Determined Attendance (PDA) and then by combining the location and road network, it will propose the fastest response of the number of vehicles needed to resolve the incident. This information is presented to the operator for confirmation. At this stage the operator combines the proposed response with information from other information systems not connected to the mobilising system and can either confirm and mobilise the proposed solution, or override it and enter a more appropriate response.



Configuration issues can and do occur with the gazetteer or road network which need to be continuously cleansed, this is a very big job and is on-going, with two members of staff assigned to system and data matters. For example each section of road will have an assigned speed associated with it so that fastest attendance times can be calculated. If part of a proposed route between two locations contains a section where the journey requires to be undertaken by ferry, and that section is incorrectly assigned a road speed, then that will dramatically alter the overall journey time and therefore the performance of the system. As can be appreciated this is a very complex system and each section has to be identified, checked and modified.

Not all of the Service's information systems are integrated with the mobilising system. For example, the system in Dundee has an integrated telephone and radio system via an Integrated Command and Control System (ICCS), however one of the Retained Duty System personnel availability systems, 'Gartan' is not integrated. The team working in control overcome this limitation by one control room operator checking the 'Gartan' system and informing the mobilising operator what stations are available prior to confirming the mobilising solution offered by the system.

The 'Vision 3' system contains automatic alerts so that if an essential action is not done by a certain stage, a visual warning, in the form of a red warning notice appears on screen. An example would be where a fire appliance does not acknowledge to Control that it is mobile to the incident within a certain time, a warning would be displayed. This ensures that there is very little opportunity for things to be overlooked.

The system records and date stamps every entry made on the mobilising system by operators, and every message or alert made by the system. Control operators will enter every message received from crews attending the incident onto the incident log creating a detailed record of the whole incident.

### 3.2.2 HMFSI's comments on the arrangements

We found that the system had been installed and was operating in a way that we would expect. Whilst all support systems were not integrated there are manual processes in place; they take slightly longer than integrated systems, but are still effective.

The system's alert processes are in place and working effectively.

## 3.4 Staffing Arrangements

### 3.4.1 Staffing arrangements in place

Figure 1 shows the Dundee OC staff structure in place at the time of our inspection.

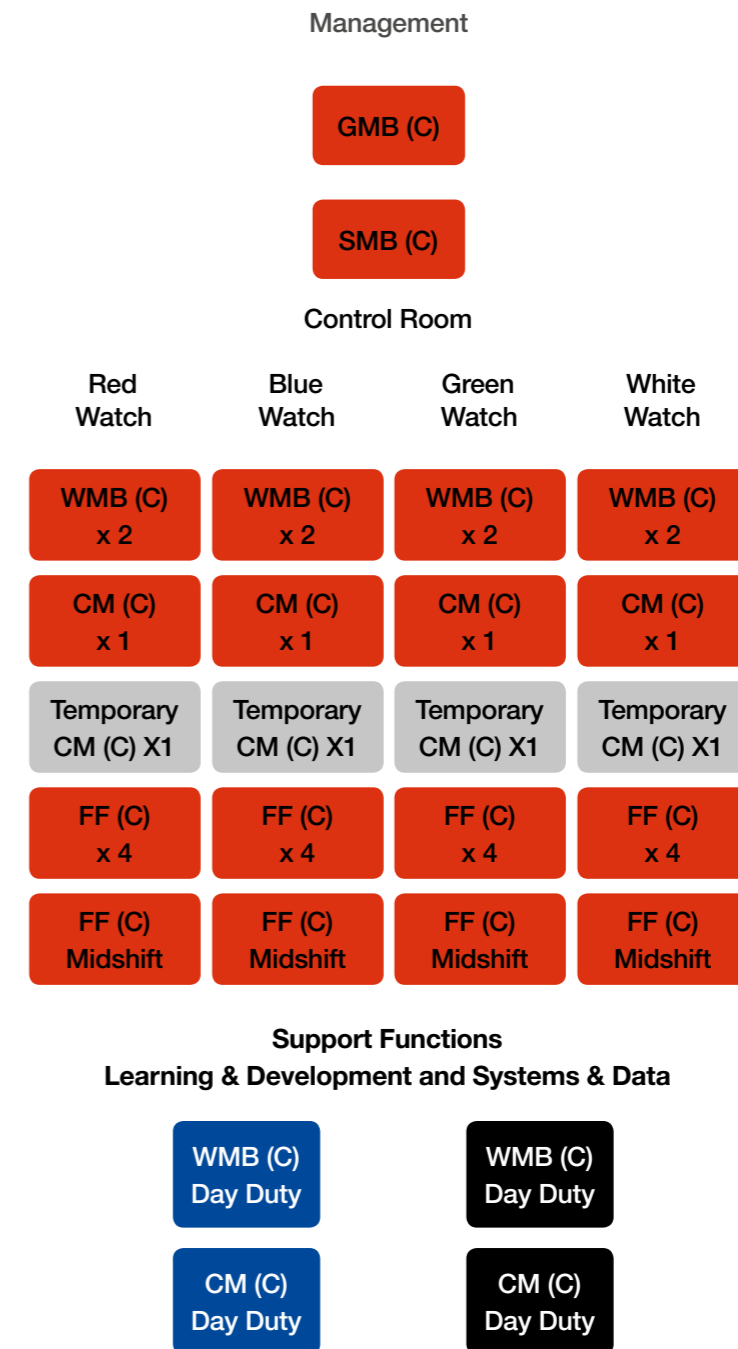


Figure 1 Dundee OC staffing structure



The control room operates 24/7, 365 days a year, on a two shift system of a day shift 0800 to 1800 hrs and a Night Shift 1800 to 0800 hrs on a continuous rota of two days, two nights and four days off. The midshift operates between 0800 to 2000 hrs, in order to meet peak demand. The establishment structure has an allowance built in to it so that holidays, sickness and other forms of authorised absence, such as training, can be managed on the watch.

The Service has set a minimum staffing level to be maintained at all times within the control room and that is, seven on a day shift and six on a night shift, this includes ranking officers to take control of the OC and to supervise call taking.

The overall establishment of the four Watches at Dundee OC's was five personnel short, and during the period under examination (6 Dec 2016 – 10 Jan 2017) failed to achieve minimum staffing on 36% of occasions. The numbers required were being made up, wherever possible, by using overtime, managers and training staff. There is also an option available to recall staff to duty, or to set up a command support room and bring in operational managers to take the pressure off the control room staff. During times of limited staffing, work is prioritised with non-essential work being stopped.

The new Dundee OC is around twice the size of the previous control for the legacy Tayside Service area. This increase in size will provide greater resilience during peak periods of demand than would have been possible in smaller control rooms with less staff on duty.

The reason for the short staffing levels was due to insufficient staff from Aberdeen and Inverness choosing to relocate to the Dundee control. The SFRS has a no compulsory redundancy policy, so employees in the Aberdeen and Inverness controls were given the option of relocation to the new control, redeployment within the Service or accept voluntary severance. Staff had the ability to change their mind on their future career path up until the very last moment of the switchover process. This tied the Service into keeping posts available to accommodate them within the new control staffing structure.

The Service has a plan to train new operators from an established pool of people seeking to join the Service in a control role, which it has activated. This initial training takes time and only a limited number of trainees can be accommodated on any shift at any one time, due to the need to supervise inexperienced new members of staff.

In addition to Dundee control being understaffed overall, approximately 50% of the officers are defined as being 'in development' in their role and are undergoing training in new supervisory roles. This situation also occurred due to a lack of substantive supervisory officers choosing to relocate to Dundee from the other Controls. Plans are in place to normalise the role structure and ensure that competency is gained by the newly promoted officers.

Due to the considerable training requirements and the distances involved the Service is unable to deploy staff from its other control rooms in Johnstone and Tollcross to assist with the understaffing, as these control rooms work on systems that are significantly different.

The Dundee OC and the watches within it are new, this means that teams and team working has had to be formed from scratch. Team bonding is starting to occur but has been hampered by the level of scrutiny and the number of official visitors that are being brought into control to examine the arrangements there.

We were informed that due to the level of scrutiny and the continuous request for staff to undertake overtime there was a reluctance to do this additional work, or at least to restrict the level of overtime so that individuals could maintain a work/life balance.

The Service plans to introduce the new common duty system in control, when it does so into the Service as a whole. This will create a further four vacancies in Dundee OC, taking the total to 9, in order to maintain the new establishment required for a five group duty system. The common duty system is based on an annualised hours system across five duty groups. The Service believes that this will make achieving a minimum staffing level easier.

Dundee OC due to its newness does not have a succession plan.

Due to the level of public interest in Dundee OC, the Scottish Government (SG) has in place regular monitoring of the staffing levels.

#### 3.4.2 HMFSI's comments on the arrangements

The SFRS has decided to set a minimum staffing level for the number on duty in the Dundee OC, this should be achieved on all occasions, it is also expected that the control should have a minimum number of supervisory managers. The Service has a reason and rationale for setting this staffing level based on risk. This is normal practice and we would expect that this level of staffing to be achieved at all times.

We have concerns that the Dundee OC is under staffed on the four watch duty system, has a high proportion of managers 'in development' and is failing to achieve minimum staffing levels on many occasions. We recognise that this situation resulted from the requirement to hold vacancies for existing staff to transfer into at the time, and as a result of the closing of the Aberdeen and Inverness Controls. We have seen that the Service has plans to rectify this position. We also acknowledge that this will take time to resolve, as staff need to be trained and gain experience. The SFRS expect this will take up to three years for staff to become competent in role.

There is no doubt that the common duty system, which is based upon an annualised hours system of working, is much more flexible for both the Service and the individual. We have concerns about the level of staffing and the number of supervisors 'in development' at the start of the system to allow it to work effectively over the first few years of its operation. The SFRS currently has OC staff in training, but this will not fill all the vacancies in Dundee. An annualised hours system that is not fully staffed and operates in isolated locations (geographical or work type) can present, in our view, a considerable risk to the organisation, which should be mitigated. We have not seen detailed plans to mitigate the risk posed by the common duty system being understaffed in Dundee OC. **We recommend that the staffing level and the number of competent managers on duty should be monitored at the highest level within the Service and that those senior officers satisfy themselves that contingency plans are in place, and activated when needed, in order to maintain minimum staffing levels at all times.**

**We would also recommend that a succession plan be formulated and implemented,** so that staffing and competency levels do not drop below a level that is required to maintain the full effectiveness of the Dundee OC in the future, once staffing levels have returned to normal levels.

The watches in Dundee OC have only just been established and it will take time for them to fully form into teams and for team members to instinctively support one another. We have no doubt that this will occur in time and we would expect that the Service's management would create a conducive environment for this development to occur.

We would suggest that SG monitoring of minimum staffing levels should continue until overall staffing and competency levels have been addressed so that the common duty system can operate effectively.

## 3.5\_Call Handling

### 3.5.1 Arrangements in Place

The call handling system operating in the Dundee OC is that one operator will take the call, mobilise and handle all messages and support to the incident throughout – they become the single point of contact wherever possible so maintaining continuity.

The control room operator's actions are overseen by a Crew or Watch Manager to ensure that every call is supervised.

The remaining control room operators assist by checking other systems for information (e.g. confirming Retained personnel availability) and supporting in peripheral activities like notifying other agencies or alerting officers.

The process of questioning a caller was outlined in 3.3.1 above.

After the mobilising information is obtained it is often possible for the operator to extract additional information from the caller that would assist the attending appliance, this is done within the Dundee OC.

If the situation demands it, the control room operator will stay on the line and give advice to the caller in order to try and ensure the caller's safety, for example if they are trapped in a room by fire. This is done in the Dundee OC.

In the event of malicious calls, the control room operator does have the ability to trace the caller and inform other agencies, so that action can be taken.

When more than one call is received at the same time each is handled by a separate member of staff. During busy periods operators may be handling more than one incident.

The overall control room operation is overseen by the Watch Manager who will keep a strategic view of control room operation and fire appliance cover.

If fire cover is depleted in an area the Watch Manager may deploy appliances on standby moves so as to ensure that the best coverage possible is maintained with the available resources.

### 3.5.2 HMFSI's comments on the arrangements

The arrangements in place in Dundee are in line with the normal practice in any fire control in the UK.

## 3.6\_Support Arrangements

### 3.6.1 Arrangements in Place

The support arrangements to the Dundee OC staff range from HR to occupational health advice in the event of sickness or stress. These arrangements are similar to other parts of the SFRS and are not specific to Control.

Staff were trained on the new system prior to and during the transition and formation of the new OC. This was planned and implemented by the training and data team of the CCF project. Dundee has a dedicated two person training team who work with the watches in order to meet employee on-going training needs. These needs are delivered through on and off watch training activities.

Initial training is provided for all new entrants, this is followed up by on and off watch training.

Recording systems for training undertaken are in place.

Dundee has a dedicated two person data team in order to work on and maintain the data within the mobilising system.

### 3.6.2 HMFSI's comments on the arrangements

Many of the support arrangements are not specific to Control e.g. HR, Health & Safety etc. We acknowledge that individuals and the Representative Bodies hold different views on the level and type of support provided to staff.

The Service has provided dedicated training and data teams to the Dundee control. It is providing and recording training.

We have looked at the other support systems in place for the Dundee OC and consider them to be in line with those provided to other SFRS members of staff.

## 3.7\_Specific Incident Investigation

### 3.7.1 Arrangements in Place

The Dundee OC has systems in place that automatically record actions on the 'Vision 3' mobilising system and record all the telephone calls and radio messages received and sent by the control room.

There were a number of specific incidents, that were raised in correspondence, where it was alleged that there had been a substandard response. We have investigated these incidents by reviewing the incident logs, talking to staff and listening to the tapes.

### 3.7.2 HMFSI's comments on the incidents that were highlighted

Control room staff are often dealing with distressed members of the public, who are trying to convey detailed information about situations and locations that they may not be familiar with. Under these circumstances it is often difficult to ensure that the information is correct to a level that will stand the test of hindsight, the control room has to act in good faith that the information is accurate. It is always possible in this environment for things to go wrong, what is important is that the control room remains flexible and responds to updated information and then learns lessons quickly, so as to adapt to situations and minimise the possibility of similar things happening again.

The 'Vision 3' mobilising system in Dundee is operating on the new national gazetteer. This contains far more information than the previous local gazetteers had, and all of this information will be expected to mature over time. The gazetteer was fit for purpose and had been checked as far as possible at the time of commissioning, but it contains a vast amount of technical geographical and road network data.

Our investigation into the incidents in question has led to us looking at the mobilising system logs, listening to the recordings of telephone and radio communications to and from Control, and the interviewing of supervisors. We have come to the conclusion that the Service has accurately portrayed the position in regards to those incidents to Ministers (Appendix 1). We believe that Ministers and the public can have confidence in the results of internal investigations and reports. We have also come to the conclusion that the Service has admitted quickly and publically, with reasons when things have not gone quite the way that they would have wished.

We found that the control room staff mobilised the appropriate resources as proposed by the system and specified by Service policy, and when further information came to light that called into question the original course of action, they amended the response to reflect the new circumstances. This we consider to be good practice.

We also observed that where issues were created by matters outside of their control e.g. in relation to the configuration of the mobilising system, amended procedures have been implemented to ensure that similar circumstances do not occur in the future.

There was one alleged incident where an appliance was allegedly mobilised to a street in Dundee rather than a similarly named area in the Highland area. We have questioned a number of people independently about this, and cannot find any trace of this incident on any of the Service's systems.

## 4\_Highland & Island Support

### 4.1\_Introduction

We looked at delivery and support provided in the Highland and Western Isles, Orkney Islands and Shetland Islands (WIOS) areas. Specifically we considered staffing arrangements, fleet and operational equipment, property and other support arrangements.

In line with HMFSI's normal operating practice, a data request was submitted to the Service with regard to the above areas of inspection. Desk top analysis was undertaken and then fieldwork conducted.

HMFSI has previously conducted a Local Area Inspection (LAI) of the Western Isles<sup>5</sup>. We are planning to conduct an inspection of the Highland area during the summer of 2017 and so in preparation for this we have interviewed the LSO and looked at data on the area: we will be doing the fieldwork later this year. We have not yet undertaken a routine LAI of the Orkney or Shetland Islands, but have visited the area during our fieldwork for some of our past thematic inspections. Both the Orkney and Shetland Islands were visited and a sample of fire stations inspected in order to gather evidence for this report.

### 4.2\_Staffing Structure Arrangements

#### 4.2.1 Arrangements in Place in the Highland area

The Highland area is geographically very large and the LSO is Area Manager John MacDonald. This area has 61 fire stations (1 wholetime station, which also has a retained section, 51 Retained, and 9 Community Response Units). There are four Group Managers and 10 Station Managers, the structure is shown in figure 2.

The majority of Group Managers are located in Inverness whilst the Station Managers are based at locations throughout the Highland area. The LSO has an expectation that Station Managers will have contact with all station personnel at least once per month. The expectation for himself and the Group Managers is that they will show visible leadership within their area of responsibility, we will be checking on this during our LAI in the summer of 2017.

The Inverness wholetime station (the station also has a retained appliance) staffing level and duty system are similar to every other wholetime duty system station in Scotland.

All the retained duty system stations have a structure of a Watch Manager and at least one Crew Manager. The Service generally works on an establishment, for planning purposes, of 10 firefighters per appliance on a station. Due to retained recruitment problems, which are similar for most retained stations within the mainland of Scotland, many of the stations are below the Service's planning level. In the Highland area, SFRS has a vacancy level of around 13% on an operational retained establishment of about 650. The average availability was just over 84.8% during the months of November and December 2016 when this inspection was taking place. There are particular issues affecting availability at Lochinver station, which was unavailable due to staffing all of the time, whilst Golspie station achieved 100% availability and there were also many other stations over 90% (Nov/Dec 2016).

<sup>5</sup> ibid



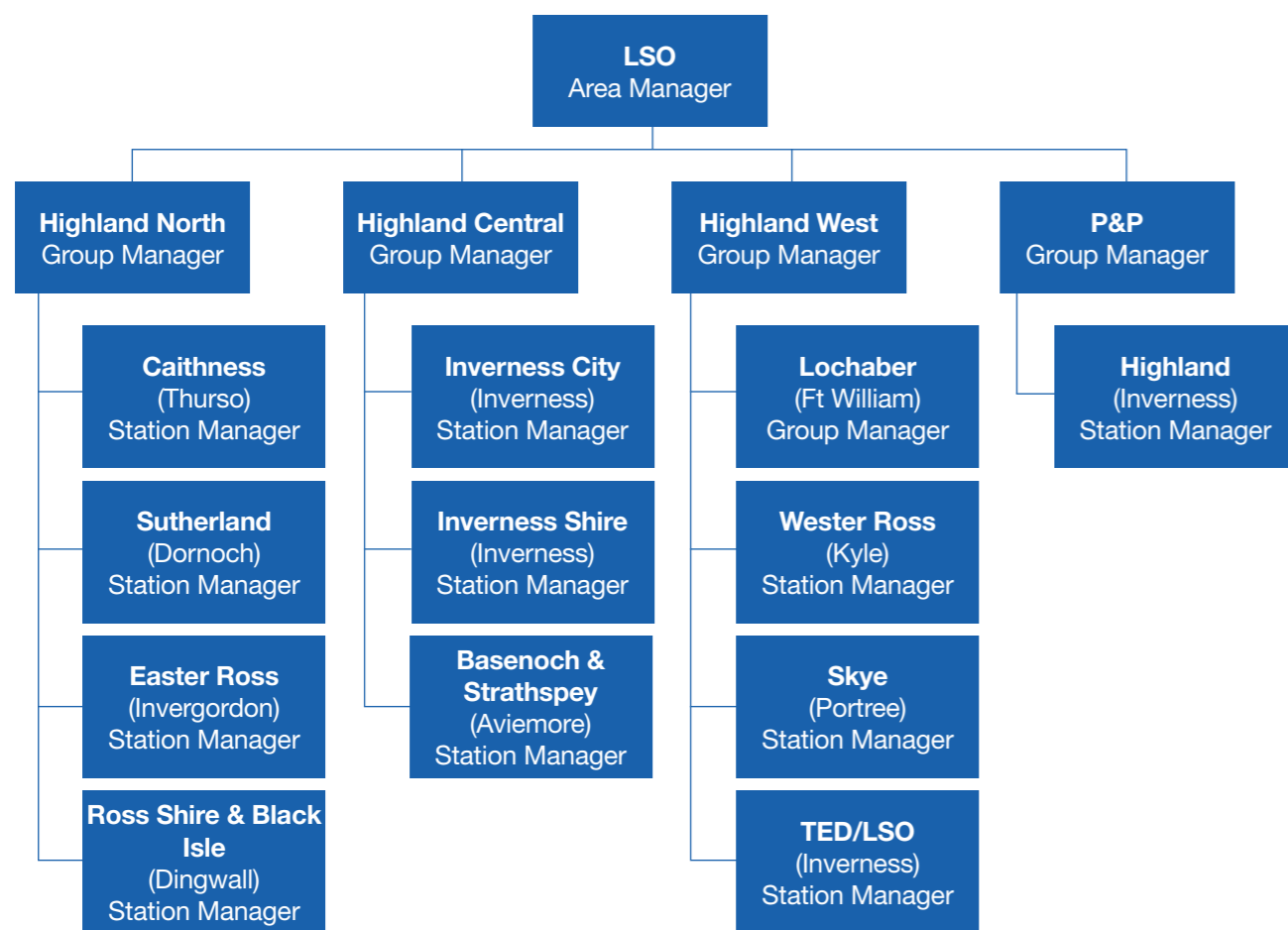


Figure 2 Organisational structure for Highland area

Incident Command cover is available from an officer of the North Service Delivery area cover group and whilst in some cases the attendance time may be long (due to geography), designated first and second call officers attendance coverage is available (the requirement for attendance of first and second call officers relate to the initial size or the development of an incident). Officers on the group hold the specialist skill sets generally required by the SFRS.

#### 4.2.2 Arrangements in the WIOS area

The three groups of islands (Western Isles, Orkney Islands and Shetland Islands) all fall under the same Local Senior Officer – Area Manager Fraser Burr. Each of the groups of islands has a Group Manager, a Station Manager and a Training and Employee Development (TED) team comprising a number of Watch and Crew Managers. Due to the comparatively remote location, these are difficult positions for the SFRS to fill, even on promotion. Each group of islands has a number of retained fire stations with a Watch Manager and at least one Crew Manager in charge of a firefighter establishment, the exact number is determined both by the number of appliances based at the station and the ability to recruit.

#### North Ronaldsay Community Fire Station

North Ronaldsay in Orkney is an island about 5km long. It has an airport with daily inter-island flights (weather permitting) and a ferry port where there is a weekly ferry, which increases to two ferries a week in the summer (weather permitting). The island has a population of 72 (2011 census) which has been in decline since 1881 when it stood at 547. The main industries are crofting/farming and tourism. There is a bird observatory on the island which has hostel and bed and breakfast accommodation capable of providing for up to 34 persons. The island has one fire station which is crewed by only four firefighters due to recruitment issues, and which currently achieves 86.48% availability (Nov/Dec 2016) (a fire appliance is only available when it has a crew of 4). Any loss of a crew member (retirement, sickness, off island travel etc.) will result in availability dropping to 0% and the island being without fire cover. The fire station is a steel container which is connected to electricity, water and Wi-Fi (very poor connection), there are no toilet facilities. The appliance is a 2003 LDV fitted with water tank and pump. It also carries a small ladder, 4 BA sets are fitted, with ancillary equipment to deal with risks on the island.

Additional supporting appliances would need to come via ferry or the crews fly in with supporting equipment (weather permitting).

Officer cover would be provided from the officers in the Orkney area or from the mainland of Scotland by plane or ferry (weather permitting).



Retained recruitment is a major issue within the three island groups for many reasons, including the small number of adults resident on many of the islands who would want to join, have appropriate fitness, and have primary work patterns which allow short notice release to attend incidents. The vast majority of stations struggle with recruitment and are below establishment, to an extent where some are only just viable, see example above. The single fire station on Fetlar (population, 61 – 2011 census), has only one firefighter and so is unavailable all the time. In the past the legacy service closed fire stations, for example on Flotta (population, 80 – 2011 census), even though this island has a large oil terminal (contingency plans have been put in place to allow attendance from neighbouring islands, one of which is Hoy (population, 419 – 2011 census) where the station at Longhope is now also suffering from its own recruitment problems and has been unavailable for a long period



of time). Overall, the three groups of islands have a vacancy factor of around 20% on an establishment of around 450, but despite this, the commitment of staff has maintained availability at around 80%.

Incident rates on many of the islands are very low, in some cases as low as one or two calls a year, but they do occur and could be life threatening as was seen recently on the Isle of Barra at a house fire which tragically resulted in loss of life. To counter this, prevention activity such as Home Fire Safety Visits are conducted, but these cannot guarantee that a fire will be prevented.

Four firefighters is the minimum number required to implement a traditional safe system of work to enable a BA crew entry to be made into a building to fight a fire and to rescue people. Traditionally a crew of four is a cut-off point and below this number an attendance would not be made. As indicated above, recruitment to achieve even this minimum level of four firefighters is a major issue on some islands.

Where there is only one fire appliance on an island like Felter, Hoy, North Ronaldsay, or Barra, and the appliance is not available, then the response will have to come from neighbouring islands with extended attendance times and consequentially the potential for additional damage or even loss of life.

In recent years new technology has come onto the market (e.g. cold cutting, high pressure misting systems) which could be operated from outside the building to provide an intervention, under a safe system of work with fewer firefighters. When combined with other equipment such as positive pressure ventilation fans and thermal imaging cameras this alternative way of working can reduce the spread of fire, remove the products of combustion, and so potentially save lives prior to additional resources arriving to allow traditional methods to be used. We are aware that the Service is looking at these technologies and would recommend that it considers these systems for very remote locations where recruitment is a major issue.

Officer command cover arrangements, which have existed for many years, is also limited on the islands as there are only two flexible duty officers on each island group. The flexible duty system means that these officers are only on call for 50% of the time and for the remainder of the time SFRS relies on officer recall arrangements or officers flying out from mainland Scotland, which can be affected by the weather. Each island group does have significant risks (e.g. Shetland – the Sullom Voe oil and gas terminal) where the establishment of command management (in line with SFRS policy) could be essential to bring the incident to a safe conclusion.

The Training and Employee Development (TED) training team is part of each on-island management team and they provide an important role in training staff on stations.

On-island management teams aim to make frequent support contact with all stations. This contact on the whole is occurring and from our discussions with a limited number of staff, is appreciated.

#### **4.2.3 HMFSI's comments on the Highland and WIOS staff arrangements:**

We have no reason to doubt that Highland fire stations are being supported by the management team with the structure the LSO has in place and his expectation of those staff. We will be testing these arrangements in our Highland area inspection during the summer of 2017.

We found that fire stations within the island groups are being supported on a regular basis by on-island management teams, with the LSO visiting and being visible whenever the opportunity arises.

We also noted that the Chief Officer and other members of the senior management team have visited Highland and WIOS as they have done in other parts of Scotland. This contact on the whole is welcomed by staff and shows that whilst personnel are geographically remote they are not overlooked by the most senior members of the service.

The Highland and WIOS areas, like the rest of Scotland, do have recruitment issues in regards to the retained duty system which is affecting appliance availability in some areas more than others. While SFRS managers and Board members are well sighted on this, it is a significant issue that needs to be addressed.

**We recommend that the Service should consider the new firefighting technologies, such as cold cutting or high pressure misting, for remote rural locations where there are recruitment or reduced availability issues, as safe systems of work with fewer firefighters might be constructed that would allow a firefighting intervention to be made.**

There is limited managerial need for senior officers to be located on the island groups, which is why there is only one Group Manager and one Station Manager in each of the three groups (Shetland, Orkney and Western Isles). However using SFRS normal Flexi Duty Officer rota systems for command of incident means that there is a senior officer in the islands on duty for 50% of the time, with the SFRS Island groups reliant on 'officer recall to duty' or out of island attendance/monitoring for the remainder of the time.

**We recommend that the SFRS designs and implements a separate flexible duty management system for these island groups, so that first call officer attendances can be available at all times within each island group. We think that this is required to improve the prospect of establishing a command system to resolve larger incidents and to ensure the health and safety arrangements for staff, who by their remoteness and island isolation have limited operational experience.**

## 4.3 Property

### 4.3.1 Arrangements in Place

The SFRS maintains a total of 101 fire stations and community response unit facilities within the Highland and WIOS areas. The type, age and condition of these premises varies. The average age of premises is 21 years old, with an age range of build between 1950 and 2013. The majority of premises are owned while 14 others are leased. For example: Lerwick Community Fire Station is a modern three bay station and includes Shetland Islands District Office, which was opened on 12 April 2003 and has all modern facilities including disabled access and a gym. By comparison, the Community Fire Station on the neighbouring Island of Bressay just a few miles away from the Shetland mainland is a building which is part leased by the Service, the back half, separated by a low block wall, could be used by a farmer for storage and/or his livestock. The station has no toilet facilities and the office accommodation/kit storage area is a timber built room in the corner of the shed. The shed has no insulation and any items left outside of the office were found to be damp and subject to water deterioration. It has no community facilities but is described as a Community Fire Station.

In terms of energy efficiency measures, two fire stations are fitted with solar panels or similar devices.

Baltasound Community Fire Station on the island of Unst in Shetland is the only station within the Highland and WIOS areas, to be shared with the Scottish Ambulance Service.



Lerwick Community Fire Station



Bressay Community Fire Station

The SFRS has invested 31% (£5.9m) of its major works capital programme in the Highland and WIOS areas over the first four years of its existence. Despite this investment there are 17 Community Fire Stations which do not have basic toilet facilities, but could be open to the public, seven of these do not have running water, which in the 21<sup>st</sup> century with a National Framework encouraging SFRS to be an employer of choice, to promote safety, health and wellbeing to a diverse workforce that is representative of the community both in terms of gender and ethnicity, is not desirable.

Property defect reporting is done via the Service's online defect system. Defects are prioritised and work contracted on the basis of need. The Service has invested 7% (£1.06m) of its minor works programme in the Highland and WIOS areas over the last four years.

### 4.3.2 HMFSI's comments on the arrangements

The SFRS has invested a considerable amount of its capital programme over the first four years of its life in to the Highland and WIOS areas, due to the legacy issues that it inherited. These issues were highlighted in HMFSI's 2012 inspection report<sup>6</sup>. Whilst progress has been made, as we have highlighted above, there is still considerable work to be undertaken.

## 4.4 Fleet and Equipment

### 4.4.1 Arrangements in Place

The fleet of vehicles in operation in the Highland and WIOS areas is of varying ages. Details are shown in the table.

Area	Number of Vehicles	Age Range of the Fleet in the Area	Average Age of Fleet in the Area	Number of Vehicles showing signs of uneconomical to repair*
Highland	71	1998 – 2015	11 Years	21 (30%)
Western Isles	15	1998 – 2012	13 Years	2 (13%)
Orkney Islands	15	1998 – 2014	14 years	9 (60%)
Shetland Islands	15	1998 – 2013	14 years	5 (33%)

\*SFRS assessment done in line with Institute of Transportation Engineers standards

Table Vehicle fleet details

The Highland and WIOS areas have attracted 16% of the vehicle fleet replacement capital at around £3.85m since the formation of the SFRS. With this level of capital investment there is a replacement of approximately four appliances a year within the areas and so it would take around 29 years to renew the fleet (assuming like for like replacement), this is far longer than the normal expected usable life span of these vehicles. The SFRS has assessed the fleet and determined that 37 of the appliances in the Highland and WIOS areas are showing signs that they are becoming uneconomical to repair. We were informed that there is a £65m backlog on the vehicle replacement programme throughout Scotland.

All vehicles that operate within the Highland and WIOS areas are serviced to standard SFRS schedules of work which comply with industry guidance. All vehicles have a safety inspection every 13 weeks in addition or at the same time as vehicle servicing. These checks are conducted independently by inspectors from the Freight Transport Association in the Islands with full reports submitted to SFRS: we spoke to one of their representatives during our fieldwork. The other safety inspections are carried out in Highland by SFRS mechanics from the Inverness workshop. The Service's vehicles, with the exception of those in Shetland, are serviced by SFRS employed mechanics from one of the vehicle workshops in Inverness or Dundee. In Shetland servicing/repair work is conducted by one of two local LGV garages, this work is carried out to SFRS servicing requirements and schedules. This arrangement has improved response time dramatically and has saved money, HMFSI would encourage this

<sup>6</sup> ibid

arrangement in the other islands if it is possible, as it not only reduces attendance/repair time and potentially costs, but also supports employment on the islands.

Vehicles are checked on a weekly basis by drivers during the station training nights, with records being kept of these checks. These records are to a standard we have seen elsewhere in Scotland.

The major items of equipment on appliances are serviced and tested in line with normal SFRS processes by vehicle technicians trained to equipment manufacturers' standards. Lifting equipment is tested by the Service's insurers. Overall the Service's equipment varies in age, some of it is outside of the manufacturer's recommended life span, but all equipment has been tested in line with manufacturer's recommendations. There is a backlog of needed equipment replacements and some essential equipment, such as defibrillators, are strategically placed to provide coverage.

Fire appliances are fitted with Drager Breathing Apparatus (BA) sets which are tested on station in line with the manufacturer's recommendations. We have sampled the records kept on station and found these to be generally satisfactory. The SFRS is now operating on a standard BA set across Scotland. This has led to standardised practices in this key area of service activity.

Personal Protective Equipment (PPE)/Fire Kit is issued to all firefighters, with records of inspection kept on station. We found these records, in general, to be satisfactory, however there were a few exceptions. Some of these exceptions are picked up during the SFRS's routine station audits. We were told that the PPE cleaning arrangements have changed relatively recently with the kit now being sent away for cleaning commercially, rather than using on-station washing machines and that the turnaround time can be several months. Whilst fire kit is generally bar-coded, we have not seen records of cleaning or repair but have been told that since the new cleaning contract has come in these are being kept by the contractor. The Service is currently tendering for replacement PPE and we understand that this will be rolled out during 2017 when issues regarding the procurement process have been resolved. At this time we are told that full records of all kit will be kept so that the cradle to grave history of each item will be available, this has not been possible up to now due to legacy issues (this is the standard of records that HMFSI would expect).

We observed in some locations that equipment that had been issued for casualty care (e.g. spine boards), was not on appliances. We have made comment on this in LAI inspection reports for other areas in Scotland. We would encourage the Local Senior Officers to ensure that, where this equipment is available and compatible with appliance stowage, it is made available on appliances, so that it can be used at incidents for the benefit of the community. If it is not compatible with appliance stowage then alternative arrangements should be made.

In 2014 Internal Audit conducted an audit of the Service's overall fleet management arrangements and gave an assurance level grading of 'reasonable'.

#### 4.4.2 HMFSI's comments on the arrangements

We found that the systems in place to be the same as those elsewhere in Scotland. The vehicle fleet is serviced and inspected as frequently as elsewhere and the recent arrangements in Shetland have speeded up repairs and servicing considerably, we consider this model of delivery to be good practice on the islands.

From our sampling we found station record keeping on standard tests to be in the same format and to a similar standard as other LSO areas in Scotland.

The growing age of the vehicle fleet and its condition as reported by SFRS, if repeated throughout Scotland, would present a significant risk to the Service and so we have determined that HMFSI will conduct a thematic review of SFRS's fleet arrangements within the next year.

## 4.5 Training

### 4.5.1 Arrangements in Place

All officers and firefighters within the Highland and WIOS areas undergo the same initial, continuation, command and specialist training as any other SFRS operational member of staff in Scotland.

The Service has a number of training venues throughout Scotland where staff can go to undertake this training. Since the formation of the SFRS, the Service has been developing training facilities at Stornoway in the Western Isles, Sumburgh Airport in Shetland and Kirkwall in Orkney. The Stornoway and Sumburgh facilities are now operational which is allowing some training in relation to BA to be undertaken on the Islands. Within the Highland area there are training facilities at Invergordon and Fort William. There are training facilities outside of the Highland area at Oban and Portlethen. These mainland facilities all involve considerable travel for the majority of staff in the areas.

Continuation training to maintain competence is conducted using the Service's on-line Learning Content Management System (LCMS) learning resource for firefighters. The system contains multi-media learning modules covering the skills based on the Maintenance Phase Development Planner (MPDP). Each subject has a series of e-learning tools, case studies, interactive packages, and assessments to support learning. Training is recorded using the Personal Development Recording (PDRPro) system. PDRPro is an electronic system used by Wholtime and Retained firefighters to record training and learning development, both from formal training and from continuous development obtained during actual incidents. This is the same as any other part of Scotland. These systems rely on IT connectivity. We comment on this further below but, in brief, connectivity is variable and poor in many areas. The Service has provided paper recording systems and memory sticks with training packages for the stations with poor IT connectivity.

We have sampled the training records of personnel and they are being kept to a similar standard to those that we witness on LAI throughout Scotland. The same issues of access to systems via slow broadband connection speed, limited numbers of computers are present in this area of Scotland as found in other areas of the Service.



TED officers are based in the Highland and WIOS areas and these staff provide more specialist training to staff than that delivered by the on station officers. There is contact between TED officers and the stations on a frequency that is similar to what we see in other parts of Scotland.

#### 4.5.2 HMFSI's comments on the arrangements

The training arrangements for the Highland and WIOS areas are the same as we see in the rest of Scotland. There has been significant investment in on-island training facilities since the formation of the SFRS, so that more training can be delivered locally.

## 4.6 Other support arrangements

### 4.6.1 Arrangements in Place

IT – There is no separate arrangement for IT provision to the Highland and WIOS areas. The areas use the national arrangements. Connections are very slow in some locations and the SFRS strategy is to set up IT-based systems to record and action many things. IT connectivity has been identified as an issue by the Board and management team and a contract has been let to speed up these connections where possible. We have seen in other areas of Scotland improved performance where this was possible.

There are limited numbers of computers on stations but the number is in line with the provision provided to similar stations elsewhere in Scotland.

Human Resources (HR) – HR advisors have been made available to support managers; this is standard practice throughout Scotland and the level of coverage is similar to elsewhere.

Health and Safety – the SFRS support and operating practices have been implemented in the WIOS area. This is a subject we will look at in more detail for the Highland area when we carry out the local area inspection later this year, but in general the arrangements and level of provision is the same throughout Scotland.

### 4.6.2 HMFSI's comments on the arrangements

We found the same support systems operating in the Highland and WIOS areas as we find elsewhere in Scotland to support other LSO areas.

# 5 Conclusions and recommendations

## 5.1 Conclusions

This is a fact finding inspection of Dundee Control and the SFRS's service delivery and support arrangements in Highland, Western Isles, Orkney Islands and Shetland Islands.

We found the CCF project to be well managed with good governance arrangements that linked to the Service's transformation arrangements. The project team has dedicated staff who are appropriately qualified. The programme is generally running in line with Prince 2 project management methodology. The programme has been inspected by internal audit.

We found that the new operations control room in Dundee was in temporary accommodation. New accommodation is in the final stage of completion and the Service is planning the cut over to the new control suite. This suite is considerably larger than the old one, which was on the same site: when completed it will be a suitable site to house the North OC.

The mobilising system is 'Vision 3' working on a national gazetteer. The system is not compatible with either of the other two control systems that SFRS operates and so staff are not interchangeable without additional training. The system is configured in line with other 'Vision 3' systems in operation in other UK Fire and Rescue Services.

On the whole, control room operators have received appropriate training to be able to operate the system, they are also receiving familiarisation visits to parts of Scotland that they are mobilising to, which was appreciated by control staff and crews in those areas we spoke to.

Staffing in the control room was five below the establishment level and this was creating problems with maintaining minimum staffing levels. The reason for this shortage relates to the historic need to keep vacancies for staff from the two legacy controls to transfer into. Staff did not take up these transfers and elected for redeployment into other SFRS posts or for voluntary severance. We believe that this was due to the additional travelling distance involved and a lack of willingness to relocate. The Service is recruiting and training new operators, but they will take time to acquire the skills and the experience to become fully competent. We also observed that a significant percentage of the Control managers were in the development phase of their role, this creates organisational risks when so many operators are also in development and require detailed supervision.

At the time of the inspection the Service was planning to make the move to a new common duty system, which is an annualised hours duty system. Whilst this is a much more flexible system for the Service and the individual, it needs to be suitably staffed. The SFRS is confident that this system will make minimum staffing levels easier to achieve. We are concerned, however, that with an additional four staff needed on top of the existing vacancies, which are now being filled, that the system's buffer which allows flexibility will be used up quickly resulting in problems later in the year or that too many operators in development will be working on a shift with too few fully qualified supervisors. We have made a recommendation in this respect.

Concerns have been raised about the response to specific incidents. We have examined the records relating to these events and can confirm that the SFRS has investigated these incidents and reported to Ministers. The report made is accurate (Appendix 1). It is easy for members of the public to criticise SFRS mobilising arrangements with the benefit of hindsight, but control staff often receive incomplete or inaccurate information from callers who are



often in a distressed state. Everything that happens in the control room is recorded and date/time stamped via voice tapes or key stroke loggers on the system. Records are kept on everything that allows detailed analysis later. The responses mobilised by Dundee control to the incidents in question were generally in line with SFRS policy and procedures, proposed by the mobilising system and what we would have expected. Where there has been an issue the Service has been quick to admit it and put in place remedial action, so as to try and prevent a recurrence. Based on the incidents we examined, Ministers and the public can have confidence in SFRS's explanation of events and that they have the capacity to respond flexibly and learn lessons continuously.

Dundee OC is new and the watches are still forming into teams, we are of the view that the level of scrutiny that staff there are under at the moment, along with the number of visitors, is hampering the team formation process, this we believe will be overcome in time.

With regard to service delivery and support in the Highland and WIOS areas we found systems and processes that are in common with the rest of Scotland. There are still some issues from the legacy service which HMFSI reported on previously. The Service has invested and given priority to these areas over other parts of Scotland, but it has more to do.

The issues that need to be addressed further include:

- The inability to recruit sufficient retained duty staff (this is not an issue unique to the Highlands and WIOS or to Scotland) but it does present a considerable risk with many fire appliances not available, due to insufficient staff. This is particularly acute on certain single appliance island locations where it is difficult to receive support.
- The age of fire appliances and rate of replacement is a systemic risk issue for the Service. HMFSI intends to do a thematic inspection of the Service's vehicle fleet arrangements later this year, so as to fully understand the scale of the issues across the whole of Scotland.

## 5.2 Recommendations

5.2.1 We recommend that the staffing level and the number of competent managers on duty in the Dundee OC should be monitored at the highest level within the Service, and that those senior people satisfy themselves that contingency plans are in place and activated when needed, so as to maintain minimum staffing levels at all times.

5.2.2 We recommend that a staff **succession** plan for Dundee OC be formulated and implemented.

5.2.3 We recommend that the Service should consider the new fire fighting technologies, such as cold cutting or high pressure misting, for remote rural locations where there are recruitment or reduced availability issues, as safe systems of work with fewer firefighters might be constructed that would allow a fire fighting intervention to be made.

5.2.4 We recommend that the SFRS designs and implements a separate flexible duty management system for these island groups, so that first call officer attendances can be available at all times within each island group. We think that this is required to improve the prospect of establishing a command system to resolve larger incidents and to ensure the health and safety arrangements for staff, who by their remoteness and island isolation have limited operational experience.

## 6 Glossary and abbreviations

Throughout this report, at the risk of some repetition, we have minimised the use of abbreviations in the interests of readability. There are some exceptions, particularly where an abbreviation is used so widely within or outside the Scottish Fire and Rescue Service that spelling it out on each occasion would look unnatural. An example is 'SFRS' for Scottish Fire and Rescue Service. An explanation of abbreviations used can be found in the table below.

BA	Breathing Apparatus
CCF	Command and Control Futures
CM(C)	Crew Manager Control
CO	Chief Officer
FF(C)	Firefighter Control
FRS	Fire and Rescue Service
GM(C)	Group Manager Control
HMFSI	Her Majesty's Fire Service Inspectorate
HR	Human Resources
H&I	Highlands and Islands
ICCS	Integrated Command and Control System
IT	Information Technology
LCMS	Learning Content Management System: an online learning resource for firefighters
LDV	LDV (vehicle brand name formerly Leyland DAF Vans)
LGV	Large Goods Vehicle
LSO	Local Senior Officer: by law the SFRS has to appoint a LSO for each local authority area in Scotland
OC	Operations Control
PDA	Pre-determined attendance: SFRS computerised control systems automatically nominate how many fire appliances are sent to a fire call, based on Service policy, on the nature of the call and the nature of the premises involved.
PDRPro	Personal Development Recording: PDRPro is an electronic system used by both Wholetime and Retained firefighters to record training and learning development, both from formal training and from continuous development obtained during actual incidents
PPE	Personal Protective Equipment
RDS	Retained Duty System

Senior leadership	The term we use to describe the Board and Strategic Leadership Team acting together to provide governance and management of the Scottish Fire and Rescue Service.
SFRS	Scottish Fire and Rescue Service.
SG	Scottish Government
SIPB	Strategic Intent Programme Board
STPB	Service Transformation Programme Board
SLT	Strategic Leadership Team. The most senior operational leadership group within SFRS.
SM(C)	Station Manager Control (two grades A & B can be established)
STPB	Service Transformation Programme Board
TED	Training and Employee Development
UK	United Kingdom
WM(C)	Watch Manager Control (two grades A & B can be established)
WIOS	The acronym for Western Isles, Orkney Islands and Shetland Islands. One of the LSO areas in the SFRS
2005 Act	The Fire (Scotland) Act 2005.

## Appendix 1\_

# SFRS Response to Queries on Specific Incidents

### Query

“In the first month from the Inverness Control closure, there has been some really astounding mistakes made, such as the unit on the Island of Bressay being turned out to go to an incident on the island of Yell because it allegedly looked closer on the map, there is 5 other stations closer to Yell”

### Response

This occurred on the 10/12/17, INCIDENT 012838 RTC

There is no explanation on the log regarding why the incorrect appliance was initially selected, however this could be related to a configuration anomaly which has since been amended. The correct appliance was mobilised and attended although it appears to only have 3 of a crew. Permission to attend was granted by GM \*\*\*\*\*.

### Query

“Another incident where Lairg were called out to attend an incident in Skye, a 2 hour journey and over 100 miles away”

### Response

This occurred on the 12/12/16, INCIDENT 013079 – Helicopter landing lights.

This was a mobilising error, however OC realised this and amended immediately and the Lairg crew were contacted on arrival at the station to inform them. The correct appliance had also been mobilised at time of call so there was therefore no delay in attendance times. Mobilising errors can occur, however, with crew’s local knowledge and the experience of the OC personnel we will always rectify without delay.

### Query

“Another couple of very alarming mistakes involving very serious road accidents where firstly Aviemore – Grantown and Carrbridge were mobilised to an accident at Tomatin, when Inverness were closer than both Grantown and Aviemore, and would probably have been in attendance before Carrbridge”.

### Response

This appears to be an incident which occurred on 22/12/16, INCIDENT 14238, RTC. The address from the caller was given as SOUTH OF SLOCHD SUMMIT, A9. This is the correct response for that area. No corrected address was passed to Control from the incident so there was no indication that this incident was at Tomatin. OC mobilised given the information they received at the time, which was to the initial address. Again it should be emphasised that OC are reliant on info passed by callers and whilst they will ask further questions and points of clarification, ultimately they can only respond to the specified address. Any doubt could (and does) result in mobilisation to different but similar sounding addresses.

### **Query**

“Secondly the Emergency Tender was not initially mobilised to the fatal RTC at Lochend before Christmas, it was only mobilised when one of the appliances attending developed a fault”

#### Response

This occurred on the 22/12/16 INCIDENT 14263.

This was reported as TWO VEHICLES, CARS, and POSSIBLY ONE TRAPPED AND THREE PERSONS INVOLVED. This correct response for this incident type was mobilised, this would have been the same Pre Determined Attendance (PDA) no matter what OCR made the initial mobilisation. Appliances were assigned at 12:48, in attendance at 13:01. At 13:15 a request for the attendance of the Heavy Rescue Unit for cutting equipment and sharps protection was made, this was an assistance message made from incident ground and is normal procedure if the Incident Manager requires the attendance of further resources.

### **Query**

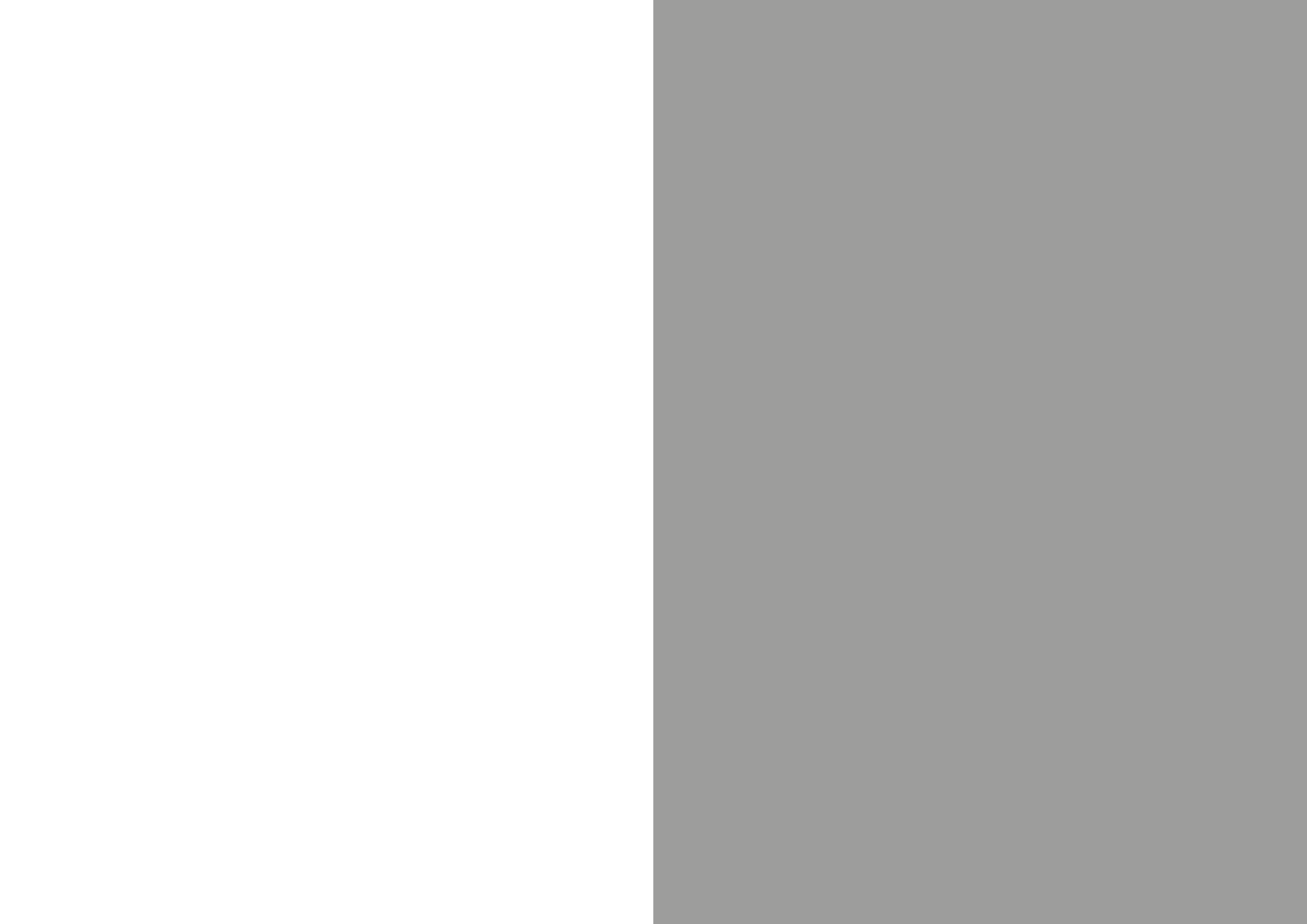
“The 3 centres will not cope with spate times when hot weather or natural disasters like heavy rainfall and high winds occurred, when the 8 centres could bearly cope, how will the 3 centres manage? They won’t is the answer!”

#### Response

Each Control Room has a minimum level of staffing to suit their increased workload. Inverness OC operated on occasion with 2 staff which could not be considered fully resilient, and the migration into our North SDA Regional OC has increased the number of OC personnel on duty. We are also looking at improving staff in our North OC through review of Watch system (5 GDS) and the release of CCF staff back into the OC environment.

This, coupled with the improved standby control room at Blackness Road will add to the resilience of the North SDA and better protect our communities.

\*\*\*\*\* Name removed by HMFSI as not relevant to this report. The officer has SFRS authority to make this decision.







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