

Integrated Risk Management Plan 2016-2021



**Northern Ireland
Fire & Rescue Service**

Protecting Our Community

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Abbreviations

ADF	Accidental Dwelling Fire
AOM	Active Operational Monitoring
BA	Breathing Apparatus
BSO	Business Services Organisation
C&C	Command and Control
CBRN	Chemical, Biological, Radiological & Nuclear
CFFT	Compartment Fire Fighting Training
CFRAU	Chief Fire and Rescue Advisor Unit
CO	Carbon Monoxide
DC	Day Crewing
DCLG	Department for Communities and Local Government
DHSSPS	Department of Health, Social Services and Public Safety
ERAS	Emergency Response Availability System
ERS	Emergency Response Standards
EU	European Union
FBU	Fire Brigades' Union
FReM	Financial Reporting Manual
FRS	Fire and Rescue Service
FSEC	Fire Service Emergency Cover
GIS	Geographical Information System
HFSC	Home Fire Safety Check
HSC	Health and Social Care
HSE	Health and Safety Executive
ICCS	Integrated Communications Control System
IRMP	Integrated Risk Management Plan
IRS	Incident Recording System
IT	Information Technology
ITS	Information Technology Services
MODAS	Mobile Data Systems
MPMNI	Managing Public Money NI
MSMF	Management Statement and Financial Memorandum
NI	Northern Ireland
NIAS	Northern Ireland Ambulance Service
NIFRS	Northern Ireland Fire and Rescue Service
OTOC	Operational Test of Competence
OTOP	Operational Test of Potential
PPE	Personal Protective Equipment
RCC	Regional Control Centre
RCI	Risk Critical Information
RDS	Retained Duty System
ROI	Republic of Ireland
RTC	Road Traffic Collisions
SAR	Search and Rescue
SFRS	Scottish Fire & Rescue Service
SSRA	Site Specific Risk Assessment
UK	United Kingdom
VC	Variable Crewing

Foreword

Welcome to the Northern Ireland Fire & Rescue Service Integrated Risk Management Plan 2016-2021. We are very pleased to be jointly introducing this plan which sets out the high-level proposals of what NIFRS intends to achieve over the next 5 years.

The role of the Fire & Rescue Service has evolved considerably over the last 10 years with increased responsibility for protecting our community within an economic climate which has produced significant financial challenges for all Public Services.

NIFRS protects and serves the whole of Northern Ireland, responding to fires, road traffic collisions and other emergencies, such as search and rescue incidents, serious flooding and chemical, biological, radiological or nuclear incidents.

Covering the second largest Fire & Rescue Service area in the United Kingdom we are unique in that we are the only UK Fire & Rescue Service to share a land border with a European Union State, the Republic of Ireland, and we have no land border with any other UK Fire & Rescue Service, severely limiting any reliance on external support for resilience.

Our work continues to contribute to making Northern Ireland safer. From 2006/07 to 2015/16 there has been a 32% reduction in the number of emergency incidents we responded to. We have successfully reduced the number of hoax calls by 71% in this period and the number of secondary fires by 60%, enabling us to make more effective use of our resources. The number of dwelling fires reduced by 13%, other major fires by 37% and road traffic collisions by 14%. Reflecting our increased statutory duties, the number of other special service calls we responded to has increased by 89%.

We have also improved our resilience against flooding, transport, collapse, and CBRN incidents. Over recent years events, such as G8 and the Olympic Torch Relay, have afforded us the opportunity to test and increase our levels of experience in multi-agency planning and management of major incidents.

Whilst we have seen improvement in areas of performance, we cannot be complacent. In 2015/16 we responded to 14 fatalities in dwelling fires, 48 fatalities due to road traffic collisions and 37 fatalities at other special service calls. There were 3,852 casualties: 1,464 requiring rescue and 1,628 people rescued without injury.

This 5 year plan recognises that we will have to make fundamental changes across NIFRS to ensure we continue to deliver a Fire & Rescue Service that is relevant to

the existing and future needs of the community. Many of the changes will be significant and complex and will take time to develop, consult upon and implement.

Our initial risk analysis work has identified that there is potential to further reduce the frequency and impact of emergency incidents. We are undertaking to further develop our risk analysis to fully understand the types of risk people in Northern Ireland face. This work will inform a review of our management structure and service delivery arrangements in line with Local Government Reform and ensure a fully integrated approach to the delivery of prevention, protection and emergency response over the next 5 years.

In the current economic climate, we face significant challenges in the recruitment, retention and availability of Retained Duty System Firefighters and we must review current arrangements to identify how we can continue to effectively deliver our services.

We have a long and successful history of partnership working with other agencies in Northern Ireland and over the next 5 years we will explore opportunities for further collaboration to deliver an improved service to the community.

As we aim to meet the challenges ahead, we are confident that we will continue to remain committed to protecting our community and to working with others to improve the safety and well-being of everyone.



G. Thompson

Gary Thompson

Chief Fire & Rescue Officer
Northern Ireland
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Carmel McKinney

Carmel McKinney OBE

Chairperson
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Fire & Rescue Service Board

Executive Summary

Northern Ireland Fire & Rescue Service (NIFRS) has completed a comprehensive risk assessment of how it performs in delivering its service to the people of Northern Ireland (NI). This assessment has been informed by an external Peer Review conducted by leading experts from across the United Kingdom (UK) Fire Sector. This Integrated Risk Management Plan (IRMP) highlights the key areas that NIFRS will address to deliver a modern Fire and Rescue Service (FRS) that is relevant to the existing and future needs of the community we serve.

Use of advanced risk analysis technology and analysis of multiple data sources can further enhance NIFRS capability to develop intelligence led strategy, improving the ability to target resources where they are most needed.

Understanding why a particular risk is higher in certain areas than others, or why a particular group of people in our community are at higher risk from an emergency incident, will enable NIFRS to develop and deliver a citizen centric approach to managing risk. Our aim is to keep the people of NI safe by appropriately integrating the provision of prevention, protection and emergency response to optimise risk reduction.

The key proposals within this Plan detail how NIFRS will better identify and manage risk over the next 5 years. In order to effectively deliver these proposals we must also address a number of corporate risks. Identified corporate risks are largely the result of a legacy of under investment in Estate and Information Technology (IT) infrastructure. Capital investment must be secured to deliver an IT System and Estate that is fit for purpose and provides the foundations to deliver a service that manages the risks faced by both the community and organisation.

NIFRS is currently allocated an annual budget with no financial reserves to draw upon. Operating in this environment makes it difficult to commit to long-term planning. We will require significant resources and long-term commitment to deliver an operating infrastructure which is fit for purpose. Business cases, tender and

procurement, project planning, and more significantly, financial planning will be necessary to secure success.

Sufficient numbers of appropriately trained Support Staff will be necessary to ensure the delivery of our proposals and to allow personnel to deliver our frontline community strategies.

Below is a summary of our key proposals for 2016-21:

Proposal 1: Develop our risk analysis capability to effectively target resources

NIFRS will invest in state of the art risk analysis/modelling tools and ensure suitably skilled personnel are available to assess risk. With anticipated budget reductions we must focus on identifying and using relevant data to inform an intelligence led, risk based strategy for the deployment of our resources.

NIFRS will build upon relationships with other partner agencies to develop cooperation and data sharing to enable those most at risk of fire and other emergencies to be identified and targeted for prevention activities.

Proposal 2: Review our service delivery and management structure in line with risk

Based on effective risk analysis, NIFRS will continually review its resource deployment to ensure service delivery arrangements match risk:

- We will develop innovative crewing models;
- We will target community engagement activity where needed most; and
- We will review our current Area and District management structure in line with Local Government Reform.

Proposal 3: Explore options to deliver a road safety awareness campaign targeted at 16 to 24 year olds

NIFRS is a key partner in the delivery of the multi-agency NI Road Safety Strategy and as such will continue to support the wider road safety message through a range of inter-agency programmes and events throughout the region.

We will evaluate the effectiveness of this work through a review of our current NIFRS Road Safety Strategy. We aim to refocus our efforts to influence a reduction in death and serious injuries, and improve behaviours exhibited by some road users within the identified 16-24 age group. This target group has been identified as most at risk to both themselves and fellow road users.

Proposal 4: Review and effectively manage the Retained Duty System (RDS)

The recently introduced electronic availability system to monitor RDS Firefighters has identified vulnerabilities in providing optimum response cover in particular areas. NIFRS has established an RDS Steering Group to review current arrangements and develop a management structure to meet modern and future FRS requirements.

Proposal 5: Review existing Emergency Response Standards (ERS)

We will review the existing NIFRS ERS, introduced in 2006, to ensure that they complement our recent community risk assessment.

Proposal 6: Explore opportunities for collaborative working with Health & Social Care (HSC) Services

We will work together with HSC and Northern Ireland Ambulance Service (NIAS) to identify how we can collectively deliver an improved service to the community we serve.

NIFRS currently work closely with our colleagues in NIAS at operational incidents, particularly RTC and bariatric incidents, and also share a number of our station facilities with them. As part of this collaborative approach, we will explore how our trained Firefighters can contribute through our existing response capability to further complement existing NIAS resources.

We will also explore how our prevention activities can be widened to deliver an enhanced community safety and well-being agenda.

Section 1 - What is Integrated Risk Management Planning?

IRMP is a process periodically carried out by Fire and Rescue Services, usually on a 3 to 5 yearly basis, where an assessment of local risk is carried out and future plans to manage that risk are communicated to local stakeholders. NIFRS has completed a comprehensive risk assessment of how it performs in delivering its service to the people of NI. The IRMP highlights the key areas that we must address to deliver a modern FRS that is relevant to the existing and future needs of the community we serve.

As part of the risk assessment we have analysed incident data, Census data and local risk information to create an accurate and current picture of the threats facing our communities. This informs our allocation of resources for prevention work, protection work including fire safety audits and inspections, and responding to emergencies.

We also ensure that we have the capacity to deal with large scale, unpredictable events through resilience planning. This involves agreements with other emergency services and partners, other FRSs and business continuity arrangements to deal with any potential disruptions to service delivery.

Risk is dynamic; it changes over time and can vary by location, season and time of day. Our approach to identifying and managing risk is driven by a National focus on the importance of understanding and tackling risks in a way which is open and accountable to communities.

In developing our IRMP, we have considered guidance and best practice from the Department of Health, Social Services and Public Safety (DHSSPS), Department for Communities and Local Government (DCLG), other UK FRSs and the Fire Brigades' Union (FBU).

NIFRS have adopted the following model to manage the IRMP process:



Purpose of Our IRMP

This document summarises the extensive research undertaken to analyse the risks in NI and provides proposals for our strategic focus for the effective management of these risks over the next 5 years.

The identified risks to our communities and our Firefighters, and the effectiveness and efficiency of our services, are what drive our key priorities and inform the work we will do. Our 5 year IRMP is an integral part of the overall planning process for our organisation.

Our main objective is the targeted integration of our prevention, protection and emergency response to ensure we have the:

Right Resources in the Right Place at the Right Time

Through this we hope to achieve:

- ✓ fewer deaths and injuries caused by fires and other emergencies;
- ✓ a reduction in the numbers of accidental dwelling fires;
- ✓ fewer deaths and injuries on our roads;
- ✓ safer business premises;

- ✓ increased partnership working between NIFRS and other stakeholders;
- ✓ less damage to property and to the environment;
- ✓ a reduction in the numbers of deliberate fires;
- ✓ reduced numbers of false alarms;
- ✓ decreased levels of anti-social behaviour; and
- ✓ improved efficiency.

The IRMP Planning Cycle

Scope: Organisational Drivers

There are a number of key drivers, mainly statutory, which influence what we consider our risks to be and subsequently how we deliver our service.

NIFRS has a statutory responsibility to attend particular incidents and carry out specific duties as detailed in the following legislation:

- Under **The Fire and Rescue Services (Northern Ireland) Order 2006** our duties moved beyond the historical activities of extinguishing fires to include other response activities, such as Road Traffic Collisions (RTC) and an increased focus on community engagement and legislative fire safety activities.
- **The Fire and Rescue Services (Emergencies) Order (Northern Ireland) 2011** further extended our statutory responsibility to include Chemical, Biological, Radiological and Nuclear (CBRN), Search and Rescue (SAR), serious flooding and serious transport incidents.
- Under **The Fire Safety Regulations (Northern Ireland) 2010** there has also been a shift in focus away from the 'prescriptive' nature of older fire safety legislation to a more risk-based approach.
- The **Civil Contingencies Act 2004 (Northern Ireland Civil Contingencies Framework)** provides blue light responders with guiding principles to manage procedures within the preparedness, response and recovery stages of large scale multi-agency events.

In addition to the incidents we respond to under our statutory responsibilities, we also attend incidents such as water rescues, bariatric rescues and animal rescues as part of our wider corporate social responsibility. We also consider attending such incidents where life or property is endangered or where we can provide assistance to the community we serve.

We also have statutory responsibilities under health and safety legislation/codes of practice, employment law, equality legislation and European Directives including:

- Health and Safety at Work (Northern Ireland) Order 1978;
- Corporate Manslaughter and Corporate Homicide Act 2007;
- Northern Ireland Act 1998 (Section 75);
- European Working Time Directive [Working Time Regulations (NI) 1998];
- The Employment Rights (Northern Ireland) Order 1996; and
- The Employment (Northern Ireland) Order 2003.

In addition to the above, a number of compliance and corporate governance requirements placed on NIFRS include:

- Managing Public Money NI (MPMNI);
- Management Statement and Financial Memorandum (MSFM);
- Financial Reporting Manual (FReM);
- Code of Accountability for NIFRS Board Members 2013; and
- Controls Assurance Standards.

We routinely review and consider Fire Sector and Health & Safety related reports and case studies with regard to both Firefighter and civilian fatalities. Recent reports considered include the Health & Safety Executive Consolidated Report and the FBU commissioned reports, 'In the line of duty' and 'Voices from the fireground'.

These reports have enabled us to develop a Firefighter fatality database which analyses the vulnerable practices and processes that occurred at fatal incidents. These reports and case studies have aided and informed policy development to mitigate future vulnerabilities.

Analysis of the above drivers allows us to determine the key risks and responsibilities for NIFRS.

Assessing Risk

Within the scope of our organisation, risk falls under 2 broad categories: community risk and corporate risk. Managing community risk is our core function; however, in order to do this we need to consider our corporate risks as these have the potential to impact on our capability to function effectively.

Community Risks

Community risks are classified as those risks to life, property or the environment that we can help to mitigate. Based on our statutory duties a significant number of risks need to be considered in developing an overall risk profile. Our emergency response commitments can be broken down into the following types:

- **Dwelling Fires** including private dwellings, houses of multiple occupancy, high-rise, residential care homes, etc;
- **Other Building Fires** including retail outlets, commercial offices, industrial units, educational establishments, medical establishments, community halls, those of heritage significance, etc;
- **Other Fires** including cars, gorse, forestry, wildland, etc;
- **Special Service Calls** including lift rescue, extrication from machinery, water rescue, rescue from height, animal rescue, building collapse, etc;
- **Road Traffic Collisions** including heavy vehicle rescues;
- **Other Transport Incidents** including aircraft, shipping, rail, etc;
- **Hazardous Material Incidents** including those of a static or mobile nature and those involving environmental or pollution risk;
- **Extreme Weather Events** including flooding, wind damage, freezing conditions, prolonged drought, etc; and

- **Terrorist/Civil Disturbance** including CBRN, terrorist related incidents, etc.

This list is not exhaustive but provides an indication of the complex operational environment in which NIFRS personnel work.

Understanding the risk of fire and other types of emergencies is critical to providing an efficient and effective service.

Corporate Risks

NIFRS corporate risks are those risks which have the potential to impact on our frontline service delivery therefore preventing us from conducting our business effectively. The NIFRS Corporate Plan 2015-20 provides significant detail of our corporate risks. These are captured in a Corporate Risk Register along with control measures in place to manage each risk. The risks can be broadly summarised into the following themes:

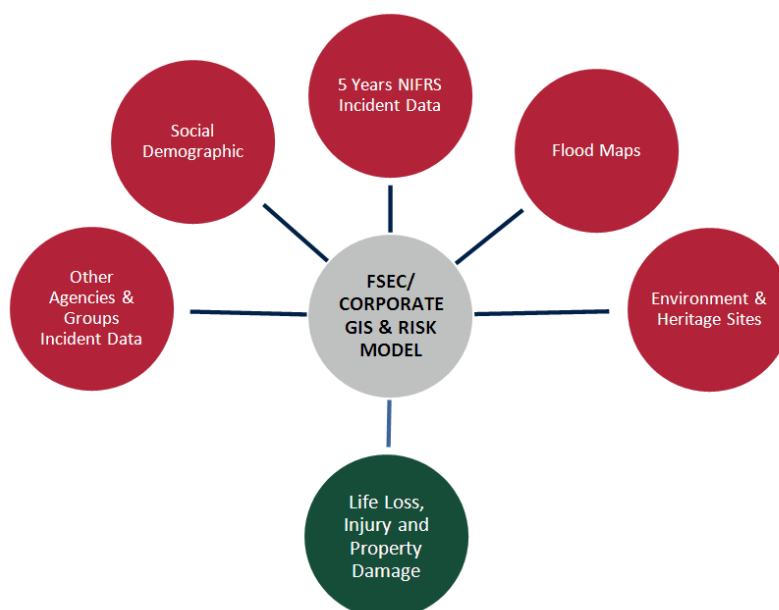
- **Finance:** sufficient funding to deliver our services effectively and the ability to financially manage for the medium to long-term;
- **Human Resources:** the correct support mechanisms and policies in place to train and develop our people, including new training facilities;
- **Information Technology:** upgrading of ageing infrastructure and software to support our people and service delivery;
- **Regional Control Centre:** upgrading of ageing Command & Control (C&C) mobilising system and alternative Standby facilities; and
- **Estate:** upgrading of identified ageing Estate.

Another fundamental area of focus for NIFRS is Firefighter safety - how we identify and assess the risks to our Firefighters. Understanding what these are enables us to provide personnel with timely risk critical information, relevant training and the equipment to deal with emergency incidents safely and effectively.

Risk Analysis Process

In order to identify levels of community risk, NIFRS has examined a number of data sets/information to predict where emergencies are more likely to occur and where the impact is likely to be more severe.

The diagram below summarises the information sources interrogated to predict and profile the life loss, injury and property damage for different emergency incidents. Fire Service Emergency Cover (FSEC) is a software solution which allows UK FRSS to model risk based on existing resources and also to model the impact of any changes to service delivery. Geographical Information System (GIS) is a platform that allows us to analyse information from a spatial perspective.



Our detailed risk analysis is also informed by individual Station Area Risk Profiles which provide an understanding of local demographics and risks. They also allow us to understand the potential impact on local economy/business; the societal/community effects; and damage to the environment and heritage sites, should particular emergency incidents occur.

Professional judgement and local knowledge from years of operational experience has been applied to interpret the wider cost of such events to our community and environment.



NIFRS acknowledges that interrogation of additional information such as its Incident Recording System (IRS) and insurance industry information to assess the extent and cost of fire damage will further enhance our capacity to profile risk. Further work will be completed in these areas where resources allow.

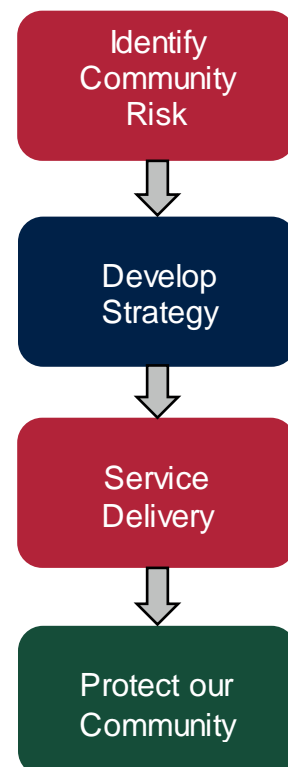
Developing Strategy

Our statutory responsibilities and risk mitigation strategies are delivered through the integration of 3 overarching principles of prevention, protection and emergency response with the overall aim of protecting our community.

Prevention encompasses initiatives targeted at the community to educate and inform on how to reduce the likelihood of risks occurring. These initiatives are generally targeted at the non-business community.

Protection covers how NIFRS works to ensure compliance with legislative requirements in properties in order to provide safer public spaces within the built environment. This includes places of work and leisure.

Emergency Response relates to the resources dedicated to help the community in times of crisis. Be this in a fire, an RTC, chemical spillage, flooding, etc, NIFRS will provide a swift and appropriate response.



We believe that better outcomes can be delivered through a more targeted approach to each of the 3 principles based on the community risk assessment. This ensures 'Public Value' through the delivery of a 'Safer Community'.

Delivery

This document is a key instrument in identifying and delivering change to our organisation going forward. Where NIFRS identifies necessary changes to its service delivery model which may impact on community risk a public consultation exercise will take place. This will include Section 75 equality considerations. Factors which may lead to future proposals may include identified changes in the risk profile, more effective management structures to deliver our services, changes in budgets, etc.

NIFRS will also continue to engage and consult with its staff and representative bodies to ensure consideration is given to their views on any changes to internal policies and/or the future direction of the organisation.

The published NIFRS Annual Report and Statement of Accounts will provide an annual update on progress against our IRMP Proposals. Any projects identified through the outworking of our IRMP Proposals will be captured in our Annual Business Planning process.

Monitor and Review

We continuously monitor our environment to ensure that our risk assessment and strategies remain current and that new or emerging issues are fully accounted for. We recognise that continual monitoring of operational performance, incident data and fatal fire reports can provide an opportunity for us to review risk and to evaluate the effectiveness of all our prevention, protection and response strategies.

We also monitor the performance outcomes of our strategies against key performance indicators and agreed targets, which are published in our Annual Report and Statement of Accounts to ensure that the strategy remains appropriate and the delivery mechanism is working as intended.

Where performance/outcomes are not as expected, we will re-evaluate both the strategy and the delivery mechanism to ensure each is fit for purpose and delivers the right outcome for our communities.

Section 2 - What has changed since our last IRMP?

A number of factors have impacted on our organisation since we consulted on our previous IRMP in 2012.

Board and Corporate Management Team

Notable changes have occurred with the cessation of the interim Chief Executive arrangement and we have now commenced a recruitment process to appoint a new Chief Fire and Rescue Officer. A new Chairperson and a number of new members were also appointed to the NIFRS Board in 2015.

The appointments of these key roles has provided a stable platform to enable the organisation to assess a number of key legacy issues and put in place management controls for reform.

Finance

NIFRS, like all public bodies, is operating in a very challenging fiscal environment where difficult decisions will have to be made which will impact on how we deliver our statutory functions. We need to make the best possible use of our resources with the available budget to continue to protect our community.

The Board has agreed 3 fundamental principles when considering saving proposals:

1. The impact on public safety;
2. The impact on Firefighter safety; and
3. The impact on employees.

These are consistent with the Savings Plan for the last financial year and NIFRS, as a frontline emergency service, will strive to protect service delivery going forward.

NIFRS has had to consider those services that can be reduced to protect the response cover to the resident population of NI while operating in this tightening financial environment.

NIFRS has seen a substantial reduction in its revenue budget allocation in recent years. In 2015/16 the opening budget allocation (adjusted for non-cash expenditure) was £69.778m. NIFRS has ensured that break-even has been achieved in each financial year by undertaking a number of wide ranging efficiency measures.

It has been confirmed that NIFRS' revenue budget allocation from DHSSPS for 2016/17 is £68.731m. This represents a 1.5% reduction from the 2015/16 opening budget allocation. The implementation of this reduction has yet to be finalised.

Throughout 2016/17, we will ensure that our organisation continues to improve and continues to protect the people of NI. We will continue to make efficiencies in order to provide an excellent value for money service to the community, whilst working closely with our partners to ensure that we are targeting the right resources in the right place and at the right time to best protect those most at risk.

Regional Control Centre

NIFRS Regional Control Centre (RCC) is located in a purpose-built secure suite within its Headquarters building in Lisburn.

RCC Firefighters use a C&C System and associated Integrated Communications Control System (ICCS) to handle all 999 emergency calls for NIFRS.



The System also provides a platform to mobilise the appropriate fire appliances to incidents throughout NI and to deliver safety critical incident information to responding Officers and Fire Crews.

The system currently used will become 'unsupported' by the service provider in the near future and a replacement is urgently required to fulfil our statutory duty and maintain continuity of service. This replacement system will include improvements in both resilience and efficiency and, in implementing change, exploit the opportunity to

enhance performance and functionality through developments in technology. The changes will also enhance resilience for mutual assistance during spate conditions.

A project is underway in collaboration with the Scottish Fire & Rescue Service (SFRS) for the joint procurement of a replacement C&C System for each FRS, one for NI and one for Scotland. The focus is on developing resilience throughout the lifetime of the system which, with use of latest technology, can deal more effectively with spikes in demand, adverse weather events and spate conditions. The collaborative approach in securing replacement C&C systems and associated ICCS for each FRS via a single programme is intended to minimise risk by combining the skills and expertise of NIFRS and SFRS Project Teams.

Delivering the same system for each FRS is intended to minimise risk to the public, partner organisations and the overall replacement programme. Early benefits will be delivered by bringing forward shared capabilities in terms of resilience, and throughout the project the overarching principle is to maintain the 'service to the public'.

The new system will also utilise 'dynamic mobilising' capability to ensure nearest assets are mobilised to emergency incidents rather than current arrangements which are constrained to station boundaries. The new system highlights how technology can be utilised to improve and provide a faster service to the community.

As part of this project, NIFRS is also reconfiguring the existing RCC facilities and will improve business continuity arrangements by developing facilities and arrangements for our Standby RCC site.

Estate

NIFRS Estate consists of 77 properties: 69 freehold and 8 leased properties. Of these properties 68 are Fire Stations, 5 are training specific sites and 4 are administrative buildings.

We have developed and delivered new operational Fire Stations in Omagh, Armagh and significantly refurbished Rathfriland Fire Station following an extensive fire. The

2 new build Stations have provided operational crews with excellent service delivery and training facilities, as well as a shared space for the community.

We have continued to maintain sites across NI, some of which require significant refurbishment. Business Cases have been developed for replacement stations in several locations and remain under review. Subject to successful approval of existing Business Cases and planning, it is anticipated that the development of a number of these projects will take place during the lifetime of this IRMP.

Significant work has also been completed to develop and secure funding to replace existing facilities based at its Headquarters in Lisburn with a new purpose-built Logistics Support Centre in Boucher Crescent, Belfast. This site will provide a central depot for the maintenance and servicing of FRS vehicles, plant and equipment and a repository for the dispensing of goods, equipment, uniform and Personal Protective Equipment (PPE). The site will integrate the latest in modern technology with functional and effective design to ensure that we can deliver the best service possible.

In recognition that there has been a legacy of under investment in NIFRS Estate, an independent survey was commissioned which identified 27 Fire Stations whose overall condition reflects “a building that is, or is becoming largely untenable as a point for the delivery of service”. The findings of the survey state that the Estate is in need of substantial improvements and upgrade to bring it up to a standard fully compliant with current statute and codes of best practice.

The survey indicates that based on 2014 estimates, £19.6m will be required over the next 10 years to address backlog maintenance and ensure statutory compliance. Over the same period, substantial capital will be required to fulfil the requirements of our Capital Plan, this will be challenging in the current economic environment. In response to these findings, we have developed an Organisational Property Asset Strategy which is underpinned by a Property Assets Management Plan to tackle the legacy issues.

Information Technology Infrastructure

Acknowledging a legacy of under investment in NIFRS Information Technology (IT) Infrastructure and System development, Management requested an investigation to assist in addressing the risk. This was completed by the Business Services Organisation (BSO) Information Technology Services (ITS) and, with the support of NIFRS IT Department, an agreed programme of work and funding has been secured for future projects.

These projects will deliver a replacement suite of hardware systems for our server, procurement of licensing for software to allow current systems to migrate to a modern, stable, supported platform and will introduce an IT Service Management process.

A number of key goals have to be addressed to ensure the infrastructure and systems develop to meet the needs of the organisation. Two members of BSO staff have been introduced into NIFRS to manage and support the IT Department. Their remit includes identifying projects to address the risks outlined in the report.

A disaster recovery system will be developed on a secondary site to provide automatic failover if the primary site is compromised. The network system will be upgraded to a Wide Area Network to provide enhanced network links. A central asset management solution will be installed to allow tracking and reporting of all NIFRS IT assets.

We will also introduce a 'Line of Business System' to ensure it continues to meet the needs of all departments. The systems will identify specifications to inform procurement processes and provide the ability to upgrade or replace hardware and software.

Training Facilities

Despite restrictions to the training facilities in Boucher Crescent and Westland Road, NIFRS has developed and delivered training to meet the needs of new statutory requirements under The Fire and Rescue Service (Northern Ireland) Order 2006 and The Fire and Rescue Services (Emergencies) Order (Northern Ireland) 2011.

Existing NIFRS training facilities have suffered from under investment pending the development of a proposed new multi-agency training facility at Desertcreat. Our training sites have been adapted to provide the best use of existing facilities. However the sites have not provided the ideal facilities for training in Incident Command, flooding and RTC response. The ability to complete realistic training in dealing with fires has been limited at both sites by restrictions on the burning of carbonaceous fires. We have been able to deliver limited real fire training at a basic unit at Belfast International Airport.

NIFRS will continue to work towards developing and delivering alternative world-class training facilities for our operational personnel to ensure they are adequately prepared for the significant risks they face on a day to day basis.



We will continue to deliver high quality training to Operational personnel and Support staff using our current facilities across a number of locations and support the development of our people by funding external training relevant to the needs of the organisation.

A review of external training is planned to identify opportunities for us to enhance our existing model and develop bespoke courses for NIFRS personnel.

Retained Duty System Availability

Gartan Emergency Response Availability System (ERAS) was introduced into NIFRS on 1 April 2014. The System enables RDS Officers and Firefighters to schedule their availability through an electronic platform. The System allows managers to oversee RDS Firefighters' availability and monitor crewing levels at any location. Firefighters can organise their personal availability remotely via the internet, text message or smartphone.



Control Firefighters at RCC can monitor live availability of staff in all RDS stations and, where shortfalls occur, use the information to immediately mobilise additional appliances to ensure sufficient resources are deployed to incidents.

In addition to the immediate mobilising of sufficient resources to incidents, the System has enabled Management to identify when and where patterns of low RDS availability occur and the implications for medium/long-term service delivery. The System has identified vulnerabilities in RDS cover in particular Station Areas, Monday to Friday during conventional working hours, due to Firefighters' primary work commitments.

This information is being used to target recruitment and pilot a new availability contract where Firefighters are contracted to work specifically Monday to Friday from 08:00-18:00 hours. Twenty-eight appointments have been made across a number of stations for the new daytime only pilot. We are currently advertising across a further 16 stations, as part of the rolling programme of recruitment, for RDS 120 hour contracts covering a range of time periods to include daytime, evenings and weekends.

Gartan availability data has also been used as evidence for exploring the possibility of evolving our crewing models to allow us to offer increased fire cover in areas where risk has increased.

A new RDS Steering Group has been established to review RDS and develop recommendations for future management.

Section 3 - Firefighter Safety

As well as posing a risk to the public, emergency incidents also pose a risk to our Firefighters. Due to the increased number of in-service deaths of operational personnel in recent years, addressing the operational safety needs of Firefighters is a key issue currently facing the UK FRS, including NIFRS.

The underlying cause of Firefighter fatalities normally involves matters that can be remedied through the implementation of policies, procedures and resources. Investigation reports indicate that Firefighter fatalities are consistently related to failures in the risk assessment process. Concerns around items of equipment and training have also been raised.

We have introduced a number of significant changes to improve Firefighter safety in response to findings from fatal fire investigations, FBU reports and DCLG Chief Fire & Rescue Advisor Unit (CFRAU) information/guidance.

Steps have been taken to enhance our ability to access Risk Critical Information (RCI) and Operational Tests of Competence (OTOC) and enhanced training has been introduced to raise the level of performance across all our staff.

The OTOC and Operational Tests of Potential (OTOP) have been developed by a newly established Command Competence Project Team to assess personnel in all supervisory roles against relevant National Occupational Standards. We now have levels of assurance that personnel taking charge of incidents are competent in the role.

We invest heavily in training our personnel. All personnel are required to complete Breathing Apparatus (BA) training every 2 years and Compartment Fire Fighting Training (CFFT) on a 3 yearly basis. CFFT exposes personnel to carbonaceous fires in a controlled scenario enabling personnel to safely deal with dwelling and small commercial fires.

All RDS operational personnel must complete 7 'Safety Critical Days' each year to ensure they are provided with suitable theory and practical training. The dedicated days follow a set syllabus to ensure that training is standardised throughout the Service. The days are supplemented by ongoing training completed while on duty and on drill nights.



Mobile Data Systems (MODAS) have been placed onto all frontline appliances.

These systems provide extensive RCI that can be accessed at operational incidents including:

- **Site Specific Risk Assessments (SSRAs):** These provide plans and specific risk information for individual sites that have been gathered by operational personnel;
- **FRS Safety Information:** MODAS provides direct access to a significant volume of NIFRS and National Guidance. This information can be viewed electronically and printed at the scene where necessary. Current available information includes Standard Operating Procedures, Operations Policies, Operational Aide Memoires, Generic Risk Assessments, Chemnet data, Hazmat information, etc;

- **LUKAS Crash Recovery System:** Enables Operational personnel to view vehicle information and hazards to assist them in dealing with RTCs in a safe and effective manner; and
- **Mapping:** Appliance locations are tracked to enable RCC personnel to mobilise the closest appliance to incidents. These maps can provide routes to incidents, measuring tools and icons to select SSRAs.



Active Operational Monitoring (AOM) is a newly introduced process to enable effective monitoring of incidents to ensure learning points are identified and good practice is shared.

Significant research has been carried out to identify how operational learning and knowledge can be shared to enhance command, safety and tactical decision-making to address experience shortfalls resulting from a reduction in emergency calls across the FRS Sector.

An electronic integrated recording system has been developed to manage, analyse and share the relevant information with the right people. Good practice and areas for improvement are also captured at the conclusion of incidents and training events through NIFRS Operational Debrief process. We will use this process to formalise the current practice of producing case studies on significant events and introduce these as a structured learning tool within the training and development process.

Safe Person Concept includes Organisational Responsibility and Personal Responsibility. NIFRS employ these to ensure Firefighter safety. The overriding premise in safety management is to ensure that collective control measures are put into effect within the workplace to safeguard everyone. An operational incident can be an inherently dangerous environment, where implementing collective controls is not always possible.

Organisational Responsibility relates to the support provided to ensure personnel are able to remain safe in a hostile environment. As an incident ground is not predictable it is difficult to 'make the workplace safe'. The UK FRS Sector has therefore devised an approach based around the Firefighter "taking their safety to the incident".



Personal Responsibility relates to an individual possessing the necessary knowledge, skills and understanding to assist them in making professional judgements about the appropriate use of available resources, in order to control the risks inherent in the unique circumstances of any emergency situation. Furthermore, individuals must acknowledge any limitations in their abilities that may have direct impact on their personal safety or that of others. Firefighters must therefore have the following qualities:



Section 4 - Previous IRMP Project Update

Priority 1 of our previous IRMP was to reduce risk to the community by initiating the following project:

“Conduct a community risk assessment exercise to identify the risk profile for Northern Ireland”

NIFRS has researched the approach taken by other FRSs, consulted with FBU representatives and considered guidance from a FRS sector competent specialist to develop a risk analysis methodology appropriate to identify and measure community risks in NI. A key element in the process is the introduction of a modular risk calculation which not only enables us to grade Station Areas based on risk, but also allows individual modules of the calculation to inform strategies for the management of specific life risk incidents.

3 complementary risk assessment techniques have been used to assess community risk:

Station Area Risk Model: Our risk calculation enables us to band Station Areas into 5 risk categories from Very Low to Very High. The calculation employs simple but globally recognised risk rating principles based on:

Risk = Likelihood x Impact

The calculation considers the likelihood of life risk incidents categorised into dwelling fires, other building fires, special service calls (RTC) and special service calls (other) and applies an ‘impact’ score based on fatality, casualty and rescues for each. All other types of incidents are included to reflect overall demand on our resources but the potential impact is not factored in.

Fire Service Emergency Cover (FSEC): This is a software solution designed to enable the UK FRS to identify risk levels based on existing resources and to model the impact of any changes to service delivery. The basis of the risk assessments

performed by FSEC is a derived relationship between response time and fatality rates for each type of incident.

Station Profiling: Individual Station Area Risk Profiles have been developed for each of our stations. They include the following information:

- **Background on the Station Area:** location and size of the area, and infrastructure information;
- **Demographics:** population information, ie, age profile, level of deprivation and census data;
- **Risks:** incidents, high-risk sites, industry, heritage, environmental and seasonal risks;
- **Resources:** station information, details of current operational resources and information regarding surrounding stations;
- **Operational Performance:** number and type of emergency incidents, FSEC predicted dwelling and RTC fatality rates and operational activity; and
- **Internal Performance Metrics:** Firefighter availability, ERS times, failures to respond, etc.

The profiles have been validated by local Station and District personnel. The purpose of the profiles is to provide further information which may be relevant in the decision-making process.

Also under Priority 1, to reduce risk to the community, our previous IRMP committed to a second project:

“Achieve increased levels of community safety through the continued delivery of risk-based fire safety and community safety initiatives”

Our modular risk calculation has been designed to evaluate our performance based on specific types of life risk incidents and assess if relevant strategies are achieving

our expected objectives. Following a review of our current Home Fire Safety Check (HFSC) strategy and extensive research, NIFRS has developed a new People at Risk Strategy which has been the subject of public consultation.

To effectively target resources and preventative measures to those most at risk in our community, we propose to change the definition of people at risk to

***“People who are aged 60 or older, have impaired mobility
or are referred to NIFRS by a partnership agency”***

We will also establish further partnership arrangements with referral agencies.

In addition to identifying targeted vulnerable groups, our community risk assessment will enable us to identify higher risk areas where resources may take longer to reach to ensure additional targeted community prevention initiatives are focused to best effect.



As part of our statutory responsibilities under The Fire Safety Regulations (NI) 2010, the NIFRS Audit Strategy forms part of our overarching integrated approach to risk management which prioritises the audit inspection of premises according to the perceived fire risk. All audits undertaken by NIFRS are initiated by one or more of the following inspection routes:

- following a fire incident;
- identified through the False Alarm and Unwanted Fire Signals Policy;
- following a complaint; and/or
- selected for audit through our risk-based audit inspection programme.

Through our risk-based audit inspection programme, we have set out further criteria for selecting premises for audit. This includes auditing premises based on historical fire data and on the findings from previous audits. We will also audit premises based on their societal loss value which is aimed at reducing the impact of a fire in public buildings and buildings of historical value, and based on the risk to Firefighters from fire whilst performing their operational duties.

The risk assessment process has also allowed us to identify areas where the risk profile is disproportionate to the level of resources allocated at present. It has also enabled us to interrogate data to ensure our existing resources are used to optimum effect.

Under the second priority from our previous IRMP, Projects 3 and 4 made commitments to:

“Enhance NIFRS emergency response capability to address current and emerging risks to community safety and to reflect public expectation”

“Ensure the effective and efficient use of operational resources by developing and implementing a service delivery model which reflects community risk, enhanced by effective performance management”

Our current Wholetime model is based on a full-time establishment of 917 Operational personnel. This number has reduced significantly to 850 due to retirements in recent years. A number of measures have been introduced, some involving public consultation, to ensure we continue to meet our statutory obligations with a reducing headcount. Steps taken to redefine our service model in line with available funding and public expectation are detailed below:

- **Flexible crewing of Aerial Appliances** has provided NIFRS with the capacity to redeploy 36 frontline Operational posts from less utilised specialist appliances to frontline fire appliances;

- **Introduction of a Rescue Pump at Central Fire Station** has facilitated the integration of an ageing Rescue Tender with a frontline appliance providing capacity to redeploy 12 Operational personnel to frontline fire appliances;
- **Introduction of a Hazmat Pump at Whitla Fire Station** has facilitated the integration of an Operational Support Unit with a frontline appliance providing capacity to redeploy 12 Operational personnel to frontline fire appliances;
- **Utilisation of the Special Rescue Team** to crew frontline appliance has enabled personnel from Central Fire Station to be utilised to crew frontline appliances at other Fire Stations; and
- **Temporary Crewing Coping Procedures** involving the reduction of appliance crewing levels to 4+4, instead of 5+4, on stations with 2 Wholetime frontline appliances. This has been introduced on occasions to ensure frontline appliances remain available when crewing numbers are low.

As part of the risk assessment process, quantifying risk at a Station Area level has also enabled a meaningful comparison across NIFRS to take place.

It has identified a number of areas where the risk profile is disproportionate to the level of resources allocated at present. A particular anomaly has been identified within our 'medium risk' band of Station Areas.



The analysis identified 4 RDS Station Areas with similar or higher risk than existing stations resourced with a Wholetime Variable Crewing (VC) shift system. VC utilises a daily 12 hour (07:30-19:30 hours) shift through a 2 Watch system.

To address this imbalance, we introduced an alternative shift system pilot referred to as Day Crewing (DC) in Enniskillen, one of the identified higher risk RDS stations.

The pilot system employs a single Watch of Wholetime Firefighters working 5 days a week from 08:00-18:00 hours, Monday to Friday.

The DC System has been designed to harness existing Wholetime resources to effectively deliver our prevention strategy, through community engagement and in line with our People at Risk Strategy, to drive down risk. The System will also allow for an increased focus on the gathering of RCI to enhance Firefighter and wider public safety.

Following significant research, we consulted on proposals to reduce existing crewing at VC stations to the new DC model and redeploy resources released from this new model to extend Wholetime resources to the 4 additional stations identified as having similar risk. The proposals also included a change to our existing Wholetime shift pattern to align the day shift to the same hours as the newly proposed DC System (08:00-18:00 hours). Re-aligning duty systems to the same day shift provides us with the opportunity to more readily move personnel across station locations to address crewing deficiencies.

The consultation process closed on 7 March 2016 and responses are currently being considered.

In an attempt to maintain current levels of service with less operational personnel, we continue to explore how our Wholetime crewing model can be managed more efficiently. An alternative crewing model is currently under consideration which will achieve savings through the use of the following:

- **Self-rostering** will ensure that Wholetime fire appliances are crewed with the optimum number required for particular types of appliance;
- An '**Out-Duty**' review will investigate how the movement of personnel from their 'base' station is utilised to optimum effect;
- **Compulsory transfers** will provide a mechanism to place personnel in stations where crewing shortfalls exist;

- A **specialist appliance review** will explore further potential to integrate less used specialist appliances with busier frontline appliances. This will release additional personnel to ensure other frontline appliances remain available to respond to incidents; and
- The **realignment of Wholetime shifts** across all crewing models will more readily facilitate the movement of personnel across station locations to address crewing deficiencies.

In order to deliver our resource to risk principles, a cultural change will be required across our workforce in relation to when and where we work. Recent consultation experience has taught us the value of communicating and considering our stakeholders' views.

To support the flexible approach necessary to deliver our services in response to changes in community risk, NIFRS has developed a new Organisational Change Policy for Operational personnel. The policy, which is currently undergoing consultation, is aimed at supporting and enabling the progression of change in a reasonable, equitable, consistent and compliant manner. Implementation of the policy will take into consideration the views of representative bodies.

Section 5 - What our Risk Analysis tells us

When developing our IRMP, a conscious decision was taken to minimise the amount of statistics provided in the form of tables, graphs, bar charts, etc. This information is readily available in other annually published documents, including the Annual Report and Statement of Accounts.

Instead we have tried to articulate what the information collated actually tells us, not just how we are performing but where improvements can be made in the future to reduce the number of incidents occurring and the impact of fatalities and injuries. We have broken down the incidents we attend into the following broad categories.

Primary Fires

In the last 5 year period (2010/11 to 2014/15) the number of fatalities associated with **primary fires** was 68. This is a reduction of 24% from the previous 5 year period (2005/06 to 2009/10) when the fatalities totalled 90.

Analysis of **dwelling fires** over the last ten years indicates a significant drop, reducing by 15% from 1,393 (2005/06) to 1,186 (2014/15). However, we have not experienced a similar reduction in the number of fatalities resulting from dwelling fires, with these figures remaining at 10 on average per year. We have traditionally addressed this risk through the outworking of our current HFSC Scheme and our media campaigns to inform and advise the public of the risk and major causes of fires in the home.

Research carried out, both within NIFRS and across the UK and worldwide, into the causation factors leading to Accidental Dwelling Fires (ADFs) has identified a number of specific groups (or individuals) who are most likely to be involved in ADFs and subsequently injured or killed.

This information, alongside the analysis of our own incident data as part of our Fatal Fire Review Process, has indicated that a significant proportion of our fire fatalities were aged over 60 and suffered from an impaired mobility that adversely impacted upon their ability to acknowledge, or respond, to an emergency in the home. As a

consequence we are currently considering a move to a more targeted approach. It is anticipated that this approach, in partnership with referral agencies, will allow us to reverse a worrying upward trend in fire deaths and injuries within the target population.

In doing so, we aim to target this high-risk group whilst simultaneously seeking to drive down the overall risk of fire within all domestic premises through media messages and fire safety initiative campaigns.

We acknowledge as the analysis referred to above demonstrates, that in order to lower both the overall risk and the number of instances of ADFs, we need to look holistically at how we match our intervention resources (fire appliances and personnel) with our prevention activities. Statistics have shown that a sole reliance on a firefighting response, though contributing to a lifesaving intervention, cannot on its own be the sole mechanism by which we provide a better outcome for the community.

It is also acknowledged that the outworking of prevention initiatives require significant resources and we have identified that our Wholetime resources are not best placed, to support specialist departments and RDS colleagues in the roll-out of prevention initiatives to mitigate risk in identified high risk areas.

It is anticipated that current work being undertaken to target resource to risk will provide additional capacity within known high-risk locations to allow for a reversal and reduction of current risk and instances of fires within the home.

The identification of risk requires the gathering of information from a number of internal and external sources. Benefits realised across the UK following the introduction of similar initiatives, have shown the need for the introduction of data sharing protocols, both with other Public Bodies and the Voluntary Sector, in order to allow us to have an accurate picture of the number and locations of those known to be at a greater risk of experiencing a fire within their home.

We are therefore engaged with these bodies in order to establish key strategic partnerships and ensure compliance with the necessary statutory duties to allow this work to progress. This broader piece of work will enhance our current arrangements and permit us to look at other known risk groups, in order to develop and introduce appropriate and effective mitigating prevention programmes to manage and lower the risk of fire.



Secondary Fires

Secondary fires, excluding grassland fires, have fallen annually over the last decade with a 59% reduction from 8,235 in 2005/06 to 3,366 in 2014/15.

As grassland fires fluctuate depending on weather conditions it is necessary to isolate these type of incidents and examine them separately. Over the past 10 years there have been periods when NIFRS has experienced spate conditions following extended periods of dry weather. Within a 2 week period in mid-April 2010, we attended 1,459 grass fires which was similar to the total grass fires attended in 2014/15 (1,498).

A decrease in the number of secondary fires reflects the success we have had in delivering focused prevention work to reduce these types of deliberate fires.

False Alarms

NIFRS receives and mobilises to 3 classifications of False Alarm as detailed in the table below. We set annual targets to reduce numbers within each category, with the exception of 'Good Intent' calls, as we want the community to remain vigilant and do not want to discourage the general public from reporting what could be a genuine emergency.

	2010/11	2014/15	% Reduction
False Alarm due to Apparatus	7996	7461	6.7
False Alarm Malicious - Received	3037	1614	46.9
False Alarm Malicious - Mobilised	820	442	46.1
False Alarm Good Intent - Received	18174	11917	34.4
False Alarm Good Intent - Mobilised	2950	2091	29.1

Although the figures for false alarm due to apparatus incidents are reducing gradually, we are reviewing our Management of Unwanted Fire Signals Policy to further address this issue. These incidents are mainly caused by false alarms generated from automatic fire alarm systems and accounted for 34% of our total mobilised incidents in 2014/15.

We will continue to work to reduce malicious calls through the application of our call challenge protocols within RCC.

The level of reduction in false alarms reflects the success we have had in delivering focused initiatives to reduce calls of this nature.

Special Service Calls - RTC

Over the past 10 years, RTCs accounted for only 2.5% of all NIFRS mobilised incidents. However, these calls have resulted in 50% of all fatalities (502) and 60% of casualties (11,557) at incidents we have attended.

Published RTC statistics for 2015 indicate that a quarter of all deaths or serious injuries on our roads have impacted upon the 16-24 age group. Although NIFRS do not hold a statutory duty to deliver preventative programmes, we continue to recognise and support the need for all Public Bodies to provide a collaborative

response. Based on the research we will target our endeavours at the 16-24 age group. This work will be provided through our strong partnerships with the Education Sector and allow us to implement visual, hard-hitting intervention programmes in order to change driver attitudes. In doing so, we aim to reverse fatality/casualty statistics within the target population.

To make best use of limited resources, it is essential that we are able to continually evaluate the effectiveness of this work. We will therefore commit to reviewing our current Road Safety Strategy. We aim to refocus our efforts to influence both a reduction in the death and serious injury statistics and improve the driver behaviour exhibited by some road users within the 16-24 age group, who have been identified as most at risk to both themselves and fellow road users.

Special Service Calls - Other

In addition to RTCs, other special service calls encountered by NIFRS has increased by 19.6% over the past 5 years from 1,484 (2005/06) to 1,775 (2014/15). A number of factors can be attributed to this increase, including additional statutory responsibilities to attend flooding and other types of major incidents.

Carbon Monoxide (CO) alarm related incidents have increased significantly in recent years and we now attend, on average, over 550 calls per annum. A number of high profile fatal incidents caused by CO poisoning have increased awareness of the danger of this gas leading to an increase in CO detectors in the home. Detectors are now also required in new homes due to changes in Building Regulation requirements.

In response to this increased demand, we now have equipped first response appliances with gas detection equipment to enable crews to detect the presence of and monitor levels of CO within the home. This equipment is being used on a daily basis to identify potential sources of CO and, following their isolation, to facilitate the safe return of occupants to the home.

We have attended 1,026 incidents classified as flood related over the last 10 years. In addition to flood related incidents, NIFRS receive requests to attend water rescue

incidents which may not be directly related to flooding. Over the last 10 years, we have rescued 338 persons across all water related incidents.

The annual rates for flooding incidents were significantly higher in 2007/8 and 2008/9 when over 400 incidents were attended in total. This increase in the level and severity of flooding calls attended is reflective of a changing climate. It is anticipated that these weather patterns will become a normal feature in the coming years. As a consequence, to give effect to the statutory duties imposed on our NIFRS Board through the introduction of The Fire and Rescue Service (Emergencies) Order (NI) 2011, we have increased our flood rescue response capacity to include 8 Specialist Flood Response Teams. These Teams are strategically placed across NI and support all our frontline appliances which are suitably equipped to provide an initial immediate rescue capability.



Flooding incidents, by their nature tend to require a multi-agency approach to manage both the immediate impact and long-term recovery. As such we continue to work with partner agencies, particularly in the pre-planning phase, to strengthen our multi-agency response. In addition to our rescue response at flooding incidents, we also maintain High Volume Pumping appliances in 3 locations across NI to provide capability to remove flood waters.

NIFRS also attends, on average, in excess of 100 hazardous material (Hazmat) related incidents each year. All our frontline appliances, and a number of strategically positioned specialist appliances are equipped with specialist equipment, including gas detection equipment, to assist in the successful management and

resolution of such incidents. Specially trained Officers work with other partner agencies using established protocols to deal with what can be highly technical incidents.

Over the past 10 years we have attended 1,349 animal rescue incidents. A significant number of these involved the recovery of large animals requiring the deployment of our Large Animal Rescue teams based at Newcastle and Omagh, Specialist Rescue Teams and Farm Animal Handling Awareness Officers. This response largely assists the farming community and requires the deployment of significant resources to counter the high-risk environments our crews are tasked to operate within.

Section 6 - The Future: Our Proposals

Our assessment of our performance has identified that, despite a reduction in calls across most areas, the fatality and injury rates are remaining static or in some instances are increasing. NIFRS believe potential exists to further reduce these rates by ensuring both our strategies and resources are better targeted at those people most at risk. Our IRMP proposals, detailed below, are therefore heavily focused on analysing and using data to inform and shape where our resources should be directed in the future to provide better outcomes for the community we serve.

In order to effectively deliver these proposals, NIFRS must address a number of corporate risks. Identified corporate risks are largely the result of a legacy of under investment in Estate and the Information Technology (IT) infrastructure. Capital investment must be secured to deliver an IT System and Estate that is fit for purpose and provide the foundations to deliver a service that manages the identified risks faced by both the community and the organisation.

We will require significant resources and long-term commitment to deliver an operating infrastructure which is fit for purpose. Business cases, tender and procurement, project planning and, more significantly, financial planning will be necessary to secure success. Sufficient numbers of appropriately trained Support staff will be necessary to secure the delivery of our IRMP proposals and to allow our personnel to deliver our frontline community strategies.

An ever changing risk profile will require our Service to become more adaptable to change to meet strategic and operational service delivery needs and remain fit for purpose.

Proposal 1: Develop our risk analysis capability to effectively target resources

This IRMP has focused on how we as an organisation have invested a significant amount of time on analysing risk. We have developed a dedicated Department to focus on this important area and utilise a range of risk assessment methods to inform this process. With the potential for future budget reductions and subsequent declining resources NIFRS must focus on becoming an intelligence led organisation where deployment of resources accurately reflects risk.

Communities and Local Government have withdrawn their support for the National FSEC risk modelling software which will impact on currency and availability of the system going forward. To counter this NIFRS will invest in state of the art risk analysis/modelling tools and ensure suitably skilled personnel are provided to assess risk. We also acknowledge that interrogation of additional information such as its Incident Recording System (IRS) and insurance industry information to assess the extent and cost of fire damage will further enhance our capacity to profile risk. Further work will be completed in this regard where resources allow.

We have also highlighted how particular groups of people are more at risk from death or injury in accidental dwelling fires. Information on these particular types of individuals is already held by other partner agencies. NIFRS must put in place data-sharing protocols with relevant partner agencies to ensure those most at risk of fire are identified and targeted for prevention activities.

Proposal 2: Review our service delivery and management structure in line with risk

Sections 4 and 5 of this Report detail how our community risk assessment and risk analysis of incident data are already being used to inform how we deliver our services. A number of factors have been identified that will influence the future shape of our operating model, including future funding, Firefighter headcount, integrated working with District Councils through community planning, etc.

Based on effective risk analysis, NIFRS will have to continually review resource deployment to ensure service delivery arrangements match risk:

- We will research/develop innovative crewing models to effectively manage resources with least impact on community safety;
- We will target community engagement activity where needed most. We will focus on vulnerable groups identified through internal metrics or signposted by partner agencies, and higher risk areas identified through risk mapping; and
- We will review our current Area and District management structure.

Proposal 3: Explore options to deliver a road safety awareness campaign targeted at 16 to 24 year olds

Published RTC statistics for 2015 indicate that a quarter of all deaths or serious injuries on our roads have impacted upon the 16-24 age group. Although NIFRS do not hold a statutory duty to deliver preventative programmes, we have historically used our resources to support the wider road safety message. We continue to recognise and support the need for all public bodies to provide a collaborative response.

We will review our current Road Safety Strategy and refocus our efforts to influence a reduction in death and serious injury statistics and improve behaviours exhibited by some road users, in particular those within the 16-24 age group.

Proposal 4: Review and effectively manage the Retained Duty System (RDS)

Gartan ERAS enables RDS Officers and Firefighters to schedule their availability through an electronic platform. The System allows managers to oversee RDS Firefighters' availability and monitor crewing levels at any location. Firefighters can organise their personal availability remotely via the internet, text message or smartphone.

The System has enabled management to identify patterns of when and where instances of low RDS availability occur and the implications for medium/long-term service delivery. For example, the System has enabled NIFRS to quantify an already identified weakness in RDS cover in particular Station Areas Monday to Friday during conventional working day hours due to our Firefighters' primary work commitments. The Gartan data will be used to inform future crewing models for RDS, analysing a range of time periods to ensure we have appropriate levels of fire cover.

A new RDS Steering Group has been established to review RDS and develop recommendations for future management.

Proposal 5: Review existing Emergency Response Standards (ERS)

NIFRS has applied its risk model across the 4,537 Small Area Census boundaries, which are the lowest level of geographic area used to measure Census data. The average number of each incident type and the level of impact has been assessed to calculate an overall risk score for each Small Area.

Banding of these risk scores allows us to evaluate levels of risk for the whole of NI. The project has enabled us to predict the areas that are more likely to suffer the consequence of a FRS emergency and informs an integrated strategy which targets prevention, protection and emergency response in an appropriate way to manage risk across NI.

NIFRS currently has ERS which act as a key performance indicator based on the time taken for our appliances to attend dwelling fires. The location of our existing emergency response resources are based on the ERS introduced in 2006 which categorise the region into high, medium and low response areas and apply 3 different response time standards for each.

Unlike urban FRSs which can provide the same emergency response times across their entire area it is impractical for NIFRS to do this. Much of NI has relatively low levels of risk; however there are higher levels of dwelling fire risk in larger population settlements and areas with higher RTC risk along main arterial routes between settlements.

Our existing ERS, are no longer accurately matched to risk, are based on a risk profile of major dwelling fires only and do not reflect additional community risks associated with non-dwelling fires, RTCs and other special service calls.

NIFRS will therefore review its current ERS to ensure that our standards of response complement our recent community risk assessment. Any proposed changes will be subject to a full public consultation exercise.

Proposal 6: Explore opportunities for collaborative working with Health & Social Care (HSC) Services

We will work together with HSC and Northern Ireland Ambulance Service (NIAS) to identify how we can collectively deliver an improved service to the community we serve.

NIFRS currently work closely with our colleagues in NIAS at operational incidents, particularly RTC and bariatric incidents, and also share a number of our station facilities with them. As part of this collaborative approach, we will explore how our trained Firefighters can contribute through our existing response capability to further complement existing NIAS resources.

We will also explore how our prevention activities can be widened to deliver an enhanced wider community safety and well-being agenda.



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