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Environment, Community and Local Governmen

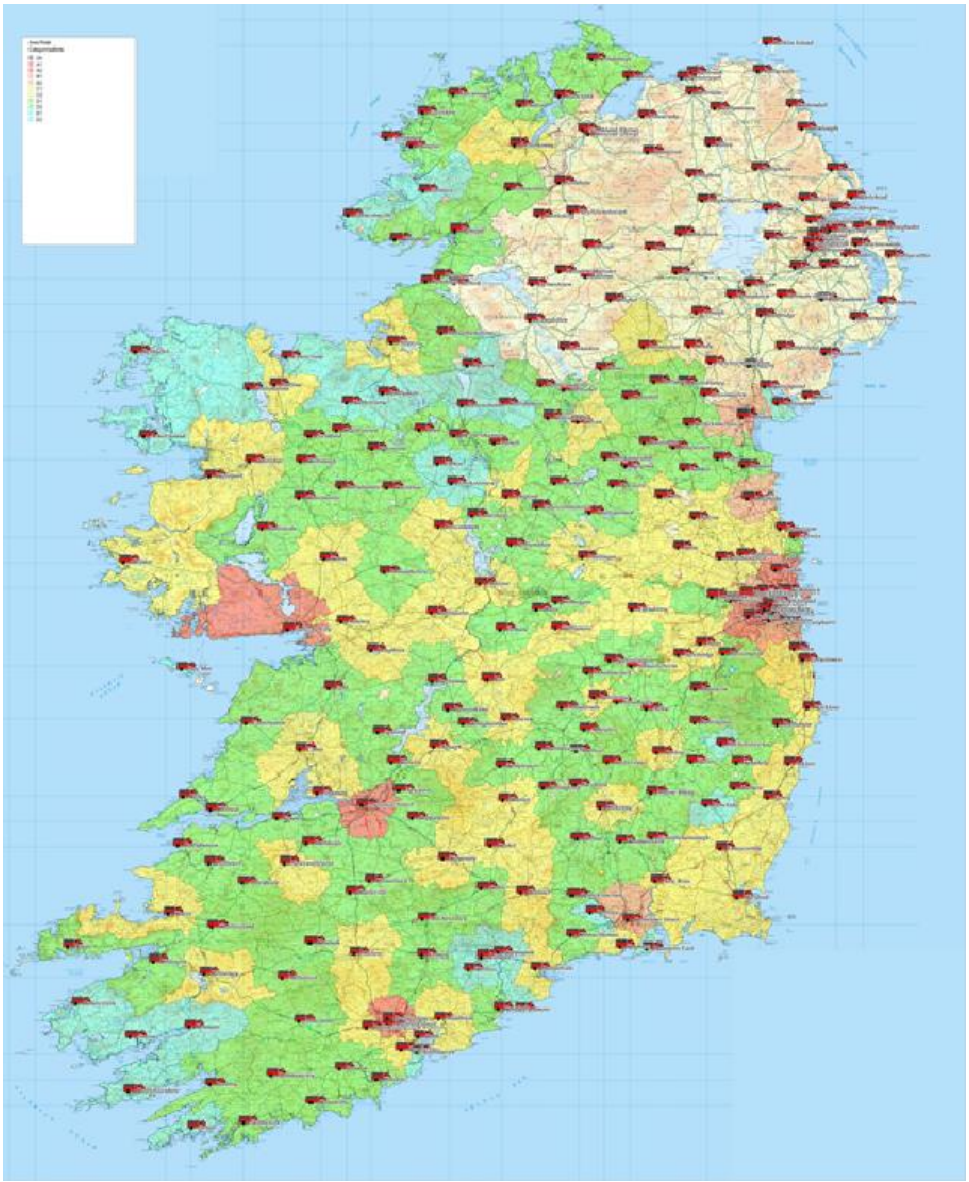
National Directorate for Fire and Emergency Management

FIRE SERVICES IN IRELAND

'LOCAL DELIVERY – NATIONAL CONSISTENCY'

FIRST REPORT OF THE FIRE SERVICES EXTERNAL VALIDATION GROUP

FEBRUARY 2016



FIRE SERVICES IN IRELAND

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FIRST REPORT

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EXTERNAL VALIDATION GROUP

APRIL 2016

SEÁN HOGAN and BRIAN SWEENEY

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PREFACE

4 February 2016

Mr David J. O'Callaghan,
Chairman,
Management Board,
National Directorate for Fire and Emergency Management

Dear David,

We attach a final version of the Report on our work as the Board's External Validation Group. Publication of the report was held over in light of the negotiations with staffing interests, which were concluded successfully in December 2015.

While 'external validation' is new in the sector, we hope that our report captures the impact of the inter-active process we engaged in with local authority and fire services management in 2014 and the first quarter of 2015.

We have included the phrase "Local Delivery – National Consistency" in the report title, reflecting our position at the inter-face of the local and national dimensions of fire risk management in Ireland.

This report portrays our view of a local government service in transition towards a very healthy state. Reflecting on the examples of good work we saw in individual fire services, as noted in Appendix B, and drawing on our own experience and perspectives, we believe the initial Area Risk Catergorisation process is a significant contribution to achieving consistent and improved levels of public safety in communities across Ireland.

We look forward to working further with the Board and stakeholders to develop and improve the initial ARC and EVG processes described in this Report.

Submitted Respectfully,

_____ _____

Seán Hogan,
National Director,
Board Member.

Brian P. Sweeney,
International Expert,
Board Member.

LIST OF ABBREVIATIONS

ARC	Area Risk Categorisation
KCS	'Keeping Communities Safe' Report (2013)
EVG	External Validation Group
NDFEM	National Directorate for Fire and Emergency Management
CFO	Chief Fire Officer
CEO	Chief Executive Officer (Local Authority)
DoS	Director of Services
FGS	Farrell Grant Sparks Report (2002)
HSA	Health and Safety Authority
SFR	Strathclyde Fire and Rescue

REPORT SUMMARY

This is the first report of a new external validation process on fire risk management in Ireland. This Report describes the development and application of the validation process initially. It then reports conclusions on the four specific areas of enquiry - Area Risk Categorisation, Fire Safety, Fire Service Operations and Major Emergency Management and Health and Safety Management. The Report concludes with an overview of themes and issues before making some recommendations for future directions.

The main conclusions of this Report are:

- Ireland is in the league of safest countries in respect of fatalities caused by fire, with a three year average rate of 6.4 fire deaths/ million of population in the years under consideration. However, there is no room for complacency on this aspect as there are indications of a reversal of the downward trend;

- Ireland's fire services are in a transition process from what might be characterised as a self-contained, individual focus to ones where collaboration with each other and partnerships with other branches of local government and other statutory and voluntary sectors are seen as key to achieving the objective of safe communities. This is happening in conjunction with a strong national emphasis on service development and extensive guidance on good practice. Much of this guidance emanates from the fire service itself, co-ordinated and approved by the National Directorate for Fire and Emergency Management (NDFEM). The NDFEM have been created at national level with a mandate to achieve consistent, effective services;

- Fire Services are applying and refining internationally-recognised risk management approaches to reduce the fire risk and the annual toll of life and property loss caused by fire;

- Local authorities are matching the assessed fire risk in their individual fire station areas with services based on both full-time and retained fire service models, with a comprehensive support infrastructure, and applying a range of appropriate fire prevention and fire protection approaches;

- Local authorities have prioritised and maintained the financial and personnel resources in their fire services at a time when they have implemented significant reductions in all other areas;

- There is evidence of the good fit of fire services within the local government system, particularly in terms of how fire service officers have led the development of effective and proven local authority capability in the area of Major Emergency Management. Also, fire services personnel undertake a diverse range of services on behalf of their communities. Examples of development of effective partnerships with other branches of local authorities, including housing and community sections, were seen.

- Local authorities have benchmarked their fire services against national standards and national norms, and a strong degree of consistency, linked to area risk

categorisation, now exists in fire service provision; All local authorities are using, or are working towards, national norms as minimum standards;

- Local authority and fire service management are highly cognisant of their statutory responsibilities to ensure the safety, health and welfare of their staff. They are working to appropriate national guidance, as well as internationally accepted norms, to achieve necessary cultural change. Local authority fire services have been recognised as leaders of best practice in safety management by independent assessors.

- The retained fire service model is seen as a particularly effective, flexible and efficient model of community service. Nonetheless, fire services face significant challenges, including tapering down of traditional activities; further consideration is required of approaches to optimise and evaluate public safety outcomes, particularly given the levels of resources provided by local authorities to maintain full-time services in areas with higher risk categorisations. Both retained and full-time service provision models face significant challenges into the future and a study of current service social and cultural underpinnings could be considered, particularly to better face the challenges of a changing society and in particular equality and diversity issues in fire services;

- This report deals with two initial, but significant, and innovative steps in enhancing public safety in Ireland, namely the area risk categorisation and external validation process. It is appropriate to reflect on the initial experience of both these processes and to refine and improve these for future iterations.

- Although services are at different stages along the road to transition, and further improvement is required in a number of identified areas, the public are served well by the evolved arrangements and can retain confidence in the integrity and professionalism of those with responsibility for managing and delivering fire safety and fire services in Ireland.

PROFILE OF REPORT AUTHORS

Brian P Sweeney joined Strathclyde Fire Service and worked at all ranks before being appointed Chief Officer of the service in 2002. He trained at the Scottish National Fire Training School and Fire Service College, Moreton (UK). He led and managed SFR which had some 4,000 fire service personnel and provided fire services for 2.7 m people in communities ranging from Glasgow city to off-shore islands.

A native of Donegal, he was appointed to the Management Board of Ireland's National Directorate for Fire and Emergency Management as an international expert. He contributed significantly to the development and publication for the first time of national standards for Irish Fire Services.

His membership of the Board was renewed and, on his retirement from the SFR Chief Officer position, he was appointed to chair the ICT Development Project Board, a sub-committee of the National Directorate's Management Board.

Seán Hogan is a Civil Engineer by profession. He worked in a variety of engineering positions, including as a volunteer with CONCERN, before joining the fire service as a fire prevention officer and working with a number of local authorities. He undertook fire-fighter and breathing apparatus wearer training in Chorley, Lancashire and officer development programmes in the Fire Services College, Moreton (UK), NIBRA (Netherlands) and Danish Fire College as well as Fire Services Council training in Ireland. He later moved to work in central government, in the Department of Environment.

In his role as Fire Adviser, he was involved directly in and has overseen significant fire service development initiatives and infrastructure provision over the past two decades. He was appointed as Ireland's first National Director for Fire and Emergency Management when the National Directorate was established in the Department of Environment in 2009.

In this position, as well as his on-going fire service development and oversight roles, he has led the development of emergency management and in particular, he has worked to embed the internationally-recognised systemic risk management approach across a number of settings in Ireland, including through the Framework for Major Emergency Management. He has been mandated by Government to co-ordinate "Whole of Government" response to a number of national level severe weather/ flooding crises since 2009.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the assistance they have received in undertaking the External Validation process on behalf of the Management Board of the National Directorate for Fire and Emergency Management.

The 27 Chief Fire Officers are the professional officers, the leaders and managers of Ireland's Fire Services, and play many critical roles. They are the ones who are guiding, developing, managing, steering and maintaining their fire services on behalf of the local authorities. They also took the time, with their small management teams, to prepare for the EVG process and accounted for their stewardship with professionalism, care and courtesy.

We would also like to acknowledge the work of many individual staff members in fire services who undertake regional and national support roles which contribute to the success of the service development process.

We also acknowledge the input of our Management Board colleagues to the successful development of this external validation process, which is a new dimension of central/ local government relations.

We acknowledge the input of staff of the National Directorate who supported us in carrying out this first round of EVGs.

DEDICATION

In the year 2007, three fire-fighters lost their lives while serving their communities.

In February 2007, fire-fighter Michael Liston from Foynes fire station was killed with Garda colleague, Brian Kelliher, while attending a road traffic accident.

In September 2007, two fire-fighters, Sub Officer Brian Murray and fire-fighter Mark O'Shaughnessy were killed while fighting a fire in a disused workshop in Bray.

Fatalities of this kind are very rare in fire services in Ireland. However, it is clear that the loss of these men is felt keenly by all connected with the provision of fire services in Ireland. The extent of work described in the section of this Report on Safety, Health and Welfare is a tribute to the esteem in which their memory is held, as well as the sacrifices of their families, loved ones and colleagues.

May the memory of Michael Liston, Brian Murray and Mark O'Shaughnessy continue to inspire necessary improvements in our fire services.

INTRODUCTION TO REPORT

1.1. Background

This report provides a comprehensive picture of fire services in Ireland. It is the first full Report of the 'External Validation Group' (EVG) which was introduced in the 'Keeping Communities Safe' (KCS) policy document published in 2013. The report is prepared in accordance with the mandate given by the Management Board of the National Directorate for Fire and Emergency Management.

This report provides a detailed account of the work undertaken in the first full cycle of EVG, which commenced on a pilot basis in January 2014 and ended in March 2015. The EVG worked on a number of key lines of enquiry, the outcome of which are described in the individual chapters of this report, and summarises the current status, as well as issues arising, from the first round of EVG visits.

1.2. Provision of Fire Services in Ireland

Fire services are provided by local authorities in Ireland. The Fire Services Act, 1981 and 2003 designates 34 fire authorities, based on the principal local authorities. The fire authorities provide a range of operational and fire safety services through 27 service delivery units currently, using an infrastructure of 217 fire stations, some 600 fire appliances and associated specialist equipment and a staff of 3450 fire service personnel.

Local political accountability for fire service delivery is maintained through the normal local government accountability arrangements and the annual estimates process, as well as exercise of the 'reserved function' of local authorities in adopting a Section 26 'Fire and Emergency Operations Plan'.

At national level, the National Directorate for Fire and Emergency Management was created in 2009 within the Department of Environment, Community and Local Government to provide national leadership for fire services and emergency management and to drive and oversee the development of consistent, effective and safe fire services by the local authorities.

1.3. The Development of Fire Services

Like all public services, fire services have been evolving and developing over the years. Disastrous incidents, such as the Stardust Fire in the 1981, were drivers of step development and changes.

While fire services are provided by local authorities, central government, through the Department of Environment, Community and Local Government supported the

development of fire services over the years, particularly through a central training programme and capital assistance for service infrastructure.

In more recent years, the Farrell, Grant, Sparks Review in 2002 charted future directions for fire services in Ireland. The Fire Services Change Programme, 2005 – 2007 was an important initiative arising from this Review and helped move Ireland's fire services in the directions recommended in FGS. It also helped shape the eventual creation of the National Directorate for Fire and Emergency Management at national level in 2009. This was a definitive response to the recommendations of the FGS report in relation to the perceived weakness in arrangements at national level and was intended as a local/ central partnership to drive the provision of consistent, quality and effective fire services in Ireland by local authorities.

All service development initiatives, while they may operate under a variety of banners, tend to have common elements. These include:

- An oversight structure
- A working structure
- An approach which involves looking at both previous reports on fire services and international practice/ literature.
- Consultation process incorporating stakeholder consultation, including direct engagement with unions.
- Direct engagement with relevant technical/ professional organisations such as the Chief Fire Officers Association as well as local authority management and relevant Government Departments and Agencies.
- Oversight and expert support from international sources, such as London Fire and Civil Defence Authority, the Dutch Fire Services (NIBRA) and Strathclyde Fire and Rescue Service.
- Keeping the Health and Safety Authority (HSA) appraised on an on-going basis.

1.4. The 'Keeping Communities Safe' Report

KCS is a Report published in 2013 on the outcome of a review of fire services in Ireland which was undertaken in 2011/2012. The objective of KCS is to achieve consistent, quality, safe and effective fire services which are in line with international practice.

The KCS policy is based on the internationally-used systemic risk management approach and places emphasis on fire prevention and fire protection facilities in buildings, as well as on fire service response.

KCS was adopted as national policy in February 2013. This was the first time national norms/ standards were established for fire services in Ireland. These norms/ standards were derived to a large extent from studies of current fire service arrangements and practices in Ireland. Individual local authority fire service provision can now be benchmarked against these national norms/ standards.

KCS provides for fire services to remain as a local authority service and subject to local political accountability. The option of moving to a national fire service was considered, but it was decided that the risks of doing this were too great for the benefits that could be obtained, and that the objectives of enhanced consistency and effectiveness could be achieved within existing structures. Local authorities continue to provide fire services, while using 'shared services' structures and regional co-ordination arrangements (such as CAMP, CISM, joint procurement contracts, training) in the interests of consistency and an enhanced range of services.

1.5. The External Validation Group Objectives and Mandate

The KCS Report provided for the establishment of an External Validation Group (EVG) to assist the National Directorate in its mandate of developing consistent and effective fire services. As this was seen as an important new process in the relationship between central and local government, the Management Board of the National Directorate concluded that a number of guiding principles should underpin the first evolution of the EVG process. These include:

- The process should be cognisant of statutory responsibilities and boundaries in the central-local government relationship;
- An amalgam report covering all services, rather than individual service reports, should be produced at the end of the first iteration of EVG;
- The process should be expert-led;
- All services should be visited in the first round.

It was decided by the Management Board that the initial EVG should comprise the Board's international expert, working with the Department's National Director. The two members of the EVG were mandated to undertake an initial round of visits to fire services, starting early in 2014, and to report back to the Board.

External validation is a new process, where the primary intention is to review individual fire service's progress with recommendations set out in "Keeping Communities Safe" and the associated guidance documents.

The EVG did not create individual written feedback for individual services arising from the first round of visits in 2014. However, summary verbal feed-back was provided to each fire service at the end of the visit, which reflected the conclusions.

The EVG process, as undertaken in 2014 and Q1 of 2015, has strengthened greatly the communication/ feed-back loop between the Department's National Directorate and local government fire services.

1.6. Interim Reports

The EVG have provided a series of Interim Reports to the Board in 2014 as follows:

Document Title	Reference Version	Status
Initial Report of External Validation Group	1 May 2014	Initial Report
Second Report of the External Validation Group	26 June 2014	Interim Report
Third Report of the External Validation Group	4 December 2014	Interim Report

The contents of these Interim Reports have been incorporated into this First Report on the EVG Process as appropriate.

2 EVG METHODOLOGY

2.1 Approach to EVG Process

External Validation is a new process that has been introduced into the working relationships between local and central government. However, the EVG process was not intended as an “inspection” or “audit” process of the area of fire services as exists in some other dimensions of government, or in other jurisdictions.

Instead, a tentative approach was used in the initial field-work/ pilot visits and this was refined and developed into the methodology and techniques described in the next sections. Key points worth noting are that the process provided for engagement with local authority management as well fire service management teams. Unfortunately, there was only limited opportunity for discussion with personnel across all the ranks in this initial round of EVG visits, but this aspect may be enhanced in future EVG processes.

The EVG process used can be described as falling within the general heading of ‘Action Research’ where themes and issues emerge and are captured as the work progresses. It became apparent as the field work went on that there was a strong level of networking among the fire services and anticipation by fire services of areas of EVG interest increased. In this way, the EVG process itself is seen as contributing to service development, rather than simply recording the situation in any fire service. The fieldwork also provided an opportunity for discussion, and sometimes robust debate, on issues as they arose.

Verbal feedback was provided to each fire service management team at the end of the day, and this was repeated to the local authority management in the presence of the Chief Fire Officer. The objective in this process was to assist current service development and help services move in the right direction. Where issues were highlighted as requiring attention, these were set generally in a context of the positive practices which were observed.

This report, completed at the end of the process, comprises what is termed as a ‘Summative Report’.

2.2 Methodology & Techniques

The initial EVG methodology evolved into a clear process as experience was gained. A full day (09.00 to 17.00 hrs) was set aside for each EVG visit. The day commenced with meeting the CFO to explain the intended process and to agree a schedule for the day. This was followed by a short meeting with the Chief Executive

and relevant Director of Services, again to introduce the EVG process as mandated by the Management Board.

The EVG then worked systematically through the detail of four broad lines of review with the CFO and Fire Service Management team. This was based primarily on the Area Risk Categorisation (ARC) documentation supplied to the EVG in advance of the visit. The documentation provided by fire services typically included a Report on the Area Risk Categorisation process undertaken. The EVG approach the conversations using four broad lines of validation against KCS national guidance and norms:

- Progress with the KCS processes (Area Risk Categorisation, Annual Service Development Plans, revised Section 26 Plan etc);
- Progress with specific national policies and guidance (National Incident Command System, Ancillary Safety Statements, SOGs, Training Guidance, etc)
- Review of Fire Safety related issues
- Review of Fire Service Operations and Emergency Management issues

This involved clarification/ discussion with fire service staff and reviewing additional available support documentation on particular topics. Examples of good practice, or issues requiring consideration by the National Directorate, were noted during these conversations.

At the end of the process, the reviewers summarised the position as understood, highlighting areas where it is agreed that a fire service would focus additionally to progress and providing feedback to the CFO and his/ her staff.

The day concludes with another meeting with the Chief Executive and Director of Services on the overall view of progress to date and the direction of travel in relation to implementation of service development initiatives.

2.3 Schedule of EVG Visits

Seventeen Fire Services were visited by the EVG in 2014 as shown in the Table below, with the remaining ten undertaken in Quarter 1 of 2015. The Area Risk Categorisations for each of Ireland's 217 fire stations were considered in this process.

TABLE 2.1

RECORD OF EVG VISITS IN 2014/ 15

	Fire Service	Date of Visit	No of Fire Stations
1	Cork County Council	22 January 2014	21

2	Clare County Council	25 March 2014	7
3	Kildare County Council	26 March 2014	6
4	Mayo County Council	15 April 2014	12
5	Galway County Council	6 June 2014	10
6	Leitrim County Council	9 June 2014	5
7	Roscommon County Council	10 June 2014	6
8	Carlow County Council	18 June 2014	4
9	Limerick City and County Council	19 June 2014	7
10	Kerry County Council	20 June 2014	10
11	Wexford County Council	25 June 2014	5
12	Louth County Council	23 October 2014	5
13	Westmeath County Council	10 November 2014	4
14	Offaly County Council	11 November 2014	5
15	Dublin City Council	20 November 2014	14
16	Wicklow County Council	21 November 2014	10
17	Donegal County Council	26 November 2014	16
18	Tipperary County Council	23 February 2015	12
19	Laois County Council	24 February 2015	8
20	Kilkenny County Council	25 Feb 2015	7
21	Longford County Council	27 February 2015	5
22	Monaghan County Council	2 March 2015	5
23	Cavan County Council	3 March 2015	10
24	Cork City Council	23 March 2015	2
25	Waterford City and County Council	24 March 2015	10
26	Sligo County Council	30 March 2015	4
27	Meath County Council	31 March 2015	7
			217

2.4 General Reactions to EVG Process

After the early round of visits, the EVG process was seen to be well accepted by fire services. The purpose was understood and the feedback indicated that it was regarded as significant, meaningful and beneficial for fire service management teams.

It is the authors' perception that the EVG visits were seen as challenging events for the Chief Fire Officer and fire service management teams. However, it is also our perception that the benefits of the process are clearly appreciated by the management teams we have engaged with. In particular, the process provides an opportunity for healthy debate on issues, as well as opportunity for review and reflection by service managers. Some issues were raised which require further consideration at national level, and a sample of these are given in Appendix C. In this way, the EVG process acts as a very direct feed-back loop from local authority to national level.

Also, an increasing level of inter-service discussion was noted in preparation for the EVG visit and anticipation and addressing of issues was evident as the process progressed. The EVG process itself may be seen thus as a significant driver of change.

2.5 Reporting Performance

While the common thread in the EVG visits is the ARC created by each fire service, it is not the intent with this report to publish the individual service reports. The approach in this report is to provide summary reports on the areas covered in the EVG, as set out in the individual chapters/ sections, with commentary as appropriate. One large data set is provided, the initial ARC results, the details are presented in Appendix A. Summaries are provided in the individual chapters/ sections.

2.6 Dealing with Specific Situations in Individual Services

At the end of the EVG process, the authors have an overwhelmingly positive view of fire services in Ireland and the transformation process that is leading towards the objectives of effective and consistent services. The strength of the EVG process is seen in access to the evidence provided to support the formation of this overall view of the fire services. Examples of 'best practice' risk analysis and follow through into 'active risk management' have been presented to the EVG. Key issues are being identified and explored and specific targets for future action agreed, where seen as necessary.

However, not all services, or aspects of all services, are at the same point of development. Where appropriate, in services where further development is required, examples of best practice in other services were highlighted and services were placed in contact with each other for particular aspects, as a means of speeding up progress.

While the EVG process provided an opportunity to give feed-back, in a number of cases/ situations there were indicators that made it appropriate to invite reflection on what were perceived as significant deviations, without an accompanying rationale or evidential base, from national norms. In such cases, fire service and local authority management proposed priority work programmes, targeted at addressing the specific situation. In a number of cases, service management has sought continuing support/ oversight in addressing identified issues and this has been provided.

The objective of the EVG team in all cases was to have a positively-oriented, significant, meaningful and beneficial process for fire services.

3 THE AREA RISK CATEGORISATION PROCESS

3.1 The Risk Management Approach

Chapter 2 of KCS outlines the Risk Management Approach on which the document is based. Risk management is an international paradigm, used especially in safety-related areas.

KCS sets out an holistic, systems approach to achieving the objective of communities safe from fire. It is based on an approach of managing the risk associated with fire to protect lives and property from the threat and occurrence of fire. The systems approach to safety management was used also in the development and roll-out of Major Emergency Management arrangements in Ireland.

Risk Management is generally seen to involve five stages, as illustrated in Figure 3.1 below:

- identifying hazards and evaluating the risks these hazards pose,
- mitigating/ ameliorating those risks by trying to reduce the probability of the event and/ or its consequences if it does occur,
- planning and preparing to deal with the hazard,
- responding to the event, and
- reviewing events with a view to learning for the future as part of a recovery stage.

FIGURE 3.1

SYSTEMS APPROACH TO RISK MANAGEMENT

Societies are not, and never will be, free from the risk of fire. At the core of this systems theory is an approach which identifies and grades the nature of the different fire risks faced by communities and develops approaches commensurate with the risk.

The objective of the fire service is to reduce the risk – using an appropriate blend of the full range of available approaches – in fire prevention, fire protection and response.

3.2 The KCS Template for Area Risk Categorisation

Each fire service was requested undertake an initial Area Risk Categorisation process for its functional area using a process set out in Chapter 7 of KCS, and to prepare a short report on the process and outcomes. Tables for use in the risk categorisation process provided in Chapter 7 are based primarily on the understanding of the current situation in Ireland with respect to existing fire risk (as determined by an analysis of three of years of actual fire data) and national norms and standards included were derived from analysis of existing situations.

The Area Risk Categorisation process results in the area to which the first response is sent by each fire station, known as the 'fire station ground', being assigned a Risk Category(s) Grading. The fire risk categories range across five grades, from very high, high, medium, low to very low risk.

The Risk Category assigned to fire station grounds was judged on a consideration of the following criteria;

- Population of main urban area
- Population Density(s) of the area (per Km^2) surrounding main urban area
- Total Population of the Station Ground
- Annual Service Demand Level (Based on Number of Incidents occurring in the station area averaged over three years)
- No. of Dwellings in the station ground & the Annual Dwelling Fire Rate
- Other building fire rates
- Percentage of tertiary incidents
- RTA activity (non clean-up) & Special Services rates
- Extent of Individual Special Hazards (e.g. Institutional, Educational, Industrial, Large Scale Retail / Commercial, SEVESO, POPA etc.)

The detailed approach to undertaking the initial Area Risk Categorisation Process is set out in Appendix C of KCS. This provides templates and tabular formats and relies on census data, the use of local knowledge and operational intelligence, Risk Based Approach Reports, the Major Emergency Management Risk Assessment and other readily available sources within the local government system to provide an adequate picture to determine risk categorisation, with associated area risk designations within each fire station ground.

It is the predominant risk in an area that defines its risk categorisation. While it is expected that buildings with significant hazards would be identified and evaluated as part of the process, it is not seen as necessary or appropriate to undertake a building

by building appraisal for the purposes of the initial area risk categorisation process. Also, as it is the full station ground that is being given a single categorisation, it will be seen clearly that many areas are categorised in a higher risk band than would be merited if the station area was divided between its urban and rural parts.

At the other end of the scale, in dealing with fire rates, anomalies are seen to occur where the number of incidents in a particular category is very small, and care had to be exercised when calculating individual station fire rates in such situations. Such statistical anomalies are easily recognisable in general and were discounted.

Designations also take account of the extent of/ history/ impact of fire prevention work - both community fire safety for domestic and statutory fire prevention work (Fire Safety Certs and enforcement). Also, the Area Deprivation Indices were consulted, as these are likely also to be an indicator of the domestic fire risk.

Significant buildings in the Individual/ Specific hazard column were readily known by the people working in each station ground. As noted above the history/ impact of fire prevention work was considered in assessing the grading to be assigned under this column. High-hazard sites, such as SEVESO sites, are closely regulated and significant risk mitigation work (including exercises involving the principal response agencies) take place. Buildings or sites which are of special interest because of their scale and importance to a community or region may not therefore be high risk, and the presence alone in an area of such facilities would not necessarily raise an area to high risk or very high risk. Such significant buildings would, however, normally merit having a specific fire service response in the form of a pre-determined attendance (PDA).

The categorisations under the various column headings are seen as indicators rather than absolute determinations in themselves, and the approach is intended as an aid to the professional judgement of those managing the service in deciding the initial area risk categorisation.

3.3 'Big Data' Analysis

The ARC process is based on analysis of three years of actual fire data generated from the three Computer Aided Mobilisation (CAMP) Centres. The National Directorate for Fire and Emergency Management worked with the three CAMP Contracting Authorities and a specialist contractor to develop a national model for Fire Risk Management in all fire authorities. This project is in line with the international trend towards the use of a risk-based approach to managing emergency service provision and brought a national consistency to this process in Ireland. The objective of the project was to provide spatial analysis of fire service historical incident data, in tandem with modelling of fire service resource deployment capabilities.

The first phase of the Risk Based Approach project dealt with the analysis of risk and activity levels combined with census data by station area on an Authority by Authority basis. The initial output from this phase of the risk based approach was a set of initial reports (July 2012) analysing risk and activity levels across each Authority based on the fire station grounds. The initial reports were followed up with Supplementary Reports (April/ May 2013) which compiled the initial information and supplemented it with additional information required for the Area Risk Categorisation process.

The data provided by this phase of the risk analysis process is integral for service planning within each fire service. This report, together with the recommendations in 'Keeping Communities Safe' report, support local fire service management in service analysis and decision-making and underpin revisions each Fire Authority's resource deployment in light of normal societal, and consequent fire risk, evolution and change.

3.4 Individual Fire Service ARC Reports and Outcomes

As a first step, each fire service has undertaken an 'Area Risk Categorisation' (ARC) process as recommended in KCS. This enables comparison, on a fire station by fire station basis, of local fire risk against national norms. This facilitates fire service management to identify specific issues such as a particularly high incidence of any category of fire and to establish targets for change. The ARC process also enables local fire service management to categorise fire risk and to establish if current service provision meets the national norms/ standards for that area risk category.

It is anticipated that, arising from this initial round of ARCs, the work of fire services, in all its facets – prevention, protection and response - will be geared in future to actively managing the highest priority fire risks within communities, while maintaining an appropriate level of response intervention capability.

The outcomes from the ARC process for the 217 fire stations is detailed in Appendix A. The aggregate numbers of stations by each risk category are shown in Table 3.1 below.

TABLE 3.1

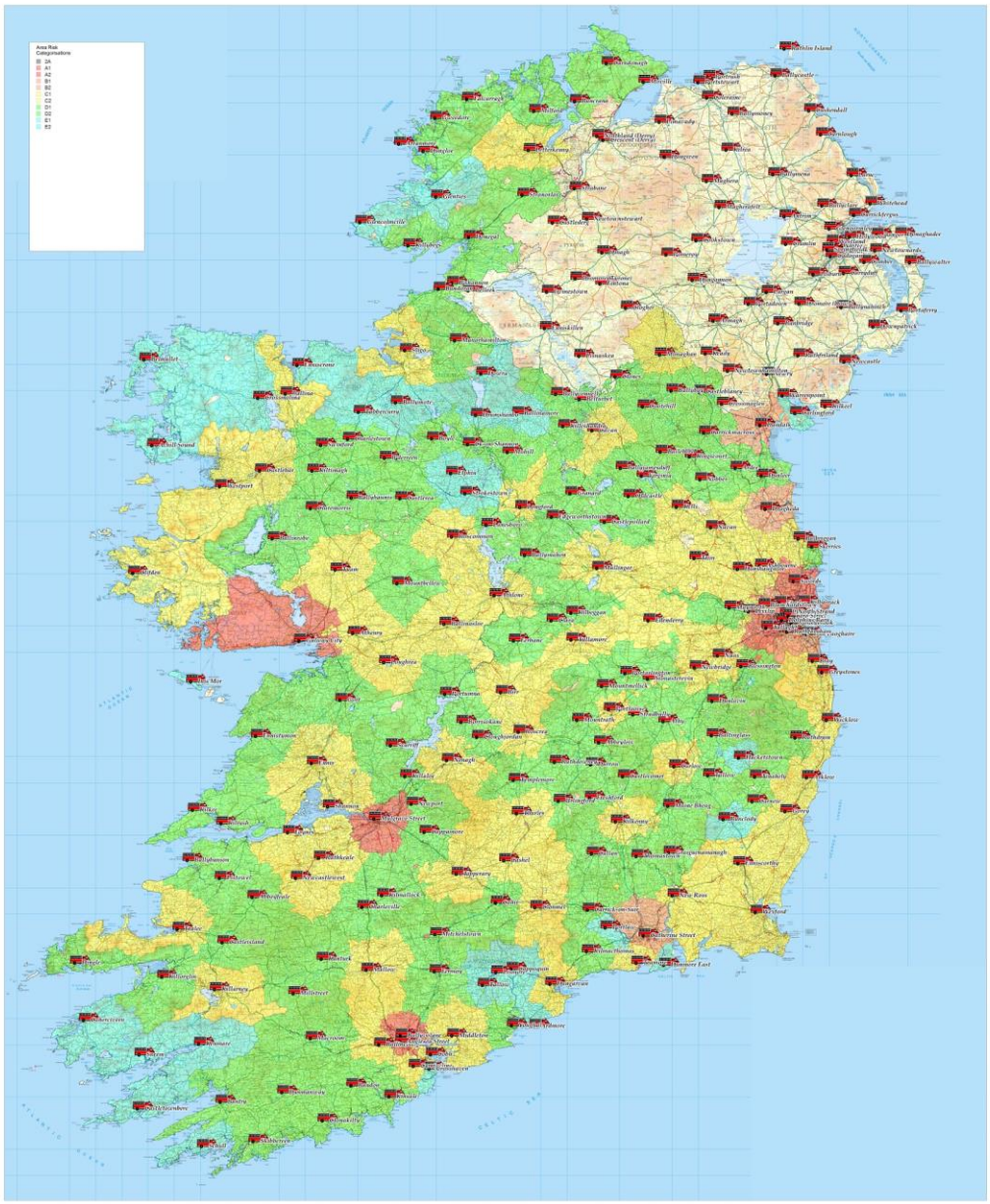
Summary of Fire Station Area Risk Categorisations

Area Risk Category	No of Stations	Population living in this Category	% National Population
A1	4	444,733	9.93%
A2	7	672,026	15.01%
B1	5	466,045	10.40%
B2	3	187,722	4.19%
C1	22	746,457	16.67%
C2	37	777,596	17.37%
D1	50	602,450	13.46%
D2	59	445,485	9.95%
E1	23	111,545	2.49%
E2	8	23,437	0.52%

The risk categorisations are mapped by station area in Figure 3.1 below.

Risk Category	Colour in Map 3.1
A1, A2	
B1, B2	
C1, C2	
D1, D2	
E1, E2	

Figure 3.1
Map showing Fire Station Risk Categories



3.5 Results of Initial Benchmarking against Response Standards in KCS

The templates set out in Appendix C of KCS, allied with the use of actual fire service response data provided to each fire service as part of Phase I of the RBA project, enable bench-marking of current response standards. Summary national data from these RBA reports is provided in this section. The figures used in compiling this data includes the average turnout times (based on three years of recorded data) of individual stations as well as travel times.

FIGURE 3.2

Percentage of National Population where First Response Arrives, Shown by 5 minute Increments

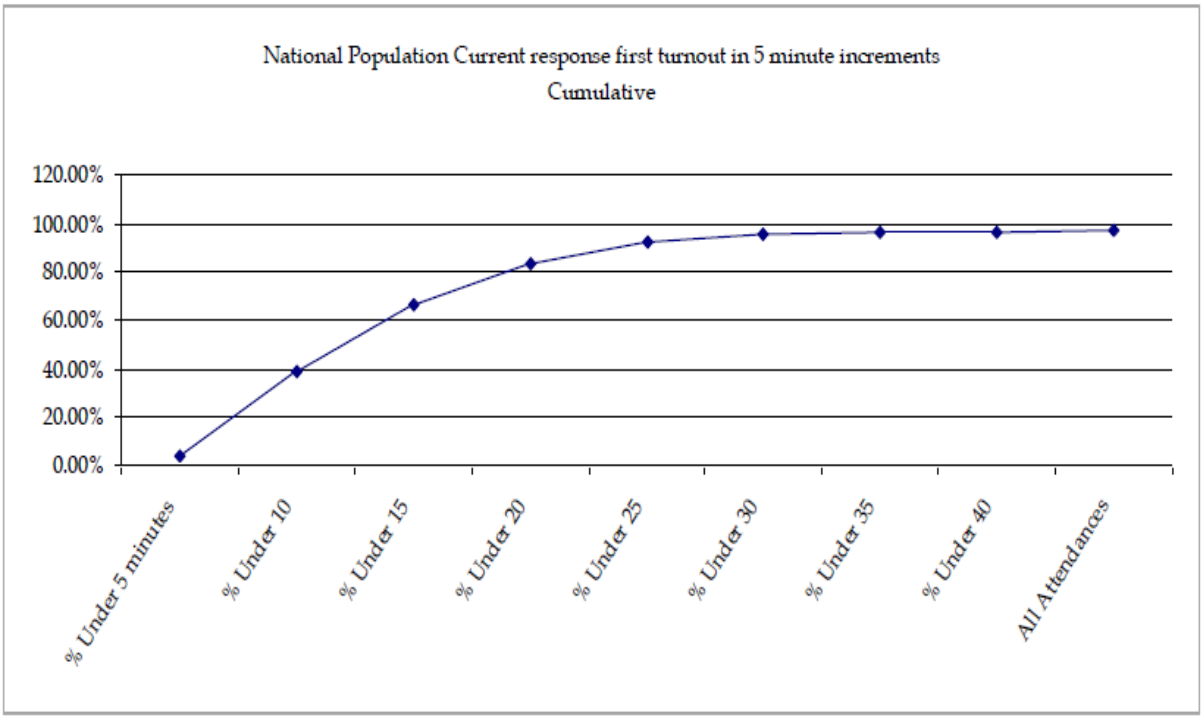


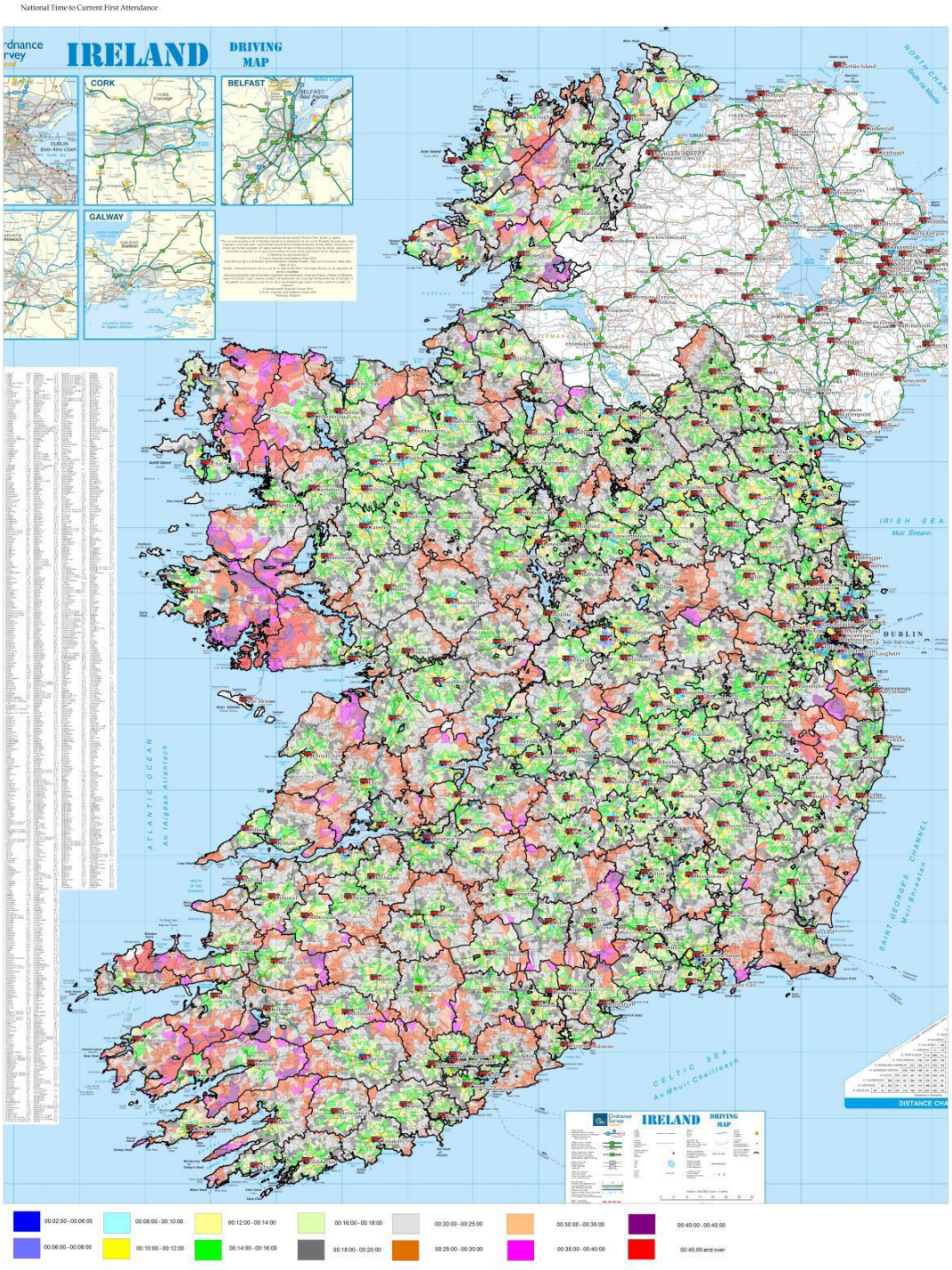
Figure 3.2 is based on the cumulative data shown in Table 3.2 below. This is presented further in Figure 3.3, which illustrates the picture of current first response.

TABLE 3.2
Percentage of National Population where first Response arrives, By 5 minute Increments

	Population Achieved	Cumulative Population Achieved
Total Population	4,582,912	
Total Population under 5 minutes	187,669	
% Under 5 minutes	4.09%	
Total Population between 5 and 10 minutes	1,582,510	1,770,179
% between 5 and 10 minutes	34.53%	38.63%
Total Population between 10 and 15 minutes	1,263,495	3,033,673
% between 10 and 15 minutes	27.57%	66.20%
Total Population between 15 and 20 minutes	791,031	3,824,704
% between 15 and 20 minutes	17.26%	83.46%
Total Population between 20 and 25 minutes	412,632	4,237,336
% between 20 and 25 minutes	9%	92.46%
Total Population between 25 and 30 minutes	149,906	4,387,242
% between 25 and 30 minutes	3.27%	95.73%
Total Population between 30 and 35 minutes	38,518	4,425,760
% between 30 and 35 minutes	0.84%	96.57%
Total Population between 35 and 40 minutes	12,695	4,438,455
% between 35 and 40 minutes	0.28%	96.85%
Total Population over 40 minutes	29,498	4,467,953
% over 40 minutes	0.64%	97.49%

FIGURE 3.3

MAP SHOWING FIRST RESPONSE ARRIVAL IN 5 MINUTE INCREMENTS



3.6 Annual Service Development Plans (ASDP)

The process of preparing the ARC reports has been used to identify those areas where incident rates are above the national norm, and to set targets for change and improvement on a station by station basis. Fire authorities have compared their individual station ground activity levels and also compared authority incident activity to national norms and targets set in 'Keeping Communities Safe'.

Appropriate mitigation measures and, in particular, community fire safety measures such as the smoke alarm scheme are being utilised to increase the safety of the public in dwellings. Fire authorities determine the priority needs in their areas and apply the available resources in the most effective configuration, ensuring an appropriate and effective balance between fire prevention, fire protection and response measures. Where issues are identified arising from the ARC process which require amendment, these are incorporated into Annual Service Development Plans (ASDPs).

3.7 Section 26 Fire and Emergency Operations Plans

After the ARC process has been completed, fire services management have, or are in the process of preparing draft 'Fire and Emergency Operations Plans', as required by Section 26 of the Fire Services Act, 1981 and 2003. The new generation of Plans are a step forward in that they can reflect the information obtained in the initial ARC analysis which is, for the first time, based on analysis of three years of real fire service data. The ARC process was developed with the legislative underpinning, Section 10 (3) of the Fire Services Act, 1981 and 2003 in mind.

Adoption of Section 26 Plans is a 'reserved function', meaning that local authority of fire service management bring the draft Section 26 Plan before the members of the local authority for their consideration.

The principles of local democratic control and accountability for fire service provision are maintained by KCS, while the objective of consistency and having national standards for an important public service such as the fire service is introduced.

3.8 The ARC Validation Process

It is a function of local service management to undertake the risk categorisation process. To assist in the objective of achieving consistent application, each fire authority was asked to present its draft ARC report, station categorisations and associated service levels to the External Validation Group, convened by the National Directorate to provide an external perspective on the process. This report is the output from that process

4 FIRE SAFETY

4.1 Statutory Responsibility for Fire Safety

Guarantees of safety cannot be offered in relation to the outcomes of fire service activity. The 'disaster tree' is an analytical approach used to understand significant events involving loss through fire, and it is the common understanding that a fire event may escalate through various levels from initiation and result in loss, damage and/ or death (including multiple deaths). The objective of fire safety activity is to prevent the event starting, or if a fire does start, to prevent it escalating through the various levels of a disaster tree to the point of causing death or large-scale loss. The probability of arriving at the point of disastrous outcomes is reduced significantly by fire service activities, but can never be fully eliminated.

Fires in dwellings comprise the largest category of societal fire risk, and more than 90% of the annual death toll from fires occur in the domestic setting.

There are typically 4,500 dwelling fires annually in Ireland, (excluding chimney fires). Other categories of property such as institutional buildings (eg hospitals and nursing homes), places of public assembly, large shops, office complexes and industrial/ factories have a potential for high or even catastrophic societal loss in the event of fire. While part of the focus of the ARC process is on the domestic dwelling fire situation, other categories of property have to be included in a risk reduction strategy. In some cases significant fire protection works have been incorporated into these categories of buildings, either from design/ construction stage and/ or as a result of specific statutory requirements / processes. Fire safety measures are primarily intended to ensure the safety of persons in and about the buildings in question, but these measures also contribute to property protection. Many of the more complex categories of buildings have features to assist fire services response on arrival.

Fire safety is achieved through the "Prevent, Protect, Respond" paradigm which is part of the overall fire risk management approach. Local authorities provide a range of services aimed at enhancing fire safety in their communities by preventing fires from happening in the first instance, and ensuring appropriate fire protection measures are in place in buildings, in addition to providing an operational response. The fire prevention/ protection work falls into two categories.

4.2 Community Fire Safety

The first is referred to as **Community Fire Safety** and aims to promote general fire safety messages to reduce the numbers of fires, together with targeting fire safety messages at key groups of the population who are identified as being particularly vulnerable to fire. The development of "Community Fire Safety" over the past decade

is a particularly welcome risk management approach. Engaging people to take action for their own safety is seen as a particularly effective approach. It is recognised also by fire services that the best and most effective access to many of those who are seen as being vulnerable to the threat of fire can be achieved through partnerships with the existing community networks and other organisations who work with 'at risk' groups.

Fires in dwellings comprise the largest category of societal fire risk and approximately 90% of the annual death toll from fires occur in the domestic setting. Domestic Smoke Alarms, which will detect fires at a very early stage and give an audible warning, are seen as a key contributor to ensuring that persons are safe from fire in the home. Specific CFS programmes include the Community Smoke Alarm Scheme where, in partnership with a range of voluntary/ community organisations, smoke alarms are provided and installed for the elderly or other vulnerable people living alone.

A number of separate research projects [1] to indicate the presence of smoke detectors in over 90% of dwellings.

Fire Services also deliver a national 'Primary Schools Programme', intended to give fire safety messages to every third class pupil in Ireland, thereby creating a fire safety aware society into the future.

Local authorities run programmes, including general fire safety promotion such as the annual Fire Safety Week as well as specific campaigns in response to locally observed patterns of fire. Communities which are particularly remote (such as island communities) are supported through a range of CFS initiatives.

[1] McMullen and Brown, (2015). DCU Study on Individual and Household Preparedness in Community Resilience in Ireland

All fire services reported on-going or renewed activity in the CFS area, specifically in relation to the Primary Schools Programme and the Community Smoke Alarm schemes. There is anecdotal evidence of the impact that the latter is having with a number of reported ‘saves’ in properties where fires have occurred after smoke alarms have been installed. Issues relating to managing for reductions in wildland and chimney fires have also been discussed as part of the EVGs. Some fire services are engaging on road safety initiatives with An Garda Síochána and HSE, where this is identified as a particular issue. The surge in fatal fire numbers in 2014 has also been considered with those services which have had fatalities. However, the apparently random nature of fatal fire events is illustrated in one service which had five fire deaths in the six months between January and June 2014, but which had zero fatalities in the twenty-four months of 2012 and 2013. Unfortunately, this upward trend has continued in 2015, with the added tragedy of the ten fire deaths associated with fire in Carrickmines, Dublin on 10 October 2015.

4.3 Technical Fire Safety

The second fire safety role of fire services is a more technical one, intended to ensure that appropriate measures are taken by the ‘persons in control’ of buildings of all kinds to prevent fires and to ensure the safety of persons in the event of fire breaking out in those buildings. Categories of property such as institutional buildings (eg hospitals and nursing homes), places of public assembly, large shops, office complexes and industrial/ factories have a potential for high or even catastrophic societal loss in the event of fire. Legislation places responsibility for preventing fire and ensuring the safety of persons in buildings on the “person in control” of such buildings. While the primary focus of much fire safety is on the domestic dwelling fire situation, other categories of property have to be included in a risk reduction strategy.

In some cases significant fire protection works have been incorporated into these categories of buildings, either from design/ construction stage and/ or as a result of specific statutory requirements / processes. Fire safety measures are primarily intended to ensure the safety of persons in and about the buildings in question, but these measures also contribute to property protection. Many of the more complex categories of buildings have features to assist fire services response on arrival.

Since 1992, under the Fire Safety Certificate system, fire officers have checked building designs for compliance with the fire safety standards set out in Building Regulations.

Fire services also provide programmes to educate persons in control of premises to which the public have access about their fire safety responsibilities, and undertake inspection programmes in targeted premises which are perceived as high risk, such as nursing homes and other sleeping risks. They also carry out ‘during performance’

inspections of 'Places of Public Assembly'. Fire services have a wide range of enforcement powers available under the Fire Services Act, 1981 and 2003.

Examples of good practice were seen during EVG visits in relation to tracking fire prevention work over time and running sector specific safety programmes. A focus has been maintained during the EVG visits on "During Performance Inspections" of Places of Public Assembly and other high risk buildings including Nursing Homes.

4.4 "PRIMe" – Premises Risk Indexing Methodology

PRIMe is a KCS project on enhancing the safety of the built environment which is being undertaken under the aegis of the National Directorate for Fire and Emergency Management and led by Wexford County Council.

The methodology has been designed by a team of subject matter experts from the Fire Service, and pilot software to aid in implementation is being designed by the NDFEM. The project seeks to appraise fire risk in all premises that fire services interact with each year, regardless of what brings the building to the attention of the fire service. A system is used to define the risk level based on its use (domestic, commercial, high risk commercial, low risk commercial, etc.), its occupancy level (sleeping risk, occupant mobility, etc.) and its population density (number of occupants).

Analysis of these factors assigns a risk rating to the premises which is then modified, positively or negatively by the fire services involvement with the premises (i.e. fire certification process, licencing, Inspection, Incident information, etc.) The project is being pilot tested initially in a number of authorities.

The output from this tool is a report on fire risk in premises within each service's functional area, which can be used to enhance and better focus the fire prevention/ inspection regime and specifically target the Community Fire Safety efforts currently in place in the fire service.

It is expected that each iteration of the system, continuously adding premises and collaborating with other local government systems, will enhance and standardise the approach to fire prevention and protection work, as well as guiding priorities for pre-incident planning by the operational service.

It is another example of a risk management approach in use in the fire service in Ireland. It is expected that the PRIMe system, described above, will become a significant input to future iterations of the Area Risk Categorisation process in time. In the meantime, it is expected that fire prevention programmes will be adjusted in light of the first round of the ARC process.

4.5 Fire Fatalities in Ireland

The lowest level of fire deaths in four decades was recorded in 2012 at 28, with a further record low of 24 fatalities in 2013. Unfortunately, the figures for fatalities from fire in 2014 show an increase over corresponding figures for the two previous years to 37. Similarly in 2015, the fire fatality count is back up at 41, including the ten victims of the Carrickmines tragedy on 10 October 2015.

Use of three year averages helps smooth the spikes caused by individual year's fluctuations and enhance statistical significance. Table 4.1 under shows the fire fatality rate per million of population, using a previous three year average. This table shows that the fatality rate in Ireland had been halved over the previous decade, but has started to climb again.

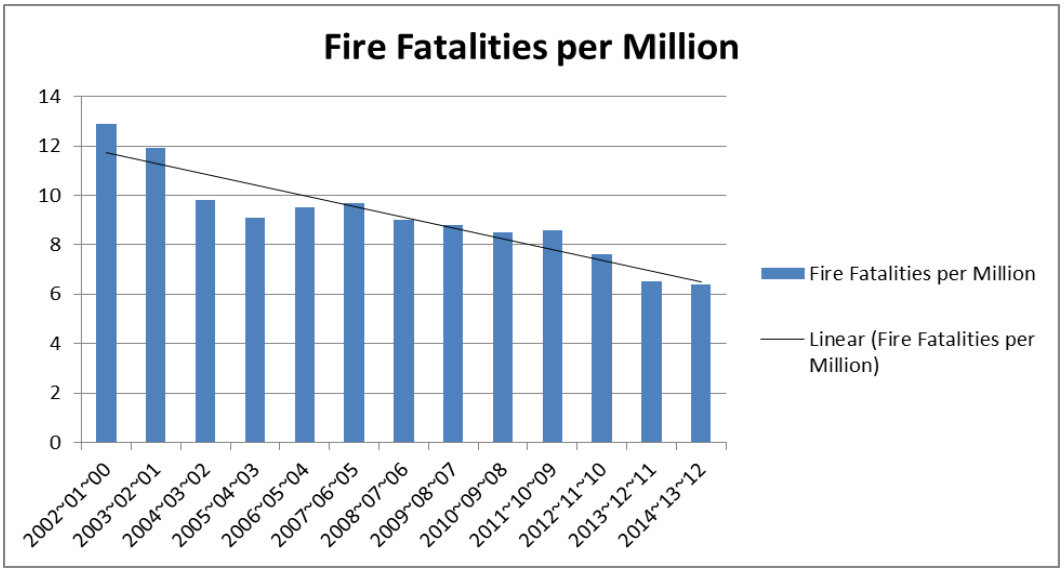
Initial figures sourced from the Health Research Board on the nine year period 2004 - 2012 indicate that 96 out of 340 (or 28%) of fire fatalities had alcohol/ drugs taken. This situation is being further researched with a view to considering the need for more targeted fire safety messaging dealing with this area.

Table 4.1
FIRE FATALITY RATES PER MILLION POPULATION, USING THREE YEAR AVERAGES

Years	Fire Fatalities Per Million
2002/01/00	12.9
2003/02/01	11.9
2004/03/02	9.8
2005/04/03	9.1
2006/05/04	9.5
2007/06/05	9.7
2008/07/06	9
2009/08/07	8.8
2010/09/08	8.5
2011/10/09	8.6
2012/11/10	7.6
2013/12/11	6.5
2014/13/12	6.4
2015/14/13	7.5

This overall trend is shown by the trend-line in Figure 4.1 under.

FIGURE 4.1

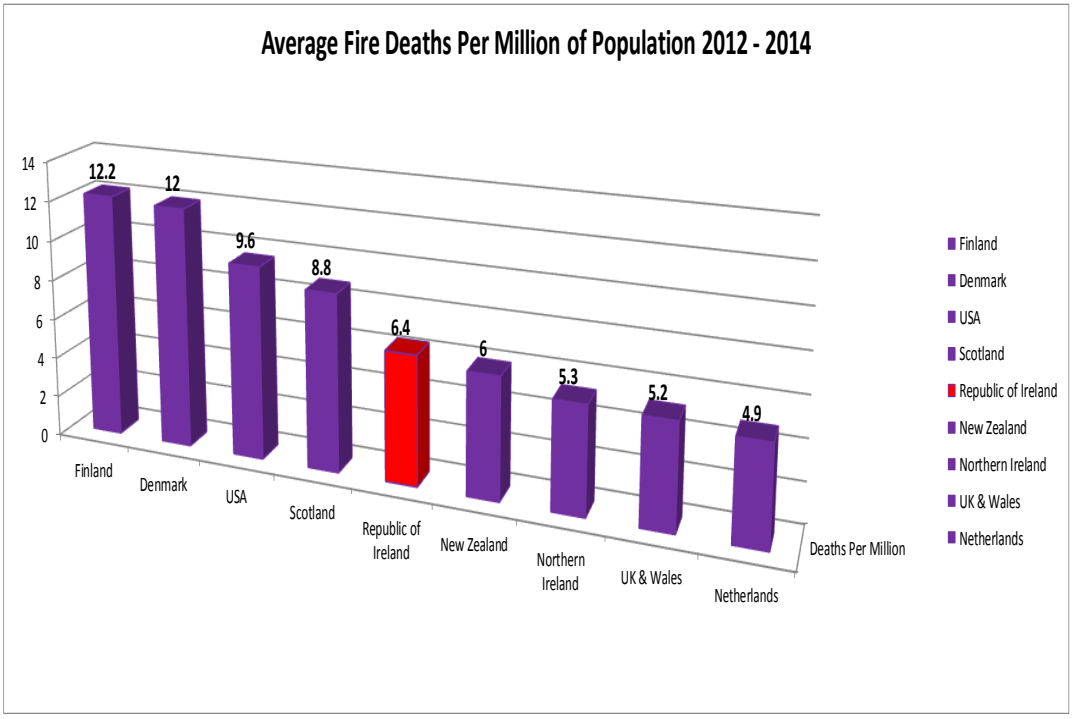


International Comparison of Fire Fatality Rates

It is also useful to benchmark Ireland's fire fatality rate against international rates. The Table 4.2 below provides relevant data for a range of countries, a number of which are selected because their scale is similar to Ireland. While a degree of caution is always necessary in comparing international statistics due to variations in definitions etc, these indicate that, at a fire fatality rate of 6.4/ million of population, Ireland is ranked with the most fire safe of countries, as shown in Figure 4.2.

FIGURE 4.2

Comparison of International Fire Fatality Rates 2012-2014



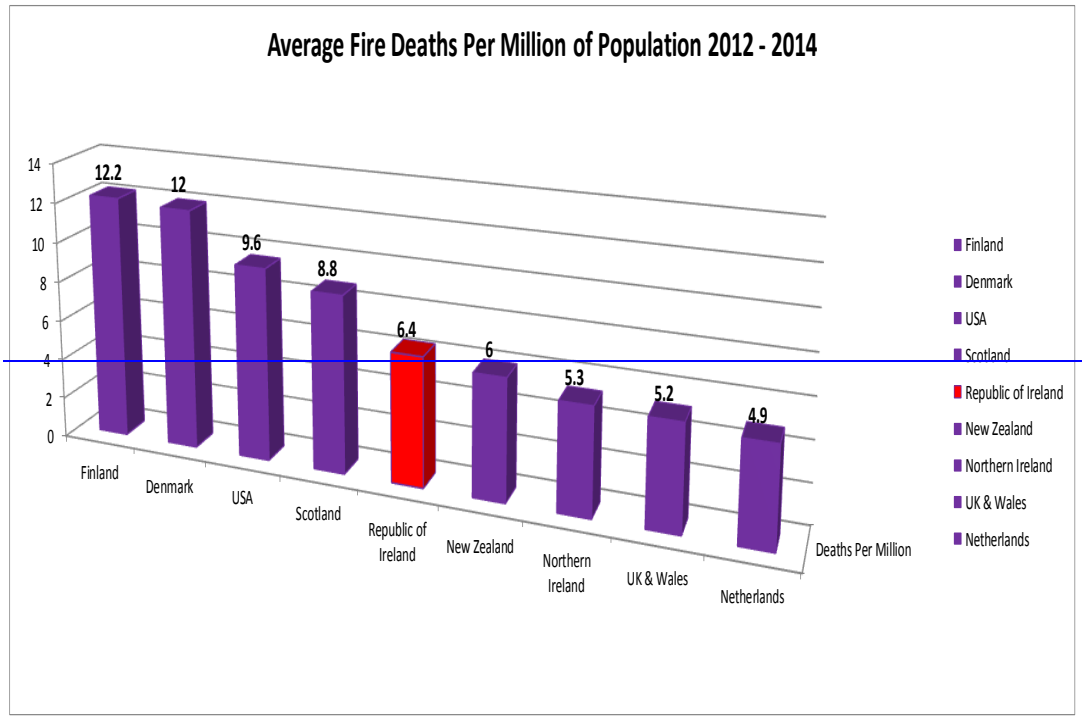


TABLE 4.2
INTERNATIONAL COMPARISON OF FIRE FATALITY RATES

Country	2012	2013	2014	Total Number of fatalities[2]	Population	Deaths per million in ascending order
Netherlands[3]	72	92	n/a	164	16,904,594	4.9
UK & Wales[4]	337	296	290	923	59,200,000	5.2
Northern Ireland[5]	10	11	8	29	1,829,725	5.3
New Zealand[6]	34	21	n/a	55	4,553,700	6
Republic of Ireland[7]	28	24	37	89	4,609,600	6.4
Scotland[8]	60	46	33	139	5,254,800	8.8
USA[9]	2919	3240	n/a	6159	320,619250	9.6
Denmark[10]	66	70	n/a	136	5,659,715	12
Finland[11]	75	58	n/a	133	5,472,421	12.2

[2] The average of these totals is used to calculate the *Deaths Per Million* total. Where the 2014 statistics were not yet available, the average is the total divided by 2 years. Where 2014 figures are available, the average is divisible by 3.
[3] Source of Data: www.nordstat.net
[4] Data provided by the British Department for Communities & Local Government "Fire Statistics: Great Britain April 2013 – March 2014"
[5] Source of Northern Ireland data: www.nifrs.org/statistics/key-performance-indicators/
[6] Source of Data: www.fire.org.nz (Emergency Incident Stats 2012-2013)
[7] All figures regarding Irish fatalities sourced from Department of Environment Community and Local Government Fire Fatality Statistics
[8] Source of Scottish Data: The Scottish Government Statistical Bulletin (Crime and Justice Series), Fire and Rescue Statistics, Scotland, 2013-14 (16 December 2014)
[9] Source of Data: Official National Fire Protection Association website, www.nfpa.org
[10] Source of Data: www.nordstat.net
[11] Source of Data: www.stat.fi

5 FIRE SERVICE OPERATIONS

5.1 The Shape of Fire Services in Ireland

As a result of the ARC process, the overall shape of Fire Services in Ireland has been confirmed as being matched to the identified fire risk on a fire station by fire station basis. The disposition of the response element of fire services in Ireland (location of stations, staffing arrangements in those stations, crewing levels and appliance/ equipment fleet) is based, by and large, on a logical, risk-related and evidence-based approach and the associated benchmarking against the standards in KCS confirms the appropriateness of this. In most services, little change has resulted from the ARC process but, based on KCS's national standards, an assured consistency is being developed/ resulting.

It is noteworthy that a number of long-standing fire cover issues have been addressed in this first round of ARC and are in the process of being resolved by service management, as a result of the evidence-supported process undertaken.

It can be concluded that the ARC process has impacted at the margins of how the response service is shaped, rather than causing wholesale change. However, in the following sections, issues requiring future attention are considered.

5.2 Pre-determined Attendances

The phrase 'Pre-determined Attendance' (PDA) has a number of meanings but is usually taken as the instructions of the Chief Fire Officer to the relevant Regional Communications Centre (RCC) for an initial fire service response to a call for assistance. PDAs include;

- **Incident Specific PDAs** (e.g. for Domestic Fires, RTCs etc.) setting the numbers and types of appliances to be mobilised to that category of incident.
- **Specific Risk Premises PDAs** (such as Institutional buildings, Airports, industrial etc) listing the number and sequence of appliances for initial dispatch to an incident in that specific building
- **Background PDA**, where the order of fire appliance attendance to a specific address, or group of addresses, is set out and is used by the Regional Communications Centre to determine the order in which appliances will be mobilised to fill an incident or specific risk premises PDA.

The KCS Report deals with two aspects of Predetermined Attendance. The first is

- Implementing the principle of nearest available resource being dispatched to an incident; and the second is

- Achieving a national consistency in response mobilisation, based on an analysis of incident types.

In the following sections, we report on the approach and the progress which has been made in implementing the KCS recommendations in relation to PDAs.

5.2.1 PDAs – Nearest Available Response

While the PDAs for the majority of the country are based on work done as part of the original CAMP project, a number of situations remain where response is not based on the nearest appliance, but on other historical factors to do with station area boundaries.

It is self-evident that, in the interests of public and fire-fighter safety, PDAs should be aligned with the principle of nearest available response. The KCS project team have undertaken detailed research and analysis of fire service response to every address in the country. A series of Reports have been prepared to support the principle of dispatch of nearest available resource as identified in the Keeping Communities Safe document. The purpose of these reports is to provide substantive evidential support to enable fire authority management to review and redefine the pre-determined attendances (PDAs) in their functional areas, in accordance with their statutory duties.

Both the national and local reports have been prepared and it is expected that these will be supplied to all authorities in the immediate future. This will enable services to begin the processes, including consultation with staffing interests, to review current PDAs and implement changes to give effect to the principle of dispatching the nearest available resource to incidents. It is also expected that this issue will be tabled at the new FSNOIG referred to previously, with a view to arranging of a national agreement on implementation.

The preparation of these reports involved technical analysis of historical response data and geographical information. These reports model the predicted order of attendance of primary fire service resources to every geographical area, based on the travel time from fire stations to those individual areas. The results are based on a combination of actual turnout times of the fire stations, using three years of cumulative response data, together with the predicted travel times.

The purpose of these reports is to provide an evidence base to support fire authorities to review and redefine the pre-determined attendances (PDAs) in their functional areas. In the majority of situations, the data support the current PDAs, and little or no change is envisaged. However, the data highlights a number of areas with significant anomalies, and it is considered important that the reports are used as a basis for reviewing attendance at boundaries involving other fire services.

The reports show that significant improvements can be obtained by adjusting the first response PDAs to address the identified anomalies. It is estimated that over

200,000 persons, or 4.5% of the total population, stand to benefit directly from better levels of response when PDAs are based on the recommendations of these reports.

The reports are not intended as a prescriptive definition of attendances to specific areas, but to provide a rational and evidence-supported basis for professional judgement. Local elements and knowledge, such as operational cover requirements, congestion factors relating to time of day, etc., also need to be factored into this analysis. However, these reports should underpin professional judgement and decision-making by each Chief Fire Officer in relation to fire service response. It is suggested that any intended deviations from the results in the reports, other than very minor ones, should be supported by a written case, evidentially based, to justify why the principle of nearest available resource, supported by the data in the reports, is not being used.

5.2.2 Nationally-Consistent Pre-Determined Attendances.

While overall response capacity of fire services is related to risk categorization as shown in Table 7.3 of KCS, it is the pre-determined attendances (PDAs) for the individual categories of incidents that determine the number of appliances which are mobilised initially in response to a call for assistance.

It is important to note that the Incident Commander, the person statutorily empowered by Sections 27/ 28 of the Fire Services Acts, may vary pre-determined attendances in light of information available/ circumstances of the particular incident, and can order additional resources for the incident at any time.

There are a significant number of incident types which are used as the basis for managing operational response. In an effort to achieve national consistency, a single system of incident categorisation (operational incident types) is set out in Appendix A of KCS, together with an associated pre-determined attendance and a primary/ secondary/ tertiary incident designation. Appendix A was derived to a great extent from current mobilisation practices in the three Regional Communications Centres, and introduces a common national fire service response for a standardised list of incident categories.

A research document was produced which reviews all the incident scenarios and undertakes a ‘Task Analysis’ to clarify if the initial response, as set down in the PDAs in Appendix A of KCS, together with the normal crewing levels, is appropriate in terms of the number of personnel, the fire appliances and equipment in order to maintain safe systems of work.

‘Task analysis’ is the study of what an individual or crew is required to do in terms of actions, in order to achieve a goal. Task descriptions are used which examine the resource requirements in terms of personnel and equipment. The description of task requirements consists of what is to be accomplished. The Task Analysis document

provides an analysis of the tasks that have to be completed and the number of fire-fighters necessary to complete them. The aim of the Task Analysis document is to examine the appropriateness of the PDAs, which to a large extent reflect existing fire services practice, with normal crewing on each appliance for the tasks to be undertaken.

Fires or other incidents that involve threat to life, or which involve structures (incidents that are classified as primary or secondary in KCS) in general have an initial response of two fire appliances. This is considered appropriate for the general run of incidents, and bearing in mind that the PDA is the initial automatic dispatch which may be varied by the Incident commander or by a premises specific PDA. Some incidents where 'persons are reported to be involved' trigger a three pump PDA. At the other end of the scale, incidents which do not generally involve a potential threat to life or structures (classified as tertiary in KCS) have an automatic one pump PDA response which, as supported by the Task Analysis Report, is considered appropriate.

It was reported during EVG that the vast majority of fire services currently have Pre-Determined Attendances which are consistent with Appendix A of KCS and little or no change, other than minor adjustments, is envisaged. A small number of services report that they expect an increase in mobilisations (generally expected to be of the order of 10%) arising from implementing two pump mobilisation to all primary and secondary incidents. An issue arose in a small number of cases where a second appliance, based in stations with retained crewing levels for one pump, had been mobilised as a second pump to domestic incidents. It was highlighted in discussions that a two pump PDA does not consist of just two Class B appliances, but two Class B appliances with normal crews, providing a norm of 9 or 10 fire-fighters.

Two significant deviations from national PDAs were reported in full-time services. In one full-time fire service, a three pump PDA was introduced for domestic fires (the national recommendation is two pumps with associated crew of 9 or 10). It is understood this was introduced approximately five years previously as part of a response to declining fire incidents and to give staff more actual incident exposure and opportunity to wear breathing apparatus. No reports or studies were available which explained the reasoning behind this increase and, arising from this report, there is no reason to think that the national PDA for this category of incident is inadequate. It may well be the case that in certain specific situations (eg persons reported), on foot of an analysis, a fire service might want to increase the PDA for address-specific incidents.

The other significant deviation was also in a full-time fire service, where there has been a long-standing practice of mobilising a van with a crew of three to certain tertiary category incidents (eg chimney fires). Again, there is no report available to

underpin/ support this practice, and its origins appear to be in history, probably associated with minimising disruption of station routine. The PDAs in Appendix A of KCS recommend a Class B appliance with a preferred normal crew of five, but that four, including an incident commander, may be used for such tertiary incidents.

While we note that the majority of fire services are using PDAs which are very closely aligned to those in Appendix A of KCS, we recommend that all fire services continue to migrate towards the nationally-recommended PDAs. The process for the introduction of any such change should be enhanced by the new national agreement with the Unions.

5.3 Service Infrastructure

Background and the Fire Services Capital Programme

The Fire Service requires an infrastructure on which to base its operations. This comprises the 217 fire stations, a fleet of 600+ appliances, a huge range of specialist equipment as well as a mobilisation and communications infrastructure.

The Fire Services Capital Programme forms part of the Department's strategy to support fire authorities in the development and maintenance of a quality fire-fighting and rescue service. The Department provides capital funding for the construction/ upgrading of fire stations and the procurement of fire appliances and specialised equipment. Investment in fire services has aimed at improving the capacity of the fire services to address the full range of hazards with which the sector now deals. This capital funding supports the local authority in its mission to protect people, communities, property and local infrastructure from fire and other emergency situations.

In 2011, the then Minister signalled that the priority for capital investment was to be directed towards maintaining the national fire appliance fleet, and approval for the acquisition of 17 new frontline fire appliances was announced. In order to aggregate demand and achieve better value-for-money in line with recommendations of the Local Government Efficiency Review Group, an innovative programme involving the joint procurement of appliances was used. This involved lead authorities tendering on the basis of an agreed national specification. Delivery of these appliances was completed during 2012 and 2013, with the final five being supplied in 2014. A new programme for the procurement of 20 fire appliances was announced in June 2015.

In February 2016, Minister Alan Kelly, T.D., announced a five-year Fire Services Capital Programme with an allocation of €40 million, based on the current annual €8 million allocation, to be used for the purchase of fire appliances and specialist equipment, building or upgrading of prioritised Fire Stations, an upgrade of the Communications and Mobilisation system, and improvements to Training Centres.

The programme will see 16 new fire station construction projects initiated, along with 10 fire station upgrades/ refurbishments. The projects in the capital programme will be reassessed on an annual basis and priorities may be adjusted to bring forward projects, taking account of their state of readiness and those offering best value-for-money. The capital programme also provides for implementation of an €8m replacement of the first generation of fire service mobilisation and communications and provides for replacement of the appliance fleet and purchase of specialist equipment.

Fire Stations

Of the country's 217 fire stations, the majority have been constructed in the last thirty year period and are regarded as having 'full' or 'good' facilities. With a small number of exceptions, those stations which are graded as A, B or C risk categories all have modern fire stations, so that the overwhelming majority of 999 calls are responded to from fire stations with full facilities.

A significant number of those with D and E risk categorisations have also been improved, but some fire stations remain which have only fair or poor facilities. Over the last decade, approval-in-principle was given by the Department for the construction of some new fire stations, but as public sector finances contracted it did not prove possible to progress many of these projects. So, while a number of new fire stations and upgrades/ extensions have been completed in recent years, requests for funding have remained outstanding in a number of cases. The Minster's announcement in February 2016 is a significant step to advancing the fire station construction/ renovation programme.

The Class B Appliance Fleet.

The scale of the fire appliance fleet in some counties emerged as an issue in early EVG visits. A detailed review of this subject has confirmed larger numbers of Class B appliances than were anticipated. It appears that when new fire engines have been provided for the fleet, appliances at the other end have not been decommissioned and the older appliances have been assigned as additional vehicles to 'one-pump' stations. The desire to have extra vehicles for 'fend-off' at RTAs is reported as being a factor, in part at least, of this trend. The result is that the Class B fleet has grown in recent years, well beyond the figures that the Department uses in planning and funding replacement appliances. As noted above in relation to PDAs, this is a potentially problematic development from a number of perspectives.

Nonetheless, there are excellent models of fleet maintenance in a number of services, providing full tracking associated with individual appliances. Equipping and funding TETRA radios for an overly-extensive fleet may prove a significant and prohibitive cost factor for individual fire services. Part of the EVG discussions in

individual services have focussed on the range of management actions required to begin to address this issue.

Special Appliance Fleet.

As a separate point, the special appliance fleet of Aerial Appliances, Emergency Tenders, Water Tankers etc. has evolved largely on a single authority basis. Additionally, the EVG visits show a level of inconsistency in relation to the provision and use of water tankers across different fire services. It is proposed that the National Directorate and Chief Fire Officers should undertake a specific review of the special appliance fleet using a 'Task and Finish' Group to devise guidance on an optimal, evidence-based appliance fleet configuration and maintenance arrangements, consistent with the Area Risk Categorisation process.

We recommend that a co-ordination exercise be undertaken to optimise special fleet disposition, and that this could best be considered as part of a Regional Agenda.

Specialist Equipment

Maintaining an expanded range of specialist equipment is also an issue for many fire services. Recent national guidance on equipment risk assessment has highlighted the need for equipment to be properly risk assessed as well as being maintained, tested and its status being recorded.

5.4 Staffing of Retained and Full-time Services

The 217 fire stations are managed by Station Officers, assisted by Sub-Officers, and are staffed by an average over the past six years of 3,249 fire–fighters, who are local authority employees; an average of 1,204 are full-time fire fighters, based in 19 fire stations (15 exclusively whole-time) in the main cities/ large towns, and 2,045 are retained fire fighters, based in 202 fire stations. The difference between full-time and retained services is that full-time crews are on station, waiting for incidents and mobilise within 1 to 2 minutes typically, while retained fire-fighters respond to bleeper alerts, go to their fire station and mobilise to incidents within a range of 4 to 7 minutes.

Table 5.1

Year	Fire Fighters – Whole Time Equivalent	Retained Fire Fighters	Total
31 DEC-09	1222	2049	3271
31 DEC-10	1203	2030	3233
31 DEC-11	1189	2077	3266
31 DEC-12	1212	2041	3253

31 DEC-13	1200	2037	3237
31 DEC-14	1199	2039	3238
6 Year Average	1204.17	2045.5	3249.67

Fire-fighter numbers in Ireland have been maintained at a constant level since the introduction of the moratorium on public service recruitment in 2009. The number of fire fighters serving on 31 Dec 2014 was 1% down on the peak in Dec 2009, or is 0.25% less than the six year average.

Full-time Fire Stations

There are 15 fire stations crewed exclusively by full-time fire-fighters. These are associated with A or B risk categorisations typically as shown in the Table below.

TABLE 5.2

FIRE STATIONS WITH EXCLUSIVELY WHOLE-TIME STAFFING

FIRE SERVICE	FIRE STATION	ARC
CORK CITY	Anglesea St	A1
CORK CITY	Ballyvolane	A1
DUBLIN	Blanchardstown	B1
DUBLIN	Dolphins Barn	A2
DUBLIN	Donnybrook	B2
DUBLIN	Dunlaoghaire	B1
DUBLIN	Finglas	A2
DUBLIN	Kilbarrack	A2
DUBLIN	North Strand	B1
DUBLIN	Phibsboro	A2
DUBLIN	Rathfarnham	B1
DUBLIN	Swords	A2
DUBLIN	Tallaght	A1
DUBLIN	Tara Street	A1
LIMERICK CITY & COUNTY	Limerick City	A2

The full-time fire services are characterised by fixed and constant staffing levels, based on long-standing IR agreements, rather than analysis of current risk and need. There is little consistency apparent across the country, or even within services with multiple stations, as to the staffing arrangements in full-time stations. Shift systems

in use include 24 hour on, 72 off as well as the 9/15 pattern. In some cases, full-time services assign dedicated staff to crew 'special' appliances, some of which are not used frequently.

These factors generate on-going requirements for both compensatory leave and staff to work overtime. Preliminary analysis of expenditure by local authorities with full-time fire services indicate that they typically spend an annual average of €95 per person (range 87 – 160) on providing their services or an annual average of €255 per household (range 237 – 409). Indications are that incident response accounts for a small proportion of time on duty, and arrangements for more optimal use of this level of resources need to be considered, particularly in light of requirements for on-going training to maintain competency, pre-incident planning and fire safety work, including community fire safety.

Mixed-Staffing Fire Stations

There are 4 stations with one full-time crew and one (or more) retained crew(s). These four stations are capable of mobilising combinations of multiple appliances, based on situation needs, with the existing crewing arrangements.

TABLE 5.3

FIRE STATIONS WITH MIXED STAFFING ARRANGEMENTS

FIRE SERVICE	FIRE STATION	ARC
GALWAY	Galway City	A2
LOUTH	Drogheda	B2
LOUTH	Dundalk	B2
WATERFORD CITY & COUNTY	Waterford City	B1

One of these services has introduced a 5 Group Duty System (5GDS) recently, which has certain benefits in terms of providing time for training and other necessary activity while consistently achieving crewing levels without the need for overtime and also minimising sick-leave.

The retained crew(s) in these mixed staffing stations are generally provided in accordance with the arrangements set out in the next section.

Retained Fire Services

The remaining 198 fire stations are staffed exclusively through the retained staffing system, whereby fire-fighters' pagers are alerted, they go immediately to their fire

station and mobilise to the incident. The retained fire service model is seen as a particularly effective model of community service.

Arrangements for staffing of retained fire services were set out in an Agreement concluded in 1999, which provided for significantly enhanced retainer and hourly payment arrangements for fire-fighters at the time. The agreement provided for an optimal arrangement of 15 staff in two pump stations (using a rostering arrangement), and a staff of 9 fire-fighters in one pump stations.

As can be seen in Table 4.4 below, there are a range of retained fire service staffing arrangements actually in place, ranging from 6 to 18 fire fighters. The deviations from the 1999 agreement generally have been agreed locally with staff representatives to suit local needs. However, these are based primarily around the 15 and 9 (+ or – 1) staffing level, with an additional arrangement where a staffing level of 12 (+ or – 1) is used.

One retained station retains an arrangement where a small number of staff are employed on a full-time basis (nucleus crewing), but this is a practice which has been phased out generally over the years as unsatisfactory.

Two pump retained fire stations typically have a range of appliances and mobilise combinations of multiple appliances, based on situation needs, with the existing crewing arrangements. One pump stations typically have an additional vehicle, a 4WD in the great majority of cases, in addition to the Class B appliance.

TABLE 5.4

FIRE STATIONS WITH RETAINED STAFFING ARRANGEMENTS[12]

Station Staffing Level	No of Stations	Related ARCs					
		C1	C2	D1	D2	E1	E2
18	1	1					
16	1	1					
15	10	8	1	1			
14	7	3	3	1			

[12] This table may require slight adjustments across categories, as actual station staffing levels change from time to time for various reasons, but the overall pattern is generally as shown.

13	7	2	3	2			
12	36	6	20	9	1		
11	4	0	1	1	2		
10	33	2	9	8	10	2	2
9	78	0	0	24	35	17	2
8	21	0	0	4	11	4	2
6	2	0	0	0	0	0	2
		2	37	50	59	23	8

Senior Fire Officers

Fire services are provided by the local authorities and senior fire officers are analogous to local authority engineering grades. The senior officers provide fire service leadership and management functions which enable the fire services in Ireland to function on a 24 hour a day, 7 day a week basis.

In contrast to other jurisdictions where up to 20% of fire-fighter numbers are engaged in head-quarters/ support functions, the fire officers in Ireland directly manage the operational fire services which have an annual budget of €267m and are staffed by the 3,250 fire fighters. They arrange, manage and deliver all training, procurement, maintenance, logistics and other support roles necessary for the functioning of the services.

The senior officer grade also plays a critical background role in ensuring quality and consistent services to the public when these are needed. A 'Rostered Senior Fire Officer' (RSFO) system is managed by each Chief Fire Officer to ensure that there is continuous availability of and response capability from an appropriately trained and experienced senior officer.

At end of Q1, 2015 the national figure of senior fire officers employed by local authorities is 201. The number of fire services with different numbers of senior fire officers is shown in the Table 5.5 below.

TABLE 5.5
NUMBERS OF SENIOR FIRE OFFICERS

No of Senior Officers in a fire service	3	4	5	6	7	8	9	10 or 10+	
No of fire services with this number	2	8	5	2	1	1	4	4	
Total Number of Officers	6	32	25	12	7	8	36	75	201

Overall, the number of Senior Fire Officers in local authorities has decreased from 270 in 2008 to 201 in 2014, a reduction of approximately 25% which is consistent with the general reduction in local authority staffing numbers over this time period. This is in contrast to fire-fighter numbers, which have been maintained at a constant level since 2009 as shown in TABLE 4.1, despite the moratorium on public service recruitment.

In addition to their work in enabling the fire service to function 24/ 7/ 365, the small corps of senior fire officers also provide a range of specialist statutory and community fire safety functions. A number of fire officers undertake building control functions on behalf of these local authorities. Fire officers also lead for local authorities in the area of major emergency management and co-ordinate local authority's emergency engagement with An Garda Síochána and the Health Service Executive. In a number of cases they manage regional communication facilities and in many cases oversee the local authority's Civil Defence[13] service. Many fire officers also contribute to national/ regional work to develop fire services in addition to their work with their own fire service.

5.6 Pre-Incident Planning

Several examples of good practice in relation to integration of fire prevention and operational activity through Pre-Incident Planning were presented during EVG visits. This is an area requiring further consideration and it is expected that the PRIMe project (see above) can enhance and standardise work in this area.

[13] Civil Defence is a statutory organisation of approximately 4000 volunteers, operated by local authorities under the aegis of the Department of Defence, with a Civil Defence Headquarters in Roscrea.

It is expected that priorities for Pre-Incident Planning work will be derived, on a station by station basis, from information included in the initial Area Risk Categorisation process.

5.7 Training

Services report that practices in relation to training have been/ are being reviewed in light of the national guidance issued by the Directorate. In one retained fire service, a significant change was introduced in 2014 to come in line with national guidance for on-station training. Examples of excellent on-station annual and three-year training programmes were seen, with full accompanying training and recording material.

The resolution of issues at national level in relation to provision and assessment of breathing apparatus wearer refresher training has been welcomed, and all retained fire services are now using the new guidance. The importance of this BA Refresher training in fire brigades which do not have many structural fires has been underlined. Several retained brigades have introduced additional quarterly BA drills in this situation also. Issues have been raised in relation to quality assurance of training and maintaining/ assessing instructor competence.

It was a matter of concern that one full-time fire service has only recently succeeded in starting a BA refresher training programme.

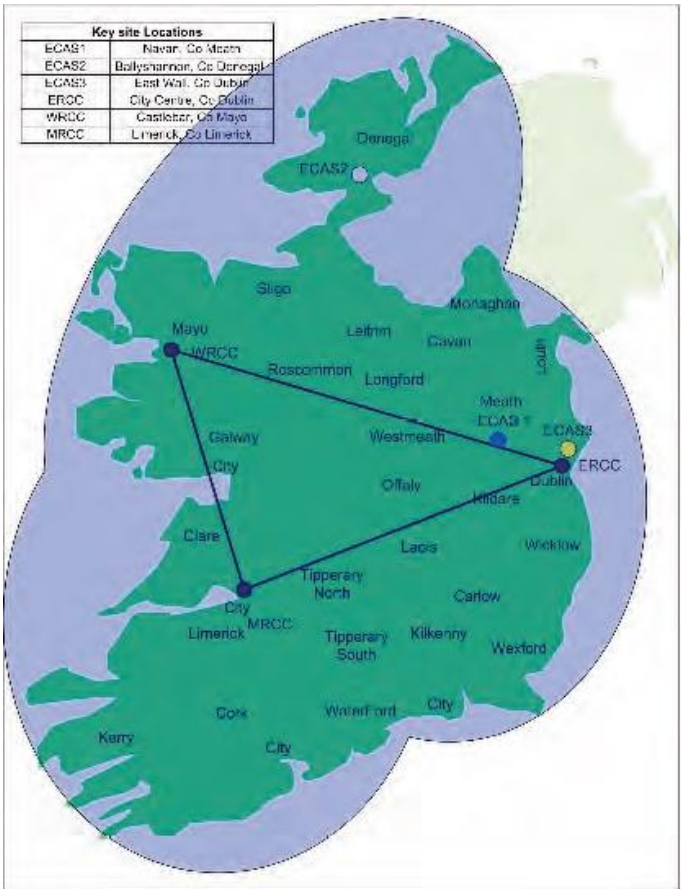
5.8 Handling of 999/ 112 Emergency Calls

In 2014, members of the public made 88,391 calls for fire service assistance via the 999/112 system. These calls are processed in the three CAMP Regional Communications Centres (RCCs) in Castlebar (serving the West and Donegal), Limerick (serving Munster) and Dublin (serving Dublin, the East of the country and Border counties).

Details of the kind of emergency involved and the caller's location are determined by specially-trained operators, and the appropriate and nearest fire service resources are alerted and dispatched to the incident. This initial response is referred to as the Pre-Determined Attendance (PDA). This may be varied by the incident commander in light of available information.

The RCC maintains communication with the Incident Commander at the scene and will mobilise additional resources or other emergency services to the incident if required.

The first-generation of CAMP technical systems (mobilising systems in the RCCs, radio equipment and signal bearers and fire station equipment) on which the communications and mobilising system operates are nearing end-of-life and significant investment will be required to maintain the current level of service. It is intended to move from the current three region-based systems to a single, unified national call-handling system, while continuing to use the current three centres as shown in the map below. This will enhance both the resilience and the capacity of the individual Regional Communications Centres for handling 999/112 calls. Implementing CTrí will require investment projected at €8m over the next three years.



An issue has been reported in relation to one Region Communications Centre, where services using this facility report some inaccuracy in handling 999 calls. While research on the issue has not been conducted as part of this EVG process, the service users report that, despite operating the established complaints procedures, the underlying problems seem to persist. We recommend that an EVG type process should be undertaken in relation to the three RCCs, which would include consideration of the reported issues and, if appropriate, enable the underlying causes to be established and addressed.

5.9 Mobilisation Times

Table 5.6 below sets out the mobilisation times being achieved by fire services currently. These are based on three years of actual data over the 36 months before November 2013. Turnouts in excess of 15 minutes were excluded as anomalies.

TABLE 5.6

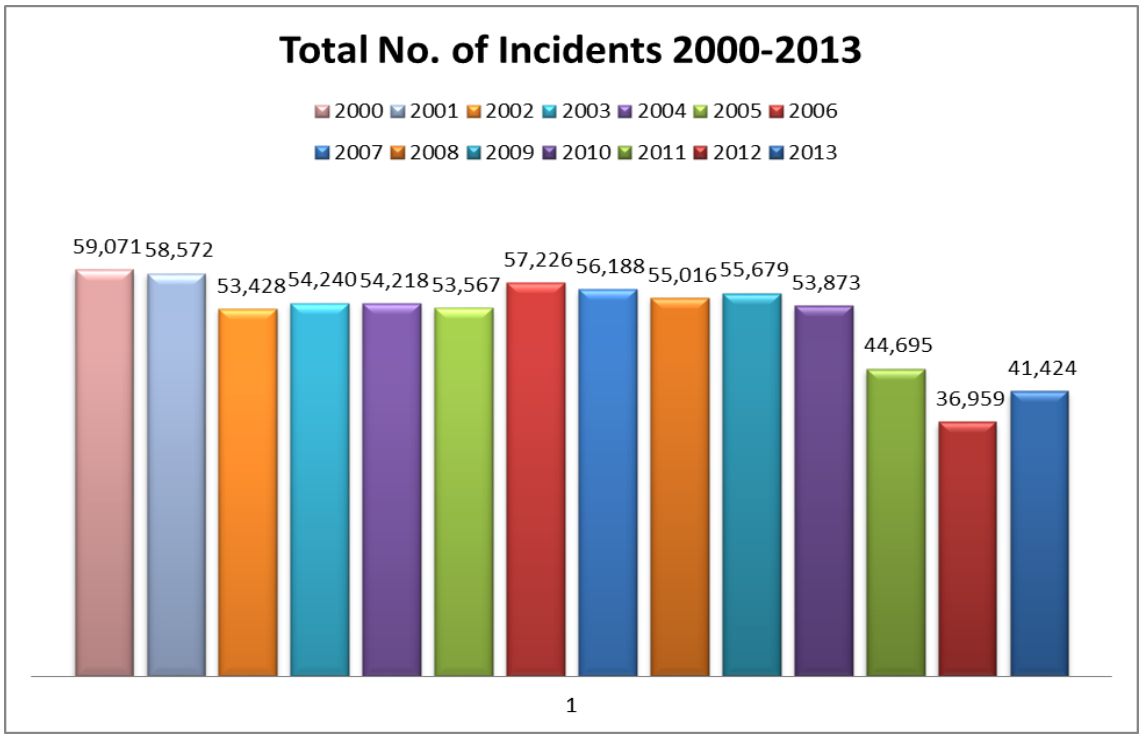
Category of Fire Station	Turnout Time band (in min.seconds)	No of Fire Stations in this band
Full-time	< 1.30	1
	1.30 – 1.40	9
	1.40 – 1.50	4
	>1.50	1
Mixed[14]	1.50 – 3.00	4
Retained	3.00 – 4.00	10
	4.00 – 5.00	49
	5.00 – 6.00	86
	6.00 – 7.00	41
	7.0 – 8.00	13
	➢ 8.00	1

[14] The data in relation to this category of station covers a period of significant transition, and it is expected that future analysis of this parameter for these stations will show enhancement in line with full time services.

5.10 Trends in incidents/ fire types

The overall trend in relation to total number of incidents being responded to by fire services on an annual basis is shown in Figure 5.7 below.

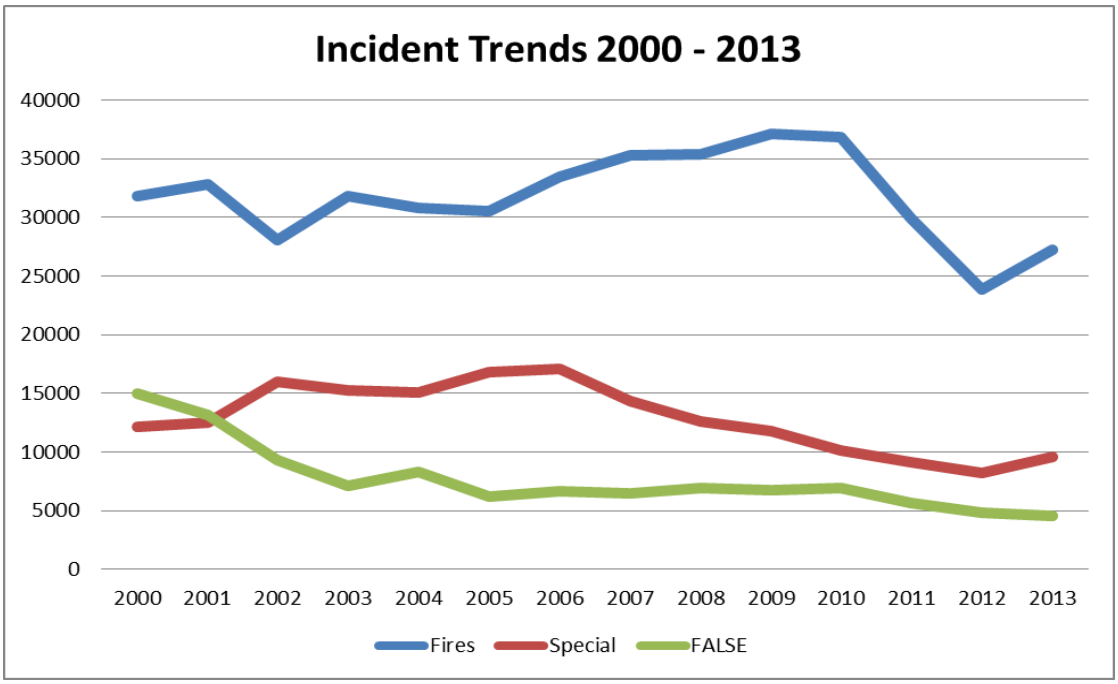
FIGURE 5.7



In this thirteen year period, as shown in Figure 5.9, 60% of incidents were fires, 25% were special services and 15% were false alarms.

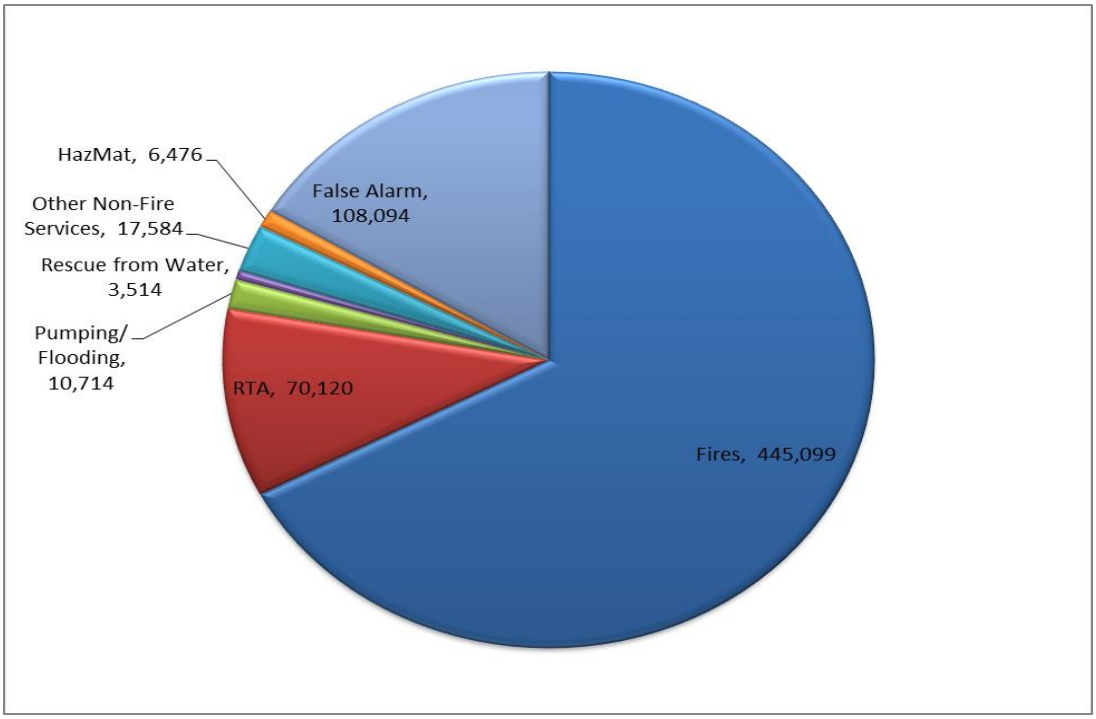
The trend over the years in the break-down between fires, special services and false alarms is illustrated in Figure 5.8 below.

FIGURE 5.8



The breakdown of the special services into RTA response, Haz Mat, Pumping/ Flooding, Rescue from Water and other non-fire services are shown in Figure 5.9.

FIGURE 5.9



Special Services.

Services report that they provide a range of special services, including water rescue and rescue from heights, in light of perceived local need. The difficulties of maintaining a broad range of competencies, and the associated requirement for specialist equipment, has led to a number services taking a more planned approach to special services provision.

6 SAFETY, HEALTH AND WELFARE OF STAFF

6.1 Introduction to Statutory Responsibilities

As well as having statutory duties under the Fire Services Acts, local authorities are governed by other legislation in undertaking their functions. One of the most important of these is the Safety, Health and Welfare at Work Act, 2005. This imposes a general duty on an employer to ensure, so far as is reasonably practicable, the safety, health and welfare at work of his or her employees, together with a series of specific additional duties relating to identifying and assessing hazards and providing instruction and training. This is a challenging legal responsibility in the context of providing an emergency service, which may be called to respond to situations of all kinds, at any location, within its functional area.

The use of and application of guidance issued from national level in relation to safety, health and welfare is the second major area of consideration during EVG visits. In approaching this aspect of the EVG mandate, we endeavoured to link and review four aspects:

- The statutory responsibilities imposed on local authorities as employers;
- The Guidance provided to assist local authorities by both the LGMA and NDFEM;
- The demonstrable work undertaken by Fire Service Management towards discharging their statutory responsibilities;
- The impact of this work in introducing a culture where safe working is a norm in fire services in Ireland.

Our findings and conclusions in relation to these are set out in the later sub-sections. First, an overview of the approach taken in set out.

6.2 Local Authority and Fire Services Management Approach to Safety, Health and Welfare Responsibilities

As required by the legislation, fire services use a range of risk management techniques to identify and control the hazards faced by their staff in providing their fire services. Managing safety is integrated into activity of all kinds in fire services, from the standards and processes used in recruitment, initial training, the kind of special appliances and equipment used, the personal protective equipment, the on-going training, instructions, supervision, reviewing and learning. Maintenance of equipment (and recording this) as well as auditing and inspection of activity are also key factors in ensuring that fire services comply consistently with statutory duties.

The use of the **"safe person concept**" is illustrated in the diagram below. This is an illustration of some aspects, not an exhaustive statement of all the elements of safety, health and welfare in the fire service.

A key aspect of this includes different forms of risk assessment undertaken by fire services as employers to discharge a specific duty under Section 19 of the S,H&W at Work Act.

- Normal workplace risk assessments are set out in Fire Service Ancillary Safety Statements (more than 50% of accidents/ incidents typically occur on the fire station);

- Dynamic Risk Assessment is undertaken by the Incident Commander at the scene of emergency incidents as part of the Incident Command system; and
- Generic or Situational Risk Assessments are developed for the various categories of incidents as part of the Standard Operational Guidance.

The EVG process was used to review the extent to which the above, as indicators of the risk management approach, are embedded within Irish Fire Services at this time.

6.3 Incidents/ Accidents and Near Misses in Fire Services

Systems for reporting and recording accidents and "near misses" in accordance with local government sector policy are in place, and as required by legislation. Although the numbers of workplace accident/ incidents reported by each fire services are very small (typically 3 – 5 notifiable incidents/ per service are reported each year), the potential for catastrophe, as happened twice in 2007, remains because of the uncontrollable environment of some fire service work. This potential has been the driver of a huge amount of work in recent years in fire services in Ireland.

While overall numbers of incidents within individual services are reported as small, there is now a strong culture in some fire services of systematic reviewing, learning and sorting out issues which can impact on worker safety. In enquiring into numbers of accidents/ near misses in fire services, we formed the view that the elevated levels of reported incidents/ near misses was a significant indicator of the embedding of a reflective workplace safety culture in fire services. In those services where good accident reporting procedures are in place, and a no-fault/ no blame culture has been developed with heightened awareness of work-place safety at station officer and crew level, increased levels of incidents are being reported and being followed up/ acted upon.

As part of the general improvement in Safety Management Systems, services have developed systems for reviewing and learning from near misses, and adjusting practices and procedures accordingly. There is a degree of variation in the quality and extent of this aspect of safety management across services, and we recommend that it is an aspect that should be reviewed by all services to appraise their position on this key indicator.

In addition to systems in each fire service, an issue arises for national level in that there is need for a system of central reporting of new hazards, for considering if/ what action is required and disseminating such information.

6.4 National Incident Command System

The Irish National Incident Command system was developed as part of the Fire Services Change Programme 2005 – 2007 to bring Ireland's fire services in line with best international practice. It was promulgated with a support and training

programme in 2008 – 2009. All fire-fighters were given a one-day introductory course in the National Incident Command system and staff who may be required to act as incident commanders (including leading fire-fighters and driver/ mechanics) undertake the three day basic course introductory course in NICS. Other officers such as sub officers, station officers and senior fire officers are required to undertake more extensive incident command training and many are themselves Incident Command instructors.

Procedures provide for an “Incident Commander” to attend every incident to which a fire service response is made. The “Incident Commander” is the person who exercises the sweeping statutory powers given to the “officer in charge” by Sections 27 & 28 of the Fire Services Act.

The incident commander assesses the needs, risks and resources of the situation and makes a plan, including ordering additional resources in addition to the initial pre-determined attendance as required, to deal with the incident.

The Incident Commander’s assessment includes a “Dynamic Risk Assessment”, reflecting the sometimes fast moving development of incidents. The incident commander relays the tactical mode adopted for dealing with the incident – either “defensive” or “offensive” - to the Regional Communications Centre, and keeps the RCC appraised of any changes in mode, including “transitional”.

It was established during EVG visits that all fire services in Ireland are applying/ using the National Incident Command system. This is a very significant factor in managing the risks associated with fire service operations.

Further guidance was developed and issued in 2014 in relation to arrangements for validating/ checking compliance with NICS (and other safety management techniques). Separate guidance on recording salient points of the dynamic risk assessment was also promulgated in 2014. These were developed from current good practice in a number of services. Implementation of these is being worked on in all services to further enhance the position of National Incident Command in underpinning effective and safe fire service operations.

6.5 Safety Statements

Employers are required by Section 20 of the 2005 Act to set out their approach to managing safety in the workplace. Again as part of the Fire Services Change Programme 2005 – 2007, a specific Fire Service Ancillary Safety Statement Template was developed and disseminated to assist fire services in meeting their statutory duties.

More recently, the 2014 guidance, *Managing Safety in Fire Services*, was issued by the NDFEM to align safety, health and welfare in fire services with general local government Safety Management Systems

It was established during EVG visits that all fire services in Ireland have a current Ancillary Safety Statement setting out their policies and approach to managing safety in the workplace. These include risk assessments and safe working practices and procedures. All services reported having safety committees (either specific fire service or part of the local authority) in place as provided for in the 2005 legislation.

In periodic reviews of their Ancillary Safety Statements, a number of services have developed the format of their statements, reflecting on-going advice from the LGMA on Safety Management Systems for the local government sector and the move by a number of services to obtain external accreditation of their Safety Management Systems to OHSAS 18001standard.

6.6 Implementation of Standard Operational Guidance

Standard Operational Guidance was developed by the National Directorate and issued to fire services in a number of tranches between 2010 to 2012; each of the 47 SOGs issued contained a risk assessment summary, relevant to the topic of the SOG; these updated and standardised Generic Risk Assessments which were issued as part of the Ancillary Safety Statement Template in 2007.

The risk assessment summary was provided to assist fire services in preparing risk assessments, in accordance with Section 19 of the Safety, Health and Welfare at Work Act. Each fire service went through a 'localisation' process, adapting the national SOG template to reflect their local circumstances. The information contained in each SOG forms the basis for preparing for specified operational incident types within the fire authority's functional area, as well as for training and complying with the statutory requirement to prepare risk assessments.

It was established during EVG visits that all fire services in Ireland have adopted an implementation approach and programme for introducing the 47 SOGs which have been issued to date. A number of services have successfully completed their programmes and embedded all 47 SOGs, some are in the process of finalising their programmes, but progress remains slow in a small number of services.

6.7 Brigade Instructions

Employers are required under Section 8 (2) (g) of the Safety, Health and Welfare at Work Act 2005 to provide instruction necessary to ensure, so far as is reasonably practicable, the safety, health, and welfare at work of his or her employees. Sample brigade instructions were developed and circulated to all fire services in 2014 which

contained material for consideration by fire authorities when putting brigade instructions in place.

Examples of instructions already in use as brigade orders or brigade instructions in fire authorities were provided as generic advisory material to support brigade management, and were intended to be adapted or localised for use in individual fire authorities.

The guidance document contained a list of 61 generic brigade instructions and it was acknowledged that some brigade instructions may not apply to some fire authorities, and some authorities may wish to add to the list or alter the list as supplied, to suit local needs.

While all fire services acknowledge the necessity for and benefit of brigade instructions in meeting the statutory responsibility under Section 8 (2) (g), a small number have not yet issued brigade instructions. Some were trying to find a balance between generic, all-encompassing instructions and the detail in the samples provided. Some reported that the process of introducing brigade instructions had given rise to issues with their staff unions.

Services are using different forms of Brigade Orders or Instructions currently and view the guidance on this subject issued by the Directorate as a helpful benchmark.

6.8 Auditing systems and External Accreditation of Safety Management Systems

On the issue of external auditing of safety management, there is a high level of engagement with local authority safety management structures and processes. Local authority health and safety officers have undertaken safety audits in a number of fire services and are ensuring that fire services are compliant with the generic Local Authority Safety Management System (LA SMS).

A number of fire services visited are at various stages of engagement with/ achieving external accreditation (OHSAS) of safety management systems. A number have achieved the OHSAS accreditation already, a number are in progress and other are hoping to embark on this journey. Like the LA SMS, the OHSAS system pulls together a whole series of building blocks (eg training records, equipment maintenance, risk assessments etc) which have been put in place by fire services over the years.

The Fire Service Safety Management System in use in Tipperary Fire Service was awarded the best Public Service Safety Management System for the second year running at the National Irish Safety Awards, organised by the National Irish Safety Organisation and supported by the Health and Safety Authority, in 2015. The Tipperary system relies heavily on the health and safety guidance produced by the

National Directorate over the years and includes items such as the Safety Manual Template issued in 2014, SOGs, Incident Command System, Dynamic Risk Assessment, training programmes and records, occupational health system, pre-incident planning, CISM, community fire safety, primary schools programme, MEM, equipment maintenance policies, ESDS etc. This is a very significant external recognition of the documentation issued by the NDFEM, and it's application is being validated by the NISO as the best available across the Public Service in Ireland.

6.9 Occupational Health Systems

As well as managing safety, fire services provide occupational health schemes to monitor and advise on health related issues**.** All retained fire services are using the LGMA Occupational Health System for both recruitment and on-going health monitoring of employees. Many report examples of benefits for fire-fighters from this scheme in that incipient medical conditions were detected which might otherwise not have been. A number of services have expressed a wish for a review of this system, particularly in relation to maintaining fitness, and how it is operated in practice.

There is no comparable national occupational health system for full-time fire services yet.

6.10 Staff Welfare and Critical Incident Stress Management

Also, because of the sometimes difficult and distressing nature of the situations encountered in the course of work and, in common with other emergency services, a Critical Incident Stress Management System (CISM) is in place in all fire services. This is provided on a contract basis by a specialist provider and includes education and preparation for fire-fighters about normal reactions to difficult situations, as well as monitoring and supporting crews after traumatic events.

Practically all fire services participate in the three region-based Critical Incident Stress Management Service provision arrangements and are involved routinely in awareness/ education initiatives. The other services have long-standing arrangement with their own CISM service provider. All report a high degree of satisfaction with the CISM services.

Nonetheless, a process to review and update the current CISM service, which is in place since 2006, has been commenced by the National Directorate.

6.11 Conclusions on Safety, Health and Welfare Issues

It is not surprising, given the impact of the tragedies of 2007, that we are reporting very significant activity and progress in the field of Safety, Health and Welfare.

It is clear that all fire services have taken up and use national guidance issued in relation to health, safety and welfare in the fire service. The National Incident Command System (NICS) and Standard Operating Guidance (SOGs) issued are particularly welcomed by fire services.

It is apparent that there has been little fundamental change in what fire services do, or how they do it, since 2007. Instead, what was very evident in the EVG visits was how systems for recording and tracking of workplace safety-related activity has mushroomed. Many services are inundated with risk-assessments of all kind, the sheer volumes of paperwork creating its own problems in communicating key messages to fire-fighters.

Safety initiatives in fire services have been supported with significant resources. Implementing LA SMS and OHSAS accreditation requires very significant up-front staffing resources. LA SMS and OHSAS are seen as very powerful Quality Assurance measures in a number of services, and it is clear that, where safety management systems have been successfully embedded, the visible benefits extend beyond safety management to overall service management.

In our opinion, another key indicator of a strong “safety culture change” is the degree of reporting of incidents/ near misses.

Good safety management is also seen as another indicator of where the management structure and communications with staff are working well, with full engagement of station officers being a key determinant of progress in embedding initiatives.

However, it is appropriate to remark that the extent to which, and the speed with which, national guidance has been implemented is varied. Services which now have a full range of good safety management initiatives in place report difficulties and delays in getting started with these and implementing them. It is expected that enhanced consultation processes and dispute resolution procedures, introduced as part of the new national agreement with unions, should enhance timely implementation of important safety initiatives.

7 – SHAPING THE FUTURE?

7.1 The Agenda for the Future

The first round of the ARC and EVG process introduced by Keeping Communities Safe has been completed. This report describes that process and offers a first-hand account of where fire services are at in Ireland.

This is by no means the end of the development stage of Irish fire services. Examples of excellence were seen in each of the areas considered in the EVG process, and some of these are listed in Appendix B of this report. One of the challenges is to extend this good practice to all services. Also, this reports highlights where changes are continuing and identifies challenging further issues to be addressed. The list of specific issues, some of which is illustrated in Appendix C, is extensive.

This report provides an opportunity to consider how the agenda for shaping the fire services into the future should be approached. Arising from our EVG experience, we would suggest that there are a number of broader/ longer term issues to be considered in the service:

Service Management Culture

Optimisation of output/ benefits for resources deployed

Equality and Diversity

Performance measuring and Reporting

Quality Assurance

However, in facing the future, we should learn from the valuable experience that has been gained in the initial ARC and EVG process.

7.2 Planning the Next Round of EVG;

It is evident that the EVG process itself has proved to be a significant driver of change, with extensive sharing of information and good practice across services as well as transformative development within individual services. Necessary development work has been identified in the EVG process.

In this Section, arising from our experience from the first round of EVG, we recommend a specific direction for the next iteration of EVG. The EVG process concluded its first iteration with visits to all 27 fire authorities in Ireland on 31 March 2015. It is generally acknowledged that the process was highly significant and was regarded by all parties as mutually beneficial. It is now proposed to undertake an updated EVG process over a 15 month period commencing in Sept 2016 and

concluding at the end of November 2017. In further developing the EVG approach, the intention is to replicate and build upon the successful characteristics of the first iteration. This will involve the creation of the environment in which the following principles will again be adhered to:

a) A similar one-day format will be utilised;
b) No individual reports will be created or published following the visits by the EVG team;
c) A National Overview Report, similar to this one, will be issued at the end of 2017;
d) A strengths-oriented, positive engagement process will again be employed;
e) The identification, sharing and promotion of best practice will again be developed;
f) Local authority and National Directorate work plans will again be aligned to focus on identified priorities.

However, in order to optimise the benefits of the second iteration of the EVG process, a number of additional developments are proposed:

a. EVG 2 should focus on three key themes that emerged from the first iteration. These three themes may be characterised as;
    i. Reviewing operational response;
    ii. Aligning all streams of service activity, using a “Unified Risk Model” (URM) see below;
    iii. Internal Service Communications and Culture.
b. It is envisaged that EVG Guidance Template would issue prior to the visits, containing the headings of the identified key issues which arise from these three themes. The template would be completed and returned by the local authority fire service, similar to the ARC reports in EVG1, prior to the visit.
c. After the visit an agreed action plan, based on the discussion of the three themes would be agreed. In this way, the fire service and the National Directorate will be clear on any actions intended.

The broad plan for the day's visits would be as follows therefore:

1) Meet with Chief Executive & DOS to introduce process
2) Meet with Chief Fire Officer & staff to review the EVG template.
3) Discuss Operational Response
    a. Area risk categorisation and variations.
    b. Review of fleet and equipment.
4) Unified Risk model, progress and discussion.

5) Discuss Communication processes and Meet fire-fighter/ staff side association for discussion.
6) Development of agreed action plan with Chief Fire Officer.
7) Meet with Chief Executive to review action plan.

It is also proposed to expand the existing EVG team, in addition to EVG 1 members, by engaging selected existing senior officers within the country to observe the process. This would be intended, in turn, to develop a future model of continuous service improvement, employing the principles of peer review. It is envisaged that a number of officers will be selected to correspond with the different types of services which are being visited. After an initial induction/ observation period it is envisaged that they could undertake selected aspects of the EVG process.

7.3 THE "UNIFIED RISK MODEL" (URM)

During the first round of EVG visits, an aspect of good practice that was evident was that many services were in the process of joining up individual aspects of fire service activity, for example, the linking of Safety Management Systems with Training, or the linking of statutory Fire Prevention with Pre-Incident Planning. In some cases, a direct link to the initial Area Risk Categorisation process, (ARC) was provided.

By putting ARC at the centre of all major strands of fire service activity, efforts in each area can be aligned better with the objective of risk reduction. We propose a "Unified Risk Model", illustrated in Figure 7.1 to capture what is happening and further embed the risk management approach in Irish Fire Services.

In this approach, the Area Risk Categorisation (ARC) provides the core information for all fire authority risk management activity. The articulation of a "Unified Risk Model" (URM) approach can enhance connections between areas of performance and provide a logic path between all associated areas of activity. The Unified Risk Model proposed here can help build consistency across services. It reflects existing best practice, and can integrate Ireland's approach to the identification of risk, and unify policy and process to manage, reduce and eliminate risk, delivering safer communities across Ireland.

Arising from these observations and discussions, it is suggested the ARC process can, and should, be placed at the centre of all aspects of fire service activity to create a unified fire risk management model.

The principle of a "Unified Risk Model" (URM), is to integrate and co-ordinate the various component activities around the Area Risk Categorisation, ARC. For the next iteration of EVG, it is suggested that by aligning component service activity areas,

both to the area risk categorisation, and in many cases with each other, a powerful risk management approach, as envisaged in the original Keeping Communities Safe document will be embedded in Irish fire services. In this approach, the Area Risk Categorisation is regarded as the central document to which all others should link, as well as other individual plans being aligned with one, two or three others.

Individual fire services may already have developed many of the elements described below, and it is suggested that this approach of building and relating service activities around the ARC can be further incorporated into the next round of Section 26 Plans.

The URM approach also fits with the Major Emergency Plan. The URM should draw initially from the hazard identification and risk assessment elements of the local authority's Major Emergency Plan, as well as highlighting the arrangements for inter-service co-ordination and co-operation in the areas of risk mitigation, preparedness & preplanning, training and exercises, response and recovery.

These component parts of the URM may be articulated as follows:

7.3.1 OPERATIONS PLAN. To include response arrangements including fire stations, services and roles, appliances and equipment, mobilising, pdas - speed and weight, crewing levels, operational policy, procedures and guidance etc.

7.3.2. STATUTORY FIRE PREVENTION PLAN. To include a structured programme of prioritised statutory fire prevention activity, the tempo, nature and frequency of activity, inspections, licensing and during performance inspections, (DPI) etc.

7.3.3. COMMUNITY FIRE SAFETY PLAN. To include a priority programme, engagement strategy, targeted activity, demand reduction initiatives, evaluation and assessment criteria. Also to include partner organisations with which the fire service works, initiatives to be undertaken collaboratively, costs and benefits, priorities, innovation and evaluated outcomes.

7.3.4 SAFETY MANAGEMENT SYSTEM. To include either the local authority Safety Management System or OHSAS accredited plan, cross cutting all activities undertaken throughout the fire authority and within which safety remains a priority issue.

7.3.5 TRAINING PLAN. To include a localised training needs assessment, incorporating the requirement for training at national, regional and local level, including an on-going station training programme which is responsive, both to the safety management system, and to emerging trends and priorities.

7.3.6. PRE-INCIDENT PLANS. These plans should set out the character, layout and nature of risk which exists within the authority's area and each fire station area. These plans should identify and prioritise those risks judged to pose the most significant hazards and provide information in a format usable by responding crews. Such plans should be available to crews, pre-arrival, and crews should be involved in visiting priority sites.

These plans are supported by the following enablers:

7.3.7 ASSETT MANAGEMENT PLANS. These plans should include the servicing, testing, maintenance and certification of all equipment, vehicles and property, including the appropriate benchmarking of costs, planned obsolescence and scheduled replacement.

7.3.8 QUALITY ASSURANCE PLAN. To include the planned quality assurance of all processes, operations, prevention, training, and to include the establishment of public opinion and their view on the quality of services delivered.

7.3.9 COMMUNICATIONS PLAN. To include an assessment of the system of sharing information, internal discussion processes, talking and listening, open forum discussions, employee opinion and representation and influence, external messaging and public engagement.

7.3.10 PERFORMANCE PLAN. To include the identification of service priorities, the adoption of standards and targets, the management of information, the publishing of measured outcomes and the analysis behind achievement or non-achievement of goals.

FIGURE 7.1


Local Community Risk Model
Training Plan
Safety Management System
Operations Plan
Area Risk Categorisation
Major Emergency Plan
Civil Defence
Pre- Incident Planning
Community Fire Safety Plan
Statutory Fire Safety Plan

7.4 Aligning the National and Local Efforts

The work of the National Directorate has been significantly aimed at supporting local service delivery to achieve the objective of consistency and quality in fire safety and fire services. This has included identifying issues and prioritising work programmes as discussed in 7.1 above.

In looking to its future role of leadership and steering the direction of development work in the fire service, we propose a complementary "National Community Risk Model", which is illustrated in Figure 7.2 below.

This illustrates how national policy, national development work programmes, national guidance and standards and national support programmes (training, capital, co-ordination) can assist in the delivery of the elements of the "Local Community Risk Model".

The EVG process is shown as a very important part of the feedback loop on all the national activity.

FIGURE 7.2


National Community Risk Model
National Policy
Development Work Programmes
Local Community Risk Model
External Validation
National Guidance and Standards
National Support Programmes
Capital Support
External Co-ordination
National Training Programme

APPENDIX A

'KEEPING COMMUNITIES SAFE'
AREA RISK CATEGORISATION PROCESS
INITIAL FIRE STATION RISK RATINGS

FIRE SERVICE	FIRE STATION NAME	ARC
CARLOW	Carlow (HQ)	C1
CARLOW	Hacketstown	E2
CARLOW	Muinebheag	D1
CARLOW	Tullow	D2
CAVAN	Bailieborough	D1
CAVAN	Ballyconnell	D1
CAVAN	Ballyjamesduff	D1
CAVAN	Belturbet	D1
CAVAN	Cavan	C1
CAVAN	Cootehill	D2
CAVAN	Dowra	E1
CAVAN	Killeshandra	D2
CAVAN	Kingscourt	D2
CAVAN	Virginia	D1
CLARE	Ennis	C1
CLARE	Ennistymon	D1
CLARE	Kilkee	D2
CLARE	Killaloe	D2
CLARE	Kilrush	D1
CLARE	Scarriff	D2
CLARE	Shannon	C2
CORK CITY	Anglesea St	A1
CORK CITY	Ballyvolane	A1
CORK COUNTY	Ballincollig	C2
CORK COUNTY	Bandon	D1
CORK COUNTY	Bantry	D2
CORK COUNTY	Carrigaline	C1
CORK COUNTY	Castletownbere	E2

CORK COUNTY	Charleville	D2
CORK COUNTY	Clonakilty	D1
CORK COUNTY	Cobh	C2
CORK COUNTY	Crosshaven	E1
CORK COUNTY	Dunmanway	D2
CORK COUNTY	Fermoy	D1
CORK COUNTY	Kanturk	D2
CORK COUNTY	Kinsale	D1
CORK COUNTY	Macroom	D1
CORK COUNTY	Mallow	C2
CORK COUNTY	Midleton	C1
CORK COUNTY	Millstreet	D2
CORK COUNTY	Mitchelstown	D2
CORK COUNTY	Schull	E2
CORK COUNTY	Skibbereen	D2
CORK COUNTY	Youghal	D1
DONEGAL	Arranmore	E2
DONEGAL	Ballyshannon	D1
DONEGAL	Buncrana	D1
DONEGAL	Bundoran	D1
DONEGAL	Carndonagh	D2
DONEGAL	Donegal	D1
DONEGAL	Dungloe	D2
DONEGAL	Falcarragh	D2
DONEGAL	Glencolmcille	E2
DONEGAL	Glenties	E1
DONEGAL	Gweedore	D2
DONEGAL	Killybegs	D2
DONEGAL	Letterkenny	C1
DONEGAL	Milford	D2
DONEGAL	Moville	D2
DONEGAL	Stranorlar/B'bofey	D1
DUBLIN	Balbriggan	C1
DUBLIN	Blanchardstown	B1
DUBLIN	Dolphins Barn	A2
DUBLIN	Donnybrook	B2
DUBLIN	Dunlaoghaire	B1
DUBLIN	Finglas	A2
DUBLIN	Kilbarrack	A2
DUBLIN	North Strand	B1
DUBLIN	Phibsboro	A2
DUBLIN	Rathfarnham	B1

DUBLIN	Skerries	D1
DUBLIN	Swords	A2
DUBLIN	Tallaght	A1
DUBLIN	Tara Street	A1
GALWAY	Athenry	C2
GALWAY	Ballinsloe	C2
GALWAY	Clifden	C2
GALWAY	Galway City	A2
GALWAY	Gort	D1
GALWAY	Kilronan (Inis Mor))	E1
GALWAY	Loughrea	C2
GALWAY	Mountbellew	D2
GALWAY	Portumna	D1
GALWAY	Tuam	C1
GALWAY	Carraroe (Proposed)	E1
KERRY	Ballybunnion	D2
KERRY	Caherciveen	E1
KERRY	Castleisland	D2
KERRY	Dingle	D2
KERRY	Kenmare	E1
KERRY	Killarney	C1
KERRY	Killorglin	D1
KERRY	Listowel	D1
KERRY	Sneem	E2
KERRY	Tralee	C1
KILDARE	Athy	D1
KILDARE	Leixlip	C2
KILDARE	Maynooth	D1
KILDARE	Monasterevin	D2
KILDARE	Naas	C1
KILDARE	Newbridge	C2
KILKENNY	Callan	D2
KILKENNY	Castlecomer	D2
KILKENNY	Freshford	D2
KILKENNY	Graiguenamanagh	D2
KILKENNY	Kilkenny	C1
KILKENNY	Thomastown	D2
KILKENNY	Urlingford	D2
LAOIS	Abbeyleix	D1
LAOIS	Durrow	D2
LAOIS	Mountmellick	D1
LAOIS	Mountrath	D1

LAOIS	Portarlington	D1
LAOIS	Portlaoise	C1
LAOIS	Rathdowney	D2
LAOIS	Stradbally	D2
LEITRIM	Ballinamore	E1
LEITRIM	Carrick-on-Shannon	D1
LEITRIM	Drumshanbo	E1
LEITRIM	Manorhamilton	D1
LEITRIM	Mohill	D1
LIMERICK CITY & COUNTY	Limerick City	A2
LIMERICK CITY & COUNTY	Abbeyfeale	D1
LIMERICK CITY & COUNTY	Cappamore	D1
LIMERICK CITY & COUNTY	Foynes	C1
LIMERICK CITY & COUNTY	Kilmallock	D1
LIMERICK CITY & COUNTY	Newcastle West	C2
LIMERICK CITY & COUNTY	Rathkeale	C2
LONGFORD	Ballymahon	D2
LONGFORD	Edgeworthstown	D1
LONGFORD	Granard	D2
LONGFORD	Lanesboro	D2
LONGFORD	Longford	C2
LOUTH	Drogheda	B2
LOUTH	Dundalk	B2
LOUTH	Ardee	D1
LOUTH	Carlingford	E1
LOUTH	Dunleer	D2
MAYO	Achill	E1
MAYO	Ballina	C2
MAYO	Ballinrobe	D1
MAYO	Ballyhaunis	D2
MAYO	Belmullet	E1
MAYO	Castlebar	C1
MAYO	Charlestown	D2
MAYO	Claremorris	D1
MAYO	Crossmolina	E1
MAYO	Kiltimagh	D2
MAYO	Swinford	D2
MAYO	Westport	C2
MEATH	Ashbourne	C2
MEATH	Dunshaughlin	C2
MEATH	Kells	C2
MEATH	Navan	C1

MEATH	Nobber	D2
MEATH	Oldcastle	D2
MEATH	Trim	C2
MONAGHAN	Ballybay	D1
MONAGHAN	Carrickmacross	D1
MONAGHAN	Castleblayney	D1
MONAGHAN	Clones	D2
MONAGHAN	Monaghan	C2
OFFALY	Tullamore	C2
OFFALY	Birr	C2
OFFALY	Clara	D2
OFFALY	Edenderry	C2
OFFALY	Ferbane	D2
ROSCOMMON	Ballaghadereen	D2
ROSCOMMON	Boyle	D2
ROSCOMMON	Castlerea	D2
ROSCOMMON	Elphin	E2
ROSCOMMON	Roscommon	C2
ROSCOMMON	Strokestown	E2
SLIGO	Ballymote	E1
SLIGO	Enniscrone	E1
SLIGO	Sligo	C1
SLIGO	Tubbercurry	E1
TIPPERARY	Borrisokane	D2
TIPPERARY	Cahir	D1
TIPPERARY	Carrick-on-Suir	D1
TIPPERARY	Cashel	C2
TIPPERARY	Clonmel	C2
TIPPERARY	Cloughjordan	D2
TIPPERARY	Nenagh	C2
TIPPERARY	Newport	D2
TIPPERARY	Roscrea	C2
TIPPERARY	Templemore	D1
TIPPERARY	Thurles	C2
TIPPERARY	Tipperary	C2
WATERFORD CITY & COUNTY	Waterford City	B1
WATERFORD CITY & COUNTY	Ardmore	E1
WATERFORD CITY & COUNTY	Cappoquin	E1
WATERFORD CITY & COUNTY	Dungarvan	C1
WATERFORD CITY & COUNTY	Dunmore East	E1
WATERFORD CITY & COUNTY	Kilmacthomas	D2
WATERFORD CITY & COUNTY	Lismore	E1

WATERFORD CITY & COUNTY	Portlaw	E1
WATERFORD CITY & COUNTY	Tallow	E1
WATERFORD CITY & COUNTY	Tramore	C2
WESTMEATH	Athlone	C1
WESTMEATH	Castlepollard	D1
WESTMEATH	Kilbeggan	D1
WESTMEATH	Mullingar	C1
WEXFORD	Bunclody	E1
WEXFORD	Enniscorthy	C2
WEXFORD	Gorey	C2
WEXFORD	New Ross	C2
WEXFORD	Wexford	C1
WICKLOW	Arklow	C2
WICKLOW	Baltinglass	D2
WICKLOW	Blessington	D1
WICKLOW	Bray	C1
WICKLOW	Carnew	D2
WICKLOW	Dunlavin	D2
WICKLOW	Greystones	C2
WICKLOW	Rathdrum	D1
WICKLOW	Tinahely	D2
WICKLOW	Wicklow	C2

APPENDIX B

EXAMPLES OF THE TYPES of GOOD PRACTICE OBSERVED

(SORTED BY CATEGORY)

This Appendix contains a sample of the types of good practice which were observed in fire services during the EVG process. They are listed here for the information of services only, and arrangements for developing, endorsing and disseminating good practice (including publishing case studies) will be considered further in the months ahead.

Good Practice	Category
Primary Schools Programme Implementation	Community Fire Safety
Student fire safety programme involving 3rd level students using social media to disseminate fire safety messages	Fire Safety
Risk Assessment approach to POPA/ DPI	Fire Safety
Plan for Fire Prevention	Fire Safety
Joint Fire & BC Inspections	Fire Safety
FP Seminars for Sectors	Fire Safety
Level of communications with fire fighters	General Management
Station Officer meetings	General Management
Safety Rep committee	General Management
Relationship with JOs	General Management
SFOs attend drill nights	General Management
Fire Service Safety Committee	General Management

Effective Mgt Team Meetings & Traffic light tracking on issues	General Management
CFO as link between LA & fire-fighters	General Management
CFS & PIPs targeted from ARC	General Management
Rail Incident Preparation	Major Emergency Management
PiP	Operations
Assett Mgt	Operations
Use of Ipad for NICS	Operations
OHSAS	Operations
A&E Maintenance Process	Operations
Dual Crewing of Specials	Operations
Operational Standards	Operations
Experience of Large Crowd Events	Public Safety
Training Policy	Training
ISO 9001 for Training	Training

APPENDIX C

EXAMPLES OF ISSUES RAISED FOR CONSIDERATION AT NATIONAL LEVEL

(SORTED BY CATEGORY)

This Appendix contains a sample of the types of issues which were observed/ raised by fire services during the EVG process. They are listed here for the information of services only, and arrangements for prioritising issues and incorporating them into work streams of the NDFEM Project Team will be considered further in the months ahead.

Issue	Category
Fire Safety Activity Alignment	FIRE SAFETY
Dangerous Substances Licencing	FIRE SAFETY
Stoves Fires	FIRE SAFETY
Relationship with HIQA on Child-care & Nursing Homes	FIRE SAFETY
Fire Safety partnerships	FIRE SAFETY
Fire Safety in State Buildings	FIRE SAFETY
Quality Assurance of FP Work - FPO Handbook – Professional supervision?	FIRE SAFETY
False Alarms in Hospitals	FIRE SAFETY
Regularisation Certs	FIRE SAFETY
Link to BCMS (Building Control Management System)	FIRE SAFETY
Ambulance Assist calls – EMS / CFR	HSE NAS
CAMP - mobilisation accuracy and response to queries	ICT
Cost of CAMP service varies across	ICT

regions	
Implications of move to TETRA	ICT
Special Appliances - National Policy	OPERATIONS
Availability for recruitment of retained fire-fighters	OPERATIONS
Recording mobilisation practices	OPERATIONS
Levels of Chimney fires	OPERATIONS
CAFS – national policy	OPERATIONS
Maintaining competency with less frequent significant incidents	OPERATIONS
Inter-authority payment arrangements	OPERATIONS
Pace of SOGs Implementation	OPERATIONS
"Shared Services" issues	OPERATIONS
HR Climate – Legacy of Disputes	OPERATIONS
IR/ HR – Lack of Trust	OPERATIONS
Use of I-Pad as a means of recording/ supporting NICS	OPERATIONS
Time & Attendance recording systems	OPERATIONS
Equipment Risk Assessments	OPERATIONS
Record-keeping on OHS	OPERATIONS
RTA – Rolling Stop on Motorway	OPERATIONS
Irish Water – support for fire services	OPERATIONS
Appliances & Specials	OPERATIONS
Driver-Mechanic or 2nd Sub Officer issue	OPERATIONS
National Safety Bulletin to complement local info on hazards?	OPERATIONS
Chainsaw policy	OPERATIONS

Mobilisation to water incidents by/ from IRCG	OPERATIONS
Delays in NICS implementation	OPERATIONS
Fleet Specials - Water Tankers and Role of ETs	OPERATIONS
Waste recycling Plant fires	OPERATIONS
Turnout times in specific stations	OPERATIONS
Inter-authority co-operation	OPERATIONS
Quality Assurance issues	OPERATIONS
Roles of Senior Officers in relationships with Station/ Sub-Officers & fire-fighters	OPERATIONS
MEM –region officer	MEM/CIVIL DEFENCE
CDOs – MEM focus for service	MEM/CIVIL DEFENCE
Civil Defence Link	MEM/CIVIL DEFENCE
MEM being updated	MEM/CIVIL DEFENCE
Fire Charges?	INSURANCE/ CHARGES
Training Records – Creating and Keeping	Training
Training of Crew Commander - 1 day & 3 day courses	Training
Driving Standards	Training