MERSEYSIDE FIRE AND RESCUE SERVICE

THE *RAPID* APPROACH

RISK ASSESSED PROGRAMME FOR INCIDENT DEPLOYMENT

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CONTENTS

THE ***RAPID*** APPROACH - RISK ASSESSED PROGRAMME FOR INCIDENT DEPLOYMENT

1. SUMMARY

This document provides information on how the risk management process employed by Merseyside Fire and Rescue Service informs the IRMP and allows the setting of local attendance times for fire engines in Merseyside, to replace the old national standards which have now been withdrawn.

2. INTRODUCTION

In June 2003 the Deputy Prime Minister presented a White Paper to Parliament entitled "Our Fire & Rescue Service". This White Paper set out the Governments' vision for the fire and rescue service of the future and how that vision will be delivered. Its guiding principle is that the fire and rescue service of the future should have the right resources, in the right place, at the right time, to save lives. The White Paper set out proposals for change in the structure of the service, in its institutions and in the working practices and procedures of all who work in the service. The provisions from the White Paper have been incorporated into the Fire & Rescue Service Bill that is currently (March 2004) passing through Parliament.

The Government have now recognised that in the past it has failed to develop its guidance to fire authorities to achieve this vision. Resources utilised by the service have not always been allocated on the basis of need because of outdated response standards and levels of risk.

The historical provision of firefighters and pumps in fixed locations to meet rigid specified national standards is no longer appropriate and all Fire & Rescue Services are now required to establish flexible, locally assessed and determined risk-based standards that should more effectively meet the needs of local communities. This will be done on the basis of risk assessment and management.

Risk management is becoming more important as a central part of any organisation's operational and strategic management. It is the process whereby organisations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across a portfolio of all activities.

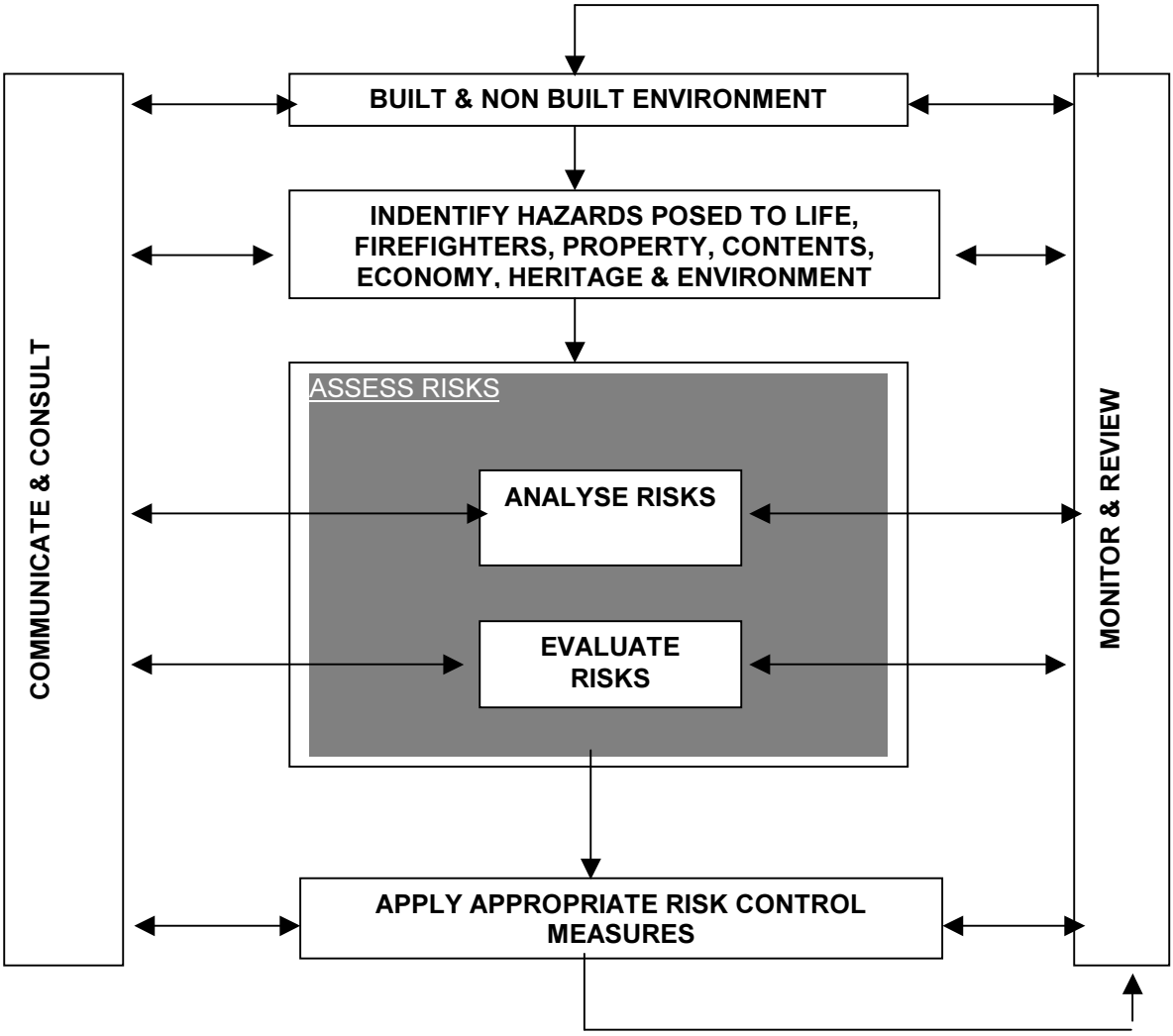
Merseyside Fire and Rescue Service have published their first Integrated Risk Management Plan (IRMP)[1] and propose to adopt a risk-assessed programme for prevention activities and for incident deployment. This document provides information on the approach used by Merseyside Fire and Rescue Service.

3. METHODOLOGY

The focus of good risk management is the identification and treatment of these risks. The risk management process is a system of continuous improvement. Risks vary and it is essential that risks, and measures put in place to minimize those risks are kept continually under review. This allows organisations to react to any variation in risk and put in place control measures appropriate to that changed risk. Furthermore options for reducing risk also vary so it is vital that improvements to risk reduction practices are put in place at the earliest opportunity.

The risk management process can be demonstrated in the schematic below. We propose to use this methodology and to put in place systems to support it.

Table 1. RISK MANAGEMENT OVERVIEW – A CYCLICAL PROCESS



Merseyside Fire and Rescue Service has been applying a process similar to this for many years. It is now proposed to develop this systematic approach further with the proposed introduction and formal adoption of the ***RAPID*** (Risk Assessed Programme for Incident Deployment) approach. This is one of the agreed actions arising from our IRMP[1]. This approach uses software in the risk assessment process and allows, amongst other things, locally determined response standards to be set to replace the old national standards, which are to be withdrawn by the Government on 1st April, 2004.

As indicated above, Merseyside Fire and Rescue Service has already been involved in the process of risk assessment and has carried out much of this work and the accompanying risk management for several years. Details of our approach with reasons why this approach is proposed are set out in the following pages together with details of further work necessary to ensure the systems are continually reassessed and improved.

To assist in the risk process the ***RAPID*** approach employs various software packages. These include

- Northgate Blue8 - a GIS system used extensively in the emergency services for plotting locations of incidents, HFRA's etc, determining response times and setting resource requirements.

- ACTIVE – a GIS system which utilises software provided by Experian which uses a geo-demographic data-set call MOSAIC. These data categorise a group of properties using each unique postcode (an average of 14 households) on the basis of the occupant's lifestyle characteristics. This produces a data-set comprising 12 lifestyles groups and 52 lifestyle types. Certain of these groups and types are known to be at greatest risk of fire.

- FSEC – a process consisting of risk assessment, response planning and modeling. The software has been developed by the ODPM over a number of years and provided, free of charge, to Fire and Rescue Authorities. This software will be available from April, 2004.

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The main reasons for introducing the ***RAPID*** approach is that it helps in the:

- Understanding of the varying fire and other incident risks in Merseyside

- Assessment of these risks

- Mapping out the risks and planning intervention policies

- Assessment of the level of resources to maintain risks at the current level, undertake regular reviews and where possible indicate where appropriate action can be taken to reduce them

- Process of providing appropriate and timely emergency responses to the risks identified

- Monitoring and reviewing of existing and new risks and taking appropriate action

- Process of supplying a regular risk based fire safety enforcement programme

The ***RAPID*** approach is a developed tool which will be added to as new tools and developments appear (such as FSEC – see above). This approach will give Merseyside Fire and Rescue Service a comprehensive risk assessment and planning tool, designed to assist the Authority to make decisions on human and material resources and their allocation (e.g. fire engine, aerial and other special appliances) with decisions based on risk levels. This is seen as being for the benefit of the community who live and work in Merseyside.

This document is designed to indicate and describe with some detail, the process Merseyside Fire and Rescue Service is following. As a way of introduction, a short section follows which summarises the work already undertaken by Merseyside Fire and Rescue Service. It also demonstrates the commitment to a risk based approach which shows a significant emphasis in targetting areas of greatest need, which cover some of the most deprived areas in England.

3.1 Home Fire Risk Assessments (HFRA's)

Merseyside Fire and Rescue Service have already carried out a programme over a period of five years, some 200,000 Home Fire Risk Assessments (HFRAs) and fitted in excess of 300,000 smoke alarms. It is the ultimate objective to ensure every home on Merseyside has a HFRA

carried out and working smoke alarm fitted. Such actions help to make Merseyside a safer place to live. All the HFRA's are plotted on risk maps.

The initial stage in producing the risk maps is to check the address of the HFRA and make corrections where required. This step is necessary to ensure the accuracy of the data. The resulting checked data is geo-coded, which is the process of assigning a precise map co-ordinate to an address. With the co-ordinate assigned, the address can be displayed on a map. In doing this, areas of high risk can be identified which have not yet received sufficient HFRAs which will help to lower the risk to an acceptable level. It is proposed to continue to target resources on these areas.

To monitor and review, as part of the risk management process (see Table 1), the effectiveness of Merseyside's HFRA programme has been analysed by Fire Data Research Ltd.[2] This was done by exploring and quantifying the relationship between the incidences of domestic dwelling fires, the outcomes of each incident in terms of fatalities and other casualties and the implementation of the HFRA programme.

The research demonstrated that the HFRA programme has made a significant impact upon the levels of accidental dwelling fires in Merseyside. It also clearly shows that the HFRA programme has had a significant beneficial impact upon the numbers both fatalities and non-fatal casualties resulting from accidental dwelling fires.

The report states that not only are the combined efforts of Merseyside Fire and Rescue Service reducing accidental dwelling fires and associated casualties and fatalities but that the tailored and targeted use of HFRA's as a key component in risk reduction is achieving reductions net of the national trend in all three of these key measures. These reductions also have a significant impact upon the economy of Merseyside equating to savings of many millions of pounds.

The report concluded that there is significant additional potential for further reduction to be achieved through the continuation of the HFRA programme.

3.2 Evaluation of Fires and Non-fire Incidents

The greatest risk of death and injury from accidental fires is in the home, where the majority of fires occur. However, Merseyside Fire & Rescue Service has to respond to a range of other fires and emergency incidents. It is proposed to develop the process of risk analysis to look at these other potential incidents and to continue to minimise their likelihood of occurring, and when they do occur, to be in a position to adequately deal with the consequences.

To do this, the ***RAPID*** approach looks at the incidence of domestic fires and also logs and analyses fires at other locations including those at offices, factories, commercial outlets, educational establishments and heritage buildings. Other fires not involving buildings and property are also included, such as vehicle fires. The approach takes into account attendance at road traffic collisions, spillages, rescues from situations not involving fires and other emergency incidents and these are all recorded and plotted. Information about high risk chemical sites, accident blackspots and other potential risks are inputted into the system and Unitary Development Plans (produced by the District Councils on Merseyside) are scrutinised for any developments which may affect an area and impact on the risk identified.

Merseyside Fire and Rescue Service risk based Fire Safety inspection and enforcement programme allows the grading of over 40,000 non-domestic premises in Merseyside according to their primary use and the standards of fire safety and general management observed within the building. High-risk buildings are subjected to frequent and comprehensive inspections, with lower risk buildings inspected less frequently. This approach ensures that premises which represent the greatest risk because of processes or management are given the greatest attention in order to seek to minimise that risk. All of this information will be accessed through the ***RAPID*** approach

and locations of high-risk premises plotted in the same way as for domestic and other areas of high risk.

The information analysed and recorded includes details of which appliances attended which incident and how long they were there. The analysis shows every appliance movement for each minute of each day for the last three to four years.

The mapping analyses carried out show that risk varies by time of day, by season and by location. This helps Merseyside Fire and Rescue Service to prepare its prevention, protection and emergency response procedures accordingly.

It is very important to liase with colleagues in the other emergency services to share data and to develop ways that can be adopted to improve the value of such data, and where possible, to standardise the data. This is already happening with both the ambulance service, which uses a similar risk analysis methodology, and with Merseyside Police, initially in relation to incidents of arson. Regular lines of communication with officers in the relevant District Council departments have been established to become aware of any changes in demographic risk that may affect our planning.

4. RISK PROCESS

Risk can be defined as "*the likelihood that harm from a particular hazard may be realised*" [3]. Risk reflects the likelihood that harm will occur and it's severity. Merseyside Fire and Rescue Service deals with incidents involving fire and other emergency incidents including road traffic collisions, chemical incidents, spillages, rescues etc. The risks associated with these activities include risk to:

- Life
- Fire & Rescue Service personnel
- Property
- Environment
- Economy
- Heritage

4.1 Risk Identification

To identify existing and potential risks to the community in Merseyside, the following methods and sources have been used (with brief examples of the type of information analysed or reviewed)

- Trends - Are particular types of incidents increasing or decreasing? What are the reasons for this? How can we improve our service?
- Local & national knowledge - Why are there particularly high numbers of incidents in certain areas? What is unique about those areas? Have other Fire & Rescue Services experienced equivalent problems and what can we learn from their experience?
- Information from other agencies - Have the Police experienced problems in certain areas with car theft leading to arson? Have Social Services identified individuals at high risk of fire? Which data can we share with other emergency services? How can we use this information to add to the picture of risk in various areas?
- Post incident analysis - Did we deal with the incident well? What problems did we encounter? How can we improve for the future? What can we

		share with others in our organisation to help improve as their service delivery?
•	Risk inspections	- What specific risk do certain properties present? How can we work with the occupiers to reduce that risk? Have we ensured that firefighters who may have to tackle an emergency are aware of those risks?
•	Analysis of the risk assessments of others in comparable fields	- Are we using effectively information from the Health & Safety Executive and other agencies to assist us in identifying and reducing risks?
•	Historical incident data.	- Has an analysis been undertaken to show where fires and other emergencies have happened in the past and how many there have been? Is our database of information which will assist in planning for the future as detailed as we need?

4.2 Risk Assessment

The assessment process involves a comprehensive approach to research and requires expertise from both within and outside the Fire Authority. The software detailed earlier has been used to show risk data in the form of maps. This provides a clearer understanding of the types, magnitude and locations of different risks.

An example of a risk map (Table 2) charting dwelling fires & injuries is shown below. This covers the Merseyside area and is the starting point of the mapping process as it is an overview. On this map the red areas have the highest incidence of fires and injuries, green being the middle and yellow the lowest.

Following this are examples of how the approach develops and shows the level of detail that can be achieved. This is shown in the smaller maps which cover the Southport area (Tables 3-5). The first map (Table 3) plots the incidences of domestic fires in the year 2000. The second (Table 4) shows the results of a concerted HFRA campaign and the installation of smoke detectors. The final map (Table 5) shows the incidences of domestic fires in the year 2002 which coincides with the latter part of the HFRA campaign. It can be clearly seen that there has been a reduction in the number of domestic fires as a result of the HFRA campaign. This provides visual evidence to support the findings of the independent impact analysis detailed above.

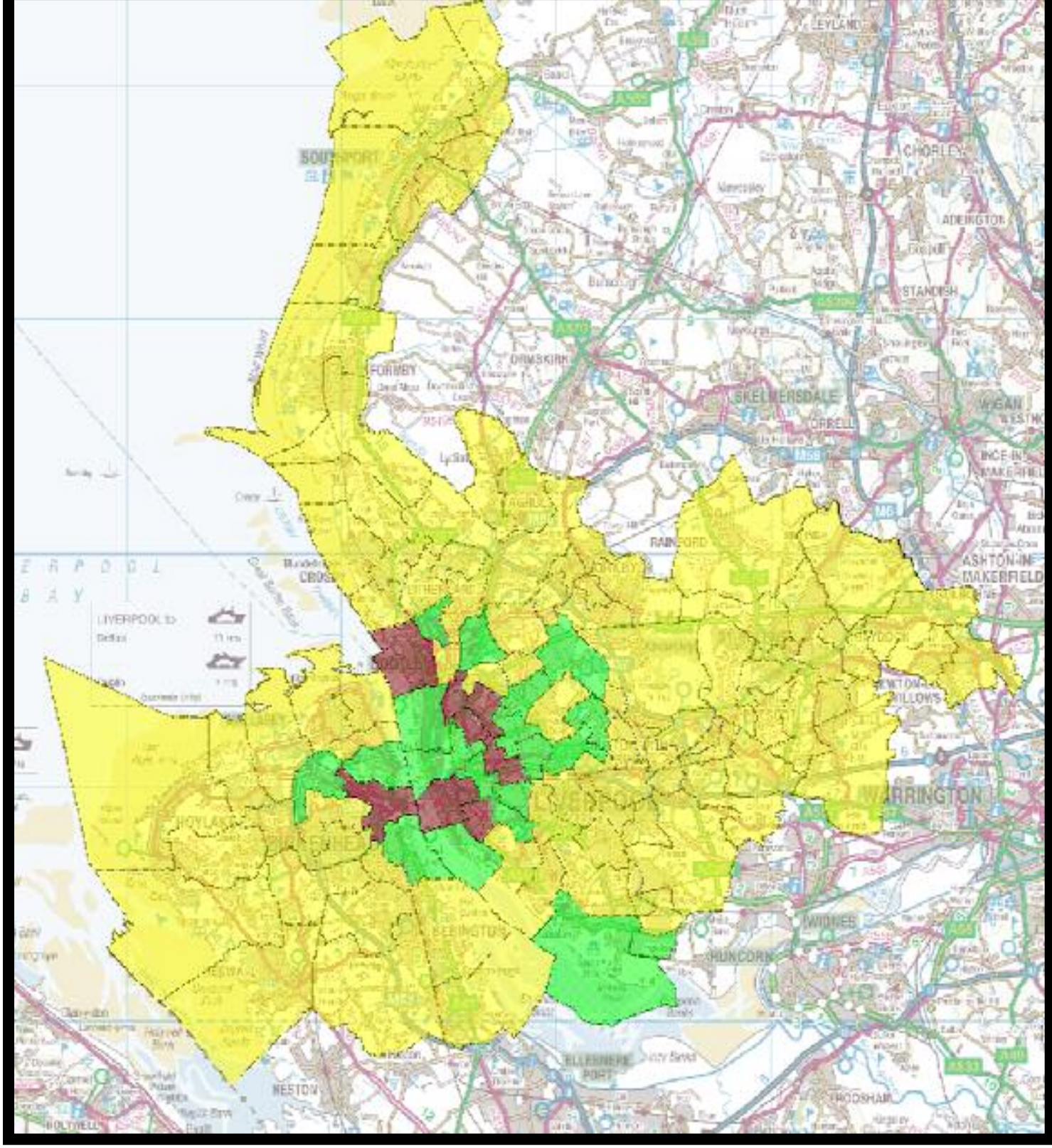
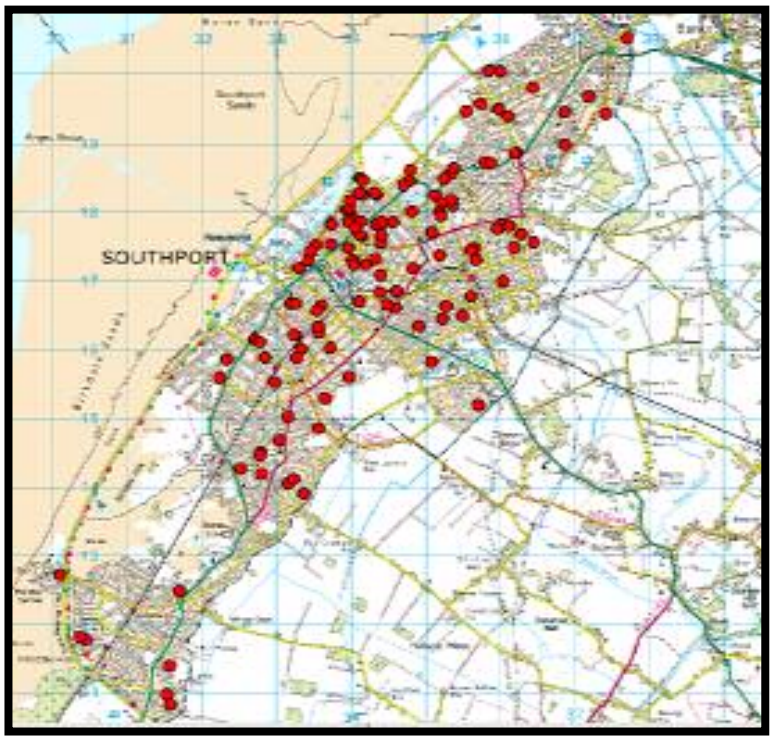


Table 2. Dwelling Fires and Injuries by Ward on Merseyside



138 Dwelling Fires occurred in Southport in 2000 (Table 3)

9072 HFRA's carried out in Southport between 22/02/2000 and 25/06/2003 (Table 4)

89 Dwelling Fires Occurred in Southport in 2002 (Table 5)

4.3 Risk Analysis

As part of the risk analysis process, risks need to be properly identified. To do this, risk maps are used to gain a clearer understanding of the types, magnitude and locations of different risks. It is necessary to do this to provide a picture of where the areas of highest (and other levels of) risk are located in order that appropriate operational resource (appliances and firefighters) deployments can be made. It also allows the Fire and Rescue Service to concentrate other non-firefighting (e.g. Community Fire Safety) resources in the areas where they are most needed.

To produce these risk maps, it was necessary to analyse data from emergency calls attended in the past and use this information to focus on areas that require attention. All incidents were geo-coded and individually plotted on the maps. In areas where fires have occurred in the past, there is a strong possibility of them occurring in that vicinity again. This is clearly illustrated by the results of the mapping which show many clusters of fires occurring. Incident data is analysed in relation to life risk from fire. This could be fire size, number of people present, number of rescues and number of casualties. The information used was from the last 3 to 4 years which is statistically considered as suitable and sufficient to start to develop trends able to be used in the future planning processes.

These maps can be analysed on a year by year basis which allows “hot spots” to be identified where there have been clusters of dwelling fires over a period of time. These are high risk areas which allow us to forecast with a high degree of confidence will produce future emergency calls.

Additional and separate analyses are carried to cover those incidents that have produced injuries and these are geo-coded and mapped. In doing this target areas are identified where fires are occurring, furthermore “hot spots” show where these fires have caused most injuries. Merseyside Fire and Rescue Service has been using data covering 10 years to analyse fire fatalities and this means that trends, the activities undertaken to respond to these trends and their effectiveness can be evaluated.

To supplement the historical information indicating where fires and injuries have occurred in the past, socio-economic and demographic data is also analysed. This includes lifestyle data such as age range, nature of housing, socio-economic ratings and patterns, crime and disorder issues (particularly the incidence of arson) and social mix. It is known from both national and local studies where fires are most likely to occur in terms of social groups, types of housing and age of residents. The socio-economic and demographic data is used to identify areas of properties which are likely to be most at risk from fire. These are also plotted onto maps and overlaid on the incident data.

Comparisons can then be made between the identified “hot spots” based on both fires and injuries and areas of high-risk properties based upon lifestyle data. This confirms the findings of previous national research and demonstrates that in Merseyside fires do occur most frequently in certain types of social groups and housing.

4.4 Risk Control

From the risk maps, Merseyside Fire and Rescue Service assesses and responds, as far as is practicable, to attempt to reduce risk and to provide an appropriate response to fires or other emergency incidents as they occur.

This involves the identification of the right tools to reduce risk, preparing risk control plans using appropriate levels of prevention, protection and intervention, implementing those risk control plans and continually monitoring and reviewing the whole process. The targeting of HFRAs, fitting of smoke detectors and emergency response provision are all based upon the ***RAPID*** approach.

Merseyside Fire and Rescue Service has, front of the mind, the philosophy that prevention is better than cure and the fundamental goal is to continue to transfer the main focus of the Service into prevention, tackling the root causes of fire in the home and emphasising the use of community fire safety. However, it is recognised that the Service must continue the role to provide an emergency response and in the following section provide details of the rationale that underpins our locally determined emergency response standards.

5. RESPONSE STANDARDS

National response standards were first formulated by the Riverdale Committee in 1936 but firmly established by the Home Office in 1958. They were subsequently more clearly defined, revised and consolidated in 1974 and again by the Joint Committee on Standards of Fire Cover in 1985. These standards are graphically represented below:-

<table>
<tr><th colspan="3">HOME OFFICE STANDARDS OF FIRE COVER</th></tr>
<tr><th>RISK CATEGORY</th><th colspan="2">FIRE BRIGADE ATTENDANCE</th></tr>
<tr><td rowspan="2">CATEGORY ‘A’
Built up areas in large cities containing large commercial and industrial premises or high rise property where there is a strong chance of fire spread.</td><td>  </td><td>  </td></tr>
<tr><td>TWO PUMPS WITHIN 5 MIN</td><td>THIRD PUMP WITHIN 8 MIN</td></tr>
<tr><td rowspan="2">CATEGORY ‘B’
Areas in towns and cities such as smaller industrial areas, extensive shopping centres and factory estates</td><td>  </td><td>  </td></tr>
<tr><td>FIRST PUMP WITHIN 5 MIN</td><td>SECOND PUMP WITHIN 8 MIN</td></tr>
<tr><td rowspan="2">CATEGORY ‘C’
Extensive areas of residential dwellings such as terraced property, blocks of flats or light industry/commercial</td><td colspan="2">  </td></tr>
<tr><td colspan="2">ONE PUMP WITHIN 8 TO 10 MIN</td></tr>
<tr><td rowspan="2">CATEGORY ‘D’
Consisting of rural property, villages and farms</td><td colspan="2">  </td></tr>
<tr><td colspan="2">ONE PUMP WITHIN 20 MIN</td></tr>
</table>

Guidance issued by the ODPM on behalf of the Government in July 2003[4] requires all Fire Authorities in preparing their IRMPs to review current standards and set new locally determined emergency response standards. In order to review the current standards and establish new standards, the Authority has used the risk mapping tools and techniques described earlier and examined research carried out principally in this country.

5.1 Studies into the Relationship between Response Times and Deaths and Injuries in Fires

"Out of the Line of Fire"

The report of the Joint Committee on the Audit Commission Report to the Central Fire Brigades Advisory Council (CFBAC) "Out of the Line of Fire" in 1998 included research on the relationship between emergency response times and fatality rates. This was compared to the conclusions of previous research into "survival times" in fires and of information from fire reports, which confirmed that the findings were consistent. The results of this research are illustrated in the following model:

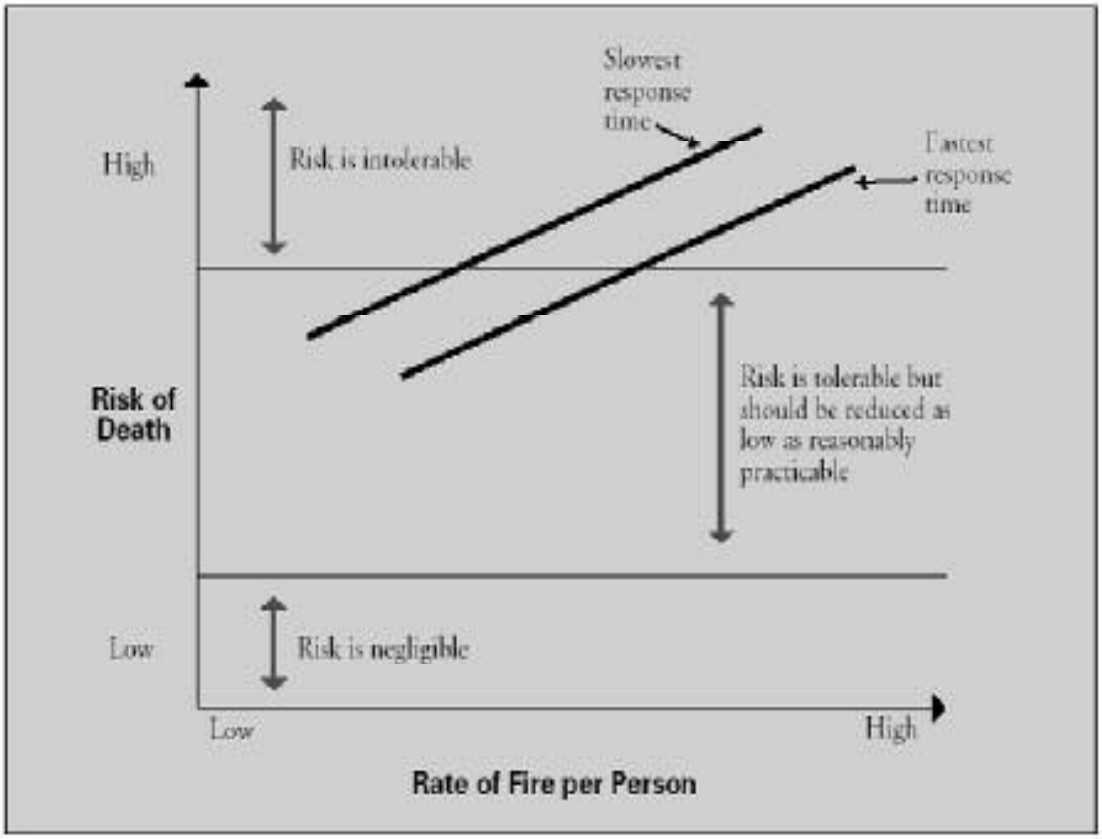


Table 6 Model of Impact of Response Times on Risk of Death in Areas with Higher and Lower Rates of fire

[5] "Out of the Line of Fire"

Further work was done on combination of response times and rate of fire and this is illustrated above. The model was tested and predictive rates of deaths compared to reported rates of death were favourable and this confirmed the model's accuracy. The model demonstrates: -

- ***In areas with higher rates of fire, a fast response time gives the same rate of death as slower response times in areas with lower rates of fire***

- ***The limits of tolerability of risk show that even the fastest response time fails to reduce risk to tolerable levels in those areas with the highest risk of fire whilst a moderate response time is sufficient to maintain a tolerable level of risk in areas with lower rates of fire. A minimum response time is required in all areas to ensure risk remains tolerable.***

5.2 Further Supporting Research

A study was undertaken by Entec[6] on behalf of the Home Office Fire Research and Development Group in 1998 into fire cover risk criteria. From this study a statistical relationship was established between fire service response times and the fatality rate in dwelling fires. This study indicated that there was a statistical relationship with a higher fatality rate per fire for longer response times. Subsequent work by the Home Office and Entec used data over a period of 13 years covering 1985 to 1997. This study confirmed there was a relationship between response times and fatality rates in those years.

The research by Entec developed the response time-fatality rate relationship by calculating what proportion of casualties were fatally injured for bands of response times. Bands of response times (of 5 minutes) were used rather than smaller units of time (such as 1 or 2 minute(s)) as the difference in fatality rates between (say) 1 minute increments is not seen as being statistically significant and because further subdivisions of response times would reduce the number of data points on which fatality rates were derived. This research utilised a large data set covering all dwelling fires involving casualties from 1984 to 1997. This research found:

- A declining rate of death per fire casualty over the period

- Similar levels of correlation between urban and rural data sets.

Table 7 below shows, using national statistics, as well as the declining fatality rates over the period that the quicker the response time, the less likelihood of death. From the two lower lines, based on regression analysis, the flatter the two lines indicates that there is little difference in death rates between attendance times of 1 – 5 minutes and 6 – 10 minutes, but it does indicate that attendance times greater than this have significantly higher death rates.

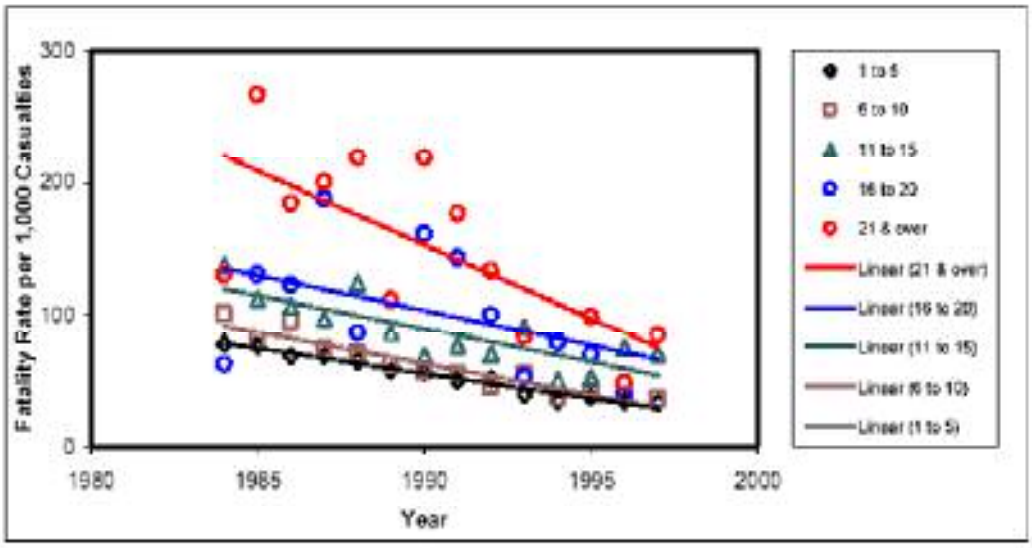


Table 7 **Linear regression applied to fatality rates to simulate the decline of fatality rates with time.**

[6] ENTEC

Table 8 below illustrates, using 5 sets of response time-fatality rate data, that average response times of 10 minutes or less have significantly lower fatality rates than response times greater than 10 minutes. Response time–fatality relationships are used in fire cover risk assessments to ascertain which response time is needed to keep death within "tolerable" levels.

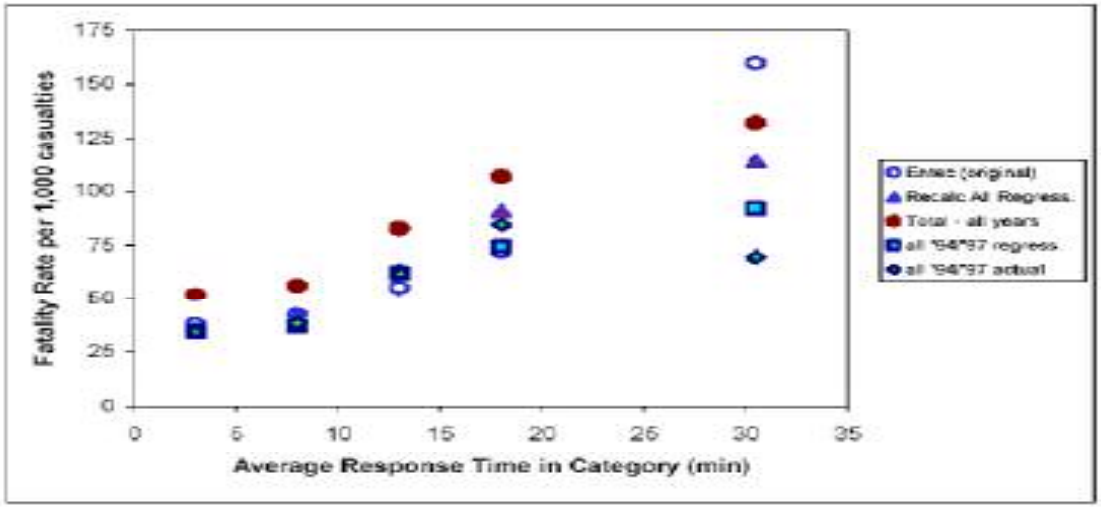


Table 8 **Variation of data for all data and response time categories.**

[6] ENTEC

Finally, Table 9 (below) provides a further comparison of response times and "probability of death of persons involved in fires". This draws the same conclusion that there is little higher probability of death in a response time of 6 to 10 minutes than there is of one of 5 minutes or less.

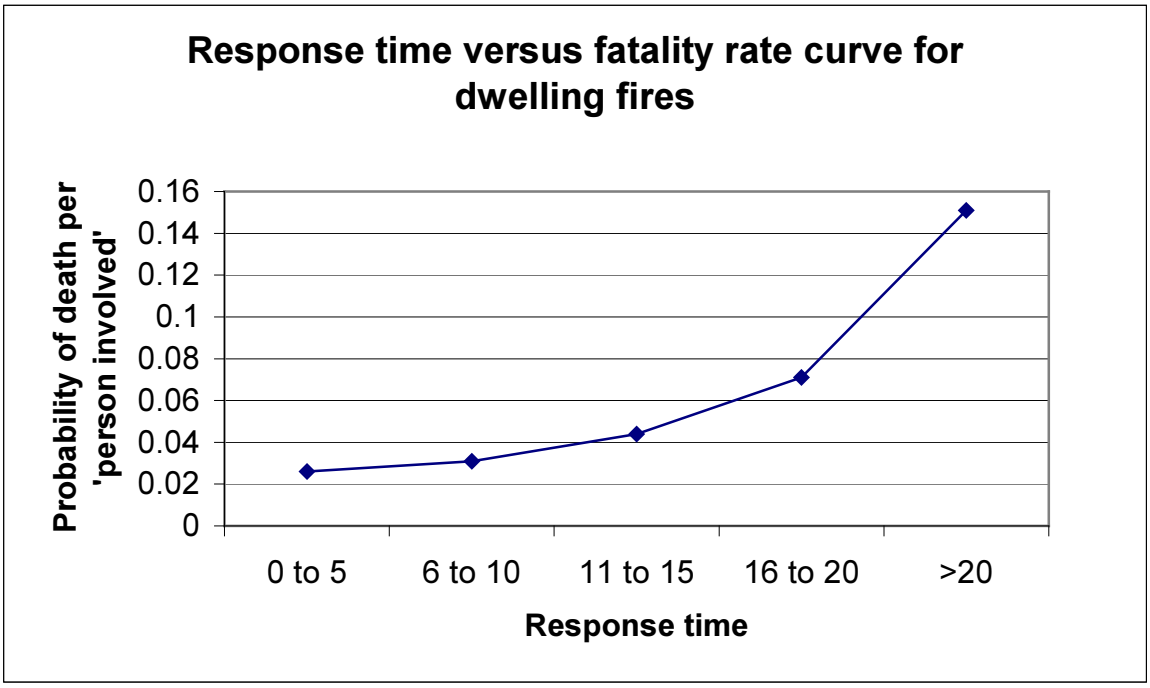


Table 9 Response time versus fatality rate curve for dwelling fires

[7]ODPM

A review was undertaken of relevant international research which may provide pointers on this matter. In the U.S.A.[8] the optimal maximum for confining fires to the room of origin was given as eight minutes, which is in line with conclusions drawn from U.K. research.

Merseyside Fire & Rescue Service agree in principle with the findings from these types of research. The following section explains how the findings are used to develop new interim response standards for Merseyside

6. IMPACT UPON MERSEYSIDE

In producing its response standards set out in the IRMP and associated Action Plan, Merseyside Fire and Rescue Service have taken account of current standards, tools and techniques available and research documentation.

It could be argued that modern communities are safer than their predecessors for many reasons. These include:

- community fire safety initiatives (particularly HFRAs and installation of smoke detectors)
- improved use of tools and techniques by the Fire Service (e.g. mapping)
- developments in safety standards (e.g. building materials, furniture etc)
- better awareness of health & safety

However, it is a fact that when fire occurs, rapid reaction and firefighting are the essential measures necessary to save life and property. The number of deaths from fire is decreasing both nationally (as illustrated in Table 7 above) and in Merseyside (for further details see the IRMP[1]). Nevertheless, the number of injuries caused by fires nationally increased from 7,600 in 1979 to 14,800 in 2001. Analysis, using the ***RAPID*** approach, has indicated that there are significant areas of Merseyside that have a high risk of fire and thus, in accordance with the findings of the research detailed above, a fast and measured response time is required to keep death and injury as low as possible.

It is clear from the research above that a response time of 10 minutes or less has the best chance of keeping fire deaths as low as possible. A quick response also allows firefighters to start tackling a fire with the idea of containing it within the room of origin and thus reducing the risk to life, both of the public and firefighters, and to property.

Against this background it is necessary to consider what impact would be likely to be made on injuries, property loss and indirect financial loss as a result of changes in the level and distribution of the firefighting response offered by Merseyside Fire and Rescue Service. Objective scrutiny of injuries caused by fire suggests that it would not be reasonable to expect a quicker response to prevent many injuries, fatal or non-fatal, through fire or smoke, occurring in the room of origin or any burns injuries to others remote from the source of ignition. Most smoke casualties away from the room of origin are potentially preventable; it is for this reason that Merseyside Fire and Rescue Service place such emphasis on our HFRA programme and the installation of smoke detectors.

The conclusion reached, taking all this into account, is that for all property fires we intend to get the first firefighting resources to the fire in 10 minutes or less, and in the areas where there is more likely to be a fire, in 8 minutes or less (5 minutes in the highest risk areas). The aim of these standards is to secure, as far as is reasonably practical, the safety of the community and health and safety of our firefighters, by containing any fire to the room of origin.

In a parallel to fire deaths, the extent to which fire losses are likely to be responsive to operational factors, particularly speed and weight of attack, is largely dependant upon the potential size of the fire and how far it will have gained hold by the time the Fire Service is in attendance. Most property loss occurs in fires in occupied buildings other than dwellings.

The relationship between fire spread and delay in discovery is complex, and it is the case that, as fires become fully developed and occupy a significant proportion of the building, the impact of speed of attendance becomes appreciably less significant. Studies of large loss fires have demonstrated that the factor most likely to contribute to the development of fires into large loss fires is the delay in discovery of the fire, rather than the speed and weight of the initial attack once the fire has been discovered[9]. Merseyside Fire and Rescue Service have recognised this association and this is the reason why we place such emphasis within our IRMP on the installation of sprinkler systems into many different non-domestic (as well as domestic) environments. It is now possible to cost-effectively equip virtually all premises which have the potential for large loss fires with automatic fire detection and sprinkler equipment, so that most fires can be detected and extinguished in their infancy.

In the absence of mandatory sprinkler systems, the ability of improved operational performance to make a significant impact on fire losses seems to rest largely on the extent to which fire losses may be responsive to appropriate weight of attack at an early stage.

The following chart sets out the proposed interim standards for attending property fires on Merseyside. They represent an excellent standard of service for the whole of Merseyside and represent one of the best response standards in the country. These interim standards will form the basis of the continued evolution of our risk management system. It is recognised that the time of intervention, particularly of the first fire engine to arrive, is important not only for the Fire

Service and its personnel but also to the community. Work will continue towards achieving lower levels of risk and the process and procedures will continue to be developed with the resultant performance reported in the IRMP. Monitoring and review of the approach will report on progress and confirm the objectives are being met, the main one being to reduce the risk from fire to the community on Merseyside.

INTERIM STANDARDS OF FIRE COVER 2004/05		
RISK CATEGORY	**FIRE SERVICE ATTENDANCE**	
CATEGORY 'A'		
	FIRST PUMP WITHIN 5 MIN	SECOND PUMP WITHIN 8 MIN
CATEGORY 'B'		
	FIRST PUMP WITHIN 5 MIN	SECOND PUMP WITHIN 8 MIN
CATEGORY 'C'		
	FIRST PUMP WITHIN 8 MIN	SECOND PUMP WITHIN 10 MIN
CATEGORY 'D'		
	FIRST PUMP WITHIN 10 MIN	SECOND PUMP WITHIN 12 MIN
WE AIM TO ACHIEVE THESE ATTENDANCE TIMES ON AT LEAST 85% OF OCCASIONS		

7. Monitor and Review

The whole process described above is a preliminary approach based upon the best information available. However in line with corporate governance the process will be reviewed by external and independent risk management consultants. The process is an evolutionary process and will be periodically reviewed to reflect increased knowledge and awareness as further information and research becomes available. External views have already been obtained and the approach has been reviewed by independent risk management consultants to ensure it conforms to good practice in risk management techniques.

References

1. "Making Communities Safer", Integrated Risk Management Plan, Merseyside Fire & Civil Defence Authority, October 2003

2. Home Fire Risk Assessment Impact Analysis Report, Steven Merrall, Fire Data Research Ltd., January, 2004

3. Management of Health & Safety at Work Regulations 1999, Health & Safety Executive

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