

2013~2016

Essex Fire Authority



BUILDING A SAFER ESSEX

INTEGRATED RISK MANAGEMENT



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Essex County Fire
and Rescue Service

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IRMP 2013/16

Introduction

Welcome to the Essex Fire Authority's latest Integrated Risk Management Plan (IRMP). The IRMP forms part of the professional way in which we identify, assess and manage risk in Essex, along with the County-wide Strategic Assessment of Risk (SAOR).

This IRMP will cover the next three years (2013-2016), but we review the SAOR every year to ensure the IRMP still addresses the risks in Essex.

The last few years have been a period of change across the world, UK, Essex and the UK Fire and Rescue Service. The global financial situation continues to affect all public services and we have been finding new ways to deliver an excellent service in difficult times.

In addition, the Fire and Rescue Service has recently faced new requirements and priorities in the latest Fire and Rescue National Framework for England, along with emerging risks identified in the UK's National Risk Assessment.

The main change in the National Framework relating to IRMP is that it will no longer just provide information on what fire and rescue services are looking to change. Instead, it will illustrate what activities and resources are in place to deal with a range of foreseeable risks. It also looks at risk management as more than an operational response. It is also about how risk can be managed with our prevention and protection strategies.

Much progress has been made against delivering the intentions within the Corporate Strategy for 2011-15, including changes to the way we deliver an operational response in certain parts of the County. These changes were delivered as part of a strategic approach to the use of prevention, protection and intervention resources across the County.

We are confident that the community risk management arrangements in Essex are robust and meet the current risk profile of the County. Therefore, there are no new recommendations within this IRMP.

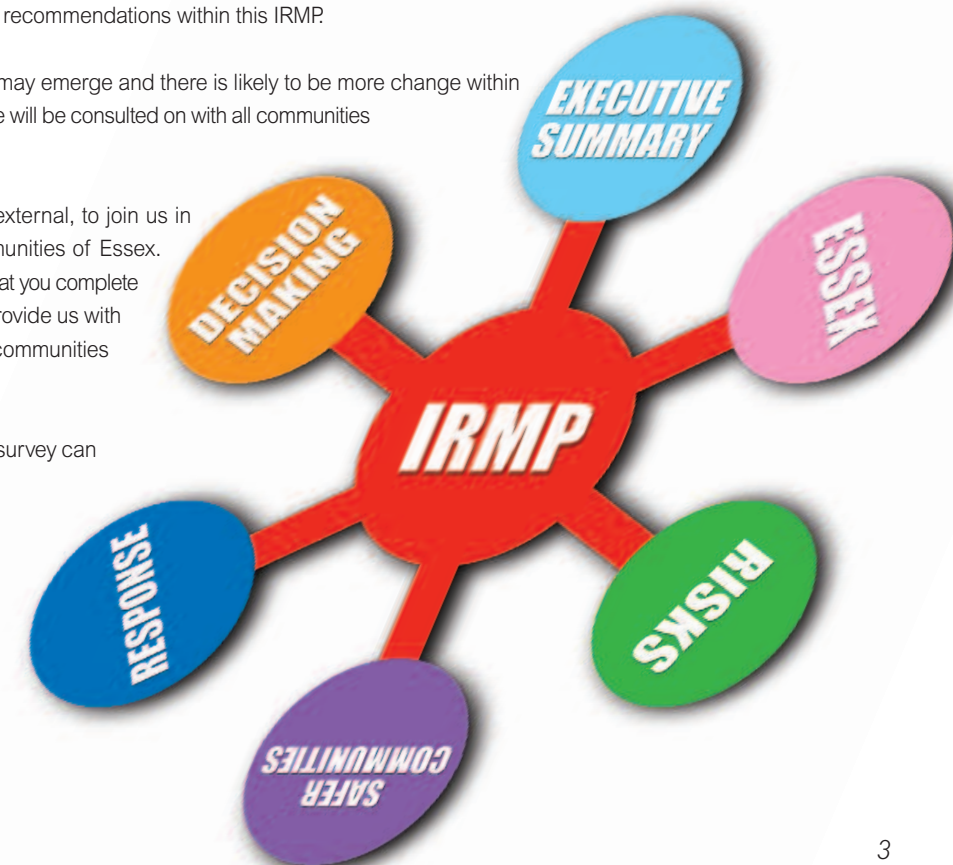
We are, however, alert and watchful to new risks that may emerge and there is likely to be more change within the three-year life of this IRMP. Any changes in the future will be consulted on with all communities and major stakeholders.

We invite all of our stakeholders, both internal and external, to join us in continuing to work to ensure the safety of the communities of Essex. Once you have considered our arrangements, we ask that you complete the enclosed feedback form on the back page and provide us with your views on our assessment of the risks facing the communities of Essex, including the control measures in place.

If you prefer to send us your views electronically, this survey can also be found on our website at essex-fire.gov.uk.



Chairman of Essex Fire Authority Anthony Hedley and Chief Fire Officer David Johnson



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Executive Summary

This Integrated Risk Management Plan (IRMP) is part of how the Fire Authority manages foreseeable risk within the areas of Essex, Thurrock and Southend. It is a requirement of the National Framework that an IRMP is published and consulted upon in its entirety.

The IRMP is an integral part of the business planning process employed within Essex County Fire and Rescue Service (the Service). The Service's **Strategic Assessment of Risk** covers all the reasonably foreseeable risks within the County. This IRMP looks at some high profile risks and explains the effects they have on Essex and how the Service has worked to mitigate them.

Included in this IRMP is a brief description of risk appetite and how this applies to the Service to set the context of the IRMP.

The profile of the County shows it is one of the largest fire and rescue services in the country. The risk profile has changed for Essex, with the Service having to respond to fewer calls, but now it also has to prepare for different types of emergencies such as large-scale terrorist attacks.

The projected growth of the population for Essex is 25% between 2001 and 2031; there will be a growth in traffic and housing to cope with that.

The risks highlighted a range from fires through to major industrial accidents. The Service works in a coordinated way with other agencies such as the Environment Agency, local authorities and utility

companies to try to prevent emergencies from happening. Together, these agencies work to provide a coordinated response to manage and recover from an emergency, should it occur.

The Service works to prevent fires in our communities. It has also been successful in preventing accidents on the roads of Essex in association with other agencies such as the Police and the Highways Agency.

The Service prioritises workplace fire safety inspections through a risk based inspection programme, which ensures that the high-risk premises are inspected regularly. The Service also recognises the important role that automatic water suppressions systems and fire engineering play in reducing the impact of fires.

How the Service responds to calls for help is important. As a result, it constantly monitors performance to ensure it is maintained at a high level. Ensuring the appropriate risk information is available to fire fighters when they need it is vital. The Service has delivered significant work to utilise information technology (IT) systems to make sure this information is available as soon as it is requested on fire ground.

As you might expect, water is a vital element of extinguishing a fire and the Service has a dedicated team ensuring that this is always available wherever a fire occurs.

All of the work above is managed by senior managers using, amongst other things, performance data specifically selected to oversee the delivery of outcomes for the public of Essex, Thurrock and Southend.

The Service has arrangements in place with all of our neighbouring services to ensure that emergencies on our borders get the most appropriate response at all times.

This IRMP paints a picture of a Service that has many exciting developments underway. However, in this financially challenging time it is important that the Service does not start any new work until it is confident that it can be undertaken on a sound financial basis.

There are no new recommendations within this IRMP.

This IRMP will be consulted upon by many means ranging from being posted on social networking sites through to being available in paper format. The Service will take due notice taken of any responses received.



The IRMP and the business planning process

Essex has a well-structured and mature business planning process that is appropriately led by the budget setting cycle. The process links activity described in the business plans with the Corporate Strategy and IRMP intentions.

Each department has a business plan that sets out its activities and describes how these activities assist in the delivery of Service objectives. Performance is monitored and plans are modified to reflect emerging issues. This means that there is always an up to date plan to achieve the Services objectives within the budget that we have.

This IRMP is derived from a number of sources, including:

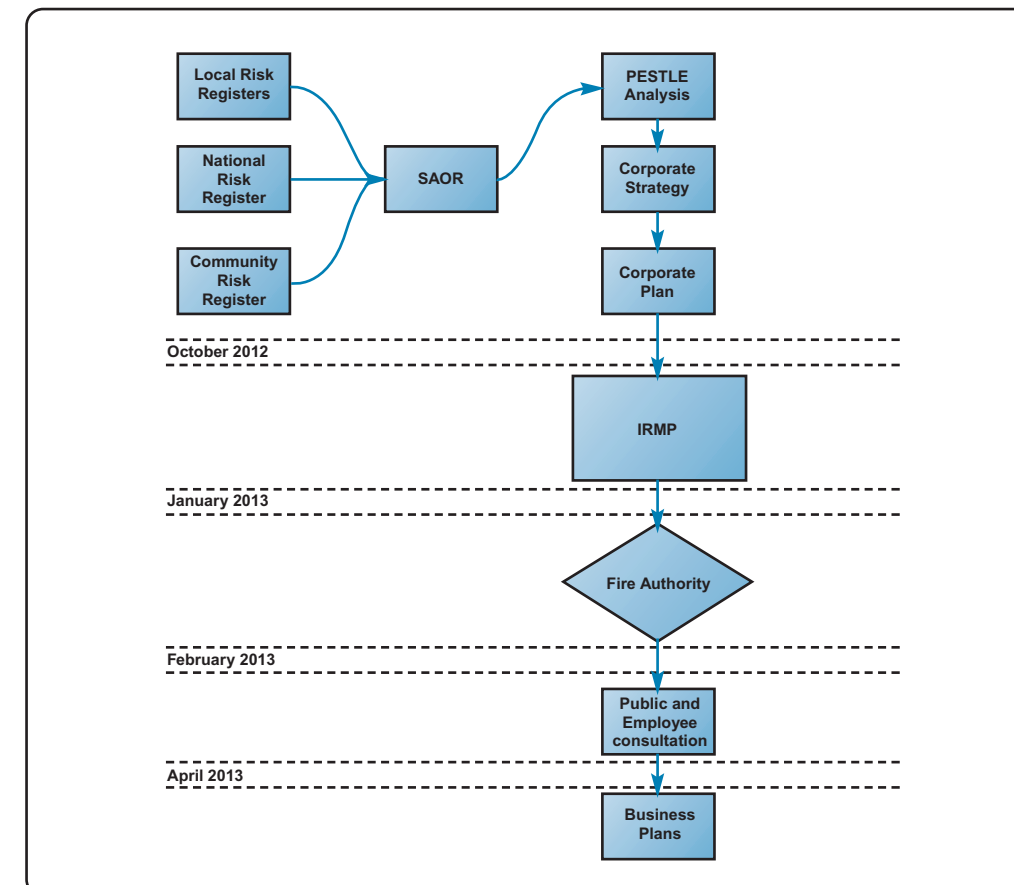
- A **Strategic Assessment of Risk** in Essex;
- **The Community Risk Register**;
- **The National Risk Register**;
- Public consultation;
- Essex Fire Authority input;
- The Corporate Strategy;
- The Corporate Plan;

- Strategic managers input;
- Consultation with employees;
- **PESTEL** analysis (political, economic, social, technological, environmental and legal analysis).

This IRMP is structured so that it sets out:

- Its purpose;
- The risk appetite of Essex Fire Authority;
- The nature of risk in Essex and the challenges it presents to Essex County Fire and Rescue Service (the Service);
- The measures that the Service will employ in order to mitigate those risks;
- How we make people safe in their homes and on the roads of Essex;
- How we respond to calls for help;
- How risk information is managed by the Service;
- How we manage what we do;
- How consultation on this IRMP will work.

The diagram below shows the simplified IRMP planning process.



Jargon Busters

Strategic Assessment of Risk

This is a document that Essex Fire and Rescue Service uses to highlight the operational risks it faces and how it intends to deal with them.

The Community Risk Register

The Community Risk Register (CRR) is a dynamic document that details the major risks within Essex that have the potential to result in a major emergency or incident type event

The National Risk Register

This document is intended to be the first step in providing advice on how people and businesses can better prepare for civil emergencies by listing all of the major risks facing the country.

PESTEL analysis

PESTEL is an acronym that stands for Political, Economic, Social, Technological, Environmental and Legal. It is used to describe an analysis that is used for determining the opportunities and risks that face an organisation.

Risk Appetite

Risk appetite is the amount of risk that an organisation is willing to seek or accept in the pursuit of its long-term objectives.

To understand what work needs to be done we need to understand the current situation and what we want to change. This may involve risk. Risk can be avoided, embraced to take advantage of an opportunity, modified (which may introduce new risks), transferred, e.g. through insurance, or retained with suitable controls. Risk appetite plays a vital role in supporting our decision making.

The following key principles underpin our risk appetite considerations:

- Risk appetite can be complex. Trying to make the very complex issue simple, while superficially attractive, can lead to missed threats and opportunities; far better to acknowledge the complexity and deal with it, rather than ignoring it;
- Risk appetite needs to be measurable, otherwise statements become empty. Suitable performance measures have to be created to understand how the work we do impacts on risk. Relevant and accurate data is vital for this process;

- Risk appetite is not fixed, there will be a range of appetites for different risks which need to align and these appetites may vary over time;

- Risk appetite should take into account the organisation's risk management capability. Until an organisation has a clear view of both its risk capacity and its ability to manage risk, it cannot have a clear approach as to what or how it should be managed;

- Risk appetite must take into account differing views at a strategic, tactical and operational level;

- Risk appetite must be appropriate for the culture of Fire and Rescue Service. This requires looking at both the desire to take risk and the desire to exercise control.

Bearing in mind the first bullet point above, the Service has for many years publicly declared our risk appetite at operational incidents, stating that:

- Firefighters in a highly calculated way:
- Will take some risk to save saveable lives;
 - May take some risk to save saveable property;
 - Will not take any risk at all to try and save lives or properties that are already lost.



Essex



Essex County Fire and Rescue Service is one of the largest fire and rescue services in the country with a wide variety of risks.

The Service is governed by the Essex Fire Authority representing Essex, Thurrock and Southend. The Authority covers an area over 1,400 square miles and houses a population of 1.7 million. It contains numerous ecologically important areas and manages one of the largest sections of coastline (350 miles) in the country. There are various conservation areas and over 14,000 listed buildings.

It is estimated that the population of Essex will grow by 25% between 2001 and 2031. This will need a 20% increase in housing by 2021, higher than many areas in the region and beyond. This growth in population includes an ever increasing percentage of people aged over 65. This increase is due, in part, to improved health care and lifestyles. Essex also has 49,000 adults that are known to be vulnerable and require support.

The sustained increase in the Essex population is placing a greater demand on public services. Despite this the overall number of emergency calls has reduced by 26% over the last five years. This has been across the board for fires, road traffic incidents and fire alarm calls.

On top of the **protection** work for workplaces that we have delivered for many years there has been a huge increase in **prevention** work targeted at homes, road safety etc.

The Service also has to be able to respond to more complex incidents such as terrorist attacks. The nature of these has changed. Dissident Irish Republican Terrorists usually targeted buildings and gave warnings in order to cause significant disruption. But now terrorism is based on causing multiple injuries. Whilst the risk of it occurring in Essex is limited, it is still something that the Service has to prepare for.

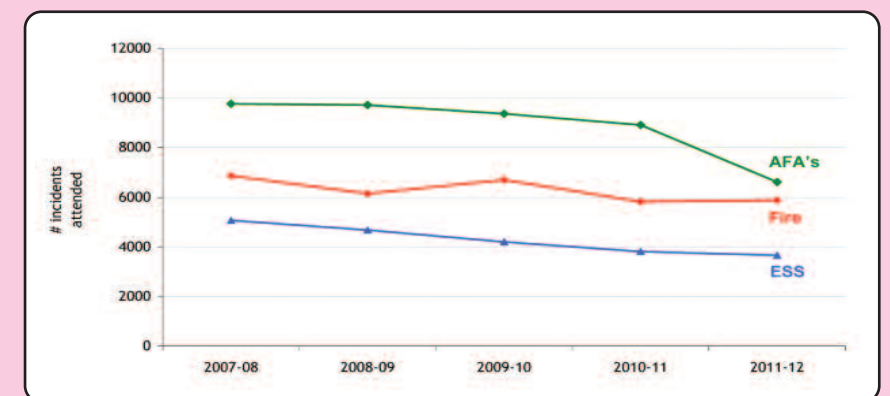
Poor weather conditions such as heavy, persistent rain and lengthy periods of snow have become more regular than in the past. The Service has always had to deal with storms and isolated, concentrated periods of

extreme weather. As these have become more frequent, the Service is putting in place more specialist equipment and procedures.

Automatic fire alarms (AFAs) have been a major unnecessary drain on Service resources. After a close examination of the figures, it was found that just about all of these incidents, 99.8%, turned out not to be an actual fire. Even where a fire did occur it was during the hours when the premises were occupied and was very small in size. Therefore, early in 2010 the policy was changed so that the Service still responded automatically to sleeping risks, schools and certain high risk premises, but other buildings such as offices no longer received an attendance unless a call was made to the Service confirming that there was a fire. All of this means that Essex is experiencing a shift in its risk profile. See chart below.

The Service has in the recent past enhanced the emergency response alongside the increase in preventative work by a number of significant changes. These include new equipment such as water rescue teams, an environmental pod and water bowsers. Also we have improved the way in which critical information is made available at the incident, with significant work from the Service's IT department. IT has modernised the infrastructure by improving back-up systems, providing mobile data terminals on appliances, a mobile incident command system and improving the IT systems on all fire stations.

The decline in incident numbers over the last five years.



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Jargon Busters

Protection

This covers all of the activities undertaken by the Service that endeavour to be in place that will help to protect members of the public before the attendance of the emergency services. An example would be asking for fire resisting doors to be fitted on bedroom doors to stop the fire spreading from the room.

Prevention

This term covers the activities undertaken by the Service intended to prevent fires and other emergencies, such as road traffic collisions from happening in the first place.

Risks

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Overview

The Service has a complex risk profile within its borders.

This includes elements of the national infrastructure that are of importance, not only to Essex, but also to the rest of the country, e.g. Stansted Airport. It also has risks that are important regionally, such as major trunk roads like the A12, M25 and M11. Alongside these are the risks that we all recognise; fires in the home and places of work, road traffic collisions and episodes of extreme weather.

The Service considers these risks within its [Strategic Assessment of Risk](#). Whilst some can be dealt with solely by the Service many require us to work with other agencies. This joint working takes many forms, including sharing buildings with the Police and exercising with other organisations. We have memorandums of understanding with a range of service providers across a range of activities. For example, Spartan Rescue for specialist off-road work and the Red Cross, for victim support after an emergency.

As with all fire and rescue services, Essex has a duty to cooperate with other [category 1 responders](#) and [local resilience forums](#) under the Civil Contingencies Act 2004 to ensure interoperability at times of need.

Essex is a proactive member of the Essex Resilience Forum, which it has chaired for many years. This forum is essential from a legal perspective but more importantly, it brings together all relevant responders to prepare for emergencies that may occur.

National risks are published and considered in the National Risk Register of Civil Emergencies [National Risk Register/Cabinet Office](#). Whilst it is not reproduced here there is a summary below of the main points that are relevant to the work of the Service. A more detailed picture of how Essex deals with risks can be found in the current [Strategic Assessment of Risk](#) 2013.

Fires Hazard

Fires are part of the day-to-day business that fire and rescue services deal with. They can be varied in size, behaviour and complexity. Whilst most fires are easily dealt with by the local fire station they can be significantly larger and therefore require a larger response from the Service.

Impact

Some fires are small, such as a fire in a rubbish bin. Whatever the size, a fire can be deadly and absolutely devastating, whether it results in a death or the loss of a factory that employs hundreds of people. The impact can be far beyond the actual fire itself. Even a fire that appears not to have caused much material damage can seriously affect the surrounding environment due to such issues as pollution or causing traffic disruption.

Impact for Essex County Fire and Rescue Service

The Service deals with many fires throughout a year (5,870 in 2011-12). As stated above they can range from small easily dealt with fires to very large ones, such as Tilbury Power Station, that needed more than fifteen fire appliances and several specialist appliances to put it out. Also the length of time a fire takes to extinguish can have an impact on the availability of Service resources. An example would be the fires we have experienced in timber recycling depots. These can take at least a week before they are safe enough to hand back to the owners. A breakdown of these calls and the other types of calls we received in 2011-12 can be seen in the table to the left.

Mitigation by Essex County Fire and Rescue Service

The Service studies very carefully the risks it may have to contend with. This risk information is constantly updated and reviewed. The Service has also undertaken a detailed study of what resources we have and where they are placed.



For those fires that are larger than that which can be dealt with by the local station there is a comprehensive system of support from neighbouring stations. Also when a large incident takes resources from an area, support from further afield will be brought in to provide cover for any other incidents that may occur at the same time.

There is a robust debrief system that reviews an incident after it is resolved and looks to identify not only learning points, but also what went well. Where there is a need to change something, whether it is a piece of equipment or a procedure, the Service takes it very seriously and treats these issues with the priority they deserve.

Flooding Hazard

Flooding and the risk of flooding are becoming more frequent as weather patterns continue to change. There are two main types: coastal flooding and inland flooding. The low-lying nature of Essex means that large portions of the coast are at risk from coastal flooding. Inland flooding can take on many forms but is naturally focused in lower-lying areas, but not exclusively, and can occur in higher areas where the water has no opportunity to move to lower-lying areas due to the intensity of rainfall.

Impact

A coastal surge, or tidal inundation as it is sometimes called, can affect the east coast. Whilst flood defences have been significantly improved, there is still a possibility of them becoming overwhelmed. This could result in large-scale evacuation and damage to property including residential, utilities and commercial.

Inland flooding causes severe disruption to localised areas and sometimes large parts of Essex. Whilst the actual flood is usually short lived the damage and disruption it leaves behind can carry on for a number of days and the recovery for the community can take many months.

Impact for Essex County Fire and Rescue Service

The impact in Essex ranges from flooded roads and houses to loss of utilities, with repairs being delayed due to the poor conditions. Salvage works include building dams, pumping out water and rescuing isolated members of the public. Flooding usually impacts on road transport networks, culminating in poor attendance at workplaces and numerous rescues having to be carried out, due to stranded motorists caught out by unexpected or underestimated conditions. The Service has seen flooding incidents increase by over 100% when comparing the first half of this year with the same period last year.

Mitigation by Essex County Fire and Rescue Service

Essex has been through many periods of poor weather across large areas of the County, which has led to huge increases in demand for an emergency response. The Service has tested and put in place business continuity arrangements for successfully managing the attendance of its own staff, ensuring the availability of a viable emergency response during all of these events.

Plans and collaborative arrangements with the Environment Agency and Essex Resilience Forum are constantly being tested, exercised and improved. The Service has invested in equipment, vehicles, training, procedures and processes that have been used and are ▶



Jargon Busters

Strategic Assessment of Risk

This is a document that Essex Fire and Rescue Service uses to highlight the operational risks it faces and how it intends to deal with them.

Category 1 responders

These are the authorities that have a requirement placed upon them by the Civil Contingencies Act to make arrangements for dealing with emergencies. Category 1 responders includes Fire Services Police and Ambulance.

Local Resilience Forums

This brings together all of the agencies that have a responsibility to plan for civil emergencies, such as floods.

1. Primary Fires: Include all fires in buildings, vehicles and outdoor structures or any fire involving casualties, rescues or fires attended by five or more appliances.

2. Secondary Fires: A fire that did not occur at a primary location, was not a chimney fire in an occupied building, did not involve casualties (otherwise categorised as a primary incident) and was attended by four or fewer appliances.

Incidents attended by ECFRS 2011–12		
Incident Category	Incident Classification	Total
False Alarm	Fire alarm due to Apparatus	2,778
	Good Intent false alarm	3,512
	Malicious False Alarm	306
Fire	Chimney	138
	Primary ¹	2,598
	Secondary ²	3,134
Special Service	Advice Only	11
	Animal assistance incidents	224
	Assist other agencies	135
	Effecting entry	409
	Evacuation (no fire)	15
	Flooding	310
	Hazardous Materials incident	51
	Lift Release	421
	Making Safe (not RTC)	134
	Medical Incident – First responder	54
	No action (not false alarm)	84
	Other rescue	199
	Other Transport incident	42
	Removal of objects from people	132
	Rescue or evacuation from water	24
	RTC	1,151
	Spills and Leaks (not RTC)	164
Stand By	39	
Suicide	32	
Water provision	4	
Grand Total		16,101

Risks contd

Jargon Busters

Prevention

This term covers the activities undertaken by the Service intended to prevent fires and other emergencies, such as road traffic collisions from happening in the first place.

Protection

This covers all of the activities undertaken by the Service that endeavour to be in place that will help to protect members of the public before the attendance of the emergency services. An example would be asking for fire resisting doors to be fitted on bedroom doors to stop the fire spreading from the room.

Dangerous substances

This is a substance or operation that because of its properties or the way it is used could cause harm to people from fires or explosions.



always ready to rescue members of the public trapped by floods. The Service has new boat teams established where they are needed across the County. These crews have been successfully deployed on a number of occasions both in and outside the County. The Service will continue to test and improve its emergency planning and assist other agencies with **prevention** and **protection** work wherever they can. This has included assisting in delivering input to school children in what to do in the case of flooding.

Also the Service is consulted on planning applications for development in areas that are prone to flooding. In considering these the Workplace Fire Safety teams look to see if it is likely to increase the number of calls we receive. If this is the case the Service will work with the developers to prevent emergencies happening in the first place.

Major Industrial Accident Hazard

Some industrial processes, especially those involving **dangerous substances**, have the potential to cause accidents. Due to their size and the substances involved, these can have an impact beyond the boundary of the site.

For sites such as those regulated under Control Of Major Accident Hazards (COMAH) regulations 1999 the Service works with local site management, the Health and Safety Executive and the Environment Agency to ensure plans are in place and tested. These sites are mainly concentrated in the south of the County along the Thames estuary coastline, but there are also sites in the north of the County. A full list of the thirteen sites that is subject to constant review can be seen below.

- Calor Gas Terminal, Canvey Island
- Calor Gas, Coryton
- Esso Terminal, West Thurrock
- EPC Group (Exchem), Harwich
- Industrial Chemicals Ltd., West Thurrock
- Nustar Terminal Ltd., Grays
- Oikos Storage, Canvey Island
- Petrochemical Carless Refinery, Harwich
- Procter and Gamble, Thurrock
- Qinetiq Shoeburyness
- Thames Oil Port, Coryton
- Shell UK Oil Products Ltd, Stanford-le-Hope.
- Vopak Terminal London B.V. Ltd., Grays

Impact

Major industrial accidents are fortunately very rare, but as was seen at the **Buncefield** fuel storage depot fire in Hertfordshire, when they do happen there are major consequences for a significant area outside the site.

Case Study

Environmental Pod

Based on debrief data and experience from other fire and rescue services it was clear that, occasionally, the Service needed an ability to respond quickly to prevent a large-scale environmental incident occurring. To provide this each fire appliance was equipped with a environmental protection pack (or "grab bag") supplied by the Environment Agency. These allowed a quick response to a potentially damaging release of liquids or gases. The Environment Agency also supported the acquisition of a demountable pod (Environmental Unit) containing more sophisticated environmental protection equipment. This allows for the Service to limit environmental damage in the early stages of a large incident, e.g. by placing booms across waterways.



Case Study

Southend Airport

To ensure the very best response is made to any incident at Southend Airport an exercise was recently carried out involving all of the responders who would normally attend an incident at the airport. With the recent expansion of the airport it was important to validate equipment and procedures that would be deployed and also to ensure that all of the agencies coordinated their efforts to the highest standard. The exercise was successful in achieving these objectives and will be a major influence in creating the revised tactical fire plan for the airport.



Other important impacts of events include a loss of jobs and loss of business at the site with a subsequent shortage of its products. If such an incident was to occur there would be implications for those that live near the sites and those that travel on routes nearby.

Impact for Essex County Fire and Rescue Service

Essex has a number of industrial sites with activities that have the potential to create a significant impact beyond their site boundaries. If the incident escalated then these problems would begin to grow. The Service would commit a large number of resources for a considerable time and this could impact on the Service's capacity for dealing with other incidents. The environmental impact of the incident itself and of our response is an important by-product of these types of incidents.

Mitigation by Essex County Fire and Rescue Service

The Service has a prominent national role in planning for incidents in petrochemical sites. The Service invests significant effort into the prevention and planning for responses to sites within Essex and also being part of the responses to sites beyond our boundaries. The Service would also draw in support from other areas as one Service may not be able to maintain all of the critical expertise and equipment necessary to cope with larger incidents. There are also local arrangements to ensure that key stations always have a fire appliance in place.

Locally, the Service has strong working relationships with all of the thirteen largest sites operators and frequently carries out joint exercises with these and other **category 1 responders**. There is continual liaison with other agencies and relevant commercial organisations in order to constantly improve the prevention and response to such incidents.

The Service always considers environmental protection in its plans. Joint working with the Environment Agency has assisted in achieving the best outcome at these challenging incidents. As a result of regular discussion each fire appliance has a "first aid" **environmental**

protection pack. To supplement this there is a demountable pod (Environmental Unit) (see photo in Case Study page 10) that can be taken to larger incidents, to assist in containing water that has been used for firefighting and may be contaminated with the products of the fire. A number of officers have been given specialist training in environmental protection and hazardous materials so they can quickly assess an incident and how to resolve it with minimal damage.

Major Transport Accident Hazard

The transport infrastructure plays a part in everybody's daily lives, whether it is to transport themselves or the goods and services that they rely on. Even a minor incident in the wrong place at the wrong time can have a massive effect.

Roads: Essex has a number of major roads running through it; including the M25, M11, A12, A120 and A13. These serve not just the County but act as arteries for goods and people from London and major transport hubs (airports and ports) around the country.

Rail: There are three main routes into London that travel through Essex, Thurrock and Southend authority areas. Services from Southend exclusively serve a large proportion of Essex's population along the Thames estuary. Two mainlines to East Anglia also run through the County

Air: There are two large airports, London Stansted and London Southend. Stansted has 18 million passengers per year with Southend recently completing a major rebuild that will see its passenger numbers grow extensively over the next few years. Essex also has many smaller airfields that have their origins from World War 2. Light aircraft crashes are not uncommon as a result.

Sea: There are international ports in Essex, Harwich, Dovercourt and Tilbury, with the Thames Estuary about to undergo a massive increase in traffic due to the development of the deep-sea container port operated by DP world. These handle a huge amount of container traffic that continues beyond the ports on the County's roads.

Jargon Busters

Buncefield

This was an oil storage depot in Hertfordshire that caught fire in December 2005. The effects of this spread way beyond the site and the surrounding area. 20 oil tanks were involved in the fire. This was an event unprecedented in peace time.

Category 1 responders

These are the authorities that have a requirement placed upon them by the Civil Contingencies Act to make arrangements for dealing with emergencies. Category 1 responders includes Fire Services Police and Ambulance.

Environmental protection pack

These are bags provided by the environment agency to Fire and Rescue Services. They contain equipment such as absorption pads that can stop or limit environmental damage as a result of an incident.

Case Study



Mass decontamination

The Service has recently significantly upgraded its ability to detect and identify hazardous substances. A specialist vehicle equipped with the latest high tech detection, identification and monitoring equipment has already been used at a number of incidents. The early identification of a substance will be a major influence in determining the selection of protective equipment and resolving the incident quickly. Having this ability means that any other specialist equipment that is needed can be sent on to the incident at the earliest possible opportunity and ensure the incident is dealt with as quickly as possible.

Jargon Busters

National resilience resources

As a result of the terrorist attack in 2001, the government invested heavily in equipment and training for Fire Services to allow them to respond to a terrorist attack.

Heavy lifting and cutting equipment

Fire engines carry modern cutting equipment so that they can carry out rescues, such as at road traffic collisions. Whilst this equipment is more than adequate for cars it is not capable of cutting into some of the larger vehicles such as lorries and train carriages. Therefore a larger version of this cutting equipment is used that can cope with the sturdier construction of larger vehicles.

Impact

Disruption to major transport hubs and routes has a major impact on a much larger area than the immediate incident site. If this occurs during inclement weather, such as snow, the impacts can be multiplied and the possibility of serious injury becomes far more likely.

Impact for Essex County Fire and Rescue Service

A large number of people who live in Essex commute into London. During rush hours the quantity of travellers increases significantly and the impact of an incident increases exponentially. Incidents such as this also reduce significantly the resources available to the remainder of the County.

Mitigation by Essex County Fire and Rescue Service

The Service works with all transport agencies to prevent incidents occurring and to limit the impact if they do.

Road is a hugely popular mode of transport and as such any incident has a large impact. Even the most minor accident can cause huge delays. The Service works closely with other relevant agencies such as the Highways Agency and the Police to try and prevent the accidents from happening. However successful that is there are always accidents to deal with. Service personnel are continually training to prepare for this evolving risk, keeping themselves aware of changes to vehicles such as different forms of construction and new fuels. The Service has entered into agreement with specialist organisations for equipment that would be prohibitively expensive for the Service to maintain. By way of example the Service has an agreement with a large vehicle recovery specialist.

Rail incidents present some very serious challenges. They include large rolling stock with many passengers, possibly in remote locations that can require off-road vehicles and specialist lifting and cutting equipment to be able to cope with foreseeable rescue scenarios.

Again, the provision of **national resilience resources**, including **heavy lifting and cutting equipment**, has been a welcome addition to the Service's capability. With the introduction of the centrally-funded regional Urban Search and Rescue Station at Colchester has come an increase in knowledge and capability. The Service also has an agreement with a third party company who can provide off-road capability for the transport of resources to otherwise difficult-to-access areas.

Essex works closely with the County's airports, to prepare for any air incident that may happen on or off site, supporting the statutory airport fire services. This includes determining how many fire appliances are needed to attend a large incident and ensuring systems are in place to make sure they are all sent as early as possible. This liaison extends to the many local airfields that operate within the boundaries of Essex.

Maritime incidents, like rail incidents, are few and far between but can be very challenging as the stability of a vessel is a prime consideration that is quickly threatened by the normal tactics for fighting fire i.e. the application of large amounts of water. A punishing environment is created very quickly by fire and water turning to steam. Fortunately ocean going ships have fixed installations and procedures to deal with fire independently and as such can usually contain an incident until they arrive in port. The Service has a responsibility to fight fire in ships alongside (moored to a dock). Crews that will face these incidents receive training in ship firefighting in order to prepare themselves for the technical and physiological challenges they will find should such an incident occur.

Major Chemical, Biological, Radiological, Nuclear and Explosives Attack Hazard

The likelihood of major incidents or attacks of this nature has increased and has taken on a new focus. Terrorist attacks are very rare but the consequences can be so

serious, and different to the incidents that emergency services have traditionally been used to responding to, that they have needed significant investment to prepare for.

Impact

The Service engages in a great deal of complex and detailed planning and preventative work for these types of incidents. If they were to occur as can be seen from the London Transport bombings on 7th July 2005 the impact can be devastating.

Impact for Essex County Fire and Rescue Service

Essex has a number of potential targets for attack. It is also possible that any attack in London will call on resources based in Essex. In either circumstance there will be significant local disruption. Emergency services will be using a large amount of their resources and it is foreseeable that contingency plans for other emergency responses would be used.

Mitigation by Essex County Fire and Rescue Service

An incident of this nature would have national implications and so the response would use national resources some of which Essex hosts. These have been integrated into the day to day working of the Service to develop familiarity with the equipment and its operation. The Service has also bought identical equipment for mainstream use to resolve incidents across the County. This equipment and the associated procedures are regularly tried and tested on fire stations and at various sites.

Human Disease Hazard

Pandemic Influenza and other contagious diseases offer a significant risk to the public and the employees of the Service. One of the most significant characteristics of a pandemic disease is its ability to travel fast and far. It infects people across many countries and is easily and quickly transferable. When a pandemic occurs it is in waves, weeks or months apart. It could affect up to half of the population.

Impact

The effects of infection will vary from person to person depending on their age, physical condition and how vulnerable they are to the disease. During the pandemic there is likely to be large scale absenteeism from work. This may cause a reduction in services. Health and care services may be subject to overload and there is likely to be a large draw on prescription medicines, which combined with possibly reduced supplies, may compound absence levels.

Impact for Essex County Fire and Rescue Service

The Service is dependent on its highly trained and

usually highly available staff. Any sustained impact on their well-being has the potential to disrupt these services. Essex will see many services affected by large scale absence causing disruption in many people's day to day life.

Mitigation by Essex County Fire and Rescue Service

There has been a great deal of planning around a pandemic breakout over recent years. These plans are now considered as part of the normal business continuity planning processes and catered for in the Service's plan for dealing with staff shortages. This plan was tested during the swine flu outbreak in 2009 and subsequently in 2012 during periods of industrial action. The plan is proven to work and there was little perceivable difference in the service noticed by the public.

The Chief Fire Officer is the Chair of the Essex Resilience Forum, which has produced the Community Risk Register. The Community Risk Register is available through the Essex Resilience forum website. "http://microsites.essexcc.gov.uk/microsites/essex_resilience/crr.htm". The **Community Risk Register** identifies not only the risks but also the lead agency for mitigation of those risks. There is a lot of collaborative planning for a pandemic event, involving all **blue light services**, health agencies and many of the other **Category 1 and 2 responders** as defined by the Civil Contingencies Act 2004.

Emerging Risks

The Service makes many plans to deal with local risks. These plans are frequently reviewed and practised as part of a planned routine to ensure they remain effective and account for any changes in circumstances, including new and emerging risks are looked for when they are identified. Equipment and procedures are adapted to deal with these.

Case Study

Emerging Risk

Over recent years there has been a rise in the seriousness of fires in high rise flats. Unfortunately on two tragic occasions, one in Hampshire and one in Hertfordshire, this rise has resulted in the deaths of firefighters. Due to this and changing lifestyles, more combustibles and increased insulation within domestic premises the way we prepare firefighters to deal with these incidents has changed. This has included improving existing procedures and equipment and using every opportunity to use them in realistic circumstances.

Jargon Busters

Community Risk Register

The Community Risk Register (CRR) is a dynamic document that details the major risks within Essex that have the potential to result in a major emergency or incident type event.

Category 1 and 2 responders

These are the authorities that have a requirement placed upon them by the Civil Contingencies Act to make arrangements for dealing with emergencies. Category 1 responders include Fire Services Police and Ambulance. Category 2 responders include utilities such as power and water companies.



How we make Communities safer

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At the forefront of the Service's work is the prevention of accidents and incidents and promoting safer and resilient communities. Within the Service preventative activity is administered by the Safer Communities department, which is part of the Safer and Resilient Communities Directorate.

How we make communities safer at home and on the roads

Community Safety has three areas of focus: children and young persons, reduction of road traffic collisions and arson reduction, including fire safety and vulnerable adults. There is a clear focus on those who are most at risk, whether it is elderly immobile house occupants, motorcyclists, families with complex needs or disaffected young persons. Home fire safety and road traffic casualty reduction activity has seen many successes with reducing the number of people killed or seriously injured on roads and reducing fire casualties in the home over recent years.

Work with children and young adults involves a number of activities that help to change behaviours and includes prevention work that is saving lives. This includes talking to school children about what to do in case of fire. There are many examples of where our FireBreak initiative has changed the direction of youngsters, helping them discover a more productive path for their future.

The Service has recently undertaken a review of fire investigation activity. This review led to an improvement in training personnel and in the analysis of information. This will enable the Service to act more proactively in trend identification to contributing to the Service's drive to make the County safer.

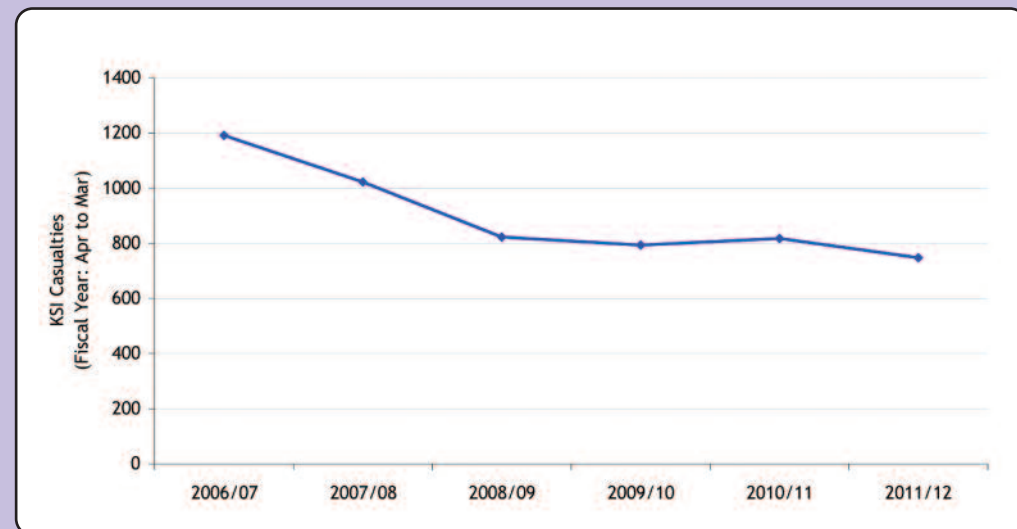
Road traffic collision prevention activity has been very



successful recently. The Service has worked closely with the other agencies involved in dealing with the many incidents that happen on the County's roads. The work to prevent road traffic collisions is a good example of how working together, with the support of the public, government and all services, we can make a big difference. The main agencies involved are Highways, Police and Fire, which work together on the Essex Casualty Reduction Board to identify target groups and locations where preventative work can have the best impact. For 2011/12 the number of killed and seriously injured was 740, 70 below our target and less than last year's figure of 782.

Closer working with other agencies that care for and protect vulnerable adults is helping us to target preventative and protection work more effectively. We have had some success in this area and we plan to do much more. ►

Figure 2: Chart showing the reduction in road casualties within Essex.



Case Study

FireBreak

An example of how FireBreak can make a difference to young lives can be seen from this example. A young offender turned his life around enough to successfully pass out from the Service's FireBreak course. His elderly victim was so impressed that they turned up at Corringham Fire Station to congratulate him. The teenager had fallen in with a bad crowd and had started missing school, as his behaviour worsened he broke into the victim's home. The teenager said "I wanted to show I was genuinely sorry and that I have changed". It is this sort of example that inspires the instructors and funding agencies to continue to make sure these courses happen.



Case Study

Vulnerable adults

In July 2012 a home fire safety visit had been requested. A technician entered a premises in which they discovered a partially dressed elderly occupant. On speaking with the home owner the technician uncovered the fact that occupants carers had not been arriving at the times they were meant to and in some cases not at all. In the opinion of the technician the house was very cold and the occupant was dehydrated as they were unable to fetch their own drink and since the carer had not been water had not been left. Whilst in the property the technician made contact with the care agency which sent someone straight out and also fetched the occupant some clothes and a blanket and also increased the heating temperature. The technician waited the short time it took for a carer to arrive so as not to leave the occupant unattended.



Case Study

Casualty reduction figures

Essex County Fire and Rescue Service has been supporting the "No Excuse - Surround a Town" road safety days this year. The 'no excuse' road safety campaign launched in January and saw Essex Casualty Reduction Board partners working together to target motorists who were driving poorly in and around Essex. To do this Police, Fire and Road Safety Officers are situated at locations around the main town centres of Essex and talk to people, share road safety advice and explain how the campaign will work towards reducing the number of people killed or seriously injured on the County's roads. 'No excuse' brings together both police enforcement and road safety education to target routes and towns where crashes and casualties are known to occur. Our role at these events is to exploit our unique position on the subject and advise the public on behaviours that will make them safer.

How we make communities safer in their home or on the roads **contd**

Jargon Busters

Regulatory Reform Fire Safety Order 2005 (Fire Safety Order)

This is a piece of legislation introduced in 2006 that replaced over one hundred other pieces of legislation and ensure that the responsibility for fire safety rested with the responsible person, usually the business owner.

Responsible person

This is the person who under the Fire Safety Order is responsible for the fire safety within premises. It is usually the business owner but can be other persons in certain case.

Risk Based Inspection Programme (RBIP)

This is a risk assessed approach to which buildings are inspected. Those that pose the most risk to the occupants are prioritised for inspection.

Better regulation agenda

This was introduced by the last government and continued by the current government and is intended to lessen the burden of regulation on businesses by concentrating where the risks are and not applying a blanket approach to inspection.

Enforcement Concordat'

This is a code introduced to reset the relationship between local enforcers and businesses. It introduced amore sympathetic approach to compliant business whilst still allowing a firmer approach fro non cooperative businesses.



How we make workplaces safe from fire

Management Strategy

Workplace Fire Safety is, as the name suggests, focused on workplaces. However this description belies the full range of buildings covered. Buildings that are not often thought of as a workplace e.g. sport centres, hospitals and hotels are also covered by the **Regulatory Reform Fire Safety Order 2005 (Fire Safety Order)**.

The Fire Safety Order came into force in 2006. It replaced over one hundred pieces of legislation simplifying the fire safety legislative landscape. It also moved the responsibility for fire safety from the Fire and Rescue Service to the **"responsible person"** (usually the building occupant). This gave fire and rescue services a much more appropriate remit; whereas previously they were only able to inspect limited categories of premises fire and rescue services are now able to concentrate on premises that presented the greatest risk to the occupants.

In order to identify premises to inspect the Service have a **Risk Based Inspection Programme (RBIP)**. The selection of premises is based on a great deal of information gathered from a number of sources including data gathered from fire statistics. This enables higher risk premises, such as care homes, to be prioritised. The risk based approach also means that there is not a singular approach to inspection intervals. Those higher risk premises that are managed well will receive less frequent inspections than those that have a history of poor compliance with fire safety standards.

The Service is also working with other enforcement agencies to lessen the inspection burden even further by sharing information in support of the **better regulation agenda**.

The Service is signed up to the **'Enforcement**

Case Study

RAFKAP

The Retail and Fire Key Authority Partnership (RAFKAP) is a great example of the fire service nationally being proactive in improving the relationship with business. There is a very clear need for regulators, such as the fire service, to do all it can to support business in providing safe premises. The RAFKAP partnership scheme works by pairing a commercial organisation with a fire service to cooperate on setting and implementing fire safety policy for that organisation. Once that is agreed all fire safety enquiries from fire services for that organisation will be dealt with by the host fire service on the commercial partner's behalf. Key benefits for the organisation include consistent fire safety advice, and a less burdensome enforcement regime as a result of higher fire safety standards in all of their relevant premises. Fire service's benefit by being able to concentrate inspections on less compliant businesses.

Case Study

Fire Engineering

An example of the benefits that a fire engineered approach can bring are highlighted by the Service's handling of the proposal to cover over the pedestrian areas of Clacton shopping village. The original proposal included significant structural work to enable the owners to comply with fire safety standards. Once the fire engineers from the Service had looked at the detail they were able to suggest a much more economical solution that still maintained the high fire safety standards around the village yet with nowhere near the impact of the original proposal. This was done by looking at the requirements of the regulations and applying fire safety principles rather than solely relying on the current guidance. Using their technical background the engineers could see that whilst the original design was safe the standards could be just as well met by another, cheaper, method.

Case Study

Sprinklers

At 02:35hrs on Friday 9 November 2012, East Sussex Fire & Rescue Service received a call to a property of 5 floors, used as an house of multiple occupation (HMO) to house vulnerable people. On arrival they discovered there had been a fire in the kitchen which had activated a single sprinkler head extinguishing the fire. The flat was occupied by two females aged 22 and 18 who had returned home late and it is believed under the influence of alcohol and medication. Once home, they had put some food on to cook and it is thought they then fell asleep. When the fire alarm sounded, the initial reaction by the occupants elsewhere in the building was that this was another false alarm, which is fairly frequent in these premises. There was no structural damage to the flat and minimal heat/smoke damage. All other flats in the premises were unaffected and remain occupied, without a sprinkler system the outcome would have been very different.



Concordat', which guides the Service in its approach to delivering its enforcement responsibilities. This has at its heart a supportive approach to enforcement, rather than a punitive one. As directed by the **compliance code** the Service further builds on this, having supportive policies encouraging a greater understanding of the requirements of legislation. The Service supports and complies with these policies and will continue to be supportive of business as its primary way of maintaining safe premises.

Experience has shown that there are a very small number of businesses that actively avoid compliance which puts persons at risk. If our supportive methods of achieving compliance fail, the Service will not hesitate to use more robust methods of enforcement to achieve acceptable levels of fire safety for their premises and more importantly for employees and visitors.

Fire Engineering

Fire Engineering is a relatively new area of fire and rescue service business. Many organisations opt for innovatively designed buildings that achieve solutions to mitigate risk and make their businesses work. On many occasions the normal fire safety guides do not offer sufficient, guidance or advice. In these cases we revert to the basic principles around which all the guidance and advice is constructed. This has allowed buildings such as Lakeside and the passenger terminal at Stansted to be designed, if they

had been forced to conform to the written guidance their development would not have been possible. Fire engineering skills can also assist in **fire investigations**. Understanding the way fire, heat and smoke behave, how building products react to a fire environment and what we would expect during construction is an excellent starting point for any investigation.

Automatic Water Suppression Systems

There are many ways of limiting the impact of a fire in a building. Water suppression systems (usually sprinklers) provide a simple mechanism for swiftly delivering water to a fire where and when it is needed. They are very reliable and can be built into the fabric of the building and be very discrete and in the event of a fire they are very efficient at preserving life and property. The Service is committed to supporting the installation of sprinklers wherever risk assessment shows that they can have a real impact.

At the Essex Fire Authority meeting in September 2012, the Authority signed a commitment to progress the case for sprinklers in residential and commercial premises. A campaign of communication and education has now been launched and is being rolled out across the County.

● Further information can be found at Chief Fire Officers Association website.

Jargon Busters

Compliance code

The compliance code addresses the general policies of regulators to promote consistency between services and promote risk based inspection work.

Fire Engineering

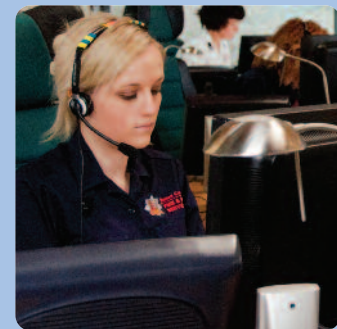
Fire Engineering is the application of scientific and engineering principles, and expert judgement, based on an understanding of the effects of fire and of the reaction and behaviour of people to fire, to protect people, property and the environment from the destructive effects of fire.

Fire investigations

Fire investigation is an aspect of the fire service that determines why fires start and using this information to help prevent further tragedies form occurring.

How we respond to calls for help

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The Service is extremely proud of the services it delivers within the County of Essex.

In addition to the proactive and essential preventative and protection work that our teams undertake, there remains the need to provide an effective and efficient operational response to 999 calls. This more traditionally recognised work of the Service is delivered within the Service through two Area Commands located in east and west Essex. Even though we only spend 5% of our time responding to calls for help, Area Commanders are tasked with ensuring that our operational crews are able to respond quickly to a broad range of 999 emergency calls, 24/7, 365 days of the year. Crews must be fully prepared to deal with a wide range of scenarios and risks that often prove to be both complex and highly dynamic. As part of that preparation a station specifically funded by central government to counter large incidents requiring specialist search and rescue skills was built at Lexden.

To ensure that this operational response remains safe, effective and efficient, a number of specific controls and measures designed to monitor and improve our performance are in place. These Key Performance Indicators (KPI's) coupled with effective leadership and management of operational incidents and crews within the two area commands serves to reinforce this operational response model. These controls are achieved in a variety of ways:

Operational Assurance

In order to provide assurance that our response to fire-fighting and rescue operations are safe, effective and efficient, the Service conduct highly focused thematic spot-checks across our operational crews throughout the year. These Operational Assurance Audits are specifically designed to pre-test our readiness to respond and are able to highlight areas for improvement or development as well as helping us share best and notable practices across all of our teams.

We also closely monitor operational incidents by physically observing and assessing the performance of crews and incident commanders against standard operational procedures and guidance. These 'Operational Support Officers' are then able to feed into the post incident debriefing process, providing a comprehensive feed-back loop against which we are able to assess the effectiveness of our operational response.

Training for Operational Response

Fire-fighting crews and Incident Commanders are regularly confronted with what often prove to be highly dynamic and complex incidents. It is vital therefore that they are well prepared for the challenges they may face so that each incident is dealt with safely and effectively. The Service achieves these levels of competency through central 'core' training programmes as well as local 'risk-based' training and verification of skills and knowledge for both incident command and breathing apparatus. Alongside

this is a comprehensive training recording system using an internally developed system known as Technical Activities, Skills and Knowledge (TASK). This monitors the development and maintenance of skills for Service personnel.

What we send to an incident depends upon:

- Location: land or water, road, high rise, off road, good or poor access etc;
- Incident type: fire, hazardous material spill, explosion, flooding, road traffic collision, person trapped, person lost, person in precarious position, if there is a record of arson, known vulnerabilities that make occupants especially vulnerable etc;
- Availability: Ideally all resources would be available all the time. In reality there are a number of things that make resources unavailable. The most significant of these is other incidents. Other factors are distance (being too far away, travel congestion, training and defects) and maintenance;
- Call handling: how quickly can we get the call, get the information and decide on a course of action (60% of the time within 1 minute, 75% of the time within 1.5 minutes and nearly 100% of the time within 2 minutes!);
- Mobilising: how quickly we can get there once the station or resource has been informed.

Performance monitoring

So that the Service can be sure that we are maintaining expected standards across a wide range of response activities we utilise a number of KPI's to monitor our on-going performance. These KPI's are specifically designed to assess our readiness in terms of availability of fire-fighters and appliances and also our speed of response to operational incidents. Three of these, availability of appliances, time to handle emergency calls and how quickly we mobilise our resources are explained below.

Availability

The Service has a target of 97% of wholtime appliances to be available for emergency calls. The current performance at 3 hours after shifts have changed is that 96% of wholtime appliances are available for calls.

Fire appliances at retained stations are expected to be available for 90% of the time. They are currently achieving 83.1%, which is short of the target. The Service has identified the underlying issues and has plans in place to improve this figure. Whilst this gap is being closed other fire stations provide emergency cover when needed.

Call Handling

This time allows for receiving the call, getting the relevant information from the caller and arranging the most appropriate mobilisation. There is usually a number of calls to every incident and to process the amount of information becoming available in a rapidly-changing environment takes a great deal of skill and organisation. The call handler must identify the correct location, interpret what type of incident it is, identify the resources needed to

deal with the incident and work out the best configuration of response. The call information and associated risk information must then be passed to the relevant resources. This can be complicated by a number of factors such as a large volume of calls for the same incident, and the confusion or distress of callers.

Mobilisation

The target is for wholtime crews to be on their vehicles and driving to the incident within two minutes. This time allows for crews receiving the message, disengaging from whatever activity they are engaged in, e.g. training or a fire safety visit, identifying the location of the incident and putting on their protective clothing. The clock stops as the officer in charge reports they are on their way to the incident.

Time taken to travel to an incident

The travel time is dictated by distance, terrain and traffic. These are factors the Service has very limited or no control over therefore we do not have a performance target for this as it could encourage the driver to take risks that they should not take. The main emphasis for travelling to an incident is to arrive safely at the incident and be able to carry out any operations needed.

How do we support firefighting

It is taken for granted that we will always have enough water to put a fire out. But this simple requirement needs a lot of "behind the scenes" work to make sure we do have enough water when we need it. This is covered by the Water Section at Service Headquarters, which has hydrant examiners testing and maintaining all of the hydrants in the area covered by the Service. Without this attention hydrants would quickly become difficult to use. But hydrants are not always available, especially in the more rural areas of the County. Then the Service has to rely on open water sources such as rivers and ponds.

The Service's Water Section works very closely with the water companies and is consulted on any new developments so they can make sure there is an adequate provision for the water supplies should there be a fire. The section is also available at all times to respond to large incidents or where water supplies are proving to be difficult.

Operational Risk information

The basis of all planning for the Service's operational response is maintaining a relevant and current knowledge of the area's risks. The Service has recently completed a large amount of work to ensure operational risk information is up-to-date and available to those that need it in the right format and at the right time.

The up to date risk information is available through mobile data terminals (MDT's) fitted to all fire appliances. This allows concise site specific information or technical information, such as details of the many safety features fitted to modern cars, to be retrieved at the scene of an incident.

Case Study

Risk Information

Operational risk information is managed using the Provision of Risk Information System (PORIS). This methodology considers the likelihood and impact of an incident occurring against 6 risk groups;

- Firefighter safety
- Heritage
- Individual/societal
- Community
- Environment
- Economic and other

The outcome of PORIS is a site or premises ranked as Level 1 through 5. Sites ranked as Level 1 present little or no risk. Level 2 sites offer low to medium risk and are covered by Premise Type Risk Information Files; risk cards for common risk types such as petrol stations or schools. Level 3 sites have a Site Specific Risk Information File created detailing the specific risks associated with that particular site. Level 4 sites have a Site Specific Risk Information File and a Tactical Fire Plan created due to their size and/or complexity. Level 5 sites present a risk requiring a national response. A Level 5 site requires the publication of both Level 3 and 4 documentation, together with multi agency plans. These sites will require a multi-agency response in the event of an incident and probably resources from outside of the County.

Case Study

USAR

Following the attacks of 9/11, the Government put in place several capabilities around the UK including one for Urban Search & Rescue (USAR). In 2007, the first of these was opened in Essex at Lexden, Colchester. This specialist station is crewed by two full time watches. These have a national and regional role but can be deployed within Essex. On top of their core USAR skills, they also offer additional specialist rescue skills and capabilities such as ropel/high line rescue and full water rescue capability including boat and rescue swimmer. They have been successfully deployed to incidents involving collapsed buildings, trapped animals, bariatric casualties and tower crane incidents.

The equipment they have includes:

- heavy duty/hot cutting equipment
- Heavy lift capability
- ropeline rescue
- timber to stabilise structures/trenches
- high volume pumps.

Case Study

New Control

The Service was successful with a recent bid for funding from the Department for Communities and Local Government to equip its fire control room. This is where all calls for help received by the Service are answered. This will be housed in a brand new building currently under construction at our Headquarters. This opportunity will be used to upgrade the radio system improving the connectivity into the national fire radio system (airwave) and hosting the IT mobilising solution for Bedfordshire fire and rescue service. This will increase our functionality and enable us to deliver the closest and most appropriate resources more efficiently and with greater accuracy to any incident.

It is also recognised that some information may be sensitive and the Service has in place security arrangements that align with the Government Security Policy Framework.

Over the Border arrangements

Essex County Fire and Rescue Service shares borders with Suffolk, Cambridge, Hertfordshire and Kent Fire and Rescue Services as well London Fire Brigade. To ensure the most appropriate response to risks on or near to these boundaries there are formal arrangements in place, or being put in place, underpinned by signed agreements as to how each service will respond to incidents. These are covered under Sections 13 and 16 of the Fire and Rescue Services Act 2004.

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The Service is risk-aware and performance led organisation. It has identified the risks that it mitigates, has described what it believes is an acceptable level of risk and has assessed the gap between the two (it's risk appetite) using the Strategic Assessment of Risk, which draws on the corporate risk register. The Service has plans to bridge that gap and monitors the delivery of those plans (performance management tools and techniques are used extensively).

Planning, target setting, monitoring and reporting are the main mechanisms by which performance is observed. There is a structure of management groups with strategic and senior management overview. Each of these management groups have clear governance arrangements that determine their roles and responsibilities. All departmental managers report through the performance management system on their departmental activities. This is reviewed at senior management level and issues that are either of concern or in need of highlighting are forwarded onto strategic

level meetings. The Fire Authority is also presented with performance information to ensure there is wider overview of performance.

There is close monitoring of what is intended to be delivered to ensure it is actually delivered. Variations are highlighted to give those with responsibility the chance to respond as to why performance has altered. This way lessons can be learnt and under performance identified early with plans for improvement. There is a framework of performance indicators to highlight key points within the Service's activity. These indicators represent performance of the organisation at critical points in the delivery chain.

The Service realises that this in itself is not enough, so it engages in third party peer reviews and audits. It regularly requests a variety of external bodies to look at aspects of the organisational activity to see what can be learnt. These can be third party reviews or they can be from accreditation bodies.

Case Study

RSM Tenon audit

As part of this programme auditors from RSM Tenon were invited in to assess whether the Service had established effective arrangements to promote good practice relating to fire safety in the community. The audit process involved a member of RSM Tenon's staff examining all of the relevant areas of the Service in order to assess the audit's objective. The audit outcome was very good highlighting only low priority recommendations. All of these have been factored into the Services future business plans.



How we are going to consult on this plan

This IRMP has set out what the Service is currently engaged with in order to achieve the best possible performance. It has set out a general overview of what challenges the Service faces and how it intends to deal with these. It refers to support documents such as the Strategic Assessment of Risk and Corporate Strategy. By way of example numerous case studies are included.

This IRMP for 2013-16 does not propose any new pieces of work. The Strategic Management Board has the backing of the Fire Authority to consolidate all the existing large pieces of work so that the Service is in a strong position to move forward. It is recognised that there are many challenges ahead and those of a financial nature figure highly, and are included in the Service's Strategic Risk Register. Previous work has highlighted areas of savings and that work has gone to plan, which means there are now sufficient reserves in place to see the Service through the anticipated **comprehensive spending review**. But it is also realised that the global financial picture is not reversing as quickly as originally thought. Factors such as the state of the European economy and the survival of the Euro all have an impact on the UK economy and, as a result, the funding of public services. The Service is confident that the next settlement of the comprehensive spending review will allow planning for activity over the next two years. What is not known at this time is what will follow beyond that. It is a certainty that there will be another spending review and therefore further economies needing to be found. But the scale of those is not yet known.

The Service is constantly looking at the risks it has to deal with and how it plans and locates its resources. There will be occasions where there can be improvements made. The proposals for these will always be balanced

against the cost to gain that improvement. This means on occasions that it is not always possible to make changes where the cost cannot be justified. Sometimes an opportunity arises where the investment can be justified. This could be the offer of a piece of land in exchange for a station site that has high development potential or it could be that the station in question needs a large amount of money spent on it to refurbish it. Whenever these opportunities arise the Service will review the arrangements and see if there is sufficient justification to make a change. It will then consult on those changes where they have a significant impact and, subject to the outcome of that consultation, make the changes.

Although this IRMP does not highlight any new pieces of work, there is still a requirement for the Service to consult on this IRMP. Employees as well as members of the public will be encouraged to offer their views. Therefore the Service will be placing notice of the publication of this IRMP in many forums. The emphasis will be on facilitating feedback using the many popular electronic methods available, but for those that prefer paper, that will be facilitated as well. The IRMP is available on the Service's website, *Twitter* feed and *Facebook* page. The Service will also engage with focus groups, including the **Activ8** volunteers, to seek their views.

The period of consultation will be 12 weeks. At the end of this period all submissions will be considered by the strategic managers and the Fire Authority. If there is a need to change the IRMP then those changes will be incorporated and published in the final IRMP.

Jargon Busters

Comprehensive spending review

This is the term widely used for the government review of the public expenditure. The outcome of which is generally less money for public services as the government endeavours to balance the nations finances.

Activ8

Activ8 is a community volunteer initiative whereby volunteers are recruited from the community to assist ECFRS in communicating with their peer groups, getting our messages across to the public.

You can find us on:

www.essex-fire.gov.uk



or contact:

chloe.rowling@essex-fire.gov.uk

ECFRS Consultation and Engagement Officer

Glossary

Activ8

Activ8 is a community volunteer initiative whereby volunteers are recruited from the community to assist ECFRS in communicating with their peer groups, getting our messages across to the public.

Better regulation agenda

This was introduced by the last government and continued by the current government and is intended to lessen the burden of regulation on businesses by concentrating where the risks are and not applying a blanket approach to inspection.

Buncefield

This was an oil storage depot in Hertfordshire that caught fire in December 2005. The effects of this spread way beyond the site and the surrounding area. 20 oil tanks were involved in the fire. This was an event unprecedented in peace time.

Category 1 responders

These are the authorities that have a requirement placed upon them by the Civil Contingencies Act to make arrangements for dealing with emergencies. Category 1 responders includes Fire Services Police and Ambulance.

Category 2 responders

These are the authorities that have a requirement placed upon them by the Civil Contingencies Act to make arrangements for dealing with emergencies. Category 2 responders include utilities such as power and water companies.

Command technology

With Information technology it is possible to run an incident such as a fire far more efficiently if computers are used.

Compliance code

The compliance code addresses the general policies of regulators to promote consistency between services and promote risk based inspection work.

Comprehensive spending review

This is the term widely used for the government review of the public expenditure. The outcome of which is generally less money for public services as the government endeavours to balance the nations finances.

Dangerous substances

This is a substance or operation that because of its properties or the way it is used could cause harm to people from fires or explosions.

Emergency response activity

This is all of the activity that the service responds to using audible visual warning devices. It includes proceeding to fires and road traffic collisions.

Enforcement Concordat'

This is a code introduced to reset the relationship between local enforcers and businesses. It introduced a more sympathetic approach to compliant business whilst still allowing a firmer approach for non cooperative businesses.

Environmental protection pack

These are bags provided by the environment agency to Fire and Rescue Services. They contain equipment such as absorption pads that can stop or limit environmental damage as a result of an incident.

Fire engineering

Fire engineering is the application of scientific and engineering principles, and expert judgement, based on an understanding of the effects of fire and of the reaction and behaviour of people to fire, to protect people, property and the environment from the destructive effects of fire.

Fire investigations

Fire investigation is an aspect of the fire service that determines why first start and using this information to help prevent further tragedies from occurring.

Heavy lifting and cutting equipment

Fire engines carry modern cutting equipment so that they can carry out rescue, such as at road traffic collisions. Whilst this equipment is more than adequate for cars it is not capable of cutting into some of the larger vehicles such as lorries or train carriages. Therefore a larger version of this cutting equipment is used that can cope with the sturdier construction of larger vehicles.

Local Resilience Forums

These bring together all of the agencies that have a responsibility to plan for civil emergencies, such as floods.

National resilience resources

As a result of the terrorist attack in 2007 the government invested heavily in equipment and training for Fire Services to allow them to respond to a terrorist attack.

PESTEL analysis

PESTEL is an acronym that stands for Political, Economic, Social, Technological, Environmental and Legal. It is used to describe analysis that is used for determining the opportunities and risks that face an organisation.

Prevention

This term covers the activities undertaken by the Service intended to prevent fires and other emergencies, such as road traffic collisions from happening in the first place.

Protection

This covers all of the activities undertaken by the Service that will help to protect members of the public before the attendance of the emergency services. An example would be asking for fire resisting doors to be fitted on bedroom doors to stop the fire spreading from the room.

Regulatory Reform Fire Safety Order 2005 (Fire Safety Order)

This is a piece of legislation introduced in 2006 that replaced over 100 other pieces of legislation and ensure that the responsibility for fire safety rested with the responsible person, usually the business owner.

Responsible person

This is the person who under the Fire Safety Order is responsible for the fire safety within premises. It is usually the business owner but can be other persons in certain cases.

Retained

Retained duty system (firefighter) – contracts to be available for agreed periods of time for firefighting purposes, but who could have an alternative full-time employment.

Risk Based Inspection Programme (RBIP)

This is a risk assessed approach to which buildings are inspected. Those that pose the most risk to the occupants are prioritised for inspection.

Risk information

This is the data and knowledge that helps the Service prepare for incidents. This can include details such as the location of flammable materials in storage.

RTC casualties

These are people who have become casualties as a result of a road traffic collision.

Spate conditions

This describes a series of events, usually weather related that cause a large number of incidents in a short space of time. This results in emergency service receiving a very high volume of calls.

Strategic Assessment of Risk

This is a document that Essex Fire and Rescue Service uses to highlight the operational risks it faces and how it intends to deal with them.

The Community Risk Register

The Community Risk Register (CRR) is a dynamic document that details the major risks within Essex that have the potential to result in a major emergency or incident type event.

The National Risk Register

This document is intended to be the first step in providing advice on how people and businesses can better prepare for civil emergencies by listing all of the major risks facing the country.

Appendices

Appendix 1 – National framework requirements for IRMP's

The national framework 2012 sets out very clear statements as to what is expected of IRMP's from fire and rescue services. These statements are repeated here for purposes of clarity.

Paragraph 1.3

Each fire and rescue authority must produce an integrated risk management plan that identifies and assesses all foreseeable fire and rescue related risks that could affect its community, including those of a cross-border, multi-authority and/or national nature. The plan must have regard to the community risk registers produced by Local Resilience Forums and any other local risk analyses as appropriate.

Paragraph 1.10

Each fire and rescue authority integrated risk management plan must:

demonstrate how prevention, protection and response activities will best be used to mitigate the impact of risk on communities, through authorities working either individually or collectively, in a cost effective way set out its management strategy and risk based programme for enforcing the provisions of the Regulatory Reform (Fire Safety) Order 2005 in accordance with the principles of better regulation set out in the Statutory Code of Compliance for Regulators, and the Enforcement Concordat.

Paragraph 1.11

Fire and rescue authorities must make provision to respond to incidents such as fires, road traffic accidents and emergencies within their area and in other areas in line with their mutual aid agreements and reflect this in their integrated risk management plans.

Paragraph 2.3

Each fire and rescue authority integrated risk management plan must:

- reflect effective consultation throughout its development and at all review stages with the community, its workforce and representative bodies, and partners
- cover at least a three year time span and be reviewed and revised as often as it is necessary to ensure that fire and rescue authorities are able to deliver the requirements set out in this Framework
- reflect up to date risk analyses and the evaluation of service delivery outcomes.

Paragraph 3.2

Fire and rescue authorities must provide assurance on financial, governance and operational matters and show how they have had due regard to the expectations set out in their integrated risk management plan and the requirements included in this Framework. To provide assurance, fire and rescue authorities must publish an annual statement of assurance.

The Government does not plan to issue additional integrated risk management plan related guidance. The Department values the multi-partner Integrated Risk Management Plan Steering Group, put in place to take this work forward.



What Do You Think?

Now that you have had the chance to review our IRMP, let us know what you think.

1. Do you agree that Essex Fire Authority has adequately considered and planned for all foreseeable risks within the IRMP and supporting documentation?

2. Do you agree that as risk changes and incident levels reduce Essex Fire Authority should continue to review how it distributes and uses its resources?

3. Do you agree that Essex Fire Authority should continue to focus its resources on those areas of greatest risk whether at home, on the road, at work or in the community?

4. Do you think that Essex Fire Authority's approach to keeping businesses safe by using a risk based inspection programme as outlined within the IRMP is correct?

Any additional comments?



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