

Arson: a call to action

A 'State of the Nation' Report

Arson Prevention Forum

September 2014

The Arson Prevention Forum

The Arson Prevention Forum (APF) was established in 2012 as a result of merging the Arson Control Forum, established by Ministers in 2001, and the Arson Prevention Bureau, which provided advice to businesses and the public on behalf of the insurance industry.

Members include:

The Association of British Insurers (ABI)

Association of Chief Police Officers (ACPO)

AXA Insurance

Building Research Establishment (BRE)

Burgoynes

Chief Fire Officers Association (CFOA)

Confederation of British Industry (CBI)

Crown Prosecution Service (CPS)

DAC Beachcroft

Department for Communities and Local Government (DCLG)

Fire Protection Association (FPA)

Home Office

Local Government Association (Fire Service Management Committee)

UK Association of Fire Investigators (UK Chapter of International Association of Arson Investigators)

Zurich Municipal

The Association of Police and Crime Commissioners (APCC) also recently been invited to join the forum.

The strategic forum provides a platform for sharing good practice, information and approaches with the intention of reducing the frequency and impact of arson with the corresponding reduction of deaths, injuries and cost to business and society as a whole.

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Introduction

This report highlights the impact of arson to society in the UK. It aims to challenge stakeholders to not only consider the effectiveness of their current arson reduction activities, but also to explore what else might be done to drive down the number of arson incidents and the associated costs and societal impacts that arson causes.

To set the number of deliberate fires in context, according to the most recently published fire statistics, in England alone they accounted for 68,900 fires, 45% of all fires attended. Putting this another way, every other fire attended by the fire and rescue service is deliberate.

Therefore, whilst deliberate fires, like accidental fires are decreasing – the number of deliberate fires and associated deaths and injuries are all down over a ten year period – accidental fires are falling at a much more significant rate.

While the number of deliberate fires is going down, the cost to business, the government, the public and the insurance industry is not. This clearly emphasises the need for more to be done.

Collaboration is the key. Working together to improve the effectiveness of prevention, protection, investigation and diversion activities will help reduce the incidence of arson.



Lee Howell QFSM FIFireE
Independent Chairman
Arson Prevention Forum

Lee Howell is the Chief Fire and Rescue Adviser/Inspector for Wales, the Chief Fire Officer for Devon & Somerset Fire & Rescue Service and a former President (2011/12) of the UK Chief Fire Officers Association. He was awarded the Queen's Fire Service Medal for distinguished service in the New Year 2014 Honours List.

Executive summary

This report encourages increased joint working between different partners and, considers how best to use our collective knowledge and resources to reduce the costs to individuals and society as a whole. There are many different data sources, differing terminology and a varying degree of commitment from some partners resulting in a lack of ownership as to 'whose problem is it anyway?'

Fire related incidents and casualties are going down across the board, but progress is slowest in addressing deliberate fire deaths. The data shows us that the majority of these occur in single occupancy dwellings and, conversely to accidental fire deaths, tend to be the younger age groups. Fire statistics do not refer to arson, so the data used in this report predominantly reflects deliberate fires, which include, but are not limited to, arson.

Deliberate fires not only endanger life, but also cost a vast amount of money. The Association of British Insurers state that their members pay out over £1bn in fire related claims each year and the larger loss fires are in non-domestic buildings. At the same time, the damage to property, business interruption and inconvenience arson causes is significant.

The approach towards arson reduction is not as joined up as it could be, and the level of investment directed towards tackling arson is limited, to say the least. When investigating what is currently taking place to combat arson, a range of examples of fire and rescue services' work was provided, some of which involved the police and other agencies but examples of the work of other partners were harder to come by.

It is therefore concluded that there is a need for all the various agencies with a responsibility and interest in arson to work better together; pooling resources and funding as well as expertise and knowledge. Details of successful interventions must be shared and learned from if we are to increase the downward trend in deliberate fires.

This is a call to action.

Setting the context

Defining arson

It is important to determine the difference between arson and deliberate fires. Although measures can be put into place to help combat both, each will sometimes require differing mitigation.

Arson is a crime as defined by the Criminal Damage Act 1971 as the intention to destroy or damage property without lawful excuse by fire or to endanger life by fire.

Deliberate fires are those where a fire is started deliberately (but not necessarily with malicious intent) e.g. some fires are started by children, psychiatric patients and suicide victims.

Arson will always be a deliberate fire but not all deliberate fires are arson.

What do the fire statistics tell us about deliberate fires?

Fires

The latest fire statistics monitor¹ to March 2013 tell us that deliberate fires attended by fire and rescue services in England decreased by 76% over a ten year period. Of the 68,900 deliberate fires in 2012/13, 49,500 (72%) were secondary fires (small outdoor fires) and 9,083 (13%) were road vehicle fires. Secondary fires are outdoor fires that are not large, with no property loss and no casualties.

Non-fatal casualties

Looking at the number of non-fatal casualties, these have more than halved over the same period – from 2,495 in 2002/03 to 1,173 in 2012/13. 70% of non-fatal casualties in deliberate fires are in dwellings, and a further 20% are in other buildings. Non-fatal casualties in all location types have decreased by over 50% in the last decade.

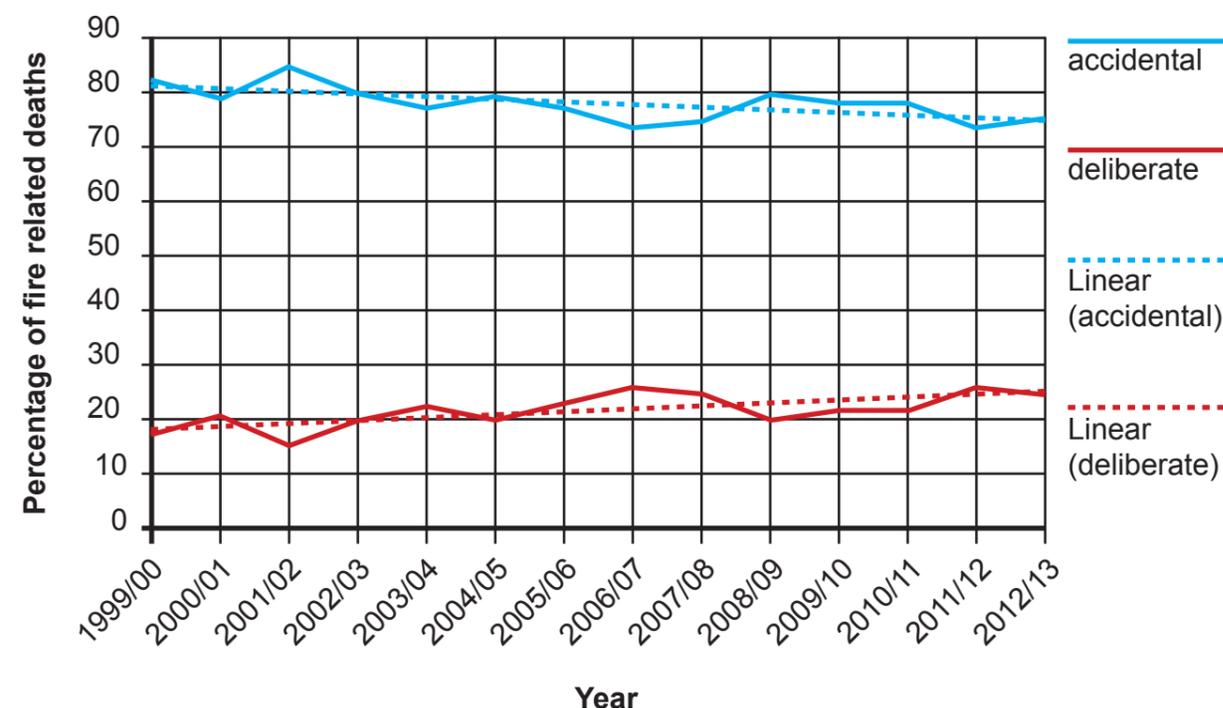
Fatalities

Deliberate fire deaths (including murder and suicide) have also reduced, but not at the same rate of decline as for fires and non-fatal casualties (see Figure 1). Furthermore, as a result of the substantial advances made in reducing accidental fire deaths, the ratio of deliberate fires deaths to accidental fire deaths is now higher; latest figures show deliberate fire deaths now make up 25% of all fire deaths.

Over the years, there have been a number of effective interventions to reduce the number of accidental fire deaths. Changes to legislation (the requirement to install smoke detectors in all new homes, the Furniture and Furnishing Regulations 1988 and the European Standard for Reduced Ignition Propensity Cigarettes) and fire prevention activity carried out by fire and rescue services – as part of the Fire Kills campaign and through home fire safety checks and other activity – have contributed to this substantial fall.

If further reductions in fire deaths are to be achieved, a greater emphasis will need to be placed on activity focused on reducing deliberate fire deaths.

Figure 1 – Graph showing the number of fire deaths from accidental and deliberate fires in England as a percentage of total fires (1999–2013)



Casualties and fatalities in deliberate fires

The Department for Communities and Local Government (DCLG) interrogated the Incident Recording System to better understand the non-fatal and fatal casualties in deliberate fires. This considered the full extent of data since the introduction of the more detailed Incident Recording System in April 2009.

From 2009 up to February 2014 there were 348 fatalities in deliberate fires, of which 214 were in buildings. Around 45% of these were suicides, leaving 122 non-suicide fatalities attributed to deliberate fires in buildings. Over the same period, there were 2,170 hospital non-fatal casualties, attributed to deliberate fires.

With a significant number of deliberate fire deaths being suicide related, the prevention work undertaken by fire and rescue services working with mental health partners and others will become increasingly important as an area of focus if such deaths are to reduce further.

In considering the scale of the problem of non-suicide related fire deaths and injuries sustained in buildings rather than in vehicles, 82% of non-fatal (1,779) and 86% of the fatal casualties (105) were in dwellings. This clearly prompts a need to take a closer look at data relating to dwelling fires.

The non-fatal casualties in deliberate dwelling fires were evenly split by gender (49% women, 51% men) and nearly 60% were aged 20-59 (see Figure 2). The majority of these occurred in single occupancy households (45%) and in single occupancy purpose built flats/maisonettes (37%). Just under 5% occurred in households in multiple occupation. Table 1 shows hospital injury rate by age group.

The fatal casualties in deliberate dwelling fires follow a similar pattern, with over half aged 30-59 (see Figure 3) but with slightly more men than women (57% and 43%). Again, the majority occur in single

¹Fire Statistics Monitor: to March 2013 – <https://www.gov.uk/government/collections/fire-statistics-monitor>

occupancy households (62% houses, 20% purpose built flats/maisonettes) with only 3% in households in multiple occupation.

Over 50% of all dwelling fire deaths and 30% of all dwelling fire non-fatal casualties are aged 60 or over. This age group only makes up 16% of the deliberate dwelling fire

deaths and 12% of the deliberate dwelling non-fatal casualties.

As outlined earlier, deliberate fire deaths are not reducing at the same rate as accidental fire deaths and more can be done to address this.

Figure 2 – Hospital injuries in deliberate building fires by age

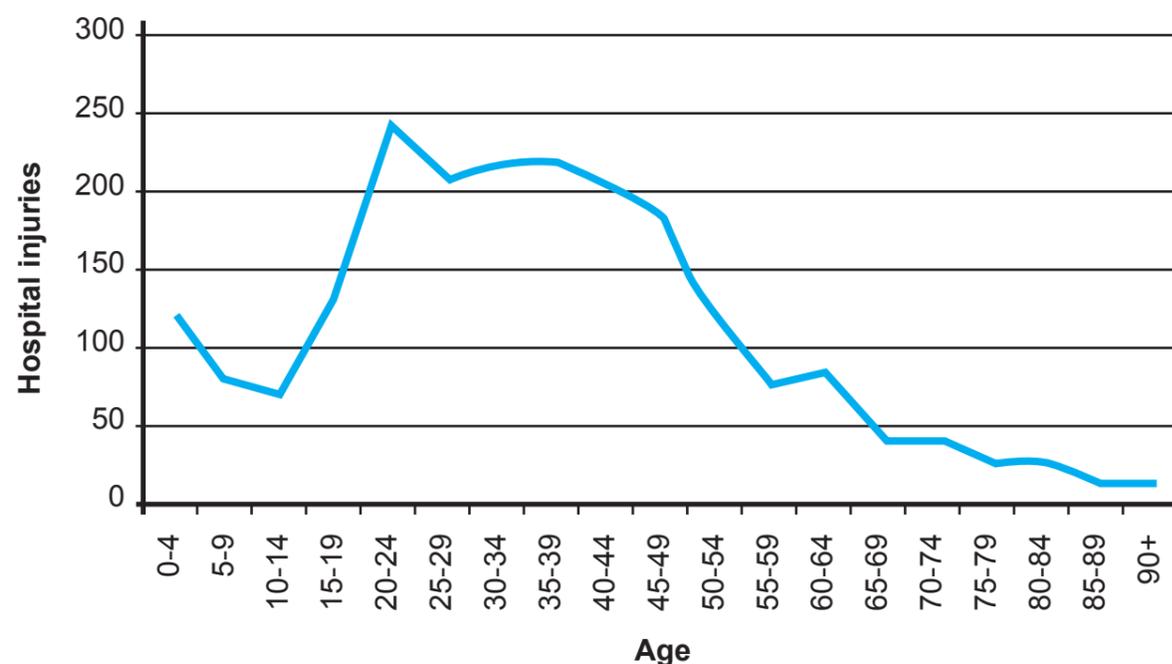
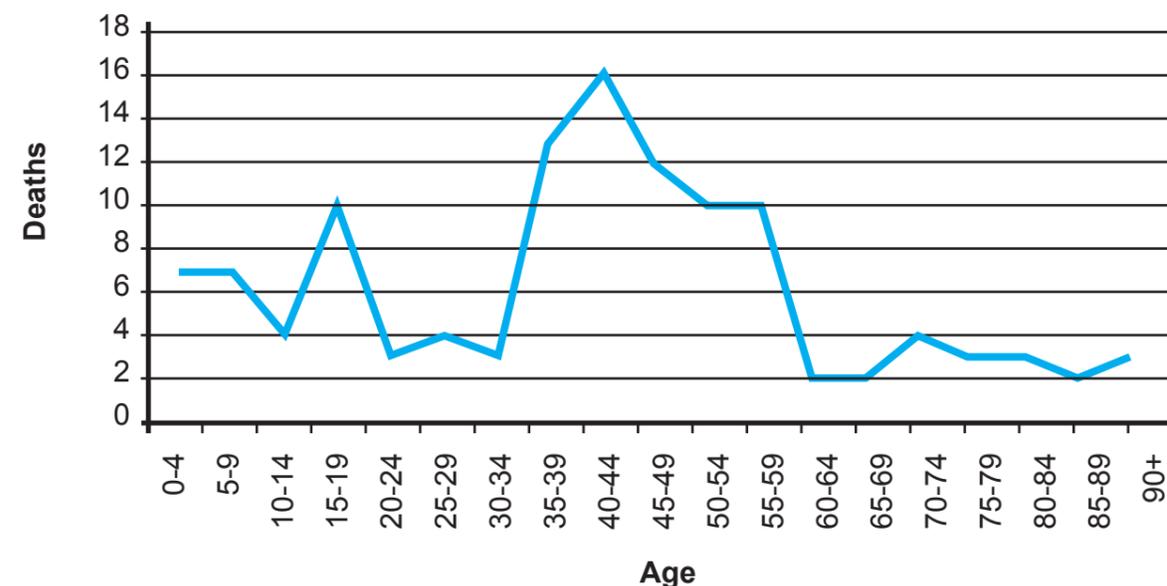


Table 1 – Injury rate per age group

Age group	Number of hospital injuries	Population estimate	Injury rate per 1,000
0-9	203	6477	31.3
10-19	209	6294.2	33.2
20-29	455	7281.2	62.5
30-39	440	7030.6	62.6
40-49	394	7764.3	50.7
50-59	199	6577.2	30.3
60-69	130	5805	22.4
70-79	71	3756.5	18.9
80-89	40	2069.8	19.3
90+	14	438.1	32

Figure 3 – Deaths in deliberate fires by age



What are the financial costs?

The associated cost of arson is significant. The Economic Cost of Fire Report 2008² published by the DCLG estimated the total cost of fire in England at £8.3bn. The cost of arson was estimated to be £1.7bn, approximately 14% of the total cost of fire, broken down as consequence (£1,178m) and the response (£524m)³. This is a reduction of 10% from the 2006 figure of £1.9bn.

Although there is no figure specifically given for the average cost of an arson incident, the average cost per fire (£8,978) gives an indication.

The Association of British Insurers have advised the APF that money paid out by their members equates to over £1.1bn each year in fire related claims. Their data also shows an increase in both claims (Figure 4) and costs (Figure 5) as a result of arson using 2004-2012 data.

Table 2 – Breakdown of the estimates for the cost of arson in England 2008

Breakdown of costs	Cost
Costs of non-detected arson	£158m
Charge/summons	£119m
Caution	£5.3m
Taken into consideration	£0.8m
Penalty notice for disorder	£2.2m
Non-sanction detection	£1.3m
Costs to the prison service	£58m
Total cost to police and prison service	£345m
Total cost of fatal and non-fatal casualties	£279m
Property damage	£543m
Lost business	£11.02m
Response costs	£524m
Total	£1.701bn

²The economic cost of fire: estimates for 2008 – Fire research report 3/2011 – <http://webarchive.nationalarchives.gov.uk/20121108165934/http://www.communities.gov.uk/archived/general-content/corporate/researcharchive/volume2/>

³Anticipation costs were not calculated as it was not possible to apportion those costs that may be attributable to anticipating arson specifically as opposed to those costs of anticipating fire in general.

Figure 4 – Total number of fire related insurance claims made by members of the Association of British Insurers from 2004–2012

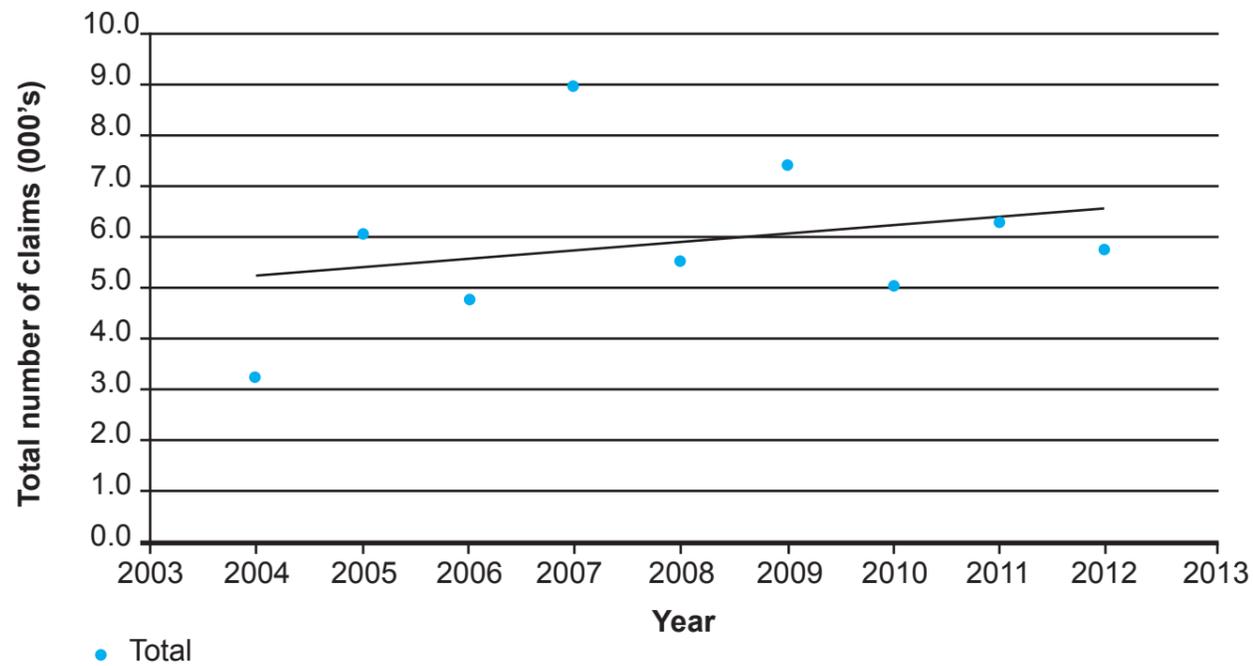


Figure 5 – Gross cost of fire related insurance claims made by members of the Association of British Insurers from 2004–2012

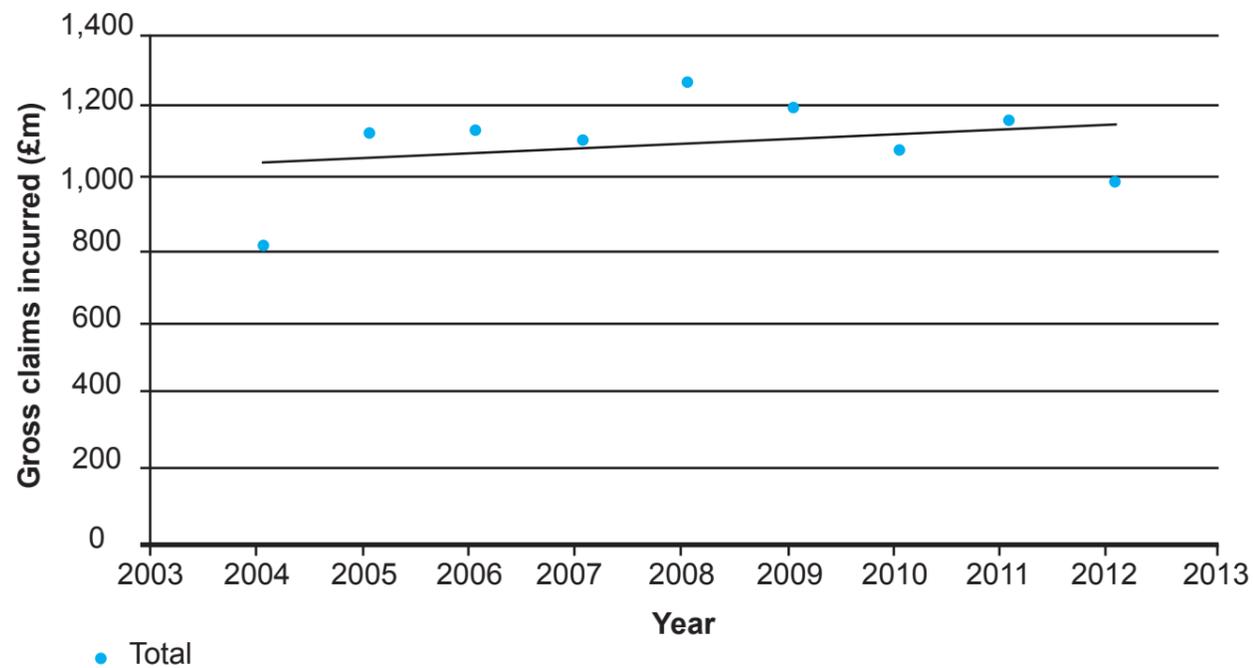


Figure 6 – Deliberate fires (by type) as a percentage of all deliberate fires

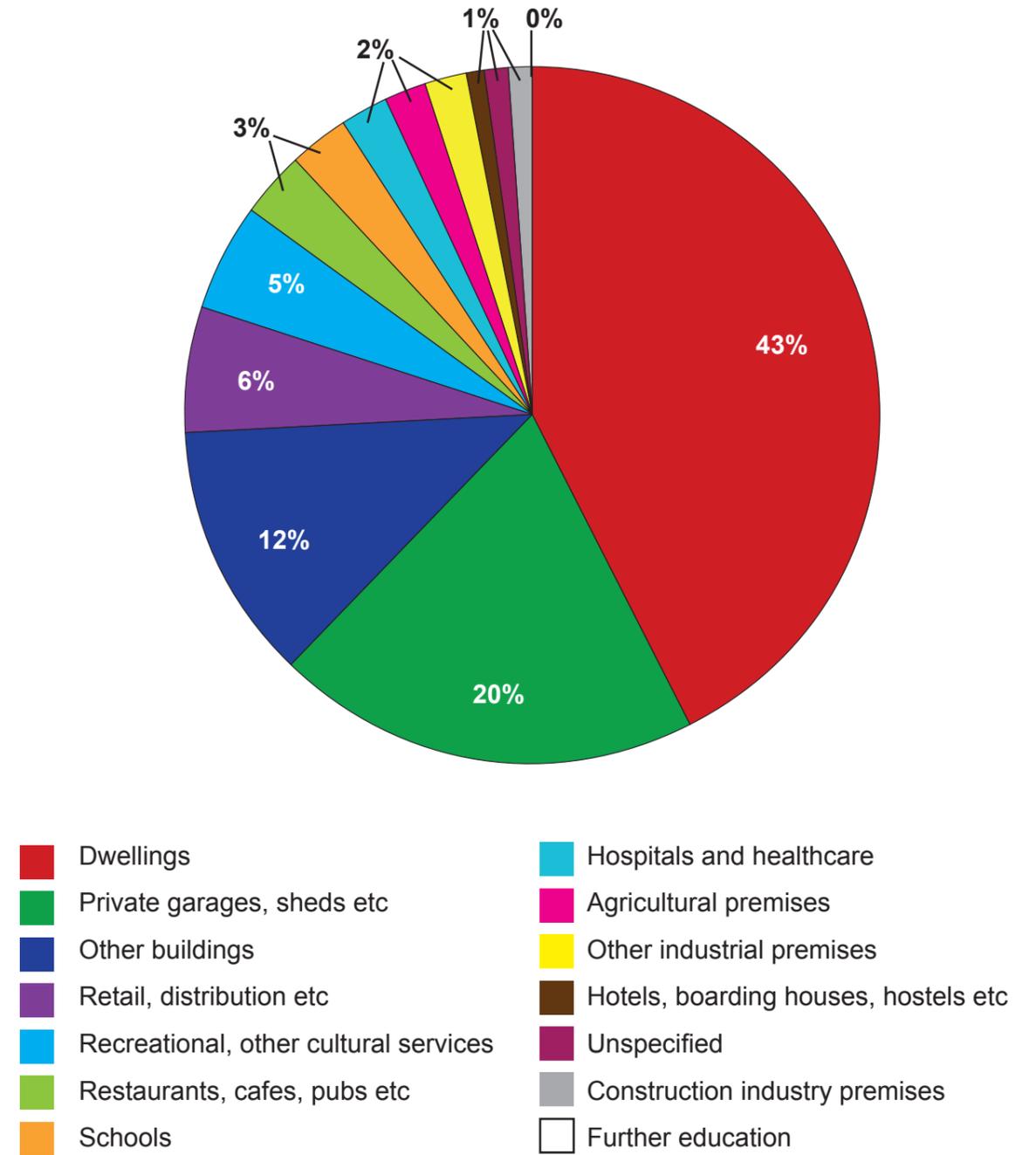


Figure 6 shows the number and type of deliberate primary fires in buildings as a percentage of all primary deliberate building fires. It can be seen from this chart that the majority of deliberate fires (43%) targeted dwellings. This graph does not take account of secondary fires and does not take account of fires in vehicles. As a percentage of all vehicle fires in Great Britain, 72% are attributed to deliberate acts.

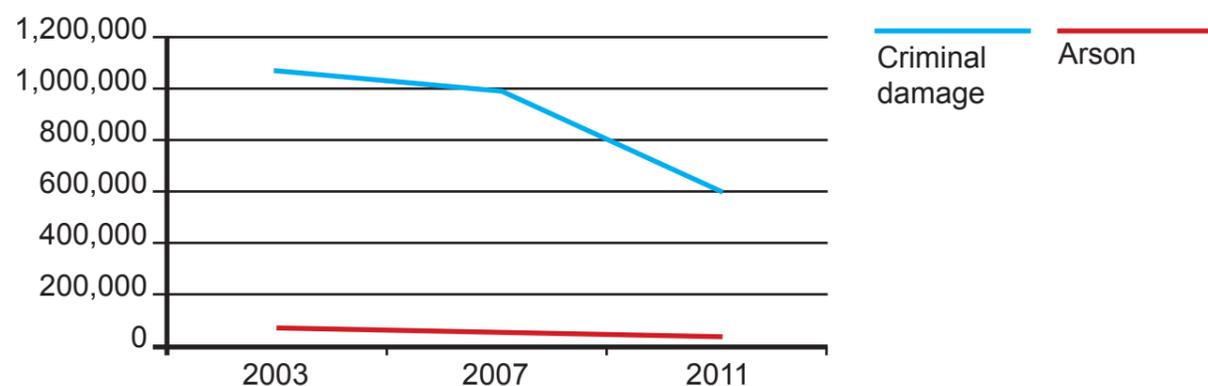
The Fire Protection Association holds data in a RISCAuthority large loss database, which holds information for fires which result in a loss greater than £100k or those which involve fatalities. Information drawn from data over a 5 year period (2009-13) shows there were 383 large loss deliberate fires averaging £622k per fire. The following table provides a breakdown of the total cost and average per deliberate fire (see Table 3).

Table 3 – Large loss from deliberate fires over 5 year period (by sector, cost and average cost) Fire Protection Association (2012)

Occupancy	Number of deliberate fires	Total cost	Average cost per deliberate fire
Retail	59	£49.2m	£833,102
Dwellings	58	£16.0m	£275,845
Non-residential misc	52	£36.8m	£707,750
Food and drink	42	£18.7m	£445,619
Industrial processing	41	£37.4m	£912,293
Warehouse	26	£23.5m	£904,692
Entertainment and culture	24	£10.4m	£434,333
Education	22	£12.6m	£572,318
Sport	17	£6.5m	£380,941
Other residential	14	£9.3m	£665,857
Permanent agriculture	5	£1.5m	£297,200
Medical	5	£10.6m	£2,122,000
Unassigned	4	£1.6m	£410,250
Religious	4	£0.5m	£130,20
Outdoor equipment etc	3	£0.9m	£296,667
Other outdoors	3	£0.5m	£157,667
Transport	2	£2.1m	£1,042,500
Car parks	2	£0.3m	£135,000

Fires in the retail sector result in the highest overall cost, but medical sector fires, although just five over the five year period, result in the highest average cost per deliberate fire – over £2m each.

Figure 7 – Arson and criminal damage crime 2003–2011. The graph shows the number of offences against the year the data was collated. Data from Association of Chief Police Officers (2013)

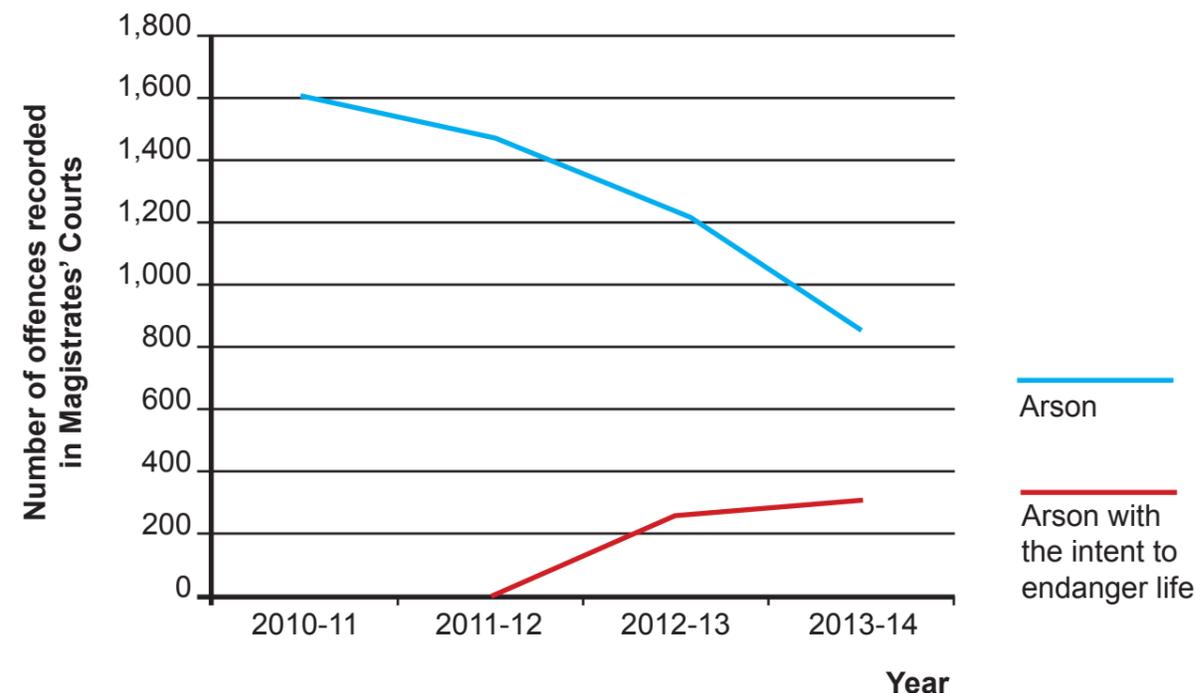


Incidents of arson and prosecutions

Data from the Association of Chief Police Officers (ACPO) shows that criminal damage is reducing at a faster rate than arson. Whilst there has been a successful reduction in criminal damage arson is not decreasing to the same rate.

Data from the Crown Prosecution Service (2013) is related to the number of offences recorded in Magistrates' Courts on the CPS Case Management System.

Figure 8 – Offences charged and reaching a first hearing in Magistrates' Courts, CPS 2013



Notes from Crown Prosecution Service

1. Data relates to the number of offences recorded in magistrates' courts on the CMS system.
2. Offences data are not held by defendant or outcome.
3. Offences recorded in the Offences Universe are those which reached a hearing. There is no indication of final outcome or if the charged offence was the substantive charge at finalisation.
4. Offences recorded are those which were charged at any time and reached at least one hearing. This offence will remain recorded whether or not that offence was proceeded with and there is no indication of final outcome or if the offence charged was the substantive offence at finalisation.
5. CPS data are available through its Case Management System (CMS) and associated Management Information System (MIS). The CPS collects data to assist in the effective management of its prosecution functions. The CPS does not collect data which constitutes official statistics as defined in the Statistics and Registration Service Act 2007. This data has been drawn from the CPS's administrative IT system, which, as with any large scale recording system, is subject to possible errors with data entry and processing. The figures are provisional and subject to change as more information is recorded by the CPS.

Summary

Fire statistics are encouraging across the board, with a long-term downward trend in the number of fires and associated casualties. However, the fall in deaths from deliberate fires is not as great as it is in terms of accidental fires. With a quarter of all fire deaths now the result of deliberate fires, there is an increasing need to address this. Looking at the fatality data, over 80% of all deliberate fire deaths are in the home, suggesting that interventions to reduce deliberate deaths could be focused here.

Deliberate fires cost a substantial amount of money. Figures from the Association of British Insurers suggest that their members

pay out £1.1bn each year in fire related claims. Fire Protection Association's figures indicate that the costs are disproportionately loaded towards non-domestic fires. To help reduce costs, mitigation resources should be focused on these fires.

The relative successes – in reducing criminal damage, but not arson; and the huge reductions in accidental dwelling fire deaths, but not deliberate – suggest that this is either a very difficult subject to tackle and/or an issue that does not get the proportionate level of consideration or action.

What is currently being done?

It is worth stating that arson is a crime and as such, it is a matter primarily for the police. However, knowledge, skills and experience from the fire and rescue services and others are invaluable to reduce this particular crime and anti social behavior related to this crime.

Police and fire and rescue services were asked to complete the same questionnaire designed to provide an insight into the current level of arson reduction activity taking place across the country. Whilst there were some excellent examples given by those who responded – only 9 responses were received from 46 police services (20%) and 26 responses from 54 fire and rescue services (48%).

Whilst the quality of the responses received was very high, it was surprising and disappointing not to have had a greater response. Those who responded are shown in Appendix A.

Fire and rescue and police service questionnaire

Q. Do you currently have any arson reduction programmes running in your service?

76% of those who answered this question do have arson reduction programmes running and of these 76% are multi agency. Fire and rescue services are the most commonly involved partners, followed by local authority, youth offending teams and schools.

Q. Do you have a dedicated arson reduction/fire crime team?

71% of those who answered this question do have a dedicated team.

Q. If you do have an arson reduction team, how many people do you employ?

25% of those who answered this question don't employ any staff, 17% employ 1-2 people, 50% employ between 3-4 people, 8% employ more than 5 staff.

Q. How much money did you spend on arson reduction initiatives last year (approx. excluding staffing costs)?

56% of those who answered this question did not spend any money on arson

reduction initiatives (other than staff time). 32% spent under £10k. 9% spent between £10k and £50k and 3% spent between £50k and £100k. No fire or police service spent more than £100k on arson.

Q. Do you have dedicated fire investigation officers (100% of time committed to fire investigation)?

69% of those who answered this question said they did have officers dedicated to fire investigation, 31% did not.

Q. What would you say was your most effective arson reduction campaign to date?

The main areas identified were: wheelie bin fire reduction, Bonfire night/Halloween, fires in open spaces, schools engagement programmes.

Q. How would you describe your relationship with the fire service at local (tactical) level?

6% said the relationship was strong. 47% said that it was satisfactory and 38% of respondents said that relationships were not strong. 9% did not respond to this question.

Whilst there is understandably a great deal of information and examples from fire and rescue services as to strategies to mitigate

Role of insurers

The insurance industry is well aware of the problem that arson presents to property and to society in general. Experience suggests that many arson fires are large, simply because the intention is to destroy the building and/or its contents, so the industry's efforts to prevent it are potentially very rewarding.

Risk surveys in the commercial property sector

Risk Management Surveyors employed by insurers will generally always consider the risk of arson as part of the property insurance risk survey and where necessary may put forward risk improvement requirement measures and advice to help reduce that risk, simply because it is one of the most likely causes of fire. In some cases these risk improvement measures can be mandatory and if not adhered to by the policyholder may invalidate the insurance policy.

Insurers will undertake selected risk engineering site inspections to support their understanding of risks they write and to provide customers with practical risk improvement solutions to better protect themselves.

Insurers will consider certain properties at high risk of arson, for example, unoccupied properties. In some cases they will conduct risk surveys on these properties at frequent intervals (insurers have stated that for some risks this may be every three months as they recognise the importance of picking up early tell-tale signs of vandalism, arson attempts etc).

Risk management guidance and advice

Many insurers actively participate with the Fire Protection Association (FPA) on a wide range of risk management forums. Through their membership of the FPA RISC Authority committees, insurers can

arson (some of these are shown below), it has been more difficult to source specific examples from others.

formulate and get assistance to help them publish generic practical guidance on loss prevention techniques, protection methods and management loss prevention practice which goes a long way to prevent, mitigate and reduce the likelihood and consequent severity of fire, including arson related incidents. The subject of arson is something that is addressed in some RISC Authority guides (see PDF BDM10) and it also gets a specific mention in the 'Essential Principles' document for the fire protection of buildings (see attached Design Guide Essential Principles PDF – principle No. 9).

Insurers have produced a wealth of advice and guidance for customers and will try to ensure that businesses undertake risk management to protect their property by implementing a number of easy, cost effective or 'no cost' measures. For example, all waste must be kept secure and out of reach, particularly on industrial estates, retail parks and outside supermarkets. In unoccupied buildings always ensure that perimeters are intact with good quality, well maintained fencing, walls and gates and that entrances and windows are fully sealed or boarded up.

Some insurers provide online arson awareness advice to their customers, for example, Aviva⁴ and AXA⁵.

Schools

Some insurers, in association with fire and rescue services have created toolkits to combat arson, focusing specifically on schools. Zurich's risk curriculum⁶ is also a key document with free online resources to help manage risk for schools⁷ and Local Education Authority customers. It essentially provides advice on common risk management issues, gives access to a design guide to 'design out' poor risk features and gives advice on contingency planning⁸.

Churches

It is not just the larger insurance companies which offer arson prevention advice to their customers. One such example is a specific insurance company, Ecclesiastical, which insures churches in the UK. They provide online advice to their customers on how to reduce the risk of arson at their properties⁹.

General

The Insurers' Fire Research Strategy scheme (InFiReS), published by the Fire Protection Association (FPA) produces various useful guides which are on the www.stoparsonuk.org website. InFiReS membership comprises a group of UK insurers that actively support a number of expert working groups developing and promulgating best practice for the protection of people, property, business and the environment from loss due to fire and other risks. In addition, the RISC Authority produced Risk Control 'Arson Prevention': The protection of premises from deliberate fire raising (2010). Fire Protection of Buildings (2003).

Aviva have also produced a Code of Practice 'Unoccupied Premises Briefing Note' which is noteworthy.

Insurers individually have data on malicious fires and this is included in their risk premium. All insurers of commercial risks have scales of discount, and loadings to reflect risk management of which arson control is an integral part, and this determines their risk appetite. Generally, arson in private residential properties is

considered by insurers to be a relatively low risk. The escape water and flood present a higher risk. Insurers will often undertake risk surveys of commercial premises, part of which will consider the risk of arson. As a result recommendations may be made to the business to take steps to reduce the risk of arson and in some cases these may be part of the terms of the policy.

Therefore insurers are linking reducing the risk of arson to the insurance they offer and the price they offer it at. Some insurers will also give premium benefits for fire prevention measures e.g. sprinklers. These factors are commercial decisions for insurers operating in a competitive market. Different insurers will have different risk appetites and as such will choose different strategies in pricing insurance.

Insurance companies employ loss adjusters, and frequently forensic scientists, to ensure that the insurance claim is valid and that appropriate financial recompense is made to the policy holder.

The remedies for a fraudulent claim by a policyholder are set to feature in the draft bill to be published following the Law Commission's review of insurance contract law.

Arson often affects people who are not responsible for causing the fire and as a result, insurers pay a significant sum in claims. The cost of these claims would reduce if prevention or target hardening arrangements are established.

⁴<http://www.aviva.co.uk/riskolutions/help/faq/answer/1756/>

⁵http://www.axaconnect.co.uk/Claims/Commercial/Commercial_Property/Hints_and_tips/

⁶<http://www.zurich.co.uk/municipal/yoursector/schools/riskcurriculum/home/introduction.htm>

⁷<http://www.zurich.co.uk/municipal/toolsandtips/schoolarsoninitiative.htm>

⁸<http://www.theguardian.com/teacher-network/partner-zone-zurich/major-incident-guidance-schools-education>

⁹<https://www.ecclesiastical.com/churchmatters/churchguidance/fireguidance/arson/index.aspx>

Voluntary Sector

There exist several charities and other organisations that can further support arson reduction activities. Crimestoppers is a well-established charity and has a track record of supporting arson reduction initiatives. They encourage people to give information about crime through a phone number or

Examples of other activity

Adult fire setter intervention Many fire and rescue services have been running fire setter schemes for young children for many years. These schemes are designed to advise children and young people with fire setting behaviour. The aim of such schemes is to help children and young people understand and control the feelings and circumstances that lead them to set fires. Advisors help a child or young person to understand the results of their actions through a series of visits and educational exercises at the child's home or a neutral venue. Following a successful bid for funds made available through the Avon and Somerset Police and Crime Commissioner (PCC), Devon & Somerset Fire & Rescue Service will be extending their fire setter intervention scheme to include adults. Training which has been part funded by the PCC grant will be delivered to both Devon and Somerset and their neighbouring fire and rescue service staff to develop a network of trained advisors.

Arson courtroom drama This is an initiative adopted by the Urban Health Partnership supported by Dorset Fire and Rescue Service. This initiative involves Year 8 students acting out a courtroom scenario dealing with a case of suspected arson. The sessions are attended by fire officers who reinforce the messages surrounding the dangers of fire. According to a report published by the Arson Control Forum in 2008, Dorset County realised a substantial reduction in the number of arson fires which they attributed to the success of this initiative.

online and they pass that information to the most appropriate organisation. They also reduce crime by running projects and campaigns in communities most affected. The relationship between the APF and Crimestoppers is being reinvigorated.

Arson freepost questionnaire initiative

Deliberate fires are often set by youths who live in the community and other residents often know the names of those responsible. A questionnaire was devised by West Yorkshire Fire and Rescue Service to be distributed to residents in hotspot areas.

Arson Prevention Bureau publication by the Association of British Insurers (2001) 'School Arson: Education Under Threat' highlighted how costly school arson fires are. In terms of insured damage to schools alone, arson attacks cost just over £65 million in 2001. However, in addition to this cost, deliberately started school fires also waste the resources of the fire and rescue and police services, as well as causing considerable disruption and inconvenience to pupils, teachers and parents. Taking into account these additional factors the real cost is nearer to £115 million (2001 figures).

Arson Prevention Forum Shown in Appendix B is an end to end process map of the identification, investigation and prosecution of arson. This is the first time that the whole system has been mapped in this way. It is only by understanding the whole system that we can fully recognise the involvement and importance of each link in the process chain and make improvements where there are weaknesses.

Arson vulnerability assessments The South Wales Fire and Rescue Service identified that vacant properties provide a target for illegal activities and trespassing. Often these properties are in a neglected state and have a damaging effect in the areas in which they are located. Following a fire at the site or during a routine survey of an

area, where properties are identified as lying empty for periods of time, fire service personnel will submit an arson vulnerability assessment. This will identify issues that will affect firefighting safety and this information will be forwarded to fire safety teams and fire control. This initiative is just one of the ways the service is supporting local authority and police operations to reduce the number of fires attended at targeted locations.

The Bobby Van/Sanctuary Room Scheme Wiltshire Fire and Rescue Service wanted to ensure people suffering from domestic violence are safe in their own homes. By working in partnership with the Domestic Violence Unit at Swindon Borough Council and the Bobby Van Trust they have been able to provide a service that covers both fire protection and offers security to those under threat.

Bright Sparx 2008 The Bright Sparx campaign is an annual event led by Lancashire Fire and Rescue Service in partnership with county and local/district councils, Crime and Disorder Reduction Partnerships (CDRPs), Trading Standards, police, youth offending teams and Environmental Services. The 2008 campaign objectives were to combat criminal damage and anti-social behaviour, to educate young people about fireworks and bonfire safety, to reduce firework and bonfire injuries and damage to property.

Clean Kent The multi-agency 'Clean Kent Campaign' was launched in May 2004 and targeted a reduction in loose rubbish fires, a reduction in the number of fly-tipping incidents reported and an increase in public perception that Kent is clean.

Community Call Back Following all arson incidents in its area, a member of the Cleveland Fire and Rescue Service Arson Task Force will contact the incident caller to thank them for informing the service of the incident. During this call information is obtained in regards to fire investigation, anti-social behaviour and further support is

offered, including a home fire safety visit. All the intelligence gathered is collated on a central database and communicated to the relevant person or department within the brigade for follow up actions to be implemented. The database allows for the identification of repeat callers or victims of fire, by highlighting the number of times a given name or contact telephone number has been entered on the system. It has also highlighted issues regarding vulnerability in terms of anti-social behaviour, deprivation and health. This information is passed onto our partners and a multi-agency solution is often the result. Often it is the actual offenders we call who are then aware that we have their details and voice on tape. This obviously acts as a deterrent to future offending.

Dealing with abandoned vehicles During 2002-3 Gloucestershire Fire and Rescue Service attended 700 vehicle fires that were established as arson; over 50% of these were abandoned vehicles or untraced owners. Dealing with each vehicle fire was costed at £4,000.

Deliberate small fires and anti-social behaviour Warwickshire Fire and Rescue Service and Warwickshire Police (WP) adopted a partnership approach to implement the Anti-Social Fire Intervention Team (ASFIT) within the Nuneaton and Bedworth Borough.

Enjoy It, Don't Destroy It - poster campaign Dorset Fire and Rescue Service launched the 'Enjoy It, Don't Destroy It' campaign in a bid to raise awareness of the devastating effects of arson in the county on areas such as heathland.

European exchange of best practice in arson prevention and investigation in 2009, led by Northumberland Fire and Rescue Service. This saw officers working in close partnership with Northumbria Police (UK), Laboratoire Central de la Préfecture de Police (France) and a number of other European organisations in order to reduce the number and severity of fire crime

incidents in Europe. The project brought together a huge amount of expertise from all four corners of the continent and successfully facilitated a greater level of information sharing across national borders. As a direct result of the project activities, fire crime professionals are now more aware of the excellent prevention and investigative practices that are currently being developed and implemented within Europe.

Expert witnesses Hampshire Arson Task Force was established to support fire and police colleagues involved in the investigation of deliberate and serious fires. Hampshire Fire and Rescue Service have strong performance in arson arrest rate (52.5%) and a conviction rate (26.7%). In addition, Hampshire Fire and Rescue Service Fire Investigators have been accepted as expert witnesses in 192 Crown Court cases since 2007. This is 100% of the cases brought before the courts.

Fire Protection Association A document was issued in 2010 entitled 'Risk Control. Arson prevention. The protection of premises from deliberate fire raising'. It was developed through the RISC Authority whose membership comprises a group of UK insurers that actively support a number of expert working groups developing and promulgating best practice for the protection of people, property, business and the environment from loss due to fire and other risks.

Firesetter Intervention Programme database Child fire play does not discriminate and its effects can be devastating. Following many years of positive interventions, Devon & Somerset Fire & Rescue Service have developed, piloted and introduced a database system for handling its annual (100+) child fire setter referrals. Having a better understanding of each fire setting occurrence will ensure that the appropriate targeted education package is delivered. It is recognised that early effective intervention is pivotal to long term arson reduction and the introduction of a

fire and rescue service designed software system has been influential in tracking and understanding fire setter referrals. The creation of this unique software solution has generated marketable interest amongst other fire and rescue services which may in the long term offset development costs and deliver financial gains.

Fire Setter Intervention Scheme Wiltshire Fire and Rescue Service's Fire Setter Intervention Scheme was designed to address fire setting behaviour amongst children and young people aged up to and including 17 years.

Fire setter intervention A case study from Essex Fire and Rescue Service is of interest. A young male (aged 9) set a fire outside his school. A referral was made by fire station staff after contact from the school head which was followed with two visits made to home. There was positive interaction during visits and the child understood consequences and showed remorse for his actions. By the second visit, the child had changed his attitude quite considerably and didn't hang around with the same friends and had joined several clubs and taken on new interests. Follow up phone calls were made to the household 6 months later and the father advised that everything was fine. There was no further firesetting/fire play.

Hot Striking after vehicle fires some communities in the West Yorkshire area have been blighted by deliberate vehicle fires for many years. Much of this criminal activity is blatant, with those responsible acting without fear of reprisals.

Insurance investigator liaison Many fire and rescue services have recognised that early engagement, liaison and appropriate information sharing, along with fire scene investigations carried out jointly by insurance forensic scientists and uniformed fire investigators have resulted in a better understanding of the potential of fraudulent claims. This has resulted in the fire service

supporting the civil court process where criminal burden of proof cannot be met. Building this closer working relationship with insurance investigators has allowed information and intelligence to be shared with the fire and rescue service, which has then been used to pursue criminal convictions.

Intelligence led design The deliberate ignition of a rubbish bin outside a supermarket spread rapidly to involve the roof area and part of the shop entrance. The cost of the fire damage was estimated at over £1 million and the store was closed for three weeks. In response to the early findings of the fire investigation by Devon & Somerset Fire & Rescue Service the estate management team of the supermarket chain carried out immediate modifications to the location of external waste bins to prevent similar fires from occurring across similar buildings nationwide. A joint investigation by fire and police secured the conviction of a 24 year old male who was sentenced to a prison term for his reckless act.

IT solutions To combat the deliberate incidents that occur in Cleveland a number of initiatives and toolkits are utilised across the brigade. They wanted to create a system of clear communication and develop recording mechanism to prevent duplication of work.

LG Improvement and Development Potential Arson Targets (PATs) Project The Potential Arson Targets (PATs) Project is a key tool for identifying and reducing the threat of potential arson through partnership working. This London Fire Brigade project allows local firefighters to keep a particularly close eye on specific buildings in the area.

Multi Agency Public Protection Arrangements (MAPPA) Involvement in MAPPA meetings allows fire and rescue services to contribute and manage the potential risk posed by offenders convicted of arson related offences. This often results in bespoke arrangements to assist with

the rehabilitation of adult offenders when released from prison.

National indicator evidence gathering West Yorkshire Fire and Rescue Service wanted the contribution of their Arson Task Forces to be properly logged and recognised. To do this links were made with all local authority call centres across West Yorkshire.

Not in my Neighbourhood Week Shropshire Fire and Rescue Service, West Mercia Police, Shropshire Council and Severnside Housing Association joined together to reduce anti-social behaviour and the number of fire calls on the lead up to and after Bonfire night.

Potential Arson Target London Fire Brigade has developed a way to reduce the risk their firefighters face when attending empty property call-outs. They are gathering data from local authorities' planning departments to highlight 'Potential Arson Targets'.

Prisoner release actions To reduce the damage, injury and loss of life as well as time and money that is wasted in deliberate fires, Wiltshire Fire and Rescue Service set about securing buildings in their area that are thought to be at risk from this type of behaviour.

The Scare Project School Crime and Arson Risk Evaluation. Bedfordshire and Luton Fire and Rescue Service has been working for several years with Bedfordshire Police and local councils to cut the risk of crime and arson in schools.

Serial Arson Investigation Ten Stage System To assist the London Fire Brigade and Metropolitan Police Service address the serial arson problems in London, a logical and practical 'Ten Stage System to Serial Arson Investigations' has been developed. It has been designed to help the joint agency investigation teams monitor case progress and is used in conjunction with an 'Arson Case Log Book'.

Spate arson calls For South Wales Fire and Rescue Services an annual spring spate of mountain and grass fires had become a critical issue as traditional prevention efforts failed to stem the number of incidents increasing to more than 7,000. The sheer volume of incidents, with associated risks such as heat exhaustion and injuries to firefighters, was pushing the entire region's fire fighting resources to the limit.

Vehicle Arson Awareness Dorset Fire and Rescue Service launched the initiative in partnership with the police to increase

awareness of vehicle safety and to offer vehicle locks at reduced rates. Leaflets were produced to highlight the risk of older cars being stolen and set alight.

These and other useful documents can be found on the website www.stoparsonuk.org

Whilst these examples outline some of the activity that has taken place over a number of years, it is important that current such initiatives are evaluated, shared and where good practice is identified, implemented where appropriate.

Conclusion

We all have a role to play, but arson is a crime that remains a difficult issue to tackle. A joined up approach is required and the Arson Prevention Forum brings parties together to begin to solve what is a very complicated set of issues.

We need to share information to better understand the problems and ensure appropriate interventions can be put in place. Statistics from the Department for Communities and Local Government help us identify fires, and casualties. Thorough and effective fire scene investigations involving the police, the fire and rescue services and insurance forensic scientists are important not only to provide a basis for the preparation of reliable statistics, but also to provide robust evidence to the Crown Prosecution Service.

We can learn from the success in driving down accidental fires and associated casualties. This was propelled by an investment in prevention: between 2004 and 2008, Government provided £36.4m¹⁰ in funding and there has been a culture shift in the fire and rescue service where now prevention and protection are very much the front line.

With the insurance industry paying out vast sums of money to enable businesses get back on their feet as quickly as possible after a fire, it seems equally if not more cost effective to ensure that as much as possible is being done to focus resources into the provision of loss prevention advice, working with partners where appropriate.

This report shows that there are many local examples taking place but that more could be done by other organisations to support this work. There could be some short-term wins. For example, the Department for Communities and Local Government could

produce an in depth look at deliberate fire in a fire statistics monitor and insurers could utilise the direct communication channels they have to reach policy holders (home owners and building managers) to educate them about how to reduce the risk of deliberate fire. The insurance industry, which is hit hardest by the costs, could invest more in arson reduction activities, working with the police and fire and rescue services.

In order to achieve this, there is a need for us all to consider the whole system rather than just looking through the lens of our own organisations. There should be a focus on prevention/early intervention rather than just a focus on response.

The Arson Prevention Forum acts as a catalyst for change but this will only be achieved in practice through efforts of individual organisations working in partnership to reduce further the cost and disruption of this particular crime.

¹⁰ [2004-08 Home Fire Risk Check Programme \(£25m\) and 2006-08 Fire Prevention Grant \(£11.4m\).](#)

Recommendations

These recommendations will assist all the involved agencies and organisations to work together to tackle arson.

The insurance industry to play a leading role in arson reduction interventions.

- The insurance industry to invest in prevention, working with police and fire and rescue services, utilising partnerships with other agencies, to see what this would look like and how this would work.
- The insurance industry to commission research to enable a better understanding of the risks and victim profiles.
- The Association of British Insurers to collate good practice with respect to arson reduction arrangements within the insurance industry and share with the Arson Prevention Forum for wider dissemination.
- Data and trends identified to be presented by the Association of British Insurers to the Arson Prevention Forum to allow other organisations to contribute to reducing the costs of arson and associated impact on society.
- The Fire Protection Association, through their RISC Authority group, working with the Association of British Insurers, to ensure that data required to inform the scale of the problem is presented to the Arson Prevention Forum on an annual basis.
- The insurance industry to report on what has worked previously to drive down claims.
- A figure is captured for the cost of arson as this is currently not separately recorded from the total cost of fire.
- The insurance industry consider the role sprinklers may play as a means of protecting properties and reducing the impact of arson and how their inclusion within buildings might reduce the fire element of insurance premiums.

The police (including Home Office and Police & Crime Commissioners)

- The commitment to reducing crime should extend to arson with greater visibility, commitment and drive to further reduce this crime and associated anti-social behaviour.
- Leadership by the Home Office, police and crime commissioners and Chief Officers will ensure arson is reduced, supported by working relationships with partners at a tactical level.

Build on partnership working, especially between fire and rescue services and the police (via CFOA and ACPO), supported by the Local Government Association (LGA) and Association of Police and Crime Commissioners (APCC).

- Ensure respective Presidents of the Association of Chief Police Officers and Chief Fire Officers Association meet to demonstrate professional leadership at the highest level and encourage greater joint working.
- Ensure the Chairman of the Fire Service Management Committee and the Chairman of the Association of Police and Crime Commissioners meet to demonstrate political leadership at the highest level and encourage greater joint working.

- The APF to extend its reach into voluntary organisations to increase awareness of the issue and mitigation strategies (e.g. Crimestoppers, MIND, Prince's Trust, Young Minds, Nacro (the crime reduction charity), education).

The Arson Prevention Forum to coordinate learning from local arson reduction programmes.

- Members of the Arson Prevention Forum to submit robust and evaluated examples of good practice to be shared.
- The Arson Prevention Forum to establish a Memorandum of Understanding to provide clarity as to what can be expected by police and fire and rescue services and the processes to be followed to ensure evidence is properly secured at the scene.
- Consider what is working and why and source evaluated case studies which demonstrate how activity led to a reduction in deliberate fires.
- Identify gaps in knowledge or approaches, utilising process mapping, and consider how best to rectify.

The Crown Prosecution Service to share lessons learnt from successful and unsuccessful prosecutions.

- The Crown Prosecution Service to share data on prosecutions with the Association of Chief Police Officers to determine what could be done to improve prosecution rates.

Encourage discussions at Central Government level to enable greater emphasis and awareness on arson reduction arrangements to be put in place at local level.

- Discussions to take place between the Department for Communities and Local Government, the Home Office and the Ministry of Justice with respect to arson in order to ensure all that can be done from a police perspective is being done which would dovetail into the drive for greater blue light collaboration and integration where appropriate.
- Raise the issue with the All Party Insurance Group, the All Party Policing Group and the All Party Fire and Rescue Service Group.
- DCLG and Home Office Government to consider how the National Framework for Fire and Rescue Services and National Policing Plan may be used to drive this agenda.

Appendix A

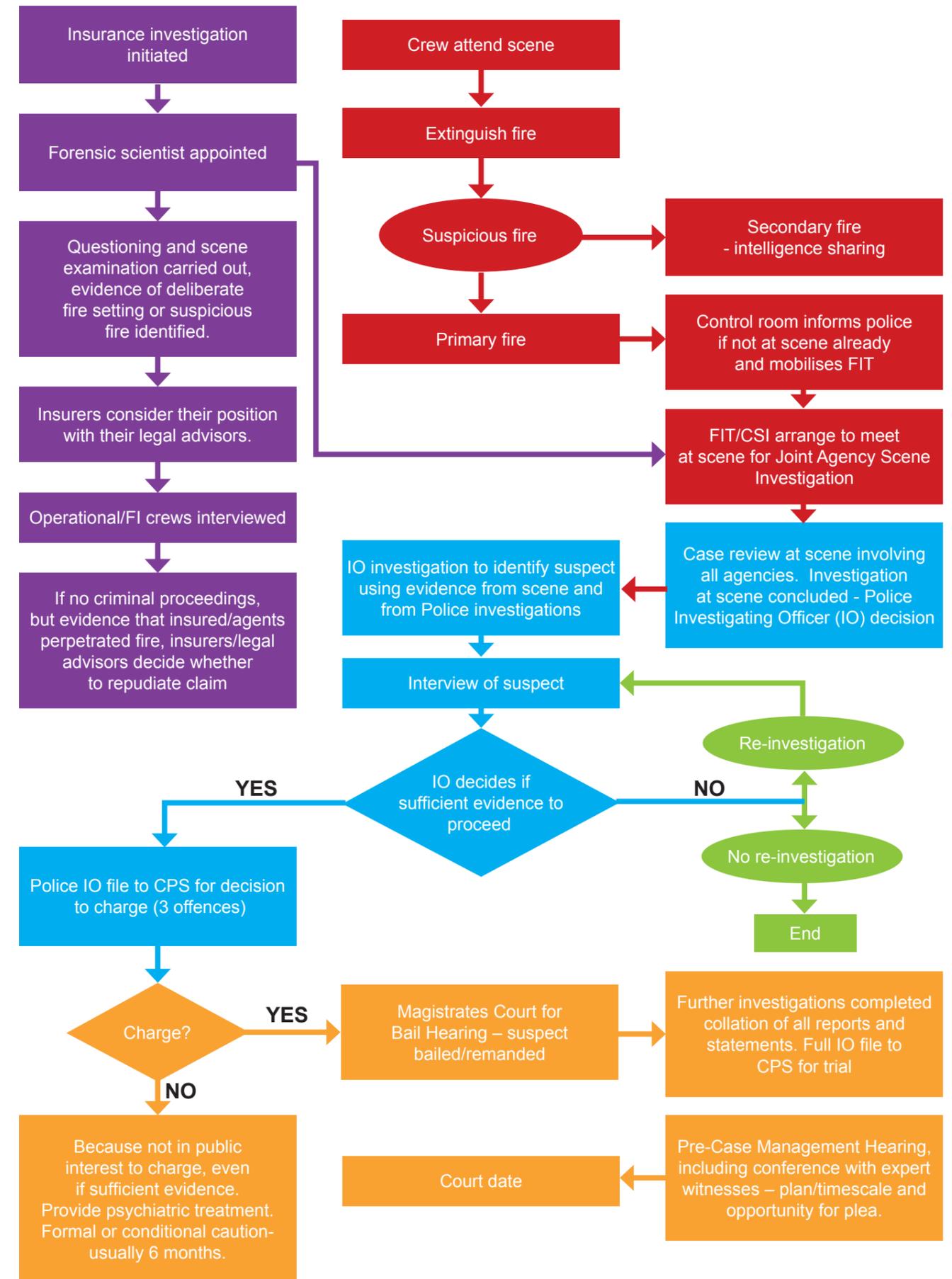
Police service responses

- Avon & Somerset
- Cumbria
- Devon & Cornwall
- Hertfordshire
- North Yorkshire
- Nottinghamshire
- Surrey
- Wales
- Warwickshire

Fire and rescue service responses

- Avon
- Buckinghamshire
- Cleveland
- Derbyshire
- Devon & Somerset
- East Sussex
- Hampshire
- Hereford & Worcester
- Hertfordshire
- Kent
- Lancashire
- Leicestershire
- Merseyside
- Mid and West Wales
- North Yorkshire
- Nottinghamshire
- Oxfordshire
- Royal Berkshire
- Shropshire
- South Wales
- South Yorkshire
- Staffordshire
- Suffolk
- Surrey
- Warwickshire
- West Yorkshire

Process mapping deliberate fire investigation and prosecution



Notes

- I. A forensic scientist may be appointed by insurers as a matter of course to investigate a primary fire. The investigation will usually be commenced the day after instructions are received, or in certain circumstances on the same day (such as when a fire service and/or a police investigation is already in progress or about to commence, or demolition of the building is about to take place for safety reasons). If a fire service investigation has been set up, ideally this should be conducted jointly with the scientist appointed by insurers. If a fire service/police investigation has not been initiated, the forensic scientist will conduct an independent investigation and where evidence of deliberate fire setting is discovered, this will be reported promptly to insurers and, with their agreement to the police/fire service.
- II. A fire is likely to be identified as 'suspicious' (ie possibly deliberate) in the first place by the breathing apparatus crew (the first firefighters to enter the building) or the incident commander. Suspicions will be based on obvious visual signs of deliberateness, such as multiple seats of fire in a single room, forced entry prior to arrival of FRS, etc. This info is passed back to the Fire Control Room and a Fire Investigation Officer (FIO) is called. The FIO uses specialist knowledge and experience to categorise the fire as either a Level 1 or a Level 2/3. This advice can be given over the telephone.
- III. Categorisation of fires:
 - i. Primary insurable fires include all fires in buildings, vehicles and outdoor structures or any fire involving insurable casualties, rescues or fires attended by five or more appliances.
 - ii. Secondary insurable fires are the majority of outdoor fires including grassland and refuse fires (not involving casualties or rescues).
 - iii. Secondary fires include fires in single derelict buildings.
 - iv. A deliberate fire may be either primary or secondary.
 - v. Primary fires are further sub-divided into level 2 and level 3 fires, depending on the seriousness/size of the fire or the financial loss involved.
 - vi. The Fire Investigation Team (FIT) is a part of the Fire and Rescue Service (FRS). It is made up of a number of specialist Fire Investigators (FIs), along with support staff/admin staff. The FIT will attend the scene to conduct an investigation in the event of any casualties. They will also attend for primary fires which the Fire Officer in Charge regards as suspicious.
 - vii. The role of the FIT is to identify the 'cause and origin' of all fires they investigate. If a scientist has been appointed by insurers, the scene examination should ideally be carried out jointly with the FIT and CSI, subject to police agreement.
- IV. Crime Scene Investigators (CSIs) will attend the scene. The attending CSI and FI will ordinarily agree to meet at the scene of the fire in daylight hours (the electricity in all affected buildings will be switched off before investigations begin for safety reasons). For a fire that is extinguished at 3am, say, the CSI and FI will attend the scene together at 10am the following day. In the event of a death at the scene, however, the investigation will commence immediately. As stated, the role of the FI is to establish 'cause and origin' of the fire. The role of the CSI (and of the police more generally) is to collate evidence for identifying and convicting the perpetrator of any arson.
- V. The term Investigating Officer (IO) describes the police officer in charge of the investigation into the crime committed. This is to be distinguished from the Fire Officer in Charge, who is the senior firefighter on scene managing the extinguishing of the fire (see note II above). A review of all evidence collected to date, and in particular the physical evidence, should be carried out at the scene under the coordination of the IO.
- VI. The IO will send an evidence file to the Crown Prosecution Service (CPS) if an arrest is made and the IO believes there is enough evidence to charge. This evidence file will contain all evidence available to the IO at the time, and may include 'aggrieved statements', witness statements, and forensics, as well as the Scene Log and Preliminary Report completed by the CSI and FI respectively. The CPS decision on whether or not to proceed with a prosecution will be based on the likelihood of conviction. A 65% or higher chance of conviction (based on the available evidence) is ordinarily required before the CPS will proceed. The decision making process may well benefit from a brief conference involving the CPS, the IO and the expert witness.
- VII. The Evidence Package is a detailed folder put together by the FIT (and Arson Task Force, where applicable) and may include a comprehensive report prepared by scientist appointed by insurers. It contains statements of all the relevant FRS personnel (Officer in Charge, crew members, the FI), as well as photographs of the scene and other reports and logs. The IO uses this package to put together his own evidence file, which he then sends to the CPS to assist with the prosecution.
- VIII. FI as expert witness: although not included in the expert witness list, FIs are normally allowed by the judge to give expert opinion evidence on the cause and origin of the fire. If the FI is not allowed to give expert evidence, or if the Major Crime Team so requests, a fire scientist will be used instead, who could be the scientist appointed by insurers who has conducted an investigation contemporaneously with the fire service and police representatives

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