# FIRE SERVICE CALL HANDLING AND MOBILISING IN THE UNITED KINGDOM

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## 1 Introduction/Background

The United Kingdom Fire Services Act 1947 Section 1(I)(c) requires Fire Authorities to ... 'secure the provision of efficient arrangements for dealing with calls for the assistance of the Fire Brigade in the case of fire and for summoning members of the Brigade'.

To meet this duty, fire authorities usually have a continuously staffed mobilising and communications centre, equipped with computer based Command & Control Systems to deal with the receipt of emergency calls and the alerting and despatching of fire service resources within its mobilising (Brigade) area.

Whilst Fire authorities have statutory responsibility for the provision of fire cover, they discharge this duty through the day-to-day activities of their fire brigades. The Secretary of State in the Office of the Deputy Prime Minister\* has central responsibility for the fire service in England and Wales, with the Scottish Executive and (under normal circumstances) The Northern Ireland Assembly having central responsibility for their respective areas.

\*The Office of the Deputy prime Minister (ODPM) was created as a central division in its own right in May 2002 and brings together key responsibilities for central and local government, fire, housing, planning and regeneration for England & Wales.

The funding mechanism for the fire service is complex, some funding comes from the government as part of a revenue support grant made to local authorities, and the remaining cost is collected through the revenue support mechanism of the local council tax.

## 2 Regulatory Issues

There is a great deal of legislation and many regulations that apply to the Fire Service, some of the most influential legislation in terms of the provision of our services systems and equipment being the Fire Services Act, the Health & Safety at Work Act and The Data Protection Act.

Some of the most relevant regulations affecting Call Handling and Mobilising/Communications Systems being:

999 <u>Liaison Committee</u> - A forum which brings together representatives of the Emergency Authorities (EAs) - (Police, Fire, Ambulance and Coastguard), the Public Telecommunications Operators (PTOs) (fixed and mobile) and other organisations with an interest in the 999 service - these include Her Majesty's Fire Service Inspectorate, The Scottish Executive, OFTEL, and the Department for Trade and Industry.

 $\underline{\text{Oftel}}$  - The Office of Fair Trading for telecommunications (OFTEL) is the regulator - or 'Watchdog' - for the UK telecommunications industry.

<u>Radio Frequency Management - Frequency' management in the UK is managed by the Radiio Communications Agency (on behalf of the Government)</u>

The Home Office Radio Communications Advisory Panel (HOCAP) is one of many sub groups and their recommendations are being taken forward in a project known as the Public Sector Radio Communications Project, (PSRCP) The fire service element of this project is named **Firelink\***. It is the central task force provided by Her Majesty's Fire Service Inspectorate (HMFSI) to project manage the

procurement and implementation of a National Wide Area Radio System - to meet the needs of the fire service and to satisfy the national requirement for interoperability by the end of 2007. Firelink will provide end to end voice and Mobile Data facilities. More information on Firelink can be found on their website http://www.firelink.org.uk

# 3 Fire Service - 999/112 Emergency Control Rooms

There are 59 Fire Brigades in the UK, 47 in England, 3 in Wales, 8 in Scotland and 1 Brigade for Northern Ireland. Every Fire Brigade has one Control centre for handling its emergency calls - with the exception of the Scilly Isles (Off the South West coast of Cornwall) giving a total of 59 Control rooms. These centres are normally referred to as 'Control'.

Control staff form part of the uniformed service, are specifically recruited and trained for the Control role and have their own role/rank structure – which mirrors that of their operational counterpart.

The 'Conditions of Service' for Control staff is the same as their operational counterparts and is negotiated nationally through the National Joint Council of Local Fire Brigades (NJC) - this includes amongst other things hours of duty and shift patterns. The majority of Control staff are members of the Fire Brigades Union (the largest representative body for the UK Fire Service)

Staffing: Although it can be shown that call rates by time of day is consistently down during the night hours – (and this trend is reflected across Brigades nationally) Staffing is maintained at the same level on both day and night shifts. (Figure 3.1)

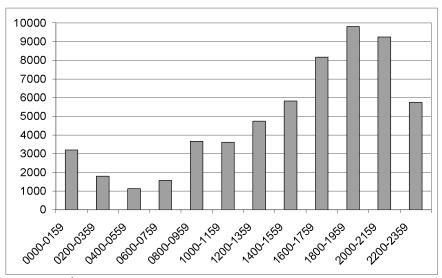


Figure 3.1 - Call volume/rate, measured by time of day/night, follows a specific trend.

Whilst Control rooms are subject to the same or similar legislative and regulatory conditions, the diverse needs and resources of each Brigade means that there is little commonality in terms of systems used and in working practices and procedures:

- The <u>largest area</u> is covered by Highland and Islands Brigade in Scotland whose Control room covers an area of 31,348 square miles, has 128 fire stations and takes in the region of 5,500 emergency fire calls per year
- One of the <u>smallest Brigades</u> is the Isle of Man (off the North West Coast of England) the Control room covers an area of 407 square miles, with 7 stations (only one of which is a whole-time station) and the Control deals with approximately 2,000 calls per year.

<sup>&</sup>lt;sup>1</sup> Figure 3.1 Mott MacDonald report 'The Future of Fire Service Control Rooms and Communications – in England & Wales (Home Office May 2000).

• The <u>busiest</u> Brigade is London, whose Control room covers an area 614 square miles, has 112 fire stations and handles in the region of 300,000 emergency calls per year.

The call rate for the smallest Control rooms could require only two members of staff to handle the volume of calls - but for Health & Safety reasons there would have to be a minimum of 3 or 4 staff on duty at any one time.

The cost effectiveness of such arrangements has been called into question in a number of Government sponsored reports <sup>2</sup>.

#### 3.1 Overview of Arrangements for Handling Emergency Calls

All Public Telephone Operators (PTO's) have a license obligation for providing an emergency call handling service. These PTO's provide Operator Assistance Centres - OAC's to deal with emergency (and other) calls.

The main PTO's are British Telecommunications (BT) who handle calls from its own fixed network and provide the operator service for other PTO's including mobile phone networks. Cable & Wireless (C&W) provide the operator 999/112 service for their own fixed cable and One2One mobile network.

When a member of the public dials 999/112 the call does not go direct to an emergency service call centre, it is first routed to an OAC, the Operator at the OAC asks the caller which service they require (Police, Fire or Ambulance) and utilising the caller line identity (or zone code for mobile phones) the operator's screen automatically displays the local emergency services that cover the geographical area in which the calling number is located.

The call is then routed to the appropriate emergency service control centre.

The OAC operator waits for the call to be answered and verbally passes the caller's telephone number to the emergency authority (EA) Control operator.

(It is estimated that the process of OAC operator answering the call to passing it to the EA Control operator takes on average 13 seconds)

To provide resilience there are 3 separate network routes from the OAC to each local EA Control Centre:

**Primary** This is the normal route used to connect the caller to the EA Control centre.

**Secondary** if the PTO operator does not get a reply to the primary route after 30 seconds, he/she

will connect to a secondary number.

**Tertiary** In the event of a major problem, which results in the primary and secondary routes

being unavailable the call, is routed to an alternative number - this is usually a

neighbouring Fire Brigade.

Whilst there are currently no National Performance Indicators (P.I's) for Fire Service Controls, individual Control's set their own call handling targets and a typical 'call ring to call answer' target is 95% of emergency calls answered within 10 seconds.

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<u>Enhanced Information Systems for Emergency Calls (EISEC)</u> - is a service available from BT this facility allows the callers telephone number and address to be automatically displayed on the EA's Control computer screen. (Information can be displayed for fixed telephone lines only)

<u>Network Resilience</u> in the event of a major failure of a PTO network - the PTO will inform the affected EA Control - contingency plans are in place to deal with such an emergency.

<u>Priority Repair Service</u> The PTO's are required to provide a free priority fault repair service to those EA's who receive 999/112 calls

<u>Secondary Control</u> There is a great deal of resilience built into Control's in terms of fallback arrangements for call handling, mobilising & communications, power supplies etc, however, Fire Brigades should have alternative arrangements to cover the receipt of calls during conditions where evacuation of the main Control centre is necessary. Arrangements usually involve a secondary control set up, either in a different building on the same site or at a different location.

Emergency Text Telephone Service for the Deaf - (Typetalk) A text users emergency service was launched in March 1995 - it gives deaf, deaf & blind, hard of hearing and speech-impaired people access to the emergency service.

<u>Language Line</u> Is a service that provides access to the services of an interpreter if an emergency caller is unable to speak the language of the Control operator/s.

Note: In Wales - there is a need to ensure that there are Operators on duty who speak Welsh. The Welsh language is the first language for many families and there are many schools who teach in the Welsh medium.

### 3.2 Control Centre Design/Equipment <sup>3</sup>

<u>Touch screen technology</u> – Communications switch - a large number of Controls now use Integrated Communication Control Systems (ICCS) which allow the operator to accept a call from whatever source in a single action, the units can accommodate a variety of types of termination including telephone lines and Control terminations for various functions such as Radio, remote control for door locks, monitoring and actioning alarms, etc.

In addition to the communications switch, the most common workstation configuration for a Fire Service Control centre operator comprises another PC terminal connected to the mobilising system. Through these two terminals the operator can carry out all mobilising and communications tasks. A third PC will hold resource display maps and geographical information systems (GIS).

<u>Mobilising System Function</u> – Most commonly known as Command & Control System (C&C system) the main function of which is to record call information and despatch selected resources – secondary functions include displaying alarm conditions for the system, recording incident information on incident logs and the generation of statistical information.

These mobilising systems typically consist of an address gazetteer, pre-determined attendances, risk register, special procedures and CHEMDATA (Chemical Information) databases.

The majority of Controls C&C Systems are currently text based with the mapping system used mainly to provide supervisors with an overview of Brigade operations, resource allocation and availability and to provide operators with incident location information should this be required during the call handling/mobilising process. Overlays may also be used to provide information on water supplies, high risk premises, kiosks, rivers, roadways etc.

On entry of an incident type the system interrogates its database to match the address information – usually down to street or building level. It may also search for risks, duplicate incidents, telephone kiosks, map references etc., so as to provide the operator with as much information as possible. When

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<sup>&</sup>lt;sup>3</sup> Fire Service Manual – Volume 1 Fire service Technology, Equipment and Media – Communications and Mobilising, HMFSI 1998

an address match is made the operator is presented with a pre determined attendance (PDA) and a recommended attendance. The system will not offer resources that are already committed at incidents or otherwise not available.

In most Brigades the C & C system makes an attendance recommendation based on 'Station Area' - the calculation on nearest appliance to a location being based on the fire station location. As can be appreciated this may mean that on occasion the recommended appliance may not be the nearest it could happen that when an incident is near the station boundary an appliance from an adjacent station area is available near that station boundary.

Control staff can and do use their own initiative in determining if another appliance is nearer (where they have this local knowledge) and also in certain circumstances, in increasing or reducing the recommended Pre-Determined Attendance (PDA).

The system only makes recommendations and the operator can override this.

The mobilising system also maintains a log for each incident, recording (and time injecting) all actions taken by operators, status updates of responding resources, communication failures, operators logging in or out of the system etc.

Control staff are responsible for monitoring system faults and alarms and for carrying out first line recovery where appropriate.

#### 3.3 Mobilising Philosophy – Fire Service Controls

The practice is to mobilise a PDA to all calls (unless there are obvious reasons why this would be inappropriate e.g. hoax call, call for another service, spate conditions etc).

The response is mobilised as promptly as possible and there are nationally recommended (property risk based) attendance standards (the 1985 Standards of Fire Cover) that set out the recommended speed and weight of response based on risk category (Figure 3.2):

Note: Attendance times are measured from the time the call is 'Sent' to the station by the Control room.

Risk Category	Description	Number of Pumps	Time limits for attendance by pumps in minutes.		
Category		1 umps	1 <sup>st</sup>	2 <sup>nd</sup>	3rd
A	Largest cities & towns, including shopping complexes, high risk industrial property, etc.	3	5	5	8
В	Larger cities & towns	2	5	8	-
C	Suburbs of large towns etc	1	8 - 10	_	_
D	All other categories excluding remote rural	1	20	-	-
Remote Rural	Areas isolated from centres of population with few buildings	No national recommendation set			
Special Risks	Hospitals, prisons, airports, tower blocks, major petrochemical plants, etc.	No national recommendation set			

Figure 3.2: the 1985 Standards of Fire Cover

The need to meet these response times and the fact that all calls are treated as an emergency and not (in general) prioritised has a direct influence on the working practices and procedures for Fire Service Control staff.

Unlike the other services who typically, prioritise calls and have call takers, dispatchers and radio operators, the Fire Service operate a one stage process with an operator expected to see a call through from receipt to mobilising a resource, for monitoring the progress of operations and providing support to crews as necessary. Supervisors have additional responsibilities amongst which are monitoring calls/incidents and though the strategic deployment of resources maintaining adequate fire cover in areas where resources have become depleted.

Note: Training of Control staff is competence based and there is a National Vocational Qualification (Level III) in Emergency Control Room Operations. Role Maps are also available for all roles in Control from Control Operator to Control Manager.

Staff are trained in giving Survival Guidance to callers involved in Fire or other entrapment situations.

A typical performance indicator for 'call completion' (time taken from answering the emergency call to time of 'send' of turnout instructions to the station) is 75% of all calls completed within 60 seconds.

<u>Turn Out Instructions to Stations</u> - the C&C System encodes data and delivers it to the communications network for onward transmission to the station, typically the instructions actuate the station alarm (or in the case of a retained station - fire-fighters pager/alerter), actuates the printer, switches on station lights and in some cases opens the appliance room doors and actuates any traffic signals.

In most cases the communications network will consist of a primary, secondary and tertiary (back-up) bearer. Secondary bearers should be independent of the primary bearer so that any failure will not affect both bearers. Examples of bearers used are ISDN (Digital), PSTN (Analogue) telephone lines and radio links including dedicated data networks and Brigade radio schemes.

In 1992 the Home Office produced a specification (GD92) <sup>4</sup> for a standard communications protocol to be used between the control centre and the station end equipment. It defines a standard protocol and message format for mobilising systems over commercially available bearers.

The main objective of the protocol is that fire authorities could procure products and they would be interoperable with other products from the same or different contractors without affecting interoperability it also means that (assuming the necessary links were in place) that any (fire) station end equipment could be actuated from a Control room anywhere in the UK.

#### 4 Radio

Each Fire Brigade has its own radio scheme and currently these are analogue systems using AM or FM techniques, Current spectrum allocation:

England and Wales operate on low-band spectrum

- base stations transmit at 70-72 MHz
- base stations receive at 80-82 MHz

Scotland operates on a higher band spectrum

- base stations receive at 146 MHz
- base stations transmit at 155 MHz

There is little interoperability between Brigades and practically none between Fire Service and other emergency services.

Over the Border Communications: There is a requirement under Section 2 & 12 of the Fire Service Act for Brigades to provide mutual assistance to other.

Section 2 allows brigades to enter into agreement for the resources from a neighbouring Brigade (whose station may be nearer to certain parts of the other Brigade's area) to be included as part of any pre-determined attendance and brigades may charge the for the use of their resources.

Note: Information on GD92 can also be found on the Firelink Website - www.firelink.org.uk

<sup>&</sup>lt;sup>4</sup> Specification of a Communications Infrastructure for Fire Service Mobilising Systems – Home Office 1992

Section 2 obliges Brigades to provide mutual assistance to each other e.g Major Incidents, spate conditions etc. Brigades cannot charge for this.

Where section 2 & 12 arrangements are in place there will be provision for responding appliances to communicate direct by radio with the other Control and in some (but not all) cases some Control's can communicate with the neighbouring Control via radio.

Most radio schemes provide duplex working but due to the need to maintain 'control' of the available radio space this is often restricted to Duplex/Simplex (Main Control having Duplex and mobile resources restricted to Simplex).

In effect, Brigade Controls have 'control' of the radio scheme and strict radio discipline is in place with standard radio message procedures to ensure the most efficient use of the radio. If appliances need to talk to each other over the main radio scheme this is enabled by Control giving 'talk-through' facility.

Control staff are also able to remotely isolate certain radio transmitters/equipment is the transmitter is faulty or causing interference.

<u>Mobile Data Systems</u> are now more commonly used, with one Brigade using GSM Cellular Telephones (Global System for Mobile Communications), others using commercial packet radio data networks but in the main most Brigades are currently using their existing analogue radio scheme to transmit data.

This means that whilst mobile data terminals have been available and used by the Fire Service since the late 1970's, they are not (in the main) used to their full potential with data transmissions restricted to encoded messages indicating a resource availability and location (based on station area) and also codes for sending certain 'standard' messages from incidents such as Grass, Rubbish or other incidents where no further additional information e.g on what is used, casualties or additional risk etc is required at that time.

Even with this limited use of mobile data, the reduction in routine radio (voice) traffic is dramatic.

There have been continuing improvements to the Fire service over the years and it is widely acknowledged that the UK Fire Service is a

'professional body, deserving credit for it's performance. It has a well deserved place in the nation's esteem .and ...localised responses to emergencies are working well...', 5

## 5 'so – if it aint broke – why fix it?'

There have been many studies of the Fire Service over recent years (footnote 2), with clear recipes for change, including options such as Joint or Shared Police/Ambulance/Fire Service Control Rooms (horizontal collaboration) or Fire only - Regional Control Rooms (vertical collaboration) the advantages of such options seen as being: improved liaison, sharing of hardware and resources, easier access to a wide pool of resources, catalyst for wider co-operation between fire brigades, accommodation and infrastructure advantages and (following high levels of initial investment) there would be lower costs with fewer Controls.

Disadvantages of the Joint Control scenario have also been identified – not least of which is the fact that Police and Fire, Ambulance & Fire borders are not in all cases co-terminus.

Together with the †Firelink Radio Replacement strategy, these combinations were seen as the way forward for Controls and Communications. However, for many reasons, there has been very little change to date with only 3 pilot schemes for joint/shared controls being set up by Cleveland, Wiltshire and Gloucestershire Fire brigades (all three have encountered institutional and industrial relations barriers to progress).

<sup>&</sup>lt;sup>5</sup> (The Future of the Fire Service, Reducing Risk, Saving Lives – <u>The Independent Review of the Fire Service</u> – Professor Sir George Bain December 2002) - known as the Bain Review

In 1996 there was amalgamation of <u>Brigades</u> in Wales going from 8 Brigades to three regional (fire service) brigades; North Wales, Mid & West Wales and South Wales, but these changes were brought about by local government reorganisation.

The agenda for change has, however, been given new impetus. New responsibilities are emerging, such as the need to deal with major terrorist threat. There is now a need for greater collaboration and interoperability, and the ability to respond on a regional and even national level.

There are the †Radio considerations, England & Wales operate contrary to normal conventions where receipt is on the lower part of the spectrum and transmission is on the higher part, Reversal of bands in order to meet international convention is costly and risky.

Current Systems are obsolete, ageing, unreliable, in excess of 30 years old in some cases Maintenance and sourcing of parts is becoming increasingly difficult.

Some systems are dependant on the Police radio infrastructure and this will not be sustainable as Police move to new Tetra System called 'Airwave'.

In addition to this on September 20<sup>th</sup>, 2002 the Government commissioned Professor Sir George Bain to carry out an independent review of the Fire Service, (the Bain Review) the proposal for the review was put forward by Fire Service employers in the course of discussions at the negotiating body for Fire Service pay.

The terms of reference required the review team to make recommendation on the future organisation and management of the Fire Service generally and in addition to the recommendations they made on conditions of service and pay, also made recommendations that are centred on the need for modernisation and flexibility - particularly the system for deploying people and the resources.

Bain argues that what is needed now is a system which deploys the resources of people and equipment so they are prepared to deal with the most likely risks of fire in the most cost effective way, using an approach based on the management of risk which recognises that people move around.

..'it [the Fire service] operates within a system of rigid prescriptions and restrictive practices, which mean that resources are not always in the right place at the right time to respond most effectively and efficiently to the community's needs...'

To be able to do this resources should be located where they are needed according to the risk present at the particular time and not as at present based on a Fire Station 24 hours a day, regardless of the level of risk.

Working practices and shift patterns would have to change; there would be the need for brigades to be able to make 'local' arrangements and agreements on shifts and hours of duty.

There would have to be more flexibility in the provision and location of resources (This will require a change in the law i.e. Section 19 of the Fire Services Act).

The current standards of fire cover would have to change to enable Brigades to locally 'risk assess' the attendances in their area and not just based on 'property' risk. (The current situation means that for example; a fire alarm actuation at a premise would attract the same weight and speed of response regardless of the time of day or night and whether the building was occupied or not).

To manage these changes, there will need to be systems in place that can manage dynamic mobilising including, for example, better use of mobile data and mapping systems using spatial rather than text based systems, and deployment of AVLS./GPS

Health & Safety of Crews and the public is also a consideration and if crews are deployed in wider areas it is vital that they are provided with full and timely information whilst en-route, giving information and advice on the potential hazards at a location and any other risks within the vicinity that they may need to take into account when making a dynamic risk assessment of the incident.

There will be the need to provide up to date, effective and reliable Data to Cabs and systems that will support GPS/GPRS

# 5 How are we going to achieve this?

In addition to some of the areas identified in the previous section, the main vehicle is the:

#### Radio Replacement Project

On 7th May 2002 the then Fire Service Minister, Alan Whitehead, announced the Government's intention to procure a national radio communications system for Fire Services in England and Wales.

This decision followed a detailed evaluation of, and means of achieving, the level of interoperability between emergency services' communications systems that was necessary to be able to deal with events of the scale of 11 September. (See also 'New Dimensions' Working Group on CACFOA Website).

A new specification reflecting the enhanced requirement for interoperability has been produced. Drawn up in terms of functional rather than a technical requirement, with the contractor responsible for achieving end-to-end functionality and performance. The contract has now gone out to tender.

In addition to addressing the interoperability issue, benefits of the Firelink project are that it will provide for better radio security, will be 'addressable' allowing crews to set up individual one to one or talk groups. It will provide two way full duplex, will be more frequency efficient than at present, maximising the available air space and it will bring the UK in line with mainline Europe radio bands.

There are cost implications both in the implementation and in ongoing contractual costs; systems in Controls will have to be upgraded to ensure they are compatible (DS200 or comparable), new radio sets will be needed on all appliances and cars. This will be a major task.

Useful websites – In addition to the Firelink website, more information on these and related issues can be found on the following websites:

- Chief and Assistant Chief Fire Officers Association (CACFOA) www.fire-uk.org
- Office of the Deputy Prime Minister (ODPM) www.odpm.gov.uk
- The Home Office www.homeoffice.gov.uk.

## In conclusion

The Government and employers are committed to the modernisation agenda, and this will mean removing what are perceived to be restrictive practices, Technical and technological considerations are one thing – the Human Interface is another and as the current situation in the UK has shown, the reaction to the Bain review and particularly to the proposed changes in the processes for staffing and duty arrangements have led to serious industrial relations problems, with strike action and non cooperation having an inevitable impact on day to day operations and organisation of the Fire Service and the safety of the public.

Dealing with these human consideration, the so called 'soft issues' – is definitely not a soft option, but one that must be resolved, the UK Fire Service has a long and proud history and there are many cultural values that people have and will continue to have, but there does need to be a mind shift.

As with any major change it is inevitable that people feel threatened, and are resistant – but personally I hope that common sense soon prevails and a compromise reached that will not only resolve this damaging impasse but (to my mind critically) will leave all – or most, parties with a sense of dignity, self respect and self worth.

Thank you.

#### Speaker's Details

Lynda left school at the age of 14, starting her first job on her 15<sup>th</sup> Birthday as an office junior, as soon as she was old enough she joined the Army and worked in Communications, leaving when she married in 1964.

Following a career break of twelve years (to care for her young daughter) Lynda's career in the Fire Service stated in October 1976 when she joined Greater Manchester County Fire Service as a Fire Control Operator, moving through the ranks on a watch to become a Watch Officer and moving into Control Management with specific responsibility for Training and Development.

In 1998 Lynda moved to South Wales Fire Service to take up a promotional and developmental opportunity, taking on the role of Control Manager in the newly created rank (for South Wales) of Principal Fire Control Officer. Lynda's first task was to oversee the successful amalgamation of the three former County controls of Gwent, Mid Glamorgan and South Glamorgan to form the new South Wales Fire Service Brigade Control. Having arrived in the Brigade only 4 months before the amalgamation she considers this to have been the most challenging, developmental and rewarding tasks she has so far undertaken.

A member of the IFE since 1995, Lynda has represented the IFE on a number of advisory panels, including the panel responsible for developing the National Standards of Competence for the Fire Service, has just stood down as President of the South Wales Branch (IFE) and sits on the Membership and Branches Committee.

A great believer in the benefits of support networks and sharing information, experience and expertise Lynda is a founder member and Chairperson of the IFE Control Special Interest Group and also the founder and Chairperson of the Control Managers Forum. She regularly organises seminars and networking opportunities.

She is regional representative and national executive committee member of Networking Women in the Fire Service (NWFS) and with the support of her Chief Fire Officer and Brigade management is involved in providing developmental workshops dealing with women's needs and women's issues, but not targeted specifically at women – the aim is to break down barriers not build them and the sessions are open to everyone.

Lynda is currently involved with a sub group of the Integrated Personal Development Working Group. (IPDGW) looking specifically at the Continuing Personal Development phase of the (National) Integrate Personal Development System (IPDS).

Lynda has a Diploma in Management Studies, is a qualified Internal Verifier and Assessor and amongst other things has qualifications in Health & Safety and Quality Assurance.

In her spare time? - she likes reading, walking and painting water colours (or trying to). Her idea of heaven, apart from a case or two of good red wine! is spending quality time with her daughter and two grandchildren on the rare occasion she gets to see them and chilling out with Brian, (her very understanding and supportive husband) in the countryside and along the coastline of the beautiful Vale of Glamorgan where she lives.

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