Fire and Rescue Service Incident Recording System (IRS): NATIONAL ROLL-OUT

Issued by:
Cath Reynolds
Fire and Resilience Directorate

Addressed to:
The Chair of the Fire and Rescue Authority
The Chief Executive of the County Council
The Clerk to the Fire and Rescue Authority
The Clerk to the Combined Fire and Rescue Authority
The Commissioner of the London Fire and Emergency Planning Authority
The Chief Fire Officer

Please forward to:

Summary
This circular provides a further update, following circular 34/2006, regarding the implementation of a national system for the recording of incidents attended by Fire and Rescue Services (FRSs). Following a successful pilot, the system is now ready for operational use by FRSs. This circular describes the purpose of IRS, the pilot, revisions since the pilot and the steps FRSs can take in order to switch to the IRS system.

For further information, contact:
Darren Sugg
Fire Statistics
Communities and Local Government
5/a Allington Towers
19 Allington Street
London SW1E 5WY

Direct line 0207 944 8362
Fax 0207 944 5664
E-mail darren.sugg@communities.gsi.gov.uk

Website www.communities.gov.uk
1.0 Background

1.1 Circular 34/2006, issued on the 20 June 2006, explained the background and rationale for a new incident recording system (IRS). Following a successful, pilot, the IRS system is now ready for use by individual FRSs. This circular briefly describes the purpose of IRS, the pilot, revisions since the pilot and the steps FRSs should take in order to adopt the system.

1.2 CLG currently collects information on incidents attended by the FRS in three ways:
   a. Primary fires attended on the FDR1 and 2 returns.
   b. Secondary fires and fire false alarms attended on the minority FDR3 return.
   c. Special services attended (including road traffic incidents) on the annual Ops 4 and 5 returns

1.3 These data are provided in a variety of ways, including, in the case of the FDR1 primary fires, in paper form. The intention to develop new electronic arrangements has been known to the FRS for some time. An initial review of the data collection took place in 2003/04. This was followed by a scoping study on how incident data could be collected using an electronic system. In parallel, there were a series of meetings and discussions regarding the data content of the new system, aspects of which have been included at the request of FRSs.

2.0 Rationale for the Incident Recording System

2.1 High quality information on the work of fire and rescue services is key to understanding risk and improving performance. CLG are investing in IRS to provide this incident information and will be encouraging fire and rescue services to start using IRS as soon as they are able, and no later than 31st March 2009.

2.2 There are a number of advantages in changing the way in which incident data are collected:
   a) Information on all incidents attended will be collected in the same way, using the same core set of questions, removing the need for the current four different returns.
   b) No need to complete and process paper FDR1 forms.
   c) More timely information will be available for both CLG and FRSs.
   d) As the IRS beds in, there should be efficiencies in data capture and verification.
   e) The collection of a core of information on all incidents attended will expand the knowledge and understanding of how FRSs operate and will help quantify the effort and impact of attending incidents other than primary fires, which has been missing up until now. This reflects new statutory responsibilities such as attending road traffic accidents.
3.0 Approaches to implementing IRS

3.1 There are two ways by which FRSs can provide electronic incident data:

   a) Providing incident data using an on-line form on a secure web-site provided by CLG; or

   b) Downloading their incident data from their management information systems using an XML internet link to the CLG web-site.

3.2 Either way, the process will involve a two way flow of data, as FRSs will be able to access their data, and generate standard reports (for example, on Best Value Performance Indicators or individual incidents) through the same internet connection to CLG. This will meet a need articulated by a number of FRSs.

3.3 For some FRSs, IRS will mean a substantial change in the way in which they collect and transfer incident data to CLG. For others, the change will be less significant. However, all FRSs will have to review their current data collection methods and business processes depending on the IRS option chosen. CLG has briefed all the leading FRS incident recording software suppliers, so that they are fully aware of the IRS proposals and the implications for their products.

4.0 Pilot and outcomes

4.1 Nine FRS took part: Buckinghamshire, Dorset, Greater Manchester, Hampshire, Leicestershire, Merseyside, Warwickshire, West Midlands and West Yorkshire. The pilot FRSs therefore represented a broad spectrum, including those with large numbers of retained duty staff, those currently using paper FDR1 forms and those with well developed incident recording systems. Of the 9 FRS in the pilot, 4 created an XML-interface. The pilot demonstrated that both IRS systems worked, and highlighted ways in which the system could be improved. Pilot FRSs are happy to be contacted for further information - the project office can provide contact details. Project office contact details are provided at the end of this Circular.

4.2 Each FRS has conducted its own Impact Assessment. These will be made available shortly on the frsonline website and via the IRS project office, together with a summary report of the pilots.

4.3 Following the pilot, the following changes were made:

   • the business process was simplified (for example, a number of questions asking for details which the attending fire officers would not know the answer at the time of the fire were removed);

   • a number of technical problems relating to the system which had been identified were rectified, improving the usability of the system.

4.4 A significant finding from the pilot for FRS was that pre-populating as much of the electronic data as possible via the mobilization system will greatly reduce the number of questions that will need to be entered into the system manually, thus easing implementation and reducing workloads for staff filling in the forms. For FRSs using the on-line form, this will mean building an interface from the command and control system to the IRS, to pre-populate the data.
4.5 Pilots also showed there is considerable variability in current business processes but that IRS is flexible enough to allow FRSs to choose which new business processes suit them. For example, an FRS may choose to use station staff or central staff to complete the forms.

4.6 The experience of the pilots is that the key issues are around business change and the training effort, rather than IT.

5.0 Fire and Rescue Services - what you should do and when

5.1 Each Fire and Rescue Service will need to conduct a full impact assessment. The impact will vary for each FRS. Factors affecting it will include current IT facilities at an FRS, MIS systems, and the ratio of retained to full-time staff. The impact assessment should cover training requirements as well as IT needs. The pilot Impact Assessments will be available at the frsonline website, showing the range of issues FRS will need to consider. Once the approach has been decided on, FRS should contact the project office to inform them of their preferred approach.

5.2 In order to achieve more integration between CLG projects, the IRS activities have been incorporated into the FiReControl transition plan. The plan details the high level activities CLG expect FRSs to consider to successfully undertake the transition to Regional Control Centres (RCCs). Accordingly, CLG are asking FRSs to update DART (the reporting system used by FiReControl and accessible by FRS coordinators) with the date they would like to switch to the new IRS system and the interim steps, including which version.

5.3 In the future, for FRSs in England, the IRS will be incorporated into each RCC. This will allow automatic data transfer between RCCs and the IRS as well as providing ongoing support for IRS. Section 8 provides more detail.

6.0 IRS Timetable

6.1 Following extensive development, piloting and testing, the IRS system is now live and operational. One of the pilot FRSs is already using the IRS to input their data live, and CLG expect a further two to follow by the end of 2007. CLG anticipate a number of FRSs will switch to the IRS for the new financial year to fit in with their business planning.

6.2 Responding to concerns over FRS capacity, CLG agreed to extend the roll-out period of IRS. The extended roll-out period is for the benefit of any FRSs unable to switch to the new system due short-term capacity problems. Nonetheless, CLG would strongly advise all FRS to join IRS as soon as is practicable. All FRS should be using the new system by the end of March 2009. After this date the current system will no longer be available (i.e. paper and electronic FRD1 forms will no longer be accepted).

6.3 CLG will continue to collect and analyse FDR1, 2 and 3 forms until the end of March 2009. Each FRS will need to decide, based on their own impact assessment, when they will adopt the IRS system and which version. Nonetheless, given the benefits of the new data collection system, CLG would recommend FRS adopt the new system as soon as is practicable.
7.0 IRS training, support and guidance

7.1 Support in using the IRS will be available for FRSs in a number of ways. A 1-day training course will be available for FRSs to attend. These will be aimed at ‘training-the-trainer’. Please contact the project office to discuss training and how to arrange attendance on a course. It will then be the responsibility of each FRS to cascade the training to all users of the system.

7.2 An e-learning package will also be available for FRSs which will provide an overview of the IRS and how to use it. This has been developed in conjunction with the Fire Service College.

7.3 CLG would like to schedule the training courses at times and locations convenient for FRSs. This will depend on the roll-out plans of each FRS.

8.0 Links with FiReControl

8.1 IRS and FiReControl will be closely linked. For English FRSs, when RCCs go live, the mobilization data submitted into IRS will originate from FiReControl.

8.2 FiReControl will support English FRSs implementation for providing electronic incident data to IRS in the following ways:

- FRSs providing IRS data using online forms will continue with this approach and will have the option to request, from FiReControl, the automatic pre-population of their forms with data directly from FiReControl
- FRSs providing IRS data through interfaces from their MIS systems will continue with this approach and develop an interface to feed their MIS with data from FiReControl – this interface could be developed by FRSs as part of their transition to FiReControl
- FRSs providing IRS data through interfaces from their current mobilising systems will have their data provided to IRS through equivalent interfaces from FiReControl.

8.3 Detailed discussions have taken place between the IRS team and the FiReControl project team. This means that the IRS will be ready to accept data from the FiReControl system when it is available.

8.4 The FiReControl system will submit data to the IRS using the published IRS XML schema. When defining the IRS schema wherever possible the FiReControl convergence product definitions have been used.

8.5 In order to continue the UK fire statistics data series, CLG will make the IRS system available to FRSs in devolved administrations without FiReControl.

9.0 Frequently Asked Questions

9.1 A list of frequently asked questions, and answers, is attached at Annex A.

Cath Reynolds

Fire and Resilience Directorate
Annex A: Your questions answered

Q. Who can I speak to learn more, or discuss an issue?

A. The contact details for the project office are:

IRS Project Office
Fire Statistics Branch
Building Research Establishment
Bucknalls Lane
Garston, Watford
Hertfordshire WD25 9XX
Tel: 01923 892902
firestatsprojectoffice@communities.gsi.gov.uk

A helpdesk for users of the system has been established and its effectiveness demonstrated during the pilot. The helpdesk is now available. Please email the IRS helpdesk at IRShelp@communities.gsi.gov.uk for support when using the system and to be provided with initial User Account details. The helpdesk telephone number is 0845 3777 888.

Please also see the articles on FRS ONLINE. (www.frsonline.fire.gov.uk/performance/article/59/510 or www.frsonline.fire.gov.uk and see the left hand bar for “New Incident Recording System”).

Q. Does more data collection mean more work?

A. Under IRS more data will be collected - data entered for each individual primary fire, secondary fire and special service attended. Although more information than under previous data collection, the benefits of electronic data capture are considerable. The new system will improve data timeliness, quality and detail, all of which is necessary for FRS to conduct IRMP risk planning as required by the Fire Services Act 2004. The new system should be more efficient, so whilst more data is being collected this should not mean there is more work.

Q. What’s involved for an FRS?

A. FRSs will have a choice of using an on-line form to report their incidents or using XML schema to provide data downloads to CLG. The on-line form will be provided by CLG, as will the format of the XML schema. FRSs should undertake an impact assessment, which assesses their current methods for providing data and options for providing data in the future. An impact assessment can then be undertaken on the options available and a decision made on the most appropriate for each FRSs circumstances.
Q. Who were the pilot FRSs?

A. Nine FRSs took part, representing a mixture of metropolitan, combined and county services: Buckinghamshire, Dorset, Greater Manchester, Hampshire, Leicestershire, Merseyside, Warwickshire, West Midlands and West Yorkshire. These FRSs have a population of approximately 13m and accounted for a third of the fires reported in England in 2005. Each of these FRSs are happy to be contacted to provide advice and information - the project office can provide contacts.

Q. How were the pilot FRSs chosen?

A: All volunteered to be in the pilot. They represent a variety of FRS types and family groups and contain a mix of on-line form users and those wishing to use the XML option.

Q. Won't it be expensive to implement?

A. The entire cost of the system development is being met by CLG in developing IRS. It is not envisaged that use of the on-line form will generate any significant extra cost to FSRs. Those FRSs using XML schema will need to make some changes to their existing electronic data systems to match the data specifications in the CLG XML schema. CLG are providing technical assistance for this and have made sample code available. The new system should be more efficient, so whilst more data is being collected this should mean efficiency savings for FRSs.

Q. Are FRS software suppliers being consulted?

A. CLG have met with all the software suppliers of which CLG are aware. CLG have explained how IRS works and many of the suppliers are considering ways in which they will respond and adapt to the new system.

Q. Will IRS be a 'new burden'?

A: No - CLG expect the savings arising from implementing IRS will offset any net additional costs of introducing the system.

Q. How does IRS relate to Firelink?

A. Both systems will link to FiReControl in England. FiReControl will provide incident data required by FRSs to submit into IRS. FiReControl will interface with the Firelink radio system to deliver mobilization messages to firefighters.

Q. How does IRS relate to e-fire/Fire Gateway?

A. As with FiReControl and FireLink, CLG are aware of the developments being pioneered in the Fire Gateway. To enhance compatibility, IRS uses the same Achieve Forms platforms for the on-line form.

Q. Will IRS users be able to use the FiReControl MDTs to complete the IRS data?

A. There are no plans to facilitate this.
Q: Will there be IRS training available to FRSs?

A: A programme of training for IRS users will be provided by Informed Solutions and CLG staff. CLG will run a series of sessions to train FRS trainers, who then train relevant staff in each FRS. The timing of these sessions will depend on FRSs implementation plans, following their initial impact assessment. An e-learning package has also been developed. There is also a separate training system on the IRS system for use by FRSs.

Q. What guidance will there be for IRS users?

A. Full technical guidance on IRS will be provided in the form of a manual and as on-line help.

Q. Will IRS be mandatory?

A. Using the existing data collection (FDR1, FDR2, FDR3, OPS 4 and 5), all FRSs already supply the majority of these data and statistics to DCLG (although in aggregate form, apart from FDR1). The introduction of IRS will not change this arrangement. The data collection benefits both CLG and FRSs in that a consistently based national picture of FRS activity can be derived from this information, which can then be used for accurate risk management planning.

Q. Will FRSs be able to access their data?

A. IRS will enable FRSs to access their own validated incident data, this will either be in the form of standard reports, for example, BVPIs or customised data downloads.

Q. Why are there two ways of supplying incident data?

A. FRSs differ in their use of IT and the ways in which they collect and store incident data. Having the option of an on-line form will assist those FRSs that do not have Management Information Systems (MISs) which can use the XML schema. Those with MISs which can use the XML, can download data relatively easily.

Q. How difficult is it to build an interface?

A. This obviously depends on the skills an experience of the developers involved. During the Pilot, those FRS who had experience did not have any problems. FRSs that didn't have relevant experience found it more difficult - as a result of this CLG are going to provide example code and a sample application as part of the XML schema pack. This should make it easier for FRSs to build interfaces.

Q. What help will you provide to build an interface?

A. As each FRS has different mobilizing and MIS systems CLG cannot provide a standard interface, however example code is being provided. Where an FRS's impact assessment highlights significant IT problems CLG may be able to offer assistance, whilst seeking to ensure that relevant skills are transferred to FRSs wherever possible.
Q. How long does it take to build an interface?

A. Again this depends on the skills/experience of the developers and the complexity of the interface being built - are you submitting all data or only pre-populating the online form with mobilizing data? Experience from the pilot suggests that to build and test an interface to pre-populate the form will take from 10-25 days effort.

Q. Is it essential to build an interface?

A. It is not necessary, users can use the Online forms system to enter all data manually. Experience from the pilots has shown that it is highly desirable to pre-populate some data. Without an interface, users will have to re-enter data that is already available in the mobilizing system, as well as causing duplication of effort this can also lead to data entry errors.

Q. How can we retrieve our data?

A. The system will allow each FRS to retrieve their data in CSV or XML format. The XML format is the complete data for each incident whereas the CSV format provides a reduced set of data. Each FRS will then be able to import the data into their own systems for analysis. As part of the XML schema pack CLG are providing example code to import the XML data into an Access database.

Q. What was the outcome of the pilot?

A. A pilot evaluation report is available which describes what was achieved in the pilot and what the findings were. This is available on FRSonline.

Q. What did the pilot FRSs do?

A. Each Pilot FRS has completed an impact assessment which is available on FRSOnline. These describe what each Pilot FRS achieved and also describes what they needed to do to implement the system.

Q. Why not wait for FiReControl?

A. FiReControl is 4 years away for some FRSs. The experience of the pilots is that the key issues are around business change and the training effort, rather than IT. Business change and training for IRS are fairly independent from FiReControl, so there will be little benefit in waiting for FiReControl but there will be considerable benefits in the high quality information IRS will provide, for example to assess risk and improve performance is required now.

Q. How long will it take to input the data?

A. This depends on the type of incident and whether the data is being pre-populated. For example, CLG estimate:

- a false alarm with data pre-population 4 questions need to be answered and CLG estimate it will take 4 minutes. This is the most common incident type (approx 40% of incidents)
- a primary fire with a casualty could have between 70 and 80 questions and take 30 minutes to complete correctly - but this relates to 0.7% of incidents and is comparable with the effort required to complete an FDR1.
Q. What data are being collected in relation to equality and diversity?

A: Following consultation with CFOA, gender and ethnicity will be recorded for all individual fire casualties, and information will be collected on the human factors that contributed to a fire starting, including disability. Although initially no information will be collected about the ethnicity of households, or in relation to fires with no casualties or non-fire incidents, this be will the subject of further discussions with CFOA as will the collection of equality and diversity data in relation to other aspects of service delivery. CLG will also undertake an annual review of the data collection.

Q. Will the system be updated in the future?

A: CLG will undertake an annual review of the data collection, including the questions asked, the guidance and the use of the system. This annual review will include users of the data and the system and should help to continually improve it.