

Private & Confidential

CLG Fire and Rescue Service (F&RS)



XML Schemas v1-0i - Release Note

Hyfinity Limited Innovation Centre
Central Boulevard
Blythe Valley Park
Solihull
West Midlands B90 8AJ

Web: <http://www.hyfinity.com>
Tel: +44 (0)121 506 9111
Fax: +44 (0)121 506 9112

Date 9th August 2007
Doc Ref Hyfinity-CLG-frs-005
Version 1.0i

Controlled Copy Darren Sugg, Richard Edwards,
FRS Community Developers

Contacts **Steve Bailey**
Mobile: 07904 153502
<mailto:steve.bailey@hyfinity.com>

Abdul Kayam
Mobile: 07904 153503
<mailto:abdul.kayam@hyfinity.com>

Contents

1	INTRODUCTION.....	5
2	SCHEMA FILE CHANGE DETAILS.....	6
3	APPENDIX F – FINAL PRODUCTION IMPLEMENTATION CHANGES - V1-0i	7
3.1	Incident Identity - New Incident Status Value	7
3.1.1	Change Requirement.....	7
3.1.2	Schema Change	8
3.2	Incident Identity - Over the Border	8
3.2.1	Change Requirement.....	8
3.2.2	Schema Change	8
3.3	Incident Identity - Parent Incident ID	9
3.3.1	Change Requirement.....	9
3.3.2	Schema Change	10
3.4	At Call - Mobilise Incident Type not known	10
3.4.1	Change Requirement.....	10
3.4.2	Schema Change	10
3.5	At Call - Origin of Call not known	10
3.5.1	Change Requirement.....	10
3.5.2	Schema Change	11
3.6	At Call - MobiliseIncidentType.....	11
3.6.1	Change Requirement.....	11
3.6.2	Schema Change	11
3.7	At Call – Group Incident Times Together.....	11
3.7.1	Change Requirement.....	11
3.7.2	Schema Change	11
3.8	On Attendance – Multiple Type Incidents	12
3.8.1	Change Requirement.....	12
3.8.2	Schema Change	12
3.9	On Attendance – Involvement of Persons	12
3.9.1	Change Requirement.....	12
3.9.2	Schema Change	12
3.10	Additional Info - Fires - Is the Property Regulated (RRO)?	13
3.10.1	Change Requirement	13
3.10.2	Schema Change	13
3.11	Additional Info - Fires – Listed Building	13
3.11.1	Change Requirement	13
3.11.2	Schema Change	14
3.12	Additional Info - Fires – Outdoor Areas	14
3.12.1	Change Requirement	14
3.12.2	Schema Change	14
3.13	Additional Info - Fires – Involving Explosions.....	14
3.13.1	Change Requirement	14
3.13.2	Schema Change	14
3.14	Additional Info - Fires – Safety Systems & Facilities Present	14
3.14.1	Change Requirement	14
3.14.2	Schema Change.....	15
3.15	Additional Info - FOSI Details Removed.....	15
3.15.1	Change Requirement	15
3.15.2	Schema Change.....	15
3.16	Additional Info - Terrorist / Major Indicators	16
3.16.1	Change Requirement	16
3.16.2	Schema Change.....	16
3.17	Additional Info - False Alarms - Previously Attended	16
3.17.1	Change Requirement	16
3.17.2	Schema Change.....	16
3.18	Additional Info - Hazardous Materials	16
3.18.1	Change Requirement	16
3.18.2	Schema Change.....	17
3.19	Additional Info - RTCs	17
3.19.1	Change Requirement	17

3.19.2	Schema Change.....	17
3.20	Fire Action / Damage – Question Changes.....	18
3.20.1	Change Requirement	18
3.20.2	Schema Change.....	18
3.21	Additional Info – Fire - Means of Escape Changes.....	18
3.21.1	Change Requirement	18
3.21.2	Schema Change.....	19
3.22	Resources Used - Callsigns	20
3.22.1	Change Requirement	20
3.22.2	Schema Change.....	20
3.23	Resources Used - Number of Supervisory Crew	20
3.23.1	Change Requirement	20
3.23.2	Schema Change.....	20
3.24	Resources Used – Vehicles Deployed	20
3.24.1	Change Requirement	20
3.24.2	Schema Change.....	20
3.25	Resources Used – Equipment Used	21
3.25.1	Change Requirement	21
3.25.2	Schema Change.....	21
3.26	Resources Used - Vehicle Data and Time Validation	21
3.26.1	Change Requirement	21
3.26.2	Schema Change.....	21
3.27	Resources Used - Vehicle Deployment to Location	22
3.27.1	Change Requirement	22
3.27.2	Schema Change.....	22
3.28	Resources Used - Vehicle Deployment from Location.....	22
3.28.1	Change Requirement	22
3.28.2	Schema Change.....	22
3.29	Involvement of Persons – Ethnicity of Victims.....	23
3.29.1	Change Requirement	23
3.29.2	Schema Change.....	23
3.30	Involvement of Persons – Fire Related Victims.....	23
3.30.1	Change Requirement	23
3.30.2	Schema Change.....	23
3.31	Involvement of Persons – Evacuation Assistance	23
3.31.1	Change Requirement	23
3.31.2	Schema Change.....	24
3.32	Involvement of Persons – Victims	24
3.32.1	Change Requirement	24
3.32.2	Schema Change.....	24
3.33	Search Incidents – Additional information	25
3.33.1	Change Requirement	25
3.33.2	Schema Change.....	25
3.34	Search Incidents – Page Controls.....	25
3.34.1	Change Requirement	25
3.34.2	Schema Change.....	25
3.35	General - Drop-Down List changes	26
3.35.1	Change Requirement	26
3.35.2	Schema Change.....	26
3.36	General - Developer Changes.....	28
3.36.1	Change Requirement	28
3.36.2	Schema Change.....	28

Document Metadata Information

Title	F&RS Incident – XML Schema v1-0i – Release Note
Creator	Steve Bailey
Subject	F&RS, GovTalk, Interoperability, Requirements, Design, XML, UML
Description	Details the XML Schema Changes for the v1-0i of the F&RS Incident Reporting Project
Publisher	F&RS for the CLG
Contributors	
Date	9 August 2007
Type	Analysis
Format	MS Word
Identifier	
Language	English
Rights	Hyfinity Limited
Audience	Domain experts
Contact	Steve Bailey, Hyfinity Limited (email: steve.bailey@hyfinity.com – Tel: 0121 506 9113)
Version	1-0i
Status	Published
Project	F&RS Incident Recording Project

Document History

Author: Steve Bailey			Owner:	Approving Body: FRSD Project Board team
Date	Version	Changes made by	Reason for Change	Doc. Status
20-03-06	v1-0a	Steve Bailey	Document Created. Addition of DeployedFrom data for Vehicles.	Draft – To be extended
14-05-06	v1-0b	Steve Bailey	Changes to WSDLs and XSDs to accommodate .NET v2.0 binding issues	
30-06-06	v1-0c	Steve Bailey	Schema changes reflecting User Needs Specification changes for the Pilot IRS system.	
10-07-06	v1-0d	Steve Bailey	Final implementation Adjustments for the pilot	Published for Pilot
08-08-06	v1-0e	Steve Bailey	Final rules and schema adjustments	Published for FRS Community
15-06-07	v1-0f	Steve Bailey	Adjustments arising from the Pilot.	Published for Production Usability system
11-07-07	v1-0h	Steve Bailey	Adjustments arising from the Pre-Production Usability Test.	Published for Production UAT system
09-08-07	V1-0i	Steve Bailey	Adjustments from Production UAT.	Published for Production system

1 Introduction

This document describes the changes to version 1-0i of the ODPM FRS IRS schema documentation. The actual Schema Version Numbers referenced in the XML Schemas have not been changed as they have not yet been published officially on GovTalk.

The schemas had previously been released to the FRS community as drafts for early review and assessment of the system and business process impact for the FRS Community. The v1-0i changes referred to in this document have arisen as a result of the final review of the Pilot system, feedback from FRS's and some amended business requirements.

Note: Schema Versions will only be incremented once the Schemas have been published and authorised by GovTalk and the Incident Recording System (IRS) has gone into production. Once published, if a schema changes it will have its version number incremented. If any of the architectural schemas change the Messages Schema (FRSIncidentMessages-v1-0.xsd) will also be changed setting the Version Number attribute explicitly for the root elements that would be transmitted within a SOAP Body. This would allow each Incident to be related to the Schema Version used to validate and store the data in the IRS Pre-Published database.

2 Schema File Change Details

The table below identifies the changes and the impact in respect to each specific Schema.

Key: (*) = Mandatory element

XRef	Schema	Element	Impact	Reason
v1-0i	All	Due to the broad range of change all the Schemas have been amended.		

3 Appendix F – Final Production Implementation Changes - v1-0i

The following requirements for change were identified during the piloting process.

3.1 Incident Identity - New Incident Status Value

3.1.1 Change Requirement

Some FRS's have the need for the FireOfficers to capture the majority of the details, but to leave some fields incomplete for others to populate before the incident is Published e.g. Fire Safety / Inspection details. It is recommended that a new status is introduced of '65 = Recorded with Queries' for this purpose.

Incident Status	Description	Notes
0	"Cancelled"	The incident is no longer required. (value changed from 99)
20	"Mobilised"	
30	"Arrived At Scene"	
40	"Under Control"	
50	"Closed"	(Mobilise data captured). Incident Closed and all Vehicles/Appliances available for re-deployment.
55	"Closed with Queries"	(Mobilise data captured)
60	"Recorded"	Incident fully recorded after the event by the FireOfficer
65	"Recorded with Queries"	Incident recorded by the FireOfficer, but there are some details still to be completed by others in the FRS.
70	"Published"	Incident quality assured and ready for Publication.
75	"Published with Conditions"	Incident quality assured, but further details expected in the future e.g. Awaiting coroners report.
80	"Queried by National Statistics"	Statistics Team have raised a query regarding the Incident published by the FRS.
90	"Closed by National Statistics"	Statistics Team have audited & closed the Incident. The Incident is now part of the National Statistics.

3.1.2 Schema Change

New value for IncidentStatus is '65 = Recorded with Queries'.

Change the Cancelled Status from '99' to '0' to restrict any validation rules that may have applied accidentally e.g. those related to Publication.

3.2 Incident Identity - Over the Border

3.2.1 Change Requirement

Currently, Over the Border incidents are identified with a simple 'Yes/No' flag. It has been concluded that the IRS system needs to ensure that only one Incident from the territory of the FRS of where the Incident occurred is recorded.

If FRS A (recording party) solely attends over the border on behalf of FRS B (territory party), FRS A will record the Incident on FRS B's behalf. The incident is registered for FRS B, but FRS A's FireOfficer compiles, records and publishes the incident details. As FRS A would have its own internal incident number, this should be recorded against the Incident to allow it to be retrieved from the IRS system by FRS A.

If FRS A attends over the border, but FRS B is managing the Incident then FRS B would record the incident, but reference FRS A's appliances on the Incident. FRS A would not submit an incident to the IRS system.

Searching for Incidents should allow FRS A or B to find the Incident they have Recorded and Published for their FRS territory or other FRS territories.

3.2.2 Schema Change

The FRSId field within the 'NationalStatisticsNumber' Structure identifies the FRS who's territory the incident occurred within. This value will be defaulted by the WebService for the InsertIncident operation by using the user authentication details if the field is not supplied in the message. The FRS would need to populate this field with the FRSId of where the incident occurred if the incident is an 'Over The Border' incident.

The 'ResponsibleParty' details records the details of who is responsible for recording and publishing the Incident. The ResponsibleParty structure includes: 'FRSId', 'StationId', 'FireOfficerId'.

The FRSId will be defaulted by the WebService to the FRSId of the recording FRS authenticated user account. For this reason the ResponsibleParty field is defined as optional in the schema.

The StationId and FireOfficerId fields are optional. This allows the online forms or an FRS's Command and Control System to default these details if they have the information. These fields will allow the 'MyIncidents' Search functionality on the website to retrieve Incidents based on the ResponsibleParty fields: 'FRSId', 'StationId', 'FireOfficerId'.

An additional 'OverTheBorderFRSIncidentIdentifier' will be added as an optional field along side the OverTheBorderIndicator to allow the FRS to specify the internal FRSIncidentIdentifier on behalf of the territorial FRS.

This OverTheBorderFRSIncidentIdentifier should be checked to ensure it does not exist on the IRS system for Inserts and Amendments.

Insert and Amend Controls

Authentication/Authorisation checks will check against the ResponsibleParty 'FRSId' and the Territory 'FRSId' to decide whether a user can Insert or Amend Incidents. A user can only Insert Incidents for their own FRS by using the FRSId within the ResponsibleParty structure (defaulted by the Web Service).

The system will restrict amendments to:

- The FRS who inserted the Incident (ResponsibleParty FRSId)
- The FRS who's territory the incident occurred within. Please note that currently this FRS can only Amend an Incident to add an alternative reference to their OverTheBorder FRS IncidentIdentifier.

Search and Get Controls

The SearchIncidents will retrieve Incidents based on the territorial 'FRSId' within the 'NationalStatisticNumberStructure' and the 'ResponsibleParty' 'FRSId'. The SearchIncidents criteria will allow an FRS to select incidents based on a number of criteria e.g. Who Recorded the Incident (ResponsibleParty), Where was the Incident, Only Over The Border Incidents, etc. The default search will retrieve all Incidents for an FRS (Territory or ResponsibleParty matches).

A number of other fields have been added as controls for selecting Incidents. There will now be a range of for Incident Status (From and To). The range is defaulted to select all Incidents regardless of the status value.

The users can also filter the results by IncidentCategory and PostCode.

The Search Results will return the 'OvertheBorderIndicator' and 'OverTheBorderFRSIncidentIdentifier', which should be displayed on the search results screen.

3.3 Incident Identity - Parent Incident ID

3.3.1 Change Requirement

A number of minor Incident scenarios have been discussed that may require the ability to link Incidents. The pilot review has concluded that this capability should be deferred at this stage, and won't be used for the first production system release.

3.3.2 Schema Change

Note: The Parent ID details will remain in the schemas, but is not currently planned to be used for the first Production system release. These fields should not be used at present. If used they will be ignored.

3.4 At Call - Mobilise Incident Type not known

3.4.1 Change Requirement

One of the FRS Command and Control systems does not capture a coded IncidentType. The FRS system captures a free-text description only. This has resulted in automated pre-population having to 'fudge' the recording of incidents to get round the problem.

There is a requirement to handle this situation by enabling the capture of the description by the Command and Control system, but then the FireOfficer will select an appropriate code when recording the full incident details.

3.4.2 Schema Change

A MobiliseIncidentType '0 = Not Known' value will be added. An optional 'Description' text field has been added as an attribute of the MobiliseIncidentType. The 'Description' will be mandatory if the MobiliseIncidentType is '0'.

This will allow an Incident to be created without the Command and Control system incorrectly setting the MobiliseIncidentType. A FireOfficer would assign the correct type at a later point by referring to the 'Description' recorded.

There will be a new rule to prevent the Incident being 'Published' unless the MobiliseIncidentType is changed from '0'.

Note: The Taxonomy ID range will be altered to '0' to '9999'.

3.5 At Call - Origin of Call not known

3.5.1 Change Requirement

One of the FRS Command and Control systems does not capture a coded 'Origin of Call' Type. The system captures a free-text description only. This has resulted in automated pre-population having to 'fudge' the recording of incidents to get round the problem.

There is a requirement to handle this situation by enabling the capture of the Description by the Command and Control system, but then allowing the FireOfficer to apply the appropriate code when recording the full incident details.

3.5.2 Schema Change

An OriginOfCallType '0 = Not Known' value will be added. An optional 'Description' text field has been added as an attribute of the OriginOfCallType. The 'Description' will be mandatory if the 'OriginOfCallType' is '0'.

This will allow an Incident to be created without the mobilisation system setting the OriginOfCallType. A FireOfficer would assign the correct type at a later point by referring to the Description.

There will be a new rule to prevent the Incident being 'Published' unless the OriginOfCallType is not '0'.

The 'Was call confirmed?' question has been removed.

3.6 At Call - MobiliseIncidentType

3.6.1 Change Requirement

The Pilot project has identified the need to present the Mobilise Incident Types based on the tree-structure style user interface control used by the on attendance PropertyType, SpecialServiceType, FalseAlarmReason.

In addition some of the RCC values will be suppressed as they are only relevant to 'Mobilisation Calls' and not 'Attended Incidents' recorded by IRS. This means restricting captured incident details to those incidents that are attended by FRS appliances. This allows the RCC Incident types list to be used, but restricts those that can be recorded by the IRS system.

3.6.2 Schema Change

The MobiliseIncidentType Taxonomy has been restructured to create a Tree structure presentation appropriate to ease user selection. In addition a 'ForNationalStatisticsUse' (yes/no) attribute has been added to specify that certain Incident Types will not be valid for the IRS system as they are not relevant to IRS Incident Recording. Those entries marked with a 'yes' cannot be displayed or used in the IRS system.

3.7 At Call – Group Incident Times Together

3.7.1 Change Requirement

The Pilot project has identified that it would simplify pre-population from Command and Control Systems if some of the details that are moved into the 'AtCall' section. This would prevent issues where Command and Control systems are unable to pre-populate unrelated details in the 'OnAttendance' section.

3.7.2 Schema Change

The 'TimeStoppedMobilising' and 'TimeIncidentClosed' have been moved from the 'OnAttendance' to the 'AtCall' structure.

3.8 On Attendance – Multiple Type Incidents

3.8.1 Change Requirement

The Pilot project has identified the need to move further towards an Incident-centric rather than Fire Incident-centric approach.

This means that the Incident capture will alter to capture details which may have traditionally applied to a single Incident. For example, it is possible to have a Fire Incident, resulting from a RTC with Hazardous Materials involved.

Various changes will be made to enable this change in focus.

3.8.2 Schema Change

PropertyType will now be mandatory for all Incidents.

It will now be possible to have 'Fire' and 'SpecialService' structures, but never in combination with 'FalseAlarms' structure.

The RTC and HazardousMaterial specific question structures will be contained within the SpecialService Structure if required to be populated. This requires that the HazardousMaterials structure is moved.

For each of these data structures there will be a specific (yes/no) question which decides whether the respective data structure should be present (HazardousMaterialsInvolved and IsRTC).

3.9 On Attendance – Involvement of Persons

3.9.1 Change Requirement

The Pilot project has identified the need to move further towards an Incident-centric rather than Fire Incident-centric approach.

The on attendance will ask two specific questions to ascertain people involved for any type of Incident Fire or Special Service:

- EvacuationAssistance took place
- Victims were involved (Rescues, Injuries or Fatalities)

These questions will be defaulted to 'no' and not displayed for FalseAlarms.

3.9.2 Schema Change

A new data structure InvolvementOfPersons will be created containing two explicit (yes/no) questions, each deciding whether the respective structure should be populated:

- EvacuationAssistanceInvolved (yes/no) - EvacuationAssistanceStructure
- VictimsInvolved (yes/no) - VictimsStructure

Each of these questions will decide whether the respective data structure should be present.

3.10 Additional Info - Fires - Is the Property Regulated (RRO)?

3.10.1 Change Requirement

It has been identified that a number of questions are asked during the form filling process that could be suppressed for Primary Fires affecting Private Dwellings. A number of questions are related to need for regulatory based questions for commercial buildings, but these don't need to be asked for private dwellings.

A new question 'IsPropertyRegulated (yes/no/don't know)' would be added to ascertain whether the building is for private or commercial use.

This will enable the following fields to be defaulted to 'yes' for regulated commercial properties - IsPropertyRegulated = 'yes':

- Q65 – Details of active fire safety systems
- Q86, 87, 88 – Building Facilities Present

The IsPropertyRegulated value will be defaulted from the PropertyType Taxonomy when the PropertyType is selected. The field can then be manually overridden.

3.10.2 Schema Change

Introduction of a new attribute of 'IsPropertyRegulated' (Yes/No) for the 'PropertyType'.

The IsPropertyRegulated of the PropertyType will be defaulted from the PropertyType Taxonomy when the PropertyType is selected.

If the question is answered 'No' then the set of fields related to the questions referenced above do not need to be captured.

The current question regarding the date of the last RRO inspection has been removed.

3.11 Additional Info - Fires – Listed Building

3.11.1 Change Requirement

The decision has been made that the IncidentLocation will force the recording of Geo Coordinates. This means that if National Heritage needs to determine if a property on an incident is a ListedBuilding the information can be determined offline by using the X and Y coordinates.

The National Heritage would hold a Gazetteer with details of the Listed properties that can be matched to the coordinated collected for Building Fire Incidents.

This means that the FRS Officer does not need to try and determine this value, which could be unreliably captured.

3.11.2 Schema Change

The ListedBuilding element has been removed.

3.12 Additional Info - Fires – Outdoor Areas

3.12.1 Change Requirement

There has been a request to capture the area affected by wild fires that impact large areas. If a Fire is identified as a large Outdoor fire then it is necessary to capture the area damaged in hectares.

3.12.2 Schema Change

An additional optional element LargeAreaSize integer will be added as an attribute to the DamageArea field within the OutdoorAreaStructure. This field will only be required if the DamageArea is set to 'Over 10,000 square metres = 1 hectar'. The LargeAreaSize will be units of hectars.

3.13 Additional Info - Fires – Involving Explosions

3.13.1 Change Requirement

A new explicit 'Was there an explosion?' (yes/no) question has been added. If this is answered with a 'yes', then the existing specific questions will be raised:

- Q60. 'Explosion due to dangerous substances'
- Q61. At what stage
- Q62. Containers Involved

3.13.2 Schema Change

Added new question ExplosionInvolved (yes/no/don't know).

Added ExplosionDetails structure for the three other fields.

3.14 Additional Info - Fires – Safety Systems & Facilities Present

3.14.1 Change Requirement

The forms captures makes it difficult to quickly identify that no details are required to be captured for: Alarm Systems Present, Safety Systems Present, Manual Systems and Building Facilities Present. All these sections allow one or more rows of detail to be captured. It is currently necessary to enter a single row in some row entries to define that there are 'none' present as most questions are presented as mandatory on the forms.

To improve the forms capture it has been identified that explicit (yes/no/don't know) questions should be asked for each section. The relevant section is then displayed on

the form if the question is answered 'yes'. This will also allow the data to clearly and consistently illustrate if the information was deliberately not recorded.
Also refer to 4.7 above for some of the values can be default to 'yes'.

3.14.2 Schema Change

The following structures will now include an explicit (yes/no/don't know) question to identify if any details are captured e.g. 'AlarmSystemsPresent':

- AlarmSystemsPresent
- SafetySystemsPresent
- ManualSystemsUsed
- BuildingFacilitiesPresent

The drop-down lists for Q66a, Q66b, Q82, Q86 will have any 'None present' and 'Not known' values removed. Therefore, rows of information will only be captured if there are relevant details to be captured.

3.15 Additional Info - FOSI Details Removed

3.15.1 Change Requirement

It has been decided that not all the current FOSI details are needed to be captured. Most of the details could be determined from other elements of data e.g. Fatalities for Members of the Public.

The details have been reduced to those not captured elsewhere:

- Were there attacks on Firefighters? (Yes/No)
- 'What type of Attack', 'Number of Serious Injuries' and 'Number of Slight Injuries'.

All other details have been removed.

3.15.2 Schema Change

The FOSI Structure will be renamed to AttackOnFirefightersStructure. The following fields have been removed:

- FOSI Classification
- PoliceAttended
- AmbulanceAttended

The following field has been added:

- AttackOnFirefightersInvolved (Yes/No)

If the question is answered 'yes' then the AttackOnFirefightersStructure must be populated. This structure will now be located in the 'InvolvementOfPersons' structure.

3.16 Additional Info - Terrorist / Major Indicators

3.16.1 Change Requirement

The definitions for these two indicators are quite ambiguous and thus open to variable interpretations. The National Statistics teams' goal is to collect factual based data and to avoid data that would be recorded in an inconsistent manner. It is for this reason the decision has been made to drop the collection of these two fields.

3.16.2 Schema Change

The following two fields will be deleted:

- TerroristIncident (yes/no)
- MajorIncident (yes/no)

3.17 Additional Info - False Alarms - Previously Attended

3.17.1 Change Requirement

It is felt that the specific question for False Alarms 'AttendedPreviously' is no longer required and was likely to be captured incorrectly.

3.17.2 Schema Change

'AttendedPreviously' field has been removed.

3.18 Additional Info - Hazardous Materials

3.18.1 Change Requirement

At present the decision on whether Hazardous Material Details need to be captured is governed by the mobilisation incident type selected. This means that the form requests the details to be entered, but the incident on attendance may not need the details. For example, the Incident on attendance may have become a false alarm, or a different type of Special Service.

The current validation rule needs to be relaxed to allow the incident to be published, but prompt the user to consider whether the Hazardous Material Details should be captured.

This will be changed by using an explicit (yes/no/don't know) question defining whether the user needs to record Hazardous Materials for a Fire or a Special Service.

3.18.2 Schema Change

The GenericType for the Incident is currently defaulted from the MobiliseIncidentType. This will be replaced by an attribute on the 'OnAttendance' SpecialServiceType. This attribute (IsHazMat – yes) will be used to default the explicit 'HazardousMaterialsInvolved' (yes/no/don't know).

The user can change the field value when it is displayed on the AdditionalInfo form section. The FireOfficer would set the field to 'yes' if Hazardous Materials details need to be captured.

Note: Adjust rule to use the (yes/no/don't know) indicator. This will prompt the user to enter the HazardousMaterialsInvolved if set to 'yes'.

To assist capture of the most common Hazardous Materials a drop-down list will be added to the form. The drop down list will display the most common values and will pre-populate the appropriate UN Code. If one is not selected from the list the user can manually enter the UN Number. The list will be based on the 'CommonUNNumberListType' in the Hazardous Materials Schema.

3.19 Additional Info - RTCs

3.19.1 Change Requirement

The decision has been made to capture specific questions for RTCs. The following questions will be captured:

- Number of small vehicles (including Cars, Mini vans, etc.)
- Number of large vehicles (coaches, lorries etc)
- Number of two-wheeled vehicles (motorbikes, bicycles, etc.)
- Were any extrications performed? – (yes/no)

For each extrication:

- Type of Vehicle (based on 'RoadVehicle' PropertyType values)
- Position of vehicle
- Type of extrication method used (if any)
- Time taken for extrication

RTC's will be defaulted based on an indicator on the SpecialServiceType Taxonomy. This will default an explicit question 'Was the Incident an RTC? (yes/no)'.

3.19.2 Schema Change

Add NoOfLargeVehicles, NoOfSmallVehicles, NoOfTwoWheeledVehicles as integers (mandatory with zero allowed) within an optional MultipleVehicles Structure.

Add ExtricationsPerformed (yes/no).

Add Repeating structure of 'ExtricationDetails' including: TypeOfVehicle, PositionOfVehicle (drop-down list), MethodUsed (drop-down list), TimeTaken (drop-down list).

3.20 Fire Action / Damage – Question Changes

3.20.1 Change Requirement

The question 'Was there follow-up Fire-Safety action or Investigation?' has been removed.

The question 'Has there been CFS Activity in the last financial year?' has been removed.

Add a new question 'Make/Model of appliance' dependant on Q48 Main Cause being set to '4 = Faulty lead to equipment or appliance', '5 = fault in equipment or appliance', '15 = Vehicle crash or collision or '99 = Other'. The question will only appear if these values are set, but it will still be optional.

Other human factors affecting cause has been split into two questions.

Q52a1) 'Human factors contributing to the cause' has been altered. Q52b) 'Was impairment due to suspected drugs/alcohol a contributory Factor?' has been added.

3.20.2 Schema Change

FireSafetyInvestigation has been removed.

CFSActivity has been removed.

MakeModelDescription optional text attribute has been added to the MainCause.

SuspectedUnderInfluence (yes/no/don't know) has been added.

HouseholdOccupancyType, OtherHumanFactors and SuspectedUnderInfluence are all now mandatory fields.

Added new field for OccupiedAtTimeOfIncident (yes/no/don't know) for Building Fires within the BuildingStructure.

3.21 Additional Info – Fire - Means of Escape Changes

3.21.1 Change Requirement

The question 'Means of Escape has been split into two questions for clarity:

- Means of Escape
- Compartmentation

The two questions need to have an 'Other' option.

3.21.2 Schema Change

The 'Details' field within the SafetySystems Structure has been renamed to MeansOfEscape. A new field Compartmentation has been added to the same structure. Both have specific drop-down lists.

The two questions have had an 'Other' attribute text field added.

3.22 Resources Used - Callsigns

3.22.1 Change Requirement

The current collection of callsigns has been designed for the future Regional Command & Control (RCC). It has been identified that FRS's would like to capture their own FRS callsigns until the Regional Command & Control (RCC) are adopted by each FRS.

3.22.2 Schema Change

There will be two sets of callsigns for Vehicles, Equipment and FireOfficers, one for the Regional Command & Control (RCC) project based on the convergence products, and one for local FRS usage.

A new 'FRScallsign' will be added to each structure. This will be free format text field.

The data structures will be changed to make the 'RCCcallsign' mandatory and the 'FRScallsign' optional OR the 'RCCcallsign' optional and the 'FRScallsign' mandatory. This will allow all current and future FRS requirements to be handled.

3.23 Resources Used - Number of Supervisory Crew

3.23.1 Change Requirement

Currently the 'Number of Supervisory Crew' field is captured against each 'Vehicle' detail entry. The requirement has been altered to capture a single figure for the 'Additional Supervisory Officers' that attend an Incident.

3.23.2 Schema Change

The 'NumberOfSupervisoryCrew' field will be deleted for individual 'Vehicle' details.

A new field will be located within the ResourceUsage structure: NumberOfNonRidingOfficers (mandatory count 0 to 999).

3.24 Resources Used – Vehicles Deployed

3.24.1 Change Requirement

The form supports an explicit question: 'Please indicate the number of appliances deployed to the fire'. This field has been added to the schemas to assist the online forms.

3.24.2 Schema Change

The 'NumberOfVehiclesDeployed' (0 to 999) field has been added. A check for more than 5 appliances deployed will be added as a Rule. To publish an incident the field value must match with the actual number of vehicles recorded on the incident.

3.25 Resources Used – Equipment Used

3.25.1 Change Requirement

An explicit question 'Were resources or equipment used at the Incident?' (yes/no) has been added. Generally it is expected that this will be answered as 'yes'. It will be defaulted to 'no' for FalseAlarms and Late Call Fires and 'yes' for all other Incidents.

3.25.2 Schema Change

The 'EquipmentUsed' (yes/no) field has been added to the ResourceUsage structure.

3.26 Resources Used - Vehicle Data and Time Validation

3.26.1 Change Requirement

It is felt that some FRS's will find it difficult to capture all the vehicle / appliance date and times. The decision has been made to make some of the date and time values optional: TimeMobilised, TimeMobile.

The TimeReturned will be deleted as it is not believed that this can be captured.

The following fields will remain mandatory as they are the minimum to ensure the resource information can be analysed usefully: TimeAtScene, TimeAvailable (for redeployment).

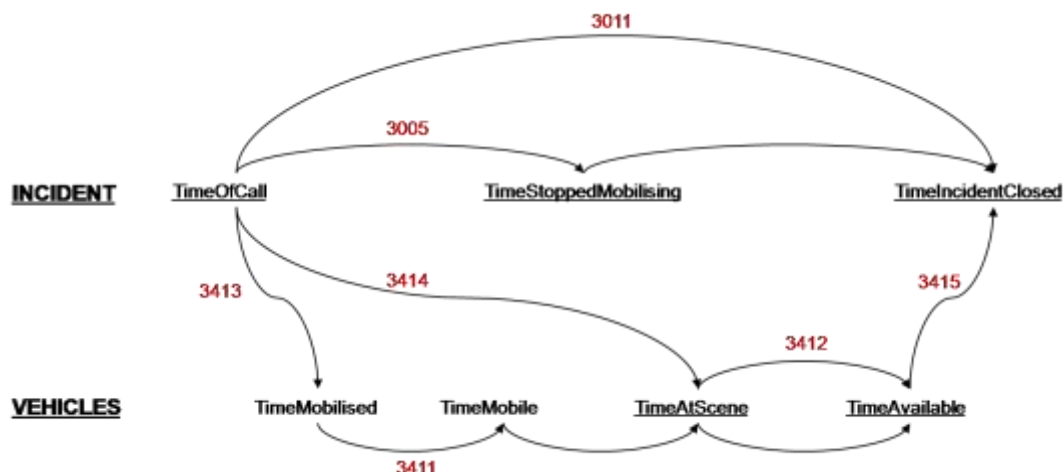
3.26.2 Schema Change

The following date and time values are now optional: TimeMobilised, TimeMobile.

The TimeReturned will be deleted as it is not believed that this can be captured.

The following fields will remain mandatory: TimeAtScene, TimeAvailable (from Scene).

Rules will be added to tighten validation for the sequence of these dates and times and those that apply to the incident as a whole. The rule dependencies are highlighted below, including the rule error numbers.



3.27 Resources Used - Vehicle Deployment to Location

3.27.1 Change Requirement

Currently the Deployment Location is attached to the Incident as a whole. It has been decided that the information will be moved to the Vehicle / Appliance details. The data is optional and not expected to be captured until the Regional Command and Control system comes into operation.

3.27.2 Schema Change

DeploymentLocation will be relocated to 'ResourceUsage / VehicleStructure'. It will be renamed to 'DeployedTo'. The 'DeployedTo / Location' will be optional as the 'IncidentLocation' will be assumed if it is empty.

3.28 Resources Used - Vehicle Deployment from Location

3.28.1 Change Requirement

The deployment from location has been altered to allow three element structures to be selected that are mutually exclusive:

- Home Station – FRSId and StationId of the appliances base station
- Other Station – FRSId and StationId of the appliances temporary station
- Location – Other Address or Non-Addressable location e.g. another incident

The data is mandatory and expected to be captured by FRS Command and Control systems.

3.28.2 Schema Change

DeploymentFrom has been implemented with a choice structure for the three options above within the 'ResourceUsage / VehicleStructure'.

3.29 Involvement of Persons – Ethnicity of Victims

3.29.1 Change Requirement

The pilot form had two fields, but should only have single field displayed for selection. There is a legal obligation for public authorities to capture the ethnicity based on the Race Relations Act.

The full detailed list of the code values will be:

"British", "Irish", "Other White", "White & Black Caribbean", "White & Black African", "White & Asian", "Other Mixed", "Indian", "Pakistani", "Bangladeshi", "Other Asian", "Caribbean", "African", "Other Black", "Chinese", "Any Other", "NOT STATED"

This is based on the GovTalk Schemas for Religion and Ethnicity.

3.29.2 Schema Change

Change to capturing a single value of the detailed level value. These values are defined by the GovTalk schemas. The ethnicity category will be removed.

3.30 Involvement of Persons – Fire Related Victims

3.30.1 Change Requirement

It is necessary to add a specific question to ascertain whether a fatality was specifically related to the Fire – 'Was fatality fire related? This question should be asked for Primary Fires only.

3.30.2 Schema Change

Add WasFireRelated (yes/no/don't know) to the Fatality and Injury structures.

3.31 Involvement of Persons – Evacuation Assistance

3.31.1 Change Requirement

An explicit 'Were persons evacuated in the Incident?' (yes/no) has been added. If this question is answered 'yes' then the various evacuation specific questions below will be asked.

The two evacuation questions previously captured are still required, but only for Dwelling Fires. This is to ensure BVPI Information can be captured.

An additional field has been added to capture evacuation details for all types of incidents if details need to be captured.

The WithAssistance 'Circumstance' attribute is no longer required.

3.31.2 Schema Change

Add a new field `EvacuationAssistanceInvolved` (yes/no) to the `InvolvementOfPersons` Structure, which decides whether the `EvacuationAssistance` Structure questions should be populated.

A new field has been added called `FRSAssistance`. The field will have a new `EvacuationRangeType`. The appropriate value should be derived from the `WithAssistance` value entered for `Dwelling Fires`.

The `WithAssistance` 'Circumstance' attribute has been removed.

3.32 Involvement of Persons – Victims

3.32.1 Change Requirement

An explicit 'Were persons rescued, extricated, injured or killed in the Incident?' (yes/no) has been added. If this question is answered 'yes' then the various victim specific questions will be asked.

3.32.2 Schema Change

Add a new field `VictimsInvolved` (yes/no) to the `InvolvementOfPersons` Structure.

3.33 Search Incidents – Additional information

3.33.1 Change Requirement

To assist the QA and bulk Publication process a number of further details have been added. These details provide a level of characteristics that enable 95% of incident types to be identified.

3.33.2 Schema Change

The following fields have been added the SearchIncidentsResponse structure:

- IsPrimaryFire
 - IsChimneyFire
 - PropertyType + PropertyCategory
 - Cause (Motive=Accident or Deliberate)
 - SpecialServiceType
 - IsRTC
 - FalseAlarmReason
 - HazardousMaterialsInvolved
 - NumberOfVehiclesDeployed
 - EquipmentUsed
 - VictimsInvolved
 - EvacuationAssistanceInvolved
 - AttackOnFirefightersInvolved
- Both as No is Secondary Fires
Outdoors, Dwellings, etc.
- Arson Control Form
Lift Release, Extrication, etc.
- FOSI Report requirement

3.34 Search Incidents – Page Controls

3.34.1 Change Requirement

To assist the QA and bulk Publication process further fields have been added to control the number of incidents to be returned and a supporting paging mechanism.

3.34.2 Schema Change

In the Search Request the 'NoOfIncidents' has been replaced with:

- PageSize Integer (optional – default 50) (Range of 1 to 500)
The number of records in a page.
- PageNumber Integer (optional) - The page to return.
- OrderSearchBy An enumeration of the element names that can be used to order the search results by e.g. TimeOfCall, DateUpdated, PostCode, etc. This is restricted to the fields that a user can use to within the selection criteria.
- OrderingType Ascending or Descending.

In the response the two fields above are returned along with the following optional details:

- TotalSize Integer Total number of matches results.

- **TotalPageNumber** Integer Total number of pages of matched results.
- **OrderSearchBy** The element name used for the sequencing/ordering of the Search results.
- **OrderingType** Ascending or Descending.

3.35 General - Drop-Down List changes

3.35.1 Change Requirement

A number of drop down list fields have had data items added / changed to assist FireOfficers when inputting in order to improve the accuracy.

3.35.2 Schema Change

The following drop down list fields have had changes made to the allowed values:

- Q13a. **OriginOfCall** – FRSIncident-v1-0.xsd
- Q16. **MobiliseIncidentType** – FRSIncidentTypeTaxonomy-v1-0.xml and FRSIncident-v1-0.xsd
- Q20a. **IncidentStatus** – FRSIncident-v1-0.xsd
- Q20b. **PropertyType** – FRSPROPERTYTypeTaxonomy-v1-0.xml
FRSIncidentPropertyMapping-v1-0.xml
- Q20c. **SpecialServiceType** – FRSSpecialServiceTaxonomy-v1-0.xml
FRSIncidentSpecialServiceMapping-v1-0.xml
- Q20d. **FalseAlarmReasonType** – FRSFalseAlarmReasonTaxonomy-v1-0.xml
- Q25b. **NormalOccupationStatus** and **IncidentOccupationStatus** –
FRSIncidentFire-v1-0.xsd
- Q33g. **Vehicle Type** – FRSIncidentResource-v1-0.xsd
- Q34a. **Equipment Type** – FRSIncidentResource-v1-0.xsd
- Q37f. **Ethnicity** – FRSIncidentVictim-v1-0.xsd
- Q37g. **CauseOfDeaths** - FRSIncidentVictim-v1-0.xsd
- Q37h. **SeverityOfInjury** - FRSIncidentVictim-v1-0.xsd
- Q37m. **Role** - FRSIncidentVictim-v1-0.xsd
- Q38a. **Evacuation With & Without Assistance** -
FRSIncidentEvacuationAssistance-v1-0.xsd
- Q38c. **Evacuation FRSAssistance** - FRSIncidentEvacuationAssistance-v1-0.xsd

-
- Q46. **LocationAtFireStart** – Dwelling, OtherResidential, NonResidential –
FRSIncidentFireBuilding-v1-0.xsd
 - Q48. **Main Cause** - FRSIncidentFire-v1-0.xsd
 - Q52a. **HouseholdOccupancyType** - FRSIncidentFire-v1-0.xsd
 - Q52b1. **OtherHumanFactor** - FRSIncidentCommonTypes-v1-0.xsd
 - Q53a. **IgnitionSource** - FRSIncidentFire-v1-0.xsd
 - Q53b. **IgnitionSourcePower** - FRSIncidentFire-v1-0.xsd
 - Q56/57. **ItemFirstIgnited and ItemResponsibleForSpread**
- FRSIncidentFire-v1-0.xsd
 - Q58. **RapidGrowth** - FRSIncidentFire-v1-0.xsd
 - Q59 **DangerousSubstances** - FRSIncidentFire-v1-0.xsd
 - Q60 **ExplosiveSubstances** - FRSIncidentFire-v1-0.xsd
 - Q61 **Explosion AtWhatStage** - FRSIncidentFire-v1-0.xsd
 - Q63 **SpecialConstruction** - FRSIncidentFireBuilding-v1-0.xsd
 - Q65a/b **MeansOfEscape & Compartmentation** - FRSIncidentFireBuilding-v1-0.xsd
 - Q70a. **Number Of Sprinkler Heads** - FRSIncidentFire-v1-0.xsd
 - Q76. **Delay in starting firefighting** - FRSIncidentFire-v1-0.xsd
 - Q83. **Impact of ManualSystems** - FRSIncidentFire-v1-0.xsd
 - Q90a/b. **FireSizeOnArrival / RestrictedTo** - Dwelling, OtherResidential,
NonResidential – FRSIncidentFireBuilding-v1-0.xsd
 - Q92, 93, 94, 95, 107
RangeType – FRSIncidentCommonTypes-v1-0.xsd
 - Q102. **VRM** – FRSIncidentTransport-v1-0.xsd

3.36 General - Developer Changes

3.36.1 Change Requirement

There are a number of changes that have been requested by Web Service Developers to further ease development.

3.36.2 Schema Change

a) Change XML examples to define XML namespaces on elements to aid .NET developers. This will stop confusion. Stop having them all at the top of the root element.

b) Add an IncidentDetails ROOT element in the IncidentMessages Schema. This will allow people to perform a basic SCHEMA validate of the shared XML of the main messages for those storing the content in a Database. An Incidents ROOT element has been added to match the structure used by the Extract process on the website.

c) Provide Strict and Flexible WSDL's that work with Microsoft WSDL.exe utility. Some developers are using data binding frameworks for some or all of the web service interactions.

d) Alter the 'AdditionalInfo' (Notes) text field to allow any characters to be captured including carriage returns, colons, etc. The field will be a string without any restrictions. Allow ContextData to include an element with an attribute (ensure any XML content). Four set values for the attribute 'InfoType' will be used for the set of notes that are largely dependant on the status of the Incident. The values will be: 'General Notes', 'Recorded with Queries', 'Published with Conditions', 'Queried by National Statistics'.

e) VRM validation has been altered to allow "O" in the final 3 characters of older vehicle plates.

e) The Token field has been tightly coupled to the Security, RequestSecurityToken and CancelSecurityToken structures to simplify binding frameworks.

f) BuildingFireSizeType had wrong description for '6 = Whole Building'.

g) Address – Allow specific external gazetteer reference identifiers to be recorded against the incident. If the Incident has the address or geo-coordinates altered via the IRS online forms then the forms will record that the address has been modified and may no longer relate to the Gazetteer references supplied during pre-population. A new attribute field AddressChanged (yes/no) will be added to the Location structure. The following fields and structure will be added within the Location Structure:

ExternalReferences – RCCgazetteerIdentifier, FRSGazetteerIdentifier, TOID, OSAPR, OrganisationName (Business or Commercial Name). All fields are optional.

h) Q52b. OtherHumanFactor - 'Other' attribute text field missing from the field.

i) Q85. MainActionNonFRS - 'Other' attribute text field missing from the field.

j) Q90b / Q91b. Distance to adjoining properties - Incorrect type attached (area range replaced with distance range).

k) StartingDelay has been moved into the PrimaryFire Action Structure.

l) FireStartLocation structure has been added to the Outdoor Structure in a similar manner to other Property Category structures.

m) FRSIncidentNumber, CreatedBy, UpdatedBy, FireOfficerId, FRScallsign have been restricted to 50 characters for SQL Database Index considerations.

n) All DateTime fields have had restrictions added to enable the Schema validation to reject invalid ranges that SQL Server can not handle.

o) The IncidentId has been changed to an xsd:long, which is consistent with a SQL BigInt.