Integrated systems and intelligence for fire and rescue services
Introduction

MSC has been working with the emergency services in London to provide robust and efficient methods for assimilating and interpreting the significant amount of available data, so that personnel at all levels can easily see how their efforts are making a difference to public safety in the capital.

We have developed a number of integrated systems encompassing:

- Rostering
- Incident management
- Personal Development
- Training
- Sickness Management
- Station Diary

Systems are designed with integration to IRS and we have received the first CLG accreditation for electronic interface to IRS.

The following pages give you a brief overview of each of the systems we have developed.
Staff Attendance Recording System (StARS)

The Staff Attendance Recording System is made up of a number of modules and is used to record availability and location of staff across the brigade. This information is used to manage staffing levels and ridership at stations. Two way communication keeps the Mobilising System up to date with details of available resources.

Rotabook
The Rotabook module is central to the StARS application and is where details of staff rotas and absences are entered. The screenshot shows a typical station watch.

Roll Call
The Roll Call module is used at fire stations to specify the ridership details of appliances for each watch shift. The rider positions for the station’s appliances are shown on the left hand side whilst the available staff for the shift are shown on the right. Crews are assigned by dragging and dropping them onto rider positions, or by selecting the auto-assign function which determines best fit whilst rotating individuals between positions from shift to shift.
Standby Module

The standby module displays shortfalls in staffing / skill levels for each shift in the top left hand panel. When the user selects a requirement the system suggests a station where a standby could be sent from, based on availability of skills and closest distance.
Sickness Management

The Sickness Management module within StARS is a workflow application for tracking sickness within the HR function, including the ability to generate forms and letters at various stages.

Maintenance

The maintenance module is a restricted access part of the system to enable administrators to configure the system as required such as for adding additional appliances and specifying public holiday dates.
Reports
The STARS application contains comprehensive reports covering analysis of absence trends and operational data as well as forecasting of future levels of standby requirements based on historic data.
The Incident Management System (IMS)

The Incident Management System (IMS) was designed and built to enable stations to enter incident related information in order to supply data to the CLG IRS system. It replaced several existing systems including the electronic FDR1 system, the Fire Investigation system and Incident Monitoring Process.

Incident List
The main application screen within IMS enables users to search for current and historic incident records against a number of criteria. By default the incident list displays the outstanding (incomplete) incidents for the station where the user is logged on.
Incident Details
The Incident Details screen is comprised of a number of tabs which contain logically grouped fields, based on the IRS data requirements plus some additional brigade specified fields.
**Incident Location – Map View**

The Incident Location is specified by the station personnel when completing the record. The address is searched for within the corporate gazetteer (such as Quick Address or NLPG) and the exact location is selected by clicking on the map which is linked into the Geographical Information System (GIS). This allows exact pinpointing of easting and northing and can return additional information about the location such as station ground and borough.
Incident Location – Aerial
Where the GIS supports it, additional layers can be shown such as aerial photography, location of hydrants, borough/ward boundaries etc.
**Incident Monitoring – Report**

The Incident Monitoring aspect of the system enables officers to enter details of personnel performance at incidents, both positive comments and highlighting areas where improvement is required. Comments can be entered against individuals, appliance crews, against specific equipment or general brigade wide issues.

**Incident Monitoring – Observation**

When entering observations for an incident the category is automatically selected based on the contents of the comment.

Spell checking is used throughout the application to highlight mistakes and offer alternative spellings.
Station Diary

The Station Diary application is an outlook style interface and is used by stations to plan all activities which take place on a watch shift. When an appliance is mobilised to an incident this is fed into the system and an appointment is created in order to accurately reflect how time is spent.

Diary – Day View

The main diary view is used to organize the activities on each shift, with the background colour reflecting the duty watch for the time of day. Appointment types are configurable but can cover such activities as training, community fire safety, station routines, incidents and meal breaks.
**Appointment Details**
The appointment details screen is used to enter the type of activity, start and end times and descriptions. The tabs which are shown at the top of the screen are automatically displayed where relevant to the appointment type.

**Appointment Details – Participants.**
The participants table allows recording of which appliances and specific individuals are involved in each appointment.
**Training Diary**

The Training Diary screen is a separate specific view to the main diary which enables users to view watch and individual training requirements for each month.
Individual Training Records System (ITRS)

ITRS provides all brigade staff with a singular view of all training undertaken by them in their career. It acts as a highly accessible, simple to use “data warehouse” for staff to view previous training achieved and areas for improvement as well as a focal point for managers to view progress of their team members. Staff can comment on entries, or highlight entries of interest to be flagged to their line manager.

ITRS integrates with a number of other LFEPA IT systems such as STARS, TCP and Station Diary. Its extensible design means that it can easily cope with other systems as they are introduced into the application, providing a future-proof way to record and report on training systems as they are introduced into the brigade.

The individual training record view permits personnel to see their own training records.
Predefined filters enable users to quickly make common queries.

Powerful custom filters allow users to quickly find exactly the records that they want to view.
Users can quickly export search results to Excel or PDF, or simply print them out.
Training Course Planner (TCP)

The TCP application has been designed to replace a number of disparate paper- and IT-based processes, to provide an end-to-end flow for planning, recording and reporting on centrally-planned training with the brigade.

It provides a rich windows forms application for data entry as well as a sophisticated report model to create custom reports by administrators. These reports can also be “uploaded” into the application to provide an easy way to generate new reports to be used by “standard” users.

The main view of TCP allows users to see at a glance potential clashes of classes whilst allocating resources across multiple courses.
One-off training can be scheduled for staff across the entire brigade.

Class can be created for a number of specific employees at a fire station.
The system allows you to define the exact makeup of a course such as the required trainers and their required qualifications.

The system includes a sophisticated report model so that administrators can create custom reports. These reports can be "uploaded" into the application to provide an easy way to generate new reports to be used by "standard" users.
Performance, Review and Development System (PRDS)

PRDS provides a mechanism for non-operational staff to create a customised development plan that meets their needs and targets, every year. Along with features to allow managers to quickly identify their staff and to set targets for them, it includes a sophisticated report model to allow administrators to create ad-hoc reports for management-level reporting.

PRDS integrates with other key LFEP systems such as SIARS in order to provide a single-sign on and a seamless end-user experience.

The main PRDS home page.
Objectives are customised for each candidate.

There is a flexible report model as well as integrated reports accessible by end-users.
Powerful administrator functions help monitor individuals development.
Electronic Personal Development Records (e-PDR)

The e-PDR system manages the career development of operational staff from creation to assessment and finally completion.

It effectively replaces the paper-based process with a streamlined smart client application, which provides customised views of data for the various users within the system.

It provides a single point of access for users to:
- view the progress of their development record against pre-defined targets;
- quickly import evidence towards their PDR from a wide variety of sources;
- assess and verify evidence of candidates based on an extensive security framework; and
- integrates with other key LFEPA systems such as StARS, IMS and ITRS.

Viewing a candidate’s record.
Assessing evidence of a candidate.

Import evidence from external systems.
The assessor home page provides a single point of entry for assessors and counter signers.
Performance Reporting

Monitoring performance is key to ensuring objectives and targets are met.

By using dashboards, reports and scorecards you can understand performance:
- within a station;
- within a FRS; and
- against Government KPIs/targets.
Moore Stephens Consulting (MSC) has a long and successful track record of working with public sector organisations, providing technology services and solutions to enable them to meet the challenges of providing better public services, improving public safety, and enabling easier access to accurate information.

With over twenty years experience of working with the London Fire Brigade we are familiar with the challenges that the Fire Services face and can work with you to develop systems that improve your resilience, capability and efficiency.
About Moore Stephens

Moore Stephens Consulting (MSC) is the IT consulting arm of Moore Stephens LLP, the global accounting and consulting firm. Founded in 2002, MSC provides a range of business intelligence and software development solutions across a number of industries.

Moore Stephens has a long and successful track record of working with public sector organisations, providing technology services and solutions to enable them to meet the challenges of providing better public services. We have provided a range of services encompassing business analysis, bespoke systems development, mobile applications, reporting and analytics solutions to many central Government departments and to large metropolitan emergency services.

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