

# Gazetteer Management at Essex County Fire and Rescue Service

Like many Fire and Rescue Services, Essex FRS had no formal or centralised method of creating or managing the address data it used, with each department individually compiling their own.

Each would have their own techniques for doing this and it was common practice for addresses to be added to systems only when they were needed rather than having them available in advance.

Although new data was received from local authorities' street naming and numbering teams, this was having to be circulated internally to 15 different people and though there were options for the fire service to buy in data from the Ordnance Survey such as ADDRESS-POINT or Address Layer 2, this option was never pursued.

What all of this meant was that there was no consistency in maintaining address data across the organisation and absolutely no method of sharing it.

Each department maintaining their own addresses was resulting in a resource intensive duplication of work and without a single process or standard by which to work there was no mechanism for a common property reference, which meant misidentification and errors between departments could easily happen.

Things began to change in 2010 after the cancellation of the FiReControl project, which would have seen Essex FRS along with Norfolk, Cambridgeshire, Hertfordshire, Bedfordshire and Suffolk fire and rescue services moving into a joint control room with shared mobilising system.



Whilst waiting for the project to be completed, Essex FRS had not upgraded its own mobilising system, so with the cancellation, they found themselves with an outdated system that needed to be replaced.

As part of this replacement project, they began to look at the address data required to feed the system and recognised that if they could get the address data right for the control room then this could be expanded to flow throughout the organisation. As such, they began the process of investigating the creation of a centralised, Essex-wide address database that would be updated by one team and shared to many.

## The Project

Incorporated into a wider project designed to consolidate their GIS platforms and introduce a corporate spatial data store (Project 032 GIS Consolidation), the plans for a corporate gazetteer were outlined in a detailed business case that was presented to the Strategic Management Board and Strategic Delivery Board.

Key to the presentation was an explanation on how all the elements would be connected together in order to revolutionise how Essex FRS used and shared spatial data, GIS and address data. Senior Management saw the benefits of the project and

approved the business case in 2011.

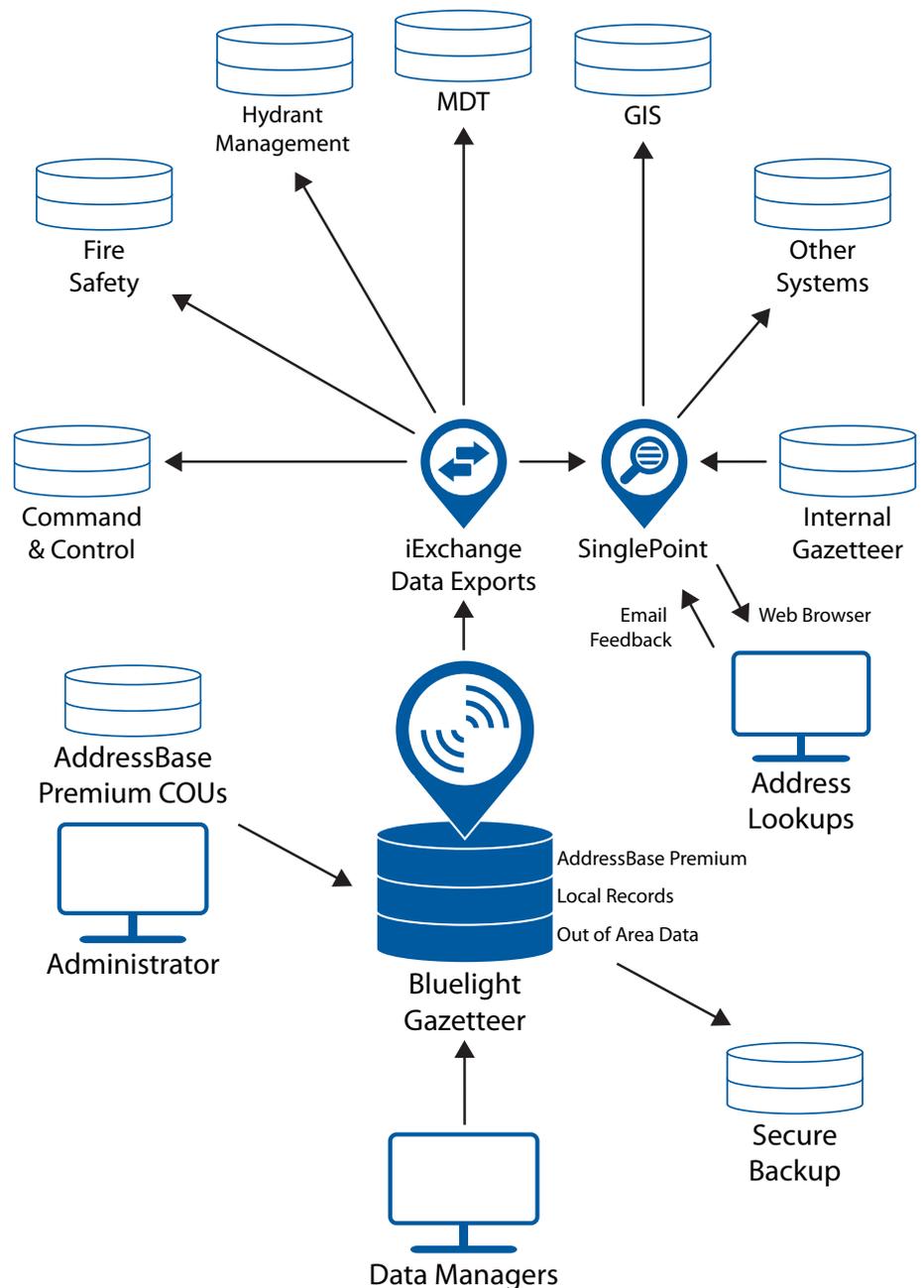
In order to more easily deliver the project it was broken down into individual stages so that not all outcomes were trying to be delivered at once. The first element was the delivery of the spatial data store, which was where both gazetteer and GIS data was to be fed from. This was followed by the installation of a gazetteer management system and the GIS was the final step of the project.

Because the data required to feed both the gazetteer management system and GIS was to be stored on the spatial data store, it opened up opportunities to easily share address data with other third party systems.

In addition to the very disparate way address data was being maintained, Essex FRS had many different GIS applications in use in house each using different versions of the same data and it was therefore key to give all staff access to the data from the spatial data store using a standard platform.

As well as breaking down the project into individual stages, the roll out of the corporate gazetteer was also staggered. Although the aims were wide reaching inasmuch as it was always intended for the data to be used across all departments, Essex FRS ensured that it went live in only one back office system before it was used anywhere else in the organisation.

This allowed for testing to be performed and was a way to identify areas in which the data needed improvement/cleansing prior to it being used live in a Control room environment.



## Obstacles

Although the use of both address data and GIS had been haphazard and segmented across the organisation, because each department had been responsible for their own data, on the whole they had been satisfied with their own way of working.

As such there was some resistance to taking a corporate approach because it would result in change, and although there would be significant benefits across the organisation, there required a process of education and learning

in order for these wider benefits to be understood and appreciated.

There was however an advantage to not having any previous corporate gazetteer system or bought in address dataset as it allowed the project team to start with a blank page, and rather than be faced with adapting existing systems and processes, they were able to instigate the new system across the board.

## Benefits

Despite the obstacles, Essex FRS have been successful in the

installation of a spatial data store, corporate gazetteer management system, and corporate GIS solution and with these in place they now have smarter and more efficient ways of working.

From the beginning, a key factor behind the creation of a corporate gazetteer was to reduce the duplication of effort in the creation and management of address data and through that minimise the chances of error.

Not only has this been achieved, but as progressively more systems are integrated, these benefits will continue to materialise and in addition to the key efficiencies in working practises, cashable savings totalling £30k per annum have been realised.

## AddressBase Premium

In time all departments will be using AddressBase Premium, which was Essex FRSs address dataset of choice and widely regarded as the most accurate and up to date currently available in the UK. It is a combination of data from local authorities, the Royal Mail and the Ordnance Survey, with each record tagged with a Unique Property Reference Number (UPRN), thus enabling cross-departmental and cross-organisational accuracy when sharing data.

As the UPRN transcends the written address, its use will give Essex FRS the highest level of accuracy when using location based information and will ensure that all pertinent information is provided to firefighters when attending emergencies such as the presence of chemicals or explosives.

Additionally, this accuracy will enable better multi-service working with the police, ambulance, local and central government, and can play a key role in fire prevention campaigns by ensuring that no properties are missed.

## Bluelight

To manage the AddressBase Premium data, Essex FRS selected the Symphony Bluelight Gazetteer from Aligned Assets. Originally developed as part of the FiReControl project, the Symphony Bluelight system was significantly upgraded after the cancellation in order to equip the Fire Service (and other emergency services) with the necessary tools to import regular updates to AddressBase Premium and build on this already comprehensive dataset with even more detail such as outbuildings and motorway marker posts.

It is this data, created and managed through the Symphony Bluelight Gazetteer that will then be fed throughout the organisation and a future option could be the use of Symphony Bluelight iExchange, which will allow for the automated export of the address data across to the recipient systems.

## Lessons Learnt

As local authorities are the main contributors to the AddressBase Premium data, it became very clear that developing good working relationship with the address custodians is key to the success of any gazetteer project.

It is of huge benefit to understand the work of these custodians and the challenges they face, but also to liaise with them so that they can better understand the work

done by the emergency services, particular in relation to how AddressBase Premium is used in an operational capacity.

What was particularly noted throughout the project was the level of resistance and the amount of education that was required, not only with regards moving to a corporate system, but specifically about the use of AddressBase Premium.

It is clear that more work could have been done about why it had been chosen, where it originates from and through that its intrinsic benefits. Put simply, you can never communicate to the whole organisation enough when implementing solutions that bring enormous business change.

## The Future

By the very nature of gazetteer and GIS initiatives they have to grow in the future. Essex FRS did not aim for a 'big bang' approach and it was important for them to introduce stable, robust solutions that could then be embedded in their business for years to come.

This has necessitated considerable work to be undertaken to ensure compatibility between the corporate gazetteer and the third party systems, and as new



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solutions are rolled out, such as the new Remsdaq mobilising system, the integration work will continue.

What Essex FRS have done in terms of a corporate gazetteer is replicable across all fire services and demonstrates a way to implement the very best in terms of both data and software without disrupting business as normal operations and in such a way that is resilient and future proof.

Technology will always develop and systems will always need to evolve to reflect changes in demand and operational requirements. A key factor in the delivery of a successful fire service will always be location – where an incident is happening, where it might happen and all the location-based data that can help in saving lives and minimising risk.

Key to this, both now and in the future, will be a corporate

gazetteer and GIS solutions that provide consistent, accurate and definitive location data across the organisation.