



SUPER GAZETTEERS TO AID THE OLYMPICS

CARL HANKOCK FROM ALIGNED ASSETS EXPLORES THE ROLE OF THE BRITISH GAZETTEERS BEHIND THE WINGS OF THE OLYMPICS TRANSPORT AND INFRASTRUCTURE SCENES

Sebastian Coe, was once quoted as saying, "To anyone who has started out on a long campaign believing that the gold medal was destined for him, the feeling when, all of a sudden, the medal has gone somewhere else is quite indescribable."

Sebastian Coe is a man who has tasted success – a lot of success – and he is not a man that likes to lose. It can only be a good thing therefore that it is this man that is the Chairman of the London Organising Committee for the 2012 London Olympics.

The leadership he demonstrated in London winning the games through to the enthusiasm and management he has shown since is evidence that the man at the top is more than qualified. But one man, for all the talent, competency and passion he may have, cannot do everything, and in order for the Games of the 30th Olympiad to be the accomplishment they almost certainly will be requires the successful working of each individual component, of which there are many thousands.

Olympics Minister Tessa Jowell stated in September 2005 that, "Ensuring that the venues, transport and infrastructure for the 2012 Olympic and Paralympic Games are delivered on time and on budget is an enormous job, and will require great skill in organisation and communication."

Transport and infrastructure, two of the main criteria for a successful Games, need to be both efficient and secure and only through this will the system allow for not only the thousands of athletes to move to and from the various venues but will allow for the transportation of the expected millions of spectators arriving from across the continent. Two of the most important players within this strategy are Transport

for London (TfL) and the British Transport Police (BTP) and amongst the applications that they are using to achieve this ambitious transportation vision are the National Land and Property Gazetteer and the National Street Gazetteer.

The Challenge for Transport for London

Project Director of the Olympic Transport Strategy at Transport for London is Hugh Sumner and it is he that is responsible for the delivery of the promises made during the bid process. During questioning by the Select Committee on Transport in October 2005 he illustrated what some of those promises were.

"We were able to describe to them [the International Olympic Committee (IOC)] very clearly how we could provide direct rail services with no interchange from over 309 stations across the UK and how we would be able to deliver a train carrying spectators every 13.87 seconds." He went on to explain, "...it gives us an unrivalled capacity, it gives us the capacity to move some 240,000 people per hour to the park, and that is important to the IOC in their decision-making because they want full stadia and they want people to use public transport, and that is what we can give them."

In addition to the expansion of the rail networks there is due to be considerable development of the North Circular to aid those travelling by road and a VIP road route for all athletes and all officials, federations and national Olympic committees. This VIP route will consist of a network of 150 miles of London road space, 62 miles of which will be taken out from general use for 24 hours a day during the time of the Olympics and just before.

A Framework For Real-Time Accuracy

To allow for this significant change within the London road network during the Olympics, TfL will be making extensive use of the National Street Gazetteer (NSG), which is a core dataset set containing all streets and their attributes. Consisting of the Local Street Gazetteers (LSGs) of all 176 Highway Authorities of England and Wales, important to TfL is the data derived from all 33 London Boroughs, which allows them a pan-London gazetteer of London's entire road network.

In order to manage and fully utilise this data, TfL enlisted the help of gazetteer specialists Aligned Assets who provided a method by which to create a single clean and accurate representation of the capital's street and road networks. The data, being constantly updated by the London Boroughs, gives a framework with real-time accuracy via the NSG from which all plans can be laid out and implemented.

Using Aligned Assets' Symphony gazetteer management software TfL can access information such as road length, location of junctions, road centre lines etc as well as being able to identify and differentiate between different types of streets, roads, footpaths and cycleways. Designed to be intuitive, user-friendly and fast, Symphony also allows for the addition of what is known as Associated Street Data (ASD).

This is the addition of supplementary information linked to the NSG records and permanently associated with each street's Unique Street Reference Number (USRN). Because of the USRNs, not only can the geographic aspect of the data remain unconfused, but also all the information related to that street can be accessed simultaneously via a single portal.

Through these solutions, TfL are therefore able, in the case of the VIP routes, to mark each street that is to be closed or restricted so that any street works or other maintenance work can be timed so as not to coincide. A simple accessing of the street concerned through the gazetteer can now list all planned works alongside Olympic based information that will not only contain information regarding the routes taken by the athletes but visitor routes around the major airports and even the route of the Olympic marathon.

Since implementing the Symphony gazetteer in 2005, TfL has the ability through the NSG and ASD to coordinate all activity through one central database. This means that the right hand can instantly see what the left hand is doing and through the application of this data London can see the free flow of traffic with disruption significantly reduced.

The British Transport Police is getting ready too

In an ever-changing world the need for resilience and preparedness has never been greater. During the Olympics, many security issues will fall upon the British Transport Police (BTP), including not only the very real threat of terrorism, but also issues surrounding technical or accidental disruption.

To ensure the reduction of any security threat, the Olympic Security Directorate (OSD) has been set up that will see 23 partner agencies working together to provide safety, security and resilience. A key player within the OSD will be the BTP, one of whose main responsibilities is to oversee the safety of Britain's railways and in the case of the Olympics the near quarter of a million people per hour that will use rail services to and from the Olympic Park.

BTP's Assistant Chief Constable for London and the Olympics, Steve Thomas explained, "BTP will play a vital role in making the London 2012 Olympics a success. Ensuring that the thousands of athletes, officials and visitors in London for the games are able to travel in safety and free from disruption is a huge task. We have begun working with partners, gearing up our technology and resources, and putting in place the plans that will make that happen. British Transport Police has been around for 180 years and there has been no greater challenge in that time than the one we are facing now."

National Gazetteer is again key to the strategy.

Like TfL, one of the partners that BTP chose was Aligned Assets who have been brought on board to provide the solutions through which they are able to access national gazetteer information. Whilst TfL makes use of the



NSG the BTP utilise its sister application known as the National Land and Property Gazetteer (NLPG), which as well as streets provides the most comprehensive listing of property address data available in the UK.

First and foremost, the NLPG through its accuracy will allow the BTP to precisely pinpoint a location when having to respond to an incident. The Unique Property Reference Numbers (UPRNs) in addition to this allows for one property to have multiple address listings e.g. Primrose Cottage, George Street and 39, George Street, which is especially useful since different people will know properties often by different names. A further advantage that the NLPG has in this regard is that since it is updated by each local council, staffed by people with local knowledge, colloquial property names can also be included.

As well as being a list of over 32 million addresses, the NLPG has each one of these geocoded, which allows for the addresses to be presented on a map, which offers the BTP additional searching capability. This enables the BTP to 'see' the data spatially through its visualisation within digital mapping technology. With this gazetteer access, the BTP will soon be able to derive practical applications by drawing a polygon around an incident location on the digital map and the software will provide all the addresses within that polygon.

Currently the BTP deal with thousands of incidents annually and both their quantity and their significance are only going to increase as the Olympics draw closer with so many more people using the public transport services.

This means that when incidents do occur, accurate location identification is even more essential. In the case of suspect packages, although only 1% of these incidents result in evacuation, if this does occur, the use of the NLPG and its polygon searches mean it can be achieved with far greater speed and efficiency, thereby maintaining public safety whilst minimising disruption.

Conclusion

The Olympics should be about human endeavour and achievement, the tens of thousands of men and women pushing themselves to the very limits of their ability. As world records are shattered and Team GB – hopefully – brings home a record number of gold medals, the focus should be on the athletes and not on the people behind the scenes, such as TfL, BTP and their partners within the geotechnology industry. For the contribution of these organisations to go unnoticed will be the best possible result since it means that they have achieved their objective of utmost security with minimal disruption. The first gold medal surely must go to them.

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