

Case Study

Going the ‘final mile’: Why TNT Post implemented RouteSmart for the planning of postal routes in their “end-to-end” delivery service

TNT Post (www.tntpost.co.uk), the Royal Mail's number one challenger for business mail of all kinds, continues to expand its end-to-end or “final mile” delivery operations following the successful conclusion of its pilot projects in Victoria and West London.

The company is realising its long held ambition to launch a national final mile delivery service within the UK. According to Nick Wells, CEO TNT Post: “TNT Post has built an excellent reputation for quality, innovation and providing choice for its clients. We are now taking those qualities and applying them to our own end-to-end delivery service. We are making a significant investment in technology, infrastructure and creating thousands of jobs.” Realising this ambition would provide Royal Mail with competition on the final mile for the first time in its more than 370 years of service.

TNT Post has created in excess of 1,000 jobs in London since April 2012 and has plans to create 20,000 jobs across the UK in the next five years. The company has also invested tens of thousands of pounds in new technology. One key element of the technology investment relates to the creation of new postal rounds and for this TNT chose RouteSmart for ArcGIS.

Tiemen van Bruggen, Head of Central Operations at TNT Post, notes: “At the very beginning of the end-to-end (E2E) project the team identified the need for a planning tool to create routes for the postal operatives.”

According to Ben Schooling, Rounds & Mapping Manager at TNT Post, “RouteSmart has been instrumental in the set-up of the E2E project at TNT Post and has helped facilitate the creation of postal delivery rounds with specific service targets.” This was especially important as one of the key objectives was to offer the ‘posties’ two hour rounds which could be ‘flexed’ to meet service demand, allow the posties to ‘double-up’ to do two rounds in a day but also be realistic about completion times thus enabling objective and equitable compensation terms for delivery operations.

Ben continues: “We chose RouteSmart over others as it combined GIS technology with postal service specific algorithms that were proven to deliver the most efficient routes. We planned to use PAF/Ordnance Survey as the base data files so needed software that was compatible and we wanted to be able to sequence the items to household level using the sortation machines which RouteSmart can do. The ability to incorporate OS updates whilst maintain the sequence of the original round was a challenge and required further development. The improvements to the Insert solver has now facilitated this.”



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Rounds & Mapping Manager



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When asked what the top three reasons for procuring a software system Tiemen replied: “We didn’t have the detailed knowledge of the geographic areas so needed a GIS based tool to assist the planners. We also required automated support since the number of rounds were large and the ability to create rounds based on varying mail volume”.

Approximately 2370 rounds to date have been created using the software. The RouteSmart software is hosted externally at specialist secure centres in the UK with users connecting from their desktops in TNT Post HQ in Marlow, Buckinghamshire.

One piece of functionality within RouteSmart that has made a significant difference to operations at TNT according to Tiemen is “... the clarity of the maps which gives a lot of visibility of the round to new starters”. Ben adds: “The ability to customize the delivery instruction booklets in Crystal reporting is beneficial and has allowed us to tailor the booklets accordingly.”

RouteSmart has provided TNT with additional benefits that were originally unforeseen such as finding the right locations for delivery units through the postcode sector polygon layer. TNT are looking to expand the use of RouteSmart to assist in defining new areas as further roll-outs occur.

The RouteSmart software was introduced by Integrated Skills Limited (ISL, www.ukisl.com) who are the exclusive UK partner for RouteSmart Inc (www.routesmart.com). Led by ISL’s GIS Technical Director James Holt, the project team worked with TNT to configure RouteSmart, import the relevant Ordnance Survey (www.ordnancesurvey.co.uk) and related data sets, interface with the sorting machines then train and mentor the TNT route planning team. According to James “As the TNT planning team became more conversant with the RouteSmart software the time taken to produce routes from scratch was reduced dramatically but at the same time the integrity and quality of the routes remained high.” James continues “... the project team at TNT were incredibly quick at learning the core concepts of the GIS technology that underpins RouteSmart.”

Ben Schooling notes: “The team at ISL are dedicated in their pursuit of tailoring the software to the needs of our business and to solving technical issues that arise and have been very supportive in assisting with the set up and ongoing development of the software.” As an example he cites “the service time input factors from the business case model were incorporated into RouteSmart and ISL have been very supportive in assisting with the formulas, scripts and calculations in order to ensure accurate targets were produced.” Ben adds that “...ISL are currently proposing a Centralised Database solution for storing and managing the source data which should give us the ability to scale up and extract and upload data much more effectively.”

Postal industry leaders depend on RouteSmart software solution for achieving maximum efficiency through route optimisation. Global and national operations such as Swiss Post, Australia Post, Itella, Luxembourg Post, Isle of Man Post Office, FedEx Home Delivery and the United States Postal Service know that every minute and every mile counts. That’s why these organisations rely upon RouteSmart for precise street address-level routing via a toolset that is continually being refined.

About TNT Post

TNT Post offers a wide range of addressed and unaddressed mail delivery services as well as mail-related value added services in the Netherlands, United Kingdom, Germany and Italy. TNT Post is recognised as one of the most efficient postal operators in the world. TNT Post is the UK’s second largest postal provider. They handle letters, packets and parcels, and can manage direct marketing with specialist door drop targeting, distribution and evaluation services. They collect, sort and transport business mail and packages, and help their customers with data and document management and with fulfilment.

TNT Post was established in the UK in early 2003. The company now reaches 26 million households, processing more than 22 per cent of all the mail that comes through the letterbox. They are the leading challenger to Royal Mail, and handle more than 3.8 billion items of mail each year for blue chip enterprises such as Barclays, BT, Centrica, npower and Sky, as well as SMEs and the public sector. TNT Post is part of PostNL, which has its headquarters in the Netherlands. PostNL is publicly listed on the Amsterdam stock exchange and had a turnover of nearly €4.3 billion in 2010.

About Integrated Skills Limited

Integrated Skills Limited (www.ukisil.com), operating internationally out of Romsey near Southampton, is a specialist provider of routing and optimisation software solutions as well as environmental consultancy. ISL’s routing and optimisation software solutions maximises efficiency through enhanced route planning and reductions in fleet size, mileage, planning time and human resource. The software is used in both operational and strategic environments as well as for scenario planning when introducing new customers, vehicles, routes and services.

ISL is the UK & Ireland partner of RouteSmart Technologies Inc.™ (www.routesmart.com) for high density, door-by-door and street-by-street route optimisation software as used in Local Government Services, Postal Services, Newspaper Distribution, Environmental Services and in the Utility sector for meter reading, meter inspections and meter implementation programmes. RouteSmart’s underlying GIS technology is from ESRI (www.esri.com).

For further information contact Alan Paget, Sales & Marketing Director at ISL.