

# Tearing up paperwork

Slough Council has called in the technology experts to create a paperless asset management system. **Surveyor** finds out more

Local Authority Traffic Engineers are being undermined by the lack of a modern, document-controlled, day-to-day working environment.

The UK is at the forefront of ITS design but the manner in which we go about our daily jobs can be vastly improved. Slough Council is challenging the status quo and driving industry best practice with a UK first – ITS Approvals Management (ITSAM).

Over the past 10 years, many industries have modernised and enhanced their operations by minimising their reliance on paper. But, it seems old habits die hard in many local authorities. Sadly, councils are now lagging behind many industries, including the NHS, when it comes to remote access and document-control procedures. For more than 10 years, Slough Council, as a unitary authority, has been looking after all assets on its highways. A great responsibility. But with an ageing stock left from the two-tier Berkshire CC system, with paper drawings, specifications and misfiled documents, over the years, the traffic section's challenges were starting to mount up. Instead of being proactive, Slough's transport section, like many others, was reacting to incidents and requests. Its staff decided to act.

Head of transport, Joe Carter, and his colleagues at Slough Council, decided action was called for and have engaged with traffic industry and software development specialist Traffic Solutions to create ITSAM – a unique solution to the problem. The key message to Traffic Solutions at



the start was that Slough didn't want another asset management system by any other name. It has enough systems whereby information can be stored and dumped.

It needed an everyday-use desktop program, a best practice document control, and approvals-management solution that worked the way ITS engineers worked – and which supported Quality Assurance-accreditation in an engineer-friendly manner.

Traffic Solutions has worked with many traffic engineering departments. Its engineers and technicians have noted that local authorities are still completely reliant on paper documentation, even though such technologies as e-mail and electronic filing systems are a reality.

So, it was a natural partnership to look to solve the situation. With some considerable insight into the use of paperless technologies, it is clear that staying with

manual/paper-based systems will continue to perpetuate problems such as the embarrassment and frustration felt by losing and misfiling documents and drawings which are sometimes expensive to replace.

The problem is complicated by its many facets. How do you guarantee that all parties working on your junction or crossing scheme are working to the same drawing or specification revision? Who approves the drawing versions? Who is working on the latest TR2500? Who is responsible for the factory acceptance test? Where are they stored? And, of course, with multiple staff and multiple contractors, who has time or is diligent enough to keep paper documentation up-to-date?

What happens if the lead signal engineer goes on long-term leave? Not even the best paper-based quality control system can answer these questions. For example, if a department files signal junctions

under the site number, then how does an officer or principle manager access the information if they are not knowledgeable with the site number, only the road names.

The same problem occurs the other way round. If sites are filed under road names, as previously occurred in Slough, an extra situation arises. If a site is based on Bath Road, London Road and Windsor Road, which road is listed first? Is the site filed under B, L or W? Or a nickname? This can mean some documents get put to one side until the relevant traffic engineer can be found so he or she can file the document.

But sometimes, that document gets lost or misplaced temporarily, thus, in the severest of cases, the wrong TR2500 or periodic inspection forms are assumed to be the current version instead. This could lead to disaster, and has done with some authorities. In the severest of cases, it can mean litigation – and the courts are unforgiving of poor document control. The local authority often pays, both financially and with low public perception. If local authorities were to undertake risk analysis of the whole situation, it really wouldn't look good.

Anecdotal evidence is extensive, with stories about being on-site with the wrong drawings and needing to travel back to the office, abandoning the on-site meeting and reconvening at a more appropriate time; where the on-site EPROM doesn't match the latest document version, or the information on a controller's RAM becomes a surprise; the log



book could be missing, and the drawing unreadable as the weather has destroyed it. More delay, increased travelling, document printing, photocopying – it all contributes to a frustrating working environment with increased costs and carbon footprint.

If asked by the chief executive, a councillor, a member of the public or even a court of law about any traffic or pedestrian junction, could you honestly put your finger on *any* specific document, drawing, safety audit, IC4 file, including the site acceptance tests, all approved documents with full audit history of periodic inspections, issues raised and subsequent resolutions *at any time*? With 100% assurity and confidence? And why not?

With the advent of the PC, we now have many electronic tools available – networks, file-servers, e-mail, word processors, spreadsheets and, of course, the Internet. But many have found that on their own, these are insufficient to ensure proper controls, and the fact that all electronic documents are stored on a file-server just makes it easier for others to gain access to confidential information which was never intended to be open.

How would you feel if competing consultancies were all looking at each other's pricing submissions? What could you do if someone deleted that little yellow

folder on your G, L or M drive?

Hence, ITSAM. Key to the design of such a software solution would be another first for the industry – that of cloud computing or rather software as a service (SaaS) – as long as the engineer has access to a web-enabled PC (or possibly a PDA/smartphone) then, with the relevant access

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they can work from anywhere in the world, whether on-site or even at home.

This means no CD or installation on to a hard drive, which means no internal ICT involvement or restrictions. Just Internet access and that's it.

Slough also saw massive potential at giving access to its consultancy, delivery and maintenance partners who could gain visibility of up-to-date information without playing e-mail or telephone tag. They could even be tasked with supplying required documentation and automatically submit it for approval. All documents 100% guaranteed to be the current, up-to-date version.

Together, Slough and Traffic Solutions have spent the best part of six months laying out the detailed plans for ITSAM and its launch is

imminent. The software development platform has been chosen so that the product has in-built flexibility to provide additional functions and modules without compromising its underlying architecture or responsiveness.

ITSAM is, in many ways, an advanced and yet easy-to-use system which incorporates industry best

departments is fully controlled, time stamped and verified. Even documents being worked on and saved in draft form can be stored safely and without other officers thinking that document is the latest version. ITSAM lists documents in draft form, waiting for approval, archive and current. With version numbers, dates and authors initials registered.

Access levels and control can be set by the chosen administrator of ITSAM, so developers or external consultants and engineers see only the documents they are supposed to see. And one of the most important assets is that a document is never deleted. It is archived, and marked deleted, so errors and mistakes can be corrected, and that MOVA design, or pelican timing sheet does not have to be rewritten.

The system is being offered to other local authorities who need to take control of their documentation and develop approvals and quality processes, while minimising manual processes. ITSAM is a world-class solution which will naturally expand into other cross-over areas of the highways and traffic department to add real value to everyday document flow and negate the problems associated with paper-based and point-less electronic asset management processes.

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