



Nomad

At the Centre of
Mobile & Flexible
Working in Local
Government



**Government
Technology**
Nomad Supplement

supplement sponsored by

CAPITA
MOBILE SOLUTIONS



Strong authentication as a managed service that's highly available, flexible and easy to use.

Imagine what that could mean for you.

Signify's proven managed security service delivers the market leading RSA SecurID two-factor authentication 'on demand', with a flexible choice of token and tokenless options. With non-stop service availability, 24x7 end user support and managed logistics we make it quick, easy and very affordable to secure all remote user access to your network.

With one less thing to worry about, what else could you be doing with your time?

Contact Signify or one of our partners today:

visit www.signify.net/nomad

call us on +44 (0)1223 472572

or ask your IT provider about a Signify managed service.



 **Signify**

nomad - at the centre of mobile & flexible working

Mobile and flexible working has come a long way since the days of e-Government when Nomad was tasked with developing guidance and toolkits and to run a series of mobile pilot projects from 2003 – 2005 to demonstrate what was possible with mobile technologies at the time. With the end of the e-Government programme, Nomad launched the Nomad Forum, established a sustainable approach with key commercial suppliers working in the local government market and continued to disseminate best practice through its website and events programme. Today, Nomad continues to work closely with local authorities and suppliers across the country to promote the mobile and flexible working agenda.

WHAT ARE NOMAD'S KEY FINDINGS?

During the last four years Nomad has witnessed significant progress made towards mobilising staff in the Public Sector. Many of the original findings from the early years of Nomad pilot project testing have now been

These include:

- Improvements in frontline services to the customer
- Efficiencies gained in overall staff productivity and subsequent cost reductions
- A strategic programme delivering benefits on a much broader long term scale
- The realisation that initial pilot projects can be fully rolled out across the authority
- The technology and modes of connection have matured with many established solutions continuing to develop and improve
- Suppliers have now recognised the importance of the public sector mobile market and offerings have increased and improved.

TRANSFORMATION – IS IT RELEVANT?

It is important to recognise that mobility solutions when linked to flexible working can support the national agenda emerging from the Treasury and Central Government departments. The recent strategies around Transformation have confirmed what has been evident for many years - that the use of technology in conjunction with changes in the way the organisation works will be crucial in meeting the challenges of the future.

Sir David Varney in the Transformational Government Strategy makes repeated reference to the importance of mobile working: "The Transformational Government strategy has set the scene for transformation of contact with citizens and businesses, including increasing the focus on the user of public services and making the most of technological advances.

"Improving the services offered through e-channels and contact centres, including new services through mobile technology, should increasingly provide a more relevant service that will improve accessibility".

The recent Treasury report on the 2007 Comprehensive Spending Review (CSR07) makes direct reference to the importance of

technology in the public sector:

"ICT and information handling processes in particular hold the potential to transform the interactions between users and the providers of public services. The increasing prevalence of ICT in the delivery of private sector service organisations will raise consumer expectations and demands on public services... the Government will need to respond to the challenges and harness the potential benefits that technological change will bring for public services."

Many of the savings achieved under the Gershon Efficiency Agenda did not arise from a fundamental transformation using technology. Nomad believes that meeting the demands of CSR07 will not be possible without a transformational approach using enabling technologies and instigating and sustaining new ways of working.

The most basic question that encompasses the above is: "What does this mean in practice for local government and how should local authorities proceed?"

What is clear is that local authorities have to work within the constraints and challenges of limited budgets, but they must look to the current market and the experiences of others to develop a pragmatic way forward to employ the enabling technologies in a way that is meaningful to staff and customers alike. There may be serious limitations around available financing to make the change but there are good examples where investment has been made and these issues have been overcome.

RECOMMENDED APPROACH

Both mobile and flexible working will need to be embedded into the transformational approach but the application and pace of change will inevitably vary across services and corporately in each authority. To deliver on the current national agendas Nomad strongly recommends the promotion of a corporate strategic approach to delivering flexible and mobile working across a local authority, which will facilitate the shaping of a consistent framework for adoption internally. This approach is being adopted by a number of authorities across the UK with a positive amount of success so far. □

confirmed by those councils who have taken up the mobile and flexible working baton.

Image courtesy of Barnsley MBC



state of the nation -a survey of local authorities

Nomad has set out to compile a picture of current mobile and flexible working solutions and initiatives being implemented in local authorities across the UK today. An ongoing Nomad National Survey has been introduced to capture detail regarding how much progress each council in the UK has made towards mobilising their services, staff and business processes.

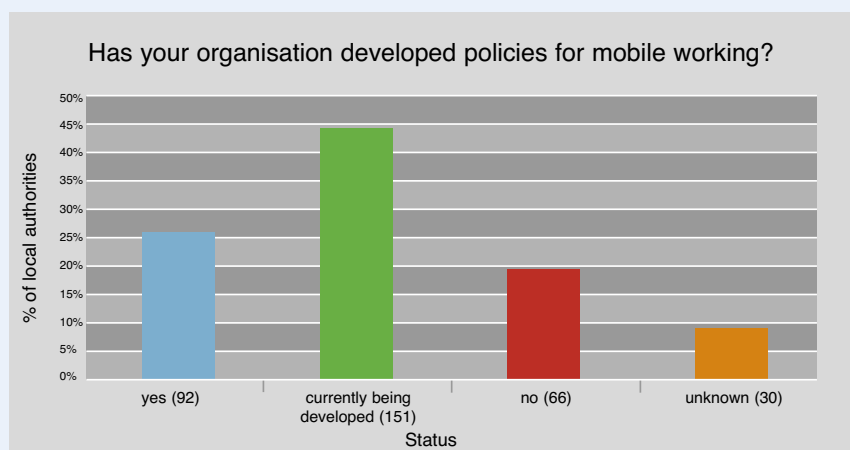
This is a dynamic survey, from which Nomad has taken a snapshot in order to bring you the latest results. Nomad will give access to the most current results as they evolve through a new Nomad micro website. The new website will enable users to search for any council that is implementing mobile and flexible working, to identify service areas benefiting from solutions and which methods of approach have been most successful. The ultimate aim of the new database will be to allow local authorities access to each other's insights, innovation, experiences, best practice and expertise, with the anticipation that costly mistakes and 're-invention of the wheel' can be avoided and communication between councils can be opened up.

One of the main findings of this ongoing survey, conducted by Nomad throughout the UK, is that local authorities are moving forward more rapidly with mobile and flexible working solutions. Confidence, expertise, experience and sharing of best practice have grown dramatically in comparison to the results of a similar Nomad survey conducted three years ago.

The results of many of the early Nomad pilot projects have confirmed that introducing mobility solutions into front line service areas will deliver increased efficiencies and improved service to the customer. Major undertakings to introduce the full flexible working model across organisations are starting to emerge with strong evidence of reduced accommodation requirements, increased productivity and a more motivated and committed workforce.

The figures listed below are a summary representation of the key messages resulting from the survey (based on a 70% return so far from local authorities (LA's) across the United Kingdom).

- **27% of LA's have developed mobile working policies**
- **45% of LA's are currently developing mobile working policies**
- **68% of LA's have developed flexible working policies**
- **55% of LA's have developed home working policies**
- **35% of LA's have put in place a corporate strategy for deployment**
- **32% of LA's have no plans to implement outdoor broadband wireless deployment.**



WHAT ARE THE IMPORTANT TRENDS FOR LOCAL AUTHORITIES COMING OUT OF THIS SURVEY?

• Mobile Market development

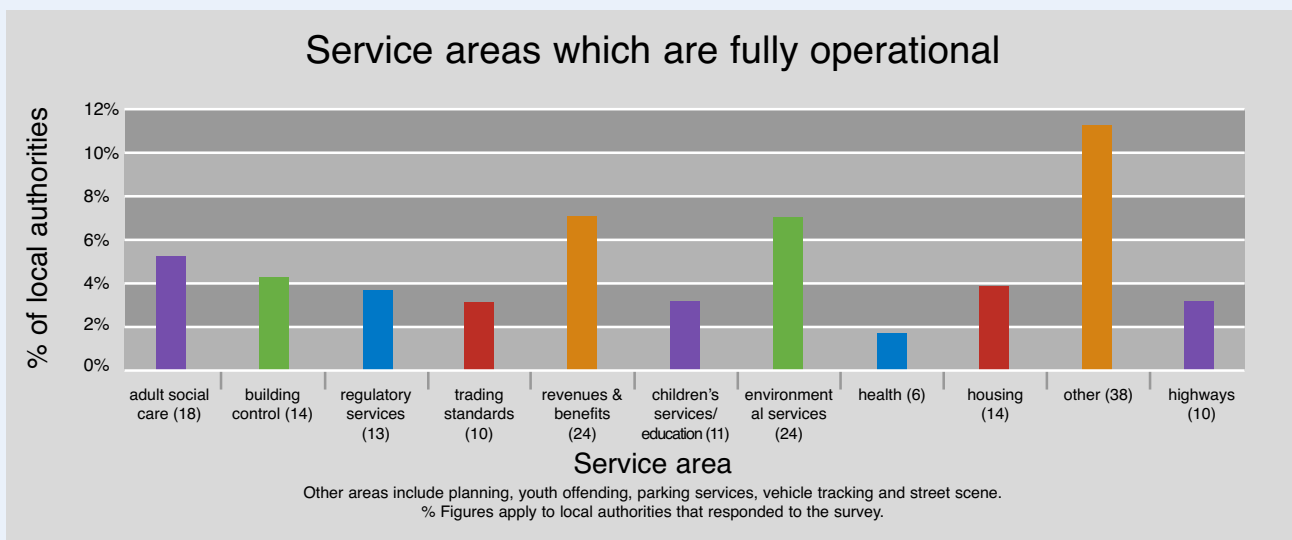
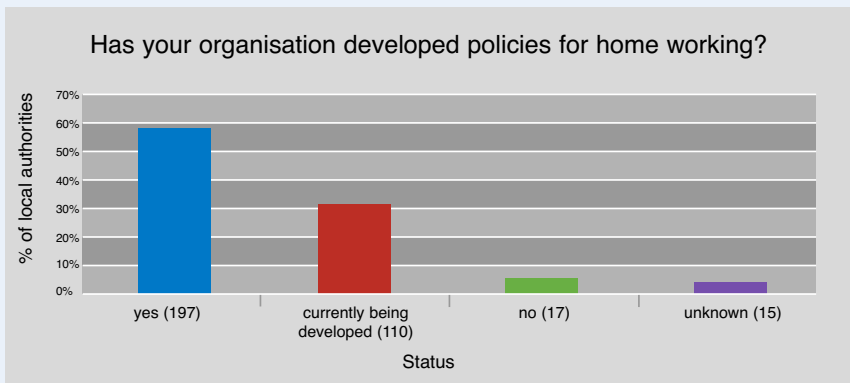
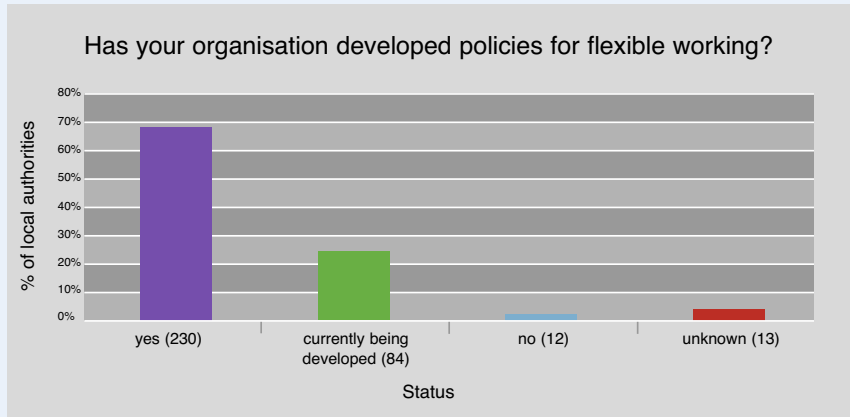
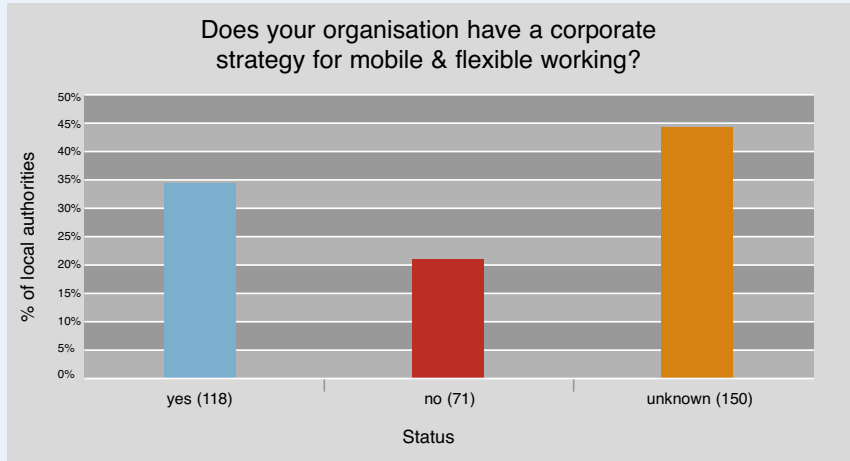
Over the last 3-4 years there has been significant investment by suppliers into the local government mobile market with recognition that practical cost effective solutions that meet the needs of service staff are paramount. The market has gradually matured with some of the established back office suppliers developing considerable mobile capability along with newer small to medium sized suppliers providing specific mobile solutions across service areas. This change means there are now proven solutions available for most scenarios and with careful selection of the partners involved successful rollout is possible.

• Service Areas

The rate of take-up for mobile initiatives varies considerably across different service areas in local government. Services such as Housing Maintenance and Benefits, where a strong business case has been proven, have led the way with some well-established solutions demonstrating tangible hard and soft benefits. The use of generic mobility solutions for email, SMS and diary facilities has also moved rapidly forward. Other areas such as Children and Adults' services and Environmental Health are still developing, with a smaller number of authorities fully operational, but are proving to be good early exemplars. Local authorities need to start implementing mobility strongly into these areas, taking advantage of the experience of these early adopters.

• Service Efficiencies – Proving the Business Case

Many early mobility projects undertaken by local authorities either faltered at the initial stage, or did not progress beyond the pilot stage and business cases were often not undertaken. With the projects 'perceived' as not delivering measurable and extensive productivity efficiencies or cashable savings this often led to increased internal resistance to >>



>> further mobile project efforts. Today the situation is entirely different. There are sufficient proven examples across a range of service areas where the business case has stood up, cashable savings have been released and the service has dramatically improved. It is also true to say that the nature of the improvement can vary, with some service areas finding it harder to takeout cashable savings. However, Nomad has seen significant changes in specific authorities such as North Hertfordshire District Council, an authority that is applying a corporate strategic change approach. The intent is to fundamentally improve customer services and as part of this introduce mobility across all front line services with the mobile service provision linked to flexible and home working. (The North Hertfordshire DC case study is available to view online at www.projectnomad.org.uk)

• **Corporate Strategic Approach**

The move to adopt mobile and flexible working at a corporate strategic level is starting to gain momentum but there are still a large number of authorities without a corporate approach. A number of authorities have developed a corporate strategic framework that embraces the whole agenda of delivering efficiencies and major organisational change through the introduction of flexible and mobile working. There is a growing recognition, which Nomad would support, that this approach is applicable

to all sizes of authority. Only 35 per cent of respondents to the recent Nomad survey indicated that there is a corporate strategy in place for the introduction of mobile and flexible working within their authority.

• **Flexible & Home Working**

The majority of authorities surveyed have implemented or are currently developing flexible working policies. However, the widespread deployment of flexible working across the organisation as a whole is still at an early stage.

Home working is often on offer to authority staff and in some instances has been taken up, with positive moves towards cutting the cost of accommodation. However, this is, in the main, still decided on a person-by-person basis, rather than implemented within a strategy across the whole service.

The benefits of flexible working often require a council wide commitment to introduce new ways of working and to rationalise accommodation, which is proving difficult to do service by service.

• **Wireless Broadband**

The survey confirmed Nomad's understanding of the take up of outdoor wireless broadband with only around 25 authorities deployed and functioning. The majority of local authorities are either at the thinking or planning stage or have no plans to develop. However, we have continued to see growing interest in wireless technologies with new authorities moving to

issue ITT's for broadband wireless networks although a key aspect of this will be in developing a sound business case and appropriate applications.

• **Suppliers**

The growth of mobile and flexible working in the public sector has seen some interesting changes in the approach and offerings from suppliers. Many of the traditional back office suppliers such as Anite and Capita have now developed a mobile architecture capability to support deployment in the field. We have also seen the emergence of many smaller companies with an offering that is entirely based on a mobile capability. Partnerships have emerged between suppliers operating in different areas of the mobile paradigm – this is an area Nomad would like to see develop further to assist local authorities.

In summary, given that the findings are based on a 70 per cent return, we can confirm that the majority of local authorities are embracing mobile and flexible working to a degree. There are numerous cases where mobile deployment is underway in multiple service areas. It is clear that the degree of progress in this field is varied with some local authorities appearing to be quite a long way down the mobile and flexible road and others just beginning their journey.

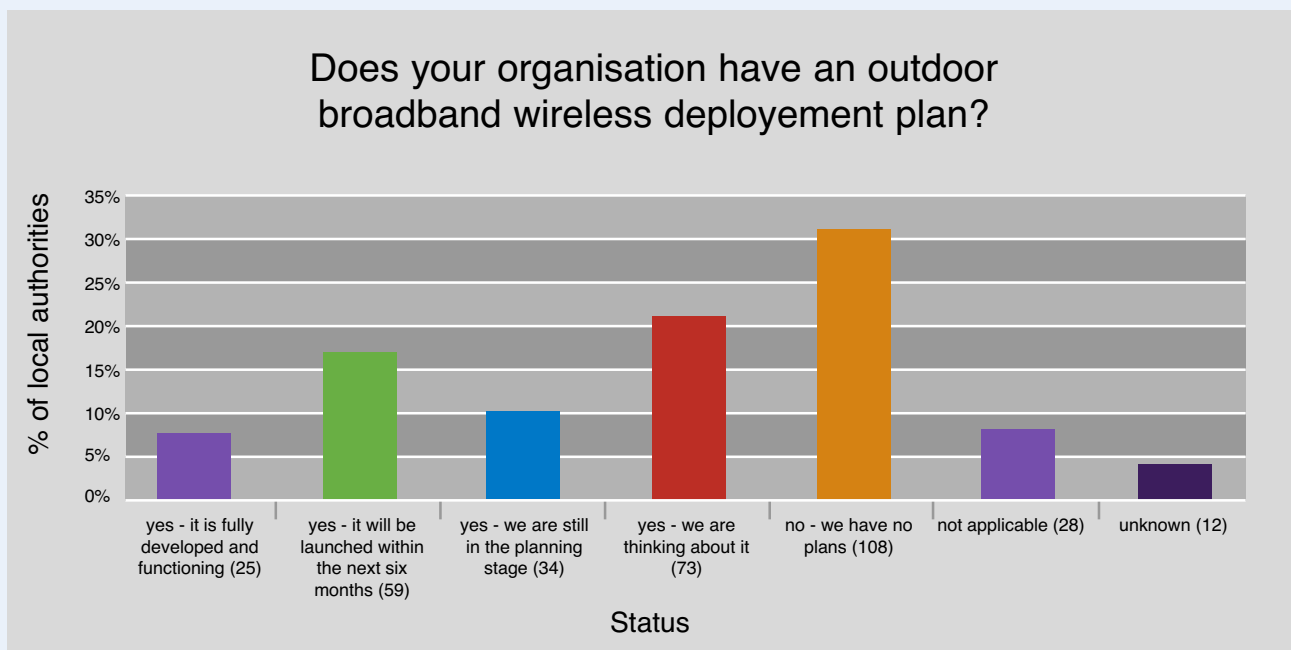
If you are looking to move forward with mobility solutions in specific services or tackle the broader flexible working agenda please get in touch with Nomad through nomad@cambridgeshire.gov.uk.

Nomad would like to thank all the authorities that have participated in the survey so far.

All Nomad case studies are available online at www.projectnomad.org.uk.

Look out for the launch date of our new 'State of the Nation' micro website – Coming Soon! □

“We have continued to see growing interest in wireless technologies with new authorities moving to issue ITT's for broadband wireless networks although a key aspect of this will be in developing a sound business case and appropriate applications”



► Written By **Integral Mobile Data**

firefighters embrace mobile data

Tyne and Wear Fire and Rescue Service turn to Integral Mobile Data (IMD), part of the OLM group to improve the mobile effectiveness of its firefighters

Undertaking fire risk assessments in homes across the Tyne and Wear area was proving a painstaking task, which required a significant commitment of time – a scarce resource for any firefighter.

To address this issue the Fire and Rescue Service identified the need for a robust mobile data management application to improve the mobile effectiveness of firefighters. Therefore Tyne and Wear Fire and Rescue turned to Integral Mobile Data (IMD), part of the OLM group, for professional advice.

THE BACKGROUND

Tyne and Wear Fire and Rescue Service serves a population of 1.08 million. With 17 stations spanning an area of 540 square kilometres, the service works closely with all communities to improve people's safety in work, domestic and social environments.

Their mission is to save life, provide humanitarian services and protect the environment. However the service is equally focused on prevention. For when it comes to fire safety, prevention is definitely better than cure.

THE CHALLENGE

A regulatory requirement of all fire and rescue services across the UK, Home Fire Risk Assessments (HFRA) require firefighters to visit the homes of people who are at the greatest risk from fire in order to complete a thorough assessment of the property.

Historically this process involved the completion of a two-page questionnaire for each household. Andy Robinson, GIS Development Officer for Tyne and Wear Fire and Rescue Service explains: "In order to complete HFRAs our firefighters undertook quite an onerous task. Firstly, the paper form was completed during the assessment within the homes, and upon returning to the station the information was manually inputted into our computer system – resulting in the duplication of data recording."

Recognising the laborious task that this method created, Tyne and Wear Fire and Rescue Service sought a solution to facilitate a more streamlined process. Andy continues: "With approximately 80 assessments completed per station per month, this was an area identified as needing significant improvement in its approach. We wanted a solution that would save our firefighters time, cut the duplication of data recording, and at the same time, be straightforward enough for our firefighters to master quickly."



THE SOLUTION

Having researched various software toolsets for the development of mobile data management applications, Tyne and Wear Fire and Rescue Service selected Integral mFORMS®. As a sophisticated platform that enables specific mobile applications to synchronise with multiple databases, Integral mFORMS® offers the power, flexibility and speed required to computer-enable their mobile workforce.

The short window for development was one of the key decision points for Tyne and Wear Fire and Rescue Service. Deployed quickly and easily by people with no specialist programming skills, the solution is now deployed within the service by over 500 firefighters across the entire area.

The firefighters now take a PDA containing Integral mFORMS® on the visits, complete the survey of the house and record it on the device. When they return to the station, they simply place the handset onto the cradle which automatically transfers the information to the database.

THE BENEFITS

The implementation of Integral mFORMS® has led to the fire service providing a more efficient HFRA service through securing both time and cost-savings. "Prior to implementation, it would take around 10 minutes to enter the data from just one form. Now the same information is completed in just seconds, and furthermore, through reducing duplication, the quality of information is much improved," comments Andy.

Through the application of this solution, Tyne and Wear Fire and Rescue Service are able to free up valuable time to focus on what they do best – saving lives and preventing risk. Andy

continues, "The time previously spent inputting data has now been reallocated to other important duties, for instance, checking the fire equipment." From an audit point of view, Tyne and Wear Fire and Rescue Service can now accurately monitor data on a monthly basis and set targets accordingly.

LOOKING FORWARD

Tyne and Wear Fire and Rescue Service has since established a focus group that includes firefighters from stations across the region that use Integral mFORMS®. As Andy concludes, "The focus group was initiated in response to the feedback from our firefighters. As our firefighters became more familiar with the solution they wanted to become more involved, and as such were keen to take part in its future development."

As it has successfully streamlined working practices for the fire service, firefighters are keen to drive the solution forward to the next stage. As a direct result of the focus groups, and exploiting the ease and speed of designing and adapting applications inherent in Integral mFORMS®, Tyne and Wear Fire and Rescue Service aim to extend usage for ad-hoc information. □

► FOR MORE INFORMATION

If you would like more information about IMD, or Integral mFORMS®, please contact: enquiries@integralmobiledata.com or telephone 0870 080 1808. Visit our website at www.integralmobiledata.com
Integral Mobile Data, Pembroke House, Ty Coch Lane, Llantarnam Park Way, Cwmbran, NP44 3AU

where to start and key messages

Where do you start as an authority when you are looking to deliver mobile and flexible working solutions? There are a number of obvious choices such as:

- Talking with the internal IT community to see if anyone else has done what you are trying to achieve within your authority
- Speaking to other service areas within your authority where some form of mobile and flexible working is in place
- Contacting the supplier of the system/s you are looking to mobilise.
- Contacting specialist suppliers in the mobile market who have solutions that may fit your requirements
- Speaking to other local authorities that have already implemented mobile and flexible working in the area you are looking at
- Checking various websites and investigating national initiatives for examples of what local authorities have done
- Attending events with specific themes in mind to understand what others have done.

Local authorities will try some if not all of these, but probably the most important in terms of building confidence is to be gained from other authorities that have implemented the solution in a similar way. This will be of increased value particularly where tangible benefits have been demonstrated and the workforce has really taken well to the approach.

In the flexible working field there is growing interest in authorities that have established a programme framework for addressing all of the component areas required to deliver the change. In all of these areas there are clear best practice guidelines and policies that have developed from the experience of individual projects. Of course, in some cases there may not be an example to follow but these are becoming less common. The majority of solutions using mobile devices (Tablet PCs, PDAs, Smartphones, BlackBerry's or Digital Pens) have been trialled by someone in local government.

It is for this reason that Nomad has continually stressed the importance of case studies and has worked to develop and disseminate these from a range of exemplar authorities. This is of particular importance in areas where the mobile agenda has yet to move ahead and the market is at the early adopter stage.

The following case studies have been included to demonstrate in practice how the mobile agenda has progressed and in which areas authorities should be concentrating.

MOBILE ASSESSMENTS

The mobile benefits assessments solution implemented at East Riding of Yorkshire Council, with Kirona Solutions Ltd, is a recognised success in that it is well established, has delivered hard cash savings and operates in a large rural authority. This is one of the longest standing mobile solutions Nomad has found and demonstrates just what is possible for any local authority responsible for this service. The service has made considerable savings in the region of £200k through the introduction of mobile working and service changes internally. The time taken to process new claims has been cut from 39 days to 19 over a two-year period. Many other authorities have subsequently implemented mobile into this service area

HOUSING MAINTENANCE

The case for mobilising front line staff in the housing maintenance area is now overwhelming with a number of excellent examples where mobile technology has been implemented for the front line workforce in conjunction with dynamic scheduling of reactive repairs. There are now many examples in local authorities and housing associations / trusts where the service has been fundamentally transformed both in terms of the cost of operation and service delivery. Nomad has evidence from well-established solutions of reductions in the costs of the repairs services of up to £1.5 million per annum.

At Peterborough City Council the implementation of a mobile working solution has enabled a significant reduction in the cost of the repairs service through increasing efficiency and reducing the levels of staff, vehicles and other resources needed to deliver it. Wrekin Housing Trust, Chesterfield Council and Erimus Housing in Middlesborough have also achieved service efficiencies and financial savings.

A common feature of mobile repairs solutions is the use of dynamic scheduling software to manage appointments for repairs with tenants. Following the implementation of a mobile solution along with a simplified schedule of rates, centralised scheduling and a call centre diagnostic tool, Darlington Council has reduced the need for operatives by 10 per cent.

Swindon Commercial Services (SCS), responsible for a range of street scene, housing, waste and highways maintenance for Swindon Borough Council has achieved a



Image courtesy of Barnsley MBC

“The Tablet PC is used to complete an assessment to support the Single Assessment Process (SAP) with the information transferred electronically into the Swift client record system”



transformation into a commercial business providing a financial return to the Council. Working with Consilium Technologies, who provided a Total Repairs and Maintenance solution, alongside an integrated job management system and modern call handling capability, the solution is supporting over 200 users. The benefits of the solution include an estimated 5 per cent efficiency gain within the IT department and savings of well over £50k in labour costs per annum.

ADULT SERVICES

At the London Boroughs of Barking & Dagenham and Havering a successful rollout of mobile technology to over 380 social workers has been achieved in conjunction with Anite. The Tablet PC is used to complete an assessment to support the Single Assessment Process (SAP) with the information transferred electronically into the Swift client record system.

Service benefits have been achieved by reducing time to complete the assessment and the overall waiting times for assessment correspondence. This is a major achievement in a service area, which more broadly across local government is at an early stage of mobile development.

HOME & FLEXIBLE WORKING

In the areas of home and flexible working we have seen at the Leeds City Council Benefits Service the introduction of new ways of working significantly improving productivity and staff morale. The introduction of fixed home working for 24 staff has been a success but did require extensive preparation to understand roles of staff and the new work environment. The correct IT setup was essential as was the agreement to HR policy and impacts on staff terms and conditions. Well-motivated staff who can work independently are most suited to home working. A clear communications strategy and support system for staff undergoing the change also contributed to this being a success. The outcomes of this project in terms of increased productivity and better work life balance created a win-win for the authority and staff alike. Leeds CC are now looking to roll out a home working strategy corporately based on the success of the benefits service.

A number of other authorities have moved forward with the broader flexible working agenda applied across the organisation:

- Workwise at Hertfordshire County Council

- Agile Working at Wiltshire County Council
- Agile Working at Salford City Council
- New Ways Of Working at Wycombe District Council

In Barnsley, new ways of working are being implemented in conjunction with the build of a new modern and purpose built head office, equipped with the latest IT, office management services and hot desks for a mobile and flexible workforce.

CHILDREN'S SERVICES

The recent Nomad National Survey has confirmed that a number of authorities are starting to address the needs of children's social workers when working away from the office. Our research and feedback from local authorities confirms that by providing simple diary, email and mobile phone capability children's staff can become more productive without the risk of overly complex solutions. Some authorities have moved this to the next level with the use of Tablet PCs for service related functions.

Sefton Council is currently trialling wireless enablement within children's services. The whole concept of the pilot, which will involve the use of Tablet PCs, is to determine whether the technology is fit for purpose for practitioners. The Tablet PCs will be used to record contact, observations, recommendations and referrals. They will be used for the full spectrum within children's services both on the educational and the care side. Examples like this are of enormous value in establishing the most appropriate technology and approach for the service.

Nomad is supportive of such initiatives, which look to maximise the benefits of the technology for children's staff, particularly where the solutions apply to the day-to-day role of staff.

OTHER SERVICES

There are many other examples of service areas deploying mobile solutions such as Planning & Building Control, Environmental Health, Street Scene, Trading Standards, Youth Offending, Highways and Parking Services to mention just a few. Across local government there is someone deploying some form of mobile technology for all of the remote services provided by local authorities.

Guidance service and case studies online Nomad often receives requests from local authorities about 'who else is doing what in the mobile and flexible working arena'. Nomad continues to provide guidance and support in these queries and shares the achievements of local authorities.

If you need further information on the above service areas or would like to view the specific case studies please check out the Nomad website at: www.projectnomad.org.uk.



► Written By **Synetrix**

the wireless imperative

Synetrix explores how strategic outcomes might be delivered through investment in municipal wireless infrastructure

The case for deploying a wireless broadband infrastructure across municipal areas is underpinned by the socio-economic outcomes at the heart of the UK Government transformation agenda, because it delivers simple and convenient access to online resources.

PRODUCTIVITY GROWTH

According to the BERR, between 1995 and 2000, 40 per cent of Europe's productivity growth and 25 per cent of the European Union's GDP were due to ICT alone. For the same period, ICT exploitation accounted for 60 per cent of productivity growth in the USA. The UK IT industry alone contributes £30bn GVA, and ICT intensive industries now contribute 45 per cent of the entire UK GVA, the highest percentage of all G7 countries apart from Germany.

Between 2000 and 2005 Britain underwent a transformation in its approach to, and use of, information technology, taking on a world-leading position in digital TV, achieving one of the most advanced and most competitive mobile phone markets in the world. Britain also provides broadband services to around 99 per cent of the population with prices continuing to fall and data speeds continuing to increase.

ALIGNING OUTCOMES

Despite this impressive progress, the government's Digital Strategy makes provision for further improvements in order to ensure that all sections of the community are able to benefit from the opportunities presented by digital technology. In particular, the government is concerned to ensure that:

- The ICT market remains competitive thereby ensuring that digital technology becomes more and more affordable;
 - ICT is increasingly adopted to promote economic and efficiency gains, particularly in the delivery of public services;
 - ICT is increasingly used in reducing levels of social exclusion, particularly by removing barriers to public service access and increasing access to education and employment opportunities;
 - Households benefit from the financial savings that access to the internet can bring; and
 - The competitiveness and productivity of businesses through the more widespread uptake and application of ICT solutions.
- In pursuit of these goals, the government

published, in 2005, its Transformational Government, Enabled by Technology plan, setting out a vision for 21st century government, requiring three key transformations:

- Services, enabled by IT, must increasingly be designed around the needs of service users and not service providers;
- There must be a much stronger emphasis on the 'front office' with service providers using shared service delivery infrastructure, including ICT; and
- There must be broadening and deepening of government's professionalism in terms of the planning, delivery, management, skills and governance of IT enabled change.

A keystone to the implementation of Transformational Government is the drive to increase efficiencies within the delivery whilst at the same time making public services more accessible to service users by shifting resources from the back office to the frontline.

WIRELESS ADVANTAGE

The publication of the Gershon Report in July 2004 made several important references to the need for the better application of ICT solutions to achieve this shift. Consultations undertaken in the preparation of the review revealed that many consultees considered that the benefits of e-government through the reduction in costs of delivering traditional services had not been realised. Others suggested that there needed to be a significant culture change to realise the benefits of ICT through an active process of managing the shift of key customer groups to ICT channels.

This is where mobility, delivered via wireless infrastructure, is at the heart of transformation – facilitating effectiveness and efficiency in the delivery of public services while ensuring a near ubiquity of network coverage – enabling a bridging of the digital divide experience by those who are currently socially and economically excluded from the digital evolution.

Wireless gives us the advantage to achieve outcomes due in part to its simple, convenient and flexible delivery of broadband data. With no requirement for fixed endpoints, public sector employees can take advantage of working flexibly while citizens can be afforded free access to government services, while service providers can deliver premium data services and content from commercial sources.

The business case for building a wireless

infrastructure is underpinned by Transformational Government, funded by the efficiencies in service delivery afforded by the technology. However, building the physical infrastructure is only the first step; the delivery of service requires that this infrastructure is operated efficiently, with open access to a wholesale platform to service providers to ensure best value is gained from this infrastructure. Hence, sustainability is the key to achieving outcomes and the commercial model is the key to sustainability. To ensure long term sustainability, it is imperative to develop the benefits model for delivering wireless broadband while validating assumptions to ensure the infrastructure and services are built to deliver the desired outcomes.

STAKEHOLDER IMPERATIVE

Synetrix is currently engaging with key local authorities, suppliers and NOMAD to articulate a wireless model where the benefits and analysis of outcomes are tied to a commercial model of building, maintaining and exploiting a wireless municipal infrastructure.

Synetrix is a well-established partner for the public sector providing secure infrastructure, integrated applications and managed services. Our expertise is in developing secure communications environments where users have optimum flexibility in the way they share and access information.

Our track record of pioneering solutions in the UK public sector offers a wide range of experience assisting local authorities - faced with the many challenges of delivering citizen centric public services - to consider commercial models, technical alternatives and develop sustainable services. □

► FOR MORE INFORMATION

More information about our company and promotion calendar is available on www.synetrix.co.uk, or contact Ian Taylor, 01252 405 600.



wireless transformation - lessons being learnt

For the last year Nomad Wireless has been engaged with educating local authorities and raising the profile of how wireless technologies such as 3G, HSPA, WiFi, WiMAX and LTE (Long Term Evolution) can assist in transforming service delivery.

In achieving the council vision, local authorities have identified the creation of strong, cohesive communities, providing excellent council services. Furthermore they strive to be recognised as leaders in delivering competitive, modern, joined-up and interactive public services, as well as creating a new form of community through the use of new technologies and the sharing of knowledge.

Wireless broadband is a pervasive technology. In the recent Nomad State of the Nation survey, it identified that the implementations of new technologies such as outdoor wireless broadband in local government are in the minority. However, we have seen a rise in the number of councils looking at such “transformational innovations”.

Councils such as Westminster, Birmingham, Leeds, Renfrewshire, Liverpool, Newcastle, Waltham Forest, Norfolk, Milton Keynes, Islington, Bristol, Swindon and Warwick District Council are all currently implementing such networks. Others are going through the competitive dialogue stage and many more are seriously thinking about the opportunities wireless can bring. Informa plc estimates that local authority Wireless projects are looking to grow from around 20 currently; to some 277 – in the UK alone – by 2011.

The delivery of this technology promises a range of potential benefits such as efficiency in the provision of local service delivery, delivering higher workforce effectiveness, attracting new business and supporting innovation, social inclusion, enhancing public safety and contributing to the knowledge economy.

However, despite this promise there are still a number of challenges to face and lessons to learn before we can see the greater adoption of wireless networks.

Developing the business case for municipal wireless still remains an art form. It is clear that “one size does not fit all” and hence local authorities will have to ensure that they examine all aspects of their business case in order to justify a wireless network. However, in the case of the City of





>> Westminster, they have installed wireless CCTV that can recognise parking permits and the plates of offending vehicles. This results in parking tickets being issued without a human witnessing the offence in person. The parking crackdown is the most significant application to be deployed on the Westminster's Wi-Fi network and parking enforcement is in this case the "killer application".

The adoption of the correct business model is also vital. Many UK local Authorities will have to ensure that in the development of a financially viable and sustainable wireless network, they examine all the possible business models and are sensitive to the profit motives on the commercial side. Simply trying to adopt the US "free model" is not necessarily going to be transferable. Recently in the US, Earthlink, a major US Internet Service Provider, who have been responsible for the development of networks such as San Francisco and Houston, says it can no longer afford to foot the bill to build citywide Wi-Fi networks and this is now jeopardizing the cities' plans to provide low-income residents with affordable broadband.

Local authorities wishing to own, build and operate a wireless network need to be aware of state aid issues. The European Commission has recently approved the use of public funds for Prague's municipal wireless network and ruled that these do not constitute state aid.

Initial plans of the Prague project raised concerns and key modifications were made. In particular, the project will now only allow the public sector and citizen's free broadband access limited to public-sector websites and public-sector non-commercial content, such as

“Although the wireless and digital community concept is still in its infancy, it is clear that communities and local government can gain immensely from the utilisation of such technologies”

e-Government services. Plans to commercialise the use of the network as a wholesaler raised doubts from a state aid perspective. It was believed that the project could have been seen as being anti-competitive by private operators by providing unrestricted free or subsidised internet access to the public.

For local authorities looking into the development of all encompassing broadband networks, choosing the right technology can be a challenge. It is important to remember that your network may consist of many complementary technologies such as fibre, cellular and wireless to form the ecosystem. New wireless standards such as Mobile WiMAX are emerging. The promise of higher speeds over longer distances is attractive. However, such new standards as yet are not prevalent in end user consumer devices such as PDAs, smart phones, and laptops. For a local authority wanting to deploy a network today this means that they need to ensure that they adopt mass market technologies such as Wi-Fi and Wi-Fi mesh networks which have the capability to upgrade to Mobile WiMAX.

Local authorities also need to be aware of the fact that the adoption of any flavour of WiMAX is based upon the use of licensed

spectrum; unlike Wi-Fi, which operates in a licence free environment. At this moment in time, the UK players within the WiMAX spectra are limited. Although the upcoming 2.5GHz to 2.69GHz auctions may change the landscape, it may mean that local authorities will have to pay a premium to acquire such services.

In summary, although the wireless and digital community concept is still in its infancy, it is clear that communities and local government can gain immensely from the utilisation of such technologies. Despite the challenges and lessons that can be learnt from pioneering, pervasive wireless technologies can help local government encourage economic development, enhance the knowledge economy, and play a pivotal role in the provision of better joined up citizen centric services and building an overall safer community.

Nomad Wireless over the next coming months will also be developing its own wireless toolkit that will further expand upon some of the challenges and issues mentioned above and would welcome your input. Please contact Nomad at nomad@cambridgeshire.gov.uk



► Written By **Motorola**

wireless traffic management

Wireless gives the green light to improving traffic management

Road management is a considerable task: keeping traffic flowing is an essential economic requirement, road users need to be monitored and safeguarded across extensive networks, new control systems (such as congestion charging) are being introduced and buses must be prioritised to ensure punctuality.

These demands are expensive and challenging to resolve. But new technology is providing cost-efficient options to build highly effective and versatile traffic control systems. One such technology is wireless broadband. It's discussed in this article with reference to the innovative traffic management programmes of Lyon and the Glasgow City Council.

WIRELESS: A BREAKTHROUGH TECHNOLOGY

A useful way to think of wireless broadband is that any service provided over a wired network can be accessed over the air. Increasingly, cities and communities with progressive administrations are incorporating wireless broadband into their communications systems to provide access to critical data, voice and video services. As the city of Lyon demonstrates, it can also be used to support a flexible range of applications such as traffic control schemes.

KEEPING TRAFFIC MOVING IN LYON

Lyon has invested in an advanced traffic management scheme, the Central de Régulation et d'Information du Trafic et des Événements Routiers (CRITER). It monitors traffic congestion and adjusts traffic lights to cut travel times across a road network hosting 4.4 million car journeys daily. The Local Authority wanted to extend the initial system to coordinate 2,000 traffic signals at main intersections. However, many of the sites were outside existing network coverage.

Motorola's Canopy® wireless broadband system provided the solution to this challenge. It wirelessly communicates data on traffic volumes generated by sensors across the road system to CRITER. This assesses the situation (on an ongoing basis), transmitting signals back through Canopy to amend light phasing. By basing these calculations on actual as opposed to aggregated information, congestion management has been significantly improved in the city area.

Canopy was simply installed and has no

subscriptions so ensuring that the network of traffic lights was expanded quickly and cost-effectively. It's scalable as well so additional lights can be easily connected. And, due to its rugged design, the Canopy modules are co-ordinating the highly secure and fail-safe communication of live traffic data and instructions for traffic lights - factors that are critical to expediting effective traffic management. Motorola technology is also being used by Glasgow City Council's roads department.

RUNNING GLASGOW'S BUSES TO TIME

Glasgow City Council is currently implementing its 'Streamline' initiative to provide citizens with a fast, frequent and reliable bus service. Hamilton Purdie is Assistant Strategic Traffic Control Manager, Glasgow City Council. He comments: 'Carrying about 40 times more people than the car, the bus is a primary factor in the drive to reduce congestion and tackle pollution. The premise of Streamline is that, if the buses are reliable, people are more likely to use them. The system aims to keep buses to timetable intervals providing a predictable service around which people can structure journeys.'

STREAMLINE: KEY COMPONENTS

Streamline applies Global Positioning Systems (GPS) to track 500 buses through eight 'corridors'. If a bus slips behind schedule, the Bus Information and Signalling (BIAS) system registers this, and gives the bus priority at traffic lights. The system also employs 'SCOOT' traffic control software. SCOOT collates data on traffic from road sensors, applying the intelligence to anticipate congestion that may impede buses. It adjusts signal phasing accordingly to keep services on schedule.

A key requirement of the system is the communications network that enables SCOOT data to be collated and passed back to control room systems and for signals to be controlled remotely. To fulfil this task the previous system relied on the local telecoms provider's infrastructure – but this required expensive installation and ongoing service leasing charges. With cost and reliability key considerations, the decision was taken to build a private network.

COMMUNICATIONS SYSTEM

With the recommendation of a technology partner, Glasgow City Council approved the

installation of a MOTOMESH™ wireless broadband network. The signal sites are networked through a series of wireless access points. Ultimately, 254 of 334 traffic lights covered by the system will be connected (currently 147 are controlled using MOTOMESH).

FAST AND EASY TO INSTALL

A primary reason for the installation of MOTOMESH is that it supports the drive to reduce both capital and operating expenditure: it's fast and easy to install; it's reliable (reducing maintenance); it's convenient (existing street furniture can be used and no planning approval is needed to site equipment) and the network is private requiring no subscription fees.

Performance was also a core consideration – in built-up areas signals from other networks can impede wireless communications. MOTOMESH, designed for battlefield communications, includes technologies to slice through this 'background noise'.

REAL-TIME DATA

Says Hamilton Purdie: 'MOTOMESH provides the network to collate and send back information on traffic volumes and the mechanism to send instructions to realign traffic light phases accordingly. Although the project is still under way, we've been impressed with the performance of the wireless network. It will deliver real-time data that's critical to effectively manage traffic flows.'

WIRELESS FLEXIBILITY

As well as supporting traffic systems, wireless is a versatile technology. For example, Motorola's technology is providing the camera infrastructure to monitor parts of the UK's motorway system. In fact, wherever rugged and reliable networks need to be quickly and cost-effectively established, wireless provides a flexible solution. □

► FOR MORE INFORMATION

If you would like to find out more visit:
www.motorola.com



nomad - moving forward

Nomad continues to evolve and accommodate the changing market and needs of local authorities. In just under 4 years Nomad has developed from a former e-government project to a self sustaining centre of excellence, owned by Cambridgeshire County Council to develop all aspects of mobile, flexible, home and wireless working. Nomad has delivered a constant national campaign supported by expertise from local government and the supplier market.

In the past year alone Nomad has seen a rise in the membership keen to not only take advantage of the free information housed in the Nomad website (www.projectnomad.org.uk), but to become active with in the Nomad Forum regional and specialist groupings. Many new members have participated in free bi-monthly meetings to network with colleagues and suppliers alike and to hear new case studies presented by local authorities - ready to share their successes and issues/challenges being faced.

Nomad goes from strength to strength and continues to develop. The last 6 months have seen considerable changes in the way Nomad is organised. With the extending geographical remit into Scotland (with Ireland and Wales also strong possibilities) Nomad has re-constituted itself to have a regional base. Currently Nomad Scotland, Nomad North and Nomad South are being established together with a revised national board overseeing the enterprise. This new structure will:

- Allow for regional events
- Provide opportunities for more councils to become involved
- Ensure that authorities have a local network to tap into
- Develop local communities around specific service themes

The new regional groups will make Nomad services and information accessible to more local councils across the UK, with more opportunities to network face-to-face. A higher volume of forum meetings with varying agendas will allow local councils to cherry pick their attendance, location and meeting dates to suit their own activity.

Nationally, the emphasis will be on a number of major events each year with our sponsors and member representatives determining the overall direction, themes and programme for Nomad.

Nomad has also carried out some major new work in surveying the current use of mobile and flexible working across UK councils and is launching a new Support Service - see specific articles on these areas. >>



► Written By **BT**

westminster: the 'wireless city'

BT helps Westminster City Council become the first of 12 UK cities to create a city-centre wireless network

With over 246,000 residents using its services and one million visitors per day to some of the UK's most popular landmarks, Westminster City Council is continually looking for solutions to increase public service efficiency and build on Westminster's reputation for innovation.

In 2004, the council began work with BT to roll out the first stage of a three-part pilot scheme, which transferred data and CCTV images over a Wireless Broadband network. As a result, Westminster has become the first of 12 UK cities to create a city-centre wireless network.

THE CHALLENGE

Westminster City Council is ceaselessly working to enhance the quality of service they bring to residents, visitors and businesses, and have established a One City vision to position the organisation as a world leader in city management. Consequently, the council joined forces with BT to explore how wireless technology could help the council revolutionise its public services. In particular, they looked into how wireless networks and applications could:

- Transform and improve performance and delivery of council services;
- Facilitate multi-agency information sharing and co-operation;
- Increase productivity of staff via mobile and flexible working.

After a year-long pilot, the council wanted to extend the capabilities of the network to help test the benefits of wireless in three specific areas:

- The wider use of CCTV to help in the management of a 24 hour city;
- The use of a wireless network to support more productive mobile working;
- Applications enhancement in the areas of parking control, remote noise monitoring and community protection.

BT'S APPROACH

BT worked with the council to determine how Westminster could make the most effective use of wireless technology and how these could integrate with the council's ambitious demands. After a site survey, BT designed and delivered a robust Wi-Fi network to create the foundations of the wireless city. This included laying the foundations at two housing estates.

In March 2006, the project was evaluated before moving on to the next stage. The Leader of Westminster City Council, Sir Simon Milton,

called it one of the most exciting developments in Westminster's history.

Since the scheme began, the city has experienced enhanced service delivery and operational efficiencies as it strives to meet its One City vision. Particular highlights include:

CRIME PREVENTION AND SAFER STREETS

25 wireless CCTV cameras have been deployed to date, with council plans to add ten more each week, up to a total of about 250. Since the start of this project:

- 58 crime and disorder incidents were reported over wireless CCTV in the immediate weeks, of which nine related to violent crimes, 19 to drug offences, 14 to anti-social behaviour, five to car crime and four to theft;
- Crime and anti-social behaviour in the pilot areas decreased compared to the same months last year. On one housing estate crime was reduced to its lowest level since April 2004;

"Since the scheme began, the city has experienced enhanced service delivery and operational efficiencies as it strives to meet its One City vision"

- Residents reported a disproportionately positive impact on their fears and perceptions of crime, with intractable cases of drug trading and loitering solved;
- Data of the quality needed for court evidence is available to police and council staff in electronic format. This allows faster distribution and more efficient storage facilitating improved street management.

TRANSFORMATION OF PARKING AND TRAFFIC ENFORCEMENT

- The quality of evidence of a contravention captured by the system is improved. Individual clips are available for scrutiny by recipients of a PCN on the Westminster website;
- More than 10,000 penalty charge notices have been issued using wireless CCTV cameras;
- The enforcement of traffic controls has been extended into the early hours and into areas considered dangerous for a parking attendant.

OPERATIONAL EFFICIENCIES

- Cost savings of 10-15 per cent are expected, through the transformation of council service delivery and performance;
- Greater efficiency overall is expected as handheld technology reduces administration, return trips to the office and associated unnecessary travel costs.

The network is now being taken on to full-scale public roll-out, with the future aim of broadening the network to 80 per cent of the city.

CONSULTING THE WESTMINSTER PUBLIC

To ensure that residents and businesses were kept up to date with the progress of the plan, an extensive and transparent public consultation process took place. A dedicated enquiry line, drop in centre and engagement with the local media ensured that the installation was well communicated and that BT's and the council's intentions were explained. Through the feedback, BT has been

able to enhance the roll-out of the scheme. The consultation model is being applied by BT and local councils in other wireless cities.

THE FUTURE

Wireless technology has become a key enabler in helping Westminster deliver its ambitious agenda to become the leader in world class city management. The Westminster example is now being used to help develop blue-prints for government service delivery worldwide and BT is now working with other cities across the UK to create huge Wireless Broadband networks so more local communities can benefit. □

Source: Westminster City Council

► FOR MORE INFORMATION

To find out more visit: www.bt.com



>> Nomad's business model of commercial sponsorship, charging for the larger events and free membership has continued to work well over the last year and enabled Nomad to continue to sustain itself. Nomad currently has nine sponsors representative of the varying facets of mobile and flexible working including the telecoms providers, back office systems areas, mobile devices and project management. Each sponsor has a seat on the board and this helps shape the programme and provides sponsors with insight as to what the hot topics for local authorities are.

Over the last year a number of repeated themes have been apparent.

- In flexible working we still see authorities struggling to establish the framework for this and devoting much time and energy to developing policies and guidance material. This seems to be less than a good use of resource when Nomad has identified plenty of

“In the past year alone Nomad has seen a rise in the membership keen to not only take advantage of the free information housed in the Nomad website (www.projectnomad.org.uk), but to become active with in the Nomad Forum regional and specialist groupings”

off the shelf examples that authorities could easily share and adapt.

- Moving to the strategic approach continues to be difficult even when authorities have had successful pilots. The best authorities have clarified their thinking and ownership of these corporate plans to enable them to move forward effectively.
- Small councils continue to find it hard to move forward with mobile implementations,

given their limited resource base. It is important that they look at what is feasible, smaller scale and what changes will provide some of the benefits most readily.

- In the wireless arena there are some fast moving and interesting models now been rolled out. Capturing the learning from these is crucial as is thinking about which of these models might be applied outside of the urban setting. □



the future of mobile computing

Integral Mobile Data (IMD) has been associated with NOMAD since its inception. IMD provides mobile solutions to the public sector, using its Integral mForms® software, in the areas of Community Care, Housing Management, Fire Prevention and Regulatory Compliance. Meanwhile their holding company, OLM Group, has a strong reputation in providing Social Care systems to Local Authorities, which increasingly need a mobile computing dimension. Philip Neame, Managing Director of Integral Mobile Data, shares his thoughts on the benefits and challenges of adopting mobile solutions.

There is growing momentum amongst providers of public services, to embrace mobile computing technology as a means to improve performance. This is particularly true of Local Authorities – who have the advantage of access to rich seams of advice from NOMAD on how to adopt the technology effectively.

The benefits are many. Streamlining business processes in this way reduces costs and dramatically improves customer service through more timely and accurate information. But less direct benefits also accrue – for example the opportunity to achieve huge savings on office space, evidence gathering and proof of compliance, real-time task scheduling, tracking of people and assets; and - increasingly important to employer and employee alike – lone worker protection.

However, the challenges should not be under-estimated. Business Process transformation, staff buy-in and training, wireless infrastructure and services, hardware, systems integration, application design tailored to workflow in the field, and security, means a complex eco-system if both the human and technical issues are to be effectively addressed and benefits optimised.

Small wonder that informed buyers are wary of doing it all themselves. They use software tools that automate much of the application development, integration, security protocols, user authentication, remote device management and upgrades. Complex organisations, such as public sector agencies and Local Authorities delivering a wide range of services, should also choose open platforms on which forms-based mobile workflow applications can rapidly be developed and deployed to

“There is growing momentum amongst providers of public services, to embrace mobile computing technology as a means to improve performance”

many different mobile devices, and readily integrated with multiple corporate systems. IMD's Integral mForms® is an example of such a platform.

- Mobile applications must be readily and cost-effectively adaptable to changing needs, processes and technology.
- Organisations must take a strategic view of mobility. A single platform that can meet everyone's needs is the sensible long-term answer.
- Mobile solution platforms must be able to support modern Business Process Management practice that increasingly involves the integration of content and applications from several corporate systems. □



broadband solution

Providing broadband access is a key goal of many housing associations. But an 'access barrier' remains: how can services be affordably priced in multi-unit dwellings? Gallions Housing Association has the answer

With the input and support of Nomad Wireless – which promotes the benefits and savings of wireless technologies in the public sector – Gallions Housing Association has been testing innovative Motorola technologies to break down these 'access barriers'. These include wireless broadband that's connected to residents through the electrical wiring of buildings. It's now rolling out what have proven to be inexpensive and easily installed services to support high-speed email and internet access. With the insight of Gallions IT manager, Tony Bezuidenhout, this article reviews the network's design and how it will also support the introduction of new cost-efficient products such as IPTV and Voice over IP.

BROADBAND OBJECTIVES

Gallions' IT team is implementing its Community Super Link (the CSL) project; an initiative to close the 'digital divide' by providing residents with access to an array of services through technology.

"We've a great website where residents can self-manage services. So the first element of the CSL's tri-part strategy is ensuring people can access this through broadband," says Tony Bezuidenhout. "Phase two will see the introduction of wireless CCTV coverage using the broadband network, as well as the delivery of TV over the Internet (IPTV) and phone services (VoIP). In phase three, we're planning to support advanced monitoring systems to safeguard vulnerable residents such as the elderly."

THE HIGH-RISE CHALLENGE

Gallions has 150 multi-unit dwellings. And in common with many associations, a number of these are high-rise blocks: buildings expensive to connect to broadband.

Tony Bezuidenhout observes: "The set-up costs for providers to supply apartments in particular with broadband are steep. Also, if we worked with a third-party supplier, we'd need to invest considerable time ensuring services are maintained and any problems are quickly resolved. We therefore decided to design our own network."

BROADBAND INFRASTRUCTURE: THE WIRELESS WAY

Gallions commissioned a high-speed broadband link to its IT systems from an

Internet Service Provider (ISP); a service which it needed to connect to homes. A tag team of complementary Motorola technologies – broadband over wireless and power lines – provided the answer.

Tony Bezuidenhout comments: "Wireless can securely broadcast broadband services. We installed Motorola's Canopy® wireless broadband and backhaul system, locating a Canopy base station on the building that houses our IT equipment. This wirelessly sends broadband to our trial apartment block, Clewer House, which, in turn, forwards the signal on to a low-rise building, Harold Wilson House."

The equipment was set up by Motorola in a matter of days, says Bezuidenhout. "And it provides up to 300Mbps – a phenomenal amount of data. With broadband delivered to the trial buildings we needed to connect this to each home, deciding to install the neat Broadband over Powerline (BPL) kit from Motorola."

BPL requires only half a day to install. "The beauty of BPL is its ease of use," observes Bezuidenhout. "To access services, users just plug a BPL modem into an available electrical socket. It's true "plug and play"! It's secure too as modems can be configured to work at specific network address points only. In tests we're recording fast speeds of around 3.6Mbps per subscriber. With the broadband in place, we reviewed subscriber equipment."

RESIDENTIAL EQUIPMENT

With residential equipment needing to be cost-efficient, and easy to use, Gallions opted to supply 'thin clients'. These PCs draw on applications from remote servers (in this instance located at Gallions IT centre) to provide a good level of performance combined with affordability. Says Tony Bezuidenhout: "We're assessing the "Jack PC" or "Extreme PC". Both systems are very small so we can create secure casings for them. The screen will be provided by connecting the PCs to residents' TVs. This is an important capability; many users aren't experienced with computers so a service through the TV is more familiar and accessible."

With broadband delivered via BPL to thin clients, Gallions has created a high-performance system. And at an expense that has been much lower than expected.

"We estimate the cost of Canopy wireless broadband coverage to be about a third of that

required when wiring buildings and we're now ready to start rolling services out to more residents. As we do this we may need to provide training and support to residents, but we don't envisage that this will become a significant resource overhead," observes Bezuidenhout.

The wireless way to broadband also confers additional advantages. Gallions owns its network and is able to ensure an equitable cost of access. The tariff is still being reviewed; but it will ensure broadband is available to all parts of the community. Also, the infrastructure provides the foundation for more services.

FUTURE SERVICES

Gallions is now connecting more broadband users – a process eased by the Canopy system. As new receivers are added, these are self-registered to bring new buildings easily online.

The second phase of the CSL, now being implemented, will see wireless IP CCTV cameras connected over the Canopy network. These will feed images to Gallions' security centre to enhance site monitoring. Wireless systems connected to meters are being reviewed too, to provide automatic readings over the broadband network. Both phone and TV services are also scheduled.

In the final phase of the project, Gallions will provide 'frail care' systems, offering wireless emergency alarms and monitoring to elderly residents through broadband connections.

WIRELESS RECOMMENDED

"We're reviewing whether to blanket the whole site with wireless broadband to create a secure wide area network. We'd use the coverage to provide mobile employees with devices equipped with GPS and panic buttons so we can better monitor and safeguard them when they're in the community. Motorola's Canopy and BPL technologies are easy to install and use and are recommended as a serious option to make broadband affordable," concludes Tony Bezuidenhout. □

▶ FOR MORE INFORMATION

If you would like to find out more visit:
www.motorola.com



launching the nomad support service

How do local authorities move forward with the broader mobile and flexible working agenda? How can the move from pilot to full rollout be achieved? Can a corporate mobile solution be applied? How do you engage with other areas of the council to move forward with a flexible working agenda?

These are just some of the questions local authorities are asking today which may not have ready-made answers. This is indicated in the large number of authorities who have not developed a corporate strategy or framework for mobile and flexible working.

In discussion with local authorities, Nomad has concluded that the approach will vary for each and may often be dependent on the local situation within the authority. For example, if there is a major drive to rationalise property this can act as a catalyst for a flexible working programme. How would the authority proceed if this drive were not present?

Increasingly Nomad is being asked for a more “personalised” support from individual councils to assist with the development of their mobile and flexible working strategies. Typically, Nomad would direct such councils to the published material or link the enquirer with

someone with the appropriate experience. This is about to change...

HOW DOES THE NOMAD SUPPORT SERVICE WORK?

Operating on a cost recovery basis, this new Nomad service will provide support to authorities in shaping the local strategic approach to the flexible and mobile working agenda. The audience may vary across authorities but it will likely involve the engagement of senior managers, directors, and where appropriate the chief executive. Activities offered will include a review of the current ‘state’ within the council, tailored workshop preparation and delivery and follow up guidance on the future approach.

The Nomad Support Service offering is one that addresses a significant market gap existing between the traditional local authority colleague support and the stage at which more significant consultant support is appropriate.

Typically authorities have approached Nomad asking for a day or two of input – often involving senior managers and members to help in putting together a strategic approach and plan. Experience shows that councils can find it difficult to plot a

track through the complex set of interdependent areas of action to achieve their aim. Authorities also seek help to understand the fundamentals of moving to these new ways of working when there is little internal experience and they want to become an informed and credible client before engaging with the commercial sector.

NOMAD RESOURCES FOR SUPPORT

Nomad, being owned and run on a day-to-day basis by Cambridgeshire County Council, is uniquely placed to offer its bank of experience, in an impartial and non-commercial setting with a brand and track record that has been widely recognised as excellent.

Nomad resources are made up of committed and engaged local authorities that are underway with developing and in some cases improving on existing mobile and flexible working implementations.

Alongside the testimonials and experience of councils, Nomad has links to a broad range of suppliers with expertise and skills necessary to add to the Nomad Support Service Offering.

Should your authority be interested in this type of support service, please contact the Nomad office on 01223 699052 or email us: nomad@cambridgeshire.gov.uk



Nomad Support Service to Local Government

At the centre of mobile and flexible working in local government



www.projectnomad.org.uk

Outline Approach: In recent months Nomad has been approached by a number of local authorities to provide an 'on-site' service to assist with the development of mobile, flexible and wireless working agendas. Examples of this include, speaking at leadership days, workshops with senior management and CEO's and specific service based sessions to transfer skills and experience. As a result of this request and other enquiries from local authorities, Nomad is establishing a fee based service offering across a range of areas.

Areas of Service

■ Events:

To provide speakers and facilitation support to internal authority events involved with the development of mobile, flexible and wireless working.

■ Strategic Review:

To work with authorities to complete a strategic review of mobile and flexible working covering: on site workshops, analysis of findings, preparation of report, presentation of findings. This is aimed at authorities looking to shape up an overall strategic approach.

■ Service Mobilisation:

Aimed at specific service areas the approach will be to complete an end to end review of mobile and flexible working across the service. This will investigate how mobility linked to business change can move the service forward. We can currently provide practitioners with hands on experience across a range of services including: Social Care, Repairs, Benefits, Regulation.

■ Health Check:

This is aimed at authorities who are already moving forward with mobile and flexible working who would like to complete a progress review / health check of the various aspects of the implementations. This may be aimed at moving pilots to full rollout or assess the benefits arising from solutions implemented.

■ Customised Review:

For authorities that may need a more detailed review of specific projects, which may not fit into the above areas, we can offer a customised review. This would be agreed following discussion with the authority.

■ Ad-Hoc Support:

Following on from the completion of the above services authorities may need to call on Nomad support from time to time to support ongoing initiatives. This would be provided on a day rate basis as required.

■ Wireless Advice:

There is a growing take up of wireless initiatives by local authorities with the deployment of wireless into school, local communities, citywide and internally within authorities. Nomad has been involved with this agenda from an early stage working closely with leading authorities and can provide experience across a range of areas: strategic review in preparation for wireless deployments, options appraisal for wireless, health check, advice on tendering, review of pilots.

For more information or to discuss this further, please contact Nomad on 01223 699052 or email us: nomad@cambridgeshire.gov.uk

Work will be completed on a cost recovery basis through Cambridgeshire County Council. As always, the best place for local authorities to freely access all Nomad materials, products, tools and guidance is the Nomad website at: www.projectnomad.org.uk



Looking to improve delivery of public services and reduce costs using wireless technologies?

Wireless technologies, from walkie-talkie radios to high speed data links, are creating significant and positive changes across local government, helping to deliver flexible, user-centric services into the heart of local communities.

WIRELESS IN ACTION

- Deploy traffic signal control and CCTV over wireless to end expensive leased line charges
- Enable staff with wireless laptops and PDAs to increase efficiency
- Use wireless Voice-over-IP to save on mobile phone charges

SOME KEY QUESTIONS

- Which services would benefit most from wireless technologies?
- Which areas or sites should be covered?
- What is the most appropriate wireless architecture?
- What are the costs and benefits?
- How do you operate & maintain a network for excellent service?

RED-M HAS UNIQUE EXPERTISE

Red-M is the partner of choice for leading Local Authorities wanting to evaluate and use wireless technologies in a scalable, reliable & secure manner. Whether your objectives are social inclusion, regeneration, flexibility, or staff and public safety, Red-M's wireless expertise can make a real difference. Red-M has completed over 300 major wireless strategy and implementation projects including corporate buildings, large shopping centres, train stations and hospitals. Red-M enables you to realise the benefits of wireless technology, delivering superior solutions, right, first time.

Contact Red-M to find out how wireless can help your Local Authority

Red-M is a Special Interest Supporter of the Nomad Wireless Forum

case study - the ReGS project

Barnsley and Sheffield deliver better quality, more efficient services using mobile and flexible working for over 200 front line staff



Image courtesy of Barnsley MBC

I magine being a field officer and having all the information you need at your fingertips no matter where you are. Wouldn't it be great if you could carry out all your inspections without having to take any documentation with you, yet having all the knowledge about premises' history and previous inspection details directly available to you? How useful would it be if that information was already put into your inspection documents, ready for you to update? And once you have updated your information, this is automatically put into an inspection report for you to give to the proprietor during your visit.

Officers in Barnsley don't imagine this - they experience it, as part of the ReGS Project. Working in partnership with Sheffield City Council, Barnsley MBC has instigated innovative use of the Civica connectors and the Civica Web service to ensure that all relevant information is "pulled" from the APP database in real time, and delivered to the officer in a simple, easy to access format. The advantage

of making this happen in real-time means that officers are provided with up to date information, even if that information is only minutes old. Once an inspection or request for service is completed, the results are available for others to access, and officers can move on without a need to access a docking station to download information. Meanwhile, back at Headquarters, customer relations officers can deal with queries about service requests using the real-time updates to ensure clients are as up to date on progress as possible.

Out in the field, all necessary documentation

is created instantly and can be printed on site allowing it to be explained to the client while the inspection is fresh in their minds. At the same time, it is uploaded to the council network and linked to individual Civica APP records. These documents can be accessed by any officer, anywhere, at any time (subject to correct access permissions) to give the full picture of often complex case histories. Underpinning this is the mobile worker "Dashboard". The Dashboard provides officers with a range of lone worker protection, administrative and communications facilities >>

"Once an inspection or request for service is completed, the results are available for others to access, and officers can move on without a need to access a docking station to download information"





Image courtesy of Barnsley MBC

that truly address the complexities and issues associated with mobile and flexible working - all in real time, and all easily accessed by any device that has web browser.

Officers routinely use the dashboard to record their working status, replacing the traditional approach, which used whiteboards and a signing-in book. By including simple information about the type of activity, intended destination and start car mileage the Dashboard facilitates a range of processes. For example, the deployment of resources and activities of staff can now be accessed by managers regardless of their location – they don't need to be in the office to see the whiteboard. The statuses recorded by staff throughout the working day are used to calculate timesheets, and mileage claims too if their odometer readings have been included. The activity and location information is used both in the generation of mileage claims and in support of lone worker protection. If officers exceed their expected finish times on district, configurable alarms alert colleagues to the non-return of a lone worker. Similarly, a panic

enforcement etc. so that all field officers can be truly mobile, carrying out their front line service delivery supported by all their "Back office" facilities whilst out in the field.

Removing the reliance on visits to a central office base to collect information has provided a range of benefits to Regulatory Services, its customers and importantly to its officers. Fewer visits to the office mean that officers have more control over their working day, and consequently their work life balance. Time freed up from unnecessary journeys may be used to deliver more service activity, and the ability to work independently of location means that officers can take the time they need to balance commitments at home. Reducing the need to use office space has allowed the service to reduce desk numbers by a quarter, even at this relatively early stage of the project. Officers are able to make informed decisions in the field, and their activities update the Civica APP database, informing the decisions of others, and providing clients with a timely response to requests for service. Information is available to staff regardless of

“The statuses recorded by staff throughout the working day are used to calculate timesheets, and mileage claims too if their odometer readings have been included”

button feature allows officers to escalate an appropriate response if they meet with potentially threatening circumstances while on site. The alarms can be configured to address different teams' needs, or for example alert a central call monitoring centre if needed. To support communication with officers the dashboard provides sms and email distribution facilities, allowing queries or team updates to be distributed easily and instantaneously – an important process to assist in communication between remote workers. Importantly the 'record once, use many times' approach to the dashboard means that officers are obliged to record a minimum of information that is used to resolve many different administrative and management information issues.

The lone worker protection and dashboard elements operate independently of the back office system so could be used by any authority. All of the products and processes which deal with the collection and real time exchange of data related to the inspection processes are directly transferable to all authorities running the Civica APP system, and can be used with many other back office systems.

The ReGS Project has unlocked tremendous potential, even though the project is by no means complete. Short term plans are to roll out this technology to other service areas such as: Pest Control, Licensing, "Street Scene"

their location, and does not depend on building opening hours, opening up a range of possibilities to deliver services in ways that better suit our customers at times that make sense to them.

Specific hardware and software infrastructure developments delivered by the project include:

- Installation and configuration of the Civica APP database connectors and web interoperability components [this establishes the means for two way data flow between the back office database and external applications, via the web]
- Provision of the necessary server hardware to enable the use of the software solutions in the field [including hosting for the underlying software that supports these solutions]
- Development of novel, web based interfaces that provide officers with straightforward access to the data they need. These interfaces are designed to take account of slow data connections by avoiding unnecessary graphics, and concentrate instead on the provision of essential data to officers in an accessible and timely manner.

For more information about the project and the approaches that have been taken, please visit www.regsproject.org.uk, or contact us at ReGS@barnsley.gov.uk. The ReGS Project has been developed in partnership with Kirona Solutions Ltd. □



► Written By **Steve Reynolds, TBS Enterprise Mobility**

is mobile technology the answer?

Improved efficiency, health & safety, flexible working, carbon footprint – these are just some of the pressures government departments are forced to address on a daily basis – but what’s the solution?

An increasing number of local authorities are realising the benefits that mobile technology brings to their organisation. The gains are being achieved in a number of ways, whether providing employees with a more flexible working environment or to improve service delivery through an integrated mobility strategy, mobile technology is helping local government meet the efficiency requirements laid down by central government.

With a proven track record in the private sector, adopting a more mobile strategy provides the organisation, especially ones with large remote workforce, with significant benefits, these include:

- Reduced environmental impact – automated electronic processes mean a reduced reliance upon paper based systems. Better planned job scheduling means working is carried out in the most efficient way possible: for example reducing the number of vehicle journeys through better planning
- Health & Safety – with the passing of the corporate manslaughter bill the duty of care on employers has never been greater
- Improved efficiency – remote workforces who are not dependant upon central depot resources mean workflow can be managed better and jobs carried out faster
- Flexible working – helping government departments meet the efficiency agenda such as Gershon

Whether you want to refine and improve workflow, reduce complex paper based procedures, reduce wastage and inefficiency, a mobile based strategy can quickly provide a solution.

MOBILITY HAS EVOLVED

TBS Enterprise Mobility is a recognised leader in the development and delivery of mobility solutions within the public sector. For around 15 years the company has been behind many local government success stories in the UK, one recent and high profile example being the London Borough of Lewisham.

TBS TASKMASTER FOR THE PUBLIC SECTOR

TaskMaster is a dynamic and versatile mobility software solution which connects you and your office-based systems with remote workers in the field via Windows Mobile™ handheld PCs or laptops. TaskMaster can be rapidly configured to meet your exact and specific information and communication



LEWISHAM WINS MICROSOFT PEOPLE MOVING BUSINESS AWARD

The London Borough of Lewisham was recognised for its application of mobile technology which resulted in a significant reduction of the organisations carbon footprint.

- The Borough employs 200 craft workers such as plumbers, carpenters and electricians, who deliver planned maintenance and repairs for 30,000 homes across the region
- To keep costs down, the Borough needed a much more reliable way of ensuring that jobs were completed in time
- Lewisham appointed TBS to implement its TaskMaster application, which delivers enterprise information to field workers using wirelessly connected Microsoft Windows Mobile based devices
- This enabled a significant improvement to how its field craft workers receive information about jobs
- The craft workers were able to operate independently of depots and dramatically increase the efficiency of building maintenance and service provision within the Borough
- The remote workers, no-longer reliant upon the central depots, were able to reduce the number of journeys to the central depot, halve the level of paper work, resulting in a reduction of their carbon output by 18.2 tonnes per year.

See the full London Borough of Lewisham video case study here:
http://www.tbsmobility.com/solutions_local_government.php

requirements, and can be seamlessly integrated with your current office systems. It is available as a full project-managed, fixed-price implementation, or can be simply configured without the need for programming skills. If you would rather buy the solution as a service, we can provide all the software and hardware as a “hosted” solution.

The age of mobile adoption is upon the public sector. To find out if a more mobile based approach can provide your organisation with improved efficiency and productivity, while reducing your carbon footprint, contact TBS

Enterprise Mobility, to arrange your free mobility and environmental audit. □

► FOR MORE INFORMATION

Tel: +44 (0) 1773 596900,
 Email: sales@tbsmobility.com
 Web: www.tbsmobility.com



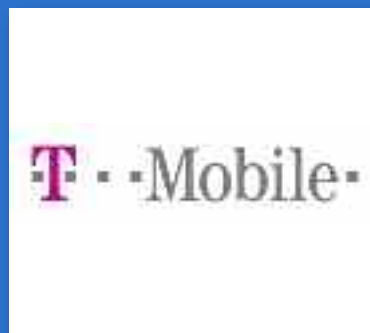
nomad sponsors

It would not be appropriate for Nomad to produce a national supplement without reference to our supporting sponsors. Although Nomad by virtue of its role has to remain supplier agnostic, we can however, recognise where key suppliers have played an important role in developing the market.

Nomad's continuation beyond the e-Government programme would not have been possible without the

underpinning funding of our sponsors. Each of the sponsors within their own area of expertise has contributed towards the growth of mobile and flexible working. Many of the sponsors moved into this market when it was still in its infancy and its potential had not been realised.

Nomad would like to go on record in thanking our sponsors for their continued support:



nomad events

Nomad, as a Centre of Excellence for mobile, flexible and wireless working regularly attends, speaks, exhibits and is represented at a number of mobile themed events and workshops run for the public sector across the country.

Alongside these, Nomad runs a programme of regional and national events to specifically workshop areas of new interest and innovation, such as flexible working (including home working and hot-desking arrangements), new solutions that fit with the shared service and transformation agendas and the increasing emergence of wireless solutions in the public sector.

Following the Nomad Autumn 2006 run of regional events (held in Manchester, Edinburgh, London and Bristol) and to coincide with the establishment of the new Nomad

Regional Forums, Nomad is currently formulating a new programme of two regional events for Autumn 2007 and a national event in Spring 2008.

The focus of all Nomad events is to disseminate new information, case studies and best practice gathered from fresh new sources. Nomad has scoured the country, identifying local authorities who are developing their mobile and flexible working solutions and re-visiting those that are now rolled-out and are seeing benefits and improvements to services, employee output, staff retention and savings in accommodation.

In late November, Nomad Scotland will host a regional event in Glasgow with service led themes and a supplier showcase.

Also planned, Nomad North will host a flexible working focussed event to be held in Barnsley

and will showcase the new council building designed from the ground up to support flexible working. This modern purpose built office incorporates the use of a centralised scanning for all internal mail and hot-desking arrangements.

The format of the national event in Spring 2008 will be focussed on a full day workshop approach in a range of service areas, dedicated to taking its audience through the spectrum of planning, business case, development of the solution, human resources, policy making, organisational change and technology options. Designed to appeal to both decision makers and implementers, the workshops will also incorporate important case study exemplars and expertise from commercial suppliers.

Keep checking the Nomad website www.projectnomad.org.uk for all Nomad events information and registration details.

who are the nomads?

Ian Laughton,
Nomad Director
ian.laughton@cambridgeshire.gov.uk

Melanie Reed, Nomad
Communications Manager
melanie.reed@cambridgeshire.gov.uk

Peter Marsden,
Nomad Programme Manager
peter.marsden@cambridgeshire.gov.uk

Help Desk: 01223 699052

Nomad Email: nomad@cambridgeshire.gov.uk

Nomad Website: www.projectnomad.org.uk

Based at: Cambridgeshire County Council,
Room 323, Shire Hall, Castle Hill, Cambridge, CB3 0AP



**With TotalMobile Solutions
you can fill out forms without
yo-yoing back and forth to the office**



Are you wasting valuable time, money and energy? Then it's time you started to work smarter. The latest solutions from TotalMobile allows you to do just that. Not only will it improve efficiency and productivity, but it can also be tailored to suit your company's specific needs.

TotalMobile benefits include:

- Real-time availability of data
- Up-to-the-minute management information
- Removes duplicate data entry
- Reduces paper work
- Reduces travel time
- Reduces carbon footprint

Why not find out how TotalMobile can help save you time and money today? For further details visit:

www.totalmobile.co.uk
or call 028 9448 0000



CONSILIUM technologies

This season's must-have mobile broadband accessory.



The USB modem from T-Mobile truly is this season's must-have accessory. It's small, easy to use, and can give you and your staff the freedom of having unlimited* high-speed mobile broadband access when and where they need it, for less than £25 (ex VAT) per month, and it's FREE with our web'n'walk mobile broadband plans.

To find out how T-Mobile can help you achieve your transformational and efficiency objectives call 0800 956 5001 or visit www.t-mobile.co.uk/business



T-Mobile
simply closer

Minimum terms contract and credit check applies. You will also have to provide us with details of your business registration. Subject to connection to web'n'walk Plan. Compatible laptop required. Subject to coverage. Mobile broadband subject to HSPA service availability. To ensure a high quality service for all our customers, a fair use policy of 3GB of data both sent and received in the UK per month applies. If you exceed 3GB per month, we may tell you to red your usage and it may again exceed 3GB per month, we may tell you that we are going to apply network protection controls, resulting in a reduced network speed for 14 days. If you exceed 3GB per month for a third time, we may tell you that we are going to apply further network protection controls, resulting in a reduced network speed and you, alongside your data plan to include a speed data allowance. We do not permit use of this service for internet phone calls. Terms & charges apply.