

MANAGEMENT REPORT



**European E-Government Index
2004**

1 Executive Summary

The public sector plays a major role in Europe's social and economic development, and local authorities in particular have come to an important realisation – e-government is about far more than just modernising public services – it can support economic growth in the region.

But in Europe, local and central government, while working to meeting e-government adoption targets and understanding the cost efficiencies that can be realised by deploying new technologies, are struggling to ascertain how best to do so. It is a time of profound change for the public sector, with ongoing social and economic challenges, institutional changes and the impact of technology that can revolutionise the way in which local authorities and government departments function.

Cost is a very real issue in providing what is now being referred to as 'citizen service'. Now that technologies have made it possible to do so, all local authorities are coming under increasing pressure from central governments to improve their operational efficiency, productivity and the quality of their services, but do so with equal or even lower budgets.

And while communications technologies can be an enabler of both these internal improvements and the broad social and economic benefits already outlined, they cannot do so alone. Only if local authorities organise the way in which they are administered in line with new technology infrastructure and have access to the skills required to maintain and develop such systems can they get the full benefits on offer.

Some of Europe's most cutting-edge local authorities are well ahead with their timetable for introducing e-government practices, with investments in next-generation communications solutions enabling them to provide superior service to the public, according to NextiraOne.

European local authorities are working to deliver more and more of their public services online and in many cases face deadlines imposed by central government to do so. International analysis of the public sector by NextiraOne, which has a long track record of delivering communications solutions for local authorities, analysed e-government projects being carried out across Europe to ascertain which regions showed distinctive levels of innovation.

This European E-Government Index aims to show briefly what progress is being made by local authorities in Europe to deliver on their e-government targets, and in particular spotlight cases of cutting-edge innovation that has allowed certain local authorities to gain greater and smarter benefits from their investments.

2 Why E-Government Needs Careful Management

E-government is not a goal in itself, but merely a means to an end. There are generally considered to be three goals of e-government exercises for local authorities, namely that they become open and transparent so that public administration is more accountable to members of the public, that everyone in the local area can gain easy access to public services, and that a more productive local government is able to deliver higher value services that are more productive and give a greater return on taxpayers' money.

These are not easy goals, which is why e-government is a difficult undertaking. But while local authorities have a challenge of organising and structuring themselves to transition to e-government, perhaps the greatest barrier they face is that most of them have very little experience of investing in the types of communications technologies required, whereas the private sector has gained valuable experience over the years.

Local authorities that have been able to make their requirements clear and evaluate technologies in close alignment with their needs are the ones that have been most successful in deploying e-government projects. There are some that have been extremely successful at doing so across Europe, but there are many more which are struggling to gain the right expertise and make wise buying decisions about communications infrastructure.

Firstly there is the specification, planning and implementation of technologies that will make the local authority's infrastructure capable of supporting the types of e-government applications that it wishes to provide. But local authorities also struggle with securing the skills that are required not just at the implementation stage but for the ongoing support of e-government applications. Put bluntly, there can be little to attract skilled workers to the public sector when many areas of the private sector still offer lucrative contracts.

Local authorities that have fared best to date as they work to meet their e-government challenges are those that have identified their specific requirements, created a clear plan and then worked with communications technology experts to deliver infrastructure and applications that will enable their requirements to be realised. Those that have had the most success have also been able to go beyond their initial objectives and create greater value from their initial investments.

3 Meeting Public Targets

The eEurope 2005 Action Plan was developed by the European Union and sets out a number of targets that member states must achieve by 2005. In summary, these are:

- i Interactivity: All basic public services must be interactive, where relevant, and accessible to all in order to provide the public with more effective services.
- ii Privacy: online interaction with governments must be completely safeguarded and trustworthy through data privacy techniques, authentication and identity management.
- iii Easier procurement: governments must make public procurement far simpler so that it is more effective and saves money. These systems must be fully interoperable to ensure co-operation between authorities.
- iv Pan-European services: there are already some international services in place such as job search and educational tools, but e-government applications also need to be integrated to realise the vision of truly European citizenship.

The many European Union declarations of intent on e-government have largely been left to the interpretation of central governments or central government bodies, which then set targets and specifications for local authorities to meet, as well as their own targets. While this means that local authorities vary in the specific targets they have set for themselves and the way in which they are working to achieve them, there are levels of e-government functionality that every local authority and government body must put in place.

There is, however, one further factor that is currently driving the e-government agenda across Europe: taxation. The charges made by local authorities for essential local services are increasing substantially in many parts of Europe, and local authorities realise that not only must they save money in order to deliver on their goals, but they must also significantly improve those services and the way in which they are provided in order to satisfy the public. Given that any negative reaction to service provision is likely to be demonstrated at the polling station when local and central government elections are held, e-government has become more than just a large-scale public sector exercise. It has become a major political issue.

Over the next pages, we will examine government organisations that have adopted innovative e-government strategies, and in many cases are an example to their peers across Europe, implemented by NextiraOne.

4 10 Innovators: E-Government in Europe



Customer	Lille Metropolitan Urban Community
Description	Local government of both French city of Lille and its surrounding area
Solution	IP communications network and support

E-Government Strategy

The Lille Metropolitan Urban Community (Lille Métropole Communauté Urbaine - LMCU) is the public body responsible for co-operation between the 87 boroughs of the city of Lille and its surrounding area. It decided on a full overhaul of the communications system, including both its new head office and 14 remote sites. The aim was to provide users with modern communication tools to make information access more user-friendly and efficient. This in turn would increase customer service for the citizens of LMCU.

NextiraOne Solution

NextiraOne deployed an IP communication solution based on Alcatel technology, which was installed in less than three days. This met LMCU's need for a cutting-edge solution that was cost-effective and quick to install. The infrastructure is based on Alcatel OmniPCX Enterprise 5.1 switches with staff using either digital phone handsets or IP phones. To keep staff in contact, a Cycos unified messaging solution will act as a traditional voice messaging system and will migrate to a unified messaging system over time. As part of the contract NextiraOne will provide support for the telecommunications and IT teams for five years.

Service Innovation

The NextiraOne solution provides all LMCU's users with the same high levels of service, whichever site they are based at. This means that it is far easier to access information within the network, increasing efficiency for staff and for LMCU. The fast deployment of the system has meant that benefits have been quickly realised for both LMCU, staff and local citizens.



Customer	Stockton-on-Tees Borough Council
Description	Local government authority in northern England
Solution	Seven-year contract for a fully managed network solution, covering data, voice and video services

E-Government Strategy

When challenged by the British Government to deploy new e-government services by 2005, Stockton Borough Council volunteered to become a 'Pathfinder' local authority and achieve its targets by 2004 instead. This fast-track strategy meant that Stockton had to bring more than 200 new applications and services onto a new converged voice and data network within two years. Its strategy was to bring its main operational applications – CRM, human resources, financial, document management, workflow and geographical information systems – online first, and then introduce further advanced services without disrupting the existing network.

NextiraOne Solution

The network connects 2,500 council staff at more than 180 sites across the borough's catchment area. The solution is based exclusively on Cisco network devices, and includes one of the largest deployments of Cisco AVVID IP telephony in the UK. Inter-site connections employ a range of services, including private circuits, wireless and xDSL.

Service Innovation

The use of Voice over IP (VoIP) technology delivers considerable savings for the council because calls between sites will not travel over the public network and thus not be metered. It predicts saving some £2.5 million in public money annually, enhancing its ability both to deploy modern business practices and to deliver a full range of e-government services.

The citizens of Stockton-on-Tees receive faster, more responsive and superior service. Better telephony and email infrastructures make council officers more accessible, while improved data networks will enhance the delivery of online e-government facilities such as bill payment, information access and direct service ordering. Meanwhile, the council is exploring how best to use its ability to employ new video services in areas such as CCTV and video conferencing.



Customer	Government of Niederösterreich (Lower Austria)
Description	Niederösterreich is the largest of the country's nine federal provinces, and has the second highest population, after Vienna
Solution	Network management contract

E-Government Strategy

The Government of Niederösterreich needed to increase the dependability of its applications and also increase the reliability of its network infrastructure in order for it to be prepared to support new online public services in the future. The administrative size of the region is such that a large volume of information is carried across its networks, and the management of them was a top priority in order to provide an efficient and effective e-business infrastructure.

NextiraOne Solution

NextiraOne supplies, implement and services the data network for the government of Lower Austria. This includes the government district in St.Pölten, the capital of lower Austria, and 21 district authorities.

NextiraOne has deployed a failure and future-proof network for 2,500 users in the government district and 1,500 users in the district authorities.

This huge network was built exclusively with Alcatel data products, in detail with three Alcatel OmniSwitch 7800 Core Switches, 24 Alcatel OmniSwitch 7700 Building Switches, 21 Alcatel OmniCore 5022 Switches and 400 Alcatel OmniSwitch 6600 Workgroup Switches.

Service Innovation

One of the main targets of the government of Lower Austria is close contact with members of the public. For this purpose the availability of electronic government is now ensured 24 hours a day, seven days a week, independent of time and place.

Therefore the public is able to:

- get common information of procedures (e.g. responsibilities, required documents, etc.)
- download documents & forms
- fill in a web-form or email the responsible department
- make an application with all required information



Customer
Description
Solution

Middlesbrough Council
Local council in Teeside area of northern England
Contact centre and unified communication solution

E-Government Strategy

Middlesbrough Council selected HBS, with NextiraOne as its technology partner, for a Euro 400 million, 10 year public-private partnership deal. The 'Service Middlesbrough' initiative was set up to deliver more efficient, cost-effective and valued public services to the area. The need for more dependable call services was, however, the top strategic priority and so the IT team that managed the project focused on this. The results was the creation of a single, high volume call centre able to offer more effective e-government services to the public.

NextiraOne Solution

NextiraOne's solution focused on three sets of interlinking technology. Firstly: flexible LAN and WAN data and voice infrastructures, delivering high availability and performance to more than 3,000 main users and a further 50-plus remote sites. Secondly: contact centre equipment and tools to provide a single point of telephone access. Thirdly: voice infrastructure for advanced telephone functionality on the desktop.

NextiraOne recabled the entire data network using an end-to-end Cisco package. A fibre optic backbone linked the six main sites, with Category 6 structured cabling for the main LANs. Based on Cisco Catalyst switches, the new networks hugely increased bandwidth and now offer transfer speeds of 32 Gbps at the core and of up to 100 Mbps bursts to the desktop.

Service Innovation

Before the project began, Middlesborough Council managed a patchwork of ageing networks, which were unable to cope effectively with the burgeoning volume of voice and data. The council published more than 50 access telephone numbers, and as a consequence the number of lost and misrouted calls was unacceptably high. Consequently project specification covered this issue and other key areas:

- a single contact centre for all outside enquiries and improved access to services in leisure centres and libraries
- internal services, including property and energy management, human resources, finance, insurance, procurement, performance review and quality assurance, public relations and marketing

- management of business processes, including pensions and payroll, housing benefit, council tax, education awards and social services benefits
- service administration across the Council



Customer	City Hall of Lyon
Description	The government of Lyon, France's second city, which includes 55 urban communes
Solution	Contact Centre

E-Government Strategy

The City Hall in Lyon needed to modernise its information systems and provide more efficient information services to members of the public. In doing so, its strategy was to deploy a single, powerful contact centre but also to provision its agents with a wealth of information that was commonly requested by the public, in order to reduce waiting times and ensure that correct answers to questions were provided.

NextiraOne Solution

The Lyon metropolitan area is home to 1.2 million people. In order to facilitate better access to local information, the City Hall of Lyon decided to deploy a call centre through a project named 'Lyon in Direct'.

The City Hall of Lyon needed to improve its call centre for all the citizens, supported at that time by one platform receiving an average of 250 calls per day. In 2003, the City Hall of Lyon wanted to launch a new strategy in order to support citizens' needs by implementing a single tool for handling calls.

The solution was based on 12 Alcatel OmniPCX 4400 platforms with accompanying management tools. Through the extension and improvement of this call centre, 80 per cent of calls were answered thanks to the creation of a database which provides answers to most of the questions. The waiting time for callers was significantly reduced.

Service Innovation

Deploying new technologies enables the City Hall of Lyon to provide superior service to local citizens. Everyone can now gain easy access to public services and benefit from a good quality of service. The town hall of Lyon facilitates contact with its citizens by allowing agents to access internal information and by responding to particular requirements from the citizens. The way in which internal information has been made so readily accessible by the public has enabled a large leap in customer service to be made.



PROVINCE DE LIEGE

Customer
Description
Solution

Province de Liège
Regional administrative authority in Belgium
IP voice communications network

E-Government Strategy

The Province de Liège is working to introduce an increasing number of e-government services and practices, which are largely driven by telephone contact with members of the public.

In doing so, the Province de Liège is also looking to lower overall administrative costs and control spending in the future. Additionally, in transitioning to e-government services the organisation has set clear targets for ensuring that the applications remain fully available.

NextiraOne Solution

NextiraOne deployed a robust, cost-effective voice network that links Province de Liège's main sites in the region as well as several large educational establishments. The network consists of 12 Alcatel OmniPCX 4440 nodes, with IP handsets installed as some of the smaller sites.

High availability was a particular concern for the team designing the network, as several of the organisations' sites host critical applications. NextiraOne was chosen for the project because of its proven ability to execute, the level of project management that it demonstrated and the quality of its ongoing support.

Service Innovation

The Province de Liège has now enabled greater access to public services through its new network. In management terms costs have been lowered but without impacting the high quality level that the citizens of the Province de Liège expect from government.



Customer	Conseil Général des Yvelines
Description	Public archive offices for the area of Yvelines, on the outskirts of Paris
Solution	Cisco-based IP network, voice over IP solution and wireless network access

E-Government Strategy

Conseil General des Yvelines had extremely specific requirements for its e-government strategy. Firstly, the council had an aggressive deadline to meet of transitioning quickly to an IP-based network infrastructure at the time it relocated. Secondly, its voice and data traffic had to remain highly secure because of the sensitive nature of its contents.

The relocation enabled a powerful, completely new network environment and applications to be planned and deployed. Central to the chosen strategy were the requirements to lower operating costs and centralise administration. The strategy was to deploy a converged IP network that could support all voice and data application needs securely.

NextiraOne Solution

The Archive Office for the Yvelines department, near Paris, chose a solution that in addition to the savings achieved through centralised administration and fewer cabling requirements, now also enables individuals carrying out searches to gain instant access to millions of documents, for examination on-site or via the Internet. At the premises, visitors can use secure Wi-Fi Internet connections. An unique mobility solution allows staff to connect to the system from anywhere within a 30 kilometre radius of the archives via a laptop or mobile phone.

The solution implemented by NextiraOne enables mobility, the administration of convergent networks and security. A VoIP network has been deployed using entirely Cisco solutions: WAN, LAN and IP phones, in particular the Cisco 7920 WIFI IP Phone solution, and Wi-Fi.

Service Innovation

The real innovation at Yvelines lies in the fact that the single, powerful IP network infrastructure supports so many applications and devices. The department's archives are considerable and historically exceptional, especially those from the Château de Versailles and those containing data on the inhabitants of the department such as civil status, diplomas and certificates. In numerical terms, the database hosts millions of documents and is equivalent to 30 kilometres of shelves.

Security is therefore paramount. The architecture is secured by duplicating the LAN network and the call manager. A large number of analogue interfaces allow various types of device to be networked, including fax machines and printers. The Wi-Fi network, deployed mainly on the archive floors, provides the archivists with immense mobility.



Customer	Assemblea Regionale Siciliana (ARS)
Description	Regional Parliament for Sicily, an Italian region in the south of the country
Solution	VoIP and contact centre solutions

E-Government Strategy

Assemblea Regionale Siciliana (ARS) is the legislative authority in Sicily, which is the one Italian region independent from the central government.

The ARS strategy is to extend certain decision making processes to its citizens, so that they are able to participate in the formulation of local law. Given this main e-democracy objective, it was necessary to proceed with modernisation of the communication system of the ARS.

NextiraOne Solution

NextiraOne implemented a VoIP solution that encompassed the customer's three principal sites: Palermo (main site in Sicily), Rome (representation site) and Enna (secondary site in Sicily).

In Enna, NextiraOne created a contact centre that provides a 24 x 365 contact centre resource for all citizens who ask for information about ARS activities, and a support desk for all ARS employees who need technical interventions and other administrative services.

NextiraOne supports both solutions under a five year contract. During this time, support will include audit services, network monitoring, preventative and reactive maintenance, remote management, consulting and reporting.

Service Innovation

Thanks to the solution and the services offered by NextiraOne, ARS is outsourcing all of its communications (internal and external), involving not just the technical considerations of the contact centre infrastructure but also the definition of the communication process.



Customer	Gemeente Gouda (www.gouda.nl)
Description	Regional administrative authority in The Netherlands
Solution	Converged Voice network with Contact Centre

E-Government Strategy

Gemeente Gouda, is the local government authority covering the municipality of Gouda. The organization has several office locations and wanted a solution that would enable the municipality to provide a better customer service to citizens. The overall idea was to provide a “one stop shop” for people in search of information backed by a solution that would improve the accessibility of the information.

In order to deliver this the organization has undertaken three actions. It created a website that offers information on all key public services, installed a new telephone system and put in place a contact centre to provide a single point of contact for information.

NextiraOne Solution

NextiraOne has installed an Alcatel OmniPCX 4400 that functions as one telephone system. All three main office locations are directly connected to the system with remaining smaller locations connected by IP telephony or by leased lines.

In addition NextiraOne installed the Alcatel OmniVista Contact Centre solution at one of the main locations. This contact centre enables fast answers to queries through an integrated call management system and Interactive Voice Response (IVR) technology.

Service Innovation

Since installation Gouda is benefiting from an optimal and controllable communication structure. The flexible design built on a single network makes it possible for users to move their own telephone handsets without the need of an administrator - even between offices. This is a big cost saver and creates a greater flexibility in the location of employees, enabling better service to citizens.

In addition the smart design of the network and the right choice of technology, made it was possible to reuse the existing phone cables. This again created cost-savings for Gemeente Gouda without impacting the services offered to citizens.



Customer	Bedfordshire County Council
Description	Regional authority with responsibility for a large volume of public services in an English county
Solution	IP-based contact centre

E-Government Strategy

Bedfordshire County Council faced a British Government deadline of bringing its key public services online by 2005. However, Bedfordshire wanted its migration to e-government to be about more than simply bringing its services into the internet age - it also wanted to transform the way in which it provides services to the community. The strategy centres on delivering e-government by transforming public access to its services via all channels, not just electronic ones.

NextiraOne Solution

NextiraOne was contracted to install an Alcatel OmniTouch Internet Protocol (IP) contact centre to provide Bedfordshire citizens with a more efficient and information-rich service. The contact centre ensures that all calls are quickly dealt with by staff capable of answering specific questions rather than simply transferring callers from one department to another.

The agents working in the contact centre were trained to receive calls pertaining to specific council services or departments and the system was configured so that diverted calls would only be diverted to appropriate, experienced agents when the system is busy.

Service Innovation

There is one key area in which Bedfordshire County Council has been highly innovative in its move to e-government. The authority is responsible for the co-ordinated provision of supply teachers – staff who are instructed to teach on a temporary basis while the main teacher is sick or away – to schools across Bedfordshire. Previously, council workers had to work unsociable hours, often remaining at their desks in the evenings or arriving early in the morning because that is when most requests for ‘emergency’ teachers are made.

However, the IP contact centre enables the agents on duty to work from home outside of normal office hours and take calls as required. This approach enables the council to free up more office space for use by other departments, provides greater work-life balance for the call centre agents and also provides a more efficient services for schools seeking supply teachers.

5 NextiraOne And E-Government

The NextiraOne solutions portfolio addresses the five critical issues impacting the deployment and management of local government data and voice communications infrastructure:

- Service enablement – improving the provision of e-government applications to the public using advanced communication technologies
- Operational excellence – improving management efficiency, effectiveness and accountability
- Security – complete communications infrastructure security and security services, ensuring continuous cost-effective protection through surveillance, alarm, integrated emergency services systems and integrated computer telephony security
- Services – managed services and financial models to guarantee high quality services delivered in the most economical manner, including minimising network downtime
- Mobility – creating an infrastructure that allows authorised individuals to communicate and share information securely no matter where they are working from, using advanced integrated mobility applications and devices

NextiraOne's focus on the European public sector is critical in its ability to deliver e-government solutions for local and central government. We understand the requirements, we share knowledge and public sector best practices across Europe, and we develop best-in-class, specific solutions with our vendor partners Cisco Systems, Nortel Networks, Alcatel and Genesys, as well as many other specialist technology companies.

Our priorities are simple: to work with the public sector throughout its change towards being more customer-centric and more service-centric. In doing so, we will support the public sector through its move towards converged technologies and applications, enabling a common communications infrastructure. Our solutions will enable government to reduce operating costs and increase productivity.

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