

## The City of Milan chooses Alcatel IP networking technology to provide innovative public services

Consolidated network features the simplified management and advanced security systems indispensable to online public service delivery

Milano

Comune  
di Milano

The City of Milan now has a single, consolidated information system that both optimizes internal resources and enables it to provide citizens with electronic access to a number of public services. Essential to this transformation were the adoption of the Alcatel OmniSwitch platform and the synergy with Alcatel Business Partner NextiraOne.

### The highly complex world of a local authority

With some 100 individual locations and offices and approximately 10,000 users, the City of Milan has long required a high degree of automation to facilitate daily operations. Since 1971, the local authority has had a data processing center using remote terminals,

situated in decentralized locations, from where official documents and health certificates could be sent by telex; the telex units were later replaced by more modern terminals, like printers and faxes. Moreover, the City adopted an IT protocol ten years before it was made mandatory by law.

However, given the diverse nature of the City's many departments – Environment, Registry Office, Municipal Police, Education, Culture, Sport, Urban Planning, Zoning Department and so on – each had developed specific IT solutions that were implemented at different times and with different modalities. This diversity meant that any network restructuring process had to integrate the individual functional units without disrupting their operations.

*“The technological solution proposed by Alcatel has proven to be the most suitable in satisfying the most pressing requirements of the local authority and for allowing the comprehensive services that should be implemented in the near future.”*

City of Milan

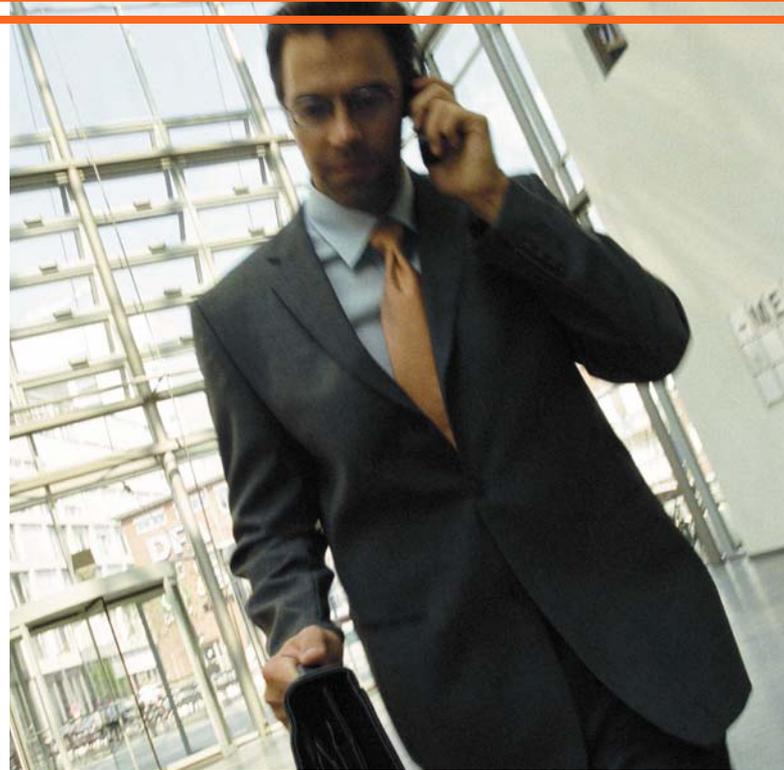
## The evolution of demands requires a strong adjustment capacity

A few years ago, the City of Milan arrived at a point where its IT system had to be thoroughly renovated in order to meet the increasing demand for IT services. On the one hand, it faced an internal demand to optimize existing resources; on the other, it needed to satisfy general public demand for electronic access (by e-mail and Internet) to the local authority's services. This meant that the legal obligations with regards to privacy were of a critical importance, as most data managed by the local authority is confidential and needs protection against unauthorized access. Therefore, the City needed an IT system powerful enough to handle the ever-increasing volume of data that it managed for its 1.18 million citizens and secure enough to fully address issues of data security and privacy – an absolute prerequisite to being able to deliver electronic public services.

The City of Milan was already collaborating with Alcatel and its Business Partner NextiraOne, with great success. Thus, it made sense to call on their support to modernize the network and upgrade its potential.

## A single homogeneous and efficient infrastructure now links the various offices

To build this new network, NextiraOne proposed a solution based on the Alcatel **OmniSwitch 7000 Series** and the Alcatel **OmniStack 6100 Series**. With the Alcatel solutions, all locations were able to use a single homogeneous infrastructure for both the internal and external exchange of data and information – more efficiently and better managed and controlled. Particular attention was paid to simplifying the management procedures (centralization) and introducing the most advanced security systems (firewall, authentication systems) in order to enable a secure and ordered growth of a network accessible to staff, as well as external users, via the Internet.



*"The new IT structure of the City of Milan has allowed the co-existence of various technologies, both legacy and new, so that no investments were lost. In addition, the Alcatel solutions that have been adopted are based on the convergence of voice, data and images and have enabled the public to be in closer contact with local authority structures."*

*Sales Director of Alcatel Italy –  
Enterprise Solutions Division*

## The new technologies must be able to co-exist with legacy technologies

The choice of Alcatel technology was supported by the need to integrate the existing units, including proprietary units (SNA/DLSw) and legacy units (IPX, token ring), with the new structure, as well as the need to protect the system against unauthorized access. The functionality of the Alcatel **OmniSwitch 7000 Series** with regard to the integration of different technologies and protocols, and their reliability,

security, redundancy, management flexibility and suitability for using new IP applications, such as VoIP, made the Alcatel solutions the ideal products to satisfy the local authority's current and future requirements.

All applications and databases operate in a mainframe environment, equipped with a top-class security system to guarantee protection against unauthorized access. The applications and databases are managed by internal staff who can count on the external support of Alcatel Business Partner NextiraOne.

## The reorganization and staff involvement

During the transformation process, the staff was fully involved in the project. One of the largest problems that had to be addressed was the complete absence of basic IT knowledge among many of the staff. As a result, some 20,000 employees needed substantial user-training for the newly installed technology. Additional problems were mostly of a practical and organizational, rather than a technical, nature.

Fortunately, thanks to its collaboration with NextiraOne, the City of Milan has benefited from top-rate system support and considerable experience, which enabled them to solve all the problems they faced. Collaboration was further strengthened with value-added services such as maintenance, network management and protection, consultancy and specialist support.

## Alcatel technology makes the provision of new electronic services to the public possible

The new technologies enable the City of Milan to offer several new electronic services to the public, including the direct application for Registry Office documents, tax calculation, payments, database consultation and mailing of forms. Thanks to the identification and authentication mechanisms offered by digital certified technology, it will be possible to access all the services that do not require a citizen's handwritten signature by using an electronic identity card and a digital signature for identification purposes.

A very interesting and promising aspect of the latest developments in the City of Milan's network is the potential of Alcatel **OmniSwitch** to support all current and future IP applications. This is a crucial factor as the services provided by the network are extensive and will certainly be further expanded with the spread of voice and video applications. The Alcatel solution has proven to satisfy the demands of the local authority and offers the potential to access all possible IP services thanks to the new network structure. In fact, a new project involving NextiraOne has already been launched to implement those services deemed most interesting, especially VoIP.

*The City of Milan now has a network equipped with all the security requirements necessary to prevent unauthorized access and with the high degree of reliability demanded from a public network.*

## Challenges

- New IT structure, open to the most recent developments of IP networks
- Introduction of innovative services for the public and the community

## Solutions

- Alcatel **OmniSwitch 7000 Series** for Enterprise switches (Alcatel **OmniSwitch 7700** and Alcatel **OmniSwitch 7800**) for IP communication and convergent environments
- Alcatel **OmniStack 6100 Series** workgroup switches (Alcatel **OmniStack 6124** and Alcatel **OmniStack 6148**)
- Alcatel **OmniSwitch / Router** multi-level switching platform

## Benefits

- Decentralization of formerly centralized services to peripheral offices
- Reduction of window waiting-time for the public
- More additional services from decentralized offices

*"Thanks to our collaboration with NextiraOne, we have benefited from full support during the creation of the network as well as with the delivery of added-value services. In addition, we signed a high-profile consultancy contract with NextiraOne for network security."*

**City of Milan**

## The Role of NextiraOne

*NextiraOne has been the IT technology supplier to the City of Milan for several years and its collaboration with the local authority has gradually been extended, largely due to the company's ability to supply a wide range of added-value services. NextiraOne proposed Alcatel technology, which allows the local authority to offer innovative services to the public at minimum cost.*

*All local authority offices involved in the evolution of the IT system have been able to use a single homogeneous infrastructure for the internal and external exchange of data, with more efficient and better coordinated management and control. The management procedures have been simplified (centralized) and the most advanced security systems have been introduced (firewall, authentication systems) to ensure a secure and ordered growth of a network that has to be accessible to internal staff and external users over the Internet alike.*

## Business Partner Info

*Headquartered in Paris and Houston, NextiraOne is a leading global provider of integrated enterprise network solutions and services that enable effective, reliable business communications. NextiraOne covers everything from planning and design to the implementation, support and management of voice, data and converged communications networks. NextiraOne provide best-in-class technologies from leading partners such as Alcatel and Genesys. Additionally, the company offers consultancy and solutions development ranging from contact center applications to network infrastructure outsourcing.*

*Discover more at [www.nextiraone.com](http://www.nextiraone.com)*

*"The choice of Alcatel units has enabled us to achieve the objectives of the City of Milan while keeping costs at a minimum. The solution proposed by NextiraOne was the only one that could satisfy the demands of the local authority, while ensuring comprehensive services."*

**Ambrogio Rigamonti – Account Manager –  
NextiraOne Italy**