

Transforming Athens City Hall with Nexans Fibre To The Office



The Municipality of Athens, Greece, is committed to modernising its internet infrastructure, bridging the digital divide, and fostering entrepreneurship. Athens is also investing in e-government services and technologies such as IaaS (Infrastructure as a Service) and SaaS (Software as a Service) to make the best use of governmental cloud technologies (gcloud). Other technologies currently being developed are data management (data-driven decision making, data processing / big data/ data mining/ data governance) and information security.⁽¹⁾



CITY OF ATHENS

The Municipality required a flexible, cost-efficient, future-proof, scalable and upgradable network to provide high-speed broadband Ethernet to employees. However, several challenges had to be overcome, as work needed to continue undisturbed during installation, and the historical building housing Athens' administration had very limited pathway space for cabling. In order to upgrade the network infrastructure in a cost-efficient, easy way and carry out refurbishment with minimum disruptions during working hours, the Greek Municipality chose Nexans innovative LAN technology and OTE Group to implement this special project.

DIGITAL CITY TRANSFORMATION

"The transformation of Athens into a Digital City is underway, and contributing to this transformation process is an important challenge for us," explains Maria Paschalidou, ICT Account Manager, OTE Group, the largest Greek telecommunications provider. "We started by implementing a Fibre To The Office (FTTO) project at Athens City Hall. This Fibre Technology offers almost unlimited bandwidth to the end users, up to 40% energy saving, scalability and modular structure. This was a complex task mainly due to the architectural design of the building. However, we managed to deliver it successfully and on time."

FTTO is a last-mile technology for Gigabit Ethernet in office LAN. Nexans LANactive FTTO solutions save installation costs, reduce CAPEX and OPEX, and can outlast several generations of active equipment. There are also considerable benefits in terms of energy consumption, network administration maintenance, rollout and associated costs. FTTO infrastructures can grow with the user's needs from the very start, can easily be adjusted to new bandwidth requirements and applications and ensure higher network availability in critically important environments.

"Delivering a traditional copper structured cabling for Athens City Hall would have been quite a challenge," explains Lambros Kostaras from infrastructure consultants ESB Agents, who was involved during the entire design and planning phase for the project. "The lack of available space for installing pathways for copper cables and building floor distribution rooms was a key obstacle. FTTO allowed us to provide fibre optic cabling throughout the entire building, resulting in energy savings of up to 42-45% and centralized remote management of the complete network."

The chosen solution consists of LANactive FTTO active switches to the desktop and LANmark-OF Microbundle fibre cable. The compact design of the Nexans LANactive switches allows for a simple, flexible installation and is especially suitable for the refurbishment of historical buildings. Nexans device manager software provides a continuous up-to-date overview of the switches wide range of functionalities.

As there is no limitation to link lengths, investment savings can be realised through smart planning. Furthermore, there is no need to invest in distribution rooms, saving on money as well as space. Considerably fewer cables are laid, so that cable trays can be calculated for smaller volumes, less weight and less fire load.

Nexans, as a global cable manufacturer, can deliver active and passive infrastructure components from stock anywhere in the world, with warranty. With its minimised cable volume and fire retardancy, Nexans indoor fibre cable with Microbundles including accessories and connectivity offer a future-proof network infrastructure, that is easily upgradable, offering space savings and, usually, two-digit energy savings.

Problem

- Need for flexible, cost-efficient & upgradable network
- Provide high-speed broadband Ethernet to employees
- Request for very low-disruptive installation process
- Lack of cabling pathway space in historical building

Solution

- LANactive FTTO switches to the desktop
- LANmark-OF Microbundle Fibre cable

Benefit

- 25-year peace-of-mind cabling infrastructure
- Foundation laid to transform Athens into a Digital City
- Cost-efficient quick and easy upgradable cabling infrastructure
- Space savings without need for data cabinets on each floor

FIBRE TO THE OFFICE

"The City of Athens has adopted FTTO as the most cost effective and energy efficient network technology for our buildings," adds Konstantinos Champides, Chief Digital Officer, Athens Municipality. "Our digital transformation aims to cover and provide advanced IT-based services to all of our employees and citizens. This requires powerful physical infrastructure based on fibre optic technology, both inside and outside our premises. In this way, we can bring fibre optic cable and associated broadband speeds right to our employees' workstations."

"Our buildings are historical reference points for Athens and we had to make certain decisions about how we could bridge history with today's digital world. The requirement was to install a flexible networking system, to accommodate the ever-changing operational environment whilst also

resolving space issues. We now have a best in class cabling infrastructure to support our needs for the next 25 years and implement our digital roadmap, which Mayor Kaminis announced in January 2018."

Workspaces can now be connected with Gigabit speeds, and installation took place without disrupting work processes or negatively impacting the characteristic architecture. The Municipality of Athens can continue its digitalisation ambitions whilst resting assured that the infrastructure can remain in place for several decades.

(1) Source: https://joinup.ec.europa.eu/sites/default/files/inline-files/eGovernment%20in%20Greece%20-%20February%202016%20-%20v%2018_0_2_00.pdf



About Nexans

As a global leader in advanced cabling and connectivity solutions, Nexans brings energy to life through an extensive range of best-in-class products and innovative services. For over 120 years, innovation has been the company's hallmark, enabling Nexans to drive a safer, smarter and more efficient future together with its customers.

Today, the Nexans Group is committed to facilitating energy transition and supporting the exponential growth of data by empowering its customers in four main business areas: Building & Territories (including utilities, smart grids, e-mobility), High Voltage & Projects (covering offshore wind farms, submarine interconnections, land high voltage), Telecom & Data (covering data transmission, telecom networks, hyperscale data centers, LAN), and Industry & Solutions (including renewables, transportation, Oil & Gas, automation, and others).

Corporate Social Responsibility is a guiding principle of Nexans' business activities and internal practices. In 2013 Nexans became the first cable provider to create a Foundation supporting sustainable initiatives bringing access to energy to disadvantaged communities worldwide. The Group's commitment to developing ethical, sustainable and high-quality cables drives its active involvement within several leading industry associations, including Europacable, The National Electrical Manufacturers Association (NEMA), International Cablemakers Federation (ICF) or CIGRE to mention a few.

Nexans employs more than 26,000 people with industrial footprint in 34 countries and commercial activities worldwide. In 2017, the Group generated 6.4 billion euros in sales. Nexans is listed on Euronext Paris, compartment A.
For more information, please visit: www.nexans.com



Nexans Cabling Solutions

Alsembergsesteenweg 2, b3 - B-1501 Buizingen

Tel: +32 (0)2 363 38 00 - Fax: +32 (0)2 365 09 99

Nexans Cabling Solutions UK and Intelligent Enterprise Solutions Competence Centre

2 Faraday Office Park - Faraday Road - Basingstoke - Hampshire RG24 8QQ

Tel: +44 (0)1256 486640 - Fax: +44 (0)1256 486650

www.nexans.com/LANsystems - info.ncs@nexans.com

Nexans Deutschland GmbH - Advanced Networking Solutions

Bonnenbroicher Str. 2-14 - 41238 Moenchengladbach - Germany

Tel: +49 2166 27-2220 - Fax: +49 2166 27-2499 - E-Mail: sales.ans@nexans.com

www.nexans.de/ans