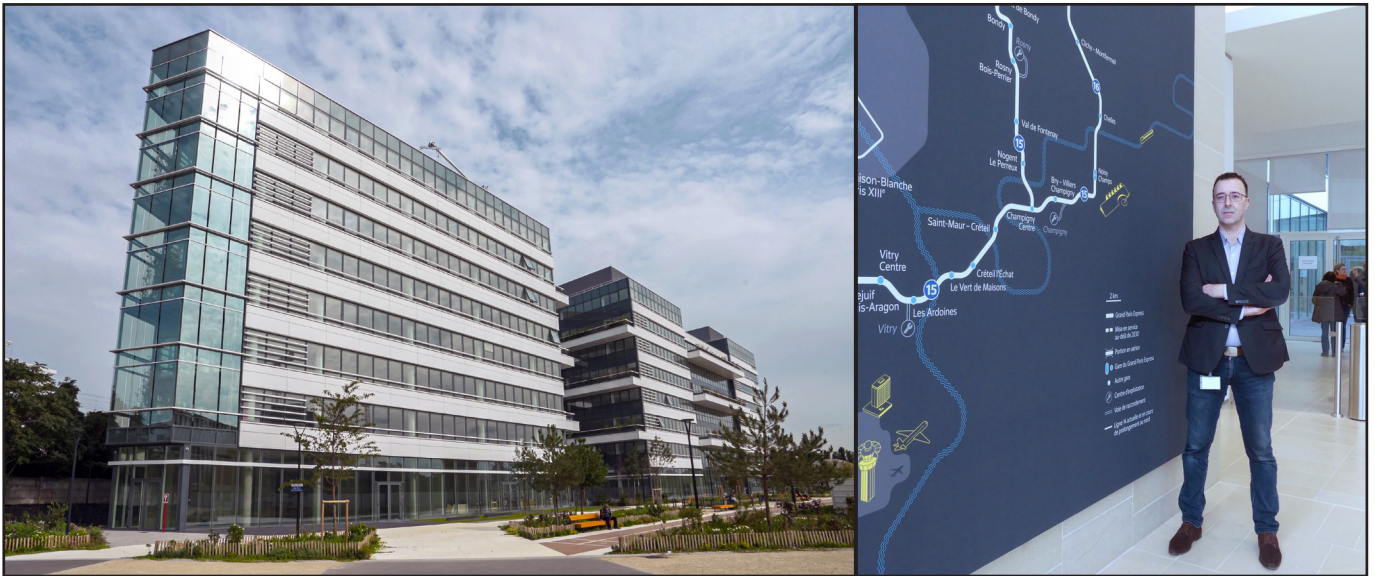


Société du Grand Paris

Choosing FTTO for wireless access throughout the building?



The Société du Grand Paris (SGP) has selected Fibre to the Office (FTTO) technology for the IT infrastructure of its new 30,000 m² Paris Region headquarters. This choice was made in order to meet requirements in the areas of flexibility, durability, and return on investment. FTTO allowed the organisation to deploy and commission innovative, scalable workspaces in record time.



A CHALLENGING MOVE

The mission of the Société du Grand Paris public agency is to design and build the Grand Paris Express, a 200 km network of new automatic metro lines covering the capital, including 68 stations. Faced with the double challenge of a recent organisational restructuring and the need to manage internal growth, SGP decided to move its head office to a 30,000 m² building in Saint Denis, bringing its employees and partners together on a single site.

The Société du Grand Paris faced several particularly challenging constraints. The first is related to saving time: from the moment the lease was signed, the building had to be fully equipped and operational within a year. That meant IT infrastructure installation needed to be completed in less than five months, as opposed to the usual 18 to 24-month cycle. Furthermore, as a public agency, budgetary constraints govern installation expenditure as well as the site's operating expenses. Furthermore, as the key objective is to prioritise employees' wellbeing and provide them with large workspaces, the room available for IT infrastructures is extremely limited.

CHOSING FTTO: AN EVOLVING LONG-TERM SOLUTION

To meet these challenges, Société du Grand Paris opted for an innovative Fibre to the Office (FTTO) solution. This technology offers currently unmatched levels of flexibility, cost-effectiveness and interoperability. It is the most suitable medium for providing the scalability needed to guarantee network performance and support current and future applications.

Only two technical rooms (each housing a 19" server rack) are required for redundant installation in the new 30,000 m² building, with seven storeys of offices and two levels of parking space, all of which are connected by Wi-Fi. With a traditional solution, 26 technical rooms would be needed. The choice for FTTO, however, enables lower energy consumption, reduced air conditioning, and simplified access controls, as well as optimisation of space usage for employees.

Redundancy of the IT installation is provided by a double fibre ring on each floor, which is, in turn, connected to the two technical rooms, and the installation of Wi-Fi terminals at junction points. As a result, only four hours of service interruption need to be taken into account each year. What's more, FTTO Switches allow equipment such as Wi-Fi access points to be powered using Power over Ethernet (PoE).

The FTTO Switches are integrated in the building's suspended ceilings and connected to Wi-Fi access points throughout the corridors. With a few exceptions, for example wherever business requirements dictate the use of wired connections (in the trading room), all workstations and meeting rooms are equipped with wireless devices. If a wired connection is required, the distributed cross-connect points provided by the FTTO Switches enable fast and easy connection close to the application.

CLOSE INVOLVEMENT OF A TRUSTED PARTNER

Société du Grand Paris sought out experienced and trusted partners, capable of providing long-term support and taking a proactive approach, to help them with this ambitious relocation project.

"We were starting with a clean slate, with an opportunity to make history, and our choice of partners was crucial to the success of the project," says Karim Amazit, Infrastructure Manager at Société du Grand Paris, responsible for moving and migrating IT infrastructure. "Nexans was chosen to implement an innovative concept which is relatively new on the market. We required the support of an experienced partner. The fact that Nexans had built up experience with FTTO infrastructure, particularly at their own location at La Défense, Paris, which we were able to visit, confirmed our choice. This was the only solution that would allow us to meet our deadlines and budgets."

The Nexans team supported SGP throughout all stages of the project. Involvement ranged from defining the fibre requirements, which are dictated by the network architecture, and developing the configuration during installation of the FTTO Switches to training SGP teams in the use of its management and supervision software platform and supporting the implementation of services in collaboration with Hope. Telephone support has been set up to ensure fast and continuous customer service.

AN INNOVATIVE, EVOLUTIONARY VISION OF THE WORKSPACE

"The advantage of the fibre-based FTTO infrastructure is the fact that this passive network has the capacity to absorb the increasing use of digital applications and devices over the next twelve years - and beyond," says Lionel Cailleux, Real Estate Project Manager at Société du Grand Paris, and leader of the relocation project. "In our project management business, Building Information Modelling (BIM) alone requires suitable secure, very high bandwidth for collaborative applications. We want to anticipate business needs and continuously update digital services and employees' Digital Workplaces, in order to continuously improve their working environment."

A first phase of Digital Workplace implementation is already operational, offering innovative services such as:

- Ubiquitous Wi-Fi throughout the building
- Wireless device support (headsets, screens, etc.)
- Remote management and daily verification of all screens by the technical teams
- Collaborative spaces connected by videoconferencing
- Presence sensors in offices, meeting rooms, parking lots, etc.
- Internal trading room
- Crisis room with 4K screen
- Secure printers
- Online Janitorial Services
- Connected beverage dispensers
- Automatic switching off of lights and screens at 9 p.m. every night.

Phase 2 is being prepared for launch by the end of the year. Services envisaged include the following:

- Meeting rooms equipped with motorized sensors for video conference cameras and microphones
- Room reservation application and screens
- Online parking space administration
- Connected sports room

Key figures

- 30,000 m² on 7 floors
+ 2 parking levels
- 78 meeting rooms
- More than 1,500 employees and long-term partners
- 4.3 km of 144-strand fibre cable and associated connections distributed throughout the building (2 loops per floor)
- 530 FTTO Switches
- 2 technical rooms

Implementation Schedule

- 13 February 2019: internal launch of the SGP project
- 17 June 2019: signing of the lease
- Mid-July 2019: order placement
- Early September 2019: launch of the fibre-optic installation
- 20 December 2019: delivery of the installation and start of network configuration
- 27 January 2020: 1,000 employees move in
- Long term: more than 1,500 employees and partners on site

Solution Benefits

- Fast FTTO installation
- Less space required for fibre optics and technical rooms
- Scalable and durable solution
- Management of installation and maintenance costs



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