

## Bouygues Telecom: A model **data centre**



### Cutting-edge technology in harmony with the environment

Bouygues Telecom's new IT Processing Centre at Montigny le Bretonneux, France, incorporates the latest Nexans LANmark-7A cabling technology to serve current and future mobile applications whilst providing a commitment to respect the environment.

## Challenges

- Future-proofing the data centre for the next 10 years
- Support of expanded mobile services like video on demand
- Achieve top quality and maximum security of transmission systems
- Operate in an environmentally responsible manner

## Solutions

- LANmark-7A cabling system offering up to 40G capacity
- 500 km of data cables and 35,000 LANmark-7A GG45 connectors installed in two computer rooms

## Benefits

- Cost effective migration to 40G
- Support legacy equipment
- Ability to cope with new services such as video on demand
- Respect for the environment

### The future - from today

"A key goal was prolonging our cabling investment by installing a very high-performance infrastructure from the outset, capable of meeting the high bandwidth requirements of new mobile services like video on demand," explains Henri Tailleboq, Infrastructure Manager at Bouygues Telecom's IT and Quality Management. That goal has been achieved at the new IT Processing Centre, combining two rooms with over 1,200m<sup>2</sup> floorspace and two other rooms still awaiting cabling. Like most data centre sites, transmission servers and internal servers are all managed at this new Processing Centre, which is a particularly big challenge. The slightest malfunction is liable to trigger instant repercussions for subscribers, given the nature of their business.

### State-of-the-art technology

"Nexans was a natural choice as our preferred partner for this project since we have worked with them before. However, their selection was also based on their knowledge of the latest infrastructure technology," says Henri Tailleboq. The two rooms are equipped with the latest Nexans LANmark-7A cabling technology, exceeding the specification of Cat7A standards, and supporting frequencies up to 1,000MHz. The solution provides a migration path to accommodate a future shift towards 40G applications. "The backwards compatibility of the GG45 connectors are also a selling point in favour of Nexans," adds Henri Tailleboq.

Did you know...

- Bouygues Télécom required a PUE ('Power Usage Effectiveness') less than or equal to 1.8 rather than the level of 2.2 to 2.3 currently seen at other computer rooms
- Noise emissions are not to exceed 70 dBA by daytime and 60 dBA at night

### A shared commitment

While the technical attributes of Bouygues Telecom's data centre make it a cutting-edge facility in today's market, the company has gone still further by making it a green operation. For example, the optimisation of climate-control is achieved by using outside air to limit less efficient production of cold air ('free cooling').

Another environmental saving is achieved through the LANmark-7A/GG45 combination in the form of energy efficiency.

A higher performing cabling network has the potential to use less power. With data streaming freely, multiple noise cancelling devices can be minimised or eliminated completely, saving electrical costs. Reducing the use of such devices also lowers heat and the associated cost of temperature control. This further makes the IT Processing Centre a building that respects the environment.

"We had an opportunity to visit a Nexans facility that saves energy thanks to its high-performance cable network. This commitment made Nexans a natural partner in our wish to embrace strong ecological solutions," concludes Henri Tailleboq.

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Henri Tailleboq, Infrastructure Manager at Bouygues Telecom's IT and Quality Management