

## **Luxembourg Colo Provides Multi-Tier Options**

Luxconnect obtains different Tier Certifications to meet the needs of the changing market demands

## By Christine De Ridder

LuxConnect, a multi-tenant, multi-tier data center and dark fiber network operator based in Luxembourg, developed an innovative strategy using Uptime Institute Tiers to differentiate the services and pricing it offers to key customer groups. In doing so, LuxConnect became the first—and so far only—facility to offer multiple Tier levels in the same data center.

"LuxConnect's multi-tier approach to Tier Certification enables it to offer customers different rooms with different Tier Objectives in the same building." Said Phil Collerton, managing director, Uptime Institute EMEA." This gives the client the opportunity to use different rooms to house different types of applications, both mission critical and noncritical, while also benefiting from the flexible SLAs and pricing models that this strategy allows LuxConnect to offer."

LuxConnect is a private limited company owned by the Luxembourg State and founded in 2006 with several missions such as strengthening the Luxembourg's position on the European Internet map and providing state-of-the-art IT environment.

Roger Lampach, CEO, said, "Among our goals was to promote and facilitate high-end ICT investments into Luxembourg and offer white space in high-quality data centers. And that is what we achieved."

Today LuxConnect has two sites and four buildings with a total server space of 14,700 square meters. LuxConnect has three independent data centres, DC1.1, DC1.2 and DC1.3, on its Bettembourg ICT Campus in the south of the country. The DC2 facility is located in Bissen. The two sites are interconnected via multiple routes using dark fiber to guarantee customers data center business continuity.



The exterior of DC1.3, Luxconnect's green data center.



A Tier IV Certified Constructed Facility server room ready to host servers.



Luxconnect's low-voltage distribution room.

LuxConnect designed, planned, and built these data centers in less than 10 years. The newest facility, DC1.3, launched in August 2015. Three of the four buildings have been Certified by the Uptime Institute, including Tier IV Certification of Design Documents for DC1.1 and Tier II Certification of Design Documents in DC2. DC1.3 has Tier II and IV Certifications of Design Documents and Constructed Facility in the same facility, which is a unique configuration.

Lampach said, "We know that we have to convince our visitors and potential customers that we are professional and that we know what to do and how to do it. Our visitors are usually very impressed by the quality and high level of our five-star data centers."

LuxConnect's mix of Tier Certifications is an integral part of meeting its customer's demands. Having multiple Tier II facilities enables LuxConnect to attract gamers who require high availability and low latency but are very cost sensitive. Other verticals, such as banks, require the Fault Tolerant Tier IV Certification of Constructed Facilities.

With support from the government, LuxConnect is able to expand as soon as market demand appears. Lampach said, "We start building when we see that there is not enough capacity in the market and without having any contracts. It's not like a profit-driven company would do, but as our primary shareholder wants outside companies to come at any moment, we have to anticipate."

The cornerstone of this approach is DC 1.3, which has both Tier II and Tier IV Certifications of Constructed Facility on the same floor in the same building, which is a unique approach.

The Tier II spaces are mostly for the gamers, according to Lampach, "The gamers have two installations, one called front end where the gaming company connects and the other one where our client analyzes customer behavior and determines which new products to present their customers. These companies pushed us to consider offering Tier II spaces. And we began the idea by achieving Tier II Certification of Design Documents in DC2."

From the beginning, LuxConnect designed its data centers following Uptime Institute's Tier standards and specifications. The company's two project managers are Uptime Institute Accredited Tier Designers. Lampach said: "Having the Tier



Cold water distribution



Luxconnect received Tier II and Tier IV Certifications for spaces in the same facility, making it unique.



Uptime Institute presents Tier Certifications to Luxconnect.

Certifications has been a real benefit for us. It's also a concern for us because we go to the market through our business partners. At the beginning, they don't really understand the differences between Tier II, III, and IV and they think downtime will never happen or they decide to take the risk."

Lampach feels that the Tier Certification of Constructed Facility process provided the project team with an opportunity to better understand the behavior of the different systems, which helps them to assure business continuity. The Operations staff also benefited from the Tier Certification process with a very intensive workweek that was instructive on the technical and human level.

"At the end of the week, Operations could really see how the electrical and mechanical systems reacted during the multiple demonstrations. They feel more comfortable working with the systems because they know exactly how to proceed for maintenance without impacting business continuity." The staff was also able to witness how the systems react during different failure scenarios.

Rich Van Loo, Uptime Institute's senior vice president, Facility Management Services, said, "The operations assessments helped to insure LuxConnect gets the most availability out of each data center regardless of Tier while still allowing flexibility to its customers. It positions them to be a true leader for IT services in the region.

LuxConnect is justifiably proud of its performance during the Certification process, as it had just two minor issues, both of which the company was able to resolve during the testing week. The minor nature of these changes testifies to the quality of LuxConnect's design, construction, and commissioning processes.



Christine De Ridder worked for several companies, including Schneider Electric and Siemens, before joining LuxConnect in 2012 as manager, Data Centre Projects. She became an Accredited Tier Designer in 2013. In addition, she speaks five languages and has an engineering degree in electromechanics.