



Case study

Brighton Digital Exchange Data Centre

Background

Location Brighton, UK

Value £700,000

Size 270m²

Duration 12 weeks

The (Brighton Digital Exchange) BDX is a business co-operative working to improve digital infrastructure and services in Brighton. Founded by seven technology companies, the BDX is a unique collaboration between Wired Sussex and technology businesses offering services to the Brighton business community.

The Brief

The £700,000 project has been funded by BDUK (Broadband Delivery UK) as part of the Superconnected Cities programme.

Seven founder businesses including Internet service, hosting and telephony providers came together to form the Brighton Digital Exchange Co-operative, which will own and run the facility.

Adapting the New England House site and transforming it into a modern data centre facility for creative and digital businesses would provide the city with

a digital platform to compete with other major technology clusters around the world.

The new data centre will unlock cheaper and faster broadband for Brighton's tech companies by creating a "Digital Exchange" in the heart of the city, where companies can collaborate to use combined buying power, to get faster broadband at lower prices.



The Solution

Challenges

New England House is an eight storey building located in Brighton, England. Opened in 1963, it was the world's first purpose built high-rise industrial business centre.

Before any building works could be undertaken to convert this unique building into a modern day digital facility, a delicate first stage process of identifying and removing all the original asbestos materials was the primary objective.

Key components

Critical Power Installation

Main LV Panel

- 175KVA supply feeding a 315A/400V Main LV Panel.

Generator

- 1 x 200KVA standby generator with 24hr fuel tank.

UPS

- 2 x synchronized 60KVA UPS with 38A/hr. 480V. (10 year design life battery)

Mechanical & Cooling Systems

Air Conditioning System

- 3 x Wall mounted Mitsubishi units with external condensing units in Comms room and UPS Switch-room.

CRAC Units

- 2 x 51.6kW Airedale down-flow units with external condensing units.

Fire Suppression

- 448m³ single FM200 fire suppression system in the UPS Switch-room, Comms room & Data Hall.
- VESDA System installed around both CRAC units and the extract fan.



Security & Access Control

House Fire Alarm

- Enhanced, to comply with the BCM (Building Control Manager.)

Access Control

- Doors into the Airlock, Data Hall & Comms room are opened via a timed remote activated number pad access control system.

CCTV

- 13 x Cameras securing all internal and external areas.

Intruder Alarm

- Airedale BMS integrated security system.



Conclusion

The new data centre at BDX will deliver the ideal platform to support the establishment of a technology hub, of technology start ups in the area, drawing wider investment from across the region.

Andy Hirst, Specialist Projects

Director for Sudlows commented; "Digital hubs such as the facility we have just completed at Brighton are crucial for small technology companies who are looking for a unique connectivity and hosting services. By deploying the latest in energy efficient technologies means they deliver high-speed digital services with low energy demands".

"The Exchange provides the technology and infrastructure to enable internet service providers like mine to work together to offer better and more tailored internet services to local businesses, especially those with specific digital needs. Through this venture Brighton is leading the way with an innovative approach to connectivity, further to support growth of this city's digital economy."

Joe Kerr, BDX Chair and Fastnet CEO



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