



LIVE UPGRADE FOR TELECOMMUNICATIONS COMPANY

HIGHLY SECURE DATA CENTRE BUILD

Keysource has completed the latest critical upgrade of a live data centre in Essex, East London as part of a national project designed to increase the capacity and resilience across the client's estate of Critical National Infrastructure.

It was completed under the terms of the national framework agreement which sees Keysource responsible for designing and project managing the upgrade of the live infrastructure at a number of UK sites.

The critical upgrade was completed in a live environment working around existing services, where it was critical to undertake in depth planning and use trusted engineers to complete the works.

The Teleco Data Centres are essential hubs in today's data driven world, across the UK facilitating the nation's access to the internet with each Telco Data Centre supporting tens of thousands of local users.

It included demolition, construction of new rooms, cooling, electrical and BMS systems.

This project also included complex project planning to allow for planning permission, surveys, strip out, construction, and installation of switchgear, UPS and power systems within the live environment.

Keysource's experience with the new LV and HV DC systems was a requirement of the project.

PROJECT HIGHLIGHTS

- Appointed as Principal Contractor to deliver turnkey solution
- Undertook Principal Designer role on behalf of the client to deliver Health & Safety obligations
- Key planning and pre-construction activities including Asbestos Survey, Structural Survey, Ground Penetrating Radar and Lifting Plan
- Production of detailed RAMS for activities within live operational environment including construction, power (AC & DC systems) and cooling
- Internal Construction around live systems including comprehensive dust prevention and airflow management mechanisms
- Modification of Raised Flooring
- Phased programme of works to manage risk with back out plans for each
- Resilient AC Electrical Installation including mechanical UPS system to support Cooling Fans and Controls
- Resilient DC Electrical Installation including phased out of hours changeover
- Replacement of existing Cooling systems with High Efficiency Free Cooling Systems

QUOTE

“Keysource has over 40 years’ experience of working within critical environments and we are able to provide a full range of services to support the full lifecycle of a project from consulting, through to project delivery and on-going management. For this project our skilled inhouse teams are able to maximise the rack footprint by challenging the traditional design and our project delivery team ensure that the live environment is never compromised.”

Richard Clifford
Director of Solutions at Keysource