Regional Digitisation Control Centre, Hong Kong



Client

Electrical and Mechanical Services Department, Hong Kong Government

Location Hong Kong

Date of project 2020

Key services provided

Design and deploy a centralized city monitoring platform

BRIEF

As an important step towards the government facilities digitalization, a Regional Digital Control Centre (RDCC) will be launched in EMSD Headquarters in 2020 Q3. Arup has been appointed to provide the design services and digital platform development works for this RDCC. The platform development will be based on the existing Neuron data platform architecture with customized user requirements.

DESIGN APPROACH AND IMPLEMENTATION

The RDCC will serve as a centralized digital platform to supervise and monitor critical E&M equipment, thus identify and quantify the potentials of assets' enhancing operational environmental efficiency and performance through data analytics capability. The scalability and system are capacity the most critical consideration of this platform to support over 400 government buildings and dramatically increasing IOT devices into a central data platform and provides flexible API interfaces for future data ingestion.

SCOPE OF WORKS

- City-wide GIS monitoring
- Unified data platform
- Building system monitoring
- Performance benchmarking
- Analytics and AI algorithm
- Emergency response

HOW WILL WE APPLY THESE TO THIS PROJECT?

The RDCC project is aiming to set up a new benchmarking to the industry on city wide digital control room and data-driven city facilitv management, manpower & resource planning, extreme climate response and portable device tracking, etc. Spatial data including 3D Map, GIS and BIM will be consolidated to enable comprehensive information visualization in city level, district level and building level respectively, leading to a user-friendly man-machine interface easily adopted by operators. Customized platform modules like consumption performance evaluation and inventory management will be possibly configured by operators to suit the flexibility and scalability requirements for future development.

