

# ESR Technology

## Data Centres Building Services Assurance



The importance of data centres and cloud computing has been underlined by the COVID-19 pandemic. During the crisis, the data centre industry has provided essential support for the global economy, supporting a massive shift to online services for businesses, schools and not-for-profit organisations. Even before the pandemic, key players were looking to add data centre capacity to meet a growing demand for cloud-based services.

Through this growth, data centre service providers and businesses generally are increasingly reliant on their IT and telecommunications infrastructure, which has to be capable of continuous operation (24x7). The volume of data being processed has led to smaller, faster computers and servers maximising the utilisation of available space. But this performance increase comes at a cost; energy consumption and heat production per square metre are increasing. When minutes of downtime can affect business performance it is crucial that a building's infrastructure is fully capable of supporting its business critical systems.



### Our services include:

- › **Integrity Assessment:** Assessment of the integrity and performance of new and existing systems through Reliability, Availability and Maintainability (RAM) modelling.
- › **Required Integrity:** Identification of optimal level of integrity required to assure business continuity.
- › **Design Optimisation:** Working with customers to deliver a meaningful comparison of Building Services integrity and performance in option studies.
- › **Options Studies:** Working with the Building Services designers to develop requirements and undertake assurance analysis for a range of design options.
- › **Requirements Specification:** Definition of the requirements for system testing and design assurance.
- › **Design Assurance:** Preparation and review of integrity assurance documentation.



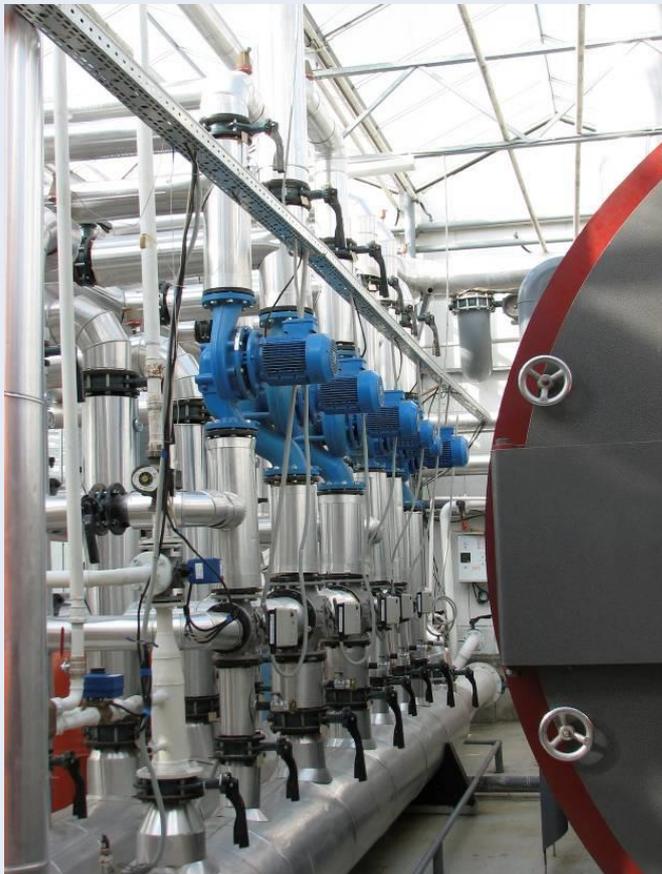
## Adding Value to Building Services Design

Review of  
Functional  
Block  
Diagrams

Define Failure  
Modes

Develop  
Reliability  
Models

Calculate the  
estimated  
Reliability,  
Availability,  
and  
Maintainability



### Why choose ESR Technology?

Our team can help in the design of new building services and evaluate the integrity of existing services. We are experienced in working with clients who demand ultra-high integrity building services across a range of industries. In association with Building Services design consultants we offer cross-industry experience to ensure that high integrity business objectives are achieved.

### We can offer:

- › Scalable team – Selected from over 20 Consultants to support your project.
- › Knowledgeable staff who can share best practice from across industry.
- › Pragmatic guidance – Based on a 30 year track record.
- › Depth of services – ‘One stop shop’ for risk and reliability support.