# CGI OpenGrid Foundation Integrated Network Model (INM)



The progressive adoption of no-and-low carbon technologies into the electricity system is increasing volatility in the demands on the electricity infrastructure. Distribution system operators need to make decisions in real time to ensure effective operation of their infrastructure. Appropriate access to accurate, complete and timely data is vital to ensure the safe and reliable automation of the system.

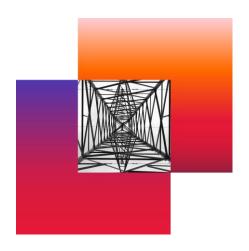
Gaining a holistic view of the system is imperative to continue to deliver the levels of safety and reliability, consumers benefit from today. CGI OpenGrid Foundation, part of our CGI OpenGrid360 suite, enables a single view of a utility's infrastructure through master data management and data integration.

# BUSINESS AND MARKET CHALLENGES

- GB network and transmission companies hold asset, network and geospatial data in different systems.
- As these companies transition to become distribution system operators and support delivery of Britain's legally binding Net Zero objectives, confidence in the accuracy and integrity of data across these system is vital to effective decision making.
- Also, GB network and transmission companies have new obligations to make their data accessible, risking reputational damage of data is found to be inaccurate.

### **CGI SOLUTION**

- CGI's Integrated Network Model (INM) draws data from existing operational systems.
- It generates a reconciled version of the network master data to create a single view of the electricity network.
- INM creates the foundation for an integrated network operator's systems architecture, which will facilitate the transition towards the efficient operation of a decarbonised energy system.



## **Key Benefits**

- Delivers a single view of a utility's network model against which all data and applications can be assessed
- Enables data-driven insights to improve grid operation, network planning, investment and event management
- Drives new business models to meet changing customer demands
- Improves data quality through automated issue identification
- Enables faster adoption of emerging technologies and applications

# **Key Success Factors**

- Delivery of a reconciled, canonical network model
- Increased confidence in decision making through access to accurate data

CGI OpenGrid360

 INM also provides a mechanism to continually improve the quality of data that need sharing by embedding feedback on data quality across systems and enabling Data Governance.

**BUSINESS BENEFITS** 

- INM makes integration of new systems simpler, more cost effective and quicker compared with traditional approaches by reconciling and remediating data across a multitude of systems.
- As new systems are added to support the transition to a decarbonised energy system, INM acts as an innovation accelerator.
- Business decisions can be made with greater confidence based on better data available across the organisation.
- Improved accuracy, completeness and timeliness of data.
- INM safe-guards corporate reputation as energy data becomes increasingly accessible to external stakeholders.

WHY CGI?

CGI is a pioneer of innovative technology in the utilities sector. With 6,000 consultants around the globe, we bring decades of experience in the electricity, downstream natural gas, water and waste water sectors. We work in partnership with our clients to deliver innovative solutions to their most complex business challenges, enabling them to succeed in their chosen markets.

We are enabling our clients to transition to a Net Zero energy system and generate value from the growing volumes of data available to them. We help them create insights, employ digital enablers to diversify revenue streams, support real-time operational excellence, and enhance customer experience, all whilst keeping their business secure.

In the UK, CGI has been a leading information technology partner on a number of innovation projects, including Low Carbon London and FALCON, making us the partner of choice to enable the DNO to DSO transition and deliver Britain's smart, flexible and sustainable energy future. Utilities need to rethink how they become more innovative and agile - and data is the key enabler

#### **About CGI**

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across 21 industry sectors in 400 locations worldwide, our 77,000 consultants provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

#### For more information

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