



Client	Energy Networks Australia
Client	Australian Energy Market Operator

## Client Need

Energy Network Australia (ENA) and the Australian Energy Market Operator (AEMO) launched the Open Energy Networks Project (OpEN-PRJ) in 2018 through a joint consultation paper seeking stakeholder input on how best to integrate the increasing penetrations of Distributed Energy Resources (DER) into Australia's electricity system in order to bring both short and long-term benefits to customers, irrespective of whether they possess DER assets or not.

The project is seeking to understand what roles a future Distribution System Operator (DSO) and AEMO should play in the future energy system to ensure that value is returned to all customers; both those connected at transmission and distribution level. Specifically, the OpEN-PRJ is investigating four market and network frameworks that can facilitate market access for all stakeholders (DER owners, aggregators, network operators, etc) while ensuring that technical network limits are not breached and the integrity and security of the network is preserved, maintaining a safe and reliable power supply for all. These frameworks are interchangeably referred to as DER and DSO frameworks.

## Our Approach

We supported the client in this work through the following activities:

- Creating high-level DSO frameworks through: research and analyses of current thinking on potential future DSO frameworks and transition programmes; critique and enhancement of client DSO frameworks based on our experience and

research undertaken; and production of high-level narratives and visual representations of the client's fourth DSO frameworks

- Developing a detailed market-agnostic SGAM through: assessing the standard structure of the SGAM framework to ensure it is fit for purpose of the architectural representation of the client's future DSO frameworks; modifying and enhancing, where appropriate, the standard structure of the SGAM; and working collaboratively with stakeholders to deliver the end state of the market-agnostic SGAM framework
- Developing the functional requirements of DSO through: collaborative stakeholder workshops investigating the 13 key functions and associated activities as they pertain to each of the fourth 'DER and DSO frameworks'; and exploration and further development of the functions and activities into discrete steps and processes between actors

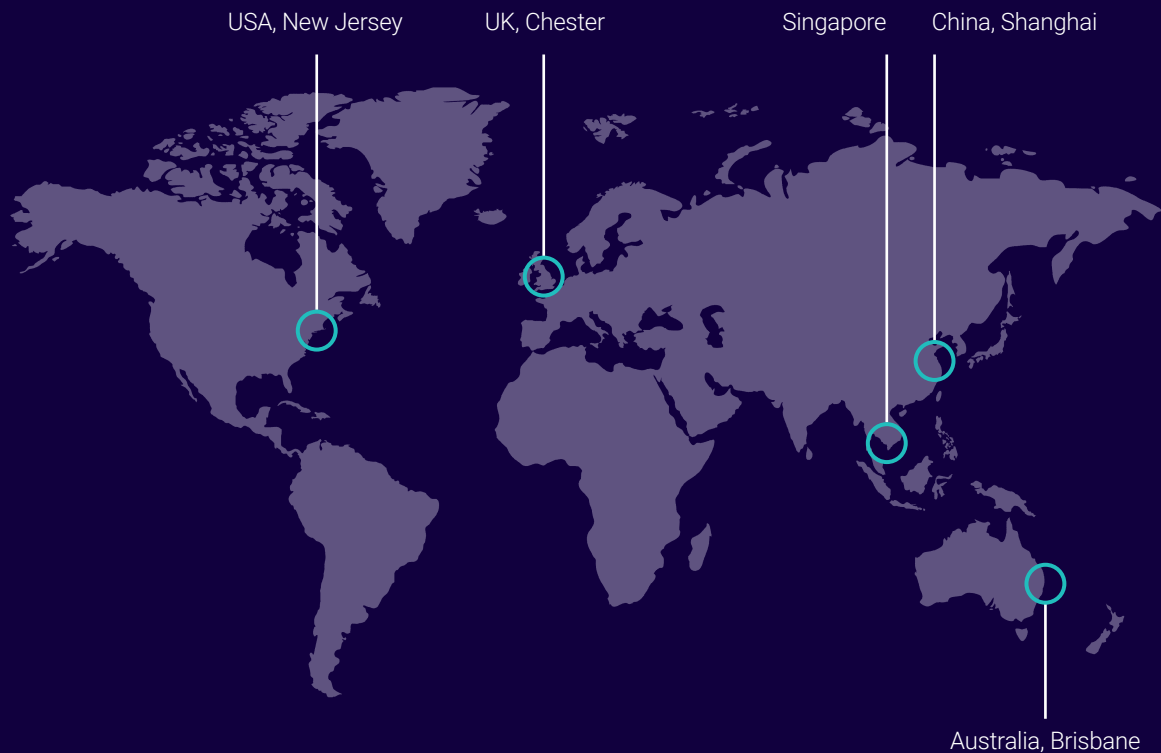
Producing SGAM frameworks for the DSO frameworks through: transposing each future DSO framework together with its market arrangements, actors, roles, relationships and functional requirements onto the market agnostic SGAM framework so that all interactions within and across the SGAM layers are comprehensively represented.

## Benefits

The interactive SGAMs were published for public consultation, allowing stakeholders to explore the various features of the fourth DSO frameworks under consideration. The Australian Energy Market Commission stated, "The Commission supports the work undertaken by OpEN". Following this consultation, ENA and AEMO were able to analyse the responses received to form a view on the preferred DSO framework going forward.

# Global Footprint

At EA Technology we specialise in asset management solutions for owners and operators of power network assets.



Founded in 1966 we have over 50 years' experience in the industry and 6 regional offices around the world to support our global customer base.

We work with a lot of our clients on a long-term basis to help them safeguard their power networks.

We advise our clients on strategy and implementation of a range of technology solutions to manage power assets, delivering maximum life and minimise cost.



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