ENA Network Transformation Roadmap (NTR) Update

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5th August –
EA Open Networks Standards Forum

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Background

- ENA has a long-standing working group, the Smart Technology Working Group (STWG), considering the implications of adoption of new ‘smart’ technologies by consumers – e.g. electric vehicles, solar PV, etc.
- The STWG has representation from ~15 EDBs and Transpower
- The STWG commission the Network Transformation Roadmap (NTR) project which was launched in April 2019

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Background

- The NTR report contains actions, grouped logically into programmes, that it recommends NZ EDBs consider undertaking.
- The NTR recognizes that there is a wide variety amongst EDBs, and therefore not every programme/action is relevant or necessary for every EDB. Individual EDBs need to use their own judgement.
- Some NTR programmes/actions might be better achieved via some industry-level collaborative projects, rather than by individual EDBs

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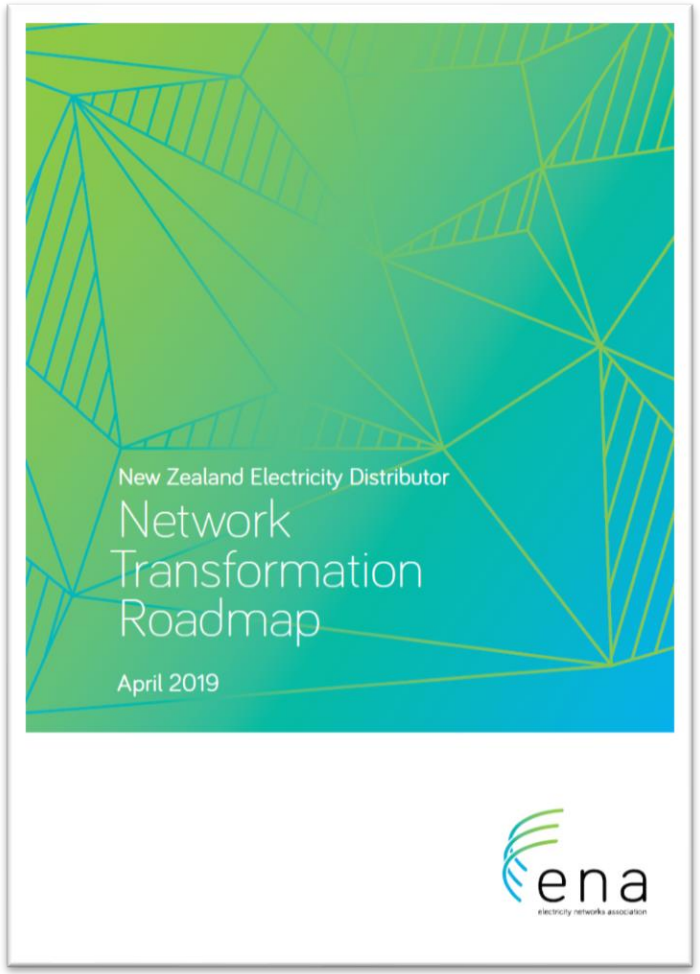
Background

Available from the ENA website:

www.ena.org.nz



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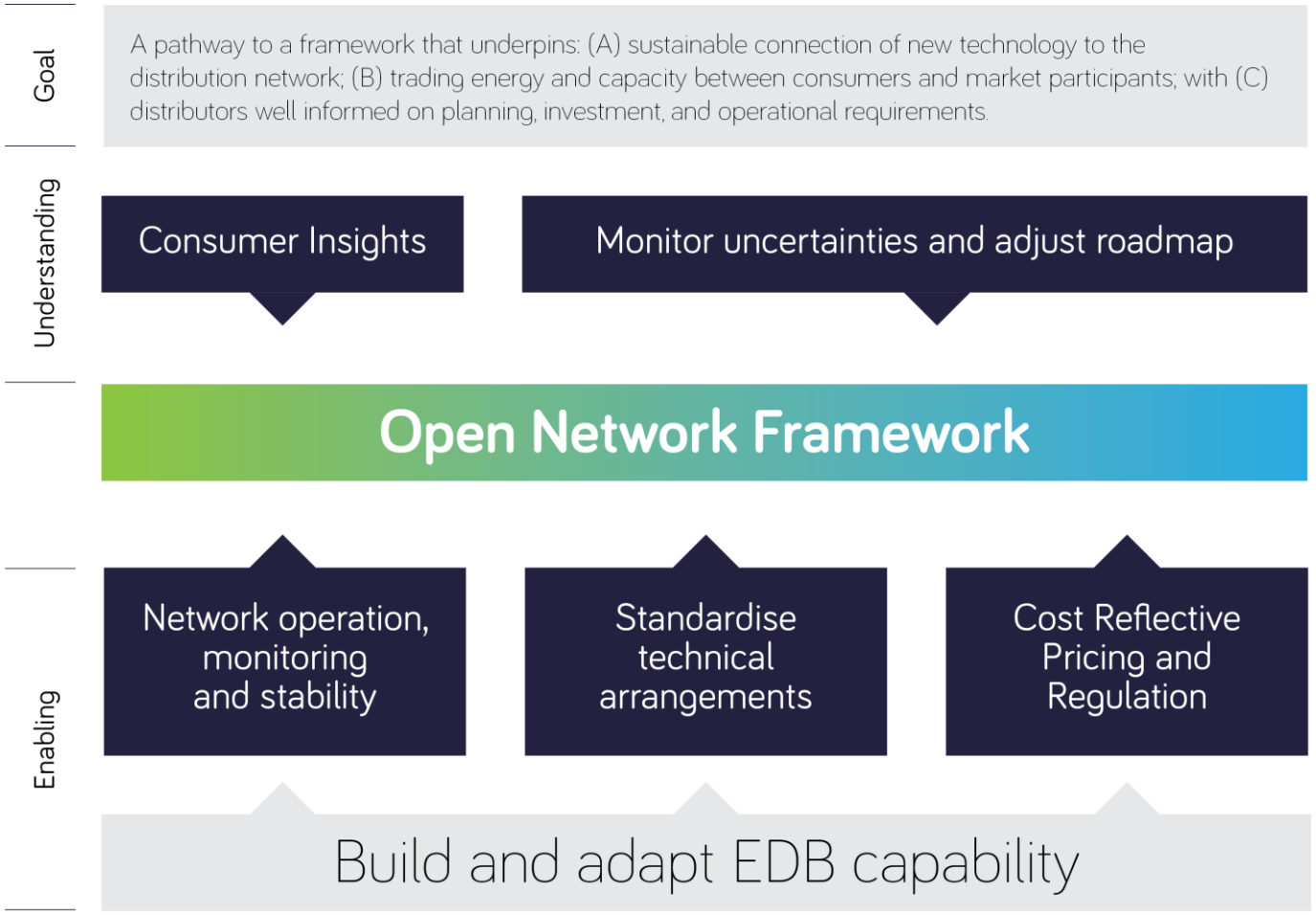
Summary of the NTR programmes



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So what have we done since?

- Following publication of the NTR in April 2019, the STWG spent some time determining which of the actions should be the priority for collective EDB work.
- The following three areas where identified as priorities and a working group established for each:
    1. Access to smart meter data
    2. LV network monitoring & visibility
    3. DER Connection Standards

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NTR WG 1 – Access to smart meter data

- NTR WG 1 has several initiatives underway or under development, including guidance on using the Data Template within the Default Distributor Agreement and work with EDBs and MEPs to agree interface standards for the exchange of operational metering data (e.g. outage alerts).

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NTR WG 2 – LV network monitoring & visibility

- NTR WG 2 has surveyed EDBs to understand their current level of LV monitoring capabilities and their strategic aspirations for the future. On the back of this survey, an external consultancy has been commissioned to produce an LV monitoring technology whitepaper, which will contain EDB-centric guidance on how these technologies can best be deployed and used.

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NTR WG 3 – DER Connection Standards

- NTR WG 3 commissioned Neil Walbran Consulting to carry out a review of all EDB DG connection processes and material, for connections made under Part 1 and Part 1A of Part 6 of the Code.
- Understand that DG is ≠ DER
- Partly prompted by request from Electricity Authority to progress develop of connection and operation standards – EA letter to ENA December 2019

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NTR WG 3 – DER Connection Standards

- The intention of the review was to understand:
  - → What requirements do EDBs have for those connecting DG, over and above requirements imposed by the Code and Electricity (Safety) Regulations?
  - → How consistent are EDB requirements, and how consistently are they presented to potential connectees?
  - → What recommendations can be made to improve the process for connectees?

NTR WG 3 – DER Connection Standards

- The review concluded that:
  - →The technical requirements were easy to find and understand;
  - →All the major EDB's (covering 77% of ICP's in NZ) completely follow the latest:
    - Electricity Industry Participation Code, specifically Part 6 (the codes) and
    - Reflect the latest joint Australian and NZ Standards for Small Scale Distributed Generation (AS/NZS4777.1:2016 and AS/NZS4777.2:2015) (the AS/ NZ standards);

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NTR WG 3 – DER Connection Standards cont'd

- The review concluded that:
  - →It is likely that any installation which followed the latest standards would meet the technical requirements of any EDB in New Zealand;
  - →The overall process would benefit from having the Electricity (Safety) Regulations (ESRs), updated to reflect the latest Aus/NZ standards (the change would then need to be gazetted into law to be legally effective);
  - →Once the ESRs are updated there may be merit in development of a single DG policy template for EDB's to use.

The Electricity Authority statutory objective

"Our statutory objective is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers."

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In that context, possible next steps?

- Advocate for amendments to ESRs to reference latest Aus/NZ inverter standards?
- Expand review to include DG connection processes for larger-scale DG?
- Consider how to expand existing DG connection processes to encompass DER?
- Something else?

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Thank you

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