

Streamlining Connections Programme FNF Connections Journey Mapping

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āhuarangi. kiritaki. mahi ngātahi.

climate. customers. collaboration.

Stream lining Connections Program me

Bringing together New Zealand experts in the connections sector to swiftly improve the new connections journey for all stakeholders involved.

Electricity Authority

Network Connections Technical Group (NCTG)

Aim: Improve the efficiency of network connections by addressing the non-price barriers to the connection and prioritisation of large capacity distributed generation and load.

Goal: Ensure adoption of industry best practice, with either changes to regulation/the code and/or the establishment of informed industry guidelines.

Priority Action: Using independent advice, develop a consultation paper for public consultation by mid 2024.

Alignment: EA's Common Quality Technical Group (CQTG)

ENA FNF

Aim: Customer journey mapping and Customer service & commercial improvements for connections

Goals: 1) Mapping of customer and EDB steps, pain points and solutions. Covering people, processes and systems for both commercial and technical areas.

2) Capturing and Co-creating improvements between stakeholders and EDBs

Alignment: EA's NCTG and EEA Technical Connection Guidelines, Industry stakeholders

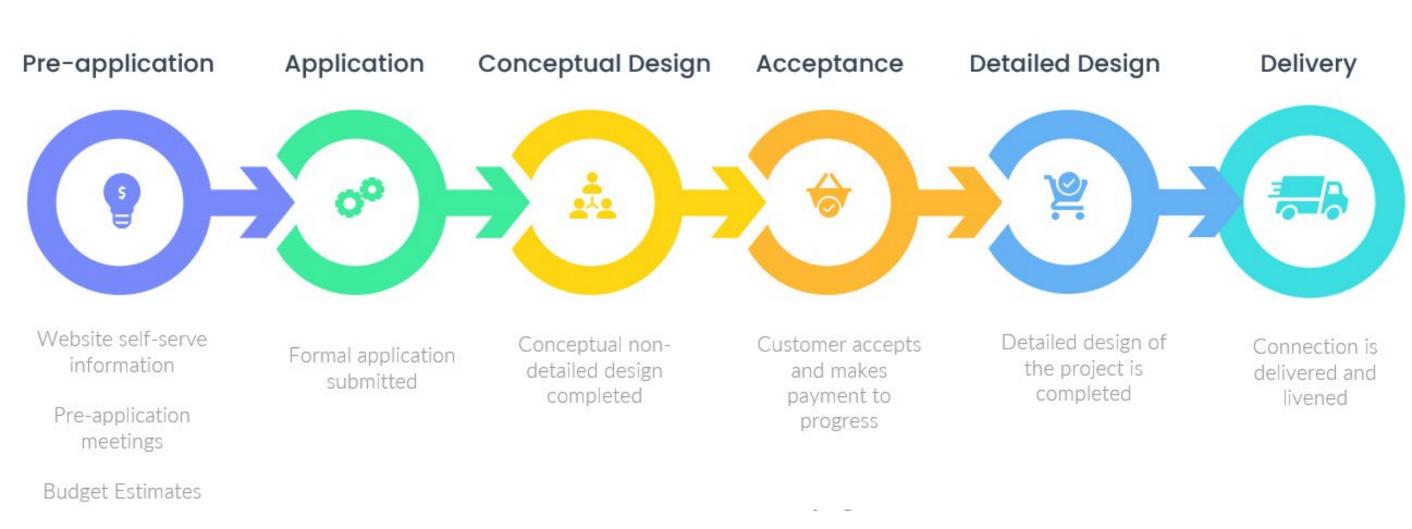
Electricity Engineers' Association

Aim: Development of a suite of technical guidelines for the connection of Distributed Energy Resources (DER) that set out the framework, principles, approach, and technical settings for EDBs to adopt in the development and application of their technical requirements for grid connection of DER.

Goal: To facilitate the fair & efficient integration of DG into the grid from the perspective of both the network, proponents and Aotearoa's electricity system more generally.

Alignment: EA's NCTG & CQTG, EEA members, ENA FF, Industry stakeholders

Connections Customer Journey



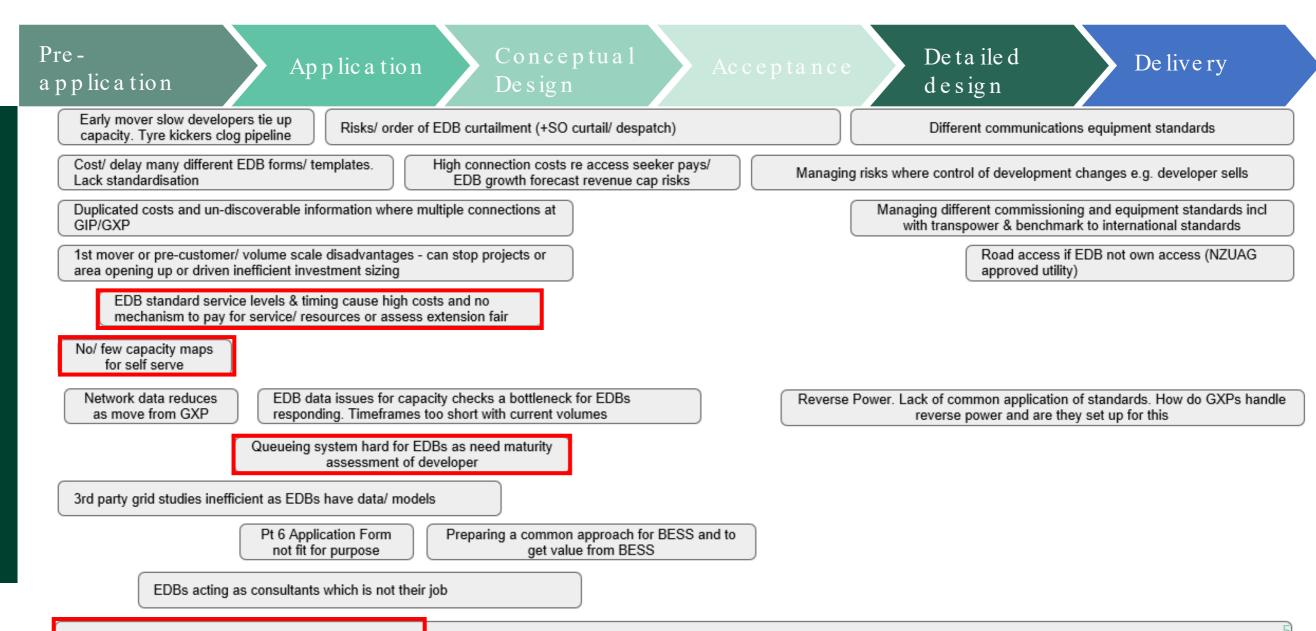
Custom er feedback on Connections pain points: EV CPOs

Pre-De ta ile d De live ry Application application De s ig n design Lack of choice & No multiyear view No network data. Shallow CAPEX If move to new site. 29 EDBs processes. People issues visibility on for EDB AMP Can't tell good from contribution v turnover, shared Lack of choice repeats cost/ time pricing approaches. performance/ EV CPO plans (& CAPEX bad sites on day 1, pre-application (& at technical standards. upstream and mailboxes, mo service provider benchmarks incl allowances) waste time & \$s back of queue?) easements DUOS account manager contractors High cost - if not What flexibility Inconsistent timings, Actual and 1st mover Poor spatial perceived DUO disadvantage (later Long lead times (+ know size to get service levels options, dynamic planning e.g. local Final bill uncertain "sensible" cost, compounded by recovery risks/ social free rides on risk of resizing) ratings, phase build, area energy plan transfers other flex/ DERs or uncertain, long time capacity) guess, repeat

Goal 20 Business Days, quotes alone ave 72 days

Expect a few months, EDB design alone 6-16 weeks

Custom er feedback on Connections pain points: Large DG



Pockets of good practice but not shared and standardised; who can lead this representing the different stakeholders?

Key themes of feedback – what we've heard so far



Access to network capacity data & other self-serve information

Early discussions regarding sites, capacity, flexibility

Too many forms for different EDBs

Inconsistent timings & service levels

Account/relationship manager

Queue Management and milestones

Contestability and performance of contractors

Common technical standards & equipment

Long lead times

Costs unknown

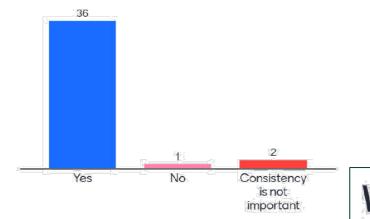
Common approach for BESS

Standardisation towards industry best practice

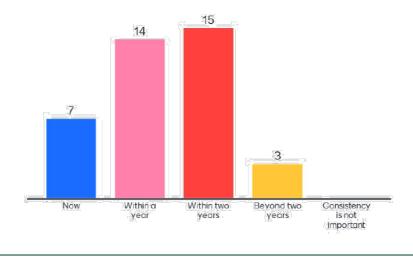
EDB member appetite is strong, but sense of urgency is mixed



Do you think we could do better to deliver a consistent experience for customers working with multiple EDBs?



When do you think EDBs should deliver a more aligned experience?



Custom er feedback on Solutions

Pre-application

Application

Conceptual Design

Acceptance

De ta ile d de s ig n

De live ry

CPOs share rollout plans Q

Condensed AMPs GIS access Dedicated resource (no GIS) Q Capacity maps HV/ Application process transparency e.g. portal Q Standard application form L

Overview 29 EDB contribution policies Q

Published metrics contractor performance Q Standardised equipment and stock holder - EDB or CPO L

More contractor competition L
Consider the approved contractors list L

Named key contacts (done for list) Q

Measure and publish performance (timescales from apply to commission bounded by voltage ranges) Q

Both sides staff education/ visits/ workshops Q

SLA_s L

Better and more dedicated resourcing and self serve L

Standardised processes incl procure L

Nationally consistent:

Minimum response times

Processes, forms, prices,

Technical standards,

Performance monitoring on timelines/cost benchmarked against national standards National reporting in plain English Q - Quick

L - Long term

Preapplication

Application

De s ig n

De ta ile d design

De live ry

Queue screening, assess criteria and milestones process (poss 2 tier)

Processes to manage order of EDB curtailment (+SO curtail/ despatch)

Common communications equipment standards

Standard EDB forms/ templates (80/20 rule)

ComCom to reduce recovery risk (forecast uncertainty), weight recovery costs later

Template approach to manage risks where control of development changes e.g. developer sells

Shared costs/ information/ cluster studies where multiple connections at GIP/GXP

Change distribution pricing (EA)

Common commissioning and equipment standards incl with transpower & benchmark to international standards.

EDBs)

Reg changes e.g. REZ support or first mover rebate standards

More standardised, common or transparent connection cost approaches

Road access if EDB not own access (NZUAG approved utility)

Equipment pick list (common to

Flexible fee structures for EDBs to provide service (e.g fund resourcing up)

Network visibility eg Capacity maps for self serve &/ or standard pre-application meets/ briefs

Sliding scale application fees based on complexity (deter tyre kickers)

Standard processes and timelines to support study data (reflective of EDB capacity)

EDB driven grid studies (as they are the holders of the data to complete the reviews?)

> Pt 6 Application Form for 1-5MW(?)

Preparing a common approach for BESS and to get value from BESS

Partner with an EDB to get a model working, then share across the industry.

Common technical standards (across EDBs and Transpower) incl baselining, monitoring, enforcement and 2-way information (e.g. so applicant understands how network responds - "reverse power" at GXP

EA

EEA

What could we usefully align on? The FNF's long-list:



We need data from EDBs to understand if time to quote, time to connect timeframes & performance are as varied as feedback suggests

1. Standard jargon buster / glossary

2. Standard contact guide / info

3. Align connections journey steps / labels across EDBs

4. Customer self-service capability: capacity maps, website info, FAQs, videos

5. Standardise preapplication meeting offering (+ charge for this service)

6. Offer approximate budget estimate

7. Standardise key questions at application (require more information upfront)

8. Introduce cost recovery for all costs at conceptual/detailed design/contractual stage (to help EDB resourcing)

9. Standardise quote cover letter with key information

10. Recommendations
where possible on
technical and
commissioning standards
(EEA-led)

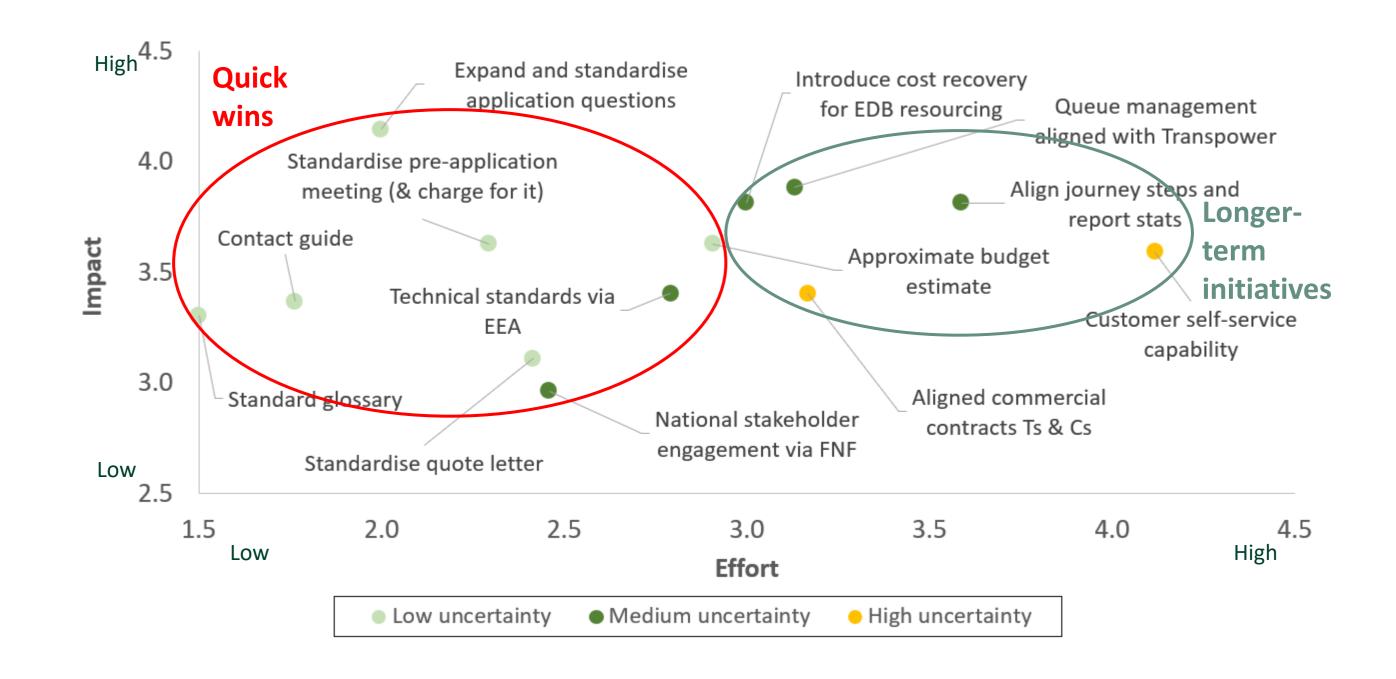
11. Have baseline commercial contracts published with standard Ts & Cs

12. Create EDB queue management & milestone policy in line with Transpower

13. National stakeholder engagement via ENA FNF with published report

What could we usefully align on? Early draft assessment of the long-list:





We'll deliver to EDBs and customers in two phases



Phase 1 May – July 24

Closing engagement loop with CPOs and Large DG customers

Collecting data from EDBs

Triaging the potential solutions

Co-creating with customers the aligned solutions for the quick wins

Phase 2 July – Dec 24

Implementing and testing quick wins – potentially trialling with 1+ EDBs

Reviewing feedback on implementation

Develop targeted delivery plan for longer-term solutions (with EEA, EA, customers, etc).