

# Additional Consumer Choice of Electricity Services

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## Stakeholder Interviews Summary Information paper

3 September 2019



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## 1 This information paper is part of the ACCES project

- 1.1 The Electricity Authority (Authority) is currently examining arrangements to enable additional consumer choice of new electricity services (the ACCES project). Allowing households and businesses to buy and sell a range of services through their electricity connection is quite a shift from the current arrangement, which is primarily about buying electricity from a single supplier.
- 1.2 New electricity services are being enabled by technology such as distributed generation, battery storage, electric vehicles and smart energy management devices. The Authority considers that facilitating additional consumer choice of electricity services will provide long-term benefits to consumers by removing barriers to competition and promoting more efficient operation in the electricity industry.
- 1.3 To test the potential for ACCES and shape our efforts to facilitate it, we have sought out and listened to the views of a range of organisations that will be actively involved in developing consumer access to multiple electricity services.
- 1.4 Between July 2019 and August 2019 we undertook a second round of interviews. These interviews allowed us to gain feedback and test the effectiveness of a proposed proposal for the regulatory architecture and systems, the Connection Agent/Channel Trader model, which would enable additional consumer choice of new electricity services. This information paper summarises the feedback provided to the Authority during these interviews.
- 1.5 This round of engagement follows an earlier round of interviews which took place between November 2018 and January 2019. The summary of those interviews is available on our website. We adopted the key messages from these interviews as the core design criteria in our development of a model to deliver consumer choice of multiple electricity services.
- 1.6 The Connection Agent/Channel Trader model (model) allows consumers to buy and sell electricity services from multiple electricity providers. The model separates the whole-of-ICP services currently provided by retailers from the sub-ICP services, and allows sub-ICP services to be reconciled through central market processes. The model introduces a new participant called the Connection Agent which is responsible for whole-of-ICP services. Channel Traders can trade sub-ICP services in central processes associated with a specific channel on the meter.
- 1.7 The model is in the embryonic stages of its development. By presenting the model to stakeholders at this early stage of its development the Authority sought to gauge the industry's first initial reactions to it, and highlight areas of particular complexity and concern for further investigation and development.

## 2 We conducted targeted interviews to gather feedback on the proposed model

### Who did we interview?

- 2.1 We interviewed people from 14 organisations to gather their feedback on the Connection Agent/Channel Trader model. Interviewees included start-ups, consumer advocates, retailers, metering equipment providers (MEPs), distributors and market operation service providers (MOSPs). A complete list of interviewees can be found at Appendix A.

- 2.2 Our interviewees in this round of engagement were largely unchanged from our previous round. In deciding who to interview we were mindful to invite a cross-section of the industry to provide a diverse range of viewpoints. Whilst it was important to hear from those that are actively involved in the development of new electricity services, it was equally important to hear the views of traditional retailers and MEPs that are also impacted by the proposed model.

### **What did we talk about?**

- 2.3 Each interview broadly followed the same format:
- (a) an update on the ACCES Project
  - (b) a discussion of the Connection Agent/Channel Trader model
  - (c) a discussion of the potential of running a pilot to obtain proof of concept.
- 2.4 Engaging in this way allowed us to gain insight into the demand for and practicality of the model. It has also allowed us to gauge the level of interest in a pilot.

## **3 We have developed a Connection Agent/Channel Trader model**

### **Design criteria adopted in the development of our model**

- 3.1 We have developed the Connection Agent/Channel Trader model. This is one option for the regulatory architecture and systems which will allow consumers to buy and sell electricity services from multiple service providers.
- 3.2 We have adopted a number of the key messages from our previous round of engagement as the design criteria for this model. A summary of what we heard in those interviews is available on our [website](#).<sup>1</sup>
- 3.3 We have focused on developing a model that supports two specific use cases. The first is a consumer with an electric vehicle (EV) that purchases energy and services for the EV separately from its household electricity supply. The second is a consumer with onsite generation that sells excess energy to a different party than the retailer they purchase their supply from.
- 3.4 Under current Code arrangements, these use cases are only possible where the retailer responsible for the ICP facilitates the process, or the EV or onsite generation is electrically separated from other household supply at a dedicated ICP.
- 3.5 A model that enables these use cases will also enable other use cases, and can be extended as further developments emerge.

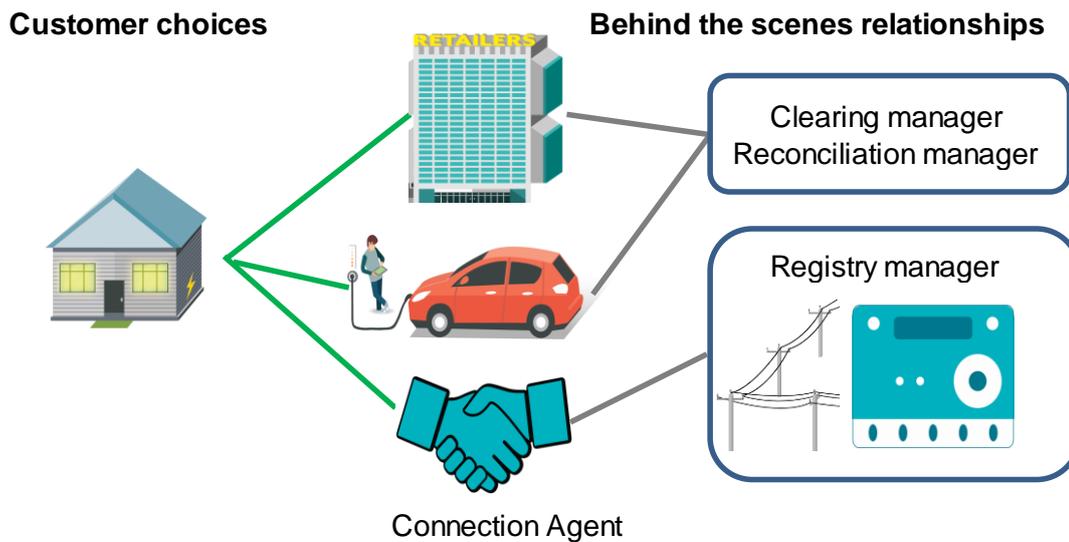
### **The Connection Agent/Channel Trader model in detail**

- 3.6 The Connection Agent/Channel Trader model separates the whole-of-ICP services currently provided by retailers from the sub-ICP services, and allows sub-ICP services to be reconciled through central market processes.

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<sup>1</sup> <https://www.ea.govt.nz/development/work-programme/evolving-tech-business/acces/development/acces-project-update/>

**Figure 1: Overview of Connection Agent trader model**



- 3.7 A single participant (the “Connection Agent”) deals with ICP-level responsibilities including engagement with the MEP and distributor, and consumer obligations. The Connection Agent may also be a Channel Trader.
- 3.8 “Channel Traders” can trade sub-ICP volumes in central processes, but they must be associated with a specific channel on the meter.
- 3.9 Switching at sub-ICP level is facilitated by a central record of who is providing services for each meter channel.

**The model allows sub-meter quantities to be separately reconciled**

- 3.10 The core market feature introduced that is not possible under current arrangements is the reconciliation of sub-meter quantities. This means that service providers can participate in central market processes without taking on responsibility for every service provided at the ICP.
- 3.11 It would operate on an opt-in basis; existing retailers would not be forced to facilitate Channel Trading at any ICP, but may choose to do so. As a result, it would require very limited changes for existing market participants who choose not to become a Connection Agent.

**Only moderate changes would be required to central regulatory systems**

- 3.12 The model would require moderate changes to the Code and moderate changes to the central Registry system, but avoids the cost of centralising sub-ICP reconciliation, and the need to define default arrangements for sharing the costs of input services (though these could be accommodated at a later stage).
- 3.13 Finally, it provides a structure for new commercial models to build on, without precluding any of the options available today – participants who want to engage via the contractual model can still do so.
- 3.14 The financial and contractual flows of the model can be found at Appendix B.
- 3.15 The Innovation and Participation Advisory Group (IPAG) is currently considering the arrangements for sharing the cost of input services (network and metering).

## Participant responsibilities

3.16 Under the Connection Agent/Channel Trader model:

- (a) a consumer can designate an agent (“Connection Agent”) for its ICP, and a service provider (“Channel Trader”) for each meter channel
- (b) any sub-ICP volume to be reconciled in market processes must have data recorded on a meter channel<sup>2</sup>
- (c) the registry would be amended to allow a Channel Trader to be recorded for each meter channel.

### **The model assigns responsibilities to those best placed to handle them**

3.17 The Connection Agent would:

- (a) manage relationships (including procurement and ongoing commercial arrangements) with the MEP and the distributor serving the ICP (input services)
- (b) use channel-level meter data to allocate and on-charge the costs of input services to Channel Traders
- (c) use channel-level meter data to determine the split of ICP-days to each Channel Trader
- (d) bear responsibilities relating to medically dependent and financially vulnerable consumers
- (e) have control over disconnection and reconnection of the ICP
- (f) be allowed (but not required) to be a Channel Trader on one or all meter channels.<sup>3</sup>

3.18 Each Channel Trader would:

- (a) be a Reconciliation Participant, meeting the amended Code requirements
- (b) use channel level meter data to reconcile its sales through the central reconciliation processes
- (c) reconcile any channel trading using HHR data only, without using profiles.

## 4 Valuable feedback was gathered from the industry

4.1 We have collated the feedback we received from our second round of engagement. The main themes can be found below.

### **The case for ACCES**

4.2 Interviewees indicated that arrangements that are envisaged by the ACCES project are beginning to sprout in isolated pockets of the industry. Examples include:

- (a) two retailers establishing arrangements whereby one retailer sells energy to the consumer whilst the other buys the consumer’s solar export

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<sup>2</sup> Solar and battery storage service providers are already using alternative measurement devices to manage and bill their services. Such devices are an order of magnitude cheaper than the smart meters used to supply market data. Recognising alternative devices for use in market reconciliation would require significant work on EIPC metrology standards and processes.

<sup>3</sup> Where an ICP continues to be managed by a single retailer, the retailer will be both the Connection Agent and the Channel Trader for all channels.

- (b) a distributor facilitating three projects to allow consumers to access to multiple electricity providers. These projects are aimed at both household and commercial and industrial customers.
  - (c) a solar company offering solar panels with battery packages via a partnership with a retailer
  - (d) a party loading or discharging a battery using arbitrage based on the published indicative wholesale electricity prices.
- 4.3 These efforts are being implemented through a series of workarounds. As a result these efforts maybe uncoordinated, expensive, disjointed and or not interoperable.
- 4.4 Interviewee feedback also indicated that many of these efforts are not purely driven by economic factors; drivers such as environmental considerations and community benefits are perceived to be equally important.
- 4.5 There has also been a tangible shift in the perspectives of interviewees since the last round of engagement. Many now see more value in the prospect of consumer access to multiple electricity providers and the introduction of arrangements to facilitate this.
- 4.6 A number of interviewees expressed a view that the Code and regulatory systems and processes allow consumers to access to multiple electricity providers but it is the behaviour of industry participants that is stopping this from occurring.
- 4.7 These interviewees suggested that the Authority take action to manage this poor behavior via greater enforcement of current Code obligations or minor amendments to the Code to target poor behavior rather than making significant changes to the regulatory architecture and processes.
- 4.8 A number of interviewees asked the Authority if it had engaged with consumers to establish the extent of consumer demand for access to multiple electricity providers. The Authority was encouraged to further investigate this, including by undertaking market research into the consumer drivers for multiple electricity services.

## **Feedback on the model was broadly supportive**

### **Interviewees saw the model as broadly fit for purpose**

- 4.9 There was a broad acceptance of the practicality of the model. Most interviewees were satisfied that reconciling at a sub-ICP level in the central market processes was a practical suggestion and likely to be fit for purpose.
- 4.10 Whilst it was acknowledged that a trial would require minimal changes to the registry, it was noted that further functional specifications for the registry would be required if the model is formally adopted. The model's impact on reconciliation was also expected to be minimal.
- 4.11 Interviewees were split as to whether the model should be opt-in for industry participants. A number of interviewees supported the model remaining opt-in for industry in order to keep costs down. Other interviewees felt that consumer choice would be limited if existing retailers could refuse to cooperate when a consumer opts into having multiple electricity providers.

### **No critical design flaws were identified**

- 4.12 Interviewees identified no critical design flaws with the Connection agent/Channel trader model.

- 4.13 Some interviewees were concerned that the introduction of the Connection Agent role was imposing cost and complexity on consumers without providing benefits which fully justify them.
- 4.14 Network value was identified as a critical component of unbundling that is not currently addressed in the model. The Authority was encouraged to consider how the model could address load control.

**Interviewees identified key areas for further design specification**

- 4.15 While it was also largely agreed that the disaggregation of responsibilities was broadly appropriate, interviewees requested further details, especially in regards to disconnection/reconnection, credit risk and prudential requirements.
- 4.16 A number of interviewees expressed a lack of clarity over the definition of a channel and encouraged the Authority to provide further detail.
- 4.17 There were split perspectives in regards to restricting the definition of a channel to a certified meter element. Whilst some interviewees were comfortable with using a device such as an inverter or EV charger to measure use, others were more supportive of restricting measurement to a certified meter.
- 4.18 “Reconciliation by difference” was suggested as a robust and preferable method when using non-certified devices to measure consumption.

**Views differed on who should be allowed to become Connections agents**

- 4.19 Many of the organisations interviewed asked for clarification in regards to the parties that would be allowed to perform the Connection Agent role.
- 4.20 A number of interviewees noted that prudential and infrastructure requirements would form a high barrier for parties that wish to take up the Connection Agent role, especially new entrants.
- 4.21 The views of interviewees were split in regards to whether Channel Traders (especially retailers) should be restricted from being Connection Agents. Some interviewees expressed that Channel Traders should be barred from being Connection Agents as playing both roles would create a conflict of interest which would drive perverse outcomes for consumers.
- 4.22 Other interviewees expressed the view that Channel Traders and retailers shouldn't be barred from performing the Connection Agent role as this would restrict competition.
- 4.23 A number of interviewees noted that the Connection Agent role might be a natural role for a distributor or MEP to play.

**Connection agent's relationships with customers was questioned**

- 4.24 Interviewees provided a range of views on how the Connection Agent relationship with the consumer would best operate and drive uptake. Some interviewees expressed that a Connection Agent should not be consumer facing. The creation of the Connection Agent role would create another level of complexity which consumers may not understand or want to engage with.
- 4.25 Other interviewees expressed that the Connection Agent should directly face consumers (or at least have the option to). A Connection Agent could deliver value to consumers through the coordination of billing and other service provider interactions.

## **Strong support for the pilot and the Authority's method of engagement**

- 4.26 We discussed the possibility of establishing a geographically restricted trial of the Connection Agent/Channel Trader Model with interviewees. The objective of the proposed trial would be to test the viability of sub-ICP trading as envisaged by the Connection Agent/Channel Trader model.
- 4.27 There was a strong level of support for the Authority undertaking a pilot. Interviewees perceived a trial to be a good way to find proof of concept or fail fast. A trial was also seen by many interviewees as an opportunity to refine the model, due to the many point of interconnection and complexity that it involves.
- 4.28 Many interviewees also expressed potential interest in playing various different roles in a trial.
- 4.29 A number of interviewees emphasised that the Authority would benefit from having external support in regards to designing and running a trial, as it is outside the Authority's area of expertise.
- 4.30 One interview suggested that the Authority consider trialing an alternative configuration of the model where Channel Traders can operate by contracting with retailers. This option would avoid the cost of system upgrades and make undertaking a trial quicker and cheaper.
- 4.31 A number of interviewees questioned the restriction of the trial area to one distribution network due to the potential difficulty in sourcing potential consumers, and willing participants to play the various roles required for a trial. It was also suggested that the Authority run the trial with a network that regularly undertakes trials.
- 4.32 Interviewees were supportive of the Authority's engagement process and appreciated the opportunity to provide feedback.

## Appendix A Organisations interviewed

We interviewed people from the following organisations:

- (a) Consumer NZ
- (b) Contact Energy
- (c) emhTrade
- (d) Embrium
- (e) Jade
- (f) Karit
- (g) Intellihub
- (h) NZX
- (i) Saveawatt
- (j) Simply Energy
- (k) SolarCity
- (l) Trustpower, with ERANZ chair and chief executive in attendance
- (m) Vector AMS
- (n) Waipa Networks

