



Submission on the Electricity Authority's Issues Paper: Updating the Regulatory Settings for Distribution Networks

28 February 2023



About Vector Metering

- Vector Metering provides advanced metering solutions for a new energy future.
- We provide a cost-effective end to end suite of energy metering, data and control services to energy retailers, distributors and customers.
- Our solutions enable customers to manage energy more efficiently. We provide consistent, reliable data to retailers and network companies to allow them to operate their business effectively and to help their customers manage their energy needs.
- Vector Metering's future-proofed services provide advanced metering and digital infrastructure that is flexible enough to enable customisation to meet customers' future requirements.
- In December 2022, Vector announced that it has selected QIC Private Equity Capital Pty Limited as preferred partner for Vector Metering joint venture, following conclusion of a strategic review. Vector has entered into a conditional agreement with QIC, under which the parties expect to finalise arrangements in the first quarter of 2023 for the sale of a 50% interest in Vector Metering to investment vehicles managed and advised by QIC.



Introduction

This is Vector Metering's submission on the Electricity Authority's (the Authority) Issues Paper on *Updating the Regulatory Settings for Distribution Networks*, released in December 2022 (the Issues Paper).

In this submission, we respond to the Authority's consultation questions that are most relevant to our business – which are mainly around the provision of consumption data and power quality data (PQD) to electricity distributors and flexibility service providers. We support greater access to smart meter data that would help unlock and optimise the value of distributed energy resources (DER). This would enable industry participants to make efficient business decisions and better navigate the transition to an increasingly renewable and digital energy future, and help ensure energy affordability for consumers during this transition.

The electricity sector has made significant progress in enabling greater data access since the Authority's first consultation paper on this workstream in 2021. While solutions to data access issues continue to be enhanced, new data opportunities and challenges have assumed greater prominence, such as the provision of PQD to distributors.

Digitalisation that enables the delivery of new and innovative services to end consumers is more than just enhancing access to data. It is also about ensuring that services being developed address the unique needs of data access seekers. We encourage the Authority to now focus on building on earlier successes on data access by ensuring flexibility is not stifled for all parties so that innovation that benefits consumers can flourish.



Our world in 2025

We are committed to delivering value to our customers through service innovation

1 Decarbonisation

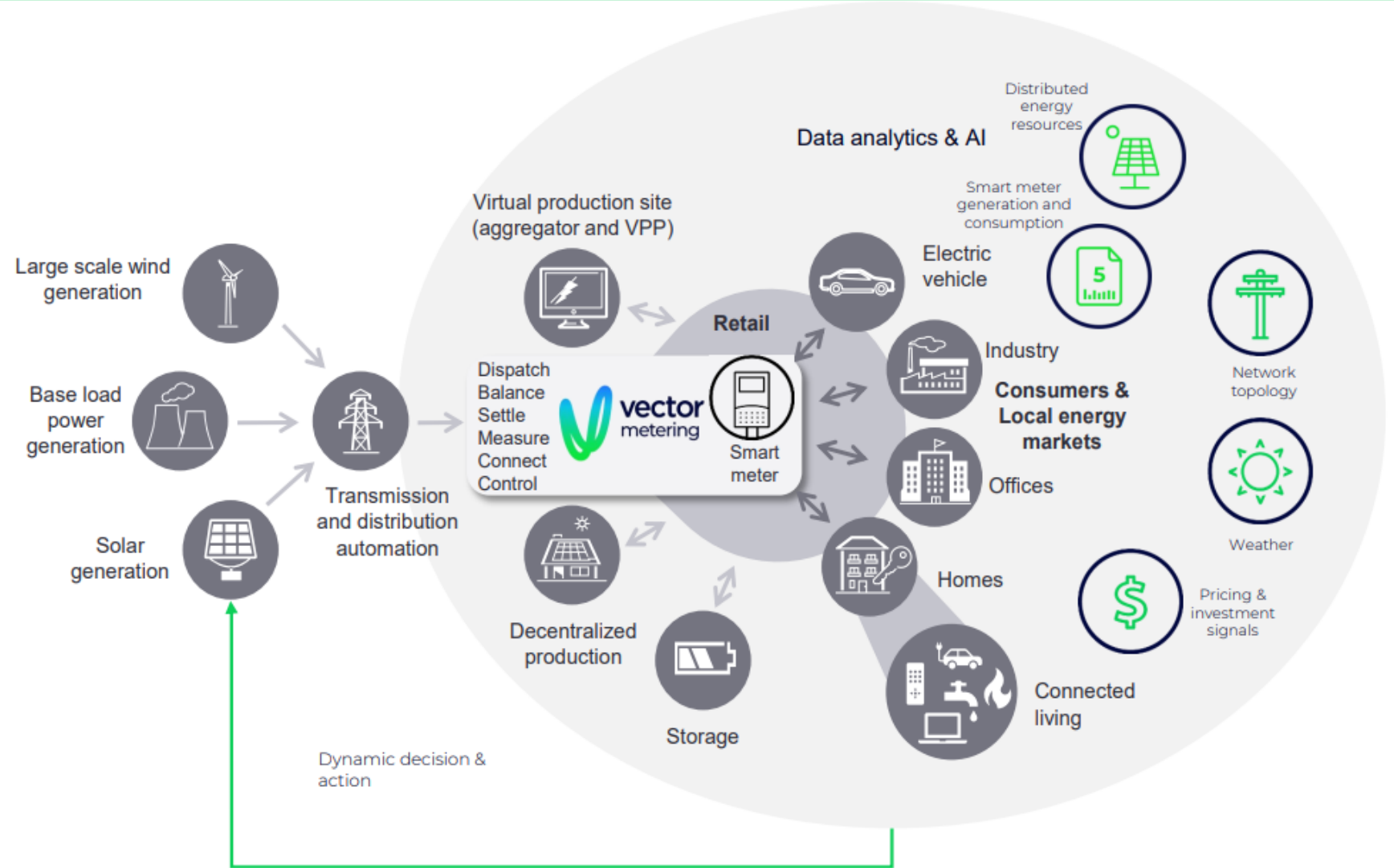
- Our data & energy management services not only provides additional levers to our customers for dealing with the rapidly changing energy markets but can drive decarbonisation

2 Supported by market tailwinds

- Customers services are driven by growth in:
 - **DER** – greater control to avoid capital investment and wholesale energy costs
 - **VPP** – enriched data to drive decision making
 - **FCAS** – improving grid stability
 - **EV** – greater flexibility in end consumer propositions

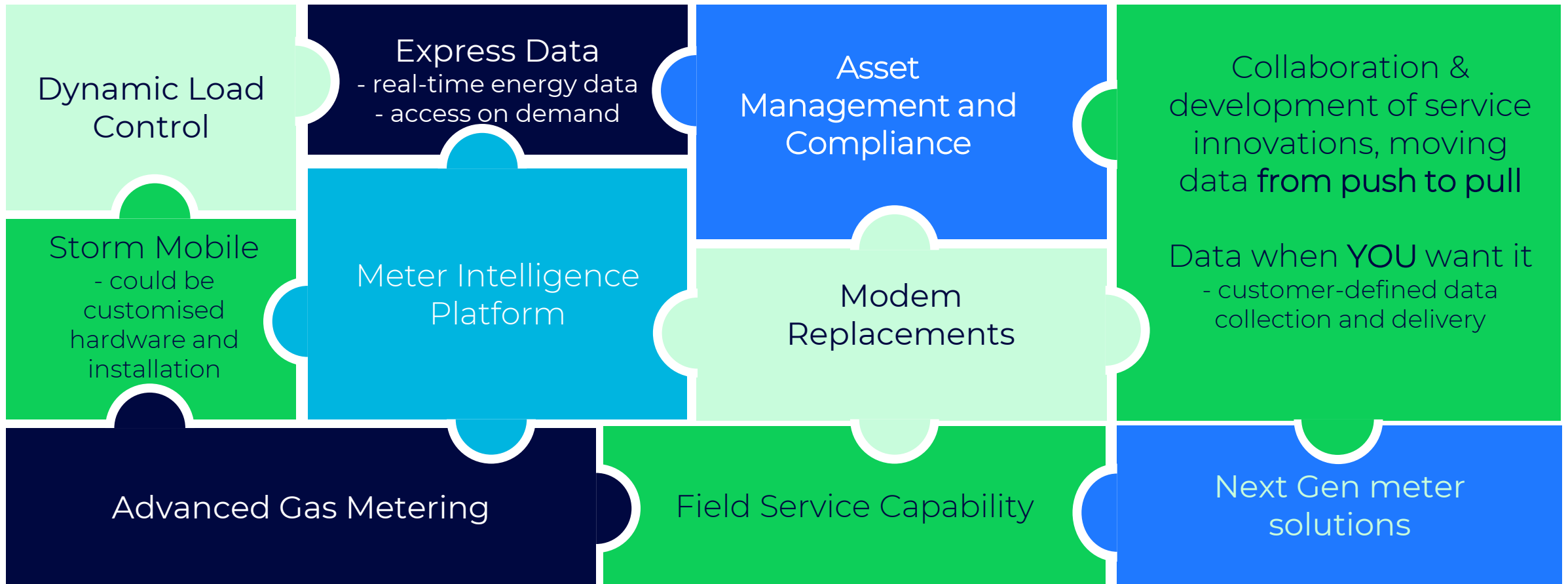
3 Driving need for innovation

- Our services are not a “one size fits all” but offer our customers flexibility on what services they want and when they want them



Pieces of the puzzle

What we are doing to get there



Responses to selected consultation questions

Q6. Do you agree that the Authority should amend the Data Template to address the above issues to improve its workability? If not, why not?

Q7. Are there other changes to the Data Template that would improve it and assist it to be a useful mechanism for open access to data?

- Vector Metering supports standardisation where it makes sense for our customers. We have no issues with the Default Distributor Agreement (DDA) Data Template being amended to improve its workability. For example, we agree that the DDA Data Template should allow consumption data to now be provided on a monthly basis, rather than six-monthly, and expand the scope of 'permitted purposes' for distributors. However, we do not believe negotiating a template update would be the best use of the Authority's and industry participants' resources, when participants can simply amend it between themselves where or when they see the need to.
- We believe the major hurdles and obstacles to data access have now been largely overcome. Our discussions with distributors have progressed to the extent that they now have access to information about what data is available and data prices.
- Vector Metering is already delivering a significant amount of data outside of the DDA framework. Our ongoing commercial discussions with distributors have posed no barriers to what has been agreed by parties, so far, or what could be agreed in future negotiations. As such, we believe the need for the DDA Data Template has been diminished; it is merely becoming a form for data request.
- We recommend that data access seekers be given the flexibility and opportunity to request the data they need and to define/specify the frequency and mechanism for the delivery of their requested data – via commercial negotiations. This flexibility would help ensure that market competition, which underpins the delivery of metering services in New Zealand, and innovation, are not stifled.

Q8. Do you agree that this is an issue? If not, why not?

Q9. Should the Authority amend the Code to clarify that MEPs must contract directly with distributors and flexibility traders to provide ICP data for permitted purposes? If not, why not?

- The need for retailer permission before metering service providers (MEPs) can provide ICP data (consumption data and PQD) for distributors' use was originally a significant issue. The retailers that imposed restrictions many years ago have since provided the necessary permissions for MEPs to provide data to distributors. Consents from most retailers came in fast and were not controversial.
- Given the progress of commercial negotiations around data access, the need for the Authority to clarify in the *Electricity Industry Participation Code* (the Code) that MEPs must contract directly with distributors to provide ICP data for permitted purposes has been diminished, in our case. The relevant parties can select the appropriate commercial arrangements for the data services they need to deliver, or purchase, from each other.
- Should the Authority decide to codify this arrangement for clarification, we recommend that the changes be in the form of a high-level direction rather than mandated provisions, clarifying:
 - that MEPs can provide data directly to distributors
 - the minimum dataset that metering installations should be capable of recording
 - the purposes for which such datasets can be used.
- Keeping Code provisions at a high level would set clear expectations on MEPs, retailers, and distributors while allowing them to negotiate agreements for the delivery of data services beyond the minimum that could be stipulated. This could enable the sector to achieve a 'cut through' in terms of speeding up the delivery, particularly of PQD, while not limiting innovation.

Response to Q8-Q9 continued

- In relation to the provision of ICP data for flexibility service providers, we believe the permitted purposes and privacy protection for this service need to be given further consideration. This service could potentially require the creation of new or differentiated service(s) that meet flexibility service providers' specific requirements. We therefore suggest that this be considered at a later date than the direct provision of ICP data for distributors, or that a timeframe not be specified at all.
- Access to data is but one component of digitalisation. New intended data recipients such as flexibility service providers would need to develop tools, change their systems, and make the necessary investment to ensure the appropriate security and privacy protections are in place before a seamless transmission of data from the MEP to their system is enabled.
- As a metering service provider in both New Zealand and Australia's National Electricity Market (NEM), we have received almost no requests for PQD data services from flexibility service providers / third parties (i.e. other than distribution networks).
- Should third parties require access to consumption data and/or PQD services, it is probable that the provision of these new services will attract additional costs as the delivery mechanisms and bespoke requirements to manage ongoing access will drive new processes into MEP businesses.
- Due to the uncertainty in the demand for data services for third parties, it is our view that no action in the regulatory framework is warranted at this stage of market development. We have shown that we are able to resolve data access issues via commercial arrangements, should any flexibility service providers, or any other third parties, seek access to smart meter data from Vector Metering.

Q10. Should the DDA Data Template be updated to include Power Quality Data? If not, why not?

- Vector Metering does not agree that the DDA Data Template should be updated to include PQD. This would be a waste of effort and resources, given distributors are starting to have (or increasingly have) access to information on the data that is available..
- Increasing volumes of data are now being provided by MEPs outside of the DDA framework. We do not see the expansion of the DDA Data Template to include PQD as adding any significant value to evolving processes. If anything, it is likely to cause delays and distracted efforts.
- There is nothing in the current DDA Data Template that would prevent the provision of other data products outside of the DDA framework. This ensures the continued promotion of flexibility and innovation.
- In addition, extending the DDA Data Template would not cover parties, e.g. retailers, who may also be interested in accessing PQD.
- We note that the Australian Energy Market Commission, as part of its proposal for the accelerated deployment of smart meters in the NEM, is proposing that the pricing of its proposed 'basic PQD service' should be based on a 'beneficiary pays' model – to be supported by a commercial agreement between the metering data provider and the data recipient (distributor, or other participant).
- Assuming that commercial arrangements are made directly between the MEP and the distributor, we are confident that this will result in prices that are limited to reflecting the marginal cost of providing the service, including a reasonable level of return for the MEP.

Q11. *Do you think that the transaction costs associated with negotiating the terms of access to ICP data held by MEPs is a problem that the Authority should prioritise? If no, why not? If yes, do you think there is merit in developing a default template to help reduce transaction costs?*

- While the Authority could look into the development of a default template for the purpose of helping reduce transaction costs (which could benefit smaller retailers), we do not believe this should be a priority.
- Given that major obstacles to data access have now been removed, or are being addressed, Vector Metering does not see value in a default multi-party template agreement. It would take considerable time to develop and agree such a template. We consider its development to be unwarranted as this:
 - would cut across established agreements (such as retailer-MEP agreements) and may create unnecessary complexity in the relevant parties' processes and for their end customers;
 - could create duplication of ongoing discussions and processes around access to consumption data and PQD, imposing unnecessary costs on the relevant parties; and
 - would create uncertainty if introduced now. Vector Metering has already developed a standardised data provision agreement and offered this to retailers and distributors in New Zealand. The agreement and data provision services have been taken up by several distributors and have been agreed with nearly a dozen retailers. We anticipate more distributors making these data requests as they observe the growing uses of data in New Zealand and Australia.

Response to Q11 continued

- Vector Metering reiterates a suggestion we made in our first submission on this workstream – that we would support incentives for distributors to procure data, for example, by providing them with allowances under the Commerce Act Part 4 regime.
- As an MEP, Vector Metering will continue to make investments in expanding metering data services where that investment is justified by future distribution network needs.

Q12. Do you agree that MEP pricing for ICP data (including Power Quality Data) and related data services is reasonable at this stage? If not, why not?

Q13. Do you agree that MEP pricing for the provision of ICP data to distributors (and other parties) could be more transparent? If not, why not?

Q14. To support the transparency of pricing, standardisation, and equal access to data, do you think that the Authority should consider further implementing IPAG's Input Services recommendations that MEPs publish standard 'pay-as-you-go' terms open to all parties? If yes, why, and what do you think this could cover? If not, why not?

- Distributors are being charged incrementally for the delivery of data services they request.
- Pricing for data services is transparent for distributors when they request this information from Vector Metering and are sent service proposals and price schedules.
- Pricing of metering services is underpinned by commercial tension (created by competing MEPs) and is cost-reflective.



Q17. The Authority acknowledges that definitions of 'real-time' vary, please explain what real-time data means to you.

Q18. Do you agree that access to 'real-time' consumption and Power Quality Data won't be needed for at least five years?

- The definition of 'real-time' could vary for different data users. For example, sub-second reliability would be required for real-time data for air traffic control, rail line signalling, or bank transaction security monitoring.
- The provision of smart meter data for low-voltage network monitoring / management does not appear to have sub-second real-time use immediately as there are very few utilities with established systems to receive that data.
- We see distributors and retailers having a real-time timeframe set at approximately **1 minute round trip** response (for it to be practical or considered 'value for money'). We have seen this to have useful application during unplanned power outages, and for demand response, flexibility, and virtual power plant programs.
- The technical ability to support access to real-time consumption data is already available, and Vector Metering already does this in Australia.
- As the adoption of DER continues to grow in New Zealand, we expect the demand for more real-time services emerging for managing fluctuating energy supply and demand. We expect this will continue to grow within a five-year timeframe.
- Vector Metering now has the ability to live stream data if a customer requires it. We anticipate this service will be valuable to a subset of our total customer base well within the next five years.
- We have yet to see a demonstration by any distributor(s) in New Zealand of the real-time application of consumption data (kWh). We have seen that demand data (kW), voltage, current, and phase angle data could have sub-minute applications.
- We are witnessing real-time data services being offered by retailers to their customers. We expect the uptake of these services to increase with the impending introduction of a Consumer Data Right in New Zealand, including in the energy sector.

Q20. Do you think the Authority should prioritise modifying the Data Template, so that flexibility traders can use it, or should the Authority prioritise amending the Code to clarify that MEPs must provide ICP data directly to flexibility traders and distributors for a set of permitted purposes without the need for retailer permission? If neither, please explain why.

- As indicated in our response to Q6-Q7, as obstacles to data access are being addressed, the need for the DDA Data Template is diminished. Vector Metering now provides increasing volumes of data outside of the DDA framework.
- Distributors have the option to elect the content of the data service they need. 'Pseudo industry norms' have been emerging in both New Zealand and Australia based on the software applications that distributors are choosing to purchase or build.
- If third parties choose to request providers for services that require them to use consumption data, then those customers can seek permissions through existing channels. Examples of parties seeking such data to provide customer energy services may include flexibility service providers, solar and battery service providers, government price plan comparison service providers, energy brokers, and energy management service providers. A specific capability for flexibility service providers seems unjustified.
- All of the above parties have access to data via the consumption data access rules and method. These could be made more efficient, rather than duplicate them with additional permission management processes.
- We note that under current arrangements, MEPs do not have sufficient information to verify a customer's relationship with an ICP. The retailer provides a necessary function to confirm that relationship and pass on the permission.

Response to Q20 continued

- Should the Authority decide to modify the Data Template and amend the Code, we suggest that the former be undertaken before resorting to any Code changes. If both proposals are to be implemented in parallel, or have overlapping timeframes, we suggest that one path should not prohibit the other from being pursued by industry participants.
- In the rapidly evolving electricity sector, it is our preference that issues be addressed via commercial arrangements or industry-based approaches in the first instance.
- Where Code changes are deemed to be required, we prefer these to be high-level directions rather than prescriptive requirements on the relevant industry participants.
- Where new and innovative services continue to be developed or are emerging, the need for greater prescription or regulation should fall away. This would ensure that innovation that benefits end consumers is not stifled and 'gold plating' of services is avoided, i.e. end consumers are not paying for services or features they do not need or desire.



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