

INTELLIHUB'S SUBMISSION ON THE ELECTRICITY AUTHORITY'S ISSUES PAPER ON "UPDATING THE REGULATORY SETTINGS FOR DISTRIBUTION NETWORKS" ("ISSUES PAPER")

10 March 2023

(1) Introduction and overview

1. Intellihub NZ Limited ("**Intellihub**") acknowledges the importance of the Electricity Authority's ("**EA**") ongoing work to understand whether any changes are required to the existing regulatory settings as applied to distributed generation, to ensure that they will encourage distribution networks to take steps to withstand more generation and connection points, due to increased use of distributed energy resources ("**DER**") and New Zealand's transition to a low emissions economy.
2. As a leading provider of metering equipment and data solutions, we understand the valuable insights and opportunities that can be unlocked through the adoption of distributed generation technology in New Zealand. In particular, there are a number of participants in the electricity market that will be able to develop and utilise new data solutions to increase the efficiency and resilience of New Zealand's electricity infrastructure and, ultimately, deliver better outcomes for consumers.
3. We are excited to be able to further contribute towards bringing benefits to consumers in New Zealand, and we welcome the opportunity to work alongside the Authority and other participants in the electricity industry to support the development of distributed generation in New Zealand.
4. However, we are also mindful of the potential for regulatory intervention to distort market incentives. For this reason, we consider that regulatory intervention should be a last resort, as there is a risk of 'regulatory error' in circumstances where markets and technology will rapidly evolve. As identified by the EA, "it seems clear that any interventions at this point should be cautiously limited to 'least regrets' measures that will not create barriers for future development of the market" and, as a result, "the Authority wants to avoid developing prescriptive commercial and regulatory frameworks too early, which could constrain market growth".¹
5. The discussion paper released in 2021 was a good first step to seek evidence of whether there are problems and, if so, the extent of them. We support the EA's approach of seeking to establish the scale of any problem before deciding whether a regulatory response is appropriate, noting that amendments made to the Electricity Industry Participation Code 2010 ("**Code**") must be subject to a cost/benefit analysis.²
6. The right balance must be struck between pre-emptive regulation or waiting for market failure. We agree with the EA's stated intention to "manage risk, remove barriers to market development, create an enabling environment, rather than predetermine who should or should not do what".³

¹ Issues Paper at para 2.58.

² Under s 39(2) of the Electricity Industry Act 2010, the Authority must ensure that the regulatory statement for a proposed amendment to the Code includes an evaluation of the "costs and benefits" and "alternative means of achieving the objectives of the proposed amendment".

³ Issues Paper at para 2.25.

7. Against that background, this submission focuses on the following aspects of the Issues Paper:
 - (a) Ensuring distributors have access to the necessary data and information to ensure their network infrastructure is ready for the anticipated increase in distributed generation through their networks; and
 - (b) Promoting the development of the flexibility trade market by ensuring flexibility traders have access to the necessary information to enable them to develop and provide their services.
8. Intellihub is supportive of facilitating both types of access to such data and information. However, achieving these goals cannot be at any cost, and there are important considerations (e.g. privacy, incentives to innovate) that must be adequately considered before regulatory steps are taken.
9. Some of the proposals the EA is considering will likely have a significant impact on MEPs' existing business and business model, with a key implication being a lack of innovation coming from this part of the market. Intellihub is therefore requesting the EA to consider the following:
 - (a) We recommend that, prior to the deciding to regulate the provision of any consumer data, the EA undertakes further consultation with distributors, retailers, flexibility traders and MEPs to determine the processes and contractual relationships that will govern the exchange of data between those participants (particularly in respect of data provided to flexibility traders and other third parties). In the absence of clear processes to govern these data exchanges, Intellihub considers that there is a substantial risk of data privacy issues arising, and that the resulting uncertainty will reduce incentives to invest in DER technology.
 - (b) In the interests of encouraging further investment in MEP technology, and in recognition of technical constraints in existing smart meter infrastructure, we strongly encourage the EA to refrain from imposing any requirements or standard terms on MEPs in relation to the collection and provision of power quality data. Intellihub considers that the potential long-term costs of regulating MEPs in relation to power quality data (such as reduced investment in new technologies and services) will outweigh any perceived short-term benefits.
 - (c) We recommend that, as an alternative to pursuing the development of the Registry, the EA undertakes further consultation with energy technology providers on the potential to leverage existing technologies to develop an automated data exchange. There are existing software platforms that already provide for the registration of DER assets, management of consumer consent and utilisation of controllable DER. We consider that the development of the Registry is likely to result in net costs, as the combined costs of the Registry (particularly those related to privacy issues and the underutilisation of DER technology) will be greater than the benefits associated with DER visibility alone.

(2) Data access for distributors and flexibility traders

Intellihub recognises the importance of smart meter data

10. The ability for consumers to share their smart meter data with distributors and flexibility traders will support the development and implementation of products and services that can support

consumers to improve the efficiency with which they are using energy, and therefore help to deliver benefits and promote innovation and competition in the energy industry. For example:

- (a) Distributors have obligations relating to the safe and efficient management and reinforcement of energy networks. Smart meter data will assist energy networks in fulfilling these obligations, maintaining continuity of supply and responding to the changing needs of the energy system. Intellihub acknowledges the importance of distributors having timely access to consumption data and power quality data for these reasons.
 - (b) Flexibility traders provide services that take the flexibility available from controllable DER to enable the movement of electricity consumption away from congested periods on the network. The long-term benefits of unlocking dynamic pricing and exchange of flexibility services across the energy sector will provide significant value to New Zealand consumers in the long-term.
11. However, we encourage the EA to be cognisant of the technical constraints that apply to the delivery of data. For example, even though smart meters may be capable of producing very granular levels of consumption and power quality data, the additional load that this creates on existing communications networks and data processing infrastructure may result in energy participants being unable to receive such granular or high frequency data.
12. Further investment in the infrastructure which facilitates the delivery of data may also be required in order to enable the continuing development of new products and services, and accordingly, the regulatory settings must not diminish incentives to innovate.

Distributors and flexibility traders already have access to available consumption data

13. The Issues Paper expresses concern that distributors and flexibility traders face barriers to access of data.⁴ MEPS, such as Intellihub, have a commercial incentive to provide consumption data and additional non-consumption data, such as power quality data, to distributors and flexibility traders, to maximise the revenue streams from their infrastructure investment. For the similar reasons, Intellihub is also incentivised to ensure that its contractual arrangements with retailers do not restrict or inhibit its ability to share non-consumption data with distributors and flexibility traders.
14. **[CONFIDENTIAL]** Improvements could be made to the Code to make it clear that retailers cannot restrict the provision of data to distributors to manage network performance, or to flexibility traders, subject to the recipient being able to provide adequate assurances that the data received will be treated in a manner consistent with privacy law requirements
15. We set out the specific considerations for the supply of consumption and power quality data to each of distributors and flexibility traders below.

Distributors

16. Intellihub already works collaboratively and invests in partnerships with distributors to create additional data services that benefit and support distribution networks. **[CONFIDENTIAL]** We consider that dialogue between distributors and MEPS should be encouraged, as the data distributors seek for their network management purposes can be captured by smart meters

⁴ Issues Paper at para 4.70.

already installed. Support systems and data processing will need to be tailored to suit the different requirements of distributors (in comparison to traders).

17. Intellihub is committed to the development of data processing and support systems that are designed to provide distributors with information that meets their requirements. In our view, the market will develop solutions to address these requirements, and any regulatory intervention which cuts across such development may serve to undermine the innovation and investment that is needed.
18. The types of innovation and opportunities available to MEPs and distributors can be highlighted by a recent example from Australia. Intellihub has recently worked with Endeavour Energy, an electricity distributor based in New South Wales, to launch a world leading program (known as Off Peak+) which is designed to improve network performance, help save customers money, and speed the transition to a low carbon future in Australia.⁵ The program involves ten energy retailers and the installation of smart meters at 2,500 homes across the Illawarra region of NSW, enabling Endeavour Energy to leverage power quality data to better respond to network issues and outages, including through the dynamic control of hot water systems. The solution also facilitates improved utilisation of surplus power during off-peak periods, helping to lower consumers' electricity bills.
19. In determining the data requirements of distributors, we note that blanket access to all consumption data and power quality data will not be required in order to meet their specific data needs, whether it is regulatory obligations or data which allows optimisation of distribution networks. Access to data must be proportionate to the legitimate purposes that it is collected for, which will be influenced by the extent to which the owner of the data has consent to the use of their data. For this reason, we consider that consumer consent to data use must form a key component of the access regime.

Flexibility traders

20. In designing data services to meet the requirements of flexibility traders, MEPs face the practical difficulty of identifying whether or not these participants are lawfully able to access and receive consumer data. While we acknowledge that flexibility traders have legitimate requirements to access data (e.g. to assist in service design or customer onboarding), there should be processes in place to ensure that each flexibility trader requesting access to data has obtained prior consent from the owner of that data.
21. **[CONFIDENTIAL]**
22. In our view, these issues require further consideration by the EA. In particular, it is not clear whether the obligation to manage the consumer consent process will rest with the retailer, such that retailers will enter into contractual arrangements with flexibility traders to facilitate access to consumer data, or whether flexibility traders will contract directly with MEPs for such access.
23. When assessing the best approach to data management, the relationship between the consumer and each of the parties is an important consideration. For example, while consumers should be able to identify their energy retailer relatively easily (and are likely to have previous experience of contacting them to discuss any issues or concerns), they are less likely to be aware that third-parties (such as flexibility traders) are capable of accessing their

⁵ Media Release, *Endeavour Energy partners with Intellihub to deliver innovative smart meter load control* (May 2021)
<https://www.intellihub.com.au/endeavour-energy-partners-with-intellihub-to-deliver-innovative-smart-meter-load-control/>.

energy consumption data and may not have a wider relationship or previous experience of engaging with these parties.

24. The disclosure of data to flexibility traders is further complicated by the potential for multiple flexibility traders to be providing services to the same ICP. In this scenario, data access processes must be sufficiently nuanced to permit the transfer of data to flexibility traders who are authorised to receive such data, while restricting access to those who are not.
25. By way of example, Kāinga Ora is currently undertaking a pilot which will utilise DER technology to facilitate a peer-to-peer energy sharing programme.⁶ We understand that the aim of the pilot is to reduce electricity bills for Kāinga Ora's energy hardship customers by fitting homes with solar panels and sharing the benefit of excess solar with customers whose roofs are unsuitable for solar installations. However, in order for the programme to work, Kāinga Ora must address the requirement for multiple retailers to receive data from a single ICP, as different retailers will provide services to customers in respect of electricity consumption and generation. While we expect that these data exchanges will be manageable in the case of a small-scale pilot, the level of complexity will be much greater when dealing with multiple service providers at each ICP across the whole of New Zealand.
26. Accordingly, data management systems will play a crucial role in unlocking the full value of flexibility services for New Zealand consumers. There must be clear contractual arrangements governing the disclosure of consumer data to flexibility traders, together with a robust process for recording and managing consumer consent to data access. As discussed below from paragraph 42, the Registry is unlikely to be fit-for-purpose, and there are existing technology platforms that could help to better solve this problem.
27. Further, Intellihub considers that these data exchange arrangements should be on commercial terms to ensure that participants are appropriately incentivised to invest in services and capabilities which can meet the requirements of flexibility traders. This is discussed further in the following section.

No net benefit in developing standard access terms

28. To a material extent, the existing market arrangements already establish a workable framework facilitating access to data, particularly in respect of distributors. As noted above, however, the Code can be improved upon to ensure that both distributors and flexibility traders have access to relevant data under all retailer contracts. Intellihub considers that this is a sufficient regulatory response at this stage, based on available evidence. In particular, the EA should be cautious about taking steps to regulate access further by seeking to standardise all commercial terms, including price.
29. The Issues Paper acknowledges that:
 - (a) the costs of developing a template would likely be high and there are already several examples of MEPs providing ICP data directly to distributors;⁷ and
 - (b) increased standardisation of data services, and greater consistency and transparency in pricing will develop over time as the market matures.⁸

⁶ Media Release, *Kāinga Ora and Ara Ake partner to enable solar energy sharing trial* (September 2022) <https://kaingaora.govt.nz/news/kainga-ora-and-ara-ake-partner-to-enable-solar-energy-sharing-trial/>.

⁷ Issues paper para 4.96.

⁸ Para 4.98.

30. Nevertheless, the EA is considering "pay as you go" standard access terms available to both distributors and flexibility traders.
31. It is important to note, however, the EA would need to consider following factors before concluding that standard terms would be appropriate in this context:
- (a) *Definition of power quality data:* there are risks associated with defining the scope of power quality data too widely or narrowly. In particular:
 - (i) If access requirements are prescribed in respect of power quality data at an overly granular level (e.g. 5 minute interval data), the technical constraints which apply to existing smart meter infrastructure in New Zealand may result in MEPs being unable to meet those requirements in respect of certain parts of their fleet.
 - (ii) On the other hand, if data access requirements impose minimum standards which are unnecessarily conservative, having standards are unlikely to be valuable. Also, the incentives on MEPs to innovate and develop new technology may be impacted, as MEPs may focus on meeting the minimum standards rather than investing in new product development.
 - (iii) Furthermore, any specification of minimum power quality data fields, intervals or frequency of delivery that MEPs may have trouble meeting may impact the delivery of key consumption data to retailer customers and undermine the key service functionality as a result (e.g. customer billing and reconciliation). We note that the level of interruption that could potentially result from such interference is significant. Even if the meters are capable of recording the power quality data fields, the interval size for the fields to be measured over (e.g., 30 mins, 15 mins, 5 mins) and the frequency of delivery may create additional load on communications networks, and data processing infrastructure, which will drive increased costs and need for further investment.
 - (b) *Different fleet capability:* the transition from analogue meters to smart meters has been an iterative process requiring a significant amount of investment by MEPs in research and development. This iterative process has resulted in the deployment of smart meters to the market which are capable of collecting varying levels of data. In particular, not all meters are capable of collecting and measuring the same power quality fields. These constraints across existing smart meter infrastructure mean that certain power quality data may not be available in respect of all consumers.
 - (c) *Costs of upgrades or replacement of "non-compliant" meters:* consideration would need to be given to who bears the cost of upgrading or replacing meters to ensure that they are able to meet any minimum standards. Retailers would typically incur the cost of leased metering equipment, but in a case where the upgrade or replacement is not for the benefit of the retailer but third parties, it is unclear.
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32. There are therefore some significant practical challenges in adopting standard terms at present, such as the potential requirement for upgrades to existing smart meter infrastructure to enable the consistent provision of power quality data across all consumers.

33. Accordingly, we consider that any decision to impose minimum data standards must take into account the constraints on existing smart meter infrastructure. In any event, any data standards would need to be grandfathered in over time by exempting all existing smart meter equipment from compliance with the new standards. This phased approach to the implementation of data standards would help to ensure that MEPs are not unnecessarily constrained from continuing to invest in new product development.
34. Furthermore, the associated costs of producing power quality data should be recoverable by MEPs through commercially negotiated terms. Negotiated commercial terms will be the most efficient mechanism of ensuring that any upgrade costs are allocated based on the specific use requirements of different industry participants, noting that any such costs would be primarily driven by the use requirements of distributors and flexibility traders (i.e. access to power quality data). There is already a market emerging for power quality data and no indications that MEPs and distributors or flexibility traders will be unable to reach agreement on commercial pricing.
35. It is noted that the unintended consequences of regulatory intervention were highlighted by the Competition and Markets Authority ("**CMA**") in its 2016 report on the UK energy market. The CMA identified a number of issues with restrictions imposed by the Office of Gas and Electricity Markets ("**Ofgem**") in relation to the tariffs charged by retailers ("**RMR Rules**"). While the RMR Rules sought to make the market "simpler, clearer and fairer to customers",⁹ the CMA found that the RMR Rules limited the ability of retailers to "compete and innovate and provide products which may be beneficial to customers and competition".¹⁰ Further, the CMA noted this was of "particular concern over the longer term as RMR rules could potentially stifle innovation around smart meters".¹¹ The CMA recommended to Ofgem that the RMR Rules be removed to allow market participants to "compete and innovate" and to encourage them to offer services that are "designed to attract specific groups of customers rather than being targeted at the mass market".¹²
36. Any amendments to the Code must meet the EA's statutory objectives under the Electricity Industry Act 2010 ("**Act**"), that is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.¹³ Innovation can contribute to greater efficiency. As mentioned above, we consider that the removal of constraints on MEPs from providing data to distributors and flexibility traders will help to unlock opportunities to develop new data-driven solutions, which will in turn contribute to an increase in the efficiency and resilience of New Zealand's electricity infrastructure. Accordingly, if the EA is contemplating minimal "least regrets" changes, then the proposed amendments to the Code to remove any constraints on MEPs from providing data may be workable.
37. The important caveat to this is that there is a robust regime in place to manage consents, protect privacy and permit MEPs to negotiate commercial terms with distributors and flexibility traders in the interests of promoting further investment in upgrading existing smart meter infrastructure and developing new and innovative products and services. The appropriate way to manage these important considerations is discussed below.

(3) Utilising the existing Registry is not a solution

⁹ Competition & Markets Authority *Energy Market Investigation – Final Report* (June 2016) at para 8.73
<<https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>>

¹⁰ Para 174.

¹¹ Ibid.

¹² Para 12.382.

¹³ Electricity Industry Act 2010, s 15.

Issues with using the Registry

38. We acknowledge the existing intention of the Registry is to facilitate the exchange of information between electricity retailers, MEPs and distributors and flexibility traders to manage reconciliation, invoicing and facilitate the switching of customers.
39. However, we consider that the proposed use of the Registry appears to be subject to certain functional limitations which may prevent New Zealand from taking full advantage of technology developments in this space, and could give rise to unintended consequences if there is too much transparency, e.g. at the expense of consumer consent, privacy and incentives to invest.
40. Some challenges we have identified in adopting this interim "solution" are as follows:
 - (a) Flexibility traders are not currently defined as participant under the Code. If the EA is seeking to provide flexibility traders with access to consumers' data, flexibility traders need to be defined and managed as all other participants are under the Code. This would make it easier for other participants to work with them as a known and validated participant.
 - (b) MEPs like Intellihub also use the Registry to validate that a retailer has the consumer's consent to have access to consumption data. The Registry is updated to reflect the retailer that the end-customer has a contractual relationship with *after* they have entered into that agreement. Flexibility traders will need some mechanism to provide to MEP's that they are entitled to receive the end consumers meter data, potentially ahead of a contractual relationship being entered into. The Registry will need to be updated to record this permission.
 - (c) Intellihub acknowledges the importance of making available data that allows consumers, retailers, distributors and other energy sector participants to encourage innovation and the development of new products and services. However, the opportunities enabled by smart metering raise questions about the protection of data and consumers' rights to privacy. As the granularity of energy consumption data being accessed increases, so do potential concerns regarding privacy and the sensitivity of the data.¹⁴ As a result, access to granular consumption data by retailers, distributors and third parties such as flexibility traders will require active consumer consent. These requirements place the onus on the party seeking consent to communicate clearly with the consumer, highlighting the benefits that will arise from granting them access to the data.
 - (d) While the Registry will provide visibility of DER, we understand that it will not function as a platform which enables the transparent remote control of DER assets. The development of secure "controllable DER" technology has created a significant opportunity to enhance the efficient operation of the New Zealand energy sector. In particular, controllable DER enables improved coordination and utilisation of DER across networks, reducing costs across the system. The ability to transparently and securely control DER will assist distributors to deliver peak demand reduction by balancing generation across the network. As the uptake of DER gains momentum,

¹⁴ Detailed energy consumption data from smart meters is likely to be 'personal information' for the purposes of the Privacy Act 2020 ("**Privacy Act**"). For this reason, the EA will need to be mindful to ensure that any regulation introduced to address the processing of energy consumption data is designed to complement the Privacy Act. We also consider that other smart metering data, such as power quality data and other data related to the ICP (eg unique identifiers, and any data that can be linked to these identifiers and which relates to identifiable individuals), may also be considered personal information, and in these circumstances data processing must also be conducted in accordance with the Privacy Act.

distributors will be able to take advantage of these tools to facilitate the aggregation and coordination of DER devices, to manage congestion and reduce the need for investment and augmentation of the network.

- (e) Without having greater functionality than what the existing Registry system provides, there is a risk that excessive transparency could have unintended and adverse effect on competition and innovation. Putting aside privacy concerns, certain participants having open access to detailed DER information at ICPs could discourage innovation. For example, flexibility traders may be reluctant to invest in new technologies if commercially sensitive data about their services is available to their competitors (e.g. information on which customers are utilising those services could be used by other flexibility traders to promote competing products).

- 41. We therefore encourage the EA to consider leveraging existing platform technologies to develop an automated data exchange that not only facilitates the registration of DER assets, but also manages consumer consent issues and enables remote control of DER to facilitate planning and operational requirements. This is discussed further below.

Alternative to the Registry: a centralised registration platform

- 42. As noted above, updates to the Registry are only a partial solution and would not offer the level of functionality required e.g. visibility without control, access rights, transparency of control commands issued etc, doesn't solve for industry issues.
- 43. We consider that, despite the potential benefits of DER visibility, the introduction of the Registry is likely to result in net costs, as the costs of introducing the Registry would be greater than the costs of designing and / or implementing a solution which addresses some of these key issues. In particular, there are existing specialist products that already offer key functionality, and which could be utilised to provide a more comprehensive solution for the New Zealand electricity industry. Further, when compared to the upfront costs of adopting a specialist product relatively early in the digitisation journey, the costs of migrating DER assets onto a new platform will continue to increase over time, because the level of complexity involved in retrospectively registering DER assets will compound as the number of DER assets in New Zealand increases. Therefore, we consider that the costs associated with upgrading the Registry to keep pace with technology developments in this space are likely to be much higher in the long run compared to adopting one of these existing products.
- 44. For example, GreenSync¹⁵, a global energy tech company, has established the Decentralised Energy Exchange (known as the "deX") which is a software platform that creates a digital record of consumer consents to the transfer of smart meter data, register and enrol multiple DER devices at each ICP, and provide detailed visibility and control over distributed energy resources, at scale. This integrated system enables networks to support more renewables faster, without compromising on important considerations such as the protection of sensitive data. It also simplifies the complexity of relationships in the electricity industry (commonly referred to as a "many-to-many" problem) by facilitating transactions and communication between distributors, generators, retailers, flexibility traders and consumers, as well as DER devices.
- 45. Australia is a proven example of the capability of the deX platform. The technology has been deployed and stress tested to provide not only a DER registration function reaching around

¹⁵ GreenSync is a subsidiary of CrescoNet, the technology development arm of the Intellihub Group.

3,000 DER systems registered per month by the end of 2022, but also to be used as a foundational tool to facilitate the secure exchange of data. [CONFIDENTIAL]

46. Please see **Appendix B** to this submission for a more detailed description of the deX platform. [CONFIDENTIAL]
47. The deX platform provides the software platform on which flexibility markets can operate. Consumers' devices that are registered with deX can be made visible to the network, subject to the consumers' consent, and can then be contracted for grid services, unlocking new value streams when supplying energy during peak demand, managing frequency or grid voltage, and reducing network constraints.
48. For distributors, the ability to view and control DER reduces the need for costly, large-scale infrastructure and creates a more secure, affordable, reliable and cleaner energy grid. The deX platform provides the tools for participants to take part in two-way energy interactions in a way that is secure and efficient. The result is efficient communication, coordination and control across a variety of DER types.

Additional privacy protection measures

49. The UK provides a useful example of how privacy issues associated with distributed generation can be addressed. The UK government has developed a Data Access and Privacy Framework ("**Framework**") to enable proportionate access to data by authorised parties, whilst also implementing safeguards to protect consumer interests. The Framework determines the levels of access to energy consumption data from smart meters for retailers, distributors and flexibility traders. It also establishes the purposes for which data can be collected and the choices available to consumers.
50. The UK government has also developed a national communications infrastructure – the Data and Communications Company ("**DCC**") – which provides a centralised location to enable authorised users to access data from smart meters, subject to the provisions of the Framework and the Smart Energy Code ("**SEC**"). The SEC is a multi-party agreement which defines the rights and obligations of retailers, distributors, flexibility traders and other relevant parties involved in the end-to-end management of smart metering in the UK.
51. The DCC is regulated by Ofgem. It is responsible for linking smart meters in homes and small businesses with energy retailers, distributors and flexibility traders. The DCC oversees the transfer of data from MEPs to these energy sector participants and ensures that the smart metering system as a whole works smoothly – and, crucially, that consumers have control over who can access their energy consumption data, how often and for what purposes.
52. Furthermore, we consider that the UK approach described above is aligned with the NZ Government's intention to establish a 'consumer data right' ("**CDR**") in New Zealand. The CDR is intended to provide consumers with wider rights to 'data portability', which could apply to energy consumption data and would enable consumers to request the transfer of their data to third party organisations. In the UK, the Framework facilitates the ability of consumers to easily access their own smart metering energy consumption data, and to share this data with third parties if they wish to do so.

APPENDIX A
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APPENDIX B
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