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INTELLIHUB GROUP

SUBMISSION TO THE AEMC DIRECTIONS PAPER ON THE REAL-TIME DATA FOR CONSUMERS RULE CHANGE REQUEST

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The Intellihub Group (Intellihub) welcomes the opportunity to provide feedback on the AEMC's Directions Paper on the Real-time data for consumers rule change request.

Intellihub is an Australian and New Zealand based digital energy management specialist that is simplifying the transition to sustainable energy through our holistic ecosystem of smart devices and services. We deliver innovative metering, data and behind the meter solutions that maximise digital and new energy services. We are an experienced and leading provider of multi-utility services across electricity and water networks for residential, commercial & industrial, embedded network and solar metering customers. We specialise in asset management, installation, financing, and the day-to-day operations of smart meters, managing more than 2.5 million advanced smart meters.

The approach proposed in the Directions Paper appears workable at a high-level, but will be costly to implement and numerous issues need to be clarified by the AEMC

Intellihub agrees with the AEMC's comments in the Directions Paper that real-time data can support customers to better understand their energy usage and take advantage of innovative products and services. However, Intellihub also agrees with the AEMC's comment that current smart meters cannot provide real-time data cheaply and 'the cost and benefits to individual customers of accessing the data from the meter are likely to be mismatched in the short term'.

Current smart meters cannot provide the form of real-time data service proposed by the AEMC and significant costs will be incurred to provide the service.

We note that some submissions to the AEMC's Consultation Paper proposed that access to real-time data should be free because the meter already records the relevant data and the customer 'owns' the data. However, this argument ignores the critical fact that there is currently no way to collect the data from the meter and deliver it to the customer every second as required by the AEMC's proposed real-time data service. The meter may contain the relevant data (with some exceptions as discussed below), but that data is currently only delivered to retailers and AEMO once a day. New equipment will be required to be installed and significant costs incurred to collect that data from the meter and deliver it once a second (86,400 times a day) instead of once a day.

In particular, some form of new local wireless access solution will be required to be installed at each customer's meter to collect real-time data from the smart meter and deliver it within 1 second as proposed in the Directions Paper. Developing and deploying this service will involve significant costs, including installing additional wireless communications equipment for every customer who requests the service and replacing either the meter's communications module or the entire meter for some customers. We set out our initial thoughts below on the technology we expect we would use to deliver this service and the main types of costs we would incur.

As set out in our submission to the Consultation Paper, Intellihub continues to consider that existing alternatives are likely to be more cost-effective for the vast majority of customers. We expect that most customers can already obtain the information they need to make informed decisions about their energy usage from existing free apps that can provide 5 or 30 minute interval data the following day and would be unwilling the pay the additional costs required to provide 1 second real-time data. For those customers or third party CER providers that require real-time data, a range of alternatives exist that are likely to be lower cost than developing a new real-time data service.

However, if the AEMC decides to regulate access to real-time data, then Intellihub considers that the approach proposed in the Directions Paper is largely workable and is preferable to alternatives that were considered in the rule change request and Consultation Paper, subject to clarifying a number of important issues raised in this submission.

Intellihub supports the AEMC's objective of providing customers with the choice of whether they wish to access real-time data and are willing to pay the costs required to provide that service. Intellihub also supports the AEMC's proposed model where customers who request the service pay the upfront costs of enabling it. That approach is more efficient and equitable than spreading the costs across all customers, particularly if the service is only used by a small number of customers as we expect will be the case in the short to medium term.

We share the AEMC's optimism that new technologies will enable us to deliver the service at a lower cost over time and are comfortable with the AEMC's proposed 15 year transition to a model where customers do not face an upfront charge. We note that we will continue to incur some costs to provide the service in the long term, which will need to be recovered from all retailers and customers under the AEMC's proposed model.

We encourage the AEMC to adopt a collaborative approach to addressing these issues, noting the very short timeframe for submissions

The Directions Paper proposes a significant change to the regulation of metering services that would impose material new obligations and costs on metering service providers (MSPs) and retailers and rely on untested new technologies and processes. The AEMC has only described its proposals at a very high-level in the Directions Paper and has only provided 3 weeks for submissions. We consider that this submissions period is inadequate for such a material reform and it has limited the amount of detail that we have been able to include in this submission.

As a result of the short timeframe, this submission focusses on our key feedback on the Directions Paper and the material issues the AEMC should consider further as it develops its draft determination. We reiterate our recommendation in our Consultation Paper submission that the AEMC should establish stakeholder working groups to engage on these issues prior to the draft determination, adopting a similar process to how the AEMC engaged on power quality data (PQD) in the metering review.

Access to real-time data within 1 second as proposed in the Directions Paper is not possible with current meters and will require development and installation of new equipment to provide wireless local access

The Directions Paper proposes that MSPs and retailers would be required to provide access to real-time data to customers and authorised third parties. It proposes defining real-time data for these purposes as 'voltage, current and phase angle recorded every second and delivered within a second'. Real-time data would not be validated.

None of our current smart meters are able to provide this form of real-time data service. Although our smart meters currently record most of this data (except phase angle, as discussed below), there is no current communications mechanism to collect this data from the meter and deliver it to a customer or authorised third party every 1 second.

Smart meters currently rely on cellular communications networks to deliver data. Intellihub currently collects metering data from its smart meters a small number of times a day using the 4G cellular communications network and delivers this metering data to its retailer customers, DNSPs and AEMO once a day, usually early the following morning. Cellular communications is a reliable method to deliver data once a day. However, this method will be too slow and expensive to deliver real-time data at any frequency greater than about every 1-2 hours due to delivery timeframes, network congestion and the increased charges from the telecommunications provider to deliver larger amounts of data. A real-time data service based on 4G cellular communications could not deliver data from the meter to the

customer or third party access seeker within 1 second and could not comply with the requirements of the AEMC's proposed real-time data service.

As discussed in detail in our previous submissions, our smart meters do not have a local communications port that can be used to provide real-time data to customers or third parties using a cable or other wired solution.

Accordingly, implementation of the type of real-time data service proposed in the AEMC's Directions Paper will require the development of some new form of wireless local access service. This service would involve the MSP providing and installing new equipment at or near the customer's metering installation that establishes a wireless connection between the customer's smart meter and a device provided by the customer's retailer or a third party that can receive and use the data. The MSP would transmit the real-time data to that retailer or third party device in accordance with the standard format and communications protocol set by AEMO.

A local wireless service would have the advantages of being able to deliver data much faster and at a much lower ongoing cost than a cellular based service. However, it would have far higher upfront costs to develop and install new equipment at the metering installation of each customer who requests the service, and in some cases also replace the current smart meter's communications module or entire smart meter so that it is able to collect and communicate real-time data that meets the AEMC's specifications. It also relies on new technologies that we do not currently offer, although we are currently trialling some solutions that could be suitable for this service.

We will need to do more work to determine the most suitable technology to deliver this service and develop and test new equipment and processes. In the very limited time available for this submission, we have set out below our initial thoughts on the type of solution we are likely to use to deliver this service in the short to medium term. This is an area where technology is developing relatively rapidly and we expect that how we deliver the service will change over time.

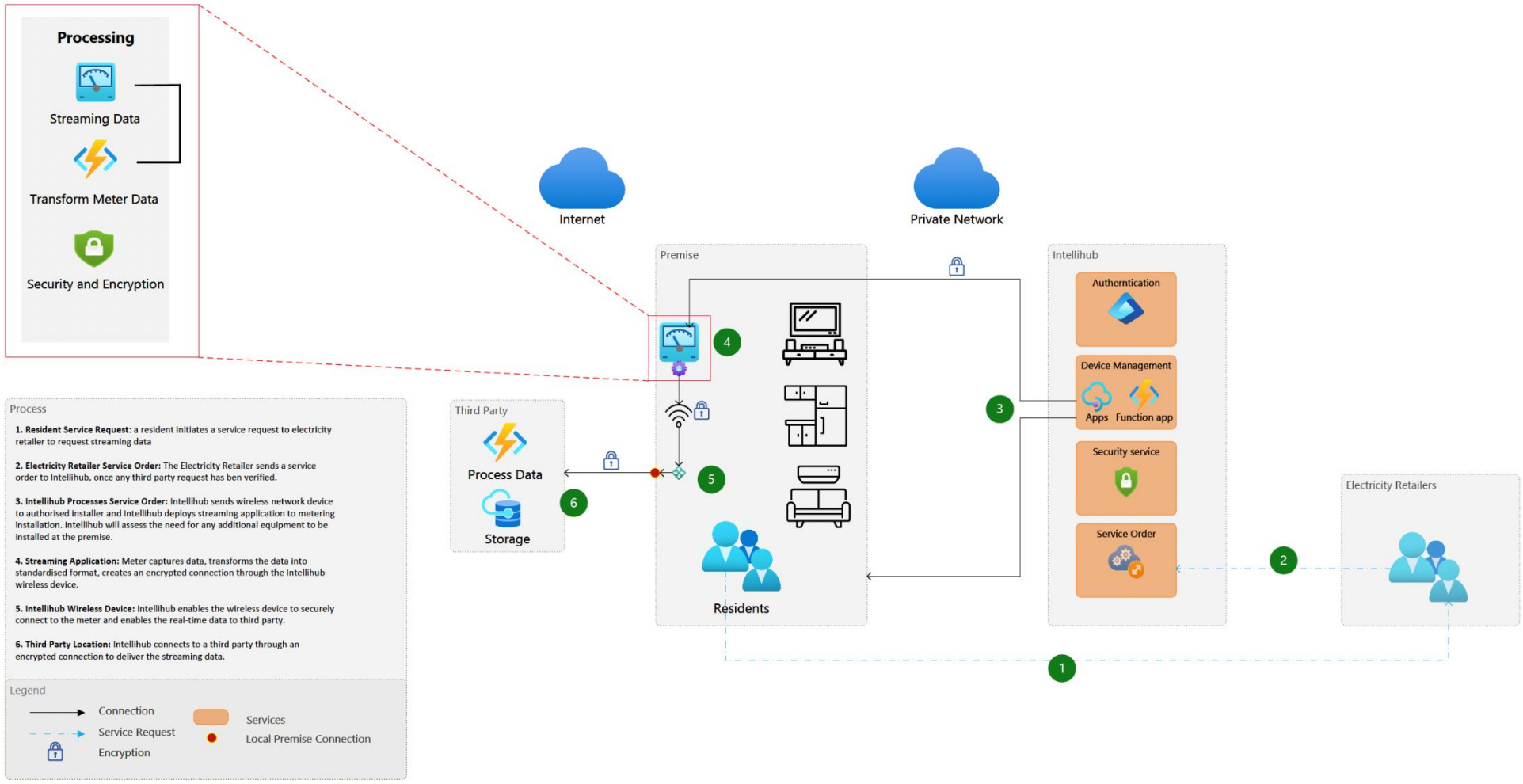
A potential model for how we would deliver the service is illustrated in the figure on the next page. The key steps in the process and key equipment involved are as follows:

1. Customer service request: The customer requests the real-time data service from its retailer.
2. Retailer service order: The customer's retailer sends a service order to Intellihub.
3. Intellihub processes service order: Intellihub provides the service, including providing the new or replacement equipment required for steps 4 and 5, authenticating third party access requests and managing cybersecurity.
4. Upgraded meter: The customer will require a meter that exceeds the current minimum services specification for the service to be provided. An application within the meter will collect the data and transform it into the required standard format. The meter's communications module will communicate this data to the Intellihub wireless device referred to in step 5. This will require an advanced communications module, and the meter's current communications module will need to be replaced by Intellihub unless the customer already has a meter with a suitable communications module. The customer's meter may also need to be replaced so that it can collect all of the required data, eg phase angle data.
5. New Intellihub wireless device: The customer will require a new Intellihub-supplied wireless device that acts as a secure bridge between the meter and the customer's or authorised third party's device. This device will use a suitable wireless technology to receive data from the meter's communications module and allow the customer or third party to connect and receive the data. This device is likely to support a range of technologies the customer or third party could use to connect, including ethernet or wireless connections. This device is required to enable a

secure connection to the meter and it is not possible for the customer or third party to bypass this step and connect directly to the meter. Further work is required to determine if an Intellihub site visit would be required to install this device, or if it is possible to use a plug-and-play device that can be sent to the customer or third party to connect.

6. **Third party device:** The customer, its retailer or its authorised third party would be responsible for providing a device that connects to the Intellihub wireless device and enables the customer or third party to access and use the real-time data.

Figure 1: Potential model for delivery of real-time data services



The AEMC should clarify the extent of MSPs' obligations to make real-time data available

The Directions Paper is unclear on the boundaries of the real-time data service that MSPs and retailers would be required to provide. For example, the Directions Paper refers in some places to an obligation on MSPs and retailers 'to make the data available',[1] while in other places it refers to MSPs and retailers being required to 'provide real-time data to customers'.[2]

The AEMC should clarify the extent of the MSP's obligation and where the MSP's obligation ends. Intellihub considers that the MSP should be required to make real-time data available for access at the metering installation by authorised access seekers. MSPs should not be required to 'deliver real-time data to the customer' or 'provide real-time data services to customers'.

The MSP's obligation to make data available should involve making it available to be accessed by a device supplied by the customer or its retailer or third party service provider at or near the customer's metering installation in the format and protocol specified by AEMO.

As discussed above, we expect that we would provide this service by providing a new wireless device that could communicate with the customer's meter, and potentially upgrading the customer's meter or its communications module. This wireless device would be able to communicate real-time data on a one-way open-access basis with any other device that uses the AEMO-specified format and protocol and meets the AEMO-specified interoperability requirements and other relevant access requirements under the rules and AEMO procedures (eg passwords, customer consent, AEMO accreditation, as discussed below). We expect that the customer's retailer or third party service provider would provide a separate device that would communicate with our device.

This new Intellihub-supplied wireless device would be located at or near the metering installation, but it is unclear whether it would form part of the metering installation under the NER.[3] Technological issues will limit the distance over which real-time data can be transmitted, particularly given the interference caused by metal meter boxes and building walls. The MSP's obligation should be limited to making real-time data available at or near the customer's metering installation. If the device on which the customer or third party wishes to use the data is located a long distance from the metering installation (eg an EV charger in the customer's garage), then the customer or third party would be responsible for getting the data to that location.

MSPs do not have any relationship with customers or third party CER providers, and their only contractual relationship is with retailers. We understand that this would continue to be the case under the approach proposed in the AEMC's Directions Paper. MSPs' real-time data service obligations should not include:

- supplying an end user device or app to the customer that the customer can use to access and understand the data, eg an in home display or usage app (although retailers or other service providers may offer this as an additional non-regulated service);
- setting up any end user devices or apps or dealing with customers' technical issues with any such device or app; or
- transmitting the data to a different location in the customer's premises other than the metering installation.

We consider that the most useful parallel to illustrate the boundaries of the MSP's obligations for the real-time data service is NBN home broadband services. The MSP's obligation would be akin to the role

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1 For example, see executive summary paragraph 6

2 For example, see executive summary paragraph 32

3 The current rules definition of 'metering installation' in chapter 10 of the NER includes a '*communications interface, if any, that are controlled for the purpose of metrology and which lie between the metering point(s) and the point at or near the metering point(s) where the energy data is made available for collection*'.

NBN Co performs. NBN Co makes broadband data available at a connection point on the customer's wall near where the NBN line enters the customer's house. The customer, or the retailer of the customer's home phone or internet service, is responsible for providing and installing any phones, modems, range extenders, computers or other devices the customer requires to access and use the data.[4] NBN has no responsibility past the point of connection on the wall.

Other aspects of the definition of the real-time data service should also be clarified or revised

The AEMC should reconsider the definition of real-time data, focussing on data that is likely to be useful to customers and excluding data that is likely to materially increase costs for limited benefit. The Directions Paper proposes that real-time data is defined as 'voltage, current and phase angle'. We expect that most customers do not need this detailed data and only want to understand their usage.

In particular, the AEMC should exclude phase angle data from the real-time data definition, or provide greater flexibility on how power factor data is expressed. As we have previously advised the AEMC in our submissions to the accelerating smart meter deployment rule change in relation to PQD, a significant proportion of Intellihub's current meters cannot provide phase angle data (they can only provide power factor expressed as the ratio of the active power kW to the apparent power kVA, but not phase angle). Including phase angle in the real-time data definition may therefore mean that many customers who request the service will need their meter to be replaced, which will materially increase the upfront cost of the service for little if any benefit.

We also recommend that the AEMC clarifies that the real-time data service obligations only apply to small customers. Large customers are likely to have more bespoke requirements and a greater range of existing options to access this data. Increased costs will be incurred by MSPs and retailers to provide real-time data services to large customers, which would be subsidised by small customers under the AEMC's proposed model that prohibits ongoing charges for this service. This issue was raised in our submission to the Consultation Paper but is not discussed in the Directions Paper.

The Directions Paper proposes that AEMO would determine a standard data format, communications protocol and any other interoperability standards that MSPs would be required to comply with when they make real-time data available. We support this approach, provided that the rules and AEMO procedures are not overly prescriptive and allow MSPs flexibility in the technologies they use and scope to innovate and use new technologies over time. We expect that different MSPs will initially use a range of technologies to deliver the service depending on their current metering fleet and available technologies.

Intellihub also notes that there are limits in practice on the number of parties that can access real-time data from each meter. This limit may vary depending on the type of technology that is deployed. Permitting a larger number of concurrent access seekers (eg the customer and multiple third parties seeking real-time data from the same meter) may increase the costs of providing the service and limit the types of technology that can be used. The AEMC and AEMO should consult on this issue and include appropriate limits in the rules or AEMO procedures on the number of access parties that need to be supported.

To minimise ongoing costs and recognise the AEMC's position that retailers cannot impose ongoing charges for the service, any AEMO service levels for the real-time data service should be minimised, similar to how the basic PQD service is regulated.

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[4] The main difference between NBN and real-time data is that we would provide access using a wireless communications technology rather than a port that the customer can plug a phone or modem into because it would be more effective and safer in the context of electricity services.

We support the Directions Paper's position that real-time data will not be validated. It is not possible to validate data that is provided any more frequently than daily.

We note that in this submission we have used the term 'Metering Service Provider (MSP)' that was used by the AEMC in the Directions Paper. This term is not used in the NER. We assume that the AEMC uses this term to refer to the Metering Coordinator (MC), Metering Data Provider (MDP) and/or Metering Provider (MP). The Directions Paper does not distinguish between those parties and does not explain which party the various real-time data obligations would be imposed on. Our preliminary view is that any real-time data obligations should be imposed on the MC, not the MDP. The AEMC should clarify and consult on this issue, noting that it was a material issue in submissions on the PQD provisions of the accelerating smart meter deployment draft rule determination.

The Directions Paper proposes that retailers would be required to provide real-time data access within 20 business days if the customer's meter needs to be replaced or retrofitted, or within 10 business days if the meter does not need to be upgraded. We recommend that the AEMC gives further thought to these timeframes, including considering the following issues:

- **The distinction between the 10 and 20 business day timeframes is confusing and the 20 business day timeframe should apply in all cases**. The Directions Paper uses unclear language that refers in different places to a meter being 'replaced', 'retrofitted' or 'upgraded'. As discussed above, we expect that many customers will not need their 'meter' to be replaced, but all customers will require additional wireless communications equipment to be installed. This equipment will be located near the meter, but will not form part of the meter and is likely to be located outside of the meter box to minimise signal interference. Additional actions will also be required to verify customer consent and activate the service. The distinction between the 10 and 20 business day deadlines is therefore unclear and appears redundant. 20 business days is a sufficiently fast timeframe for provision of a real-time data service, which is an optional service that does not require the same timeframes as for installation of a new or replacement meter.
- **The timeframes should clarify the boundaries of the retailer's and MSP's obligations and that other parties will also need to take actions for the customer to be able to use the service**: As discussed above, the MSP's and retailer's obligation should be limited to making the real-time data available in the AEMO-specified format and protocol at the metering installation. The customer or its third party CER provider will need to provide additional equipment or apps and take other actions to access and use the real-time data. This needs to be reflected in any regulated timeframes for the provision of the service, ie the rules should be clear that the timeframe is met when the data is made available for collection by the access seeker, not when the data is able to be used by the end customer.
- **An exemptions framework is needed**: The proposed timeframes will not be able to be met in some circumstances and the rules should include exceptions to the timeframes as is the case for the existing meter installation timeframes. The AEMC should consult on appropriate exceptions, which should include the matters that are currently exceptions to the meter installation timeframes under clauses 7.8.10 to 7.8.10C of the NER (eg access issues, meter board remediation requirements or needing to interrupt supply to other customers) and the new PQD provisions that will be added to clause 7.3.2 (eg type 4A or 8B meters).

MSPs will incur significant costs to provide real-time data services they will need to recover from retailers and retailers will need to recover from customers

The Directions Paper states that MSPs and retailers will be able to implement a charge for access to real-time data. MSPs would recover their costs under their commercial contracts with retailers. Retailers would recover their upfront costs (ie the MSP's charges and other upfront costs incurred by the retailer)

from customers under a new one-off charge per connection point. Retailers could not impose a separate ongoing charge for access to real-time data services, and would instead need to recover any ongoing costs from all customers as part of their retail electricity service.

The Directions Paper states that this upfront charge would 'seek to cover any upfront costs to enable access'.[5] The Directions Paper is not clear on what types of costs are intended to be covered by this charge, but it does refer in several places to the fact that enabling real-time data will require MSPs to replace current smart meters or 'retrofit' them with real-time data functionality. We consider that upfront charges should recover those meter replacement or retrofitting costs and any other costs incurred by the MSP or retailer to enable access to real-time data. This aligns with the AEMC's intention that costs should be recovered from those customers who request the service rather than smeared across all customers.

MSPs will incur significant costs to provide the real-time data service proposed in the Directions Paper. We expect that we will incur the following main types of costs:

- **Costs to develop and test new technologies and processes to deliver the service:** Intellihub will incur significant costs to develop, test and deploy new technologies and processes to provide the real-time data service, noting that there is no current 'off-the-shelf' technology that can deliver this service. MSPs would seek to recover these costs through their upfront charge. We note that there will be significant upfront development costs regardless of the level of uptake of the service. Accordingly, there is there is a risk that MSPs are unable to recover all of these costs through upfront charges due to low uptake of the service and need to look at options to recover some of these costs through their ongoing metering charges to retailers.
- **Costs to purchase and deploy wireless communications equipment for each customer who requests the service:** As outlined above, Intellihub will need to deploy new wireless communications devices for every customer who requests the service. For some customers, we will also need to replace the communications module of their existing smart meter with a new module that supports wireless communications. Standard communications modules are designed to meet the minimum services specification at the lowest possible cost by delivering data a small number of times per day using 4G cellular technology, not once per second using wireless technology. Intellihub will incur capital costs to purchase and develop this equipment and labour costs to install it that will need to be recovered through the upfront charge.
- **Commissioning costs for each customer who requests the service:** A new process will be required to commission the real-time data service for each customer who requests it, including activating the service, issuing passwords and confirming the access seekers has complied with customer consent and other access requirements. Intellihub will incur one-off costs related to this process for each customer who requests the service. Retailers will also incur additional one-off costs to manage customer requests for the service and activate the service. These costs would be recovered through MSPs' and retailers' upfront charges.
- **Costs to purchase and install a replacement meter for some customers:** Some customers may require a replacement smart meter to enable Intellihub to provide the real-time data service. The AEMC should seek to define the real-time data service in a way that reduces the need for meters to be replaced. However, as noted above, the AEMC's proposed definition of real-time data includes phase angle data but a significant proportion of Intellihub's current meters cannot provide phase angle data. We recommend that phase angle data is removed from the real-time data definition. If it is not removed, we are likely to need to replace the customer's meter with a different type of meter than can provide this data. The costs of any meter upgrades or replacements would be recovered through MSPs' and retailers' upfront charges.
- **Ongoing costs to maintain and repair the equipment and provide the service:** Intellihub will also incur a range of ongoing costs to deliver the real-time data service. This will include costs to

[5] Directions Paper, executive summary paragraph 5.

maintain and repair the wireless communications equipment and replace it at the end of its life. We expect that we would recover these costs either by including an estimate of these costs in our upfront real-time data service charge to retailers or seeking to recover them through our ongoing metering service charge to retailers.

Given the very short timeframe for this submission, we have not been able to provide estimates of these costs, but we would be happy to engage with the AEMC separately to provide cost estimates on a confidential basis.

We agree with the AEMC's proposal that the recovery of these costs by MSPs is a matter for commercial negotiations between MSPs and retailers. The types or amounts of costs that can be recovered by MSPs should not be regulated in the NER. However, it would be useful for the draft determination to provide more clarity on the types of costs that are likely to be incurred to manage stakeholder expectations.

The AEMC's proposed 15 year timeframe for upfront charges appears workable. It is highly likely that we will continue to incur some costs to provide the real-time data service after that date. However, this period will provide us sufficient time to investigate new technologies that could deliver the real-time data service more efficiently and factor any costs after that date into the charges for our general metering services when we renegotiate contracts with retailers

AER publication of MSPs' commercial charges is not appropriate and will not promote competition

The Directions Paper proposes that for 15 years from the commencement of the real-time data rules, the AER would annually publish the price of accessing real-time data for each smart meter model, charged by each retailer to its customers and by each MSP to retailers. The Directions Paper asks for submissions on how and where the AER should publish these prices.

Intellihub does not support this recommendation. MSPs' charges are commercially negotiated with retailers under confidential contracts and are commercially sensitive.

There is no precedent in the NER for disclosing this type of commercially sensitive contract information. Indeed, Intellihub is not aware of any examples from any industry where such detailed price information from commercially negotiated contracts is required to be disclosed publicly. Publication of separate prices for each smart meter model and each MSP and retailer as proposed by the AEMC would be an unprecedented form of regulation that would require disclosure and publication of very detailed commercially sensitive information from confidential contracts. It is unclear why real-time data justifies such regulation when it does not apply to other services.

Requiring disclosure of this commercially sensitive price information is not likely to promote competition. Instead, it is more likely to reduce competition by incentivising MSPs to offer the same price, service levels and non-price terms to every retailer and not agree to any discounts or changes to standard non-price terms.

The amount charged by each MSP to each retailer will be negotiated as part of a broader commercial arrangement and could vary for a range of reasons. MSPs are likely to use different technologies to deliver the real-time data service and incur different costs to provide it. Individual MSPs and retailers may also agree on different service levels or other commercial terms that affect the price of the service. Each MSP's charges to retailers will also be affected by the terms of existing metering agreements between MSPs and retailers and the extent to which MSPs are able to pass on new charges under those agreements under change in law or other provisions. Public disclosure of this information is therefore unlikely to be useful for retailers, third parties or customers and could be misleading in terms of the prices that would apply to a different retailer or third party.

If the AEMC was to require some form of publication of prices, the information that is published should be aggregated as much as possible to protect the details of individual commercial contracts. For example, the AER could collect price information from each retailer but aggregate that information and only publish the average price charged by MSPs to retailers (ie a single average price across all MSPs and retailers in the NEM excluding Victoria).

AER publication of an average price could be achieved using a similar approach to how the AER currently collects and publishes information on metering costs when setting the Default Market Offer (DMO).[6] In setting the DMO, the AER collects data from each retailer on smart meter costs including any one-off or upfront fees. The AER uses this information from each retailer to publish an average smart meter cost for each DMO area (ie each DNSP network area).

The AER could adopt a similar approach to gather cost data on upfront real-time data charges from retailers and publish:

- the average price charged to retailers by MSPs for upfront charges for real-time data services (published as a single average cost across the NEM excluding Victoria); and
- the average price charged by retailers to customers for upfront charges for real-time data services (published as a single average cost across the NEM excluding Victoria).

We expect that each retailer would also publish its charges to customers on its website, as is standard practice for all retailer charges and does not require regulation.

We consider that this is all the information that is needed to provide retailers, third party service providers and customers with useful information on real-time data upfront charges, and is an approach that best balances transparency and commercial confidentiality.

If the AER is required to publish price information, we consider that it would also be useful for the AER to publish data on the number of customers that have taken up the real-time data service as part of its regular retail performance reports.[7] This information will be useful to assess the effectiveness of the reforms.

The AEMC or AEMO will need to develop appropriate accreditation, customer consent, cyber-security and compliance arrangements for third parties who access real-time data

The Directions Paper notes that real-time data contains personal and sensitive information about consumer behaviour that third parties could misuse. It states that the AEMC is considering whether additional requirements should be placed on third parties that request access to consumer data, in addition to the requirement to obtain consent and invites comments on whether some form of accreditation should be mandated for third parties seeking to gain access to consumer data.

In particular, the AEMC asks:

- Should additional requirements be placed on third parties that request access to consumer data?
- Should third parties be accredited by AEMO under the NER?
- Are there any other safeguards required to ensure third parties do not misuse data?

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6 For example, see the AER's Final determination on the Default Market Offer (DMO) price for 2024–25 and associated cost assessment model, available at https://www.aer.gov.au/industry/registers/resources/reviews/default-market-offer-prices-2024-25/final-decision

7 See https://www.aer.gov.au/industry/retail/performance-reporting

Intellihub agrees with the AEMC's concerns regarding the protection of privacy and other risks related to access to real-time data.

Intellihub recommends that any person who seeks access to real-time data should be required to be an accredited service provider under a new AEMO accreditation category (unless they are already a registered participant, eg a retailer or DNSP). This is consistent with how the rules currently treat any other party that can access metering data.

Unless access seekers are an accredited service provider or registered participant, they are not subject to the NER and the AEMC or AEMO have no ability to set and enforce critical protections related to maters such as privacy, confidentiality and cyber-security. It would be inappropriate for retailers and DNSPs who access real-time data to be subject to rules requirements in relation to these matters but for other third party access seekers to not be subject to any such oversight. For example, the Directions paper states that existing confidentiality provisions in the rules would apply to real-time data, but we note that those provisions will not apply to third party access seekers unless they are a registered participant or deemed to be a registered participant for the purpose of those provisions.[8]

A new accredited service provider category would be similar to how the rules currently treat MDPs, MPs, Embedded Network Managers or the new NMI Service Provider role under the flexible trading rule change. This is a relatively low cost and light-handed form of regulation. It is appropriate for any party who can access sensitive metering data or MSATS information and is a lower-cost alternative to requiring these parties to be registered participants.

Accreditation will enable the AEMC to impose appropriate obligations on access seekers and to deem them to be registered participants for the purposes of relevant rules provisions such as the confidentiality obligations, similar to other accredited service providers. It will also enable the AER and AEMO to oversee compliance with those obligations and enable the AEMC to recommend that any relevant obligations are made civil penalties, which will be important to ensure compliance with key obligations. As discussed below, it could also enable alternative approaches to regulating issues like customer consent.

Accreditation will also enable AEMO to set appropriate accreditation requirements, for example requiring access seeks to demonstrate that they have appropriate systems to obtain and record customer consent, manage cyber-security and protect privacy and are members of an appropriate dispute resolution scheme. We recommend that the rules require AEMO to addresses these matters in its procedures.

MSPs do not have a direct relationship with customers and cannot verify customer consent

The Directions Paper states that third parties should only access real-time data after obtaining consent to act on a consumer's behalf. The AEMC proposes requiring third parties to obtain consumer consent, and requiring retailers or MSPs to verify that consumers have given consent.

The AEMC proposes two potential pathways for customers to obtain consent:

- Retailer centred: The third party would request real-time data from the retailer and the retailer would verify customer consent.
- MSP-centred: The third party would request real-time data from the MSP and the MSP would verify customer consent

[8] For example, the confidentiality obligations in clauses 7.15.1 and 8.6.1 only apply to registered participants or other parties deemed to be registered participants under clause 8.6.1A.

Intellihub considers that the MSP-centred approach is unworkable. MSPs have no direct relationship with customers. We do not have the customer's name or contact details and have no way to verify that the customer has provided consent.

The AEMC states in the Directions Paper that the MSP-centred approach is likely to be more efficient, but 'this pathway assumes that the MSPs do not have to engage with the retailer to verify consent. If the MSP is unable to verify consent independent of the involvement of the retailer, this option may not be efficient.'[9]

The AEMC's assumption that MSPs would not need to engage with retailers to verify consent is not correct. The AEMC does not explain how MSPs, who do not have customer's names or contact details, would verify consent. We do not consider that it would be possible for MSPs to verify customer consent without contacting the retailer and requesting the retailer to contact the customer to verify that the customer has provided consent. Such an approach would be very inefficient and slow, and retailers may not cooperate unless subject to a rules obligation to do so. Alternatives such as the MSP relying on information provided by the third party to verify consent would not be an effective form of verification.

We also consider that involving the retailer in the process will be important given that the customer will incur an upfront charge from the retailer for providing real-time data services. It is likely to lead to disputes if third parties are able to arrange provision of a real-time data service directly with the MSP and the customer then receives a charge from its retailer for that service when it has never engaged with its retailer and may not be aware of the charge. Retailers are also better placed to manage other access-related issues such as protections for customers experiencing family violence.

We therefore consider that the retailer-centred pathway is preferable and that the MSP-centred pathway is not a viable option.

If the AEMC is concerned about involving retailers in the consent verification process, we recommend that the AEMC considers a third option for managing consent issues as set out below.

If third parties are required to become accredited service providers as proposed above, then the rules can impose enforceable consent obligations directly on those accredited third parties with penalties for non-compliance. This approach would be more consistent with other NER and NERR consent obligations, where the requirement to obtain consent is usually a rules obligation backed up by record keeping obligations and a civil penalty, rather than expecting one party to check whether a different party has complied with its obligations.

Under this approach:

- third parties who request access to real-time data would need to be accredited by AEMO as a new category of accredited service provider (unless they are already a registered participant, eg a DNSP);
- third parties would be required by the rules to obtain explicit informed consent from the customer before requesting access to the customer's real-time data;
- charges for the service would continue to be levied as proposed in the AEMC's Directions Paper, ie the MSP would charge the retailer an upfront charge for the service and the retailer would charge the customer an upfront charge (as opposed to the MSP charging the third party directly, given that there is no contractual relationship between the MSP and third party);
- as part of obtaining explicit informed consent, the third party would be required to advise the customer of any charges it will incur, including any upfront charges from its retailer;
- third parties would be required to retain records of this consent;

[9] Directions Paper, p 35.

- AEMO's accreditation requirements could require third parties to demonstrate as a requirement for accreditation that they have suitable processes to obtain consent and retain records, and could allow AEMO to undertake audits of compliance with consent requirements;
- when requesting real-time data access from the MSP, the third party would confirm to the MSP that it is an accredited service provider and has customer consent; and
- the AEMC would recommend that the consent obligations on third parties be a civil penalty.

Intellihub supports the AEMC's proposed approach to DNSP access to real-time data

The Directions Paper states that DNSPs could access real-time data under the proposed framework for third party access to real-time data. DNSPs would be treated the same as other third parties, including needing to obtain customer consent.

Intellihub supports this approach. Requiring DNSPs to obtain customer consent will be particularly important given the significant upfront costs involved in providing the service, which will be passed on to the customer unless it has already requested the service for a different purpose and paid the upfront charge.

Our comments above on third party consent requirements should also apply to DNSPs. Like other third parties, DNSPs should be required to obtain the customer's explicit informed consent, including advising the customer of any upfront charges they may be required to pay to their retailer. The AEMC should clarify that DNSPs cannot include terms in their standard connection agreements or other contracts that deem customers to have provided consent to DNSPs accessing the customer's real-time data.

The AEMC should engage with stakeholders to determine appropriate implementation timeframes

The Directions Paper does not address implementation timeframes for the proposed new rules. We recommend that the AEMC engage with affected stakeholders including retailers, MSPs and AEMO to determine the steps that would be required for implementation and appropriate timeframes for those steps.

Based on implementation processes and timeframes for similar recent rule changes, our initial view is that implementation is likely to involve the following key steps:

- The AEMC makes a final rule
- AEMO consults on and publishes procedures covering the matters required by the final rule, including:
  - additional details and technical requirements for the definition of real-time data
  - the common format and communications protocol for exchanging real-time data
  - interoperability and cybersecurity requirements and any other applicable standards or requirements
  - accreditation requirements for third parties who request real-time data
- AEMO makes any changes to systems or processes that are required to implement the final rule
- MSPs' equipment vendors develop and supply new equipment (eg new wireless communications equipment and/or replacement meters) that MSPs can use to provide access to real-time data in accordance with the final rule and AEMO procedures
- MSPs and retailers develop and test new technologies, systems and process to provide access to real-time data in accordance with the final rule and AEMO procedures.

Given that we will need to develop and test new technologies to implement the AEMC's proposed approach, we consider that the implementation timeframe should be 2 to 3 years from the date the final rule is made, based on:

- at least 9 months from publication of the final rule for AEMO to develop and consult on procedures
- around 12 months from publication of AEMO's procedures for MSPs' equipment vendors to develop and supply new equipment to meet the requirements of the final rule and AEMO's procedures
- around 9 months from the date that equipment is available from vendors for MSPs to update systems and processes and test the new equipment and processes.

The AEMC should also engage with AEMO on how implementation of these reforms is best sequenced with other reforms and system changes that AEMO is implementing over the coming years.

We would be happy to provide more detail on any of the issues raised in this submission and to work with the AEMC to provide information to inform its assessment of the costs and benefits of the rule change request. If you have any questions regarding this submission please contact Dino Ou, Industry Development Lead on dino.ou@intellihub.com.au or 02 8303 4033.

Regards

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