

Our future is digital

Transitioning to a smarter, more connected, and data-driven electricity system



Appendix A: Format for submissions

Complete the submission form below and email your completed submission to digitalisation@ea.govt.nz with 'Digitalisation paper' in the subject line.

Terms and Conditions

We will publish your name and organisation (if this applies), but not your contact details. If you think we should not publish any part of your survey response, please tell us which part shouldn't be published and why.

Please note, all survey responses, including parts you've asked not to be published, can be requested under the Official Information Act 1982. This means we would be required to release all surveys in full, unless there was a good reason under the Act to withhold it. We would consult with you if this meant releasing information you asked not to be published.

I understand (select one): ☒ Yes ☐ No

Submitter (full name)	
Who are you responding as? (select one)	<div><input type="radio"/> Consumer</div> <div><input type="radio"/> Innovator or technology company</div> <div><input type="radio"/> Small or medium business consumer</div> <div><input type="radio"/> Industry participant</div> <div><input checked="" type="radio"/> Other</div>
Organisation and position (if applicable)	SEANZ [REDACTED] [REDACTED]

Questions	Comments
<p>Q1. What could stop or slow digitalisation of the electricity system? What would make it successful? How far should digitalisation go?</p>	<p>The primary contributor to stopping or slowing digitalization is likely to be organizations seeking to protect what they see as competitive advantage or other business reasons for restricting wider access to the data they hold. Examples may include meter data (which should be considered as owned and paid for by customers) which energy retailers and / or MEP's not wanting to make widely available since they see value opportunities in having exclusive rights to use it. EDB's may not want to make visible the network voltage conditions on their LV networks, since this will place them under greater scrutiny to remedy issues. Also of importance will be consumer privacy concerns and having appropriate measures in place to protect their core electricity data from being mis-used. These concerns however are solvable.</p> <p>From a solar industry POV, having direct online access to granular consumption data is critically important to assessing accurate assessment of project potential. Similarly understanding of local network voltage information is important to understand potential curtailment of generation due to high voltage at the project feasibility stage.</p> <p>The scope of digitalization should include: Core data required to support customer switching, DER design and installation, DER integration Communication standards for integrating DER systems into the grid and providing support for new flexibility markets Digitalisation of core processes such as DG applications, and system operator / DSO comms (e.g. some SO functions are currently phone / email based)</p>
<p>Q2. Do you agree with how we have defined 'data' and 'information', especially in the context of making data more visible?</p>	<p>Yes, these are standard definitions of these terms and should be well understood. In the context of this report, it is data that is being discussed</p>
<p>Q3. What data do you think needs to be more visible?</p>	<p>The digitalization process needs to have clear and specific outcomes it is trying to achieve and then the data required can be defined. From a solar industry POV it is the data defined in Q1. Also to enable use of DER, current solar generation, battery state of charge, current charging / discharging rate, additional battery discharge capacity etc. would help support effective use of DER within a network management / grid management (DSO / SO) environment.</p>
<p>Q4. What challenges do you think we might face in trying to increase visibility? What considerations need to be given to data privacy or cybersecurity? How could increasing visibility create more opportunities for consumers, participants and innovators?</p>	<p>As per Q1</p>
<p>Q5. What work are you planning or doing to increase visibility within the electricity system? Are you aware of any work that contributes to this goal?</p>	<p>No work directly</p>
<p>Q6. What challenges do you think we might face in increasing interoperability? What other opportunities do you think greater interoperability will bring?</p>	<p>There will be a key decision to make as to whether core datasets should be distributed, in which case rules around formats and data standards are needed, or whether certain core data should be maintained centrally in a single data store. A good example is meter data which SEANZ suggests should be a centrally managed dataset with access available to multiple stakeholders in a controlled way.</p> <p>Reaching agreement on standards across multiple parties, who may already have investments in systems supporting specific data formats or communication standards will be challenging (but essential). It is suggested that it is likely that democratic principles are abandoned, and a single neutral party makes informed decisions to set the standards that industry participants must use.</p>

Q7. What work are you planning or doing to increase interoperability within the electricity system? Are you aware of any work that contributes to this goal?	SEANZ are not currently planning to do work in this area, other than recognizing the need for comms standards to enable flexibility services and markets
Q8. What challenges do you think we might face in simplification? How could simplifying create more opportunities?	Incumbents trying to protect their perceived business advantages from maintaining the status quo.
Q9. What work are you planning or doing to increase simplification within the electricity system? Are you aware of any work that contributes to this goal?	No work planned.
Q10. Do you have any other comments on this paper?	<p>A more detailed definition of the specific problems that are aiming to be addressed and the outcomes expected is needed. This will then be arranged in priority order so that results can be achieved incrementally. There is no rationale argument as to why the electricity industry shouldn't be digital. In addition, processes should also be digitized.</p> <p>From a solar industry POV for example, a national system for lodging and processing proposed distributed generation systems would be beneficial, particularly as the expected volumes increase significantly. This would then flow through to accurate statistics of installed resources (which we do not have today) and allows monitoring of approval times. There is even potential for automated, instant approvals for small scale systems if EDB's have defined hosting capacity at ICP level.</p>