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# Basic Power Quality Data Consultation

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**7 May 2025**

Issues Paper

Proposed Changes

# Notice of Consultation

**Date of Notice:** 7 May 2025

This Notice of First Stage of Rules Consultation (**Notice**) informs all Business-to-Business (**B2B**) Parties, relevant B2B Change Parties, AEMO and such other persons who identify themselves to the Information Exchange Committee (**IEC**) as interested in the B2B Procedures (**Consulted Persons**) that AEMO is conducting this consultation (**Consultation**) on the B2B Procedures (on behalf of the IEC).

The Consultation is being conducted under clause 7.17.4 of the National Electricity Rules (**NER**), in accordance with the Rules consultation requirements in NER 8.9.

## Matters under Consultation

The changes (**Changes**) which are proposed (**Proposal**) support the:

- Implementation of the Accelerating Smart Meter Deployment (**ASMD**) Rule of the Australian Energy Market Commission (**AEMC**), specifically, Basic Power Quality Data.
- Removal of technical content for the applicable procedures.

**Table 1 Summary of Proposal**

Instrument	New/Amended
Data Posting Process	New
Technical Delivery Specification	Amended
Customer Site Details Notification Process	Amended
Service Order Process	Amended
One Way Notification Process	Amended
Meter Data Process	Amended
B2B Guide	To be amended as part of the Second Stage

## Consultation Process

The IEC invites written submissions on the matters under the Consultation, including any alternative or additional proposals which you consider may better meet its objectives, as well as the national electricity objective in section 7 of the National Electricity Law.

Submissions in response to this Notice should be sent by email by 5:00pm (AEST) on 19 June 2025 to [NEM.Retailprocedureconsultations@aemo.com.au](mailto:NEM.Retailprocedureconsultations@aemo.com.au). A response template has been provided on AEMO's website. Please send any queries in respect of the Consultation to the same email address.

Submissions received after the closing date and time will not be valid. The IEC is not obliged to consider late submissions for this reason. A late submission should explain the reason for lateness and the detriment to the proponent if the IEC does not consider the submission.

Please identify any parts of your submission which you wish to remain confidential, explaining why. The IEC has asked AEMO to manage such information to avoid any confidentiality issues. Any confidential information will have a de-identified analysis to the IEC and Business-to-Business Working Group (**B2B-WG**), to enable their decisions to be made impartially. The IEC may still publish that information, if it does not consider it to be confidential, but will consult with you before doing so. Material identified as confidential may be given less weight in the decision-making process than material that is published.



In your submission, you may request a meeting with the IEC to discuss the matters in the Consultation, stating why you consider a meeting is necessary or desirable. If appropriate, meetings may be held jointly with other Consulted Persons. The IEC will generally make details of matters discussed at a meeting available to other Consulted Persons and may publish them, subject to confidentiality restrictions.

**Table 2 Summary of Consultation Stages**

Stage	Date
Publication of Issues Paper	7 May 2025
Closing date for submissions in response to Issues Paper	19 June 2025
Publication of Draft Report and Determination ( <b>Draft Report</b> )	31 July 2025
Closing date for submissions in response to Draft Report	29 August 2025
Publication of Final Report and Determination ( <b>Final Report</b> )	10 October 2025

The IEC developed the Changes in the interests of implementing the ASMD rule change and improving the B2B Procedures. The Changes require AEMO B2B e-Hub system changes. Participants may require system changes due to the Changes. The Changes were recommended to the IEC by the members of the B2B-WG.

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# 1. Background

This Issues Paper has been prepared to detail the Proposal. The Changes have been developed under the IEC’s power to manage the ongoing development of the B2B Procedures as contemplated by NER 7.17.7(a)(2), as well as to implement the process under NER 7.17.4.

This Issues Paper also provides information which is to be considered by the IEC in determining whether to implement the Changes to the B2B Procedures, namely:

- An issues statement in respect of the Proposal (see section 1.1).
- A summary of the Changes, including consideration of the B2B Principles (see sections 1.1 and 2.7).
- A consideration of the B2B factors (see section 2.8).

The Changes have been considered and recommended by the members of the B2B-WG.

The Changes would result in:

- A new Procedure being implemented:
  - The ‘Data Posting Process’ Procedure
- Amendments to:
  - The Technical Delivery Specification
  - The B2B Guide (the IEC will provide the proposed changes at the Draft Report Stage, considering any relevant submissions in response to this Issues Paper).
- Amendments to the following to remove technical content:
  - Customer Site Details Notification Process.
  - Service Order Process.
  - One Way Notification Process.
  - Meter Data Process.

The Changes require B2B e-Hub system changes. Participants may also need to update their systems and processes.

## 1.1 Issues statement and scope

The proposed changes aim to enhance the functionality of Business-to-Business (B2B) communications to support communication of Basic Power Quality Data (PQD) between B2B Participants. These changes are required by the Accelerating Smart Meter Deployment (ASMD) Rule, Changes are also required to the procedures to support the evolving landscape of B2B communications, ensuring that they do not limit the evolution of technical solutions.

The Changes were recommended to the IEC by the members of the B2B-WG.

The members of the B2B-WG are as follows:

**Table 3 B2B-WG members by sector**

Retailers	Distributors	Metering Service Providers
AGL	AusNet Services	Bluecurrent
Alinta Energy	Energy Queensland	IntelliHUB
EnergyAustralia	Essential Energy	PlusES
Origin Energy	SA Power Networks	Yurika

Retailers	Distributors	Metering Service Providers
Red Energy and Lumo Energy	TasNetworks	

The Consultation is built on B2B Procedures version 3.9 (effective 1 December 2025).

**Table 4 Summary of Proposal**

Instrument	New/Amended
Data Posting Process	New
Technical Delivery Specification	Amended
B2B Guide	Amended
Customer Site Details Notification Process	Amended
Service Order Process	Amended
One Way Notification Process	Amended
Meter Data Process	Amended

## 1.2 Proposed Consultation plan

The proposed consultation plan is as follows:

**Table 5 Consultation Plan**

Stage	Start Date	End Date
Publication of Notice of Consultation and Issues Paper	7 May 2025	
Participant submissions to be provided to AEMO	7 May 2025	19 June 2025
Closing date for submissions in response to Issues Paper	19 June 2025	
IEC to consider all valid submissions and prepare Draft Report, including change-marked Procedures	19 June 2025	31 July 2025
Publication of Draft Report	31 July 2025	
Participant submissions to be provided to AEMO	31 July 2025	29 August 2025
Closing date for submissions in response to Draft Report	29 August 2025	
IEC to consider all valid submissions and prepare Final Report, including change-marked Procedures	29 August 2025	10 October 2025
Publication of Final Report	10 October 2025	

# 2. Proposed Changes

## 2.1 Basic Power Quality Data

### 2.1.1 Background

The Accelerating Smart Meter Deployment (ASMD) Rule provides DNSPs with better access to basic power quality data (PQD) to unlock a range of benefits for stakeholders.

PQD refers to the characteristics of the power supply as measured by the meter. The final rule introduces a new defined term for basic PQD which comprises measurements of voltage, current, and phase angle (basic PQD). The ASMD Rule does not define advanced PQD, but advanced PQD would include measurements in addition to those identified for basic PQD (advanced PQD).

For DNSPs, access to information about a small customer's electrical power supply is seen as increasingly important for the safe and efficient operation of the distribution system. Giving DNSPs better access to basic PQD is intended to support their understanding of the network, and is expected to allow DNSPs to:

- maximising CER hosting capacity
- reduce line losses
- minimise safety risks, such as through earlier detection of neutral integrity faults and voltage excursions at customer premises
- drive down costs within the distribution network by extracting the most value from the existing distribution network assets and optimising future investment decisions.

The proposed changes to basic PQD access and exchange arrangements are intended to promote better outcomes for consumers and the broader energy system by:

- improving standardisation in the structure, types, sequencing, and frequency of basic PQD provided across market participants
- reducing differences in exchange architectures or methods for basic PQD access
- addressing a potential lack of competitive pricing where basic PQD is required from a high percentage of sites.

The ASMD Rule:

- defines basic PQD
- allows local DNSPs, the AER and AEMO to access or receive basic PQD free of charge
- allows appointed MC, MPs, MDPs to access or receive basic PQD on commercial terms
- imposes responsibilities and requirements on MCs to enable better access for DNSPs
- makes consequential amendments to facilitate the basic PQD arrangements.

In consultation with stakeholders, AEMO will lead work to update its processes and procedures to further develop the basic PQD framework by:

- further defining basic PQD details and the basic PQD service, including the relevant NMI Standing Data
- designing the exchange architecture and service levels to enable the basic PQD service
- specifying any other matters to be included in procedures to ensure the successful implementation and enforcement of the basic PQD service.

The basic PQD arrangements in the ASMD Rule will apply to all small customer meters from 1 July 2026.

### 2.1.2 Proposal

The B2BWG received advice from AEMO, who is responsible for providing and operating the B2B e-Hub, that the Basic Power Quality Data communication from MCs to DNSPs will be using the fire and forget pattern in the new IDX platform.

In determining the most effective way of implementing the B2B PQD provisions, the B2B-WG and the IEC considered two options:

- Amending existing Procedures, such as the One-way Notification Process.
- Creating a new Procedure.

The B2B-WG concluded that due to the fire and forget pattern a new procedure is required.

Therefore, the IEC is proposing to create a new Procedure, in accordance with NER Chapter 7.17.3, titled the 'Data Posting Process' procedure. The Data Posting process is intended to enable Participants to send information or messages to other Participants where the Initiator requires confirmation of a successful delivery from the B2B e-Hub and does not require confirmation of a successful delivery from the Recipient.

The design of the Power Quality Data transaction considers the obligations defined in the ASMD Rule, AEMO's proposed Basic Power Quality Data Procedure, and the new IDX platform. A key consideration is that the MC is not required to store the data collected from the meter and is only required to deliver the data at least once per day. Therefore, the design of the B2B transaction enables flexibility for basic PQD for a National Metering Identifier (NMI) to be sent over multiple transactions.

For example, if a NMI has two meters, the basic PQD for each meter can be sent in separate transactions. Similarly, for a NMI with one meter, the voltage data can be sent in one transaction, the current data in another, and the phase angle data in a third transaction. While the design supports this flexibility, it also considers and balances the ease of processing by recipients of this data. To this end, it proposes a format that allows for a fully qualified data set rather than supporting a positional data payload.

To assist interested parties interpret the format of the PowerQualityData transaction as defined in the new procedure, a sample PQD message layout has been provided in section 5 – appendix A of this paper for illustrative purposes.

### 2.1.3 Questions

The IEC requests feedback to the following questions.

- |  |
|--|
| <p><b>Question 1:</b> Do you agree with the details contained in the new 'Data Posting Process' procedure? If no, please provide your proposed changes.</p> <p><b>Question 2:</b> Do you believe an alternative option/approach would better achieve the desired objectives? If yes, please provide your reasoning and details of your alternative approach.</p> |
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## 2.2 Removal of Technical Content from the Procedures

### 2.2.1 Background

The IEC proposes removing unnecessary technical references from the B2B procedures. These references currently constrain the procedures to specific technical solutions, which is both limiting and impractical. With the proposed implementation of the new IDX platform there will be new methods of communicating B2B transactions between participants, therefore it is essential to ensure the procedures remain technology-agnostic.

Specifically, all references to aseXML transactions will be removed from the B2B procedures, except for the B2B technical specification. This repositioning is considered largely editorial and is expected to have no impact on participants systems or processes. It will allow the procedures to focus on overarching processes and requirements, while the technical specifications provide the detailed instructions needed for implementation. By removing these constraints, the procedures will better support the evolving landscape of B2B communications, ensuring they are not limited by outdated or specific technical solutions. This adjustment is a crucial step in supporting contemporary and future communication methods.

### 2.2.2 Proposal

All references to aseXML will be removed from the following B2B procedures:

- Customer Site Details Notification Process

- Service Order Process
- One Way Notification Process
- Meter Data Process

With the removal of references to aseXML from the B2B procedures, a new section, section 1.6, has been added to the B2B Technical Delivery Specification to define the content, format, and delivery methods, as required under the Rule. In addition, section 1.6 references AEMO’s IDX technical specification documents to support B2B communications that will be transacted using the new IDX platform.

Minor editorial changes were also made to the B2B Technical Delivery Specification.

### 2.2.3 Questions

Question 3: Do you agree that the removal of references to “aseXML” in the core procedures is editorial in nature and does not introduce a system or process change to participants? If not, can you please provide details of the implications to your business?

Question 4: Do you agree with the addition and content of section 1.6 in the B2B Technical Delivery Specification? If not, can you please provide details of your concerns?

## 2.3 B2B Principles

The IEC considers that this B2B Issues Paper supports each of the B2B Principles, as follows:

B2B Principle	Justification
B2B Procedures should provide a uniform approach to B2B Communications in participating jurisdictions.	The B2B Procedures, in terms of transactions, are not jurisdiction-specific, therefore do not create any jurisdictional differences.
B2B Procedures should detail operational and procedural matters and technical requirements that result in efficient, effective, and reliable B2B Communications.	The B2B Procedures improve the communications and operational processes between participants through the development of consistent and defined information exchange.
B2B Procedures should avoid unreasonable discrimination between B2B Parties.	The B2B Procedures do not introduce changes that would unnecessarily discriminate between B2B Parties, as the changes are either optional or apply equally across all parties.
B2B Procedures should protect the confidentiality of commercially sensitive information.	The B2B Procedures do not introduce changes that would compromise the confidentiality of commercially sensitive information.

## 2.4 B2B Factors

The IEC has determined that the B2B Factors have been achieved as follows:

B2B Factors	Justification
The reasonable costs of compliance by AEMO and B2B Parties with the B2B Procedures compared with the likely benefits from B2B Communications.	The Changes will ensure continued compliance by AEMO and B2B Parties with the NER in addition to consistency between B2B Communications and business practices.
The likely impacts on innovation in and barriers to entry to the markets for services facilitated by advanced meters resulting from changing the existing B2B Procedures.	The B2B Procedures do not impose barriers to innovation or market entry. They provide clarity of required B2B communication which allows participants to streamline their operations, better meet regulatory requirements and allow for all relevant information to be contained within the Communications structure to allow for efficient processes.
The implementation timeframe reasonably necessary for AEMO and B2B Parties to implement systems or other changes required to be compliant with any change to existing B2B Procedures.	The IEC has undertaken significant work to allow industry sufficient time to implement the proposed changes to support the rule commencement date.

## 2.5 Benefits

The Change supports the following B2B Principles by establishing a mechanism for efficiently communicating Basic Power Quality Data information in a consistent and reliable manner, by:

- providing a uniform approach to B2B Communications in participating jurisdictions; and
- detailing operational and procedural matters and technical requirements that result in efficient, effective, and reliable B2B communications.

The Change supports the B2B Factors by:

- Clearly defining the actions that are required by the Sender and the Recipient to allow efficient Basic Power Quality Data communications.
- Updating the Technical Delivery Specification to provide a clear technical description of the various transactional changes, to ensure all parties can efficiently build systems and processes to receive and transmit them.

## 2.6 Costs

To efficiently implement the new Rule relating to Basic Power Quality Data, changes will be required to the B2B e-Hub to implement the new IDX platform and the new PowerQualityData transaction.

Participants should consider the costs, as well as risks, associated with the Change, including:

- The costs and resources they require to implement the Change, as well as their ongoing operational cost and resources.
- Their ability to implement the Change on the proposed dates, considering other known or upcoming industry changes, as well as internal projects.
- The impact of inefficiencies in the ASMD Rule and the potential for Civil Penalties to be applied.

## 2.7 MSATS Procedures

No conflicts have been identified associated to the B2B Proposal by AEMO with the Market Settlement and Transfer Solution Procedures.

## 2.8 Questions on proposed changes

**Question 3:** Do you have any other suggestions, comments, or questions regarding this consultation? If you have any comments outside of the scope of this consultation, please reach out to your relevant B2B-WG representatives.

# 3. B2B Proposal

The Change in the Proposal is detailed within the attached change marked B2B Procedures which are published with this Issues Paper.

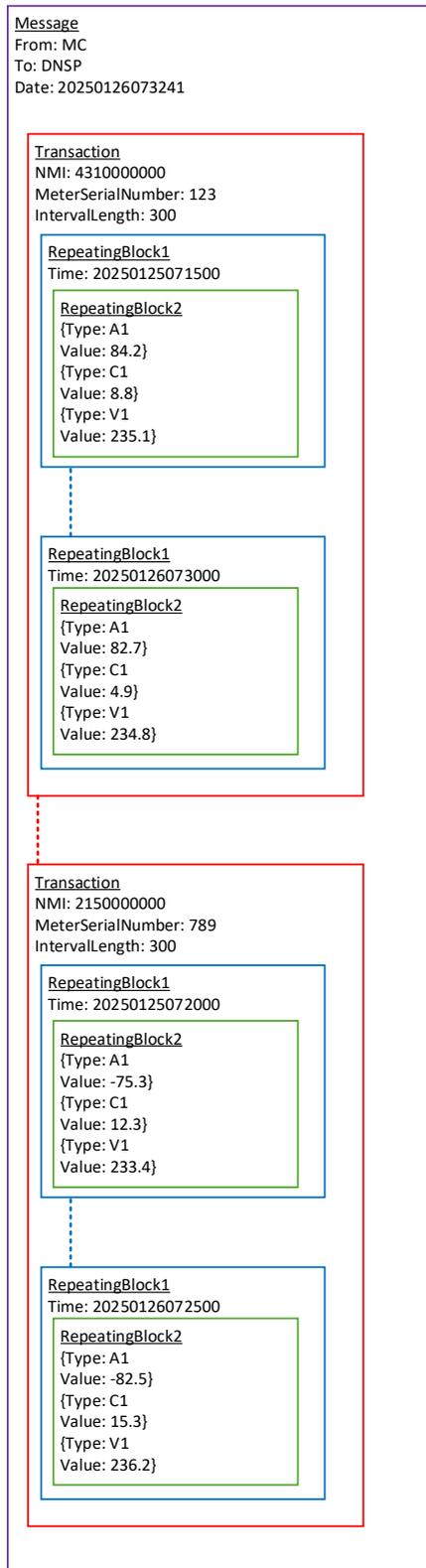
# 4. Glossary

This Issues Paper uses several terms that have meanings defined in NER. The NER meanings are adopted, unless otherwise specified.

Term	Definition
<b>AEMC</b>	Australian Energy Market Commission
<b>AEMO</b>	Australian Energy Market Operator
<b>B2B</b>	Business-to-Business
<b>B2B-WG</b>	Business-to-Business Working Group
<b>CSDN</b>	Customer and Site Details Notification
<b>DNSP</b>	Distribution Network Service Provider
<b>FRMP</b>	Financially Responsible Market Participant
<b>IDX</b>	Industry Data Exchange. A new technology platform AEMO is proposing for the B2B e-Hub
<b>IEC</b>	Information Exchange Committee
<b>LNSP</b>	Local Network Service Provider
<b>MC</b>	Metering Coordinator
<b>MFIN</b>	Meter Fault and Issues Notification
<b>MP</b>	Metering Provider
<b>MPB</b>	Metering Provider – Category B
<b>MSATS</b>	Market Settlements and Transfers Solution
<b>NEM</b>	National Electricity Market
<b>NER</b>	National Electricity Rules
<b>NERL</b>	National Energy Retail Law
<b>NMI</b>	National Metering Identifier
<b>SO</b>	Service Order

# 5. Appendix A

Below is a diagram depicting the structure of the proposed PowerQualityData transaction.



A message can have multiple transactions

A transaction can have multiple RepeatingBlock1

Each RepeatingBlock1 can have multiple RepeatingBlock2

Each RepeatingBlock2 can have multiple Type and a corresponding Value