TECHNICAL DELIVERY SPECIFICATION DISCUSSION PAPER

PURPOSE

The purpose of this paper is identify the main discussion points that need to be addressed to inform the drafting of the Technical Delivery Specifications. The main focus of this paper is to discuss the technical transmission and delivery of B2B messages through the e-Hub as well as the corresponding technical and business acknowledgement patterns.

BACKGROUND

Rule change No 12 of 2015, a date of 1 December 2017 has been set for changes to the B2B Procedures to take account of new metering competition arrangements and the operation of a new B2B e-Hub.

In early 2015, AEMO conducted a consultation with a stakeholder reference group to identify the B2B e-hub requirements to support the delivery of advanced metering services and the competitive metering market framework. The current B2B e-hub was considered to be unsuitable for the future environment.

Currently there is a single method in which participants communicate through the e-Hub. This is currently done through an FTP interaction with the MSATS B2B Handler using aseXML messages and payloads. This will change to include new methods in which participants can communicate allowing additional flexibility and efficiency when interacting with other participants through the e-Hub. There is also a requirement for messages to go from the initiator to both the service provider and associated secondary parties. This has changed B2B messaging from one to one to one to many.

The B2B e-hub requirements identified are presented below. These were reviewed with stakeholders at workshops run from March 2016 – May 2016 and were considered to still be an accurate reflection of market requirements when presented to the Transitional IEC on 16th July 2016

Key design requirements

- The B2B e-hub should be available 24 hours, 7 days a week, as a minimum to support a defined group of services.
- The B2B e-hub should support the following interfaces:
    - Current and future B2B services based on FTP;
    - Modern methods of exchanging information, such as web-services;
    - Senders and receivers not needing to use the same interfacing method; and
    - A low volume user interface.
- The B2B procedures and e-hub should:
    - Be capable of supporting one-to-one and one-to-many transaction management; and
    - Allow users to define which B2B parties are to receive each B2B communication

- The B2B e-hub could deliver additional value if it supports the sophisticated routing of transactions, including combined B2B and B2M transaction processing.
- The B2B e-hub should be capable of facilitating the transfer of communications within a 5 second time frame, whether via messaging, transaction delivery or peer-to-peer.
- The B2B e-hub must provide a peer-to-peer facility.

The B2B Working Group and AEMO have just finished drafting the new set of transactions to support the new arrangements. This includes new content for transactions as well as a new requirement for multi-party transactions. There will also be new e-Hub communication methods that will become available. Drafting this procedure is dependent on finalisation of business functionality requirements and an overall design of the new e-Hub. These new transactions, content and communication methods will result in significant changes to the B2B Procedure: Technical Delivery Specifications and there are still a number of outstanding items that need to be addressed through industry consultation.

DISCUSSION

B2B PROCEDURE: TECHNICAL DELIVERY SPECIFICATIONS

The B2B Working Group and IT Working Group will be engaged to provide guidance on the technical transactional requirements being driven by the B2B Working Groups. AEMO will generate discussion papers and workshop packs to discuss the key technology changes to the e-Hub and the outcome of these workshops will provide material to assist AEMO in drafting a new procedure to replace the B2B Procedure: Technical Delivery Specifications.

Parts of the current *B2B Procedure: Technical Delivery Specification and B2B Procedure: Technical Guidelines* will be combined to form the new B2B technical specification document.

AEMO will be open to industry participants identifying other technical items that will need to be addressed during the course of the consultation.

KEY AREAS FOR DISCUSSION:

There are a few key discussion points that AEMO require participant input in relation to the new functionality proposed by the procedures. In addition to the working group feedback, AEMO will be asking industry through the consultation to provide feedback on the following areas that will form the structure and content of the Technical Delivery Specifications Procedure.

A particularly significant area for consultation is the practical implementation of the one-to-many requirement that is embodied in the Service Order Procedures where the concept of Notified Parties for Service Orders and Service Order responses is introduced. It is recognised that the one-to-many model introduces a number of technical challenges which are not consistent with the bi-lateral model of the current b2B Hub.

A second significant departure from the current implementation is implied by three of the key requirements:

1. That the hub supports 'Modern methods of exchanging information, such as web-services'

2. That 'Senders and receivers [are] not needing to use the same interfacing method'

3. That the hub will support 'Current and future B2B services based on FTP'

This discussion paper seeks input from participants on a range of matters which relate to these significant changes:

1. FTP Delivery methods - The current method and protocols used to communicate with the B2B e-Hub will continue to operate as they do today. There are no changes proposed to how participants communicate using this method other than the scenario where 'notified parties' are present. This however will not change how participants interact with the E-hub using FTP.
   1.1. No changes?

2. FTP Acknowledgement Patterns - The acknowledgement patterns will change to support the new multiple recipient interactions between participants. However if it is an FTP to FTP with a single recipient there will be no change.
   2.1. No Changes to FTP Acknowledgement patterns for one to one communications?

3. New delivery protocols - The new SMP platform will provide additional communication protocols to enable instantaneous messaging for participants. As well as the other functionality supported by the new B2B e-Hub.
   3.1. What is the new delivery protocol (s) proposed by AEMO?
   3.2. Are there any other protocols that need to be considered?
   3.3. What transaction types are these protocols they applicable for?
   3.4. If more than one protocol' was offered by the B2B hub, how will participants specify their preference?

4. New e-hub interoperability - The new e-Hub will allow participants using different communication protocols to continue to interact. The B2B e-Hub will have the functionality to transform messages from one protocol to another.
   4.1. What interchangeable protocols are available to participants?
   How will the e-Hub support multiple delivery protocols?

5. New e-hub acknowledgement patterns – The new communication protocols are under review to determine how the acknowledgement patterns will work. The objective is to have them interact in a similar way to FTP.
   5.1. Will there be any difference in acknowledgement patterns for the different protocols?
   5.2. What are the new acknowledgement patterns for the new protocol(s)?
   5.3. New e-hub multiple messaging acknowledgement patterns?

6. New e-hub many to one messaging (to accommodate Notified parties for Service Orders)
   6.1. Will the recipient of an information only message MACK it or MACK and TACK it?
   6.2. If a participant TACKs an information only message should this go back to the initiator of this message? Is so what happens to the message if it's a Negative TACK?
   6.3. What will the process be if a message notification (i.e. a Service Order Notification) is sent to the wrong participant by the initiator?
   6.4. How will the information only recipient (the Notified party) know if a transaction has been rejected, should they receive a copy of the negative MACK?
   6.5. How might these work for a 'synchronous' delivery method? Any changes?
   6.6. Message bundling for multiple TO parties, how will this work?

7. New e-hub validations
   7.1. What are the current validations?
   7.2. What additional validations are required to support the new functionality?

8. Contingency
   8.1. Is the current contingency component in the technical delivery specifications sufficient to continue into the new document?

9. Other changes to the procedures
    9.1. aseXML transactions and acknowledgements will move from the Technical Guidelines into this new procedure.
    9.2. The Participant-managed details i.e. ROCL description and obligations - will be removed and will be published separately AEMO on the AEMO website.
    9.3. AEMO will remove defined terms into the Retail Glossary and Framework
    9.4. Event codes are being moved from B2B Procedure: Technical Guidelines into each relevant B2B Procedures.

NEXT STEPS

Participants to review the key areas for discussion and prioritise and populate the template below.

Participants to review the current B2B Procedure: Technical Delivery Specification to prepare for the future working groups and to identify key areas of focus. Participants to populate the below template and return to AEMO.

The B2B Working Group and Systems Working Group will work together to determine the technical requirements of the B2B communications and the new e-Hub itself using feedback from this process.

Each group will meet during October and November to refine and document these requirements – and these will feed back into the drafting of the new technical document for consultation.

The first stage of the consultation is scheduled to end November/December and, at this time, industry feedback will be collated and summarised to feed into the drafting of the new technical document.

A Draft document will be published with all other draft B2B Procedures in December 2016 in time for the second stage of the consultation.