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B2B GUIDE

PREPARED BY:
VERSION: 1.0
EFFECTIVE DATE: 01 December 2017
STATUS: FINAL

Approved for distribution and use by:

APPROVED BY: IEC
TITLE: [Title]

DATE: 6/03/ 2017

VERSION RELEASE HISTORY

Version	Date	Author	Comments
1.0	6/3/2017		Initial version created as part of changes related to National Electricity Amendment (Updating the Electricity B2B Framework) Rule 2016 No. 6.

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1. INTRODUCTION

1.1. Purpose and Scope

- (a) This B2B Guide has been developed as a result of changes to the B2B Framework. These resulted from the Rule changes in relation to the Shared Market Protocol and Metering Competition, effective 1 Dec 2017. Certain content in the B2B Procedures up to v2.2 was no longer appropriate in a Procedure due to the nature of the Rule changes. However it was acknowledged that this information regarding standard business practices was still useful for participants to understand how industry processes are typically carried out.
- (b) This Guide describes how B2B Communications are typically used in standard processes in the NEM. It aims to provide interested parties with an understanding of how B2B Communications defined in the B2B Procedures are used in the context of the broader industry scenarios, and to assist participants when forming their respective bilateral/commercial agreements.
- (c) While this document provides guidance on B2B Communications it does not cite regulation related to the messages described within. Participants should consider the relevant regulatory instruments to determine where obligations on parties reside.
- (d) This Guide does not include rules (which must be followed) but instead describes typical business practices (which other businesses may expect to be followed).
- (e) This Guide includes reference to both Regulated and Non Regulated services and service providers across the NEM.
- (f) To the extent of any inconsistency between this Guide and any relevant Law, Rules, Procedures, or jurisdictional instrument, the relevant jurisdictional instrument shall prevail to the extent of the inconsistency.
- (g) Where indicated that additions and changes have been made, this is generally referring to the differences between version 2.2 and version 3.0 of the B2B Procedures.

1.2. Document Control

- (a) As this B2B Guide is not a B2B Procedure under the Rules, this document may be updated without the need for formal consultation. To make the guide as useful as possible Industry participants are encouraged to propose changes where they see improvement can provide value.
- (b) This document will be maintained and updated in line with any changes to the B2B Procedures and provided as supporting documentation as part of a B2B Procedure consultation.
- (c) This document can be updated outside of any B2B Procedure consultation.
- (d) The IEC will be responsible for maintaining this document and any suggestions for amendments or inclusions should be put forward to the IEC via your industry representative.

1.3. Related Documents

Title	Location
Retail Electricity Market Procedures – Glossary and Framework	http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Glossary-and-Framework
B2B Procedure: Service Order Process	http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Business-to-business-procedures
B2B Procedure: Meter Data Process	http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Business-to-business-procedures
B2B Procedure: Customer and Site Details Notification Process	http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Business-to-business-procedures
B2B Procedure: One Way Notification Process	http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Business-to-business-procedures
B2B Procedure: Technical Delivery Specifications	http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering/Business-to-business-procedures

1.4. Guidance Notes

Within the various B2B procedures Guidance Notes, shown as [Guidance Note #], have been incorporated. These are intended to point the reader to the relevant instrument which provided the basis for the B2B process or timing. These were incorporated during the development of V3.0 of the B2B Procedures based on a directive from the IEC following legal advice being received by the IEC.

2. CONTEXT AND SUMMARY OF THE B2B CHANGES

- (a) Metering Competition introduces a range of competitive services into the Electricity Industry that result in significant change to the pre-existing operating models. As a result, the proposed B2B processes have undergone review and change to:
- (i) cater for the separation of responsibilities between metering services and DNSP provided services,
 - (ii) cater for the need to share information between different parties who may have an interest in a single customer supply point, and
 - (iii) support the remote capabilities of smart meters.
- (b) The Service Order Procedures have undergone significant change. There is a clear distinction between a range of regulated electricity supply related services offered by DNSPs and a different set of metering related services offered by competitive Metering Providers. To cater for this, the terminology used in the service order process has been changed to include two groups of services:
- (i) Supply Service Works, which are typically undertaken by the DNSP; and
 - (ii) Metering Service Works, which are typically undertaken by the Metering Service Provider.
- (c) The Service Order Procedure introduces a mandatory field for all service order requests to indicate whether the service order relates to a Life Support Customer or not. Where the initiator of a Service Order has the site registered in their systems as life support then this field should be used.
- (d) The Service Order Procedure includes the capability to include a Notified Party into the process. The intention of this is to provide information to parties who are affected by a service order request but not involved directly in the provision of the requested service. When populated within the Service Order transaction, the Notified Parties are provided information relating to the Service Order to be informed of the status prior to the service being rejected, commenced and on completion/not completed of the service. The action type of cancellation for a service order will trigger a not completed service order response for the original service order that the cancellation was sent for. This not completed status would be sent to the notified party.
- (e) The Customer and Site Details Notification Procedures have been changed in the following areas.
- (i) Site access and hazard processes have been extended to allow greater sharing between the multiple parties that have an interest in the data.
- (f) The One Way Notification procedures have been expanded to cater for the exchange of additional information between participants in the following way:
- (i) The One Way Notification protocol has been expanded to support both CSV and XML payloads.
 - (ii) Three new processes have been developed to provide a communication tool to help participants meet their obligations under the Rules relating to planned interruptions, informing Retailers of meter faults and failures, and advising DB's that MP's have completed some work at a site. A fourth transaction was created for participants to use for Notified Parties. These are:
 - (A) The Planned Interruption Notification has been included to provide a communication tool to allow a participant to meet their obligations under the NERR to inform parties of a planned outage.
 - (B) The Meter Fault and Issue Notification has been included to support the obligation under the Rules for the MP/MC/DNSP to inform the Retailer about meter installation malfunctions. Could also be used by the MP to advise their

- (C) The Notice of Metering Works has been included to facilitate the effective exchange of information after a meter installation has changed. This facility has been requested by Industry participants for some time but had been deferred for later consideration under Power of Choice.
- (D) A Notified Party Transaction Data Notification has been designed to support the new Notified Party Model. Participants using the functionality of the e-hub to deliver Notifications or to deliver these messages themselves.
- (g) The Meter Data Process has been changed to include new remote services that are required to support features under the Minimum Services Specification for meters enabled with remote access capabilities. There have also been some minor change to the Verify Meter Data process which has been included as a result of Industry requests that had previously been deferred for later consideration during Power of Choice.

3. DIAGRAMS DEPICTING BOUNDARIES BETWEEN DB'S & MP'S

The diagrams below are high level diagrams of the boundaries between the distribution responsibilities and the metering providers responsibilities that have been introduced due to metering competition.

Figure 1 Typical Underground Installation

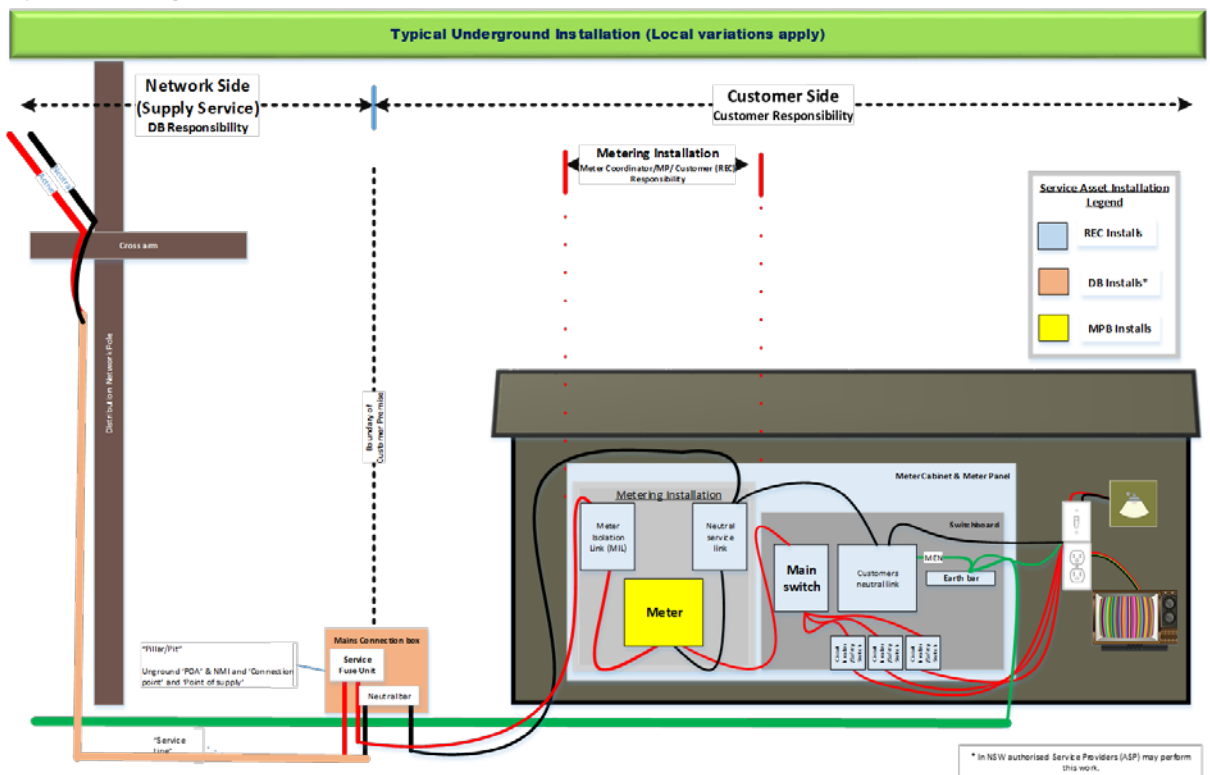
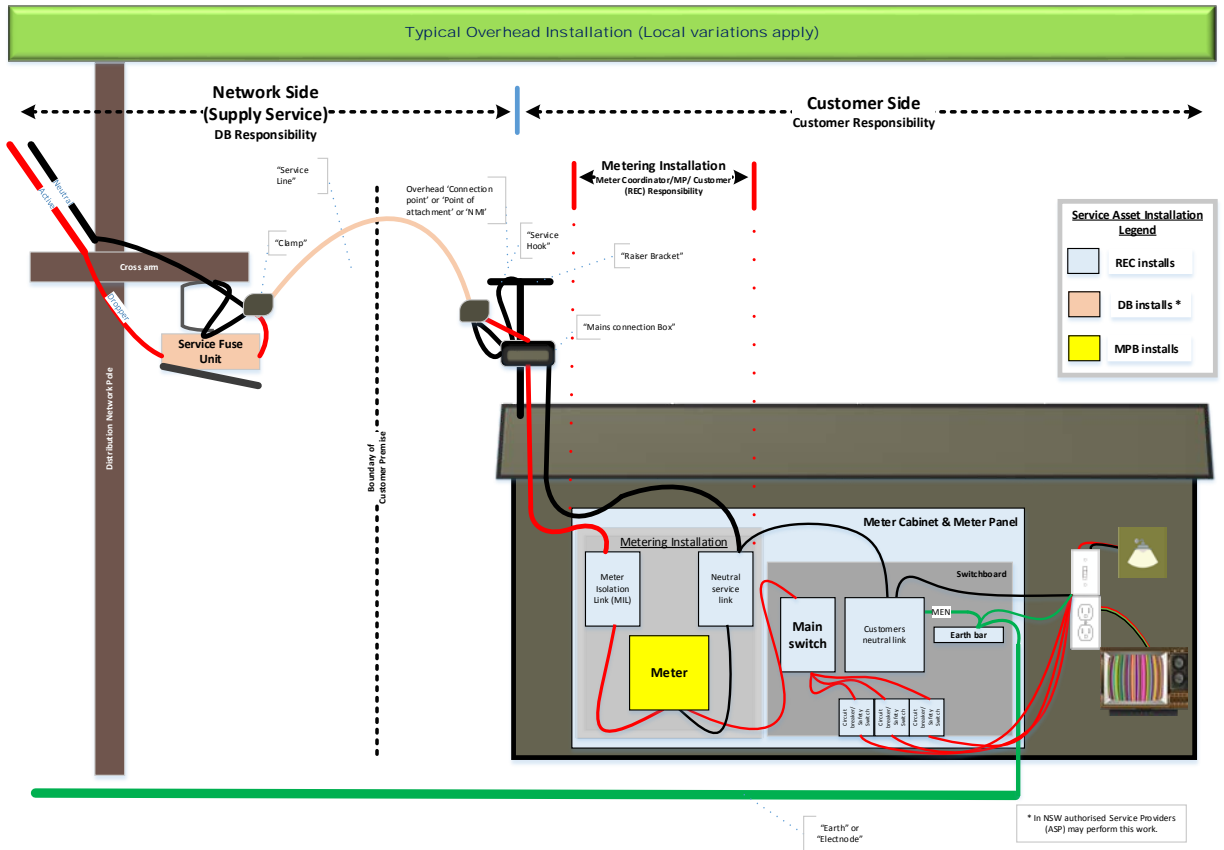


Figure 2 Typical Underground Installation



4. COMMUNICATIONS MODEL

- (a) Where possible, references to specific roles have been replaced with the more generic terms Initiator, Recipient and Notified Party(ies). This allows the B2B Procedures, and therefore the usage of B2B Communications to be more flexible by not restricting a specific participant role to either initiate a request or respond to a request. The aim is to allow the B2B Communications to cater for various business models and processes depending on the contractual/bilateral agreements made between parties.

4.1. Initiator

- (a) The initiator is the party who initiates the Service Order, CSDN, One Way Notification and Meter Data Requests..
- (b) In some specific instances, certain B2B Communications can only be initiated by certain roles and these are specified in those parts of the Procedures.

4.2. Recipient

- (a) The Recipient is the party who receives the Service Order, CSDN, One Way Notification or Meter Data Requests and is responsible for performing the requested action.
- (b) For a given request, there is only one recipient. For works that require multiple parties to carry out certain tasks, each party will receive a separate B2B communication from the Initiator requesting work to be done.

4.3. Notified Parties

- (a) The Notified Party is a party with an interest in the site who can be advised when an Initiator sends a Service Order Request to a Recipient for action. The intent of a notification is to give related parties visibility of activities undertaken by a Recipient.
- (b) Notified parties who receive a notification are not being requested by the Initiator to take any action. A Notified Party may, however, choose to use a notification as a trigger for any internal business process that they so choose.
- (c) It is the responsibility of the party receiving the B2B Communication as a Notified Party to process the notifications as they see fit.
- (d) Notified parties should only reject a notification if it relates to a NMI that they are not responsible for. All other data provided in the message to the Notified party is for information purposes only, and the Notified party must not reject the notification on the basis of that content. If the Notified Party has concerns about the content they are receiving in these messages – they should contact the Initiator to discuss and resolve the concern.
- (e) The suggested Notified Parties for each B2B Communication is defined in Table 1. .

4.3.1. Identification of Notified Parties

- (a) The notified party can be one or many participants. It is the responsibility of the Initiator to determine which parties should receive notifications.
- (b) It is expected that the DNSP will wish to be a notified party when there are physical changes at a site (eg meter change, de-energisation, re-energisation) and they need to know about this change in advance of MSATS updates. Other non-urgent changes, such as meter reconfiguration, can be determined through MSATS updates and therefore informing Notified Parties may not be required.
- (c) Meter Coordinators, Meter Providers and Meter Data Providers all have an interest in changes which may be affected by the DNSP, most commonly de-energisation for instance.
- (d) Which of these meter service providers require a notification is dependent on the contractual arrangements between the initiator and the Metering Coordinator and the Meter Provider/Meter Data Provider.

- (e) If the Meter Coordinator, Meter Provider and Meter Data Provider are all part of one business they may indicate that one notification is appropriate.
- (f) If however, the Meter Coordinator is one business and the Meter Provider and Meter Data Provider are a separate business, then all three parties may require a notification.

4.4. Business Communications Model Changes

- (a) For transactions only between an Initiator and a Recipient, the Business Communication Model remains unchanged. That is, there will continue to be BusinessReceipt and BusinessAcceptance/Rejections exchanged between participants
- (b) For Service Order transactions only, the Initiator has the ability to include a list of Notified Parties in the Service Order content. These parties will receive a Notified Party transaction which will contain details of the Service Order.
- (c) Initiators can include the list of Notified Parties within the ServiceOrder Request leaving the management of routing the Notifications associated with the Service Order to the e-Hub. Alternatively an Initiator can manage the communications of these Notifications using the Notified Party transaction.
- (d) The Initiator is responsible for ensuring that the relevant notified parties are informed of service orders and the status of those service orders. This can be done using the functionality of the e-hub or by generating the specific notifications independently of the e-Hub.
- (e) Notified Parties will follow the current Business Communication Model for message acknowledgement. That is, when Notified Party Notifications are received (as OneWayNotification messages), Notified Parties will acknowledge these with BusinessReceipt and BusinessAcceptance/Rejections as appropriate.
 - i. When an initiator elects to use NotifiedParty transaction to notify the Notified Parties, the Notified Parties will follow the current Business Communication Model for message acknowledgement, i.e. Notified Parties will acknowledge these with BusinessReceipt and BusinessAcceptance/Rejections as appropriate and these acknowledgements will be returned to the Initiator in their original form.
 - ii. When an initiator elects to use e-hub functionality to notify the Notified Parties, the Notified Parties will follow the current Business Communication Model for message acknowledgement, i.e. Notified Parties will acknowledge these with BusinessReceipt and BusinessAcceptance/Rejections as appropriate however these will be intercepted by the e-hub allowing the Initiator to be informed about the response from the Notified party when exceptions occur. BusinessReceipts will not be returned to the Initiator however will be retained in the e-hub for debugging or investigation purposes; A BusinessAcceptance issued by the Notified Party will be trapped in the e-Hub and if the Initiator has elected to be informed of these, will receive a NotifiedParty transaction with a NotificationStatus of "Accepted by Notified party". If the Notified party issues a BusinessRejection it will be transformed by the e-Hub and returned to the Initiator as a NotifiedParty transaction with a NotificationStatus of "Rejected by Notified party".
- (f) When rejected notifications (either via a BusinessAcceptance/Rejections or NotifiedParty transaction) are forwarded to the initiator for resolution, the cause of the rejection will need to be determined and appropriate action should be taken. This may involve Initiator sending a separate NotifiedParty transaction to the correct Notified Party (if . If Service Order number (RB Reference Number or similar) is provided in the NotifiedParty transaction sent by the Initiator, the e-Hub will link this transaction to the original Service Order and send any future NotifiedParty transactions to the corrected notified parties. Alternatively it could involve the Initiator examining their process for determining which parties are to be Notified Parties and improving that process for future Service Orders. Initiators should use best endeavours to ensure that they correctly identify and inform Notified Parties for any Service Orders they issue

– otherwise inefficiencies and extra costs may be borne by all parties which could otherwise have been avoided

- (g) Notified Parties play no role in a Service Order transaction. The transaction copies are provided for information only. A Notified Party may choose to use the information provided as a way of determining what impact work assigned to other parties will have.
- (h) Further details on the methods by which an Initiator can communicate with a Notified Party are covered in the B2B Procedure: Service Order Process, the B2B Procedure: One Way Notification Process and the B2B Procedure: Technical Delivery Specifications

5. TABLE OF B2B COMMUNICATIONS

5.1. B2B Transactions and Participants

- (a) Table 1 below describes which party typically fulfils the roles of Initiator, Recipients and Notified Parties for each Service Order, One Way Notification, CSDN and Meter Data communication.
- (b) It is important to be aware that while this table provides guidance on these roles, it is the regulatory framework (National and jurisdictional) and bi-lateral agreements that will determine which parties participate in these transactions.
- (c) Participants need to consider existing regulations to determine which parties are entitled to request, perform and have access to the service or data being requested.
- (d) The use of Notified Parties is optional, the rationale for creating this transaction was to provide information to parties who were not performing the work, this allowed them some visibility as to what is happening at the site to enable them to provide information to a customer if they should make contact with them.

Key	Description
RB	Retailer (This may be the Current FRMP in MSATS or may be a Prospective Retailer or a Local Retailer)
DB	Distributor (This will always be the current DNSP in MSATS)
MP	Meter Provider (This may be the Current MP in MSATS or a Prospective MP)
MDP	Meter Data Provider (This may be the Current MDP in MSATS or a Prospective MDP)
MC	Meter Coordinator (This may be the Current MC in MSATS or a Prospective MC)
ENM	Embedded Network Manager (This will be the current ENM)
X	Not applicable

Table 1 : Table of B2B Transactions and Typical Participant combinations

B2B Procedure	Transaction Type	Sub Type	Purpose	Initiator/s	Recipient	Notified Parties
Service Orders	Supply Service Works	Allocate NMI	The first step in a new connection process	RB	DB/ENM	X
Service Orders	Supply Service Works	Establish Permanent Supply	Establish supply - Part of overall new connections process. This service order is not required in NSW whilst the Accredited Service Provider Scheme is in operation for service works.	RB	DB	MDP / MP / MC
Service Orders	Supply Service Works	Establish Temporary Supply	Establish supply - Part of overall new connections process. This service order is not required in NSW whilst the Accredited Service Provider Scheme is in operation for service works.	RB	DB	MDP / MP / MC
Service Orders	Supply Service Works	Establish Temporary in Permanent	Establish supply - Part of overall new connections process. This service order is not required in NSW whilst the Accredited Service Provider Scheme is in operation for service works.	RB	DB	MDP / MP / MC
Service Orders	Supply Service Works	Supply Abolishment	Abolish supply	RB	DB	MDP / MP / MC
Service Orders	Supply Service Works	Supply Alteration	Alter the supply (eg upgrade service to multi-phase / move). This service order is not required in NSW whilst the Accredited Service Provider Scheme is in operation for service works.	RB	DB	MDP / MP / MC
Service Orders	Supply Service Works	Tariff Change	A request from a retailer to change a customer's network tariff	RB	DB	X
Service Orders	Supply Service Works	Temporary Isolation	Temporary supply Isolation to facilitate 3rd party metering works or other. This service order is not required in NSW whilst the Accredited Service Provider Scheme is in operation for service works.	RB	DB	MDP / MP / MC
Service Orders	Supply Service Works	Temporary Isolation – Group Metering	Tempory supply isolation where multiple NMI's are connected to one supply point.	RB	DB	MDP / MP / [MC]
Service Orders	Metering Service Works	Change Timeswitch Settings	Change the timeswitch settings.	RB	DB	MP / MC
Service Orders	Metering Service Works	Exchange Meter	Swap an existing meter or meter installation to a new one	RB or MC	MP	DB / MDP
Service Orders	Metering Service Works	Install Controlled Load	Install or set up Controlled Load devices, including hot water	RB or MC	MP or DB	DB / MDP / MC
Service Orders	Metering Service Works	Install Meter	Install one or more meters or metering installations	RB or MC	MP	DB / MDP / MC
Service Orders	Metering Service Works	Move Meter	Move the location of a meter	RB or MC	MP (or DB for Type 5/6)	MDP / DB / MC

B2B Procedure	Transaction Type	Sub Type	Purpose	Initiator/s	Recipient	Notified Parties
Service Orders	Metering Service Works	Remove Meter	The removal of one or more <i>meters</i> is required. The removal of redundant <i>meters</i> . A Remove Meter used to remove the last meter on site should be accompanied with a Supply Abolishment sent to the DNSP.	RB or MC	MP (or DB for Type 5/6)	DB / MDP / MC
Service Orders	Metering Service Works	Meter Investigation – Inspect	Inspect meter and report	RB or MC	MP (or DB for Type 5/6)	MDP / MC
Service Orders	Metering Service Works	Meter Investigation - Meter Test	Perform meter test	RB or MC	MP (or DB for Type 5/6)	MDP / MC
Service Orders	Metering Service Works	Reseal Device	Device seal is missing and requires replacement	RB or MC	MP (or DB for Type 5/6)	MDP / MC
Service Orders	Metering Service Works	Meter Reconfiguration	Reconfigure meter (eg Remotely re-program)	RB or MC	MP (or DB for Type 5/6)	MDP / MC
Service Orders	Re-energisation	After Disconnection for Non payment	Re-Energise the customer after a disconnection for Non-payment	RB	DB or MP or MC	MDP / DB / MP / MC
Service Orders	Re-energisation	Remote	Re-Energise the customer via Remote communication with the meter	RB	DB (VIC) or MP or MC	MDP / DB / MP / MC
Service Orders	Re-energisation	Retrospective Move-in	When a move-in reading is required for an already Energised Site.	RB	DB or MP	MDP / DB / MP / MC
Service Orders	Re-energisation	New Reading Required	Re-Energise the customer via a site visit. If the site is already energised then collect a Reading	RB	DB or MP	MDP / DB / MP / MC
Service Orders	Re-energisation	Physical visit	Re-Energise the customer via a site visit	RB	DB or MP	MDP / DB / MP / MC
Service Orders	Re-energisation	Recipient Discretion	Re-Energise the customer using recipients standard business process	RB	DB or MP or MC	MDP / DB / MP / MC
Service Orders	De-energisation	Pillar Box Pit Or Pole-Top	De-Energise the customer at a point upstream of the point of attachment	RB	DB	MDP / MP / MC
Service Orders	De-energisation	Remove Fuse	De-Energise the customer via removal of the service fuse	RB	DB	MDP / MP / MC
Service Orders	De-energisation	Remote	De-Energise the customer using remote means	RB or MC	DB (VIC),MP or MC	MDP / DB / MC
Service Orders	De-energisation	Local Meter Disconnection	De-Energise the customer through local operation of in-built meter contactor	RB	DB/(VIC) / MP	MDP / DB / MP / MC
Service Orders	De-energisation	Recipient Discretion	De-Energise the customer via a method chosen by the service provider	RB or MC	DB or MP or MC	MDP / DB / MP / MC
Service Orders	Special Read	Check Read	Obtain a meter reading	RB	MDP (or DB for Type 5/6)	X
Service Orders	Special Read	Final Read	Obtain a meter reading	RB	MDP (or DB for Type 5/6)	X
Service Orders	Special Read	No Sub Type	Can be used when a Retailer requires a transfer on a special read.	RB	MDP (or DB for Type 5/6)	X

B2B Procedure	Transaction Type	Sub Type	Purpose	Initiator/s	Recipient	Notified Parties
Service Orders	Miscellaneous Services	No Sub Type - Ignore if populated	An ad-hoc service request	Any	Any	Any
Customer and Site Details Notification	Customer Details Request	No Sub type	Request from a DNSP or an MP to a Retailer to supply the Customer and Life-support details	DB or MP or MC	RB	X
Customer and Site Details Notification	Customer Details Notification	No Sub type	Customer and Life support details issued to DNSP or MP after update or on request	RB	DB or MP or MC	X
Customer and Site Details Notification	Site Access Request	No Sub type	Request from a Retailer to obtain a copy of the Site access and hazard information.	RB or MP or DB or MC	RB or MP or DB or MC	X
Customer and Site Details Notification	Site Access Notification	No Sub type	Publication of Site access and hazard information. Typically this is from a Retailer to a DNSP or MP whenever the data changes, but can also be from a DB or MP to a Retailer based on receiving a site access request	RB or DB or MP or MC	DB & MP or RB or MC	X
One Way Notifications	Notice of Metering Works	No Sub type	Informs the DNSP about the details of a recently completed metering works	MP or MC	DB	X
One Way Notifications	Meter Fault and Issue Notification	No Sub type	Informs a retailer about a meter fault. Can be from an MP, MC or a DNSP in the case of Type 5 and 6 meters.	MP or DB or MC	RB	X
One Way Notifications	Planned Interruption Notification	No Sub type	Informs a DNSP about planned interruptions on the network	RB or MC	DB	X
One Way Notifications	Network Tariff Notification	No Sub type	Informs a Retailer about an intent to change network tariffs	DB	RB	X
One Way Notifications	Meter Exchange Notification	No Sub type	A transaction to support forward planning of bulk meter rollouts.	RB or MP or MC	Any	X
One Way Notifications	Notified Party	No Sub Type	A special purpose transaction used to inform Notified parties of the state of a service order process	RB or MC	Any	X
Meter Data Process	Provide Meter Data	No Sub type	Request to provide meter data	RB or DB or MDP	MDP	X
Meter Data Process	Verify Meter Data	No Sub type	Request to verify meter data	RB or DB or New MDP	MDP / old MDP	X
Meter Data Process	Meter Data Notification	No Sub type	Provision / delivery of meter data to market participants	MDP	RB or DB or MDP or MC	X
Meter Data Process	Remote Service Request	No Sub type	Request to invoke a remote services function. Directed to a remote meter via Service provider	DB or RB or MC	MP or MC	X

B2B Procedure	Transaction Type	Sub Type	Purpose	Initiator/s	Recipient	Notified Parties
Meter Data Process	Remote Service Response	No Sub type	Provision of meter status and electrical measurements and events from a remote meter	MP or MC	DB or RB or MC	X

6. USAGE SCENARIOS

6.1. Service Orders

6.1.1. Establishing a new customer service (a new connection)

- (a) As multiple parties will be involved in actioning and completing what was previously known as a New Connection Service Order a range of new separate Service Orders with associated Notifications have been created to facilitate the overall communications for this process.
- (b) This process is considered the most complex of the high-volume services undertaken in the market.
- (c) These transactions can be used in different sequences to facilitate the different jurisdictional and safety requirements that impact on the sequence of steps for a new connection in different Jurisdictions.
- (d) A typical process in establishing a new connection service, depending on the jurisdiction, would reasonably expect to follow the following steps:
 - (i) Customer or authorised party, engages a Retailer and requests to be connected. Any prerequisite work required to enable connection of supply is expected to have completed prior to contacting the Retailer. E.g. (Network infrastructure or augmentation - this may involve the Customer/REC directly contacting the DNSP to determine any specific supply requirements).
 - (ii) When the site is ready for energisation the Retailer sends an Allocate NMI Request to the DNSP. The DNSP reviews the accompanying paperwork (as defined by jurisdictional requirements), and may also complete further analysis e.g. site check before accepting the request. The DNSP creates the NMI, sends a response to close the Allocate NMI SO Request and also generates a Create NMI CR to MSATS.
 - (iii) Notified Party(ies) are not required for the Allocate NMI Request as participants associated with the new NMI will receive the COM notification via MSATS.
 - (iv) Until the Allocate NMI CR has passed the objection period and is at least at PEND in MSATS, no other service order can be raised, as all other service orders require the NMI.
 - (v) After obtaining the NMI the Retailer or MC can then initiate the service orders to allow the field work to commence.
 - (vi) There are two basic service orders that the Retailer would raise. Depending on the jurisdiction and agreements with participants these transactions may be issued in a particular sequence, or raised concurrently. The transactions could include:
 - (A) Metering Works Service order with Subtype 'Install Meter'
 - (B) Supply Works Service Order with Subtype 'Establish Permanent Supply'

Metering Service Works

- (a) The Retailer (or MC) raises a Metering Service Works Service Order directed to the MP, with a subtype of "Install meter" and provides the necessary information in the Service Order to allow the MP to correctly identify the type of metering equipment that must be installed.
- (b) After receiving a Metering Works Service Order with Subtype 'Install Meter', the MP schedules and installs the meter and provides a SO Response. If the work was completed successfully, then the MP will send a Notice of Metering Works (NMW) to the DNSP. It will also generate the Create Metering Installation Details CR in MSATS.

Supply Service Works

- (a) The Retailer will send the DNSP a Supply Works Service Order (except in NSW) with Subtype 'Establish Permanent Supply or Establish Temporary Supply or Establish Temporary in Permanent',
- (b) The DNSP will check that any additional paperwork provided at this point is acceptable. Providing all paperwork is in order, the DNSP schedules and attempts to connect the supply for the NMI. The DNSP provides the Service Order Response to the Initiator, as well as generate the Change NMI CR to update the NMI Status in MSATS.
- (c) Participants must be aware that there are jurisdictional differences that impact the order of the field work and therefore the sequence of Service Orders requests.
 - (A) In some jurisdictions the supply service may need to have been established prior to the Meter Install. In this case, the MP could choose to require the Initiator to only send the Service Order once the supply service has been installed or could choose to rely on the fact that they are a Notified Party to a 'Supply Works- Establish Permanent' Service Order, as a trigger for their field work. These process sequence details are up to negotiation between participants.
 - (B) In some Jurisdictions, the DNSP may require the meter to have been installed prior to the supply being established, tested and energised. In this case, the DNSP could choose to require the Retailer to only send the Service Order once the meter has been installed or could choose to rely on the fact that they will receive a Notice of Metering Works (NMW) transaction once the metering has been installed, as a trigger for their field work. These details are up to negotiation between participants.
 - (C) In NSW the customer engages a service provider directly (under the Accredited Service Provider Scheme). The metering service provider assigned by the Retailer will install the required metering and co-ordinate with the ASP for connection of supply.

6.1.2. Example Process Flows – New Customer Service

- (a) In this section a series of process diagrams are shown that depict example sequences for undertaking a process to establish a new Customer service in various jurisdictions.
- (b) This document does not prescribe the sequence that must occur, as that will be subject to specific (and possibly changing) jurisdictional safety requirements and is subject also to the preferred operating model of the participants in each jurisdiction.

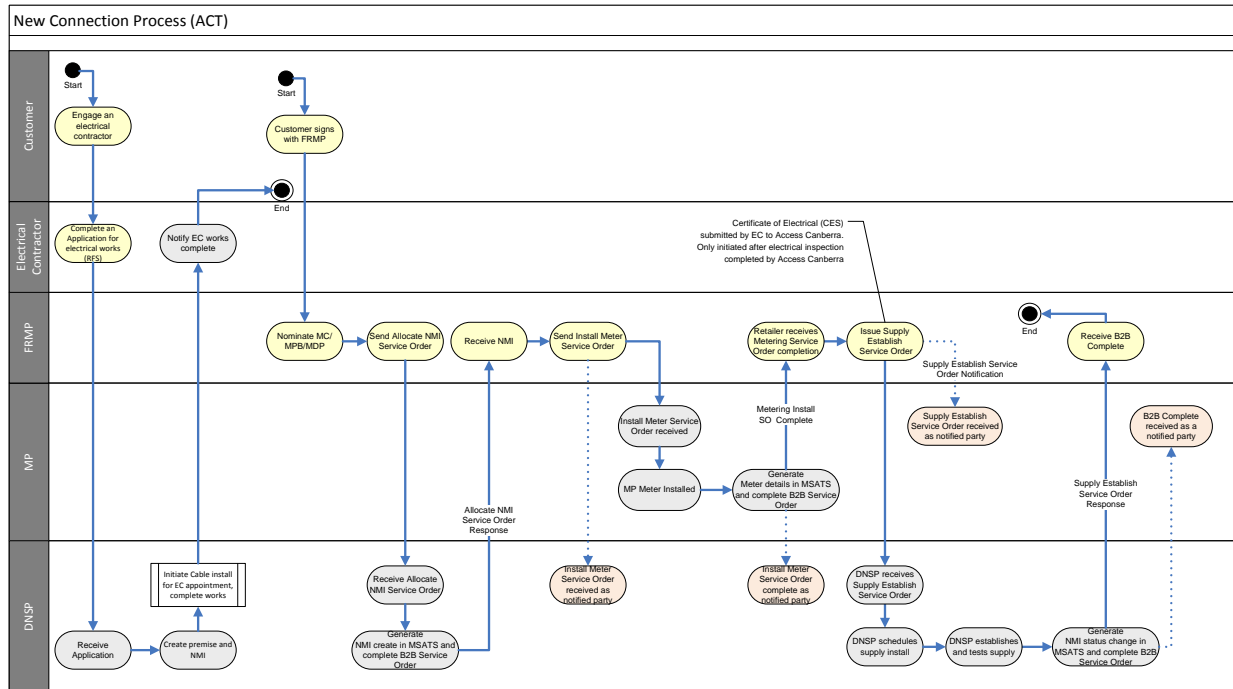
It is recommended that participants in the various jurisdictions use these diagrams as a starting point for confirming the sequences that are most suitable for their particular circumstances.

The following pages provide a proposed model for undertaking new customer services.

Australian Capital Territory (ACT)

- (a) The following process diagram depicts a proposed model for establishing a new Customer Service in ACT. In this model the Meter is shown as being installed before the Supply has been established with the Retailer issuing a Supply Establishment Service Order after receiving confirmation that the Metering Installation is complete.

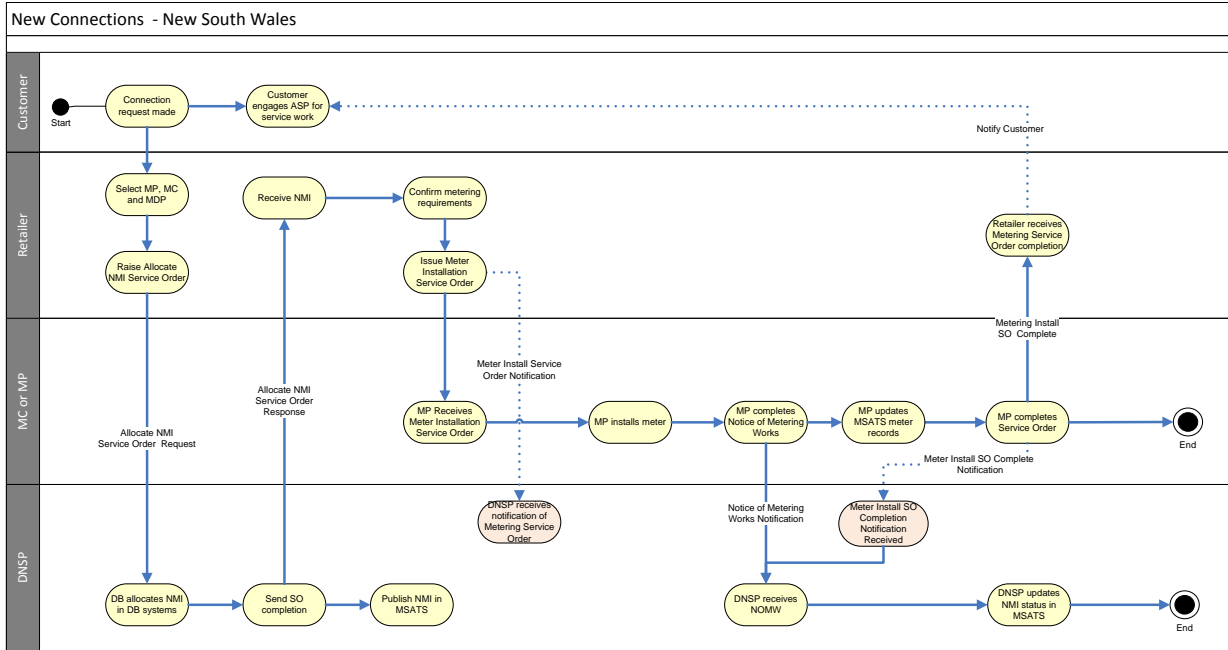
Figure 3 Proposed new Customer Service sequence for ACT



New South Wales

- (a) The following process diagram depicts a proposed model for establishing a new Customer Service in NSW. In this Jurisdiction the ASP is responsible for establishing supply under the customer direction. As a result there is no Supply Works transaction depicted in this model.

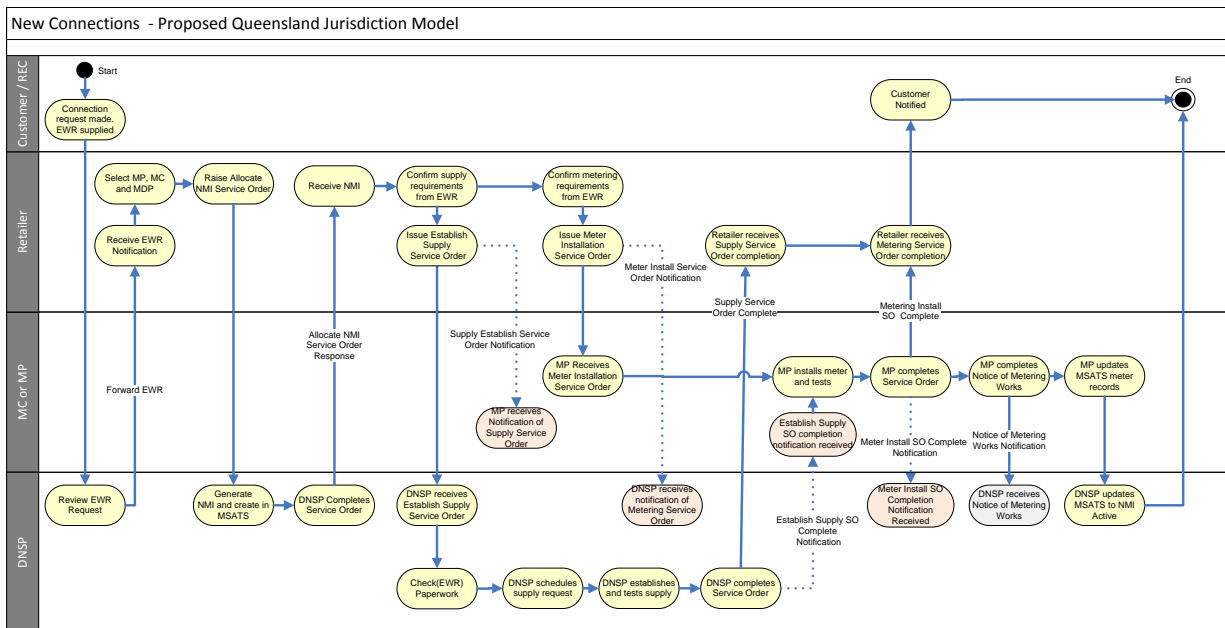
Figure 4 Proposed new Customer Service sequence for NSW



Queensland

- (a) The following process diagram depicts a proposed model for establishing a new Customer Service in Queensland. In this model the Meter is shown as being installed after the supply has been established, with the Notified Parties transaction with the *NotificationStatus* of 'Completed' being used as a trigger to commence the meter installation activity.
- (b) This process assumes that the Customer or Customers Representative has engaged with the DNSP regarding the works being undertaken and has approval to proceed with the ALLOCATE NMI request via the Retailer.

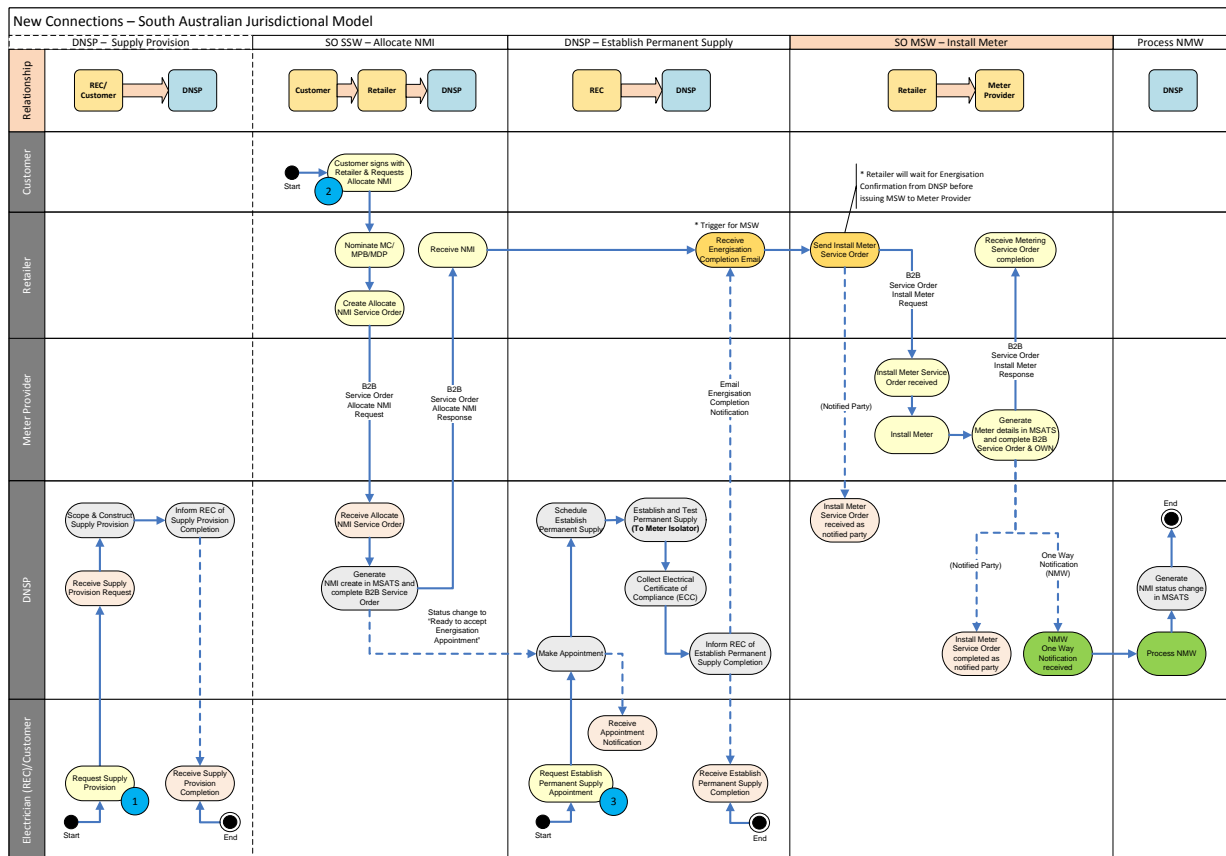
Figure 5 Proposed new Customer Service sequence for QLD



South Australia

- (a) The following process diagram depicts a proposed model for establishing new customer connection in South Australia. In this model the establishing of permanent supply or energisation will occur only up to the meter isolator.
- (b) Process sequence of events:
1. Electrical contractor/Customer engages SAPN to establish Supply Point.
 2. Customer engages their retailer to Establish Retail Contract for the new connection and trigger Allocate NMI.
 3. Electrical contractor/customer schedules a booking with SAPN to Establish Permanent Supply. A notification of completion is sent to retailer.
 4. Notification of completion of Establishing Permanent Supply from SAPN triggers retailer to contact Meter Provider to issue a Metering Services Works.
 5. SAPN as a final step will commission the NMI and inform the retailer and market.

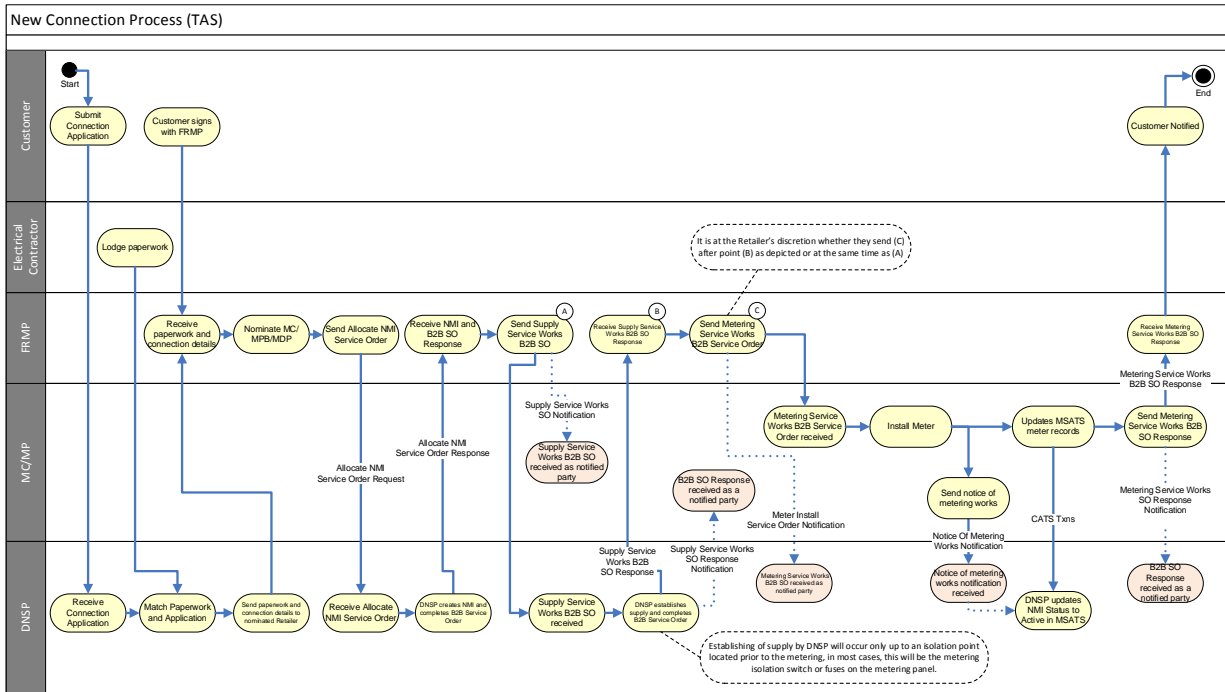
Figure 6 Proposed new Customer Service sequence for SA



Tasmania

- (a) The following process diagram depicts a proposed model for establishing a new Customer Service in Tasmania

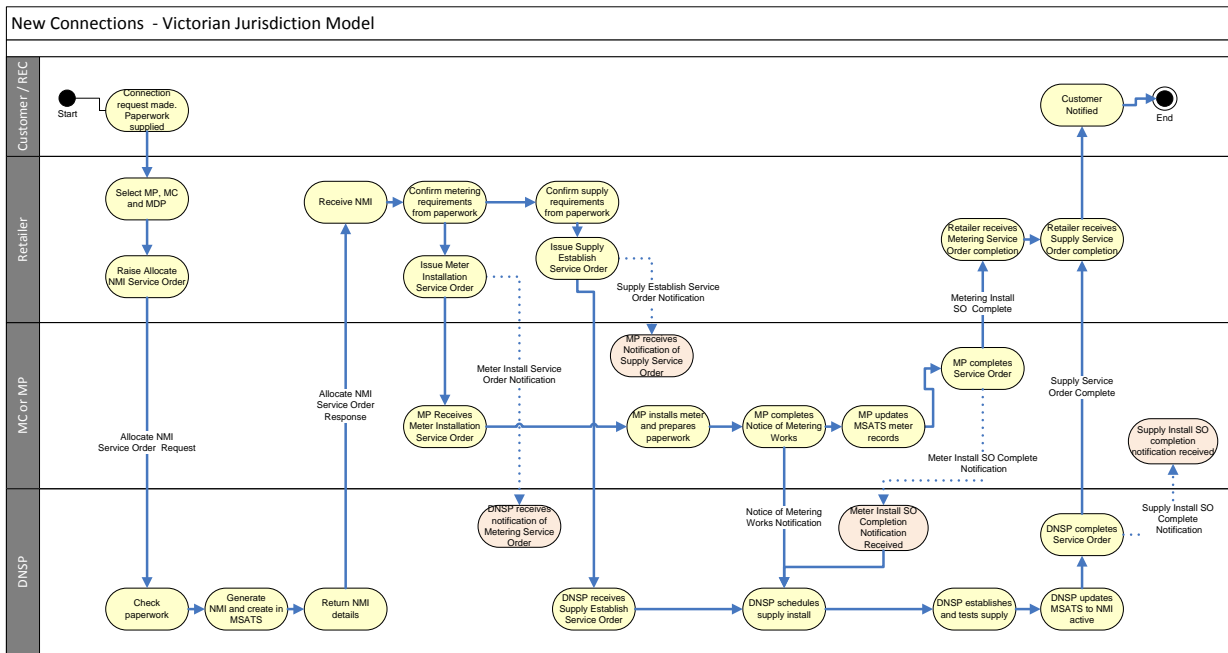
Figure 7 Proposed new Customer Service sequence for TAS



Victoria

- (a) The following process diagram depicts a proposed model for establishing a new Customer Service in Victoria. In this model the Supply is shown as being established after the meter has been installed with the Notice of Metering Works (NMW) or the Notified Party transaction with type of 'Metering Service Work', subtype of 'Install Meter' and with the *NotificationStatus* of 'Completed' being used as a trigger to commence the supply establishment activity.

Figure 8 Proposed new Customer Service sequence for VIC



6.1.3. Supply and Metering upgrades and alteration

- (a) Similar to New Connections, the old 'Adds & Alts' Service Order process has been replaced and the activities are now covered by the various Service Orders for Metering Service Works and Supply Service Works.

Table 2 shows the original Adds and Alts Sub-Type and the replacement transaction(s):

Table 2 : Comparison of old Add/Alts Subtype with new Service Orders Types

Former Add / Alts Subtype	Proposed Service Order Type and Subtype
Install Controlled Load	<p>The following Service order will be issued to the MP:</p> <ul style="list-style-type: none"> • Metering Service Works - Install Controlled Load
Move Meter	<p>The following Service order will be issued to the MP:</p> <ul style="list-style-type: none"> • Metering Service Works – Move Meter <p>And additionally the following Service Order may be issued to the DNSP (except in NSW) if the supply connection point must also be moved:</p> <ul style="list-style-type: none"> • Supply Service Works - Supply Alteration
Install Meter	<p>This Service Order will be issued to an MP when an additional meter is required to be added to an existing connection or for a new meter for a new connection.</p> <ul style="list-style-type: none"> • Metering Service Works - Install Meter <p>If the metering being installed requires a Supply Alteration (e.g. phase upgrade) then an additional transaction will be issued to the DNSP:</p> <ul style="list-style-type: none"> • Supply Service Works – Supply Alteration <p>If the customer, REC or Retailer requires supply isolation to facilitate this metering work an additional transaction may be issued to the DNSP:</p> <ul style="list-style-type: none"> • Supply Service Works – Temporary Isolation
Remove Meter	<p>This Service Order will be issued to an MP when a meter removal is required.</p> <p>Metering Service Works – Remove meter</p> <p>If the customer, REC or Retailer requires Supply Isolation to facilitate this metering work an additional transaction may be issued to the DNSP:</p> <ul style="list-style-type: none"> • Supply Service Works – Temporary Isolation <p>If this results in there being no meters assigned to that NMI, then an additional transaction must be issued to the DNSP (except NSW):</p> <ul style="list-style-type: none"> • Supply Service Works – Supply Abolishment.

Former Add / Alts Subtype	Proposed Service Order Type and Subtype
Exchange Meter	<p>This Service Order will be commonly used to facilitate meter churn for metering competition. This Service Order will be issued to an MP when a meter exchange is required:</p> <ul style="list-style-type: none"> • Metering Service Works – Exchange meter <p>If the Metering being exchanged requires a Supply Alteration (e.g. phase upgrade) then an additional transaction may be issued to the DNSP:</p> <ul style="list-style-type: none"> • Supply Service Works – Supply Alteration <p>If the customer, REC or Retailer requires Supply Isolation to facilitate this metering work an additional transaction may be issued to the DNSP:</p> <ul style="list-style-type: none"> • Supply Service Works – Temporary Isolation
Other	<p>A New Metering Works subtype has been created to allow for a request to remotely re-configure a meter:</p> <ul style="list-style-type: none"> • Metering Service Works – Meter Reconfiguration <p>The specifics of the meter reconfiguration request must be defined in the Special Instructions field in the service order and agreed contractually between the parties</p>

- (b) Customer/Retailer initiated changes - Where metering works is required (i.e. no changes to the supply connection point), a *ServiceOrderType* of 'Metering Service Works' is used with the appropriate sub-type.
- (i) A temporary outage is likely to be required in order to complete the metering works, but it is possible that this can be undertaken by the Metering Provider without requiring the DNSP to attend the site.
 - (ii) If isolation of supply by the DNSP is needed to safely conduct the metering works, the Initiator will be required to also raise a Supply Service Works Service Order with Subtype of 'Temporary Isolation' to the DNSP.
 - (iii) If the MP is unable/not authorised to re-connect supply and perform the necessary safety checks, the Initiator (usually the Retailer) may be required to raise a subsequent Re-energisation request. Depending on if they are a notified party and/or any specific business rules which exist, the DNSP may choose to first update the NMI Status to 'D' and after the Re-energisation request is received and actioned update the NMI Status back to 'A'.
 - (iv) Upon completion of the metering works, in addition to providing a Response to the original Request, if the metering assets have changed the MP will send a Notice of Metering Works (NOMW) to the DNSP, and update MSATS as required with the new metering installation details.
- (c) Where a change in supply, e.g. change in location of connection point, or increasing from single phase to 3-phase, a *ServiceOrderType* of 'Supply Service Works' and *Subtype* 'Supply Alteration' is used.
- (i) Where an arrangement exists between the DNSP and the MP, the DNSP may be able to complete all the work on-site. The MP is not required to attend on-site, but may need to perform some remote activities before the DNSP can provide a Response and closure of the Supply Alteration works.
 - (ii) Where a Supply Alteration involves associated metering changes, it is expected that the Initiator also raise the appropriate Metering Service Works Request.

- (d) Where it is determined that the most efficient and effective way to complete the required works is to have multiple parties attend on-site at the same time, the works can be arranged by a 'coordinating party' (refer to section 5.1.5 Service Order Coordination for further details).

6.1.3.1. Example Process Flows – Meter Exchange

Figure 9 A Meter Exchange sequence where the MP is not changing

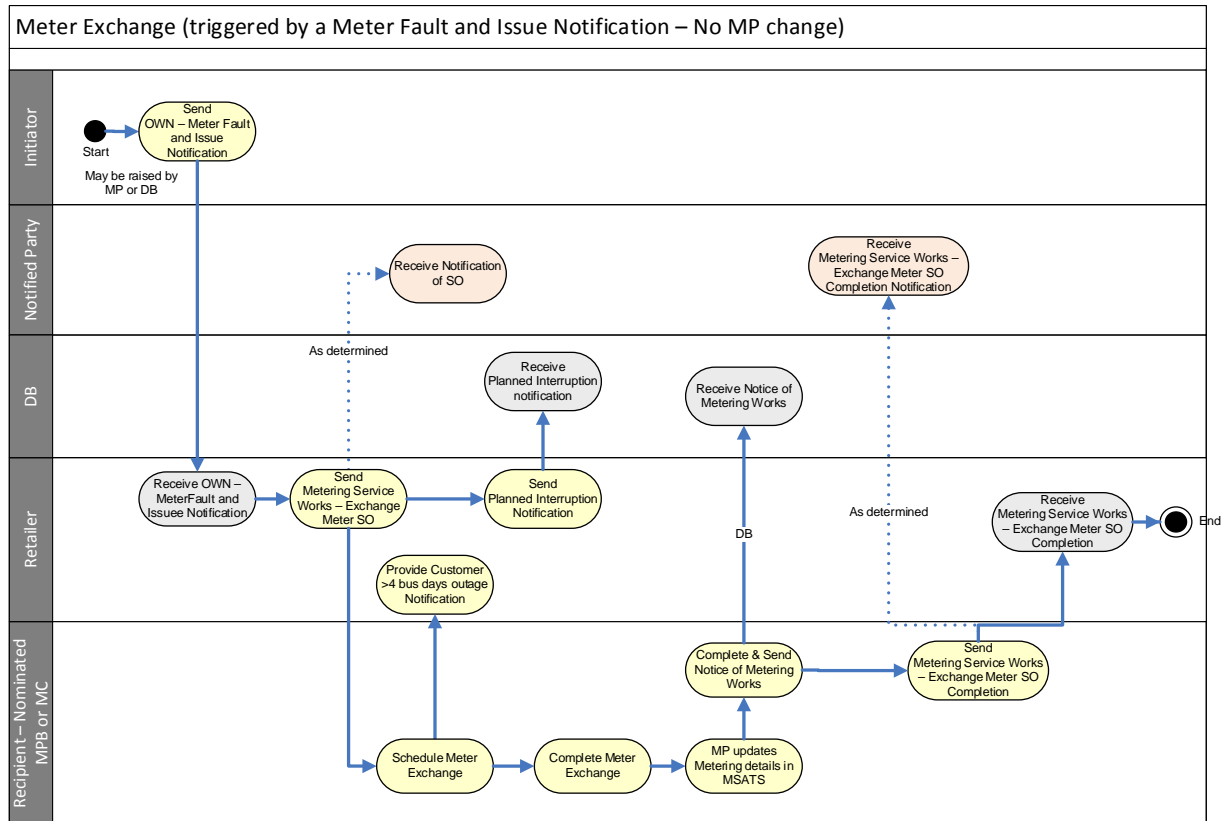
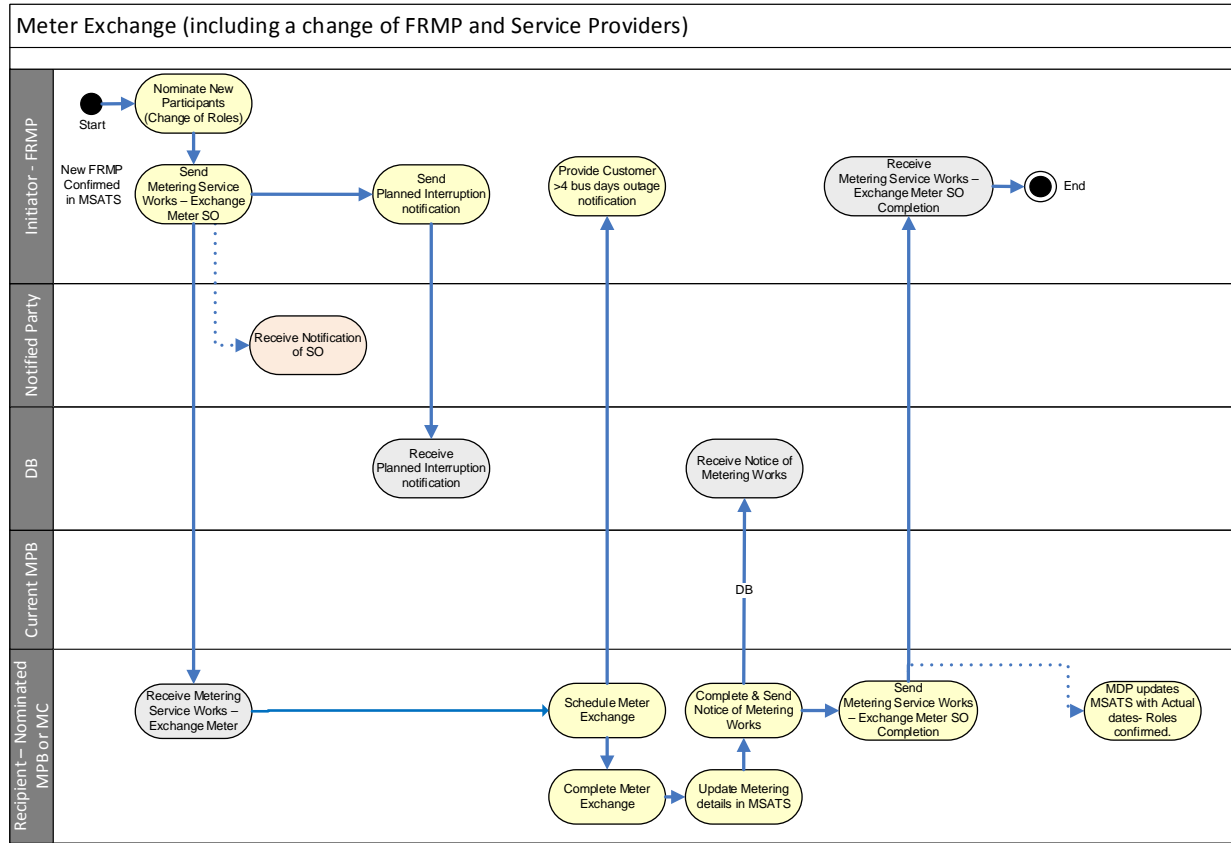


Figure 10 A Meter Exchange process preceded by FRMP, MC, MDP, MP Role changes



6.1.4. Re-energisation & De-energisation

- (a) The B2B procedures have specified the methods (SubTypes) and reasons used to de-energise premises, this allows clarity of de-energisations that have a regulatory restriction. This same logic and approach has not been applied to Re-energisation service orders. There is only a need to specify the most appropriate Re-energisation SubType (as per the Service Order Procedure) for the request.
- (b) The Initiator of the De-energisation Request may be either the Retailer or the MC (remote only).
- (c) Depending on the method requested by the Initiator, the Recipient of the Re-energisation/De-energisation Request may be either the MC (remote only), MP or the DNSP.
- (d) For a Re-energisation that accompanies a move-in (i.e. change of Retailer), the incoming Retailer may not be aware (or certain) of the method previously used to de-energise the site.
 - (i) Two statuses exist in MSATS, NMI Status (which the DNSP is responsible for maintaining) and the Meter Register Status (which the MP is responsible for maintaining). In most cases this information can be used to determine which party to send the re-energisation request to. However, where a de-energisation request is followed on the same day by a re-energisation request, MSATS may not be up-to-date. In those cases, the initiator will need to apply additional business rule logic to determine who to send the re-energisation request to.
 - (ii) The incoming Retailer will need to ensure that they have an arrangement with an MC that has an agreement with the Current MP, otherwise they will need to nominate a New MC that does have such an arrangement prior to raising the re-energisation request.
 - (iii) In these scenarios the incoming Retailer may receive a rejection from the MC/MP/ /DNSP they raise a re-energisation request to, and will subsequently need to re-raise a new re-energisation request to the other party.

Figure 11 Example De-Energisation process

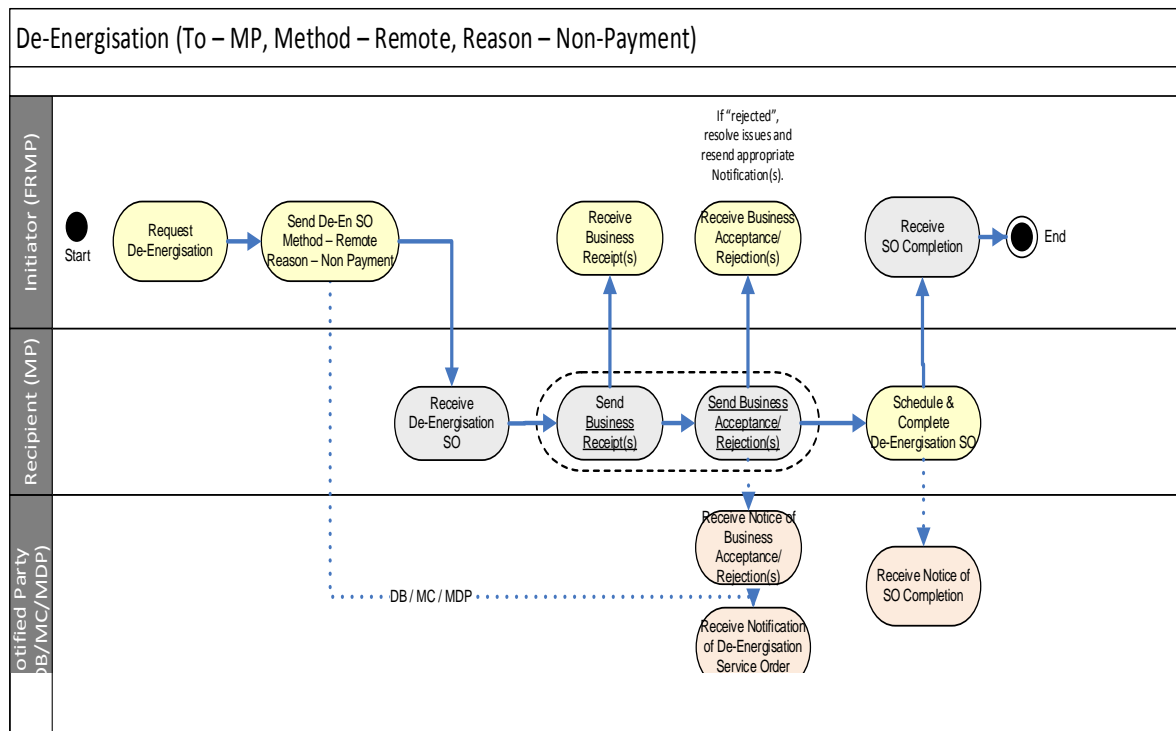
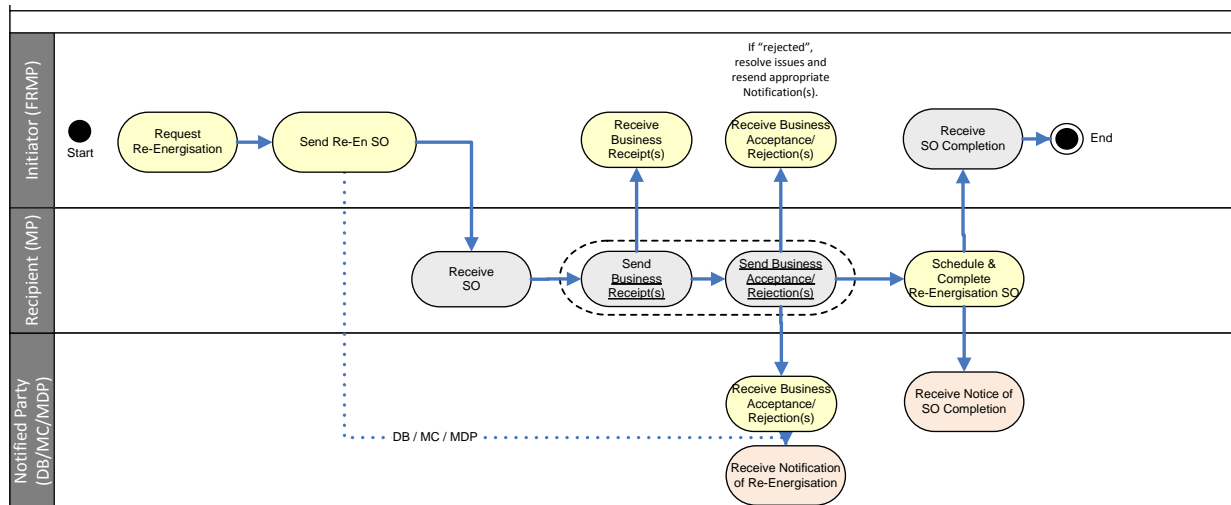


Figure 12 Example Re-Energisation process



6.1.4.1. Change to De-energisation Service Order format

- (a) One of the changes that has been made to the format for De-energisation Service Orders is to separate the de-energisation method from the de-energisation reason. This change is to allow participants to more accurately manage de-energisation requests, and the situations when they can and cannot be used.

6.1.4.2. De-Energisation Method

- (a) There are now multiple service providers available to undertake customer de-energisation and different methods are available to different service provider. The diagram below shows which parties generally have access to which methods.

Figure 13 De-Energisation Methods

	Meter		Service Fuse	Pole / Pit / Pillar
Device	Meter		Service Fuse / Isolator	Pole / Pit / Pillar
SO Method Type	Remote	Local Meter Disconnection	Remove Fuse	Disconnection at Pole / Pit / Pillar
LNSP	Remote (VIC only)	Manual (VIC only)	Manual	Manual
Contestable MP	Remote	Manual	N/A	N/A

6.1.4.3. De-Energisation Reasons

- (a) To ensure clarity of the reason for de-energisation and ensure that all de-energisation reasons which are covered by a *protected period* are clearly identified, additional de-energisation reasons have been added to the Service Order framework and have been matched to the protected period obligations within the NERR and Victorian Energy Retail Code.

The de-energisation reasons (and associated protected periods) are shown in Table 3 below.

Table 3 : B2B Service Order Types and Protected Periods

B2B Service Order De-energisation Reason	NERR De-Energisation Type	NERR Clause 116 Protected Period	VERC De-Energisation Type	VERC Clause 116 Protected Period
Non-Payment	CI 111 - De-energisation for not paying bill	CI 116 Applies	CI 111 - De-energisation for not paying bill	CI 116 Applies
Contract (as per NERR)	CI 112 - De-energisation for not paying security deposit		CI 112 - De-energisation for not paying security deposit	
No Access	CI 113 - De-energisation for denying access to meter		CI 113 - De-energisation for denying access to meter	
Illegal Usage	CI 114 - De-energisation for illegally using energy		CI 114 - De-energisation for illegally using energy	
Unauthorised Usage	CI 115 - De-energisation for non-notification by move-in or carry-over customers		CI 115 - De-energisation for non-notification by move-in or carry-over customers	
Move Out ¹		CI 116 Does Not Apply		CI 116 Does Not Apply
Safety				
Defect				
Site Works				
Customer Requested				
Other				
¹ To be used when the customer has vacated the premises				

6.1.4.4. De-Energisation Summary

The combination of de-energisation methods (subtypes) and reasons are summarised in the table below:

Table 4 : Summary of De-Energisation Methods and Reasons

De-Energisation Method	De-Energisation Reason	Comment
<ul style="list-style-type: none"> Disconnection at pole top, pillar box or pit Local Meter Disconnection Remote Remove Fuse Recipient discretion 	<ul style="list-style-type: none"> Non-Payment Contract (as per NERR) No Access Illegal Usage Unauthorised Usage 	Protected Period Applies

De-Energisation Method	De-Energisation Reason	Comment
	<ul style="list-style-type: none"> • Move Out • Safety • Defect • Site Works • Customer Requested • Other 	Protected period does not apply

- (a) For example, a disconnection for Non-Payment might be undertaken by sending a Service Order to the relevant Participant as:
- (1) **Method:** Remove Fuse, **Reason:** Non Payment
 - (2) **Method:** Remote, **Reason:** Non-Payment
- (b) Similarly, a Move Out disconnection may be requested by:
- (1) **Method:** Remove Fuse, **Reason:** Move Out
 - (2) **Method:** Remote, **Reason:** Move Out

6.1.4.5. Service Order Scenario Table

Scenario	Candidate Service Orders (with subtype) Required to fulfil scenario		Notes (these only relate to SMALL customers).
	To MPB	To DB	
New Connection required	Metering Service Work (MSW) <ul style="list-style-type: none"> • Install Meter 	Supply Service Works (SSW) <ul style="list-style-type: none"> • Allocate NMI • Establish Permanent Supply (not NSW) • Establish Temporary in Permanent (not NSW) • Establish Temporary Supply (not NSW) 	New Connection processes are different in each jurisdiction. Refer to Guide process maps.
Additions & Alterations – Scenario requires metering work only	Metering Service Work – <ul style="list-style-type: none"> • Move Meter • Install Meter (assumes additional to existing) • Install Controlled Load 	Service not supported by DB	Assumes Metering Work can be achieved without supply isolation. If Supply isolation is required then a SSW – Temporary Isolation will be required to be sent to the DB.
Additions & Alterations – Scenario requires metering upgrade and supply service upgrade	Metering Service Work – <ul style="list-style-type: none"> • Move Meter • Install Meter (assumes additional to existing) • Install Controlled Load 	Supply Service Works <ul style="list-style-type: none"> • Supply Alteration • Temporary Isolation 	This scenario includes an upgrade to the Supply service. This will typically be required when a site moves from single phase to 3 phase as a result of increased load requirements. A SSW will be typically sent to the DB requesting this upgrade and a MSW will be sent to the metering provider to upgrade the meter. It is likely that a level of co-ordination between the DB, the MP and the customer's REC will be required. Note: Customers in NSW may engage a ASP to

			perform the Supply Service upgrade on behalf of the DB.
Remote De-energisation Required (non-VIC)	De-energisation <ul style="list-style-type: none"> • Remote • Recipient Discretion 	Service not supported by DB	Initiator should refer to the <i>MeteringInstallationtypecode</i> (COMMS4D) in MSATS to determine if the meter supports this functionality.
Remote De-energisation Required (VIC)	De-energisation <ul style="list-style-type: none"> • Remote • Recipient Discretion 		In Victoria both DB's and Contestable Metering providers will have the ability to perform remote services. Initiators should determine who to send the SO request to by referring to the MP role in MSATS which will indicate which party has remote connectivity to the meter. Initiator should refer to the <i>MeteringInstallationtypecode</i> (COMMS4D or MRIM in the case of a DB owned meter) in MSATS to determine if the meter supports this functionality. Cannot be requested for meters with a <i>MeteringInstallationtypecode</i> of 'MRAM'.
Physical De-energisation required	De-energisation <ul style="list-style-type: none"> • Local Meter Disconnection 	De-energisation <ul style="list-style-type: none"> • Remove Fuse • Local Meter Disconnection 	In general physical de-energisation will be performed by the DB unless the Initiator wishes this to be performed at the metering via the lifting of the meter's internal contactor. This service can be requested of the MP.
Remote Re-energisation required (non-VIC)	Re-energisation <ul style="list-style-type: none"> • Remote • Recipient Discretion 	Service not supported by DB	Outside Victoria a remote re-energisation can be requested of a contestable metering provider. Initiator should refer to the Metering Installation code (COMMS4D) in MSATS to

			determine if the meter supports this functionality. Cannot be requested for meters with a <i>MeteringInstallationtypecode</i> of 'MRAM'.
Remote Re-energisation required (VIC)	Re-energisation		In Victoria both DB's and Contestable Metering providers will have the ability to perform remote services. Initiators should determine who to send the SO request to by referring to the MP role in MSATS. Initiator should refer to the Metering Installation code (COMMS4D) in MSATS to determine if the meter supports this functionality. Cannot be requested for meters with a Meter Installation code of 'MRAM'.
	<ul style="list-style-type: none"> • Remote 		
Physical Re-energisation required	Re-energisation <ul style="list-style-type: none"> • Physical Visit 	Re-energisation <ul style="list-style-type: none"> • After Disconnect for Non-Payment • Physical Visit • New Reading Required 	In general physical Re-energisation will be dependent on the method of De-energisation and who performed it. MSATS <i>NMIStatusCode</i> and <i>MeterRegisterStatusCode</i> will indicate if the service order should be sent to the DB or the MP. A <i>NMIStatusCode</i> of 'D' will indicate that a physical fuse removal was undertaken by the DB to de-energisation the site therefore the physical replacement of the fuse is required. Physical Visit may also be requested of a Metering Provider where they offer such service and the method of de-energisation was Local Meter Disconnection or Remote (indicated by the <i>MeterRegisterStatusCode</i> of 'D') when they require a technician on site at time of

			energisation (where a retailer is not satisfied that the site can be safety energised remotely).
Meter Investigation	<p>Metering Service Work</p> <ul style="list-style-type: none"> • Meter Investigation – Meter Test 	<p>Metering Service Work</p> <ul style="list-style-type: none"> • Meter Investigation – Meter Test 	Usually used in circumstances where a customer or retailer is querying the correct operation of the meter and is requesting the Meter provider to perform a set of meter tests to validate meter data. As both contestable metering providers and DB's will have metering assets in the field for some time, Initiators should determine who to send the SO request to by referring to the MP role in MSATS.
<p>Meter Fault</p> <p>Scenario - retailer raising request to Metering provider to visit site to remedy a suspected meter/comms fault.</p>	<p>Metering Service Work</p> <ul style="list-style-type: none"> • Meter Investigation – Inspect 		Usually used for when a fault of some description is suspected and the initiator is requesting a metering provider to attend site and determine the exact nature of the issue. The fault may have been detected by the MP systems who has requested the initiator to raise a Service Order request to underpin the field work. Initiators should determine who to send the SO request to by referring to the MP role in MSATS.
Change Time Switch settings – External to meter	Service not supported by MP	<p>Metering Service Work</p> <ul style="list-style-type: none"> • Change TimeSwitch setting 	Used when the Initiator wishes to change on/off times of a physical controlled load device separate to the meter. This is not to be used when changing the on/off times inside a meter.

<p>Change Time Switch settings – Internal to meter</p>	<p>Metering Service Work</p> <ul style="list-style-type: none"> • Meter Reconfiguration + special notes indicating new switching times 	<p>Metering Service Work (VIC only)</p> <ul style="list-style-type: none"> • Meter Reconfiguration + special notes indicating new switching times 	<p>Used when the Initiator wishes to change on/off times using the controlled load (indicated by the MSATS <i>ControlledLoad</i> indicator) within a smart meter. Initiators should determine who to send the SO request to by referring to the MP role in MSATS. Note: It is currently not possible to determine from MSATs if Load is being managed internally or externally to the meter. Initiators can expect the MP to reject this request if it is not the party controlling the load. The Initiator can then issue a new SO to the DB to perform this physically.</p>
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6.1.5. Service Order Coordination

- (a) For more complex Service Order scenarios where coordination is required to have more than one party on-site concurrently, the Initiator may nominate a 'coordinating party' (with the agreement of that party) by populating 'Yes' in *ServiceOrderCoordinationRequired* and providing the appropriate details in *CoordinatingContactName* and *CoordinatingContactTelephoneNumber* in the Service Order Request. The coordinating party may be the Registered Electrical Contractor (REC), the MC, MP, DNSP or another party such as the body corporate for a multi-dwelling site.
- (b) It is anticipated that specific processes will develop overtime, Some examples of complex situations that require service order coordination between multiple parties include the following:
- (i) High Voltage Injection –
- In a high voltage injection situation, there can be many meters that simultaneously fail as a result of the injection event.
- In this a case it is likely that the DNSP becomes the principle co-ordinating party for the resolution of the outage, and thus will be the party to initially advise the affected retailers of their responsibility with regard to the failed meters and provide a set of contact details for co-ordination purposes.
- The Retailer would then include the DNSP's emergency coordinator's contact details in the Service Order coordination fields of the Meter Exchange service orders that they issue to their Meter Providers.
- (ii) Group Metering Isolation –
- In a situation where a metering works must occur at a connection that is part of a group metering setup (that is, one single isolation point for multiple customers), then a co-ordinating party must be identified who will take on the responsibility of advising all affected retailers or their customers prior to any site isolation taking place. This co-ordinating party in these cases may possibly be the customer's REC or may be a representative of the Body Corporate if the site is an apartment complex.
- (c) It is expected that the service provider will contact the 'coordinating party' nominated in the Service Order and negotiate an agreed time for the work to be scheduled. Where the coordinating party is expecting contact but does not receive any communication within a reasonable timeframe, it is suggested that the 'coordinating party' follow-up with the responsible Retailer so as to minimise delays or impact to the Customer.

6.1.6. Tariff Change Service Order

- (a) Where a Retailer wishes to request the DNSP to change a customer's Network Tariff the retailer will use a Service Order subtype Tariff Change and populate the proposed tariff field in the Service order.
- (b) The DNSP will review the request and if agrees with the tariff change will perform the necessary updates of MSATs and respond to the Service Order with a completion code.
- (c) Should the DNSP not agree with the request the Service order will be closed with a Not Completed status and the reason provided in the special notes.

6.2. Customer and Site Details Notification

- (a) The Customer and Site Details Notification Procedures have been changed in the following areas.
 - (i) The ability to request customer details via the Customer Details Request has been extended to the MP/MC.
 - (ii) Site access and hazard processes have been extended to allow greater sharing between the multiple parties that have an interest in the data.

6.2.1. Customer Details Request

- (a) The Customer Details Request (CDR) can be initiated either by a DNSP or by an MP/MC. The request is always directed to a Retailer who retains the source of truth master copy of this information as they are the principal contact point with the Customer.
- (b) The DNSP (or MP/MC), if they become aware of Life-support are to contact the Retailer by email as specified in the Procedure and advise the Retailer to update their records. In this way the Retailer is retained as the 'source of truth database of record' for this information.
- (c) Life support email contact information for the Retailer is located in the ROCL

6.2.2. Customer Details Notification

- (a) The Customer Details Notification will be sent by the Retailer to the DNSP when the details are amended in the Retailers system
- (b) The Retailer and MC/MP may also agree to provide an update of the Customer details when they are amended.
- (c) When a retailer receives a Customer Details Request from an MP/MC or a DNSP they will provide a Customer Details Notification in response.

6.2.3. Life Support

- (a) The effective management of Life Support information becomes more complex with the introduction of the Metering Competition rule changes. In particular with the increase in on-market sites within embedded networks and the involvement of new participants that may need to obtain or share Life Support information.
- (b) Changes to Life Support processes have been extended (via simple manual notification) to the DNSP to meet the NERR obligations and to the retailer of a child customer within an embedded network
- (c) More complex changes to Life Support are awaiting the outcome of the changes being developed by the AER.

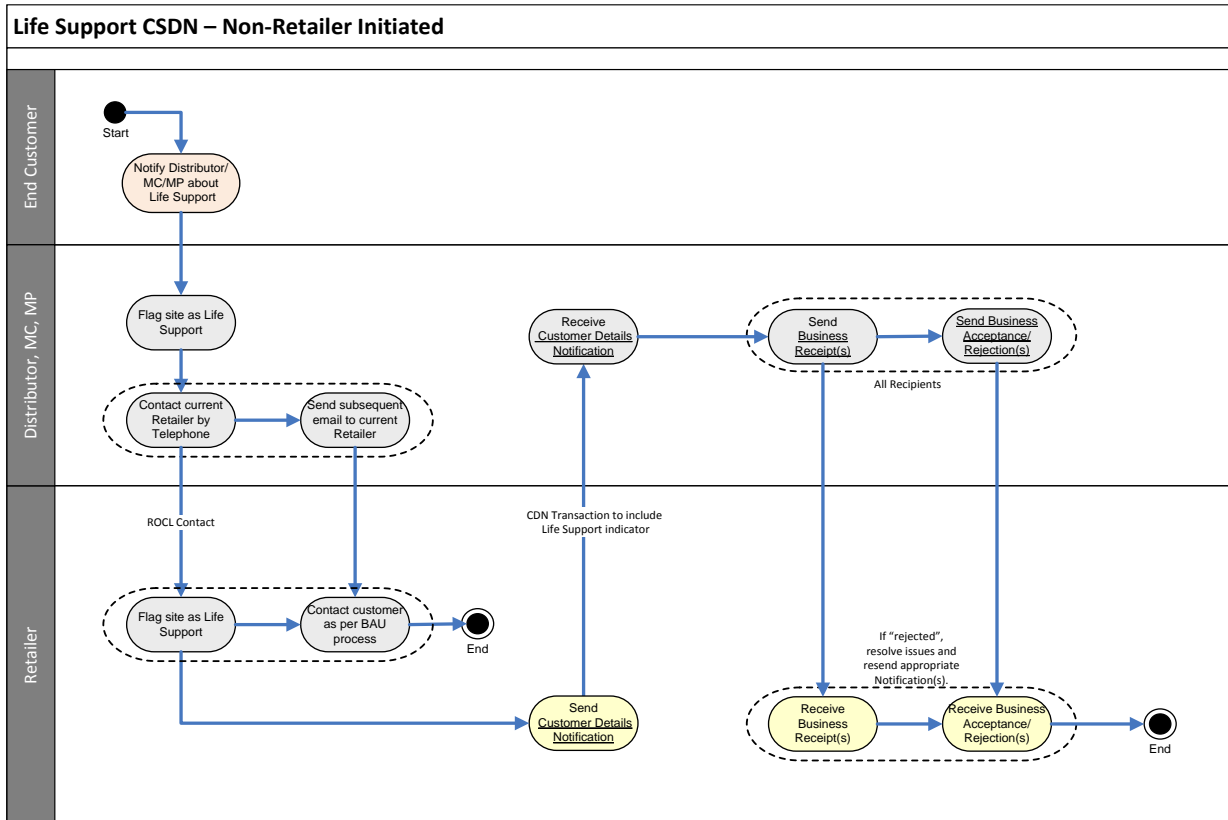
6.2.3.1. Example Process Flows involving Life Support data

CDN with life support Non-Retailer Initiated

- (a) In the diagram below, a Life Support situation is identified by a party other than a Retailer.
 - (i) If a DNSP becomes aware of a customer Life Support requirement, the DNSP will utilise the manual notification method to advise the Retailer of the life support requirement.
 - (ii) If the retailer of a child customer (in an embedded network) becomes aware of a customer life support requirement, they would contact the DNSP of the embedded network. The DNSP would then follow the process below to advise the retailer of the embedded network.
- (b) Once notified, the Retailer will then update their records, and then broadcast an update of the Life Support details to the DNSP and other parties as contractually agreed, via the Customer Details Notification transaction.

Process diagrams for this are shown below:

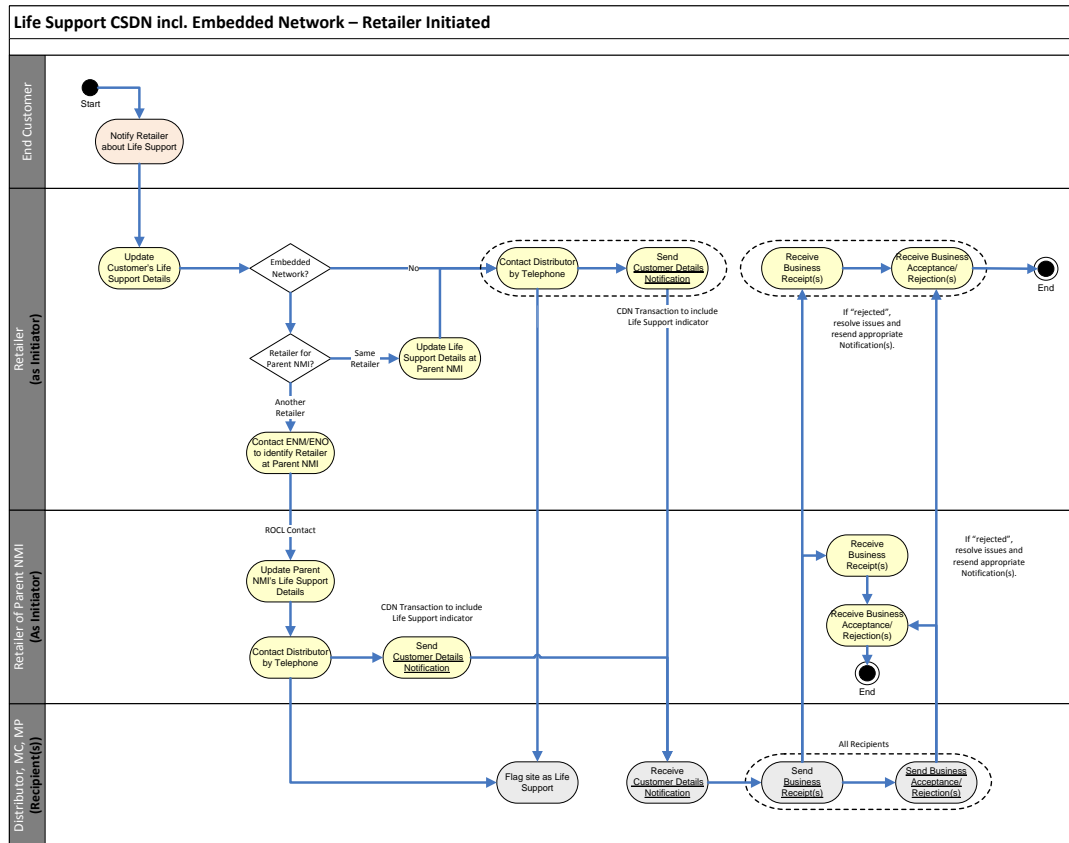
Figure 14 Example Life Support CSDN process where DNSP, MC or MP initiates process



CDN with Life Support within an Embedded Network

- (a) In the diagram below, a Life Support situation is communicated to Retailer by a Customer, but if that Customer resides in an Embedded Network, then extra steps are required to ensure that the Retailer and DNSP of the Parent NMI are also informed.

Figure 15 Example Life-Support CSDN process involving and Embedded Network



6.2.4. Customer Details Reconciliation

- (a) The Customer Details Reconciliation allows participants involved to request a snapshot of all NMIs, for which the Retailer is financially responsible, where the customer is flagged with Life Support by the reconciling party during the reconciliation process.

6.2.5. Site Access Request

- (a) The Site Access Request is a new transaction intended to enable greater sharing of Hazard and Access Information between participants. Previously there was only a one way flow of information between Retailer and DNSP of the Site Access Notification. With the introduction of metering competition an MP may require Site Access information from another party or a new Retailer may wish to obtain current Site Access Information from a DNSP. As a result this request now allows for any current or nominated party to request the information of any other party.
- (b) Each participant will maintain their own records of Site Access Data. There is no master record.

6.2.6. Site Access Notification

- (a) The Site Access Notification no longer remains a transaction that flows in one direction from a Retailer to a DNSP. A Site Access Notification will be provided by one party when they receive a request from another party.
- (b) Under normal circumstances when the Retailer updates their Hazard and Access details as a result of entering changes into their system during customer contact, they will automatically trigger a single Site Access Notification to the DNSP.
- (c) If there is an agreement between the Retailer and MC/MP a second Site Access Notification may also be triggered from the Retailer to the MC/MP.
- (d) In order to avoid a race condition where the Retailer, DNSP and the MP receive updates from one party which triggers updates to other parties and so on in an endless cycle, certain rules must be followed.
- (e) Rules for Site Access Notifications.
 - (i) Only the Retailer will issue a Site Access Notification pre-emptively (That is without being requested to).
 - (ii) The Retailer will only issue a pre-emptive Site Access Notification after updating their Hazard and Access details via their user interface. They must not issue a Site Access Notification after updating their systems with data from a Site Access notification they themselves have received.
 - (iii) The DNSP and the MP/MC will only ever issue a Site Access Notification to a participant after the receipt of a Site Access Notification Request.
- (f) No participant is obliged to update or overwrite their own copy of Site Access Data on the basis of receiving a Site Access Notification.
- (g) Each participant must decide what data they choose to share when publishing a Site Access Notification, with the expectation that the published data should ideally be helpful and usable by the receiving party.

6.3. One Way Notification

- (a) The One Way Notification process enables Participants to send information or messages to other Participants in a single transaction for one or more NMIs via CSV or XML.
- (b) Participants who generate or receive One Way Notifications are expected to follow the standard business Accept/Reject process for each NMI referenced within the transaction payload. Where validation fails, participants are expected to respond accordingly by sending a business reject signal to the initiator.
- (c) The One Way Notification procedures have been expanded to cater for the exchange of additional information between participants. This includes changes to support both CSV and XML payloads within the One Way Notifications
- (d) Four new Transactions have been added which can assist in meeting obligations under the Rules..
 - (i) The Notice of Metering Works– This transaction has been included to facilitate the effective exchange of information after a meter installation has changed. This facility has been requested by Industry participants for some time but had been deferred for later consideration under Power of Choice. This transaction uses an XML payload
 - (ii) Planned Interruption Notification – This transaction provides a communication tool to allow a participant to meet their obligations under the NERR to inform parties of a planned outage. This transaction uses a XML payload
 - (iii) Meter Fault and Issue Notification – This transaction supports the obligation under the Rules for the MP/MC/DNSP to inform the Retailer about meter installation malfunctions. Could also be used by the MP to advise their Retailer of when they could schedule work to allow for the Retailer to meet their obligations of advising customers if a planned outage is required. This transaction uses an XML payload
 - (iv) Notified Party Notification -A special One Way Notification has been designed to support the new Notified Party Model. Participants have the option of using functionality built into the e-hub to deliver these messages or to manage the delivery themselves. This transaction uses an XML payload

6.3.1. One Way Notification Transactions

- (a) The B2B procedures identify a number of transactions as follows:

6.3.1.1. Meter Exchange Notification (MXN)

- (i) This transaction is provided by the party actioning a meter exchange program and provides early advice of planned meter exchanges, this was originally used during the Victorian DNSP led rollout for advising retailers when a meter exchange was scheduled. Participants may use this transaction at their discretion.

6.3.1.2. Network Tariff Notification (NTN)

- (i) This transaction retains its purpose of being a means for a DNSP to notify a Retailer of an intention to change the Network tariff associated with one or more connection points.

6.3.1.3. Planned Interruption Notification

- (a) The planned interruption notification is a communication tool that could be used to facilitate the requirement under the NERR for a Retailer to advise a DNSP about a planned outage of a NMI which they are scheduling.
- (b) The Notice of Metering Works has been defined as an XML payload.

6.3.1.4. Meter Fault and Issue Notification

- (c)
- (a) This Meter Fault and Issue Notification is intended to facilitate the requirement under the rules for an existing MP, MC or DNSP to advise a Retailer when a meter becomes non-compliant. That is, it is failing to perform its function as a meter, or is exceeding its agreed specifications under metrology procedures and therefore the Retailer will need to arrange for a replacement.
- (b) This transaction is also used when the initiator wishes to advise the recipient that a fault condition with the metering has been found at a site. This may be used in circumstances where a network fault or other event has caused damage to one or more metering installations and the DNSP requires a Retailer to arrange for a metering provider to address the situation. It is expected that this transaction will complement but not replace direct communication between the DNSP and Retailer when the Customer may be impacted.
- (c) This transaction can also be used when a DNSP wishes to advise a Retailer that a Customers annual load characteristics have exceeded metrology classification and that metering work is required.
- (d) The optional fields in the transaction (STARTTIME, ENDDATE, STARTTIME and DURATION) have been included so that Metering Providers (if they use this transaction) can advise the Retailer of potential scheduling availability to perform associated work with a Meter Fault. This information can be used as input by the Retailer to support their obligations for planned interruption notifications, if an interruption to supply is needed. .
- (e) The Notice of Metering Works has been defined as an XML payload.

6.3.1.5. Notice of Metering Works

- (a) The Notice of Metering Works is sent from an MP to a DNSP after a Meter Exchange, Installation or Removal has taken place. The Notice of Metering Works has provision for sending and receiving information about the meters that have been installed, any meters that have been removed, and allows for the capture of meter readings from any manually read accumulation meters removed or repurposed at the site.

The Notice of Metering Works has been defined as an XML payload.

6.3.1.6. Notified Party Notification

- (a) This Notified Party Notification plays a special role in informing participants who may be affected by a service order that there is field or remote activity occurring at a site in which they have a financial or other interest
- (b) This transaction is either generated by the e-Hub and sent to the Notified parties on behalf of the Initiator of the service order, or is generated directly by the Initiator and sent to the Notified party. One of these two approaches could be adopted by the Initiator to inform other parties about Service Orders that may impact them.

6.4. Meter Data Process

6.4.1. Provide Meter Data

- (a) The Provide Meter Data transaction continues to perform the same function. With Retailers, DNSPs and MDP's using the PMD to request that an MDP provides validated meter data.
- (b) Where a PMD is requested for periods within 13 months, there is an expectation that the PMD can be responded to within 1 business day. Where the period exceeds 13 months, the initiator must communicate with the MDP, as the relevant data may be archived and agreement is required on how to request that data.

6.4.2. Verify Meter Data

- (a) The Verify Meter Data transaction continues to perform the same function. With Retailers DNSPs and MDP's using it to request that an MDP investigate the reason why meter data is not being received as expected.
- (b) New Investigation code have been included:
 - (i) Verify/Missing Registers – used when the initiator is indicating they are expecting reads for a particular register.
 - (ii) Require Estimate Read – used when the Initiator is indicating they are expecting Estimate reading for Settlement purposes.
 - (iii) Meter Churn – used when the Initiator is requesting Meter Churn Data following a meter exchange and change of roles.

6.4.3. Remote Service Request/Response

- (a) The Remote Services transactions provide for the requirement in the Minimum Services Specification as defined in the NER Table S7.5.1.1.
- (b) The use of this transaction is by agreement.
- (c) These transactions allow for remote interrogation of a meter installation to support
 - (i) The remote retrieval of metering data as a one-off or scheduled service, including quality flags for a specified point or points in time and the provision of such data to the requesting party.
 - (ii) The remote retrieval of point in time information from a specified metering installation including the contactor status (energised or de-energised) voltage, current, Power factor and other bi-laterally agreed information
 - (iii) The remote retrieval of information over a period of time including readings from across a date/time range and meter events collected by the metering installation over a defined period.
- (d) The Remote Service Request contains a number of pre-defined fields/parameters that allow the Initiator to indicate the type of information they are seeking in the response, the period of time that the response should relate to, and the format of the data they wish to receive. Additionally the request provides for a number of user-definable parameters which will allow further flexibility of use of these transactions (as agreed between parties) without requiring the entire transaction structure to be re-negotiated across Industry.
- (e) The Remote Service Response contains a data block that allows for a payload of different formats to be sent from the Service Provider back to the Initiator. It is envisaged that participants will agree bi-laterally the format and detailed structure of any data sent in the payload of the Remote Service Response. By allowing a flexible format in the

payload, participants will be able to develop and further refine the most efficient and effective payload structure for the different remote services that are currently identified and also those that are not yet identified but may arise in the future.

7. BUSINESS PRACTICES

- (a) This section contains a range of common business practices and other process requirements that have been migrated from the Procedures to the B2B Guide because it is anticipated that they may impose obligations on parties who must only be subject to commercial arrangements and cannot be subject to binding obligations in B2B procedures.

7.1. Service Order Process

7.1.1. General Principles

- (a) The Recipient should use reasonable endeavours to meet the original Timing Requirement for the completion of requested work that was inappropriately rejected.
- (b) On accepting the ServiceOrderRequest, the Recipient is expected to use reasonable endeavours to complete the work within the Required Timeframe for the Completion of the Requested Work.

7.1.2. Raising a ServiceOrderRequest

- (a) To indicate a new Request, the ServiceOrderRequest should specify the *ActionType* as “New”.

7.1.3. Actioning the ServiceOrderRequest

- (a) The Recipient of the ServiceOrderRequest is expected to schedule and use reasonable endeavours to complete the work, taking into account any *SpecialInstructions* and *Appointment* details contained in the ServiceOrderRequest.
- (b) The limitation of the *ScheduledDate* in the Procedures to no more than 100 calendar days in the future likely relates to the 65 prospective days allowed in MSATS for a prospective change. This is listed here as calendar days as B2B works on local timings, whereas MSATS uses the NEM calendar.

7.1.3.1. Raising a ServiceOrderResponse

- (a) Where the Recipient does not receive a BusinessReceipt or BusinessAcceptance/Rejection from the Initiator after sending the ServiceOrderResponse, the Recipient may investigate the failure of the delivery and notify the Initiator. If the Initiator reasonably considers that delivery failure lies with the Recipient, the Recipient may resend the original ServiceOrderResponse, as appropriate.

7.1.3.2. Use of Status, Exception and Product Codes in ServiceOrderResponses

- (a) The *ProductCodes* for each DNSP are published on various websites for each jurisdiction. At the time of publication these are:
 - (i) The Victorian DNSP Product Codes are published on the Essential Services Commission website: <http://www.esc.vic.gov.au>
 - (ii) The ACT, NSW, SA, TAS and Queensland codes are as published by each DNSP.
- (b) *ProductCodes* for Meter Providers are provided through the contract between parties. General *ProductCodes* and descriptions may be published on the respective Meter Provider websites.
- (c) Specific requirements are expected to apply to the use of the “Cost TBA” code as follows:
 - (i) The *ProductCode* “Cost TBA” should not be used for Re-energisation, De-energisation and Special Read ServiceOrderRequests; and
 - (ii) The *ProductCode* “Cost TBA” should only be used when the Recipient needs to do further investigation to determine what work was attempted or completed at the Site. This *ProductCode* must not be used as a default.

7.1.4. Closing the Service Order Process

- (a) If the Initiator has rejected the ServiceOrderResponse (with a negative BusinessAcceptance/Rejection), it is expected that the Recipient and the Initiator negotiate a resolution of the situation, with the agreed resolution being reflected in each party's systems.

7.1.5. Works Scheduling

- (a) The Service Provider may use the ServiceOrderType, ScheduledDate and the CustomerPreferredDateAndTime fields to determine when the work should be scheduled and completed.

7.1.6. Cancelling a ServiceOrderRequest

- (a) Charges consistent with the allowed ProductCodes may apply for any cancelled ServiceOrderRequest.

7.1.7. Common Business Practices

7.1.7.1. General

- (a) **MSATS Relationship** - MSATS batch updates each night with the previous days Change Requests. As such, it may not have the most current information. Therefore, an MSATS transaction does not remove the need for a Service Order.

For example, where the prospective transfer is to take place on a Special Read, the Retailer must raise a Special Read ServiceOrderRequest to the appropriate Service Provider. Refer to table number 4-M for read type code usage in the CATS procedures.

- (b) **Service Time**

- (i) ServiceTime is used to inform the Recipient when the work can be performed, and it also indicates what charges the Initiator is willing to accept.
- (ii) For work the Initiator requests only to be undertaken outside Business Hours:
 - (A) The Initiator should specify a ServiceTime of "Non-Business Hours" and ensure the information in the SpecialInstructions field provides additional and specific information regarding the detail and reason for the "Non-Business Hours" request.
 - (B) The Recipient should take into account the value in the ServiceTime field when scheduling the ServiceOrderRequest.
 - (C) Indicates that the Initiator will accept any "Non-Business Hours" charges.
- (iii) Where the Initiator does not wish to pay an after-hours fee a ServiceTime of "Business Hours" should be used. This indicates that the Initiator will not accept after-hours charges and will accept a delay in service completion (within the bounds of agreed service levels) in preference to undertaking the work after-hours.
- (iv) Where the Initiator prefers the work to be undertaken within business hours but is willing to pay the after-hours fee where necessary in order to speed up completion, a ServiceTime of "Any Time" should be used. This indicates that the Initiator will accept after-hours charges if the work needs to be undertaken outside Business Hours.

- (c) **Meter Reading Date** – Where a meter reading is associated with a Service Order, the Recipient should ensure that the meter reading date provided via the MDFF file aligns with the date the Service Order was completed (ActualDateAndTime).

- (d) **Customer Details** – Where Customer Details (name and telephone number) are required for the completion of a ServiceOrderRequest, these should be provided using the Customer's contact details fields (CustomerContactName, CustomerContactTelephoneNumber).

It is anticipated that this information will not be used to permanently update the Recipient's customer-related records. Any permanent updates to Customer Details are sent from the Retailer to the MC, MP and DNSP in a CustomerDetailsNotification. The Customer and contact information provided in a ServiceOrderRequest should only be used for the completion of the identified work.

- (e) **Site Details** – The Initiator should ask the Customer if there are any Hazards or Access Requirements prior to initiating a ServiceOrderRequest. Where the Customer reports no Hazards or Access requirements the Initiator is expected to indicate this using the appropriate values in the ServiceOrderRequest. This information should be used for the completion of the identified work only.
- (i) If the Customer has supplied any special access details, the Initiator is expected to include these in *AccessDetails*. These details exclude the hazards covered by the *HazardDescription* field.
 - (A) Where the Customer reports no access requirements, the Initiator should indicate this by using the value “Customer Reports No Access Requirements” in the *AccessDetails* field.
 - (B) Any permanent updates to access or hazard details should be sent from the Initiator to the Recipient in a SiteAccessNotification.
- (f) **Read all meters**
- (i) Where the Recipient reads the meter as part of completing the ServiceOrderRequest, the Recipient is expected to use reasonable endeavours to read all meters at the NMI. Excluding ServiceOrderRequests that are Not Completed.
- (g) **Meter Serial Number**
- (i) *MeterSerialNumber* is required where work is specific to a meter. The Initiator should provide the *MeterSerialNumber* if it is available. A Recipient will reconcile the *NMI / MeterSerialNumber* combination(s) against information held in their records, and thereby help confirm the correct site will be visited for the Service as early in the process as possible. If the requested work affects all meters, the Initiator does not have to provide any meter serial numbers.
 - (ii) Where the Recipient identifies a discrepancy between a *NMI* and the *MeterSerialNumber* the Recipient should progress the ServiceOrderRequest if it believes the discrepancy relates to its own data. If it believes the discrepancy relates to the *MeterSerialNumber* provided by the Initiator, the Recipient should reject the ServiceOrderRequest except for High Priority Service Orders, where the Recipient should contact the Initiator and agree how to resolve the discrepancy. If the ServiceOrderRequest is rejected, the Recipient must provide the *MeterSerialNumber(s)* in the *Explanation* field associated with the appropriate *EventCode* (“Invalid data. Details provided in *Explanation*”).
- (h) **ProposedTariff field**
- (i) The Recipient must not reject the ServiceOrderRequest if the *ProposedTariff* value is wrong or does not suit the Site’s metering. The MSATS notification will provide the details of the tariff(s) actually allocated to the Site.
- (i) **Other rules**
- (i) The Recipient may seek to recover costs for any actioned work from the Initiator who requested that work that was completed or attempted.
 - (ii) An Initiator is expected to use reasonable endeavours to send ServiceOrderRequests as they arise and not to bundle them and send them in a batch.

7.1.7.2. Service Paperwork

- (a) Examples of alternative, agreed methods to reference the Service Order Number when providing Service Paperwork are:
- (i) When Faxed - the Service Order number is to be clearly displayed at the top right hand corner of the Service Paperwork;
 - (ii) When Emailed - the Service Order number is to be clearly displayed in the subject line of the email;
 - (iii) When using Online systems - as agreed by the users of the online system;
 - (iv) When provided by transaction – as agreed by the users of the transaction;
 - (v) When left 'On-Site' – the Service Order number is not required. In this case, even if the Retailer is provided with a copy of the Service Paperwork by the DNSP or MP, the Retailer is not required to provide a copy of the Service Paperwork back to the DNSP or MP when raising a Service Order.
- (b) Upon receipt of the ServiceOrderRequest that requires Service Paperwork to be provided by the Retailer, the Service Provider must:
- (i) not reject the ServiceOrderRequest on the basis of missing paperwork
 - (ii) where the necessary Service Paperwork has not been received, wait at least 1 hour to receive Service Paperwork prior to providing a Business Signal of BusinessAcceptance/Rejection
 - (iii) Note: The Service Provider can send a BusinessAcceptance/Rejection at any time within the hour when the paperwork is received (and reconciled to the Service Order) or is not required.
 - (iv) within the timeframes permitted for the BusinessAcceptance/Rejection and after 1 hour, where all necessary Service Paperwork has not been received and the Service Provider wishes to accept the ServiceOrderRequest, respond with a severity "Warning" with a Business Event of 'Documentation required'
- (c) Service Paperwork must be provided in Victoria for sites that have been physically de-energised for more than 12 months.
- (d) In those jurisdiction where safety certificate paperwork is required for both the customer's premise and the metering installation, then the Initiator must ensure that there is a reference to both the customer and the metering safety certificate paperwork in the Supply Service Works Service Order, unless the safety certificates are to be left on-site in which case they should be identified as 'on-site' in the Supply Service Works service order
- (e) Some jurisdictions may require the provision of safety related paperwork where there is a material change to the Site's electrical supply requirements (eg 1 phase to 3 phase). Reference to this paperwork should also be provided.

7.1.7.3. Allocate NMI – NSW

- (a) As the DNSP does not do the actual connection work in NSW, the DNSP will only receive a Supply Service Works - Allocate NMI Service Order to facilitate the New Connection process. The MP will however receive a Metering Service Works – Install Meter Service Order as part of the overall process. Refer to Figure 4 for more information.
- (b) The Retailer must provide the NMI to the Customer, or Accredited Service Provider (ASP) or builder, with a request that the NMI is included on relevant electrical works forms. These forms include the Notification of Additional Load, the Application for Connection (AFC), and the Notice of Service Work (NOSW). If the NMI is not provided on the NOSW form, the DNSP will reject the NOSW.

7.1.7.4. Allocate NMI – Other Jurisdictions

- (a) The use of a Supply Service Works Service Order with a sub-type of Allocate NMI is always the first step in an overall B2B New Connection process.
- (b) This Service Order type has Service Paperwork requirements in some jurisdictions.
- (b) Typically an Electrical Works Request (EWR) or a Form A in Queensland is required as one of the key items of paperwork to be provided by the Electrical Contractor to the DNSP prior to NMI Allocation.
- (c) Under most circumstances it is expected that the Customer's Safety Certificate is also provided at the Allocate NMI stage, however the option exists for a Retailer to supply that document with the subsequent Supply Service Works Service Order to establish a type of supply.
- (d) If the Recipient considers the requested metering configuration is incorrect, the Recipient may advise the Initiator of this using a BusinessAcceptance/Rejection transaction.

7.1.7.5. Completing the New Connection – Other Jurisdictions

- (a) To complete the New Connection, the Retailer will be required to initiate a Metering Service Works – Install Meter Service Order to the MP/MC. If a metering configuration is different from that requested by the Initiator, the MP should advise the Initiator of the metering configuration and the reason for it in the *SpecialNotes* field of the ServiceOrderResponse.
- (b) To complete the New Connection, the Retailer will also be required to initiate a Supply Service Works Service Order with the applicable establish sub type to the DNSP. In those jurisdictions requiring Metering Installation Safety Certificate paperwork to be provided prior to the establishment of supply, the Safety Certificate ID should be provided with the Service Order or alternatively an indication that the safety certificate will be left on-site must be given.
- (c) An Initiator should use the *SpecialInstructions* field in the subsequent Metering Service Works Service Orders to an MP or Supply Service Works Service Orders to a DNSP to advise the Recipient of any specific tariff or metering requirements that are not already provided.

7.1.7.6. Metering Service Works

- (a) The Initiator must use the *ProposedTariff* field to advise the Recipient of any specific tariff that the Initiator requires. The *SpecialInstructions* field should provide additional information, such as metering requirements or any other special requirements.
- (b) If the Recipient considers the requested metering configuration is incorrect, the Recipient may advise the Retailer of this using a *BusinessAcceptance/Rejection* transaction.
- (c) If the Recipient installs a metering configuration different from that requested by the Retailer, the Recipient must advise the Retailer of the metering configuration and the reason for it in the *SpecialNotes* field of the *ServiceOrderResponse*.

7.1.7.7. Meter Reconfiguration

- (a) A Meter Reconfiguration request is a sub-type of a Metering Service Works Service Order. The Initiator should specify the required configuration in the *SpecialInstructions* field of the *ServiceOrderRequest*. For example a change to control load on/off times within the meter will require this service order type, with details of new times in special instructions.

7.1.7.8. Change Timeswitch Settings

- (a) A change timeswitch setting request is a sub type of Metering Service Works Service Order. This should be used when arranging a change to a network device.

7.1.7.9. Supply Service Works

- (a) The Initiator and Recipient must ensure that all necessary paperwork is available and completed in order to progress and complete a Supply Service Works Service Order where the Customer's connection is to be changed. This Service Order type has Service Paperwork requirements in some jurisdictions. The Supply Service Works – Service Order Sub Types that will require paperwork include:
 - (i) Supply Service Works – Allocate NMI
 - (ii) Supply Service Works – Supply Abolishment
 - (iii) Supply Service Works – Supply Alternation
 - (iv) Supply Service Works – Establish Temporary Supply
 - (v) Supply Service Works – Establish Temporary in Permanent
 - (vi) Supply Service Works – Establish Permanent Supply
- (b) A Supply Service Works Service Order may be sent by the Retailer to the DNSP at the same time as the Metering Service Works Request is sent to the MP/MC. In that situation Safety Certificate paperwork for the Metering Installation will not be created at the time that the Supply Works Request is sent. In those jurisdictions requiring paperwork, the Metering Safety Certificate should be marked in the Service Order as being available On-Site.

7.1.7.10. Miscellaneous

- (a) Participants should not use this Service Order type for Standing Data enquiries. This includes seeking confirmation and clarification of address details, tariff details, Site network relationship details such as the Distribution Loss Factor (DLF) & Transmission Node Identity (TNI), meter details, etc.

7.2. Customer & Site Details Process

7.2.1. Common Business Rules for Notifications

- (a) Where a Retailer becomes aware of changes to Customer details (such as outage contact changes or Life Support details), it must initiate a *CustomerDetailsNotification* to the DNSP.
- (b) The Retailer may initiate a *CustomerDetailsNotification* to other participants by agreement.

7.2.2. Customer Details Request

- (a) Any participant may initiate a CustomerDetailsRequest transaction in order to obtain the most up-to-date Customer Details and Life Support information from a Retailer

7.2.3. Customer Details Notification

- (a) The Retailer is expected to use reasonable endeavours to send the CustomerDetailsNotification in the following situations:
 - (i) At completion of transfer, or;
 - (ii) When the customer moves out or moves in, or
 - (iii) Upon receipt of routine updates provided by the existing customer.
- (b) If a Customer changes Retailer, the Old Retailer should not send a CustomerDetailsNotification

7.2.4. Customer Details Reconciliation

- (a) The CustomerDetailsReconciliation provides Recipients with a snapshot of all NMIs, for which the Retailer is financially responsible, where the customer is flagged with Life Support at the time of the Reconciliation.
- (b) The use of BusinessAcceptance/Rejections for the CustomerDetailsReconciliation will be a subset to that used for the CustomerDetailsNotification.
- (c) The Recipient can only reject for reasons as specified in section 5.5.1 of the B2B Procedure: Customer and Site Details Notification Process. If the DNSP finds an issue with the customer data other than the Life Support flag provided in the CustomerDetailsReconciliation, the Recipient should use the CustomerDetailsRequest process in accordance with the B2B Procedure: Customer and Site Details Notification Process.
- (d) The Participants should agree the timing of the Customer Details Reconciliation. This agreement should consider criteria such as:
 - (i) conflicting scheduled reconciliations with other Participants;
 - (ii) IT support availability; and
 - (iii) other impacting activities.

7.2.4.1. Life Support

- (a) Where a party becomes aware of a Life Support requirement there are defined processes which must be followed to ensure that the relevant market participants are aware of the Life Support Requirement.
 - (i) DNSPs must advise the Current Retailer by email who will update the customer details and initiate a Customer Details Notification.
 - (ii) MC/MPs should advise the Current Retailer by email of a Life Support requirement, who will in turn update their records and initiate a Customer Details Notification.
 - (iii) Retailers of customers within an embedded network must advise the DNSP of the parent network and the Embedded Network Operator. The parent DNSP must advise the parent Retailer by email who will in turn update their records and initiate a Customer Details Notification.

7.3. One Way Notifications

7.3.1. Process Overview

- (a) The One Way Notification process enables Participants to send information or messages to other Participants in a single transaction for multiple NMLs.
- (b) The process is designed to allow flexibility to add additional new message types within the Business Document without an aseXML Schema change, by incorporating the data in format defined within the transaction.
- (c) There is one Business Document associated with this overall process: OneWayNotification - the provision of selected information between Participants.

7.3.2. Meter Exchange Notification (MXN)

- (a) This transaction forms the communication method for an Initiator to notify a Recipient of planned meter exchanges under a Mass Meter Exchange (roll out) Program. .
- (b) For this process the definition of "Mass Meter Exchange Program" shall mean the mass roll out of a "smart meter replacement program", initiated by a Participant or mandated by jurisdictional or national regulatory instruments.
- (c) During a Mass Meter Exchange Program the Initiator should raise a *OneWayNotification* (MXN), for each impacted current Participant affected, each time a new customer notification is sent.
- (d) During a Mass Meter Exchange Program the Initiator is expected to take reasonable endeavours to include multiple MXN records in OneWayNotification transactions.
- (e) A Participant may initiate the Meter Exchange Notification (MXN) for;
 - (i) individual meters,
 - (ii) small numbers of meter exchanges,
 - (iii) large number of meter exchanges; and
 - (iv) pilots & trials that are not part of a Mass Meter Exchange Program
- (f) It is reasonably expected that where a Participant initiates a meter exchange program in e(iii) and e(iv) above, that it will engage with affected Participants to determine impacts and agree whether the use of *OneWayNotification* (MXN) is appropriate.
- (g) The MP is not obliged to complete the meter exchange during the notification dates provided to the Recipient.
- (h) If the MP fails to complete the meter replacement between the notification dates, and consequently provides the customer with a new notification, a new OneWayNotification (MXN) transaction should be sent to the affected Participants.
- (i) For the advance notification to be useful, the Initiator should send the *OneWayNotification* (MXN) transaction at least four days prior to commencing any meter exchange.
- (j) The MP may negotiate a different period with the customer outside the notification dates and not notify the affected Participants.
- (k) The Initiator is only expected to notify the current Participant for a given Role as defined by MSATS at the time the Meter Exchange Notification (MXN) is created.
- (l) Notifications of successful meter exchanges are communicated via the existing MSATS Change Request process.
- (m) Recipients may receive more than one OneWayNotification (MXN) per day from the same Initiator.

7.3.3. Network Tariff Notification (NTN)

- (a) This transaction is the communication method typically used for DNSPs to notify Retailers and/or MCs of planned network tariff changes in advance of the network tariff change taking effect.
- (b) Where a meter reconfiguration is required as a result of the change in Network Tariff the Retailer should request the MP to perform the reconfiguration via a Metering Service Works Request.
- (c) Where no metering changes are required, the DNSP will make the corresponding update to the Network Tariff in MSATS.
- (d) The DNSP should raise a *OneWayNotification* (NTN) for each impacted Current Retailer.
- (e) The DNSP is expected to provide all network tariffs applicable for the NMI as at the proposed change date in the *OneWayNotification* (NTN).
- (f) The DNSP is expected to take reasonable endeavors to include multiple NTN records within the *OneWayNotification* (NTN).
- (g) The DNSP is expected to engage with impacted market Participants before any *OneWayNotification* (NTN) are raised.
- (h) To provide sufficient forward-notice, the DNSP should produce the *OneWayNotification* (NTN) a minimum of thirty business days before the Network Tariff change becomes effective.
- (i) The DNSP is not obliged to complete the Network Tariff change on the proposed dates provided to the Retailer.
- (j) The DNSP is not required to notify the Retailer if a planned Network Tariff change does not occur.
- (k) If the DNSP fails to complete the Network Tariff change on the NOTICEENDDATE and consequently re-schedules the Network Tariff change, a new *OneWayNotification* (NTN) transaction shall be sent to the Retailer and/or MC.
- (l) The DNSP is only required to notify the current Retailer as defined by MSATS at the time the Network Tariff Notification (NTN) is created.
- (m) If a prospective Retailer exists either at the time of creating or post the creation of the *OneWayNotification* (NTN) transaction, there is no requirement for the DNSP to also notify the prospective Retailer.
- (n) Notifications of successful Network Tariff changes are communicated via the existing MSATS Change Request process.
- (o) Recipients may receive more than one *OneWayNotification* (NTN) per day from the same Initiator.
- (p) Any Network Tariff change is effective from the MSATS change request effective date.
- (q) The network tariff must be an approved and published Network Tariff before it can be used in the Network Tariff Notification.

Planned Interruption Notification

- (a) For this process the “Planned Interruption Notification” shall mean the notification of a Retailer Initiated Planned Interruption of supply for a Customer from the Current Retailer (FRMP) to the DNSP in advance of when the interruption is scheduled.
- (b) The details provided in the notification will reflect the details of the interruption provided by the retailer to the customer.
- (c) The Initiator must provide the start and end dates of the interruption window as applicable for the NMI(s).

- (d) The Initiator must provide the expected duration of the planned interruption.
- (e) The Initiator must produce the Planned Interruption Notification transaction a minimum of four business days before the Planned Interruption is scheduled.
- (f) The Initiator is not obliged to perform the Planned Interruption on the proposed dates provided to the Recipient.
- (g) The Initiator is not required to notify the Recipient if a Planned Interruption did not occur.
- (h) Recipients may receive more than one Planned Interruption Notification per day from the same Initiator.

7.4. Meter Fault and Issue Notification

- (a) For this process the “Meter Fault and Issue Notification” shall mean the notification of a faulty meter or family of meters to the Current Retailer (FRMP) to enable them to arrange for the meter(s) to be replaced, or notification of a meter or meters that have exceeded the allowable consumption threshold for their given jurisdiction.
- (b) The Recipient must appoint a contestable Metering Co-ordinator when the Initiator of the notification is the Initial Metering Co-ordinator.
- (c) Provided the Recipient of the notice is correct for the given NMI/s, it is expected that action will be taken to initiate the replacement the meter/s for the NMIs identified in the notice.
- (d) The Initiator will advise whether the Customer’s premise is on supply or not.
- (e) The Initiator will advise the reason they have determined why the meter is faulty.
- (f) The optional fields in the transaction (STARTTIME, ENDDATE, STARTTIME and DURATION) have been included so that Metering Providers (if they use this transaction) can advise the Retailer of potential scheduling availability to perform associated work with a Meter Fault. This information can be used as input by the Retailer to support their obligations for planned interruption notifications, if an interruption to supply is needed.

7.5. Notice of Metering Works

- (a) The Notice of Metering Works is typically provided to the DNSP shortly after metering works are completed, and provides advance notice of metering changes prior to the appropriate Change Request being raised and affected in MSATS. Where there is any discrepancy between the information in the NOFFMW and metering installation details updated in MSATS, MSATS is considered the database of record.

7.6. Meter Data Process

7.6.1. Provide Meter Data

- (a) Worked example for Accumulation Meters:

MDFF content provided in response to a request for MDFF data for the period 1 January to 15 April

Start date	End date	Start read	End read	Consumption
1 Dec	1 Feb	0	100	100
1 Feb	1 Mar	100	200	100
1 Mar	1 Apr	200	300	100

- (b) If the MDP has the MDFF Data which is the subject of a ProvideMeterDataRequest, they should send a MeterDataNotification transaction containing a MDFF file with the requested data to the relevant Participant. If the MDP is unable to provide the MDFF Data the subject of a ProvideMeterDataRequest, or the MDFF Data to which the MDP has access and wishes to provide to the Participant does not exactly correlate to the subject of the ProvideMeterDataRequest, the associated BusinessAcceptance/Rejection transaction for the ProvideMeterDataRequest should contain a relevant *EventCode* to explain the situation.
- (c) MDPs may provide multiple MeterDataNotifications in response to a single ProvideMeterDataRequest.
- (d) A Participant must use reasonable endeavours to ensure that the MDFF Data they are requesting is only for a period where they have a relevant Participant Relationship with the NMI.

7.6.2. Verify Meter Data

- (a) A VerifyMeterDataRequest transaction does not replace a Special Read ServiceOrderRequest. If a Participant requires a site visit the Participant should raise a Special Read ServiceOrderRequest.
- (b) MDPs may provide multiple MeterDataNotifications in response to a single VerifyMeterDataRequest.
- (c) A Participant is expected to ensure that the MDFF Data they are querying is only for a period where they have a relevant Participant Relationship with the NMI.

7.6.3. Remote Service Request/Response

- (a) A standard business practice for use of Remote Service Request is expected to be negotiated between the Initiator and the Recipient and subject to commercial arrangements.
- (b) The current structure of the request and response is expected to meet the NER requirements for the Minimum Services Specification.
- (c) The request allows for the Initiator to request a variety of services as per allowed values but may also introduce user defined services by agreement with the service provider.
- (d) The request also contains the format that the response is to be provided in. Similarly the Initiator can nominate a format as per allowed values but may specify a user defined format code with agreement with the service provider.

- (e) The response contains a numeric Error Code which is used to indicate Success (zero) or Failure (non-zero). Where the response indicates failure the recipient will populate the Error Description (text field) to give the initiator the reason for failure.
- (f) A product code is also contained within the response to be used for reconciliation purposes.

8. APPENDIX 1 – SERVICE ORDER PAPERWORK REFERENCE TABLE

To the extent of any inconsistency between this reference table and any relevant Jurisdictional instrument, the relevant Jurisdictional instrument shall prevail to the extent of the inconsistency.

The documents listed in the table below are a collation of existing industry obligations. This table does not create new obligations.

Service Order Type/Subtype	Description	Form Reference Allowed Values*
Supply Service Works - Establish Temporary Supply, Establish Temporary in Permanent, and Establish Permanent Supply, Supply Alteration, Allocate NMI	<p><u>Safety Certificate:</u></p> <ul style="list-style-type: none"> • Victoria = (Certificate of Electrical Safety (CES)); • SA = Electrical Certificate of Compliance (ECC – note that this will be picked up on site at time of connection); • TAS = reference to Certificate of Electrical Compliance (CEC) on EWR; • ACT, NSW & QLD = not applicable; <p><u>Other Forms:</u></p> <ul style="list-style-type: none"> • Victoria = Electrical Works Request (EWR); Notice of Metering Works (NOMW); • SA = FORM A; • TAS = Electrical Works Request (EWR); • ACT = RFS; • Queensland = Energex - Electrical Works Request (EWR) or Ergon Energy - Request for Initial Connection, Metering Change or Service Alteration (FORM A). 	<ul style="list-style-type: none"> • EWR • NOMW • FORM A • RFS
Re-energisation	<p>In Victoria, if a service has been off supply (de-energised) for more than 12 months, the SIRs (Service Installation Rules) require a notification that a safety check has been conducted by an electrical contractor. Certified Evidence that an Installation is safe to reconnect, e.g. EWR, CES or Letter, is required.</p> <p>In SA, if a service has been off supply (de-energised) for more than 12 months, or due to a site defect, an Electrical Certificate of Compliance (ECC) is required.</p> <p><u>Safety Certificate:</u></p> <ul style="list-style-type: none"> • Victoria = (Certificate of Electrical Safety (CES)); • SA = Electrical Certificate of Compliance (ECC – note that this will be picked up on site at time of connection); <p><u>Other Forms:</u></p> <ul style="list-style-type: none"> • Victoria, TAS = Electrical Works Request (EWR); • Letter from a Licensed Electrical Inspector or Registered Electrical Contractor. • Reconnection of Supply form. 	<ul style="list-style-type: none"> • Letter • EWR • RoS
De-energisation	<p>In NSW (Ausgrid Distribution Area), for De-energisation after non-payment, the Retailer may be required to provide the DNSP (via email) an Assurance Notification. The Assurance Notification advises the Service Provider the Retailer has the right to arrange for de-energisation under its contract with the customer and as permitted under the National Energy Retail Rules.</p>	Not Applicable

Service Order Type/Subtype	Description	Form Reference Allowed Values*
Metering Service Works	<p><u>Safety Certificate:</u></p> <ul style="list-style-type: none"> • Victoria = (Certificate of Electrical Safety (CES); • SA = Electrical Certificate of Compliance (ECC – note that this will be picked up on site at time of connection); • TAS = reference to Certificate of Electrical Compliance (CEC) on EWR; • ACT, NSW & QLD = not applicable; <p><u>Other Forms:</u></p> <ul style="list-style-type: none"> • Victoria = Electrical Works Request (EWR); Notice of Metering Works (NOMW); • SA = FORM A; • TAS = Electrical Works Request (EWR); • ACT = RFS; • Queensland = Energex - Electrical Works Request (EWR) or Ergon Energy- Request for Initial Connection, Metering Change or Service Alteration (FORM A). 	<ul style="list-style-type: none"> • EWR • NOMW • FORM A • RFS
Supply Service Works - Supply Abolishment	<p><u>Safety Certificate:</u></p> <ul style="list-style-type: none"> • ACT, NSW, TAS & QLD = not applicable; <p><u>Other Forms:</u></p> <ul style="list-style-type: none"> • Victoria = Electrical Works Request (EWR); Notice of Metering Works (NOMW); Application for Abolishment of Electrical Supply (AAES). • SA = FORM A; • TAS = Electrical Works Request (EWR) or Application for Supply Abolishment (ASA) • ACT = RFS; • 	<ul style="list-style-type: none"> • EWR • NOMW • AAES • FORM A • ASA • RFS • RAS •

* In the SO field "FormDocumentReference" values for Safety Certificates such as CES & ECC are not allowed. The Safety Certificate reference number should be entered in the "SafetyCertificateID" field of a SO.