B2B PROCEDURE:

METER DATA PROCESS

PREPARED BY:	AEMO ~~Retail~~ Markets ~~and Metering~~
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VERSION RELEASE HISTORY

Version	Date	Author	Comments
1.0	23/12/2004	NEMMCO	Final Determination version.
1.1 DRAFT	22/4/2005	NEMMCO	Draft issued for Consultation.
	20/6/2005	NEMMCO	Draft issued as Draft Determination.
1.1	1/8/2005	NEMMCO	Final Determination version.
1.2	29/8/2005	NEMMCO	Changes to incorporate clause 7.2A of National Electricity Rules that deals with Manifest and minor or procedural errors.
1.3 DRAFT	30/6/2006	NEMMCO	Update for changes proposed prior to Tranche 1 go live that have no operational impact and changes required to accommodate the commencement of FRC in Queensland.
1.3.DRAFT 2	30/10/2006	NEMMCO	Update following first consultation workshop
1.3 DRAFT 3	5/12/2006	NEMMCO	Updated from comments received in 2nd stage consultation
1.3 DRAFT FINAL	15/12/2006	NEMMCO	Final Draft
1.3	30/01/07	NEMMCO	Version recommended by the IEC to NEMMCO on 22 January 2007 and approved by NEMMCO for publication on 30 January 2007.
1.4	20/06/2007	NEMMCO	Updated to Service Order Process to accommodate changes in re-energisation service order timings. No changes were made to this document.
1.5	03/12/2008	NEMMCO	Issued as Final Determination
1.5.1	27/04/2009	NEMMCO	Update the version number and release date to retain version numbering with the other B2B Procedures. Updated singular and plural references to the word "Procedure (s)". Issued as FINAL Determination
1.6	23/06/2009	NEMMCO	Update the version number and release date to retain version numbering with the other B2B procedures. Removed clause 1.2(b) and changed the publish date to effective date on the front cover. Published as FINAL Determination.
1.6.1	18/08/2009	AEMO	Update to reflect change of governance from NEMMCO to AEMO. Update the version number and release date to retain version numbering with other B2B Procedures Minor updates to sections 1.2, 1.3, 1.4, to align clauses with the other B2B Procedures. Issued as Determination – Effective 25 November 2009
1.7	17/03/2010	AEMO	Updated version numbers and release date to retain version numbering with other B2B Procedures. Graphical updates to diagrams. Update Clause 1.7. Move Business Event information to the B2B Procedure Technical Guidelines for B2B Procedures. Issued as Final Determination – effective 26 May 2010
1.7a	15/07/2011	AEMO	Updated version number to 1.7a and release date to retain version numbering with other B2B Procedures. Updated procedure to facilitate further extension of contestability to small business customers in Tasmania
1.8	15/08/2011	AEMO	Updated version numbers and release date to retain version numbering with other B2B Procedures.
1.9	06/11/2012	AEMO	Updated version numbers and release date to retain version numbering with other B2B Procedures. Update to clauses 1.5.2 a.4; 1.7 a; 2.4 a; 2.9 a and 3.2.2 a for Meter Data Providers.
2.0	13/11/2013	AEMO	Updated version numbers and release date to retain version numbering with other B2B Procedures.

Version	Date	Author	Comments
2.1	15/05/2014	AEMO	Updated version numbers and release date to retain version numbering with other B2B Procedures.
2.2	21/11/2014	MSWG / AEMO	Minor changes made to section 2.5 and timing requirements for Provide Meter Data Process (section 3.2) added following MSWG review. Updated version numbers and release date to retain version numbering with other B2B Procedures.
3.0	01/09/2017	AEMO	Updated for the following: • National Electricity Amendment (Expanding Competition in Metering and Related Services) Rule 2015 No. 12; • National Electricity Amendment (Embedded Networks) Rule 2015 No. 15; and • National Electricity Amendment (Updating the Electricity B2B Framework) Rule 2016 No. 6.

Interpretation

For details of the interpretation of key words, such as addresses, dates, times and field types, refer to the B2B Procedure: Technical Guidelines for B2B Procedures.

Documentation Conventions

Refer to the B2B Procedure: Technical Guidelines for B2B Procedures for the details of the documentation conventions.

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1. INTRODUCTION

1.1. ~~Document Structure~~Purpose and Scope

This B2B Procedure: ~~~~Data Request Process (Procedure) is published by AEMO in accordance with clause 7.17.3 of the NER and specifies the standard MDFF data request processes ~~and transaction data.~~

1.2. Definitions and Interpretation

The Retail Electricity Market Procedure – Glossary and Framework:

(a)   is incorporated into and forms part of this Procedure; and

(b)   should be read with this Procedure

(c)   In the event of any inconsistency between this Procedure and the B2B Procedure Technical Delivery Specification~~~~, unless this Procedure provides otherwise, the B2B Procedure: Technical Delivery Specification shall prevail to the extent of the inconsistency.

1.3. Related AEMO 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 Technical Delivery Specification	
B2B Procedure Service Order Process	
B2B Procedure Customer and Site Details Notification Process	
Metrology Procedure: Part A	http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Retail-and-metering
Metrology Procedure: Part B	
MDFF Specification	
B2B Guide	
NMI Procedure	
CATS Procedures	

~~Section One provides an introduction to this Procedure.~~

~~Section Two details the high-level process flows.~~

~~Section Three defines the Timing Requirements for the Meter Data process.~~

~~Section Four itemises the data to be provided in each transaction.~~

~~1.1. Introduction~~

~~a.   This B2B Procedure: Meter Data Process ("Procedure") is approved by AEMO in accordance with clause 7.17.3 of the National Electricity Rules ("Rules").~~

~~b.   This Procedure may only be amended in accordance with clause 7.17.3 of the Rules.~~

~~c.   In the event of any inconsistency between this Procedure and the Rules, the Rules shall prevail to the extent of the inconsistency.~~

~~d.   In the event of any inconsistency between this Procedure and the Metrology Procedure, the Metrology Procedure shall prevail to the extent of the inconsistency.~~

~~e.   In the event of any inconsistency between this Procedure and the MSATS Procedures the MSATS Procedures shall prevail to the extent of the inconsistency.~~

f.   In the event of any inconsistency between this Procedure and the B2B Procedure Technical Delivery Specification or the B2B Procedure Technical Guidelines for B2B Procedures (together referred to as the "B2B Technical Procedures"), unless this Procedure provides otherwise, the relevant B2B Technical Procedure shall prevail to the extent of the inconsistency.

g.   In this Procedure, a capitalised word or phrase has the meaning given to it:

   (i)   in this Procedure;

   (ii)   if no meaning is given to it in this Procedure, it is defined in the B2B Procedure Technical Guidelines for B2B Procedures; or

   (iii)   if no meaning is given to it in the B2B Procedure Technical Guidelines for B2B Procedures, it is defined in the Rules.

h.   This Procedure shall be interpreted in accordance with the rules of interpretation set out in clause 1.7 of the Rules and the B2B Procedure Technical Guidelines for B2B Procedures. Provisions that are placed in a square box coloured grey are provided by way of explanation and to assist readers and do not form any obligation on Participants or affect the interpretation of this Procedure. Provisions that fall within a section entitled "Worked Example" are provided for assistance only and do not form any obligation on the Participants nor do they affect the interpretation of this Procedure.

1.2.   Jurisdictional Instruments

a.   To the extent of any inconsistency between this Procedure and any relevant jurisdictional instrument, the relevant jurisdictional instrument shall prevail to the extent of the inconsistency.

1.3.   Purpose

a.   This Procedure defines the standard Meter Data Process and transaction data requirements between participants, with which they must comply.

1.4.   Scope

1.4.1.   Inclusions

This Procedure enables:

a.   Meter Data Providers (MDP) to send MDFF Data to Retailers, DNSPs, ENMs, MCs and other MDPs, and to receive confirmation that the MDFF Data has been received and accepted.

   (i)   The Procedure allows Participants to request the latest version of MDFF Data.

         The Procedure allows Participants to query the MDFF Data.

      Meter Providers to request metering information from the another metering provider prior to installing their own meter.

      Retailers and DNSP's to request metering information from the current metering provider at a point in time or scheduled point in time.

b.   Retailers and DNSP's to request meter data either on demand or scheduled.

1.4.2.   Exclusions

a.   This Procedure does not apply to:

   (i)   Processes for inventory and load tables for unmetered supplies as dealt with in the Metrology Procedure;

   (ii)   Metering configuration information, namely NMI Standing Data, as dealt within Existing MSATS Procedures;

      (iii)   Changes to the recorded Next Scheduled Read Date;

      (i)   Delivery of Metering Data to MSATS pursuant to the Metrology Procedure and Service Level Procedure for Metering Data Providers.

1.5. aseXML

a. A Participant must use the agreed industry standard of aseXML messaging to deliver Transactions pursuant to this Procedure. Participants must ensure that any MDFF Data provided complies with the requirements of the MDFF Specification and is delivered using a MeterDataNotification transaction.

1.6. Application of this Procedure

a. As required by 7.17.4(i) of the National Electricity Rules, Local Retailers, Market Customers, Distribution Network Service Providers, AEMO, Metering Data Providers and Metering Providers must comply with this Procedure.

b. As permitted by clause 7.17.4(j) of the National Electricity Rules, Local Retailers, Market Customers and Distribution Network Service Providers may on such terms and conditions as agreed between them communicate a B2B Communication on a basis other than as set out in this Procedure, in which case the parties to the agreement need not comply with this Procedure to the extent that the terms and conditions agreed between them are inconsistent with this Procedure.

c. This Procedure applies to all Meter Installations.

d. This Procedure applies to MDFF Data. in respect of a NMI located in a Participating Jurisdiction as follows:

Transaction	ACT	NSW	QLD	SA	VIC	TAS*
Provide Meter Data Request	Yes	Yes	Yes	Yes	Yes	Yes
Verify Meter Data Request	Yes	Yes	Yes	Yes	Yes	Yes
Meter Data Notification	Yes	Yes	Yes	Yes	Yes	Yes

* Note: Applies to second tier sites only in Tasmania.
Key
Yes   Applicable as defined.
No   Not applicable.

1.7. Enforceability of the Procedure

a. The Procedure is enforceable by the Australian Energy Regulator in accordance with its powers under section 15 of the National Electricity Law.

1.8. Terminology and Definitions

1.8.1. Terminology

a. In this Procedure:

    (i)   the term "Basic Meter Data" refers to accumulated consumption and/or demand data (i.e. data from a Type 6 Metering Installation).

    (ii)   The term "Interval Meter Data" refers to meter consumption data and/or demand for time periods (i.e. data from a Types 1-5, or 7 metering installation).

    (iii)   The term "MDFF" is used to refer to the current effective version of the Participant Meter Data File Format specification. The current Meter Data File Format specification is located on the AEMO web site.

  b. The term "Participant" is limited in its meaning and is not as defined in the B2B Procedure Technical Guidelines for B2B Procedures. In this Procedure Participant means the party receiving MDFF Data from the MDP. A Participant may be any one of the LR, FRMP, TNSP, DNSP or another MDP.

  c. The term " Notification" refers to a MeterDataNotification Transaction.

  d. The term "Request" refers to either ProvideMeterDataRequest or a VerifyMeterDataRequest Transaction.

1.8.2. Business Documents

  a. Throughout this Procedure, the term "Business Document" is used to refer to the key B2B Messages or Transactions sent between the various Participants.

In this Procedure, the relevant Business Documents are:

(a) ProvideMeterDataRequest;

(b) VerifyMeterDataRequest, and the

  MeterDataNotification.

1.8.3. Business Signals

(a) The delivery specification details of transactions in this Procedure are contained in the B2B Procedure B2B Technical Delivery Specification.

(b) Participants must ensure that their technical delivery mechanism supports the following Business Signals:

  (i) BusinessReceipt; and

  (ii) BusinessAcceptance/Rejection

(c) A *BusinessReceipt* indicates that a Business Document has been received and its contents indicate if it is readable by the Recipient.

(d) A *BusinessAcceptance/Rejection* represents formal acceptance or rejection of the appropriate Business Document by the Recipient based on the application of business rules.

1.9. Related Documents

  a. This Procedure has been prepared in conjunction with and should be read in conjunction with:

  (i) B2B Procedure Technical Delivery Specification

  (ii) B2B Procedure Technical Guidelines for B2B Procedures

  (iii) Meter Data File Format Specification

  b. Participants should also refer to the following documents. It should be noted that these documents have been prepared by way of assistance only and are not a legally binding document nor does it affect in any way the interpretation of this Procedure.

  (i) Meter Churn Data Management Rules

  (ii) Participant Build Pack - B2B System Interface Definitions

  (iii) Frequently Asked Questions: Meter Data Process

2. BUSINESS COMMUNICATION PROCESSES

2.1. Process Overview

Table 1 details hthe ere are three six distinct businesscommunication processes associated with this overall processMDFF data requests processes this Procedure applies to, indicates which Business Documents are used to initiate each type of data request and provides a brief description of each:.

Table 1   Overview of Applicable Processes

Name of Process	Business Document	Description
Meter Data Notification	MeterDataNotification	A delivery mechanism of MDFF data from an MDP. The provision of MDFF Data as part of the MDPs' normal production process obligations. These may include scheduled meter reads, reads Includes Scheduled Meter Readings, Meter Readings taken by an MDP in response to a service order request ServiceOrderRequest and other MDFF data (such as forward estimatesEstimations). The type of data that may be requested by an Initiator using ProvideMeterDataRequest, VerifyMeterDataRequest or RemoteOnDemandMeterRead.
Provide Meter Data	ProvideMeterDataRequest	An Initiator can The Process by which a Participant requests the provision of the latest version of MDFF data held by the MDP. Recipient. It This does not involve the investigation of problems with MDFF data. It is not to be used to request meter data under the Meter Data Provision Procedure.
Verify Meter Data	VerifyMeterDataRequest	An Initiator can query MDFF data to ensure that the latest version is being queried. The process by which a Participant queries MDFF Data. This is normally executed Normally initiated after a ProvideMeterDataRequest to ensure that the latest version of data is being queried has been completed.
Meter Installation Inquiry	MeterInstallationInquiryRequest	An Initiator can request from a participant with whom they have a contract for service, a single point in time *metering information* or scheduled point in time service.
Meter Installation Inquiry	MeterInstallationInquiryResponse	A Recipients response to a Meter Installation Inquiry Response
Remote On Demand Meter Read	MeterReadRequest	An Initiator can request from a participant with whom they have a contract for service, *metering data* on demand,.

(a)   Meter Data Notification Process - The provision of MDFF data as part of the MDPs' normal production process obligations. These may include Scheduled Meter Reads, reads in response to a Service Order Request and other MDFF data (such as forward Estimates).

(b)   Provide Meter Data Process - The process by which an Participant Initiator requests the provision of the latest version of MDFF data held by the MDPRecipient. This does not involve the investigation of problems with MDFF data.

          Verify Meter Data Process - The process by which a Participant Initiator queries MDFF data. This is normally executed after a ProvideMeterDataRequest to ensure that the latest version of data is being queried.

2.2.   Descriptions of Processes

2.2.1. General

(a)   Upon receipt of a ProvideMeterDataRequest, VerifyMeterDataRequest, PreInstallationRequest MeterIstallationInquiryRequest, or RemoteOnDemandMeterReadRequest a Recipient must return a *BusinessReceipt* to the Initiator.

(a)(b) Upon receipt of a MeterDataNotification from an MDP, a Participant must return a *BusinessReceipt* to the MDP to confirm the receipt of that MeterDataNotification.

2.2.2.2.   Meter Data Notification Process

(a)   A MDP Initiator must provide MDFF Data to Participants Recipients in accordance pursuant to the Metrology Procedure and Service Level Procedure (MDP)for Metering Data Providers.

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(a)(b) This MDFF Data must be provided by way of a MeterDataNotification.

(b)   Upon receipt of a MeterDataNotification from an MDP, a Participant must return a *BusinessReceipt* to the MDP to confirm the receipt of that MeterDataNotification.

(c)   The Participant Recipient must then send a *BusinessAcceptance/Rejection* to the MDP Initiator as follows:

   (i)   1.   A *BusinessAcceptance/Rejection* with *Status* of "Accept" must be used to indicate acceptance, including the format of the MDFF Data but excluding the business content of the MDFF Data, and that the entire file has been accepted.

   (ii)   2.   A *BusinessAcceptance/Rejection* with *Status* of "Reject" is to must be used to indicate rejection of the B2B Transaction, including the format of the MDFF Data but excluding the business content, and that the entire file has been rejected. Upon receipt of the *BusinessAcceptance/Rejection* the MDP Initiator must resolve the problem and resend the data if appropriate. If the file format is invalid, the MDP Initiator must resolve the problem and resend the data if appropriate. If otherwise, the MDP Initiator must communicate the results of the investigation to the Participant Recipient who sent the *BusinessAcceptance/Rejection*.

   (iii) 3.   A *BusinessAcceptance/Rejection* with *Status* of "Partial" is to must be used to indicate a rejection of the B2B Transaction, excluding the business content of the MDFF Ddata that relates to only part of the file. This is indicated by *KeyInfo* fields with one or more line numbers. The data to be returned by the MDP Initiator must include all data relating to each NMI that relates to a line number in the *BusinessAcceptance/Rejection*. Upon receipt of the *BusinessAcceptance/Rejection* the MDP Initiator must investigate the rejection and determine if the rejection it is valid. If the rejection it is valid, the MDP Initiator must resolve the problem and resend the data if appropriate. If otherwisethe rejection is not valid, the MDP Initiator must communicate the results of the investigation to the Participant Recipient who sent the *BusinessAcceptance/Rejection*.

   (iv)   4.   If the error relates to the business content of the MDFF Ddata, the file should be accepted by the Receiver Recipient via a *BusinessAcceptance/Rejection*. Queries regarding the MDFF Ddata must be communicated via either a ProvideMeterDataRequest or a VerifyMeterDataRequest.

   (v)   5.   The term "business content" in the above points means refers to the types of issues covered by the *InvestigationCodes* used in VerifyMeterDataRequests.

2.3.2.2.3.   Provide Meter Data Process

(a)   An Participant Initiator may commence the Provide Meter Data Process if they require:

   (i)   a Participant requires MDFF Data from an MDP, to which it is they are entitled in accordance with the rulesto under the NER;

   (ii)   a Participant requires historical Mmetering Data from a MDP to which they are entitled pursuant to under the CATS Procedure and/or a jurisdictional instrument; or

   (iii) a Participant requires a MDP Recipient to re-send certain specified MDFF Data.

(b)   Upon receipt of a ProvideMeterDataRequest, a MDP Recipient must return a *BusinessReceipt* to the Participant Initiator who sent the ProvideMeterDataRequest to confirm the receipt by that MDP Recipient of the ProvideMeterDataRequest.

(c)   Upon receipt of a ProvideMeterDataRequest, a MDP Recipient must respond to the Participant Initiator who sent the ProvideMeterDataRequest as follows:

   (i)   If the MDP Recipient is able to fully satisfy the Request, the MDP Recipient must send a BusinessAcceptance/Rejection with a *Status* of "Accept" and send a MeterDataNotification in response to the Request; or

   (ii)   If the MDP Recipient can partially satisfy the Request, the MDP Recipient must send a BusinessAcceptance/Rejection with a *Status* of "Partial" and send a MeterDataNotification in response to the Request. The MDP Recipient must provide

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appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be fully satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Information"; or

(iii)   If the ~~MDP~~ Recipient is unable to satisfy the Request, the ~~MDP~~ Recipient must send a BusinessAcceptance/Rejection with a *Status* of "Reject" and must not send a MeterDataNotification in response to the Request. The ~~MDP~~ Recipient must provide appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Error".

(d)   If the *BusinessAcceptance/Rejection* transaction sent by a ~~MDP~~ Recipient indicates a problem (using an appropriate *EventCode*) with the ProvideMeterDataRequest, the ~~Participant~~ Initiator must use reasonable endeavours to resolve the problem and provide a new ProvideMeterDataRequest or VerifyMeterDataRequest, if appropriate.

(e)   Where a MeterDataNotification is provided in response to a ProvideMeterDataRequest the ~~MDP~~ Recipient must ensure that the MeterDataNotification contains the MDFF Data requested in the ProvideMeterDataRequest for that *RequestID*.

(f)   The ~~Participant~~ Initiator must respond to a MeterDataNotification with *BusinessReceipt* and *BusinessAcceptance/Rejection* transactions.

(g)   If the *BusinessAcceptance/Rejection* transaction for a MeterDataNotification has a *Status* of "Reject" or "Partial", the ~~MDP~~ Recipient must use reasonable endeavours to resolve the problem which may include providing the correct MDFF Data to the ~~Participant~~ Initiator in a new MeterDataNotification, if appropriate. Any additional MeterDataNotification which is dealing with a problem from a previous MeterDataNotification must have the same *RequestID* as in the original MeterDataNotification.

~~2.4.~~2.2.4.   Verify Meter Data Process

(a)   An Initiator may commence the Meter Data Verification Process if~~If~~:

(i)   ~~a Participant reasonably believes~~ the MDFF Data specified in the MeterDataNotification is erroneous ~~(including but not limited to a potential anomaly with part of the data)~~; or

(ii)   ~~a Participant reasonably believes that~~ the response provided to a previous Request has not resolved their query~~.~~;

~~then that Participant may commence the Meter Data Verification Process.~~

(b)   An~~ Participant~~ Initiator must ensure that a VerifyMeterDataRequest sent to a ~~MDP~~ Recipient contains sufficient details to enable ~~that MDP~~ the Recipient to investigate and resolve the Initiator's query ~~which is the subject of the VerifyMeterDataRequest~~.

(c)   Upon receipt of a VerifyMeterDataRequest, an MDP must return a *BusinessReceipt* to the Participant who sent the VerifyMeterDataRequest to confirm the receipt by that MDP of the VerifyMeterDataRequest.

(d)   Upon receipt of a VerifyMeterDataRequest, a ~~MDP~~ Recipient must use reasonable endeavours to verify the MDFF Data which is the subject of the ~~Participant's~~ Initiator's VerifyMeterDataRequest ~~to that Participant~~. ~~The verification process is re-validation of the data that is held in the MDP's systems without an obligation to perform a field visit.~~The required verifications consists of a desktop re-validation of the MDFF.

(e)   Upon completion by the ~~MDP~~ Recipient of the action in clause (d) above, the ~~MDP~~ Recipient must respond to the ~~Participant~~ Initiator who sent the VerifyMeterDataRequest as follows:

(i)   ~~With the exception of where an *InvestigationCode* of "Recipient not responsible for the NMI" is used, if~~If the ~~MDP~~ Recipient is able to fully satisfy the Request, the ~~MDP~~ Recipient must send a BusinessAcceptance/Rejection with a *Status* of "Accept" and send a MeterDataNotification in response to the Request. ~~Where an *InvestigationCode* of "Recipient not responsible for the NMI" is used, and the MDP sends a *BusinessAcceptance/Rejection* with a *Status* of "Accept", the MDP must not send a MeterDataNotification in response to the Request~~; or

(ii)   If the ~~MDP~~ Recipient can partially satisfy the Request, the ~~MDP~~ Recipient must send a BusinessAcceptance/Rejection with a *Status* of "Partial" and send a MeterDataNotification in response to the Request. The ~~MDP~~ Recipient must provide appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be fully satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Information" or "Error"; or

(iii)   If the ~~MDP~~ Recipient is unable to satisfy the Request, the ~~MDP~~ Recipient must send a BusinessAcceptance/Rejection with a *Status* of "Reject" and must not send a MeterDataNotification in response to the Request. The ~~MDP~~ Recipient must provide appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Error".

(f)   If the *BusinessAcceptance/Rejection* transaction indicates a problem (using an appropriate *EventCode*) with the VerifyMeterDataRequest, that Participant must use reasonable endeavours to resolve the problem which may include providing a new VerifyMeterDataRequest, if appropriate.

(g)   Where a MeterDataNotification is provided in response to a VerifyMeterDataRequest the MDP must ensure that the MeterDataNotification contains the MDFF Data requested in the VerifyMeterDataRequest for that *RequestID*.

(h)   A Participant must respond to the MeterDataNotification with *BusinessReceipt* and *BusinessAcceptance/Rejection* transactions.

(i)   If the *BusinessAcceptance/Rejection* transaction for a MeterDataNotification has a Status of "Reject" or "Partial", the MDP must use reasonable endeavours to resolve the problem which may include providing the correct MDFF Data to the Participant in a new MeterDataNotification, if appropriate. Any additional MeterDataNotification which is dealing with a problem from a previous MeterDataNotification must have the same *RequestID* as in the original MeterDataNotification.

2.2.5.   Meter Installation Inquiry Process

An Initiator may commence a MeterInstallationInquiryRequest process if they:

(a)   are authorised to receive the information; and

(b)   require information from the Current MP regarding a *metering installation*.

(c)   Upon receipt of a MeterInstallationInquiryRequest, a Recipient must respond to the Initiator who sent the MeterInstallationInquiryRequest, as follows:

(i)   If the Recipient is able to fully satisfy the Request, the Recipient must send a BusinessAcceptance/Rejection with a Status of "Accept" and send a MeterInstallationInquiryResponse, in response to the Request; or

(ii)   If the Recipient is unable to satisfy the Request, the Recipient must send a BusinessAcceptance/Rejection with a Status of "Reject" and must not send a MeterInstallationInquiryResponse, in response to the Request. The Recipient must provide appropriate EventCodes and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be satisfied. The EventCodes in the BusinessAcceptance/Rejection must have a Severity of "Error".

2.2.6.   Remote On Demand Meter Read Process

(a) An Initiator may commence a RemoteOnDemandMeterReadRequest process if they are authorised to ᵣreceive the information.

(b) Upon receipt of a RemoteOnDemandMeterReadRequest, a Recipient must respond to the Initiator who sent the RemoteOnDemandMeterReadRequest as follows:

(i)   If the Recipient is able to fully satisfy the Request, the Recipient must send a BusinessAcceptance/Rejection with a Status of "Accept" and send a MeterDataNotification in response to the Request; or

(i)(ii)   If the Recipient is unable to satisfy the Request, the Recipient must send a *BusinessAcceptance/Rejection* with a Status of "Reject" and must not send a MeterDataNotification in response to the Request. The Recipient must provide appropriate *EventCodes* and associated details in the *BusinessAcceptance/Rejection* to explain why the Request cannot be satisfied. The EventCodes in the *BusinessAcceptance/Rejection* must have a Severity of "Error".

2.5.2.3.   ~~Process~~ Diagrams

Each of the five processes described in section 2.1 is ~~The following diagrams~~ illustrated ~~the high-level process flows and are provided by way of explanation only.~~ in Figures 1-~~5~~6:

Figure 1   Overview of the Meter Data Process

~~(a)   Refer to Section 3.1 for the definition of the timing points (triangles A-F) shown in Figures 2 and 3 below.~~

Overview of the Meter Data Notfication Process

Figure 2   Meter Data Notification Process

Normal Meter Data Notification Process Timing Points
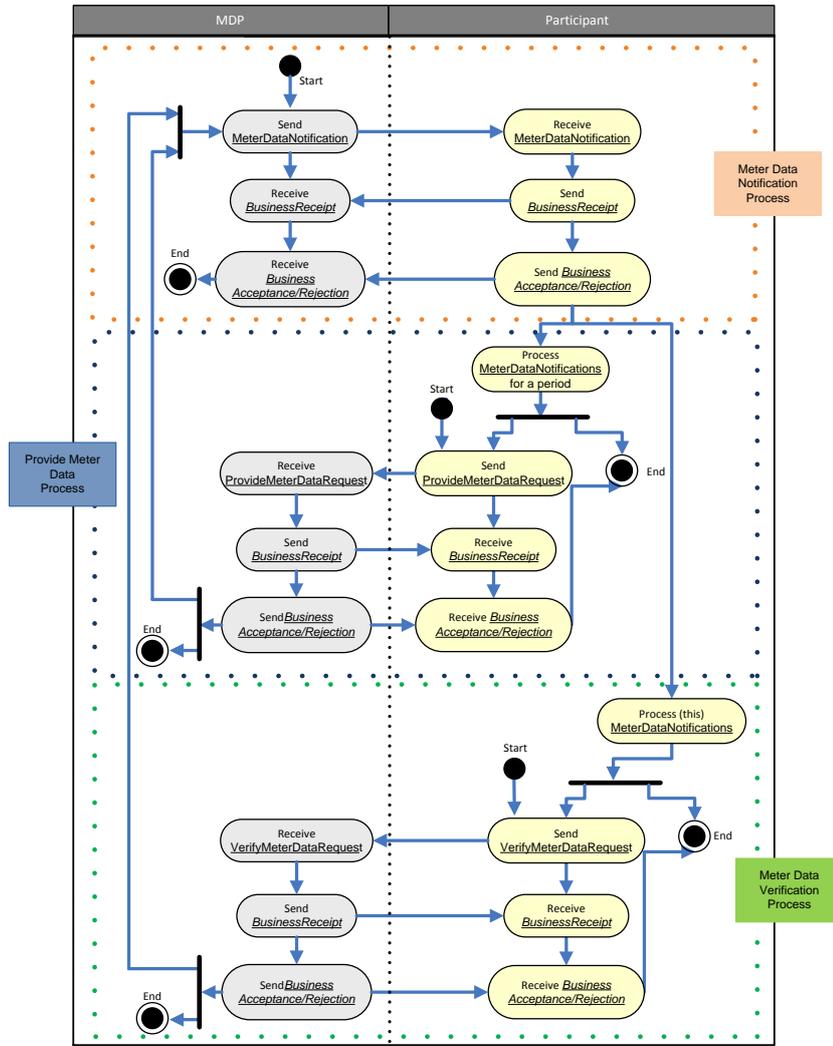
Field Code Changed

Figure 3 Provide or Verify Meter Data Process

Figure 4 Meter Installation Inquiry Process

Figure 5   Remote On Demand Meter Read Request Process

Field Code Changed

2.4. Timing Requirements

The Timing Points associated with each of the processes described in section 2.~~1~~2 are illustrated as points A to F in the diagrams ~~in section 2.2~~ and are defined in Table 2~~1~~ and the associated Timing Periods are defined in Table 3~~2~~.

Table 2   Timing Points

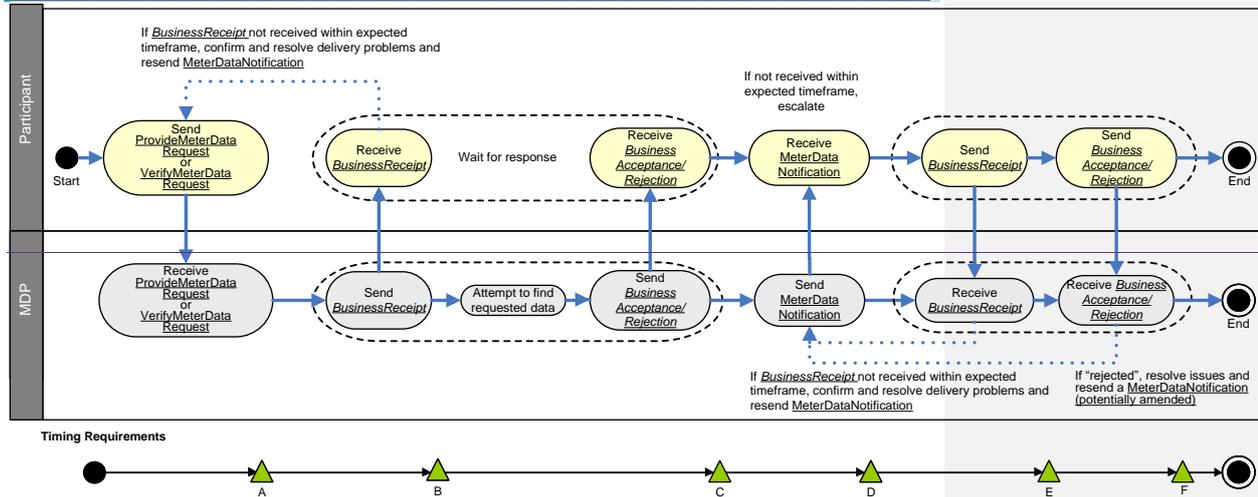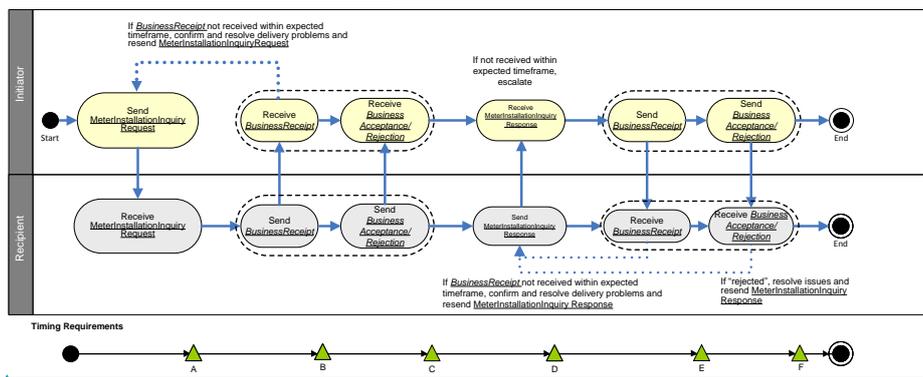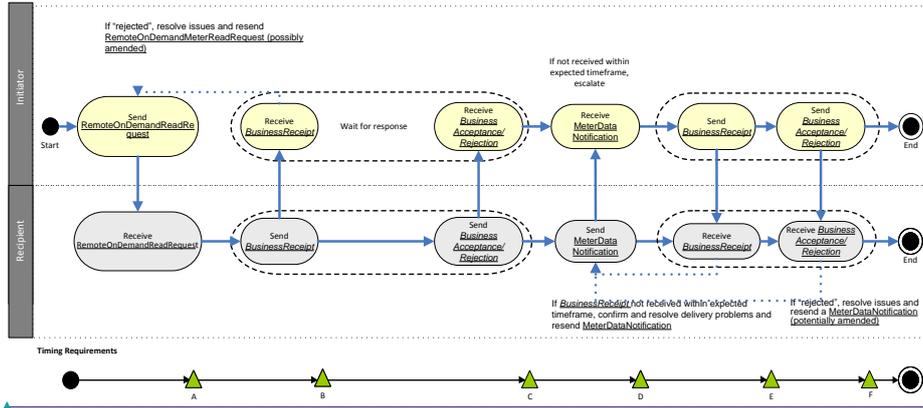| Timing Point	Definition
A	When the Initiator issues a Request to the Recipient.
B	When the ~~Recipient sends~~Initiator receives a *BusinessAcceptance/Rejection Receipt* from the Recipient~~for a Request to the Initiator.~~
C	~~When the Recipient sends a Notification to the Initiator.~~When the Recipient is attempting to satisfy the initiators Request and sends a *BusinessAcceptance/Rejection*
D	~~When the Recipient receives a *BusinessAcceptance/Rejection* for a Notification from the Initiator.~~When the Recipient sends a *BusinessAcceptance/Rejection* for a Request to the Initiator.
E	When the Recipient sends a Notification or Response to the Initiator.
F	When the Recipient receives a *BusinessAcceptance/Rejection* for a Notification or Response from the Initiator.

Table 3   Timing Periods

Timing Period	Definition	Usage
BusinessReciept for Requests	This is from the Initiator sending the Request to the receipt of a *BusinessReceipt* by the Initiator. Commences at Timing Point A and ends at Timing Point B	Used by the Initiator to determine whether the Request has been received and can be read. If the *BusinessReceipt* has not been received before the expiry of this timing period the Initiator may escalate the non-receipt and/or resend the original request.
BusinessAcceptance/ Rejection for Requests	This is from the Initiator sending the ~~ProvideMeterDataRequest or VerifyMeterDataRequest~~Request to the receipt of a *BusinessAcceptance/Rejection* for the Request by the Recipient. Commences at Timing Point A~~A~~ and ends at Timing Point B~~C~~.	Used by the Initiator to determine whether a Request has been accepted by the Recipient. If the *BusinessAcceptance/Rejection* has not been received before the expiry of this Timing Period, the Initiator may escalate the non-receipt.
MeterDataNotification/ Response for Requests	This is from the Initiator sending a ~~ProvideMeterDataRequest or VerifyMeterDataRequest~~Request to the Initiator receiving the associated MeterDataNotification or Response from the Recipient. Commences at Timing Point A~~A~~ and ends at G~~C~~D.	If the MeterDataNotification or Response has not been received before the expiry of this Timing Period, the Initiator may escalate the non-receipt.
BusinessReciept for MeterDataNotification/ Response	This is from the Recipient sending the MeterDataNotification ot Response to the receipt of a BusinessReceipt by the Recipient Commences at Timing Point D and ends at Timing Point E	Used by the Recipient to determine whether a MeterDataNotification or Response has been received and can be read. If the *BusinessReceipt* has not been received before the expiry of this timing period the Recipient may escalate the non-receipt and/or resend the original MeterDataNotification or Response.
BusinessAcceptance/ Rejection for MeterDataNotification	This is the period from the Recipient sending the MeterDataNotification or Response to the receipt of a *BusinessAcceptance/Rejection* for the Request by the Recipient. ~~Timing~~Commences at Timing Point D and ends at Timing point F.~~D defines this period.~~	Used by the Recipient to determine whether a MeterDataNotification or Response has been accepted by the Initiator. If the *BusinessAcceptance/Rejection* has not been received before the expiry of this Timing Period, the Recipient may escalate the non-receipt.

2.4.1. Timing Requirements for Business Signals

The Timing Requirements for a *BusinessReceipt* and a *BusinessAcceptance/Rejection* ~~are set out~~ in ~~section 4.10 of~~ the B2B Procedure: B2B Technical Delivery Specification, except for

BusinessAcceptance/Rejections for Requests, which must meet the timing requirements for the Meter Data Notification Process, as specified in section 2.4.2~~3~~.

2.4.2. Timing Requirement for Normal Meter Data Notification Process

(a)   An Initiator must send a MeterDataNotification within the timeframe specified in Jurisdictional instruments, contractual arrangements and the Service Level Procedure (MDP).

2.4.3. Timing Requirement for ProvideMeterDataRequest and VerifyMeterDataRequest

Unless otherwise agreed between the parties the timings for PMD and VMD will be as follows:

(a)   An Initiator must not issue a ProvideMeterDataRequest relating to a scheduled reading event until:

    (i)   The Fourth Business Day following the read event for remotely read *metering installations*;

    (ii)   The Sixth Business Day following the published Next Scheduled Read Date for manually read *metering installations*; and

    (iii)   The Seventh Business Day of the calendar month for the previous month's MDFF Data, for Controlled Unmetered Devices

(b)   A participant must not issue a ProvideMeterDataRequest, relating to a ServiceOrderRequest for a manually read *metering installation* until the fourth Business Day following the receipt of the completed ServiceOrderResponse.

(c)   Where a Recipient is required to send a MeterDataNotification in response to a ProvideMeterDataRequest, the Recipient must send the MeterDataNotification within one Business Day of receiving the ProvideMeterDataRequest.

(d)   Where a Recipient is required to send a MeterDataNotification in response to a VerifyMeterDataRequest, the Recipient must send the MeterDataNotification within five Business Days of receiving the VerifyMeterDataRequest.

2.4.4. Timing Requirement for Meter Installation Inquiry and Remote On Demand Meter Read Requests

(a)   All timings are as agreed between the Recipient and the Initiator.

~~Timing Requirement for all of the other Requests~~

~~All timing requirements are as agreed between the Recipient and the Initiator.~~

~~Business Rules~~

~~2.6.   Timing~~

~~a.   All obligations set out in this section 2 of this Procedure must be completed in accordance with the Timing Requirements set out in section 3 of this Procedure.~~

~~2.7.   Meter Data Notification Process~~

~~a.   A MDP must provide MDFF Data to Participants pursuant to the Metrology Procedure and Service Level Procedure for Metering Data Providers. This MDFF Data must be provided by way of a MeterDataNotification.~~

~~b.   Upon receipt of a MeterDataNotification from an MDP, a Participant must return a *BusinessReceipt* to the MDP to confirm the receipt of that MeterDataNotification.~~

~~c.   The Participant must then send a *BusinessAcceptance/Rejection* to the MDP as follows:~~
~~1.   A *BusinessAcceptance/Rejection* with *Status* of "Accept" is to be used to indicate acceptance of the B2B Transaction, including the format of the MDFF Data but~~

excluding the business content of the MDFF Data, and that the entire file has been accepted.

2. A *BusinessAcceptance/Rejection* with *Status* of "Reject" is to be used to indicate rejection of the B2B Transaction, including the format of the MDFF Data but excluding the business content, and that the entire file has been rejected. Upon receipt of the *BusinessAcceptance/Rejection* the MDP must resolve the problem and resend the data if appropriate. If the file format is invalid, the MDP must resolve the problem and resend the data if appropriate. If otherwise, the MDP must communicate the results of the investigation to the Participant who sent the *BusinessAcceptance/Rejection*.

3. A *BusinessAcceptance/Rejection* with *Status* of "Partial" is to be used to indicate a rejection of the B2B Transaction, excluding the business content of the MDFF Data that relates to only part of the file. This is indicated by *KeyInfo* fields with one or more line numbers. The data to be returned by the MDP must include all data relating to each NMI that relates to a line number in the *BusinessAcceptance/Rejection*. Upon receipt of the *BusinessAcceptance/Rejection* the MDP must investigate the rejection and determine if the rejection is valid. If the rejection is valid, the MDP must resolve the problem and resend the data if appropriate. If otherwise, the MDP must communicate the results of the investigation to the Participant who sent the *BusinessAcceptance/Rejection*.

4. If the error relates to the business content of the MDFF Data, the file should be accepted by the Receiver via a *BusinessAcceptance/Rejection*. Queries regarding the MDFF Data must be communicated via either a ProvideMeterDataRequest or a VerifyMeterDataRequest.

5. The term "business content" in the above points means the types of issues covered by the *InvestigationCodes* used in VerifyMeterDataRequests.

2.8. Provide Meter Data Process

> **Commented [A2]:** Moved to 2.2.3

d. A Participant may commence the Provide Meter Data Process if:

1. a Participant requires MDFF Data from an MDP, to which it is entitled in accordance with the rules;

2. a Participant requires historical Metering Data from a MDP to which they are entitled pursuant to the CATS Procedure and/or a jurisdictional instrument; or

3. a Participant requires a MDP to re-send certain MDFF Data.

b. Upon receipt of a ProvideMeterDataRequest, a MDP must return a *BusinessReceipt* to the Participant who sent ProvideMeterDataRequest to confirm the receipt by that MDP of the ProvideMeterDataRequest.

c. Upon receipt of a ProvideMeterDataRequest, a MDP must respond to the Participant who sent the ProvideMeterDataRequest as follows:

4. If the MDP is able to fully satisfy the Request, the MDP must send a BusinessAcceptance/Rejection with a *Status* of "Accept" and send a MeterDataNotification in response to the Request; or

5. If the MDP can partially satisfy the Request, the MDP must send a BusinessAcceptance/Rejection with a *Status* of "Partial" and send a MeterDataNotification in response to the Request. The MDP must provide appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be fully satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Information"; or

6. If the MDP is unable to satisfy the Request, the MDP must send a BusinessAcceptance/Rejection with a *Status* of "Reject" and must not send a MeterDataNotification in response to the Request. The MDP must provide appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Error".

d. If the *BusinessAcceptance/Rejection* transaction sent by a MDP indicates a problem (using an appropriate *EventCode*) with the ProvideMeterDataRequest, the Participant must use reasonable endeavours to resolve the problem and provide a new ProvideMeterDataRequest or VerifyMeterDataRequest, if appropriate.

e. Where a MeterDataNotification is provided in response to a ProvideMeterDataRequest the MDP must ensure that the MeterDataNotification contains the MDFF Data requested in the ProvideMeterDataRequest for that *RequestID*.

f. The Participant must respond to a MeterDataNotification with *BusinessReceipt* and *BusinessAcceptance/Rejection* transactions.

g. If the *BusinessAcceptance/Rejection* transaction for a MeterDataNotification has a Status of "Reject" or "Partial", the MDP must use reasonable endeavours to resolve the problem which may include providing the correct MDFF Data to the Participant in a new MeterDataNotification, if appropriate. Any additional MeterDataNotification which is dealing with a problem from a previous MeterDataNotification must have the same *RequestID* as in the original MeterDataNotification.

2.9. Verify Meter Data Process

> **Commented [A3]:** Moved to 2.2.4

e. If:

7. a Participant reasonably believes the MDFF Data in the MeterDataNotification is erroneous (including but not limited to a potential anomaly with part of the data); or

8. a Participant reasonably believes that the response provided to a previous Request has not resolved their query,

then that Participant may commence the Meter Data Verification Process.

b. A Participant must ensure that a VerifyMeterDataRequest sent to a MDP contains sufficient details to enable that MDP to investigate and resolve the query which is the subject of the VerifyMeterDataRequest.

c. Upon receipt of a VerifyMeterDataRequest, an MDP must return a *BusinessReceipt* to the Participant who sent the VerifyMeterDataRequest to confirm the receipt by that MDP of the VerifyMeterDataRequest.

d. Upon receipt of a VerifyMeterDataRequest, a MDP must use reasonable endeavours to verify the MDFF Data which is the subject of the Participant's VerifyMeterDataRequest to that Participant. The verification process is re-validation of the data that is held in the MDP's systems without an obligation to perform a field visit.

e. Upon completion by the MDP of the action in clause (d) above, the MDP must respond to the Participant who sent the VerifyMeterDataRequest as follows:

1. With the exception of where an *InvestigationCode* of "Recipient not responsible for the NMI" is used, if the MDP is able to fully satisfy the Request, the MDP must send a BusinessAcceptance/Rejection with a *Status* of "Accept" and send a MeterDataNotification in response to the Request. Where an *InvestigationCode* of "Recipient not responsible for the NMI" is used, and the MDP sends a

BusinessAcceptance/Rejection with a *Status* of "Accept", the MDP must not send a MeterDataNotification in response to the Request; or

2.   If the MDP can partially satisfy the Request, the MDP must send a BusinessAcceptance/Rejection with a *Status* of "Partial" and send a MeterDataNotification in response to the Request. The MDP must provide appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be fully satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Information" or "Error"; or

3.   If the MDP is unable to satisfy the Request, the MDP must send a BusinessAcceptance/Rejection with a *Status* of "Reject" and must not send a MeterDataNotification in response to the Request. The MDP must provide appropriate *EventCodes* and associated details in the BusinessAcceptance/Rejection to explain why the Request cannot be satisfied. The *EventCodes* in the BusinessAcceptance/Rejection must have a *Severity* of "Error".

f.   If the *BusinessAcceptance/Rejection* transaction indicates a problem (using an appropriate *EventCode*) with the VerifyMeterDataRequest, that Participant must use reasonable endeavours to resolve the problem which may include providing a new VerifyMeterDataRequest, if appropriate.

g.   Where a MeterDataNotification is provided in response to a VerifyMeterDataRequest the MDP must ensure that the MeterDataNotification contains the MDFF Data requested in the VerifyMeterDataRequest for that *RequestID*.

h.   A Participant must respond to the MeterDataNotification with *BusinessReceipt* and *BusinessAcceptance/Rejection* transactions.

i.   If the *BusinessAcceptance/Rejection* transaction for a MeterDataNotification has a Status of "Reject" or "Partial", the MDP must use reasonable endeavours to resolve the problem which may include providing the correct MDFF Data to the Participant in a new MeterDataNotification, if appropriate. Any additional MeterDataNotification which is dealing with a problem from a previous MeterDataNotification must have the same *RequestID* as in the original MeterDataNotification.

2.5.   ~~Common~~ Business Rules

~~2.10.~~2.5.1.   Common

(a)   MeterDataNotifications may be received out of sequence.

(b)   Prior to rejecting a Notification or Request Transaction on the basis that the ~~sending Participant~~ Initiator does not have the correct Role for the *connection point*, ~~Participants~~ Intitiators must ~~use reasonable endeavours to~~ confirm that this is correct on the basis of information held in MSATS.

~~(a)~~(c)   If a Recipient accepts a MeterDataNotification (with a *BusinessAcceptance/Rejection*) and subsequently discovers a problem with the MDFF data provided, the Recipient may raise a Request to resolve the situation.

~~(b)~~   Any ProvideMeterDataRequest or VerifyMeterDataRequest with a *StartReadDate* earlier than the time limit prescribed in the NER for holding online data may be rejected by the Recipient.

(d)

Special circumstances, such as meter changeovers, may create situations where the *ParticipantID* in the Request does not match the Participant relationships for the NMI in MSATS. For further details regarding these situations refer to the AEMO document Meter Churn Data Management Rules.

ParticipantsRecipients should be aware that MeterDataNotifications may be received out of sequence.

If a Participant Recipient accepts a MeterDataNotification (with a *BusinessAcceptance/Rejection* transaction) and subsequently discovers a problem with the MDFF Data provided, the Participant Recipient may raise a Request to resolve the situation.

Intitators must be aware that a Recipient is only required to maintain Metering Data on-line for a period of 13 months[1]. Any ProvideMeterDataRequest or VerifyMeterDataRequest with a *StartReadDate* earlier than 13 months prior to the date of the ProvideMeterDataRequest may be rejected by the Recipient.

2.11.2.5.2. Meter Data Notification Business Rules

(a) An Participant Initiator issuing a MeterDataNotification must ensure that the MeterDataNotification only contains either basic Accumulation Meter (a *CSVConsumptionData* record*)* or Interval Meter (a *CSVIntervalData* record) data and does not contain a mixture of basic accumulation and interval MDFF Datathe two.

   (b) The description of these CSV files is defined in the AEMO document *Meter Data File Format*. The *Meter Data File Format specification* can be located on the AEMO web site.

(c)(b) TheAn MDP Initiator must ensure that the MDFF data provided in a MeterDataNotification is the latest version of that data.

2.12.2.5.3. Provide Meter Data Process Business Rules

a. Participants must be aware that an MDP is only required to maintain Metering Data on-line for a period of 13 months[2]. Any ProvideMeterDataRequest with a *StartReadDate* earlier than 13 months prior to the date of the ProvideMeterDataRequest may be rejected by the MDP.

(a) A MDP Recipient who receives a ProvideMeterDataRequest must determine which Meter what Readings the Participant Initiator has requested in accordance with the following:

   (i) For basic Accumulation Meters, the MDP Recipient must provide all available MDFF data that the Participant Initiator is entitled to for the inclusive period of the *StartReadDate* and *EndReadDate* specified in the ProvideMeterDataRequest. This includes all reading periods that ended in the requested date range.

   Worked Example: (basic accumulation meter only)

   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

   (ii) For Interval Meters, the MDP Recipient must provide all available MDFF data that the Participant Initiator is entitled to for the inclusive period of the *StartReadDate* and *EndReadDate* specified in the ProvideMeterDataRequest.

(b) If the *EndReadDate* is not provided by an Participant Intiator in the a ProvideMeterDataRequest, the MDP Recipient must provide all MDFF data on and after the *StartReadDate* that the Participant Initiator is entitled to receive.

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[1] Or, as defined by the Service Level Procedure : Metering Data Provider Services
[2] Or, as defined by the Service Level Procedure for Metering Data Providers.

(c) ~~Participants~~ Initiators must not repeatedly request MDFF data ~~which they~~ requir~~ed~~ as a result of a fault within the processing of the data by the ~~Participant's~~ Initiator's systems.

   b. ~~A Participant must not send a ProvideMeterDataRequest until the regulated period (refer 3.2.2.a) for the delivery of MDFF Data has expired.~~

   c. ~~If the MDP has the MDFF Data which is the subject of a ProvideMeterDataRequest, they must 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 must contain a relevant EventCode to explain the situation.~~

   d. ~~MDPs may provide multiple MeterDataNotifications in response to a single ProvideMeterDataRequest.~~

(d) Where a~~n~~ ~~Participant~~ Initiator requests MDFF data in a ProvideMeterDataRequest for a period ~~which~~ that covers a change between ~~an basic~~ Accumulation Meter and ~~an~~ Interval Meter~~ing~~, the ~~MDP~~ Recipient must provide to th~~e~~at ~~Participant~~ Initiator MeterDataNotifications with the MDFF data required for each date range applicable to each meter installation type.

   e. ~~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.~~

2.13. 2.5.4. Verify Meter Data business rules

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a. ~~Participants must be aware that an MDP is only required to maintain Metering Data on-line for a period of 13 months. Any~~ VerifyMeterDataRequest ~~with a~~ *StartReadDate* ~~earlier than 13 months prior to the date of the~~ VerifyMeterDataRequest ~~may be rejected by the MDP.~~

> Commented [A4]: Moved to common rules 2.5.1 (d)

A~~n~~ ~~Participant~~ Initiator must provide values in the fields in the VerifyMeterDataRequest to match the level of the data being queried:

(a) If the data being queried is at the *NMI* level, only the *NMI* needs to be provided.

(b) If the data being queried is at the single *meter* level, the *NMI* and the *MeterSerialNumber* must be provided.

(c) If the data being queried is at an individual Data stream level, the *NMI*, *MeterSerialNumber* and *NMISuffix* must be provided.

(d) If the data being queried relates to the configuration of ~~the~~ a Site, the *NMI* and *NMIConfiguration* must be provided.

(e) The ~~Participant~~ Initiator must ensure that the *InvestigationCode* and *InvestigationDescription* match the level of data provided ~~per~~ as provided in paragraphs (a) - (d)~~points 1 to 4 above~~.

b. ~~A~~ VerifyMeterDataRequest ~~transaction does not replace a Special Read ServiceOrderRequest. If a Participant requires a site visit the Participant must raise a Special Read~~ ServiceOrderRequest~~.~~

c. ~~MDPs may provide multiple~~ MeterDataNotifications ~~in response to a single~~ VerifyMeterDataRequest.

d. ~~A Participant must ensure that the MDFF Data they are querying is only for a period where they have a relevant Participant Relationship with the NMI.~~

e. ~~A Participant must not send a~~ VerifyMeterDataRequest ~~until the regulated period (refer 3.2.2) for the delivery of Metering Data has expired.~~

2.13.1. 2.5.4.1. Investigation Codes Usage

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The ~~Participant~~ Initiator must use the appropriate *InvestigationCode* as ~~defined~~ specified in ~~the following~~ Table 3 to communicate the reason for the VerifyMeterDataRequest.

~~Table 1~~Table 4   Investigation Code Explanations

InvestigationCode	~~Business Rules~~Use
Confirm Reading For Vacant Site	~~This code is~~ Used where ~~a~~ *substitut*~~ed~~ *metering data* ~~ion~~ or *estimat*~~ed~~ *metering data* is provided for a vacant site and the ~~Recipient~~ Initiator ~~theits replacement of~~ *substituted* ~~or estimated metering data with zero consumption.~~ reasonably believes the consumption is overstated.
Confirm Zero Consumption	~~This code is~~ Used where the ~~Participant~~ Initiator requires confirmation of a zero consumption value~~(s)~~.
Incomplete Data[3]	~~This code is~~ Used where the ~~Participant~~ Initiator reasonably believes that they have not received a complete set of data. ~~For example, there is a gap(s) in the provided data (eg one day's data is not provided for the period requested).~~ This code must only be used following a ProvideMeterDataRequest that has resulted in incomplete MDFF Data being provided.
Invalid MDFF Data	~~This code is~~ Used where the ~~Participant~~ Initiator reasonably believes that data in the MDFF data (300/350line) does not match the configuration information in the MDFF data (200/250 line). ~~For example, a Datastream is provided in the MDFF data that does not match the NMIConfiguration.~~

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[3] Must only be used after a ProvideMeterDataRequest is completed.

InvestigationCode	~~Business Rules~~Use
Invalid Standing Data	This code is used where the Initiator reasonably believes that the configuration data in the MDFF data is inconsistent with MSATS. The Initiator must not use this code until the required timeframes for updating MSATS have passed.
~~Invalid Standing Data~~	~~This code is used where the Participant reasonably believes that the configuration data in the MDFF Data is not consistent with MSATS. The Participant must not use this code until the required timeframe for updating MSATS has passed (as defined in the MSATS Procedure, CATS Procedure).~~
Missing Datastream[3]	~~This code is~~ Used where the ~~Participant~~ Initiator reasonably believes that the ~~Datastreams~~ channel/s ~~registered .~~ ~~is~~ are incomplete based on the configuration information provided. This could be in the MDFF file or information obtained elsewhere. This code must only be used following a ProvideMeterDataRequest that has resulted in incomplete MDFF Data being provided.
~~Recipient not responsible for the NMI~~	~~This code is used where a Participant has received MDFF Data for a NMI that they do not have a market relationship with.~~
Require Actual Reading or Substitute[3]	~~This code is~~ Used where the ~~Participant~~ Initiator reasonably believes that they are entitled to Actual Metering Data or substituted metering data for a specified period. ~~has received an Estimate reading and requires either an Actual or Substitute reading.~~ This code must only be used following a ProvideMeterDataRequest that has not provided Actual or Substituted data. ~~resulted in Estimated MDFF Data being provided.~~
Require Final Substitute[3]	~~This code is~~ Used where the ~~Participant~~ Initiator has received a Substitut~~ion~~e ~~reading and~~ reasonably believes they ~~should have received a Substitution with~~ a quality flag of 'F' ~~Final~~ Substitute (the requirements for Final Substitution being detailed within the~~se~~ section 2.4 of Metrology Procedures: Part B). ~~and requires a Final Substitute reading.~~ ~~This code must only be used following a ProvideMeterDataRequest that has resulted in Substitute MDFF Data being provided.~~
Scheduled Reading Required	Used where the Intitator reasonably believes that the NSRD has lapsed and the MDFF data has not been provided within the required timeframe. This code must only be used following a ProvideMeterDataRequest that resulted in Estimated *metering data* being provided.
~~Require Latest Version~~	~~This is where the correct latest version of the meter and configuration data (as recorded in MSATS) has not been made available to the Participant within the required timeframe.~~ ~~This code must only be used following a ProvideMeterDataRequest.~~
~~Scheduled Reading Required~~	~~This code is used where the Participant reasonably believes that the Next Scheduled Read Date has lapsed and the MDFF Data has not been provided within the required timeframe.~~ ~~This code must only be used following a ProvideMeterDataRequest that has resulted in Estimated MDFF Data being provided.~~
Service Order Reading Required	~~This code is~~ Used where the ~~Participant~~ Initiator has received a *ServiceOrderResponse* with a *ServiceOrderStatus* of "Partially Completed" or "Completed" and the associated MDFF data has not been provided within the required timeframe. The ~~Participant~~ Initiator must ~~use reasonable endeavours to~~ provide the *Service Order Number* in the *InvestigationDescription* field. This code must only be used following a ProvideMeterDataRequest that has resulted in Estimated MDFF Data being provided.
Verify High Reading	~~This code is~~ Used where the ~~Participant~~ Initiator reasonably believes the Meter Reading is too high compared to ~~the consumption history for the Site~~Historical Data, or following a customer complaint. Th~~e~~ verification required is desktop only~~is request may not initiate a site visit to check readings~~.
Verify Low Reading	~~This code is~~ Used where the ~~Participant~~ Initiator reasonably believes the Meter Reading is too low compared to ~~the consumption history for the Site~~Historical Data, or following an ~~customer~~ End User complaint. The verification required is desktop only.~~This request may not initiate a site visit to check readings.~~
Verify/Missing Register[3]	~~This code is to be~~ Used where the Initiator reasonab~~le~~y believes that the registers received in the MDFF do not align with those ~~registered~~ in MSATS. This code must only be used following a ProvideMeterDataRequest that has resulted in incomplete MDFF Data being provided.

InvestigationCode	Business RulesUse
Require Estimate Data[3]	This code is to be Used where the Initiator reasonably believes they areit is entitled to forward an Estimation data to support the settlement process. This code must only be used following a ProvideMeterDataRequest that has resulted in a business event code of no data found.
Meter Churn	Used where the Initiator reasonable believes that they have not received actual Meter Churn data.
Other	Any other reason not covered by the any other InvestigationCodes, or where multiple InvestigationCodes apply.

2.5.5. Meter Installation Inquiry

(a)   Only one MeterInstallationInquiry must be sent per *NMI* per day.

(b)   The Recipient must send a *BusinessAcceptance/Rejection* to the Initiator, following validation of the MeterInstallationInquiry.

(c)   The Recipient must send a MeterInstallationInquiryResponse (see Section 3.7) details of the *metering installation* for the requested *NMI*.

(d)   The details provided in a MeterInstallationInquiryResponse must be current as at the date and time that it was sent.

2.5.6. Remote On Demand Meter Read Request

(a)   Only one RemoteOnDemandMeterReadRequest must be sent per *NMI* per day.

(b)   The Recipient must send a *BusinessAcceptance/Rejection* to the Initiator, following validation of the RemoteOnDemandMeterReadRequest.

(c)   The Recipient must send a MeterDataNotification.

(d)   The details provided in a MeterDataNotification must be current as at the date and time that the Response was sent.

3. TIMING REQUIREMENTS

3.1. Definition of Timing Points and Periods

(a)   The diagrams in Section 2.2 above will assist in understanding the tables below.

(b)   The Timing Points A to F described and used below are shown in the diagrams in section 2.2.

(c)   The following definitions apply:

Timing Point	Definition
A	This timing point is when the ParticipantInitiator issues a Request to the MDPRecipient.
B	This timing point is when the Participant Initiator receives a *BusinessReceipt* from the MDP Recipient in response to the Request
CB	This timing point follows the MDP's Recipient's attempt to satisfy the Request and is when the MDP Recipient sends a *BusinessAcceptance/Rejection* for a Request to the ParticipantInitiator.
DC	This timing point is when the MDP Recipient sends a Notification to the ParticipantInitiator.
E	This timing point is when the MDP Recipient receives a *BusinessReceipt* for a Notification from the ParticipantInitiator.
FD	This timing point is when the MDP Recipient receives a *BusinessAcceptance/Rejection* for a Notification from the Participantinitiator.

(d)   The following definitions apply:

Timing Period	Definition	Usage
BusinessReceipt for Requests	This is the period from the Participant Initiator sending the ProvideMeterDataRequest or VerifyMeterDataRequest to the receipt of the associated *BusinessReceipt* by the ParticipantRecipient. Timing Points A and B define this period.	Used by the Participant Initiator to determine whether the Request has been received and can be read. If the *BusinessReceipt* has not been received before the expiry of this period, the Participant Initiator may escalate the non-receipt and /or resend the original request.
BusinessAcceptance/Rejection for Requests	This is the period from the Participant Initiator sending the ProvideMeterDataRequest or VerifyMeterDataRequest to the receipt of a *BusinessAcceptance/Rejection* for the Request by the ParticipantRecipient. Timing Points A and C B define this period.	Used by the Participant Initiator to determine whether a Request has been accepted by the MDPRecipient. If the *BusinessAcceptance/Rejection* has not been received before the expiry of this period, the Participant Initiator may escalate the non-receipt.
MeterDataNotification for Requests	This is the period from the Participant Initiator sending the ProvideMeterDataRequest or VerifyMeterDataRequest to the Participant Initiator receiving the associated MeterDataNotification from the MDPRecipient. Timing Points **A** and **D C** define this period.	If the MeterDataNotification has not been received before the expiry of this period, the Participant Initiator may escalate the non-receipt.
BusinessReceipt for MeterDataNotification	This is the period from the MDP Recipient sending the MeterDataNotification to the receipt of the associated *BusinessReceipt* by the MDPRecipient. Timing Points **D** and **E** define this period.	Used by the MDP Recipient to determine whether a MeterDataNotification has been received and can be read. If the *BusinessReceipt* has not been received before the expiry of this period, the MDP Recipient may escalate the non-receipt and /or resend the original request.
BusinessAcceptance/Rejection for MeterDataNotification	This is the period from the MDP Recipient sending the MeterDataNotification to the receipt of a *BusinessAcceptance/Rejection* for the Request by the MDPRecipient. Timing Points **D** and **F** defines this period.	Used by the MDP Recipient to determine whether a MeterDataNotification has been accepted by the ParticipantInitiator. If the *BusinessAcceptance/Rejection* has not been received before the expiry of this period, the MDP Recipient may escalate the non-receipt.

3.2.   Timing requirementsAll Transactions

3.2.1.   All transactions

(a)   The Timing Requirements for *BusinessReceipt* and a *BusinessAcceptance/Rejection* are set out in section 4.10 of the B2B Procedure B2B Technical Delivery Specification, except for *BusinessAcceptance/Rejections* for Requests. In this case the MDP Recipient must send a *BusinessAcceptance/Rejection* for the Request within the same timeframe as the MeterDataNotification (as specified in 3.2.2.a and 3.2.4a).

(b)   The priority granted to these transactions must comply with clause 4.7(a) of the B2B Procedure B2B Technical Delivery Specification.

3.2.2.   Timing Requirement for Normal Meter Data Notification Process.

A MDP Intiator must send the MeterDataNotification within the timeframe defined in each jurisdiction'sany jurisdicational documents Metrology Procedure and the Service Level Procedure: for Metering Data Providers Services.

3.2.3.   Timing Requirement for ProvideMeterDataRequest.

> **Commented [A5]:** Moved to section 2.4.3

All timings are as agreed between the Recipient and the Initiator.

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a.   A Participant must not issue a ProvideMeterDataRequest relating to a scheduled reading event until:

(i)   The Fourth Business Day following the read event for type 1, 2, 3 and 4 Metering Installations;

(ii)   The Sixth Business Day following the published Next Scheduled Read Date for type 5 and 6 Metering Installations; and

(iii)   The Seventh Business Day of the calendar month for the previous month's MDFF Data, for type 7 Metering Installations

b.   A participant must not issue a ProvideMeterDataRequest, relating to a ServiceOrderRequest for type 5 and 6 Metering Installations until the fourth Business Day following the receipt of the completed ServiceOrderResponse.

c.   Where a MDP is required to send a MeterDataNotification in response to a ProvideMeterDataRequest, the MDP must send the MeterDataNotification within one Business Day of receiving the ProvideMeterDataRequest.

3.2.4.   Timing Requirement for sending a MeterDataNotification for a VerifyMeterDataRequest

a.   Where a MDP is required to send a MeterDataNotification in response to a VerifyMeterDataRequest, the MDP must send the MeterDataNotification within five Business Days of receiving the VerifyMeterDataRequest.

4.3.   TRANSACTIONS

Key

M = Mandatory (must be provided in all situations).
R = Required (must be provided if this information is available or has changed).
O = Optional (may be provided and should be used if provided).
N = Not required (not required and may be ignored if provided).

4.1.3.1.   ProvideMeterDataRequest ~~Transaction~~ Data

~~Each of the Participants~~ Initiators must ensure that the ProvideMeterDataRequest conforms with the usage, format and definitional rules detailed in the ~~Table 4~~following table:

~~Table 2~~Table 5   ProvideMeterDataRequest Data

Field	Format	Use	Definition
~~ParticipantID~~InitiatorID	VarChar(10)	M	The ~~Participant~~ Initiator's Participant ID.~~requesting the MDFF data.~~ Participant ID as published in MSATS.
~~ParticipantRole~~InitiatorRole	VarChar(4)	M	The ~~market role of the Participant~~ Initiator's Role ~~requesting the MDFF Data.~~ Participant Role as published in MSATS.
~~MDPID~~RecipientID	VarChar(10)	M	The ~~MDP~~ Recipient's ~~being asked to provide MDFF Data.~~ Participant ID as published in MSATS.
RequestID	VarChar(15)	M	~~Participant~~ Initiator defined reference, used for reference and tracking. Must be a new (unused) number, unique for the ~~initiating Participant~~Initiator.
NMI	Char(10)	M	*NMI* for the *connection point* missing data.
NMIChecksum	Char(1)	O	NMI Checksum for the *connection point* missing data.
StartReadDate	DATE	M	The start date for the period for which the ~~Participant~~ Initiator is requesting MDFF data.
EndReadDate	DATE	O	The end date for the period for which the ~~Participant~~ initiator is requesting MDFF data. ~~Refer 2.9.~~

4.2.3.2.   VerifyMeterDataRequest ~~Transaction~~ Data

~~Each of the Participants~~ Initiatorss must ensure that the VerifyMeterDataRequest conforms with the usage, format and definitional rules detailed in ~~Table~~ the following table~~5~~:

~~Table 3~~Table 6   VerifyMeterDataRequest Data

Field	Format	Use - Interval Data	Use - ~~Basic~~ Accumulation Data	Definition
~~ParticipantID~~InitiatorID	VarChar(10)	M	M	The ~~Participant~~ Initiator querying the MDFF Data. Participant ID as published in MSATS.
~~ParticipantRole~~InitiatorRole	VarChar(4)	M	M	The market role of the ~~Participant~~ Initiator querying the MDFF Data. Participant Role as published in MSATS.
~~MDPID~~RecipientID	VarChar(10)	M	M	The ~~MDP~~ Recipient being asked to verify MDFF Data. Participant ID as published in MSATS.
RequestID	VarChar(15)	M	M	~~Participant~~ Initiator defined reference, used for reference and tracking. Must be a new (unused) number, unique for the ~~initiating Participant~~Initiator.
NMI	Char(10)	M	M	NMI for the *cConnection pPoint* being queried.
NMIChecksum	Char(1)	O	O	NMI Checksum for the *connection point* ~~missing data~~.

Field	Format	Use - Interval Data	Use - ~~Basic~~ Accumulation Data	Definition
NMIConfiguration	VarChar(240)	M/N	M/N	The NMIConfiguration provided in the MDFF Data being queried. If this value is provided, the expected NMI Configuration or the perceived problem of the configuration must be provided in the *InvestigationDescription* field. Refer to ~~2.10.b~~ a2.5.4 for the rules regarding the usage of this field.
MeterSerial	VarChar(12)	M/N	M/N	Meter Serial ~~number~~ID. Only required if the data being queried is at the single *meter* level or ~~is at~~ an individual Data~~-~~stream level. Refer to ~~2.10.b~~ a2.5.4 for the rules regarding the usage of this field.
NMISuffix	Char(2)	M/N	M/N	As defined in the ~~National Metering Identifier~~NMI Procedure~~s~~ eg. "~~"~~E1~~"~~","~~"~~K1~~"~~","~~"~~Q2~~"~~" etc. ~~The national Metering Identifier Procedure is located on the AEMO Web site.~~ Mandatory if the data being queried is at an individual Data~~-~~stream level (ie a single NMISuffix~~)~~ or if a *CurrentRead* ~~value~~ is provided. Refer to ~~2.10.b~~ a2.5.4 for the rules regarding the usage of this field.
RegisterID	VarChar(10)	O	O	Register identifier. Defined the same as the RegisterID field in the CATS_Register_Identifier table. ~~The value must match the value in MSATS.~~ ~~E.g. "1", "2", "E1", "B1".~~ May be provided where the data being queried relates to a single *RegisterID* or if a *CurrentRead* ~~value~~ is provided
CurrentRead	VarChar(15)	N	M/N	Original Meter Reading provided in the MDFF data ~~that is~~ being queried. This must be presented as a Register Read. Example of values: 1234567.123 or 0012456.123. Values must include leading zeros. Values must be exclusive of *meter* multipliers. Mandatory for ~~Basic~~ Accumulation *Meters* if any of the following *InvestigationCodes* are used: • Confirm Reading For Vacant Site • Verify High Reading • Verify Low Reading • Confirm Zero Consumption If this field is populated, ~~then~~ the *NMISuffix* must be populated and the *RegisterID* may be populated.
CurrentReadDate	DATE	N	M/N	Date of the Meter Reading in the MDFF data being queried. Must be provided if *CurrentRead* is populated.
CurrentConsumption	Numeric(15,3)	N	M/N	Original consumption figure (in kWh) in the MDFF data ~~that is~~ being queried. Must be provided if *CurrentRead* is populated.
StartReadDate	DATE	M	M	The first day of the period the ~~Participant~~ Initiator is querying.
EndReadDate	DATE	M	O	The last day of the period the ~~Participant~~ Initiator is querying. If querying a single day's *interval* *metering* data or a single ~~accumulation~~basic Meter Reading, this date is the same as the *StartReadDate*.

Field	Format	Use - Interval Data	Use - ~~Basic~~ Accumulation Data	Definition
InvestigationCode	VarChar(40)	M	M	Allowed values: • Confirm Reading For Vacant Site • Confirm Zero Consumption • Incomplete Data • Invalid MDFF Data • Invalid Standing Data • Missing Datastream • ~~Recipient not responsible for the NMI~~ • Require Actual Reading or Substitute • Scheduled Reading Required • Require Final Substitute • ~~Require Latest Version~~ • Service Order Reading Required • Verify High Reading • Verify Low Reading • Verify/Missing Registers • Require Estimate Read • Meter Churn • Other
InvestigationDescription	Varchar(240)	M	M	Free text that must be used to assist the investigation. The ~~Participant~~ Initiator must ~~clearly defined~~specify the Meter Reading, the period and the description of the problem.

4.3.3.3. MeterDataNotification ~~Transaction~~ Data

~~Each of the Participants~~ Initiators must ensure that the MeterDataNotification conforms with the usage, format and definitional rules detailed in ~~Table 6~~the following table:

~~Table 4~~Table 7   MeterDataNotification Data

Field	Format	Use	Definition
~~MDPID~~IntitiatorID	VarChar(10)	M	~~MDP~~ Initiator's Participant ID ~~as published in MSATS.~~
~~ParticipantID~~Recipient ID	VarChar(10)	M	The ~~Participant~~ Recipient's ~~to whom the data is being provided.~~ Participant ID ~~as published in MSATS.~~
~~ParticipantRole~~Recipie ntRole	VarChar(4)	M	The ~~market role of the Participant~~ Recipient's Role ~~to whom the data is being provided. Participant Role~~ as published in MSATS.
RequestID	VarChar(15)	N/M	The RequestID provided in the initiating Request. Not required when transaction sent as part of the normal Meter Data Notification Process. Mandatory when the transaction is sent to the requesting ~~Participant~~ Initiator as a response to a ProvideMeterDataRequest. ~~or~~ VerifyMeterDataRequest or RemoteOnDemandMeterReadRequest
CSVConsumptionData	CSVDATA	R	Contains embedded data in CSV format for ~~basic~~ Accumulation Meters. This is the standard file format for ~~basic~~ accumulated metering data defined in a valid MDFF. Refer to ~~2.8~~2.5.2 a. ~~a~~ for details of the usage of this field.
CSVIntervalData	CSVDATA	R	Contains embedded data in CSV format for Interval Meters. This is the standard file format for *interval metering* data defined in a valid MDFF. Refer to ~~2.8~~2.5.2 a.~~a~~ for details of the usage of this field

3.4. MeterInstallationInquiryRequest Data

Initiators must ensure that the MeterInstallationInquiryDataRequest conforms with the usage, format and definitional rules detailed in the following table:

Table 8   MeterInstallationInquiryRequest Data

Field	Format	Use	Definition
InitiatorID	VARCHAR(10)	M	Initiator's Participant ID as published in MSATS.
InitiatorRole	VARCHAR(4)	M	Initiator's Role as published in MSATS.
RecipientID	VARCHAR(10)	M	Recipient's Participant ID. as published in MSATS
RequestID	VARCHAR(15)	M	Initiator defined reference, used for reference and tracking. Must be a new (unused) number, unique for the Initiator.
NMI	CHAR(10)	M	*NMI* for the *connection point* missing data.
NMIChecksum	CHAR(1)	O	NMI Checksum for the *connection point* missing data.
MeterSerial Number	VARCHAR(12)	M	Meter Serial ID(s). This is a repeatable field.to allow for the provision of multiple meters.
ServiceType	VARCHAR(15)	M	Permitted content: • On Demand
InquiryCode	VARCHAR(80)	M	Permitted content • Meter Connection Status • Voltage and Current • Average Voltage • Power • Frequency • Meter Event Retrieval • All of the above

Field	Format	Use	Definition
TradingInterval	VARCHAR(140)	O	Nominated ~~Trading Intervals~~TIs to calculate average *voltage* and current.~~,~~ ~~e~~E.g 1,10,20,30,48.
SpecialNotes	VARCHAR(240)	O	Any special notes ~~the Initiator wishes to convey to the Recipient.

3.5. MeterInstallationInquiryDataResponse Data

Recipients must ensure that the MeterInstallationInquiryDataResponse conforms with the usage, format and definitional rules detailed in the following table:

Table 9   MeterInstallationDataResponse Data

Field	Format	Use	Definition
InitiatorID	VARCHAR(10)	M	Participant ID as published in MSATS.
InitiatorRole	VARCHAR(4)	M	Participant Role as published in MSATS.
RecipientID	VARCHAR(10)		Participant ID as published in MSATS
RequestID	VARCHAR(15)	M	Initiator defined reference, used for reference and tracking. Must be a new (unused) number, unique for the Initiator.
NMI	CHAR(10)	M	NMI for the connection point.
NMIChecksum	CHAR(1)	O	NMI Checksum for the connection point
MeterSerial Number	VARCHAR(12)	M	This field repeats to allow the provision of details for multiple meters.
ReadDateTme	DATETIME(14)	M	The date and time the meter was interrogated.
Status	VARCHAR(1)	M/N	Status of the switch used to effect the disconnection and reconnection services. Must be a Meter Status Code equivalent to the codes in CATS Mandatory where Meter Connection Status or All of the Above *Inquiry Code* is used.
Voltage	VARCHAR(7)	M/N	The *voltage* as measured by the *metering installation* Mandatory where Voltage and Current or All of the Above *Inquiry Code* is used.
Current	VARCHAR(7)	M/N	The current as measured by the *metering installation* Mandatory where Voltage and Current or All of the Above *Inquiry Code* is used.
Power	VARCHAR(7)	M/N	The power (watts) as measured by the *metering installation* Mandatory where Power or All of the Above *Inquiry Code* is used.
Frequency	VARCHAR(7)	M/N	The supply frequency (Hertz) as measured by the *metering installation* Mandatory where Frequency or All of the Above *Inquiry Code* is used.
Average	VARCHAR(7)	M/N	The average *voltage* and current over a nominated TI for one or more nominated TI's; Mandatory where Voltage and Current or All of the Above *Inquiry Code* is used.

Field	Format	Use	Definition
Events	VARCHAR(100)	M/N	Events that have been recorded in *meter* log (or logs) including recorded information in the tamper detection alarm, reverse energy flow alarm and *metering* device temperature alarm. Minimum event types that must be returned are: • Temperature alarm • generation detected • under voltage • over voltage • tamper • over current Mandatory where Meter Event Retrieval or All of the Above *Inquiry Code* is used

3.6. RemoteOnDemandMeterRead Request

Recipients must ensure that the RemoteOnDemandMeterReadRequest conforms with the usage, format and definitional rules detailed in the following table:

Table 10   RemoteOnDemandMeterReadRequest Data

Field	Format	Use	Definition
InitiatorID	VARCHAR(10)	M	Initiator's Participant ID as published in MSATS.
InitiatorRole	VARCHAR(4)	M	Initiator's Role as published in MSATS.
RecipientID	VARCHAR(10)	M	Recipient's Participant ID as published in MSATS
RequestID	VARCHAR(15)	M	Initiator defined reference, used for reference and tracking. Must be a new (unused) number, unique for the Initiator.
NMI	CHAR(10)	M	*NMI* for the *connection point.*
NMIChecksum	CHAR(1)	O	NMI Checksum for the *connection point.*
MeterSerial Number	VARCHAR(12)	M	Meter Serial ID(s). This is a repeatable field.to allow for the provision of multiple meters.
ServiceType	VARCHAR(15)	M	Permitted content: • On Demand
SpecialNotes	VARCHAR(240)	O	Any special notes the Initiator wishes to convey to the Recipient

~~4.4.~~3.7.   Business ~~Acceptance / ~~Rejection ~~transaction~~

(a)   A Participant must ensure that a *BusinessAcceptance/Rejection* ~~transaction~~ has a *Status* ~~field completed as follows~~specified in ~~Table 1~~the following table~~2~~:

~~Table 5~~Table 11 Business Acceptance/Rejection Data~~.~~

Field	Format	Use	Definition
Status	Enumeration	M	~~Allowed values~~Permitted content: • Accept • Partial • Reject Refer to Clause 2.4, 2.5~~,~~. ~~and~~ 2.6 and guide for usage.

(b)   If the *Status* is not ~~"~~'Accept~~",~~', a Participant must ~~ensure~~ provide ~~that~~ one or more of the ~~following~~ Event blocks ~~is provided~~in ~~Table 1~~the following table~~3~~:

Table 6Table 12 *Business Acceptance/Rejection* Data if not Accepted.

Field	Format	Use	Definition
EventCode	NUMERIC(4)	M	Non-negative number. A code to indicate the reason for the rejection. Applicable codes are in the table at 4.5. A positive number.
KeyInfo	NUMERIC(*8)	M/N	If this field is populated with a number, the number is the line number within the CSV data block that the event occurred. If the field is not populated, the *EventCode* refers to the aseXML transaction, not the CSV data.
Context	EventContext	M/N	The Data Element in the received Business Document that cause the Event. For an error in the CSV data block (*KeyInfo* is populated) this will be a copy of the line where the event was found. Where the line is longer than the field size available, the field is to be fully populated starting from the first character of the line.
Explanation	Unlimited Varchar	M/O	An explanation of the event. Must be provided where the Business Event requires an *Explanation*.

4.5.3.8.   Applicable Events

(a)   Participants must use the most relevant Business Event(s). Where multiple *EventCode(s)* are applicable these may be provided.

(b)   Where the *EventCode* is not in the aseXML reserved range (0-999), an *EventCodeDescription* should be included in accordance with the aseXML Guidelines.

(c)   The reference table for relevant Business Events that can apply to this process including and *EventCode(s)* is are in the tTable 14:the table below below.

a.   The reference table for Business Events that can apply to this process and the relevant Business Signals, including EventCode(s) is located in section 5.2 of the B2B Procedure Technical Guidelines for B2B Procedures.

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Table 13   Meter Data Process - Business Event Details

Business Event	Explanation Required	Severity	MeterData Notification	ProvideMeter DataRequest	VerifyMeter DataRequest	MeterInstallation InquiryRequest	RemoteOnDemand MeterReadRequest	Event Code	Relevant Procedure Clause or Reference Notes
Requested data has previously been sent in response to a previous ProvideMeterDataRequest.	No	Error		Yes				1936	Initiator has made more than one request for the same version of the MDFF data.
Participant is not entitled to requested data for part of the date range requested	No	Information		Yes				1934	The *Severity* is 'Information' as the Recipient will send a MeterDataNotification to the Initiator with the available MDFF data. Refer Clauses 2.6.3 & 2.6.4
Participant is not entitled to requested data for part of the date range requested	No	Error			Yes			1934	The *Severity* is 'Error' as the Recipient will not send a MeterDataNotification to the Initiator with the available MDFF data. Refer Clauses 2.6.3 & 2.6.4
Participant is not entitled to requested data for date range requested	No	Error		Yes	Yes	Yes		1933	General market principle.
Insufficient information provided to action Request.	Yes	Error			Yes			1958	The Initiator has not clearly defined the reading, the period and the description of the problem.
NSRD not past yet (ie allowed timeframe to provide reading has not expired yet).	No	Error			Yes			1948	
Query has been investigated and no change made to the MDFF Data.	Yes	Error			Yes			1959	
StartReadDate is before the MDP SLR[4] on-line storage requirement.	No	Information		Yes	Yes			1960	2.6.1a
Requested data is no longer on-line	No	Error		Yes	Yes			1946	2.6.1
No data found	No	Error		Yes	Yes			1931	
New request with previously used *RequestID*.	Yes	Error		Yes	Yes	Yes	Yes	1913	
NMI abolished.	No	Error		Yes	Yes	Yes	Yes	1961	
No active meters.	No	Error		Yes	Yes	Yes	Yes	1962	
Recipient is not the MDP for the whole period.	No	Information		Yes				1963	
Recipient is not the MDP for the whole period.	No	Error			Yes			1963	

[4] Note that the term 'SLR' refers to 'SLP' or Service Level Procedure.

Recipient is not responsible for the supplied NMI.	Yes	Error		Yes	Yes	Yes	Yes	1923	The Recipient is not responsible for the *NMI*.
Format problem found in MDFF	Yes	Error	Yes					1925	An error occurred while loading the MDFF. *Status* indicates the data that has been rejected (Table 14)
Required timeframe for updating MSATS has not passed	No	Error		Yes				1968	Used where the Initiator has not waited the required time for MSATS to be updated.
Invalid Request	Yes	Error		Yes				1969	Used where the Request does not make sense to the Recipient.
Recipient did not initiate request	Yes	Error	Yes					206	Standard aseXML Code. The *RequestID* in the MeterDataNotification is not one provided by the Recipient.
Accept	No	Information	Yes	Yes	Yes	Yes	Yes	0	Standard aseXML Code
Data missing. Details provided in *Explanation*	Yes	Error	Yes	Yes	Yes	Yes	Yes	201	Standard aseXML Code. Used where data with a usage of Required in the Procedure is missing.
Invalid data. Details provided in *Explanation*	Yes	Error	Yes	Yes	Yes	Yes	Yes	202	Standard aseXML Code. Covers situations where the data in a field or combination of fields is invalid.
Request matches an existing Request. The *TransactionID* of the related Request is provided in *Explanation*.	Yes	Error			Yes			1965	
No further data available.	No	Information	Yes					1966	Used where the Recipient provides all the data it has but this does not satisfy a ProvideMeterDataRequest. Used in a *BusinessAcceptance/Rejection* with a *Status* of 'Partial'.
No Contract	No	Error				Yes	Yes	TBC	Used where the Recipient does not have a contract with the Initiator to provide the service requested.
Service Not Provided	No	Error				Yes	Yes	TBC	Used where the Recipient does not provide the service requested.
No Comms	No	Error				Yes	Yes	TBC	Used where communications were not available at the time of the request.

b.

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