



Specification Pack Usage Guidelines

For the SA and WA Gas Retail Markets

Prepared by: AEMO Markets

Document ref: NA

Version: 8.6

Effective date: 30 June 2023

Status: FINAL

Approved for distribution and use by:

Approved by: Violette Mouchaileh

Title: Executive General Manager - Reform Delivery

Date: 10/3/2023

Version History

Version	Date	Author(s)	Changes and Comments
0.1	18/11/03	B. Eaves	First version
1.0	14/11/03	D Bone	Updated for consistency
1.1	28/11/03	D Bone	
2.9	19/01/04	Z Gemmell	Updated for division of REMCo Specification Pack and REMCo Information Pack.
3.0	6/05/04	Z Gemmell	Updated to align with REMCo Specification Pack and REMCo Information Pack v3.0
4.0	13/07/04	Z Gemmell	Updated to remove information relating to REMCo Information Pack v4.0 in accordance with Rule Change C05/04S
5.0	1/10/10	T Sheridan	Updated to reflect the relevant Market Operator requirements following the transfer of REMCo's SA retail market operations to AEMO
5.1	20/12/10	D. McGowan	Updated to include new version 4.2 of the ICD.
5.2	1/08/11	D. McGowan	Updated to include new version 4.3 of the ICD Updated to include new version 5.3 of the FRC B2M-B2B Hub System Specifications. Updated to include correction to the version number for the following documents: FRC B2B System Interface Definitions; FRC CSV Data Format Specification; B2B Service Order Specifications, Part 1 and Part 2,
5.3	30/07/12	S. Macri	Update to include customer classification. SA Only. See IN027/11
5.4	1/02/13	S. Macri	Update to include SA Only changes: <ul style="list-style-type: none"> • IN008/10 – South Australian Crossed Meter Process • IN008/12 – South Australian Tariff D incorrect referencing • IN011/11 – South Australian MIRN Checksum update • IN006/12 – South Australian RoLR Requirement
5.5	1/10/13	D, McGowan	Update to include SA and WA changes: <ul style="list-style-type: none"> • IN008/13 (SA) and C01/13S (WA) Notification Period for New GBO ids and Hub ids. Changes to Connectivity and Technical Certification document.
5.6	1/01/14	D. McGowan	Updated to include: <ul style="list-style-type: none"> • IN026/12 – SA RoLR Automation • IN015/13 – (Residual RMP and Spec Pack changes for SA RoLR) • IN004/12 – (Redundant provision and minor GIP and Spec Pack changes)

5.7	1/07/14	T. Sheridan	Updated to include: <ul style="list-style-type: none"> IN039/12 – MHA/MRT Service Orders IN017/13 – Amendments from Service Orders Road Map Review
5.8	24/04/15	T. Sheridan	Updated to include WA Only change: <ul style="list-style-type: none"> C03/14S – Bulk Energy History Requests
5.9	17/05/15	T. Sheridan	Updated to include: <ul style="list-style-type: none"> IN023/14 (Documentation changes for the FRC Hub Upgrade);
6.0	14/09/15	D. McGowan	Update to include SA only changes <ul style="list-style-type: none"> IN006/09 Service Order Response Changes IN012/11 Process to Identify Previous FRO
6.1	01/01/16	D. Martin	Update to include WA only change: <ul style="list-style-type: none"> C04/15S – Hansen Reference in the Specification Pack
6.2	31/10/16	D. McGowan	Update to include: <p>WA</p> <ul style="list-style-type: none"> C02/16C – REMCo to AEMO transition changes. <p>SA</p> <ul style="list-style-type: none"> IN029/16 – REMCo to AEMO transition
6.3	16/11/16	N Datar	Update to include: <ul style="list-style-type: none"> IN031/11 Fast Track Process for Release of Address Enumerations (SA only)
6.4	31/03/17	N Datar	Update to include <ul style="list-style-type: none"> IN034/16 FRC Hub Self Service Certification Enhancement
6.5	29/09/2017	N Datar	Update to include <ul style="list-style-type: none"> IN039/16 Harmonisation of T900 Password Protection
6.6	04/12/17	D. McGowan	Updated to included <ul style="list-style-type: none"> IN026/16 Minor documentation changes
6.7	30/04/18	D. McGowan	Update to include WA change <ul style="list-style-type: none"> IN003/17W Process to identify previous FRO
6.8	29/06/18	N Datar	Update to include IN011/17 SA Rpt Timing Clause 215
6.9	29/03/2019	N Datar	Update to include IN003/18W Address Attributes
7.0	08/08/19	N Datar	Update to include IN012/17 Updates to deregistered MIRN Status (SA Only)
8.0	20/09/19	N Datar	Update to include IN004/18W Complete MIRN Listing
8.1	10/02/20	D. McGowan	Updated to include IN006/17 – SA RMP Harmonisation
8.2	30/09/20	N. Datar	Updated to include

			IN017/20 Add planned work to usage of the Customer Details Notifications (CDN) transaction (SA only)
8.3	30/4/2021	D.McGowan	IN004/17 – Holistic tidy up of East Coast RMPs (SA only)
8.4	29/11/2021	D. McGowan and A. Pathy	IN003/20 – Adoption of the two B2B Life Support (LS) transactions including adopting a version of the aseXML schema that contain these LS transactions. IN011/20 – Adoption of the aseXML CDN and CDR IN003/20W – Add CDN and CDR for WA IN009/19W - Add meter status to WA transactions IN010/20W -Add new meter status codes IN026/15 and IN002/15W – Add new JECs
8.5	10/10/2022	D.McGowan	IN009-21 – Minor corrections following 29 November 2021 release IN006-21 Proposal to remove SA documentation duplication in Specification Pack (SP) and Participant Build Pack (PBP)
	01/11/2022	D.McGowan	IN013/22 - Added Pallamana Farm Tap
8.6	30/06/2023	N Datar	IN001/23 – Participant Certificate Automation IN005/23 – Transfer SA details from SAWA to PBP3 IN004/21W – Include transaction certification table

Table of Contents

1. Introduction	6
1.1. Purpose	6
1.2. Audience	6
1.3. Format of this Document	6
1.4. Management of the AEMO Specification Pack	6
2. Overview of the AEMO Specification Pack	7
3. AEMO Specification Pack	9
3.1. Usage Guidelines	9
3.2. Interface Control Document (ICD)	9
3.3. B2B System Interface Definitions	9
3.4. Transport Layer	10
3.4.1. FRC B2M-B2B Hub System Architecture (WA only)	10
3.4.2. FRC B2M-B2B Hub System Specifications (WA only)	10
3.5. CSV File Format	11
3.6. Connectivity Testing and Technical Certification (WA Only)	11
3.7. Readiness Criteria (WA only)	11
3.8. Service Order Specifications (WA only)	12
3.9. aseXML schema	12
4. Other Related Documents	13

Table of Figures

Figure 1 Contents of AEMO Specification Pack	8
----------------------------------------------------	---

1. Introduction

1.1. *Purpose*

The purpose of this “Usage Guidelines” document is to present an overview of the various documents that form the AEMO Specification Pack for the South Australian and Western Australian gas retail markets, and the purpose of each of the documents. Some guidance is provided on the way in which the documents can be used.

1.2. *Audience*

The document has been written for the business and IT personnel within market participant organisations and the Market Operator, who will be using the AEMO Specification Pack. It is expected that the audience will have some basic understanding how the Gas Retail Market operates in South Australia and Western Australia.

1.3. *Format of this Document*

Following this introduction, the Usage Guidelines present an overview of the documents that form the AEMO Specification Pack.

The final section in the main body of the document provides details of other related documents to which the audience may wish to refer.

1.4. *Management of the AEMO Specification Pack*

The Specification Pack will be managed by AEMO and amendments to the AEMO Specification Pack will be made as required using the relevant jurisdictions change control procedure.

2. Overview of the AEMO Specification Pack

The following table provides an overview of the AEMO Specification Pack. The documents are provided in a directory structure as follows:

Main Directory	Sub-Directory	Documents	Version
Specification Pack	1. Usage Guidelines	Specification Pack Usage Guidelines	8.6
	2. Interface Control Document (ICD)	Interface Control Document	5.2
	3. B2B System Interface Definitions	FRC B2B System Interface Definitions	5.0
	4. Transport Layer	FRC B2M-B2B Hub System Specifications (WA only) FRC B2M-B2B Hub System Architecture (WA only) For SA see Participant Build Pack 3 – FRC B2B System Specification For SA see Participant Build Pack 3 – FRC B2B System Architecture	4.0 3.7
	5. CSV File Format	FRC CSV Data Format Specification	3.3
	6. Connectivity and Technical Certification (WA Only)	Connectivity Testing and Technical Certification (WA Only)	3.8
	7. Readiness Criteria (WA Only)	Readiness Criteria (WA Only)	2.3
	8. Service Order Specifications	B2B Service Order Specifications, Part 1 (WA only) and Part 2 (WA only), For SA Participant Build Pack 1 - Table of Transaction, Job Enquiry Code tab, and Elements tab (only the Job Enquiry Code 1, 2 and 3 elements)	2.5 and 3.6
	9. aseXML Schemas	The complete set of aseXML schemas and examples which participants have subscribed to for SA / WA Gas is available from www.aemo.com.au/asexml	SA – R40 WA – R40
	10. GasEnumerations.xsd	Enumerations file containing the gas-specific enumerations that can be added to at short notice and can be released outside of the standard aseXML change cycle.	SA – 1.0.0 WA – 1.0.0

Figure 1 Contents of AEMO Specification Pack

3. AEMO Specification Pack

3.1. Usage Guidelines

The purpose of this Usage Guidelines document is to present an overview of the various documents that form the AEMO Specification Pack and the purpose of each of these documents.

3.2. Interface Control Document (ICD)

The ICD document provides a baseline definition of the GRMS build against the Business Specification per the Retail Market Procedures (RMP).

The ICD describes in detail the physical transactions to be transferred between the Gas Retail Market System (GRMS) and the market participants of South Australia and Western Australia to support the RMP.

The ICD provides sufficient detail to market participants in the SA and WA jurisdictions to enable development of software interfaces to support their FRC operations in the two markets. This document is to be used as the primary build document with the Business Specification document for the GRMS system.

The ICD also contains detailed definitions of data elements used in transactions, event codes and provides a cross-reference between the logical flows listed in the Consolidated Transaction Table and the corresponding physical aseXML and csv transactions.

This document also describes the mapping of the aseXML data items to the latest aseXML compliant schema.

3.3. B2B System Interface Definitions

The purpose of the B2B System Interface Definitions document is to define the behaviour of the SA/WA market business and IT systems. The definitions identify the manner in which the participants in the South Australia and Western Australia Gas Market will communicate with each other to manage their day-to-day business.

The document presents the participant's systems as a "black box" highlighting only the necessary interfaces that are required for all participants to specify, build and test their systems.

The specific interfaces are presented under the following headings:

- Meter Reads – Energy and Consumption
- Service Orders
- MIRN Discovery
- Route and Site Information
- Network Billing.

The document also contains detailed definitions of data elements used in transactions, event codes and provides a cross-reference between the logical flows listed in the Consolidated Transaction Table and the corresponding physical aseXML transactions.

The B2B System Interface Definitions is based on the AEMO document, FRC B2B System Interface Definitions. For background details on the methodology and formats used in this document, refer to Participant Build Pack Usage Guide from AEMO.

3.4. *Transport Layer*

3.4.1. FRC B2M-B2B Hub System Architecture (WA only)

The FRC B2M-B2B Hub System Architecture document provides a comprehensive architectural overview of the FRC transaction and messaging system based on the use of AEMO's FRC Hub.

The document contains the significant architectural elements of that System which will be used for communication between participants and the Gas Retail Market System (GRMS – B2M) and also for B2B communications. The document provides details of:

Architecture - Provides an overview and a definition of the transport and messaging architecture.

Application Layer – Describes functional and operational aspects of the aseXML Transaction Application. Topics include the obligations of the application, schema and schema validation, and interoperability. The section also describes the participant Communications Infrastructure, Public Key Infrastructure and the Message Service Interface, which will mediate between the Message Service Handler and these other applications / infrastructure elements.

Message Layer – Provides a description of the Message Service Handler (MSH) that is the centrepiece of the transaction and messaging system. The MSH is an implementation of the ebXML Message Service Specification. Packaging, routing, and delivery are dealt with in detail. The handler services, being Message Status Request, and MSH Ping are also described.

Transport Layer – Describes the interface between the Message Service Handler and transport protocols to be supported. Network infrastructure is outlined including the system topology, gateways, the hub, and expected network traffic.

Security – Provides participants with an understanding of the security issues involved as well as the expected implementation detail, and participant requirements. Some details, which would themselves compromise the security approach, have been excluded. The three sections are Key Management, Encryption, and Digital Signature.

3.4.2. FRC B2M-B2B Hub System Specifications (WA only)

The FRC B2M-B2B Hub System Specifications document provides the configuration and control settings that apply to the transaction and messaging system.

These specifications comprise standard service names, time intervals for message timeouts, standard participant identifiers, XML header mappings, and specific FBS port and network addressing details.

These specifications are the variable implementation details that apply to the FBS architecture, as defined in the FRC B2M-B2B Hub System Architecture.

3.5. CSV File Format

This document defines format of Comma-Separated Values (CSV) files for transactions that are to be exchanged between Market Participants.

3.6. Connectivity Testing and Technical Certification (WA Only)

The Connectivity Testing and Technical Certification document describes the process through which organisations wishing to participate in the WA Gas Retail Markets can achieve technical certification from the relevant Market Operator.

Technical Certification includes most activities that would be termed connectivity testing. However, some interfaces are not covered by Technical Certification. This document therefore also provides an overview of those areas of Connectivity Testing not covered by Technical Certification.

The document is in three parts:

1. The certification process relating to transactions routed via the FRC Hub;
2. The certification process relating to the automated electronic file interface (FTP) between market participants' gateways and the gas retail market system (GRMS) operated by AEMO for the WA Gas Retail Market; and
3. Connectivity Testing for those interfaces not addressed in Technical Certification.

3.7. Readiness Criteria (WA only)

The readiness criteria document sets out the criteria that will form the basis of AEMO's assessment of participants' readiness pursuant to the issuance of a GBO Identification in accordance with rule 21B of the RMP.

3.8. Service Order Specifications (WA only)

The B2B Service Order Specifications define the detailed usage of Job Enquiry Codes and Job Completion Codes. The Service Order Specifications are in two parts:

1. Detailed definitions of usage of data elements for different Job Enquiry Codes (Word document).
2. Definitions of Job Enquiry Codes and the associated Job Completion Codes (Excel file)

3.9. aseXML schema

Transactions are conducted on the basis of a set of industry rules encapsulated in the aseXML schema and expressed in aseXML documents. The complete set of aseXML schemas and examples which participants have subscribed to for SA / WA Gas is available from <http://www.aemo.com.au/About-the-Industry/Information-Systems/aseXML-Standards/aseXML-Schemas>.

4. Other Related Documents

The audience for the AEMO Specification Pack may also wish to refer to the following documents:

- Guidelines for Development of a Standard for Energy Transactions in XML (aseXML), published by AEMO and available at www.aemo.com.au.
- aseXML schema available at www.aemo.com.au