Specification Pack Usage Guidelines

For the SA and WA Gas Retail Markets

Version: ~~5.6~~5.7
Last Update: ~~1 January~~1 July 2014

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 included 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	1/2/13	S. Macri	Update to include SA Only changes: • 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: • 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: • 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: • IN039/12 – MHA/MRT Service Orders

			• IN017/13 – Amendments from Service Orders Road Map Review

Preamble:

This document has been modified to comply as closely as possible with the jurisdictional conditions of both the South Australian and Western Australian gas retail markets in place since 1 October 2009. The reader needs to be aware of the following changes.

(a)   Several terms have been changed to a general term where possible with a market specific definition; and

(b)   In the interests of keeping new terms and acronyms to a minimum, the original word has been italicised where possible to indicate that its definition again depends on its location.

This approach is to promote interchange-ability in these documents for the benefit of stakeholders from both states.

The terms and there relevant definitions are as follows:

Term:	South Australian Market Definition:	Western Australian Market Definition:
Market Operator	AEMO	REMCo
Retail Market Rules (RMR)	Retail Market Procedures	Retail Market Rules

For more information please contact the Market Operator in your state:

	AEMO	REMCo
Website:	http://www.aemo.com.au	http://www.remco.net.au

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1. Introduction

1.1. Purpose

The purpose of this "Usage Guidelines" document is to present an overview of the various documents that form the 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 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 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 Specification Pack

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

2. Overview of the Specification Pack

The following table provides an overview of the 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	5.~~6~~7
	2. Interface Control Document (ICD)	Interface Control Document	4.4
	3. B2B System Interface Definitions	FRC B2B System Interface Definitions	3.~~6~~7
	4. Transport Layer	FRC B2M-B2B Hub System Specifications FRC B2M-B2B Hub System Architecture	3.6 3.2
	5. CSV File Format	FRC CSV Data Format Specification	3.2
	6. Connectivity and Technical Certification	Connectivity Testing and Technical Certification	3.4
	7. Readiness Criteria	Readiness Criteria	2.1
	8. Service Order Specifications	B2B Service Order Specifications, Part 1 and Part 2,	2.2 3.~~1~~2
	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 – R29 WA – R13

Figure 1 Contents of Specification Pack

3. 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 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 Rules (RMR).

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 Gas Retail Market Rules.

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

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

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

The Connectivity Testing and Technical Certification document describes the process through which organisations wishing to participate in the SA and 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 REMCo for the SA and WA Gas Retail Markets; and
3. Connectivity Testing for those interfaces not addressed in Technical Certification.

3.7. Readiness Criteria

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

3.8. Service Order Specifications

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 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 http://www.aemo.com.au/About-the-Industry/Information-Systems/aseXML-Standards/aseXML-Schemas