

# IMPACT & IMPLEMENTATION REPORT (IIR)

<b>Issue number</b>	Package 2 – 2023 (IN001/23W IN003/22W IN004/21W)		
<b>Impacted jurisdiction(s)</b>	Western Australia		
<b>Proponent</b>	See table in section 3.1	<b>Company</b>	
<b>Affected gas market(s)</b>	<ul style="list-style-type: none"> <li>Retail</li> </ul>	<b>Consultation process (ordinary or expedited)</b>	Ordinary
<b>Industry consultative forum(s) used</b>	GRCF	<b>Date industry consultative forum(s) consultation concluded</b>	Thursday, 1 September 2022
<b>Short description of change(s)</b>	Allow market participants to self-manage their Transport Layer Security (TLS) Certificates that are used to connect to many AEMO gas systems, amend WA description for TCR in service order specification and include transaction certification table for WA.		
<b>Procedure(s) or documentation impacted</b>	See Section 2		
<b>Summary of the change(s)</b>	<p>IN001/23W - Amend SSL with TLS certificates in the Technical Protocol (TP) documents, include a clause for subscribers to ensure currency of their digital certificates and a new self-management tool for subscribers to update the certificate.</p> <p>IN003/22W - Amend the description for Job Enquiry Code TCR.</p> <p>IN004/21W - Include a table of required transactions for certification per role as an appendix in the TP document.</p>		
<b>IIR prepared by</b>	Nandu Datar	<b>Approved by</b>	Meghan Bibby
<b>Date IIR published</b>	30 January 2023	<b>Date consultation concludes</b>	27 February 2023
<b>Email address for responses</b>	<a href="mailto:grcf@aemo.com.au">grcf@aemo.com.au</a>		
<b>Other key contact information</b>			



## IMPACT & IMPLEMENTATION REPORT

### CRITICAL EXAMINATION OF PROPOSAL AND SUBMISSION DETAILS

#### 1. DESCRIPTION OF ISSUE

The following is a description of issues for each of the initiatives that form part of the Package 2 – 2023 consultation.

##### IN001/23W<sup>1</sup>

Electricity and Gas market participants connect to many of AEMO's systems securely using TLS certificates supplied by AEMO.

TLS Certificates are only required by participants for application-to-application (also known as system-to-system) communications (user Interfaces do not use AEMO-supplied TLS certificates).

The Gas Supply Hub FRC, also known as the FRC Hub<sup>2</sup> (Gas Retail B2B, and B2M, traffic using ebXML) requires the use of TLS certificates to authenticate through AEMO's network.

The eHub, also known as the Energy Hub, also requires the use of TLS certificates to authenticate through AEMO's network.

These TLS certificates must be replaced every 3 years. Today, the replacement process is manual and can take weeks. Most participant TLS certificates will start expiring from June 2023 and participants must replace expiring certificates with new ones to avoid disconnection from AEMO systems.

As part of improving market security and empowering market participants to self-manage their connections to AEMO systems, AEMO is:

- upgrading the network to allow newer and more secure TLS versions and deprecate old and less secure versions; and
- providing a better way than the current manual approach to TLS certificate management, allowing participants to self-manage their AEMO-supplied TLS certificate through a TLS Certificate Management interface.

The older technology Secured Socket Layer (SSLv3, or less), TLS v1.0 and TLS v1.1 is still in use by a few participants. AEMO will continue to accept the SSL and TLS v1.0/v1.1 connections until the changes to Technical Protocol<sup>3</sup> (TP) documents being consulted become effective, which is expected to be 30 June 2023. AEMO will not accept the SSL and TLSv1.0/v1.1 connections after this date.

Technical advice about the above changes was circulated to the Gas Retail Consultative Forum (GRCF) in October 2022.

Because of the above technical changes, some of the TPs will require minor amendments in order maintain alignment with new self-managed process.

##### IN003/22W

This initiative is a minor documentation error that ATCO identified in December 2021 to do with AEMO Specification Pack document B2B Service Order Specifications Part 2. The description for

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<sup>1</sup> For the avoidance of doubt the proposed changes in relation to IN001/23W are not limited to Western Australian. The same changes proposed in this consultation apply in east coast jurisdiction (See IN001/23)

<sup>2</sup> FRC Hub is the term used in the Retail Market Procedure (RMP)

<sup>3</sup> In relation to WA, also known as AEMO Specification Pack



Job Enquiry Code TCR (Trailer Air Coupling) is correct. The last word in the sentence contains “installed” when it should be the word “Removed”. This oversight wasn’t identified during the IN002/15W (New Job Enquiry Codes) consultation which was implemented in late November 2021.

### IN004/21W

Currently the East Coast certification document (Gas FRC B2B Connectivity Testing and System certification (VIC, QLD, SA, AND NSW/ACT)) includes an Appendix B & C showing the required transactions for certification per role. This proposal is to include a similar Appendix in the Connectivity Testing and Technical Certification (WA Only) document so that it harmonises with the East Coast document.

Section 3 of this IIR contains further information about each of the above issues and a brief explanation of the specific changes. Attachment A of this IIR contains amendments for each of the proposed changes.

## **1.1. Pre-consultation outcomes**

At the Gas Retail Consultative Forum (GRCF) prioritisation session held in November 2022, participants supported AEMO’s proposal to initiatives IN001/23W, IN003/22W and IN004/21W to a consultation package.

## **1.2. Invitation to provide feedback. Scope of changes.**

Anyone wishing to make a submission for this second stage consultation stage are requested to use the response template provided in Attachment B. Submissions close COB 27 February 2023 and should be e-mailed to [grcf@aemo.com.au](mailto:grcf@aemo.com.au).

IMPORTANT: The scope of works is limited to the initiatives described above. The scope maybe expanded to pick up other minor typographical errors that are identified. A more thorough review of the other sections of the TPs is out of scope for this consultation.

## **2. REFERENCE DOCUMENTATION**

- FRC B2M – B2B Hub System Architecture v3.6
- FRC B2M – B2B Hub System Specifications v3.9
- FRC HUB Operational Terms and Conditions v9.0
- Specification Pack Usage Guide v8.5
- B2B Service Order Specification (WA only) – Part 2 v3.5
- Connectivity Testing and Technical Certification (WA Only) v3.7

## **3. OVERVIEW OF CHANGES**

As outlined in Section 1, this IIR is made up of three existing initiatives, each having their own specific change as described in Attachment A. It is AEMO’s view that none of these changes significantly alter any of the existing obligations placed on participants. It is envisaged that the above should contribute to improving the user experience in accessing AEMO’s systems and provide further clarity towards participating in Western Australian retail gas market.

AEMO is targeting to have the formal consultation processes concluded in the first half of 2023 with the proposed effective date of 30 June 2023 should they be approved by the Economic Regulation Authority (ERA).



### 3.1. Proposed changes

The following table indicates which initiative affects which document. The clauses of each document that have been updated have had a change id comment applied to them indicating which initiative is related to which change of drafting.

Change ID	Title	Proponent	Documents affected
IN001/23W	Participant Certificate Automation	AEMO	FRC B2M – B2B Hub System Architecture FRC B2M – B2B Hub System Specifications FRC HUB Operational Terms and Conditions Connectivity Testing and Technical Certification (WA Only) Specification Pack Usage Guide
IN003/22W	Amend the description for Job Enquiry Code TCR	ATCO	B2B Service Order Specification (WA only) – Part 2
IN004/21W	Include a transaction certification table for WA	AEMO	Connectivity Testing and Technical Certification (WA Only)

The proposed changes are:

Participant Certificate Automation (IN001/23W).

- Replacing SSL, TLSv1.0 and TLS v1.1 to TLS v1.2 and encryption from 128 to 2048 where applicable in the documents mentioned above.
- Include a new clause in FRC HUB Operational Terms and Conditions that requires Subscribers to ensure the currency of their AEMO-issued digital certificates and request AEMO for re-issues and renewals when required.
- A new interface for Participants to self-manage their AEMO-supplied TLS certificates. Market participants will be required to ensure their own TLS certificate currency and self-manage their TLS certificates,
  - The solution will allow participants to retrieve their existing AEMO-supplied TLS certificates, create new TLS certificates, and renew, reissue or revoke existing certificates
  - The solution will send notifications to Participants prior to the expiry of the TLS certificate to remind them to replace their soon-to-expire certificate.
  - AEMO will monitor the replacement of expiring certificates to ensure participants are self-managing the replacement of their TLS certificates prior to expiry.

Amend the description for Job Enquiry Code TCR (IN003/22W).

- Replacing the last word “installed” with the word “Removed” in the document mentioned above.

Include a transaction certification table for WA (IN004/21W).

- Include a table of required transactions for certification per role as an appendix in the document mentioned above.

See Attachment A for further information about these changes.

## 4. LIKELY IMPLEMENTATION EFFECTS AND REQUIREMENTS

### IN001/23W

Subscribers will be required to ensure the currency of their AEMO-issued digital certificates and request AEMO for re-issues and renewals when required.



Subscribers using the SSLv3, TLS v1.0 or TLS v1.1 to connect with AEMO will be required to transition over to using TLSv1.2.

IN003/22W

The change will provide clarity for the use of job enquiry code TCR.

IN004/21W

The participants can ensure that all operational transactions are now certified.

**5. OVERALL COST AND BENEFITS**

AEMO expects there will be negligible implementation costs since none of the changes proposed in this IIR require system changes or substantial process changes.

Implementation of Participant Certification Automation is expected to deliver the following benefits:

- Empowers the participants self-manage their connection and TLS Certificates to AEMO systems.
- TLS technology uses 2048 bits encryption and a higher TLS version, making the connection more secure.
- Reduces the risk of participants being disconnected from MTLS-authenticated systems due to expired certificates.

AEMO considers this initiative will require minor process change for the Subscribers to use the self-managed TLS Certificate Management solution for managing their TLS certificates used for TLS connection to AEMO systems.

The benefits of the other two initiatives are intangible in nature and are likely to be realised as follows:

- Increased clarity within the retail gas regulatory framework.
- Harmonised certification of transactions across all retail gas markets.

**6. MAGNITUDE OF THE CHANGES**

AEMO has deemed this change to be non-material since there will be negligible implementation costs and none of the changes require system or substantial process changes.

**7. AEMO'S PRELIMINARY ASSESSMENT OF THE PROPOSAL'S COMPLIANCE WITH CLAUSE 378 OF THE RMP:**

As part of the second-round consultation (IIR), AEMO put forward the following assessment regarding compliance with clause 378 of the RMP:

<p>Ensure that the retail gas market operates and is governed in a manner that is,</p> <ul style="list-style-type: none"> <li>(i) open and competitive;</li> <li>(ii) efficient; and</li> <li>(iii) fair to participants and their customers</li> </ul>	<p>AEMO's view is that the proposed change will continue to promote competition, properly reflects operational practices and will not disadvantage participants or their customers.</p>
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<p>Ensure compliance with all applicable laws</p>	<p>AEMO’s view is that the proposed changes are consistent with the applicable laws, and participants will be given an opportunity during this IIR consultation to inform AEMO if they believe the proposed change is in conflict with any applicable laws.</p>
<p>Ensure effective consultation occurs and gives stakeholder’s opportunities to provide feedback of the proposed changes</p>	<p>AEMO’s view is that this IIR consultation and the subsequent IIR consultation, in addition to the discussions at the GRCF, will provide adequate opportunities for participants to provide feedback on the proposed changes.</p>

No participant put forward any opposing views in relation to AEMO assessment during the first-round consultation therefore AEMO maintains its original assessment described in the previous points as noted above.

## 8. CONSULTATION FORUM OUTCOMES

On 13 December 2022 AEMO published a PPC and participants were invited to provide feedback on AEMO’s assessment of the proposals (IN001/23W, IN003/22W and IN004/21W). Submission closed on 17 January 2023. AEMO received responses from AGL, Alinta Energy, and Origin Energy. All participants expressed their support that the changes described in the PPC should proceed. Participant feedback suggested typographical edits to some of the documents. This feedback and AEMO’s response thereto is provided in Attachment C.

## 9. SUPPORTING DOCUMENTATION

Attachment A Proposed changes to Technical Protocol (TP) documents

Attachment B IIR Response Template



## **IMPACT & IMPLEMENTATION REPORT – RECOMMENDATION(S)**

### **10. SHOULD THE PROPOSED PROCEDURES BE MADE?**

AEMO recommends the changes proposed in Attachment A.

### **11. PROPOSED TIMELINES**

Subject to all necessary approvals, AEMO proposes the following timeframe:

- Issue IIR on 30 January 2023.
- IIR feedback due 27 February 2023.
- Economic Regulation Authority (ERA) submission issued by end of March 2023.

AEMO will work with ERA on the process to set an effective date for these changes. The target effective date for these changes is 30 June 2023.



## **ATTACHMENT A – MARKED UP CHANGES (SEE SECTION 3)**

Draft versions of the Technical Protocol (TP) documents showing tracked changes between the current version and the proposed changes are attached separately to this document. [Blue underline](#) means addition and ~~red-strikeout~~ means delete.

- FRC B2M – B2B Hub System Architecture
- FRC B2M – B2B Hub System Specifications
- FRC HUB Operational Terms and Conditions
- Specification Pack Usage Guide
- B2B Service Order Specification (WA only) – Part 2
- Connectivity Testing and Technical Certification (WA Only)

## **ATTACHMENT B – IIR RESPONSE TEMPLATE**

The IIR response template has been attached separately to this document. There are two sections in the template:

- Section 1 seeks feedback on AEMO’s examination of the proposal in Sections 1–9 (i.e., whether AEMO has correctly captured the requirements and surrounding context of the proposal).
- Section 2 seeks feedback on the proposed changes listed in Attachments A.

Anyone wishing to make a submission to this IIR consultation are to use this response template.

Submissions close COB 27 February 2023 and should be emailed to [grcf@aemo.com.au](mailto:grcf@aemo.com.au).





## ATTACHMENT C – GENERAL FEEDBACK GIVEN TO PPC

Section 1 - General Comments on the Proposed Procedure Change

Sections 1 to 8 of the PPC sets out details of the proposal.

Does your organisation supports AEMO’s assessment of the proposal?

If no, please specify areas in which your organisation disputes AEMO’s assessment (include PPC section reference number) of the proposal and include information that supports your organisation’s rationale for not supporting AEMO’s assessment.

IN#	Ref #	Company	Response	AEMO Response (AEMO only)
IN001/23W	1	AGL	AGL considers the issues have been adequately assessed	AEMO notes AGL’s support for the changes.
	2	Alinta Energy	Alinta Energy supports the amendments proposed by AEMO.	AEMO notes Alinta Energy’s support for the changes.
	3	Origin Energy	Origin supports AEMO’s PPC assessment.	AEMO notes Origin Energy’s support for the changes.
IN003/22W	4	AGL	AGL considers the issues have been adequately assessed	AEMO notes AGL’s support for the changes.
	5	Alinta Energy	Alinta Energy supports the amendments proposed by AEMO.	AEMO notes Alinta Energy’s support for the changes.
	6	Origin Energy	Origin supports AEMO’s PPC assessment.	AEMO notes Origin Energy’s support for the changes.
IN004/21W	7	AGL	AGL considers the issues have been adequately assessed	AEMO notes AGL’s support for the changes.
	8	Alinta Energy	Alinta Energy supports the amendments proposed by AEMO.	AEMO notes Alinta Energy’s support for the changes.



	9	Origin Energy	Origin supports AEMO's PPC assessment.	AEMO notes Origin Energy's support for the changes.
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Section 2 - Feedback on the documentation changes.

FRC B2M – B2B Hub System Architecture					
Ref #	Organisation	Clause #	Issue / Comment	Proposed text <i>Red strikeout</i> means delete and <i>blue underline</i> means insert	AEMO Response (AEMO only)
10	AGL	Title	Document Title Grammar and singular market.	Document Title should be B2M-B2B Hub System Architecture for <del>the SA and</del> WA Gas Retail <del>Markets</del>	AEMO agrees with AGL's suggestion as it adds clarity to the Title.
11	AGL	Document page header	The page header includes both the SA and WA Market	Delete the following: <i>FRC B2M-B2B Hub System Architecture for the SA and WA Gas Retail Markets</i>	AEMO notes that this is the feature of Microsoft Word application where deleted text is not shown as tracked change and will not appear when the changes are accepted. AEMO agrees to remove 's' in 'Markets'.
12	AGL	Purpose	Grammar	Markets is now singular: used in the <del>South Australian and</del> Western Australian Gas Retail <del>Markets</del>	AEMO agrees with AGL's suggestion as it adds clarity to the sentence.
13	AGL	General	Grammar change resulting from the removal of the SA market from the document (ie from 2 markets to 1 market).	Throughout document – change plurals (eg markets) to singular (market).	AEMO agrees with AGL's suggestion as it adds clarity to the text.
14	AGL	Definitions FRC Hub	Grammar	Change Australian to Australia. including <del>South Australian and</del> Western Australian.	AEMO agrees with AGL's suggestion as it adds clarity to the definition.
15	AGL	CI 2.4.3.	Typos	Remove additional 's' in procedures.	AEMO agrees with AGL's suggestion as it adds clarity to the clause.

				<p>All other t2 times are governed by the <i>Retail Market Procedures</i> and will be policed by audit.</p> <p>t3 is the maximum time duration before a transaction response is received.</p> <p>The t3 times are governed by the <i>Retail Market Procedures</i> and will be policed by audit.</p>	
16	Alinta Energy	6	"SSL" has been replaced with "TSL" rather than "TLS".		AEMO agrees with Alinta Energy's suggestion as it adds clarity to the clause.
<b>FRC B2M – B2B Hub System Specification</b>					
Ref #	Organisation	Clause #	Issue / Comment	Proposed text <span style="color: red;">Red strikeout</span> means delete and <span style="color: blue; text-decoration: underline;">blue underline</span> means insert	AEMO Response (AEMO only)
17	AGL	Title	Document Title Grammar and singular market.	Document Title should be B2M-B2B Hub System Architecture for <span style="background-color: yellow;">the SA and WA Gas Retail Markets</span>	AEMO agrees with AGL's suggestion as it adds clarity to the Title.
18	AGL	Document page header	The page header includes both the SA and WA Market	Delete the following: <i>FRC B2M-B2B Hub System Architecture for the SA and WA Gas Retail Markets</i>	AEMO notes that this is the feature of Microsoft Word application where deleted text is not shown as tracked change and will not appear when the changes are accepted. AEMO agrees to remove 's' in 'Markets'.
19	AGL	General	Grammar change resulting from the removal of the SA market from the document (ie from 2 markets to 1 market).	Throughout document – change plurals (eg markets) to singular (market).	AEMO agrees with AGL's suggestion as it adds clarity to the text.
20	AGL	5.2 Obtaining Certificates	The document indicates that the user should follow an online instruction – but		AEMO notes AGL's comment. AEMO is currently in the process of finalising the online instructions specification. AEMO will



			does not specify where that online instruction may be located.		include a placeholder and it will be updated with the link for online instructions prior to publishing AEMO's decision.
<b>FRC HUB Operational Terms and Conditions</b>					
Ref #	Organisation	Clause #	Issue / Comment	Proposed text <del>Red strik</del> means delete and <u>blue underline</u> means insert	AEMO Response (AEMO only)
21	AGL	Current version	Typo - 2048 bit <b>encryotion</b>	Change to 'encryption'	AEMO agrees with AGL's suggestion as it adds clarity to the text. The current version release details table has been updated.
22	AGL	4.1.12	AEMO advice (5/1) is that the sentence should read:  4.1.12. Subscribers will ensure the currency of their AEMO-issued digital certificates and request AEMO for re-issues and re <b>newals when required</b>  AGL has no issues with the proposed text.		AEMO agrees with AGL's suggestion as it adds clarity to the text.
23	Alinta Energy	4.1.12	Subscribers will ensure the currency of their AEMO-issued digital certificates and request AEMO for re-issues and re [text missing here].		AEMO has amended the text as per the response to feedback from AGL above (ref #22).
<b>B2B Service Order Specification (WA only) – Part 2</b>					
Ref #	Organisation	Clause #	Issue / Comment	Proposed text <del>Red strik</del> means delete and <u>blue underline</u> means insert	AEMO Response (AEMO only)
			No feedback received		

Connectivity Testing and Technical Certification (WA Only)					
Ref #	Organisation	Clause #	Issue / Comment	Proposed text <del>Red strik</del> means delete and <u>blue underline</u> means insert	AEMO Response (AEMO only)
24	AGL	Appendix A	Please check transaction list <ul style="list-style-type: none"> <li>Life Support not used in WA gas at this time</li> </ul>		AEMO notes AGL's comment and has removed the Lift Support transactions from Appendix A
25	Alinta Energy	1.3	Define "TLS" the first time it is used.	Connect to the FRC Hub using TLS ( <u>Transport Layer Security</u> ), either via the Internet or the Gas Industry Network;	AEMO agrees with Alinta Energy's suggestion as it adds clarity to the clause.
26	AEMO	Table of Content	Sentence at the top showing error 'For the SA and WA Gas Retail Markets <b>Error!</b> <b>Bookmark not defined.</b>	Remove the sentence as it is not required.	AEMO has removed the sentence.
Specification Pack Usage Guide					
Ref #	Organisation	Clause #	Issue / Comment	Proposed text <del>Red strik</del> means delete and <u>blue underline</u> means insert	AEMO Response (AEMO only)
			No feedback received		