

FRC GAS HUB PARTICIPANT USER GUIDE

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1. Introduction

This document contains information for participants in Australian Energy Markets to connect to, and use, the FRC Hub infrastructure put in place to accommodate the VIC, QLD, SA, NSW-ACT & WA retail Gas markets.

The document provides an overview of the system, and specific information for participants who wish to initiate a connection to the hub in order to operate in the relevant markets. The document also contains a number of appendices with detailed instructions on the use of certain features of the FRC system.

The document does not provide business, functional or technical information specific to any of the markets that use the hub for communication. This information is provided in business process documents, and functional and technical specifications supplied by the Market Operator of the market in which a participant wishes to operate. Contact the relevant Market Operator to obtain copies of these documents.

1.1 Audience

The document is targeted at actual and potential users of the FRC Hub environment with specific emphasis on the following roles:

Business Owners – May use the document to gain an understanding of the FRC Hub system in order to determine the business requirements of the system.

Project Managers – May use the document to determine the necessary planning that a participant or market operator must undertake in order to incorporate the FRC Hub in a market FRC implementation.

System Architects – May use the document to identify the architectural requirements of systems and processes necessary to operate in the FRC Hub environment.

Technical Developers – May use the document to identify the technical requirements, specifications and protocols necessary for a participants IT system to interact with the FRC Hub

1.2 Acronyms

ACRONYM	DESCRIPTION
aseXML	A Standard for Energy Transactions in XML. XML schema designed to accommodate the necessary transactions required to operate the energy markets
B2B	Business to Business. Interactions between two or more independent business participants.
CSR	Certificate Signing Request.
ebXML	Electronic Business XML. Protocol designed to facilitate B2B interactions.
FRC	Full Retail Contestability

ACRONYM	DESCRIPTION
HTTP	Hyper Text Transfer Protocol
HTTP/S	Hyper Text Transfer Protocol/ Secure. HTTP using SSL for secure communications over the internet
ISP	Internet Service Provider
Market Operator	The entity that manages the operations of a specific gas market.
MWS	My WebMethods Server
NEM	National Electricity Market
NSW-ACT	New South Wales and Australian Capital Territory Gas Market
AEMO	Australian Energy Market Operator Ltd
SAWA	South Australian and Western Australian Gas Markets
SSL	Secure Sockets Layer. Provides for encrypted transmission of documents over the internet and authentication using x509 certificates
URL	Universal Resource Locator
VicGas	Victorian Gas Market

2. Overview

The AEMO Gas FRC infrastructure enables participants to send business transactions over common network, message and transaction protocols. Business transactions are sent as aseXML documents carried as payloads inside ebXML message envelopes and transmitted over HTTP/S.

aseXML controls all business transaction functions, such as identification, timing, acknowledgment, transaction duplicate handling, etc. aseXML documents are generally handled by individual business back end systems.

ebXML controls message level functions such as reliable delivery, once-and-only-once delivery, message time-to-live, message integrity, non-repudiation, etc. ebXML messaging is generally handled via a single ebXML gateway, through which all aseXML transactions are routed. The hub currently supports ebXML v1.0 only.

HTTP/S controls network level delivery, network encryption, etc. HTTP/S enables messages to be sent securely over the internet, VPN or an agreed WAN/LAN network.

2.1 Stakeholders

The following are stakeholders in the hub and related infrastructure and are responsible in some way for administration, management and operations.

- **AEMO** - The current owner of the Hub and related infrastructure, and is responsible for administration, support, maintenance and future planning
- **Gas Market Development** - Section of AEMO that is responsible for the management of participants in AEMO market

- **Participants** - All entities who connect a gateway to the hub in order to send messages to another entity. Includes Distributions Businesses/Network Operators, Retailers/Users, and Market Operators.

2.2 Participant ID

A Participant Id is used in both the aseXML document and ebXML message to identify the sender and recipient of the message/transaction. Participant Ids in the VIC, QLD, SA, NSW-ACT & WA Gas and NEM markets are alpha-numeric, and no more than 10 characters in length. Both markets have identified a number of Participant Ids, including some that are not yet in use.

In the FRC infrastructure each Participant Id resolves to a URL to which the Hub will direct all messages, in other words an ebXML gateway. Therefore, new entrants to the hub infrastructure will need to ensure that their Participant Id does not conflict with any that have already been assigned by other markets.

2.3 Topology

The FRC infrastructure operates as a Hub and Spoke topology. Each participant, whilst needing to know the Participant Id of all other participants in the applicable market, need only set up a connection to the FRC Hub in order to be able to participate in the market. The hub routes messages to the desired recipient based the applicable architectural documents for the market.

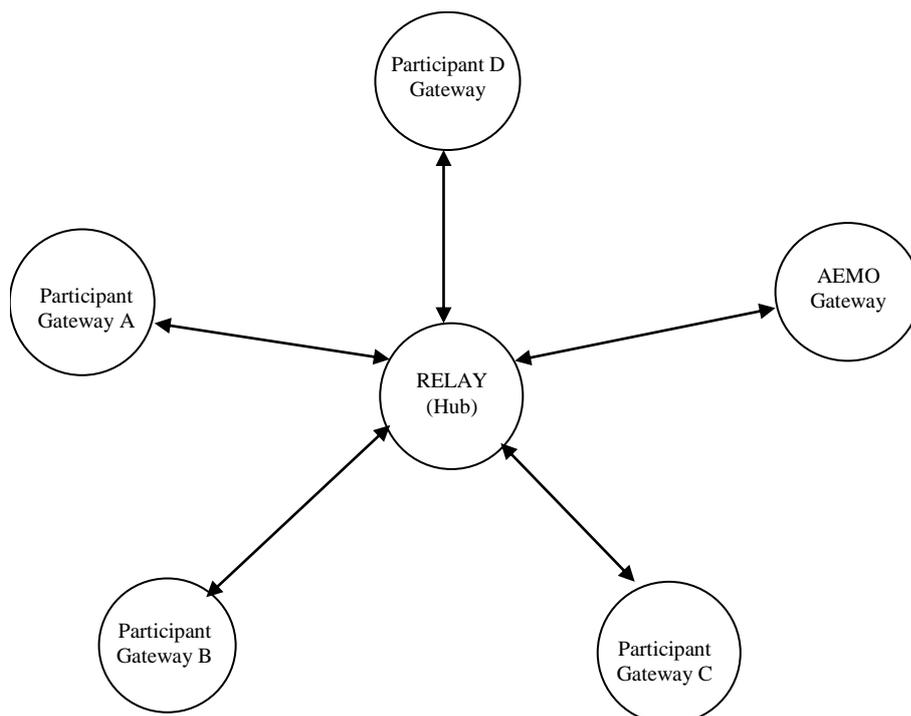


Figure 1 Production environment topology

Participant gateways are responsible for all end-to-end ebXML message functions such as reliable delivery, time-to-live, once-and-only-once delivery, etc. The hub is responsible for digital signature validation, re-signing using its own certificate, routing messages to the correct recipient and performing aseXML schema validation (if configured).

2.4 Environments

The infrastructure consists of a PreProduction/certification environment and a production environment. Participants initially connect to the PreProduction environment in order to test their systems and certify them for use within the production environment. Following successful certification a participant can then connect to the production hub and exchange ebXML messages containing aseXML payloads with other participants in accordance with the various business, architectural and technical documents applicable to the relevant market.

Each hub – PreProduction/Production – is configured individually. Therefore, a participant may use the same Participant Id, but with a different URL, on each hub, thus enabling different PreProduction/Production gateways to be used. In addition, a participant may negotiate more than one Participant Id for the PreProduction hub to enable more than one gateway to be connected.

The PreProduction/certification environment contains, along with the PreProduction Hub, two responders that act as mock gateways and are used for testing and certification. These responders have Participant Ids of **FBSTEST - (Sandpit Responder)** and **FBS - (Certify Responder)**. Therefore, in a participant's PreProduction environment these two Participant Ids need to be accepted as valid Ids.

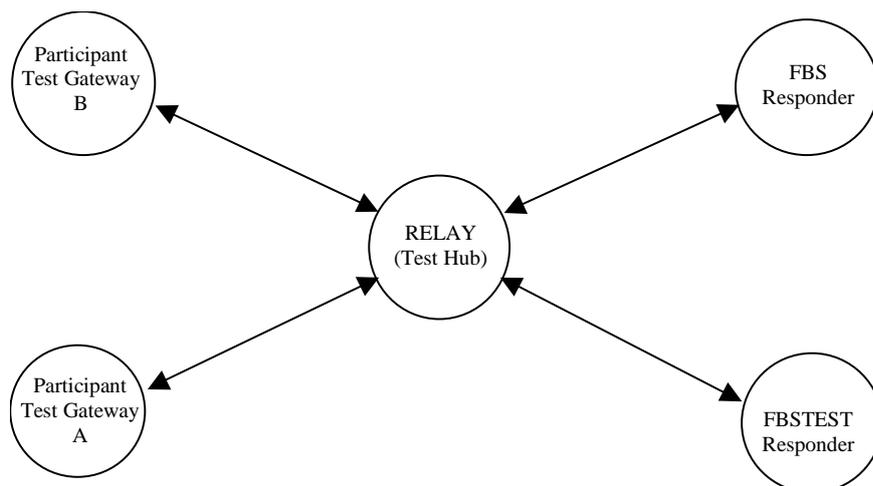


Figure 2 PreProduction environment topology showing responders

FBSTEST may be used by a participant at any time to test functionality of their gateway. FBS may only be used for official certification testing in accordance with section 3.6.

2.5 Security

All communications between the FRC Hub and a participant's gateway are carried out using HTTP/S over SSL. SSL encryption is controlled using public/private key pairs, with a different key pair required to connect to each hub (PreProduction/Production). In addition, ebXML messages are digitally signed using the same key pairs to guarantee data integrity and message non-repudiation.

Each participant must create/obtain a private key and a Certificate Signing Request (CSR). Two private keys/CSRs must be generated – one for testing and one for production. The CSRs are forwarded to FBS Administration, who will arrange for the production of Public Keys verified by the FBS Administration Certificate Authority (CA). The Public Keys will be returned to the participant along with the FBSAdmin CA Certificate, and the Public Keys for the PreProduction Hub and the Production Hub (as applicable). FBS Administration will also retain copies of the generated Public Keys for application to the applicable hubs.

Each hub, as well as the certification responders, provide a browser interface that enables a participant to view messages that have been generated by the responders and routed through the hub. The PreProduction environment allows connection to this interface using HTTP by supplying a username and password. The username will be the participant's Participant Id, and the password will be provided on registration. To connect with a browser to the Production Hub, or the PreProduction Hub or Responders over HTTP/S, a participant must convert their Private Key to a PKCS#12 format and install this on their client machine.

If a participant does not currently have access to software to create keys, a suitable application is available for download free from <http://www.openssl.org>.

2.6 Administration

The hubs are currently administered by AEMO. The name of the administration section is FBS Administration or FBSAdmin. To contact FBSAdmin call the AEMO support hub 1300 236 600 mentioning Gas B2B Hub, or e-mail support.hub@aemo.com.au

This is a technical administration only (i.e. hub connectivity, message throughput, etc.). For issues relating to market operations (i.e. customer transfers, B2B issues) contact the applicable participant or market operator directly.

2.7 Provided Gateway

The FRC Hub uses webMethods Integration Server as the application. The licence for this application also provides for the supply of webMethods software to participants to use as a gateway in the FRC Hub environment. The software can be installed and configured as an ebXML gateway out of the box, with services also provided to help integration with participants back end systems. There are restrictions on the usage of this gateway but it is free of charge.

Contact FBSAdmin if you wish to use webMethods as your gateway.

3. Entry Procedures

3.1 Network

Participants can connect to the hubs via the internet or through MarketNet.

If connecting using the MarketNet a participant will need to:

- arrange/ensure MarketNet connectivity arrangements with AEMO
- arrange firewall access to the PreProduction and Production systems with AEMO

If connecting over the internet then no more should need to be done other than private ISP arrangements, but it is wise to confirm routing and networking with AEMO.

It is recommended that both paths be arranged in case of failure of one of the access methods.

Unfortunately there is no shortcut method for determining successful connectivity at the network level. Only the HTTP/HTTPS ports are made available, so ICMP things like Ping and Trace Route cannot be used. Once ports are set up, FBSAdmin can work with a participant using HTTP/S to ensure connectivity.

3.2 Hub Connectivity

To connect a gateway to hub use the following URLs:

Service	Internet Entry URL	MarketNet Entry URL
Production HUB	https://hub.aemo.com.au:5319/ OR	https://hub.marketnet.net.au:5319/

Service	Internet Entry URL	MarketNet Entry URL
	https://prod.frchub.net:5319/	
PreProduction HUB	https://preprodhub.aemo.com.au:5319/ OR https://preprod.frchub.net:5319/	https://preprodhub.marketnet.net.au:5319/

**Note**

The URL's to the old HUB will still function for participants and are mapped to the new HUB.

In addition, to connect to the Hub Portal use the following URLs:

Service	Internet Entry URL	MarketNet Entry URL
Production Portal	https://hubportal.aemo.com.au:443/	https://hubportal.marketnet.net.au:443/
PreProduction Portal	https://preprodhubportal.aemo.com.au:443/	https://preprodhubportal.marketnet.net.au:443/

3.3 Participant Gateway Connectivity

Participants will define their own URL, either by IP address or DNS name, to use for their gateway. The only requirement for URLs is that they must use a port between 5318 and 5330, as these are the only ports enabled through the hubs firewall

All other ports are blocked by firewall rules and cannot be used.

3.4 Responders

The Responders are a part of the PreProduction Hub infrastructure and are available for participant use. The functionality available to users is:

- aseXML validation – submit an aseXML document and have it validated against the aseXML schema.
- aseXML message sending – submit an aseXML document and have it wrapped in ebXML and sent to the defined recipient's PreProduction gateway.
- Certification – a number of screens to guide a participant through the certification process.
- Certification Checker – review the current status of a certification run.
- System notifications (see section 4.3).
- View transaction details – search and view transactions that have been submitted to and from a recipients gateway.
- Resubmit transactions – resubmit a transaction from the Hub to a recipients gateway.
- Partner Profiles – view external id's and contact details of participants.

The above functionality is available through the FRC Hub Portal browser interface. See Appendix A for instructions in the use of this functionality.

The Responders also function as a participant gateway if ebXML messages are sent to them via the PreProduction Hub. In this instance the functionality available is as follows:

- ebXML messaging functions (acknowledgments, errors, etc.)
- aseXML transaction validation and acknowledgment

To use the above functionality send an ebXML message containing an aseXML transaction, with the Receiver set to 'FBSTEST' or 'FBS', through the PreProduction Hub. The Responder will receive the message and return an ebXML acknowledgment. The Responder will then validate the aseXML transaction and return an ebXML message containing an aseXML transaction acknowledgment.

3.5 Registration

In order to use the FRC Hub infrastructure a participant must first register with the Market Operator for the market in which they wish to operate. Contact the relevant Market Operator for details on how to register in that market.

The Market Operator will contact FBSAdmin and provide the following participant information:

- Company Name
- Participant Id
- Nominated Contact Name
- Nominated Contact Phone Number
- Nominated Contact E-mail Address.

The Nominated Contact can then use the registration form, available from the AEMO website, to register on the applicable hub. To obtain the form, go to <http://www.aemo.com.au>, and select 'Metering & Retail Development' from the menu. The form is available under the heading 'FRC Gas Hub'.

Instructions for completing the form are contained in the form. You will need to know the URL of your gateway and receiving service, as well as providing a contact name and number. If there are any questions contact FBSAdmin

Submit the form along with a CSR (see Section 2.5) to fbsadmin@aemo.com.au. You will receive certificates for access to the applicable hub, and a password if your request is to access the PreProduction Hub and Responders.

The general sequence for hub registration is:

- Register for use on the PreProduction Hub

- Activate on PreProduction Hub and Responders
- Test using Sandpit (FBSTEST), bilateral tests, etc.
- Certify as required using Certify (FBS)
- Register for use on Production Hub
- Activate on Production Hub

3.6 Certification

Currently, all Market Operators require that participants pass certification before they are allowed access to the Production Hub. Each Market Operator has a Certification Process document that describes the necessary steps to be taken by participants in order to certify. Contact the relevant Market Operator to obtain a copy.

The certification process involves sending documents to, and receiving documents from, the Certification Responder (FBS). To support the process a browser based User Interface is available on the Responder. See Appendix A for instructions in the use of this interface.

Once certification is carried out, the participant will review their certification status of all messages and transactions that are required to be certified via the Certification Checker. Once all transactions have passed, the Participant will contact Support Hub to request a review by FBSAdmin. FBSAdmin will then do a final review of the transactions and acknowledgements that have been sent by the participant. A report will be created and forwarded to the participant and the relevant Market Operator. The Market Operator will review the report in accordance with that market's requirements and, if satisfied with the results, will notify FBSAdmin and the participant of successful certification.

Following successful certification FBSAdmin will create a profile on the Production Hub which, when activated, will enable the participant to send production transactions within the applicable market.

3.7 Activation

In order to activate their profile on the Production Hub a participant must formally request this through the applicable Market Operator. Contact the relevant Market operator to determine their requirements for activation. At a minimum, for activation FBSAdmin need the following information:

- The date that you wish to become active in the Production environment
- The transactions that you intend to use

FBSAdmin will confirm that you are certified for the proposed transactions and activate your profile at the appropriate time.

4. Production

4.1 Support

The hub and infrastructure are supported 24x7. Level 1 support is currently supplied by the AEMO Support Hub. All technical issues relating to the hub infrastructure should be directed to this Support Hub in the first instance. They will determine who can handle the problem.

FBSAdmin have staff on-call 24x7 should the need to escalate arise.

Each Market Operator has a Helpdesk to accept business related issues. Issues relating to individual participants should be directed to the relevant participant's helpdesk.

See 0 for a troubleshooting guide with further information regarding contacts in the event of issues.

4.2 Industry Outage Window

The Hub and the related infrastructure may be unavailable for normal business during the scheduled Industry Outage Window of 4 hours on Sundays - starting at 10:00AM AEST. This time may be utilised to apply any low-impact patches and fixes.

The Participants are advised not to schedule any batch jobs to send messages during this Window as well as for three hours preceding the Window. The reason for avoiding the batch jobs for three hours before the window is to minimise the risk for manual sending of messages in the event that the ebXML Acks from the recipients have not been received due to any problems in processing the message at the recipient gateways.

Hence, although the Industry Outage Window is effective between 10:00AM and 2:00PM (AEST) on Sundays, the Participants are advised to avoid sending messages between 7:00AM and 2:00PM (AEST).

However, it may be noted that the unavailability of the Hub/s during the Industry Outage Window is rare.

4.3 System Notifications

Participants have an obligation to broadcast certain information regarding their IT systems to all other participants in the markets. This is information such as planned and unplanned outages of gateways, performance issues and other information that a participant believes may assist in the smooth operation of the FRC B2B System.

A User Interface has been created on the Preproduction FRC Hub portal for participants to use when sending these notifications. The interface takes a number of inputs from the user, and generates an e-mail that is sent out via a defined distribution list. The interface has been put in place to ensure a consistent format of message, so that recipients can automate processes based on the receipt of these notifications (i.e. send an SMS alert, etc.).

The interface sends a message to a mailbox that has a distribution list assigned. Each participant who needs to receive notifications is able to assign one e-mail address to this

distribution list. This address should not be a personal mailbox, but rather a company mailbox that, in turn, can distribute the notifications as the participant desires. In this way each participant can manage changes to internal notification distribution without constantly requiring changes to the main distribution list maintained by FBSAdmin. The mailbox is known as FRCRelay, and a participant provides the e-mail address as part of the registration process.

See section A.8 for instructions in the use of the notifications interface.

4.4 Transactions Log

Both the Production and PreProduction hubs have a browser interface available to participants through which they may view their ebXML messages. From this interface you will be able to determine basic information about your messages, particularly whether a message was delivered successfully to the recipient or not.

See section A.6 for instructions in the use of this interface.

4.5 Dispute Resolution

ebXML message data on the Production Hub is retained online and available to participants as per section 4.4 for a maximum of fifty days. Data older than 50 days is retained in an archive for a period of seven years.

Using this data, FBSAdmin can provide resolution in the event of a dispute between participants over such things as message delivery, non-repudiation of message content, etc. If a participant requires data from an archive that is not available through the portal, they are required to send a request to FBSAdmin. Either a date/time window or a specific ebXML MessageId is required to enable identification of the data.

4.6 Security

As stated in section 2.5 participant gateways connect to the Production Hub using HTTP/S and Public/Private key pairs. Participants are responsible at all times for the security of their private key. If the private key is compromised, the integrity of the authentication, encryption and non-repudiation functions of the FRC system cannot be guaranteed. If a participant believes their key may be compromised they must immediately:

- Notify FBSAdmin. Depending on the circumstances of the compromise, FBSAdmin may choose to disable the participants profile to stop receipt of messages.
- Generate a new Private Key and Certificate Signing Request (CSR)
- Send the CSR to FBSAdmin. FBSAdmin will arrange the creation of a new certificate and return this to the participant
- Immediately, if the profile has been disabled, or at an agreed time if not, FBSAdmin and the participant will change to the new certificate set.

- Notify all participants, either via FRCRelay (see section 4.3) or through the applicable working groups.

The private key of the hub is also at risk of compromise. If this occurs then all participants will be effected, as the hub's key set will need to be changed. FBSAdmin will carry out the following if compromise of the key is suspected.

- Notify all participants via FRCRelay (see section 4.3)
- Generate a new Private Key and Certificate
- Send the Certificate to all participants
- Notify all participants of a time that the new certificate is to be applied.
- At the agreed time, replace the certificates and work with participants to ensure connectivity is maintained.

4.7 Disaster Recovery and Business Continuity

In order to maintain Business Continuity, the FRC Hub environment consists of a Primary Site and a Disaster Recovery Site. Should an incident disable the Primary Site, or critical components within the Primary Site, control will be transferred to the DR Site.

The actions necessary for both the participant and the hub provider to implement this transfer will vary, depending on the impact of the incident.

See Appendix C for details of the DR facilities and analysis of participant requirements to support these facilities.

Participants should also have a DR solution for their gateway in place. Provision is made in the registration process for an alternative URL to be recorded, if this is required as part of the solution.

Appendix A FRC Hub Portal User Interface

The FRC Hub Portal user interface provides access to a number of functions. Below is a summary of the functions available across the Production and Preproduction environments:

Function	Production	Preproduction
View transaction details		
Send aseXML		
Validate aseXML		
Resubmit transactions		
Email notifications		
Perform certification		
Certification checker		
Partner profiles		

The Preproduction environment provides access to two responders – **FBS** and **FBSTEST**. The **FBS** responder is used for official certification and the **FBSTEST** responder is used as a sandpit environment and is a mirror of the certification environment. The sandpit is for participants to use when they wish to send messages through the FRC B2B System in a Preproduction environment. Participants can practise the certification processes in the sandpit before requesting formal certification via the certification responder.

Refer to Section 2.4 for further details on environments.

A.1 Log into FRC Hub Portal

- Using a web browser, navigate to the appropriate URL:

Service	Internet Entry URL	MarketNet Entry URL
Production Portal	https://hubportal.aemo.com.au:443/	https://hubportal.marketnet.net.au:443/
PreProduction Portal	https://preprodhubportal.aemo.com.au:443/	https://preprodhubportal.marketnet.net.au:443/

- The **FRC Hub Portal Login** interface displays. Enter your **Participant ID** and **Password** (provided by FBS Admin when your organisation was registered for the FRC B2B System) and click **Log In**.



FRC HUB Portal

[Log In](#)

[Forgot Password?](#)

3. The login credentials are validated, and if successful, the main interface displays.

The screenshot shows the main interface of the FRC HUB portal. At the top left is the AEMO logo. To the right, it says 'FRC HUB' with the lightbulb and flame icons. Below this are links for 'FBS TN | About | Help | Logout'. A 'Navigate' sidebar is on the left, containing a tree view with categories: AEMO, Partner (with sub-item Custom), Monitoring (with sub-item Integration), and Administration (with sub-item Integration). The 'Custom' and 'Integration' sub-items under 'Partner' and 'Administration' are highlighted in yellow. The main content area is currently blank. At the bottom left, it says 'All times EST (UTC+10:00)' and at the bottom right, 'Powered by Software AG'.

**Note**

The portal remembers the windows that were open in your previous session and will retain and redisplay these on subsequent logins.

A.2 Perform Certification

The purpose of certification is to verify that Gas Market participants can connect to the FRC Hub and then use it to send and receive messages and aseXML transactions. These messages and transactions must conform to the standards described in Participant Build Packs 2 and 3.

There are two types of certification transactions. These are:

- Technical transactions that establish a participant's ability to connect to the FRC Hub
- AseXML transactions that describe the business processes undertaken by a participant acting in a given market role

The following windows are a tool set to help you, as a participant, to successfully complete the FRC Certification Process. You nominate for which transactions you want certification, you schedule the execution time of the transactions you will receive, and you provide data for those transactions. For a first time certification, you nominate all the transactions that you need to send or receive across the FRC B2B System. You can then limit subsequent certifications to a subset of transactions.

Certification transactions are grouped by Market, aseXML Schema Version and Market Role. Once you select the appropriate Market, Schema Version and Market Role for your organization, a list of certifiable transactions for that role appears. From this list, you select transactions either individually or, for convenience, by Transaction Group. At any time, you can return to the main menu and so cancel any transactions you may have selected.

Once you have selected the transactions, then you can:

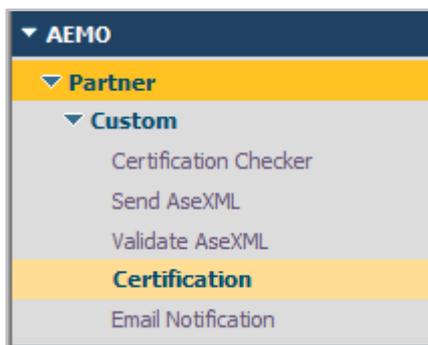
- Provide data to populate the transactions sent to you by the Certification Process.
- Choose to have transactions sent immediately or schedule them for sending at a later time

**Warning**

Do not use the Back button in your browser to return to a previous window when using the certification system. AEMO cannot guarantee the resulting transaction status.

To perform an FRC certification:

1. From the menu click **AEMO**, then **Partner**, then **Custom** and then **Certification**.



- The **Welcome to the FRC Certification process** window displays.

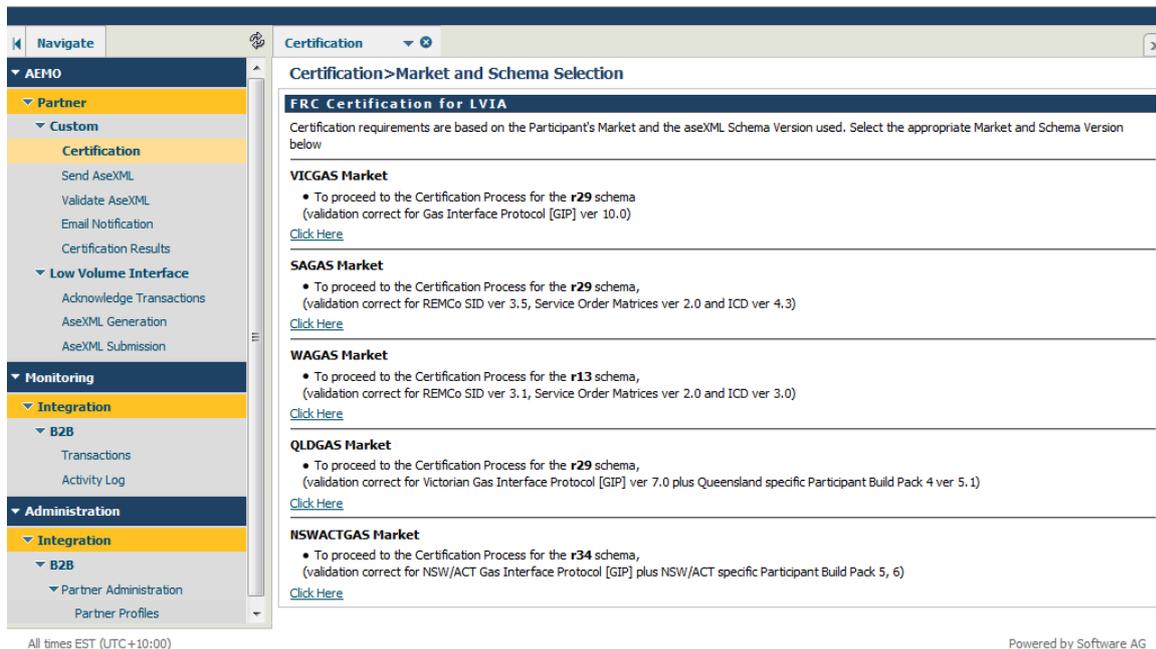
- Select the correct **Responder** from the drop-down box at the top of the window. The **FBS** responder should only be used for official certification. The **FBSTEST** responder can be used as a sandpit responder for testing transactions.
- Once you have read the welcome message, click the **click here** link at the bottom of the page.



Note

The certification scripts are available for download in xls format from this window. It is recommended that you download the scripts prior to proceeding to the certification.

- The **Market and Schema Selection** window appears. Click the **Click Here** link for the market you wish to be certified for.



Certification > Market and Schema Selection

FRC Certification for LVIA

Certification requirements are based on the Participant's Market and the aseXML Schema Version used. Select the appropriate Market and Schema Version below

VICGAS Market

- To proceed to the Certification Process for the **r29** schema, (validation correct for Gas Interface Protocol [GIP] ver 10.0)

[Click Here](#)

SAGAS Market

- To proceed to the Certification Process for the **r29** schema, (validation correct for REMCo SID ver 3.5, Service Order Matrices ver 2.0 and ICD ver 4.3)

[Click Here](#)

WAGAS Market

- To proceed to the Certification Process for the **r13** schema, (validation correct for REMCo SID ver 3.1, Service Order Matrices ver 2.0 and ICD ver 3.0)

[Click Here](#)

QLDGAS Market

- To proceed to the Certification Process for the **r29** schema, (validation correct for Victorian Gas Interface Protocol [GIP] ver 7.0 plus Queensland specific Participant Build Pack 4 ver 5.1)

[Click Here](#)

NSWACTGAS Market

- To proceed to the Certification Process for the **r34** schema, (validation correct for NSW/ACT Gas Interface Protocol [GIP] plus NSW/ACT specific Participant Build Pack 5, 6)

[Click Here](#)

All times EST (UTC+10:00) Powered by Software AG

6. The **Role Selection** window appears. Click the role link that your organisation fulfils in the gas market. The following roles are available for selection:
- Retailer/User
 - Distributor/Network Operator
 - Market Operator

7. The **Certification > <Role>** window displays. On the Certification Role window you select the type of transaction you want to certify. You can certify that you are able to receive specific transactions from the responder, or you can choose to send transactions to the responder, and the system will validate these and confirm the result.



Note

Certification is a process between your gateway and the responder. No other participants are involved. Once you have certified your system for a particular transaction, in both directions, you can send messages to and receive messages from other participants through the hub.

Transactions appear under those sent to your organisation by the responder, and those sent from your organisation to the responder. The transactions available are the ones pertaining to the market, schema version and role you selected. There are many possible transactions.

For your convenience, these transactions are grouped under **Transaction Group** headings. You can quickly select one or more of these headings to get all the transactions in that group. Alternatively, you can select individual transactions using the checkboxes. You can also select a transaction group and then clear the checkboxes for unwanted transactions in that group

If you select **ALL**, the responder will validate that your front-end system can both send and receive all allowable transactions for your role.

Select the transactions you want certification for, scroll to the end of the window, and then click **Continue**.

To clear all selected transactions in the Certification Role window, scroll to the end of the window and click **Clear**.

The screenshot displays the 'Certification>Retailer Transaction Form' in the FRC HUB. The interface includes a left-hand navigation menu with sections for Partner, Monitoring, and Administration. The main content area is titled 'FRC Certification for FBS' and contains a list of transaction groups. Each group has a 'Sent To Retailer' and 'Sent FROM Retailer' section with checkboxes for various transaction types. At the bottom right, there are 'Clear' and 'Continue' buttons.

8. The **Confirmation** window displays and the **Participant ID** field is automatically populated.

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

FRC HUB

FBS TN | About | Help | Logout

Navigation: AEMO, Partner, Custom, Monitoring, Integration, B2B, Administration, Integration, B2B, Partner Administration

Certification Confirmation

FRC Certification for FBS

This screen allows you to confirm your selection of transactions for certification, and to optionally schedule the execution and provide data for those transactions which are initiated by the Certification Process and responded to by you.

The data you enter on this screen is not used in any transactions initiated by you and responded to by the Certification Process. You may populate those transactions with any valid data of your choosing. If you do not provide a Schedule Date and Time, the transactions initiated by the Certification Process will be sent to you immediately.

Select **Continue** to proceed.
Select **Reset** to undo any selection.

The transactions will be executed immediately UNLESS Schedule DATE/TIME is entered.
Note: if incorrect date selected simply click inside the Schedule Date box.

Schedule Date:

Schedule Time:

Mandatory

Participant ID: FBS

Optional

Choose any combination of the following.

Your Email (to receive a summary report):

Mim:

Initiating Transaction Id:

Change Request Id:

Service Order Number:

Service Provider Reference:

***Address**

Street No:

Street Name:

street type:

Suburb:

PostCode:

* all fields must be completed.

Your Certification Transaction List

Sent TO Retailer	Sent FROM Retailer
Ping	Ping
Signed Message	Signed Message
Expired Message	Medium Priority Message
aseXML with multiple txn's	Reliable Messaging Test
Duplicate aseXML txn	CATSCheckRequest
CATSCheckResponse	CATSCheckRequest
CATSCheckResponse	CATSCheckWithdrawal
CATSCheckResponse	CATSCheckWithdrawal
CATSCheckResponse	CATSCheckAlert

Clear Confirm

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9. Complete the remaining form fields in the **Confirmation** window :

- Schedule Date:** Specify the date you wish to send the certification transactions. If you do not request a Schedule Date and Time, the responder sends transactions initiated by the Certification Process, immediately. You should not schedule a date and time before the present. If you do, the responder will return an error to the screen on submission.
- Schedule Time:** Specify the time (HH:MM:SS) you wish to send the certification transactions. If you do not request a Schedule Date and Time, the responder sends transactions initiated by the Certification Process immediately. If you enter a Date you must also enter a Time. You should not schedule a date and time before the present. If you do, the responder will return an error to the screen on submission.
- Participant ID:** This is pre-populated by default with the ID used to log onto the system. The system uses this ID to determine whom to send the return transactions. The ID can be changed by directly typing into the box, if necessary.

- **Your Email:** Specify a valid email address that you would like the confirmation email to be sent. The system sends a summary of the certification process you have requested to the mailbox you nominate.

**Note**

The data fields below are used to populate the relevant data elements in responder-initiated transactions that are sent back to you. These fields are optional, however if you provide address details, all the address fields must be completed.

Only provide one set of input data per certification process.

- **MIRN**
- **Initiating Transaction Id**
- **Change Request Id**
- **Service Order Number**
- **Service Provider Reference**
- **Street No**
- **Street Name**
- **Street type**
- **Suburb**
- **Postcode**

10. Scroll to the end of the window and review the certification transaction list. If the transaction list is correct click **Confirm**.
11. The **Summary** window displays. Check your details and if correct, click **Submit**.

The screenshot shows the AEMO FRC HUB interface. The top left features the AEMO logo and the text 'AUSTRALIAN ENERGY MARKET OPERATOR'. The top right has 'FRC HUB' and icons for a microphone and a flame. Below this are links for 'FBS TN | About | Help | Logout'. The main navigation menu on the left is expanded to show 'Partner' > 'Custom' > 'Certification'. The main content area is titled 'Certification Summary' and contains the following information:

- FRC Certification for FBS**
- The following summarises the information selected for certification. Select **Submit** to proceed.
- Participant Id:** FBS
- Schema Version:** r29
- Market:** VICGAS
- *No Scheduled Date entered
- Any Additional Information provided:
 - Email:**
 - Mim:**
 - Initiating Transaction Id:**
 - Change Request Id:**
 - Service Order Number:**
 - Service Provider Reference:**
 - Address:**
- Sent TO Retailer:** Ping
- Sent FROM Retailer:**
- Submit** button

At the bottom, it says 'All times EST (UTC+10:00)' and 'Powered by Software AC'.

12. The system displays a message to show that the service is completed. This may take some time if you are running the service immediately. If you scheduled the service to run in the future the final response should be almost immediate.

This screenshot shows the same AEMO FRC HUB interface, but the main content area now displays a completion message:

- Status:** Certification Complete
- Error:**

The rest of the page, including the navigation menu and footer, remains the same as in the previous screenshot.

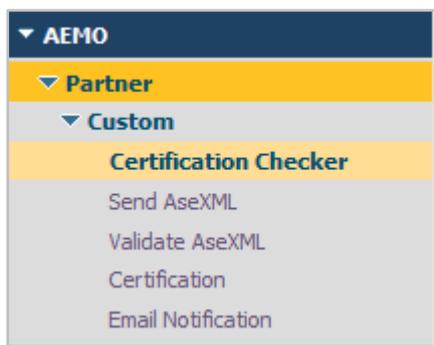
A.3 Certification Checker

The Certification Checker is a search screen that allows you to view details of certifications that you have participated in, either as a sender or receiver.

The Certification Checker will give the status (pass/fail) of both Window 1 and Window 2 certification.

To view details of completed certifications:

1. From the menu click **AEMO**, then **Partner**, then **Custom** and then **Certification Checker**.



2. The **Certification Checker** window displays.

The screenshot shows the AEMO web application interface. The top navigation bar includes the AEMO logo, 'FRC HUB', and 'Logout'. The main content area is titled 'Certification Checker' and contains a search form. The form has the following fields: 'Responder' (set to 'FBS'), 'Sender Name' (set to 'FBS'), 'Receiver Name' (set to 'FBSTEST'), 'Market' (set to 'MOGAS'), 'Role' (set to 'Retailer/User'), 'Date From' (set to '00 : 00'), and 'Date To' (set to '00 : 00'). Below the form is a table titled 'Certification Results' with columns: Transaction Name, Transaction ID, User Status, Transaction Status, Market, Ack Transaction Status, Ack User Status, Ack Receipt ID, Pass, Reason, and DocTimeStamp. The table currently shows one row with 'Empty' in the Ack Transaction Status column. There are 'Check Results' and 'Export to CSV' buttons at the bottom of the table.

3. Complete the search form fields:

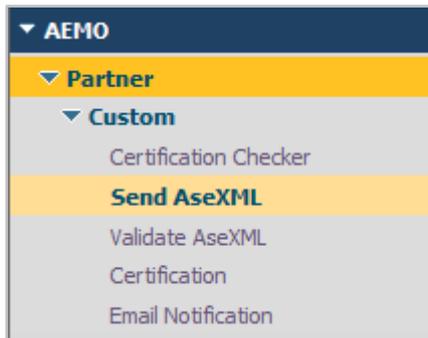
- **Responder:** The responder used to perform the certification.
- **Receiver Name:** The participant receiving the certification transaction.
- **Sender Name:** The participant initiating the certification transaction.
- **Market:** The market used to perform the certification.
- **Role:** The role of the participant in the market (used to determine which transactions are required to be submitted/received)
- **Date From:** The date where transactions/messages should be searched from
- **Date To:** The date where transactions/messages should be searched to

A.4 Send aseXML

To send an XML message, you use the Submit aseXML Document window. The Send aseXML utility wraps your aseXML in ebXML and sends it via the PreProduction FRC Hub.

To send an aseXML transaction:

1. From the menu click **AEMO**, then **Partner**, then **Custom** and then **Send AseXML**.



2. The **Send AseXML** window displays.

 A screenshot of the 'Send aseXML Document' window in the AEMO FRC HUB. The window has a header with the AEMO logo and 'FRC HUB' text. Below the header is a navigation sidebar with the 'Send AseXML' option highlighted. The main content area contains a 'Responder' dropdown menu set to 'FBS', a large text input field with the prompt 'Please Enter your aseXML below:', and 'Clear' and 'Submit' buttons at the bottom right. The footer of the window indicates 'All times EST (UTC+10:00)' and 'Powered by Software AG'.

3. Paste your XML into the window and click **Submit**.



Note

The 'From' in your aseXML must match the Participant ID of the responder you are using. This is 'FBSTEST' for the Sandpit and 'FBS' for Certification.

- A Status message displays the document id of the submitted transaction. This document id can be used for searching in the **Transactions** window.

The screenshot shows the AEMO FRC HUB interface. The top left features the AEMO logo (Australian Energy Market Operator). The top right displays 'FRC HUB' with icons for a lightbulb and a flame, and links for 'FBS TN | About | Help | Logout'. A navigation bar includes a 'Navigate' button and a 'Send AseXML' dropdown menu. The left sidebar is expanded to show the 'Partner' > 'Custom' menu, with 'Send AseXML' highlighted. The main content area displays a status message: 'Status: FBS_1b8cea4b-9e37-427b-a392-415d8d02adbc' and an 'Error:' field. The footer indicates 'All times EST (UTC+10:00)' and 'Powered by Software AC'.

A.5 Validate aseXML

The FRC Responder provides you with a useful tool for validating your aseXML without sending it. Validation checks the structure of your aseXML data against the aseXML standards currently in use by the AEMO operated retail gas markets. It does not check the validity of the actual data presented.

To validate an aseXML transaction:

- From the menu click **AEMO**, then **Partner**, then **Custom** and then **Validate aseXML**.

This screenshot shows a portion of the AEMO navigation menu. The 'AEMO' menu is expanded to show 'Partner', which is further expanded to show 'Custom'. The 'Validate AseXML' option is highlighted in yellow, indicating it is the selected item.

2. The **Validate AseXML** window displays.

3. Paste your XML into the window and click **Submit**.



Tip

You can use the **Validate aseXML** window as a simple editor. If validation fails, click the **Validate AseXML** window title to start again.

4. The system validates the document and the results display in the **Validate AseXML** window. The validation results appear in four parts as follows:

Section	Comments
Validation Result	<p>The Validation Successful value indicates whether the document has passed validation:</p> <ul style="list-style-type: none"> • True: indicates the validation was successful • False: indicates the validation failed due to one or more errors in the document
Errors	<p>Shows the details of any errors that may have occurred. Two types of error may occur:</p> <ul style="list-style-type: none"> • missing or invalid elements • badly formed aseXML

Section	Comments
Name Space	Shows the schema namespaces detected in the input document.
Ase XML Record	This section lays out the structure of the XML document in nested form. Each nested section is labelled with a heading and the sections indicate the layers in the document.

An example of a successful validation:

The screenshot displays the 'Validate AseXML' interface in the AEMO system. The top navigation bar includes the AEMO logo, 'FRC HUB', and utility icons. A sidebar on the left contains a 'Navigate' menu with categories like AEMO, Partner, Custom, Monitoring, Integration, B2B, and Administration. The main content area shows the validation results for 'Validate AseXML', indicating 'Validation Successful: TRUE'. Below this, an 'Errors' section is empty. The 'Name Space' section lists 'Ase: urn:caseXML:r29' and 'Xsi: http://www.w3.org/2001/XMLSchema-instance'. The 'Ase XML Record' section shows 'Version: 1.0' and 'Encoding: UTF-8'. The 'Ase XML' section provides the schema location and a detailed 'Header' with 'From' and 'TO' information, including description, body, message ID, date, transaction group, priority, and security context. The 'Transactions' section shows a single transaction with its ID, date, and detailed XML structure. The 'Acknowledgements' section is currently empty.

An example of a failed validation due to a missing standard aseXML element such as 'Transaction Group':



Note

If an element of the standard aseXML is missing, For example, if the **Transaction Group** line is missing, the error message indicates that the validation did not expect to get a data item where it did. The path name tells you in which section of the aseXML the error occurred. In this case, it is in the **Header** section. The statement in the error message 'Priority at position 4' tells you that it has found the element **Priority** at the fifth line (counting starts from zero) where it expected some other element. The element normally above **Priority** must therefore be missing.

The screenshot shows the AEMO FRC HUB interface. The left sidebar contains navigation options under 'AEMO', 'Partner', 'Monitoring', 'Integration', and 'Administration'. The main content area is titled 'Validate AseXML' and shows 'Validation Successful: FALSE'. An 'Errors' section displays the message: 'aseXML schema validation failure on payload. Path:/aseXML/Header/ Error message:[ISC.0082.9009] Child element Priority {} at position 4 is unexpected'. Below this, the 'Name Space' section lists 'Ase: urn:aseXML:r29' and 'Xsi: http://www.w3.org/2001/XMLSchema-instance'.

An example of a failed validation due to missing attribute value:

The screenshot shows the AEMO FRC HUB interface. The left sidebar contains navigation options under 'AEMO', 'Partner', 'Monitoring', 'Integration', and 'Administration'. The main content area is titled 'Validate AseXML' and shows 'Validation Successful: FALSE'. An 'Errors' section displays the message: 'aseXML schema validation failure on payload. Path:/aseXML/Header/Market Error message:[ISC.0082.9460] No matching enumeration value'. Below this, the 'Name Space' section lists 'Ase: urn:aseXML:r29' and 'Xsi: http://www.w3.org/2001/XMLSchema-instance'.

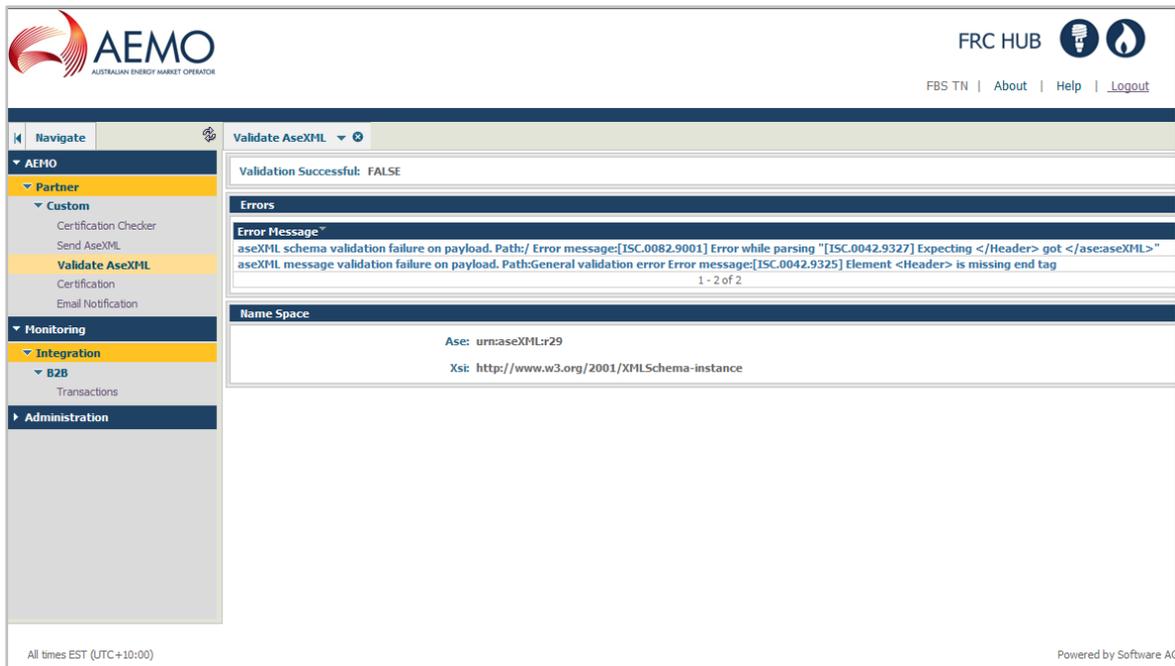
An example of a failed validation due to a data element that is longer than the prescribed length:

The screenshot shows the AEMO FRC HUB interface. The left sidebar contains a navigation menu with categories: AEMO, Partner, Custom, Monitoring, Integration, B2B, and Administration. The 'Validate AseXML' option is selected under the 'Partner' section. The main content area displays the validation results for 'Validate AseXML'. The status is 'Validation Successful: FALSE'. An error message is shown: 'aseXML schema validation failure on payload. Path:/aseXML/Transactions/Transaction/SpecialReadRequest/ServiceOrder/ServiceOrderNumber Error message: [ISC.0082.9465] Value is longer than maximum length'. The error is listed as '1 of 1'. Below the error message, the 'Name Space' section shows 'Ase: urn:aseXML:r29' and 'Xsi: http://www.w3.org/2001/XMLSchema-instance'. The footer indicates 'All times EST (UTC+10:00)' and 'Powered by Software AG'.

An example of a failed validation due to an invalid data type:

The screenshot shows the AEMO FRC HUB interface. The left sidebar contains a navigation menu with categories: AEMO, Partner, Custom, Monitoring, Integration, B2B, and Administration. The 'Validate AseXML' option is selected under the 'Partner' section. The main content area displays the validation results for 'Validate AseXML'. The status is 'Validation Successful: FALSE'. An error message is shown: 'aseXML schema validation failure on payload. Path:/aseXML/Transactions/Transaction/SpecialReadRequest/AppointmentDetail/Preferred/Date Error message: [ISC.0082.9447] Value does not conform to datatype'. The error is listed as '1 of 1'. Below the error message, the 'Name Space' section shows 'Ase: urn:aseXML:r29' and 'Xsi: http://www.w3.org/2001/XMLSchema-instance'. The footer indicates 'All times EST (UTC+10:00)' and 'Powered by Software AG'.

An example of a failed validation due to badly formed aseXML:



Note

Where an element is optional, validating XML with this element missing produces a True result.

A.6 View transaction details

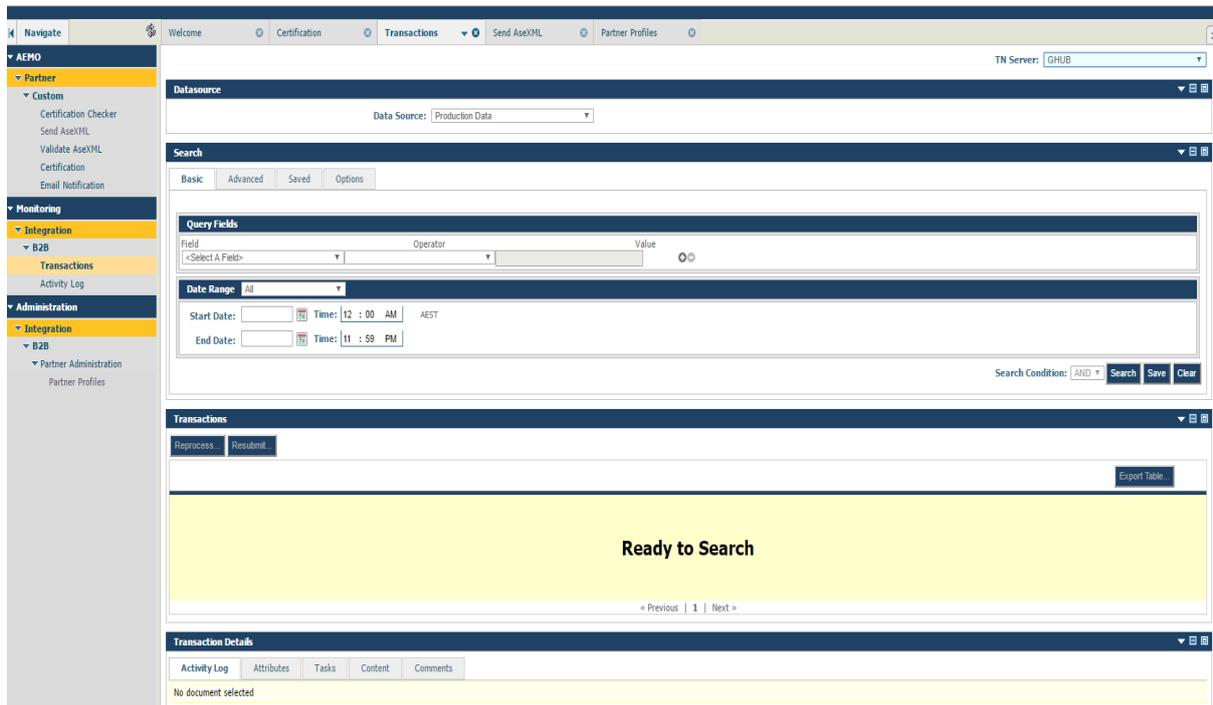
The **View transaction details** window allows participants to search and view transactions that have been submitted to, sent and received by a recipients gateway, and is available on both the Production and PreProduction FRC hubs.

To search for a transaction:

1. From the menu click **Monitoring**, then **Integration**, then **B2B** and then **Transactions**.



2. The **Transactions** window displays.



3. Select the correct **TN Server** from the drop-down box at the top of the window. This field is used to filter the transactions based on a server. If **FBS** is selected, all transactions in which the FBS responder is the sender or receiver displays. Likewise for **HUB** and **FBSTEST**.

4. In the **Search** section, enter desired search criteria and click **Search**.

**Note**

To save your search criteria for future searches, click **Save**. You will be prompted to provide a name and description. The search will be saved in the **Saved** tab of the **Search** section.

5. The search results display in the **Transactions** section. The following information displays:
 - **Date Received:**
 - **Document Type:**
 - **Sender:**
 - **Receiver:**

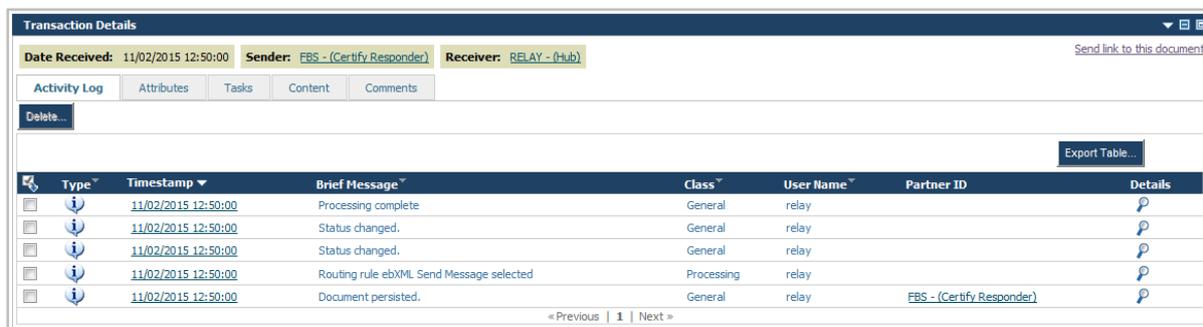
- **Processing Status:**
- **User Status:** The Status of all messages received by the gateway should be 'SendMessage:sent'. This indicates that the hub believes that the message was delivered successfully to the gateway. If the hub encountered an error attempting to send to the gateway the Status will be 'SendMessage:err'. If you need to obtain further details regarding the specific error contact FBSAdmin via the Support Hub. The Status of all messages sent to the hub by the gateway should be 'MessageRouting'. If the hub encountered an error while processing the message (i.e. recipient not recognised, digital signature invalid, etc.) the Status will be 'RouteMessage:err'. However, errors encountered while delivering the message to the intended recipient do not get reported on this screen. If you need to determine this information you need to view the Activity Log entries by following the directions below.
- **Document ID:** The ebXML message ID.
- **Conversation ID:** The ebXML conversation ID plus a number generated internally by WebMethods. A Conversation ID is only recorded against messages that have been sent 'From' the participant. It is not recorded against the messages sent 'To' the participant.
- **Related Documents:**
- **Details:**
- **Action:**

Date Received	Document Type	Sender	Receiver	Processing Status	User Status	Document ID	Conversation ID	Related Documents	DetailsAction
10/02/2015 15:49:32	ebXML Routing	VENCorp	RELAY (RELAY)	DONE	SendMessage:err	VENCORP 25f58b8e-0864-4a59-85f6-43404ef4751c	VENCORP INVESTRA VENCORP 25f58b8e-0864-4a59-85f6-43404ef4751c		
10/02/2015 15:48:33	ebXML Routing	VENCorp	RELAY (RELAY)	DONE	SendMessage:err	VENCORP 2f5d9ab3-f42d-4ba9-a3ae-3e11c4e5911d	VENCORP INVESTRA VENCORP 2f5d9ab3-f42d-4ba9-a3ae-3e11c4e5911d		
10/02/2015 15:47:34	ebXML Routing	VENCorp	RELAY (RELAY)	DONE	SendMessage:err	VENCORP eb196ff7-0a8f-40b6-b0a7-3278128ca0ba	VENCORP INVESTRA VENCORP eb196ff7-0a8f-40b6-b0a7-3278128ca0ba		
10/02/2015 15:46:33	ebXML Payload	RELAY (RELAY)	INVESTRA (VIC)	DONE	SendMessage:err	VENCORP c0211618-5d42-4c74-833c-b8cdd8cde31	VENCORP INVESTRA VENCORP c0211618-5d42-4c74-833c-b8cdd8cde31		
10/02/2015 15:46:33	aseXML Transaction	VENCorp	INVESTRA (VIC)	DONE	aseXML Transaction	VENCORP-MSG-d26817357fe49f8a164c621	VENCORP INVESTRA		
10/02/2015 15:46:33	ebXML Routing	VENCorp	RELAY (RELAY)	DONE	MessageRouting:proc	VENCORP c0211618-5d42-4c74-833c-b8cdd8cde31	VENCORP INVESTRA VENCORP c0211618-5d42-4c74-833c-b8cdd8cde31		
10/02/2015 15:46:33	ebXML Routing	VENCorp	RELAY (RELAY)	DONE	SendMessage:sent	VENCORP c0211618-5d42-4c74-833c-b8cdd8cde31	VENCORP INVESTRA VENCORP c0211618-5d42-4c74-833c-b8cdd8cde31		



Participants are only permitted to view documents as they transit between the participant gateway and the hub. Therefore the 'Sender' is always either the participant or the hub, as is the 'Receiver'. Because of this, if a 'Sender' is input the results will only display Sent messages, regardless of the Sender that is input. If a 'Receiver' is input the results will only display Received messages.

- To view details of a transaction, click either the magnifying glass icon  in the **Details** field, or the date link in the **Date Received** field.
- The transaction details display in the **Transaction Details** section. The **Activity Log** tab is displayed by default. You may also view the transaction **Attributes**, **Tasks**, **Content** and **Comments** by clicking the relevant tabs.



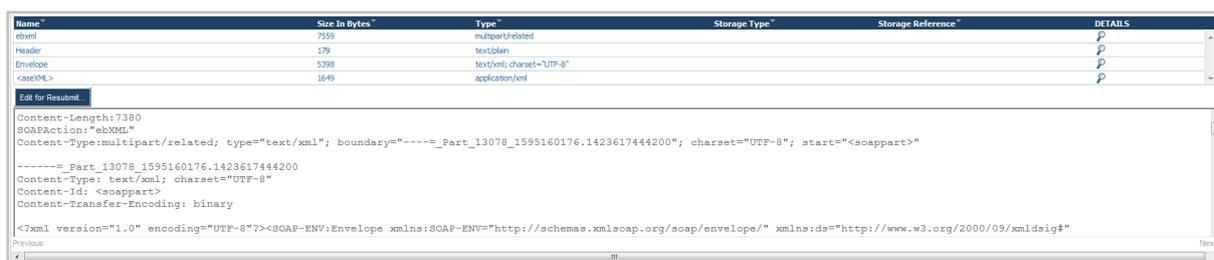
The **Type** column indicates the type of log entry when you hover over the  icon. If this is 'Message' the message was delivered successfully. If it is 'Error' the hub encountered an error while attempting to deliver the message.

Not all messages have an Activity Log entry. Messages received by the gateway that were successful do not have an entry. Messages sent from the gateway that were delivered successfully have an Activity Log entry of type 'Message'. Messages both to and from the gateway that encountered an error will have an Activity Log entry of type 'Error'.

- To view the transaction content, click on **Content** tab. The transaction content items display.



- Click on the magnifying glass icon  in the **DETAILS** column for the item you wish to view. The content displays in a text editor window below.



A.7 Resubmit transaction

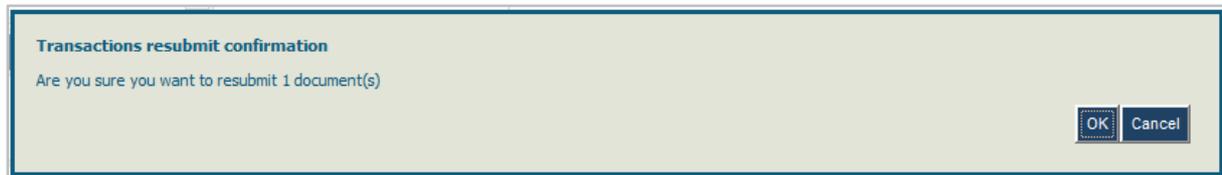
The FRC Hub portal provides a useful function that allows transactions to be resubmitted from the Hub to the participant. Participants can use this function to resubmit transactions that they originally failed to receive from the Hub due to outages or issues with their own gateway.

To resubmit a transaction:

1. Search for the transactions you wish to resubmit by following steps 1 to 6 from Section **A.6 View transaction details**.
2. From the transactions search results, select the checkbox for the transactions to be resubmitted.

Date Received	Document Type	Sender	Receiver	Processing Status	User Status	Document ID	Conversation ID	aseXMLMessageId	Related Documents	DetailsAction
<input checked="" type="checkbox"/>	aseXML_BidOrder	BELAY (BELAY)	VENCorp	DONE	Payload:proc	ORIGIN:2F43738383adF399016afe	ORIGIN:VENCORP-ORIGIN:2F43738383adF399016afe			
<input type="checkbox"/>	aseXML_Payload	BELAY (BELAY)	VENCorp	DONE	SendMessage:sent	ORIGIN:2F43738383adF399016afe	ORIGIN:VENCORP-ORIGIN:2F43738383adF399016afe			
<input type="checkbox"/>	aseXML_Transaction	ORIGIN	VENCorp	DONE	aseXML_Transaction	ORG-4d8d6fe1-0652-4302-9d8e-15212006		ORG-4d8d6fe1-0652-4302-9d8e-15212006		

3. Click **Resubmit**. Note: This button is disabled by default, and is enabled once a checkbox is selected.
4. The **Transactions resubmit confirmation** box displays. Click **Ok** to proceed with the resubmission.



5. The transactions are resubmitted by the Hub to the participant and a status message displays at the top of the **Transactions** section.

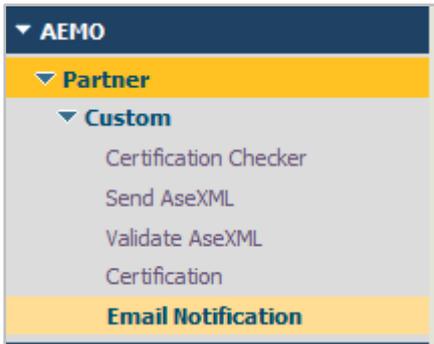
Date Received	Document Type	Sender	Receiver	Processing Status	User Status	Document ID	Conversation ID	aseXMLMessageId	Related Documents	DetailsAction
<input type="checkbox"/>	aseXML_BidOrder	BELAY (BELAY)	VENCorp	DONE	Payload:proc	ORIGIN:2F43738383adF399016afe	ORIGIN:VENCORP-ORIGIN:2F43738383adF399016afe			
<input type="checkbox"/>	aseXML_Payload	BELAY (BELAY)	VENCorp	DONE	SendMessage:sent	ORIGIN:2F43738383adF399016afe	ORIGIN:VENCORP-ORIGIN:2F43738383adF399016afe			
<input type="checkbox"/>	aseXML_Transaction	ORIGIN	VENCorp	DONE	aseXML_Transaction	ORG-4d8d6fe1-0652-4302-9d8e-15212006		ORG-4d8d6fe1-0652-4302-9d8e-15212006		

A.8 Email Notifications

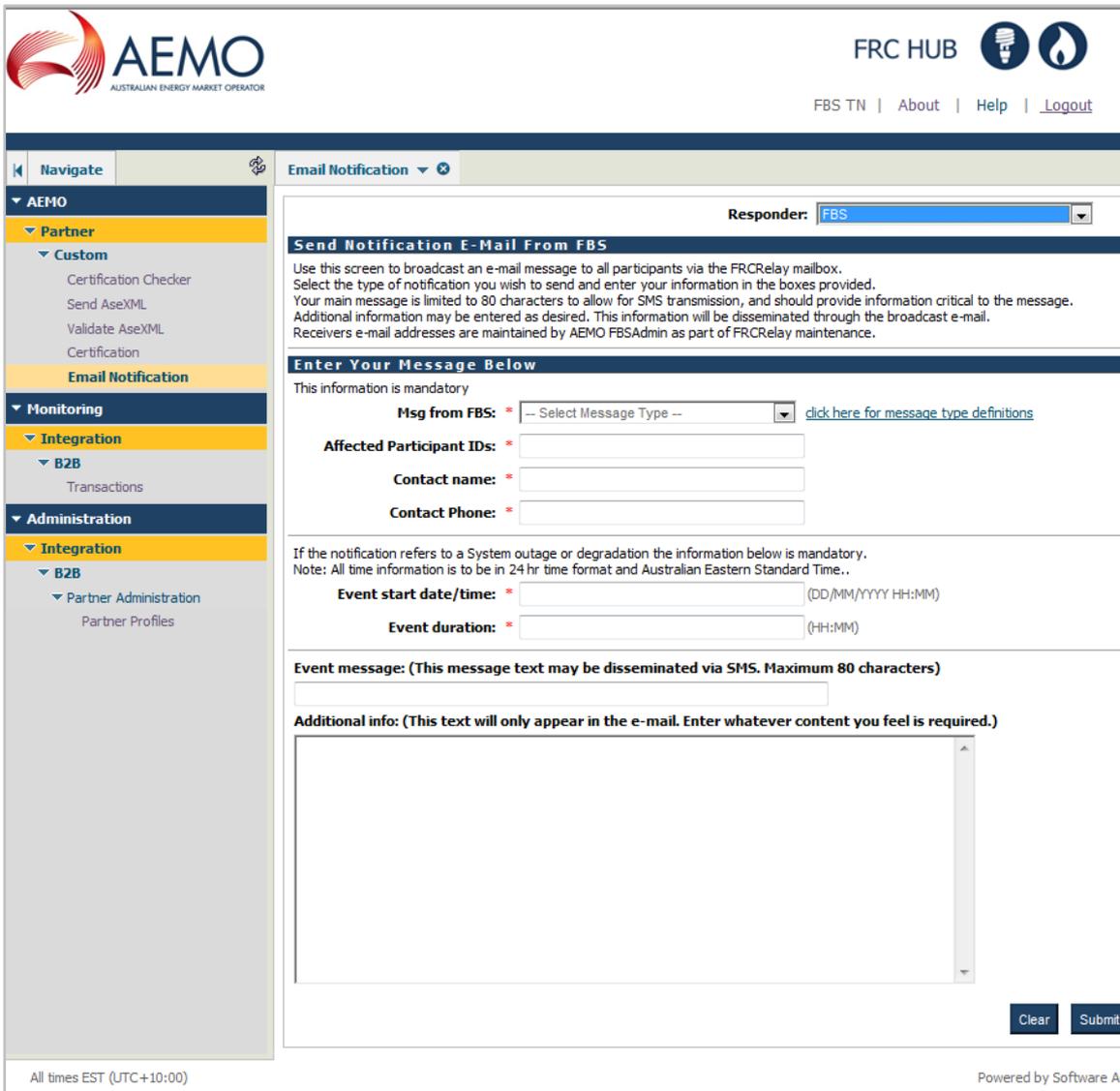
The FRC Hub portal has an interface for creating and sending specific e-mail notifications to all participants. These notifications are generally to provide information about outages or changes to a participant’s gateway, which will impact other participants.

To send an email notification:

1. From the menu click **AEMO**, then **Partner**, then **Custom** and then **Email Notification**.



2. The **Email Notification** window displays.



3. Select the correct **Responder** from the drop-down box at the top of the window. The **FBS** responder should only be selected for sending notifications related to the official certification environment. The **FBSTEST** responder is used for sending notifications related to the sandpit responder.

4. Complete the remaining form fields:

- **Msg from FBS:** Select the message type from the dropdown list. This is a mandatory field. Note: selecting the [click here for message type definitions](#) link will produce the following popup window to provide guidance on which message type to select:

Message Type List:	
Message Type	Definition
System Degraded	Gateway/Hub is currently suffering degraded performance
System Down	Gateway/Hub is currently offline
System Normal	Gateway/Hub performance has returned to normal after an outage or degradation in performance. This message should be sent following any outage or degradation, including planned outages, regardless of previous messages that have been sent.
Planned Outage	Gateway/Hub will be taken offline sometime in the future (generally 24 hrs notice is considered a planned outage)
Unplanned Outage	Gateway/Hub will be taken offline immediately or in the near future (generally < 24 hrs notice is considered an unplanned outage)
Notice to Market	Any other notification to the market

Ok

- **Affected Participant IDs:** All Participant IDs affected; this defaults to a single Participant ID. This is a mandatory field.
- **Contact name:** Name of the person who can provide further information if required. This is a mandatory field.
- **Contact phone:** Phone number of the contact. This is a mandatory field.
- **Event start date/time:** The date and time that the reported incident began, or will begin. This is a mandatory field for notifications that refer to a system outage or degradation. Note: all time information is to be in 24 hr time format (DD/MM/YYYY HH:MM) and Australian Eastern Standard Time.
- **Event duration:** The length, or anticipated length, of the incident in the format HH:MM. This is a mandatory field for notifications that refer to a system outage or degradation.
- **Event message:** The message to be sent. This is limited to 80 characters and should provide the critical information regarding the incident. It will be incorporated into the Subject of the e-mail. Note: this message may be disseminated via SMS.
- **Additional info:** Any additional information regarding the incident that the participant wishes to send. Note: this text will only appear in email notifications.



Warning

If a mandatory field is not populated a message will be displayed and the user prompted to correct it.

- Click **Submit**. A summary window displays and the message is sent.

A.8.1 Secondary Notification Method

The System Notifications interface may not be available at all times. If a participant is unable to connect to FBSTEST, or FBS, to use the interface, the fall-back procedure is to send an e-mail direct to the mailbox that has been set up to forward these messages to other participants.

To send an email notification via the secondary method:

- Create an e-mail in the format shown below:

```
Subject: G#FBSAdmin#Notice to Market#Start 20/02/2007 09:00 +10:00#Dur 00:00 hrs#Red Energy added
to the Prod Hub

CompanyName: FBSAdmin

AffectedParticipantIDs: FBSAdmin

EventType: Notice to Market

EventStartTime: 20/02/2007 09:00 +10:00

EventDuration: 00:00 hours

EventMessage: Red Energy added to the Prod Hub

EventAdditionalInformation: A profile has been created for Red Energy (Vic Gas Market), and
activated on the Production Hub.

ContactName: David Winship

ContactPhone: 1300 236 600
```

Message Type



Warning

The 'Subject' field has been formatted to allow participants to forward it on via SMS. It must contain the critical information and not be more than 160 characters.

- Send the e-mail to 'fcrelay@aemo.com.au'

A.9 Partner Profiles

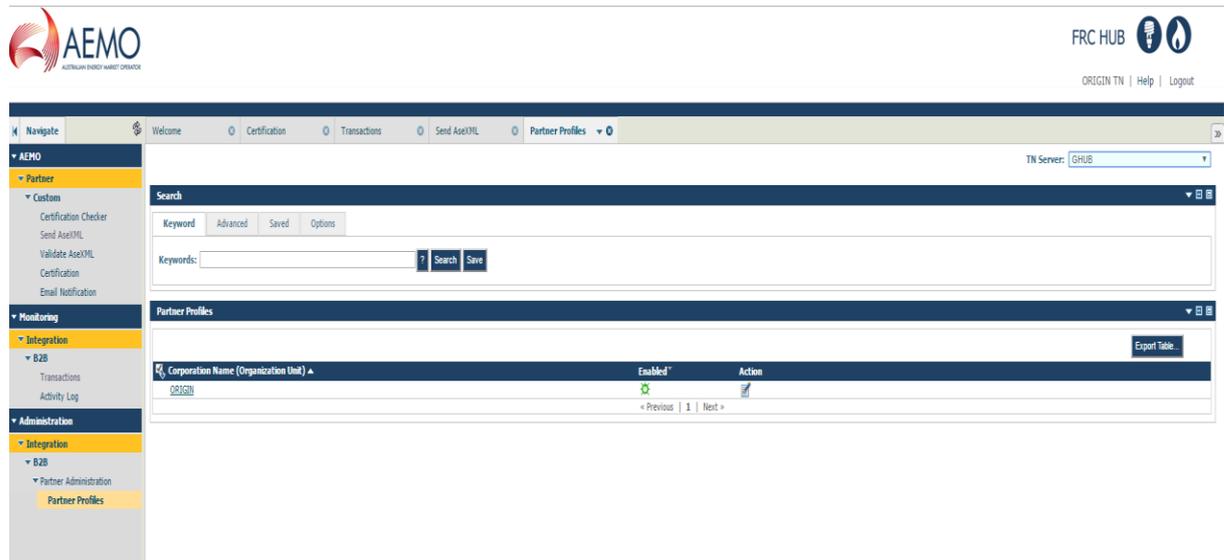
The Partner Profiles window allows participants to view their current details, such as their external id's and contact details.

To view partner profiles:

1. From the menu click **Administration**, then **Integration**, then **B2B**, then **Partner Administration** and then **Partner Profiles**.



2. The **Partner Profiles** window displays. The window shows the participant's details.



3. To view your details, click on the participant name link in the **Corporation Name** field.
4. The **Partner Details** window displays and the **External IDs** tab is displayed by default. You may also view the other tabs by clicking on them - **Addresses**, **Contacts**, **Partner Group Membership**, **Delivery Settings**, **Extended Fields**, **Users**, **Certificates** and **Permissions**.

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

FRC HUB

FBS TN | About | Help | Logout

Partner Profiles

Partner Details

Save Save & Close Cancel

Corporation Name: VENCORP
Organization Unit:
Status: Active
Preferred Language: Root Locale

External IDs | Addresses | Contacts | Partner Group Membership | Delivery Settings | Extended Fields | Users | Certificates | Permissions

Add ID... Delete Add ID Type...

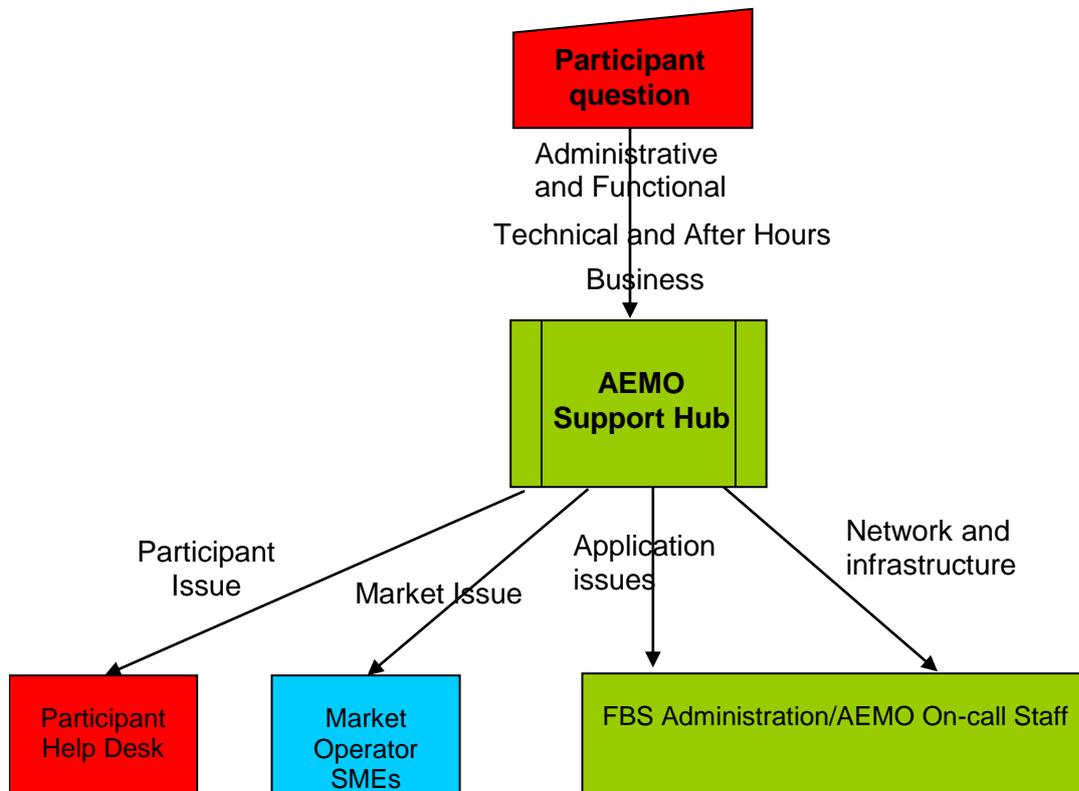
	Id Type	Value
<input type="checkbox"/>	Mutually Defined	VENCORP
<input type="checkbox"/>	urn:frchub.net	VENCORP

1 - 2 of 2

Save Save & Close Cancel

All times EST (UTC+10:00) Powered by Software AG

Appendix B Troubleshooting Guide



AEMO Support Hub
The AEMO Support Hub is the first point of contact for all Hub administrative, functional and application issues and questions.
Tel: 1300 236 600
Email Support.Hub@aemo.com.au

Figure 3 Troubleshooting contact guide

Appendix C Disaster Recovery Provisions

C.1 Introduction

This document outlines the major components/facilities that constitute the Gas Hub service, the impact each would have on the business in the event of a disaster and what, if any, standby services may be available.

C.2 Overview

The Hub Provider (AEMO) provides hub services from both a Primary Site, and a DR Site. The sites are interconnected, and all hub functions and data are available to participants at both sites.

C.3 Cutover

Should the Production Hub be unavailable for more than one hour - subject to Hub Service Provider discretion - the hub services will be cutover to the DR site.

When this cutover occurs participants are not required to make any changes to their systems, if accessing the FRC Hub via the Internet or MarketNet.