MSATS B2B USER INTERFACE GUIDE

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PREPARED BY:	Information Management and Technology – Electricity IT Solutions (EITS)
DATE:	11 October 2011

Final

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This Document Identification

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Documents made obsolete: The release of this document changes only the version of the MSATS B2B USER INTERFACE GUIDE. No documents are made obsolete by releasing this document version.

Contents

1 Introduction

1.1 Purpose

This document is a user interface guide for the B2B functions available in the MSATS Web Portal, version 3.0 – software build 46.77. The document is part of the MSATS User Guide Group; see “Related resources” below for information on other documents in the MSATS User Guide Group.

1.2 Audience

The audience for this guide is:

- MSATS registered participants
- MSATS agents as authorised by the registered participant
- AEMO

1.3 Scope

1.3.1 What’s in this guide

This document contains the following information:

- Use of the menus associated with the MSATS B2B Browser and the B2B Responder.
- A glossary of B2B terms.
- Help with advanced searching.

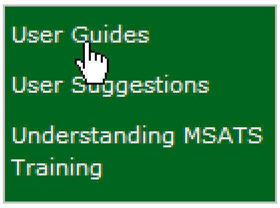
For information about how to:

- Provide other users with access to your MSATS Web Portal participant data; see “Related resources” below for information on other documents in the MSATS User Guide Group.
- Log in or out of the MSATS Web Portal, see “EITS publications” on page 54.

1.3.2 Related resources

The MSATS User Guide Group of documents form a detailed guide to the use of the MSATS Web Portal. Each document is targeted towards a specific audience and explains how to navigate and use the menus for each web portal function.

The documents are accessed by clicking the **User Guides** link on the MSATS main menu.



The following table provides a description of each document in the MSATS User Guide Group and its intended audience.

Document name	Description	Registered participants	B2B users	Participant admins	Ombudsman organisations	AEMO
MSATS Introduction Guide	An overview of the MSATS Web Portal. Contains a list of Reference Information referred to in this document.	✓	✓	✓	✓	✓
MSATS User Interface Guide	Explains how to use the MSATS Participant Web Portal functions	✓	✓	✓	✓	✓
MSATS AEMO User Interface Guide	Explains how to use the MSATS AEMO only Web Portal functions					✓
MSATS B2B User Interface Guide	Explains how to use the B2B functions		✓			✓
MSATS Participant Rights Administration User Interface Guide	Explains how to create and maintain users to provide them access to your data.			✓	✓	✓
MSATS Ombudsman Enquiry User Interface Guide	Explains how to use the Ombudsman Enquiry system.				✓	✓

Note: refer to the AEMO website to obtain other documents that may be useful for understanding MSATS and B2B procedures: http://www.aemo.com.au/electricityops/msats.html.

1.4 Organisation

This document is organised in the following way:

- The first section is an introduction to this document.
- Sections 2 and 3 explain how to use the B2B menus in the MSATS Web Portal.
- Section 4 explains how to use the advanced transaction search features.
- Section 5 is a glossary of B2B terms.
- The final section contains other useful references.

1.5 Conventions

Important Note: important information.

Note: other useful information.

Menu item: text formatted in this style refers to a menu item in the MSATS Web Portal.

$\boxed{\textbf{Button}}$: text formatted in this style refers to a button to click on a screen.

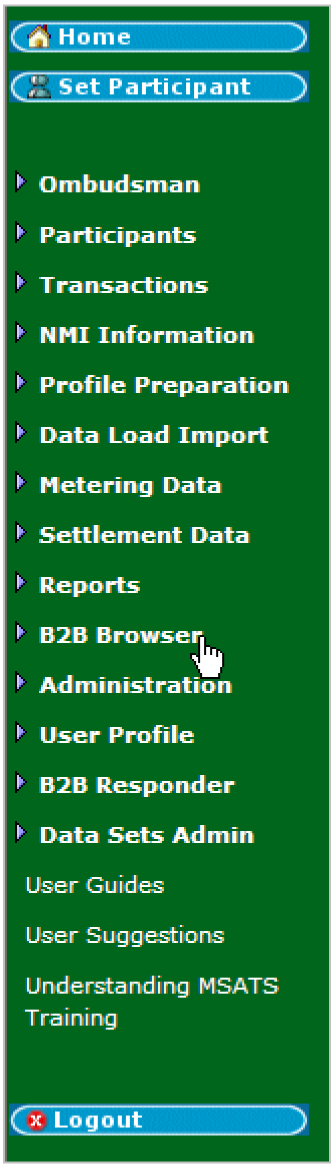
Link: text formatted in this style refers to a link to click on a screen.

Screen: text formatted in this style refers to a field or description on a screen.

“Reference”: text formatted in this style refers to another document or section in this document.

2 B2B Browser

Providing you have the appropriate access rights, the **B2B Browser** menu displays in the MSATS main menu.



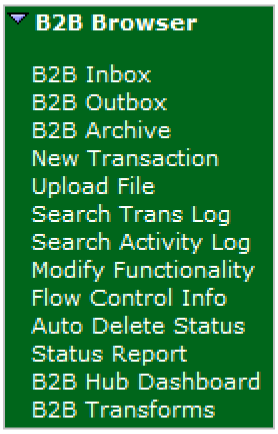
2.1 B2B Inbox

Registered B2B participants have read and write access to the B2B inbox where they can place B2B Messages or Acknowledgements.

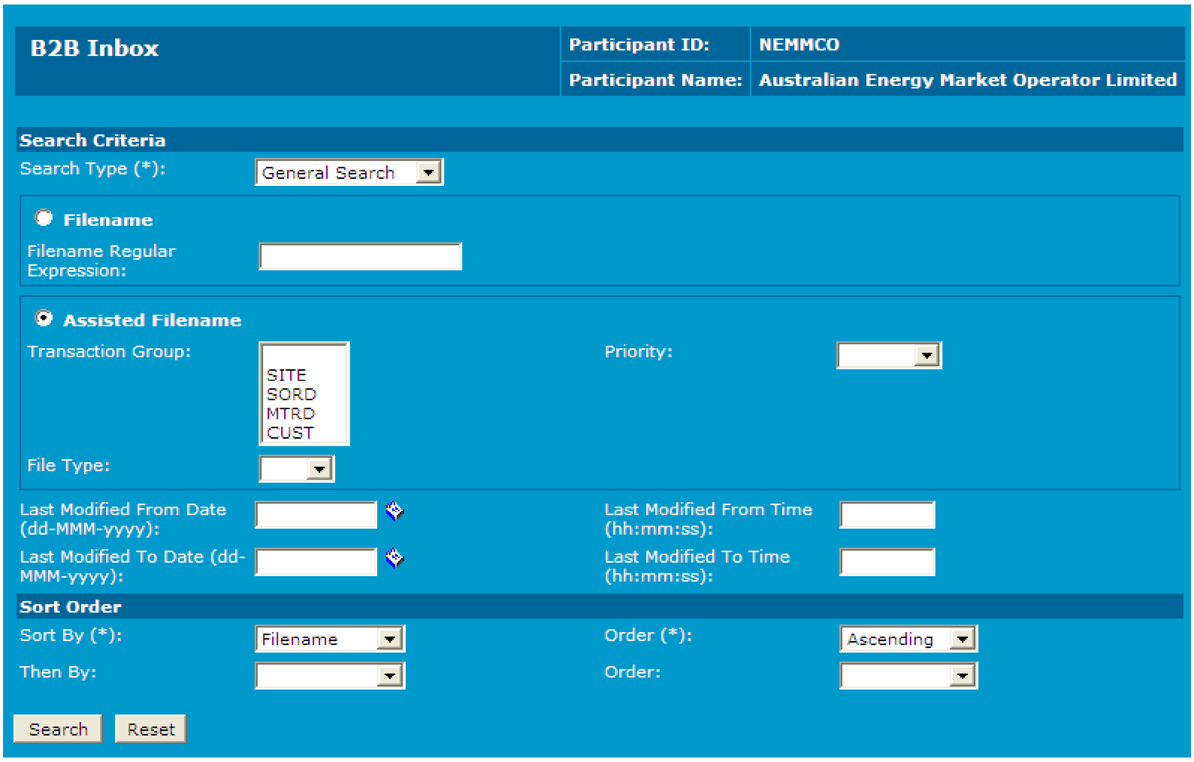
2.1.1 Browsing the B2B inbox

To browse the B2B inbox:

1. On the main menu, click **B2B Browser** and then click **B2B Inbox**.



2. The **B2B Inbox** displays the **Search Criteria** and **Sort Order**.



3. Click the **Search Type** drop-down arrow and select a search type (this is a required field):
   - **General Search:** search for all file types.
   - **Zips for Deletion:** search for .ZIP files that have a corresponding .ack and .ac1 file in the B2B outbox.
   - **Acks for Deletion:** search for .ACK files that do not have a corresponding .ZIP file in the B2B outbox.
4. Click the **Filename** field and type a regular expression to match the target filename. For help see “Advanced Searching” on page 41

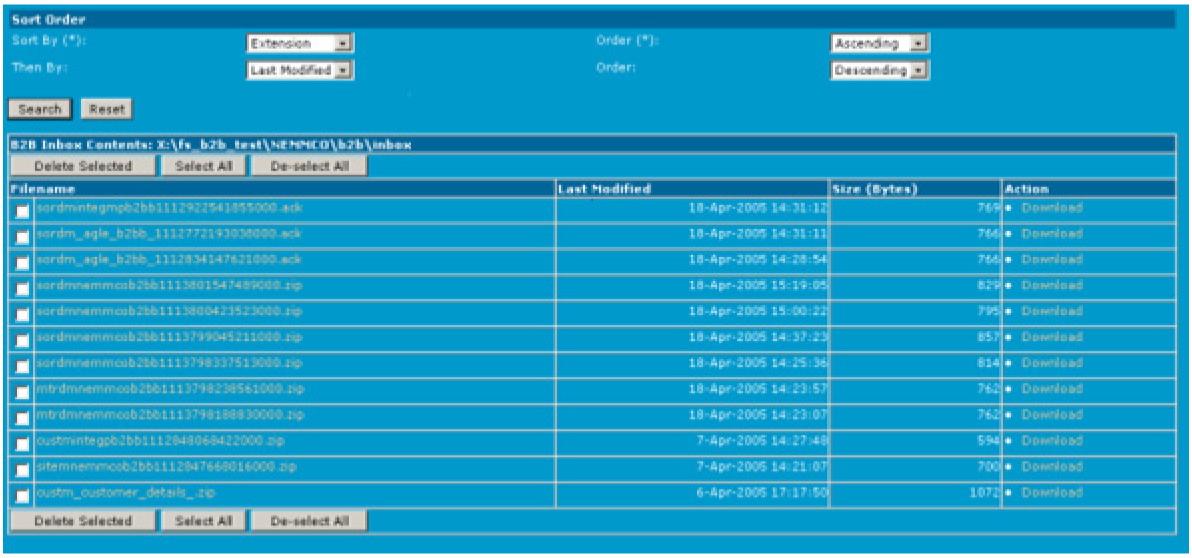
5. The **Assisted Filename** field is used to search for **Transaction Group, Priority** and **File Type**.

   Note: a blank field acts as a wildcard. For example, a blank field for **Transaction Group** has the effect of searching all transaction groups. For further help on searching see “Advanced Searching” on page 41.

6. In the **Last Modified Date** and **Time** fields, you can search for files that fall within a defined date and time range.
7. In the **Sort Order** section, select how to display your search results. The **Sort By** and **Order** fields are required.
8. Click **Search**.

   Click **Reset** to clear all fields and start again.

9. The search results display. In the example below, the results are sorted first by file **Extension** in **Ascending** order and then by **Last Modified** date in **Descending** order.



10. Next do one of the following:
    - View a file by clicking the filename in the **Filename** column.
    - Download a file by either:
      - Clicking **Download** next to the required file in the **Action** column.
      - Viewing the file and clicking **Download** from the **View Message Acknowledgement screen**.
    - Select files by either:
      - Placing a tick next to the filename (☑).
      - Clicking **Select All** to select all files.
      - Clicking **De-select All** to un-tick selected files.
    - Delete a file by either (this option is only available to participants with the relevant rights):
      - Clicking **Delete** in the **Action** column for the relevant file.
      - Selecting the files for deletion and clicking **Delete Selected.**

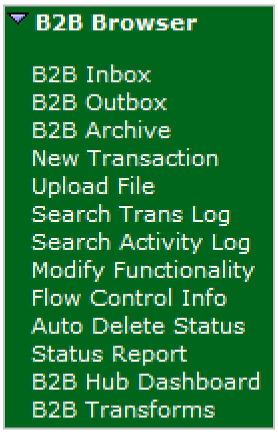
2.2 B2B Outbox

The B2B outbox contains received files. The B2B Handler archives completed B2B transactions after 10 days (see “B2B Archive” on page 9).

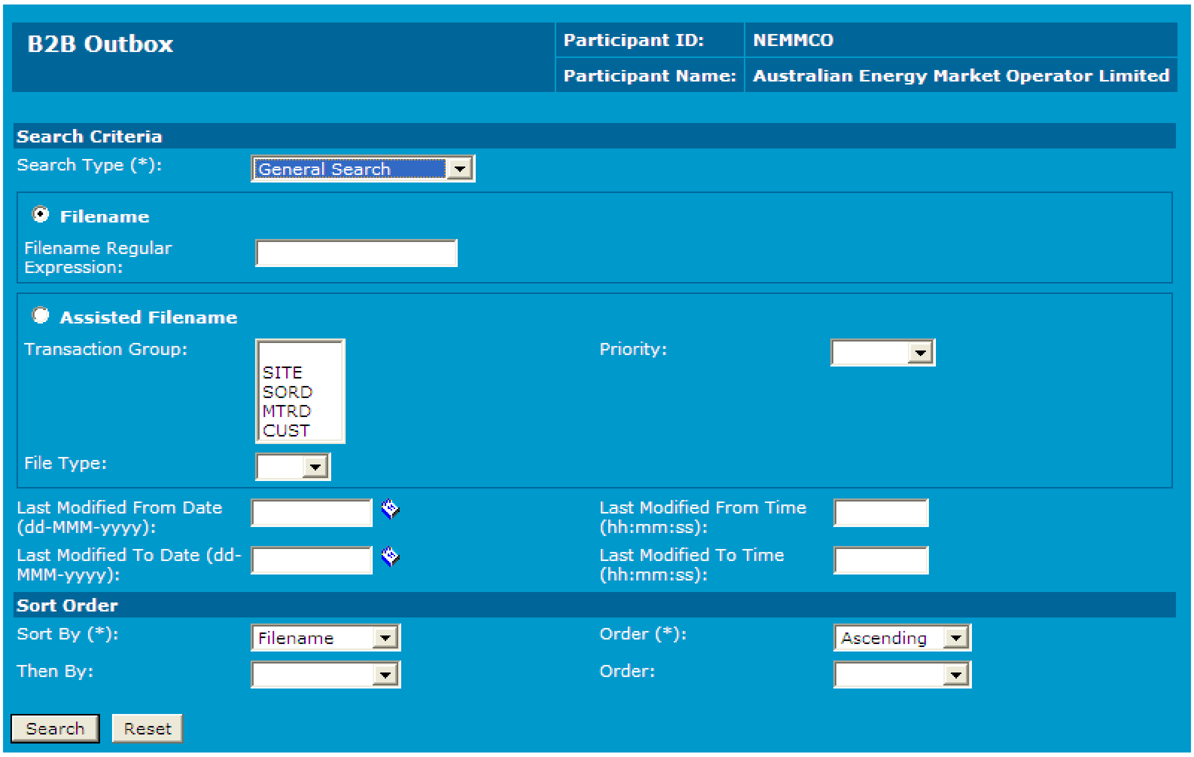
2.2.1 Browsing the B2B outbox

To browse the B2B outbox:

1. On the main menu, click **B2B Browser** and then click **B2B Outbox**.



2. The B2B outbox displays the **Search Criteria** and **Sort Order**.



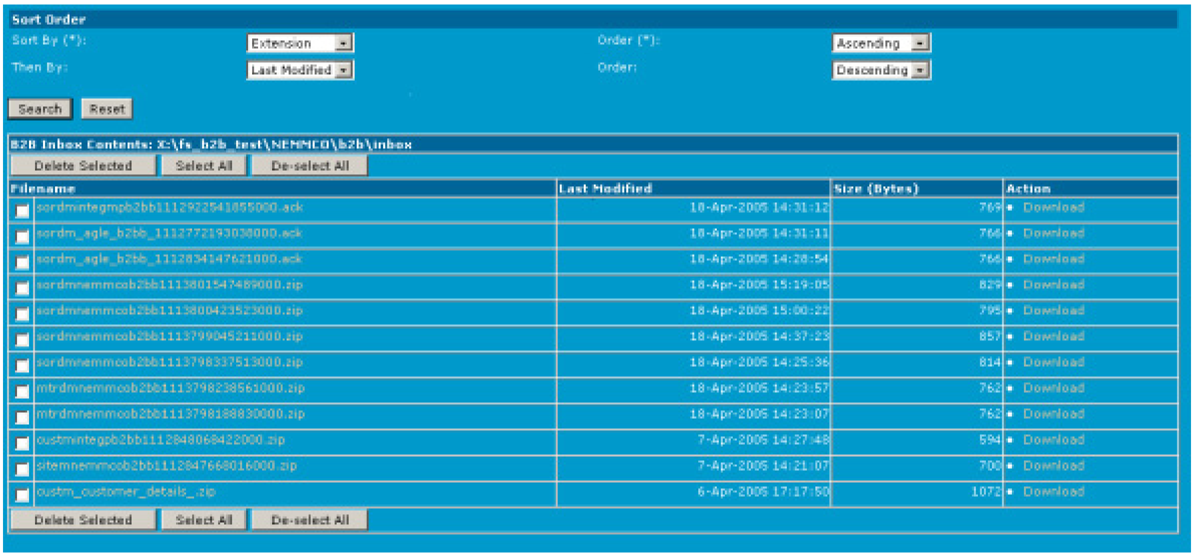
3. Click the **Search Type** drop-down arrow and select a search type (this is a required field):
   - **General Search:** search for all file types.
   - **Unacknowledged Zips:** searches for .ZIP files that do not have a corresponding .ACK file in the B2B inbox.
4. Click **Filename** field, type a regular expression to match the target filename. For help see “Advanced Searching” on page 41.
5. The **Assisted Filename** field is used to search for specific criteria: **Transaction Group, Priority** and **File Type**.

Note: a blank field acts as a wildcard. For example, a blank field for **Transaction Group** has the effect of searching all transaction groups. Refer to "Advanced Searching" on page 41 for further help on searching.

6. In the **Last Modified Date** and **Time** fields, you can search for files that fall within a defined date and time range.
7. In the **Sort Order** section, you select how to display your search results.
8. Click **Search**.

   Click **Reset** to clear all fields and start again.

9. The Search Results displays.



10. Next do one of the following:
    - View a file by clicking the filename in the **Filename** column.
    - Download a file by either:
      - Clicking **Download** next to the required file in the **Action** column.
      - Viewing the file and clicking **Download** from the **View Message Acknowledgement screen**.
    - Select files by either:
      - Placing a tick next to the filename (☑).
      - Clicking **Select All** to select all files.
      - Clicking **De-select All** to un-tick selected files.
    - Delete a file by either (this option is only available to participants with the relevant rights):
      - Clicking **Delete** in the **Action** column for the relevant file.
      - Selecting the files for deletion and clicking **Delete Selected.**

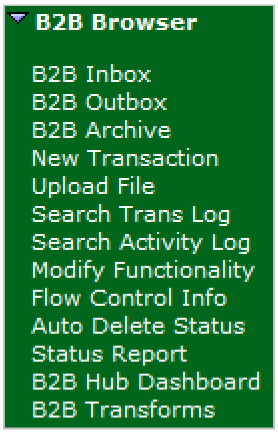
2.3 B2B Archive

Once a .ZIP file in the B2B outbox is acknowledged, the B2B Handlers move the file into the B2B Archive directory. The B2B Archive has sort order capabilities but not searching capabilities like the B2B inbox and B2B outbox.

2.3.1 Browsing the B2B archive

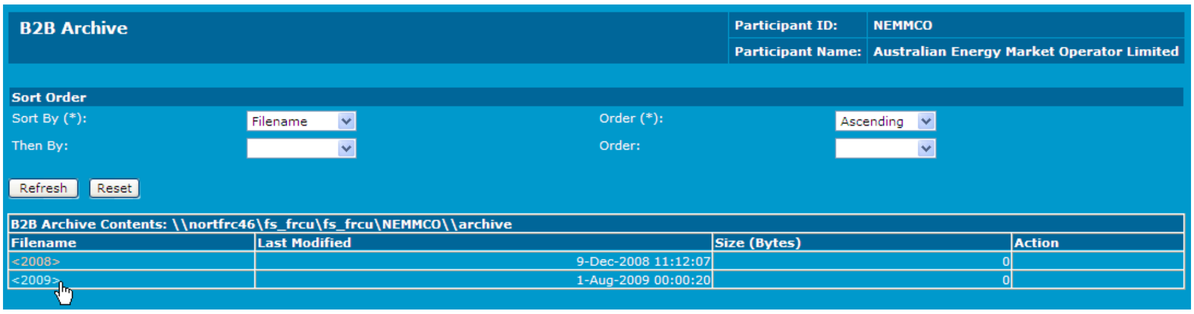
To browse the B2B archive:

1. On the main menu, click **B2B Browser** and then click **B2B Archive**.



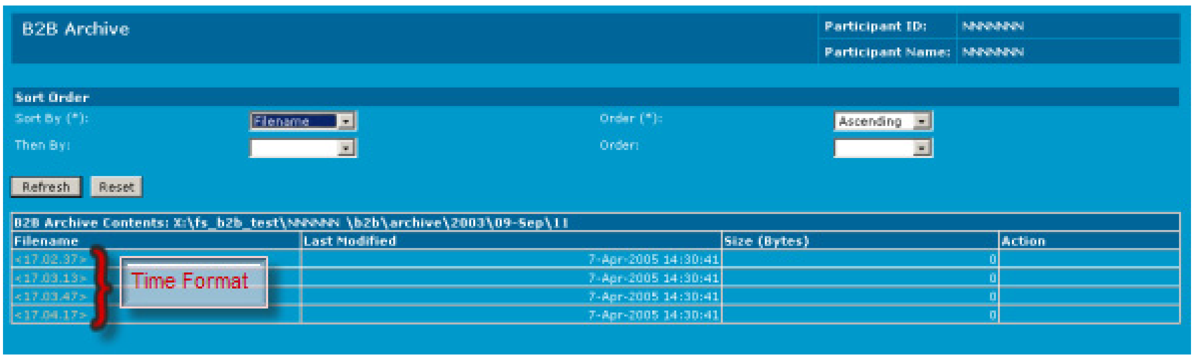
2. The **B2B Archive** screen displays select the sort order and click **Refresh**.

   Click **Reset** to clear all fields and start again.



   - View a file by clicking the filename in the **Filename** column and drilling down several layers until filename displays with a time format.

Note: there is a hierarchy when browsing through the B2B Archive. At the top of this hierarchy is the **Year** directory under the **Filename** column. This is the top level of the B2B Archive directory and contains archives for previous years. Archive files are generally available for a period of 13 months. Only the B2B Archive can contain a .ZIP file with multiple files.



- Download a file by either:
  - Clicking **Download** next to the required file in the **Action** column.
  - Viewing the file and clicking **Download** from the **View Message Acknowledgement screen**.

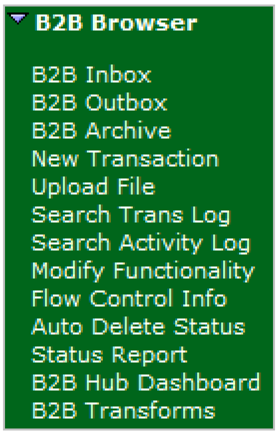
2.4 New Transaction

Participants with the appropriate access can create new B2B transactions using the B2B Browser. The transaction is automatically zipped and placed in the B2B inbox ready to be sent to the recipient.

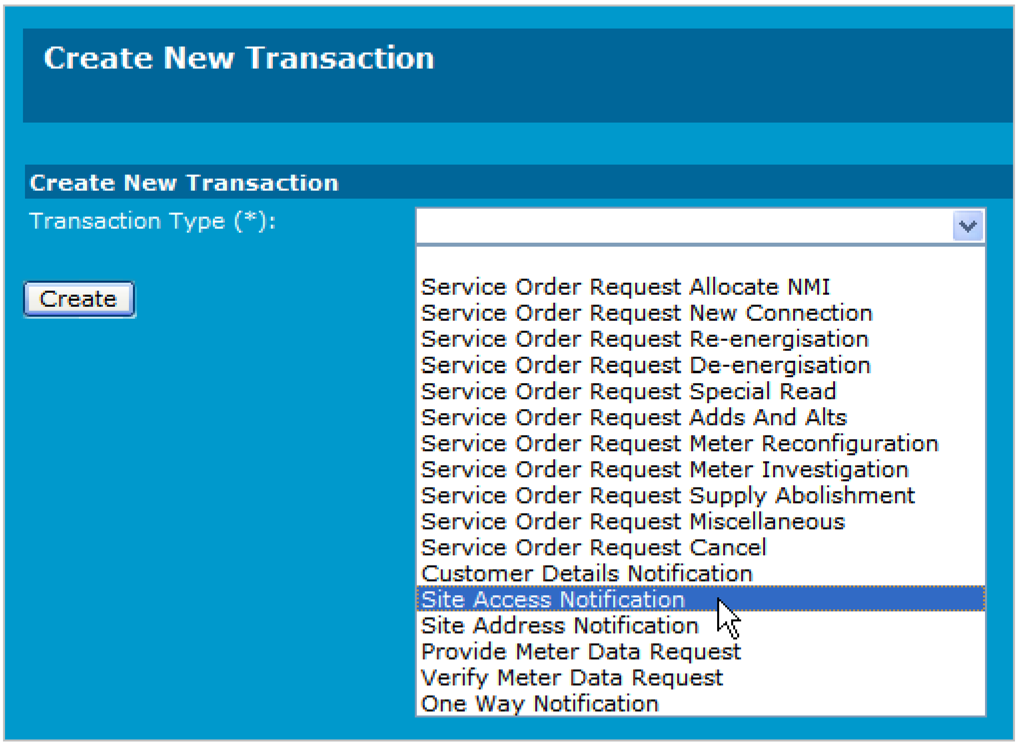
2.4.1 Creating a new transaction

To create a new transaction:

1. On the main menu, click **B2B Browser** and then click **New Transaction.**



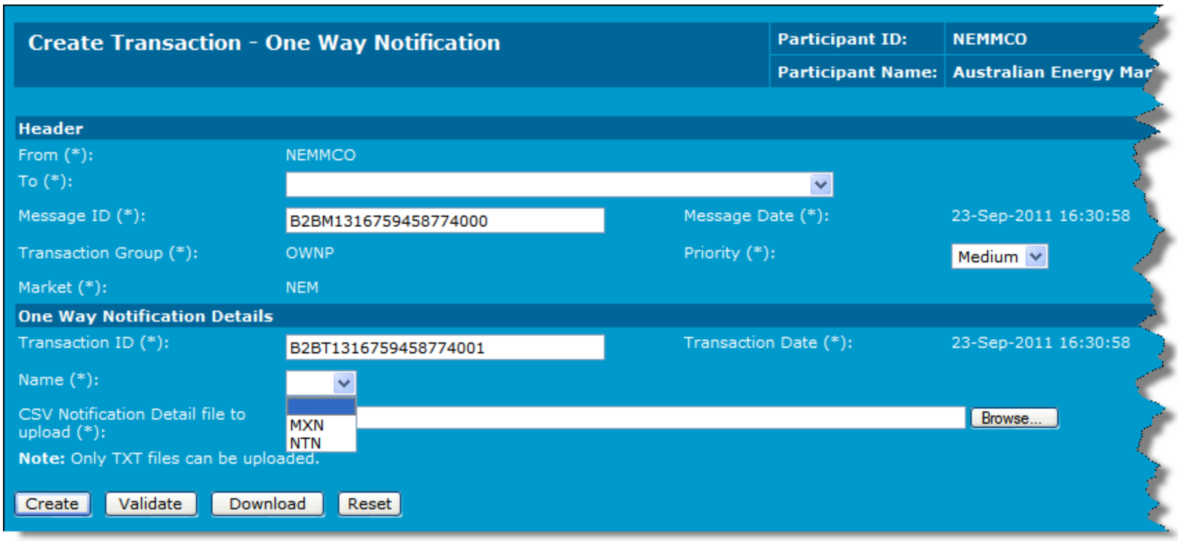
2. The **Create New Transaction** screen displays. Click the **Transaction Type** drop-down arrow and select a transaction type from the list (this is a required field), and then click **Create**.



3. The selected transaction type form displays. Complete all required fields marked with an asterisk* and any other relevant fields.

   Note: The message type in the **Name** field is used to facilitate the ability for a Distribution Network Service Provider (DNSP) to inform a Financially Responsible Market Participants (FRMP) of a proposed network tariff change, in advance of that network tariff becoming effective on the connection point. This ensures the FRMP can fulfil their regulatory obligations towards customers, and negotiate new retail contracts based on the proposed network tariff.

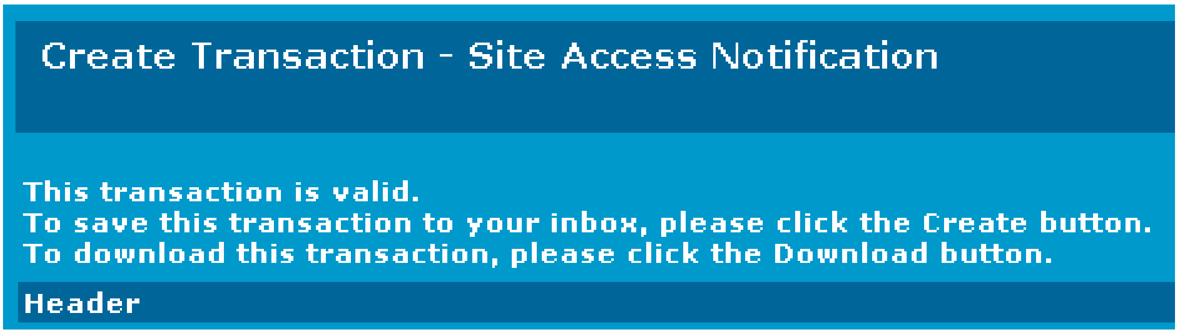
   - **MXN** – Meter Exchange Notification (existing).
   - **NTN** – Network Tariff Notification (new).



4. Next, click one of the following buttons:

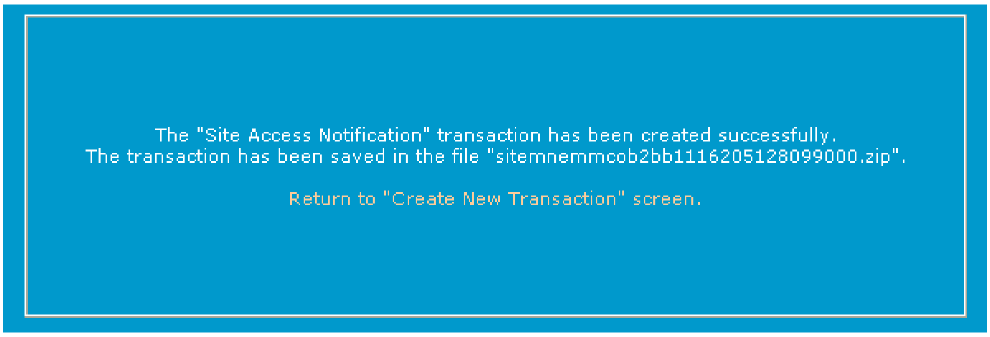
   - **Create** – to create the transaction and place it in your B2B inbox. If any values are invalid, a list of errors is displayed. Fix the errors and click **Create** again.

   - **Validate** - to validate the data entered. If any values or required fields are invalid, a list of errors is displayed.



- **Download** – to download the transaction as a .ZIP file.
- **Reset** – To clear the form and start again.

5. A confirmation message displays when a successful transaction is completes.



To create another transaction, click **Return to Create New Transaction screen**.

Note: **Service Order Request** screens such as **Create Transaction - Service Order Request Supply Abolishment** (see "Figure 2: Create Transaction - Service Order Request Supply Abolishment" on page 13) includes the optional sections, **Customer Contact Name** and **Business Contact Name** sections. To ensure the aseXML is valid, you may be complete either one of these sections, but not both (see Figure 1 below). Otherwise, leave the sections blank.

Figure 1:Create Transaction – Service Order Request – Supply Abolishment error

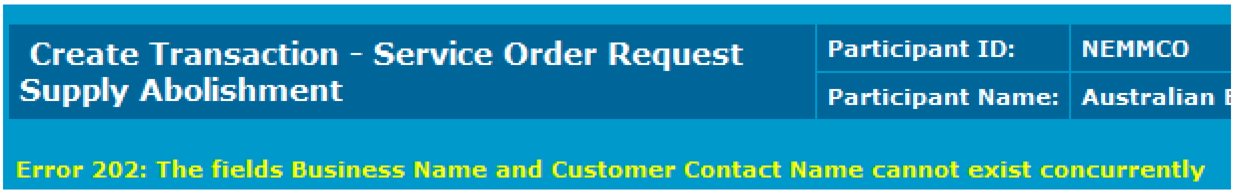
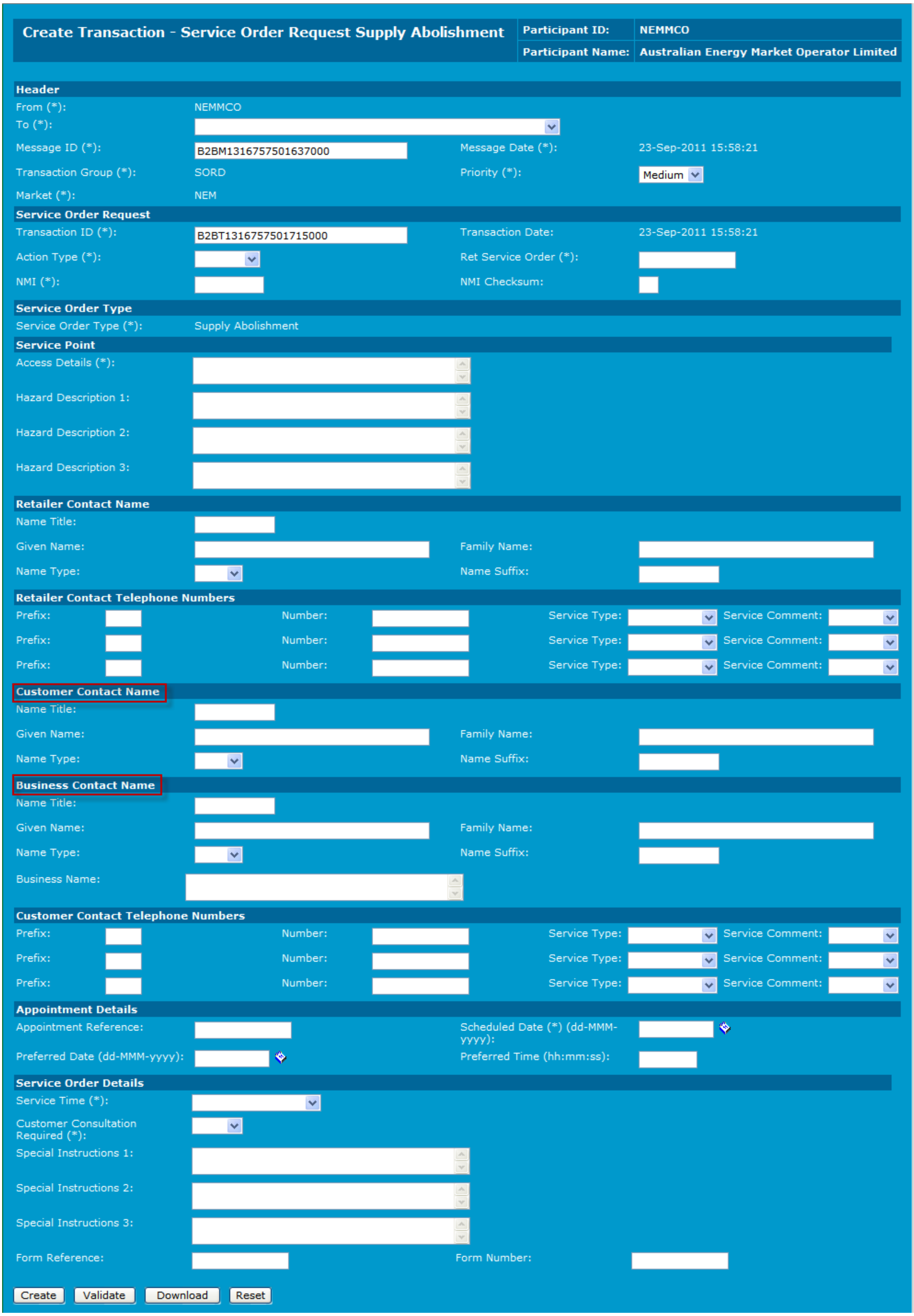


Figure 2: Create Transaction - Service Order Request Supply Abolishment



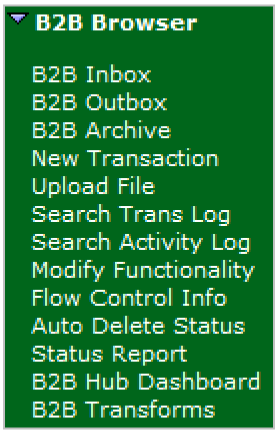
2.5 Upload File

Authorised participants can use the **Upload File** menu to upload .ZIP and .XML files directly to their B2B inbox.

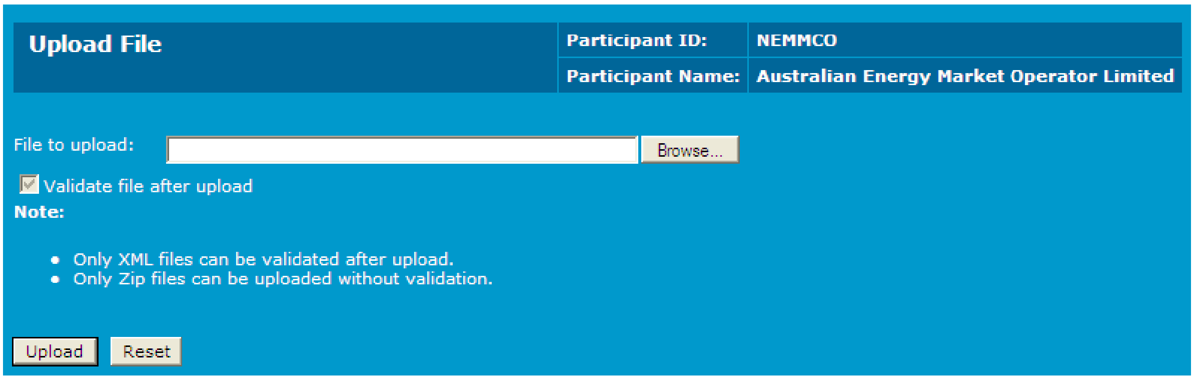
2.5.1 Uploading a file

To upload a file:

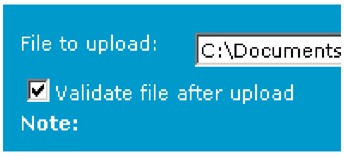
1. On the main menu, click **B2B Browser** and then click **Upload File.**



2. The **Upload File** screen displays. Click **Browse** to locate the file for uploading.

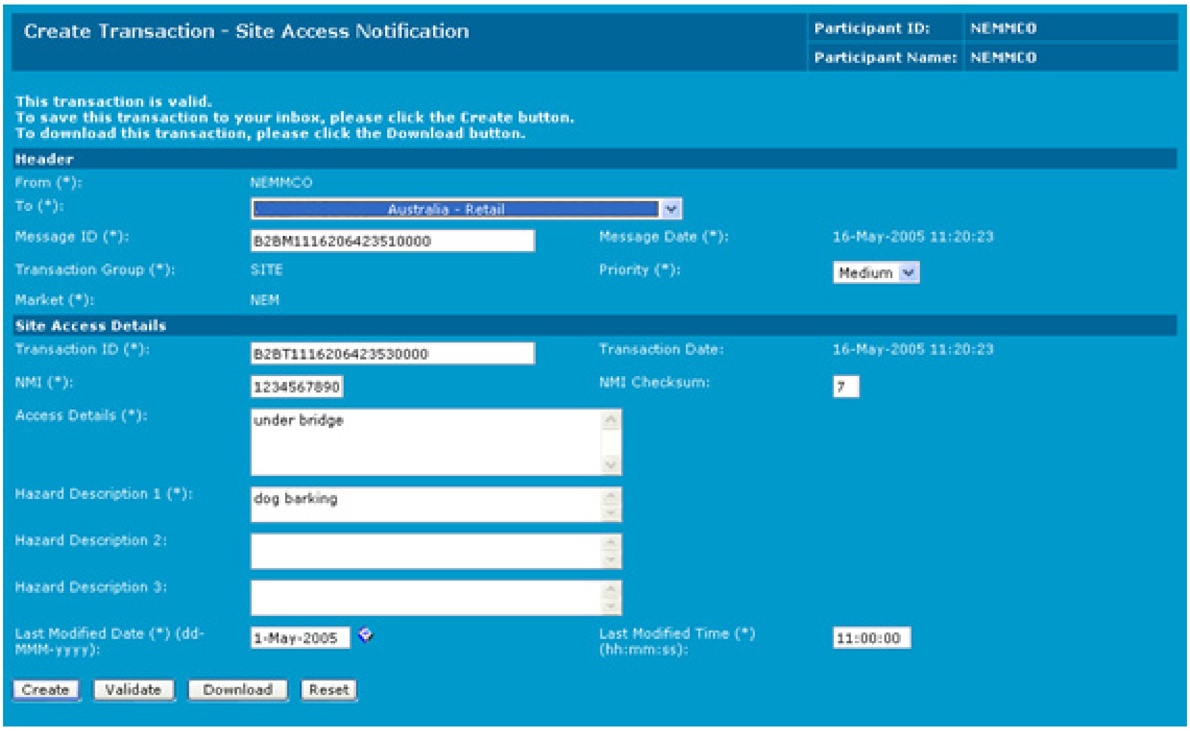


If you are uploading an .XML file and it requires validation after upload, click the **Validate file after upload** check box.



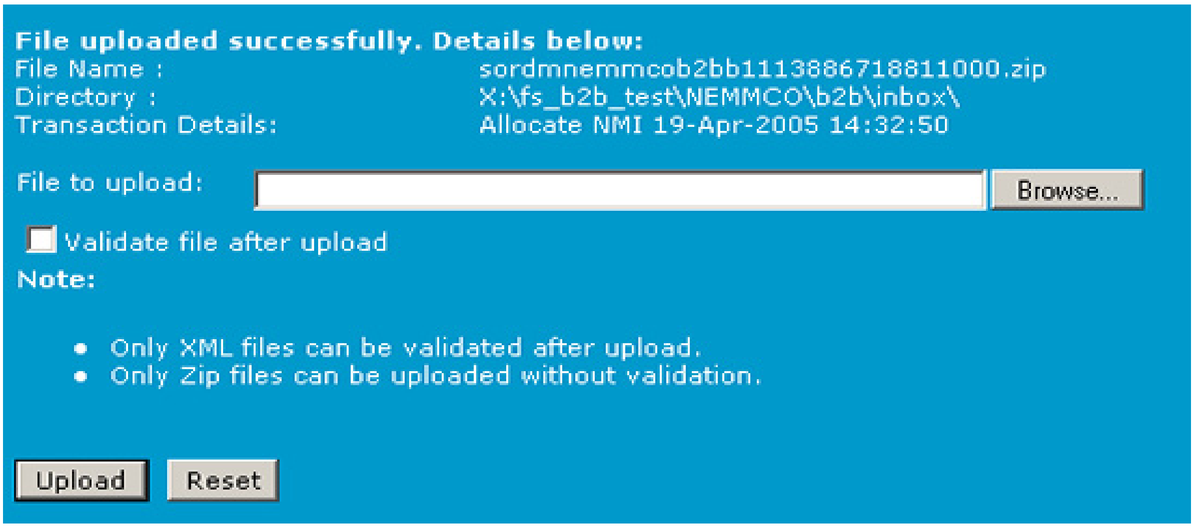
3. Click **Upload**
4. Click **Reset** to clear the **file to upload**.

If an .XML file is uploaded, the **Create Transaction** form displays with the file information. If required, the values can be edited.



If a .ZIP file is uploaded, it uploads directly into your inbox, without the displaying the **Create Transaction** screen.

A confirmation message displays if the .ZIP file uploads successfully.



An error message displays if the .ZIP file already exists or there was an error uploading.

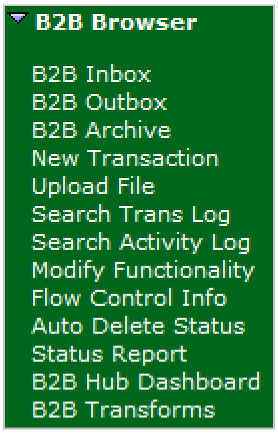
2.6 Search Trans Log

The B2B Transaction log records all the transactions the B2B Hub has handled; this includes all messages and transaction acknowledgements. You can search the transaction log to track specific transactions.

2.6.1 Searching the transaction log

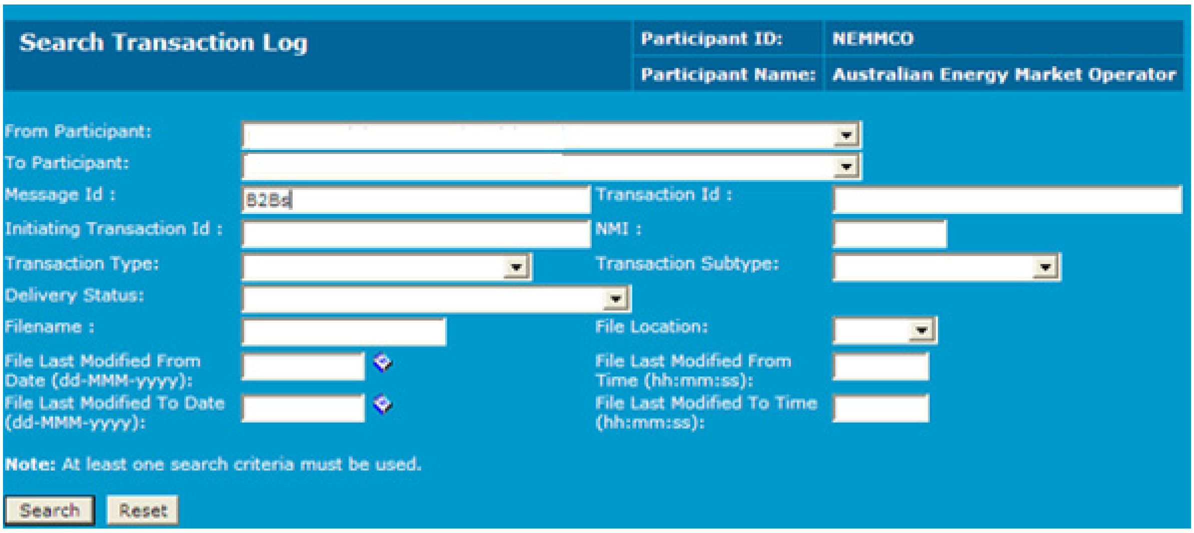
To search the transaction log:

1. On the main menu, click **B2B Browser** and then click **Search Trans Log.**

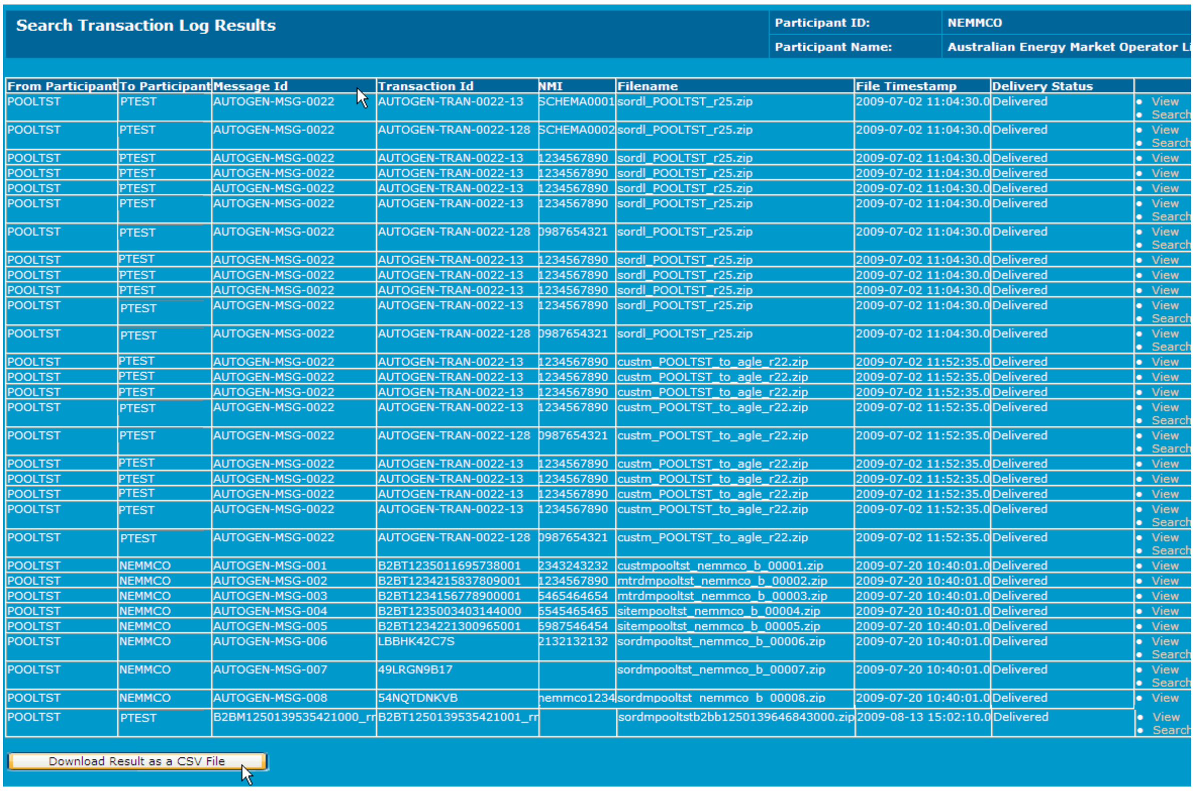


2. The **Search Transaction Log** screen displays. Complete the relevant fields and click **Search**. For help, see “Table 1 Search Transaction Log fields” on page 18.

   Click **Reset** to start again.



3. The **Search Transaction Log Results** screen displays. For help understanding the fields see “Table 2: Search Transaction Log Results” on page 18. Select one of the following options:
   - Click **Download Result as a CSV file** at the bottom of the page to display the result in a spreadsheet format.
   - Click **View** in the **Action** column to see the message details. Refer to “Viewing a transaction” on page 18 for further information.
   - Click **Search** in the **Action** column to see information for related Service Order Request Transactions.



Search Transaction Log Results

Participant ID:	NEMMCO
Participant Name:	Australian Energy Market Operator Li

From Participant	To Participant	Message Id	Transaction Id	NMI	Filename	File Timestamp	Delivery Status	
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	SCHEMA0001	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-128	SCHEMA0002	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-128	0987654321	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-128	0987654321	sordl_POOLTST_r25.zip	2009-07-02 11:04:30.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-128	0987654321	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-13	1234567890	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View • Search
POOLTST	PTEST	AUTOGEN-MSG-0022	AUTOGEN-TRAN-0022-128	0987654321	custm_POOLTST_to_agle_r22.zip	2009-07-02 11:52:35.0	Delivered	• View • Search
POOLTST	NEMMCO	AUTOGEN-MSG-001	B2BT1235011695738001	2343243232	custmpooltst_nemmco_b_00001.zip	2009-07-20 10:40:01.0	Delivered	• View
POOLTST	NEMMCO	AUTOGEN-MSG-002	B2BT1234215837809001	1234567890	mtrdmpooltst_nemmco_b_00002.zip	2009-07-20 10:40:01.0	Delivered	• View
POOLTST	NEMMCO	AUTOGEN-MSG-003	B2BT1234156778900001	5465464654	mtrdmpooltst_nemmco_b_00003.zip	2009-07-20 10:40:01.0	Delivered	• View
POOLTST	NEMMCO	AUTOGEN-MSG-004	B2BT1235003403144000	5545465465	sitempooltst_nemmco_b_00004.zip	2009-07-20 10:40:01.0	Delivered	• View
POOLTST	NEMMCO	AUTOGEN-MSG-005	B2BT1234221300965001	5987546454	sitempooltst_nemmco_b_00005.zip	2009-07-20 10:40:01.0	Delivered	• View
POOLTST	NEMMCO	AUTOGEN-MSG-006	LBBHK42C7S	2132132132	sordmpooltst_nemmco_b_00006.zip	2009-07-20 10:40:01.0	Delivered	• View • Search
POOLTST	NEMMCO	AUTOGEN-MSG-007	49LRGN9B17		sordmpooltst_nemmco_b_00007.zip	2009-07-20 10:40:01.0	Delivered	• View • Search
POOLTST	NEMMCO	AUTOGEN-MSG-008	54NQTDNKVB	nemmco1234	sordmpooltst_nemmco_b_00008.zip	2009-07-20 10:40:01.0	Delivered	• View
POOLTST	PTEST	B2BM1250139535421000_rr	B2BT1250139535421001_rr		sordmpooltstb2bb1250139646843000.zip	2009-08-13 15:02:10.0	Delivered	• View • Search

Download Result as a CSV File

This table explains the Search Transaction Log Results fields.

Field	Description
From Participant	The Participant who sent the transaction.
To Participant	The Participant who received the transaction.
Message Id	The Id of the message. This field uses SQL patterns. This means that you can use % for wildcard and any other valid SQL constructs. See "SQL patterns (Transaction Management)" on page 41.
Initiating Transaction Id	The initiating transaction id contained in the transaction. This field supports SQL patterns.
Transaction Type	The transaction type of the transaction.
Delivery Status	The delivery status. For example 'Completed', 'Rejected' etc.
Filename	The filename of the transaction; this field supports SQL patterns.
File Last Modified From Date	The start of the date range that the transaction's Last Modified Date is greater than or equal to.
File Last Modified To Date	The end of the date range that the transaction's Last Modified Date is less than or equal to.
Transaction Id	The transaction id of the transaction; this field supports SQL patterns.
NMI	The NMI contained in the transaction.
Transaction Subtype	The subtype of the transaction.
File Location	The physical location of the file; this is an absolute path.
File Last Modified From Time	The start of the time range that the transaction's Last Modified Time is greater than or equal to.
File Last Modified To Time	The end of the time range that the transaction's Last Modified Time is less than or equal to.

Table 1 Search Transaction Log fields

This table explains the Search Transaction Log Results.

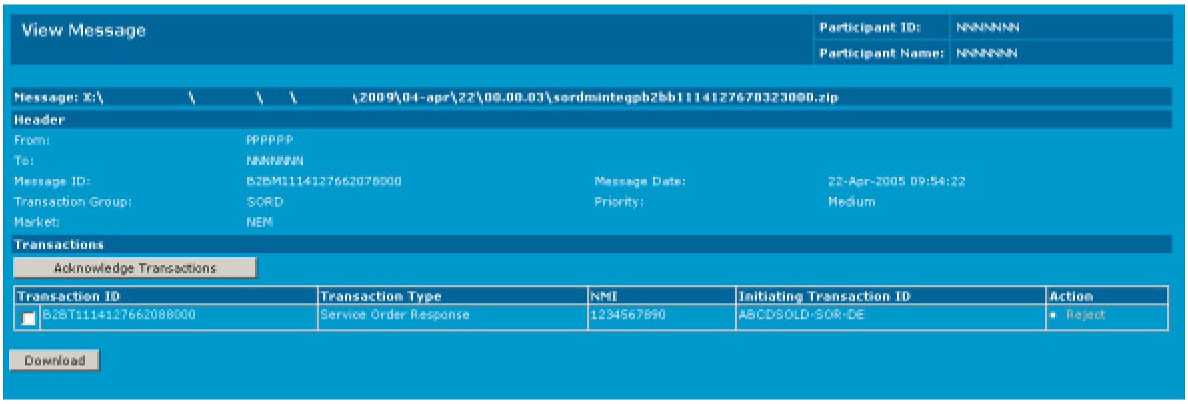
Field	Description
From Participant	The Participant who sent the transaction.
To Participant	The Participant who received the transaction.
Message Id	The Id of the message.
Transaction Id	The transaction ID.
Init Transaction Id	The initiating transaction id.
Transaction type	The transaction type.
Transaction subtype	The transaction subtype.
NMI	The NMI of the transaction.
Filename	The name of the file that contained the message.
File Timestamp	When the file was written to the Participant's B2B Hub inbox.
Delivery Status	The current status of the Message/Transaction (e.g. Delivery pending or Delivered).

Table 2: Search Transaction Log Results

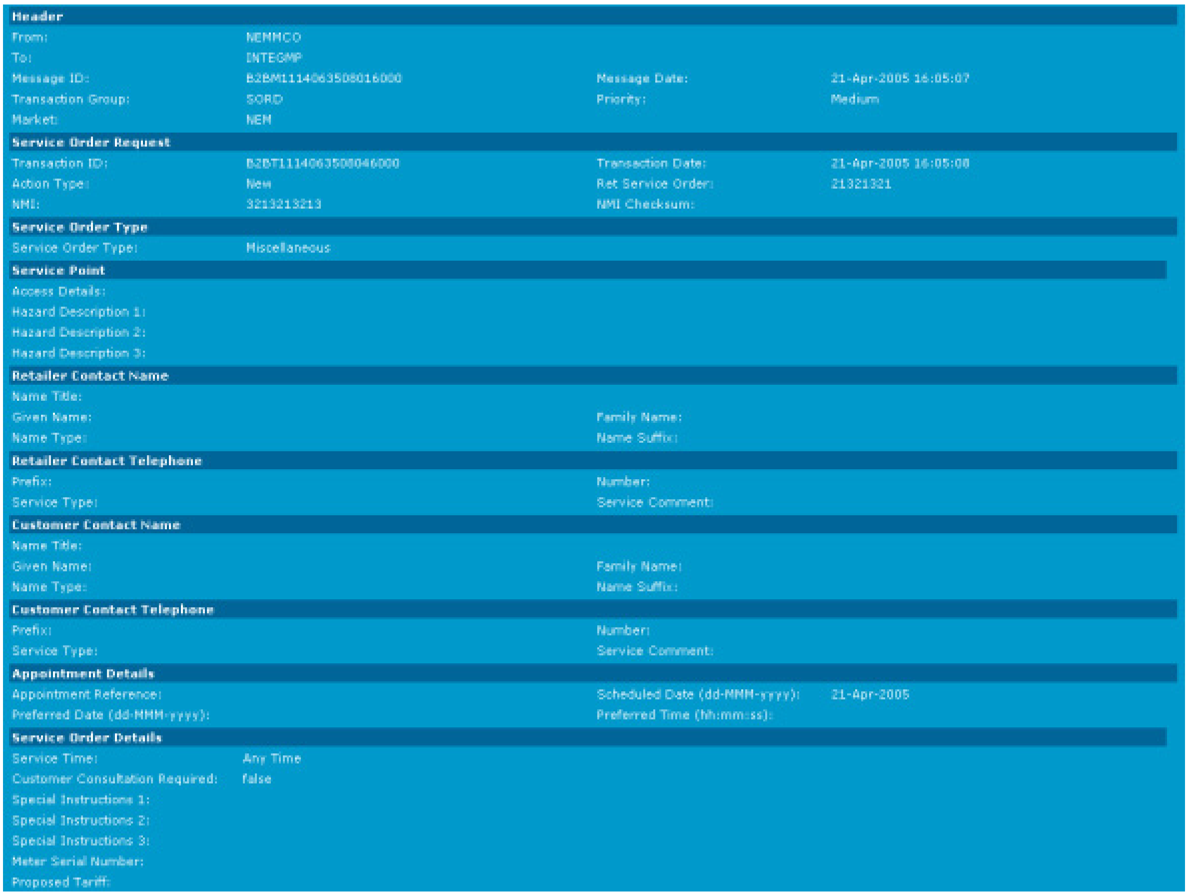
2.6.2 Viewing a transaction

To view a transaction:

1. Follow the instructions for "Searching the transaction log" on page 16.
2. Click **View** to display the **View Message** screen. Select from the following options:
   - Click **Download** in the **Action** column to download the message.
   - Click **Acknowledge Transaction** to acknowledge the message.
   - Click **Reject** in the **Action** column to reject the message.
   - Select a **Transaction ID, Transaction Type, NMI** or **Initiating Transaction ID** to view further information.



For example, click the **Transaction ID** link to view the message information.



2.7 Search Activity Log

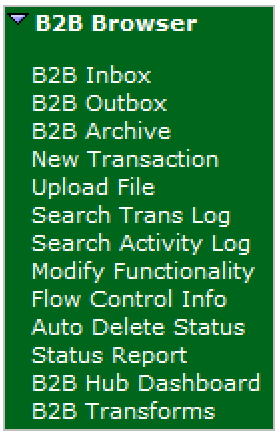
The Activity Log records actions within the B2B Browser. The following actions are logged:

- Upload File
- Create Transaction
- Create Acknowledgement
- Delete File
- Download File
- Auto Delete On
- Auto Delete Off
- Toggle Modify Functionality On
- Toggle Modify Functionality Off
- Search Transaction Log
- View B2B Hub Dashboard
- View Flow Control Data

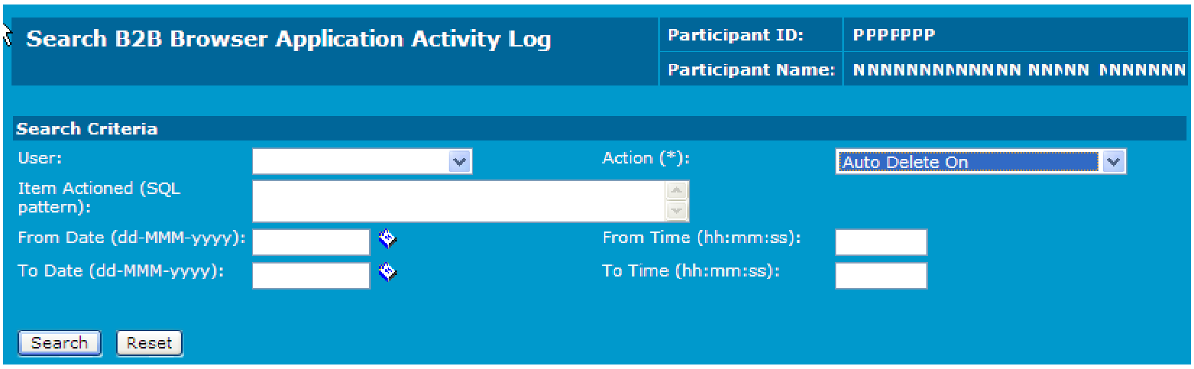
2.7.1 Searching the activity log

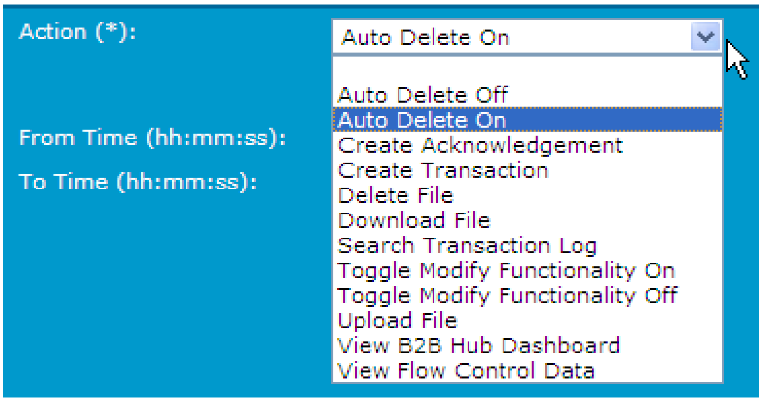
To search the activity log:

1. On the main menu, click **B2B Browser** and then click **Search Activity Log.**



2. The **Search B2B Browser Application Activity Log** screen displays. Click the **Action** drop-down arrow and select from list (this is a required field).

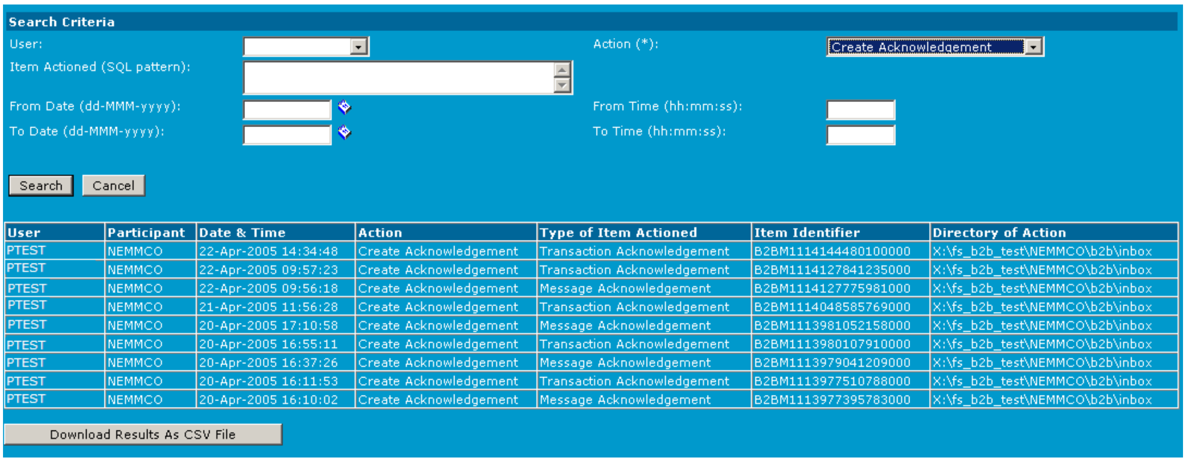




3. Complete any other optional fields and click **Search**. For help, see “Table 3: Optional search fields” on page 21.

   Note: participants can only search their own actions.

4. The search results display. For help understanding the search result fields see “Table 4: Search result fields” on page 22.



This table explains the optional search fields.

Field	Description
User	Select a specific user who performed the selected action (above) from the drop down menu.
Item Actioned	From the drop down menu, select the item the action was performed on. Note: the content of this field depends on the action context.
From date	The start of the date range when the action was performed. The format is dd-MMM-yyyy. (e.g. 01-Jan-2005).
To date	The end of the date range when the action was performed. The format is dd-MMM-yyyy. (e.g. 01-Jan-2005).
From time	The start of the time range when the action was performed. The format is hh:mm:ss (e.g. 10:30:00)
To time	The end of the time range when the action was performed. The format is hh:mm:ss. (e.g. 10:30:00) For this example, select the Create Acknowledgement action from the drop down menu and click Search.

Table 3: Optional search fields

This table explains the search results.

Column Name	Description
User	Who performed the action.
Participant	The Participant ID.
Date/time	The date and time the action was performed.
Action	The action performed.
Type of item actioned	The item that the action was performed on. This field has different content depending on the action context. Refer to the following table for further information.
Item identifier	Unique item identifier for the item actioned. This field has different content depending on the action context. Refer to the following table for further information.
Directory of action	The directory where the action was performed. Note: This only applies when a file is affected, i.e. Create Transaction, Create Acknowledgement, Upload File, Download File and Delete File actions

Table 4: Search result fields

This table explains the Type Of Item Actioned and Item Identifier fields.

Action	Type of Item Actioned	Item Identifier
Upload File	File	Filename of the uploaded file
Create Transaction	The transaction subtype.	The Transaction Id of the created transaction.
Create Acknowledgement	Transaction Acknowledgement or Message Acknowledgement	The Message Id of the acknowledgement
Delete File	File	The filename of the deleted file.
Download File	File	The filename of the downloaded file
Auto Delete On	Process	N/A
Auto Delete Off	Process	N/A
Toggle Functionality On	Process	The functionality name that was toggled on
Toggle Functionality Off	Process	The functionality name that was toggled off.
Search Transaction Log	Search	N/A
View B2B Hub Dashboard	Report	The Participant whose dashboard was viewed.
View Flow Control Data	Report	N/A

Table 5: Type Of Item Actioned and Item Identifier fields

2.8 Modify Functionality

The B2B Browser has a set of functionalities that can be turned off or on. This allows quick control over what Participant users can and cannot do using the B2B Browser. The functionalities are:

- Delete File
- Upload File
- Create Response Message Acknowledgement
- Auto Delete From inbox
- Create New Transaction
- Create Response Transaction
- Create Response Transaction Acknowledgement
- Upload & Validate Transaction

Note: when a function is toggled on or off, it is toggled for all users of the Participant. The toggling of functionality works in conjunction with MSATS rights when deciding whether a user has access to a particular functionality.

Users have access to a particular functionality if they have both the correct MSATS rights and the functionality is toggled on. In all other cases, users will not have access to the functionality.

The table below explains the logic.

Toggle	MSATS Right	Result
On	Y	Functionality in use
Off	Y	Functionality not in use

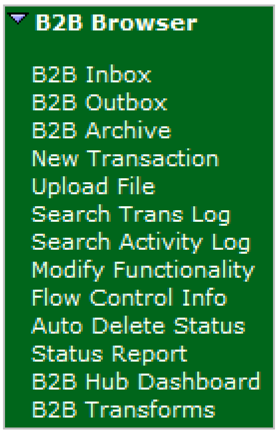
Toggle	MSATS Right	Result
On	N	Functionality not in use
Off	N	Functionality not in use

Note: a "Y" in the MSATS Right column denotes the user has the correct MSATS right for the functionality.

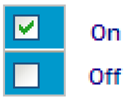
2.8.1 Modifying functionality

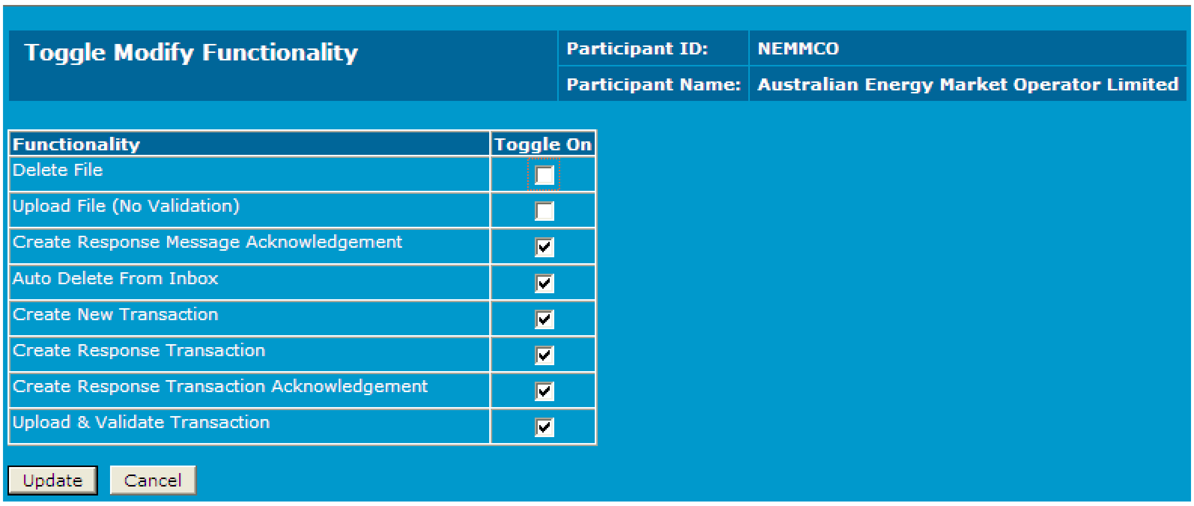
To modify functionality:

1. On the main menu, click **B2B Browser** and then click **Modify Functionality**.



2. The **Toggle Modify Functionality** screen displays. Click the check box to change the functionality, indicated by:





3. Click **Update**. A message confirming the update displays.

Status has been updated successfully

Functionality	Toggle On
Delete File	☐
Upload File (No Validation)	☐
Create Response Message Acknowledgement	☑
Auto Delete From Inbox	☑
Create New Transaction	☑
Create Response Transaction	☑
Create Response Transaction Acknowledgement	☑
Upload & Validate Transaction	☑

Update Cancel

2.9 Flow Control Info

Flow control is information about water marks and stop file details for a participant.

The Water Mark levels control the flow of files into the inbox and outbox. The **Flow Control Configuration** section displays the low, warn and high Water Mark levels.

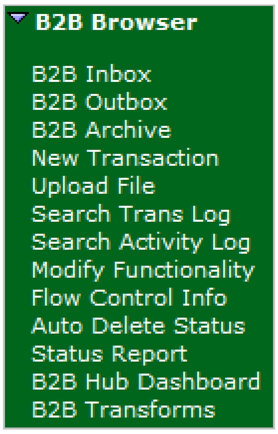
- If the number of unacknowledged files in an outbox exceeds the warn watermark, a warning file is sent to all participants into their Stopbox to inform them that a Participant is running behind in acknowledging files.
- If the high watermark is exceeded, the B2B Handlers create a stop file in the participants outbox and cease to deliver files to their outbox.
- When sufficient files have been acknowledged, and the number of unacknowledged files falls below the low watermark, the B2B Handlers remove the stop and warning files to resume delivering files again.

The **Flow Control Files** section, displays the warning files and stop file information. This includes information on, the filename, the time it was last modified, the cause and the suggested action to undertake.

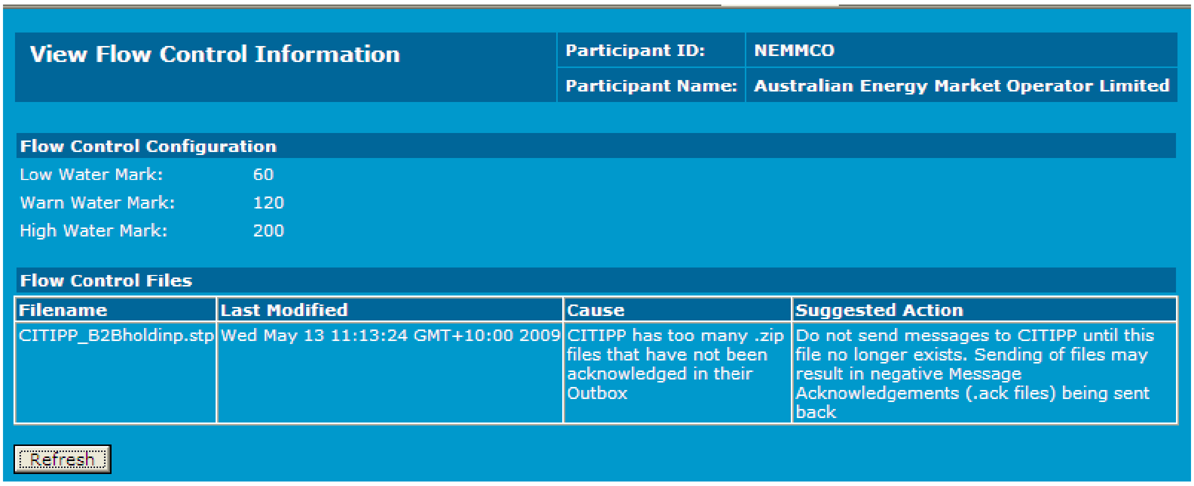
2.9.1 Displaying flow control info

To display flow control information:

1. On the main menu, click **B2B Browser** and then click **Flow Control Info**.



2. The **View Flow Control Information** screen displays with **Flow Control Configuration** and **Flow Control Files** information. Click **Refresh** to see the latest information available.



2.10 Auto Delete Status

The **Auto Delete Status** sub menu provides an automated process to delete .ZIP and .ACK files that are in the correct state. The correct states are:

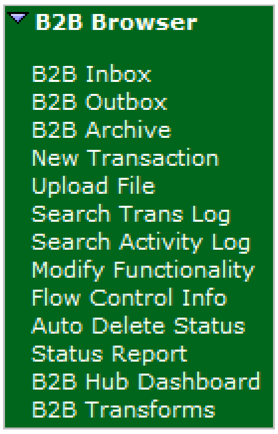
- Delete all .ZIP files from a Participant's inbox where an .ac1 file and an .ACK file exist in the Participant's outbox.
- Delete all .ACK files from a Participant's inbox where there is not a corresponding .ZIP file in the participant's outbox.

The status of the auto delete process can be viewed and turned on and off by Participant users if they have the correct MSATS access rights. To turn the Auto Delete Status on and off, complete the following steps.

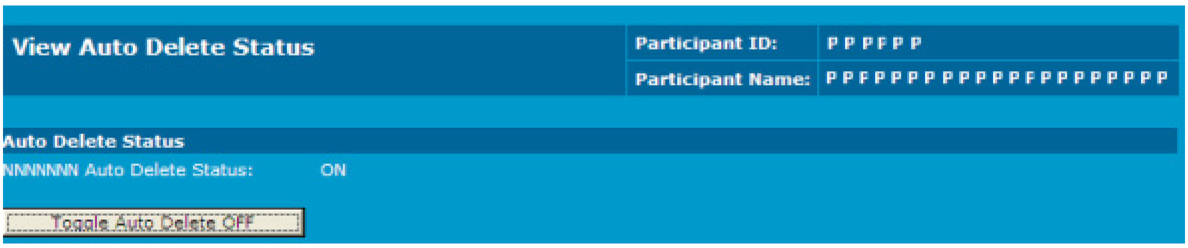
2.10.1 Viewing auto delete status

To view auto delete status:

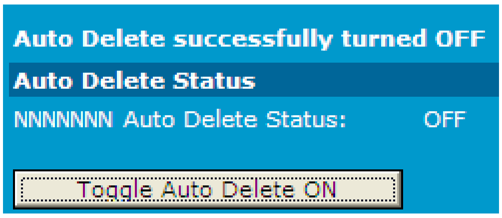
1. On the main menu, click **B2B Browser** and then click **Auto Delete Status**.



2. The **View Auto Delete Status** screen displays with the current **Auto Delete Status** toggled **ON**. To turn the status off, click **Toggle Auto Delete Off**.



3. A message displays confirming that the auto delete status was successfully turned off. Note: The Toggle button is now displayed as **Toggle Auto Delete ON**.



2.11 Status Report

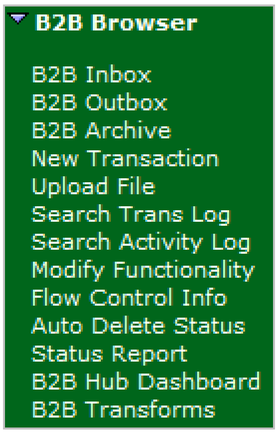
The **B2B Participant Status Report** has the Last Modified Date in both the B2B inbox and outbox directories of the following:

- Most recently created .ZIP.
- Most recently created .ACK.
- Oldest created .ZIP.
- Oldest created .ACK.

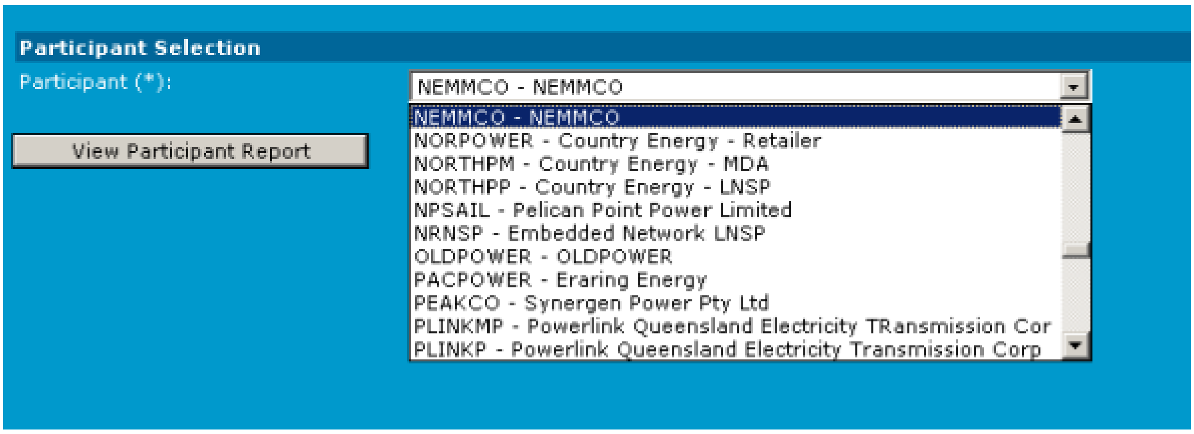
2.11.1 Viewing the status report

To view the status report:

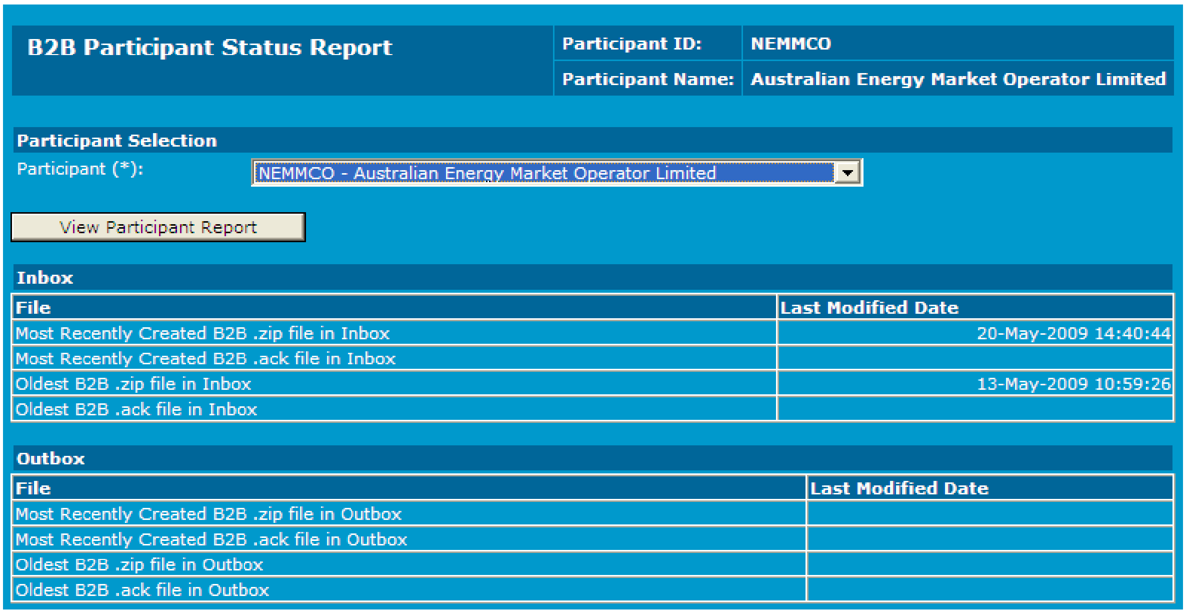
1. On the main menu, click **B2B Browser** and then click **Status Report**.



2. The **Participant Selection** screen displays. Click the **Participant** drop-down arrow and select a Participant from the list.
3. Click **View Participant Report**.



4. The **B2B Participant Status Report** results display the **Inbox** and **Outbox** details.



Note: if there is are no .ACK or .ZIP files the **Last Modified Date** is blank.

2.12 B2B Hub Dashboard

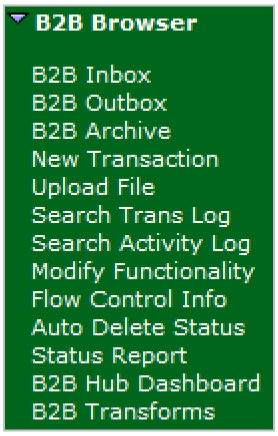
The B2B Hub Dashboard status report contains the following information:

- The number of files in each state for the participant.
- The action required to move the files to the next state.
- Who is responsible for performing the next action.

2.12.1 Viewing the B2B Hub dashboard

To view the B2B Hub dashboard:

1. On the main menu, click **B2B Browser** and then click **B2B Hub Dashboard**.



2. The **B2B Hub Dashboard (Current Status)** screen displays. Click the **Participant** drop-down arrow and select a participant from the list.
3. Click **View Report**.

Note: participants can only view their own dashboard.

B2B Hub Dashboard (Current Status)

Participant ID:	NEMMCO
Participant Name:	Australian Energy Market Operator Limited

Report

Participant (*):

View Report

The status report displays. Do one of the following to view further information:

- Click **Flow Control information** to display the flow control information.
- Click **Download Report As CSV File** to download the result as a .csv file.

B2B Hub Dashboard (Current Status)

Participant ID:	NEMMCO
Participant Name:	Australian Energy Market Operator Limited

Report

Participant (*): NEMMCO - Australian Energy Market Operator Limited

View Report

State Number	Description	Inbox	Outbox	Total in this state	Status	Next Action
1	.zip file exists in Inbox no other corresponding files.	.zip		0	.zip has not been delivered to other participant	B2B Handler to copy file to other participant
2	.zip file exists in Inbox corresponding .ac1 file exists in Outbox	.zip	.ac1	18	.zip has been delivered to other participant	Other participant to send .ack file
3	.zip file exists in Inbox corresponding .ac1 and .ack files exist in Outbox	.zip	.ac1 .ack	0	Other participant has acknowledged receipt of .zip file	Current participant to validate .ack and delete .zip file from Inbox.
4	.zip file does not exist in Inbox corresponding .ac1 and .ack files exist in Outbox		.ac1 .ack	0	Current participant has accepted the .ack and deleted .zip file	B2B Handler to delete .ac1 and .ack from Outbox
5	.zip file exists in Outbox no other corresponding files		.zip	0	.zip file has been received from other participant	Current participant to send acknowledgment to other participant (.ack file)
6	.zip file exists in Outbox corresponding .ack file exists in Inbox	.ack	.zip	0	.ack has not been delivered to other participant	B2B Handler to copy .ack to other participant
7	.zip does not exist in Outbox .ack exists in Inbox	.ack		0	B2B Handler has delivered .ack to the other participant and deleted .zip from Outbox	Current participant to delete .ack from Inbox.

Number of Invalid Acknowledgements: 0

Flow Control information | Download Report As CSV File

2.13 B2B Transforms

Using the **B2B Transforms** menu, participants with access rights can nominate the aseXML release they want to use for receiving B2B transactions and acknowledgements. AEMO applies an XML transform to change the schema release of user-selected transaction types, including their acknowledgements. Only the transaction types supported in both the currently supported and immediately superseded schema releases are available for selection, since any transaction type available in only one release of an aseXML schema is limited to that release.

Note: Versioning of the transaction types and the aseXML schema are different, although related. Each aseXML release has an unique identifier, being its namespace identifier (for example, xmlns="urn:aseXML:r25"). The part after the second colon in the namespace identifier is used as an abbreviation of the aseXML schema namespace identifier, since that is the part that changes from one release of aseXML schema to the next. By convention, transaction types use the abbreviation of the aseXML schema identifier when the transaction type definition last changed as the version identifier of that transaction type. This means the two identifiers are related, look the same, and both can be called a "version". So, the meaning of the abbreviation (such as "r25") depends upon its context, and it is possible to easily misinterpret the context due to the relationship. Similarly, the word "version" may refer to the transaction type version attribute or to the aseXML namespace identifier abbreviation, depending upon context. Processing XML files (including transforming) requires clear handling of the namespace, so the **B2B Transforms** menu has the aseXML schema releases as its primary context, and the transaction types are used to partition the transitioning process (if desired).

The ability to transition one B2B transaction group at a time allows progressive implementation of the changeover from one aseXML schema release to the next supported release in B2B.

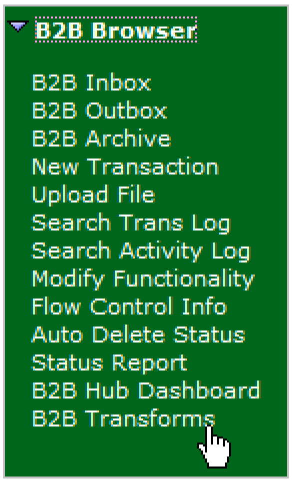
Making the transition from receiving in one release of aseXML to another requires reducing activity to zero, to achieve a clean changeover. Doing nothing for an extended time hampers the flow of B2B business between participants, so a time-limit is imposed for the transition. To prevent an excessive backlog of files to catch up, a maximum is set for the count of .ZIP files held back from processing during the transition before the changeover is either completed or cancelled.

During the transition time, a temporary holding directory in each participant's B2B folder, called "parkbox", holds the files sent by other participants. When the transition between aseXML releases completes, the files in the holding directory are copied or transformed into the outbox and deleted after processing.

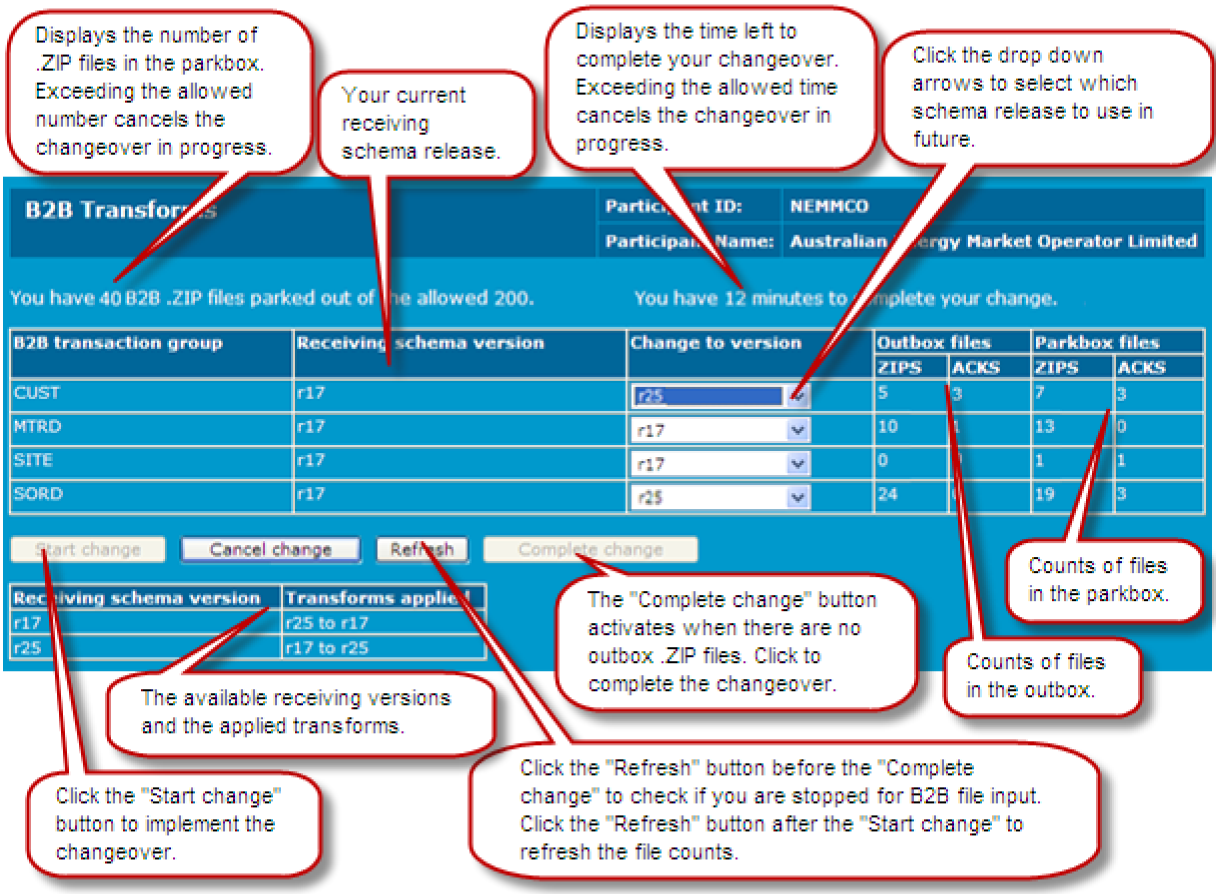
2.13.1 Nominating B2B transforms

To nominate a new B2B transform for one or more B2B transaction types (for both the transaction and its acknowledgement):

1. On the main menu, click **B2B Browser** and then click **B2B Transforms**.



2. The **B2B Transforms** screen displays (providing a B2B stopfile is not in place, see "B2B stopfile" on page 31).

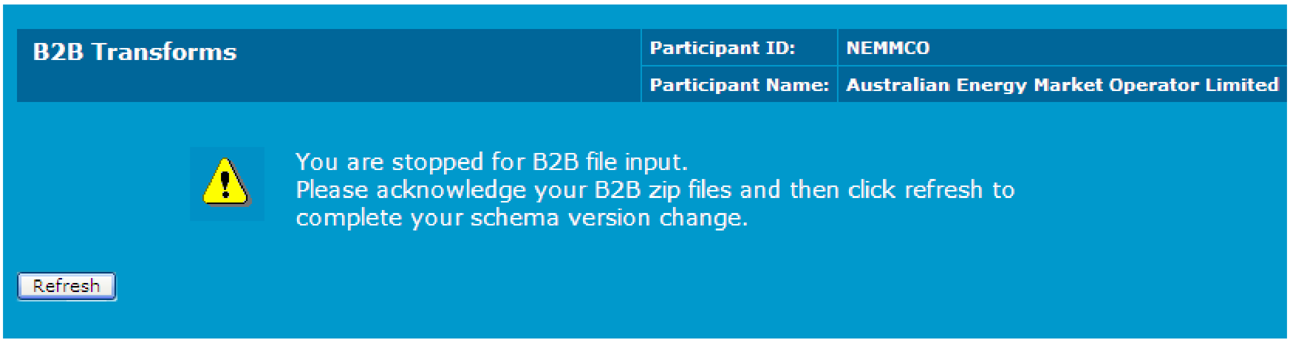


3. Click the drop-down arrows under **Change to version** and select the schema release you are going to handle for each required **B2B transaction group**. "Do not transform" means you can receive in either of the receiving schema releases shown at bottom left of the screen.
4. Click **Refresh** to check if you are stopped for B2B file input and then, if not stopped, click **Start change**.
5. Click **Refresh** again to refresh the **Outbox files** counts. **Complete change** activates when the sum of **Outbox files** counts is zero (0).
6. When **Complete change** activates, do one of the following:
   - To complete the transform, click **Complete change.**
   - To abandon the transform, click **Cancel change**. Abandoning the change is only possible if you have not already completed the change. If **Cancel change** is not activated (that is, is greyed out) then you have either, already completed the change, or the change is cancelled.

2.13.2 B2B stopfile

Clicking **B2B Transforms** checks for the presence of a B2B stopfile in your B2B outbox. If present, the message below displays. You must acknowledge the B2B .ZIP files in your outbox, which must be empty for the transition process to complete (see "Browsing the B2B outbox" on page 7).

Clicking **Refresh** in the **B2B Transforms** screen, checks if attempts to clear the stopfile are successful. If the stopfile is cleared, the **B2B Transforms** screen displays, see "Nominating B2B transforms" on page 29.



3 The B2B Responder

The **B2B Responder** menu is located on the main menu in the MSATS pre-production environment only. The B2B Responder forms part of the technical testing process for B2B Transactions.

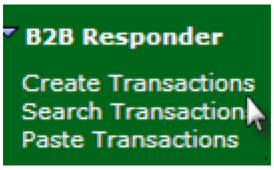
The B2B Responder is used by participants to specify which transactions they would like to receive as part of the initiative to test the operational interaction between participants' systems and the MSATS B2B Hub. Participants with appropriate MSATS access rights can specify what standard transactions they would like to receive. Standard transactions are transactions that have fixed values, preset in templates within the system.

In addition to creating transactions, participants can search and track the flow of messages between the Responder and themselves.

3.1 Creating a transaction

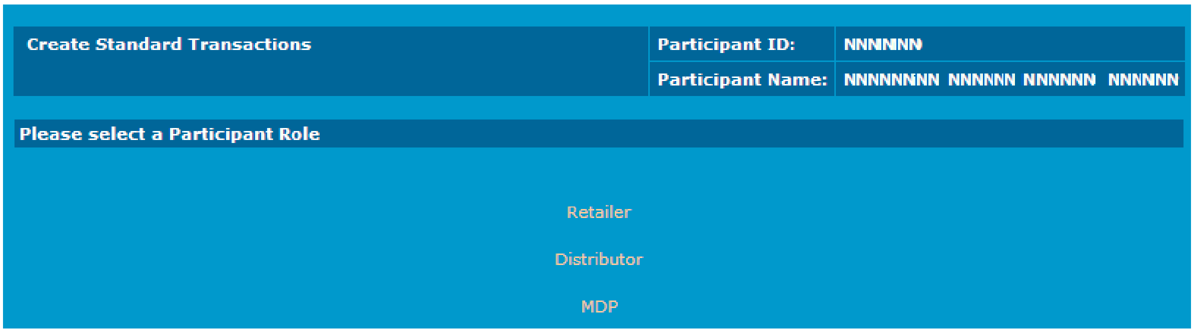
To create a transaction:

1. On the main menu, click **B2B Responder** and then click **Create Transactions**.



2. The **Create Standard Transaction** screen displays. Select a **Participant Role** (the example below explains the transactions available for the **Retailer** role).

Note: the roles displayed vary accord to your access rights.

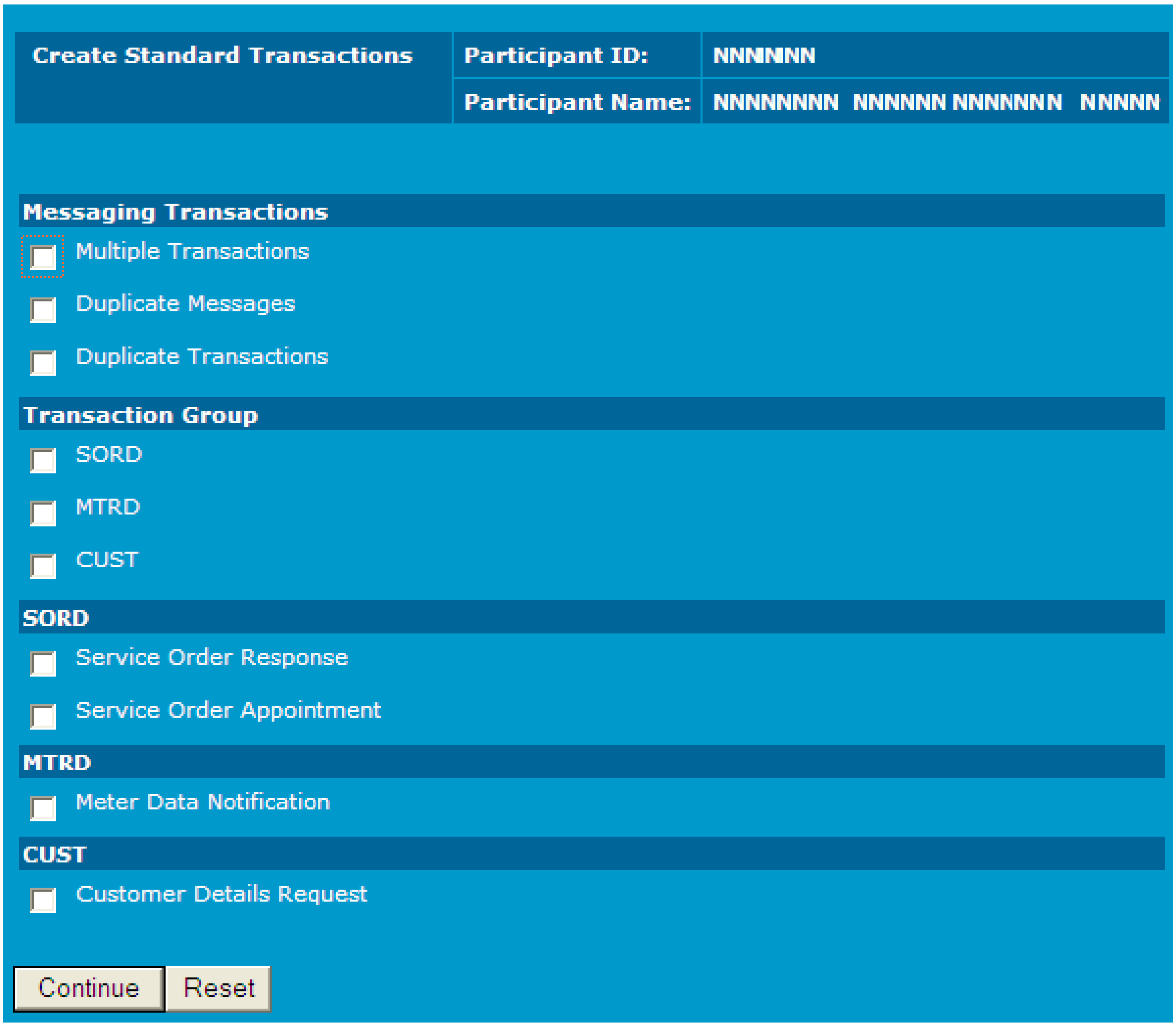


3. The available transactions display where you make your selections. The **Messaging Transactions** section has three options:

   - **Multiple Transactions** allows the creation of multiple transactions within one message.
   - **Duplicate Messages** – allows the creation of two exact same messages.
   - **Duplicate Transactions** – allows the creation of two exact same transactions, each in a different message.

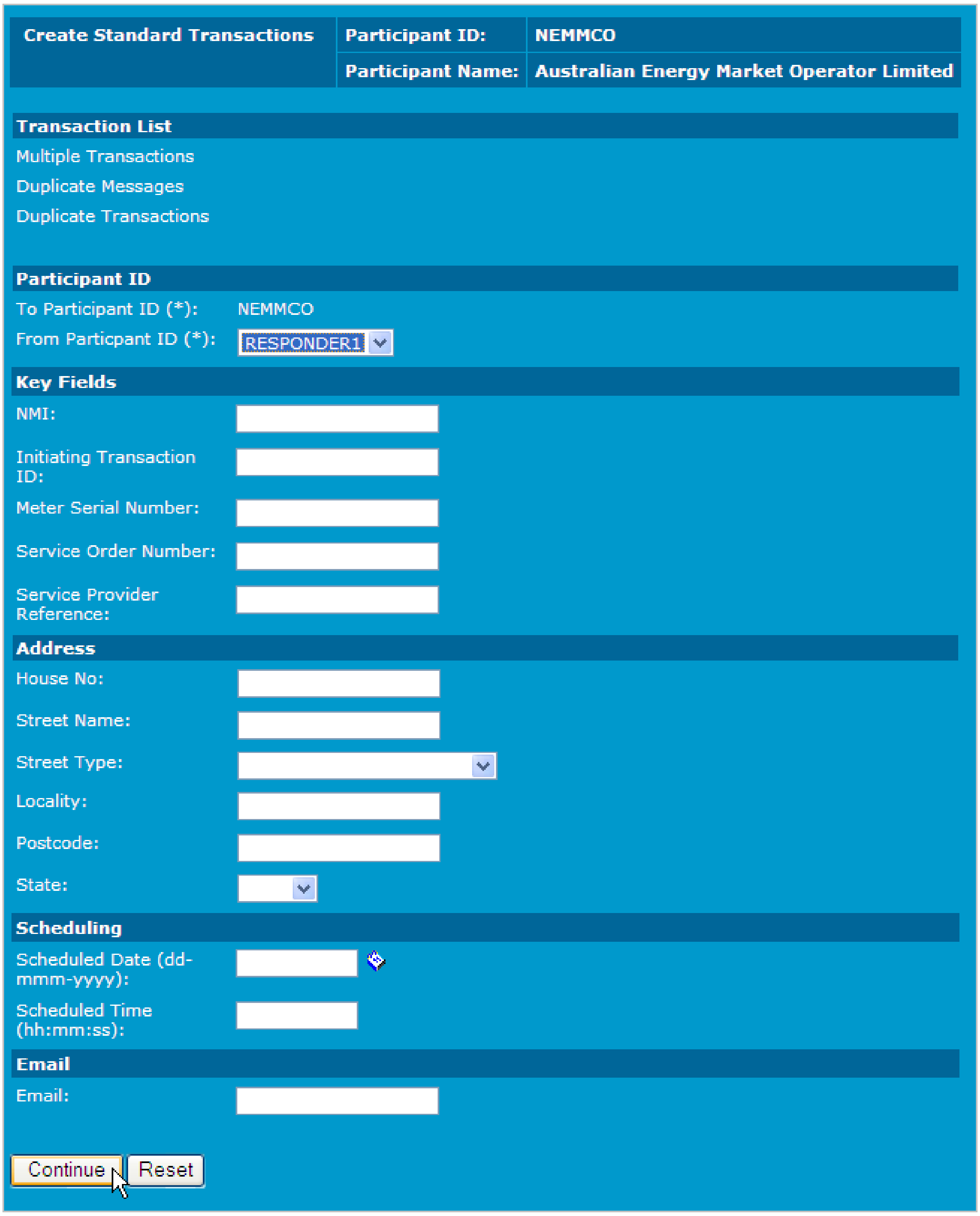
   The **Transaction Group** section contains options for each transaction group for example, if the **SORD** check box is selected, all transactions under the SORD section are automatically ticked. Alternatively, each transaction can be checked individually.

4. Make your selections and click **Continue**.



5. The **Create Standard Transaction** screen displays requiring additional information. Complete your required fields and click **Continue**.

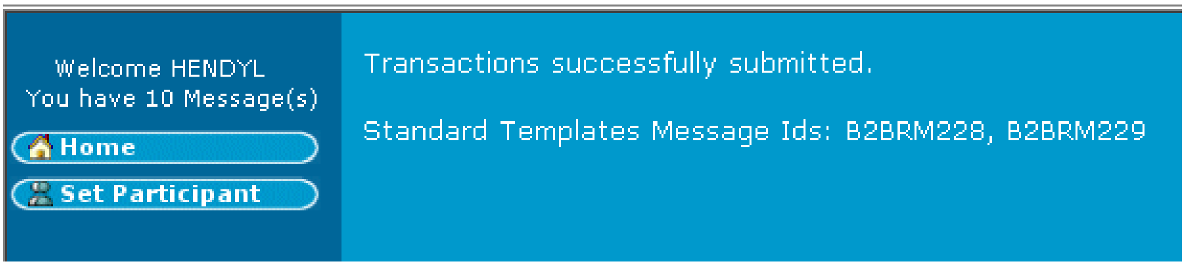
   For help understanding the fields see “Table 6: Create Standard Transaction fields” on page 36.


Create Standard Transactions
Participant ID:
NEMMCO
Participant Name:
Australian Energy Market Operator Limited
Transaction List
Multiple Transactions
Duplicate Messages
Duplicate Transactions
Participant ID
To Participant ID (*):
NEMMCO
From Particpant ID (*):
RESPONDER1
Key Fields
NMI:
Initiating Transaction ID:
Meter Serial Number:
Service Order Number:
Service Provider Reference:
Address
House No:
Street Name:
Street Type:
Locality:
Postcode:
State:
Scheduling
Scheduled Date (dd-mmm-yyyy):
Scheduled Time (hh:mm:ss):
Email
Email:
Continue
Reset

6. Review the details and click **Submit**.

STOP **Important Note:** only the appropriate fields are set for example, the **Initiating Transaction ID** is not set for an **Allocate NMI transaction**, but is set for a **Meter Data Notification**. The key fields do not apply to multiple and duplicate messages or transactions.

7. A confirmation message displays the **Message IDs**. All messages are created in the appropriate Responder local inbox and sent to the B2B Hub.



This table explains the Create Standard Transaction fields.

Field Name	Description
NMI	The NMI for the transaction
Initiating Transaction Id	The Initiating transaction.
Meter Serial Number	The meter serial number for the transaction.
SORD Order Number	The service order number for the transaction.
SORD Reference Number	The service order reference number for the transaction.
Address	The physical address for the transaction. All fields must be completed for the address to be included in the transaction. If a field is left blank then all the address fields are ignored.
Scheduled Date	The date the transactions are to be sent. If the scheduled date is in the past, the transaction(s) is sent immediately.
Scheduled Time	The time the transactions are to be sent. If the scheduled date and time is in the past, the transaction(s) is sent immediately.
Email	The email address to send a confirmation email. The field only supports the entry of one email address.

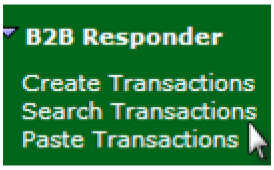
Table 6: Create Standard Transaction fields

3.2 Search Transaction

3.2.1 Searching for a transaction

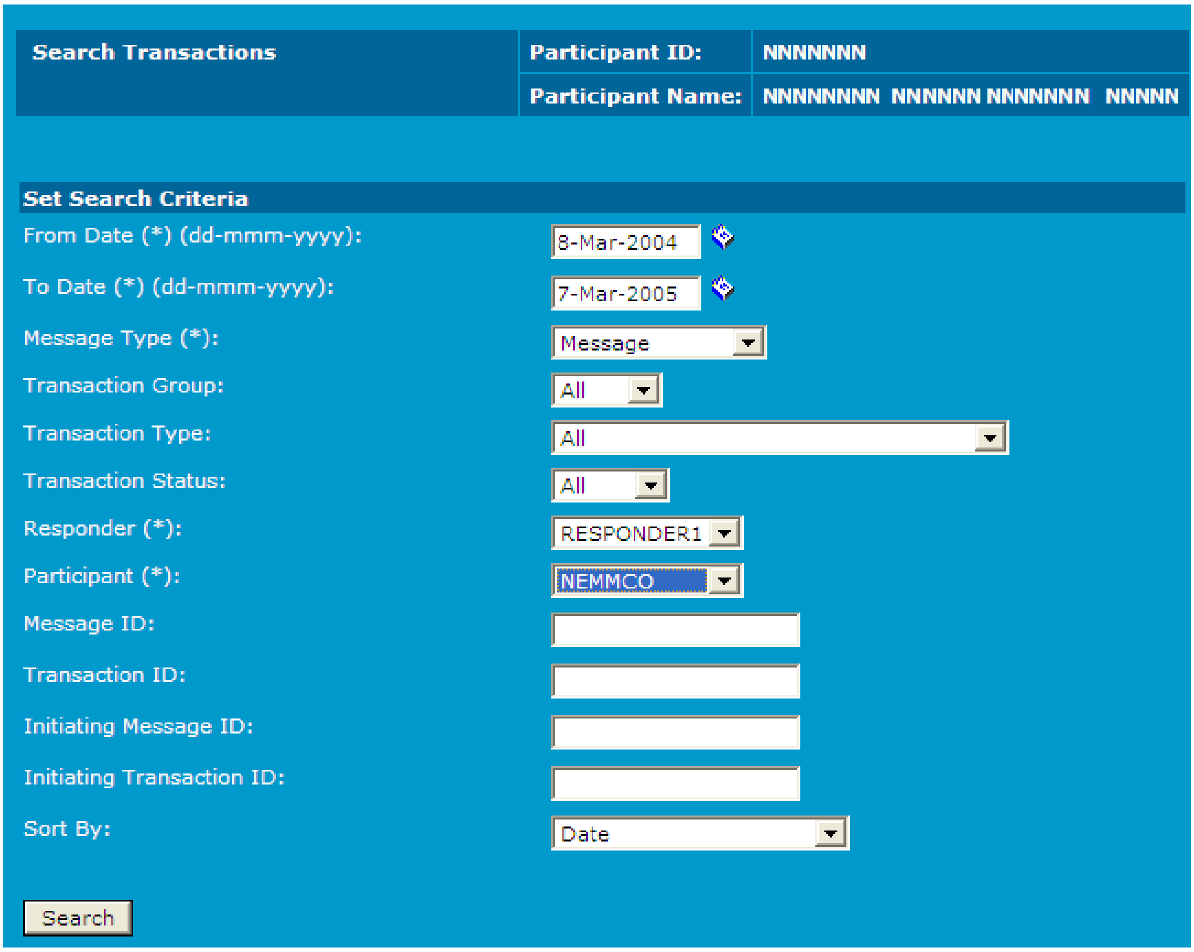
To search transactions:

1. On the main menu, click **B2B Responder** and then click **Search Transactions**.

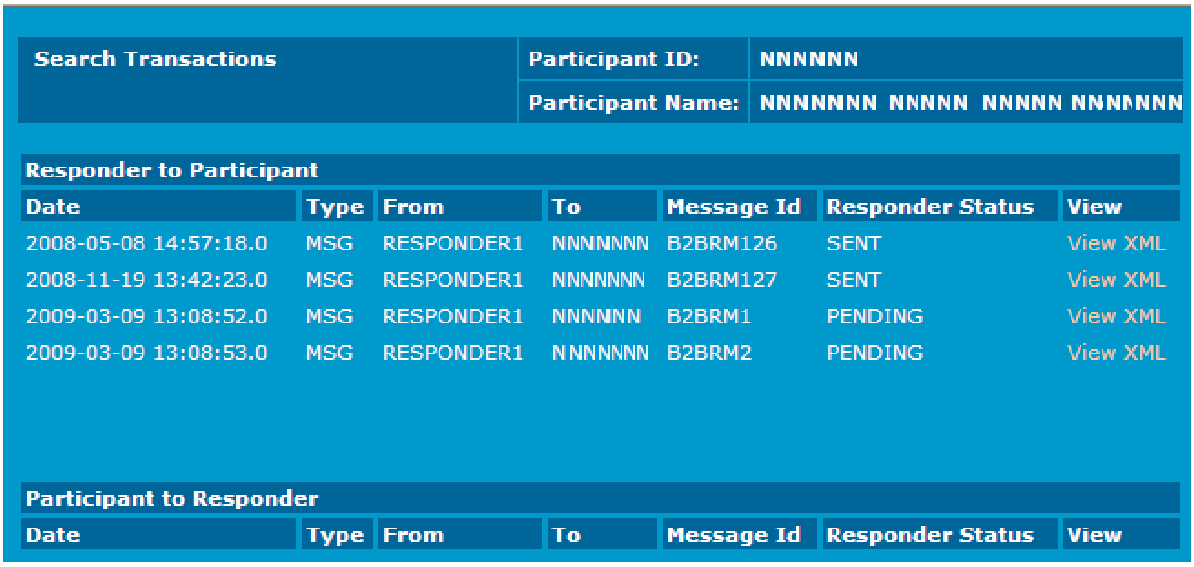


2. The **Search Transaction** screen displays. Complete the required and optional fields and click **Search**. For help understanding the fields see “Table 7: Search Transactions fields” on page 38.

Note: depending on the **Message Type**, leave the optional **Message ID**, **Transaction ID**, **Initiating Message ID**, and **Initiating Transaction ID** fields blank so all fields are searched.



3. The search results display. To view a transaction's XML file, click **View XML** in the **View** column.



4. The .XML transaction file displays.

Important Note: participants with the appropriate rights can search and track the flow of messages between a responder and other participants.

This table explains the Search Transactions fields.

Table 7: Search Transactions fields

Field Name	Description
From Date *	The date to search from must be greater than or equal to the current date.
To Date *	The date to search to, must be less than or equal to the current date.
Message Type *	There are 4 message types. Message, Transaction, Transaction Ack, Message Ack.
Transaction Group	There are four groups: SORD, SITE, CUST and MTRD.
Transaction Type	The type of transaction.
Transaction Status	Rejected, Partial or Accepted
Responder *	The responder instance
Participant *	The Participant
Message ID	Message ID
Transaction ID	Transaction ID
Initiating Message ID	Initiating Message ID
Initiating Transaction ID	Initiating Transaction ID
Sort By	The field to order the results by

3.3 Paste Transactions

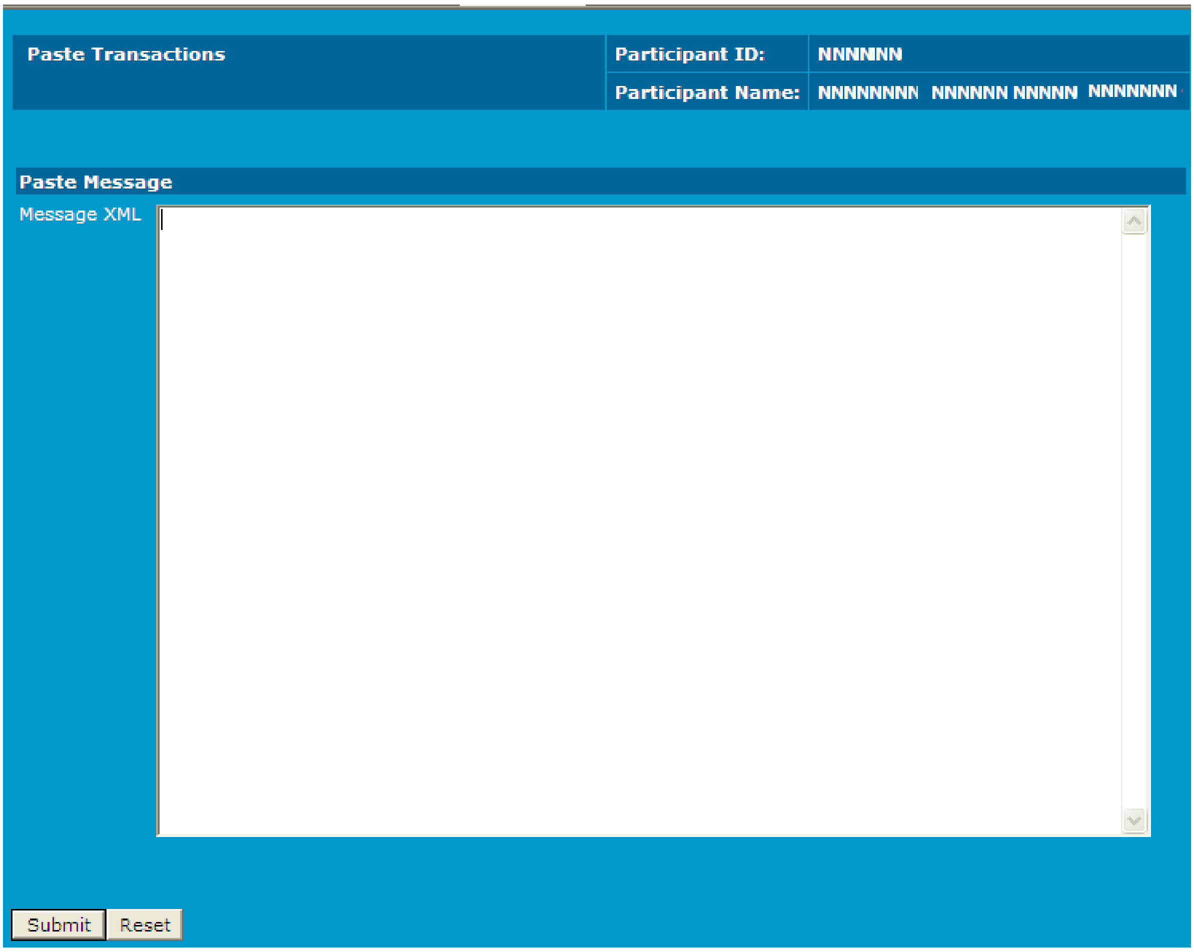
Participants with the appropriate MSATS access can paste XML transaction messages in the B2B Responder. The paste functionality supports the pasting of Messages (i.e. a message containing transactions) and Acknowledgements (both message and transaction acknowledgments).

3.3.1 Pasting transactions

To paste XML messages:

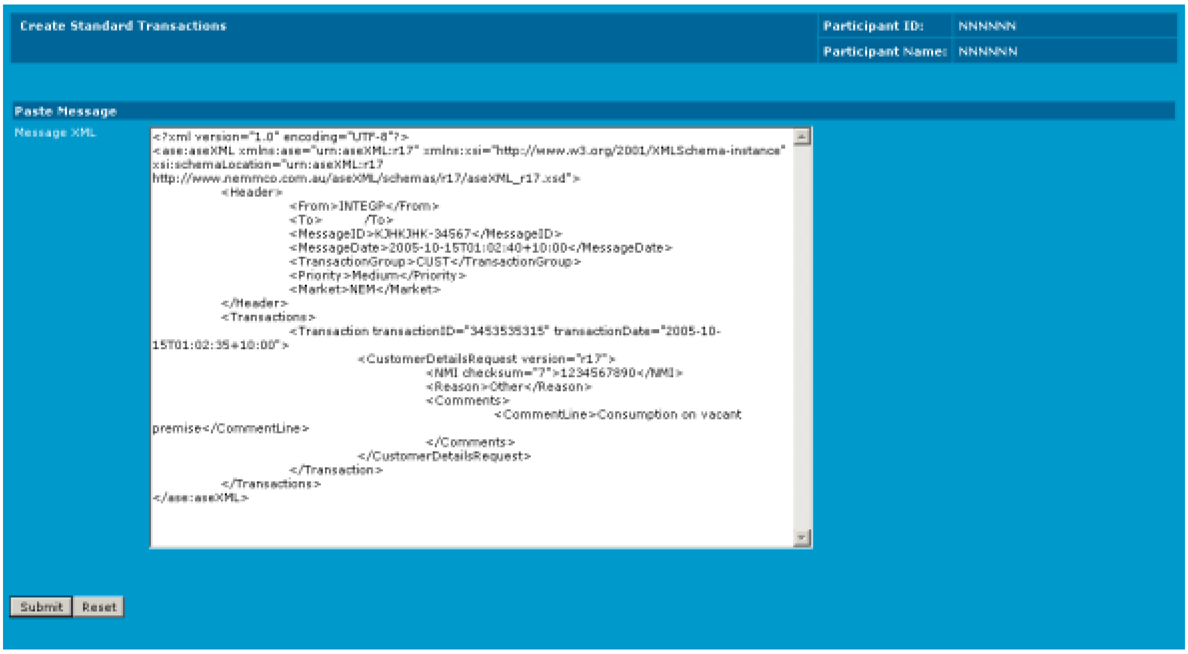
1. On the main menu, click **B2B Responder** and then click **Paste Transactions**.

2. The **Paste Transaction** screen displays where you can paste an XML message.

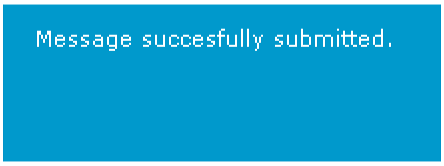


3. Paste your XML message into the textbox and click **Submit**.

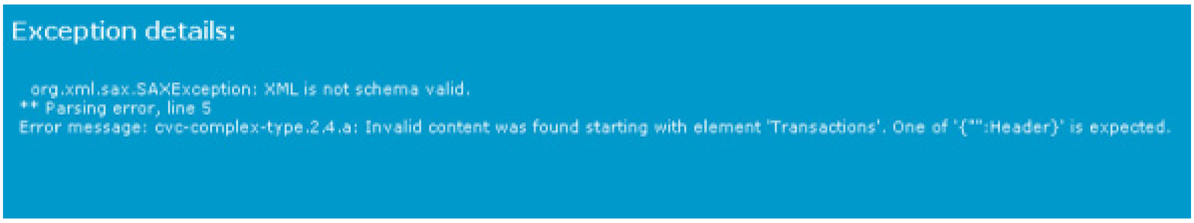
Important Note: the paste functionality only allows for the pasting of XML messages that have a valid schema. It does not support the pasting of standalone events or message ACKS. If the message does not contain an appropriate Responder instance in the **<From>** tag, the message is stored in the database but is not sent to the participant.



4. A message displays confirming the message was submitted successfully.



Note: if the message is not schema valid, for example, the header is missing, an exception message displays. The exception details explain that the content is not XML valid, and that a header element is expected.



4 Advanced Searching

This section provides information on how to use regular expressions in searches. A regular expression is a string of characters that tells the search function which string (or strings) to look for. Following is an explanation of the format of regular expressions.

If you are familiar with Perl, you already know the syntax. For those familiar with Unix, you should know that there are subtle differences between Perl's regular expressions and Unix regular expressions.

4.1 SQL patterns (Transaction Management)

You can use SQL criteria in your search transactions, which means that fields on the **Search Transaction Log** screen allow the field's value to map directly to an SQL query. For example, when the % value is entered for the Message Id, it has the effect of executing the query using an SQL construct such as " where message Id like '%'".

The following table shows use of the common SQL patterns where x = your entered value.

SQL Pattern	Description
%	This is the Wildcard character that matches any word. Example: If% is entered for message Id, it has the effect of matching any message id
xxxx%	This is a type of substring matching. It matches the starting value and any text after that value. Example: If B2B%is entered for message Id, it matches all messages with the message id starting with the word B2B.
%xxxx%	This is another type of substring matching. It fetches all text matching the value in the middle of the %. Example: If %BB% is entered for message Id, it matches any message Id that contains the word BB in the middle.
%xxxx	This matches text that has the value after the %. Example: If %BB is entered for the message Id, it matches any message Id that ends with the word BB
_xx	The underscore matches any single character. If _value is entered, it matches any text starting with the underscore and followed by the text value. Example: If _abc is entered, it matches xabc, eabc, etc.

4.2 Simple regular expressions

In its simplest form, a regular expression is just a word or phrase to search for. For example, sitemnemmcob2bb1\.zip matches the exact text "sitemnemmcob2bb1.zip" but nothing else.

Note: the "." (the period character) is a metacharacter that matches any character; so to match a ".", use "\.". For example to search for "sitemnemmcob2bb1.zip", enter:

- "sitemnemmcob2bb1\.zip".

Spaces may be part of the regular expression, even when they are not intended, so be careful the regular expression does not have any trailing spaces unless they are part of the string to searched for.

4.3 Metacharacters

Some characters have a special meaning to the search function. These characters are called metacharacters. Although they may seem confusing at first, they add a great deal of flexibility and convenience.

4.3.1 Period

The period (.) is a commonly used metacharacter. It matches exactly one character for example, the regular expression “site.nemmcob2bb1\.zip” matches the following:

- sitemnemmcob2bb1.zip
- sitehnemmcob2bb1.zip
- sitelnemmcob2bb1.zip

Note: the period matches exactly one character-- it does not match a string of characters, nor will it match the null string.

4.3.2 Backslash

The backslash (\) is also a metacharacter, it is requires to search for a string that contains a period. The backslash is used to indicate the character immediately to its right is to be taken literally. For example, to search for the string "sitemnemmcob2bb1.zip", enter:

- sitemnemmcob2bb1\.zip

This is called "quoting". The period in the regular expression above has been quoted. In general, whenever the backslash is placed before a metacharacter, the search function treats the metacharacter literally rather than invoking its special meaning.

Note: unfortunately, the backslash is used for other things besides quoting metacharacters. Many "normal" characters take on special meanings when preceded by a backslash. The rule of thumb is, quoting a metacharacter turns it into a normal character, and quoting a normal character may turn it into a metacharacter.

4.3.3 Question mark

The question mark indicates the character immediately preceding it either zero times or one time for example, “sitemnemmcob2bb1?\.zip” matches either:

- sitemnemmcob2bb.zip
- sitemnemmcob2bb1.zip

4.3.4 Star

Another metacharacter is the star (*), it indicates the character immediately to its left may be repeated any number of times, including zero. For example, “sitemnemmcob2bb12*3\.zip” matches:

- sitemnemmcob2bb13.zip
- sitemnemmcob2bb123.zip
- sitemnemmcob2bb1223.zip
- sitemnemmcob2bb1222222223.zip
- any string that starts with "sitemnemmcob2bb1" and is followed by a sequence of "2"'s, and ends with a "3.zip".

4.3.5 Plus

The plus (+) metacharacter indicates the character immediately preceding it may be repeated one or more times. It is just like the star metacharacter, except it doesn't match the null string. For example, “sitemnemmcob2bb12+3\.zip” matches "sitemnemmcob2bb13.zip ", but it **does not** match:

- sitemnemmcob2bb123.zip
- sitemnemmcob2bb1223.zip
- sitemnemmcob2bb1222222223.zip etc.

4.3.6 Combinations of metacharacters

Metacharacters can be combined. A common combination includes the period and the star metacharacters, with the star immediately following the period. This is used to match an arbitrary string of any length, including the null string. For example, “site.*” matches:

- all strings that start with “site” including “sitemnemmcob2bb12223.zip” and “sitemnemmcob2bb123.ACK”.

4.4 Other characters

Earlier it was mentioned that the backslash can turn ordinary characters into metacharacters, as well as the other way around. An example of this is, the digit metacharacter, which is invoked by following a backslash with a lower-case "d", like this: "\d". The "d" must be lower case (because there is another metacharacter, the non-digit metacharacter, which uses the uppercase "D"). The digit metacharacter matches exactly one digit; that is, exactly one occurrence of "0", "1", "2", "3", "4", "5", "6", "7", "8" or "9". For example, the regular expression “sitemnemmcob2bb\d\.zip” matches:

- sitemnemmcob2bb1.zip
- sitemnemmcob2bb2.zip etc.

It does not match for example “sitemnemmcob2bba.zip”.

If the digit metacharacter is combined with the other metacharacters; for example, “sitemnemmcob2bb\d+\.zip” matches:

- any string starting with "sitemnemmcob2bb", followed by a string of numbers, followed by a ".zip". (Note: the plus is used, and so "sitemnemmcob2bb.zip" is not matched.)

There is another metacharacter, the non-digit metacharacter, which uses the uppercase "D". The non-digit metacharacter looks like "\D" and matches any character except a digit. For example “sitemnemmcob2bb\D\.zip” matches:

- sitemnemmcob2bba.zip
- sitemnemmcob2bbb.zip
- sitemnemmcob2bbc.zip

It **does not** match "sitemnemmcob2bb1.zip", "sitemnemmcob2bb2.zip" or "sitemnemmcob2bb3.zip".

In changing the "d" from lower-case to upper-case, the meaning of the digit metacharacter is reversed. This holds true for most other metacharacters of the format backslash-letter.

There are three other metacharacters in the backslash-letter format. The first is the word metacharacter, which matches exactly one letter, one number, or the underscore character (_). It is written as "\w". It's opposite, "\W", matches any one character except a letter, a number or the underscore. For example, “\w+\.zip” matches:

- all strings of at least length 1 and contains only letters, numbers and underscores, followed by “.zip”.

The whitespace metacharacter matches exactly one character of whitespace. (Whitespace is defined as spaces, tabs, newlines, or any character which would not use ink if printed on a printer.)

The whitespace metacharacter looks like this: "\s". Its opposite, which matches any character that is not whitespace, looks like this: "\S".

Note: the underscore (_) is considered a "word" character.

There are three other metacharacters you can use. The first is the braces metacharacter. This metacharacter follows a normal character and contains two number separated by a comma (,) and surrounded by braces ({}). It is like the star metacharacter, except the length of the string it matches must be within the minimum and maximum length specified by the two numbers in braces. For example, “sitemnemmcob2bb1{3,5}\.zip” matches:

- sitemnemmcob2bb111.zip
- sitemnemmcob2bb1111.zip
- sitemnemmcob2bb11111.zip

The alternative metacharacter is represented by a vertical bar (|). It indicates an either/or behaviour by separating two or more possible choices. For example,”(site|mtrd).*” matches:

- any string beginning with the strings "site" or "mtrd".

The last metacharacter is the brackets metacharacter. The bracket metacharacter matches one occurrence of any character inside the brackets ([]). For example, “site[lmh]nemmcob2bb\.zip” matches:

- sitelnemmcob2bb.zip
- sitemnemmcob2bb.zip
- sitehnemmcob2bb.zip

Ranges of characters can be used by using the dash (-) within the brackets. For example, sitemnemmcob2bb[1-4]\.zip matches:

- sitemnemmcob2bb1.zip
- sitemnemmcob2bb2.zip
- sitemnemmcob2bb3.zip
- sitemnemmcob2bb4.zip.

The bracket metacharacter can also be inverted by placing a caret (^) immediately after the left bracket. For example, sitemnemmcob2bb[^02468]\.zip matches:

- any string starting with "sitemnemmcob2bb" ending with anything except an even number followed by “.zip”.

Note: within brackets, ordinary quoting rules do not apply and other metacharacters are not available. The only characters that can be quoted in brackets are "[", "]", and "\".

4.5 Forbidden characters

Due to the way the search function works, the following metacharacters should not be used, even though they are valid Perl metacharacters:

- ^ (allowed within brackets)
- $ (allowed within brackets)
- \n
- \r
- \t
- \f
- \b

The following are allowed within brackets ():

- \1, \2 ... \9
- \B
- :
- !

Note: to search for parentheses within text outside of brackets, quote the parentheses.

4.6 Things to remember

The following information should be noted about regular expressions:

The search is case insensitive, for example:

- SITEmnemmcob2bb\.zip
- Sitemnemmcob2bb\.zip
- sitemnemmcob2bb\.zip

All search for the same text therefore; there is no need to capitalise.

Note: metacharacters must still have the proper case. This is especially important for metacharacters whose case determines whether their meaning is reversed or not.

Outside of the brackets metacharacter, the parentheses must be quoted with brackets and braces to get the search function to take them literally.

4.7 Common expression examples

Expression	Description
sitemnemmcob2bb12345\.zip	Matches exactly “sitemnemmcob2bb12345.zip”
.*	Matches all strings
(site|mtrd).*zip	Matches all zip extensions that starts with “site” or “mtrd”
.*aemo.*	Matches all text that contains “aemo”
.*aemo.*zip	Matches all zip extensions that contain “aemo”

5 Glossary of B2B terms

The following table contains a glossary of terms used within the B2B system and its related documentation.

Term	Definition
Accept	As a general term, this means the Recipient of the Message or Transaction has agreed to process the Message or Transaction further. When used in the context of a Transaction, indicates that the Recipient of the Transaction has accepted the Transaction using a BusinessAcceptance/Rejection with an ase:Status of "Accept".
Access Requirements	Specific Site access requirements associated with the conduct of a Service Order. Refer B2B Procedures: Customer & Site Details Notification Process and B2B Procedures: Service Orders Process.
Accredited Service Provider	Electrically qualified personnel accredited to perform certain electrical works by the NSW or ACT Government.
Acknowledgement	Refer to B2B Acknowledgement.
Acknowledgement File	A file containing a Message Acknowledgement. Refer B2B Procedures: Technical Delivery Specification.
AEMO	Australian Electricity Market Operator.
Appointment	An agreement between the end-use customer (or their agent), Service Provider and Retailer to perform requested work at a specific time. Refer to B2B Procedures: Service Orders Process.
Approved Version of the Schema	A version of the aseXML schema approved by the aseXML Working Group, or its successors. Refer B2B Procedures: Technical Delivery Specification.
aseXML	A Standard for Energy Transactions in XML. A set of schemas and usage guidelines that define how data should be exchanged under FRC in the gas and electricity industries in Australia.
aseXML Document	Refer to aseXML Message. Refer B2B Procedures: Technical Delivery Specification.
aseXML Message	A Message compliant with an aseXML schema.
aseXML Message Handler	Software that manages aseXML Message interactions. Refer B2B Procedures: Technical Delivery Specification.
aseXML Schema	Specification used to describe the structure of an aseXML message.
aseXML Transaction	Refer to Transaction.
aseXML Wrapped CSV Transaction	An aseXML Transaction that includes CSV formatted data. Refer B2B Procedures: Technical Delivery Specification.
ASP	Refer to Accredited Service Provider.
B2B	Business-to-Business. Generic term used to refer to defined business-to-business interactions between participants; excludes interactions between a Participant and market systems such as MSATS.
B2B Acknowledgement	A generic term used to refer to an aseXML message or Transaction Acknowledgement, specifically within the context of a B2B interaction. A B2B Acknowledgement is the physical interpretation of a Business Signal. Often referred to as being positive (indicating correctness of the associated file) or negative (indicating an error with the associated file).
B2B Browser Application	An application supplied by AEMO for participants to manage their MSATS B2B Handler inbox and outbox, and support the creation of a specified set of B2B Transactions.

Term	Definition
B2B Contacts List	A list of contact details published by participants to be used for the purpose of contact between participants to support B2B communications pursuant to the B2B Procedures.
B2B File	Refer to B2B Message and B2B Procedures: Technical Delivery Specification.
B2B Infrastructure	Refer to National B2B Infrastructure.
B2B Initiator	Participant who initiates a B2B Interaction.
B2B Interaction	A complete set of related exchanges of B2B Messages between two participants involving: Business Document Business Receipt Business Acceptance/Rejection
B2B Message	A B2B Transaction or Acknowledgement sent between a B2B Initiator and a B2B Recipient.
B2B Process	A defined business process of which a B2B Interaction is a key component. Identified B2B Processes are: Service Orders Customer & Site Details Meter Data
B2B Recipient	The receiving Participant of a B2B Transaction or Acknowledgement (sent by a B2B Initiator). As a convention, the Initiator of a B2B Interaction is the Participant who sends the Business Document.
B2B Standard	A collection of B2B Procedures and supporting documentation that collectively form a coherent set of requirements (an industry “B2B Standard”). The components of a B2B Standard are described by the B2B Standards Framework.
B2B Standards Framework	Describes the components of a B2B Standard.
B2B Technical Delivery Specification	TheB2B Procedures: Technical Delivery Specification. Defines the technical requirements for communicating B2B messages between participants using the MSATS B2B Handler or contingency systems.
B2B Transaction	See Transaction.
B2B Transaction Types	The Transactions defined in the B2B Procedures. Refer B2B Procedures: Technical Delivery Specification.
Build Pack	A document that details the specific aseXML interfaces to be used in the implementation of B2B transactions.
Business Acceptance	Specific instance of a Business Acceptance/Rejection Business Signal indicating acceptance.
Business Acceptance/Rejection	A Business Signal indicating whether a Business Document has been accepted or rejected based on the application of business rules. Refer to each B2B Procedure for further details regarding the use of this Transaction.
Business Day	As defined in the National Electricity Rules. [A day other than a Saturday, or Sunday or a day which is lawfully observed as a national public holiday on the same day in each of the participating jurisdictions.
Business Document	The term Business Document is used to refer to the key.
Business Receipt	A Business Receipt is a Business Signal that indicates that a Business Document has been received and its contents indicates if it is readable by the recipient.

Term	Definition
Business Rejection	Specific instance of a Business Acceptance/Rejection Business Signal indicating a rejection.
Business Signal	An acknowledgement generated by a B2B Recipient on processing a Business Document to indicate whether: The Business Document has been received and is readable (this Business Signal is called a Business Receipt). The Business Document does or does not pass business rule validation (this Business Signal is called a Business Acceptance/Rejection).
CATS	The Consumer Administration and Transfer Solution.
CATS Participant	As defined in the MSATS Procedures: CATS Procedures. Any organisation that has a defined role in the MSATS system – see role.
Close of Business	5.00pm at the location of the Site on a Business Day.
Registered Participant	As defined in the National Electricity Rules.
Connection Date	The date the Connection Point is connected to the electricity network, refer B2B Procedure: Service Order Process.
Connection Point	As defined in the National Electricity Rules.
Current FRMP	As defined in the MSATS Procedures, CATS Procedures The Retailer that is identified on the current NMI master record.
Current LNSP	As defined in the MSATS Procedures, CATS Procedures The LNSP that is identified on the current NMI master record.
Current MDP	As defined in the MSATS Procedures, CATS Procedures The MDP that is identified on the current NMI master record.
Current Retailer	Refer to Current FRMP.
B2B Procedures	Technical Guidelines for B2B Procedures.
Current RP	As defined in the MSATS Procedures, CATS Procedures The RP that is identified on the current NMI master record.
Customer and Site Details	The elements of data identified in any of the Notification transactions detailed in the B2B Procedures: Customer and Site Details Notification Process. Refer B2B Procedures: Customer and Site Details Notification Process.
Customer and Site Details Changes	Includes new, amended, additional, or removal of one or more elements of data identified in any of the Notification transaction detailed in the B2B Procedures: Customer and Site Details Notification Process. Refer B2B Procedures: Customer and Site Details Notification Process.
Customer Details	The elements of data identified in the CustomerDetailsNotification transaction detailed in the B2B Procedures: Customer and Site Details Notification Process. Refer B2B Procedures: Customer and Site Details Notification Process
Customer Details Changes	Includes new, amended, additional, or removal of one or more elements of data identified in any of the CustomerDetailsNotification transaction detailed in the B2B Procedures: Customer and Site Details Notification Process. Refer B2B Procedures: Customer and Site Details Notification Process
De-energised Site	A Connection Point that is not electrically connected to the network. Refer B2B Procedures: Service Order Process.
Disconnecting Officer	The Service Providers personnel performing a de-energisation Service Order. Refer B2B Procedures: Service Order Process.
Distributor	The term DNSP is used in favour of “Distributor” in the B2B Procedures.
DNSP	Distribution Network Service Provider. Also know as Network, Distribution Business, Distributor.

Term	Definition
ebXML	Electronic Business XML. An internationally developed set of protocols for using XML. ebXML is a wide ranging standard that covers all layers of messaging. VicGas FRC project has adopted only the transport, routing and packaging (TRP) recommendations of ebXML, and is using aseXML to define standards for message content.
End-use Customer	The person consuming the electricity at the Connection Point, refer B2B Procedures: Service Order Process.
Energised Site	A Connection Point that is electrically connected to the network, refer B2B Procedures: Service Order Process.
Event Code	A specific code used to refer to a Business Event defined in a B2B Procedure; refer B2B Procedures: Technical Delivery Specification.
FAQs	Frequently Asked Questions. Used to provide supplementary answers to questions raised regarding the interpretation of the B2B Procedures.
File Limit	Refers to the number of files in an inbox or outbox at which point the B2B Handler will generate a flow control file. Refer B2B Procedures: Technical Delivery Specification.
File Transfer and Acknowledgement Protocol	See MSATS File Exchange Protocol. Refer B2B Procedures: Technical Delivery Specification.
FRC	Full Retail Contestability. The state of the energy market when all customers can be transferred between retailers.
FRMP	Financially Responsible Market Participant. As defined in the National Electricity Rules. The current retailer responsible for energy consumption at a connection point.
Fully Tagged aseXML Transactions	An aseXML Transaction not containing a CSV payload; Refer B2B Procedures: Technical Delivery Specification.
Hazard	A health and / or safety risk at a Site. Refer B2B Procedures: Customer and Site Details Notification Process and B2B Procedures: Service Orders Process.
Hub Acknowledgement	A Message Acknowledgement generated by the B2B Handler. Refer B2B Procedures: Technical Delivery Specification.
Inbox	Refer to MSATS B2B Handler inbox.
Initiating Message	The first Message in a series of related Messages. Refer B2B Procedures: Technical Delivery Specification.
Initiator	See B2B Initiator.
Life Support	An occupant of the premises relies on electricity for operation of life support equipment. The definition of life support equipment may vary between jurisdictions.
LNSP	As defined in the National Electricity Rules. Includes both transmission and distribution businesses.
Local Retailer	As defined in the National Electricity Rules.
MDA	Meter Data Agent responsible for providing interval meter data. Note that the term MDP is used generically in the B2B procedures and that use of the term MDA refers to specific obligations related to interval meter data.
MDFF Data	The data contained in an electronic file formatted according to the Meter Data File Format specification.
MDFF Specification	Meter Data File Format specification. As specified in the AEMO document ME_MA0001vxxx.

Term	Definition
MDP	Meter Data Provider. Used as a generic term to refer to the role of providing basic or interval meter data.
Message	See B2B Message.
Message Acknowledgement	An aseXML realisation of a Business Receipt.
Meter Data Notification Process	The provision of Metering Data to participants as part of the MDPs normal production process obligations. Refer to the B2B Procedures: Meter Data for details.
Meter Data Process	The overall process for the provision of Metering Data to a Participant by an MDP, requests by the appropriate Participant for to provision of “missing” Metering Data from a MDP, or the querying of the validity of any Metering Data which has been supplied by an MDP. Has 3 component processes: Meter Data Notification Process, Provide Meter Data Process, and Meter Data Verification Process. Refer to the B2B Procedures: Meter Data for details.
Meter Data Verification Process	The process by which a Participant queries the Metering Data received in a Meter Data Notification from an MDP. The process also allows a Participant to provide an alternative Substitution that may be considered by the MDP. Refer to the B2B Procedures: Meter Data for details.
Metering Data	As defined in the National Electricity Rules.
Metering Data Providers Service Level Requirements	The Service Level Requirements detail the requirements/deliverables on which AEMO and the Metering Provider have agreed that the Metering Provider will provide Metering Data collection services for metering installations and other related services in accordance with the National Electricity Rules, relevant Metrology Procedures and market requirements.
Metering Installation	As defined in the National Electricity Rules.
Metrology Procedure	As defined in the National Electricity Rules.
MPB	Meter Provider Type B.
MSATS	Market Settlement and Transfer System.
MSATS B2B Handler	An extension of the MSATS batch handler to manage B2B transactions. As described in the B2B Procedures: Technical Delivery Specification.
MSATS B2B Handler Inbox	The file directory where participants publish B2B messages and acknowledgements for other participants. As described in the B2B Procedures: Technical Delivery Specification.
MSATS B2B Handler Outbox	The file directory where participants receive B2B messages and acknowledgements from other participants. As described in the B2B Procedures: Technical Delivery Specification.
MSATS B2B Procedure	Refer to B2B Procedure.
MSATS File Exchange Protocol	The file exchange protocol used by MSATS.
MSATS Notification	As defined in MSATS Procedures: CATS Procedure. Refer B2B Procedures: Service Orders Process.

Term	Definition
National B2B Infrastructure	Infrastructure (software and hardware) that physically enables B2B communication between participants. This includes, but is not necessarily limited to: MSATS B2B Handler (software and hardware) MSATS B2B Gateways Communications between participants and MSATS B2B Gateways Participant Gateways
NEM	National Electricity Market.
New FRMP	The FRMP that is identified on a change request prior to the change request being completed.
New MDP	The MDP that is identified on a change request prior to the change request being completed.
New Retailer	Following the completion of a transfer of a NMI, the Retailer that is the current FRMP.
New RP	As defined in the MSATS Procedures: CATS Procedures. The Responsible Person (RP) identified on a change request prior to the change request being completed.
Next Scheduled Read Date	As defined in the MSATS Procedures: CATS Procedures.
NMI	National Metering Identifier as defined in the National Electricity Rules.
NMI checksum	A number, 1 digit in length, which is used to validate that a NMI supplied to the MSATS system is a valid NMI.
NMI classification	A code that identifies the nature of the flow of electricity at a connection point, e.g. Generator, interconnector. Retail connection points are classified as small, or large, depending on the volume of energy consumed. Sample and Eprofile are used to classify loads used for profiling under certain conditions.
Non-technical B2B Procedures	The B2B Procedures other than the B2B Procedures: Technical Guidelines for B2B Procedures and the B2B Procedures: Technical Delivery Specification.
Notification	A Transaction that does not have a corresponding reply Transaction. See Notification Business Transaction Pattern.
Notification Business Transaction Pattern	A B2B Interaction characterised by one Participant sending a Notification transaction (e.g. CustomerDetailsNotification) to another Participant without a corresponding reply Transaction.
Old Retailer	Any previous FRMP for a NMI.
One Way Nofification	A B2B Procedure that defines the standard processes and transaction data requirements for one way messaging transactions between market participants. It provides a process where participants can send messages to other participants for multiple NMIs in a single transaction.
Outbox	Refer to MSATS B2B Handler outbox.
Participant	Local Retailers, Market Customers and Distribution Network Service Providers.
Participant B2B System	The computer hardware and software used by a Participant to create, send, receive and process B2B Messages.
Participant Directories	Participant inbox and outbox used by the B2B Handler. Refer B2B Procedures: Technical Delivery Specification
Participant Gateways	Hardware and software used by a Participant to send and receive B2B files. Refer B2B Procedures: Technical Delivery Specification.

Term	Definition
Participant Relationship	Where a Participant has a Role recorded in MSATS with respect to a Connection Point.
Previous Retailer	Refer to Old Retailer.
Prospective Retailer	Retailer who may initiate a defined B2B process on the basis that they are in the process of applying for responsibility of a given site (using the Customer Transfer process through MSATS).
Provide Meter Data Process	The provision by an MDP of Metering Data specifically requested by a Participant. Refer to the Meter Data B2B Procedure for details.
Put Process	The FTP „Put" command, used to copy files between Participant inboxes and outboxes. Refer B2B Procedures: Technical Delivery Specification.
Recipient	Refer to B2B Recipient.
Reconciliation Process	The provision of the Customer Details held by the FRMP for all of their current customers in the DNSPs area at the time of the data extract. Refer to the Customer and Site Details B2B Procedure for further details.
Regulated Timeframe	The Timing Requirement imposed on a Service Provider by the relevant jurisdictional instrument for the conduct of the regulated service.
Reject	When used in the context of a Transaction, indicates that the Recipient of the Transaction has rejected the Transaction using a Business Acceptance/Rejection with an ase: Status of "Reject". Refer to all B2B Procedures.
Request and Response Transactions	Refer to Request/Response Business Transaction Pattern.
Request/Response Business Transaction Pattern	A B2B Interaction characterised by one Participant sending a Request transaction (e.g. ServiceOrderRequest) to another Participant and the other Participant responding with a corresponding Response transaction (e.g. ServiceOrderResponse). In some cases, a Notification may be sent in response to a Request transaction (e.g. a MeterDataNotification providing the metering data requested in a ProvideMeterDataRequest).
Required Timeframe	The time allowed for the Completion of the Requested Work. This period represents the Regulated Timeframe for the performance of the work requested (where a Regulated Timeframe exists) or an agreed period specified in the relevant B2B Procedures. Refer to the Service Orders B2B Procedure.
Retailer	As defined in the MSATS Procedures; CATS Procedures The person who is responsible in the wholesale market for the settlement of electricity that has been supplied to a consumer's NMI.
Role	As defined in the MSATS Procedures: CATS Procedures. The role an organisation has with a connection point in CATS. Note that a single company may be associated with a connection point in more than one role.
RP	Responsible Person, as defined in the Rules.
Rules	National Electricity Rules.
Schema	Refer to aseXML Schema.
Service Order	A request to perform specified work; Refer Service Order Process
Service Order Process	The process of requesting the performance of specified work and receiving notification of the outcome of the request. Refer B2B Procedures: Service Order Process.

Term	Definition
Service Order Request	A request made by a Retailer to a Service Provider for a defined service to be performed at a Connection Point. Refer B2B Procedures: Service Order Process.
Service Provider	When used in a B2B Procedure, refers to the DNSP or MDP or MPB.
Site	The physical location of the Connection Point. Refer B2B Procedures: Customer and Site Details and Service Orders Process.
Technical Delivery Specification	B2B Procedures: Technical Delivery Specification. Defines the technical requirements for communicating B2B messages between participants using the MSATS B2B Handler or contingency systems.
Technical Guidelines	Refer to Technical Guidelines for B2B Procedures.
Technical Guidelines for B2B Procedures.	B2B Procedures: Technical Guidelines for B2B Procedures. Defines guidelines for the developers of B2B documentation to ensure a consistent use of terminology across all B2B Procedures.
Timing Period	Period between two Timing Points.
Timing Point	Point in time when an activity occurs.
Timing Requirement	The Timing Points by when an activity must be initiated or an activity completed.
Transaction	An aseXML realisation of a Business Document.
Transaction Acknowledgement	An aseXML realisation of a Business Acceptance/Rejection.
Transaction Group	The Transaction Group field in aseXML Message. Refer B2B Procedures: Technical Delivery Specification.
Transaction Model	The physical exchange of B2B messages to complete a B2B interaction.
Transaction Priority	An element on an aseXML message that allows the sender to indicate their preference in terms of timeliness of processing for the message contents. The three allowable values are “High”, “Medium” and “Low”. As used in terms such as „Medium Priority or „Low Priority.
UML	Unified Modelling Language. A convention adopted for drawing process flow diagrams (activity diagrams) and sequence diagrams.
XML	eXtensible Markup Language.

5.1 Special Terms

Term	Definition
Rules	National Electricity Rules

Table 1: Special terms

6 References

The resources listed in this section contain additional related information that may assist you.

Note: it is important to ensure that you are reading the current version of any document.

- About Administration: for information about using Set Participant (e.g. for agents), see the "About Administration" menu, when logged into the EMMS Web Portal.
- AEMO Help Desk: phone: 1300 300 295, option 2; e-mail: helpdesk@aemo.com.au.
- National Electricity Rules: see the AEMC website http://www.aemc.gov.au.

6.1 AEMO's website

The following documents are found on AEMO's website:

- *Guide to Market Systems – Gaining Access*, for information on access to AEMO's Web Portals. Participants wishing to use AEMO's Web Portals are required to have access to the AEMO Market Systems using the MarketNet Private Network. MarketNet provides information using web interfaces to participants, available from http://www.aemo.com.au/registration/nemnet.html.
- Participant Administration: For information about managing a Web Portal account (accounts are created in MSATS), see the *Participant Rights Administration User Interface Guide*, available from http://www.aemo.com.au/electricityops/userguide.html.

6.2 EITS publications

Participant users with the credentials can find the following documents in the secure EITS Publications area on AEMO's website (application to AEMO's Help Desk). Documents in "EITS Publications" are available to registered participants only.

- *AEMO CSV Data Format Standard*, describes the CSV standard used within flat files provided to participants. Its primary function is to provide sufficient information to allow participants to understand the AEMO CSV data format standard.
- *AEMO's IP Addresses for Participants*, provides information about URLs for accessing AEMO's IT systems.
- *Electricity Market Management Systems (EMMS) Web Portal Applications*, provides a summary of EMMS Web Portal applications, to assist participants with decisions about AEMO's IT systems.
- *Guide to Market Systems – Maintaining and Extending Access*, provides high-level, summary information about AEMO's IT systems, to assist participants with decisions about usage of the data interfaces to AEMO's systems.
- *Web Portal Login User Guide*: for information on how to log on to AEMO's Web Portals.

6.3 Information centre

The AEMO Information Centre provides an information service for all interested parties, from NEM participants to the general public, providing information regarding AEMO NEM operations and the electricity industry generally.

- Telephone: 1300 361 011. E-mail: infocentre@aemo.com.au.