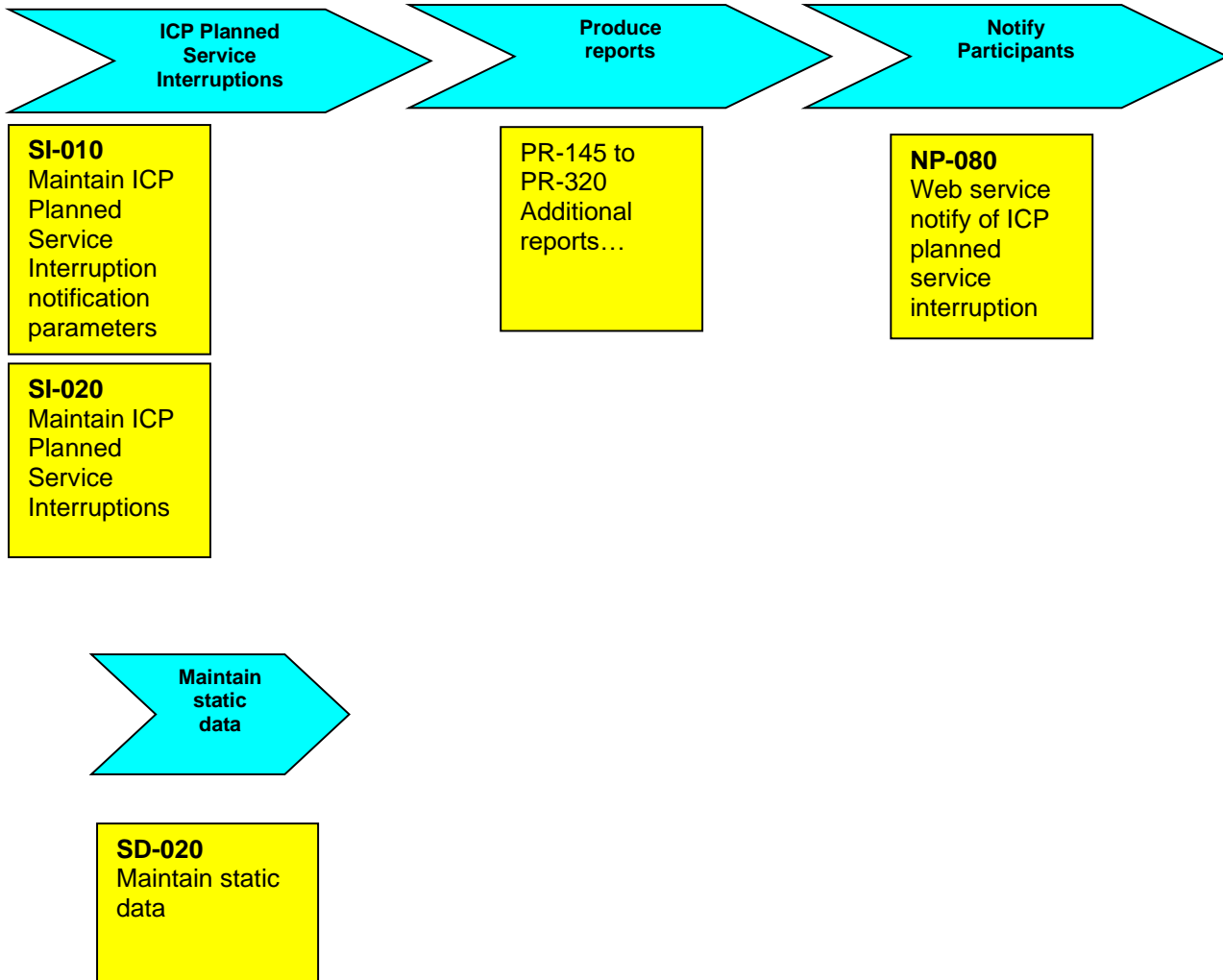


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### Process Maps



## Web Services

### 1.18 Web Services

Access to address search, ICP event history and ICP details enquiries are provided via Web Services. The facility provides Traders with a more efficient way for their Customer Service Representatives to access the Registry.

1.18.2 Access to Notify of event change (NP-070). The facility allows a participant with ICP responsibilities; that is a Trader, Distributor or MEP, to poll the Registry and receive a response containing a batch of ICP notifications.

1.18.3 Access to ICP planned service interruption notification (NP-080). The facility allows a participant with ICP responsibilities; that is a Trader, Distributor or MEP, to poll the Registry and receive a response containing ICP planned service interruption information

## SI-010 Maintain ICP planned service interruption notification parameters

|                         |  |
|-------------------------|--|
| <b>Sub-process:</b>     | SI-010 maintain ICP Planned service interruption notification parameters |
| <b>Process:</b>         | ICP planned service interruptions  |
| <b>Participants:</b>    | Traders, Metering Equipment Providers                                    |
| <b>Code references:</b> |  |
| <b>Dependencies:</b>    |  |

|  |
|--|
| <b>Description:</b>  |
| <p>A Registry user with supervisor privileges will be able to select whether and where notifications of ICP planned service interruptions are sent from the Registry.</p> <p>By default, if no ICP service interruption notification parameters have been setup a trader participant will receive notification of all ICP identifiers in the planned service interruption file supplied by a distributor, provide they have at least 1 affected ICP. If a trader participant wishes to limit the notifications to their own ICP identifiers they must explicitly set the appropriate option.</p> <p>An MEP will only receive notifications for those ICPs for which the MEP is currently the responsible participant.</p> <p>A participant will be able to vary the file output format to suit back office systems; for example, a participant may select whether an ICP service interruption file includes a description (DES) line or not (the default).</p> <p>A participant will be able to elect to have planned service interruption information delivered to the participant's EIEP hub directory (the default for traders) or fromreg folder on the Registry SFTP server (the default for MEPs) or both.</p> |

|  |
|--|
| <b>Business requirements:</b>  |
| <ol style="list-style-type: none"> <li>1. Only a Registry user with supervisor privileges must be able to perform this function.</li> <li>2. A supervisor must be able to select to receive ICP planned service interruption notifications.</li> <li>3. Files must be delivered to the participant's EIEP hub (the default for traders) or fromreg folder on the Registry SFTP server (the default for MEPs), or both.</li> <li>4. Where a participant has multiple roles (for example, is both Trader and MEP) and uses the same participant identifier for both roles, the settings must apply to all roles.</li> <li>5. Once set the parameter settings must apply immediately to all ICP planned service interruption output sent to the participant.</li> <li>6. A MEP participant must be able to elect to:             <ol style="list-style-type: none"> <li>a) not receive planned service interruption information; or</li> <li>b) receive planned service interruption information (the default), in which case the files will contain only ICPs it is responsible for. The MEP will also receive additional files where it is the gaining MEP involved in a MEP switch which has a completion date between the date of the initial notification and start date of the planned service interruption (i.e. start date or alternate date (whichever is later) of interruption 1 if the event includes a single service interruption, or of the final interruption if the event includes multiple service interruptions).</li> </ol> </li> </ol> |

7. A Trader participant must be able to elect to:
  - a) receive planned service interruption files containing all ICPs provided it is responsible for at least one ICP in the file (the default); or
  - b) receive planned service interruption files containing only ICPs it is responsible for, in which case the Trader will also receive additional files where it is the gaining Trader involved in a Trader switch (including backdated switches and switch withdrawals) which has a completion date between the date of the initial notification and start date of the planned service interruption (i.e. start date or alternate date (whichever is later) of interruption 1 if the event includes a single service interruption, or of the final interruption if the event includes multiple service interruptions)
  
8. Trader and MEP participants must be able to select parameter settings to receive ICP planned service interruption files with either:
  - a) a description (DES) line. If selected the DES line must appear after the EIEP5A HDR line; or
  - b) no description (DES) line (the default)
  
9. Trader and MEP participants must be able to request service interruption files be delivered to their EIEP hub directory (the default for traders) or fromreg folder on the Registry SFTP server (the default for MEPs) or both. If delivery to the EIEP hub is selected a participant may select to receive the file in:
  - a) Registry format (with standard batch file HDR record); or
  - b) EIEP5A format (no standard batch file HDR record)

|  |
|--|
| <b>Data inputs:</b>  |
| ICP planned service interruption settings for each participant role. |

|   |
|---|
| <b>Processing:</b>  |
| <b>System:</b> <ol style="list-style-type: none"> <li>1. Validates ICP planned service interruption notification options.</li> <li>2. Updates selected options</li> </ol> |

|                                   |
|-----------------------------------|
| <b>Data outputs:</b>              |
| Confirmation of options on screen |
| Audit trail of changes            |

**SI-020 Maintain ICP planned service interruption**

|                         |   |
|-------------------------|---|
| <b>Sub-process:</b>     | <b>SI-020 Maintain ICP planned service interruption</b> |
| <b>Process:</b>         | ICP planned service interruptions                       |
| <b>Participants:</b>    | Traders, Distributors, Metering Equipment Providers     |
| <b>Code references:</b> |   |
| <b>Dependencies:</b>    | SI-010  |

|  |
|--|
| <b>Description:</b>  |
| <p>Distributors must notify Traders of planned service interruptions and provide planned service interruption information that enables traders to record details in their customer information systems and notify affected customers where required to do so.</p> <p>Planned service interruption information includes the ICPs and description of the area affected, interruption reason, distributor event number, and off/on dates and times.</p> <p>Many distributors have built systems to transfer planned service interruption information through the EIEP hub to traders using the EIEP5A format. This delivery mechanism will continue to be available as an option for both distributors and traders.</p> <p>MEPs may also elect to receive planned service interruption files containing the ICPs they are responsible for.</p> <p>Distributors may choose to upload EIEP5A files to the EIEP hub with the Registry recipient code RGST, and the Registry will deliver EIEP5A files to affected participants via the EIEP hub (the default for traders, option for MEPs) or Registry SFTP (option for traders, the default for MEPs) with customised outputs reflecting the recipient’s preferences (or defaults).</p> <p>Distributors may also choose to submit files to the EIEP hub with the Registry recipient code RGST in Registry file format (that is including the standard Registry header (HDR) line).</p> <p>Distributors may choose instead to upload a batch file containing similar information as EIEP5A (EIEP5A but with the addition of a standard Registry header (HDR) line) to the registry SFTP server. With this option the Registry will:</p> <ul style="list-style-type: none"> <li>• generate notification files (in the same format as EIEP5A but with the addition of a standard registry header) to the affected participant’s fromreg folder on the Registry SFTP server (option for traders, the default for MEPs); and/or</li> <li>• if required by the affected participants, provide an             <ul style="list-style-type: none"> <li>○ EIEP5A format file to the participant’s EIEPIn folder on the EIEP hub (the default for traders, option for MEPs); or</li> <li>○ Registry format file to the participant’s EIEPIn folder on the EIEP hub (option for both traders and MEPs).</li> </ul> </li> </ul> <p>Traders and MEPs may also choose to receive files via both the EIEP hub and fromreg folder on the Registry SFTP server.</p> |

Where the distributor chooses to upload a batch file using the Registry SFTP server, the file must conform to standard Registry header conventions (i.e., contain a standard Registry header (HDR) record) as the HDR record in the EIEP5A format does not conform to the Registry HDR.

Where the distributor uploads a planned service interruption file using the EIEP hub, the Registry will (if necessary) construct and insert a valid standard Registry header (HDR) record as the first line of the file before processing the file.

Where a file is submitted by an agent on behalf of the distributor, acknowledgements and notifications will be returned to the agent (as 'Sender' in the EIEP5A file name) provided the agent has used a valid participant identifier or non-participant identifier that is known to the Registry, and to the distributor (as owner of information in the file with the distributor's network participant identifier used in the 'Sent on behalf of participant' field).

The Registry must use the EIEP5A header (HDR) to determine if a file has been submitted by a distributor or agent, and, if applicable, who the distributor is and who the agent is in order to send acknowledgements and notifications to the correct party. There may be additional acknowledgements and notifications sent depending on the header information.

The Registry will validate the file and advise affected participants of the ICP planned service interruptions. Results of the file validation will be returned to the distributor's fromreg folder on the Registry SFTP server (and agent's fromreg folder on the Registry SFTP server if sender is an agent with a valid participant identifier or non-participant identifier that is known to the Registry), or where a file point of origin is the EIEP hub the file validation results will also be delivered to the distributor's EIEP hub directory (and agent's EIEP hub directory if sender is an agent with a valid participant identifier or non-participant identifier that is known to the Registry).

Where the distributor wishes to revise planned service interruption information supplied in a previous file the distributor (or distributor's agent if applicable) will provide an updated file (with communication type PLR) that will be used as a complete replacement for the previously supplied planned service interruption information.

Where the distributor wishes to entirely cancel a planned service interruption supplied in a previous file the distributor (or distributor's agent if applicable) will provide a file with communication type code PLC in the EIEP5A HDR line and may supply detail (DET) lines for all ICPs affected. The Registry will ignore any detail lines included in a cancellation file. Once cancelled a Distributor Event Number cannot be reused.

A MEP may also elect to receive (the default), or not receive, planned service interruption files.

**Business requirements:**

1. Maintenance of ICP planned service interruptions must only be performed by a Distributor (or distributor's agent).
2. A file submitted via the Registry SFTP server requires the inclusion of all mandatory elements of the Registry Planned Service Interruption file definition.
3. The file naming convention of a file submitted via the EIEP hub must:
  - a. have a Recipient code of the Registry (RGST); and

- b. use a EIEP File Type of EIEP5A.
- 4. The file must be confirmed and acknowledged in accordance with the participant identifier's EIEP communication settings; and if the file does not contain the standard Registry HDR line the Registry must
  - a. Construct a valid and standard Registry HDR record; and
  - b. Insert the constructed HDR record as the first line of the file
- 5. The file must be transferred to the Registry SFTP server for validation and processing by the Registry.
- 6. If the file's point of origin is the EIEP hub, results of file validation must be returned to the distributor's EIEP hub input directory (and agent's EIEP hub input directory if sender is an agent with a valid participant identifier or non-participant identifier that is known to the Registry). If the file's point of origin is the Registry SFTP server, results of file validation must be returned to the distributor's fromreg folder on the Registry SFTP server (and agent's fromreg folder on the Registry SFTP server if sender is an agent with a valid participant identifier or non-participant identifier that is known to the Registry).
- 7. The Registry must record a unique ICP planned service interruption by a combination of the distributor's network participant identifier and the Distributor Event Number.
- 8. Maintenance of an existing ICP planned service interruption must be performed by matching the file's Distribution Event Number against an existing ICP planned service interruption Distribution Event Number for the distributor's network participant identifier. If maintenance of an existing ICP planned service interruption is performed:
  - a. ICP identifiers in the replacement file must replace matching ICP identifiers from the previous maintenance; and
  - b. ICP identifiers that are not already present in the Registry must be treated as additions to the planned service interruption; and
  - c. ICP identifiers that are not present in the replacement file must be treated as cancellations; that is, they are removed from the planned service interruption
- 9. The Registry must notify affected participants of ICP planned service interruptions (communication type codes PLS, PLI), revisions (PLR) and cancellations (PLC).
- 10. Subject to the notification settings (or defaults) for each participant identifier, an affected participant must include:
  - a. Current Trader
  - b. Current MEP
  - c. If the ICP identifier is involved in a Trader switch completing between the initial notification and start date of the planned service interruption, the gaining Trader
  - d. If the ICP identifier is involved in a MEP switch completing between the initial notification and start date of the planned service interruption, the gaining MEP
- 11. Where an ICP planned service interruption is a cancellation, the Registry must notify participants of the cancellation only if they have been previously notified.
- 12. Where an affected participant performs multiple roles on an ICP as a responsible participant and uses the same participant identifier for both roles; that is, both trader and MEP have a common participant identifier, they must receive only 1 planned service interruption notification for the ICP. For the avoidance of doubt:
  - a. If a MEP and trader use the same participant identifier, and the trader has elected to receive files containing only the ICPs for which it is responsible, then the trader/MEP will receive a file containing only ICPs where it is the trader only or both the trader and MEP, but not where it is the MEP only.
- 13. Registry must validate that:



- a. if 'Sent on behalf of participant' is Null (i.e. where sender is the distributor) then 'Sender' must be a valid network participant identifier
- b. if 'Sent on behalf of participant' has a participant identifier (i.e. where sender is an agent) it must be a valid network participant identifier

| <b>Data inputs:</b>   |               |                            |  |
|---|---------------|----------------------------|--|
| Distributor provided planned service interruption information.<br>Each attribute on an input line is comma separated. |               |                            |  |
| <b>Attribute Input</b>  | <b>Format</b> | <b>Mandatory /Optional</b> | <b>Comments</b>  |
| Record Type   | Char 3        | M                          | Must be one of <ul style="list-style-type: none"> <li>• HDR – indicates the row contains planned service interruption specific header information</li> <li>DES - indicates the row contains description information. The DES row is optional, a maximum of 1 DES row may be supplied.</li> <li>• DET - indicates the row contains detail planned service interruption information. A minimum of 1 DET row must be supplied.</li> </ul>   |
| HDR record type followed by   |               |                            |  |
| File Type   | Char 7        | M                          | Must be PLINT  |
| Version of EIEP   | Numeric 3.1   | M                          | Version of the EIEP protocol being used for this file. For example, 10.1   |
| Sender  | Char 20       | M                          | Name of sending party. May be the distributor or distributor's agent. Valid participant identifier to be used if the sender is a participant, or valid non-participant identifier if sender is an agent with a non-participant identifier.   |
| Sent on behalf of Participant identifier  | Char 4        | O                          | Valid participant identifier of party on whose behalf data is provided. Must be a valid network participant identifier if sender is an agent, otherwise Null.<br>Validated by the Registry to ensure either the 'Sender' or 'Sent on behalf of participant' is a valid network participant identifier<br>The Registry must validate that: <ul style="list-style-type: none"> <li>(i) if 'Sent on behalf of participant' is Null (i.e., distributor has submitted the file to the registry) then 'Sender' must be a valid network participant identifier;</li> <li>(ii) if 'Sent on behalf of participant' has a participant identifier (i.e., where Sender is an agent) it must be a valid network participant identifier</li> </ul> |
| Recipient participant identifier  | Char 4        | M                          | Valid recipient participant identifier.<br>Not validated by the Registry   |
| Report run date   | DD/MM/YYYY    | M                          | Valid date.  |

|  |            |     |  |
|--|------------|-----|--|
| Report run time  | HH:MM:SS   | M   | Valid time, 24-hour format   |
| Unique File identifier   | Char 15    | M   | Number that uniquely identifies the file. Not validated by the Registry  |
| Number of detail records   | Numeric 8  | M   | Number of DET records  |
| Communication Type Code  | Char 3     | M   | Must be a valid Communication Type Code as per static data table.  |
| Distributor Event Number   | Char 15    | M   | Distributor's unique reference number for the planned servicer interruption.   |
| "spare"  |            | O   | Reserved for future use. Any value provided in this field must be discarded  |
| Utility type   | Char 1     | M   | G (Gas) or E (Electricity)   |
| <p>DES record type.<br/>                     The DES line may be provided but is not validated nor loaded into the Registry.<br/>                     The intention is to minimise change for participants with pre-existing systems that currently generate a DES line</p>  |            |     |  |
| <p>DET record type followed by</p>   |            |     |  |
| ICP Identifier   | Char 15    | M   | Must be a valid ICP identifier   |
| Feeder   | Char 20    | O   | Transformer and feeder number. Not validated by the Registry   |
| Street/area affected   | Char 255   | M   | Free format text description of locality affected.   |
| Interruption reason  | Char 255   | M   | Free format text description of interruption reason  |
| Number of interruptions  | Num 1      | M   | Number of planned interruptions. There must be a minimum of 1 interruption and maximum of 5. This must match the number of Interruption periods provided.          |
| Distributor Event Number   | Char 15    | M   | Distributors unique reference number for the planned service interruption. Must be identical to the Distributor Event Number defined in the HDR record             |
| <p>Distributor may specify up to 5 interruption periods numbered 1 through 5, 1 being the first interruption and 5 being the last.<br/>                     The following interruption date and time fields are repeated maximum 5 times.<br/>                     As a minimum, the first set of interruption information must be provided.</p> |            |     |  |
| Interruption "x" Start Date  | DD/MM/YYYY | O   | Commencement date of interruption "x". Mandatory for interruption 1.   |
| Interruption "x" Restore Date  | DD/MM/YYYY | M/O | Most accurate indication of date when power will be restored for interruption "x". Mandatory if Interruption Start Date is provided                                |
| Interruption "x" Start Time  | HH:MM      | M/O | Start time for first interruption. 24-hour format for example 21:00 (aka 9pm). Mandatory if Interruption Start Date is provided                                    |
| Interruption "x" expected or actual restore time   | HH:MM      | M/O | Restore time for interruption. 24-hour format for example 21:00(aka 9pm). Mandatory if Interruption Start Time is provided. Must be after Interruption Start Time. |

|   |            |   |  |
|---|------------|---|--|
| Interruption “x” alternative date   | DD/MM/YYYY | O | Alternative Interruption Start Date if first planned interruption cannot proceed on Interruption “x” Start Date. |
| Revision reason   | Char 50    | O | Free format. Reason for revision of planned service interruption (only if communication type code is PLR).       |
| URL   | Char 50    | O | URL for updated or additional information if available from distributor’s website                                |
| Identifier “x” represents the interruption period 1 through 5.  |            |   |  |
| <p><u>A distributor provides a planned service interruption file</u><br/>                 HDR,RQPLINT,NETA,RGST,14/01/2018,11:13:12,00000003,service interruption in Oxford<br/>                 HDR,PLINT,1.0,NETA,,RGST,14/01/2018,11:10:00,6677991,2,PLS,OX-88713,,E<br/>                 DET,0000000491AA176,,Oxford area school bay road,Building Demolition,....<br/>                 DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,....</p> |            |   |  |

|  |
|--|
| <b>Processing:</b>   |
| <p><b>System</b></p> <ol style="list-style-type: none"> <li>Verifies that if the ‘Sent on behalf of participant’ is other than Null it must be a valid network participant identifier (and ‘Sender’ will identify the distributor’s agent), and if it is Null then the ‘Sender’ must be a valid network participant identifier,</li> <li>Validates the submitted ICP planned service interruption file</li> <li>If the PLINT HDR row fails validation the entire file is rejected.</li> <li>Adds, updates, or cancels ICP planned service interrupt information</li> <li>Supplies an acknowledgement file to the distributor’s EIEP hub input directory or fromreg folder on the Registry SFTP directory (and agent’s EIEP hub input directory or fromreg folder on the Registry SFTP directory if sender is an agent with a valid participant identifier or non-participant identifier that is known to the Registry), aligned with file’s point of origin, with the results of the ICP planned service interruption file validation.</li> <li>Alerts affected participants of ICP planned service interruptions, revisions or cancellations considering the participant’s ICP planned service interruption notification parameters.</li> </ol> |

|   |
|---|
| <b>Data outputs:</b>  |
| <p>Acknowledgement file(s) delivered to:</p> <ul style="list-style-type: none"> <li>Distributor’s fromreg folder on the Registry SFTP directory (and agent’s fromreg folder on the Registry SFTP directory if applicable); or</li> <li>Distributor’s EIEP hub directory (and agent’s EIEP hub directory if applicable) with following EIEP file naming convention:                     <ul style="list-style-type: none"> <li>Sender – RGST</li> <li>Recipient – distributor’s network participant identifier (and agent’s participant identifier or non-participant identifier if provided by the agent)</li> <li>File Type – EIEP5A</li> <li>Unique Id - Distributor Event Number and “validationResults”</li> </ul>                     For example:<br/>                     RGST_E_NETA_EIEP5A_201503_20151203_ OX-88713.validationResults                 </li> </ul> |

- If an agent has submitted a file, the acknowledgement file will only be delivered to the agent if the agent has used a valid participant identifier or non-participant identifier that is known to the Registry in the file name.

Updated ICP planned service interruptions for the submitting distributor for the unique distributor event number.

Notification to affected trader/MEP participants of ICP service interruptions in accordance with the participant's notification preferences (or defaults) via:

- Batch File; and/or
- EIEP hub with following EIEP file naming convention:
  - Sender – Registry Participant identifier
  - Recipient – Participant identifier
  - File Type – EIEP5A
  - Unique Id - Distributor Event Number and "ServiceInterruption"

For example:

RGST\_E\_RETA\_EIEP5A\_201503\_20151203\_OX-88713ServiceInterruption

| Name        | Format  | Description  |
|-------------|---------|--|
| Input line  | Char    | Line as supplied in the distributor's input file   |
| Result Code | Numeric | <ul style="list-style-type: none"> <li>• Error code, else</li> <li>• 000 – no error</li> </ul> |

Acknowledgement file examples:

1. HDR line error with invalid Communication Type Code, HDR and all DET lines rejected:

```
HDR,RSACK,RGST,NETA,08/06/2018,14:27:12,00000003,service interruption in Oxford
HDR,PLINT,1.0,NETA,,RGST,08/06/2018,14:22:00,6677991,2,PZZ,OX-88713,,E,815
DET,0000000491AA176,,Oxford area school bay road,Building Demolition,,...815
DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,,...815
```

2. HDR line error with invalid number of detail lines, HDR and all DET lines rejected:

```
HDR,RSACK,RGST,NETA,08/06/2018,14:27:12,00000003,service interruption in Oxford
HDR,PLINT,1.0,NETA,,RGST,08/06/2018,14:22:00,6677991,5,PLR,OX-88713,,E,816
DET,0000000491AA176,,Oxford area school bay road,Building Demolition,,...816
DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,,...816
```

3. DET line rejected with ICP not found:

```
HDR,RSACK,RGST,NETA,08/06/2018,14:27:12,00000003,service interruption in Oxford
HDR,PLINT,1.0,NETA,,RGST,08/06/2018,14:22:00,6677991,2,PLR,OX-88713,,E,000
DET,0000000491AA176,,Oxford area school bay road,Building Demolition,,...000
DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,,...103
```

ICP planned service interruption file delivered to participant's EIEP hub input directory and/or fromreg folder on the Registry SFTP directory in accordance with the participant's notification preferences (or defaults).

A Description line (DES) is provided according to a participant's ICP service interruption notification parameters

DET

ICP Identifier

|  |      |  |
|--|------|--|
| Feeder   |      |  |
| Street/Area Affected   |      |  |
| Interruption Reason  |      |  |
| Number of Interruptions Notified   |      |  |
| Distributor Event Number   |      |  |
| Distributor may specify up to 5 interruption periods numbered 1 through 5, 1 being the first interruption and 5 being the last. The following literal fields are repeated 5 times with "x" representing the interruption period.   |      |  |
| Interruption "x" Start Date  |      |  |
| Interruption "x" Restore Date  |      |  |
| Interruption "x" Start Time  |      |  |
| Interruption "x" Expected or Actual Restore Time   |      |  |
| Interruption "x" Alternative Date  |      |  |
| Detail lines as provided in the distributor's ICP planned service interruption file  |      |  |
| Input line   | Char | Line as supplied in the distributor input file |
| <p>File example with a description (DES) line:</p> <p>HDR,RSPLINT,RGST,RETA,14/01/2018,11:13:12,00000004,service interuption in Oxford<br/> <b>DES,ICP Identifier, Feeder, Street/Area Affected.Interruption Reason...</b><br/> HDR,PLINT,1.0,NETA,,RETA,08/06/2018,14:22:00,6677991,2,PLR,OX-88713,,E<br/> DET,0000000491AA176,,Oxford area school bay road,Building Demolition,....<br/> DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,....</p> <p>File example with no description (DES) line:</p> <p>HDR,RSPLINT,RGST,RETA,14/01/2018,11:13:12,00000003,service interuption in Oxford<br/> HDR,PLINT,1.0,NETA,,RETA,08/06/2018,14:22:00,6677991,2,PLR,OX-88713,,E<br/> DET,0000000491AA176,,Oxford area school bay road,Building Demolition,....<br/> DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,....</p> |      |  |

## NP-080 Web service notify of ICP planned service interruption

|                         |  |
|-------------------------|--|
| <b>Sub-process:</b>     | <b>NP-080 Web Service notify of ICP planned service interruption</b> |
| <b>Process:</b>         | Notify participants  |
| <b>Participants:</b>    | Distributors, Traders, Metering Equipment Providers                  |
| <b>Code references:</b> |  |
| <b>Dependencies:</b>    | SI-020   |

|  |
|--|
| <b>Description:</b>  |
| <p>This function is concerned with provision of a web service to allow participants to query the ICP planned service interruptions against an ICP.</p> <p>A participant polls the Registry requesting ICP planned service interruption information in accordance with the following filters:</p> <ul style="list-style-type: none"> <li>a) ICP identifier; or</li> <li>b) Distributor Event Number; or</li> <li>c) network participant identifier.</li> </ul> <p>The Registry will respond with:</p> <ul style="list-style-type: none"> <li>a) A rejection error; or</li> <li>b) All current and impending ICP planned service interruptions; or</li> <li>c) A “no ICP planned service interruptions” response.</li> </ul> |

|  |
|--|
| <b>Business requirements:</b>  |
| <ol style="list-style-type: none"> <li>1. A participant calling the web service must:             <ul style="list-style-type: none"> <li>a) Fulfil a role that allows access to the web service; that is has a role of Trader, Distributor or MEP; and</li> <li>b) Have authorisation to use the Web Service from the Registry Manager</li> </ul> </li> <li>2. A participant calling the web service must provide a valid logon and password</li> <li>3. A participant must be able to request current and impending planned service interruptions for an ICP</li> <li>4. If there are no ICP planned service interruptions the Registry must return a message stating “No current or impending planned service interruptions for this [ICP/Distributor Event Number/network participant identifier]”.</li> <li>5. The Registry Manager may deactivate access to the web service.</li> </ol> |

|                     |
|---------------------|
| <b>Data inputs:</b> |
|---------------------|

- Logon user ID and password
- ICP Identifier, or Distributor Event Number, or network participant identifier.

**Processing:**

**System:**

1. Validates participant has provided a valid logon user ID and password
2. Validates participant access to the web service. If deactivated returns a response message:
  - a) "Access to this Registry Web Service is deactivated. Please contact the Registry Manager".
  - b) Logs the unauthorised access to the web service
3. Creates a response including all current and future dated planned service interruption records

**Data outputs:**

Web service response including:

- ICP planned service interruption records (if any), or no ICP planned service interruptions.
- Message (e.g. No current or impending planned service interruptions)

The ICP planned service interruption information must contain information as per SI-020.

**PR-320 Resend ICP planned service interruptions**

|                         |   |
|-------------------------|---|
| <b>Sub-process:</b>     | PR-320 Resend ICP planned service interruptions     |
| <b>Process:</b>         | ICP planned service interruptions                   |
| <b>Participants:</b>    | Traders, Distributors, Metering Equipment Providers |
| <b>Code references:</b> |   |
| <b>Dependencies:</b>    | SI-010, SI-020                                      |

|  |
|--|
| <b>Description:</b>  |
| A Distributor, Trader or MEP participant may report on ICP planned service interruption records. |

|   |
|---|
| <b>Business requirements:</b>   |
| <ol style="list-style-type: none"> <li>1. A Distributor must be able to report ICP planned service interruption records they have submitted to the Registry.</li> <li>2. A Trader or MEP must be able to report ICP planned service interruptions where they have at least 1 ICP involved in the planned service interruption.</li> <li>3. The report must return either             <ol style="list-style-type: none"> <li>a. All ICP planned service interruptions; or</li> <li>b. A specific ICP planned service interruption</li> </ol> </li> </ol> |

| <b>Data inputs:</b>  |         |                     |   |
|--|---------|---------------------|---|
| <ul style="list-style-type: none"> <li>• ICP planned service interruption notification parameters (SI-010).</li> <li>• ICP planned service interruptions (SI-020).</li> </ul> <p>Parameters:<br/>                 Each parameter line is preceded by a line type identifier consisting of "PRAMnn" where nn refers to the parameter number.<br/>                 Each attribute on an input line is comma separated.</p> |         |                     |   |
| Parameter Name   | Type    | Mandatory /optional | Description   |
| Network participant identifier and Distributor event number  | Char 19 | O                   | Distributor's network participant identifier and unique distributor event number. If null then report all ICP planned service interruptions where the requesting participant has ICPs involved. |



|  |        |   |  |
|--|--------|---|--|
| All ICPs (ignored for distributors)  | Char 1 | O | Y – report all ICPs involved in the planned service interruption<br>N – report only ICPs where the participant is currently responsible in the role of MEP or gaining MEP in a MEP switch, Trader or gaining Trader in a Trader switch.<br>Null – default to planned service interruption notification settings<br><br>For MEP this parameter defaults to N (a MEP may only view ICPs where they are the current or gaining MEP) |
| Include description line   | Char 1 | O | Y – output includes a DES line<br>N – output does not include a DES line<br>Null - default to planned service interruption notification settings (for a distributor request this equates to N)   |
| <p>File example requesting an individual ICP service interruption, with all ICPs and no DES line:<br/>HDR,RQPLINTLIS,RETA,RGST,23/09/2014,09:01:17,4,My ICP Service interruptions<br/>PRAM01,NETA123456,Y,</p> <p>File example requesting all ICP service interruptions including own ICPs with a DES line<br/>HDR, RQPLINTLIS,RETA,RGST,23/09/2014,09:01:17,4,My ICP Service interruptions<br/>PRAM01,N,Y</p> |        |   |  |

|   |
|---|
| <b>Processing:</b>  |
| <p><b>System:</b></p> <ol style="list-style-type: none"> <li>Validates report selection criteria.</li> <li>Reports ICP planned service interruptions considering participant ICP planned service interruption notification parameters</li> <li>Delivers output to the distributor’s fromreg folder on the SFTP directory or EIEPIn directory in accordance with the delivery channel used by the distributor to submit planned service interruption information to the registry.</li> <li>Delivers output to the trader/MEP’s fromreg folder on the Registry SFTP directory or EIEPIn directory in accordance with the participant’s notification preferences (or defaults).</li> </ol> |

|  |               |   |
|--|---------------|---|
| <b>Data outputs:</b>                                 |               |   |
| Each attribute on an output line is comma separated. |               |   |
| <b>Name</b>  | <b>Format</b> | <b>Description</b>  |
| HDR input line                                       | Char          | Line as supplied in the most recent distributor input file. |
| DET input line                                       | Char          | Line as supplied in the most recent distributor input file  |
|  |               |   |

File example where a single ICP planned service interruption requested:  
HDR,RSPLINTLIS,RGST,RETA,23/09/2014,09:01:17,00000003,My ICP Service interruptions  
HDR,PLINT,1.0,NETA,,RETA,08/06/2018,14:22:00,6677991,2,PLS,OX-88713,,E  
DET,0000000491AA176,,Oxford area school bay road,Building Demolition,....  
DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,....

File example where all ICP planned service interruption requested and a DES line:  
HDR,RSPLINTLIS,RGST,RETA,23/09/2014,09:01:17,00000008,My ICP Service interruptions  
DES,ICP Identifier, Feeder, Street/Area Affected.Interruption Reason...  
HDR,PLINT,1.0,NETA,,RETA,08/06/2018,14:22:00,6677991,2,PLS,OX-88713,,E  
DET,0000000491AA176,,Oxford area school bay road,Building Demolition,....  
DET,0000000493AA1F3,,Oxford area school bay road,Building Demolition,....  
HDR,PLINT,1.0,NETA,,RETA,07/06/2018,09:22:00,6677800,1,PLS,AM-13,,E  
DET,0000000575AA176,,Amberley 223 Main road,Power Pole Replacement,....  
HDR,PLINT,1.0,NETA,,RETA,07/06/2018,09:22:00,666675,1,PLR,WA-99987,,E  
DET,0000000677AA176,,Wanganui 33 Kings street,NSP replacement,....

**Batch interface cross reference map**

| Process   | Input Header | Output Header | Input Filename Example   | Maintenance Acknowledgement Filename Example (if applicable) | Report Output Filename or delivered switch file (if applicable) | File naming Convention                          |
|---|--------------|---------------|--------------------------|--|---|---|
| <b>Reports and Notifications</b>                |              |               |                          |  |   |   |
| PR-320 Resend ICP planned service interruptions | RQPLINTLIS   | RSPLINTLIS    | ResendMyPLINTRecords.txt |  | PSIendMyPLINTRecords.txt  | Same filename except first 3 character replaced |

## QU-020 View ICP information

|                         |                             |
|-------------------------|-----------------------------|
| <b>Sub-process:</b>     | QU-020 View ICP information |
| <b>Process:</b>         | Make query online           |
| <b>Participants:</b>    | All users                   |
| <b>Code references:</b> | Clause 11.28 of the Code.   |
| <b>Dependencies:</b>    | QU-010                      |

|  |
|--|
| <b>Description:</b>  |
| A user can view all the information about an ICP that includes its current attributes, history of changes, notifications delivered and audit details. The only exception to this is the channel reading value provided in CS and RR switch messages. This information is only viewable by users of the responsible participants at the Event Date of the switch. |

|   |
|---|
| <b>Business requirements:</b>   |
| <ol style="list-style-type: none"> <li>1. All approved users must be able to view all attributes of an ICP. However, the channel reading values provided in the CS and RR switch messages must only be available to the participants responsible for the ICP on the Event Date.</li> <li>2. The details of the ICP must be displayed 'as at' a particular date including whether the ICP is the subject of any switch. All attributes that were applicable on the 'as at' day must be shown.</li> <li>3. <u>The user must be able to view for the ICP identifier all current and impending ICP planned service interruptions</u></li> <li>4. The user must be able to view the history of the ICP identifier (i.e. all the events associated with an ICP) and all switch messages.</li> <li>5. The user must be able to drill down from events to see the full details of the event, details of changes made, the notifications delivered and the audit details.</li> <li>6. The user must be able to view and download a CSV version of events and switch transactions.</li> <li>7. The user must be able to view a map of the location of the ICP using its stored GPS co-ordinates.</li> <li>8. The user must be able to view reconciliation information including periods of responsibility of participants and NSP trading periods.</li> <li>9. All screen layouts and contents must be agreed with the Authority, and must not be changed without the Authority's consent.</li> </ol> |

|                     |
|---------------------|
| <b>Data Inputs:</b> |
|---------------------|

- ICP Identifier.
- 'As at' date – defaulted to today's date.
- ICP history filters – event/switch type, with or without changes.
- Map display option.
- CSV file download option

**Processing:**

For the ICP identified, the system:

Finds and displays the attributes, derived attributes (summary data), historical information, notifications, reconciliation information and audit details of the ICP that were applicable on the "As at" date.

**Data outputs:**

**Summary Data:**

The following attributes and derived attributes are displayed:

ICP Identifier

'As at' Date

ICP planned service interruptions

ICP switch status derived attributes:

- Trader Switch
- MEP Switch

Status Event attributes

- Event Date
- ICP Status
- Status Reason

Address Event attributes

- Event Date
- Physical Address Unit
- Physical Address Property Name
- Physical Address Number
- Physical Address Street
- Physical Address Suburb
- Physical Address Town
- Physical Address Region

- Physical Address Post Code

Network Event attributes

- Event Date
- Network participant Identifier
- POC
- Reconciliation Type
- Dedicated NSP
- Installation Type
- Unmetered Load Details – Distributor
- Shared ICP List
- Direct Billed Status

Pricing Event attributes

- Event Date
- Distributor Price category Code
- Chargeable Capacity
- Distributor Installation Details
- Distributor Loss Category Code

Trader Event attributes:

- Event Date
- Participant Identifier of Trader
- Proposed MEP
- Profile
- Unmetered Load Details for Trader
- ANZSIC
- Submission Type HHR
- Submission Type NHH

Metering Event attributes:

- Event Date
- MEP Participant Identifier
- HHR Flag
- NHH Flag
- PP Flag
- Meter Multiplier Flag
- Highest Metering Category

- Meter Channel Count

Metering Event derived attributes:

- C&I TOU
- AMI Comm
- AMI Non Comm
- Serial Numbers

**ICP History and Audit Details:**

Shows all events and switch transactions for a selected ICP. The information displayed for each is:

- Event Type
- Effective Date
- Input Date
- Input Time
- Audit Reference
- Input By Participant Identifier
- User's Participant Identifier
- Mode of input (screen or file)
- State of event (Active, Reversed or Replaced)

For reversed or replaced events the following extra information is shown:

- Reversal or Replacement date and time
- Audit reference
- Participant
- Input By Participant Identifier
- User's Participant Identifier
- Mode of input (screen or file)

**View Details:**

Shows a selected event or switch transaction's details either on screen or in CSV format - see ICP event maintenance and switching (sections 3.1 to 3.4) for formats. All CSV formatted details are downloadable.

**Notifications:**

Shows a selected event or switch transaction's notifications that were delivered, detailing:

- Notification Type
- Operation Type (input/reversal/replacement)
- Filename
- Date and time submitted

**Reconciliation information:**

Shows the periods of responsibility of reconciliation participants of an ICP, identifying, per change of Trader, Network, POC Installation Type and Submission Type where the Status was 'active' with an Installation Types of 'Load' or 'Both':

- Start Date
- End Date
- Trader Participant Identifier
- Network Participant Identifier
- POC
- Installation Type
- Status
- Meter Type(s)

Shows an ICP's NSP trading periods, identifying per change of Trader, NSP, Installation Type, Reconciliation Type and Profile:

- Start Date
- End Date
- Trader Participant Identifier
- Network Participant Identifier
- POC
- Installation Type
- Reconciliation Type
- Status
- Profiles

**ICP Planned service interruptions:**

Shows all current and impending planned service interruptions record for an ICP detailing:

- Distributor event number
- Feeder
- Communication Type Code
- Interruption start date(s) and time(s)
- Interruption end date(s) and time(s)
- Interruption alternative start date
- Date and time submitted
- Revision Reason
- URL for additional information



**RS-010 Make switch request (NT)**

|                         |   |
|-------------------------|---|
| <b>Sub-process:</b>     | <b>RS-010 Make switch request (NT)</b>              |
| <b>Process:</b>         | Traders switch ICP                                  |
| <b>Participants:</b>    | Traders   |
| <b>Code references:</b> | Clauses 1 to 16 and 22 of Schedule 11.3 of the Code |
| <b>Dependencies:</b>    | MP-020, PR-030, <u>SI-020</u>                       |

|  |
|--|
| <b>Description:</b>  |
| <p>The gaining Trader initiates a switch by sending a switch request message (NT) to the registry. The registry then forwards the request on to the losing Trader. Depending on the gaining Trader's notification parameter settings, the system can send a snapshot PR-030 report, for every ICP being switched, showing the current state of each event type of the ICP.</p> <p>Trader Default Situation<br/>                 A Trader in a Trader Default situation may not make a Switch Request to the Registry to gain responsibility for an ICP</p> |

|   |
|---|
| <b>Business requirements:</b>   |
| <ol style="list-style-type: none"> <li>1. Only the gaining Trader can send an NT to the registry.</li> <li>2. The current Status of an ICP as defined by the most recent Status event must be either inactive or active and must have an associated Metering event or have solely unmetered load.</li> <li>3. There must not already be a Trader switch in progress for the ICP.</li> <li>4. The switch type can be either a MI (move in switch) or TR (standard Trader switch) or a HH</li> <li>5. Assignment of the switch type in an NT must conform with the following rules:                         <ol style="list-style-type: none"> <li>a) If the latest Metering event (summary level) has an AMI Flag of "Y":                                 <ol style="list-style-type: none"> <li>i. and if the Highest Metering Category is 1, 2 or 9, then the switch type must be MI or TR.</li> <li>ii. and if the Highest Metering Category is 3, 4 or 5, then the switch type must be HH.</li> </ol> </li> <li>b) If the latest Metering event (summary level) has an AMI Flag of "N":                                 <ol style="list-style-type: none"> <li>i. and if the Highest Metering Category is 1, 2 or 9 then   <ul style="list-style-type: none"> <li>• if the Submission Type will not change* then the switch type must be MI or TR.</li> </ul> </li> <li>ii. and if the Highest Metering Category is 3, 4 or 5, then the switch type must be HH.</li> </ol> </li> </ol> </li> </ol> <p>Any switch type may be submitted for all other combinations of no metering, AMI Flag, Submission Type change* and Highest Metering Category i.e. that is not covered by a) or b) above.</p> <p>*Submission Type will/will not change refers to the assignment of this ICPs attributes - Submission Type HHR and Submission Type NHH - by the system once this switch has completed (as per the processing logic in RS-050).</p> <p>Submission Type will change when:</p> |

| Current Submission Types | Post CS Submission Types                       |
|--------------------------|--|
| HHR = Y and NHH = N      | (HHR = N and NHH = Y) or (HHR = Y and NHH = Y) |
| HHR = N and NHH = Y      | (HHR = Y and NHH = N) or (HHR = Y and NHH = Y) |
| HHR = Y and NHH = Y      | (HHR = Y and NHH = N) or (HHR = N and NHH = Y) |

6. A Proposed Transfer Date must be provided if the switch type is MI or HH. The Proposed Transfer Date must be after the initial assignment and after any other completed switches which have not been withdrawn. The Proposed Transfer Date must be within the period that the gaining Trader has an active role of 'Trader'. Where the Proposed Transfer Date is not provided, the gaining Trader must be currently active in the role of 'Trader'.
7. The Address information provided on an NT must only be used by the losing Trader to confirm that the new Trader has identified the correct ICP. It must not be used to update the registry.
8. An audit trail and an acknowledgement must be generated for the NT.
9. The NT must be forwarded by the registry to the losing Trader in a file in the same format as input, and in accordance with their switch notify parameters.
10. Where the ICP has current or impending ICP planned service interruptions, and the gaining Trader has not previously been notified of the planned service interruption; the Registry must notify the gaining Trader in accordance with their ICP planned service interruption parameters.
11. An NT must not be corrected or reversed once it has been accepted by the registry; instead, it must be withdrawn.
12. Once the NT has been accepted, all online queries relating to the ICP in question must highlight that a Trader switch is in progress.
13. As part of the NT message delivery and in accordance with the notification parameter settings of the gaining Trader, the system may also provide, immediately (and only to) the gaining Trader, a file containing the events 'as at' the Proposed Switch Date (or today's date where the Proposed Transfer Date is missing) and any events that have changed since that date for each ICP. The format of this file is the snapshot version of PR-030 – Event Detail Report. The report can be requested to be provided in csv or xml format which is a parameter setting within the notify parameters process (MP-020). The name of this file will be the same as the NT message with a file extension of ".eda".

A Trader who is in a Trader Default situation may not submit an NT to the Registry

**Data inputs:**

Each attribute on an input line is comma separated.

NT (notice of transfer) attributes are as follows:

| Name        | Type   | Mandatory/ optional | Description |
|-------------|--------|---------------------|-------------|
| Record type | Char 1 | M                   | Must be "P" |

| Name   | Type            | Mandatory/ optional | Description   |
|--|-----------------|---------------------|---|
| ICP  | Char 15         | M                   |   |
| Requesting Trader  | Char 4          | O                   | New Trader participant identifier. The Participant Identifier can be derived by the system.   |
| Confirmation Address Unit  | Char 20         | O                   |   |
| Confirmation Address Number/ RAPID number  | Char 25         | O                   |   |
| Confirmation Address Street  | Char 30         | O                   |   |
| Confirmation Address Suburb  | Char 30         | O                   |   |
| Confirmation Address Town  | Char 30         | O                   |   |
| Confirmation Post Code   | Numeric 4       | O                   |   |
| Confirmation Address Region  | Char 20         | O                   | Address Region must be a valid Region as per Static Data table.   |
| Confirmation Property Name   | Char 75         | O                   |   |
| Proposed Transfer Date   | DD/MM/YYYY<br>Y | M/O                 | Mandatory if the Switch Type is MI or HH.<br>The gaining Trader must be active in the role of 'Trader' on the Proposed Transfer Date or, if left blank, 'as at' today's date. |
| Switch Type  | Char 2          | M                   | Must be one of MI or TR or HH.  |
| Proposed Profiles  | Char 25         | M                   | One or more Profiles separated by spaces. Each one must be valid for the requesting Trader on the Proposed Transfer Date.   |
| Proposed ANZSIC  | Char 7          | O                   | Valid consumer's ANZSIC code,   |
| User Reference   | Char 32         | O                   | Free text.  |
| Example:<br>HDR,RQSWITCHNT,RETB,RGST,16/07/2007,15:36:20,1,<br>P,9999999999AB123,RETB,Unit1,127,Peel<br>Street,Ohau,Twizel,9971,Canterbury,01/01/2009,MI,RPS MXP,A013100,NTSwitchUserRef |                 |                     |   |

| Processing:   |
|---|
| <p><b>System</b></p> <ol style="list-style-type: none"> <li>Validates all attributes and checks their dependencies.</li> <li>Checks that the requesting Trader is allowed to input the NT.</li> </ol> |

3. Checks the Trader is not in a Trader Default situation
4. Rejects an NT with errors and returns it to the sender with the reason for the rejection.
5. Updates each ICP to indicate that a Trader switch is in progress.
6. Keeps a copy of the NT and completes the audit trail information for it.
7. Delivers the NT to the current Trader either immediately or as part of a later batch in accordance with that Trader's switch notify parameters.
8. Identifies if the ICP has current or impending ICP planned service interruption records and, where the gaining trader has not previously been notified of the planned service interruption, notifies the gaining trader in accordance with the gaining Trader's ICP planned service interruption notification parameters.
9. Deliver a snapshot PR-030 file to the new Trader, in accordance with their notify parameter settings.
10. Generates an acknowledgement to the gaining Trader.

**Data outputs:**

- ICP updated to indicate that a Trader switch is in progress and the NT has been received.
- Stored copy of the switch request message and its associated audit trail information.
- NT to forward to the losing Trader.
- ICP planned service interruption to the gaining Trader
- Acknowledgement.

**RW-020 Acknowledge withdrawal request (AW)**

|                         |  |
|-------------------------|--|
| <b>Sub-process:</b>     | <b>RW-020 Acknowledges withdrawal request (AW)</b>                       |
| <b>Process:</b>         | Trader withdraws switch  |
| <b>Participants:</b>    | Trader, Metering Equipment Provider                                      |
| <b>Code references:</b> | Clauses 17 and 18 of Schedule 11.3 <u>and</u> Schedule 11.5 of the Code. |
| <b>Dependencies:</b>    | <u>RW-010</u>  |

|   |
|---|
| <b>Description:</b>   |
| A Trader, having received a notice requesting a switch withdrawal, sends an acknowledge withdrawal (AW) message to the registry in reply. The acknowledgement can either accept or reject the withdrawal request. |

|   |
|---|
| <b>Business requirements:</b>   |
| <ol style="list-style-type: none"> <li>1. The Trader receiving a notice to withdraw a switch must respond to it by sending an AW to the registry.</li> <li>2. There must be an immediately prior NW for the latest switch of the ICP and no matching AW.</li> <li>3. A Trader must not submit a AW message where the result is a Trader in a Trader Default situation gaining responsibility for an ICP.</li> <li>4. A Trader <u>must</u> only submit an AW acceptance message which would cause the ICP to become the responsibility of a Trader in a period where they were active in the role of 'Trader'.</li> <li>5. The registry must keep a copy of the AW for a minimum of 3 months.</li> <li>6. An audit trail and an acknowledgement must be generated for the AW.</li> <li>7. The AW must be forwarded to the other Trader by the registry in a file and in accordance with their switch notify parameters.</li> <li>8. The AW must be forwarded to the current MEP, unless they have been sent the AW as a result of also being the Trader.</li> <li>9. An AW cannot be corrected or reversed once accepted by the registry.</li> </ol> |

| <b>Data inputs:</b>   |         |                     |   |
|---|---------|---------------------|---|
| Each attribute on an input line is comma separated.                                 |         |                     |   |
| <ul style="list-style-type: none"> <li>• AW (withdrawal acknowledgement)</li> </ul> |         |                     |   |
| Name  | Type    | Mandatory/ optional | Description   |
| Record type   | Char 1  | M                   | Must be 'P' - premises.   |
| ICP   | Char 15 | M                   |   |
| Trader  | Char 4  | O                   | Trader Participant Identifier who submits the withdrawal acknowledgement. Can be derived by system. |

|   |         |   |  |
|---|---------|---|--|
| Withdrawal Transfer Status  | Char 1  | M | A—withdrawal accepted.<br>R—withdrawal rejected. |
| User Reference  | Char 32 | O | Free text.                                       |
| <p><u>Example:</u><br/>HDR,RQSWITCHAW,RETB,RGST,10/07/2007,11:00:00,1<br/>P,9999999999AB123,RETB,A,AW_UserReference</p> |         |   |  |

|   |
|---|
| <b>Processing:</b>  |
| <p><b>System</b></p> <ol style="list-style-type: none"> <li>1. Validates all attributes and checks their dependencies.</li> <li>2. Checks that the responding Trader is allowed to send the AW message.</li> <li>3. Checks the gaining Trader is not in a Trader Default situation.</li> <li>4. Rejects an AW message with errors and returns it to the sender with a reason for the rejection.</li> <li>5. If the AW message indicates that the withdrawal is accepted, cancels the latest switch. If it was a completed switch, any events inserted by the gaining Trader after the Actual Transfer Date of the switch are reversed except for Trader events that commenced an MEP switch where an MN acceptance was also submitted. In this instance, the system will replace these Trader events with details inherited from the prior Trader's latest Trader event, but with the Event Date and Proposed MEP attributes taken from the Trader event being replaced. The ICP is updated to indicate that a switch is no longer in the withdrawal process. Responsibility for the ICP reverts to the losing Trader.<br/><br/><u>Cancels (removes) ICP planned service interruption information for the losing Trader; that is the Trader that does not have ICP responsibility is no longer to be notified of planned service interruption information. If required creates ICP planned service interruption information and notifies the gaining trader in accordance with the gaining Trader's ICP planned service interruption notification parameters.</u></li> <li>6. If AW indicates that the withdrawal is rejected and, prior to the commencement of the withdrawal being initiated, a Trader switch was in progress, the system restores the ICP to the <i>switch in progress</i> state. (The Trader switch can proceed, or another withdrawal can be initiated.) If the withdrawal was for an already completed Trader switch, the system ends the withdrawal in progress for the ICP. (It is available for switching again.)</li> <li>7. Forwards the AW to the other Trader either immediately or as part of a later batch in accordance with that Trader's switch notify parameters.</li> <li>8. Forwards the AW to the current Metering Equipment Provider of the ICP. All AW messages are batched together in one file and delivered overnight.</li> <li>9. Completes the audit trail information of each event inserted and reversed as well as for the AW.</li> <li>10. Generates an acknowledgement of the AW for the responding Trader.</li> <li>11. Determines the affected parties of each event insertion, replacement and reversal and generates notifications to them, with reference to their notification parameters. The affected parties are the Distributor, gaining Trader, losing Trader, MEP and the Proposed MEP if there is an MEP switch in progress.</li> <li>12. Each withdrawal initiation and acknowledgement pair of transactions, regardless of whether the acknowledgement is an acceptance or a rejection, resolves a switch withdrawal request.</li> <li>13. A Trader event reversal may result in the MEP switch in progress status being set off.</li> </ol> |

**Data outputs:**

- ICP updated to indicate that the latest Trader switch is no longer being withdrawn.
- Stored copy of the AW and its associated audit trail information.
- AW to forward to the other Trader and MEP.
- Possible Trader and Status event reversals.
- Possible Trader event replacements.
- Possible MEP switch in progress status set off.
- Notifications.
- Acknowledgements.

**RM-020 Add new trader information**

|                         |  |
|-------------------------|--|
| <b>Sub-process:</b>     | <b>RM-020 Add new Trader information</b>                         |
| <b>Process:</b>         | Trader updates information about an ICP                          |
| <b>Participants:</b>    | Traders  |
| <b>Code references:</b> | Clauses 11.7, 11.14, 11.18, and clauses 9 to 20 of Schedule 11.1 |
| <b>Dependencies:</b>    | RA-010   |

|   |
|---|
| <b>Description:</b>   |
| The Trader adds one or more new events to an ICP. The event(s) may either represent a change to the information stored on the registry in respect of the ICP, e.g. a new MEP, or may be information that should have been entered previously but was missed. The event is not for an existing Event Date. |

|   |
|---|
| <b>Business requirements:</b>   |
| <ol style="list-style-type: none"> <li>1. Traders are solely responsible for updating Trader event information. They also share the responsibility of maintaining the Status event with the Distributor.</li> <li>2. Traders may only insert new Status events with Status values of <i>active</i> or <i>inactive</i></li> <li>3. At a minimum, all mandatory attributes of an event must be provided; no attribute values may be inherited from prior events.</li> <li>4. Traders may only insert events with Event Dates that are within their period of responsibility.</li> <li>5. Traders may only insert events with their own Participant Identifier as the value of the Trader attribute.</li> <li>6. Events cannot be inserted prior to the date on which the first Trader accepted responsibility for of the ICP.</li> <li>7. Events cannot be inserted for Event Dates after the date of decommissioning.</li> <li>8. An event must not be inserted if that would invalidate other prior events.</li> <li>9. It must be possible to insert more than one event at the same time.</li> <li>10. A Trader cannot insert a new Proposed MEP attribute (ie. change it) in a Trader event where the Event Date is in the period of responsibility of a different MEP that is not the current MEP. The period of responsibility for an MEP is the period on and between the Event Date of their first population of Metering Event data until the Event Date of the next MEPs first population of their Metering event data. However, where there is no 'next MEP' then an event with a new Proposed MEP is permitted provided this Trader event has the latest Event Date (there are no Trader events with later Event Dates). To clarify, a Trader cannot input a new Proposed MEP attribute (ie. change it to a different MEP code) in a new Trader event which is not the latest.</li> <li>11. A Trader cannot submit a new Proposed MEP in a Trader event where its Event Date is on or before the latest Event Date of any Metering Event; unless approved by the Authority (refer to Sub-process MM-040).</li> </ol> |



12. A Trader cannot submit a new Proposed MEP in a Trader event when there is a Trader switch in progress.
13. If more than one event type is being inserted, the Event Dates of each event type may differ. It is possible to add information for just one event type ie. either the Trader event or the Status event.
14. If a new Proposed MEP Identifier has been submitted, the ICPs MEP Switch in progress status is set on. Where the ICP has current or impending ICP planned service interruptions, and the Proposed MEP has not previously been notified of the planned service interruption; the Registry must notify the Proposed MEP in accordance with their ICP planned service interruption parameters.

Refer to Appendix 7 for guidance on the MEP participant identifiers of MNON and MREM. These should not be notified to the registry as a MEP participant identifier by traders

**Data inputs:**

One or more of:

- Trader event; or
- Status event.

Each attribute on an input line is comma separated.

See sub-process RA-010 for the format.

**Processing:**

**System**

1. Validates all attributes and checks their dependencies.
2. Checks that the Trader is allowed to make this change.
3. Adds the events supplied by the Trader.
4. Completes the audit trail information for each event added.
5. Determines the affected parties for each event inserted (Distributor, Trader, other Trader if there is a Trader switch in progress (new or withdrawal), MEP, Proposed MEP if there is an MEP switch in progress) and generates notifications for those who require them.
6. Generates acknowledgements to the Trader for each event added.
7. Determines whether a new Proposed MEP Identifier has been submitted and then the ICPs MEP Switch in progress status is set on.
8. Identifies if the ICP has current or impending ICP planned service interruption records and, where the Proposed MEP has not previously been notified of the planned service interruption, notifies the Proposed MEP in accordance with the Proposed MEP's planned service interruption notification parameters.

**Data outputs:**

- New Trader event and/or Status event with the associated audit trail information.
- Notifications.
- Acknowledgements.
- MEP Switch in progress status.

**MM-010 Add new metering information**

|                         |  |
|-------------------------|--|
| <b>Sub-process:</b>     | <b>MM-010 Add new metering information</b> |
| <b>Process:</b>         | MEP maintains metering information         |
| <b>Participants:</b>    | Metering Equipment Providers               |
| <b>Code references:</b> | Schedule 11.4                              |
| <b>Dependencies:</b>    |  |

|   |
|---|
| <b>Description:</b>   |
| The MEP, as indicated in the Trader event, inputs metering installation information for an Event Date on or after the event date of the Trader event that first nominated them as the Proposed MEP. |

|   |
|---|
| <b>Business requirements:</b>   |
| <ol style="list-style-type: none"> <li>1. A new Metering event can only be added to an ICP if the ICP has a Trader assigned (is in the active or inactive state).</li> <li>2. The addition of metering information requires the completion of, at least, all the mandatory attributes in the Metering event for ALL installations, components, and channels. No partial additions of particular installations, components or channels are permitted as no attribute values are automatically inherited from prior events. N.B. A submission for the same Event Date as an existing Metering event will overwrite all the existing metering information with the new metering information.</li> <li>3. The Event Date of an insertion of metering information must be:             <ul style="list-style-type: none"> <li>• within the MEPs period of responsibility for that ICP, <b>or</b>,</li> <li>• on or after either                 <ol style="list-style-type: none"> <li>a. in the case of the first MEP of a new ICP (i.e. there is no active metering event), the Event Date of the earliest contiguous Status event change to the Ready state of the ICP preceding initial assignment, otherwise</li> <li>b. the Event Date of the latest Trader event in which they were first nominated as the Proposed MEP<sup>1</sup> ,</li> </ol> </li> </ul> <p>where</p> <ul style="list-style-type: none"> <li>• they have also sent an associated acceptance MEP Responsibility Notice (MN) to the Registry for this ICP since <b>and</b></li> <li>• there are no Metering Events for a different MEP on or after the Event Date of their proposed Metering Event <b>and</b></li> <li>• they are the latest Proposed MEP.</li> </ul> <p>(The period of responsibility is the period on and between the Event Date of their first population of metering event data until the Event Date of the next MEPs first population of their metering event data).</p> </li> </ol> |

- <sup>1</sup>It is possible that the Trader has inserted subsequent Trader events with other attribute changes. The MEP should be permitted to insert metering information for Event Dates on or after the initial/first Trader event where they were nominated provided the latest Trader event still has their code as the Proposed MEP and all other conditions above are satisfied. For the Event Date of an historical insertion see MM-040 Missing MEP Historical Insertion.
4. Maintenance can be undertaken of Metering events of an ICP whilst a Trader switch or an MEP switch is in progress.
  5. Where the update is a change of MEP responsibility, and the ICP has a planned service interruption; the Registry must remove the planned service interruption notification from the losing MEP
  6. Notifications must be generated to all affected parties as at the Event Date (Distributor, Trader, other Trader if there is a Trader switch in progress (new or withdrawal), MEP, Proposed MEP if there is an MEP switch in progress).
  7. An acknowledgement of the change is sent to the submitting MEP.
  8. An event must not be corrected if that would invalidate other prior events.
  9. Audit logs must be recorded for all inserts and changes to Metering events.
  10. Arrival of metering records for the Proposed MEP on the latest Trader event switches the MEP switch in progress status off.

| <b>Processing:</b>   |
|--|
| <p>System</p> <ol style="list-style-type: none"> <li>1. Validates all attributes and checks their dependencies.</li> <li>2. Summarises the metering information from the installation, meter/component and register/channel attributes submitted to derive the metering summary attributes of the new Metering event.</li> <li>3. Summarises the Highest Metering Category on the installation level from the metering component level information – Metering Installation Category attribute - applicable for the installation.</li> <li>4. Creates the appropriate events with the attribute values input by the MEP and derived by the system (Summary level information).</li> <li>5. Completes the audit trail information for each Metering event created.</li> <li>6. Determines who the affected parties are (Distributor, Trader, other Trader if there is a Trader switch in progress (new or withdrawal), MEP, Proposed MEP if there is an MEP switch in progress) and generates notifications to them, with reference to their notification parameters.</li> <li>7. Generates acknowledgements to the MEP for each event created.</li> <li>8. Determines whether to switch off the MEP switch in progress status for the ICP by examining the submitting MEP against the Proposed MEP on the applicable Trader event.</li> </ol> |

### SD-020 Maintain Static Data

|                         |  |
|-------------------------|--|
| <b>Sub-process:</b>     | <b>SD-020 Maintain static data</b>             |
| <b>Process:</b>         | Maintain static data                           |
| <b>Participants:</b>    | Registry Manager                               |
| <b>Code references:</b> | Clauses 19 to 22 of Schedule 11.3 of the Code. |
| <b>Dependencies:</b>    |  |

|   |
|---|
| <b>Description:</b>   |
| <p>All the codes and identifiers used in the registry are maintained by the registry manager. The registry manager receives instructions regarding the maintenance of these codes and identifiers from the Authority, which approves all new codes and identifiers. The types of codes and identifiers to be maintained and their purposes are as follows:</p> <ul style="list-style-type: none"> <li>• Participant identifiers and the roles of each participant (4 characters) – valid Trader, Metering Equipment Providers, Approved Test Houses and Distributor Participant Identifiers, their full company names and their roles.</li> <li>• Event types (3 characters) – used to validate events.</li> <li>• Profiles (3 characters) – general list of all Profiles that can be used in the system.</li> <li>• Profiles available to individual Traders during specific periods.</li> <li>• Regions (15 characters) – used to validate the regions that can be used in addresses. The current regions are:             <ul style="list-style-type: none"> <li>• Auckland;</li> <li>• Bay of Plenty;</li> <li>• Canterbury;</li> <li>• Gisborne;</li> <li>• Hawke’s Bay;</li> <li>• Manawatu;</li> <li>• Marlborough;</li> <li>• Nelson &amp; Bays;</li> <li>• Northland;</li> <li>• Otago;</li> <li>• Southland;</li> <li>• Taranaki;</li> <li>• Timaru &amp; Oamaru;</li> <li>• Waikato;</li> <li>• Wairarapa;</li> <li>• Wanganui;</li> <li>• Wellington; and</li> <li>• West Coast.</li> </ul> </li> <li>• Event Status codes (three digits numeric) – used to validate Status events.</li> <li>• Status Reason codes (two digits numeric) – used to validate the Status Reason in Status events:</li> </ul> |

The current reasons associated with a decommissioned Status are:

- 01—setup in error;
- 02—installation dismantled; and
- 03—ICP amalgamation.

The current reasons associated with an inactive Status are:

- 04— electrically disconnected vacant property;
- 05—reconciled elsewhere;
- 06— electrically disconnected ready for decommissioning;
- 07— electrically disconnected remotely by AMI meter;
- 08— electrically disconnected at pole fuse;
- 09— electrically disconnected due to meter disconnected;
- 10— electrically disconnected at meter box fuse; and
  - 11— electrically disconnected at meter box switch and
  - 12 – New connection in progress

- NT switch types (two characters) – used to validate NT switching protocol messages: S, SM, H, HM, NH, HN, HH, MI and TR. S, SM, H, HM, NH, HN will be discontinued after migration but will remain in historical records.
- Additional NT switch types for a Trader Default situation –T<n> (where <n> is A, B, etc for ICPs allocated during tender 1, 2, etc) and MA (ICPs allocated during mandatory assignment). The Trader Default switch types must only be used by the Registry Manager during a Trader Default switching process
- Meter channel, TN/NC and CS/RR register content codes (four characters) – used to validate metering channel updates, TN, NC, CS and RR switching protocol messages (see below).
- TN/NC and CS/RR register units (five characters) – valid values for TN, NC, CS and RR messages: kWh, kW, kVA, kVArh.
- TN/NC and CS/RR meter location codes – valid values for use in TN, NC, CS and RR messages (see below).
- AN response codes and MN advisory codes (two characters) – used to validate AN and MN switching protocol messages (see below).
- NW withdrawal advisory codes (two characters) – used to validate NW switching protocol messages (see below).
- AW/AC withdrawal response codes (one character) – used to validate AW and AC switching protocol messages: A—accept, R—reject.
- Fuel Type codes (char 15) and Description (char 100):
  - bio-mass - bio-mass (includes wastes and residues);
  - electric vehicl - electric vehicle (includes fuel cells);
  - fresh water - fresh water (includes stored, pumped and run of river);
  - geothermal - geothermal;

industrial proc - industrial process (includes heat, excludes bio-mass);  
 liquid fuel - liquid fuel (includes diesel, petrol and fuel oil);  
 natural gas -natural gas;  
 solar - solar;  
 tidal - tidal;  
 wave - wave;  
 wind - wind;  
 other - includes any process that doesn't fit neatly into another category, includes multiple generators of different fuel types; and  
 undefined - this code exists only to support the creation of the fuel type field and cannot be selected by distributors.

- ANZSIC codes with an additional code "000000" to indicate a residential consumer. A table of :
 

| ANZSIC Code (char 7) | Description (char 120) |
|----------------------|------------------------|
|                      |                        |
- Direct Billed Status codes (char 11). A table of 'Retailer', 'Distributor', 'Neither', 'Both', 'TBA' and NULL.
- Reconciliation Type codes (2 characters). Used to validate the Reconciliation Type in Network events. For a list of valid codes see the description of this attribute in section 1.4.
- Installation Type codes (1 character). Used to validate the Installation Type in Network events. For a list of valid codes see the description of this attribute in section 1.4.
- Metering Installation Type codes (3 characters). Used to validate the Metering Installation Type in the Metering Installation level of Metering events. For a list of valid codes see the description of this attribute in section 1.4.
- Certification Type codes (1 character). Used to validate the Certification Type in the Metering Installation level of Metering events. For a list of valid codes see the description of this attribute in section 1.4.
- Certification Variation codes (1 character). Used to validate the Certification Variations in the Metering Installation level of Metering events. For a list of valid codes see the description of this attribute in section 1.4.
- Component Type codes (1 character). Used to validate the Metering Component Type in the Metering Component level of Metering events. For a list of valid codes see the description of this attribute in section 1.4.11.
- Trader Default minimum tariff (numeric 6.6). Used during a Trader Default situation. Compared against the tariff supplied by a Trader tendering for ICPs. An unrealistic tariff could inadvertently cause a recipient Trader to receive ICP's that may cause hardship. The minimum tariff is set by the Authority and is in c/kWh
- Switch Saving Participant register. Used to record traders that have elected to have or cancel the switch saving protection scheme. Register includes trader name, participant identifier, start date, and end date (discontinued).
- Compensation Factors. Contains a list of known, commonly used Compensation Factors where Metering Component Type is M (metered). Only used in audit compliance reporting.

- Trader Default Exclusion Code (3 characters). Describes the reason why a Trader is unable to accept a mandatory assignment of ICPs.
- EIEP File Types (7 characters). Used to identify EIEP Transfer Permissions (EI-040). The EIEP file must indicate whether it is transferred to the recipients batch directory for further processing
- Reserved Entity Codes a code value that may not be used as an entry on a static data table, for example, a Distributor may not use DEF or DRL as a Distributor Loss Factor Code:

**Business requirements:**

1. Only the registry manager must be able to add, modify or delete codes.
2. Each code and identifier must have an effective start date and end date associated with it and a full description.
3. The registry must maintain an audit trail for each insert/update/deletion to record who made the change and when.

**Processing:**

**Data inputs:**

- New or changed information for each table.

**Data outputs:**

- Updated static data tables.