

# Electricity Information Exchange Protocols (EIEP)

## EIEP11: New connection information Non-regulated

Effective from 1 October 2019

| Version | Date amended        | EIEP Ref | Comments   |
|---------|---------------------|----------|--|
| 10      | 27 November<br>2013 | EIEP 7   | Sender format field decreased from 50 to 20 characters.  |
| 11      | 2 October 2018      | EIEP11   | Terminology alignment and other minor improvements and<br>corrections consistent with changes made to other EIEPs<br>in accordance with the 2017 operational review of EIEPs<br>1-12 (excluding EIEP11)<br>Replaced "livening" with "electrically connecting" and<br>corresponding terms to reflect Code changes made in<br>2013 |

## **Version control**

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## 1 EIEP11: New connections information

| Title:          | EIEP11: New connections information   |  |  |
|-----------------|---|--|--|
| Version:        | 11  |  |  |
| Application:    | <ul> <li>Where agreed, this protocol allows:</li> <li>a) traders to request new ICPs or livening of new ICPs from a distributor (or their agent)</li> <li>b) distributors to advise traders of new ICP creation.</li> </ul>   |  |  |
| Participants:   | Trader/Distributor  |  |  |
| Code reference: |   |  |  |
| Dependencies:   | The use of system agreement may set out that the parties have agreed to use<br>EIEP11 for new connections information.<br>The use of system agreement between the distributor and the trader may also<br>set out additional requirements relating to the information that must be<br>provided in this file that the distributor and/or the trader must comply with.<br>Address information must also comply with registry requirements. |  |  |

### Description of when this protocol applies

This file is used by traders to request new ICPs or to request livening from the distributor (or their agent) prior to the livening of an ICP and for distributors to use this file to advise traders of new ICP creation.

Either the trader or the distributor will use this file to notify each other of changes to the ICP during the construction phase.

### **Business requirements**

- The distributor and each trader must agree on the file transport mechanism by which the trader or distributor will provide information and the destination address. Non-manual interfaces use electronic file transfer either via File Transfer Protocol (FTP) or Secure File Transfer Protocol (SFTP) connectivity. In the case of FTP a security mechanism must be used to protect confidentiality. Whatever method is agreed that method must be in a format approved and published by the Authority.
- 2. Where information is required to be transferred using email, the contents must be delivered in a secure manner and password protected.
- 3. This protocol will be used in the timeframes as agreed between parties.
- 4. An agent may provide data on behalf of the trader, in which case the header will identify the relevant parties. The appointment of an agent must be a permission function of the responsible reconciliation participant and receiving participants must allow for agents in their systems.
- 5. Only codes that are stipulated in this document, or are Electricity Authority approved published codes, or are codes determined in the registry and reconciliation functional specifications are to be used.
- 6. Information provided in the file will be consistent with the terminology used in the Glossary of Standard Terms published by the Authority.
- 7. The file must contain all mandatory information, failure to provide the required information will result in the file being deemed as incomplete.

#### **Business requirements**

- 8. Information is to be provided in accordance with the following status codes unless otherwise specified:
  - O Optional
  - M Mandatory where applicable
  - C Conditional Mandatory if available, otherwise Null (also refer to the validation rules)
- To assist in understanding where these apply when files can be communicated both ways between participants, the relevant status code is given in the assigned column either Trader to Distributor or Distributor to Trader.
- 10. All price category codes or price component codes used must be those published by the distributor.
- 11. This EIEP has five formats depending on the type of communication required. The codes for each file type are further discussed below. To follow this protocol is a table of codes for use with this file.
- 12. The initial request may come from either the contractor (acting on behalf of the customer) or the trader. The trader will use the request for new ICP using the format RAICP, whereas if a contractor or customer makes the request this EIEP will not be required.
- 13. If the distributor has received a request (either from a trader or directly from a customer) they will advise the proposed trader once the ICP has been approved using the appropriate RAICP fields.
- 14. The RAICP file can also be used to supply new information to the trader nominated by the applicant where a request was not made directly by the trader. This information may include rejection or notify of delay in issuing an ICP. The distributor must provide information as to the reason (codes given in table to follow) for delay and a proposed ICP creation date must be provided.
- 15. On receipt of an RAICP file from a distributor, the trader may accept or reject responsibility by using the appropriate acceptance (ACC) or rejection (REJ) response code.
- 16. For address information the postal address is considered to be the billing address unless otherwise agreed between parties.
- 17. Where a postal address is required, if for a post box or rural area then the PO or RD must be specified.
- 18. The postal address post code field is to be used when an international zip code is to be applied.
- 19. Changes that are made to the ICP prior to the ICP being made "active" on the registry must be communicated by either party using this EIEP with a file name CHICP.
- 20. The CHICP format will include the current status of all fields including those that have changed. The change in status can include confirmation of electrically connecting an ICP in response to the request to electrically connect the ICP from a trader.
- 21. Requests from traders to electrically connect an ICP will use the LRICP format.
- 22. For the purpose of communication metering information the MTICP format is to be used. A record should be present for all equipment at the installation, not just being added, changed or removed.

#### **General requirements**

- 1. If there are any conflicts between this document and the Code, the Code will take precedence.
- 2. In general, all participants must provide the recipient with:
  - (a) accurate information for all points of connection at which they are responsible for the current consumption period
  - (b) when available, revised information for all points of connection at which they have purchased or sold electricity during any previous consumption period
  - (c) any additional information requested in respect of any consumption period.
- 3. A number of data transfers are required between participants in order for the EIEP process to take place. These data flows if not previously agreed between participants are to be those recommended by the Authority. At all times data transfers must take place in a secure and predictable manner.

### General requirements

4. It is the responsibility of the parties to meet the principles of the Privacy Act when exchanging customer information.

#### Data inputs

Information from trader's application for supply process.

### 1.1 Header for all EIEP11 file formats

| Event data                               | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|--|----------------|---|---|---|
| Header record type                       | Char 3         | М   | М   | HDR – indicates the row is a header record type   |
| File type                                | Char 7         | М   | М   | Use code related to file format e.g. RAICP  |
| Version of EIEP                          | Num 3.1        | М   | М   | Version of EIEP<br>protocol that is being<br>used for this file.  |
| Sender                                   | Char 20        | М   | М   | Name of sending party.<br>Participant identifier to<br>be used if the sender is<br>a participant.                   |
| Sent on behalf of participant identifier | Char 4         | С   | С   | Participant identifier of<br>party on whose behalf<br>data is provided.<br>Mandatory if sender not<br>a participant |
| Recipient<br>participant identifier      | Char 4         | М   | М   | Valid recipient participant identifier  |
| Report run date                          | DD/MM/YY<br>YY | М   | М   | Date the report is run  |
| Report run time                          | HH:MM:SS       | М   | М   | Time the report is run  |
| Unique file identifier                   | NUM 15         | М   | М   | Number that uniquely identifies the report  |
| Number of detail records                 | NUM 8          | М   | М   | Total number of DET records in report   |
| Utility type                             | Char 1         | М   | М   | Type of energy supply;<br>G = Gas; or<br>E = Electricity  |

## 1.2 Request for new ICP or acknowledgement and advice of new ICP (RAICP or AKICP)

| Event data  | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|---|----------------|---|---|---|
| Detail record type                                    | Char 3         | М   | М   | DET – indicates the row is a detail record.   |
| Trader reference                                      | Char 12        | М   | С   | Identifies the site in the trader's system  |
| Initiator name  | Char 30        | М   | М   | Name of the customer<br>or agent who made the<br>request for this ICP.  |
| Initiator phone                                       | Char 15        | М   | М   | Contact phone number of Initiator   |
| ICP request date                                      | DD/MM/YY<br>YY | М   | М   | Date the originator made the request.   |
| Proposed<br>participant identifier                    | Char 4         | М   | М   | Valid reconciliation<br>participant identifier that<br>will be supplying the site   |
| Proposed date for<br>electrical<br>connecting the ICP | DD/MM/YY<br>YY | С   | С   | Date that the ICP is<br>expected to be<br>electrically connected.<br>Can be null  |
| POC   | Char 8         | C   | С   | Valid code for the point<br>of connection to which<br>the ICP is connected as<br>at the date the report is<br>run. For local networks<br>'POC' is typically<br>referred to as the GXP.<br>Can be null |
| Reason code   | Char 3         | М   | М   | Reason code from<br>distributor Indicates<br>reason this record is<br>being sent. See table of<br>codes below   |
| ICP creation date                                     | DD/MM/YY<br>YY | C   | C   | The date the ICP<br>identifier was first<br>created on the registry<br>or modified If reason<br>code given was DLY<br>(Delayed), this should<br>be the predicted ICP<br>creation date.                |

| Event data                          | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|-------------------------------------|---------|---|---|--|
| ICP identifier                      | Char15  | С   | М   | Unique identifier for an<br>ICP created by a<br>distributor in<br>accordance with clause<br>1 of Schedule 11.1 of<br>the Code  |
| Transformer<br>number               | Char12  | 0   | 0   | Transformer number<br>ICP is likely to be fed<br>from. Can be null.  |
| Network participant<br>identifier   | Char4   | М   | М   | Network participant identifier   |
| Distributor<br>reference            | Char12  | С   | С   | Unique reference<br>number in distributor's<br>system (if already<br>allocated). Can be null   |
| Connection type                     | Char2   | Ο   | 0   | Connection type for the NSP. Can be null   |
| Loss category code                  | Char 7  | С   | С   | The relevant code in the<br>schedule published by<br>the registry that<br>identifies the relevant<br>loss factor(s) that apply<br>to submission<br>information for the ICP |
| Voltage                             | Char1   | С   | М   | L = LV, H = HV   |
| Phases                              | Int 1   | М   | М   | Number of phases   |
| Current rating                      | Int 4   | С   | С   | Current rating requested. Can be null  |
| Capacity                            | Num 5.1 | С   | С   | Capacity (KVA / kW).<br>Can be null  |
| Requested network<br>price category | Char 15 | C   | М   | Price category code<br>(from the distributor's<br>published delivery price<br>schedule) requested by<br>the originator. Can be<br>null                                     |
| Actual network<br>price category    | Char 15 | С   | С   | Actual price category<br>code advised by the<br>distributor  |

| Event data                  | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|-----------------------------|---------|---|---|---|
| Congestion period<br>demand | Num 4.1 | Ο   | С   | Mandatory if calculation<br>of network charges<br>requires a congestion<br>period demand. Can be<br>null  |
| Residential flag            | Char 1  | М   | Μ   | Premises is residential,<br>Y or N  |
| Name                        | Char 50 | С   | С   | Name of end consumer.<br>Can be null  |
| Phone number<br>other       | Char 15 | С   | С   | Contact phone number<br>of end consumer. Can<br>be null   |
| Physical address<br>unit    | Char 20 | С   | С   | Sub dwelling number;<br>Level of sub dwelling   |
| Physical address<br>number  | Char 25 | С   | С   | RAPID Number, Street<br>Number, Dairy Number;<br>issued by government<br>agency or local<br>government authority<br>that identifies a point or<br>location on a street.           |
| Physical address<br>region  | Char 20 | С   | С   | The regions are based<br>on phone book areas<br>that are generally<br>known by callers. (see<br>registry functional specs<br>for list)  |
| Physical address<br>street  | Char 30 | М   | М   | Official road name<br>issued by government<br>agency or local<br>government authority.  |
| Physical address<br>suburb  | Char 30 | C   | C   | A bounded locality<br>within a city, town or<br>shire principally of<br>urban character and<br>usually with a focus of a<br>shopping centre,<br>schools or<br>transport facility. |
| Physical address<br>town    | Char 30 | М   | М   | An officially recognised<br>and named population<br>centre, defined within a<br>geographic boundary.  |

| Event data                     | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|--------------------------------|---------|---|---|--|
| Physical address<br>post code  | Char 30 | 0   | 0   | The post code assigned<br>by NZ post (zip code if<br>outside NZ).                                    |
| Physical address property name | Char 75 | С   | С   | Name given to the<br>property or building by<br>the owner or party with<br>legal naming rights.      |
| Physical address<br>lot number | Int 5   | С   | С   | If no address a lot<br>number must be<br>provided. Can be null                                       |
| Physical address<br>DPS        | Char 10 | С   | С   | If no address a DPS<br>number must be<br>provided. Can be null                                       |
| Additional<br>information      | Char 75 | С   | С   | Additional location information. Can be null   |
| Postal address unit            | Char 25 | С   | С   | Sub dwelling number;<br>Level of sub dwelling  |
| Postal address num             | Char 25 | С   | С   | Sub dwelling number;<br>Level of sub dwelling  |
| Postal address<br>street       | Char 30 | С   | С   | Official road name<br>issued by government<br>agency or local<br>government authority.               |
| Postal box/RD                  | Char 30 | С   | С   | Number assigned a postal delivery box or rural delivery number.                                      |
| Postal address<br>suburb       | Char 30 | С   | С   | A bounded locality<br>within a city, town or<br>shire principally of<br>urban character              |
| Postal address<br>town         | Char 30 | С   | С   | An officially recognised<br>and named population<br>centre, defined within a<br>geographic boundary. |
| Postal address<br>postcode     | Char 30 | C   | С   | The post code assigned<br>by NZ post (zip code if<br>outside NZ).                                    |
| Postal address<br>country      | Char 30 | С   | С   | The country for postal information   |

| Event data   | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|--|---------|---|---|--|
| Electrician name   | Char 30 | С   | С   | Name of electrician.<br>Can be null  |
| Electrician phone  | Char 15 | С   | С   | Contact phone number<br>for electrician. Can be<br>null                          |
| Unmetered supply   | Char 1  | М   | М   | Y or N   |
| Meter installer<br>name                                  | Char 30 | С   | С   | Name of meter installer.<br>Can be null  |
| Meter installer<br>phone                                 | Char 15 | С   | С   | Phone number for<br>meter installer. Can be<br>null                              |
| Name of person<br>electrically<br>connecting ICP         | Char 30 | С   | С   | Name of person<br>electrically connecting<br>ICPs. Can be null                   |
| Authorisation code<br>for electrically<br>connecting ICP | Char 10 | С   | С   | Network authorisation<br>code for electrically<br>connecting ICP. Can be<br>null |
| Phone number of<br>person electrically<br>connecting ICP | Char 15 | С   | С   | Phone number of<br>person electrically<br>connecting ICPs. Can<br>be null        |
| Builders temporary<br>supply                             | Char 1  | М   | М   | Y or N   |
| Irrigation   | Char 1  | М   | М   | Y or N   |
| Irrigation pump size                                     | Num 7.2 | С   | С   | KW rating of irrigation pump. Can be null  |
| Mains size   | Int 4   | С   | С   | Mains size in mm <sup>2</sup> . Can be null                                      |
| Meters in permanent position                             | Char 1  | М   | М   | Y or N. If not applicable<br>use N   |
| Additional<br>information                                | Char 75 | 0   | 0   | Any further useful<br>information about this<br>request. Can be null             |

## 1.3 Change in ICP information or ICP status (CHICP or LRICP)

| Event data  | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|---|----------------|---|---|---|
| Detail record type                                      | Char 3         | М   | М   | DET – indicates the row is a detail record.   |
| Trader reference  | Char 12        | С   | С   | Identifies the site in the trader's system. Can be null   |
| ICP identifier  | Char 15        | М   | Μ   | Unique identifier for an<br>ICP created by a<br>distributor in<br>accordance with clause<br>1 of Schedule 11.1 of<br>the Code   |
| Reason code   | Char 3         | М   | М   | Indicates reason this<br>record is being sent.<br>Refer table 4 (Reason<br>codes) for valid codes.  |
| Service request<br>number                               | Char 15        | С   | С   | Service Request<br>number for request to<br>electrically connect an<br>ICP or acknowledging a<br>request to electrically<br>connect an ICP.<br>Mandatory in these<br>cases. |
| ICP modification<br>date                                | DD/MM/YY<br>YY | М   | М   | Date ICP was modified   |
| Proposed trader<br>participant identifier               | Char 4         | М   | М   | Valid reconciliation<br>participant identifier of<br>trader that will be<br>supplying the site  |
| Proposed date for<br>electrically<br>connecting the ICP | DD/MM/YY<br>YY | C   | С   | Date that the ICP is<br>expected to be<br>electrically connected.<br>Mandatory if request<br>originated by distributor  |
| Actual date ICP<br>was electrically<br>connected        | DD/MM/YY<br>YY | С   | С   | Actual date that ICP<br>was electrically<br>connected   |

| Event data                        | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|-----------------------------------|---------|---|---|--|
| POC                               | Char 8  | 0   | 0   | Valid code for the point<br>of connection to which<br>the ICP is connected as<br>at the date the report is<br>run. For local networks<br>'POC' is typically<br>referred to as the GXP.<br>Can be null. |
| Transformer<br>number             | Char 12 | 0   | 0   | Transformer number<br>ICP is to be fed from.<br>Can be null  |
| Network participant<br>identifier | Char 4  | М   | М   | Network participant identifier   |
| Distributor<br>reference          | Char 12 | С   | С   | Unique reference<br>number in distributor's<br>system if already<br>allocated. Can be null   |
| Connection type                   | Char 2  | Ο   | 0   | Connection type for the NSP. Can be null   |
| Loss category code                | Char 7  | С   | С   | The relevant code in the<br>schedule published by<br>the registry that<br>identifies the relevant<br>loss factor(s) that apply<br>to submission<br>information for the ICP                             |
| Voltage Category                  | Char 2  | С   | С   | L = LV, H = HV   |
| Phases                            | Num 1   | С   | С   | Number of phases   |
| Mains type                        | Char 1  | С   | С   | U = Underground,<br>O = Overhead.<br>Can be null   |
| Mains size                        | Int 4   | С   | С   | Mains size in mm <sup>2</sup> . Can be null  |
| Current rating                    | Int 4   | С   | С   | Current rating   |
| Unit of measure                   | Char 6  | С   | С   | Unit of measure for the<br>current rating (amps/<br>kVA / kW). Null if the<br>current rating is null.  |

| Event data                  | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|-----------------------------|---------|---|---|---|
| Network price<br>category   | Char 75 | С   | C   | The relevant price<br>category code (from the<br>distributor's published<br>delivery price schedule)  |
| Congestion period<br>demand | Num 4.1 | Ο   | C   | Mandatory if calculation<br>of the network charges<br>require a congestion<br>period demand. Can be<br>null   |
| Additional<br>information   | Char 75 | Ο   | 0   | Additional information<br>required to ascertain<br>line charges for the<br>installation. Can be null  |
| Physical address<br>unit    | Char 20 | С   | С   | Sub dwelling number;<br>Level of sub dwelling   |
| Physical address<br>number  | Char 25 | С   | С   | RAPID Number, Street<br>Number, Dairy Number;<br>issued by government<br>agency or local<br>government authority<br>that identifies a point or<br>location on a street.           |
| Physical address<br>region  | Char 20 | М   | Μ   | The regions are based<br>on phone book areas<br>that are generally<br>known by callers. (refer<br>registry functional<br>specification for list)                                  |
| Physical address<br>street  | Char 30 | М   | М   | Official road name<br>issued by government<br>agency or local<br>government authority.  |
| Physical address<br>suburb  | Char 30 | C   | С   | A bounded locality<br>within a city, town or<br>shire principally of<br>urban character and<br>usually with a focus of a<br>shopping centre,<br>schools or transport<br>facility. |
| Physical address<br>town    | Char 30 | М   | М   | An officially recognised<br>and named population<br>centre, defined within a<br>geographic boundary.  |

| Event data   | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|--|---------|---|---|---|
| Physical address<br>postcode                             | Char 30 | С   | С   | The post code assigned<br>by NZ post (zip code if<br>outside NZ).                               |
| Physical address<br>property name                        | Char 75 | С   | С   | name given to the<br>property or building<br>by the owner or party<br>with legal naming rights. |
| Physical address<br>lot number                           | Int 5   | С   | С   | If no address a lot<br>number must be<br>provided. Can be null                                  |
| Physical address<br>DPS                                  | Char 10 | С   | С   | If no address a DPS<br>number must be<br>provided. Can be null                                  |
| Additional<br>information                                | Char 75 | 0   | 0   | Additional location information. Can be null  |
| Electrician name   | Char 30 | Ο   | 0   | Name of electrician.<br>Can be null. Can be null  |
| Electrician phone  | Char 15 | 0   | 0   | Contact phone number<br>for electrician. Can be<br>null   |
| Unmetered supply   | Char 1  | М   | М   | Y or N  |
| Meter installer<br>name                                  | Char 30 | 0   | 0   | Name of meter installer.<br>Can be null   |
| Meter installer<br>phone                                 | Char 15 | Ο   | 0   | Phone number for meter installer. Can be null   |
| Name of person<br>electrically<br>connecting ICP         | Char 30 | Ο   | 0   | Name of person<br>electrically connecting<br>ICP. Can be null                                   |
| Authorisation code                                       | Char 10 | 0   | 0   | Network authorisation<br>code for electrically<br>connecting ICP. Can be<br>null                |
| Phone number of<br>person electrically<br>connection ICP | Char 15 | 0   | 0   | Phone number for<br>person electrically<br>connecting ICP. Can be<br>null                       |

| Event data                    | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|-------------------------------|---------|---|---|--|
| Cert of Verification<br>(CoV) | Char 10 | С   | С   | Certificate of<br>Verification number,<br>mandatory if notice for<br>electrically connecting<br>the ICP. |

## 1.4 Provision of metering information to either party (MTICP)

## 1.5.1 Premise detail

| Event data   | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|--|----------------|---|---|---|
| Detail record type                                       | Char 1         | М   | М   | Valid value: (P)remises   |
| ICP identifier   | Char 15        | М   | Μ   | Unique identifier for an<br>ICP created by a<br>distributor in<br>accordance with clause<br>1 of Schedule 11.1 of<br>the Code   |
| Metering<br>installation location<br>code                | Char 6         | М   | Μ   | The 6 character code<br>(can be 1 to 6<br>characters) from the list<br>of codes within the<br>registry that identifies<br>the location of the<br>metering installation. |
| Additional<br>information                                | Char 75        | 0   | 0   | Freeform text describing<br>additional info regarding<br>meter location. Can be<br>null   |
| Metering<br>installation<br>certification expiry<br>date | DD/MM/YY<br>YY | М   | М   | Metering installation certification expiry date   |
| Metering category  | Num 1          | М   | М   | Meter category 0 to 6.  |
| Meter count  | Int 3          | М   | М   | Number of meters<br>installed. There may be<br>more meter records<br>below than this number   |
| Load control device count                                | Int 3          | М   | М   | Number of load control devices installed  |

| Event data                | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule                                     |
|---------------------------|---------|---|---|---|
| Additional<br>information | Char 75 | Ο   | 0   | Additional info regarding installation. Can be null |

## 1.5.2 Meter detail

| Event data                                | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|---|----------------|---|---|---|
| Record type                               | Char 1         | М   | М   | Valid value: (M)eter  |
| ICP identifier                            | Char 15        | М   | Μ   | Unique identifier for an<br>ICP created by a<br>distributor in<br>accordance with clause<br>1 of Schedule 11.1 of<br>the Code |
| Meter or load<br>control device<br>status | Char 3         | М   | Μ   | "REM" = Removed,<br>"INS" = installed,<br>"LR" = Left Running,<br>"DAM" = Damaged   |
| Installation/remove<br>d date             | DD/MM/YY<br>YY | 0   | 0   | Date meter was<br>installed/removed,<br>Optional otherwise. Can<br>be Null  |
| Equipment owner                           | Char 4         | М   | М   | Party code assigned to the equipment owner  |
| Metering<br>component serial<br>number    | Char 25        | М   | Μ   | Actual serial number of<br>the device. Where<br>integral to the meter,<br>will be the same as the<br>meter serial number.     |
| Meter element<br>number                   | Char 2         | М   | М   | Sequential channel<br>number (identifier)<br>assigned by MEP.   |
| Equipment<br>manufacturer                 | Char 30        | 0   | 0   | Equipment<br>Manufacturer if<br>available   |
| Equipment model                           | Char 30        | 0   | 0   | Equipment model number if available   |

| Event data               | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|--------------------------|---------|---|---|---|
| Meter type               | Char 3  | С   | С   | Mandatory where the<br>metering component<br>type = "M". Can only be<br>assigned as:<br>"NHH" if the metering<br>category is 1 or 2<br>"PP" if the metering<br>category is 1<br>"HHR" can be assigned<br>for any metering<br>category value |
| Phases                   | Num 1   | М   | М   | Number of phases connected to the meter   |
| Meter rating             | Int 4   | Ο   | 0   | Maximum current rating for the meter  |
| Meter voltage            | Int 5   | 0   | 0   | Meter voltage in volts  |
| Meter class              | Num 2.2 | Ο   | 0   | Measurement class for the meter   |
| Meter channel<br>count   | Int 3   | М   | М   | 0 to 999 to indicate the<br>number of meter<br>channels used to obtain<br>metering information at<br>the ICP. May be zero.  |
| Energy flow<br>direction | Char 1  | C   | С   | An identifier of whether<br>the channel records the<br>import (injection from<br>the ICP into the<br>Network) ("I"), or the<br>export (extraction from<br>the network to<br>the ICP) ("X")  |

## 1.5.3 Meter channel detail

| Event data  | Format | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule         |
|-------------|--------|---|---|-------------------------|
| Record type | Char 1 | М   | Μ   | Valid value: (R)egister |

| Event data                             | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|--|---------|---|---|---|
| ICP identifier                         | Char 15 | М   | М   | Unique identifier for an<br>ICP created by a<br>distributor in<br>accordance with<br>clause1 of Schedule<br>11.1 of the Code  |
| Metering<br>component serial<br>number | Char 25 | М   | М   | Actual serial number of<br>the device. Where<br>integral to the meter,<br>will be the same as the<br>meter serial number.   |
| Ratio compensation                     | Num 6   | М   | М   | Multiplier to be applied to the channel   |
| CT ratio                               | Char 6  | 0   | 0   | CT ratio applied to<br>channel eg: 2000/5.<br>Can be null.  |
| Channel number                         | Num 3   | М   | М   | A unique number within<br>the metering component<br>assigned by the MEP<br>that identifies each data<br>channel.  |
| Number of dials                        | Num 2   | М   | М   | Number of dials/digits on the meter channel   |
| Decimal places                         | Int 1   | М   | М   | Number of decimal<br>places the meter<br>records  |
| Remote channel<br>exists               | Char 1  | М   | М   | Channel has a remote<br>register attached. Y or<br>N.   |
| Register content<br>code               | Char6   | C   | С   | A code that identifies<br>the type of information<br>being recorded by the<br>channel and must<br>reflect the physical or<br>programmed<br>configuration of the<br>metering installation.<br>Mandatory where<br>metering<br>component type = M or<br>D. |

| Event data                | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule   |
|---------------------------|----------------|---|---|---|
| Period of<br>availability | Num 2          | С   | С   | Minimum number of<br>hours within a day yjay<br>supply is available (or<br>controlled part if<br>available for an<br>inclusive channel). Must<br>be <=24). Mandatory<br>where metering<br>component = M or D. |
| Unit of measure           | Char6          | М   | М   | The type of unit<br>applicable to each fixed<br>and variable delivery<br>price (examples are<br>provided in Table 5)  |
| Price component<br>code   | Char 25        | 0   | С   | Price component code<br>for each fixed and<br>variable delivery price<br>as per the distributor's<br>published delivery price<br>schedule Can be null   |
| Last meter read<br>date   | DD/MM/YY<br>YY | М   | Μ   | Date meter was last<br>physically read or the<br>last validated meter<br>reading if permanent<br>estimate supplied.   |
| Reading                   | Char 10        | М   | М   | Reading for the channel.  |

## 1.5.4 Load control device detail

| Event data                                | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|---|---------|---|---|--|
| Record type                               | Char 1  | М   | М   | Valid value: (Contactor)   |
| ICP identifier                            | Char 15 | М   | Μ   | Unique identifier for an<br>ICP created by a<br>distributor in<br>accordance with<br>clause1 of Schedule<br>11.1 of the Code |
| Meter or load<br>control device<br>status | Char 3  | М   | М   | REM = Removed, or<br>INS = installed, or<br>LR = Left Running, or<br>DAM = Damaged   |

| Event data                           | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|--------------------------------------|----------------|---|---|--|
| Installation/remove<br>d date        | DD/MM/YY<br>YY | 0   | 0   | Date load control device<br>was installed or<br>removed Can be null          |
| Load control device<br>owner         | Char 6         | 0   | 0   | Load control device<br>metering equipment<br>owner participant<br>identifier |
| Load control device<br>number        | Char 15        | М   | М   | Load control device<br>number for the<br>installation                        |
| Load control device<br>serial number | Char 15        | М   | М   | Load control device<br>serial number for the<br>installation                 |
| Load control device<br>make          | Char 30        | 0   | 0   | Load control device make. Can be null  |
| Load control device<br>model         | Char 30        | Ο   | 0   | Load control device model. Can be null                                       |
| Load control device<br>frequency     | Int 4          | Ο   | Ο   | Injection frequency in<br>Hz   |
| Switch count                         | Int 2          | М   | М   | Number of switches installed   |

## 1.5.5 Load control device switch detail

| Event data                                | Format  | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|---|---------|---|---|--|
| Record type                               | Char 1  | М   | М   | Valid value: (S)witch  |
| ICP identifier                            | Char 15 | М   | М   | Unique identifier for an<br>ICP created by a<br>distributor in<br>accordance with<br>clause1 of Schedule<br>11.1 of the Code |
| Meter or load<br>control device<br>status | Char 3  | М   | М   | REM = Removed, or<br>INS = installed, or<br>LR = Left Running, or<br>DAM = Damaged   |

| Event data                             | Format         | Trader to<br>Distributor:<br>Mandatory/Optio<br>nal/Conditional | Distributor to<br>Trader:<br>Mandatory/Option<br>al/Conditional | Validation rule  |
|--|----------------|---|---|--|
| Installation/remove<br>d date          | DD/MM/YY<br>YY | 0   | 0   | Date switch was<br>installed or removed,<br>Can be null      |
| Load control device<br>number          | Char 15        | М   | М   | Load control device<br>number for the<br>installation        |
| Metering<br>component serial<br>number | Char 25        | М   | М   | Actual serial number of the load control device.             |
| Switch position                        | Int 1          | М   | М   | Position of switch in<br>load control device                 |
| Switch rating                          | Int 2          | 0   | 0   | Current rating in amps                                       |
| Switch voltage                         | Int 3          | 0   | 0   | Voltage for switch   |
| Switch type                            | Char 2         | 0   | 0   | Single switch/single<br>throw = ST<br>Over/double throw = DT |
| Load control<br>channel identifier     | Char 30        | 0   | 0   | The code identifier for the network device that is used.     |
| Function ID                            | Char 30        | 0   | 0   | Identifies switch function                                   |

### Protocol specifications

- 1. The information is to be provided as a comma delimited text file. Commas are therefore prohibited within fields. For customer names that require separation a tilde character (~) should be used. This is the only provision for the use of a tilde character.
- 2. Each formatted file will consist of one or more records, with each record being a single line of text as defined in the business rules. Records are to be delimited with one of the following:
  - (a) a carriage return character and a line feed character combination (ASCII characters 13 and 10) commonly used in Windows based programs, or
  - (b) a line feed character (ASCII character 10) commonly used in Unix based programs, or
  - (c) a carriage return character (ASCII character 13) commonly used in Mac based programs.
- 3. Data fields within files are defined using the attributes in the table following these specifications.
- 4. Matching of file names, code list values, etc, are to be case insensitive.
- 5. Each data file will contain only one header but may contain any number of detail records.
- 6. The first record of a file contains 'Header" information followed by zero or more detail lines.
- 7. Each file created will have a file name as outlined below and must have names that are unique within any month.

Sender + Utility Type + Recipient + File Type + Report Month + Report Run Date + UniqueID# (e.g.

#### Protocol specifications

hhmm run time, or ICP but limited to Char (60)) with an extension of .TXT and with the components concatenated using the underscore character, to assist readability.

e.g. TRUS\_E\_UNET\_RAICP\_200007\_20000802\_1232.TXT

[Char4\_Char1\_Char4\_ Char7\_yyyymm\_yyyymmdd\_UniqueID.TXT]

Data outputs

## 2 Table of codes used in EIEP11

|     | Logical   | Data turna | Bules |  |
|-----|---|------------|-------|--|
| 2.1 | Table 1 List of attributes to define data fields used in EIEP11 |            |       |  |

| Logical<br>format | Data type | Rules  | Example  |
|-------------------|-----------|--|--|
| INT (n)           | Integer   | ASCII representation of an integer number (ie no decimals), no leading zeros, no spaces, a leading "-" if negative (no sign if positive), with 1 to n digits.<br>Numbers only: ASCII characters 48 to 57, and 45 where applicable.                                       | INT (4)<br>12<br>-1234   |
| NUM (n.d)         | Decimal   | ASCII representation of a decimal number (ie a rational number), no spaces, a leading "-" if negative (no sign if positive), with up n digits including up to (n minus d) digits to the left of the decimal place, and up to d digits to the right of the decimal place. | NUM (6.2)<br>123.45<br>1234.0<br>-12.32<br>NUM (6.3)<br>-0.123 |
|                   |           | For integers, the decimal point is not required.<br>A decimal point on its own must not be used to<br>represent zero (use "0")<br>Trailing zeros are optional.   | 23.987<br>987.000<br>8   |
|                   |           | No leading zeros other than when the number starts with "0."<br>Numbers only: ASCII characters 48 to 57, and 45/46 where applicable.   |  |

| Logical<br>format | Data type | Rules   | Example  |
|-------------------|-----------|---|--|
| CHAR (n)          | Text      | Up to n characters (ASCII characters 32 to 43<br>and 45 to 126 only).<br>As commas (ASCII character 44) are used as<br>field separators, they must not be used within<br>the field data (it is recommended that any<br>commas found in source data be changed to a<br>semi-colon (ASCII character 59) when files are<br>created.<br>Where customer names require separation, a<br>tilde character (~) should be used.<br>Fields must not contain any leading or trailing<br>spaces. | The quick brown fox  |
| DATE              | Date      | <ul> <li>ASCII format with: Year represented as:</li> <li>YYYY for century and year</li> <li>Month represented as:</li> <li>MM to display leading zero</li> <li>Day represented as</li> <li>DD to display leading zero</li> <li>ASCII format for any separators used</li> </ul>   | YYYYMMDD e.g.<br>20050216<br>DD/MM/YYYY e.g.<br>16/02/2005 |
| TIME              | Time      | ASCII in 24 hour format<br>Hour represented as HH with leading zeros<br>Minutes represented as MM with leading zeros<br>Seconds represented as SS with leading zeros<br>ASCII format for any separators used<br>Note: both NZST and NZDT will be used and will<br>be indicated as necessary   | HH:MM:SS e.g.<br>13:15:01<br>HH:MM<br>e.g. 13:15           |
| DATETIME          | Date/Time | ASCII format with same rules as both Date and Time Data Types   | YYYYMMDDHHMMSS<br>e.g. 20050216131501                      |
| NULL              | Null      | Field contains no data  |  |

| 22  | Table 2 ASCII character set for use within fields of F | 11 |
|-----|--|----|
| Z.Z | Table 2 ASCII character set for use within helds of a  | 11 |

| Character | ASCII |
|-----------|-------|
| 32        | Space |
| 33        | İ     |
| 34        | u     |
| 35        | #     |
| 36        | \$    |
| 37        | %     |
| 38        | å     |
| 39        | l     |
| 40        | (     |
| 41        | )     |
| 42        | *     |
| 43        | +     |
|           |       |

| Character | ASCII |
|-----------|-------|
| 64        | @     |
| 65        | A     |
| 66        | В     |
| 67        | С     |
| 68        | D     |
| 69        | E     |
| 70        | F     |
| 71        | G     |
| 72        | Н     |
| 73        | I     |
| 74        | J     |
| 75        | К     |
| 76        | L     |

| Character | ASCII |
|-----------|-------|
| 97        | ۵     |
| 98        | b     |
| 99        | с     |
| 100       | d     |
| 101       | e     |
| 102       | f     |
| 103       | 9     |
| 104       | h     |
| 105       | i     |
| 106       | j     |
| 107       | k     |
| 108       |       |
| 109       | m     |

| 45 | - |
|----|---|
|    |   |
| 46 |   |
| 47 | / |
| 48 | 0 |
| 49 | 1 |
| 50 | 2 |
| 51 | 3 |
| 52 | 4 |
| 53 | 5 |
| 54 | 6 |
| 55 | 7 |
| 56 | 8 |
| 57 | 9 |
| 58 | : |
| 59 | ; |
| 60 | < |
| 61 | = |
| 62 | > |
| 63 | ? |

| 77 | Μ |
|----|---|
| 78 | N |
| 79 | 0 |
| 80 | Р |
| 81 | Q |
| 82 | R |
| 83 | S |
| 84 | Т |
| 85 | U |
| 86 | V |
| 87 | W |
| 88 | Х |
| 89 | У |
| 90 | Z |
| 91 | [ |
| 92 | ١ |
| 93 | ] |
| 94 | ^ |
| 95 | _ |
| 96 | ` |

| 110 | n |
|-----|---|
| 111 | o |
| 112 | р |
| 113 | q |
| 114 | r |
| 115 | s |
| 116 | t |
| 117 | u |
| 118 | v |
| 119 | w |
| 120 | × |
| 121 | У |
| 122 | z |
| 123 | { |
| 124 |   |
| 125 | } |
| 126 | ~ |
|     |   |
|     |   |
|     |   |

## 2.3 Table 3 Naming codes for EIEP11

| Naming code | Description   |
|-------------|---|
| RAICP       | Request for new ICP                                       |
| AKICP       | Acknowledgement and advice of new ICP                     |
| LRICP       | Request for electrically connecting an ICP to the network |
| CHICP       | Change required prior to electrically connecting an ICP   |
| MTICP       | Metering information                                      |

## 2.4 Table 4 Reason codes for EIEP11

| Reason code | Description   |
|-------------|---|
| GEN         | General details change                                |
| LIV         | Notification that ICP has been electrically connected |
| CRE         | ICP Created   |
| INC         | Incomplete data                                       |
| DLY         | ICP creation delayed                                  |
| EXI         | ICP already exists                                    |
| WNW         | Wrong network   |
| REJ         | Rejected  |

| Reason code | Description    |
|-------------|----------------|
| ACC         | Trader accepts |

## 2.5 Table 5 Unit of measure table

| Unit   | Description   |  |
|--|---|--|
| kWh  | kilowatt hour energy (real energy)  |  |
| kW   | kilowatt demand (real power), or capacity                                     |  |
| kVAh   | kilovolt ampere hour energy (apparent energy)                                 |  |
| kVA  | kilovolt ampere demand (apparent power), or capacity rating                   |  |
| kVArh  | kilovolt ampere reactive hour energy (reactive energy)                        |  |
| kVAr   | kilovolt ampere reactive demand (reactive power)                              |  |
| kVA-km   | kilovolt ampere capacity multiplied by kilometres                             |  |
| Con or ICP   | used for per connection per day or per ICP per day delivery prices            |  |
| Equipment  | typically used for dedicated equipment delivery prices (e.g. transformers)    |  |
| Fixture  | typically used for per fixture delivery prices associated with streetlighting |  |
| Note: This list is not exhaustive, alternative units of measure and descriptions may be used if contained in the distributor's published delivery price schedule |   |  |