

Electricity Information Exchange Protocols (EIEPs)

Overview

2 October 2018



Version control

Version	Date amended	EIEP ref	Comments
10	6 December 2013	EIEP overview	Amendments from February 2013 consultation. Draft for publication prior to final EIEPs being published under Part 12A of the Code.
10.1	30 June 2017	EIEP overview	Document updated to reflect regulatory and style changes. Amended to align with 2017 operational review of EIEPs
11	2 October 2018	EIEP overview	Rename EIEP9 'ICP physical address change notification'. Rename EIEP8 'Price category changes'

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1 Electricity Information Exchange Protocols functional specifications

Introduction

- 1.1 Electricity Information Exchange Protocols (EIEPs) provide standardised formats that support the reliable exchange of information between participants, and participants and other parties.¹
- 1.2 EIEPs are either regulated or non-regulated. Regulated formats include EIEPs 1, 2, 3, 12, and 13. Non-regulated EIEPs may be adopted in contracts between traders and distributors (normally use of system agreements), and between retailers and field services providers. These EIEPs may vary in the information that they contain depending on arrangements between the parties or as their systems may dictate.
- 1.3 Through the use of EIEPs, parties are able to efficiently exchange regular and/or large volumes of information.

Standing Data Formats Group

- 1.4 The Standing Data Formats Group (SDFG) was established in May 2006 to consider new EIEPs. The EIEPs were developed to communicate information ranging from consumption data to enable invoicing of network charges, information to support invoices and reconciliation of network charges, customer information, planned and unplanned service interruption information, faults and service requests, price category changes and new connections. EIEPs have evolved to provide a low cost, consistent and reliable means of communication.
- 1.5 The revised EIEPs incorporate industry changes (including Code amendments), and consistent terminology with that of the registry functional specification, reconciliation functional specification and the Glossary of Standard Terms (which will be amended from time to time if terminology preferences change).

This document

- 1.6 This document is the overview of the functional specifications for all EIEPs, both regulated and non-regulated. It should be read in conjunction with the separately published EIEPs, the Code requirements (where appropriate), participant use of system agreements (UoSAs) and the registry and reconciliation functional specifications.
- 1.7 To achieve and maintain the maximum level of standardisation across participants' IT systems, the Authority recommends that EIEP implementations adhere fully to the specifications (including formats and business requirements) contained in this document.

2 Concept and structure

- 2.1 The EIEPs are designed to be used by participants for frequently exchanged and/or high volume information sets within specified time frames.

¹ EIEP6B provides for the exchange of fault and service request information between retailers and field services providers. EIEP 13 provides for the exchange of consumer consumption information between retailers and consumers or consumers' authorised agents.

- 2.2 Each EIEP is self-contained, in that it contains all relevant information. EIEP-specific reference codes are set out following the file format for each EIEP.
- 2.3 The EIEP specifications have been drafted in a style consistent with other industry functional specifications. This style provides a table with sections for:
- (a) Header information – title, Code references and dependencies
 - (b) Description – purpose of the EIEP
 - (c) Business requirements – how the data file is to be interpreted and used, and the structure of the data file
 - (d) Data inputs – information required to produce a data file
 - (e) File format; Header – identifying file data
 - (f) File format; Detail – the information to be exchanged
 - (g) File specifications – supporting field information, naming standards and rules for field population including example files
 - (h) Data outputs – for other intended recipients e.g. registry or reconciliation.

The EIEP formats

2.4 The table below contains a list of all EIEPs.

Format name	Description	Send → Receive	Frequency used	Type
EIEP1	Detailed ICP billing and volume information <ul style="list-style-type: none"> • As billed • Incremental as billed normalised • Replacement RM normalised • Incremental RM normalised 	Trader → Distributor Distributor → Trader	Monthly	Regulated
EIEP2	Aggregated billing and volume information <ul style="list-style-type: none"> • Summary of EIEP1 for ICP prices • Variable volumes and charges for GXP prices (Distributor to Trader only) 	Trader → Distributor Distributor → Trader	Monthly	Regulated
EIEP3	Half hour metering information	Trader → Distributor	Monthly	Regulated
EIEP4	Customer information <ul style="list-style-type: none"> • Snapshot • Incremental 	Trader → Distributor	Monthly (or as required)	Non-regulated
EIEP5A	Planned service interruptions	Distributor → Trader	As required	Regulated
EIEP5B	Unplanned service interruptions	Distributor → Trader	As required	Non-regulated

Format name	Description	Send → Receive	Frequency used	Type
EIEP6	Faults and service requests – refer EIEP6A and EIEP6B			
EIEP6A	Network related customer faults <ul style="list-style-type: none"> • Initiation • Status update and closure 	Trader → Distributor Distributor → Trader	As required	Non-regulated
EIEP6B	Non-network related customer faults and service requests <ul style="list-style-type: none"> • Initiation • Status update and closure 	Retailer → Field Services Provider Field Services Provider → Retailer	As required	Non-regulated
EIEP7	General installation status change	Trader → Distributor	As required	Non-regulated
EIEP8	Price category changes <ul style="list-style-type: none"> • Notification • Rejection 	Trader → Distributor Distributor → Trader	As required	Non-regulated
EIEP9	ICP physical address change notification	Trader → Distributor	As required	Non-regulated
EIEP10	Discontinued			
EIEP11	New Connections: <ul style="list-style-type: none"> • Request for a new ICP • Provision of a new ICP • Change of ICP information • Provision of metering information by either party 	Trader → Distributor Distributor → Trader	Daily (or as required)	Non-regulated
EIEP12	Delivery price change notification	Distributor → Trader Distributor → Authority	As required	Regulated
EIEP13A	Detailed electricity consumption information for consumers (half hour and non-half hour)	Retailer → Consumer (or their authorised agent)	As required	Regulated
EIEP13B	Summary consumption information	Retailer → Consumer (or their authorised agent)	As required	Regulated

Format name	Description	Send → Receive	Frequency used	Type
EIEP13C	Electronic request format for EIEP 13A or EIEP 13B	Consumer's authorised agent → Retailer	As required	Regulated
EIEP14	Retailer tariff rate notification ²	Retailer → Third Party Service Provider	As required	Non-regulated

² EIEP14 is a voluntary protocol which may be used by a retailer when responding to a request from a third-party service provider that requests the retailer's generally available tariff plans. As it is not included in this operational review and the terminology used reflects the regulated requirements set out in Clause 11.1(g) and 11.32G of the Code, the use of terms "tariff rate" and "tariff plans" have not been changed to reflect the terminology preferences for retail pricing (e.g. "pricing plan(s)") as it would require Code changes.

Abbreviations and codes used in the format

- 2.5 Part 1 of the Code provides most definitions associated with the terms used in the EIEPs.
- 2.6 A Glossary of Standard Terms provides definitions for all other terminology used within the EIEPs. This document is published on the Authority's website at <http://www.ea.govt.nz/dmsdocument/14292>.
- 2.7 As previously noted, the EIEPs should be used in conjunction with the registry and reconciliation functional specification documents. These documents contain a list of attributes and codes that are to be used with formats included in the EIEPs.
- 2.8 In particular, references to tables such as Meter Location Codes, Register Content Codes and Disconnection Codes are those referred to in the registry functional specification.³

3 Information exchange mechanisms

Electronic data file transfer

- 3.1 Most non-manual interfaces use electronic file transfer either via File Transfer Protocol (FTP) or Secure File Transfer Protocol (SFTP) connectivity. The Authority encourages parties to use the EIEP transfer hub when transferring EIEP file formats.⁴
- 3.2 A data file created on the source system is transferred to a predetermined directory on the destination system using FTP or SFTP. Alternatively, the transfer may be carried out via a central hub webpage using Secure Hyper-Text Transfer Protocol (HTTPS).
- 3.3 The transfer mechanism used and the destination address is configurable at the file type level as agreed between the parties. Where FTP is used, additional security must be used to protect the confidentiality of the information transferred.
- 3.4 Where information is transferred using email, the information must be delivered in a secure manner and password protected.

4 Management of EIEPs

Review and change process

- 4.1 Any participant may propose a change to the business requirements, formats, reports, or any other part of an EIEP file (e.g., add or change fields) by submitting a change proposal form (or equivalent form) to the Authority. A form is available on the Authority's [EIEP webpage](#)⁵. Where an EIEP is regulated by the Code, any changes will need to go through the amendment process set out in the Code.

Process for regulated EIEPs

- 4.2 The Code requires that, before the Authority regulates an EIEP or amends a regulated EIEP, the Authority must consult with the participants that the Authority considers will be affected by the EIEP. However, the Authority need not consult if the Authority considers that the amendment is:

³ The registry functional specification can be downloaded from www.electricityregistry.co.nz.

⁴ The EIEP transfer hub is a SFTP provided by the Authority for participants and agents to use when transferring EIEP file format. More information on the EIEP transfer hub is available from the market operations team at marketoperations@ea.govt.nz.

⁵ <http://www.ea.govt.nz/operations/retail/eiep/>.

- (a) technical and non-controversial; or
 - (b) there has been adequate prior consultation so that the Authority has considered all relevant views.
- 4.3 If the Authority considers that consultation is necessary, the Authority will follow its [consultation charter](#). Any changes being consulted on will be flagged as under review on the Authority's website and all affected parties notified through the Authority's Market Brief.
- 4.4 The Authority may also consult the SDFG before it makes its consideration under paragraph 4.2.
- 4.5 Once the decision has been made, the Authority will inform the proposer and notify all affected participants. If the EIEP will be updated, the Authority will publish the changes on its website.

Process for non-regulated EIEPs

- 4.6 The SDFG will review any proposals to change an unregulated EIEP using a review process. If the change is considered minor, the SDFG may recommend to the Authority that the change is immediately approved, declined, or amended and affected participants notified of the change.
- 4.7 For more substantive changes to unregulated EIEPs, if the SDFG's recommendation is to approve or amend the proposal, the proposal will be circulated to interested parties for comment for a period of two weeks or more. The Authority will consider any comments, then will modify the EIEP documentation accordingly. Minor changes will receive an incremental change to the version number on the document (i.e. v10.0 to v10.1).
- 4.8 The SDFG may recommend to the Authority that a proposal to change an unregulated EIEP is sent out for longer consultation with the industry (e.g. for a major change). If the Authority agrees and decides that industry consultation is necessary, the relevant EIEP will be flagged as under review on the Authority's website and all affected parties notified through the Authority's Market Brief. Participants may then submit on the proposed changes. Major changes will incur a full point change to the version number of the document (i.e. v10.0 to v11.0).
- 4.9 If approved (or amended), the Authority will inform the proposer and notify all affected participants. The EIEP will be updated and the Authority will publish the changes on its website.
- 4.10 If the Authority declines or defers the proposal, it will inform the proposer and give reasons for the decision.

Effective date of change

- 4.11 The Authority will advise the effective date of the change when it publishes the change. There may be a transition period if the change is significant enough to warrant this (advised at time of publication).

Transparency

- 4.12 The review process for proposed EIEP changes will be transparent to affected participants. Any participant may request copies of any written material of the SDFG relating to the proposal.