

Electricity Information Exchange Protocols (EIEP)

EIEP4: Customer information Non-regulated

Effective from 1 October 2019



Version control

Version	Date amended	EIEP Ref	Comments
10	27 November 2013	all	Sender format field decreased from 50 to 20 characters.
10.1 draft	30 June 2017	EIEP4	Amendments include: Improvements to add clarity and consistency to content Business requirements inserted with respect to incremental files to alert participants to potential options where there are multiple triggers within a day, and reversals Deleted option of Distributor to Trader as always Trader to Distributor
11	2 October 2018	EIEP4	Improvements to add further clarity and consistency following submissions received in response to the 4 August 2017 consultation paper and the Authority's responses and decisions set out in the decision paper. Reinstate 'Fax number' field Increase phone number fields to 20 characters Increase email address field to 254 characters, and allow for multiple email addresses separated by semi-colon Add a new 'Reversal indicator' field at the end of the Detail record, to be populated with "Y" in the incremental file if the trader wishes to communicate a reversal event, otherwise Null. Null in the snapshot file. Delete proposed business requirement 17. Amend general requirements clause covering compliance with the Privacy Act, to remove obligation on distributor to comply with terms & conditions of the trader's customer contract

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1 EIEP4: Customer information

Title:	EIEP4: Customer information
Version:	11
Application:	This protocol allows traders to provide customer information to distributors, as a snapshot or incremental file. Incremental customer detail changes will result in a “triggered” report to be sent to the distributor.
Participants:	Trader/Distributor
Code reference:	
Dependencies:	The use of system agreement between the distributor and the trader may also set out requirements relating to the provision of customer information that the distributor and/or the trader must comply with, such as obligations under the Privacy Act and the terms and conditions of customer contracts, restrictions on the purposes for which the customer information may be used, and the obligation to treat the customer information as confidential information.

Description of when this protocol applies
Where agreed, this protocol is used by traders to provide distributors with a snap-shot of the trader’s customer information at a specific point in time (typically monthly or weekly), or to provide distributors with incremental changes in the trader’s customer information (typically daily), to be used only for the purposes as agreed between traders and distributors. Distributors will use this information to verify or update their records.

Business requirements
<ol style="list-style-type: none"> 1. The distributor and each trader must agree on the file transport mechanism by which the trader 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 and when agreed between parties. 4. An agent may provide data on behalf of the relevant reconciliation participant, in which case the header for EIEP4 will identify the reconciliation participant. 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. A trader must use codes that are: <ol style="list-style-type: none"> (a) stipulated in this document, or (b) approved and published by the Electricity Authority; or (c) determined in the registry and reconciliation functional specifications 6. Information provided in the file will be consistent with the terminology used in the Glossary of Standard

Business requirements

- 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.
 8. Information is to be provided in accordance with the following status codes unless otherwise specified:
 - O Optional
 - M Mandatory
 - C Conditional - Mandatory if available, otherwise Null (also refer to validation rules)
 9. 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. For address information the postal address is to be populated with the billing address including PO Box numbers and RD numbers). If the trader uses the physical installation address as the billing address, then this is to be populated to the postal address fields.
 11. When an international address is required the zip codes is to be applied in the post address post code field.
 12. Parties will need to agree whether the file is to be either:
 - (a) a “snapshot” file that provides customer information for all ICPs with a customer contract as at an agreed date; or
 - (b) an “incremental” file that provides customer information for ICPs with a customer contract when any customer information has been amended or added since the last incremental or snapshot version was provided. Incremental files should be denoted as file type X.
 13. If the trader or distributor becomes aware of a format error or the file is incomplete, that party must advise the other party as soon as practical after becoming aware of the issue.
 14. If no agreement can be reached as to whether the file is to be a partial or full replacement for the correction of the error as noted above, then a full replacement file is required.
 15. Recipients of EIEP4 files must be capable of receiving I (initial), R (complete replacement) and X (partial replacement) files.
 16. For incremental files, there may be multiple customer change triggers within a day. As the trader may be able to provide multiple records as an alternative to the last record (natural default), the distributor may wish to discuss its preference with the trader. For example, if customer A moves out and customer B moves in on the same day, a distributor would receive both customer A and B movements under multiple incremental records functionality, or only customer movement B under single incremental record functionality.
 17. For incremental files, reporting of reversals is not transparent, and as the trader may be able to separately alert the distributor to a reversal record (e.g. switch withdrawal or reversal of a move-in or move-out), the distributor may wish to discuss options (if any) with the trader.

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

General requirements
<p>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.</p> <p>4. It is the responsibility of participants to comply with their obligations under the Privacy Act, and (where applicable) to comply with the terms and conditions of its customer contracts, when exchanging customer information.</p>

Data inputs

Event data	Format	Trader to Distributor: Mandatory/Optional/Conditional	Validation rules
<i>Header record type</i>	Char 3	M	HDR – indicates the row is a header record type
<i>File type</i>	Char 7	M	Customer Information Listing - CUSIN
<i>Version of EIEP</i>	Num 3.1	M	Version of EIEP protocol that is being used for this file.
<i>Sender</i>	Char 20	M	Name of sending party. Participant identifier to be used if the sender is a participant.
<i>Sent on behalf of participant identifier</i>	Char 4	C	Participant identifier of party on whose behalf data is provided. Mandatory if sender not a participant
<i>Recipient participant identifier</i>	Char 4	M	Valid recipient participant identifier
<i>Report run date</i>	DD/MM/YYYY	M	Date the report is run
<i>Report run time</i>	HH:MM:SS	M	Time the report is run
<i>Unique File identifier</i>	Char 15	M	Number that uniquely identifies the file
<i>Number of detail records</i>	NUM 8	M	Total number of DET records in report
<i>Report period start date</i>	DD/MM/YYYY	M	Report run start date (inclusive)
<i>Report period end date</i>	DD/MM/YYYY	M	Report run end date (inclusive)
<i>Utility type</i>	Char 1	M	G (Gas) or E (Electricity)

Event data	Format	Trader to Distributor: Mandatory/Optional/Conditional	Validation rules
<i>File status</i>	Char 1	M	I = Initial or R = Replacement or X = Replace only those ICPs contained in this replacement file, also used for each incremental file

Event data	Format	Trader to Distributor: Mandatory/Optional/Conditional	Validation rules
<i>Detail record type</i>	Char 3	M	DET – indicates the row is a detail record.
<i>ICP identifier</i>	Char 15	M	Unique identifier for an ICP created by a distributor in accordance with clause 1 of Schedule 11.1
<i>Customer name</i>	Char 100	M	Legal name or the name of the customer. Multiple names to be concatenated into one field
<i>Phone number home</i>	Char 20	C	Home land line phone number.
<i>Phone number work</i>	Char 20	C	Number person can be contacted at during business hours.
<i>Phone number mobile</i>	Char 20	C	Cell phone number
<i>Fax number</i>	Char 15	C	Fax number
<i>Email address</i>	Char 254	C	Must provide one email address if available. Multiple email addresses may be provided, separated by a semi-colon
<i>Postal free form</i>	Char 30	C	All postal fields can be Null, but are mandatory if available
<i>Postal address unit</i>	Char 25	C	Sub dwelling number; Level of sub dwelling
<i>Postal address num</i>	Char 25	C	Number issued by government agency or local government authority that identifies a point or location on a street for postal purposes
<i>Postal address street</i>	Char 30	C	Official road name issued by government agency or local government authority.

Event data	Format	Trader to Distributor: Mandatory/Optional/Conditional	Validation rules
<i>Postal Box/RD</i>	Char 30	C	Number assigned a postal delivery box or rural delivery number.
<i>Postal address suburb</i>	Char 30	C	A bounded locality within a city, town or shire principally of urban character.
<i>Postal address town</i>	Char 30	C	An officially recognised and named population centre, defined within a geographic boundary.
<i>Postal address postcode</i>	Char 30	C	The post code assigned by NZ post (zip code if outside NZ)
<i>Postal address country</i>	Char 30	C	The country for postal information.
<i>Event date</i>	DD/MM/YYYY	M	In relation to an ICP, means the date on which an arrangement between a customer and a trader for the supply of electricity at the ICP comes into effect
<i>Disconnection restriction</i>	Char 1	M	"Y" for Yes or "N" for No for Medically Dependent customers or other critical disconnection restrictions.
<i>Medical restriction type</i>	Char3	C	MDN if medical dependent customer notified. MDV if medical dependent customer verified. Mandatory if MDC notified or verified, otherwise Null.
<i>Customer no.</i>	Num 15	M	Trader's customer number. (the identifier that the trader assigns to the customer which remains the same across all the connections for the customer)
<i>Consumer no</i>	Num 15	C	Trader's consumer number defined as the trader's unique ID that links the premises and the consumer.
<i>Customer Title</i>	Char 20	C	Separated customer title details.
<i>Surname</i>	Char 100	M	Separated customer surname details (populate with separated company name(s) if customer includes a company)
<i>First name</i>	Char 100	C	Separated customer first name details.

Event data	Format	Trader to Distributor: Mandatory/Optional/Conditional	Validation rules
<i>Finalled date</i>	DD/MM/YYYY	C	In relation to a ICP, means the date on which an arrangement between a customer and a trader for the supply of electricity at the ICP was terminated. For use in incremental files only. Mandatory if incremental file and customer contract finalled.

Protocol specifications
<ol style="list-style-type: none"> 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 <ol style="list-style-type: none"> (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. The following file naming convention is to be used with this file: Sender + Utility Type + Recipient + File Type + Report Month + Report Run Date + UniqueID# (e.g. 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_CUSIN_200007_20000802_1232.TXT [Char4_Char1_Char4_ Char7_yyyyymm_yyyyymmdd_UniqueID.TXT]

Data outputs

2 Table of codes used in EIEP4

2.1 Table 1 List of attributes to define data fields used in EIEP4

Logical format	Data type	Rules	Example
INT (n)	Integer	<p>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.</p> <p>Numbers only: ASCII characters 48 to 57, and 45 where applicable.</p>	<p>INT (4)</p> <p>12</p> <p>-1234</p>
NUM (n.d)	Decimal	<p>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.</p> <p>For integers, the decimal point is not required.</p> <p>A decimal point on its own must not be used to represent zero (use "0")</p> <p>Trailing zeros are optional.</p> <p>No leading zeros other than when the number starts with "0."</p> <p>Numbers only: ASCII characters 48 to 57, and 45/46 where applicable.</p>	<p>NUM (6.2)</p> <p>123.45</p> <p>1234.0</p> <p>-12.32</p> <p>NUM (6.3)</p> <p>-0.123</p> <p>23.987</p> <p>987.000</p> <p>8</p>
CHAR (n)	Text	<p>Up to n characters (ASCII characters 32 to 43 and 45 to 126 only).</p> <p>As commas (ASCII character 44) are used as field separators, they must not be used within the field data (it is recommended that any commas found in source data be changed to a semi-colon (ASCII character 59) when files are created.</p> <p>Fields must not contain any leading or trailing spaces.</p>	The quick brown fox
DATE	Date	<p>ASCII format with: Year represented as:</p> <ul style="list-style-type: none"> — YYYY for century and year <p>Month represented as:</p> <ul style="list-style-type: none"> — MM to display leading zero <p>Day represented as</p> <ul style="list-style-type: none"> — DD to display leading zero 	<p>YYYYMMDD e.g.</p> <p>20050216</p> <p>DD/MM/YYYY e.g.</p> <p>16/02/2005</p>

Logical format	Data type	Rules	Example
		ASCII format for any separators used	
TIME	Time	ASCII in 24 hour format Hour represented as HH with leading zeros Minutes represented as MM with leading zeros Seconds represented as SS with leading zeros ASCII format for any separators used Note: both NZST and NZDT will be used and will be indicated as necessary	HH:MM:SS e.g. 13:15:01 HH:MM e.g. 13:15
DATETIME	Date/Time	ASCII format with same rules as both Date and Time Data Types	YYYYMMDDHHMMSS e.g. 20050216131501
NULL	Null	Field contains no data	

2.2 Table 2 ASCII character set for use within fields of EIEP4

Character	ASCII	Character	ASCII	Character	ASCII
32	Space	64	@	97	a
33	!	65	A	98	b
34	"	66	B	99	c
35	#	67	C	100	d
36	\$	68	D	101	e
37	%	69	E	102	f
38	&	70	F	103	g
39	'	71	G	104	h
40	(	72	H	105	i
41	)	73	I	106	j
42	*	74	J	107	k
43	+	75	K	108	l
		76	L	109	m
45	-	77	M	110	n
		78	N	111	o
46	.	79	O	112	p
47	/	80	P	113	q
48	0	81	Q	114	r
49	1	82	R	115	s
50	2	83	S	116	t

Character	ASCII	Character	ASCII	Character	ASCII
51	3	84	T	117	u
52	4	85	U	118	v
53	5	86	V	119	w
54	6	87	W	120	x
55	7	88	X	121	y
56	8	89	Y	122	z
57	9	90	Z	123	{
58	:	91	[	124	|
59	;	92	\	125	}
60	<	93	]	126	~
61	=	94	^		
62	>	95	_		
63	?	96	Z		