

# Electricity Information Exchange Protocols (EIEP)

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## EIEP5A: Planned service interruptions Regulated

Effective from 1 April 2024



## Version control

Version	Date amended	EIEP Ref	Comments
10	27 November 2013	EIEP5	Sender format field decreased from 50 to 20 characters.
10.1 draft	30 June 2017	EIEP5A	<p>Amendments include:</p> <p>Outcome from split of former combined EIEP5 (Service interruptions) into separate EIEP5A (Planned service interruptions) and EIEP5B (Unplanned service interruptions) EIEPs</p> <p>Improvements to add clarity and consistency to content</p> <p>PLI (initial advice only) added, PLR repurposed for all revisions</p> <p>Optional URL and PLR revision reason fields added.</p> <p>Amended business requirements to specify each interruption event must be represented in its own file</p> <p>RES description row added to provide headers for manual interpretation of fields</p>
11	2 October 2018	EIEP5A	<p>Amendments include:</p> <p>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.</p> <p>Amended business requirements 11, 12 and 17 to ensure clarity for planned service interruption events that include multiple service interruptions</p> <p>Amended business requirement 14 to provide guidance for when a planned service interruption should be cancelled and replaced with a new event</p> <p>Add a new business rule setting out default notification periods</p> <p>EIEP5A to become a regulated EIEP</p> <p>Remove the additional description (DES) row</p> <p>New business requirement 23 to ensure clarity that active and inactive ICPs should be included in the file.</p>
11.1	26 April 2022	EIEP5A	Increased size of 'Interruption reason' field
11.2	11 April 2023	EIEP5A	<p>Amendments include:</p> <p>Mandating a delivery mechanism consistent with Option 3 in the EIEP5A decision paper (published 11 April 2023):</p> <ul style="list-style-type: none"> <li>providing for delivery to traders/MEPs by distributors via the EIEP transfer hub and/or SFTP (as decided by the participant)</li> <li>customising content delivered by the registry to traders/MEPs reflecting each participant's preferences (or defaults) as set out on each registry user's organisation supervisor screen.</li> </ul>

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# 1 EIEP5A: Planned service interruptions

<b>Title:</b>	<b>EIEP5A: Planned service interruptions</b>
<b>Version:</b>	11.2
<b>Application:</b>	<p>This protocol:</p> <ul style="list-style-type: none"> <li>a) specifies how distributors provide planned service interruption information to traders to enable traders to record details in their customer information systems and notify affected customers where required to do so by the relevant use of system agreement</li> <li>b) allows MEPs to receive planned service interruption information</li> <li>c) specifies the delivery mechanism of planned service interruption information.</li> </ul>
<b>Participants:</b>	Distributor/Registry/Trader/MEP
<b>Code reference:</b>	
<b>Dependencies:</b>	The use of system agreement between the distributor and the trader should also set out processes relevant to planned service interruptions (including which party is required to notify affected consumers) that the distributor and/or the trader must comply with.

<b>Description of when this protocol applies</b>
<p>This protocol is used by distributors to advise traders of planned service interruptions and provide planned service interruption information to enable traders to record details in their customer information systems and to notify affected customers where required to do so by the relevant use of system agreement.</p> <p>MEPs may also receive planned service interruption information, but only for ICPs for which they are currently responsible.</p>
<b>Business requirements</b>
<ol style="list-style-type: none"> <li>1. The distributor must upload EIEP5A files with the registry recipient code RGST to the EIEP transfer hub or registry SFTP. With the registry SFTP, the distributor must use the registry batch interface to upload files containing the standard registry HDR line followed by the EIEP5A format.</li> <li>2. The registry then provides EIEP5A files via the EIEP transfer hub to each trader/MEP's inbox (the default for traders) or registry SFTP (the default for MEPs), or both, according to their preferences (or defaults) as set out in the Supervisor screen.</li> <li>3. Traders can customise content reflecting each trader's preferences (or defaults) as set out on the Supervisor screen: <ul style="list-style-type: none"> <li>• all ICPs (the default) or only ICPs the trader is responsible for</li> <li>• excluding (the default) or including a description (DES) line.</li> </ul> </li> <li>4. MEPs can elect to receive (the default), or not receive, EIEP5A files containing only ICPs the MEP is responsible for, and can customise content reflecting the MEP's preferences (or defaults) as set out on the Supervisor screen: <ul style="list-style-type: none"> <li>• excluding (the default) or including a description (DES) line.</li> </ul> </li> </ol>

5. Where initial files include only ICPs the trader/MEP is responsible for (in accordance with the Supervisor screen settings), the registry will provide additional notifications (EIEP5A files) to the gaining trader/MEP for ICPs associated with a trader/MEP switch (including back dated switches and switch withdrawals) with a completion date between the initial notification and start date of the planned service interruption. For the purposes of additional notifications, 'start date of the planned service interruption' means the 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).
6. This protocol will be used in the timeframes as set out below, or as otherwise agreed between parties.
7. An agent may provide data on behalf of the distributor, in which case the header will identify the distributor. The appointment of an agent must be a permission function of the distributor and receiving traders/MEPs must allow for agents in their systems.
8. A distributor must only use codes that are:
  - (a) stipulated in this document;
  - (b) approved and published by the Electricity Authority; or
  - (c) determined in the registry and reconciliation functional specifications.
9. Information provided in the file will be consistent with the terminology used in the Glossary of Standard Terms published by the Authority.
10. The file must contain all mandatory information, failure to provide the required information will result in the file being deemed as incomplete.
11. 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)
12. This file is to be used by distributors to give traders advice of a planned service interruption affecting certain ICPs, the area affected, planned service interruption reason, and planned service interruption date(s) and off/on times. There is also provision for an alternative date or dates and times if the planned service interruption cannot take place on the original date(s) and time(s).
13. This protocol provides for planned service interruption events where the event includes a single service interruption, and where the event includes multiple service interruptions.
14. For an event that includes a single service interruption, the distributor provides a list of affected ICPs with the appropriate date(s) and single off/on time. For an event that includes more than one service interruption on the same, consecutive or near-consecutive days, for the same group (or largely the same group) of ICPs, the distributor provides a single file with a list of ICPs affected and the appropriate dates and off/on times, and the same unique distributor event number.
15. The protocol can also be used to advise of a previously notified planned service interruption being cancelled by means of the appropriate communication type code in the file, and the file must include all ICPs affected.
16. Where the distributor wishes to revise any information previously provided in a file (except for a cancellation) due to rescheduling (change of date(s) and/or off/on times), a change to the list of ICPs affected, reason for the planned service interruption, area affected or feeder details, the distributor must provide an updated file using the appropriate communication type code for a revision, and the file must include all ICPs affected by the planned service interruption. Significant changes to the ICPs affected must be processed as a cancellation and new planned service interruption.
17. A notification for rescheduling is not required where a planned service interruption is simply being shifted to an alternative date and off/on times that have already been included in a file previously provided to traders.
18. Unless otherwise agreed, every notification file uploaded by the distributor (or its agent) to the registry must include all affected ICPs regardless of their trader as recorded on the registry.
19. Each file may only provide for a single planned service interruption event (which may include more than one interruption), and each initial advice file must have a unique distributor event number.

### Business requirements

20. The distributor event number must be the original distributor event number used in the initial advice if revising or cancelling a planned service interruption previously communicated in an EIEP5A file.
21. The recipient is to ensure that they apply the files in the order that they are received, with the latest information being the most current.
22. Where, in accordance with the use of system agreement, traders are required to provide advance notification to affected customers of a planned service interruption the file will be used as a source file for a mail merge.
23. 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.
24. In the absence of alternative notification periods agreed between the parties, the distributor is expected to provide the following minimum notice periods to traders:
  - (a) Initial advice (PLS): 10 business days
  - (b) Initial advice for information only (PLI): 4 business days
  - (c) Revision (PLR): 7 business days (i.e. it must be rescheduled if fewer than 7 business days remain)
  - (d) Cancellation (PLC): 4 business days where practicable
25. For clarity, all active and inactive ICPs should be included within the file.

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

### Data inputs

<b>Event data</b>	<b>Format</b>	<b>Distributor to Registry, Registry to Trader/MEP: Mandatory/Optional/Conditional</b>	<b>Validation rules</b>
<i>Header record type</i>	Char 3	M	HDR – indicates the row is a header record type
<i>File type</i>	Char 7	M	Planned Service Interruption PLINT
<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	C	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 For distributor to registry files the recipient identifier must be RGST
<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 records in report
<i>Communication type code</i>	Char 3	M	As per table of planned service interruption communication type codes following this EIEP
<i>Distributor event number</i>	Char 15	M	Distributor's unique reference number for the planned service interruption.
<i>Spare</i>		O	Null
<i>Utility type</i>	Char 1	M	G (Gas) or E (Electricity)

<b>Event data</b>	<b>Format</b>	<b>Distributor to Registry, Registry to Trader/MEP: Mandatory/Optional/Conditional</b>	<b>Validation rules</b>
<i>Detail record type</i>	Char 3	M	DET – indicates the row is a detail record.

<b>Event data</b>	<b>Format</b>	<b>Distributor to Registry, Registry to Trader/MEP: Mandatory/Optional/Conditional</b>	<b>Validation rules</b>
<i>ICP identifier</i>	Char 15	M	ICP identifier means a unique identifier for an ICP created by a distributor in accordance with clause 1 of Schedule 11.1
<i>Feeder</i>	Char 20	C	Transformer and feeder number if available.
<i>Street/area affected</i>	Char 255	M	Best description of locality affected if known
<i>Interruption reason</i>	Char -255	M	Reason for planned interruption
<i>Number of interruptions notified</i>	Num 1	M	Number of planned interruptions notified (up to a maximum of 5)
<i>Distributor event number</i>	Char 15	M	Distributor's unique reference number for service interruption
<i>Interruption 1 start date</i>	DD/MM/YYYY	M	Date first interruption to commence
<i>Interruption 1 restore date</i>	DD/MM/YYYY	M	Most accurate indication of date when power will be restored for first interruption
<i>Interruption 1 start time</i>	HH:MM	M	Start time for first interruption
<i>Interruption 1 expected or actual restore time</i>	HH:MM	M	Most accurate indication of time when power will be restored for first interruption
<i>Interruption 1 alternative date</i>	DD/MM/YYYY	C	Alternative date if first planned interruption cannot proceed on proposed start date. Mandatory if applicable, otherwise Null
<i>Interruption 2 start date</i>	DD/MM/YYYY	C	Date second interruption to commence Mandatory if applicable, otherwise Null
<i>Interruption 2 restore date</i>	DD/MM/YYYY	C	Most accurate indication of date when power will be restored for second interruption Mandatory if applicable, otherwise Null
<i>Interruption 2 start time</i>	HH:MM	C	Start time for second interruption Mandatory if applicable, otherwise Null



<b>Event data</b>	<b>Format</b>	<b>Distributor to Registry, Registry to Trader/MEP: Mandatory/Optional/Conditional</b>	<b>Validation rules</b>
<i>Interruption 2 expected or actual restore time</i>	HH:MM	C	Most accurate indication of time when power will be restored for second interruption Mandatory if applicable, otherwise Null
<i>Interruption 2 alternative date</i>	DD/MM/YYYY	C	Alternative date if second planned interruption cannot proceed on proposed start date. Mandatory if applicable, otherwise Null
<i>Interruption 3 start date</i>	DD/MM/YYYY	C	Date third interruption to commence Mandatory if applicable, otherwise Null
<i>Interruption 3 restore date</i>	DD/MM/YYYY	C	Most accurate indication of date when power will be restored for third interruption Mandatory if applicable, otherwise Null
<i>Interruption 3 start time</i>	HH:MM	C	Start time for third interruption Mandatory if applicable, otherwise Null
<i>Interruption 3 expected or actual restore time</i>	HH:MM	C	Most accurate indication of time when power will be restored for third interruption Mandatory if applicable, otherwise Null
<i>Interruption 3 alternative date</i>	DD/MM/YYYY	C	Alternative date if third planned interruption cannot proceed on proposed start date. Mandatory if applicable, otherwise Null
<i>Interruption 4 start date</i>	DD/MM/YYYY	C	Date fourth interruption to commence Mandatory if applicable, otherwise Null
<i>Interruption 4 restore date</i>	DD/MM/YYYY	C	Most accurate indication of date when power will be restored for fourth interruption Mandatory if applicable, otherwise Null
<i>Interruption 4 start time</i>	HH:MM	C	Start time for fourth interruption Mandatory if applicable, otherwise Null
<i>Interruption 4 expected or actual restore time</i>	HH:MM	C	Most accurate indication of time when power will be restored for fourth interruption Mandatory if applicable, otherwise Null

<b>Event data</b>	<b>Format</b>	<b>Distributor to Registry, Registry to Trader/MEP: Mandatory/Optional/Conditional</b>	<b>Validation rules</b>
<i>Interruption 4 alternative date</i>	DD/MM/YYYY	C	Alternative date if fourth planned interruption cannot proceed on proposed start date. Mandatory if applicable, otherwise Null
<i>Interruption 5 start date</i>	DD/MM/YYYY	C	Date fifth interruption to commence Mandatory if applicable, otherwise Null
<i>Interruption 5 restore date</i>	DD/MM/YYYY	C	Most accurate indication of date when power will be restored for fifth interruption Mandatory if applicable, otherwise Null
<i>Interruption 5 start time</i>	HH:MM	C	Start time for fifth interruption Mandatory if applicable, otherwise Null
<i>Interruption 5 expected or actual restore time</i>	HH:MM	C	Most accurate indication of time when power will be restored for fifth interruption Mandatory if applicable, otherwise Null
<i>Interruption 5 alternative date</i>	DD/MM/YYYY	C	Alternative date if fifth planned interruption cannot proceed on proposed start date. Mandatory if applicable, otherwise Null
<i>Revision reason</i>	Char 50	O	Reason for revision (PLR communication type code)
<i>URL</i>	Char 50	O	URL for updated or additional information if available on distributor's website

Protocol specifications	
1	The information is to be provided as a comma delimited text file. Commas are therefore prohibited within fields.
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: <ul style="list-style-type: none"> <li>(a) a carriage return character and a line feed character combination (ASCII characters 13 and 10) commonly used in Windows based programs, or</li> <li>(b) a line feed character (ASCII character 10) commonly used in Unix based programs, or</li> <li>(c) a carriage return character (ASCII character 13) commonly used in Mac based programs.</li> </ul>
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 by 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. ORON_E_RGST_PLINT_200007_20000802_1232.TXT (distributor to registry), RGST_E_TRUS_PLINT_200007_20000802_1232.TXT (registry to trader) [Char4_Char1_Char4_Char7_yyyymm_yyyymmdd_UniqueID.TXT

Data outputs

## 2 Table of codes used in EIEP5A

2.1 Table 1 List of attributes to define data fields used in EIEP5A

Logical format	Data type	Rules	Example
INT (n)	Integer	ASCII representation of an integer number (i.e. no decimals), no leading zeros, no spaces, a leading "-" if negative (no sign if positive), with 1 to n digits.  Numbers only: ASCII characters 48 to 57, and 45 where applicable.	INT (4) 12 -1234
NUM (n.d)	Decimal	ASCII representation of a decimal number (i.e. 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) 123.45 1234.0 -12.32 NUM (6.3)

Logical format	Data type	Rules	Example
		<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>-0.123</p> <p>23.987</p> <p>987.000</p> <p>8</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>	
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>Where customer names require separation, a tilde character (~) should be used.</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> <p>— YYYY for century and year</p> <p>Month represented as:</p> <p>— MM to display leading zero</p> <p>Day represented as</p> <p>— DD to display leading zero</p> <p>ASCII format for any separators used</p>	<p>YYYYMMDD e.g. 20050216</p> <p>DD/MM/YYYY e.g. 16/02/2005</p>
TIME	Time	<p>ASCII in 24 hour format</p> <p>Hour represented as HH with leading zeros</p> <p>Minutes represented as MM with leading zeros</p> <p>Seconds represented as SS with leading zeros</p> <p>ASCII format for any separators used</p> <p>Note: both NZST and NZDT will be used and will be indicated as necessary</p>	<p>HH:MM:SS e.g. 13:15:01</p> <p>HH:MM e.g. 13:15</p>
DATETIME	Date/Time	<p>ASCII format with same rules as both Date and Time Data Types</p>	<p>YYYYMMDDHHMMSS e.g. 20050216131501</p>
NULL	Null	Field contains no data	

## 2.2 Table 2 ASCII character set for use within fields of EIEP5A

Character	ASCII
32	Space
33	!
34	"
35	#
36	\$
37	%
38	&
39	'
40	(
41	)
42	*
43	+
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	?

Character	ASCII
64	@
65	A
66	B
67	C
68	D
69	E
70	F
71	G
72	H
73	I
74	J
75	K
76	L
77	M
78	N
79	O
80	P
81	Q
82	R
83	S
84	T
85	U
86	V
87	W
88	X
89	Y
90	Z
91	[
92	\
93	]
94	^
95	_
96	`

Character	ASCII
97	a
98	b
99	c
100	d
101	e
102	f
103	g
104	h
105	i
106	j
107	k
108	l
109	m
110	n
111	o
112	p
113	q
114	r
115	s
116	t
117	u
118	v
119	w
120	x
121	y
122	z
123	{
124	
125	}
126	~

2.3 Table 3 Planned service interruption communication type codes for use in EIEP5A

Communication type code	Description
PLS	Planned Service Interruption - Initial Advice. To be used where the trader is required to notify affected customers.
PLI	Planned Service Interruption – Initial advice for information only, customers already notified. To be used where the distributor is required to notify or has optionally notified affected consumers.
PLR	Planned Service Interruption – Revision (other than a cancellation). Used to revise any information previously provided in a file which may be due rescheduling (change of date(s) and/or off/on times), change to the list of ICPs affected, reason for the planned service interruption, area affected or feeder details.
PLC	Planned Service Interruption – Cancellation