



European Network of
Transmission System Operators
for Electricity

THE ENERGY IDENTIFICATION CODING SCHEME (EIC) REFERENCE MANUAL

2022-02-01

VERSION 5.5

2 Copyright notice:

3 **Copyright © ENTSO-E. All Rights Reserved.**

4 This document and its whole translations may be copied and furnished to others, and derivative
5 works that comment on or otherwise explain it or assist in its implementation may be prepared,
6 copied, published and distributed, in whole or in part, without restriction of any kind, provided that
7 the above copyright notice and this paragraph are included on all such copies and derivative
8 works. However, this document itself may not be modified in any way, except for literal and whole
9 translation into languages other than English and under all circumstances, the copyright notice or
10 references to ENTSO-E may not be removed. For the avoidance of doubt, when this document is
11 translated into languages other than English, in the event of inconsistencies between the English
12 version published on the EIC website and any version in another language, the English version
13 published on the EIC website shall prevail.

14 This document and the information contained herein is provided on an "as is" basis.

15 **ENTSO-E DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT**
16 **LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT**
17 **INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR**
18 **FITNESS FOR A PARTICULAR PURPOSE.**

19 **This document is maintained by the ENTSO-E CIM EG. Comments or remarks are to be**
20 **provided at cio-admin@entsoe.eu**

21 **NOTE CONCERNING WORDING USED IN THIS DOCUMENT**

22 The force of the following words is modified by the requirement level of the document in which
23 they are used.

- 24 • SHALL: This word, or the terms "REQUIRED" or "MUST", means that the definition is an
25 absolute requirement of the specification.
- 26 • SHALL NOT: This phrase, or the phrase "MUST NOT", means that the definition is an absolute
27 prohibition of the specification.
- 28 • SHOULD: This word, or the adjective "RECOMMENDED", means that there may exist valid
29 reasons in particular circumstances to ignore a particular item, but the full implications shall
30 be understood and carefully weighed before choosing a different course.
- 31 • SHOULD NOT: This phrase, or the phrase "NOT RECOMMENDED", means that there may
32 exist valid reasons in particular circumstances when the particular behaviour is acceptable or
33 even useful, but the full implications should be understood and the case carefully weighed
34 before implementing any behaviour described with this label.
- 35 • MAY: This word, or the adjective "OPTIONAL", means that an item is truly optional. One
36 vendor may choose to include the item because a particular marketplace requires it or because
37 the vendor feels that it enhances the product while another vendor may omit the same item.
38 An implementation which does not include a particular option SHALL be prepared to
39 interoperate with another implementation which does include the option, though perhaps with
40 reduced functionality. In the same vein an implementation which does include a particular
41 option SHALL be prepared to interoperate with another implementation which does not include
42 the option (except, of course, for the feature the option provides.).

43

Revision History

Version	Release	Date	Paragraphs	Comments
1	0	2001-05-24		Initial publication.
2	0	2002-06-20		Correction to remove the use of the asterisk character (*) in the EIC code since it could be used in a filename.
3	0	2004-09-30	Section 1 Section 3 Annex 4 Annex 5 Annex 6	Update of the introduction section to bring it into line with the current situation to define the new EIC code type "W" for units. Specify more responsibilities for the CIOs and additional responsibilities for the LIOs. Modify the DTD to incorporate the EIC Responsible Party and to provide explanatory text. Explanation of the use of the EIC parent. Explanation of the use of the EIC Responsible Party.
4	0	2005-05-11		General revamping of the document to incorporate the extension of the coding system to the energy market, to permit the EIC code to be used locally as well as nationally and to detail the use of the balance group object type.
5	0	2015-06-18	All	Restructuring of the Reference Manual, to clarify the content along with the introduction of legally clear information.
5	1	2016-02-15	3.1.2, 3.2.3	Redraft the rules for LIOs which are involved in the issuance of EIC participants and its assets which are in different country.
5	2	2017-06-01	5.4	Add description/constraints on additional attributes.
5	3	2018-05-08	5.1	Examples of significant and non-significant codes were corrected.
5	4	2021-09-15	4.2	Clarifications with regards to the usage of EIC X and V codes were added to the manual. References to personal data with regards to CIO were removed or rephrased. Approved by MC.
5	5	2022-02-01	4.2	EIC object Type A definition was improved.

44

45

References

46 All the documentation about the EIC coding scheme is available on the EIC website
47 (www.eiccodes.eu)

48 In particular, the following information is provided:

- 49 a) The EIC reference manual
- 50 b) The EIC implementation guide
- 51 c) The EIC list of functions
- 52 d) The list of EIC Local Issuing Offices
- 53 e) The list of EIC codes in the central registry

CONTENTS

54			
55	Copyright notice:		2
56	Revision History		3
57	References		3
58	CONTENTS		4
59	Introduction		5
60	Definitions		6
61	Governance		7
62	3.1	EIC Participant	7
63	3.1.1	Obligations/Responsibility	7
64	3.1.2	Process of “creating” or “updating” an EIC code	8
65	3.2	Local Issuing Office	8
66	3.2.1	Obligations/Responsibility	8
67	3.2.2	Process to become a LIO	9
68	3.2.3	Process to issue an EIC code	10
69	3.2.4	Process to communicate to the CIO registry	11
70	3.2.5	Process to publish its EIC codes	11
71	3.2.6	Process to deactivate or reactivate an EIC code	12
72	3.2.7	Process to update the additional attributes of an EIC code	12
73	3.3	Central Issuing Office	12
74	3.3.1	Obligations/Responsibility	12
75	3.3.2	Acceptance/Revoke of a LIO	13
76	3.3.3	Process to update CIO registry	13
77	3.3.4	Verification and integration of an international EIC code	13
78	3.3.5	Process to publish EIC codes	14
79	3.3.6	Organisation of regular meetings	14
80	3.4	Common provisions for CIO, LIO and EIC Participants	14
81	3.5	ENTSO-E	14
82	3.5.1	Obligations/ Responsibility	14
83	EIC codes: requirements and types		14
84	4.1	General requirements	14
85	4.2	EIC code types	15
86	4.3	EIC attributes	16
87	Structure of the EIC code		16
88	5.1	General	16
89	5.2	Permitted characters	16
90	5.3	Overall structure	16
91	5.4	Structure of other attributes	16
92			
93	List of figures		
94	Figure 1 –Structure of an EIC code		16
95			

96 Introduction

97 Electronic data interchange (EDI) in the European energy market requires a common identification
98 scheme to be effective. EIC Participants (traders, producers, qualified consumers, etc.) have the
99 possibility to act in different market areas. System operators have to exchange information
100 amongst themselves as well as with other EIC Participants. In addition there are many other
101 objects that require identification for information interchange to be successful (tie lines, resource
102 objects, etc.). In order to provide such functionality a reliable identification scheme is a necessity.

103 The non-exhaustive list of objects that need to be identified are:

- 104 • System operators, traders, producers, consumers, power exchanges, grid operators,
105 suppliers, agents, service providers, etc.
- 106 • Local grids where metering points are situated, market balance areas consisting of a number
107 of local grids, control areas, etc.
- 108 • Cross border connections, metering points, settlement or accounting points, etc.
- 109 • Any object that generates, or consumes energy.
- 110 • The physical lines that connect adjacent market (balance) areas or internal lines within an
111 area.
- 112 • The physical or logical places where an identified object or the IT system of an identified
113 object is or could be located.
- 114 • Substations for electrical nodes (stations, passive nodes, etc.).

115 ENTSO-E consequently introduced an identification scheme, which provided an easy migration
116 path for existing national schemes, in a format that makes it suitable for general electronic data
117 interchange. The resulting Energy Identification Coding scheme - EIC - is described in the rest of
118 this reference manual.

119 EIC codes are necessary for ENTSO-E, ENTSOG and actors of the energy market to fulfil their
120 obligations pursuant to:

- 121 • the Transparency Regulation, for the electricity sector¹;
- 122 • the Gas Regulation, for the gas sector²;
- 123 • the REMIT Regulation and the REMIT implementing act, for both the electricity and the gas
124 sectors³.

¹ Namely Commission Regulation (EU) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets and amending Annex I to Regulation (EC) No 714/2009 of the European Parliament and of the Council (the "Transparency Regulation"). The [manual of procedures](#) developed by ENTSO-E under this Regulation prescribes the use of EIC codes to report information under the Transparency Regulation (notably EIC codes type X, Y, W, V and T).

² Namely, Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (the "Gas Regulation"), as modified by Commission Decision of 24 August 2012. The Automatic Download User Manual developed by ENTSOG pursuant to the Gas Regulation equally prescribes the use of EIC codes to report information under the Gas Regulation (notably EIC codes types X, Y and Z).

³ Regulation (EU) No 1227/2011 of the European Parliament and of the Council of October 2011 on wholesale energy market integrity and transparency (the "REMIT" Regulation) and the Commission Implementing Regulation (EU) No 1348/2014 of 17 December 2014 on data reporting implementing Article 8(2) and Article 8(6) of Regulation (EU) No 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency (the "REMIT implementing act") render EIC codes mandatory. EIC codes have to be submitted to report information pursuant to Article 8(2) of the REMIT Regulation (Article 5 and the Annex of the REMIT implementing act):

- EIC codes identifying the delivery point or zone/areas for contracts related to the supply of electricity and gas (Annex of the REMIT implementing act, Table 1, row 48 and Table 2, row 41);

125 These obligations follow from the legislative and regulatory acts in force at the date of release of
126 the version 5.0 of the EIC reference manual and are without prejudice to any legislative and/or
127 regulatory acts that may be amended or adopted thereafter. ENTSO-E reserves the right to amend
128 this section of the reference manual in case legislative and regulatory changes are relevant and
129 applicable to EIC codes.

130 **Definitions**

131 For the purpose of this reference manual, the following definitions apply:

132 **Local EIC code** means an EIC code allocated for activities limited to an area of operation and is
133 not used in another country.

134 **International EIC code** means an EIC code allocated for activities on one or several geographical
135 area(s) which may cross borders with another country and/or for any other activities outside the
136 limits of this area as subject to publication or reporting requirements pursuant to EU legislation.
137 The international EIC code shall be registered in the CIO registry.

138 **Party** means a physical or legal entity active on the electricity and/or gas markets, which can be,
139 without being exhaustive, a trader, a producer, a consumer or a group of consumers, a system
140 operator, etc., and which can be or is allocated under this reference manual an EIC code type X.

141 **EIC Participant** means a physical or legal entity which is allocated one or several EIC code(s) by
142 an authorised LIO. The quality of “EIC Participant” applies as soon as an entity applies to be
143 allocated an EIC code.

-
- *EIC codes type X (identifying the sender of the document, the bidding party, the rights holder, the transferee party and the market participant for whom a bid is submitted) and EIC codes type Y (identifying the “in” and “out” area, both for primary allocation and secondary rights) for contracts related to the transportation of electricity (Annex of the REMIT implementing act, Table 3, rows 4, 16, 19, 20, 33 – 36, and 54) ;*
 - *EIC code type Z (identifying the network point) for contracts related to gas (Annex of the REMIT implementing act, Table 4, row 22).*

In addition, ENTSO-E and ENTSG have to report the data under Article 8(5) of the REMIT Regulation through their transparency platforms (Articles 8 and 9 of the REMIT implementing act). As EIC codes are to be used to report information on the transparency platforms, EIC codes are equally to be used to report information under Article 8(5) of the REMIT Regulation and Articles 8 and 9 of the REMIT implementing act.

Finally, EIC codes are listed as an option amongst other codes (e.g. Legal Entity Identifier (LEI), Bank Identifier Code (BIC), etc.) to identify information under Article 8(2) of the REMIT Regulation (Article 5 and the Annex of the REMIT implementing act).

144 **Governance**

145 The administrative organization for EIC management is composed of a four level structure:

- 146 • Level 1: EIC Participant

147 The EIC Participant submits a request for an EIC code for an identifying party or for an object.
148 The role of the EIC Participant consists in providing the LIO with the information necessary for
149 the EIC code creation and all necessary updates.

- 150 • Level 2: Local Issuing Office (LIO)

151 Each country, which directly or indirectly is a part of the European energy network, can have one
152 or more LIO for issuing EIC codes. In addition, an energy association, (such as ENTSO-E, EFET,
153 BDEW, DVGW, etc.) can also become a LIO. The LIO shall manage the EIC codes it allocates
154 and maintains a local registry.

- 155 • Level 3: Central Issuing Office (CIO)

156 The CIO is currently under the direct responsibility of ENTSO-E. It ensures the management of
157 the central registry and the acceptance of LIOs.

- 158 • Level 4: ENTSO-E

159 ENTSO-E defines after consulting the LIOs the governance of the EIC scheme and maintains the
160 EIC Reference manual.

161 **3.1 EIC Participant**

162 **3.1.1 Obligations/Responsibility**

163 An EIC Participant is responsible for the accuracy and completeness of the information it submits
164 when applying for an EIC code. Once an EIC code is issued, the EIC Participant shall be
165 responsible for the information provided in the EIC code and shall inform the LIO that issued the
166 EIC Code of any changes in the EIC information.

167 By applying for and being allocated an EIC code, an EIC Participant accepts:

- 168 • explicitly this reference manual and to comply with its provisions;
- 169 • that this reference manual is governed by, and shall be construed in accordance with Belgian
170 law for relations with the CIO or national law of the LIO in the case of relations with the LIO;
- 171 • that any disputes or disagreements arising from or in connection with this reference manual
172 shall be settled amicably. For the disputes which cannot be settled amicably within a
173 reasonable period of time, the competent courts under the applicable law shall have exclusive
174 jurisdiction to settle any disputes arising out or in connection with this reference manual.

175 When an EIC Participant is in material breach of this reference manual, the LIO and/or the CIO
176 shall have the right to:

- 177 • send a written notice to the EIC Participant requesting it to remedy its breach within 30
178 calendar days;
- 179 • suspend the allocated EIC code in the absence of remedy within the timing set in the written
180 notice;
- 181 • revoke the allocated EIC code in the absence of remedy within 30 calendar days following the
182 suspension of the authorisation.

183 A revoked EIC code shall be reinstated as soon as the EIC Participant demonstrates to the LIO
184 and/or the CIO it has remedied the breach in question.

185 A CIO or LIO may suspend or revoke an EIC code upon a reasoned request of a public competent
186 authority claiming a breach of the applicable law. In no event shall the CIO or LIO be responsible
187 for such suspension or revocation.

188 After receiving a new EIC code or an amended one, the EIC Participant shall verify the accuracy
189 of its EIC code content with the data it submitted when applying for the EIC code and/or if relevant
190 when requesting a change to its EIC code information. The EIC Participant shall also verify the
191 accurate publication of its EIC code on the CIO or LIO registries. The EIC Participant shall notify
192 in the shortest timing following the publication of the EIC code any possible errors it identifies to
193 the concerned LIO. In the absence of notification of an error within 10 business days after the
194 publication of the EIC code, the EIC code is understood as valid and cannot engage the
195 responsibility of the LIO or CIO.

196 The person applying for an EIC code on behalf on a Party which wishes to become an EIC
197 Participant shall submit to the LIO a declaration attesting it acts on behalf of the EIC Participant.

198 An EIC Participant, when requesting a change to the information content of an EIC code, shall
199 submit to the LIO a declaration attesting it was issued the EIC code in question and that the
200 person signing the declaration acts on behalf of this EIC Participant.

201 As described in 3.5.1, EIC participants agree to be bound by any future amendments of this
202 reference manual, by continuing using the EIC code they were allocated.”

203 **3.1.2 Process of “creating” or “updating” an EIC code**

204 An EIC Participant may request an EIC code from a LIO. It is also possible to request that the
205 information associated with the EIC code be modified or that an EIC code be deactivated. If the
206 request is not acceptable for any reason (EIC code already exists, incorrect display name, etc.)
207 the EIC Participant is informed by the LIO and may, if necessary, make a new request.

208 If an EIC participant withdraws from operating on the energy market then this information shall
209 be provided to the LIO to enable the deactivation of the EIC code.

210 The EIC Participant shall provide to the LIO an e-mail address (preferably generic) to enable EIC
211 code information queries from the LIO and/or the CIO to be handled.

212

213 A LIO shall only issue an EIC code type X for Party not registered (e.g. VAT identification number
214 or a unique identification code) or other codes for objects not located in the country where the
215 LIO operates if:

- 216 • the concerned EIC Participant demonstrates there is no LIO in the country where the Party is
217 registered / the object is located or;
- 218 • the LIO(s) in the country where the Party is registered / the object is located do not issue EIC
219 codes for the sector (electricity or gas) and type the EIC Participant applies for.

220

221 **3.2 Local Issuing Office**

222 **3.2.1 Obligations/Responsibility**

223 A LIO explicitly accepts:

- 224 • this reference manual and to comply with its provisions;
- 225 • that this reference manual is governed by, and shall be construed in accordance with, Belgian
226 law for relations with the CIO or national law of the LIO in the case of relations with EIC
227 Participants;

228 • that any disputes or disagreements arising from or in connection with this reference manual
229 shall be settled amicably. For the disputes which cannot be settled amicably within a
230 reasonable period of time, the competent courts under the applicable law shall have exclusive
231 jurisdiction to settle any disputes arising out or in connection with this reference manual.

232 A LIO is responsible for the allocation and maintenance of the EIC codes it issues and a LIO shall
233 publish at least the list of all the active EIC codes that it has issued in its local registry with at
234 least the information proposed in the EIC implementation guide

235 A LIO shall correct errors identified by the EIC Participant in existing EIC codes that the LIO has
236 issued.

237 The LIO is not responsible for the accuracy, completeness and validity of the information that is
238 provided by an EIC Participant.

239 The LIO is not responsible for loss, damage, costs and expenses which may incur as a direct
240 consequence of acts or omissions from an EIC Participant, the CIO or any third party. The LIO is
241 responsible only for the EIC codes it allocates.

242 The LIO shall perform its obligations without prejudice to the application of national legislation
243 relating to the protection of personal data or to the protection of commercially sensitive
244 information. In this respect, the LIO shall not be held liable for any failure to perform its
245 obligations, when such failure is due to the necessary compliance of the LIO with such legislation.

246 A LIO shall provide at least the following minimum services:

247 • to provide a local registry on a web-page accessible by third parties. The LIO publishes the
248 energy sector (gas or electricity or both) and the EIC code types that it covers;

249 • to publish the list of all EIC codes allocated by the LIO in a processable form according to the
250 EIC implementation guide that can be downloaded by third party;

251 • to ensure that an EIC code or a display name has not already been allocated for the requesting
252 party either locally or in the central registry. If an EIC code has already been allocated in the
253 central registry to identify the entity or object, the LIO shall inform the EIC Participant applying
254 for an EIC code;

255 • to provide a party with all the details relevant to the EIC codes they are responsible for and to
256 notify EIC Participants of their obligation to keep the content of the EIC codes current.

257 When a LIO is in material breach of this reference manual, the CIO shall have the right to take
258 actions according to section 3.3.2.

259 LIOs will issue, maintain and publish the needed EIC codes free of charge for EIC Participants,
260 unless the competent national regulatory authority agrees that the LIO asks a fee to EIC
261 Participant in its area of operation. Any LIO asking a fee shall publish on its website the applicable
262 fee and inform the other LIOs.

263 The LIO shall treat as confidential any data qualified as confidential it receives from an EIC
264 Participant, another LIO or the CIO. The LIO shall use utmost care and discretion not to disclose,
265 publish or disseminate the confidential data. This obligation is without prejudice to the
266 communication of data to the CIO and other LIOs in accordance with this reference manual and,
267 if necessary or requested, to competent authorities. The LIO shall inform EIC Participants of this
268 possible communication. The LIO shall process and publish the data it receives in line with the
269 national law on protection of personal data.

270 **3.2.2 Process to become a LIO**

271 An applicant shall be authorised by the CIO in order to become a LIO. It shall fill in the application
272 form available on the EIC website and submit it to the CIO.

273 The application form shall be signed by an authorised representative of the submitting
274 organisation and shall contain at least:

- 275 • Name and address of the legal entity submitting the request;
- 276 • Documentation of the motivations for the creation of the LIO;
- 277 • The area of operation;
- 278 • The sector it will cover (gas, electricity). If it does not cover both sectors then it should indicate
279 which LIO covers the absent sector, if such information is available.
- 280 • The EIC code types (see section 4.2) it will allocate. If it does not allocate all EIC code types
281 then it should indicate thorough justification and indicate which LIO(s) allocates the missing
282 code types for its area of operation.

283 In case where the requirements of the reference manual are met, the CIO shall assign to the
284 applicant a unique 2-character code that identifies it as a LIO. In case of non-compliance, the CIO
285 shall inform the applicant of the motivations for the rejection.

286 The ENTSO-E Secretary General or the designated responsible person on the Secretary
287 General's behalf will supply the successful LIO by post, email or fax with a certificate
288 acknowledging the LIO status.

289 The CIO shall publish the new LIO information in the EIC website.

290 **3.2.3 Process to issue an EIC code**

291 On reception of a request for the creation of an EIC code, the LIO will initially validate the
292 credentials of the requesting EIC Participant.

293 It shall ensure that the allocated EIC codes are stable over time.

294 Regarding requests referring to a party, a LIO can request:

- 295 • an excerpt of the national trading register (e.g. VAT identification number or a unique
296 identification code);
- 297 • the ACER identification code if one exists;
- 298 • the description of the EIC code shall be provided in a description attribute (free text) and also
299 using the list of functions published in the EIC web site;
- 300 • the legal entity name shall correspond to its registered name;
- 301 • any other information deemed necessary by the LIO.

302 A LIO shall only issue an EIC code or update information of an EIC code that begins with its LIO
303 identification number.

304 The EIC Participant shall be informed of any problems identified. In a second phase the LIO shall
305 verify in the local and central registry to ensure that an EIC code has not been already allocated
306 to this entity or object. If an EIC code already exists for this entity or object, there are two
307 possibilities:

- 308 • An EIC code exists in the local registry; the EIC Participant could be making a request for the
309 EIC code to become an international EIC code. If this is the case then the process continues.
310 However, if this is not the case then the EIC Participant is informed of the existing EIC code;
- 311 • An EIC code exists in the central registry in which case the EIC Participant is informed of the
312 EIC code's existence that identifies already the entity or object.

313 Display names in the central registry are required to be unique by EIC type. This uniqueness
314 check by EIC type also applies to locally assigned EIC codes. In order to ensure that a locally
315 assigned EIC code has a display name that is unique it is recommended that it begins with the

316 two character international country code of the country in question, or the LIO number, in case
317 there are more than one LIO in the same country. For example a local EIC code assigned in
318 Switzerland shall have display name such as “CH-NAME”. A conflict may occur in the case of
319 several LIOs in the same country in which case the display name shall use the LIO number
320 instead.

321
322

323 A LIO shall only issue an EIC code type X for Party not registered (e.g. VAT identification number
324 or a unique identification code) or other codes for objects not located in the country where the
325 LIO operates if:

- 326 • the concerned EIC Participant demonstrates there is no LIO in the country where the Party is
327 registered / the object is located or;
- 328 • the LIO(s) in the country where the Party is registered / the object is located do not issue EIC
329 codes for the sector (electricity or gas) and type the EIC Participant applies for.

330 **3.2.4 Process to communicate to the CIO registry**

331 LIOs may assign local EIC codes. In this case the EIC code assigned shall not be submitted to
332 the CIO. An EIC code that has been created for use on the local market may at some later date
333 be upgraded for use on the international market. The LIO has, in such a case, to transmit the EIC
334 code information to the CIO.

335 The LIO shall ensure that a locally assigned EIC code respects all the rules laid down in this
336 document and in particular it shall ensure that the display name per each type of EIC code and
337 whatever its status (active/inactive) that is assigned is unique within the central registry.

338 A LIO shall provide at least the following minimum services:

- 339 • to transmit to the CIO all international EIC codes.
- 340 • to send to the CIO any updated information that is in the central registry.
- 341 • to manage the EIC codes under its responsibility by:
 - 342 a) enabling inquiries about an EIC code;
 - 343 b) suspending when necessary an EIC code;
 - 344 c) modifying when necessary information related to an EIC code.

345 When there are several LIOs for a same geographical area, the LIOs shall cooperate with each
346 other to ensure that no different EIC codes are allocated to a same legal entity.

347 When a locally assigned EIC code becomes an international EIC code, the LIO shall ensure that
348 the display name is still unique within the central registry for the category of the EIC code in
349 question. If not it shall make any required changes that are necessary.

350 For the creation of an international EIC code, the LIO shall supply the central registry with all
351 allocated international EIC codes and the standard information. Each LIO shall send all
352 internationally assigned EIC codes to the CIO containing the related information and their
353 allocated EIC codes. This information shall be sent to the CIO by the LIO using either the standard
354 XML electronic document which will be validated through the appropriate XML schema. More
355 information on the XML structure of the EIC scheme and the EIC attributes can be found in the
356 EIC implementation guide document, which is available in the EIC website (www.eiccodes.eu).

357 **3.2.5 Process to publish its EIC codes**

358 Each LIO shall have a web-page where all EIC codes they allocate shall be published.

359 **3.2.6 Process to deactivate or reactivate an EIC code**

360 Deactivation/reactivation of a local EIC code is carried out by the LIO who is responsible for it.

361 Before an international EIC code may be deactivated, a LIO shall send a deactivation request to
362 the CIO. The EIC code in question shall be kept active for a period of two months prior to its
363 deactivation. If during that time a request is made for it not to be deactivated the EIC code shall
364 remain active. The requesting LIO shall be informed of its removal. If, after the two month period
365 no requests have been received the EIC code will be deactivated by the CIO.

366 The reactivation of an already deactivated EIC code is possible in the case where an EIC code
367 identifying an object has been deactivated and a request is made to reactivate it for use to identify
368 the same object.

369 A LIO may reactivate a deactivated EIC code after it has ensured that it is identifying the same
370 object. For an international EIC code, the request for reactivation is sent to the CIO who shall
371 reactivate the EIC code immediately.

372 **3.2.7 Process to update the additional attributes of an EIC code**

373 A LIO is allowed to update the attributes of an existing EIC code following an update request by
374 the owner of the EIC code. All attributes can undergo change, except for the case of the VAT
375 identification number or a unique identification code for Parties. In the latter case, an update is
376 allowed only if the update does not affect the essence of the legal entity. To this end, the following
377 changes to the VAT identification number or a unique identification code can be considered as
378 non-essential:

- 379 • the restructuring of a legal entity, leading to the transfer of the EIC codes to another legal
380 entity succeeding to its activities for the EIC codes (such as for instance the merger of several
381 entities or the split of one entity into several entities);
- 382 • the modification of the VAT identification number or a unique identification code in a country
383 following the accession to the European Union (see e.g. the case of Croatia);
- 384 • the modification of the form of the legal entity.

385 The LIO can request all necessary documentation that demonstrates that the change of VAT
386 identification number or a unique identification code does not change the essence of the legal
387 entity. Regarding the update of other EIC attributes, the LIO shall simply verify that the display
388 name remains unique in each EIC code type.

389 **3.3 Central Issuing Office**

390 **3.3.1 Obligations/Responsibility**

391 The CIO is responsible for the collection, integration and publication of all the international EIC
392 codes received from the LIOs.

393 The CIO shall not be liable for indirect or consequential damages arising under or in connection
394 of this reference manual.

395 The CIO is not responsible for the accuracy, completeness and validity of the information that is
396 provided by a LIO. The CIO is not responsible for loss, damage, costs and expenses which may
397 incur as a direct consequence of acts or omissions from an EIC Participant, a LIO or a third party.
398 The CIO is responsible only for the management of the EIC codes published on its central registry.
399 It is not responsible for EIC codes published only on local registries or allocated by an entity it
400 did not recognise as LIO or by an entity whose authorisation to act as LIO was suspended or
401 revoked.

402 The CIO shall treat as confidential any data qualified as confidential it receives from an EIC
403 Participant or a LIO. The CIO shall use utmost care and discretion not to disclose, publish or
404 disseminate the confidential data. This obligation is without prejudice to the consolidation by the

405 CIO of all the data received from the LIOs and the regular communication of this consolidated
406 data to all LIOs as well as to the communication of data if necessary to competent authorities.

407 CIO does not need to receive personal data from any of the LIOs as that information should be
408 stored in their local repositories. Therefore, CIO will not circulate any personal data back to the
409 LIOs.

410 Communication with the Market Participants should always go through the LIO.

411

412 **3.3.2 Acceptance/Revoke of a LIO**

413 When a LIO is in material breach of this reference manual, the CIO shall have the right to:

- 414 • send a written notice to the LIO requesting it to remedy its breach within 45 calendar days;
- 415 • suspend the authorisation to act as a LIO in the absence of remedy within the timing set in
416 the written notice;
- 417 • revoke the authorisation to act as a LIO in the absence of remedy within 45 calendar days
418 following the suspension of the authorisation.

419 A revoked LIO shall be reauthorised as a LIO once it demonstrates to the CIO that it remedied
420 the breach it was notified.

421 EIC codes allocated by a suspended and/or revoked LIO remain valid until the reauthorisation of
422 the concerned LIO. While the LIO is suspended and/or revoked, the CIO shall find a solution for
423 the management of the active EIC codes.

424 **3.3.3 Process to update CIO registry**

425 The CIO shall perform the following validation checks:

- 426 • The EIC code is unique within the central registry;
- 427 • The display name is unique per EIC code type within the central registry;
- 428 • The EIC code and display name respect the naming rules and only use the permitted
429 characters;
- 430 • The contents of the function attributes shall exist in the permitted function list;
- 431 • If two different EIC Participants have the same VAT identification number or identification
432 code and this is permitted by the local tax regulations, one of the two EIC codes should be
433 designated as EIC Parent, otherwise one of the two EIC codes will not be accepted.
- 434 • A request to deactivate an EIC Participant code which is EIC parent or EIC responsible shall
435 not be permitted unless all EIC children or responsible for EIC codes are already updated;
- 436 • The last request date shall be modified with each addition, modification deactivation or
437 reactivation of an EIC code;
- 438 • The EIC code with an erroneous EIC attribute shall not be published, until the LIO provides a
439 compliant EIC attribute;
- 440 • All mandatory attributes shall be present.

441 **3.3.4 Verification and integration of an international EIC code**

442 On reception of an LIO request submission, the CIO verifies that all the required information is
443 present and that the controls defined in section 3.3.3 are respected. When the controls are not
444 respected, the request is rejected and the LIO is informed of the rejection.

445 This requires immediate action by the LIO. Once the verifications successfully carried out the
446 central registry is updated accordingly. The CIO also ensures that the last requested date is

447 superior to the requested date in the central registry. If not the date is changed to the current date
448 and the LIO is informed of the change.

449 **3.3.5 Process to publish EIC codes**

450 The CIO shall publish on its central registry the list of authorised, suspended and/or revoked LIOs.

451 The CIO shall add to its registry the valid EIC codes as received from the LIOs and publish in a
452 processable form downloadable by third party the related attributes excluding personal data.

453 The CIO shall publish the list of EIC codes it receives from the LIOs in a processable form
454 according to the EIC implementation guide downloadable by third party.

455 **3.3.6 Organisation of regular meetings**

456 The CIO shall ensure a proper coordination of LIOs through regular CIO/LIOs meetings.

457 **3.4 Common provisions for CIO, LIO and EIC Participants**

458 An actor (being LIO, CIO or EIC Participant) shall indemnify any other actor only against damage,
459 costs and expenses which it may incur as a direct consequence of a breach of this reference
460 manual resulting from a gross negligence and/or wilful misconduct. The actor's liability shall be
461 limited to a maximum amount of 1.000 EUR per damaging event and shall not be liable for indirect
462 or consequential damages arising under or in connection of this reference manual.

463 **3.5 ENTSO-E**

464 **3.5.1 Obligations/ Responsibility**

465 Any coding scheme needs a body to maintain it and to ensure that it satisfies market requirements.

466 ENTSO-E shall manage the maintenance of the EIC scheme. The LIOs or the CIO may provide a
467 maintenance request for a change to or evolution of the EIC scheme. Any proposed changes to
468 this reference manual shall have the consensus of all participating LIOs and the CIO.

469 Should this reference manual be amended, the amended reference manual will be published on
470 the EIC website (www.eiccodes.eu). The CIO and LIO will inform on their respective website of
471 the publication of the amended reference manual on the EIC website. By continuing using the EIC
472 codes they were allocated, EIC Participants agree to be bound by the reference manual as
473 amended.

474 **EIC codes: requirements and types**

475 **4.1 General requirements**

476 A successful identification scheme requires that the allocated codes are stable over time.

477 Only EIC codes issued by LIOs that respect the rules of this reference manual are valid EIC
478 codes.

479 Only one EIC code shall be allocated per entity or object⁴.

480 EIC codes shall identify abstract or physical objects by what they are used for and not by their
481 physical characteristics. For instance, a replacement of a transformer does not require a change
482 of the EIC code that is used to identify it.

483 The EIC code is to be used as a complete string without trying to extract information from its
484 structure.

⁴ In case they were issued before the version 5.0 of the EIC reference manual and are referred to in the local market rules and national laws, more than one EIC code of type X per party shall remain valid until phased out.

485 Only a restricted list of functions can be assigned to a given EIC code, based on its code type.
486 This list of functions is maintained by the ENTSO-E WG EDI and can be found in the EIC website.

487 **4.2 EIC code types**

488 • EIC object type X (Party)

489 The EIC code of type X is used to identify a Party⁵ or Parties (if allowed by local tax regulation).
490 A party must be understood as a legal entity having a VAT identification number or a unique
491 identification code (like Legal Entity Identifier or Company Registration number). See rules
492 defined in chapter 3.2.3.

493 The allocation of an EIC code does not permit a Party to participate in any energy market. The
494 Party has necessarily to be registered in accordance with local market rules of the area where
495 the Party wants to operate.

496 • EIC object type Y (Area)

497 The EIC code of type Y is used to identify a domain which can be considered as a delimited area
498 that is uniquely identified for a specific purpose and where energy consumption, production or
499 trade may be determined. It can be a geographical or market area, such as control areas, balance
500 groups, bidding zones, balancing areas, etc.

501 Only system operators, grid operators (distribution operators), market operators, imbalance
502 settlement responsible parties, balance responsible parties, and regulators are allowed to request
503 new EIC area identification codes.

504 • EIC object type Z (Measurement point)

505 The EIC code of type Z is used to identify a physical or logical point that is used to identify an
506 object where the measurement of energy is measured or calculated.

507 • EIC object type W (Resource object)

508 The EIC code of type W is used to identify objects to be used for production, consumption or
509 storage of energy. Examples are: generation unit, production unit, LNG terminals, gas storages
510 etc. Excluded are the passive elements in the grid, e.g. lines or transformers.

511 • EIC object type T (Tie-line)

512 The EIC code of type T is used to identify connecting objects such as interconnection lines, lines,
513 busbar-couples, transformers, etc.

514 • EIC object type V (Location)

515 The EIC code of type V is used to identify:

516 A physical or logical place where a Party could be located.

517 An IT system that may be operated by one or more parties. One of the parties has to be indicated
518 as the responsible for the code.

519 A location has necessarily an EIC responsible party associated with it.

520 Note: A V code can be used as Sender or Receiver Identification in the documents. But not as
521 Subject Party.

522 • EIC object Type A (Substations)

⁵ With the introduction of the EIC coding system, balance groups in the electricity market were assigned EIC code type X in some European countries. In Germany, this usage of local EIC codes remains valid due to local market rules and national laws.

523 The EIC code of type A is used to identify substations or topological nodes.

524 **4.3 EIC attributes**

525 The information of an EIC code which are stored in the central or local registry are described in
526 the ENTSO-E EIC implementation guide.

527 **Structure of the EIC code**

528 **5.1 General**

529 The Energy Identification Coding scheme (EIC) is based on fixed length alphanumeric codes. The
530 EIC codes will contain information about the LIO in addition to information on the object identified.
531 It is strongly recommended that EIC codes should be non-significant alphanumeric codes. This
532 maintains the uniqueness of the code and stability of the coding system. Examples:

- 533 • of a random non-significant code: 10X168Y4E6H0041Z
- 534 • of a non-random significant code: 10X---ENTSOE---L

535 **5.2 Permitted characters**

536 Permitted characters are numbers (0 to 9), capital letters (A to Z, English alphabet) and the sign
537 minus (-). To avoid confusion, the check character shall use numbers (0 to 9) or the capital letters
538 (A to Z).

539 **5.3 Overall structure**

540 The structure of the EIC may be broken down as follows (see Figure 1):

- 541 • The 2-characters identifying the LIO, as assigned by the CIO.
- 542 • One character identifying the object type that the EIC code represents.
- 543 • 12 digits, uppercase characters or minus signs allocated by the LIO in compliance with general
544 and local rules to identify the object in question (party, measurement point, area, etc.). This
545 implies that the significance of these 12 characters shall always remain constant.
- 546 • 1 check character based on the 15 previous characters used to ensure the validity of the EIC
547 code. The check digit algorithm is described in the EIC implementation guide document, which
548 is available in the [EIC website](#).



549 **Figure 1 –Structure of an EIC code**

550 **5.4 Structure of other attributes**

551 The display name should have a maximum length of 16 character. The permitted letters are the
552 uppercase characters “A” to “Z”, the minus sign “-”, the plus sign “+”, the underscore sign “_”, or
553 the numeric values “0” to “9”. Each Display name assigned by a LIO must be unique within the
554 LIO’s registry and the central (CIO) registry. This uniqueness should be guaranteed only within
555 codes of the same EIC type⁶.

⁶ See section 4.2 for EIC code types.