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**Business Requirements Specification  
for the  
Nomination and Matching Procedures  
In Gas Transmission Systems (NOM BRS)**

**Draft Version 0 Revision 128 – 201~~53~~-0~~25~~-272**

**Approved**

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10 **Log of changes**

<b><u>Change</u></b>	<b><u>Date of change</u></b>	<b><u>Issuer of change</u></b>
<b><u>References to NC BAL updated based on structure of Regulation after comitology</u></b>	<b><u>1 July 2014</u></b>	<b><u>ENTSOG</u></b>
<b><u>Addition of a table reflecting reference documents and status of these</u></b>	<b><u>1 July 2014</u></b>	<b><u>ENTSOG</u></b>
<b><u>Addition of authorisation process for single sided nominations</u></b>	<b><u>9 Feb. 2015</u></b>	<b><u>ENTSOG</u></b>

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76 **1 Objective**

77 ~~The Commission Regulation (EU) No 312/2014 of 26 March 2014 establishing a~~ Network  
78 Code on Gas Balancing ~~(of Transmission Networks (hereinafter 'NC BAL) of transmission~~  
79 ~~networksBAL')~~ sets forth provisions in respect to gas balancing regimes within the borders of  
80 the European Union with the aim to facilitate gas trading across Balancing Zones toward  
81 greater market integration.

82 It defines gas balancing rules, including network-related rules on nominations procedure, on  
83 imbalance charges and on operational balancing as required by Article 8(6)(j) of ~~the~~  
84 Regulation (EC) No 715/2009.

85 Its aim is to harmonise gas balancing arrangements to support the completion and  
86 functioning of the European internal gas market, the security of supply and appropriate  
87 access to the relevant information, in order to facilitate trade, including cross-border trade,  
88 to move forward towards greater market integration.

89 ~~The Commission Regulation (EU) No 984/2013 of 14 October 2013 establishing a~~ Network  
90 Code on Capacity Allocation Mechanisms ~~in Gas Transmission Systems (hereinafter 'NC~~  
91 ~~CAMCAM')~~ defines how adjacent Transmission System Operators cooperate in order to  
92 facilitate capacity sales, taking into consideration general commercial as well as technical  
93 rules related to capacity allocation mechanisms. The Congestion Management Principles  
94 (CMP) guidelines provide rules in respect to contractual congestion in gas transmission  
95 networks.

96 This document defines the business requirements that are necessary for a harmonised  
97 software implementation of the information exchanges necessary to satisfy the processes  
98 defined in the above mentioned Network Codes in addition to the future Network Code on  
99 Interoperability and Data Exchange Rules (~~hereinafter 'NC INTINT')~~).

100 **2 Scope**

101 This document outlines the external business requirements that are necessary in order to  
102 ensure a harmonised transmission of information between parties participating in the  
103 nomination and matching environment. It is intended for use by parties involved in such an  
104 implementation. In particular, it forms a specification to enable EASEE-gas to produce  
105 documentation that can be approved and published.

106 This Business Requirements Specification (BRS) covers only those requirements that are essential  
107 for the harmonised implementation of nomination and matching process exchanges.

108 This Business Requirements Specification (BRS) is targeted towards business-to-business  
109 application interfaces. However, it may be equally put into place in a more user-orientated  
110 fashion through a web-based service.

111 This document does not define a governance process for attribute definitions or other  
112 requirements. Such a process will need to be determined and defined elsewhere.

113 The requirements set out in this document are subject to change if there is any change in the  
114 obligations on transmission system operators.

115 The Business Requirements Specification does not describe the process for determining the  
116 identification of which capacity is to be interrupted.

117 In the diagrams the notions of initiating and matching system operator appear, these roles may  
118 be provided by an intermediary where there is agreement between the transmission system  
119 operators.

120 This document, for readability purposes, uses the single sided nomination process as  
121 systematically coming from the Initiating System Operator. However it should be clearly  
122 understood that a single sided nomination can be received by one or the other Transmission  
123 System Operators as bilaterally agreed by them. The receiver of the single sided nomination is  
124 independent from the initiating or matching role being played. If the Transmission System  
125 Operators agree then network users can decide themselves which Transmission System  
126 Operator will receive a single-sided nomination.

127 Note: The information requirements specify that multiple connection points are possible within  
128 an information flow. However it has been left to each Transmission System Operator to  
129 determine whether or not in an information flow it will be permitted to provide only one  
130 connection point or multiple connection points.

131 It should also be noted that all timings mentioned in the document are the maximum possible.  
132 All actions, however, should be taken as soon as reasonably possible.

133 For the submission of singles-sided nominations, the transmission system operators active at a  
134 respective connection point shall agree and make public to which of them single-sided  
135 nominations shall be submitted.

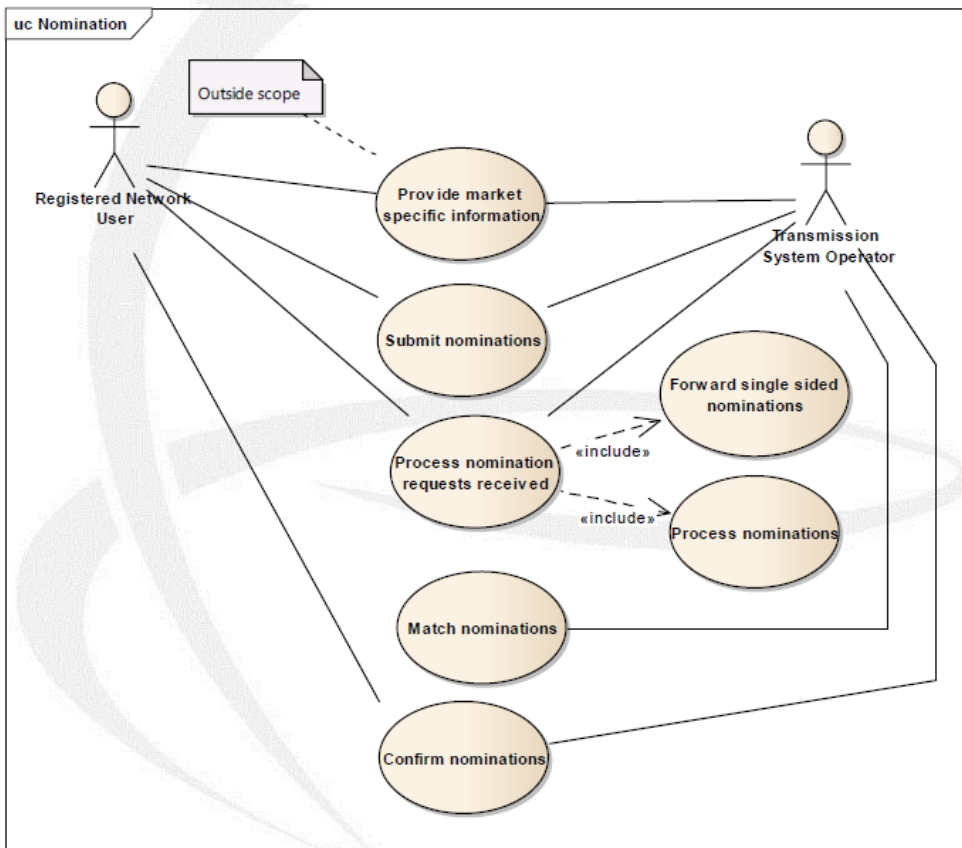
136 **3 Business requirements**

137 This section describes in detail the business requirements that the information flows are  
138 intended to satisfy.

139 **3.1 Nomination requirements**

140 This section outlines the overall business process behaviour of the system without going into  
141 the detailed internal workings of each entity. It defines the external requirements of the  
142 business process: the relationships between the entities concerned.

143



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145

Figure 1: overview of the Nomination process use case



146 **3.2 List of actors**

147 **3.2.1 Registered Network User**

148 A network user that has acceded to and is compliant with all applicable legal and contractual  
149 requirements that enable him/her to book and use capacity on the relevant Transmission  
150 System Operator's network under a capacity contract.

151 A Registered Network User in the context of this document has obtained a right to nominate  
152 and is understood in ~~the Balancing-NC BAL as a~~ Network ~~Code as a Shipper-User~~.

153 **3.2.2 Transmission System Operator**

154 A natural or legal person who carries out the function of transmission and is responsible for  
155 operating, ensuring the maintenance of, and, if necessary, developing the transmission  
156 system in a given area, and, where applicable, its interconnections with other systems. It is  
157 also responsible for ensuring the long term ability of the system to meet reasonable  
158 demands for the transportation of gas.

159 At each connection point a Transmission System Operator may have ~~four~~ specific roles in  
160 ~~two~~ different contexts:

161 1. In the context of double-sided nominations in the interface with the Registered  
162 Network ~~user-User~~:

- 163 • That of a Transmission System Operator who receives all nominations submitted  
164 by the Registered Network Users registered in the system operator's area;

165 2. In the context of single sided nominations in the interface with the Registered  
166 Network User:

- 167 • That of the adjacent active Transmission System Operator who ~~is the~~  
168 ~~Transmission System Operator that~~ receives all the single sided nominations  
169 submitted by ~~all a~~ Registered Network User on behalf of itself and on behalf of  
170 the counter party ~~Network Users of this Network User-Registered Network User~~  
171 of the adjacent Transmission System Operator to whom the active Transmission  
172 System Operator forwards the single sided nominations;

- 173 • ~~2~~ That of the passive Transmission System Operator who is adjacent to the active  
174 Transmission System Operator and receives the single sided nominations  
175 forwarded by the active Transmission System Operator.

176 3. In the context of the matching process between Transmission System Operators

- 177 • That of an Initiating Transmission System Operator who is the Transmission  
178 System Operator that initiates the matching process by sending all necessary  
179 data to the Matching Transmission System Operator;

- 180 • That of a Matching Transmission System Operator who is the Transmission  
181 System Operator that performs the matching process and who sends the results  
182 to the Initiating Transmission System Operator.

183 **3.3 Use case detail**

184 **3.3.1 Provide market specific information**

185 This use case enables the provision of market specific information related to the Registered  
186 Network User to the Transmission System Operator. It is outside the scope of this Business  
187 Requirement Specification and is only provided for information.

188 This enables the establishment of the business rules and obligations for the use of single  
189 sided nominations between the Transmission System Operator and the Registered Network  
190 User.

191 **3.3.2 Submit nominations**

192 This use case enables a Registered Network User to provide nominations for processing to a  
193 Transmission System Operator. A nomination may be submitted by only one Registered  
194 Network User on behalf of both parties (known as a single sided nomination) or each  
195 Registered Network User on each side of the connection point (known as a double sided  
196 nomination).

197 A single sided nomination means that there is no corresponding nomination transmitted by  
198 the counter party Registered Network User to its Transmission System Operator. ~~All-The~~  
199 ~~active Transmission System Operator will forward the~~ single sided nominations ~~must only be~~  
200 ~~submitted~~ to the adjacent passive Transmission System Operator(s) ~~that has been~~  
201 ~~designated by both.~~

202 Both Transmission System Operators will agree bilaterally on who will be the active  
203 Transmission System Operator that receives the single sided nominations from his  
204 Registered Network Users. In principle, the Transmission System Operator that requires the  
205 nomination information more urgently due to market processes should be foreseen as active  
206 Transmission System Operator. However, if the involved Transmission System Operators  
207 agree, the concerned Registered Network Users can decide themselves which, ~~for the~~  
208 ~~purposes of this document is shown as the~~ Initiating Transmission System  
209 Operator. Operators will receive the single sided nominations.

210 A double sided nomination means that both Registered Network Users must submit  
211 nominations independently to their respective Transmission System Operators on each side  
212 of the connection point.

213 A nomination request made by a Registered Network User to the Initiating active  
214 Transmission System Operator may contain a mix of both single sided and double sided  
215 nominations.

216 There is no distinction made in the nomination ~~request between request between~~ bundled  
217 and unbundled capacity or between firm and interruptible capacity. The nomination request  
218 on a given connection point shall contain uniquely the total nominated quantity, ~~the flow~~  
219 direction and the counterpart. The Transmission System Operators at a connection point

220 may decide to allow Registered Network Users to submit nomination requests on both  
221 directions of the gas flow or to submit the net nomination request.

### 222 **3.3.3 Process nomination requests received**

223 This use case enables the Transmission System Operator receiving a nomination request to  
224 validate its content. This process will be detailed in the use cases “process single sided  
225 nominations” and “process nominations” described below.

226 The Transmission System Operator always acknowledges receipt of the nominations from  
227 the Registered Network User and the forwarded nominations from the Transmission System  
228 Operator that received a single sided nomination. The acknowledgement may be either  
229 positive or negative.

#### 230 **3.3.3.1 Process single sided nominations**

231 For the purposes of clarity and ease of description the process for single sided nominations  
232 described in this document ~~the recipient of a single sided nomination shall~~ shows cases in  
233 which the active Transmission System Operator is always ~~be deemed as~~ the Initiating  
234 Transmission System Operator and the ~~recipient of the forwarded single sided nomination~~  
235 ~~shall~~ passive Transmission System Operator is always ~~be deemed as~~ the Matching  
236 Transmission System Operator.

237 ~~All single sided nominations shall be passed by the~~ In practice, this combination of roles of  
238 the Transmission System Operators at a connection point is not a requirement. Depending  
239 on the agreement of the involved Transmission System Operators, single sided nominations  
240 could be submitted to both, the Initiating Transmission System Operator ~~to~~ or the Matching  
241 Transmission System Operator.

242 ~~All single sided nominations shall be passed by the active Transmission System Operator to~~  
243 ~~the passive Transmission System Operator~~ for local processing ~~within. Unless agreed~~  
244 ~~otherwise by the involved Transmission System Operators, this shall be done as soon as~~  
245 ~~technically possible and feasible but no later than~~ 15 minutes after the (re)-nomination  
246 deadline(s). If required by the passive Transmission System Operator, the forwarded  
247 nomination message shall additionally contain for each received single sided nomination the  
248 point of time at which the original nomination message was technically received by the  
249 active Transmission System Operator.

250 A single sided nomination shall only be forwarded to the ~~Matching~~ passive Transmission  
251 System Operator once the syntactical and semantic content of the submitted nomination is  
252 coherent.

253 It should be noted that within this process, the ~~Matching~~ passive Transmission System  
254 Operator has to process all the single sided nominations that have been received from the  
255 ~~Initiating~~ active Transmission System Operator as if it would be a nomination sent by his own  
256 Registered Network User. to ensure that the validation rules are respected.

257 The forwarded nominations shall be transmitted on a per connection point basis.

258 ~~A Transmission System Operator can only carry out any capacity checks once all the single-~~  
259 ~~sided and the double-sided nominations have been received.~~

### 260 **3.3.3.2 Process nominations**

261 All double sided and single sided nominations are handled together on a connection point  
262 ~~and~~, account pair ~~and on a flow direction~~ basis.

263 Standard processing is then carried out on each nomination to ensure that it respects all  
264 validation rules as well as ensuring that it remains within the nomination possibilities  
265 allowed for the Registered Network User-, ~~taking into account the time required for the~~  
266 ~~forwarding of single sided nominations.~~

267 When necessary the Transmission System Operator provides interruption notifications to the  
268 Registered Network User. Such notifications are for information and are only submitted once  
269 per nomination period.

270 Once processing has been completed the Initiating Transmission System Operator transmits  
271 to the Matching Transmission System Operator the nominations as processed as well as the  
272 nominations as received if agreed bilaterally by the Transmission System Operators.

### 273 **3.3.3.3 Authorisation process for single sided nominations**

274 ~~For the use of single sided nominations, the passive Transmission System Operator needs to~~  
275 ~~establish a process that enables the counter party Registered Network User to authorise the~~  
276 ~~Registered Network User in the system of the active Transmission System Operator to~~  
277 ~~submit single sided nominations on its behalf to the active Transmission System Operator.~~  
278 ~~Such an authorisation could e.g. be conducted via a website interface, an addendum to the~~  
279 ~~transport contract, an edig@s message, etc. The passive Transmission System Operator shall~~  
280 ~~check whether for all forwarded single sided nominations a valid authorisation from the~~  
281 ~~concerned counter party Registered Network User to the nominating Registered Network~~  
282 ~~User is in place.~~

283 ~~The authorisation from the counter party Registered Network User to the passive~~  
284 ~~Transmission System Operator shall contain at least the following information:~~

- 285 ~~• The account or portfolio code of the Registered Network User that is authorising~~  
286 ~~another Registered Network User to submit single sided nominations on its behalf;~~
- 287 ~~• The account or portfolio code of the Registered Network User that is authorised to~~  
288 ~~submit single sided nominations on its behalf;~~
- 289 ~~• The connection points for which the authorisation is valid;~~
- 290 ~~• The validity period (start and end date) of the authorisation.~~

291 ~~For cases in which a single sided nomination is submitted on behalf of one legal entity active~~  
292 ~~in both networks, the authorisation process may not be necessary, if the involved~~  
293 ~~Transmission System Operators conclude a bilateral agreement allowing them to check the~~  
294 ~~identities of nominating Registered Network Users. If in such a case the Registered Network~~

295 User that submitted a single sided nomination to the active Transmission System Operator is  
296 also submitting a corresponding counter nomination to the passive Transmission System  
297 Operator, the nominations shall be processed as double sided nominations, unless specified  
298 otherwise by the Transmission System Operators.

299 If a passive Registered Network User submits a nomination to the passive Transmission  
300 System Operator affecting an account or portfolio code of the active Registered Network  
301 User for a period for which a valid authorisation between the two Registered Network Users  
302 is in place, the nomination shall be processed as double sided and the respective  
303 authorisation shall be deactivated for the respective gas day, unless specified otherwise by  
304 the Transmission System Operators.

#### 305 **3.3.4 Match nominations**

306 This use case enables the Matching Transmission System Operator to match the processed  
307 results from both sides and to determine the quantities that are to be confirmed.

308 Once the matching has been finalised the confirmed nominations and the processed quantities  
309 established by the Matching Transmission System Operator are transmitted to the Initiating  
310 Transmission System Operator. If agreed between Transmission System Operators the double  
311 sided original nominations received by the Matching Transmission System Operator may also be  
312 transmitted.

#### 313 **3.3.5 Confirm nominations**

314 This use case enables a Transmission System Operator to confirm to the Registered Network  
315 User the results of the submitted nomination requests.

316 In the case of single sided nominations as well as double sided nominations each Transmission  
317 System Operator shall provide the confirmed nominations to their respective Registered  
318 Network User.

319 The Registered Network User that submitted single sided nominations may also inform the  
320 counterparty of the results.

321 **3.4 Information flow definition**

322 **3.4.1 Nomination Sequence flow**

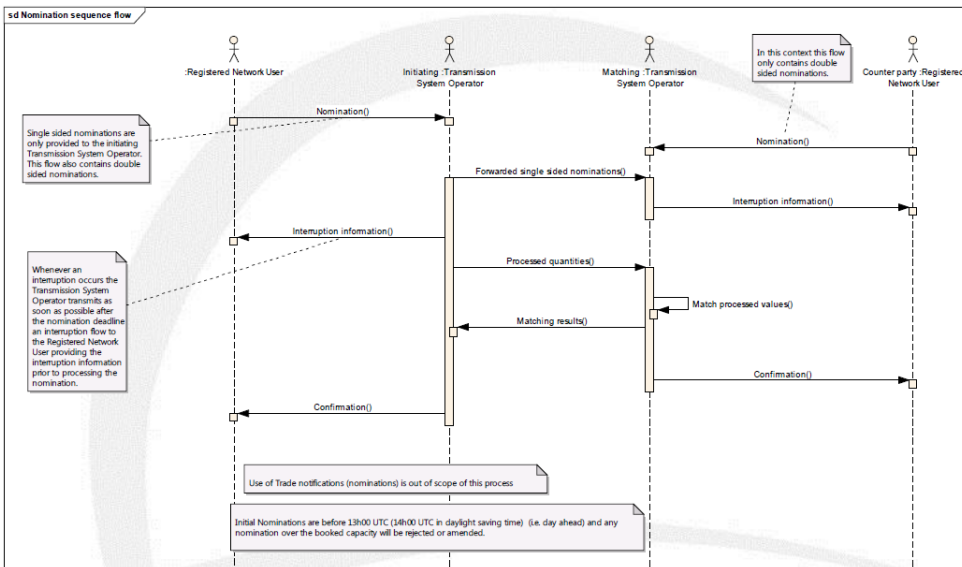


Figure 2: Information flow sequence

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325 The operational sequence is broken down into 5 mandatory information flows and one  
326 optional flow. A sixth flow simply identifies for clarification the point where matching takes  
327 place.

328 The five mandatory flows are:

- 329 1. The transmission of nomination information between the Registered Network User  
330 and the Transmission System Operator. ~~If the transmission is~~In case of double sided  
331 nominations, the information shall be submitted to the Initiating Transmission  
332 System Operator ~~the information may contain single sided and double sided~~  
333 nomination information. If the transmission isand to the Matching Transmission  
334 System Operator by the respective Registered Network Users. In case of single sided  
335 nominations, the information shall be submitted to ~~the information may only contain~~  
336 double sided nomination information-active Transmission System Operator (in this  
337 example being the Initiating Transmission System Operator).
- 338 2. The transmission of single sided nomination information ~~between~~from the active  
339 Transmission System Operator to the passive Transmission System Operator (in this  
340 example from the Initiating Transmission System Operator ~~and~~to the Matching  
341 Transmission System Operator. ~~This transmission occurs within 15 minutes after the~~  
342 nomination deadline and contains in accordance with point 3.3.3.1 all the single  
343 sided nominations that have been received.



- 344 3. The transmission of matching information between the Initiating Transmission  
345 System Operator and the Matching Transmission System Operator. This transmission  
346 occurs within 45 minutes after the nomination deadline and contains all the  
347 nominations processed by the Initiating Transmission System Operator and optionally  
348 the nomination.
- 349 4. The transmission of the matching results between the Matching Transmission System  
350 Operator and the Initiating Transmission System Operator. This transmission occurs  
351 within 90 minutes after the nomination deadline and contains at least all the  
352 nominations where the processed information has been matched and that are  
353 confirmed. It also contains the processed results on the Matching Transmission  
354 System Operator side and optionally the nomination.
- 355 5. The transmission of the confirmation between the Transmission System Operator  
356 and the Registered Network Users. This transmission occurs within two hours after  
357 the nomination deadline and contains the results of their nominations.

358 A sixth information flow, interruption information, only occurs in the case where a  
359 Transmission System Operator has introduced an interruption to the Registered Network  
360 User nomination. In this case the Transmission System Operator informs the Registered  
361 Network User of the interruptions that have affected the nomination. This information is  
362 basically provided for information since processing of the nomination may not yet be  
363 completed. It must occur within the 45 minutes after the nomination deadline.

364 **3.4.2 Nomination Workflow**

365 **3.4.2.1 Pre-nomination process workflow**

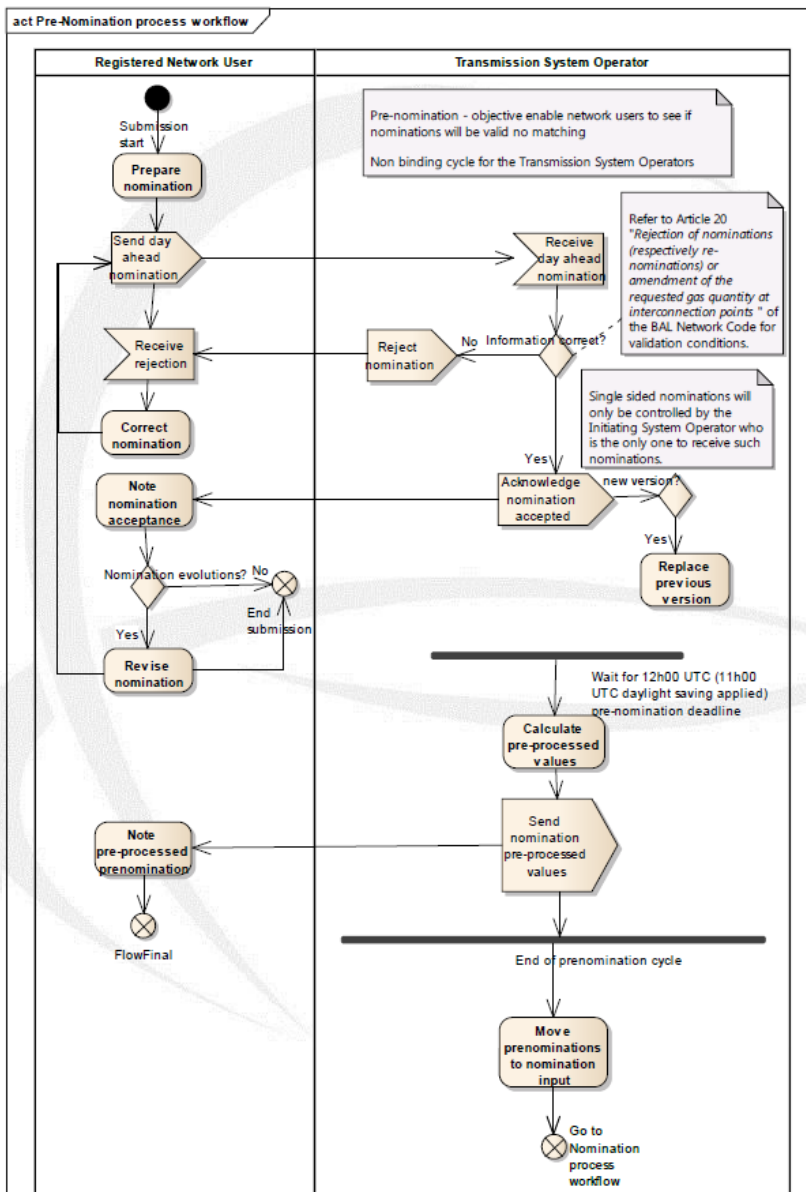


Figure 3: Pre-nomination workflow

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368 The pre-nomination process is to enable a Registered Network User to verify if the  
 369 nominations submitted are valid in the environment of the receiving Transmission System  
 370 Operator. The Registered Network User receives a response based on the pre-processed  
 371 values. There is no matching carried out nor is the information passed to the Matching  
 372 Transmission System Operator.

373 This step is not a binding possibility for a Transmission System Operator and may be not  
 374 permitted if not agreed by both Transmission System Operators. If the step is permitted then  
 375 the Registered Network User may decide to use it or not.

376 **3.4.2.2 Nomination process workflow**

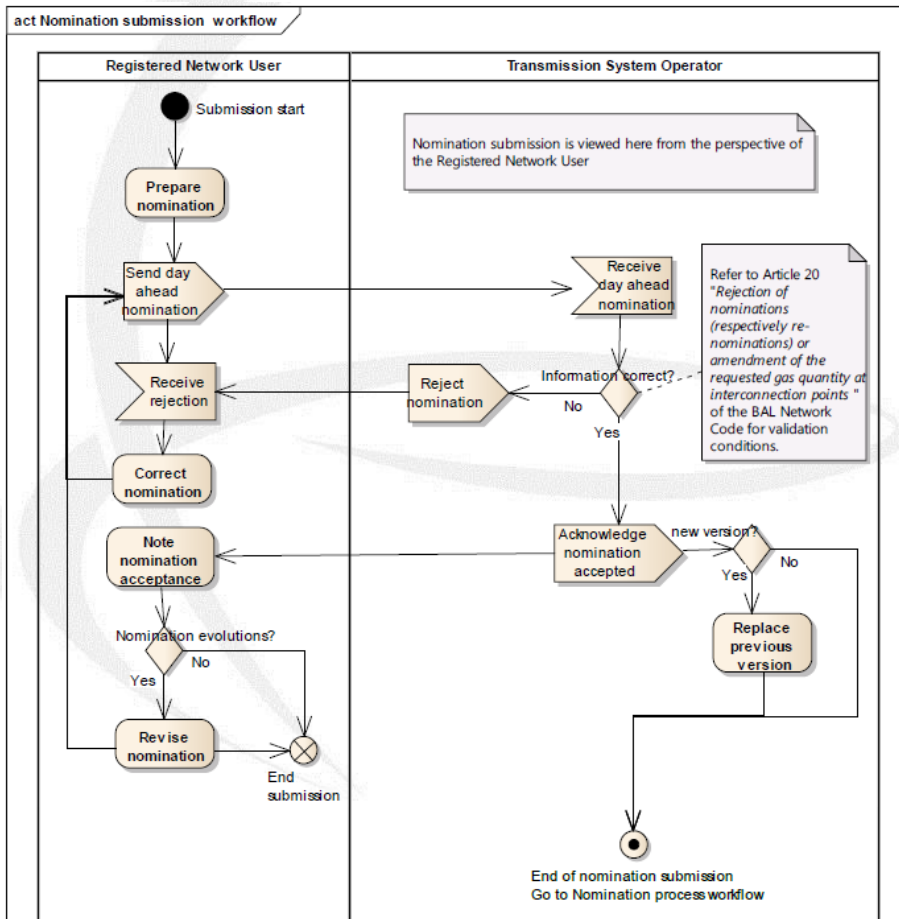


Figure 4: Nomination workflow

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379 Nomination submissions are carried out as depicted in figure 4. The Registered Network  
380 User submits all nominations to the local Transmission System Operator.

381 In the case of single sided nominations only the Registered Network User whose  
382 Transmission System Operator acts ~~also~~ as the Initiating active Transmission System Operator  
383 submits the single sided nominations.

384 Once the nomination submission has terminated and the nomination deadline has been met  
385 the matching process as depicted in figure 5 is carried out.

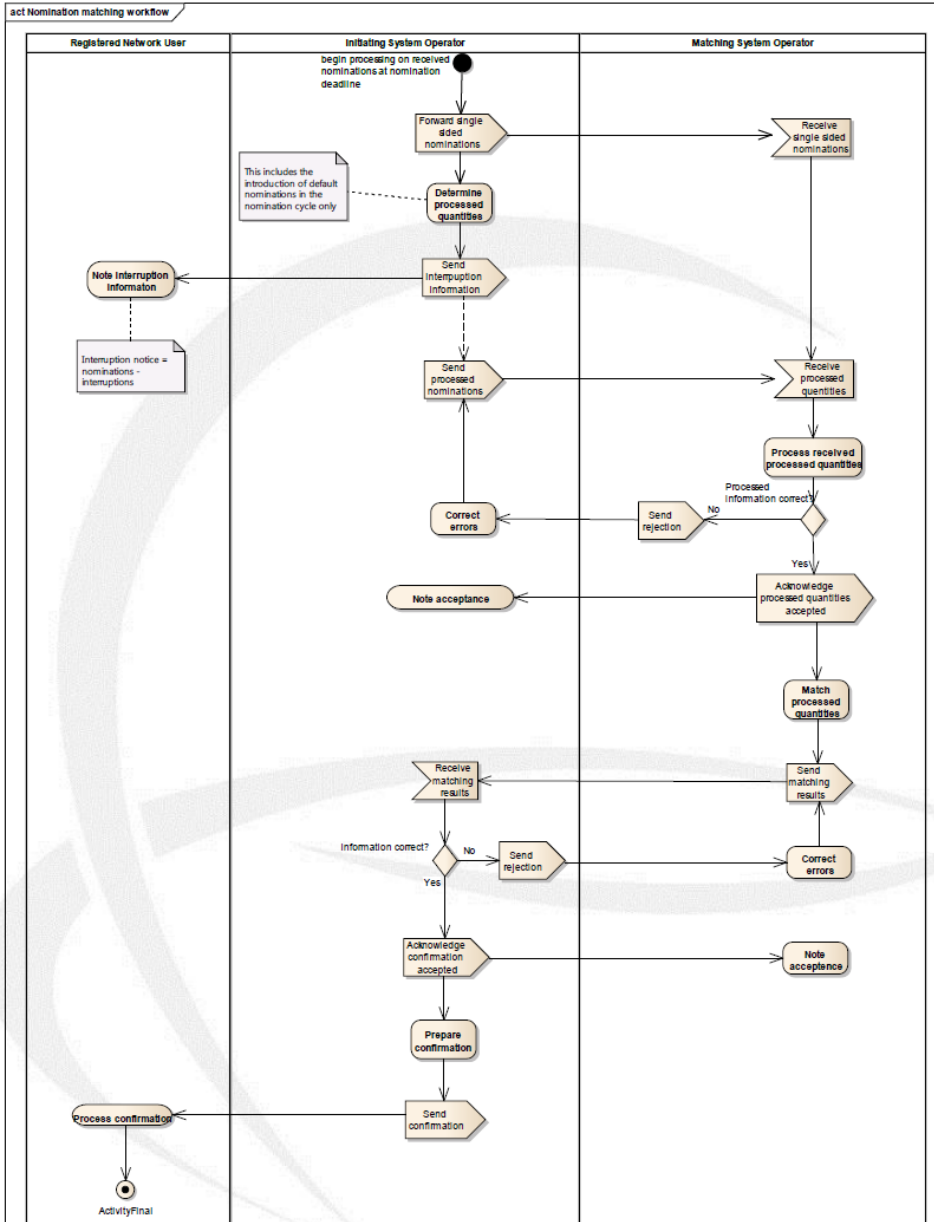


Figure 5: Nomination process workflow

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388 The **Initiatingactive** Transmission System Operator then transmits all single sided  
389 nominations to the **Matchingpassive** Transmission System Operator within 15 minutes after

390 | the nomination deadline in order to facilitate processing by the **Matchingpassive**  
391 Transmission System Operator.

392 Once the nominations have been accepted, they are processed by the Transmission System  
393 Operators in order to ensure that they comply with local market rules.

394 If either Transmission System Operator has to carry out an interruption this information is  
395 provided to the Registered Network User for information.

396 Once all nominations have been processed, the Initiating Transmission System Operator  
397 transmits the processed results and optionally the nominations to the Matching  
398 Transmission System Operator.

399 ~~The Matching Transmission System Operator verifies that the information is correct.~~ All the  
400 processed quantities received from the Initiating Transmission System Operator are matched  
401 with all the processed quantities established by the Matching Transmission System  
402 Operator.

403 Any differences in the matching process have a basic rule applied (in general the lesser  
404 values rule). The final confirmed quantities are then transmitted by the Matching  
405 Transmission System Operator to the Initiating Transmission System Operator. This includes  
406 the quantities processed by the Matching Transmission System Operator and optionally all  
407 the nominations received.

408 The Initiating and Matching Transmission System Operators then confirm to their respective  
409 Registered Network Users the results of the matching process.

### 410 **3.4.3 General Acknowledgement process**

#### 411 **3.4.3.1 Business process definition**

412 The acknowledgment business process is generic and can be used in all the energy market  
413 business processes at two levels:

- 414 • System level: To detect syntax errors (parsing errors, etc.);
- 415 • Application level: To detect semantic errors (invalid data, wrong process, etc.).

416 If there is a problem encountered at the first level, then a technical acknowledgement may  
417 be sent to inform the originator of the problem.

418 If errors are encountered at the second level or if the application can successfully process  
419 the information, then an application acknowledgement may be sent to inform the issuer of  
420 the situation.

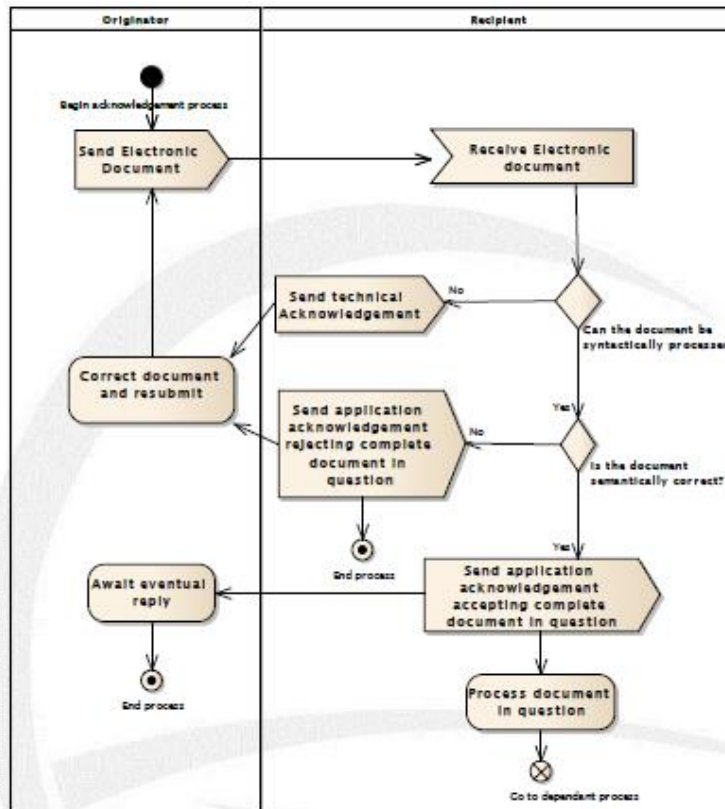


Figure 6: Acknowledgement process

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### 423 3.4.3.2 Technical acknowledgment

424 A technical acknowledgement occurs when an electronic document is received that cannot  
425 be correctly processed for submission to the application. Such an error could occur for  
426 example whenever the XML parser cannot correctly parse the incoming document. Other  
427 instances could be the incapacity to correctly identify the issuer of the document in relation  
428 to the process requested.

429 In such a case a technical acknowledgement can be sent to the document issuer providing  
430 the information that the XML document in question cannot be correctly processed by the  
431 system.

### 432 3.4.3.3 Application acknowledgment

433 Within each business process of the gas market, business rules are to be defined stating  
434 whether or not an application acknowledgment is to be sent upon reception of an electronic  
435 document.

436 In particular, where the originator is in the role of a Transmission System Operator and the  
437 recipient is in a “market participant” type role, all electronic documents sent by entities in  
438 the role of a Transmission System Operator shall be considered as received and correct, and  
439 the acknowledgement process is not required unless an acknowledgment document is  
440 required for a specific purpose.

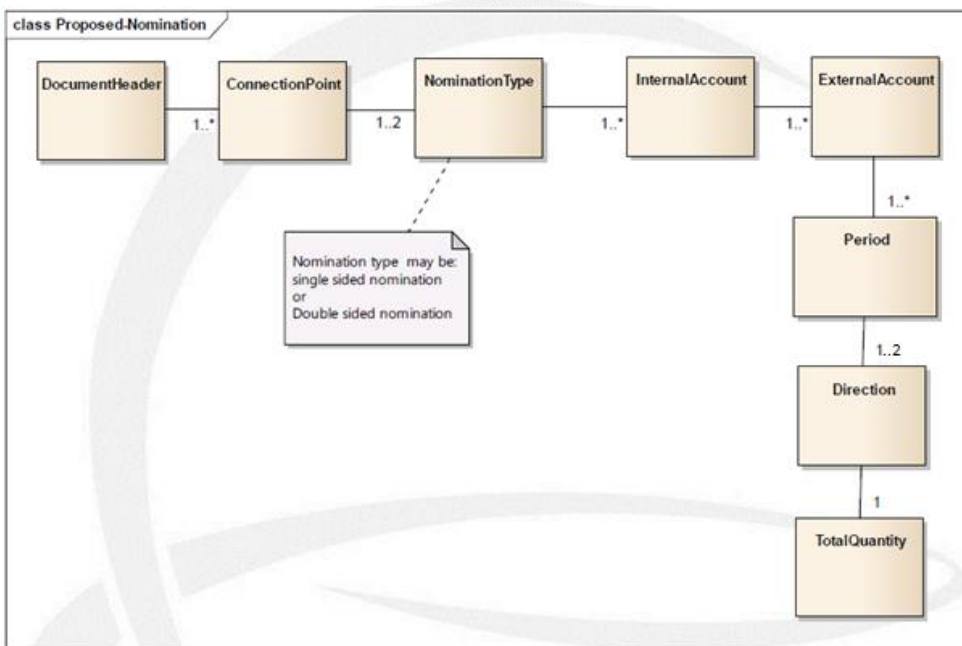
441 Otherwise, upon reception, checks are to be carried out at the application level to assess  
442 that the received document can be correctly processed by the application. The issuer is  
443 informed that:

- 444 • Its document, that is stated as valid after this verification, is ready to be processed by  
445 the reception of an acknowledgement document accepting the complete document  
446 in question;
- 447 • Its document is rejected for processing by the reception of an acknowledgement  
448 document rejecting the complete document in question with details on the level of  
449 errors.

450 **3.5 Information model requirements**

451 The following information requirements have been identified as the essential business  
452 information that needs to be catered for in the relevant information exchanges. They are  
453 outlined in the paragraphs below.

454 **3.5.1 Nomination information flow**



455 **Figure 7: Nomination information flow**

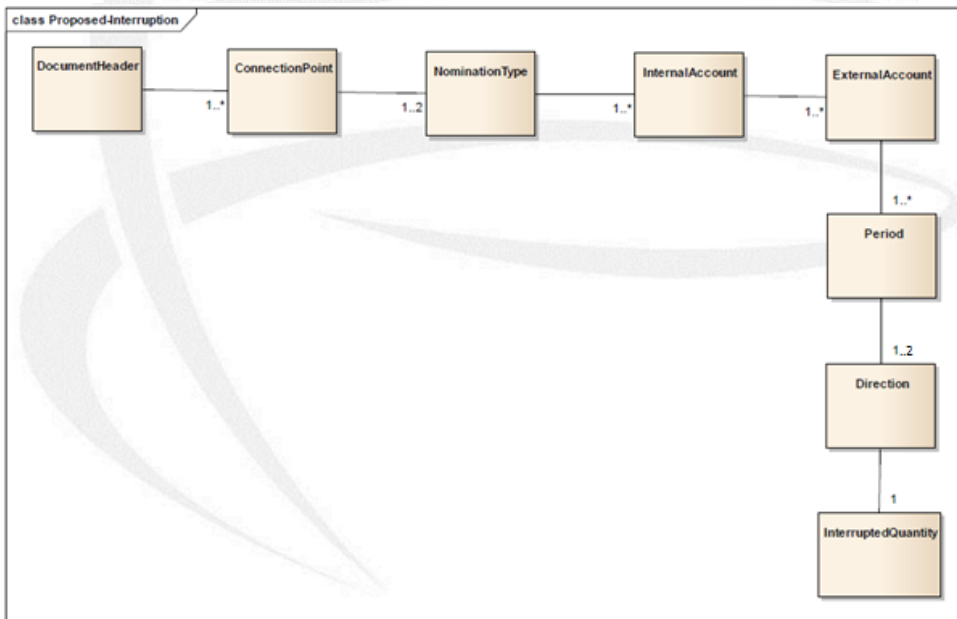
456 The nomination information flow is broken down into the following classes of information:

- 457 1. The header that provides all the information concerning the identification of the  
458 nomination including the gas day.
- 459 2. The Connection Point that identifies the connection point identification. Multiple  
460 connection points are permitted per nomination.
- 461 3. The Nomination Type indicating whether the nomination for the connection point is  
462 single sided or double sided.
- 463 4. The Internal Account that identifies the account of the submitting Registered  
464 Network User that is managed by the Transmission System Operator receiving the  
465 nomination (Article 16.3 of BAL NC). There may be multiple internal accounts for a  
466 given connection point. An internal account must have the identification of the  
467 Transmission System Operator that provides the code.
- 468

- 469 5. The External Account that identifies the account of the ~~counter-part~~ counterpart  
 470 Registered Network User that is managed by the ~~counter-part~~ counterpart System  
 471 Operator (Article ~~16.13~~(4) of NC BAL-NC). There may be many external accounts for a  
 472 given internal account. An external account must have the identification of the  
 473 Transmission System Operator that provides the code.
- 474 6. The Period that identifies the time period for which the information provided relates  
 475 (Article ~~16.13~~(5) of NC BAL-NC). A time period may only relate to a gas day in the case  
 476 of standard nominations (Article ~~16.13~~(6) of NC BAL-NC). The management of any  
 477 other period is outside the scope of this specification. A time period may be  
 478 expressed as a complete gas day or as a number of parts of the gas day (e.g 24  
 479 hours).
- 480 7. The Direction that identifies whether the nomination provided is an input or an  
 481 output to the area of the Transmission System Operator.
- 482 8. The Total Quantity being nominated.

483 **Note: for a given connection point the value of the internal account combined with**  
 484 **the value of the external account shall only appear once, per flow direction. As**  
 485 **defined in 3.3.2, the Transmission System Operators at a connection point may**  
 486 **decide to allow Registered Network Users to submit nomination requests on both**  
 487 **directions of the gas flow or to submit the net nomination requests.**

488 **3.5.2 Interruption information flow**



489



490

Figure 8: Interruption information flow

491 The optional interruption information flow is only provided if an interruption occurs against  
492 the Registered Network Users nomination. It is transmitted as soon as possible after the  
493 interruption is identified. It is only transmitted once in the nomination cycle. It can occur  
494 that it does not represent the final processed value that is submitted to a Matching  
495 Transmission System Operator.

496 The interruption information flow is broken down into the following classes of information:

- 497 1. The header that provides all the information concerning the identification of the  
498 interruption including the gas day.
- 499 2. The Connection Point that identifies the connection point. Multiple connection points  
500 are permitted per interruption.
- 501 3. The Nomination Type indicating whether the interruption for the connection point  
502 affects a single sided or double sided nomination.
- 503 4. The Internal Account that identifies the account of the submitting Registered  
504 Network User that is managed by the Transmission System Operator that has applied  
505 the interruption. There may be multiple internal accounts for a given connection  
506 point. An internal account must have the identification of the Transmission System  
507 Operator that provides the code.
- 508 5. The External Account that identifies the account of the ~~counter-part~~counterpart  
509 Registered Network User that is managed by the ~~counter-part~~counterpart  
510 Transmission System Operator. There may be many external accounts for a given  
511 internal account. An external account must have the identification of the  
512 Transmission System Operator that provides the code.
- 513 6. The Period that identifies the time period that has been specified in the nomination.
- 514 7. The Direction that identifies whether the nomination provided is an input or an  
515 output to the area of the Transmission System Operator.
- 516 8. The Quantity which reflects the value expressed in the nomination but reduced in  
517 compliance with the interruption.
- 518 9. Interruption type (optional) providing optional information by the Transmission  
519 System Operator on the type and the reasoning of an interruption.

520 **3.5.3 Forward nomination flow**

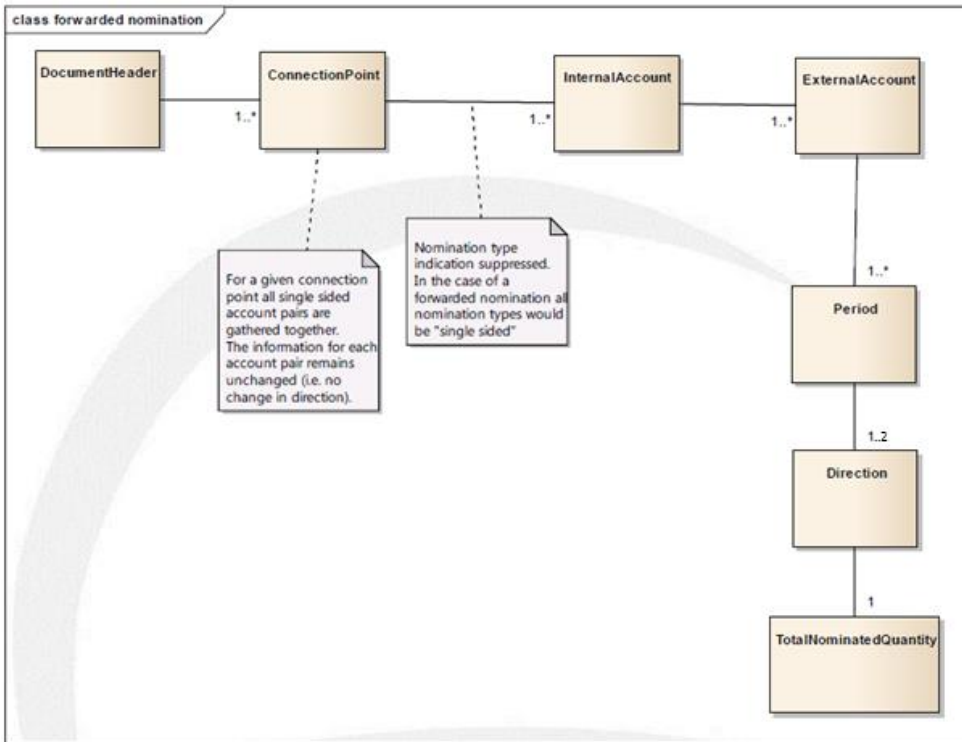


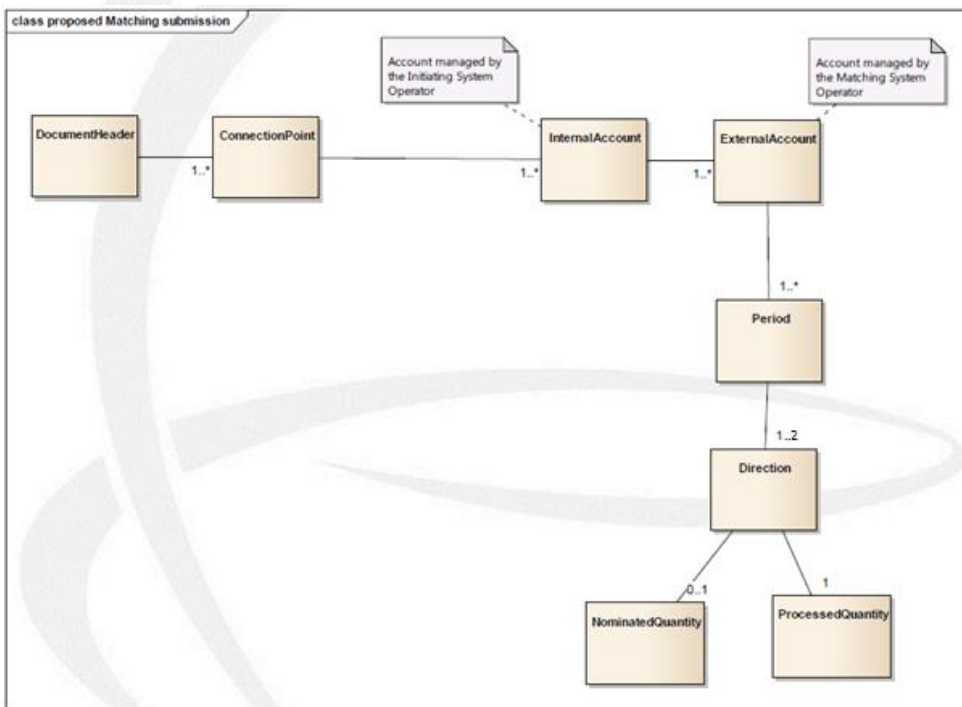
Figure 9: Forward nomination flow

521  
522  
523 In the case of a single sided nomination, it is necessary that this information is forwarded to  
524 the Matching passive Transmission System Operator by the active Transmission System  
525 Operator, in order to enable the information to be processed locally. The information flow is  
526 broken down into the following classes of information:

- 527 1. The Header that provides all the information concerning the identification of the  
528 single sided nomination including the gas day.
- 529 2. The Connection Point that identifies the connection point identification. Multiple if  
530 agreed by the involved Transmission System Operators, multiple connection points  
531 are permitted per nomination request.
- 532 3. The Internal Account that identifies the account of the submitting Registered  
533 Network User that is managed by the forwarding Transmission System Operator.  
534 There may be multiple internal accounts for a given connection point. An internal  
535 account must have the identification of the Transmission System Operator that  
536 provides the code.

- 537 4. The External Account that identifies the account of the ~~counter-part~~counterpart  
 538 Registered Network User that is managed by the ~~counter-part~~counterpart System  
 539 Operator. There may be many external accounts for a given internal account. An  
 540 external account must have the identification of the Transmission System Operator  
 541 that provides the code.
- 542 5. The Period that identifies the time period for which the information provided relates.  
 543 A time period may only relate to a gas day in the case of standard nominations. The  
 544 management of any other period is outside the scope of this specification. A time  
 545 period may be expressed as a complete gas day or as a number of parts of the gas  
 546 day (e.g 24 hours).
- 547 6. The Direction that identifies whether the nomination provided is an input or an  
 548 output to the area of the Transmission System Operator forwarding the nomination.
- 549 7. The Total nominated Quantity being nominated.

550 **3.5.4 Matching submission information flow**



551  
 552 **Figure 10: Matching information flow**

553 A matching information flow contains the processed values of nominations received by the  
 554 Initiating Transmission System Operator. It may contain the quantity nominated by the  
 555 Registered Network User.

- 556 The matching information flow is broken down into the following classes of information:
- 557 1. The Header that provides all the information concerning the identification of the  
558 matching flow including the gas day.
  - 559 2. The Connection Point that identifies the connection point. Multiple connection points  
560 are permitted per matching information flow.
  - 561 3. The Internal Account that identifies the account of the submitting Registered  
562 Network User that is managed by the Initiating Transmission System Operator. There  
563 may be multiple internal accounts for a given connection point. An internal account  
564 must have the identification of the Transmission System Operator that provides the  
565 code.
  - 566 4. The External Account that identifies the account of the ~~counter-part~~counterpart  
567 Registered Network User that is managed by the Matching Transmission System  
568 Operator. There may be many external accounts for a given internal account. An  
569 external account must have the identification of the Transmission System Operator  
570 that provides the code.
  - 571 5. The Period that identifies the time period as identified in the nomination flow.
  - 572 6. The Direction that identifies whether the nomination provided is an input or an  
573 output to the area of the Initiating Transmission System Operator.
  - 574 7. The Nominated Quantity represents the quantity nominated by the Registered  
575 Network User and may optionally be provided.
  - 576 8. The Processed Quantity which represents the quantity as processed by the Initiating  
577 Transmission System Operator.

578 **3.5.5 Matching results information model**

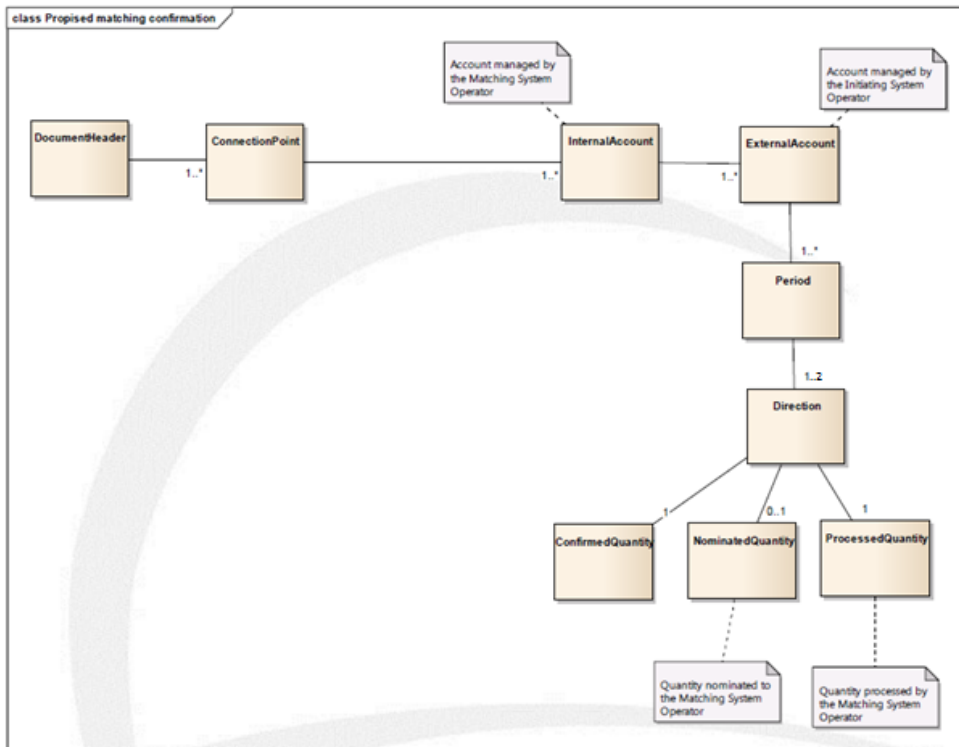
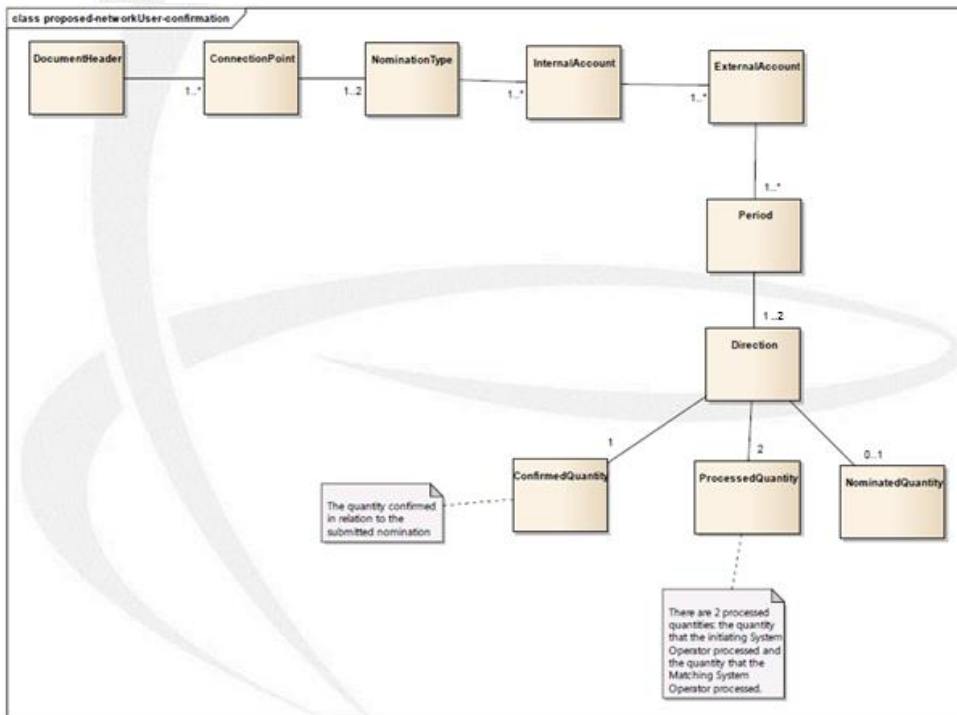


Figure 11: Nomination confirmation information flow

- 579
- 580
- 581 When the Matching Transmission System Operator terminates the matching process the
- 582 matching results are transmitted to the Initiating Transmission System Operator.
- 583 The matching results information flow is broken down into the following classes of
- 584 information:
- 585 1. The Header that provides all the information concerning the identification of the
  - 586 matching results flow including the gas day.
  - 587 2. The Connection Point that identifies the connection point. Multiple connection points
  - 588 are permitted per matching results information flow.
  - 589 3. The Internal Account that identifies the account of the submitting Registered
  - 590 Network User that is managed by the Matching Transmission System Operator. There
  - 591 may be multiple internal accounts for a given connection point. An internal account
  - 592 must have the identification of the Transmission System Operator that provides the
  - 593 code.

- 594 | 4. The External Account that identifies the account of the ~~counter-part~~ counterpart  
 595 Registered Network User that is managed by the Initiating Transmission System  
 596 Operator. There may be many external accounts for a given internal account. An  
 597 external account must have the identification of the Transmission System Operator  
 598 that provides the code.
- 599 5. The Period that identifies the time period as identified in the nomination flow.
- 600 6. The Direction that identifies whether the nomination provided is an input or an  
 601 output to the area of the Matching Transmission System Operator.
- 602 7. The Confirmed Quantity for the nomination.
- 603 8. The Nominated Quantity that has been received by the Matching Transmission  
 604 System Operator may optionally be provided.
- 605 9. The Processed Quantity that has been carried out by the Matching Transmission  
 606 System Operator.

607 **3.5.6 Registered Network User confirmation information flow**



608  
609

Figure 12: Registered Network User nomination confirmation information flow

610 This information flow is provided by the Transmission System Operators to the Registered  
611 Network Users to confirm the quantities that will be taken into consideration in the  
612 Registered Network User nominations.

613 The nomination confirmation information flow is broken down into the following classes of  
614 information:

- 615 1. The Header that provides all the information concerning the identification of the  
616 nomination confirmation flow and relates it to the nomination including the gas day.
- 617 2. The Connection Point that identifies the connection point. Multiple connection points  
618 are permitted per nomination confirmation information flow.
- 619 3. The Nomination Type indicating whether the information concerns a single sided or  
620 double sided nomination
- 621 4. The Internal Account that identifies the account of the Registered Network User to  
622 whom the confirmation is being sent that is managed by the Transmission System  
623 Operator transmitting the nomination confirmation. There may be multiple internal  
624 accounts for a given connection point. An internal account must have the  
625 identification of the Transmission System Operator that provides the code.
- 626 5. The External Account that identifies the account of the ~~counter-part~~counterpart  
627 Registered Network User that is managed by the ~~counter-part~~counterpart  
628 Transmission System Operator. There may be many external accounts for a given  
629 internal account. An external account must have the identification of the  
630 Transmission System Operator that provides the code.
- 631 6. The Period that identifies the time period as identified in the nomination flow.
- 632 7. The Direction that identifies whether the nomination provided is an input to the  
633 System Operator area or whether it is an output.
- 634 8. The Confirmed Quantity in relation to the quantity nominated. Each Transmission  
635 System Operator shall provide the confirmed nominations to its submitting  
636 Registered Network User. The Registered Network User that submitted single sided  
637 nominations may also inform the counter party of the results.
- 638 9. The Processed Quantities that have been calculated by both Transmission System  
639 Operators.
- 640 10. The Nominated Quantity that had been submitted by the counter party Registered  
641 Network User. This information is ~~only~~optionally provided if it has been provided by  
642 the relevant Transmission System Operator. If the Registered Network User had  
643 submitted a single sided nomination this information is not provided.



644 **3.6 Definitions of the attributes used in all the models**

645 Definitions originating from the [NC CAM](#), [Balancing NC BAL](#) and ~~Interoperability Network~~  
646 [Codes NC INT](#) will be reviewed as soon as the document has been finalized.

Name	Description
Nomination request	refers to a set of nominations submitted by a Registered Network User.
Interconnection point (also termed Connection Point)	means a physical or virtual point connecting adjacent entry-exit systems or connecting an entry-exit system with an interconnector, in so far as these points are subject to booking procedures by network users (origin: <a href="#">NC CAM-NC</a> )
Period	Start time and end time of <a href="#">the</a> gas flow for which the <del>document nomination or re-nomination</del> is submitted. (A period concerns one gas day <del>(according to</del> Article <del>16.13(5)</del> of <a href="#">NC BAL-NC</a> ).
Transmission System Operator	Also termed "TSO" and is defined in Article 2(4) of the Directive or the entity responsible for keeping the transmission network in balance in accordance with and to the extent defined under the applicable National Rules.
Processed quantity	Means the quantity of gas that the TSO is scheduling for flow, which takes into account the Network User's nomination (respectively re-nomination), contractual conditions and the capacity as defined under the relevant transport contract
Network User's Counterparty	means the Network User who delivers gas to or receives gas from a Network User at an Interconnection Point.
Gas Day	means the period from 5:00 to 5:00 UTC or, when daylight saving time is applied, from 4:00 to 4:00 UTC ( <del>Article 16.6 of BAL</del> origin: <a href="#">NC CAM</a> ).

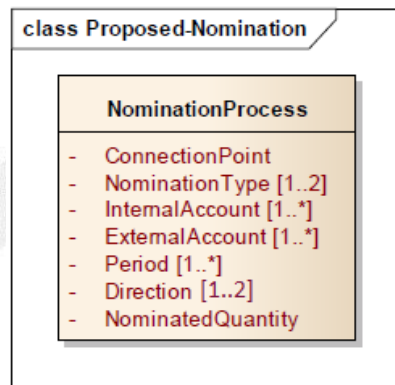


Internal Account	<p><del>A Registered-Network User account within the Transmission System Operators environment where the Registered Network User normally submits nominations-user identification or, if applicable, its balancing portfolio identification</del>(Article <del>16-13</del>(3) of <u>NC BAL NC</u>).</p>
External Account	<p><del>A Registered-Network User account of a Networks User's user's</del> counterparty <del>within the counterparty Transmission System Operators environment</del>identification or, if applicable, its balancing portfolio identification; (Article <del>16-13</del>(4) of <u>NC BAL NC</u>).</p>
Direction	<p>The indication of whether a gas flow is an input or an output in respect to the Transmission System Operator area where the information is being submitted.</p> <p>In all messages exchanged between Transmission System Operators, each Transmission System Operator declares Input and Output in relation to their system (for instance: Input quantities sent from TSO1 to TSO2 will become Output quantities in the corresponding ICT system of TSO 2 and vice versa).</p>
Nomination Type	<p>An indication whether a nomination is single sided or double sided.</p>
Single sided nomination	<p>A nomination that is submitted by a Registered Network user on behalf of both involved parties to only one Transmission System Operator.</p> <p>A single sided nomination can be received by one or the other Transmission System Operators as bilaterally agreed by them. The receiver of the single-<del>sided nomination</del>-sided nomination is referred to as <u>'active' Transmission System Operator</u></p>

	<p><u>while the adjacent party is referred to as 'passive' Transmission System Operator. Whether a Transmission System Operator is active or passive in the process of handling single-sided nominations</u> is independent from the initiating or matching role being played. If the Transmission System Operators agree then network users can decide themselves which Transmission System Operator will receive a single-sided nomination</p>
Double sided nomination	A nomination that is submitted by both Registered Network Users to their respective Transmission System Operators.
Initiating Transmission System Operator	means the transmission system operator initiating the matching process by sending necessary data to the Matching Transmission System Operator.
Matching Transmission System Operator	means the Transmission System Operator performing the matching process and sending the result to the Initiating Transmission System Operator.
Nominated quantity	means a quantity of gas nominated by a network user for exchange on an interconnection point with a network user for a gas day D.
Confirmed quantity	means the quantity of gas confirmed by a TSO to be scheduled or rescheduled to flow on Gas Day D. At an Interconnection Point, the Confirmed Quantity(-ies) will take into account Processed Quantity(-ies) and the matching process used for comparing and aligning the requested gas quantity to be transported by Network Users at both sides of an Interconnection Point.

648 **3.7 Requirements per process**

649 **3.7.1 Nomination process**

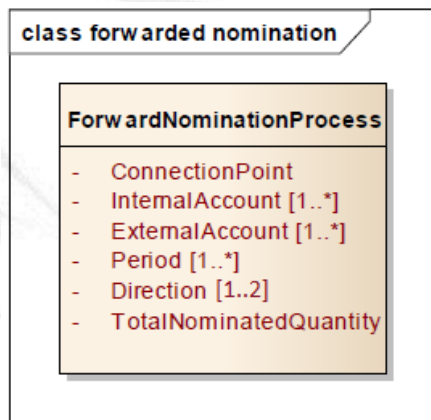


650  
651 **Figure 13: Nomination process information requirements**

652 Note 1: wherever the indication [0..\*] appears against an attribute this signifies that the  
653 attribute in question is optional. For example, the attribute “InternalAccount [0..\*]” is not  
654 used in the case of ~~ultimate~~ultimate users. The indication [1..\*] means that at least one  
655 occurrence of the information must be present.

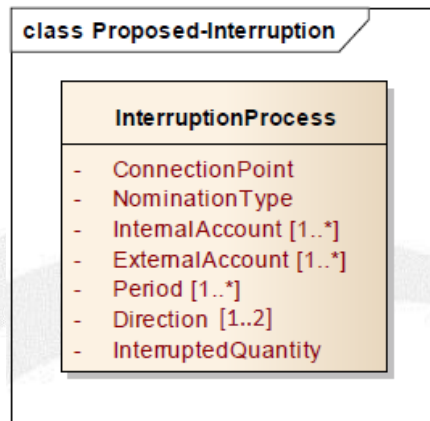
656 Note 2: The information outlined in the class diagram does not represent any structural  
657 constraints. It only represents the information requirements for a given information flow.

658 **3.7.2 Forward nomination process**



659  
660 **Figure 14: Forwarded nomination information requirements**

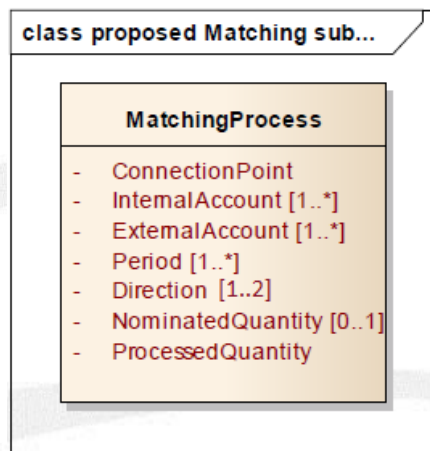
661 **3.7.3 Interruption process**



662  
663

Figure 15: Interruption process information requirements

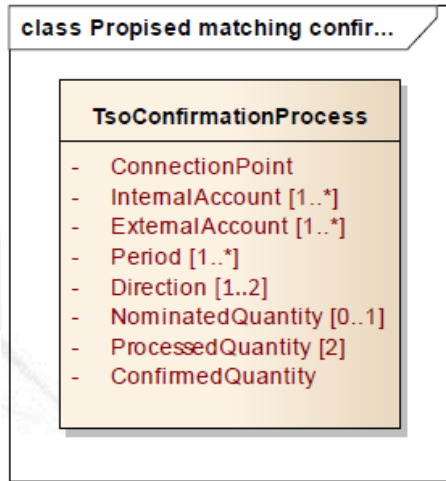
664 **3.7.4 Matching process**



665  
666

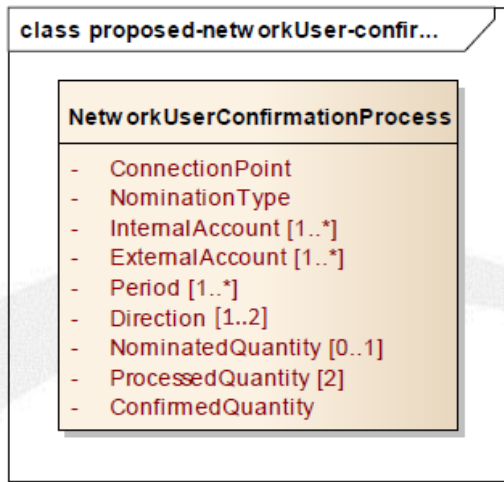
Figure 16: Matching process information requirements

667 **3.7.5 Matching Transmission System Operator confirmation process**



668  
669 **Figure 17: TSO confirmation process information requirements**

670 **3.7.6 Registered Network User confirmation process**



671  
672 **Figure 18: Registered Network User confirmation information requirements**

673

674

#### **4 Reference documents**

<u>Document</u>	<u>Status</u>	<u>Date of last status change</u>	<u>Link</u>
<a href="#"><u>Commission Regulation (EU) No 984/2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems</u></a>	<a href="#"><u>In force</u></a>	<a href="#"><u>14 October 2013</u></a>	<a href="#"><u>Link</u></a>
<a href="#"><u>Commission regulation (EU) 312/2014 establishing a Network Code on Gas Balancing of Transmission Networks</u></a>	<a href="#"><u>In force</u></a>	<a href="#"><u>26 March 2014</u></a>	<a href="#"><u>Link</u></a>
<a href="#"><u>Network Code on Interoperability and Data Exchange</u></a>	<a href="#"><u>Publication in official Journal pending</u></a>		<a href="#"><u>Link</u></a>

675