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

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Version 0 Revision 15 – 2016-02-08

9 Log of changes

Change	Date of change	Issuer of change
References to NC BAL updated based on structure of Regulation after comitology	1 July 2014	ENTSOG
Addition of a table reflecting reference documents and status of these	1 July 2014	ENTSOG
Addition of authorisation process for single sided nominations in point 3.3.3.3 Addition of optional time stamp to the forward nomination flow in point 3.5.3 Minor clarifications: <ul style="list-style-type: none"> ➤ Clarification on legal scope in lines 116-118 ➤ Clarification on content of nomination in lines 210-212 ➤ Clarification on submission of interruption notice in lines 480-482 	27 May 2015	ENTSOG
Inserted clarification of the Common Data Exchange Solutions Inserted the Common Data Exchange Solution Table and further explanation	8 February 2016	ENTSOG

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78 **1 Objective**

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

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

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

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

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 the requirements for the harmonised
107 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
118 may be provided by an intermediary where there is agreement between the transmission
119 system operators.

120 For the avoidance of doubt, this document provides no formal obligations on TSOs and
121 relevant NRAs with regards to how they are going to implement Art.19 (7) of Commission
122 Regulation (EU) No 984/2013 in their national systems.

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

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

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

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

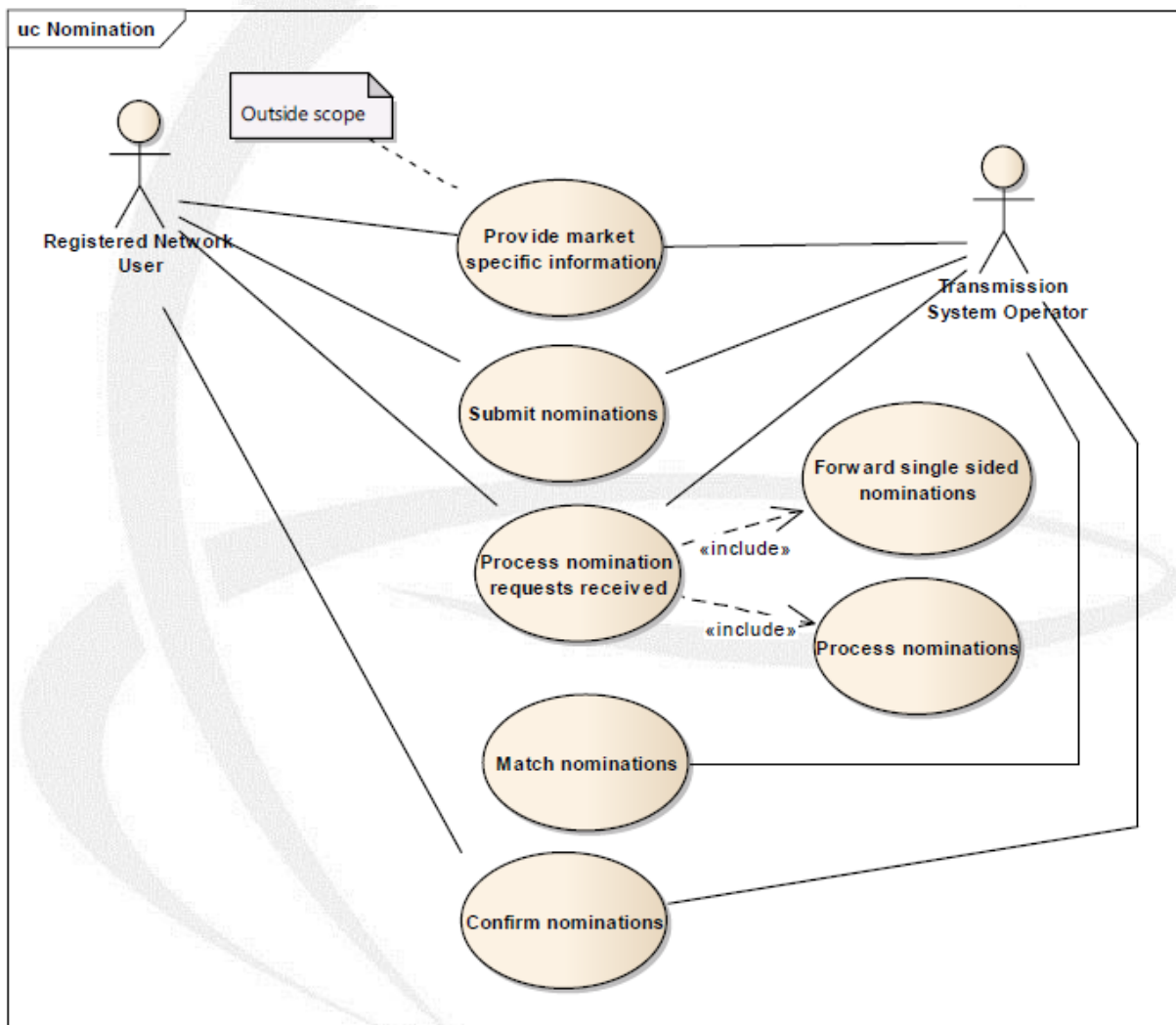
139 **3 Business requirements**

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

142 **3.1 Nomination requirements**

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

146



147
148

Figure 1: overview of the Nomination process use case

149 **3.2 List of actors**

150 **3.2.1 Registered Network User**

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

154 A Registered Network User in the context of this document has obtained a right to nominate
155 and is understood in NC BAL as a Network User.

156 **3.2.2 Transmission System Operator**

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

162 At each connection point a Transmission System Operator may have specific roles in
163 different contexts:

164 1. In the context of double-sided nominations in the interface with the Registered
165 Network User:

166 • That of a Transmission System Operator who receives all nominations submitted
167 by the Registered Network Users registered in the system operator's area.

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

170 • That of the active Transmission System Operator who receives the single sided
171 nominations submitted by a Registered Network User on behalf of itself and on
172 behalf of the counter party Registered Network User of the adjacent
173 Transmission System Operator to whom the active Transmission System
174 Operator forwards the single sided nominations;

175 • That of the passive Transmission System Operator who is adjacent to the active
176 Transmission System Operator and receives the single sided nominations
177 forwarded by the active Transmission System Operator.

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

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

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

185 **3.3 Use case detail**

186 **3.3.1 Provide market specific information**

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

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

193 **3.3.2 Submit nominations**

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

199 A single sided nomination means that there is no corresponding nomination transmitted by
200 the counter party Registered Network User to its Transmission System Operator. The active
201 Transmission System Operator will forward the single sided nominations to the adjacent
202 passive Transmission System Operator.

203 Both Transmission System Operators will agree bilaterally on who will be the active
204 Transmission System Operator that receives the single sided nominations from his
205 Registered Network Users. In principle, the Transmission System Operator that requires the
206 nomination information more urgently due to market processes should be foreseen as active
207 Transmission System Operator. However, if the involved Transmission System Operators
208 agree, the concerned Registered Network Users can decide themselves which of the
209 Transmission System 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 active Transmission System
214 Operator may contain a mix of both single sided and double sided nominations. Each
215 individual nomination within a nomination request refers to a specific account pair, a specific
216 connection point and a flow direction.

217 There is no distinction made in the nomination request between bundled and unbundled
218 capacity or between firm and interruptible capacity. The nomination request on a given
219 connection point shall contain uniquely the total nominated quantity, the flow direction and
220 the counterpart. The Transmission System Operators at a connection point may decide to
221 allow Registered Network Users to submit nomination requests on both directions of the gas
222 flow or to submit the net nomination request.

223 **3.3.3 Process nomination requests received**

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

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

231 **3.3.3.1 Process single sided nominations**

232 For the purposes of clarity and ease of description the process for single sided nominations
233 described in this document shows cases in which the active Transmission System Operator is
234 always the Initiating Transmission System Operator and the passive Transmission System
235 Operator is always the Matching Transmission System Operator. In practice, this
236 combination of roles of the Transmission System Operators at a connection point is not a
237 requirement. Depending on the agreement of the involved Transmission System Operators,
238 single sided nominations could be submitted to both, the Initiating Transmission System
239 Operator or the Matching Transmission System Operator.

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

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

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

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

256 **3.3.3.2 Process nominations**

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

259 Standard processing is then carried out on each nomination to ensure that it respects all
260 validation rules as well as ensuring that it remains within the nomination possibilities

261 allowed for the Registered Network User, taking into account the time required for the
262 forwarding in case of single sided nominations.

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

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

269 **3.3.3.3 Authorisation process for single sided nominations**

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

279 The data exchange solution for this data exchange is to be negotiated between the
280 transmission system operator and the registered network user. In case an electronic
281 message is used, the Edig@s format is recommended as shown below:
282

Information Flow	From Role	To Role	Confidentiality Level	Recommended Data Exchange Solution
Nomination Authorisation	Registered Network User	Transmission System Operator	Private	Document Based

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 The above-described authorisation process is not obligatory for cases in which a single sided
292 nomination is submitted on behalf of one legal entity active in both networks, if the involved
293 Transmission System Operators conclude a bilateral agreement allowing them to check the
294 identities of nominating Registered Network Users. In such a case, the involved transmission
295 system operator can decide not to require an authorisation from the network user in order

296 to process single sided nominations. If in such a case the Registered Network User that
297 submitted a single sided nomination to the active Transmission System Operator is also
298 submitting a corresponding counter nomination to the passive Transmission System
299 Operator, the nominations shall be processed as double sided nominations, unless specified
300 otherwise by the Transmission System Operators.

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

307 **3.3.4 Match nominations**

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

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

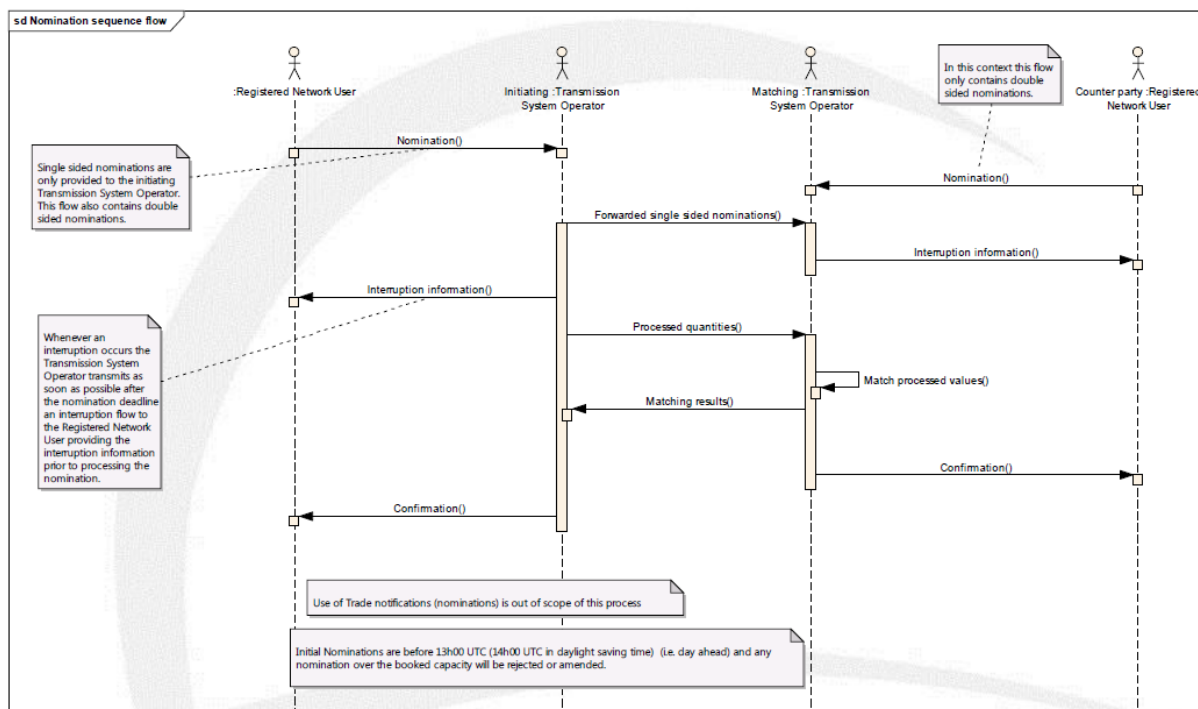
315 **3.3.5 Confirm nominations**

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

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

321 **3.4 Where the registered Network User submits single sided, he may also inform the**
322 **counterparty of the results. Information flow definition**

323 **3.4.1 Nomination Sequence flow**



324 **Figure 2: Information flow sequence**
325

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

329 The five mandatory flows are:

- 330 1. The transmission of nomination information between the Registered Network User
331 and the Transmission System Operator. In case of double sided nominations, the
332 information shall be submitted to the Initiating Transmission System Operator and to
333 the Matching Transmission System Operator by the respective Registered Network
334 User(s). In case of single sided nominations, the information shall be submitted to the
335 active Transmission System Operator (in this example being the Initiating
336 Transmission System Operator).

337 The common data exchange solution for the data exchange for double sided nominations
338 is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Nomination	Registered Network User	(Initiating) Transmission System Operator	Private	Document Based

Nomination	Registered Network User	(Matching) Transmission System Operator	Private	Document Based
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- 341 2. The transmission of single sided nomination information from the active
342 Transmission System Operator to the passive Transmission System Operator (in this
343 example from the Initiating Transmission System Operator to the Matching
344 Transmission System Operator) in accordance with point 3.3.3.1 all the single sided
345 nominations that have been received.

346 The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Forward Single Sided Nomination	(Active) Transmission System Operator	(Passive) Transmission System Operator	Private	Document Based

347

- 348 3. The transmission of matching information between the Initiating Transmission
349 System Operator and the Matching Transmission System Operator. This transmission
350 occurs within 45 minutes after the nomination deadline and contains all the
351 nominations processed by the Initiating Transmission System Operator and optionally
352 the nomination.

353 The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Processed Quantities	(Initiating) Transmission System Operator	(Matching) Transmission System Operator	Private	Document Based

354

- 355 4. The transmission of the matching results between the Matching Transmission System
356 Operator and the Initiating Transmission System Operator. This transmission occurs
357 within 90 minutes after the nomination deadline and contains at least all the
358 nominations where the processed information has been matched and that are
359 confirmed. It also contains the processed results on the Matching Transmission
360 System Operator side and optionally the nomination.

361 The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Matching Results	(Matching) Transmission System Operator	(Initiating) Transmission System Operator	Private	Document Based

362

363 5. The transmission of the confirmation between the Transmission System Operator
364 and the Registered Network Users. This transmission occurs within two hours after
365 the nomination deadline and contains the results of their nominations.

366 The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Confirmation	(Initiating) Transmission System Operators	Registered Network Users	Private	Document Based
Confirmation	(Matching) Transmission System Operators	Registered Network Users	Private	Document Based

367

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

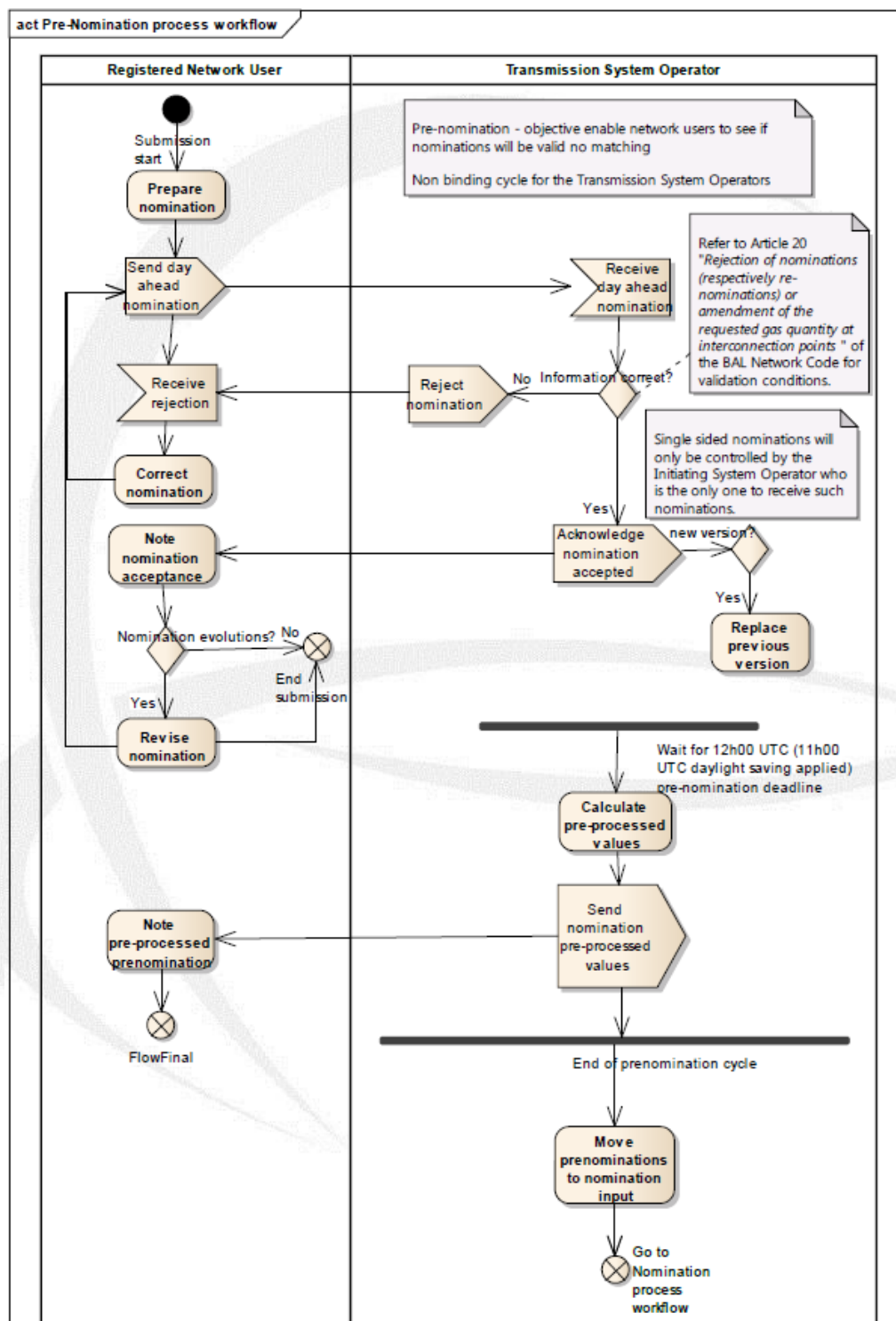
374 The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Interruption Information	(Initiating) Transmission System Operator	Registered Network User	Private	Document Based
Interruption Information	(Matching) Transmission System Operator	Registered Network User	Private	Document Based

375

376 **3.4.2 Nomination Workflow**

377 **3.4.2.1 Pre-nomination process workflow**



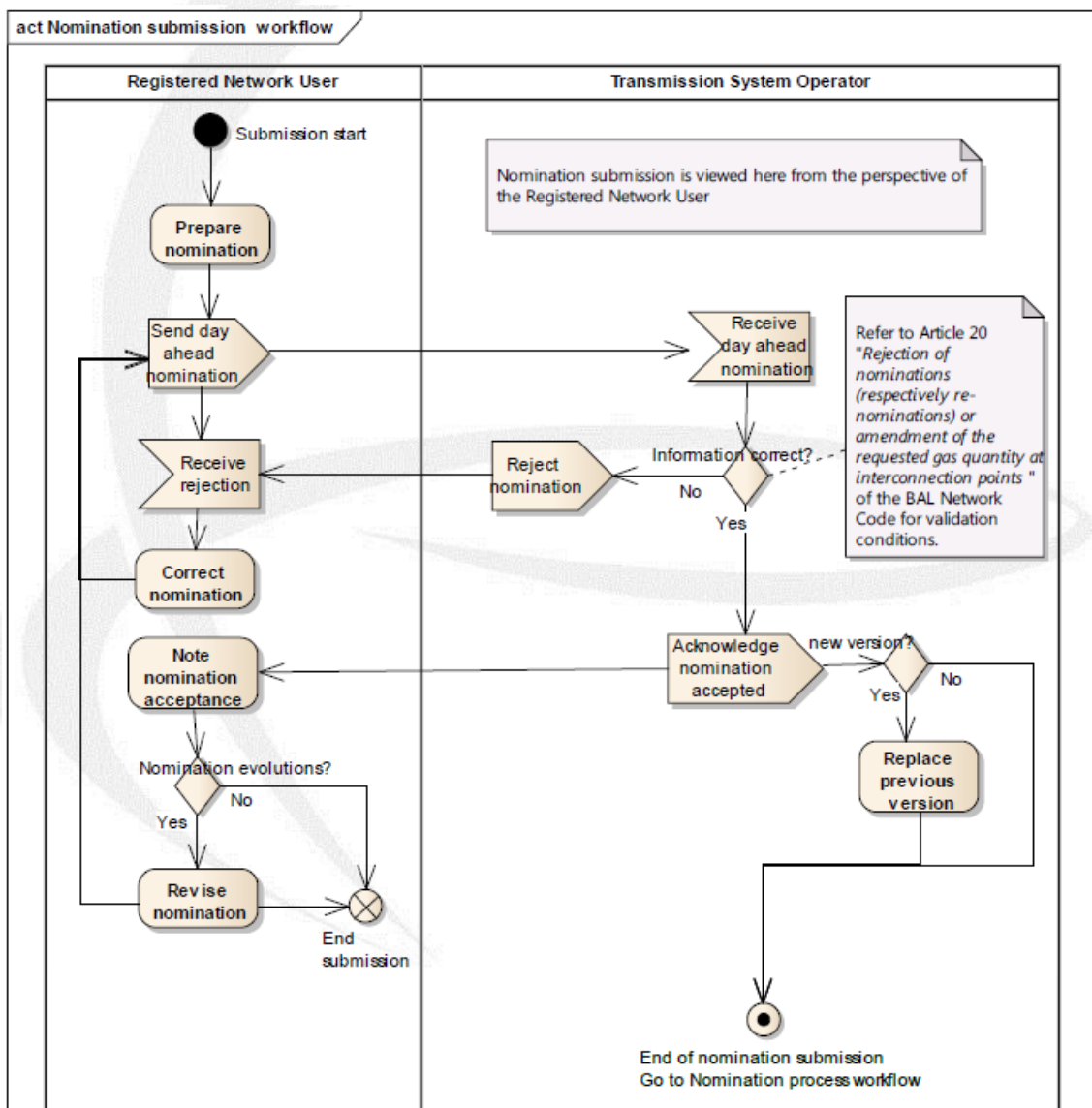
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Figure 3: Pre-nomination workflow

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

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

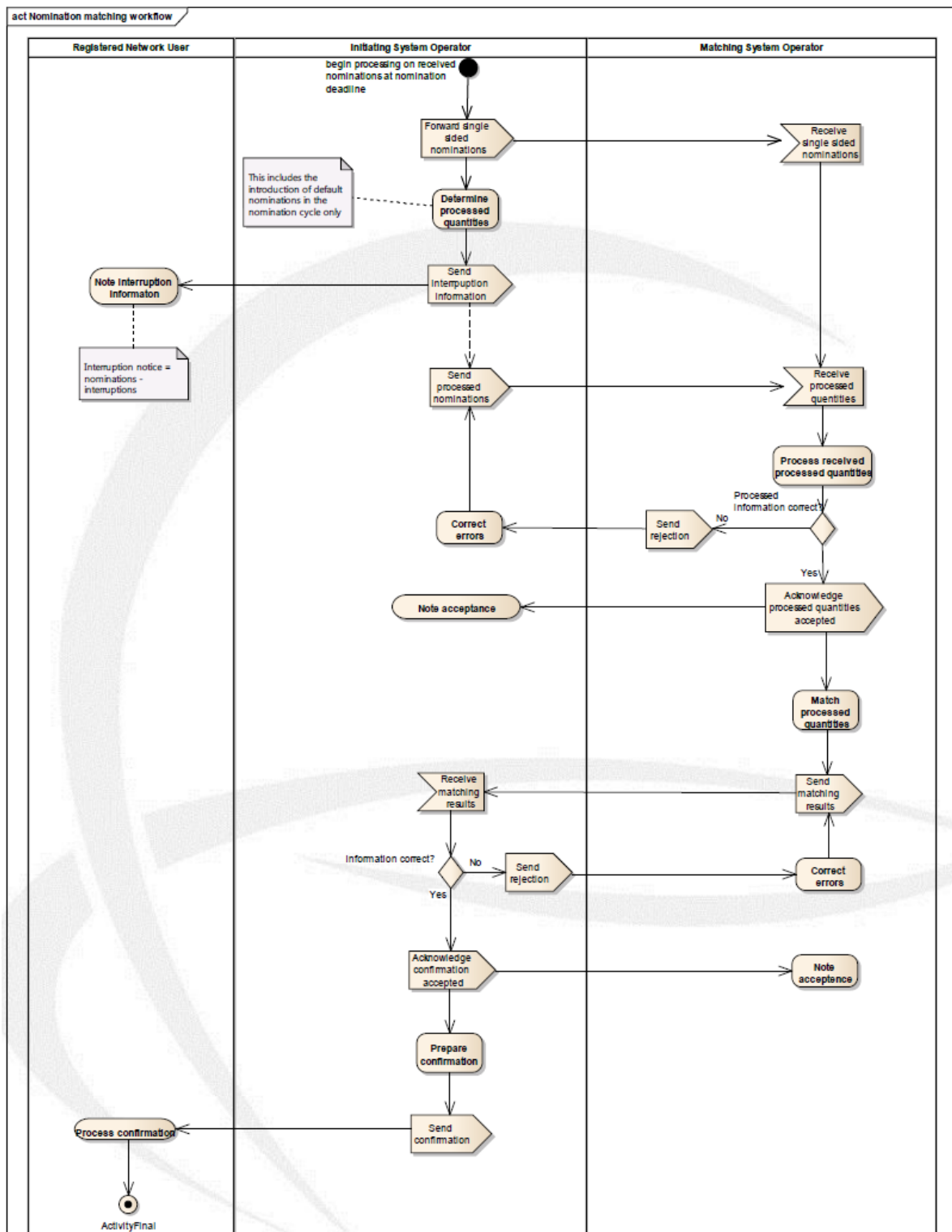
388 **3.4.2.2 Nomination process workflow**



389
390

Figure 4: Nomination workflow

- 391 Nomination submissions are carried out as depicted in figure 4. The Registered Network
392 User submits all nominations to the local Transmission System Operator.
- 393 In the case of single sided nominations only the Registered Network User whose
394 Transmission System Operator acts as the active Transmission System Operator submits the
395 single sided nominations.
- 396 Once the nomination submission has terminated and the nomination deadline has been met
397 the matching process as depicted in figure 5 is carried out.



398
399

Figure 5: Nomination process workflow

400 The active Transmission System Operator then transmits all single sided nominations to the
401 passive Transmission System Operator within 15 minutes after the nomination deadline in
402 order to facilitate processing by the passive Transmission System Operator.

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

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

407 Once all nominations have been processed, the Initiating Transmission System Operator
408 transmits the processed results and optionally the nominations to the Matching
409 Transmission System Operator.

410 All the processed quantities received from the Initiating Transmission System Operator are
411 matched with all the processed quantities established by the Matching Transmission System
412 Operator.

413 Any differences in the matching process have a basic rule applied (in general the lesser
414 values rule). The final confirmed quantities are then transmitted by the Matching
415 Transmission System Operator to the Initiating Transmission System Operator. This includes
416 the quantities processed by the Matching Transmission System Operator and optionally all
417 the nominations received.

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

420 **3.4.3 General Acknowledgement process**

421 **3.4.3.1 Business process definition**

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

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

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

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

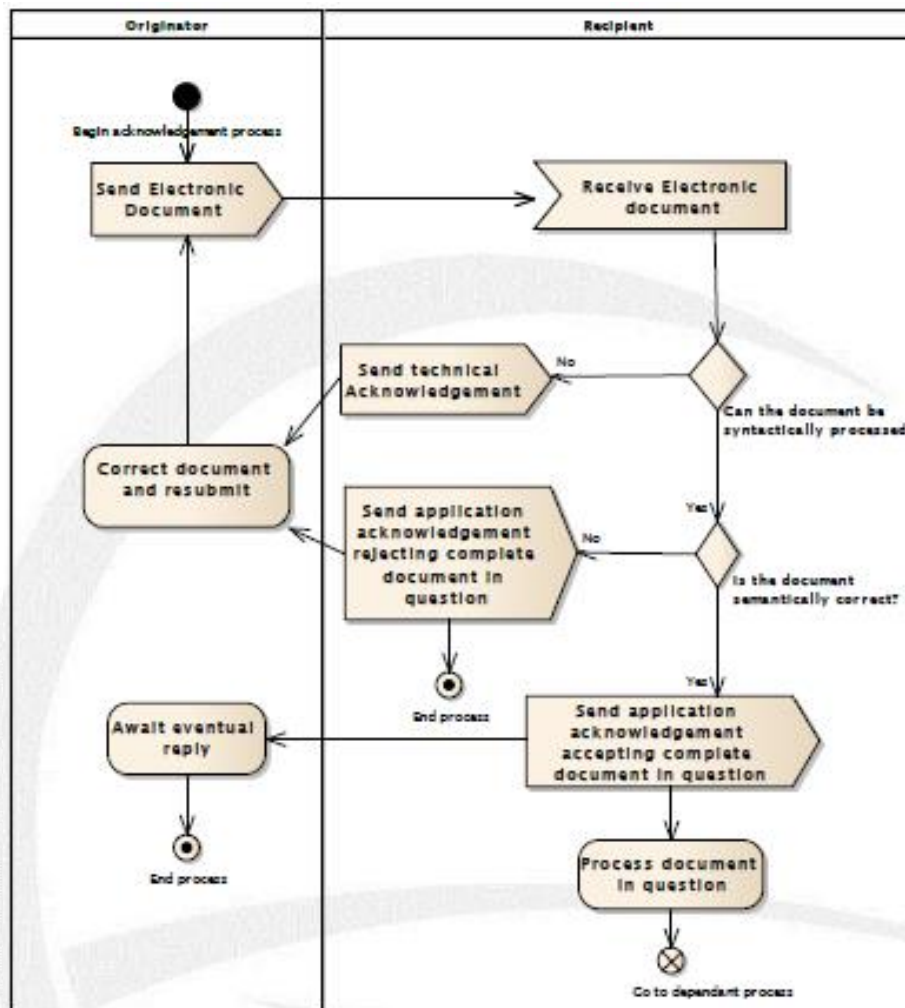


Figure 6: Acknowledgement process

431
432

433 **3.4.3.2 Technical acknowledgment**

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

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

442 **3.4.3.3 Application acknowledgment**

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

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

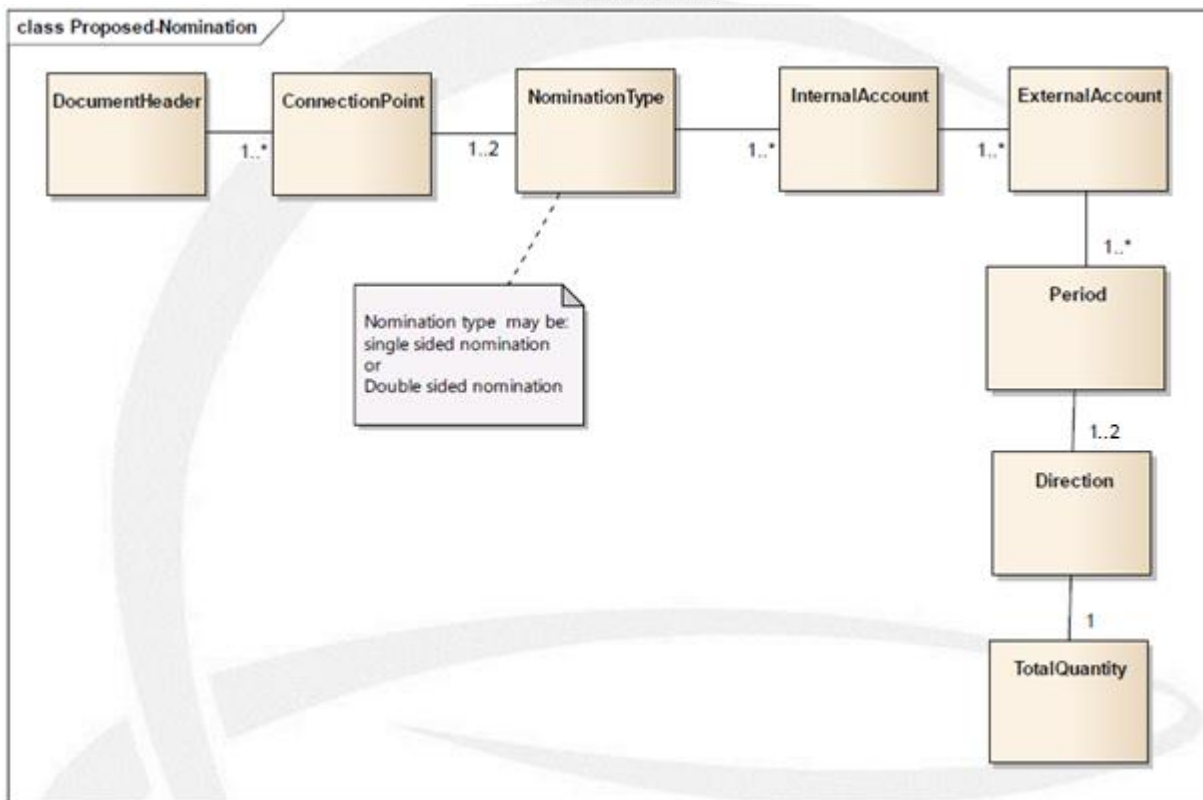
451 Otherwise, upon reception, checks are to be carried out at the application level to assess
452 that the received document can be correctly processed by the application. The issuer is
453 informed that:

- 454 • Its document, that is stated as valid after this verification, is ready to be processed by
455 the reception of an acknowledgement document accepting the complete document
456 in question;
- 457 • Its document is rejected for processing by the reception of an acknowledgement
458 document rejecting the complete document in question with details on the level of
459 errors.

460 **3.5 Information model requirements**

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

464 **3.5.1 Nomination information flow**



465
466 **Figure 7: Nomination information flow**

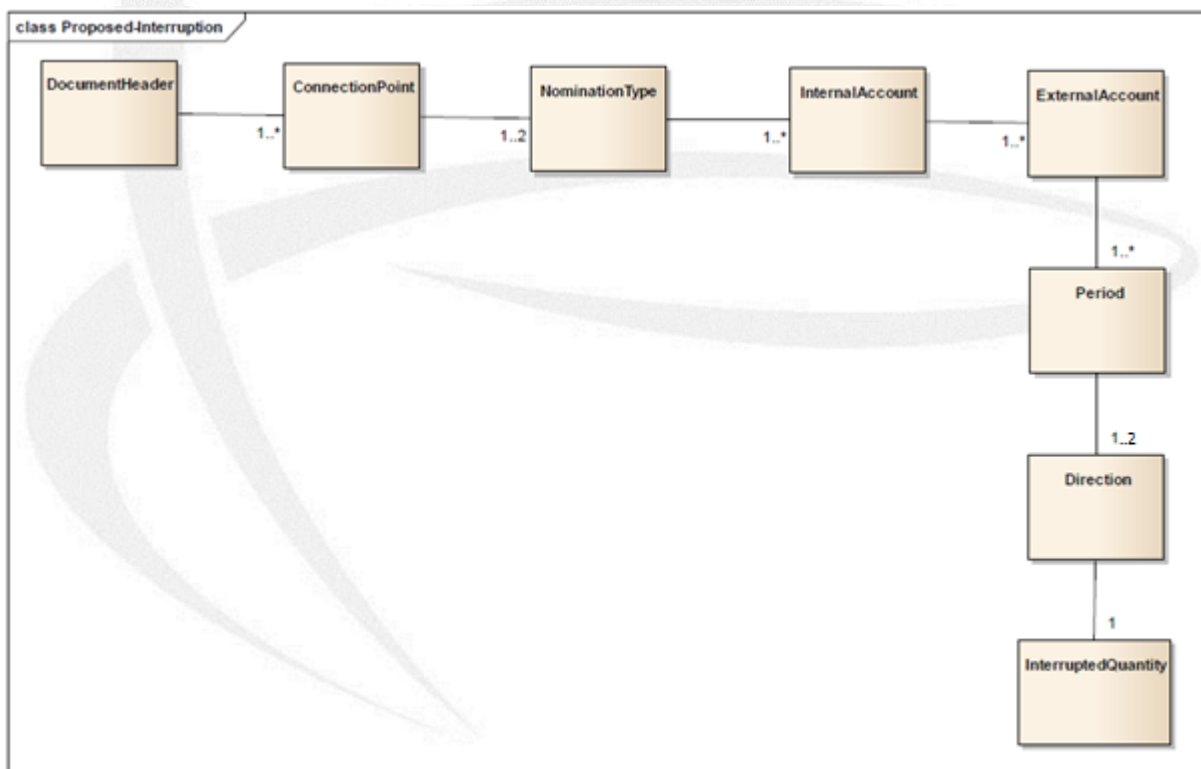
467 The nomination information flow is broken down into the following classes of information:

- 468
- 469 1. The header that provides all the information concerning the identification of the nomination including the gas day.
 - 470 2. The Connection Point that identifies the connection point identification. Multiple
471 connection points are permitted per nomination.
 - 472 3. The Nomination Type indicating whether the nomination for the connection point is
473 single sided or double sided.
 - 474 4. The Internal Account that identifies the account of the submitting Registered
475 Network User that is managed by the Transmission System Operator receiving the
476 nomination (Article 16.3 of BAL NC). There may be multiple internal accounts for a
477 given connection point. An internal account must have the identification of the
478 Transmission System Operator that provides the code.

- 479 5. The External Account that identifies the account of the counterpart Registered
480 Network User that is managed by the counterpart System Operator (Article 13(4) of
481 NC BAL). There may be many external accounts for a given internal account. An
482 external account must have the identification of the Transmission System Operator
483 that provides the code.
- 484 6. The Period that identifies the time period for which the information provided relates
485 (Article 13(5) of NC BAL). A time period may only relate to a gas day in the case of
486 standard nominations (Article 13(6) of NC BAL). The management of any other period
487 is outside the scope of this specification. A time period may be expressed as a
488 complete gas day or as a number of parts of the gas day (e.g. 24 hours).
- 489 7. The Direction that identifies whether the nomination provided is an input or an
490 output to the area of the Transmission System Operator.
- 491 8. The Total Quantity being nominated.

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

497 3.5.2 Interruption information flow



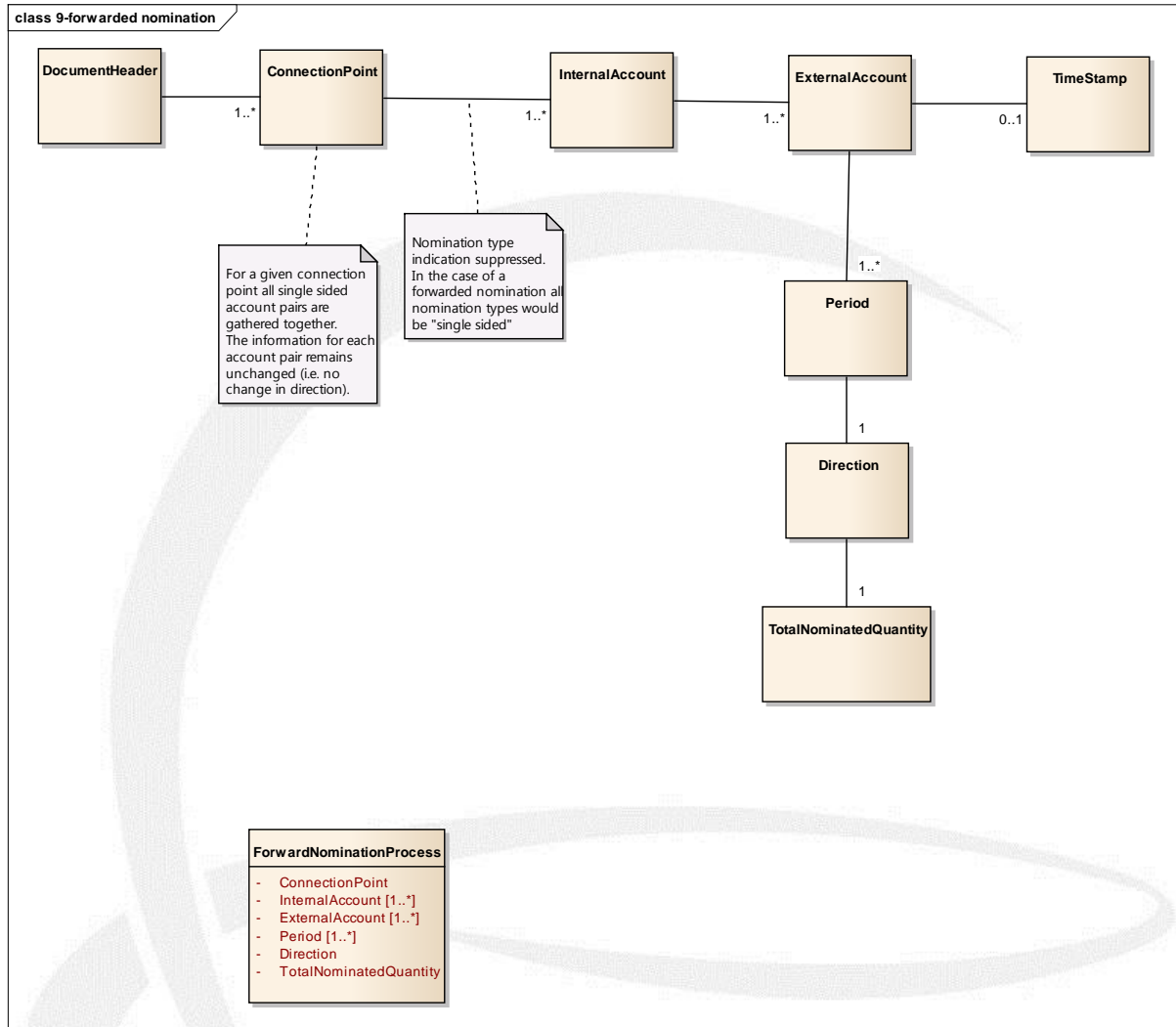
498 Figure 8: Interruption information flow
499

500 The optional interruption information flow is only provided if an interruption occurs against
501 the Registered Network Users nomination. It is transmitted as soon as possible after the
502 interruption is identified by the interrupting transmission system operator to its respective
503 registered network user, irrespective of whether a single sided or double sided nomination
504 was initially submitted. It is only transmitted once in the nomination cycle. It can occur that
505 it does not represent the final processed value that is submitted to a Matching Transmission
506 System Operator.

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

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

531 **3.5.3 Forward nomination flow**



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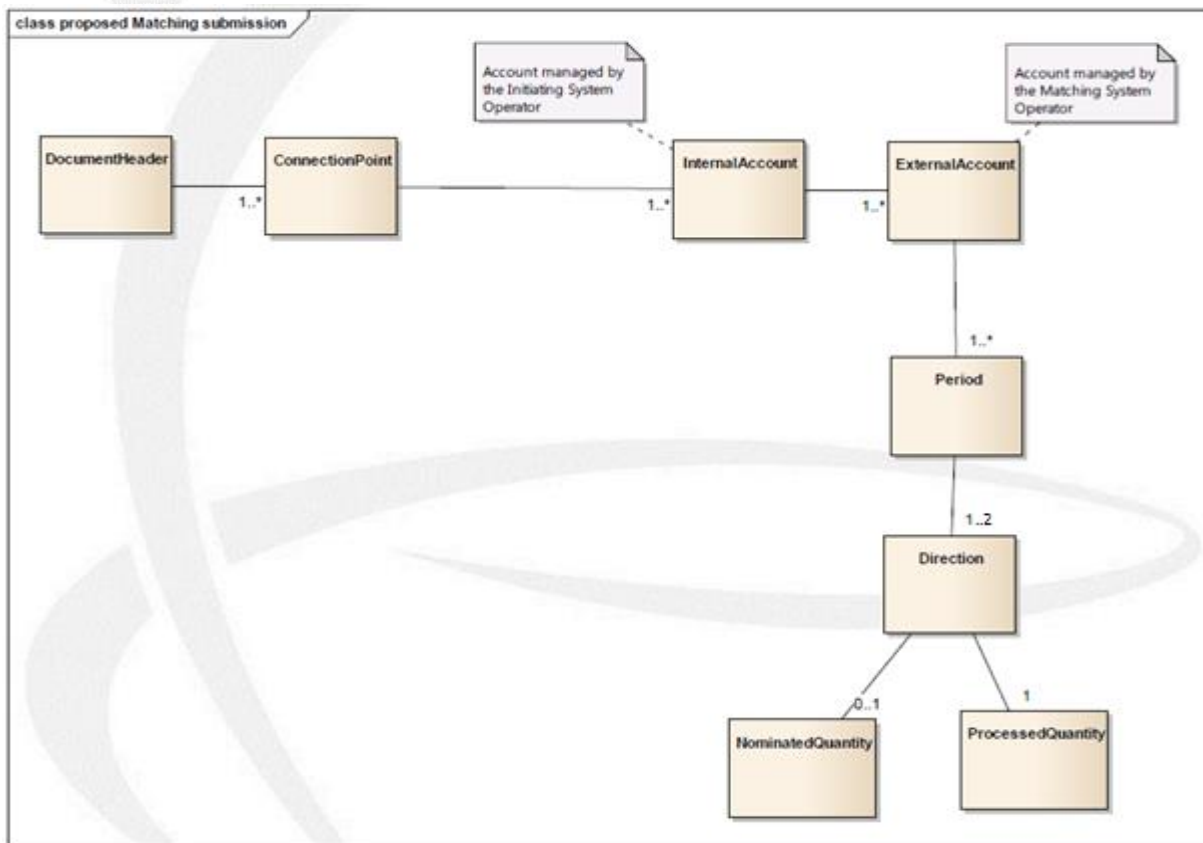
Figure 9: Forward nomination flow

534 In the case of a single sided nomination, it is necessary that this information is forwarded to
 535 the passive Transmission System Operator by the active Transmission System Operator, in
 536 order to enable the information to be processed. The information flow is broken down into
 537 the following classes of information:

- 538 1. The Header that provides all the information concerning the identification of the
 539 single sided nomination including the gas day.
- 540 2. The Connection Point that identifies the connection point identification. If agreed by
 541 the involved Transmission System Operators, multiple connection points are
 542 permitted per nomination request.
- 543 3. The Internal Account that identifies the account of the submitting Registered
 544 Network User that is managed by the forwarding Transmission System Operator.
 545 There may be multiple internal accounts for a given connection point. An internal

- 546 account must have the identification of the Transmission System Operator that
547 provides the code.
- 548 4. The External Account that identifies the account of the counterpart Registered
549 Network User that is managed by the counterpart System Operator. There may be
550 many external accounts for a given internal account. An external account must have
551 the identification of the Transmission System Operator that provides the code.
- 552 5. If applicable, the time stamp that identifies the point of time at which the initial
553 single sided nomination was received by the active transmission system operator.
- 554 6. The Period that identifies the time period for which the information provided relates.
555 A time period may only relate to a gas day in the case of standard nominations. The
556 management of any other period is outside the scope of this specification. A time
557 period may be expressed as a complete gas day or as a number of parts of the gas
558 day (e.g. 24 hours).
- 559 7. The Direction that identifies whether the nomination provided is an input or an
560 output to the area of the Transmission System Operator forwarding the nomination.
- 561 8. The Total nominated Quantity being nominated.

562 **3.5.4 Matching submission information flow**



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564

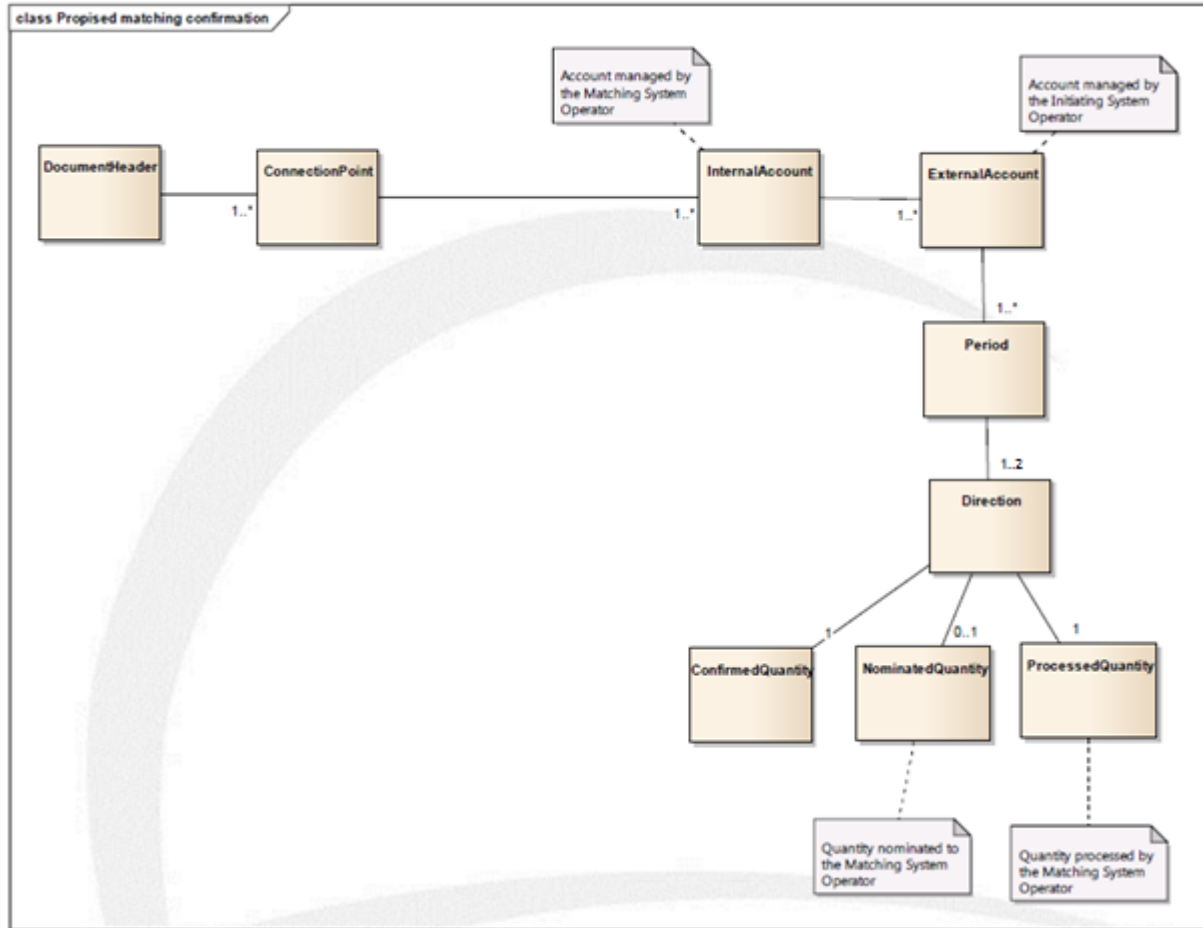
Figure 10: Matching information flow

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

568 The matching information flow is broken down into the following classes of information:

- 569 1. The Header that provides all the information concerning the identification of the
570 matching flow including the gas day.
- 571 2. The Connection Point that identifies the connection point. Multiple connection points
572 are permitted per matching information flow.
- 573 3. The Internal Account that identifies the account of the submitting Registered
574 Network User that is managed by the Initiating Transmission System Operator. There
575 may be multiple internal accounts for a given connection point. An internal account
576 must have the identification of the Transmission System Operator that provides the
577 code.
- 578 4. The External Account that identifies the account of the counterpart Registered
579 Network User that is managed by the Matching Transmission System Operator. There
580 may be many external accounts for a given internal account. An external account
581 must have the identification of the Transmission System Operator that provides the
582 code.
- 583 5. The Period that identifies the time period as identified in the nomination flow.
- 584 6. The Direction that identifies whether the nomination provided is an input or an
585 output to the area of the Initiating Transmission System Operator.
- 586 7. The Nominated Quantity represents the quantity nominated by the Registered
587 Network User and may optionally be provided.
- 588 8. The Processed Quantity which represents the quantity as processed by the Initiating
589 Transmission System Operator.

590 **3.5.5 Matching results information model**



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Figure 11: Nomination confirmation information flow

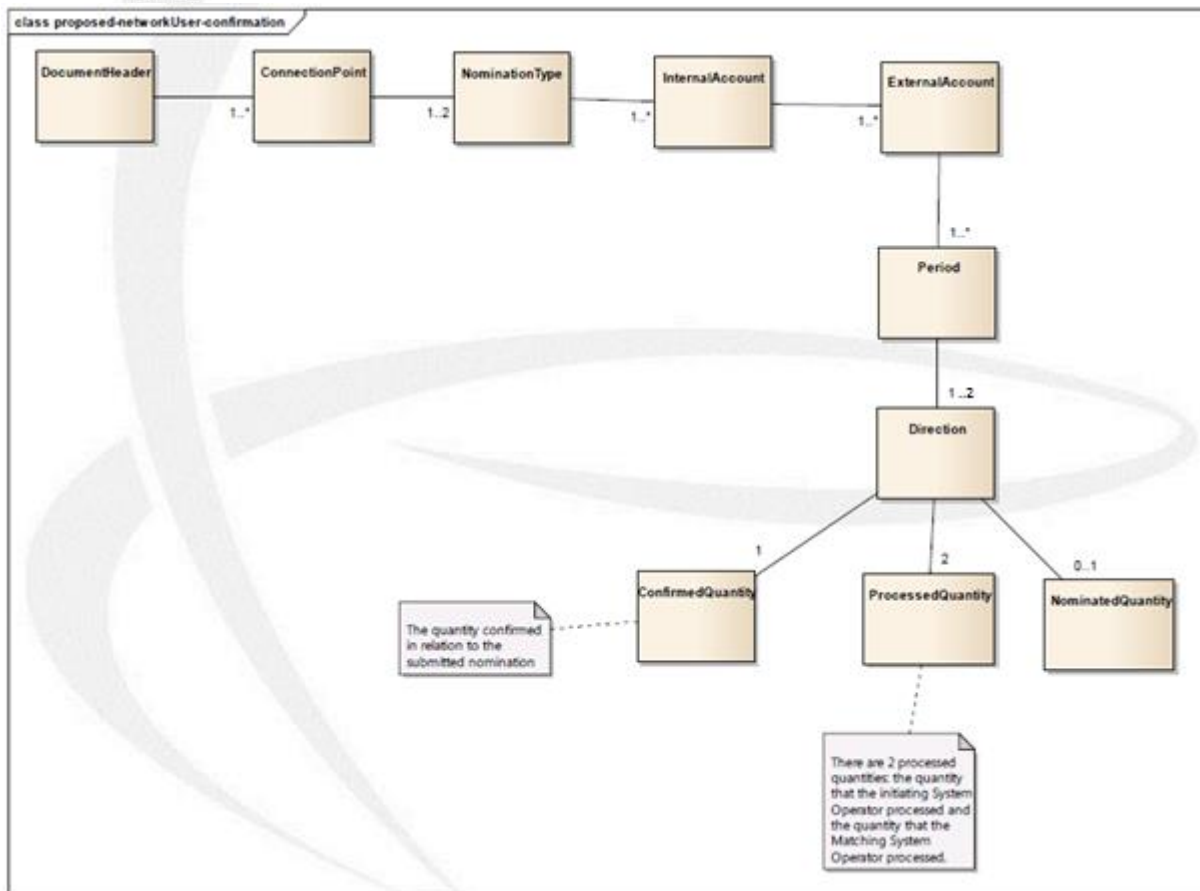
593 When the Matching Transmission System Operator terminates the matching process the
594 matching results are transmitted to the Initiating Transmission System Operator.

595 The matching results information flow is broken down into the following classes of
596 information:

- 597 1. The Header that provides all the information concerning the identification of the
598 matching results flow including the gas day.
- 599 2. The Connection Point that identifies the connection point. Multiple connection points
600 are permitted per matching results information flow.
- 601 3. The Internal Account that identifies the account of the submitting Registered
602 Network User that is managed by the Matching Transmission System Operator. There
603 may be multiple internal accounts for a given connection point. An internal account
604 must have the identification of the Transmission System Operator that provides the
605 code.

- 606 4. The External Account that identifies the account of the counterpart Registered
607 Network User that is managed by the Initiating Transmission System Operator. There
608 may be many external accounts for a given internal account. An external account
609 must have the identification of the Transmission System Operator that provides the
610 code.
- 611 5. The Period that identifies the time period as identified in the nomination flow.
- 612 6. The Direction that identifies whether the nomination provided is an input or an
613 output to the area of the Matching Transmission System Operator.
- 614 7. The Confirmed Quantity for the nomination.
- 615 8. The Nominated Quantity that has been received by the Matching Transmission
616 System Operator may optionally be provided.
- 617 9. The Processed Quantity that has been carried out by the Matching Transmission
618 System Operator.

619 **3.5.6 Registered Network User confirmation information flow**



620
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Figure 12: Registered Network User nomination confirmation information flow

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

625 The nomination confirmation information flow is broken down into the following classes of
626 information:

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

656 **3.6 Definitions of the attributes used in all the models**

657 Definitions originating from the NC CAM, NC BAL and NC INT will be reviewed as soon as the
658 document has been finalized.

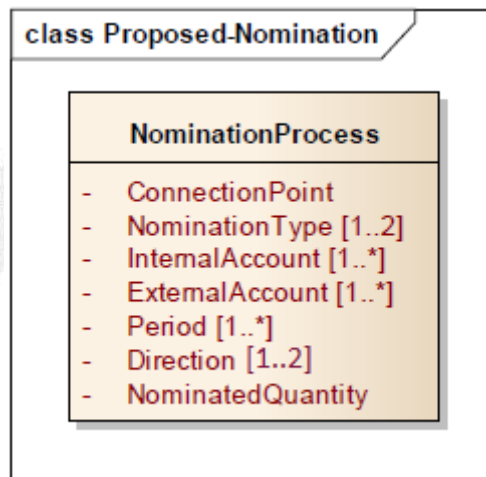
Name	Description
Common Data Exchange Solution	Means the type of data exchange to be made available by all TSOs as defined in the Network Code Interoperability and Data Exchange Rules.
Confidentiality Level	Means the level of confidentiality that is to be applied on the data in a given data exchange. The confidentiality level used in this process for all data is Private. Private means the data is only to be shared between the two parties.
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.
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>
Double sided nomination	A nomination that is submitted by both Registered Network Users to their respective Transmission System Operators.

External Account	Network user's counterparty identification or, if applicable, it's balancing portfolio identification; (Article 13(4) of NC BAL).
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 (origin: NC CAM).
Information Flow	Description of the function of a given data exchange.
Initiating Transmission System Operator	Means the transmission system operator initiating the matching process by sending necessary data to the Matching Transmission System Operator.
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: NC CAM)
Internal Account	Network user identification or, if applicable, it's balancing portfolio identification (Article 13(3) of NC BAL).
Matching Transmission System Operator	Means the Transmission System Operator performing the matching process and sending the result to the Initiating Transmission System Operator.
Network User's Counterparty	Means the Network User who delivers gas to or receives gas from a Network User at an Interconnection Point.
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.
Nomination request	Refers to a set of nominations submitted by a Registered Network User.

Nomination Type	An indication whether a nomination is single sided or double sided.
Period	Start time and end time of the gas flow for which the nomination or re-nomination is submitted. (A period concerns one gas day according to Article 13(5) of NC BAL).
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
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-sided nomination is referred to as 'active' Transmission System Operator 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 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>
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.

659 **3.7 Requirements per process**

660 **3.7.1 Nomination process**



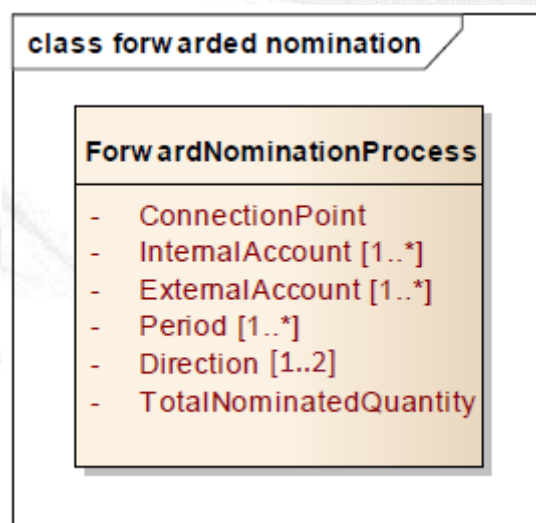
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662

Figure 13: Nomination process information requirements

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

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

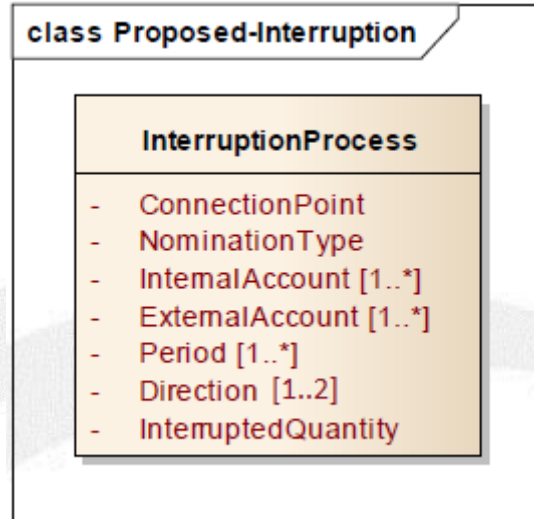
669 **3.7.2 Forward nomination process**



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Figure 14: Forwarded nomination information requirements

672 **3.7.3 Interruption process**

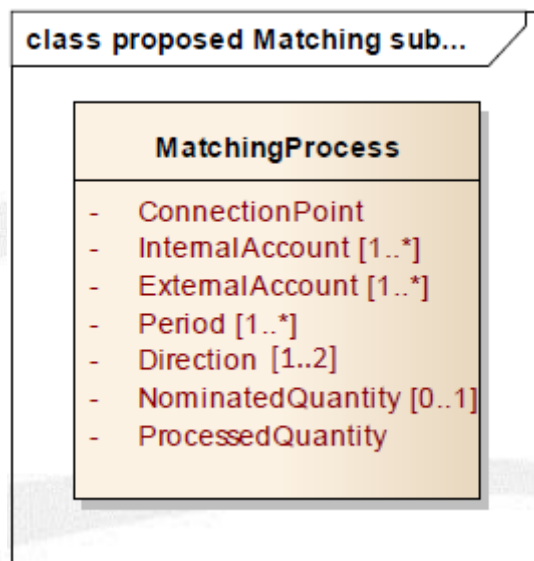


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Figure 15: Interruption process information requirements

675 **3.7.4 Matching process**

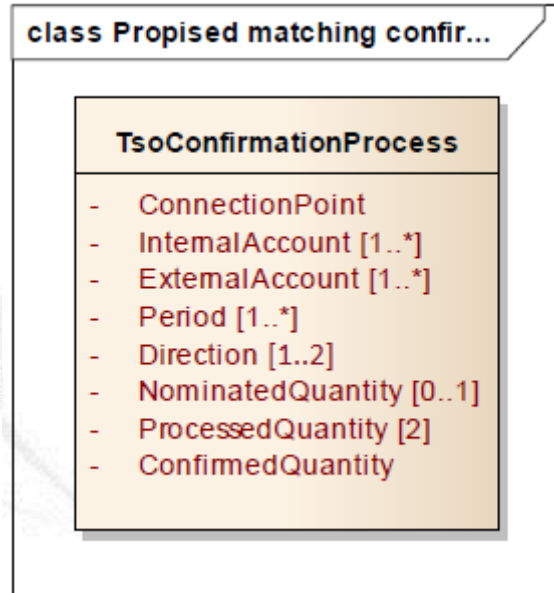


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Figure 16: Matching process information requirements

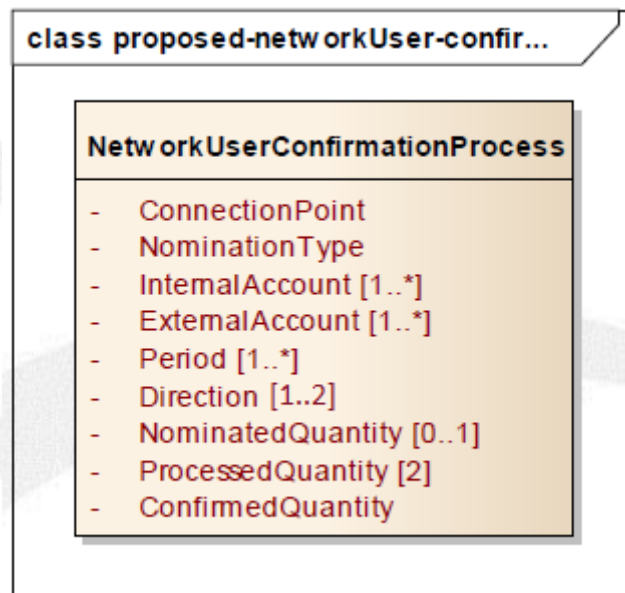
678 **3.7.5 Matching Transmission System Operator confirmation process**



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Figure 17: TSO confirmation process information requirements

681 **3.7.6 Registered Network User confirmation process**



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Figure 18: Registered Network User confirmation information requirements

4 **Common Data Exchange Solution Table**

This section describes the common data exchange solution for each data exchange identified in this process.

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Nomination Authorisation*	Registered Network User	Transmission System Operator	Private	Recommended - Document Based
Nomination	Registered Network User	(Initiating) Transmission System Operator	Private	Document Based
Nomination	Registered Network User	(Matching) Transmission System Operator	Private	Document Based
Forward Single Sided Nomination	(Active) Transmission System Operator	(Passive) Transmission System Operator	Private	Document Based
Processed Quantities	(Initiating) Transmission System Operator	(Matching) Transmission System Operator	Private	Document Based
Matching Results	(Matching) Transmission System Operator	(Initiating) Transmission System Operator	Private	Document Based
Confirmation Notice	(Initiating) Transmission System Operators	Registered Network Users	Private	Document Based
Confirmation Notice	(Matching) Transmission System Operators	Registered Network Users	Private	Document Based
Interruption Information	(Initiating) Transmission System Operator	Registered Network User	Private	Document Based
Interruption Information	(Matching) Transmission System Operator	Registered Network User	Private	Document Based

*** The data exchange solution indicated with (*) is to be negotiated between the transmission system operator and the registered network user. In case an electronic message is used, the Edig@s format is recommended.**

690 **5 Reference documents**

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

691