

1
2
3
4
5
6
7

Business Requirements Specification
for the
Capacity Allocation Mechanism (CAM)
Network Code
and the
Congestion Management Procedures (CMP)
Guidelines

8
9

Version 19 2017-06-21

10 **Log of changes**

Change	Date of change	Issuer of change
<p>Inserted clarification of the Common Data Exchange Solutions</p> <p>Inserted the Common Data Exchange Solution Table</p>	12 April 2016	ENTSOG
<p>V17 Updated clarification of the Common Data Exchange Solutions</p> <p>Updated the Common Data Exchange Solution Table</p>	22 June 2016	ENTSOG
<p>Updated the process descriptions on Surrender Capacity (Surrender only via Auction Office + Information about Surrendered Capacity sold by TSO to NU) – section 3.2.3.1.1, 3.3.1.5, 3.3.1.12, 3.2.5.1, 3.6.5</p> <p>Reworded the description on Manage Credit limit – section 3.2.6</p> <p>Updated the Network User Workflow – section 3.3.3.2</p> <p>Updated the Auction Process Workflow – section 3.3.3.5</p> <p>Updated and inclusion of Definitions – section 3.5</p> <p>Updated requirements for Bookable Point administration process – section 3.6.1</p> <p>Updated requirements for Network User registration process – section 3.6.2</p> <p>Updated requirements for Offered Capacity process – section 3.6.4</p> <p>Updated requirements for Auction process – section 3.6.6</p> <p>Updated requirements for Secondary Market Transfer process – section 3.6.7</p>	26 July 2016	ENTSOG
<p>Deletion of the two potential types of a capacity buy back – section 3.2.4.3</p> <p>Deletion of term “flow commitment” in definition of ReverseAuctionType – section 3.5</p> <p>Replacement of “assignment” by “transfer of ownership (assignment)” – section 3.2.5, 3.3.2, 3.5</p>	23 May 2017	ENTSOG
<p>Addition of Conversion (Conversion from Unbundled to Bundled)</p>	3 October 2018	ENTSOG

11	Table of contents		
12	1	Introduction.....	8
13	2	Scope	8
14	3	Business Requirements	9
15	3.1	CAM/CMP requirements.....	9
16	3.1.1	List of actors	10
17	3.1.1.1	Auction Office	10
18	3.1.1.2	Network User	10
19	3.1.1.3	Transmission System Operator.....	10
20	3.1.1.4	Booking platform	10
21	3.2	Use case detail.....	11
22	3.2.1	Register Network User (not referenced in the CAM/CMP regulation).....	11
23	3.2.1.1	Validate Network User registration	11
24	3.2.2	Register Bookable Points.....	11
25	3.2.3	Auction capacity	12
26	3.2.3.1	Determine offered capacity	13
27	3.2.3.1.1	Surrender capacity	14
28	3.2.3.1.1.1	Submit capacity for surrender.....	14
29	3.2.3.1.1.2	Transmit surrendered capacity information	14
30	3.2.3.1.1.3	Determine surrender validity	15
31	3.2.3.1.1.4	Modify a surrender.....	15
32	3.2.3.1.1.5	Integrate into Offered Capacity	15
33	3.2.3.1.1.6	Determine surrendered capacity sold.....	15
34	3.2.3.1.2	Define amount between Transmission System Operators	15
35	3.2.3.1.3	Send offered capacity	16
36	3.2.3.1.4	Publish offered capacity	17
37	3.2.3.2	Bid for capacity	17
38	3.2.3.2.1	Submit bid.....	18
39	3.2.3.2.2	Modify bid	18
40	3.2.3.2.3	Cancel a bid	18
41	3.2.3.3	Allocate capacity	18

42	3.2.3.4	Publish auction results	18
43	3.2.4	Determine if capacity buyback is necessary	19
44	3.2.4.1	Identify firm capacity nominated over technical capacity	19
45	3.2.4.2	Determine if alternative technical and commercial measures can be	
46	applied	19	
47	3.2.4.3	Establish capacity to be bought back.....	20
48	3.2.4.4	Submit to Auction Office the reverse auction requirements	20
49	3.2.5	Operate secondary market (not referenced in the CAM/CMP regulation)	20
50	3.2.5.1	Submit a Trade Proposal	21
51	3.2.5.2	Reject a Trade Proposal	22
52	3.2.5.3	Respond to a Trade Proposal	22
53	3.2.5.4	Accept the response to a Trade Proposal (conditional to Transmission	
54	System Operator approval)	22	
55	3.2.5.5	Confirm a Trade	22
56	3.2.6	Manage credit limits (not referenced in the CAM/CMP regulation)	22
57	3.3	Information flow definition	25
58	3.3.1	CAM/CMP Sequence flow	25
59	3.3.1.1	Bookable point registration	26
60	3.3.1.2	Network User registration to Transmission System Operator	26
61	3.3.1.3	Network User registration to Auction Office	27
62	3.3.1.4	Approved Network Users.....	27
63	3.3.1.5	Surrender capacity rights.....	27
64	3.3.1.6	Offered capacity.....	28
65	3.3.1.7	Credit limit	29
66	3.3.1.8	Capacity bid.....	30
67	3.3.1.9	Allocated capacity	30
68	3.3.1.10	Detailed capacity allocated	30
69	3.3.1.11	Aggregated auction results	31
70	3.3.1.12	Surrendered capacity sold	31
71	3.3.1.13	Reverse auction requirements.....	31
72	3.3.1.14	Reverse auction bid.....	32
73	3.3.1.15	Allocate reverse auction results	32

74	3.3.2	Secondary market sales.....	33
75	3.3.3	CAM/CMP Workflow	35
76	3.3.3.1	Bookable point Administration process	35
77	3.3.3.2	Network User Registration process	36
78	3.3.3.3	Offered capacity process	37
79	3.3.3.4	Surrender capacity process.....	39
80	3.3.3.5	Auction process.....	40
81	3.3.3.6	Secondary market trade process	42
82	3.3.3.7	Reverse auction process	43
83	3.4	Information model requirements	44
84	3.5	Definitions of the attributes used in all the models	45
85	3.6	Requirements per process	55
86	3.6.1	Bookable point administration process	55
87	3.6.2	Network User Registration process.....	56
88	3.6.3	Account Registration process.....	57
89	3.6.4	Offered capacity process.....	58
90	3.6.5	Surrender capacity process	59
91	3.6.6	Auction process	61
92	3.6.7	Secondary market transfer process	65
93	3.6.8	Credit limit process	66
94	4	Common Data Exchange Solution Table	68
95			

96	Table of figures	
97	Figure 1: overview of the CAM/CMP process use case.....	9
98	Figure 2: the auction capacity use case	12
99	Figure 3: Determine offered capacity use case.....	13
100	Figure 4: CMP surrender network capacity use case	14
101	Figure 5: bid for capacity use case	17
102	Figure 6: Reverse auction use case	19
103	Figure 7: Secondary market capacity	21
104	Figure 8: Credit limit requirements.....	24
105	Figure 9: Information flow sequence	25
106	Figure 10: Information flow sequence	26
107	Figure 11: Secondary market sequence	33
108	Figure 12: Bookable point Administration workflow	35
109	Figure 13: Network User Registration workflow.....	36
110	Figure 14: Offered capacity workflow	37
111	Figure 15: Surrender capacity process	39
112	Figure 16: Auction workflow	40
113	Figure 17: Secondary market transfer process	42
114	Figure 18: Reverse auction workflow.....	43
115	Figure 19: Bookable point administration requirements	55
116	Figure 20: Network User registration requirements.....	56
117	Figure 21: Account registration requirements.....	57
118	Figure 22: Transmission System Operator Offered capacity information requirements	58
119	Figure 23: Offered capacity information requirements.....	59
120	Figure 24: Surrendered capacity information requirements	59
121	Figure 25: Surrender capacity request validation requirements.....	60
122	Figure 26: Surrender capacity result requirements	60
123	Figure 27: Bid information requirements	61
124	Figure 28: Detailed capacity allocated information requirements.....	62
125	Figure 29: Allocated capacity information requirements	62
126	Figure 30: Aggregated auction results	63

127	Figure 31: Transmission System Operator Buy back capacity information requirements	64
128	Figure 32: Secondary market capacity rights transfer information requirements.....	65
129	Figure 33: Secondary market capacity rights transfer confirmation information requirements	
130	65
131	Figure 34: Network User credit limit information requirements.....	66
132	Figure 35: Network User credit situation requirements.....	67
133		

134 **1 Introduction**

135 The Regulation (EU) No. 984/2013 for Capacity Allocation Mechanism (CAM NC) and the
136 Commission Decision (2012/490/EU) on Congestion Management Procedures (CMP guidelines)
137 set forth provisions regarding capacity allocation mechanisms and congestion management
138 procedures. The CAM NC defines a standardised capacity allocation mechanism in the form
139 of an auction procedure for relevant Interconnection Points within Europe, including the
140 underlying Standard Capacity Products to be offered and the description of how cross-border
141 capacity is to be allocated. The manner in which adjacent Transmission System Operators
142 cooperate in order to facilitate capacity sales, taking into consideration general commercial
143 as well as technical rules related to capacity allocation mechanisms are also outlined.

144 Additionally, the CMP guidelines define how congestion management procedures are put into
145 place in the event of contractual congestion.

146 **2 Scope**

147 This document defines the external business requirements that are necessary for a
148 harmonised implementation of the transmission of information between parties related to
149 the CAM Network Code, the CMP guidelines and other issues not included in these regulations
150 but related to them (marked as “not referenced in the CAM/CMP regulation” in this
151 document, e.g. credit limits, master data). It is intended to be used by parties participating in
152 the capacity allocation mechanism and congestion management procedures. In particular,
153 the Business Requirements Specification (BRS) enables EASEE-gas to produce the Message
154 Implementation Guideline (MIG).

155 The BRS does not cover the following subjects, which are referred to in the CAM NC/CMP
156 guidelines but are not essential for the allocation of primary and secondary capacity or for
157 congestion management:

- 158 - Co-ordination of maintenance information
- 159 - Nominations against capacity rights
- 160 - Cooperation between Auction Offices

161 This BRS covers requirements for the harmonised implementation of auctions for primary
162 capacity, for secondary market capacity right transfer processes and congestion management
163 procedures as specified in the CAM NC/CMP guidelines. The requirements therefore define
164 the necessary interfaces for the implementation, from an IT perspective, of a capacity
165 allocation and congestion management system.

166 This BRS is targeted towards business-to-business application interfaces or in a more user-
167 orientated fashion through a web-based service.

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

170 The requirements set out in this document are subject to change if there is any change in the
171 obligations on Transmission System Operators or any other party.

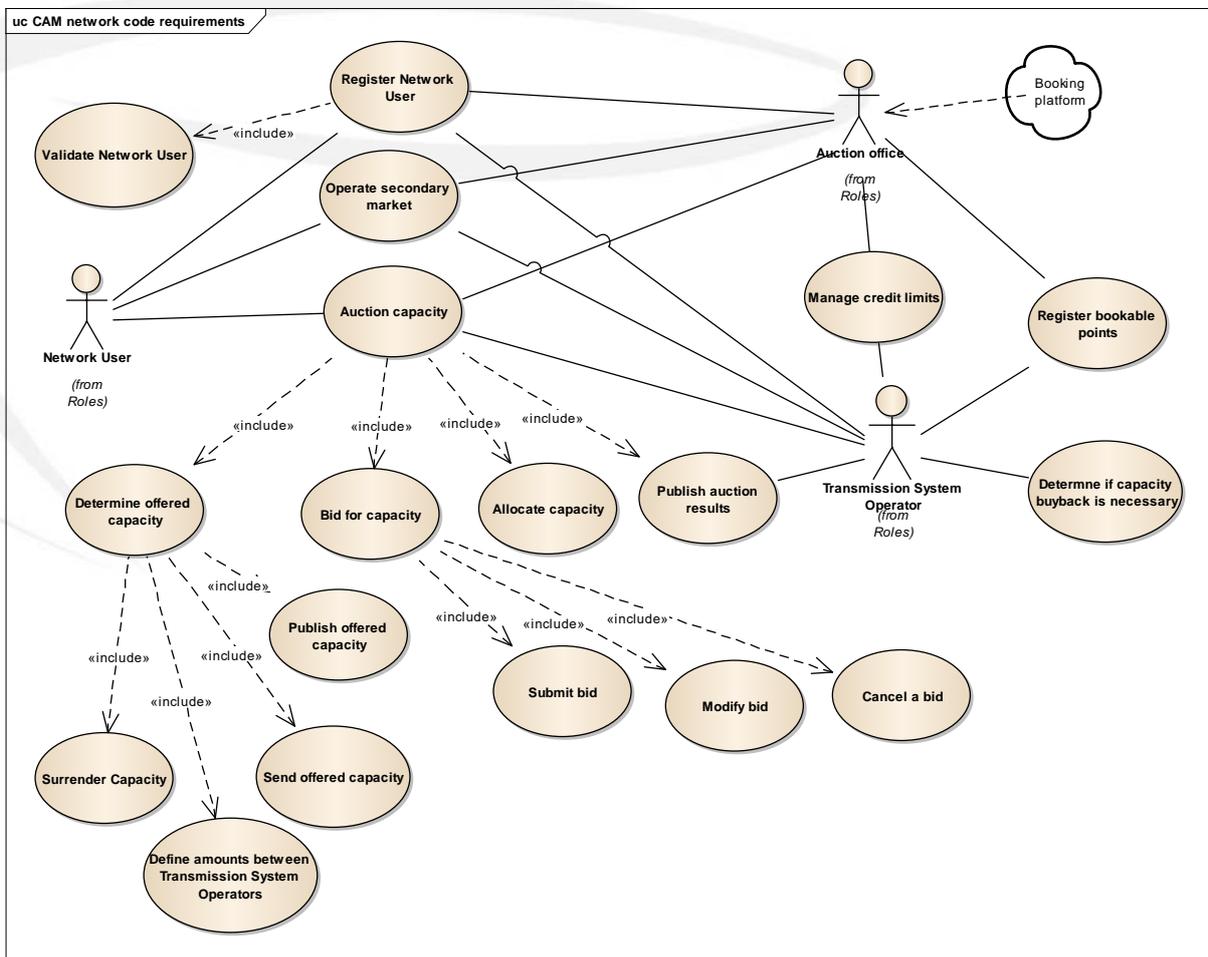
172 **3 Business Requirements**

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

175 **3.1 CAM/CMP requirements**

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

179



180

181

Figure 1: overview of the CAM/CMP process use case

182 **3.1.1 List of actors**

183 **3.1.1.1 Auction Office**

184 The party that is responsible for the reception of bids and for the allocation of capacity as well
185 as for the management of the booking platform, acting on behalf of Transmission System
186 Operators.

187 **3.1.1.2 Network User**

188 A Network User is defined in the Regulation (EU) No. 715/2009 in Article 2 (11). A Network
189 User that has acceded to and is compliant with all applicable legal and contractual
190 requirements that enable him/her to book, trade and use capacity on the relevant
191 Transmission System Operator's network under a capacity contract.

192 **3.1.1.3 Transmission System Operator**

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

198 **3.1.1.4 Booking platform**

199 An application that implements the rules and processes for offering and allocation of all
200 capacity and may permit Network Users to offer and obtain secondary capacity.

201 It is managed by an Auction Office.

202 **3.2 Use case detail**

203 Besides the aforementioned requirements for coordinated implementation, the further core
204 processes need to be considered as preconditions to the implementation of other
205 requirements arising from NC CAM. It is understood that the registration of the Transmission
206 System Operators is always carried out within the relevant Auction Offices.

207 **3.2.1 Register Network User (not referenced in the CAM/CMP regulation)**

208 In order to participate in the CAM/CMP processes to obtain capacity, the Network User and
209 the personnel authorised to use the booking platform (authorised personnel) need to be
210 registered with the Auction Office and the Transmission System Operator(s). The registration
211 process includes the submission of the individual Network User master data to the Auction
212 Office and the Transmission System Operator(s).

213 The Network User also transmits to the Transmission System Operator(s) the data required
214 by the Transmission System Operator(s), from whom the Network User would like to get
215 capacity. If required the Network User transmits its registration data via the Auction Office to
216 the Transmission System Operator(s).

217 The Network User transmits to the Auction Office the data required by the Auction Office for
218 gaining access to the booking platform.

219 The new Network User must provide a unique identification, such as an EIC code, to the
220 Auction Office and to the Transmission System Operator(s) in order to ensure a unique
221 identifier of the company on the booking platform in place. The Network User also provides
222 information concerning each of its authorised personnel.
223 Network User accounts may be provided to the Auction Office where required by the
224 Transmission System Operator.

225 The Auction Office after verification forwards the necessary data to the Transmission System
226 Operator for validation.

227 **3.2.1.1 Validate Network User registration**

228 The Transmission System Operator validates the information received.

229 The result of the validation is communicated to the Auction Office. The Auction Office informs
230 the Network User of the approval/rejection of access to the booking platform. The
231 approval/rejection information regarding the access to the Transmission System Operator(s)
232 networks(s) is provided by the Transmission System Operator(s). In the case where the
233 Network User registers via the Auction Office, it is provided by the Auction Office.

234 **3.2.2 Register Bookable Points**

235 Before any capacity can be offered to the market the bookable points need to be defined by
236 the Transmission System Operators and submitted to the Auction Office for the publication
237 on the booking platform. Necessary updates of bookable point data are also included in this
238 process.

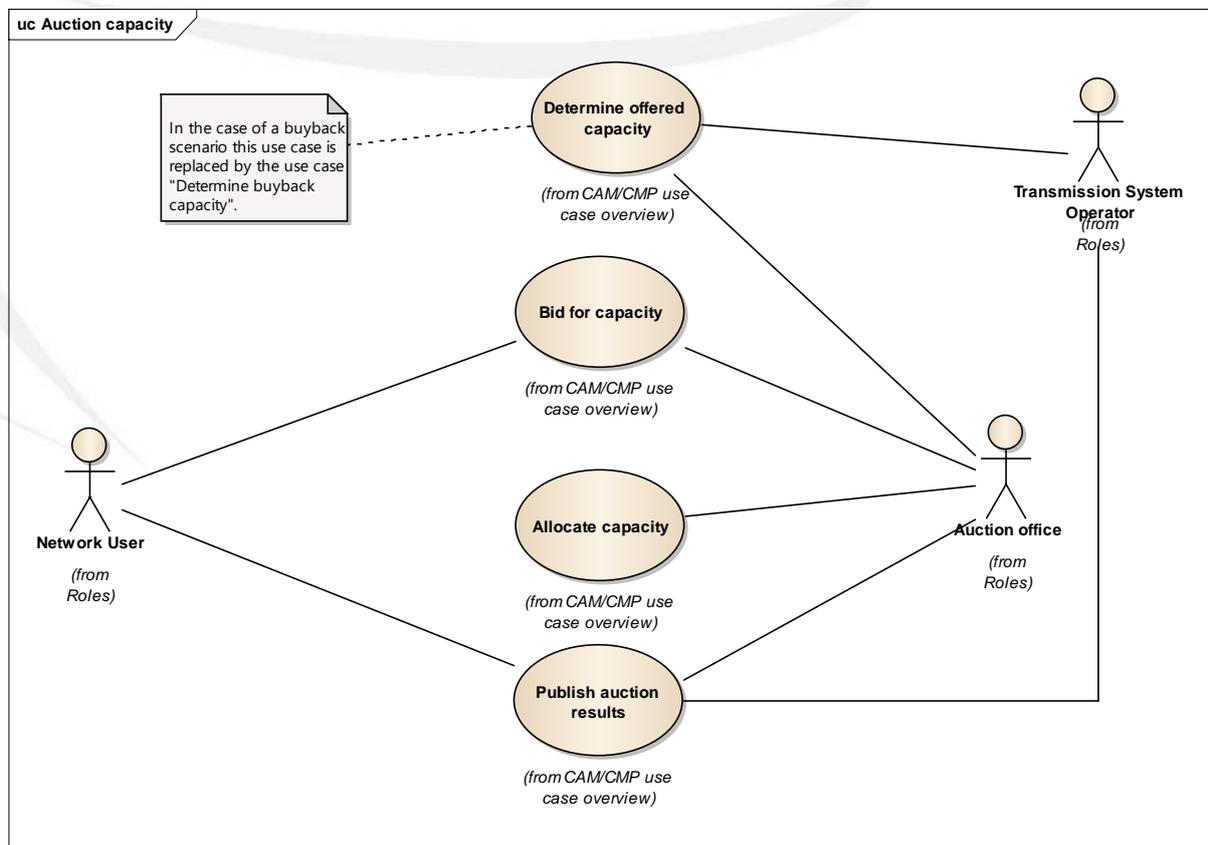
239 A bookable point is defined by several items (see definition in chapter 3.5).

240 The bookable point bundling process is managed by the Auction Office.

241 The bookable point will then be visible on the booking platform.

242 3.2.3 Auction capacity

243 This use case permits the auction and the allocation of capacity at an interconnection point
244 using an "ascending clock" or "uniform price" auction mechanism, as described in Articles 17
245 and Article 18 CAM NC, respectively. In the case the reverse process is carried out through an
246 auction, the same auction process may be used with the exception that the use case
247 "Determine offered capacity" is replaced by the use case "Determine reverse auction
248 capacity" to cover the determination of reverse auction capacity.



249

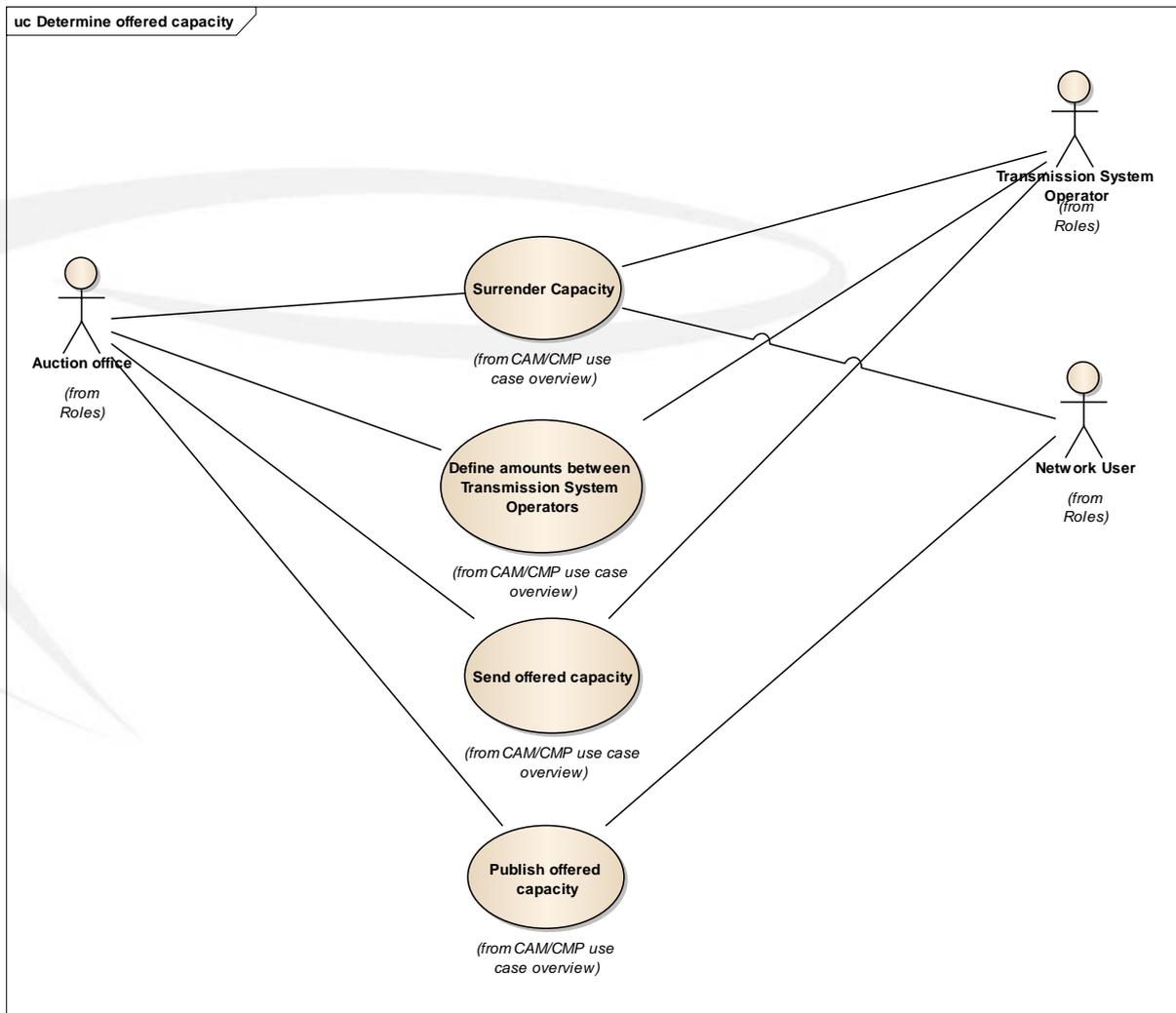
250

Figure 2: the auction capacity use case

251 Figure 2 outlines the relations that exist between each of the use cases and the actors.

252 **3.2.3.1 Determine offered capacity**

253 The Transmission System Operator determines the capacity that shall be offered to the
254 market for auctioning. The determination of the capacity is carried out through the use case
255 as outlined in the use case in Figure 3.

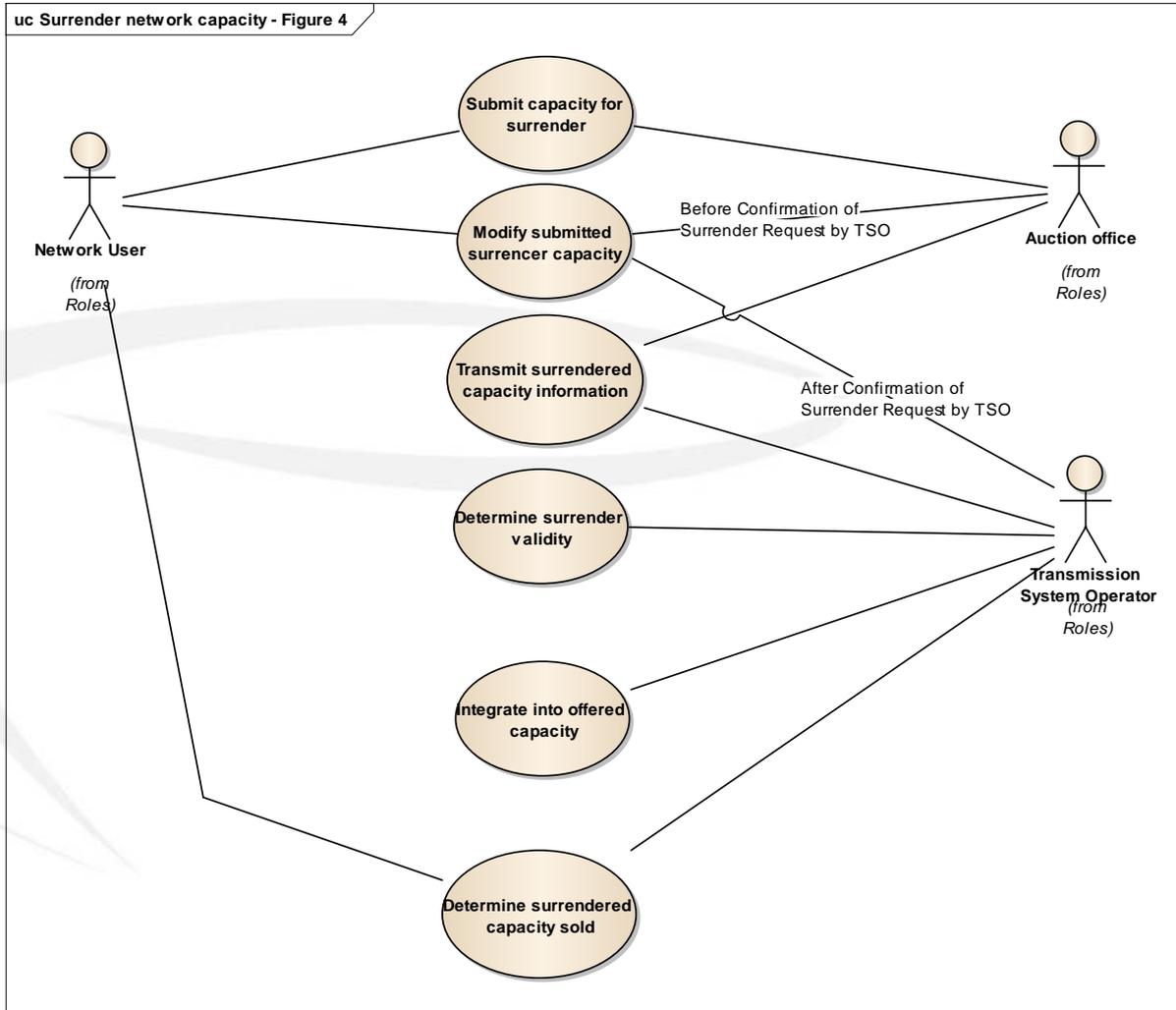


256
257

Figure 3: Determine offered capacity use case

258 Once the Transmission System Operator has defined the Offered Capacity it is transmitted to
259 the Auction Office.

260 **3.2.3.1.1 Surrender capacity**



261
262

Figure 4: CMP surrender network capacity use case

263 **3.2.3.1.1.1 Submit capacity for surrender**

264 If the surrender process is supported by the Transmission System Operator(s), the Network
265 User shall surrender capacity to the Auction Office for resale at any time according to the
266 applicable regulatory framework. The surrendered capacity must be identified as bundled or
267 unbundled and concerns at least capacity products with a duration longer than a day (subject
268 to the NRA decision).

269 Bundled capacity shall only be surrendered as bundled (subject to the NRA decision). A
270 bundled or unbundled capacity surrender request must identify the Transmission System
271 Operator(s). A bundled capacity surrender request shall be forwarded to the involved
272 Transmission System Operators for validation.

273 **3.2.3.1.1.2 Transmit surrendered capacity information**

274 The Auction Office transmits the surrendered capacity received to the Transmission System
275 Operator(s) after internal validation by the Auction Office.

276 The Transmission System Operator forwards its positive/negative validation response of the
277 surrender request to the Auction Office. The Auction Office informs the Network User about
278 the confirmation/rejection by the Transmission System Operator.

279 Extra steps for surrender may be implemented by the Auction Office.

280 **3.2.3.1.1.3 Determine surrender validity**

281 The Transmission System Operator ensures the validity of all Network Users submission.

282 **3.2.3.1.1.4 Modify a surrender**

283 As long as lead times constraints are respected, the Network User may cancel all or part or a
284 surrender request by submitting a recall surrender request which, as long as lead time
285 constraints for capacity publication are respected, will be taken into account by the
286 Transmission System Operator.

287 In case the surrender request has been confirmed by the Transmission System Operator(s) to
288 the Network User, any modifications may have to be sent directly to the involved
289 Transmission System Operator(s) by the Network User.

290 **3.2.3.1.1.5 Integrate into Offered Capacity**

291 Once the surrendered capacity is validated, the Transmission System Operator integrates the
292 information into the offered capacity.

293 **3.2.3.1.1.6 Determine surrendered capacity sold**

294 The Transmission System Operator allocates the surrendered capacity sold to the Network
295 Users depending on local market rules and informs them of their capacity that has been sold.

296 When allocating the surrendered capacity sold to the Network Users the Transmission
297 System Operator allocates the surrendered capacity on a first come first served basis.

298 **3.2.3.1.2 Define amount between Transmission System Operators**

299 The Transmission System Operator calculates the capacity to be offered within the booking
300 platform. A Transmission System Operator may inform the Auction Office about any
301 competition between several connection points, capacity types and any relevant information
302 related to Article 19 (5(a) and (b) CAM NC.

303 In case of a competing situation involving more than one Transmission System Operator, the
304 competition algorithm is managed by the Auction Office.

305 1st option:

306 As default rule, the Transmission System Operators shall decide to let the Auction
307 Office determine the bundled and unbundled capacity that makes up the established
308 offered capacity. Each Transmission System Operator at each side of the IP shall

309 inform the Auction Office of the offered capacity. The Auction Office shall apply the
310 lesser rule in order to determine the bundled capacity.

311 Any differences between the lesser value calculated by the Auction Office and the
312 capacity previously sent by Transmission System Operators can be considered as
313 unbundled capacity and may be auctioned separately.

314 Such unbundled capacity will be clearly identified by the Auction Office to the Network
315 Users at the time when the capacity is offered.

316 2nd option:

317 The use case “Define amounts between Transmission System Operators” is used in
318 this case by the Transmission System Operators to define the bundled and unbundled
319 capacity that will make up the offered capacity. The final result is then sent by both
320 Transmission System Operators to the Auction Office for publication. In case of
321 mismatch then both quantities are rejected.

322 **3.2.3.1.3 Send offered capacity**

323 The offered capacity is sent to the Auction Office (booking platform) by the Transmission
324 System Operator.

325 **3.2.3.1.4 Publish offered capacity**

326 The Auction Office then publishes the part of the offered capacity that will be auctioned as
327 bundled capacity and the part of the offered capacity that will be auctioned as unbundled
328 capacity.

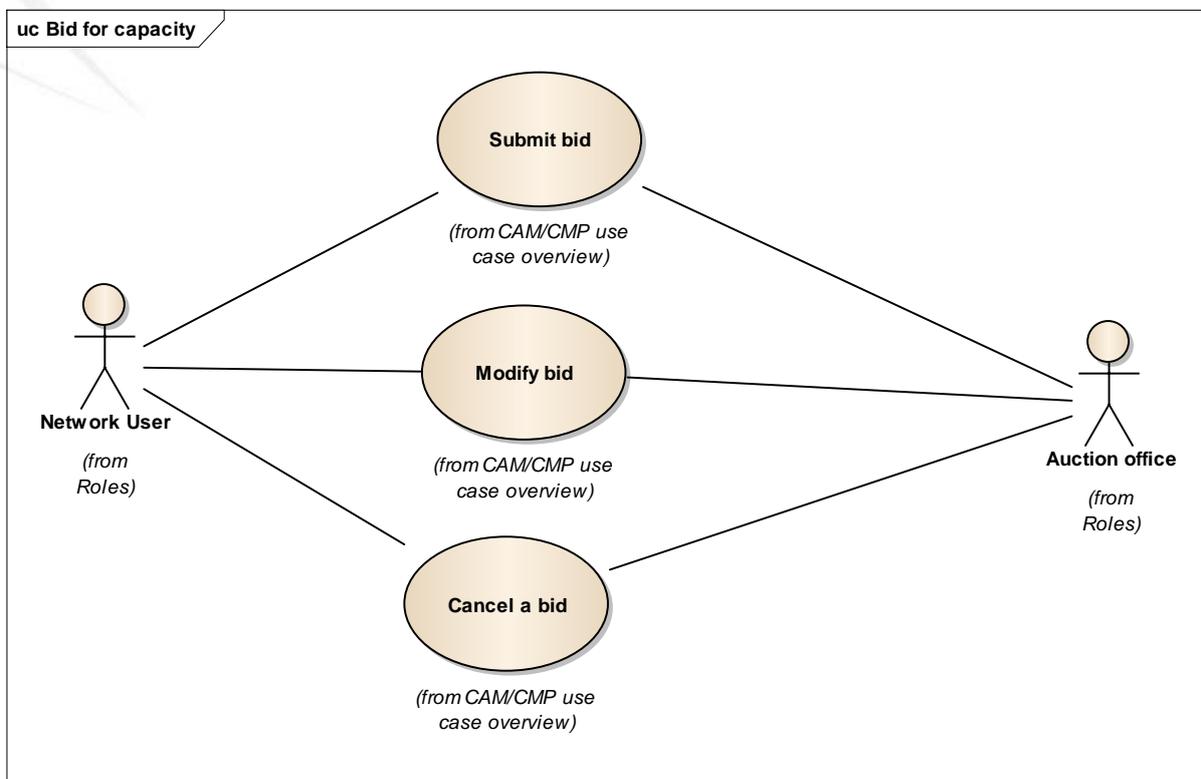
329 The Network Users are also informed in the publication of any starting price and, in the case
330 of ascending clock auctions, the value of the large price step and the small price step for the
331 bidding rounds.

332 **3.2.3.2 Bid for capacity**

333 For a given auction (in which one capacity product covering a specific period is offered)
334 Network Users submit bids with the amount of capacity required (for the price step
335 announced in the concerned bidding round in the case of an ascending clock auction) and, in
336 the case of uniform price auctions, the price they are willing to pay on top of the starting price
337 and they shall also indicate the minimum capacity that is acceptable in the case of a reduced
338 allocation.

339 In case of an ascending clock auction, the Network User may submit only one valid bid per
340 bidding round. This bid may be modified or withdrawn during the course of bidding round.
341 The rules that apply during a bidding round shall be compliant with Article 17 CAM NC.

342 In case of a uniform price auction, the bids shall be compliant with Article 18 CAM NC.



343

344

Figure 5: bid for capacity use case

345 **3.2.3.2.1 Submit bid**

346 The Network User submits bids for an amount of capacity for the price step announced in the
347 concerned bidding round, in the case of an ascending clock auction, or an amount of capacity
348 (requested and minimum) and price, in the case of a uniform price auction. Each bid shall refer
349 to a given product within a given auction. In an ascending clock auction, such bids shall respect
350 the rules on bid quantities set out in Article 17(5), (8 and (16) CAM NC.

351 **3.2.3.2.2 Modify bid**

352 As long as the bidding round is open, a Network User may modify the bid according to the
353 requirements stated in Article 17 CAM NC and Article 18 CAM NC.

354 **3.2.3.2.3 Cancel a bid**

355 The Network User may at any time before the closure of a bidding round cancel a bid placed
356 earlier in that round according to the requirements stated in Article 17 CAM NC and Article
357 18 CAM NC.

358 Exceptional cases in which a Network User cannot cancel a bid are bidding rounds with small
359 price steps in ascending clock auctions according to the requirements stated in Article 17.

360 **3.2.3.3 Allocate capacity**

361 The capacity is allocated respecting market rules, as set out in article 17 (in an ascending clock
362 auction) and Article 18 CAM NC (in a uniform price auction).

363 **3.2.3.4 Publish auction results**

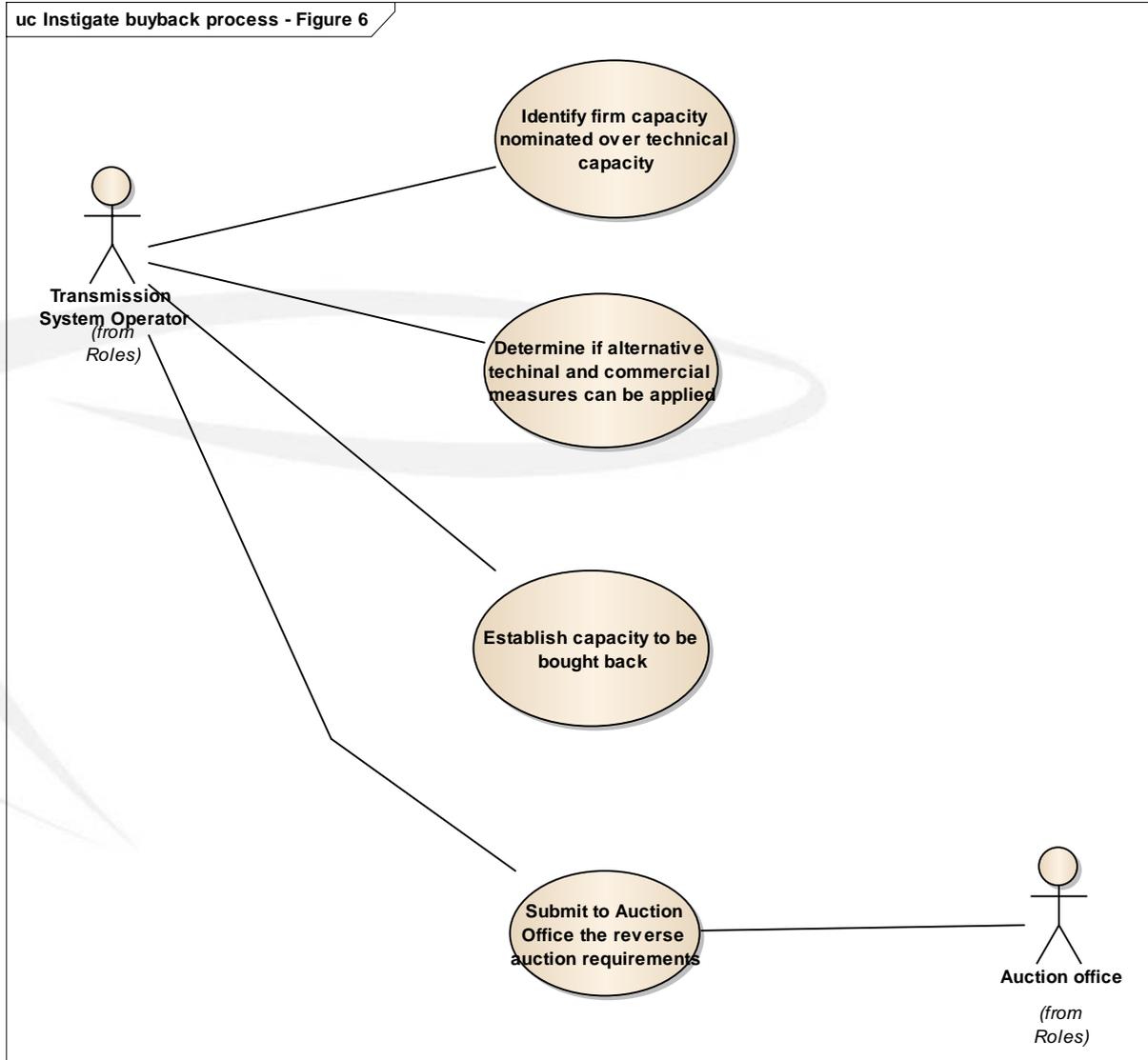
364 Network Users are informed by the Auction Office of the results of the bids that they have
365 submitted.

366 The Auction Office informs the market of the final aggregated auction information.

367 The Auction Office provides the Transmission System Operators with the detailed auction
368 results.

369 In ascending clock auctions intermediate results may be provided to the Transmission System
370 Operators by the Auction Office.

371 **3.2.4 Determine if capacity buyback is necessary**



372

373

Figure 6: Reverse auction use case

374 **3.2.4.1 Identify firm capacity nominated over technical capacity**

375 The Transmission System Operator shall identify firm capacity nominated over technical
376 capacity.

377 **3.2.4.2 Determine if alternative technical and commercial measures can be**
378 **applied**

379 The Transmission system Operator then determines if any alternative technical and
380 commercial measures can be applied.

381 **3.2.4.3 Establish capacity to be bought back**

382 The Transmission System Operator determines the amount of capacity that will have to be
383 bought back in the congested direction to re-establish the situation, without taking into
384 consideration whether the capacity is bundled or not.

385 For the Transmission System Operator this information is irrelevant as it seeks to achieve a
386 flow reduction. For the Network User the bundling status is irrelevant as it states the financial
387 compensation desired for not flowing gas.

388 As an alternative to the reverse auction the Transmission System Operator may also buy back
389 the capacity by playing the role of a Network User on the secondary market.

390 **3.2.4.4 Submit to Auction Office the reverse auction requirements**

391 The Transmission System Operator shall send capacity to be purchased to the Auction Office
392 so that a reverse auction can be put into place. The Transmission System Operator may
393 include some restrictions, for example:

- 394 • the maximum price the Transmission System Operator is willing to pay for buying back
395 the capacity
- 396 • the list of Network Users that are allowed to participate in the buy-back procedure

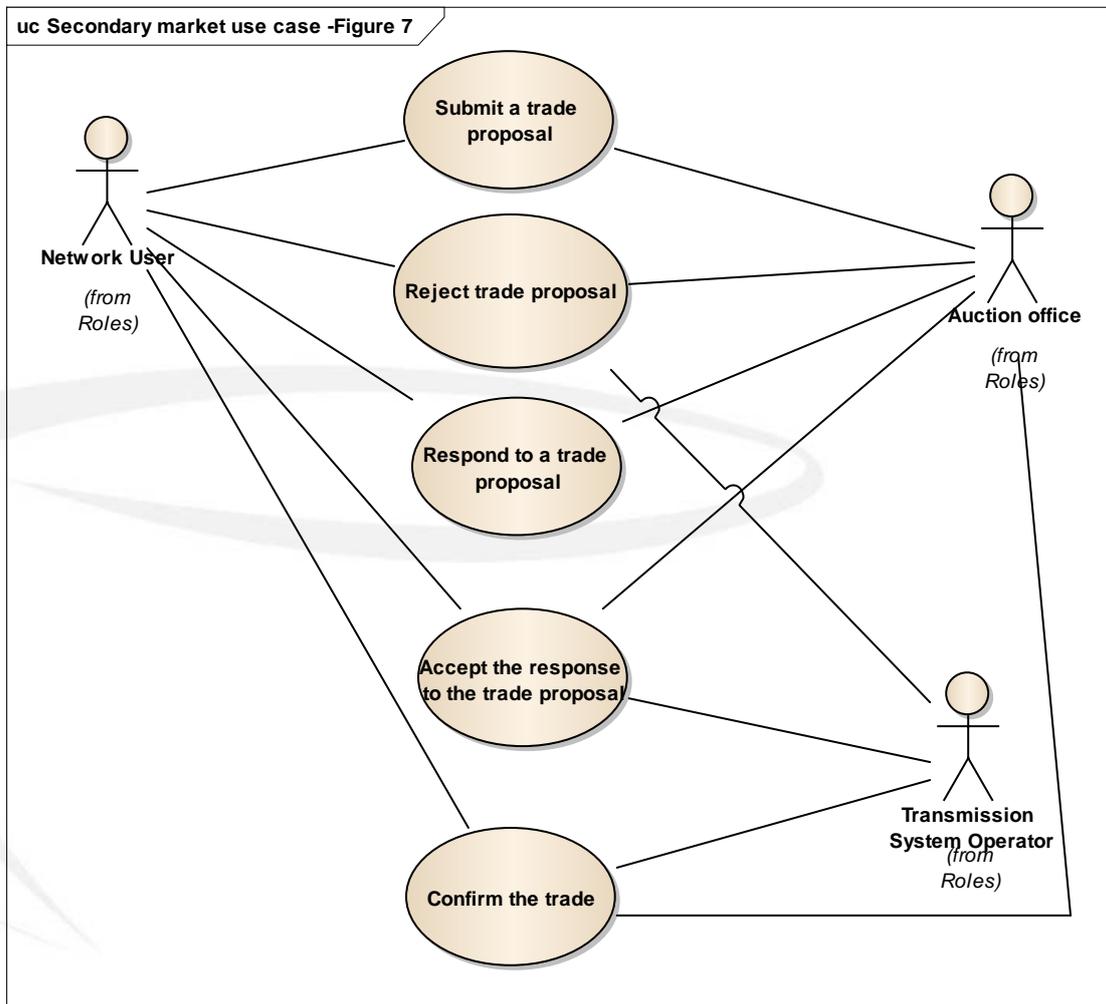
397 The use cases of submit bid, modify bid and cancel bid are the same except that the auction
398 type is generally a uniform price auction where the seller may provide in the bid the capacity
399 for sale and its price. Local market rules may determine that any other kind of auction
400 mechanism may be used.

401 **3.2.5 Operate secondary market (not referenced in the CAM/CMP** 402 **regulation)**

403 This section covers Secondary market functionalities handled by capacity booking platforms
404 as well as the transfer of capacity rights at the conclusion of each trade.

405 In the text no differentiation between transfer of ownership (assignment) and transfer of use
406 is made, however this differentiation should be included in the relevant messages.

407 Capacity products originally booked as bundled shall be traded as bundled products on the
408 secondary market. A bundled capacity trade shall be forwarded to the involved Transmission
409 System Operators for validation.



410

411

Figure 7: Secondary market capacity

412 3.2.5.1 Submit a Trade Proposal

413 A Network User has the possibility to sell or buy capacity to other Network Users.

414 In the text no differentiation between over the counter, call for orders and first committed
415 first served is made, however this differentiation should be included in the relevant messages.

416 Consequently a Network User can submit a trade proposal to the secondary market to sell or
417 buy capacity concerning a connection point. The proposal shall include information about the
418 bookable point, capacity, period, availability type of capacity, bundled/unbundled, nature of
419 transfer(full or partial transfer of rights), price and in case it is a proposal to sell capacity the
420 identification of the related capacity contract incl. issuer of the contract, the duration over
421 which the trade is valid. The trade proposal can be updated/withdrawn by the submitter
422 before any trade(s) have been confirmed.

423 **3.2.5.2 Reject a Trade Proposal**

424 If a trade proposal is submitted to an Auction Office, the Auction Office shall forward the
425 trade proposal to the Transmission System Operator(s) at their request. The Transmission
426 System Operator has the possibility to reject the trade proposal if the proposal does not
427 meet the pre-defined conditions for a trade. The rejection is communicated to the Auction
428 Office, who will forward the information to the concerned Network User(s) and
429 Transmission System Operator(s).

430 **3.2.5.3 Respond to a Trade Proposal**

431 After the publication of a trade proposal Network Users can respond to it by conceding the
432 offer at a given price or by proposing capacity at a requested price.

433 **3.2.5.4 Accept the response to a Trade Proposal (conditional to Transmission 434 System Operator approval)**

435 If an appropriate response to a trade proposal is received from a Network User, the submitter
436 of the trade proposal can close the trade by accepting the response. Once the response to
437 the trade proposal is accepted, it is sent to the relevant Transmission System Operator(s) for
438 confirmation.

439 **3.2.5.5 Confirm a Trade**

440 The Transmission System Operator(s) must be informed about the trade by the involved
441 Network Users or by the Auction Office on their behalf. The Transmission System Operator(s)
442 confirms or rejects the transfer after carrying out the necessary validity checks.

443 The information about the confirmation or rejection of a transfer is sent to the involved
444 Network Users.

445 The Transmission System Operator(s) has/have a maximum of 5 working days for confirming
446 a trade for capacity rights after it has been concluded. For the transfer of use of day-ahead
447 capacity rights a maximum confirmation time of 6 hours starting at 10:00 am (UTC)¹ applies.
448 One or both network user(s) has/have to submit its/their trade latest at 10:00 am (UTC)² on
449 D-1.

450 **3.2.6 Manage credit limits (not referenced in the CAM/CMP regulation)**

451 In order to ensure that a Network User is permitted to purchase a given quantity of capacity
452 during the auction process or a secondary market transaction a Transmission System
453 Operator may inform the Auction Office of the permitted financial limits for a Network User
454 if required.

¹ Winter time; 09:00 am (UTC) daylight saving time

² Winter time; 09:00 am (UTC) daylight saving time

455 The Transmission System Operator identifies each product (auction and trades) subjected to
456 credit limit verification and the multiplication factor(s) to be applied to a Network User's bid
457 (starting price + surcharge) associated to a specific product and to trades, considering the
458 duration of the trades. This defines the framework. The Transmission System Operator
459 transfers to the Auction Office information concerning the Network User validity period(s) of
460 the limits and associated credit value(s).

461 The Transmission System Operator informs the Auction Office of the Network User credit
462 limits every time these evolve.

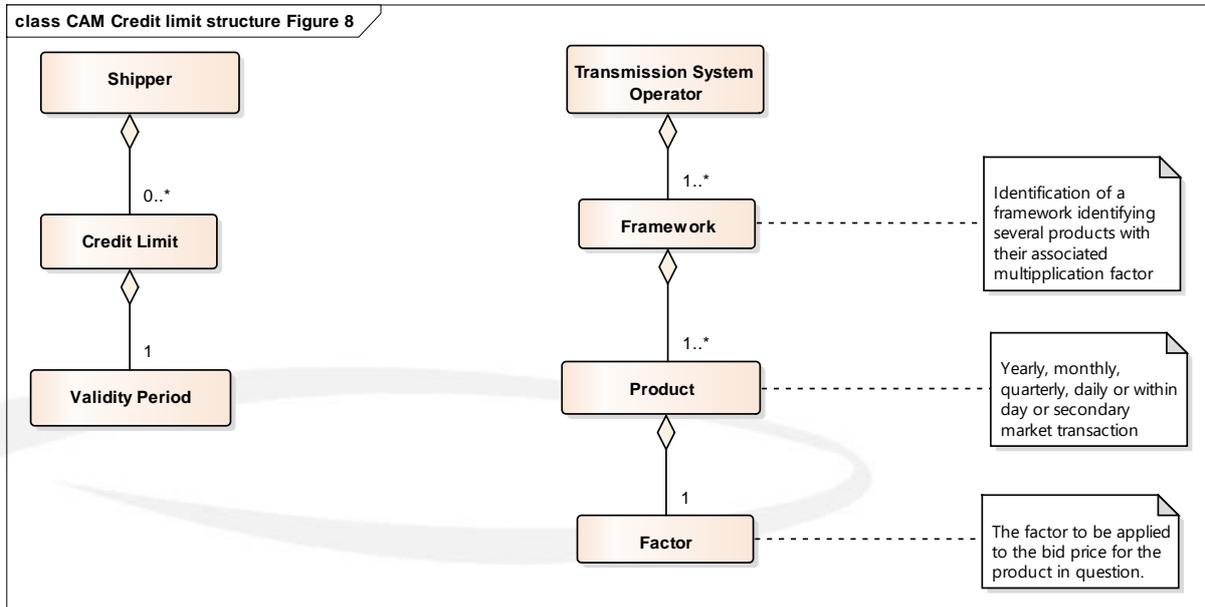
463 Network Users may be able to consult their credit limit information on the booking platform
464 if such a right is accorded by the Transmission System Operator. The financial value for a given
465 Network User's bid associated to a specific product is determined by the multiplication of the
466 unitary price (starting price + surcharge), amount, the period associated with the product,
467 which intersects with the credit limit validity period and the multiplication factor of the credit
468 limit for this product. Before the acceptance of a Network User's bid, the Auction Office
469 verifies if the Network User's credit limit is equal to or greater than the financial value of the
470 bid. If this is the case, the Auction Office accepts the bid and adjusts the remaining credit
471 value after each bid submission and capacity allocation. The Auction Office may provide the
472 used credit value upon request of the Transmission System Operator.

473 A Network User may have a credit limit and an associated validity period. The credit limit
474 covers all the guarantees that the Network User may hold.

475 The Transmission System Operator may define several frameworks. Each framework includes
476 the following information: name of the framework; product type; credit factors which apply
477 to the products.

478 The determination of whether or not a credit limit is exceeded is carried out on a per bid basis
479 where for the product in each framework that the Transmission System Operator decides to
480 apply credit limit verifications, is equal to or greater than the financial value of the bid. If this
481 check is not positive then the credit limit is deemed to be exceeded and the bid is rejected.

482 During the secondary process the remaining credit value is adjusted.

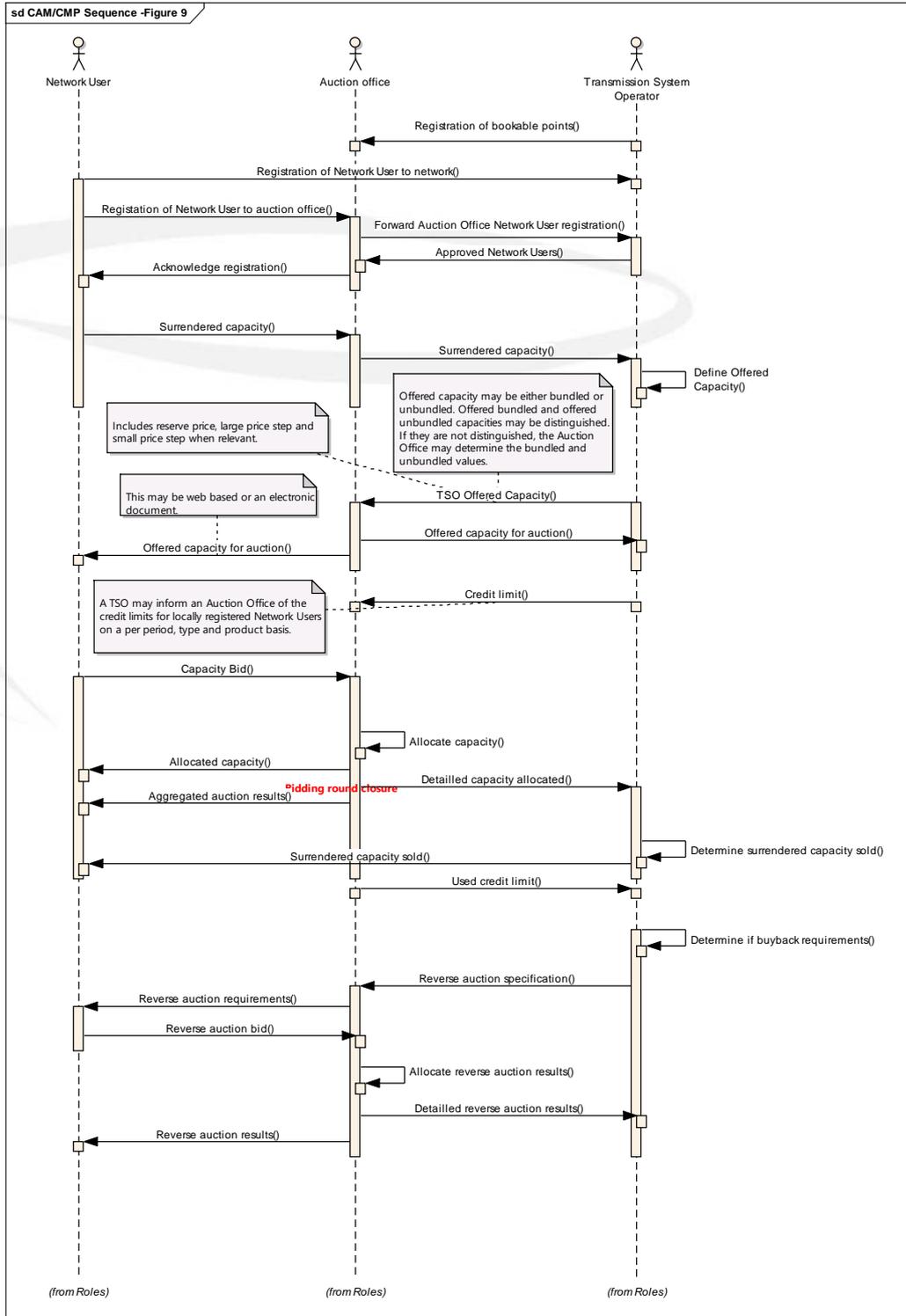


483
484

Figure 8: Credit limit requirements

485 **3.3 Information flow definition**

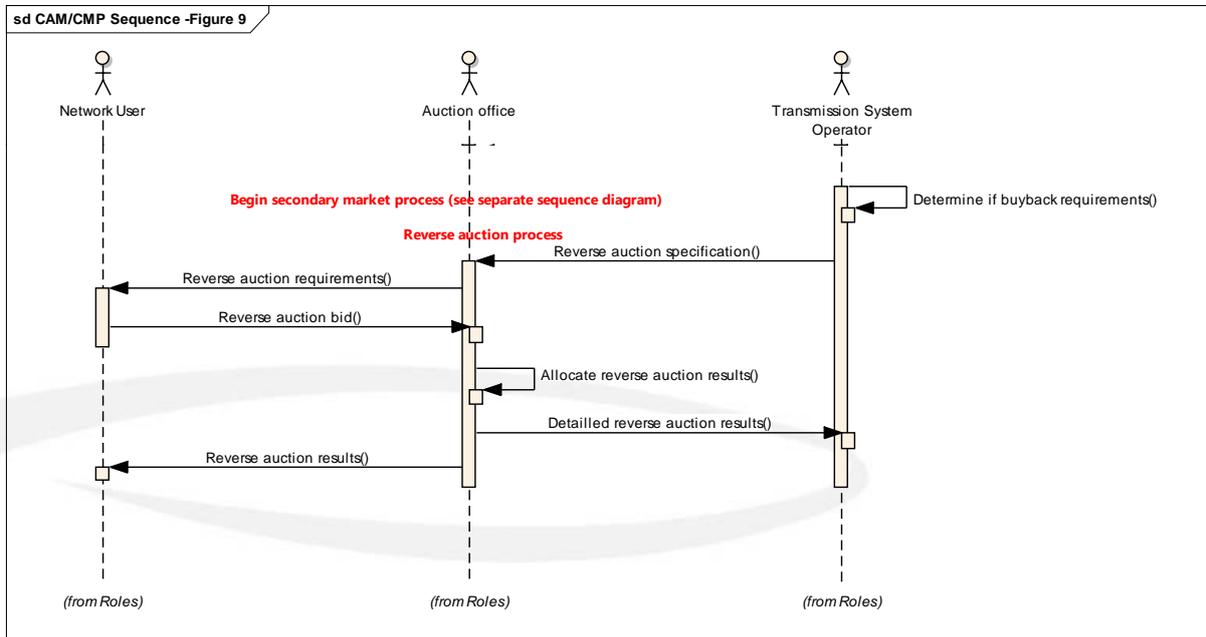
486 **3.3.1 CAM/CMP Sequence flow**



487

488

Figure 9: Information flow sequence



489
490

Figure 10: Information flow sequence

491 **3.3.1.1 Bookable point registration**

492 The Transmission System Operator provides the Auction Office with the information of all the
493 connection points where capacity can be booked.

494 The data exchange solution for this data exchange is to be negotiated between the
495 Transmission System Operator and the Auction Office.

496

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Bookable Point Registration	Transmission System Operator	Auction Office	Private	- Interactive

497 **3.3.1.2 Network User registration to Transmission System Operator**

498 Prior to operating on the market a Network User must register with the Transmission System
499 Operator.

500 The data exchange solution for this data exchange is to be negotiated between the
501 Transmission System Operator and the Network User.

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Network User Registration	Network User	Transmission System Operator	Private	- Interactive

502 **3.3.1.3 Network User registration to Auction Office**

503 Prior to operating on the market a Network User must register with the Auction Office if the
504 Network User wishes to participate in CAM/CMP processes.

505 The data exchange solution for this data exchange is to be negotiated between the Network
506 User and the Auction Office.
507

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Network User Registration to Auction Office	Network User	Auction Office	Private	- Interactive

508 **3.3.1.4 Approved Network Users**

509 The Transmission System Operator will validate and approve the Network User's
510 participation. The Transmission System Operator informs the Auction Office of the Network
511 Users that are permitted to participate in CAM/CMP processes.

512 The data exchange solution for this data exchange is to be negotiated between the
513 Transmission System Operator, the Auction Office and the Network User.
514

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Approved Network User	Auction Office	Transmission System Operator	Private	- Document Based
Approved Network User	Transmission System Operator	Auction Office	Private	- Interactive
Approved Network User	Auction Office	Registered Network User	Private	- Interactive

515 **3.3.1.5 Surrender capacity rights**

516 Prior to a given auction period a Network User may surrender capacity rights that he holds
517 for the intended period of the auction (dependent on national regulations). The capacity to

518 be surrendered is sent to the Auction Office for transmission to all involved Transmission
519 System Operators. Once verified the capacity will be incorporated into the total offered
520 capacity for the next auction product.

521 The common data exchange solution with the registered network user for this data exchange
522 is shown below:

523

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Surrender Capacity Rights	Registered Network User	Auction Office	Private	Interactive

524

525 The data exchange solutions between the Auction Office and the Transmission System
526 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
527 data exchange solution is to be negotiated between the parties:

528

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Surrender Capacity Rights	Auction Office	Transmission System Operator	Private	- Document Based

529 3.3.1.6 Offered capacity

530 The capacity on offer shall be sent by each Transmission System Operator to the Auction
531 Office in compliance with the business case defined in section 3.2.3.1.2.

532 The Auction Office assigns an auction identification to the offered capacity provided by the
533 Transmission System Operators.

534 The Auction Office informs the Transmission System Operators of the products that will be
535 auctioned and publishes the information for use by the market along with any price step
536 information if the auction concerns an ascending clock auction.

537 The data exchange solutions between the Auction Office and the Transmission System
538 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
539 data exchange solution is to be negotiated between the parties:

540

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Offered Capacity	Transmission System Operator	Auction Office	Private	Recommended - Document Based

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Offered Capacity	Auction Office	Transmission System Operator	Private	Recommended - Document Based

541 The common data exchange solution with the registered network user for this data exchange
542 is shown below:
543

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Offered Capacity	Auction Office	Registered Network User	Public	Interactive

544 3.3.1.7 Credit limit

545 The Transmission System Operator may inform the Auction Office of credit restrictions that
546 have been placed on Network Users in the context of a contract. The Auction Office ensures
547 that the cumulative purchase of auction products and trades does not exceed the Network
548 Users credit limit. (refer to section 3.2.6)

549 The credit limit information may be sent to the Auction Office at any time to enable more
550 conclusive verifications be carried out within the auctioning system. This information may
551 include the creation, modification or suppression of a credit limit.

552 The Auction Office may provide used credit value of all relevant Network Users to the
553 Transmission System Operator upon request.

554 The data exchange solutions between the Auction Office and the Transmission System
555 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
556 data exchange solution is to be negotiated between the parties:
557

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Credit Limit	Transmission System Operator	Auction Office	Private	Recommended - Document Based
Credit Limit	Auction Office	Transmission System Operator	Private	Recommended - Document Based

558 **3.3.1.8 Capacity bid**

559 Network Users submit bids in accordance with the type of auction being run. Before a uniform
560 price auction or an ascending clock bidding round closes they may submit modifications to
561 their bids or cancel the bid completely if the auction process allows it. (refer to section 3.2.3.2)

562 The common data exchange solution for this data exchange is shown below:
563

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Capacity Bid	Registered Network User	Auction Office	Private	Interactive

564 **3.3.1.9 Allocated capacity**

565 The Auction Office allocates offered capacity to a Network User's bid and informs the
566 Network User of the quantity and price allocated according to the given auction process.
567 (refer to section 3.2.3.3)

568 The common data exchange solution for this data exchange is shown below:
569

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Allocated Capacity	Auction Office	Registered Network User	Private	Interactive

570 **3.3.1.10 Detailed capacity allocated**

571 Once the capacity allocation has terminated the Auction Office transmits all the Network User
572 allocations to the Transmission System Operator. (refer to section 3.2.3.4)

573 The data exchange solutions between the Auction Office and the Transmission System
574 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
575 data exchange solution is to be negotiated between the parties:
576

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Detailed Capacity Allocated	Auction Office	Transmission System Operator	Private	Recommend-Document Based

577 **3.3.1.11 Aggregated auction results**

578 This represents the total aggregated values for the auction (at least the clearing price and
579 total capacity sold) and is intended for use by any market participant. (refer to section 3.2.3.4)

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

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Aggregated Auction Results	Auction Office	All	Public	Interactive

581 **3.3.1.12 Surrendered capacity sold**

582 When the Transmission System Operator receives the detailed results of the auction it
583 determines if the capacity sold is greater than the Transmission System Operator's available
584 technical capacity. If this is the case the Transmission System Operator allocates the
585 remaining sold capacity to the Network Users that have surrendered capacity. (refer to
586 section 3.2.3.1.1.6)

587 The Transmission System Operator will inform the Network User about the Surrendered
588 Capacity Sold.

589 The common data exchange solution between Transmission System Operator and the
590 registered Network user is shown below:

591

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Surrendered Capacity Sold	Transmission System Operator	Registered Network User	Private	Document based

592 **3.3.1.13 Reverse auction requirements**

593 In the case where it is necessary to buy back capacity via an auction, the Transmission System
594 Operator determines how much capacity should be bought back and a cap price for any
595 purchases.

596 The data exchange solutions between the Auction Office and the Transmission System
597 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
598 data exchange solution is to be negotiated between the parties:

599

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
------------------	-----------	---------	-----------------------	-------------------------------

Reverse Auction Requirements	Transmission System Operator	Auction Office	Private	Recommended - Document Based
------------------------------	------------------------------	----------------	---------	------------------------------

600 **3.3.1.14 Reverse auction bid**

601 The bidding procedure will be the same as carried out for a uniform price auction. Local
602 market rules may determine that any other kind of auction mechanism may be used.

603 The common data exchange solution for this data exchange is shown below:
604

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Reverse Auction Bid	Registered Network User	Auction Office	Private	Interactive

605 **3.3.1.15 Allocate reverse auction results**

606 Once the reverse auction closes the Auction Office evaluates the bids received and allocates
607 the capacity to the Network Users. The Auction Office distributes the finalised results.

608 In the case where bundled capacity has been sold back the adjacent Transmission System
609 Operator is informed of the sale.

610 The data exchange solutions between the Auction Office and the Transmission System
611 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
612 data exchange solution is to be negotiated between the parties:
613

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Allocate Reverse Auction Results	Auction Office	Transmission System Operator	Private	Recommended - Document Based

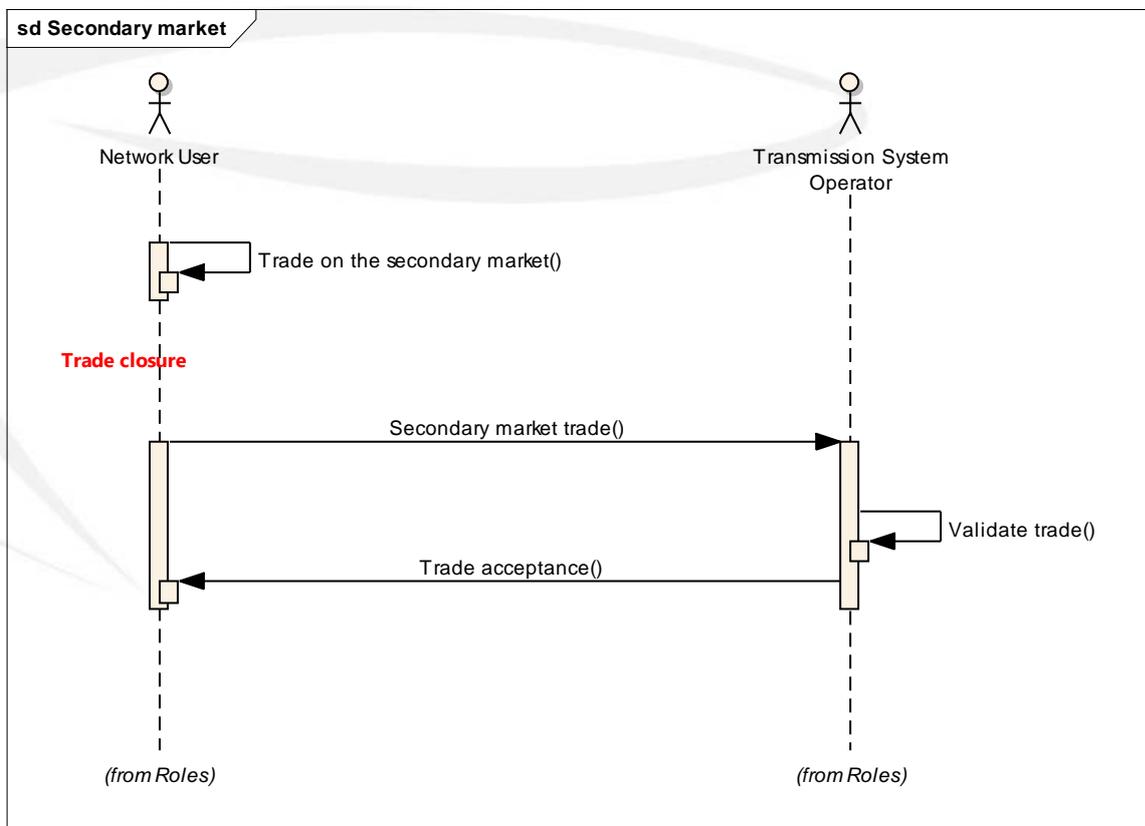
614 The common data exchange solution for this data exchange is shown below:
615
616

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Allocate Reverse Auction Results	Auction Office	Registered Network User	Private	Interactive

617 **3.3.2 Secondary market sales**

618 Capacity may be sold on a secondary market. Bundled capacity bought in an auction shall be
619 sold on the secondary market as bundled capacity. Unbundled capacity on both sides of an
620 interconnection point may be bundled in the secondary market.

621 In the text no differentiation between transfer of ownership (assignment) and transfer of use
622 is made, however this differentiation should be included in the relevant messages. Besides,
623 no differentiation between over the counter, call for orders and first committed first served
624 is made, however this differentiation should be included in the relevant messages.



625
626

Figure 11: Secondary market sequence

627 If capacity is offered on the secondary market the Network User that traded the capacity or
628 the Auction Office (on behalf of the Network Users) must inform the Transmission System
629 Operator of the trade.

630 The common data exchange solution for the data exchange between the Registered Network
631 User or Auction Office on behalf of the Registered Network User and the Transmission System
632 Operator is shown below:
633

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
------------------	-----------	---------	-----------------------	-------------------------------

Secondary Market Sales	Registered Network User (or Auction Office)	Transmission System Operator	Private	Interactive
------------------------	---	------------------------------	---------	-------------

634 The Transmission System Operator validates the trade information. Once the trade
635 submission is deemed valid, the Transmission System Operator confirms the trade. The
636 Transmission System Operator informs the Network Users or the Auction Office, who is acting
637 on behalf of the Network Users, about the confirmation.

638 In the case of error the Network Users are informed and take the necessary corrective action.

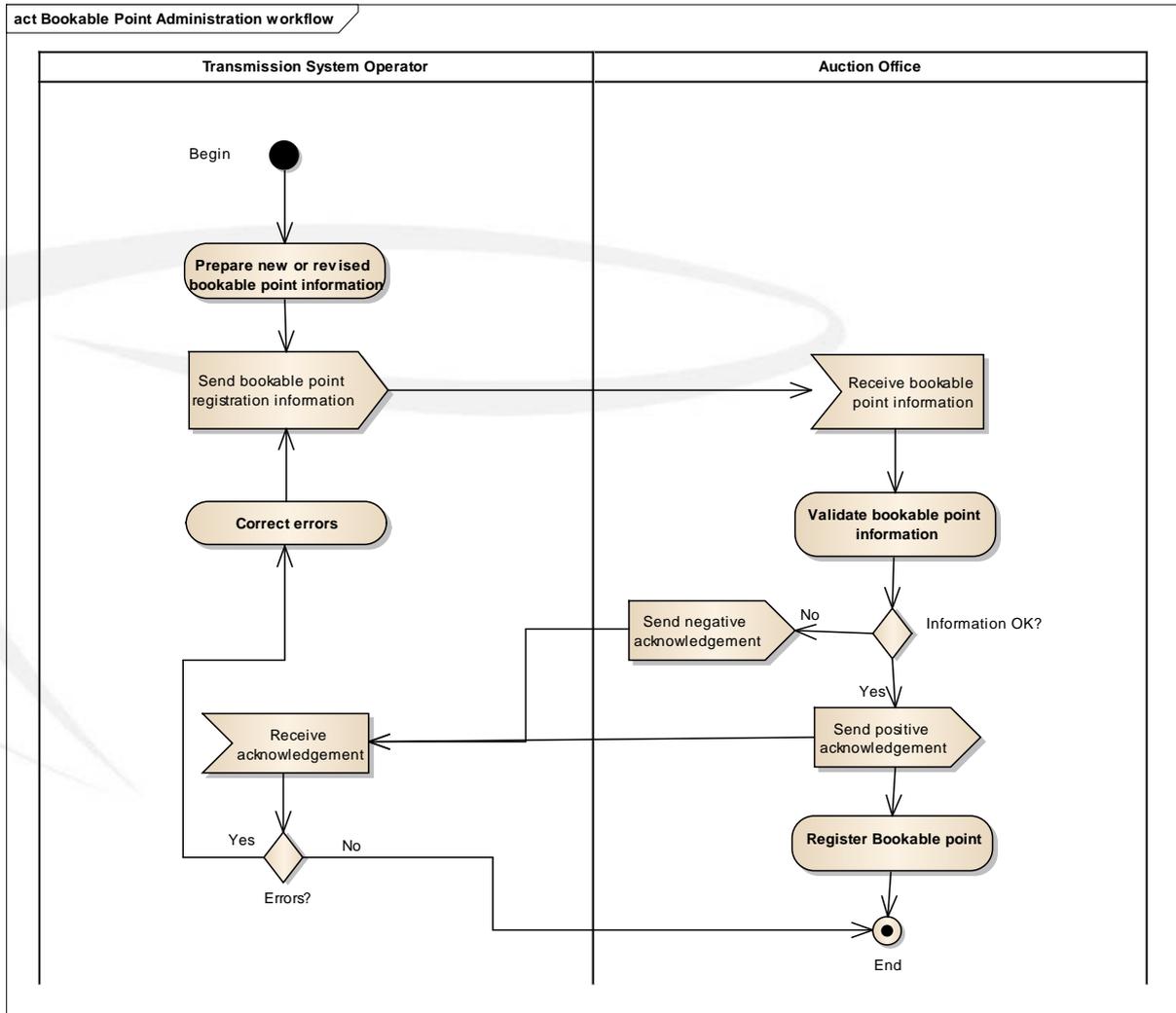
639 The common data exchange solution for this data exchange is shown below:

640

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Secondary Market Sales	Transmission System Operator	Registered Network User (or Auction Office)	Private	Interactive

641 **3.3.3 CAM/CMP Workflow**

642 **3.3.3.1 Bookable point Administration process**



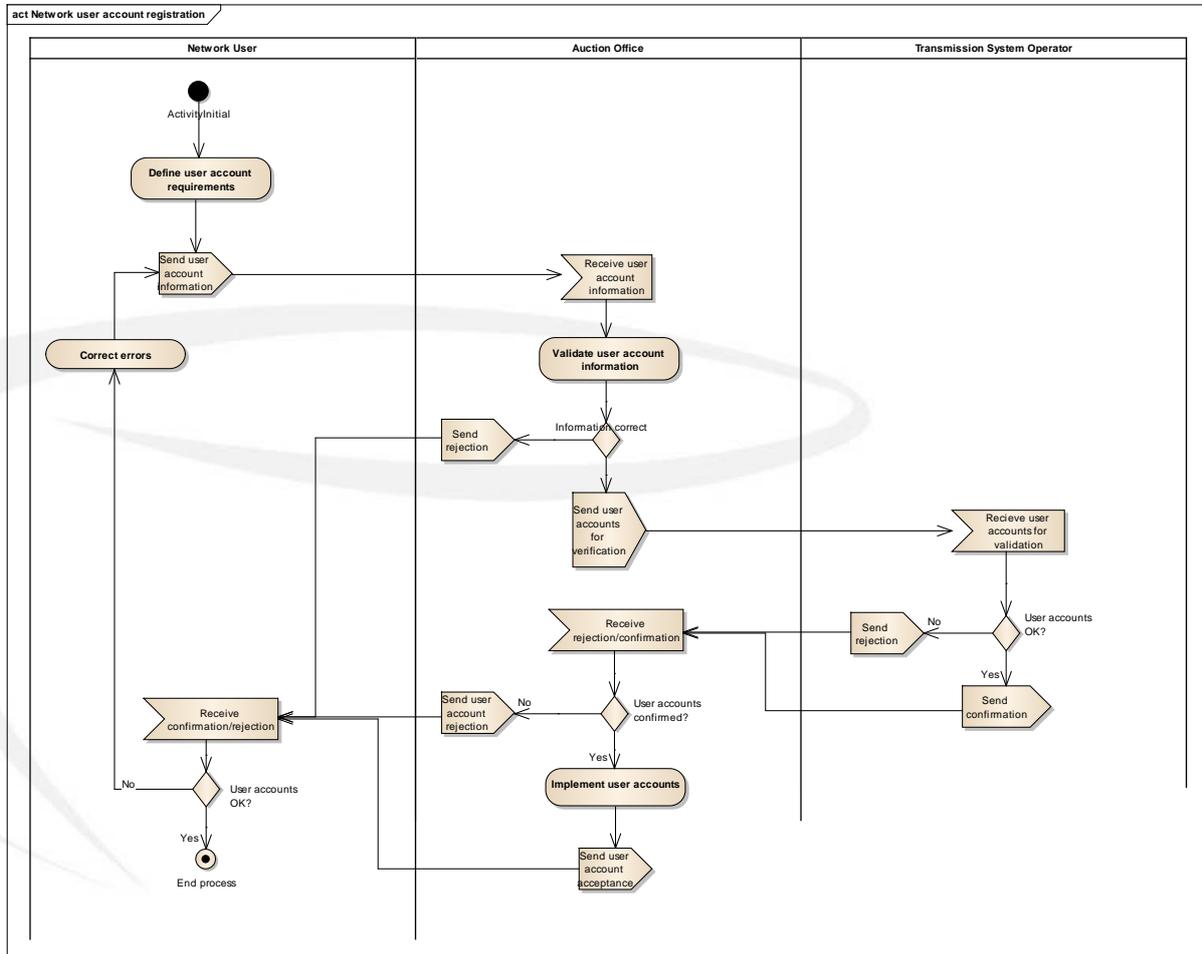
643

644

Figure 12: Bookable point Administration workflow

645 For the publication of bookable points on the booking platform the Transmission System
 646 Operator sends to the Auction Office the data for each bookable point, where capacity is
 647 going to be sold. This includes the data for a new bookable point as well as data updates for
 648 an existing and already published bookable point.

649 **3.3.3.2 Network User Registration process**



650
651

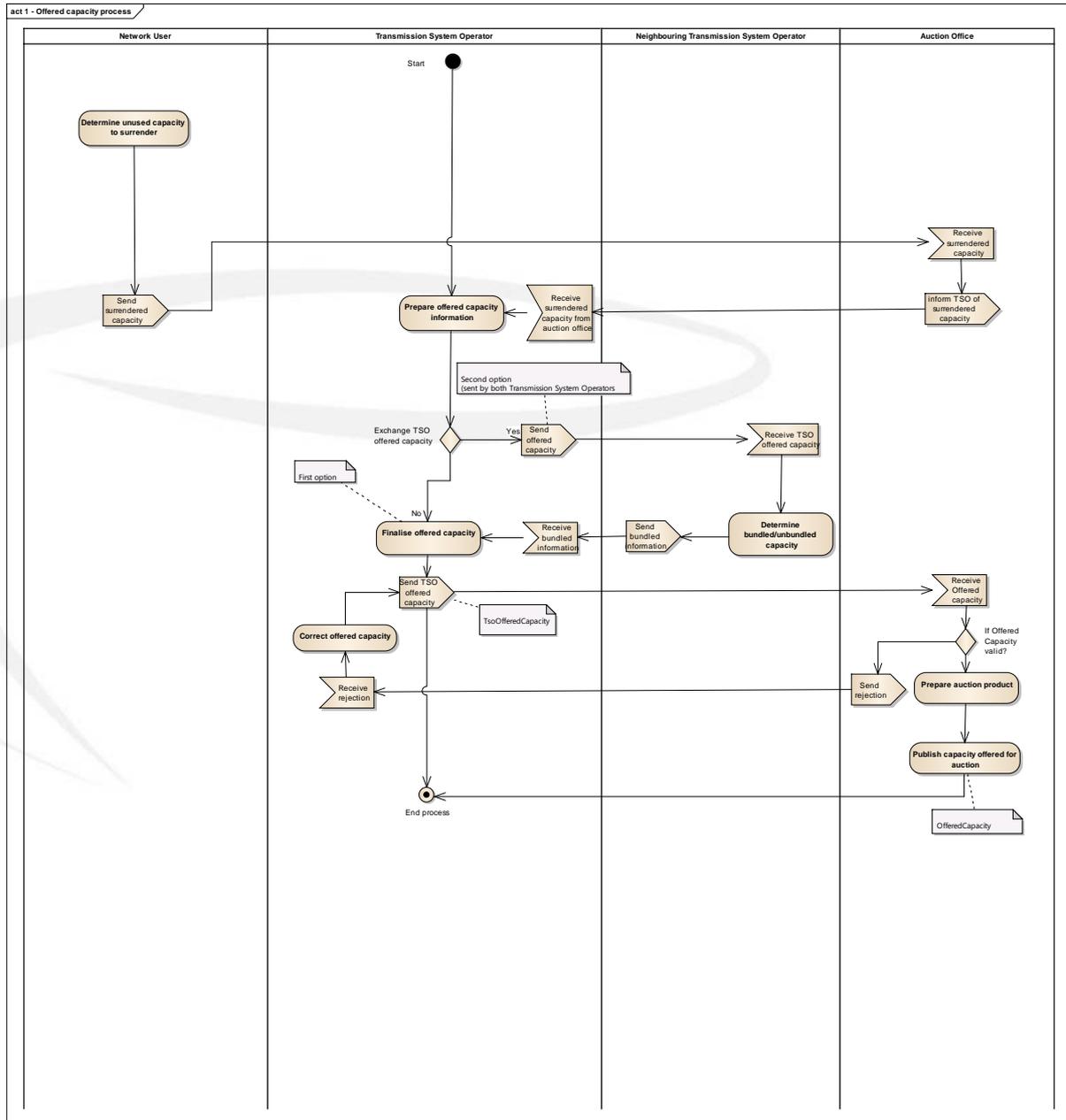
Figure 13: Network User Registration workflow

652 Two Network User registrations are required for each Network User. One for the registration
653 to the Transmission System Operator network and one to the Auction Office.

654 The Auction Office registration request includes at least one authorised person and at least
655 one Transmission System Operator identification.

656 Network User accounts are provided by the Network User or the Transmission System
657 Operator on behalf of the Network User to the Auction Office if required by the Transmission
658 System Operator. The Auction Office validates the registration data and forwards the valid
659 requests to the identified Transmission System Operator for approval. The Transmission
660 System Operator confirms/rejects the approval request. Once confirmed, the registration
661 information is then sent to the Network User.

662 **3.3.3.3 Offered capacity process**



663
664

Figure 14: Offered capacity workflow

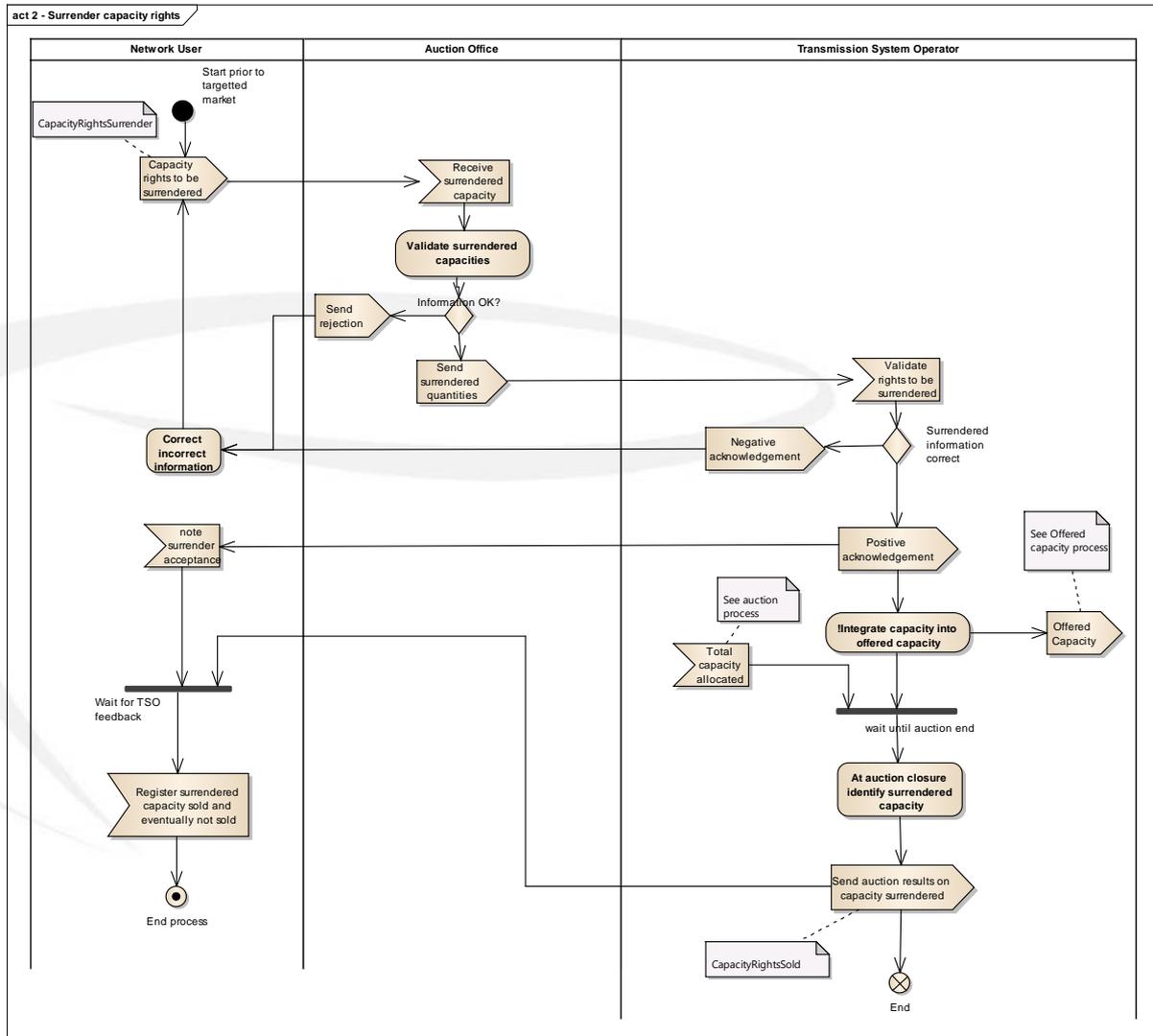
665 The determination of offered capacity begins on a cyclic basis depending on the standard
666 capacity product.

667 The Transmission System Operator(s) send(s) the offered capacity to the Auction Office
668 according to the options described in point 3.2.3.1.2.

669 For a given market situation a Transmission System Operator may provide the Auction Office
670 with credit limitations of the Network Users for the products to be auctioned or for secondary
671 transactions between Network Users. This information will be used by the Auction Office to

- 672 ensure the legitimacy of the bids and the secondary trades (only in the case of Network Users
673 that buy capacity).
- 674 The Auction Office then makes this offered capacity information available to the market in
675 the appropriate manner (web publication, download capability, etc..).

676 **3.3.3.4 Surrender capacity process**



677
678

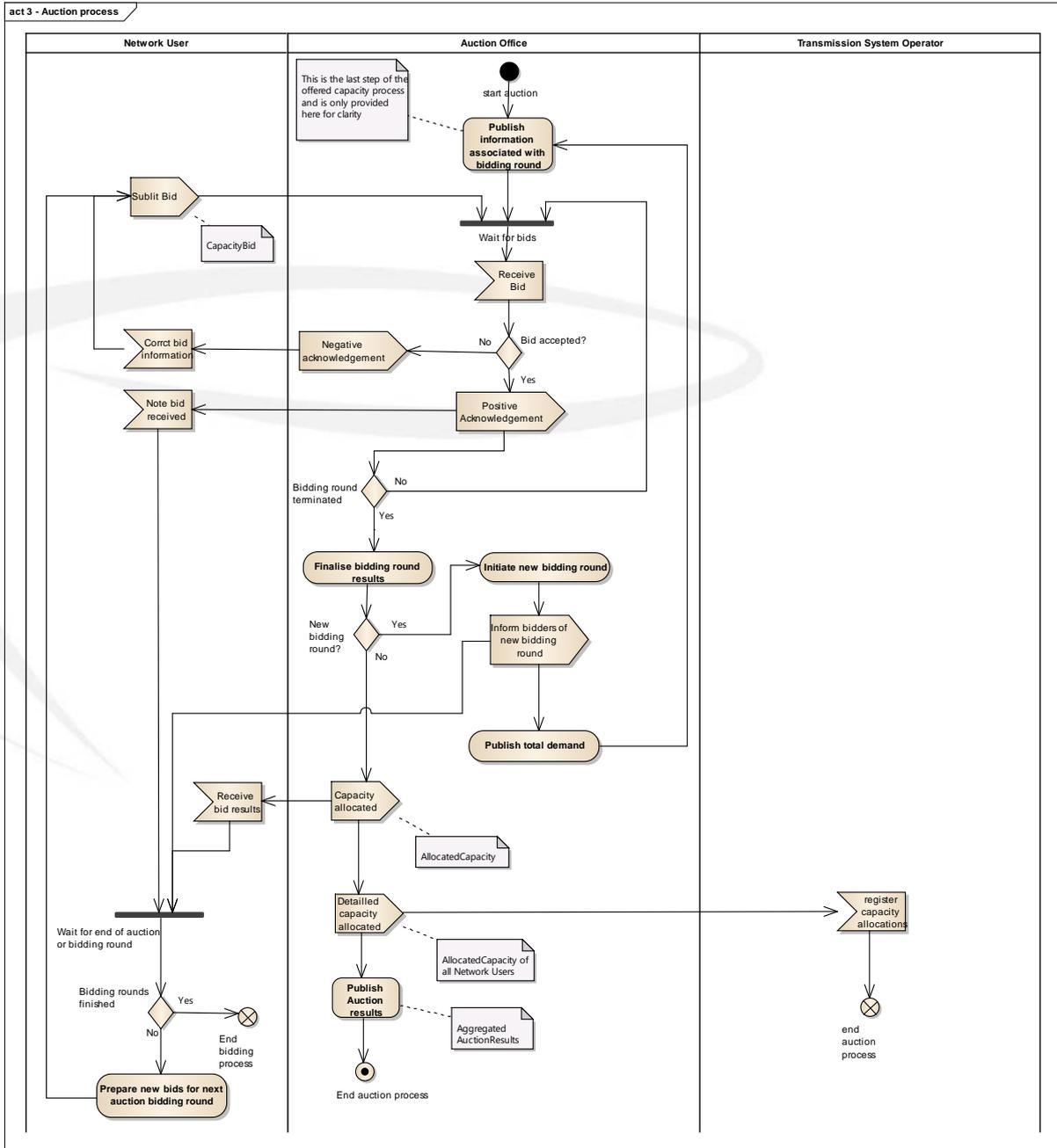
Figure 15: Surrender capacity process

679 If a Network User has more capacity than needed, the excess may be surrendered to the
680 Auction Office who sends the surrendered capacities to the relevant Transmission System
681 Operators (depending on the bundling situation) for inclusion in the offered capacity.

682 The Transmission System Operator will ensure that the capacity that has been surrendered is
683 correct (bundled capacity not split, capacity available, etc.). If everything is in order the
684 capacity is integrated into the offered capacity.

685 When the auction is completed, the Transmission System Operator determines the part of
686 the surrendered capacity that has been sold and informs the Network User of the outcome.

687 **3.3.3.5 Auction process**



688
689

Figure 16: Auction workflow

690 Transmission System Operators or the Auction Office on behalf of the Transmission System
691 Operators shall provide Network Users who bid in the day-ahead auctions with the option to
692 have valid unsuccessful bids automatically entered into the subsequent within-day auction
693 according to Article 15 (10) CAM NC.

694 The Auction Office validates each bid and informs the bid submitter of the outcome of the
695 validation process. In the case of a rejection, the Network User may correct the bid
696 information and resubmit it to the Auction Office before the bidding round closure.

697 In the case of the bid being successfully validated the Network User awaits the outcome of
698 the auction. However, during the bidding round it is possible for the Network User to submit
699 additional bids in the case of uniform price auctions, to make modifications to existing bids
700 or to cancel an existing bid.

701 The Auction Office manages the bids received and any changes provided until the bidding
702 round closes.

703 Once the bidding round closes, the Auction Office determines the situation between the
704 capacity requested and the capacity offered.

705 The opening of a new bidding round in case of an ascending clock auction is subject to Article
706 17 CAM NC.

707 A Transmission System Operator can send to the Auction Office a request to cancel an ongoing
708 auction due to a force majeure. The Auction Office cancels the auction and informs all
709 involved Transmission System Operators and Network Users about the auction cancellation.

710 Prior to beginning the new bidding round, the Network Users that participated in the
711 previous bidding round are informed that a new bidding round will take place with a new
712 price step. In addition, information on the previous bidding round is published on the
713 booking platform website.

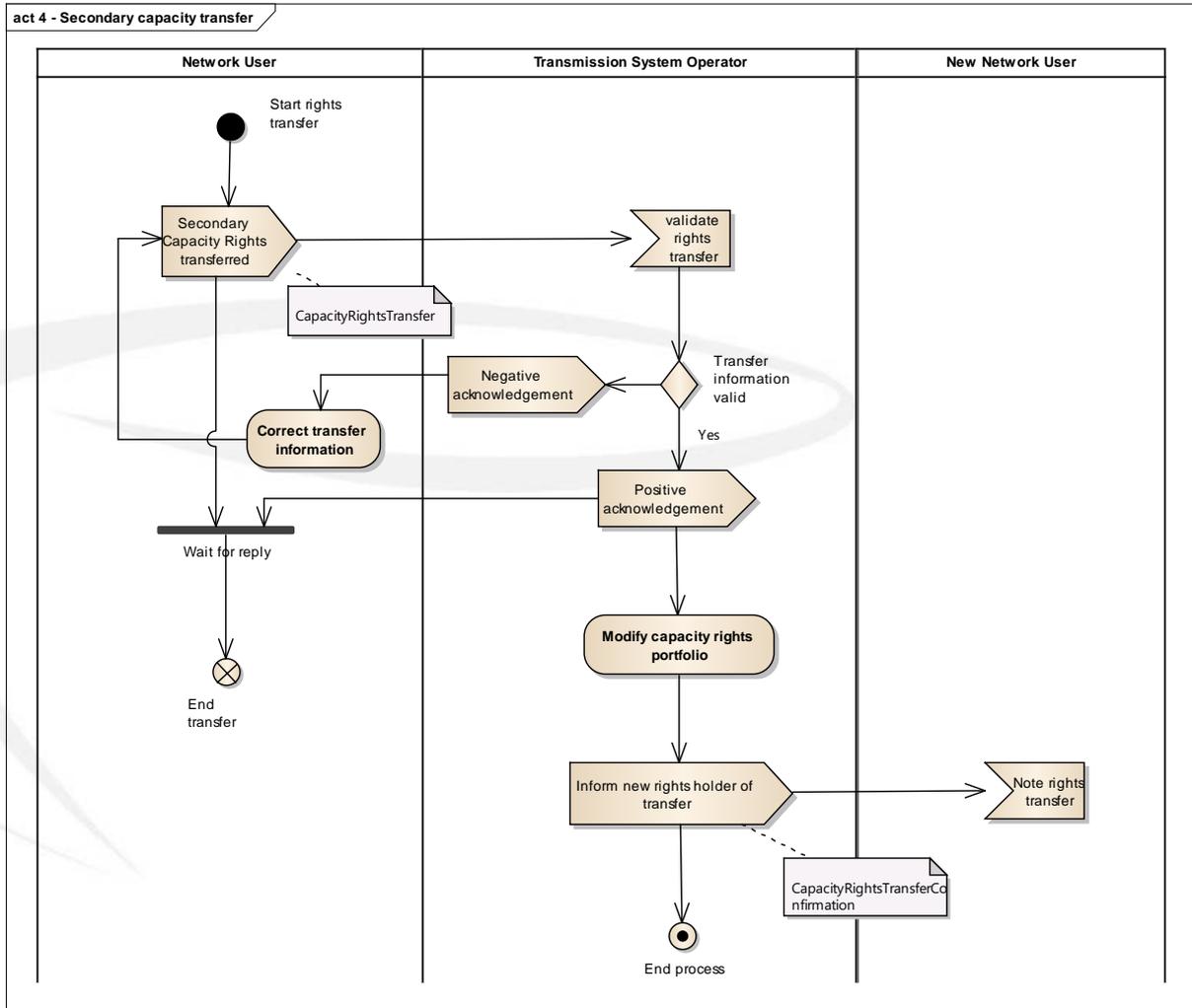
714 At the closure of the auction, the Auction Office allocates the capacity respecting market rules
715 and informs each Network User of the outcome of the auction. The Auction Office also
716 provides the complete list of allocations to the Transmission System Operators.

717 In a final step the Auction Office publishes the results of the auction.

718 The bidding in the reverse auction takes place in a similar fashion as an ordinary auction.
719 When the auction closes the Auction Office processes all the bids and then may provide the
720 list of validated bids to the Transmission System Operator.

721 The Auction Office then informs the Network Users of their successful bids.

722 **3.3.3.6 Secondary market trade process**



723
724

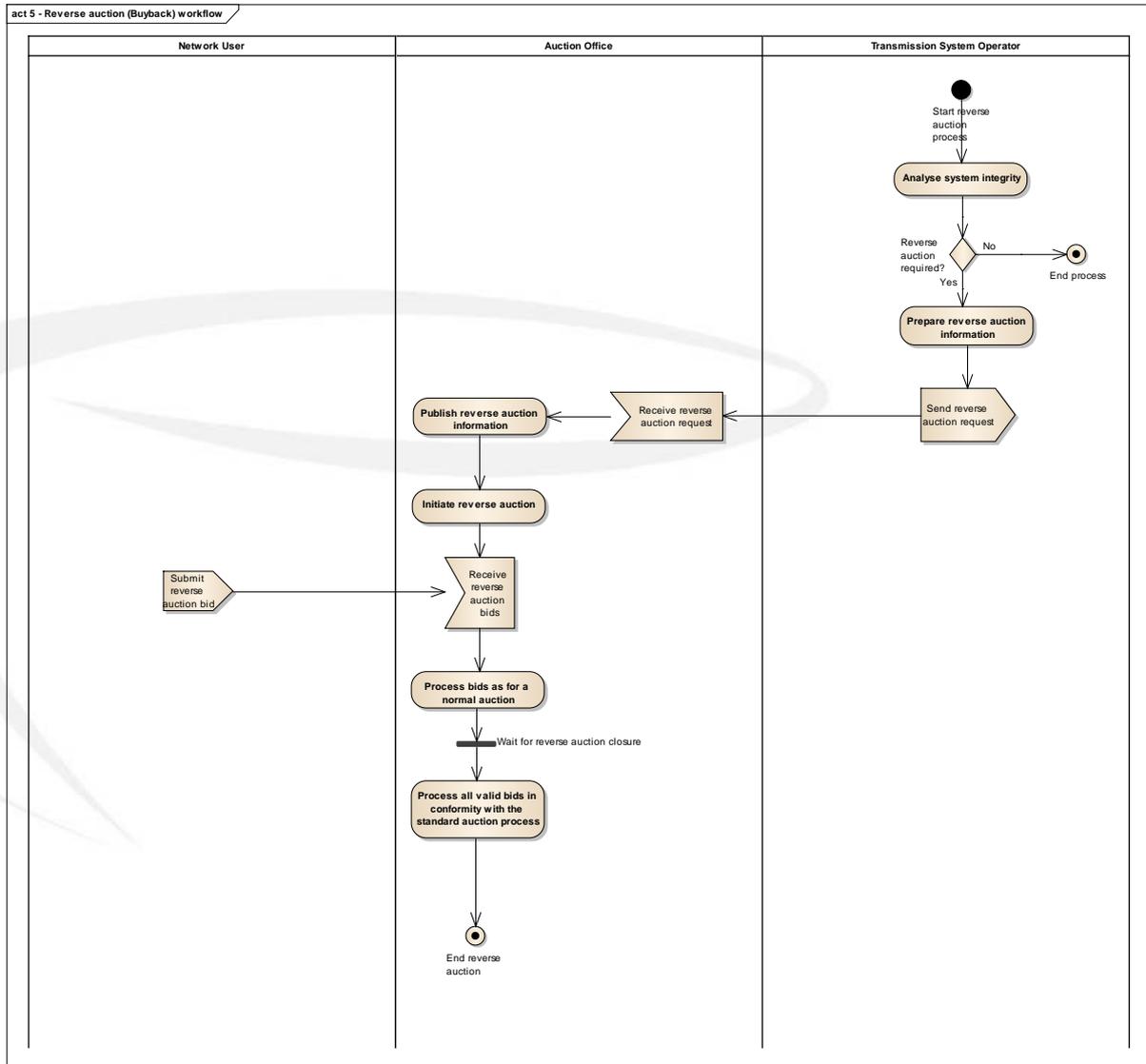
Figure 17: Secondary market transfer process

725 A secondary market trade process may take place where Network Users and eventually
726 Transmission System Operators (in the case of reverse process), may trade the capacity that
727 has been acquired.

728 The Transmission System Operator(s) must be informed of all trades by either the Network
729 Users or the Auction Office on their behalf.

730 The Transmission System Operator(s) validate(s) the trade and when successful inform(s)
731 directly or through the Auction Office the concerned Network Users of the capacity that has
732 been transferred.

733 **3.3.3.7 Reverse auction process**



734

735

Figure 18: Reverse auction workflow

736 The Transmission System Operator analyses if there is sufficient technical capacity in the
737 network to handle the nominations provided by the Network Users.

738 In the case where there is insufficient technical capacity an oversubscription situation exists
739 and the Transmission System Operator must initiate a reverse process in order to align the
740 network requirements with the technical possibilities.

741 Once the amount of overcapacity is determined the Transmission System Operator informs
742 the Auction Office of the amount to be bought back from the market.

743 The reverse auction process then takes place as defined within the auction process.

744 As alternative to a reverse auction the Transmission System Operator may buy back the
745 capacity acting in the role of a Network User on the secondary market.

746 **3.4 Information model requirements**

747 The following information requirements have been identified as the essential but not
748 exhaustive business information that needs to be catered for in the relevant information
749 exchanges.

750 **3.5 Definitions of the attributes used in all the models**

Name	Description
Account	<p>An account assigned by a Transmission System Operator or by Market area coordinator to a Network User used for capacity and balancing accounting. This is also known as a Balancing Group or Portfolio code</p> <p>This is identified with the InternalAccountIdentification (see definition).</p>
AdditionalComments	<p>Additional text may be provided by the Transmission System Operator or the Auction Office to provide additional non-processable information.</p>
AllocationIdentification	<p>The identification of the contractual reference under which the capacity was assigned by an Auction Office</p>
AuctionIdentification	<p>The identification of the auction where the capacity rights were offered</p>
AuctionPeriod	<p>The period during which an auction occurs</p>
AuctionSequence	<p>The identification of the specific order for the auction of the capacity products as indicated by the Transmission System Operator.</p>
AuctionType	<p>The type of the auction algorithm, e.g. uniform price auction and ascending clock auction</p>
AuthorisedUserIdentification	<p>The identification of a user authorised by a Network User</p>
AvailabilityType	<p>The identification of the type of availability of the capacity (e.g. firm or interruptible)</p>
BIC	<p>Bank Identifier Code</p>
BidAmount	<p>The total quantity of the bid</p>

Name	Description
BiddingRound	<p>The identification of the auction round where the capacity rights were allocated in an ascending clock auction</p> <p>A uniform price auction consists of a single bidding round.</p>
BiddingRoundPrice	The price that has been established for a given bidding round
BidIdentification	The identification of the Network User's bid provided by the Auction Office or the Network User
BidPrice	<p>The price bid on top of the starting price for the capacity requested</p> <p>The price bid (premium/surcharge) is fixed. The regulated tariff might be a floating or fixed amount depending on the tariff arrangements in place.</p>
BidRollover	The indication to rollover non-allocated capacity bids from the Day Ahead auction to the first Within-Day auction
BillingPostalAddress	The billing address (of a person or business) to which mail is delivered
BookablePoint	A bookable point may be defined as the identification of a (inter)connection point (EIC), the flow direction, the "to TSO" and "from TSO" or in the case of one Transmission System Operator at both sides of the connection point the "to Market area" and the "from Market area"; in case of an unbundled point "to TSO" or "from TSO" is not required.
BookablePointName	The name of a bookable point as defined by the Transmission System Operator that can be displayed

Name	Description
BookablePointIdentification	A sequential number distinguishing one entity from another, for example for distinguishing bookable points
BookablePointType	The type of the bookable point such as LNG, storage, transmission, production, supply,...
BookedCapacity	Capacity already allocated to Network Users at a ConnectionPoint This information may be transferred by the Transmission System Operator for the yearly auction according to Article 19 (5(a) & (b)) CAM NC.
BookingCosts	The costs associated with the capacity allocation
CapacityAmount	The amount of capacity specified for the period
CapacityAmountAllocated	The amount of capacity allocated to a bid
CapacityAmountOffered	The amount of capacity offered for a given auction
CapacityAmountSold	The amount of capacity rights that have been sold in an auction, aggregated across all Network Users
CapacityAmountSurrendered	The amount of capacity that have been surrendered by a Network User to a Transmission System Operator to be presented for sale on an auction.
CapacityAmountTransferred	The amount of capacity that has been transferred between Network Users on the secondary market

Name	Description
CapacityOfferIdentification	Identification assigned by a Transmission System Operator to identify an offered capacity instance
CapacityType	Identification of way in which the capacity rights have been packaged (i.e. Bundled, unbundled).
ClearingPrice	<p>The price that successful Network Users shall pay at a specific auction to the concerned Transmission System Operator</p> <p>It is determined as set out in Article 17 (19) (in an ascending clock auction) and Article 18 (11) (in a uniform price auction) CAM NC.</p>
CompetingProductCharacteristic	The characteristic of a product that is to be placed in competition in an auction
ConnectionPoint	The point where gas sale/purchase/trade/transfer may take place
ConnectionPointIdentification	The identification of the ConnectionPoint
ContactType	The type of a Network User contact such as dispatching, capacity operation and invoicing
ContractReference	The reference of a Transmission System Operator assigned contract
Conversion	The quantity of unbundled capacity already booked that may be converted into bundled capacity in case of a successful firm capacity bid
ConversionAmount	The unbundled conversion amount
ConversionReference	The reference to unbundled booked capacity that is used to auction for bundled capacity
CreditLimitAmount	The amount of a credit limit
CreditLimitIdentification	The identification of a credit limit assignment to a Network User

Name	Description
CreditLimitUsed	The amount of a credit limit used on a primary or secondary market by a Network User
Currency	The identification of a currency as defined in ISO 4217
Email	An electronic mail address
FamilyName	Family name of a person
Fax	The telephone number of a fax machine
FirstName	Part of a person's full nomenclature
FromTso	The Transmission System Operator where the gas is exiting the network
FromMarketArea	The Market area where the gas is exiting the network
FrameworkIdentification	Identification code for the framework that represents a combination of products and multiplication factors for the calculation of a credit limit
FrameworkName	The name of a credit limit framework
GasType	The type of gas which may be H-gas or L-gas
IBAN	International Bank Account Number
InterConnectionPoint	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
InterConnectionPointIdentification	An energy identification code (EIC) distinguishing interconnection points

Name	Description
InternalAccountIdentification	The identification of an account (balancing group or portfolio code) managed by a Transmission System Operator for a Network User that is registered in the Transmission System Operator's area
LargePriceStep	A fixed amount that is defined per auction.
MarketArea	<p>A market area represents the virtual merger of transmission systems and downstream distribution systems to form a single balancing zone. In this respect, market areas are comparable to trading zones.</p> <p>This is identified with the FromMarketArea and ToMarketArea (see definition).</p>
MaxBidPercentage	This information defines the maximum quantity that a bidder may bid in the auction expressed as a percentage.
MinimumCapacityAmount	<p>The Minimum Amount of Capacity for the respective Standard Capacity Product which the Network User is willing to be assigned (origin: CAM NC)</p> <p>The MinimumCapacityAmount is only used in case of uniform price auctions, where it is mandatory.</p>
MobileTelephoneNumber	The telephone number of a wireless handheld device that allows users to make calls and send text messages, among other features
MultiplicationFactor	The factor that is used to multiply the value of a Network User's transactions of a given type, in order to calculate the used value of the credit limit (depending on local market rules). This information is delivered by the Transmission System Operator to the Auction Office.

Name	Description
NetworkUserIdentification	The identification of a Network User that has acceded to and is compliant with all applicable legal and contractual requirements that enable him/her to book and use capacity on the relevant Transmission System Operators' network under a Capacity Contract (origin: CAM NC)
NetworkUserName	The name of the legal entity acting as Network User
OfficeTelephoneNumber	The telephone number of a standard telephone in an office that is wired to a telephone line
Period	The period covered for the capacity amount in question
ProductIdentification	The identification of a credit limit product that has a multiplication factor
PublicationDateTime	The publication date and time of a reverse auction
RegisteredPostalAddress	The address (of a person or business) to which mail is delivered, as distinct from the actual street address
ReservePrice	The minimum eligible floor price in the auction, being equal to the Regulated Tariff
ReverseAuctionType	The type of reverse auction that is used by the Transmission System Operator to solve a technical congestion in the transmission system (Buyback)
RollOver	An indicator to inform the Auction Office that any unsold capacity shall be rolled over to the next defined period
ShareRate	A portion shared between Transmission System Operators of the auction premium
SmallPriceStepAmount	The amount of each small price step

Name	Description
SmallPriceStepNumber	The number of small price steps included in the LargePriceStep
StandardCapacityProductType	The duration of the standard capacity product: yearly, quarterly, monthly, daily or within-day
StartingPrice	The price defined by the Transmission System Operator which is the minimum price in an auction for a certain capacity product
Status	The condition of an object (e.g. Auction, Network User, bookable point), such as rejected, modified, cancelled, valid, active...
TermsAndConditionsAccepted	A flag to indicate that the Terms and Conditions have been accepted by the authorised user
Timestamp	The date and time of the current credit limit situation
Title	Prefix added to a person's name
TotalCreditLimit	The total credit limit provided by the Transmission System Operator and assigned to the Network User
ToTso	The Transmission System Operator where the gas is entering the network
ToMarketArea	The Market area where the gas is entering the network
TradeNature	Only used in secondary trades - A classification of a secondary market trade proposal to be either an transfer of ownership (assignment) or a transfer of use
TradingMarketType	Market in which the Network User is allowed to trade (Primary or Secondary market)
TradingProcedure	Only used in secondary trades - A classification of the different types of secondary market transactions: Call for Orders (CFO), First

Name	Description
	Comitted First Served (FCFS) or Over the Counter (OTC)
TransfereelIdentification	The identification of a Network User that has bought transferred capacity rights on the secondary market
TransferorIdentification	The identification of a Network User that has transferred capacity rights on the secondary market
TSOIdentification	The identification of a Transmission System Operator
TsoPriceCap	The price limit that a Transmission System Operator is willing to pay for capacity in a reverse auction
UnderlyingSurcharge	Only used in secondary trades - is the surcharge of the primary transaction underlying the secondary market deal
UnderlyingTariff	Only used in secondary trades - is the regulated charge of the primary transaction underlying the secondary market deal
UnitOfMeasure	The unit of measure in which the capacity amount is expressed
UnitOfPrice	The unit of measure in which the price is expressed
Upgrade	The quantity of interruptible capacity already booked that may be upgraded into firm capacity in case of a successful firm capacity bid
UpgradeAmount	The interruptible to firm upgrade amount
UpgradeReference	The reference to interruptible booked capacity that is used to auction for firm capacity
ValidityPeriod	The period of validity of an object

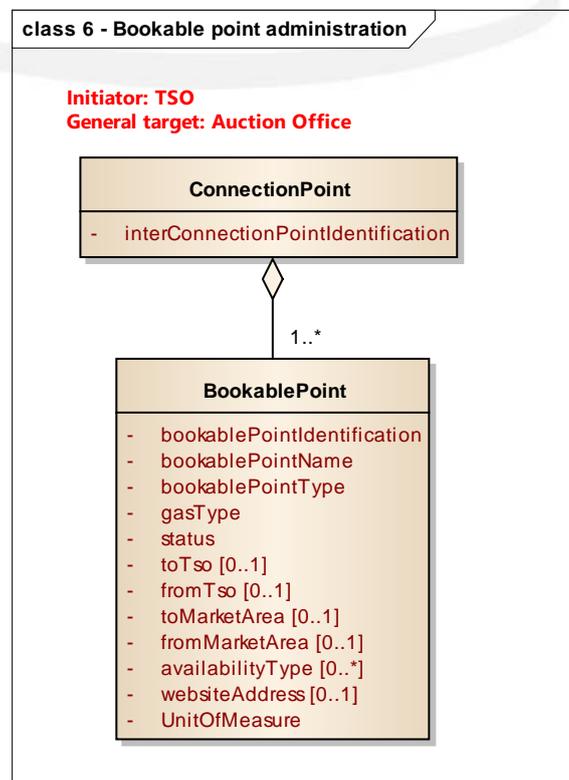
Name	Description
VatCode	The value added tax code assigned by a national organisation
WebsiteAddress	URL of a TSO-Website, that contains all commercial terms and conditions

751 **3.6 Requirements per process**

752 Note 1: Wherever the indication [0..1] appears against an attribute this signifies that the
753 attribute in question is optional. For example, the attribute “PriceSteps [0..1]” is not used in
754 the case of uniform price auctions.

755 Note 2: The information outlined in the class diagram does not represent any structural
756 constraints. It only represents the basic information requirements for a given information
757 flow, knowing that a given piece of information may be provided by an equivalent set of
758 attributes This BRS is targeted towards business-to-business application interfaces or in a
759 more user-orientated fashion through a web-based service.

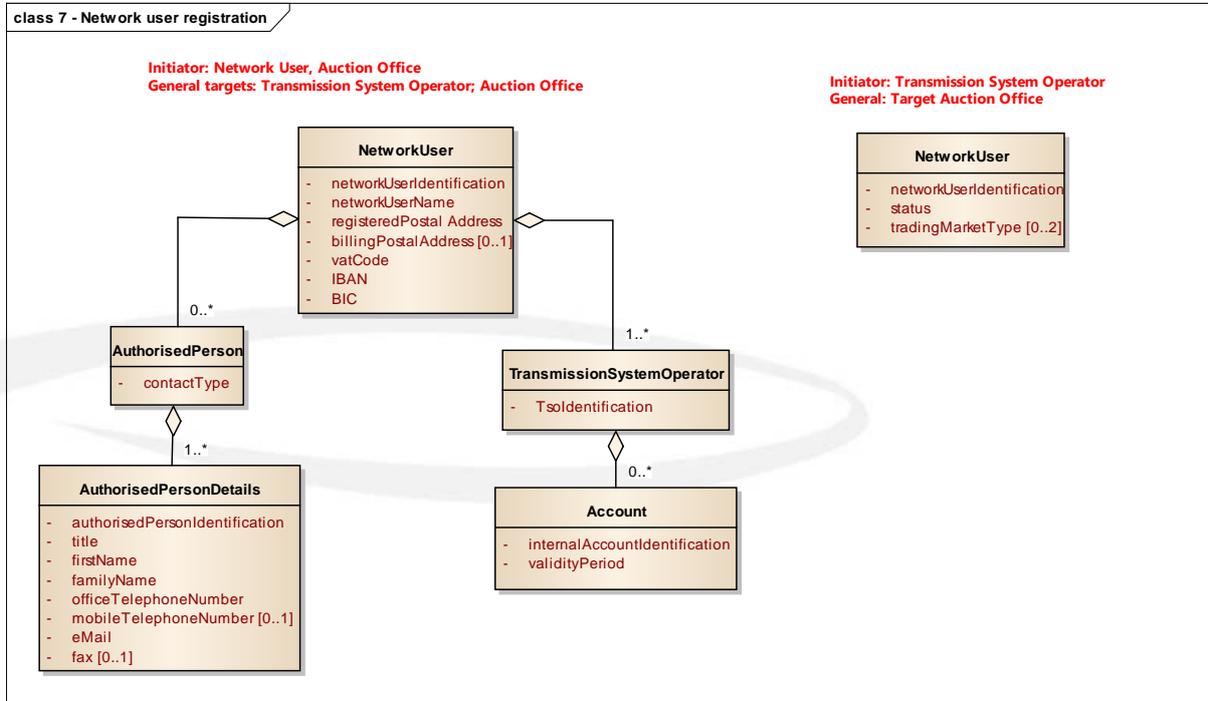
760 **3.6.1 Bookable point administration process**



761
762

Figure 19: Bookable point administration requirements

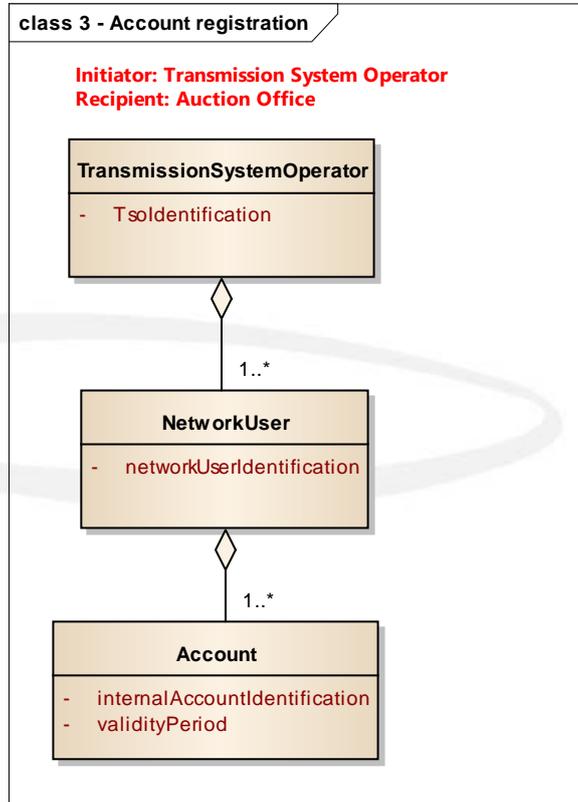
763 **3.6.2 Network User Registration process**



764
765

Figure 20: Network User registration requirements

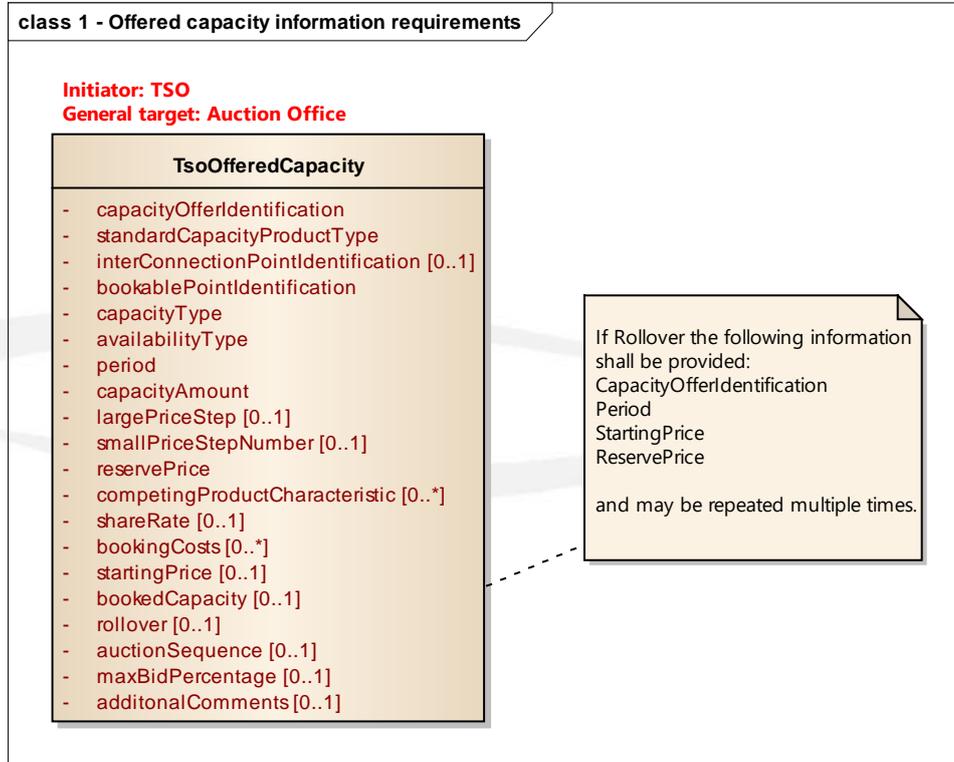
766 **3.6.3 Account Registration process**



767
768

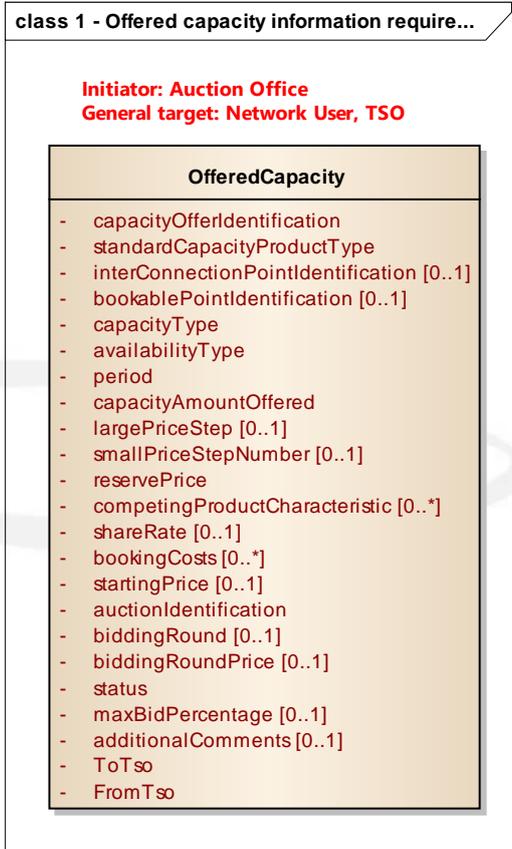
Figure 21: Account registration requirements

769 **3.6.4 Offered capacity process**



770
771
772

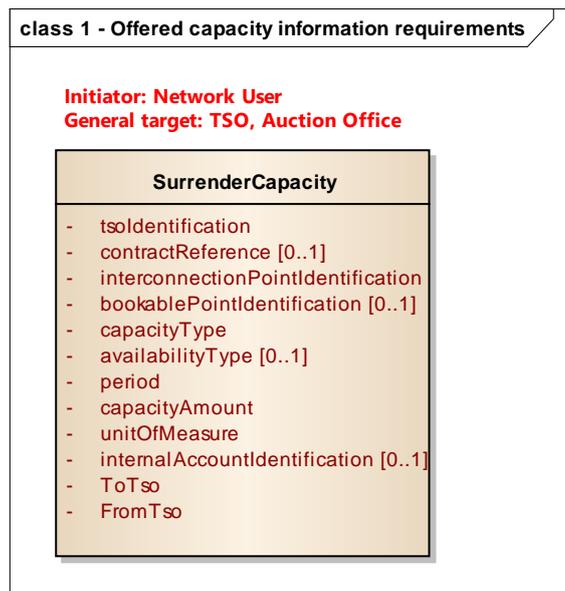
Figure 22: Transmission System Operator Offered capacity information requirements



773
774

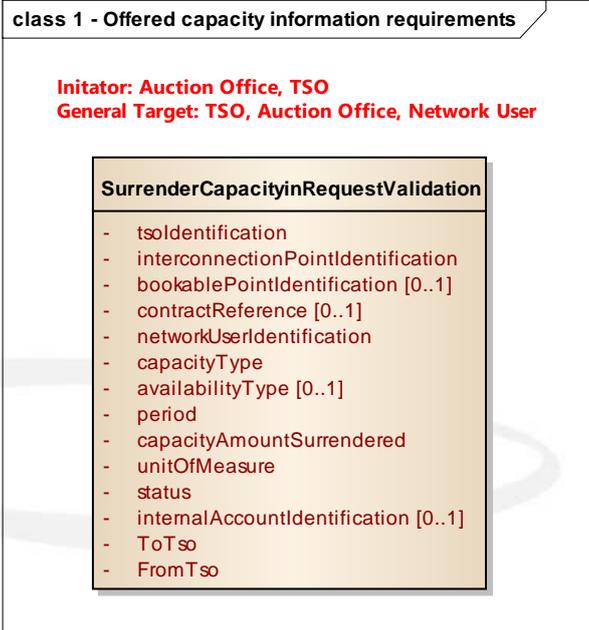
Figure 23: Offered capacity information requirements

775 3.6.5 Surrender capacity process



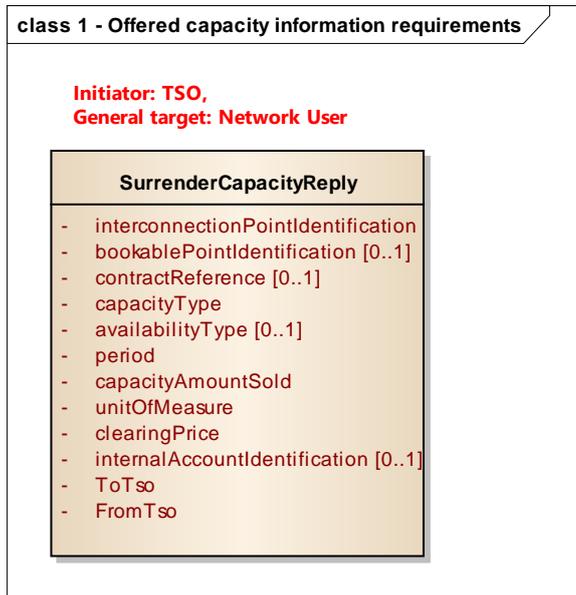
776
777
778

Figure 24: Surrendered capacity information requirements



779
780

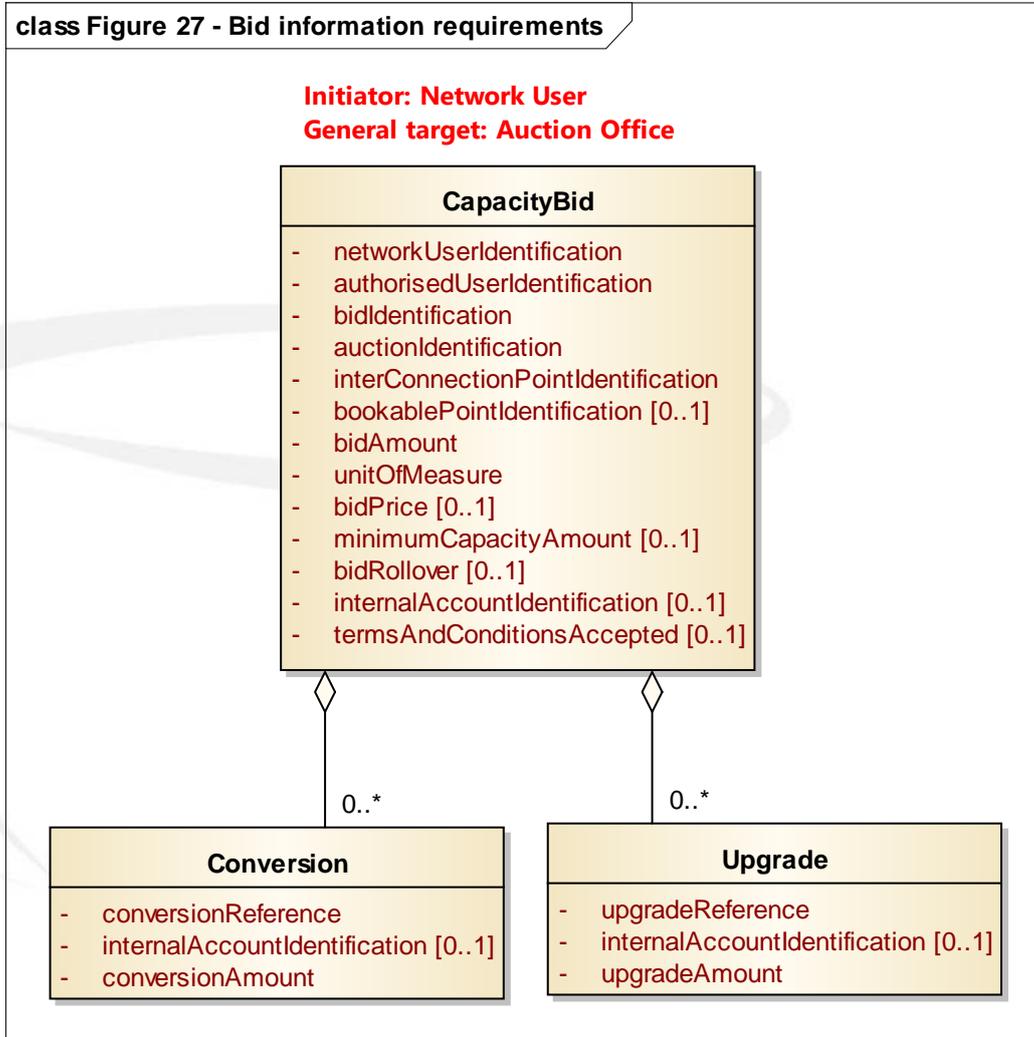
Figure 25: Surrender capacity request validation requirements



781
782

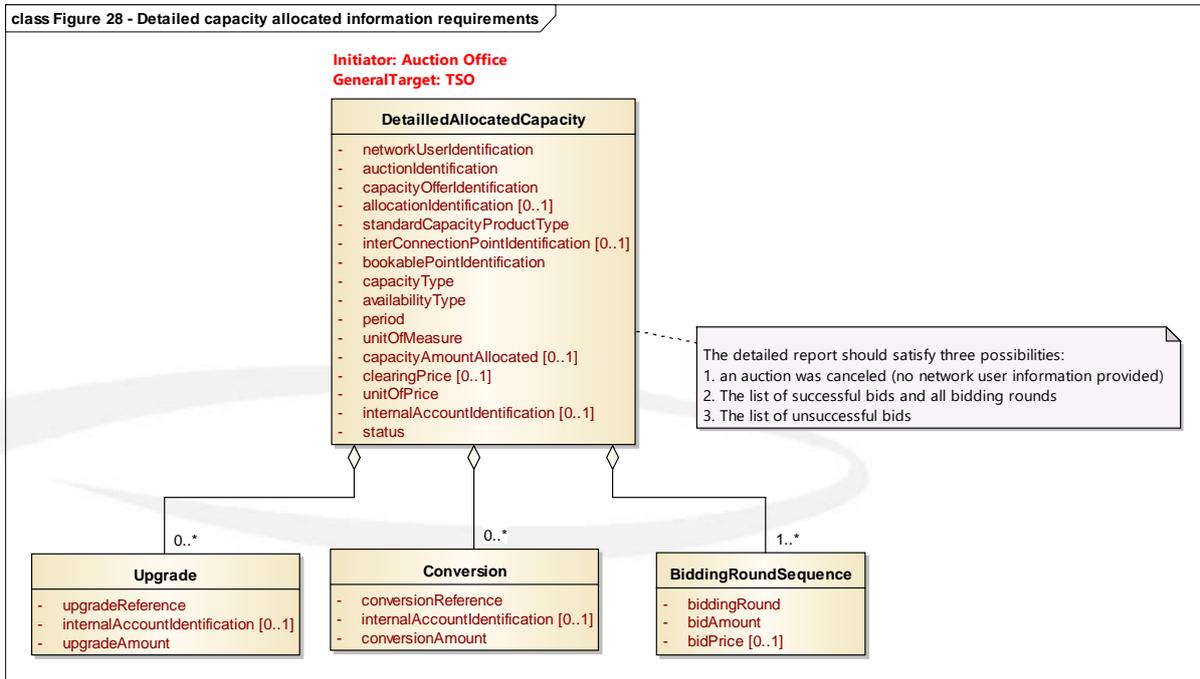
Figure 26: Surrender capacity result requirements

783 **3.6.6 Auction process**



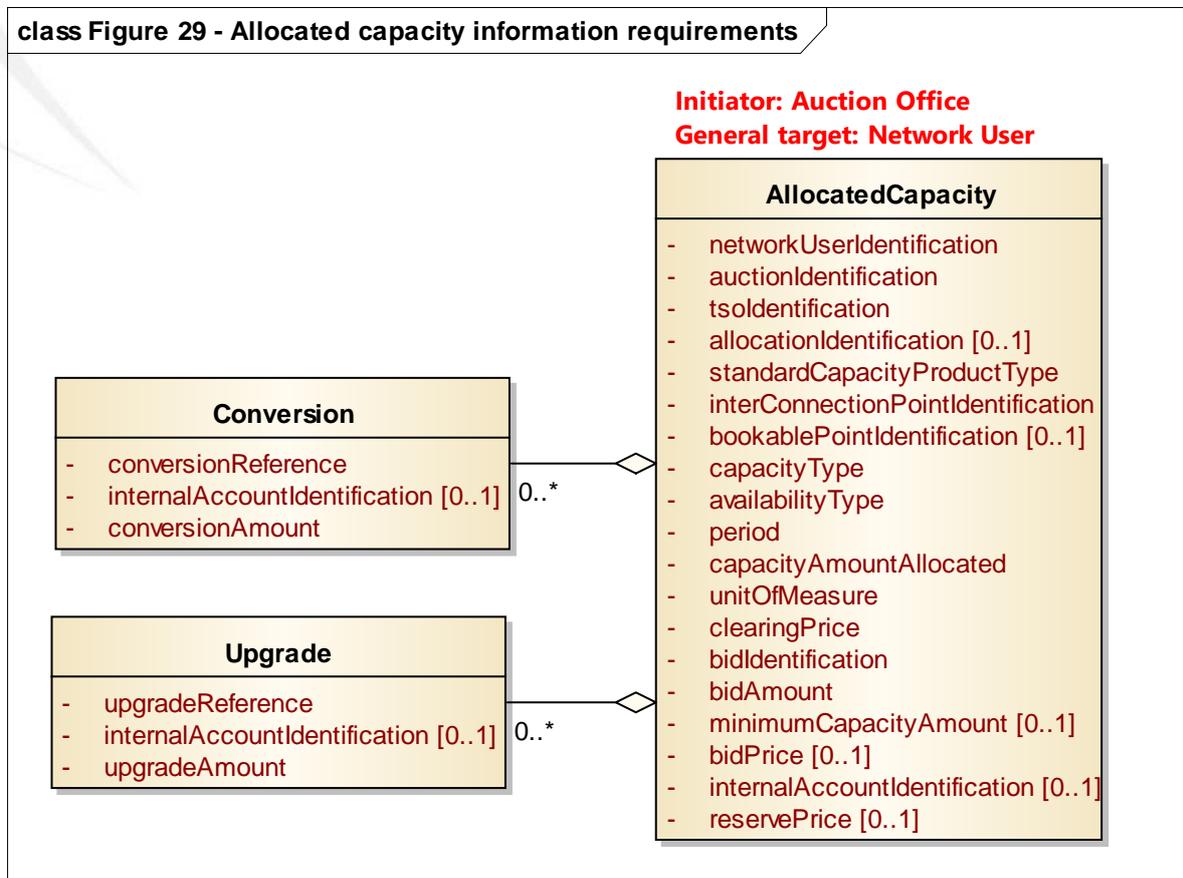
784
785

Figure 27: Bid information requirements



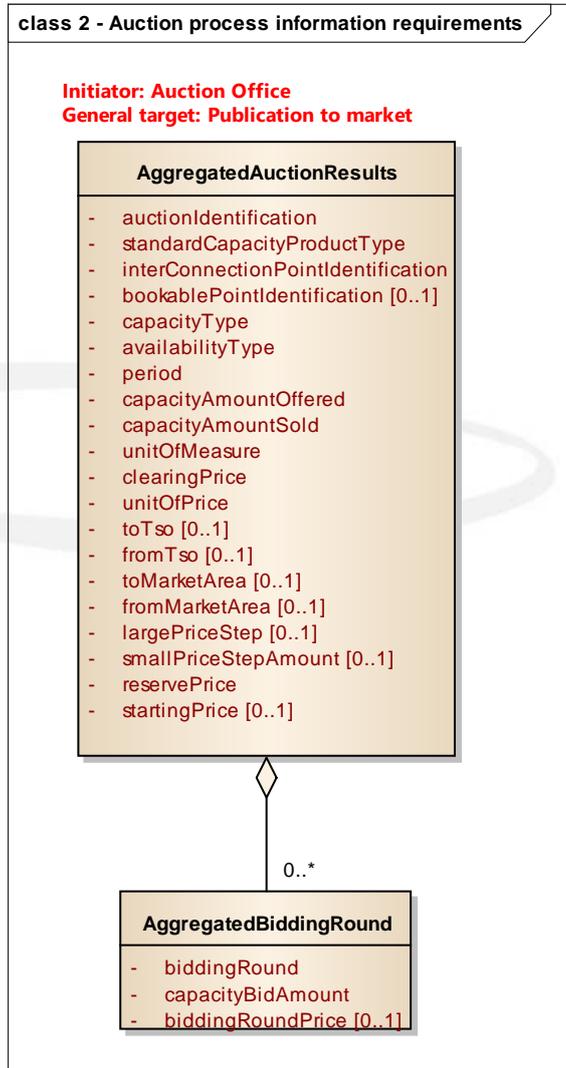
786
787

Figure 28: Detailed capacity allocated information requirements



788
789

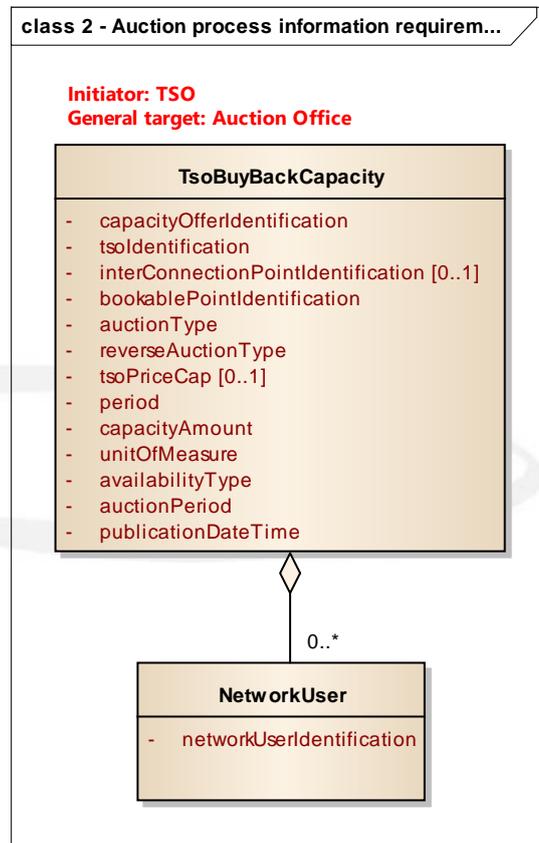
Figure 29: Allocated capacity information requirements



790

791

Figure 30: Aggregated auction results

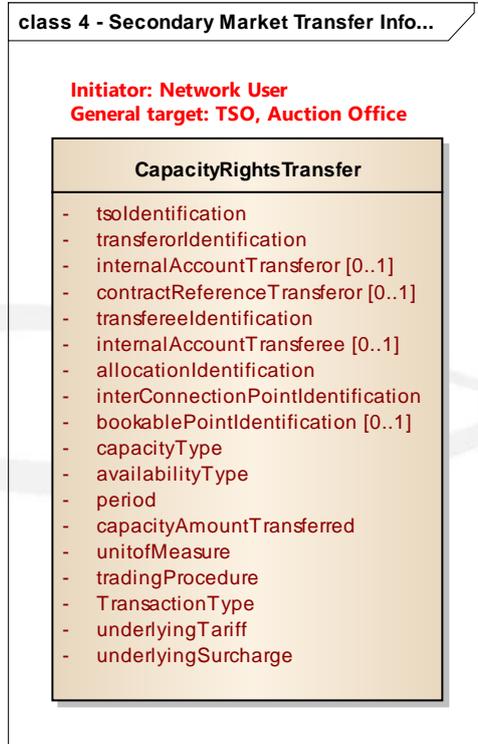


792

793

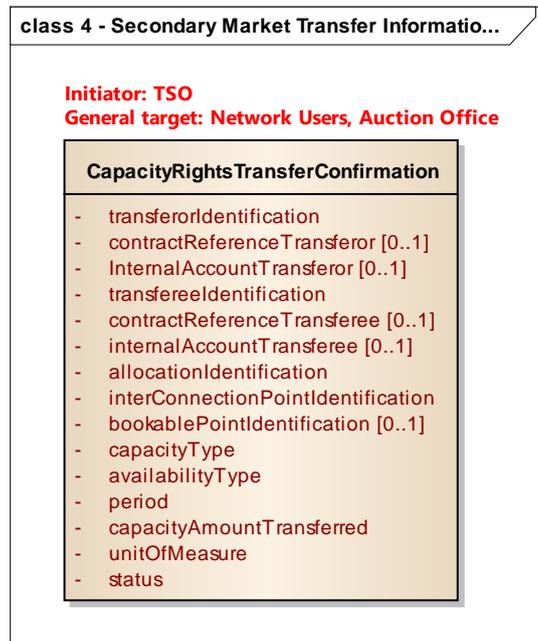
Figure 31: Transmission System Operator Buy back capacity information requirements

794 **3.6.7 Secondary market transfer process**



795
796

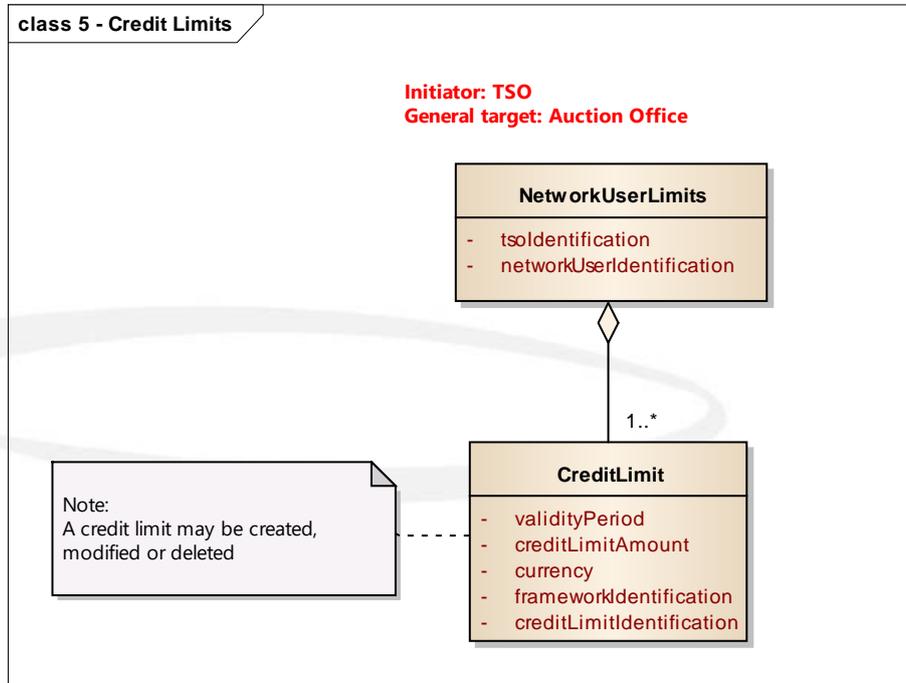
Figure 32: Secondary market capacity rights transfer information requirements



797
798
799

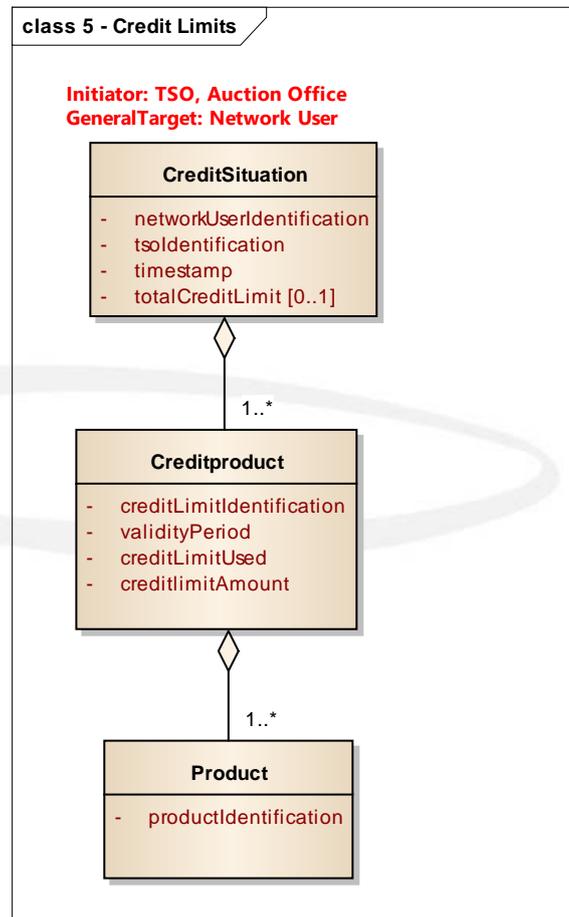
Figure 33: Secondary market capacity rights transfer confirmation information requirements

800 **3.6.8 Credit limit process**



801
802

Figure 34: Network User credit limit information requirements



803
804

Figure 35: Network User credit situation requirements

805 **4 Common Data Exchange Solution Table**

Information Flow	From Party Role Value	To Party Role Value	Confidentiality Level	Common Data Exchange Solution
Bookable Point Registration	Transmission System Operator	Auction Office	Private	- Interactive
Network User Registration	Registered Network User	Transmission System Operator	Private	Recommended - Interactive
Network User Registration to Auction Office	Network User	Auction Office	Private	Recommended - Interactive
Approved Network Users	Auction Office	Transmission System Operator	Private	Recommended – Document Based
Approved Network Users	Transmission System Operator	Auction Office	Private	Recommended - Interactive
Approved Network Users	Auction Office	Registered Network User	Private	Recommended - Interactive
Surrender Capacity Rights	Registered Network User	Auction Office	Private	Interactive
Surrender Capacity Rights	Auction Office	Transmission System Operator	Private	Recommended – Document Based
Offered Capacity	Transmission System Operator	Auction Office	Private	Recommended – Document Based
Offered Capacity	Auction Office	Transmission System Operator	Private	Recommended – Document Based
Offered Capacity	Auction Office	Registered Network User	Public	Interactive
Credit Limit	Transmission System Operator	Auction Office	Private	Recommended – Document Based
Credit Limit	Auction Office	Transmission System Operator	Private	Recommended – Document Based
Capacity Bid	Registered Network User	Auction Office	Private	Interactive
Allocated Capacity	Auction Office	Registered Network User	Private	Interactive

Detailed Capacity Allocated	Auction Office	Transmission System Operator	Private	Recommended – Document Based
Aggregated Auction Results	Auction Office	All	Public	Interactive
Surrendered Capacity Sold	Transmission System Operator	Registered Network User	Private	Document based
Reverse Auction Requirements	Transmission System Operator	Auction Office	Private	Recommended – Document Based
Reverse Auction Bid	Registered Network User	Auction Office	Private	Interactive
Allocate Reverse Auction Results	Auction Office	Transmission System Operator	Private	Recommended – Document Based
Allocate Reverse Auction Results	Auction Office	Registered Network User	Private	Interactive
Secondary Market Sales	Registered Network User	Transmission System Operator	Private	Interactive
Secondary Market Sales	Transmission System Operator	Registered Network User	Private	Interactive

806 **The common solutions are not subject to the regulation covered by the Network Code for Interoperability and Data Exchange Rules and are provided for guidance.**