

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 2016-04-12**

10 **Log of changes**

<b>Change</b>	<b>Date of change</b>	<b>Issuer of change</b>
Inserted clarification of the Common Data Exchange Solutions Inserted the Common Data Exchange Solution Table	12 April 2016	ENTSOG

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

42	3.2.3.4	Publish auction results .....	20
43	3.2.4	Determine if capacity buyback is necessary .....	21
44	3.2.4.1	Identify firm capacity nominated over technical capacity .....	21
45	3.2.4.2	Determine if alternative technical and commercial measures can be	
46	applied	21	
47	3.2.4.3	Establish capacity to be bought back.....	22
48	3.2.4.4	Submit to Auction Office the reverse auction requirements .....	22
49	3.2.5	Operate secondary market (not referenced in the CAM/CMP regulation) .....	22
50	3.2.5.1	Submit a Trade Proposal .....	23
51	3.2.5.2	Reject a Trade Proposal .....	24
52	3.2.5.3	Respond to a Trade Proposal .....	24
53	3.2.5.4	Accept the response to a Trade Proposal (conditional to Transmission	
54	System Operator approval) .....	24	
55	3.2.5.5	Confirm a Trade .....	24
56	3.2.6	Manage credit limits (not referenced in the CAM/CMP regulation) .....	24
57	3.3	Information flow definition .....	27
58	3.3.1	CAM/CMP Sequence flow .....	27
59	3.3.1.1	Bookable point registration .....	28
60	3.3.1.2	Network User registration to Transmission System Operator .....	28
61	3.3.1.3	Network User registration to Auction Office .....	29
62	3.3.1.4	Approved Network Users.....	29
63	3.3.1.5	Surrender capacity rights.....	30
64	3.3.1.6	Offered capacity.....	30
65	3.3.1.7	Credit limit .....	31
66	3.3.1.8	Capacity bid.....	31
67	3.3.1.9	Allocated capacity .....	32
68	3.3.1.10	Detailed capacity allocated .....	32
69	3.3.1.11	Aggregated auction results .....	32
70	3.3.1.12	Surrendered capacity sold .....	33
71	3.3.1.13	Reverse auction requirements.....	33
72	3.3.1.14	Reverse auction bid.....	34
73	3.3.1.15	Allocate reverse auction results .....	34

74	3.3.2	Secondary market sales.....	34
75	3.3.3	CAM/CMP Workflow .....	37
76	3.3.3.1	Bookable point Administration process .....	37
77	3.3.3.2	Network User Registration process .....	38
78	3.3.3.3	Offered capacity process .....	39
79	3.3.3.4	Surrender capacity process.....	41
80	3.3.3.5	Auction process.....	42
81	3.3.3.6	Secondary market trade process .....	44
82	3.3.3.7	Reverse auction process .....	45
83	3.4	Information model requirements .....	47
84	3.5	Definitions of the attributes used in all the models .....	48
85	3.6	Requirements per process .....	56
86	3.6.1	Bookable point administration process .....	56
87	3.6.2	Network User Registration process.....	57
88	3.6.3	Account Registration process.....	58
89	3.6.4	Offered capacity process.....	59
90	3.6.5	Surrender capacity process .....	60
91	3.6.6	Auction process .....	62
92	3.6.7	Secondary market transfer process .....	66
93	3.6.8	Credit limit process .....	67
94	4	Common Data Exchange Solution Table .....	69
95			

96	<b>Table of figures</b>	
97	Figure 1: overview of the CAM/CMP process use case.....	10
98	Figure 2: the auction capacity use case .....	13
99	Figure 3: Determine offered capacity use case.....	14
100	Figure 4: CMP surrender network capacity use case .....	15
101	Figure 5: bid for capacity use case .....	19
102	Figure 6: Reverse auction use case .....	21
103	Figure 7: Secondary market capacity .....	23
104	Figure 8: Credit limit requirements.....	26
105	Figure 9A: Information flow sequence.....	27
106	Figure 10: Secondary market sequence .....	35
107	Figure 11: Bookable point Administration workflow .....	37
108	Figure 12: Network User Registration workflow.....	38
109	Figure 13: Offered capacity workflow .....	39
110	Figure 14: Surrender capacity process .....	41
111	Figure 15: Auction workflow .....	42
112	Figure 16: Secondary market transfer process .....	44
113	Figure 17: Reverse auction workflow.....	45
114	Figure 18: Bookable point administration requirements .....	56
115	Figure 19: Network User registration requirements.....	57
116	Figure 20: Account registration requirements.....	58
117	Figure 21: Transmission System Operator Offered capacity information requirements .....	59
118	Figure 22: Offered capacity information requirements.....	59
119	Figure 23: Surrendered capacity information requirements .....	60
120	Figure 24: Surrender capacity request validation requirements.....	60
121	Figure 25: Surrender capacity result requirements .....	61
122	Figure 26: Bid information requirements .....	62
123	Figure 27: Detailed capacity allocated information requirements.....	63
124	Figure 28: Allocated capacity information requirements .....	63
125	Figure 29: Aggregated auction results .....	64
126	Figure 30: Transmission System Operator Buy back capacity information requirements .....	65

127	Figure 31: Secondary market capacity rights transfer information requirements.....	66
128	Figure 32: Secondary market capacity rights transfer confirmation information requirements	
129	.....	66
130	Figure 33: Network User credit limit information requirements.....	67
131	Figure 34: Network User credit situation requirements.....	68
132		





133 **1 Introduction**

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

144 Additionally, the CMP guidelines define how congestion management procedures are put  
145 into 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  
150 regulations but related to them (marked as “not referenced in the CAM/CMP regulation” in  
151 this document, e.g. credit limits, master data). It is intended to be used by parties  
152 participating in the capacity allocation mechanism and congestion management procedures.  
153 In particular, the Business Requirements Specification (BRS) enables EASEE-gas to produce  
154 the Message 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  
163 management procedures as specified in the CAM NC/CMP guidelines. The requirements  
164 therefore define the necessary interfaces for the implementation, from an IT perspective, of  
165 a capacity 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  
171 the obligations on Transmission System Operators or any other party.



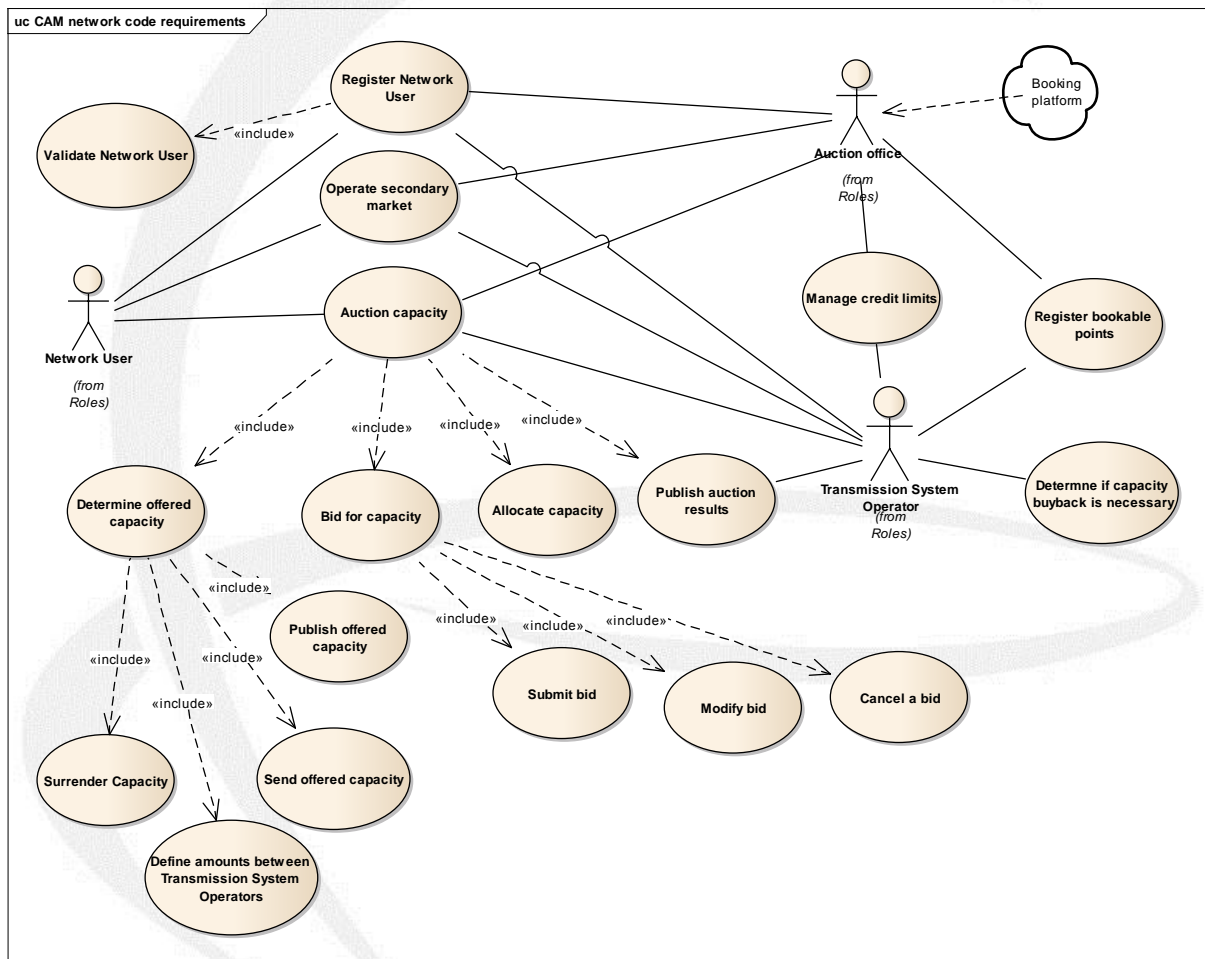
172 **3 Business Requirements**

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  
177 into the detailed internal workings of each entity. It defines the external requirements of  
178 the 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  
185 well as for the management of the booking platform, acting on behalf of Transmission  
186 System 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  
197 demands 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  
206 Transmission 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  
211 registration process includes the submission of the individual Network User master data to  
212 the Auction 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  
216 to the Transmission System Operator(s).

217 The Network User transmits to the Auction Office the data required by the Auction Office  
218 for 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  
226 System 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  
230 informs 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.

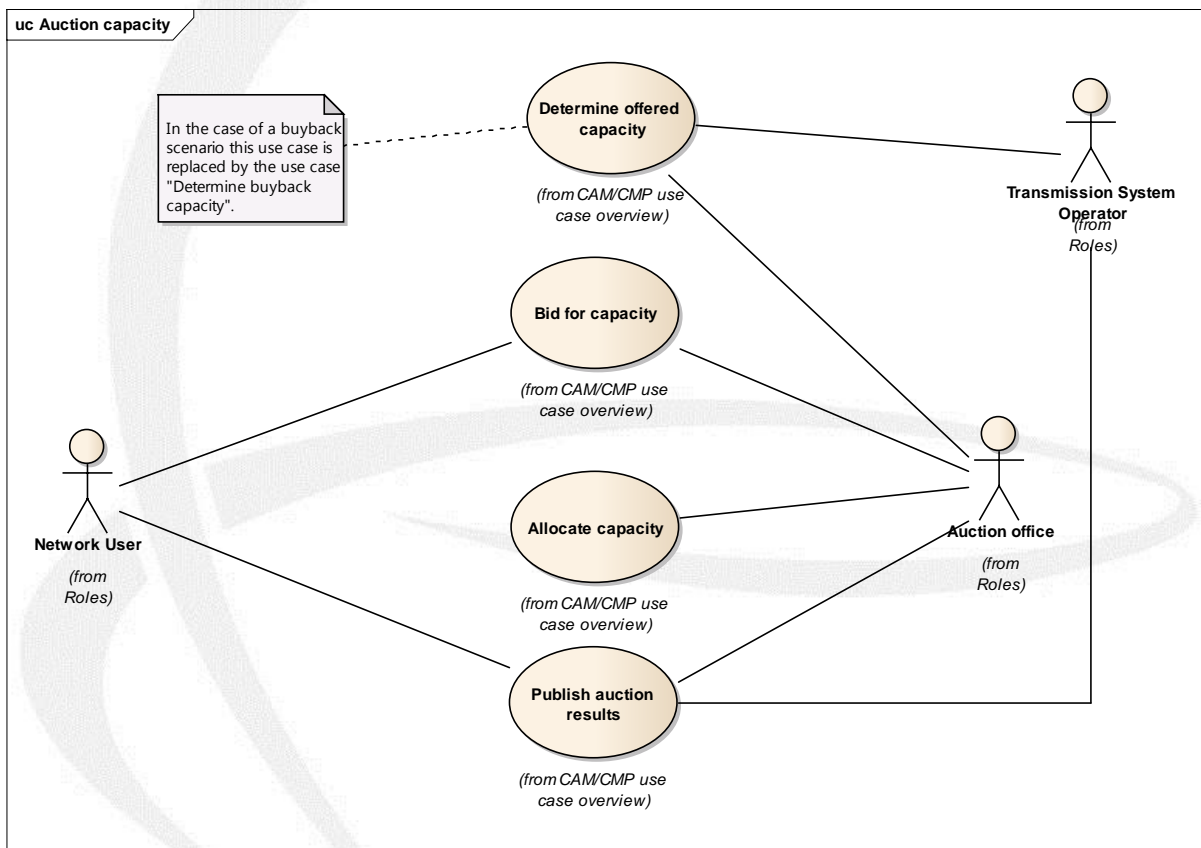
239 A bookable point is defined by several items (see definition in chapter 3.5).

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  
246 an 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

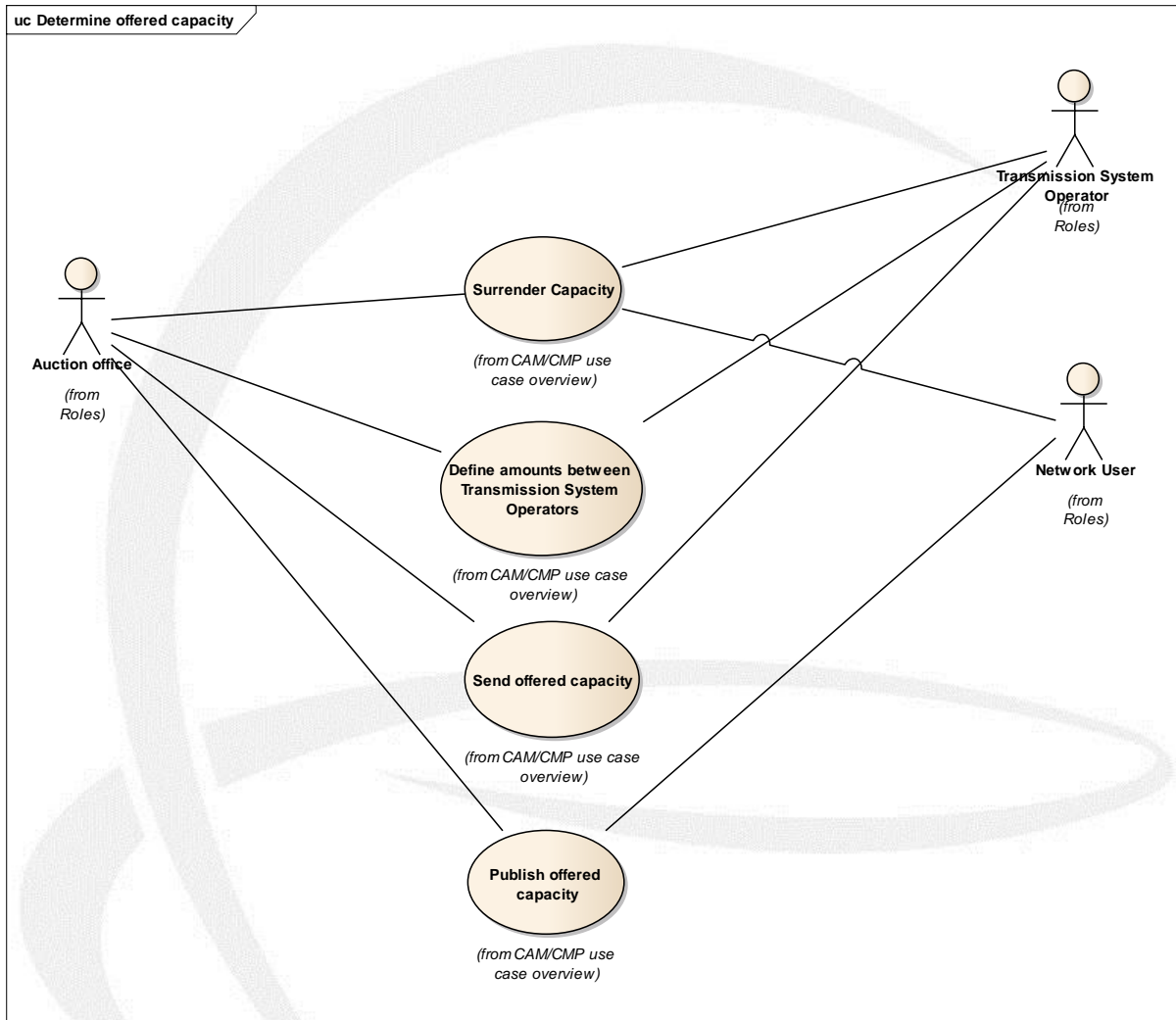
250

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.



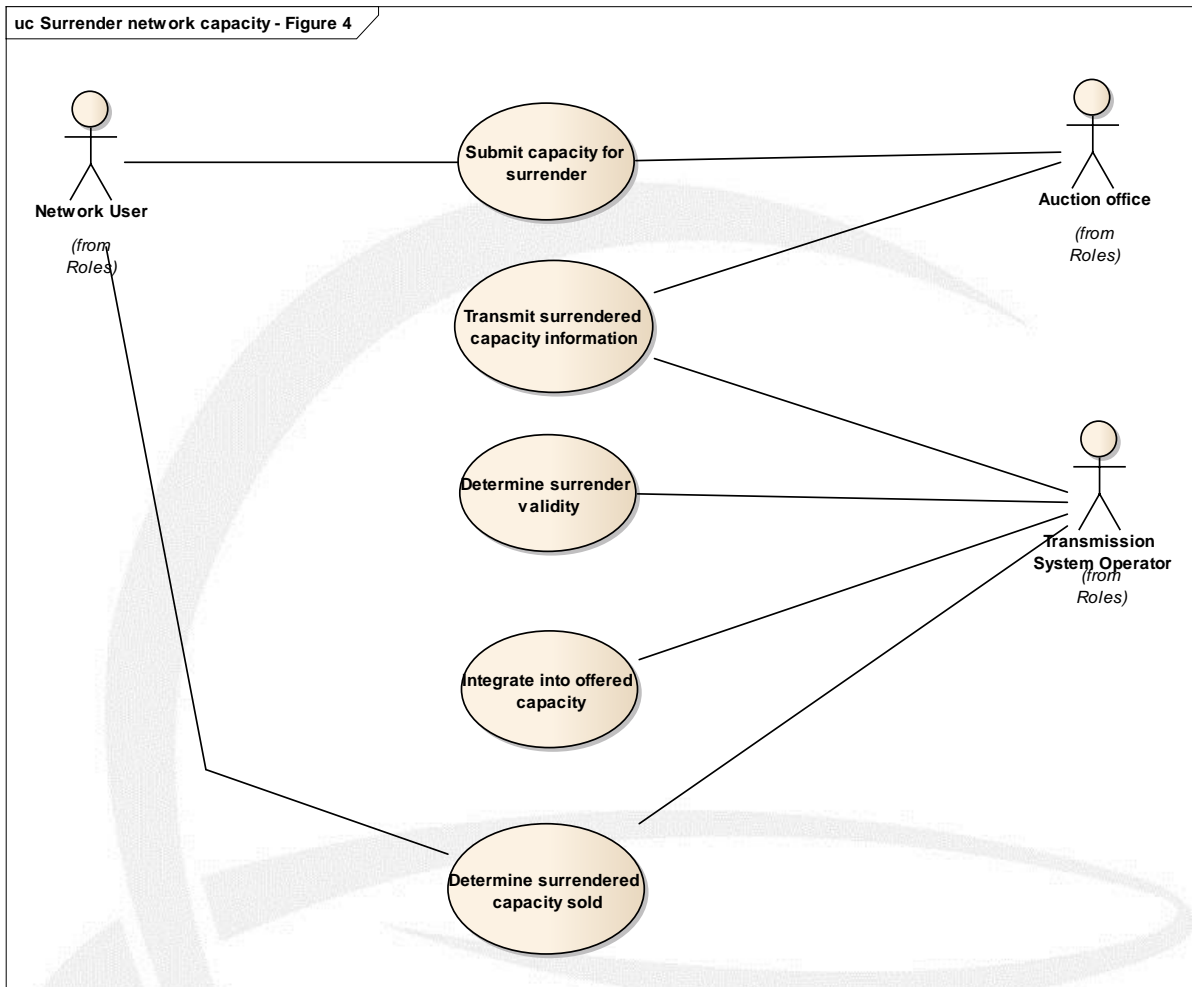
256  
257

Figure 3: Determine offered capacity use case

258 Once the Transmission System Operator has defined the Offered Capacity it is transmitted  
259 to 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. The surrendered  
266 capacity must be identified as bundled or unbundled and concerns at least capacity  
267 products with a duration longer than a day (subject to the NRA decision).

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

272 **3.2.3.1.1.2 Transmit surrendered capacity information**

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



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

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

279 **3.2.3.1.1.3 Determine surrender validity**

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

281 **3.2.3.1.1.4 Modify a surrender**

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

286 **3.2.3.1.1.5 Integrate into Offered Capacity**

287 Once the surrendered capacity is validated, the Transmission System Operator integrates  
288 the information into the offered capacity.

289 **3.2.3.1.1.6 Determine surrendered capacity sold**

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

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

295 **3.2.3.1.2 Define amount between Transmission System Operators**

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

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

302 1<sup>st</sup> option:

303 As default rule, the Transmission System Operators shall decide to let the Auction  
304 Office determine the bundled and unbundled capacity that makes up the established  
305 offered capacity. Each Transmission System Operator at each side of the IP shall  
306 inform the Auction Office of the offered capacity. The Auction Office shall apply the  
307 lesser rule in order to determine the bundled capacity.

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

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

313 2<sup>nd</sup> option:

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

#### 319 **3.2.3.1.3 Send offered capacity**

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

322 **3.2.3.1.4 Publish offered capacity**

323 The Auction Office then publishes the part of the offered capacity that will be auctioned as  
324 bundled capacity and the part of the offered capacity that will be auctioned as unbundled  
325 capacity.

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

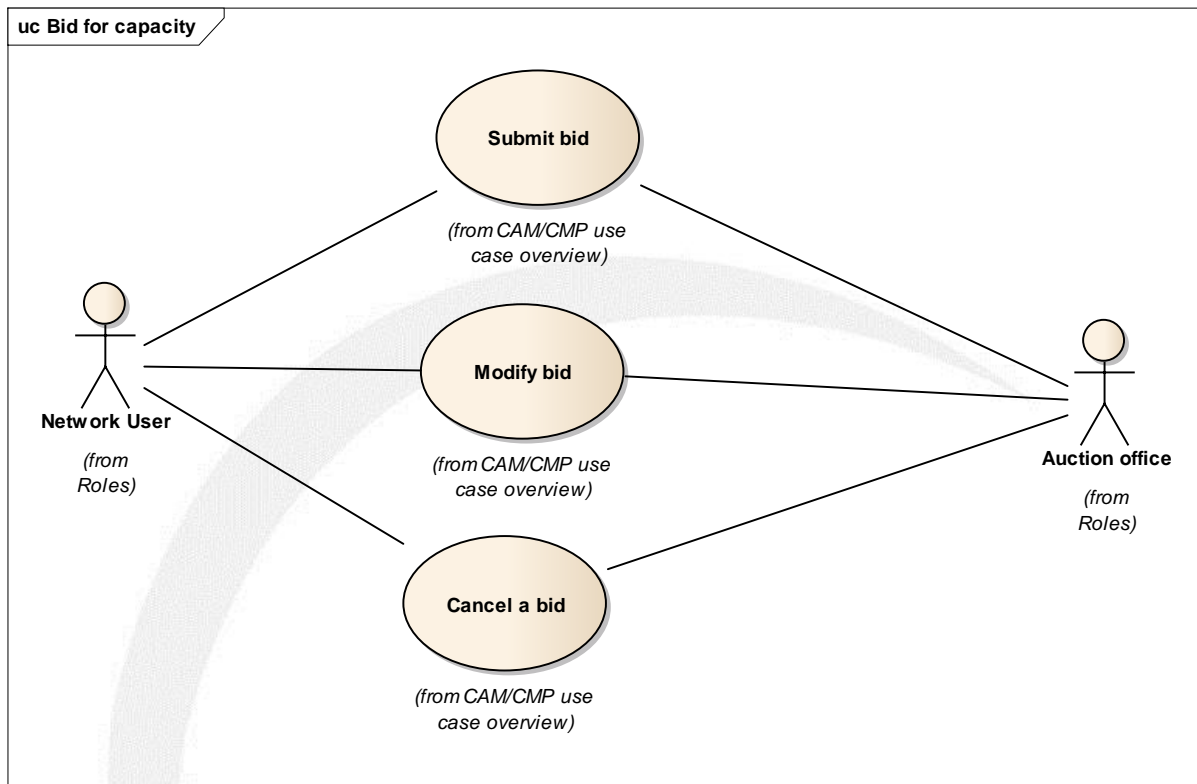
329 **3.2.3.2 Bid for capacity**

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

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

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

341



342

343

Figure 5: bid for capacity use case

#### 344 **3.2.3.2.1 Submit bid**

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

#### 350 **3.2.3.2.2 Modify bid**

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

#### 353 **3.2.3.2.3 Cancel a bid**

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

357 Exceptional cases in which a Network User cannot cancel a bid are bidding rounds with  
 358 small price steps in ascending clock auctions according to the requirements stated in Article  
 359 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  
362 clock auction) and Article 18 CAM NC (in a uniform price auction).

363 **3.2.3.4 Publish auction results**

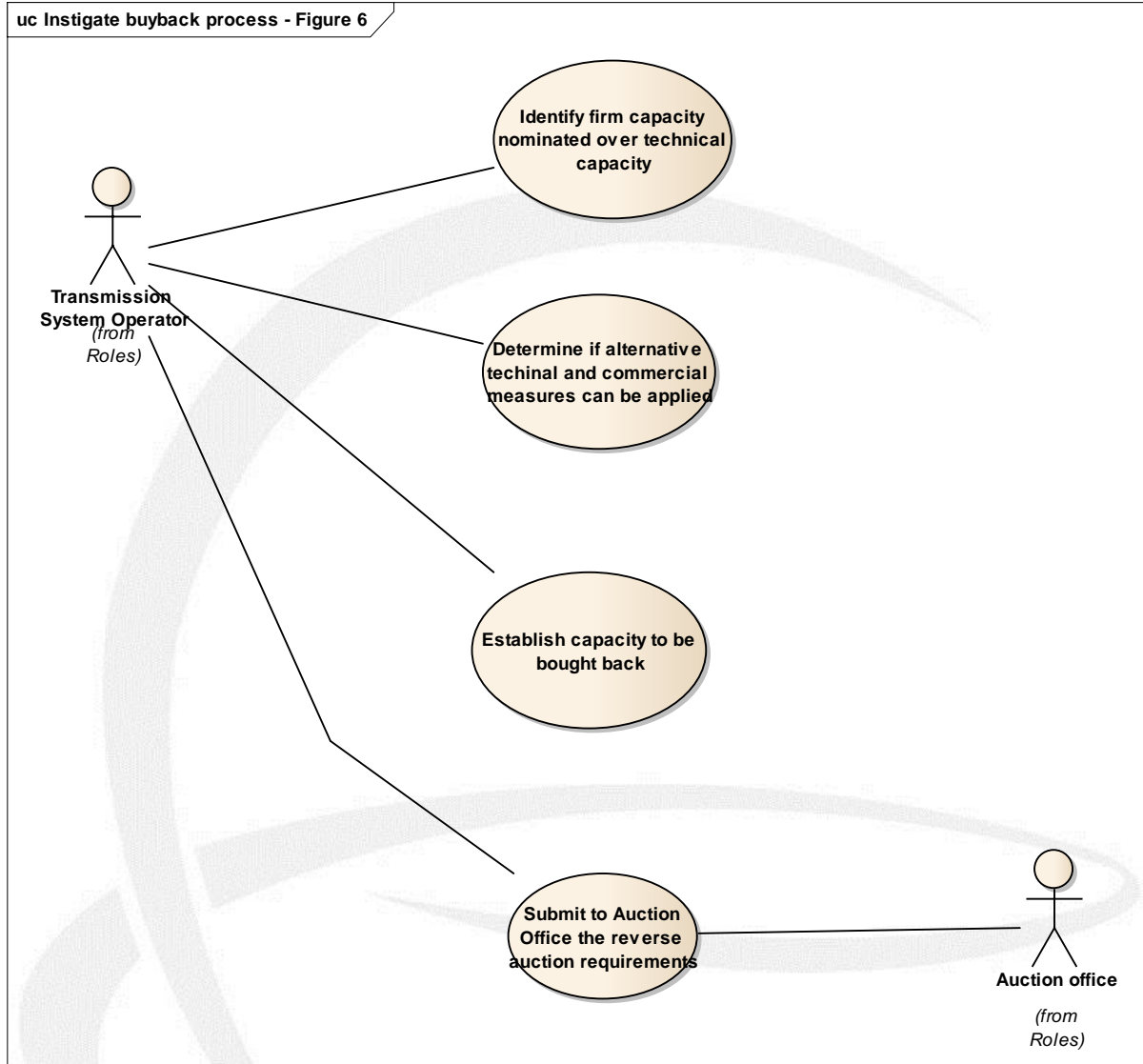
364 Network Users are informed by the Auction Office of the results of the bids that they have  
365 submitted.

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  
370 System 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 to re-establish the situation, without taking into consideration whether the  
384 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  
387 financial compensation desired for not flowing gas.

388 There are two types of buy back;

- 389 • buying back capacity in the congested direction
- 390 • selling capacity with a nomination commitment in the counter-direction.

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

### 393 **3.2.4.4 Submit to Auction Office the reverse auction requirements**

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

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

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

### 404 **3.2.5 Operate secondary market (not referenced in the CAM/CMP 405 regulation)**

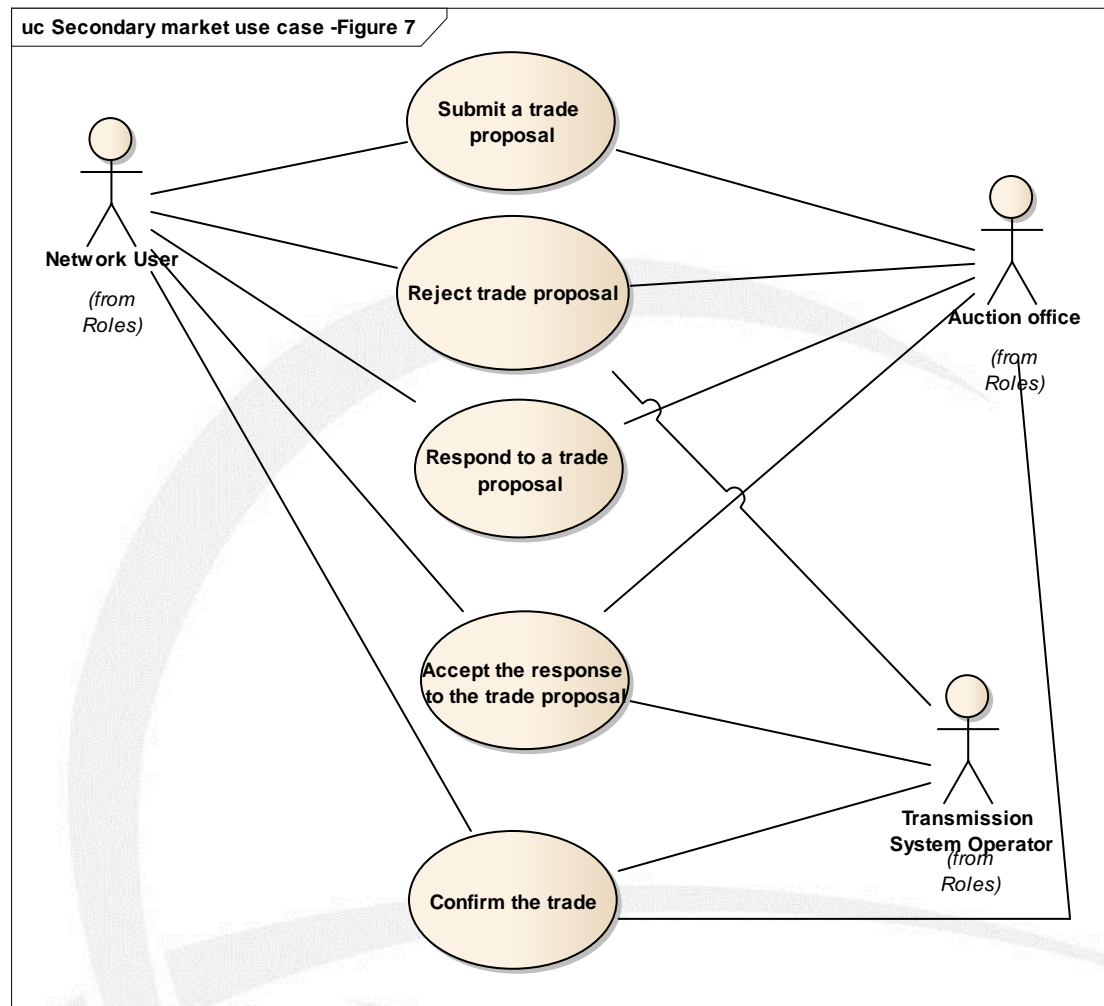
406 This section covers Secondary market functionalities handled by capacity booking platforms  
407 as well as the transfer of capacity rights at the conclusion of each trade.

408 In the text no differentiation between assignment and transfer of use is made, however this  
409 differentiation should be included in the relevant messages.

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

413





414

415

Figure 7: Secondary market capacity

### 416 3.2.5.1 Submit a Trade Proposal

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

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

421 Consequently a Network User can submit a trade proposal to the secondary market to sell  
422 or buy capacity concerning a connection point. The proposal shall include information about  
423 the bookable point, capacity, period, availability type of capacity, bundled/unbundled,  
424 nature of transfer(full or partial transfer of rights), price and in case it is a proposal to sell  
425 capacity the identification of the related capacity contract incl. issuer of the contract, the  
426 duration over which the trade is valid. The trade proposal can be updated/withdrawn by the  
427 submitter.

### 428 **3.2.5.2 Reject a Trade Proposal**

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

### 435 **3.2.5.3 Respond to a Trade Proposal**

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

### 438 **3.2.5.4 Accept the response to a Trade Proposal (conditional to Transmission** 439 **System Operator approval)**

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

### 444 **3.2.5.5 Confirm a Trade**

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

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

450 The Transmission System Operator(s) has/have a maximum of 5 working days for confirming  
451 a trade for capacity rights after it has been concluded. For the transfer of use of day-ahead  
452 capacity rights a maximum confirmation time of 6 hours starting at 10:00 am (UTC)<sup>1</sup> applies.  
453 The network user has to submit its trade proposal latest at 10:00 am (UTC)<sup>2</sup> on D-1.

### 454 **3.2.6 Manage credit limits (not referenced in the CAM/CMP regulation)**

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

---

<sup>1</sup> Winter time; 09:00 am (UTC) daylight saving time

<sup>2</sup> Winter time; 09:00 am (UTC) daylight saving time

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

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

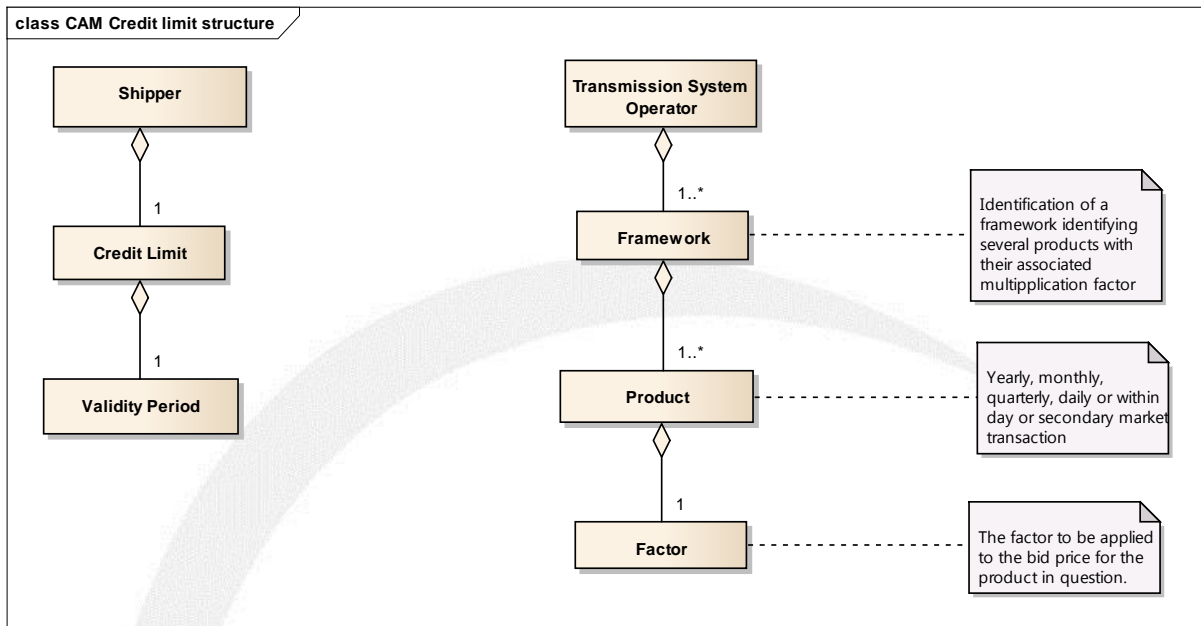
467 Network Users may be able to consult their credit limit information on the booking platform  
468 if such a right is accorded by the Transmission System Operator. The financial value for a  
469 given Network User's bid associated to a specific product is determined by the  
470 multiplication of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

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

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

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

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

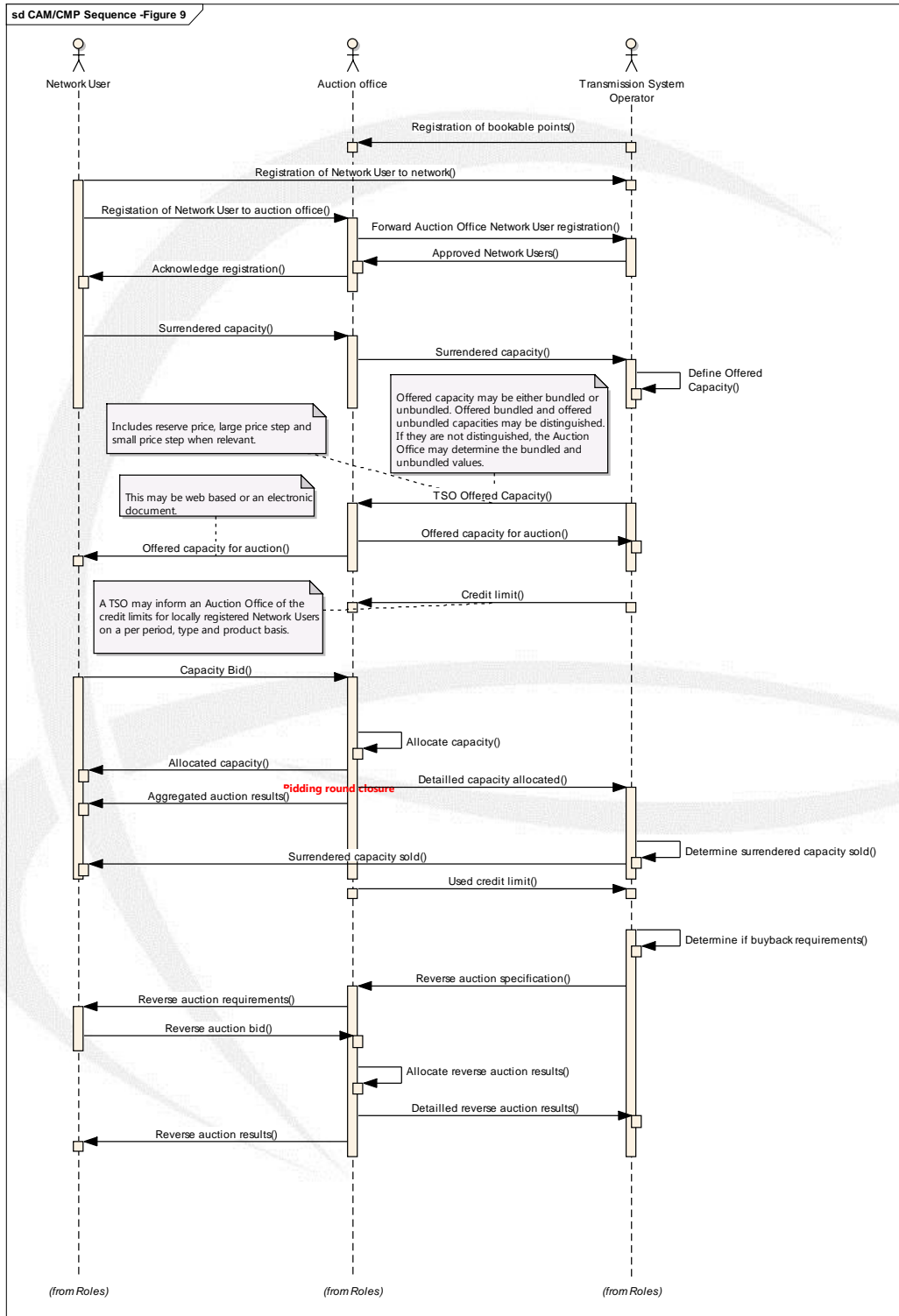


488  
489

Figure 8: Credit limit requirements

### 490 3.3 Information flow definition

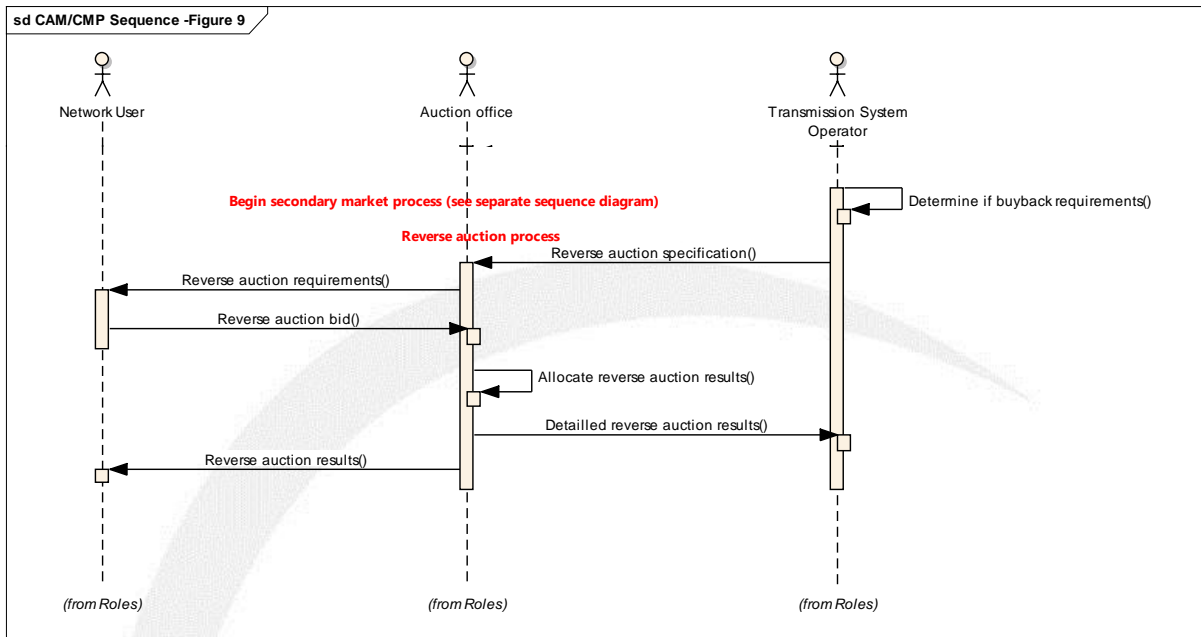
#### 491 3.3.1 CAM/CMP Sequence flow



492

493

Figure 9: Information flow sequence



494  
495

Figure 10: Information flow sequence

496 **3.3.1.1 Bookable point registration**

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

499  
500 The data exchange solution for this data exchange is to be negotiated between the  
501 Transmission System Operator and the Auction Office.  
502

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Bookable Point Registration	Transmission System Operator	Auction Office	Private	Not Applicable

503

504 **3.3.1.2 Network User registration to Transmission System Operator**

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

507  
508 The data exchange solution for this data exchange is to be negotiated between the  
509 Transmission System Operator and the Network User.  
510  
511  
512



Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Network User Registration	Network User	Transmission System Operator	Private	Not Applicable

513

### 514 3.3.1.3 Network User registration to Auction Office

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

517

518 The data exchange solution for this data exchange is to be negotiated between the Network  
519 User and the Auction Office.

520

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Network User Registration to Auction Office	Network User	Auction Office	Private	Not Applicable

521

### 522 3.3.1.4 Approved Network Users

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

526

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

529

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Approved Network User	Auction Office	Transmission System Operator	Private	Not Applicable
Approved Network User	Transmission System Operator	Auction Office	Private	Not Applicable
Approved Network User	Auction Office	Registered Network User	Private	Not Applicable

530



531 **3.3.1.5 Surrender capacity rights**

532 Prior to a given auction period a Network User may surrender capacity rights that he holds  
533 for the intended period of the auction. The capacity to be surrendered is sent either to the  
534 Auction Office for transmission to all involved Transmission System Operators or to the  
535 Transmission System Operator(s). Once verified the capacity will be incorporated into the  
536 total offered capacity for the next auction product.

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

539

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

540

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

544

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Surrender Capacity Rights	Auction Office	Transmission System Operator	Private	Not Applicable

545 **3.3.1.6 Offered capacity**

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

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

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

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

556

557

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Offered Capacity	Transmission System Operator	Auction Office	Private	Not Applicable

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Offered Capacity	Auction Office	Transmission System Operator	Private	Not Applicable

558  
559  
560  
561

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

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

### 562 3.3.1.7 Credit limit

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

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

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

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

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Credit Limit	Transmission System Operator	Auction Office	Private	Not Applicable
Credit Limit	Auction Office	Transmission System Operator	Private	Not Applicable

### 575 3.3.1.8 Capacity bid

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

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
Capacity Bid	Registered Network User	Auction Office	Private	Interactive

581

### 582 3.3.1.9 Allocated capacity

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

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

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

587

### 588 3.3.1.10 Detailed capacity allocated

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

591 The data exchange solutions between the Auction Office and the Transmission System  
592 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the  
593 data exchange solution is to be negotiated between the parties:  
594

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Detailed Capacity Allocated	Auction Office	Transmission System Operator	Private	Not Applicable

### 595 3.3.1.11 Aggregated auction results

596 This represents the total aggregated values for the auction (at least the clearing price and  
597 total capacity sold) and is intended for use by any market participant. (refer to section  
598 3.2.3.4)

599 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

600

### 601 3.3.1.12 Surrendered capacity sold

602 When the Transmission System Operator receives the detailed results of the auction it  
603 determines if the capacity sold is greater than the Transmission System Operator's available  
604 technical capacity. If this is the case the Transmission System Operator allocates the  
605 remaining sold capacity to the Network Users that have surrendered capacity. (refer to  
606 section 3.2.3.1.1.6)

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

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Surrendered Capacity Sold	Auction Office	Transmission System Operator	Private	Not Applicable

611

612 The common data exchange solution between Transmission System Operator and the  
613 registered Network user is shown below:  
614

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

615

### 616 3.3.1.13 Reverse auction requirements

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

620 The data exchange solutions between the Auction Office and the Transmission System  
621 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the  
622 data exchange solution is to be negotiated between the parties:  
623

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Reverse Auction Requirements	Transmission System Operator	Auction Office	Private	Not Applicable

624 **3.3.1.14 Reverse auction bid**

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

627 The common data exchange solution for this data exchange is shown below:  
628

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

629

630 **3.3.1.15 Allocate reverse auction results**

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

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

635 The data exchange solutions between the Auction Office and the Transmission System  
636 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the  
637 data exchange solution is to be negotiated between the parties:  
638

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Allocate Reverse Auction Results	Auction Office	Transmission System Operator	Private	Not Applicable

639

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

641

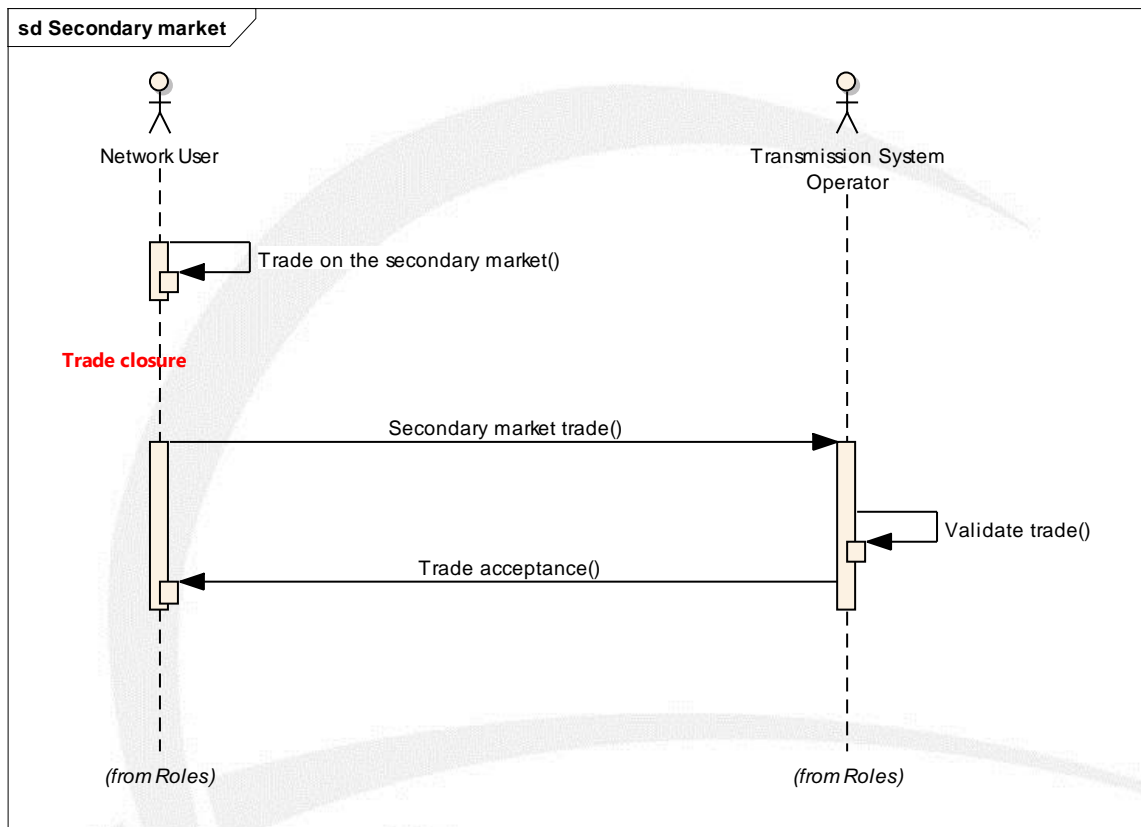
Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Allocate Reverse Auction Results	Auction Office	Registered Network User	Private	Interactive

642

643 **3.3.2 Secondary market sales**

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

647 In the text no differentiation between assignment and transfer of use is made, however this  
648 differentiation should be included in the relevant messages. Besides, no differentiation  
649 between over the counter, call for orders and first committed first served is made, however  
650 this differentiation should be included in the relevant messages.



651  
652

Figure 11: Secondary market sequence

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

656 The common data exchange solution for the data exchange between the Registered  
657 Network User or Auction Office on behalf of the Registered Network User and the  
658 Transmission System Operator is shown below:

659

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

660 The Transmission System Operator validates the trade information. Once the trade  
661 submission is deemed valid, the Transmission System Operator confirms the trade. The



662 Transmission System Operator informs the Network Users or the Auction Office, who is  
663 acting on behalf of the Network Users, about the confirmation.

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

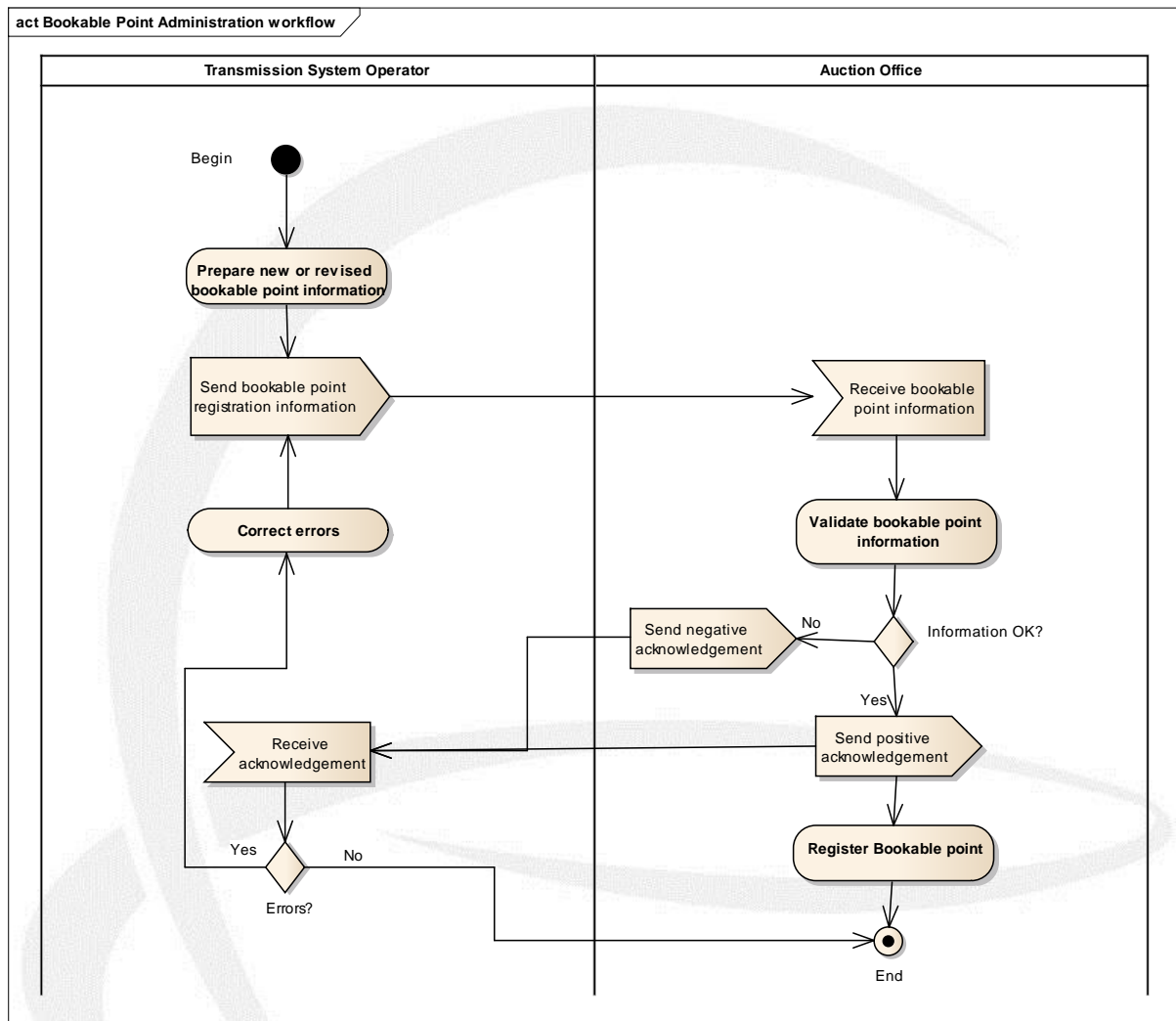
666 The common data exchange solution for this data exchange is shown below:  
667

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

668

669 **3.3.3 CAM/CMP Workflow**

670 **3.3.3.1 Bookable point Administration process**



671  
672

Figure 12: Bookable point Administration workflow

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

677  
678

679 **3.3.3.2 Network User Registration process**

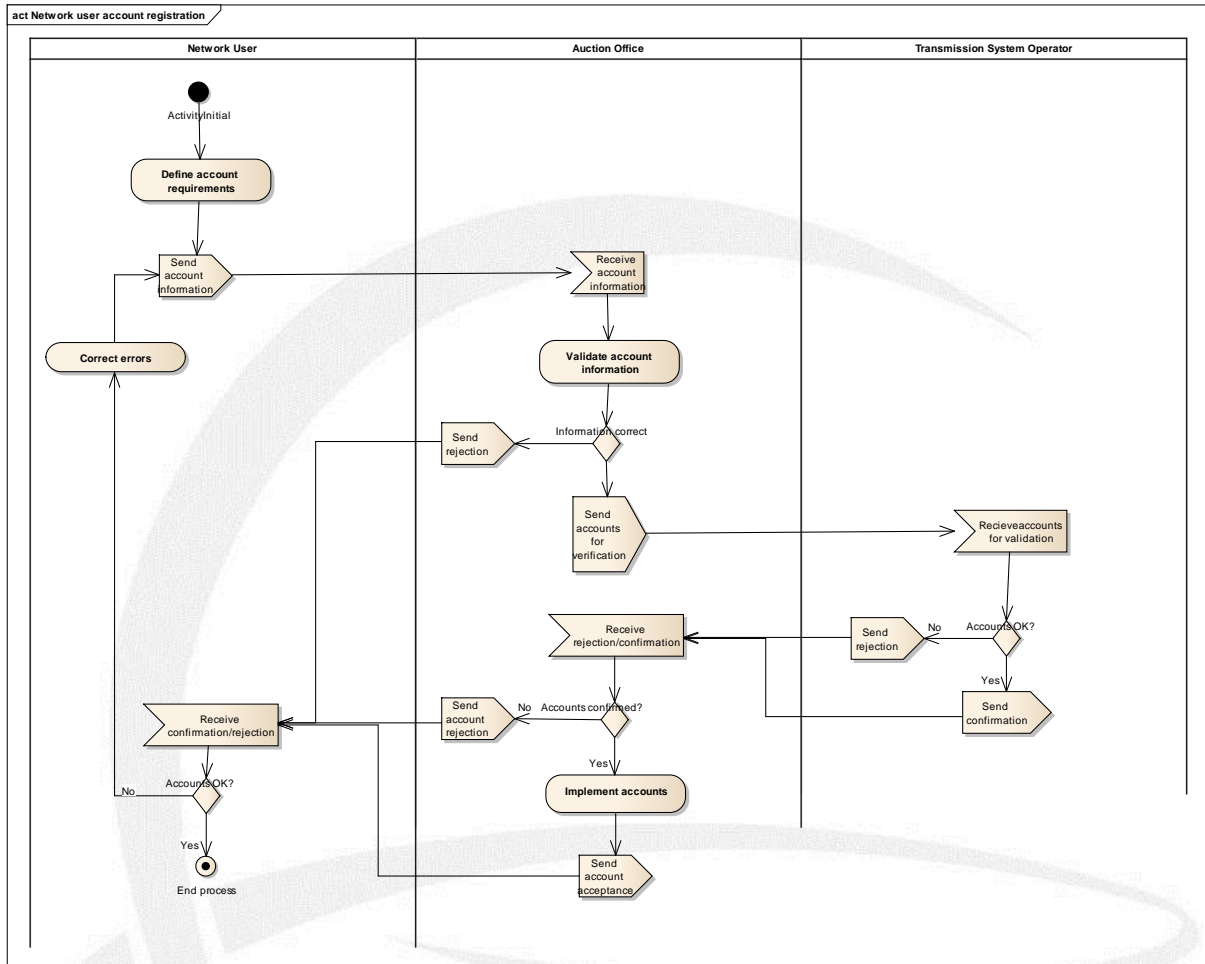


Figure 13: Network User Registration workflow

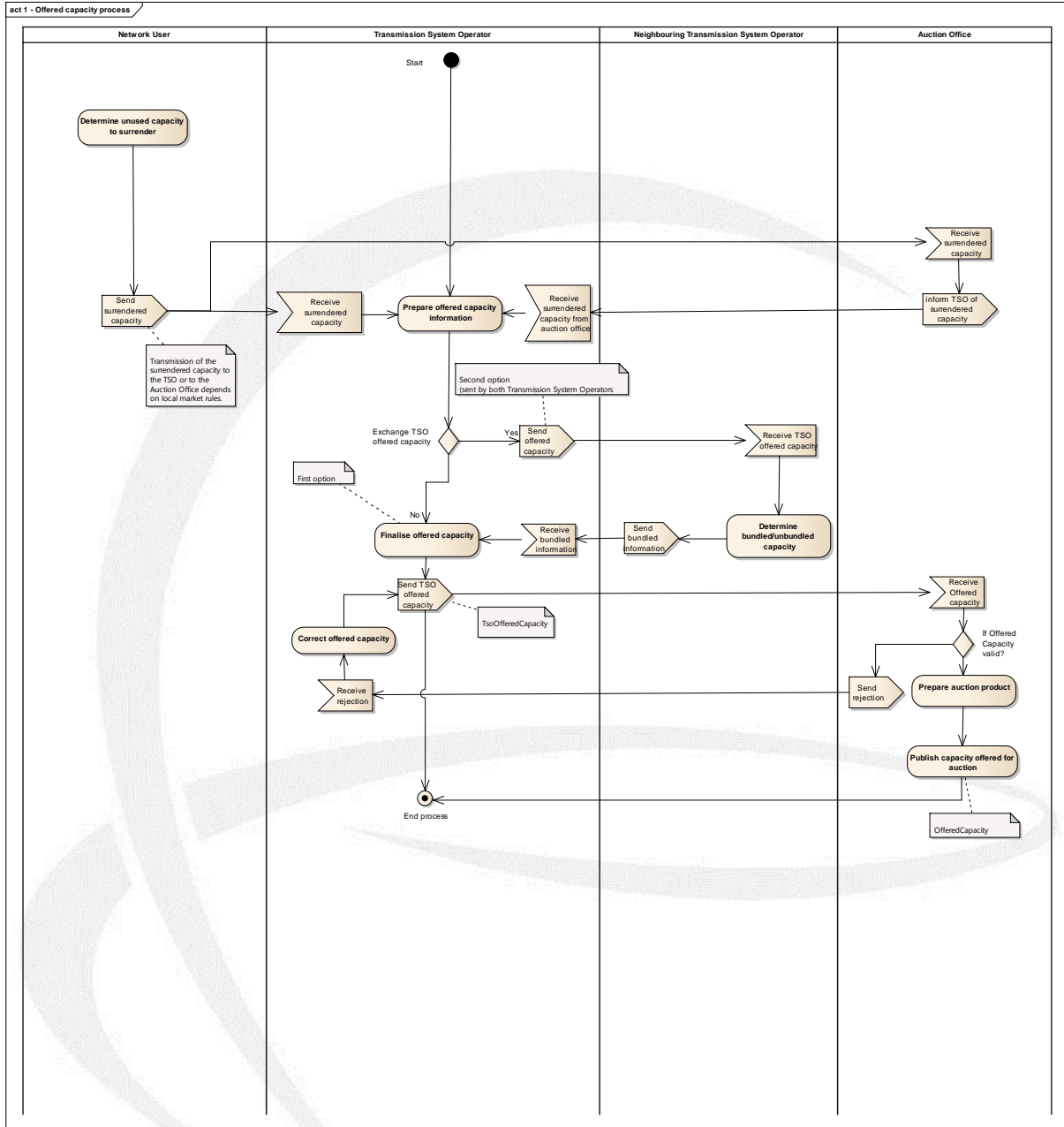
680  
681

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

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

686 Network User accounts are provided by the Network User or the Transmission System  
687 Operator on behalf of the Network User to the Auction Office if required by the  
688 Transmission System Operator. The Auction Office validates the registration data and  
689 forwards the valid requests to the identified Transmission System Operator for approval. The  
690 Transmission System Operator confirms/rejects the approval request. Once confirmed, the  
691 registration information is then sent to the Network User.

692 **3.3.3.3 Offered capacity process**



693  
694  
695

Figure 14: Offered capacity workflow

696 The determination of offered capacity begins on a cyclic basis depending on the standard  
697 capacity product.

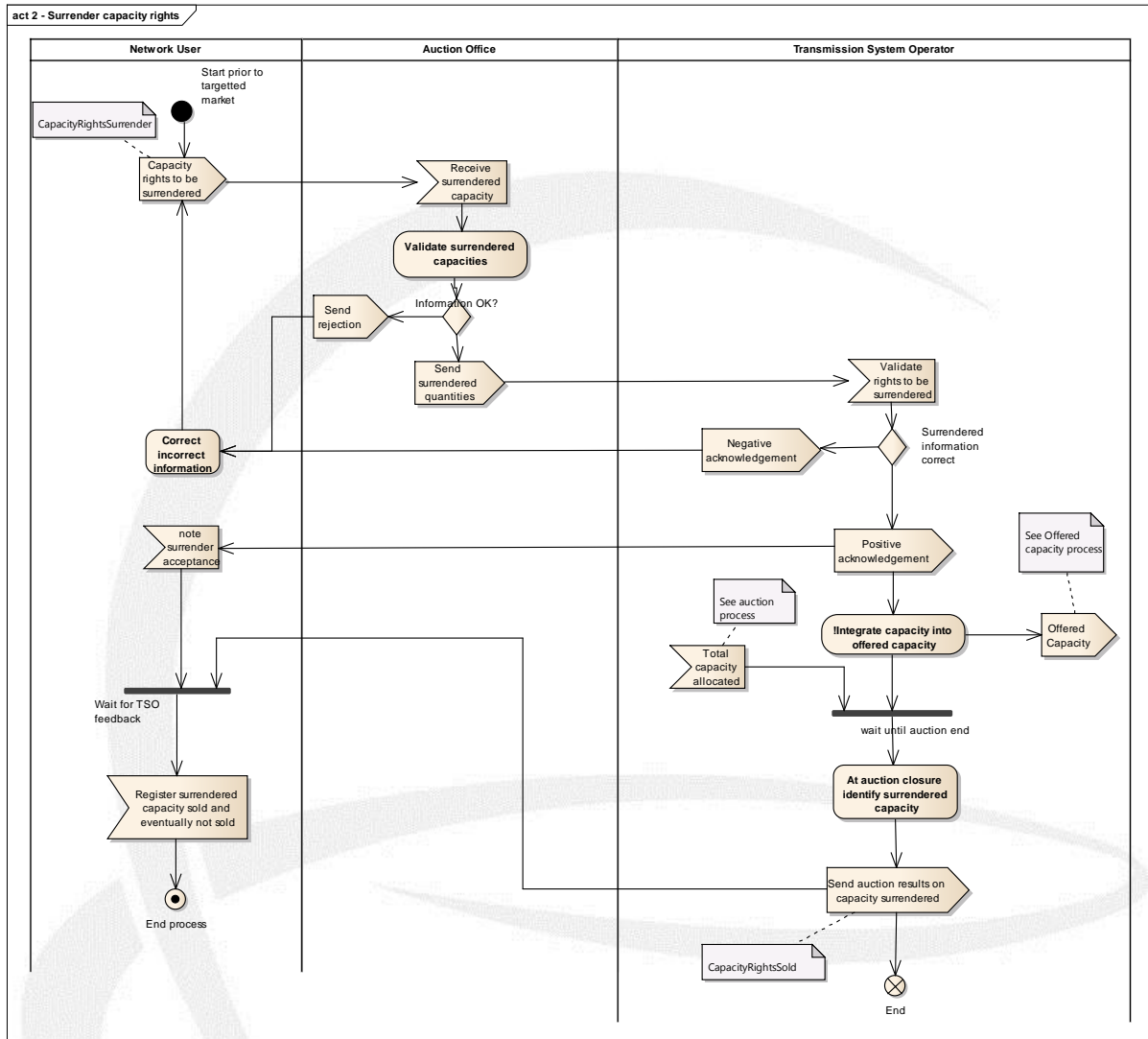
698 The Transmission System Operator(s) send(s) the offered capacity to the Auction Office  
699 according to the options described in point 3.2.3.1.2.

700 For a given market situation a Transmission System Operator may provide the Auction  
701 Office with credit limitations of the Network Users for the products to be auctioned or for

702 secondary transactions between Network Users. This information will be used by the  
703 Auction Office to ensure the legitimacy of the bids and the secondary trades (only in the  
704 case of Network Users that buy capacity).  
705 The Auction Office then makes this offered capacity information available to the market in  
706 the appropriate manner (web publication, download capability, etc..).  
707



708 **3.3.3.4 Surrender capacity process**



709  
710

Figure 15: Surrender capacity process

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

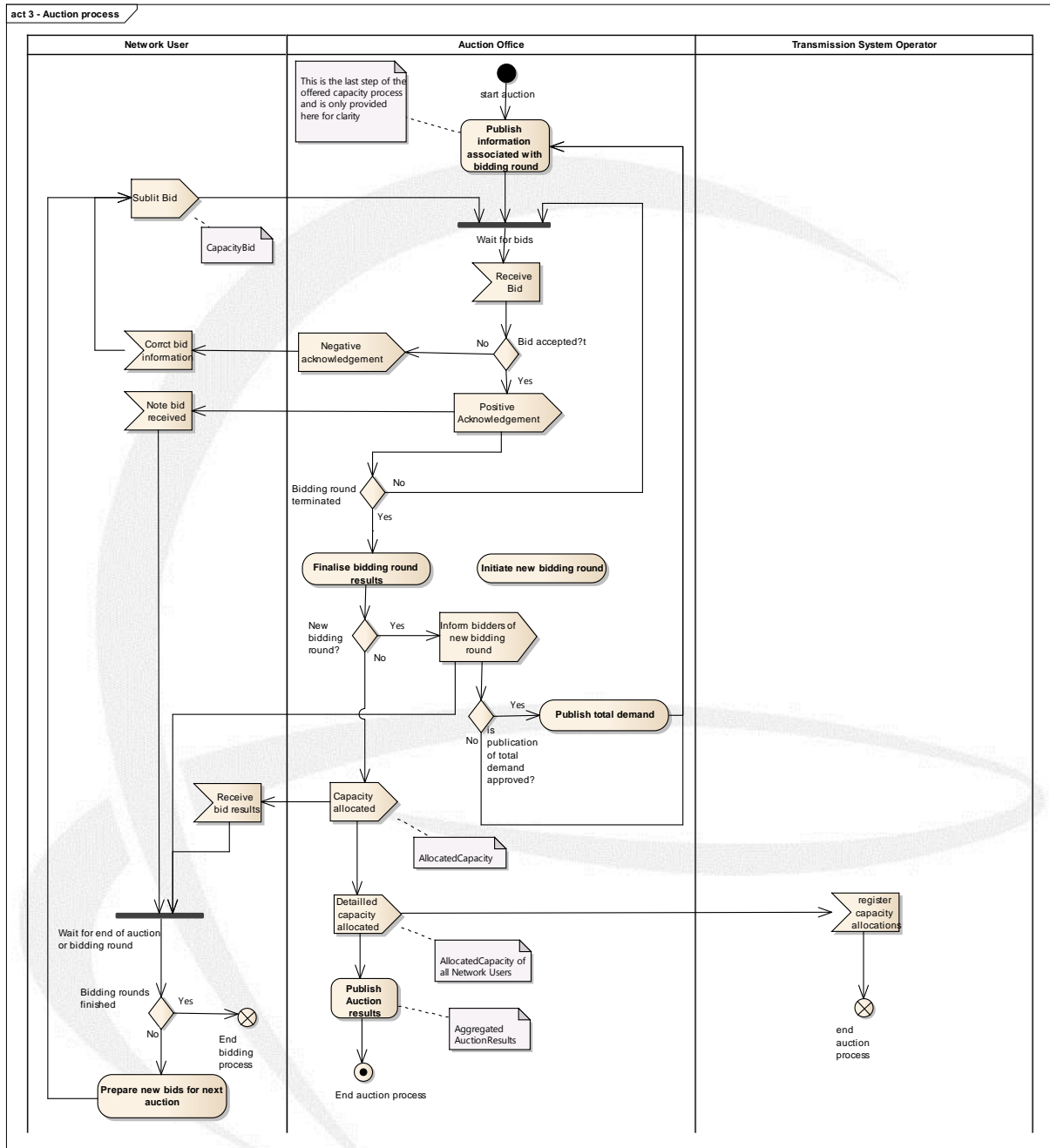
715

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

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



721 **3.3.3.5 Auction process**



722  
723

Figure 16: Auction workflow

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

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

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

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

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

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

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

745 Prior to beginning the new bidding round, the Network Users that participated in the  
746 previous bidding round are informed that a new bidding round will take place with a new  
747 price step. In addition information on the previous bidding round may be published if this is  
748 authorised by the Transmission System Operators.

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

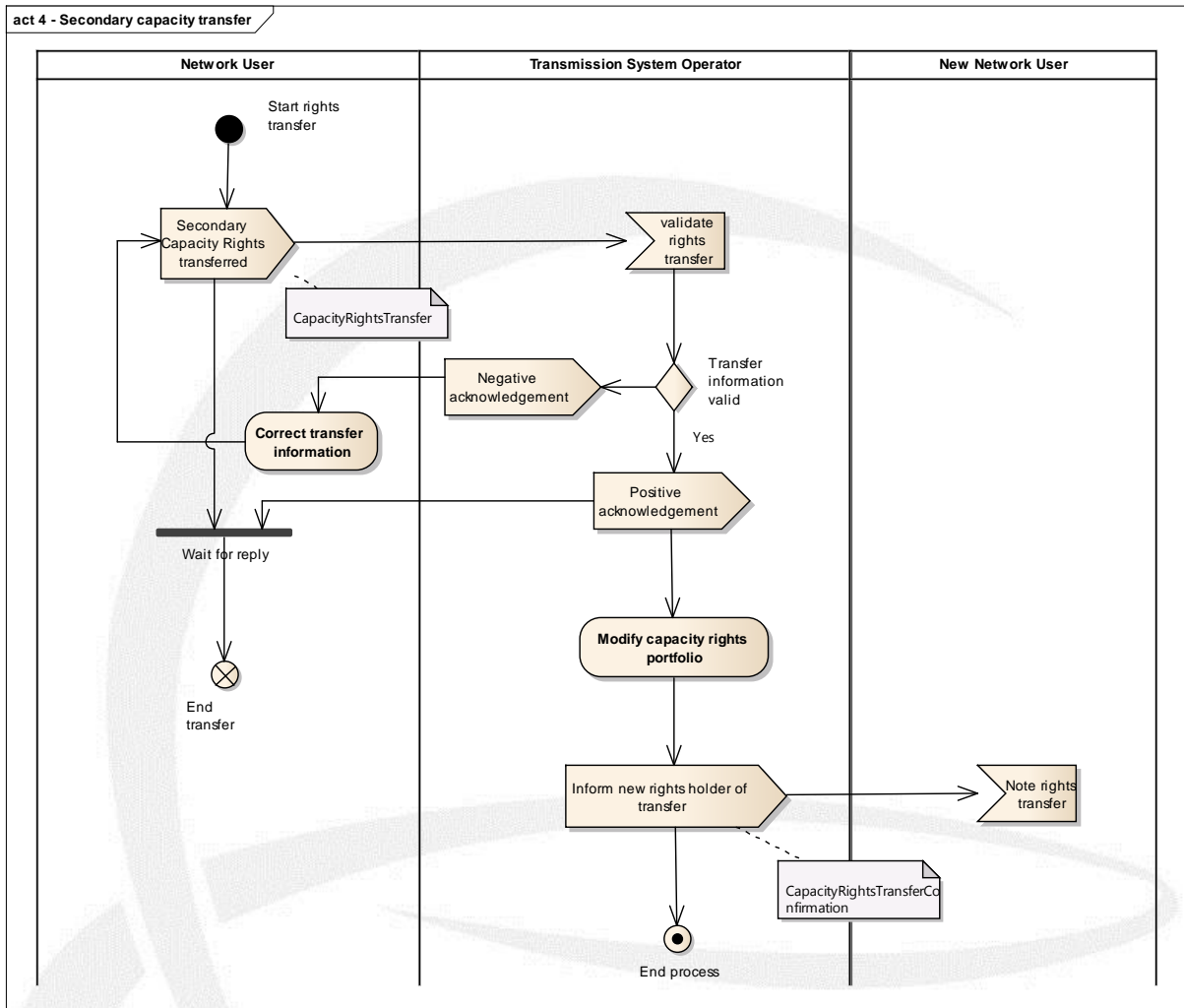
752 In a final step the Auction Office publishes the results of the auction.

753 The bidding in the reverse auction takes place in a similar fashion as an ordinary auction.  
754 When the auction closes the Auction Office processes all the bids and then may provide the  
755 list of validated bids to the Transmission System Operator. In this case the Transmission  
756 System Operator verifies the bids received and provides to the Auction Office the list of  
757 successful bids.

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

759

760 **3.3.3.6 Secondary market trade process**



761  
762

Figure 17: Secondary market transfer process

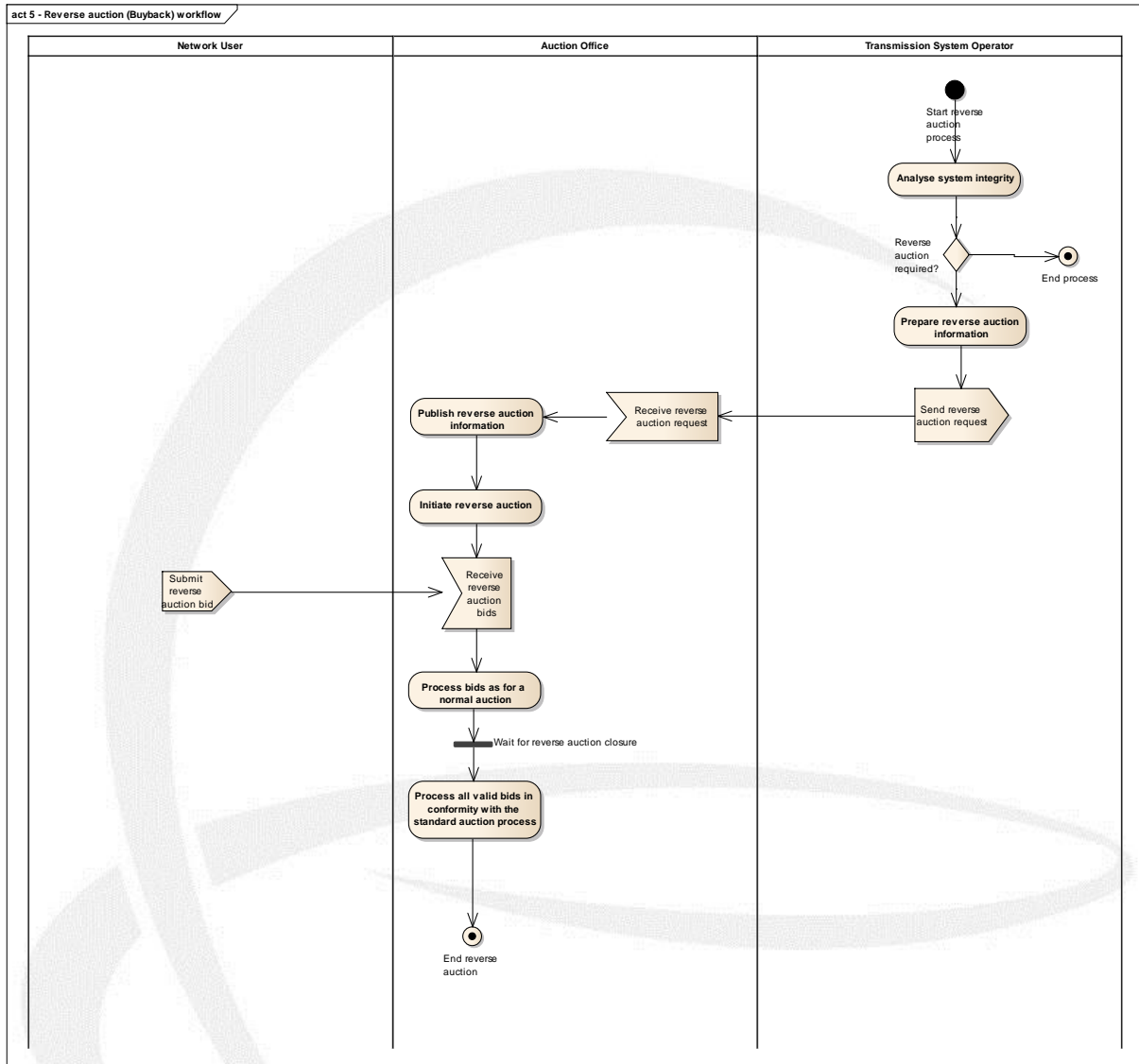
763 A secondary market trade process may take place where Network Users and eventually  
764 Transmission System Operators (in the case of reverse process), may trade the capacity that  
765 has been acquired.

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

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

771

772 **3.3.3.7 Reverse auction process**



773  
774

Figure 18: Reverse auction workflow

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

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

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

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

783 As alternative to a reverse auction the Transmission System Operator may buy back the  
784 capacity acting in the role of a Network User on the secondary market.  
785



786 **3.4 Information model requirements**

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





790 **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>
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>
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>
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	<p>The price that has been established for a given bidding round</p>
BidIdentification	<p>The identification of the Network User's bid provided by the Auction Office or the Network</p>

Name	Description
	User
BidPrice	<p>The price bid on top of the starting price for the capacity requested</p> <p>The price bid may be either a fixed or a floating 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
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	<p>Capacity already allocated to Network Users at a ConnectionPoint</p> <p>This information may be transferred by the Transmission System Operator for the yearly auction according to Article 19 (5(a) &amp; (b)) CAM NC.</p>

Name	Description
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
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

Name	Description
	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
ConversionAmount	The interruptible conversion amount
CreditLimitAmount	The amount of a credit limit
CreditLimitIdentification	The identification of a credit limit assignment to a Network User
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

Name	Description
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
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
InterruptibleConversion	The quantity of interruptible capacity already booked that may be converted into firm capacity in case of a successful firm capacity bid
InterruptibleReference	The reference to interruptible booked capacity that is used to auction for firm capacity
LargePriceStep	A fixed or variable amount that is defined per Interconnection Point and Standard Capacity Product
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>
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</p>

Name	Description
	mandatory.
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 credit limit to establish the credit limit for a given product type
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



Name	Description
	(Buyback or flow commitment)
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
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
TradingMarketType	Market in which the Network User is allowed to

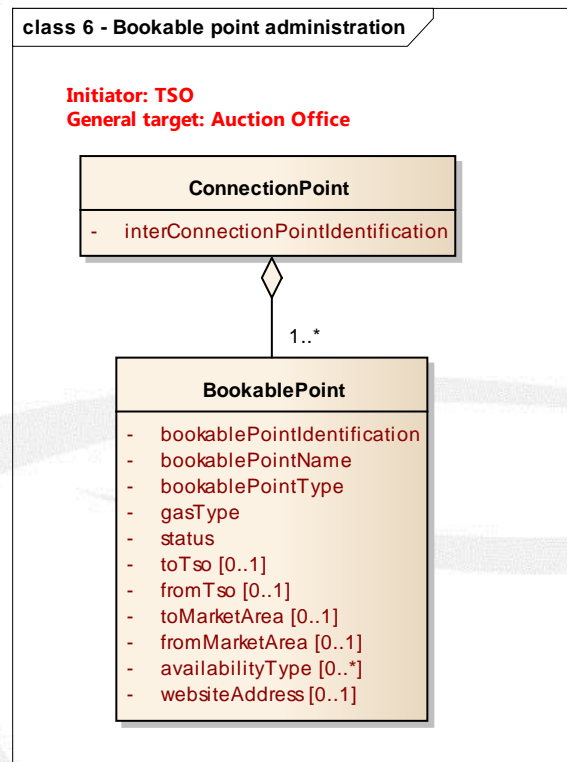
Name	Description
	trade (Primary or Secondary market)
TransfereelIdentification	The identification of a Network User that has bought transferred capacity rights on the secondary market
TransferorIdentification	The identification of a Network User that has transferred capacity rights on the secondary 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
UnitOfMeasure	The unit of measure in which the capacity amount is expressed
UnitOfPrice	The unit of measure in which the price is expressed
ValidityPeriod	The period of validity of an object
VatCode	The value added tax code assigned by a national organisation
WebsiteAddress	URL of a TSO-Website, that contains all commercial terms and conditions

791 **3.6 Requirements per process**

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

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

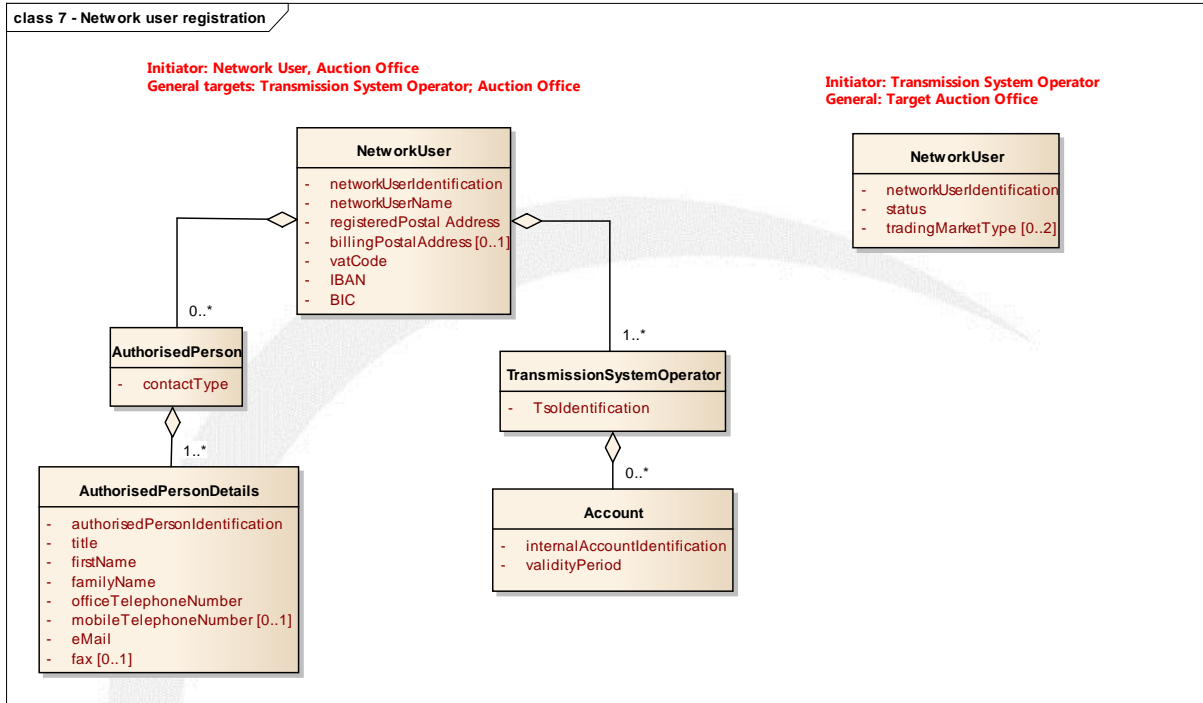
800 **3.6.1 Bookable point administration process**



801  
802

Figure 19: Bookable point administration requirements

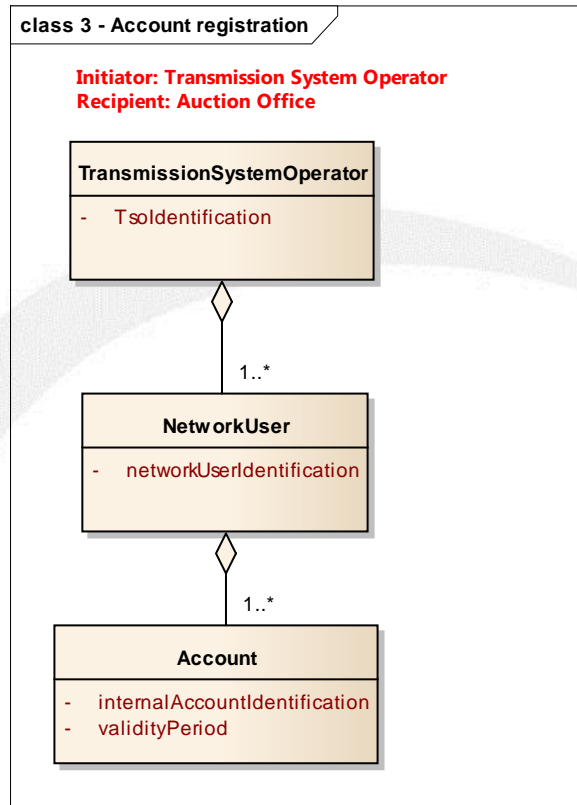
803 **3.6.2 Network User Registration process**



804  
805  
806  
807

Figure 20: Network User registration requirements

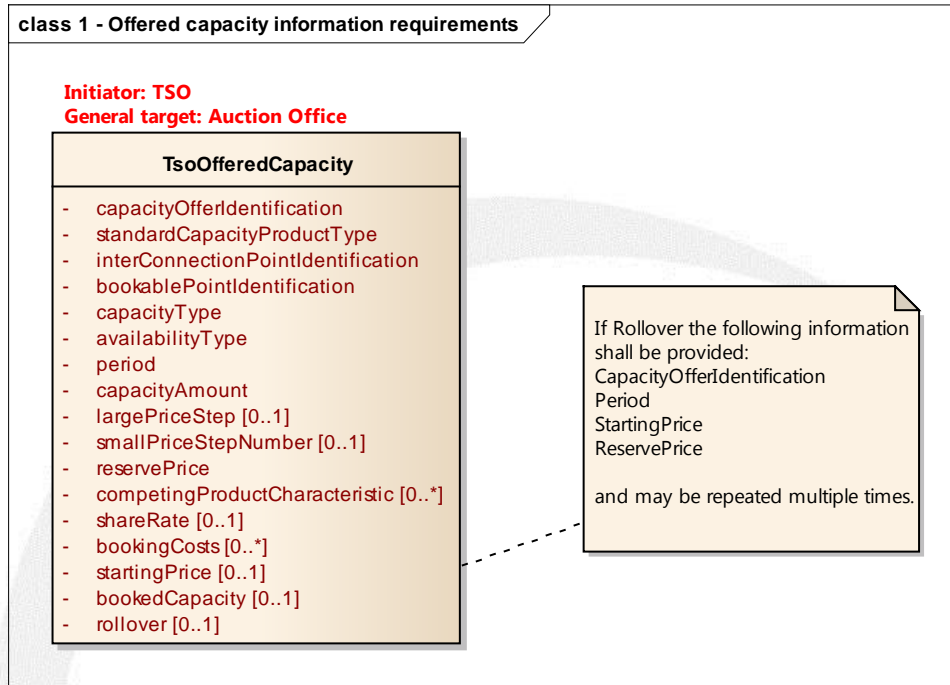
808 **3.6.3 Account Registration process**



809  
810

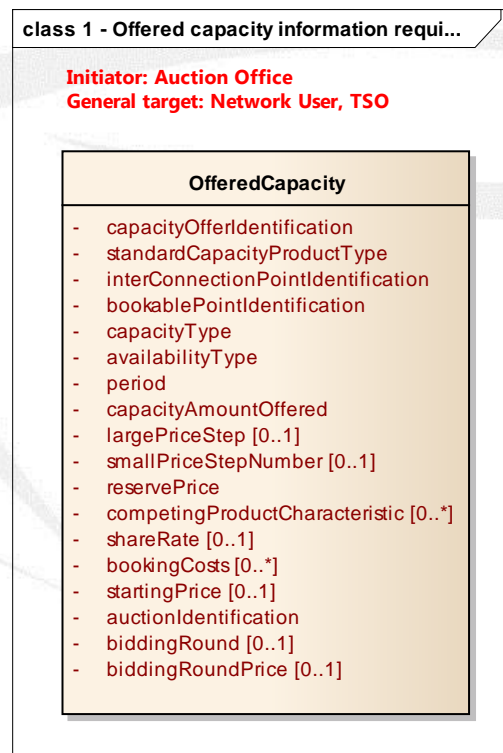
Figure 21: Account registration requirements

811 **3.6.4 Offered capacity process**



812  
813  
814

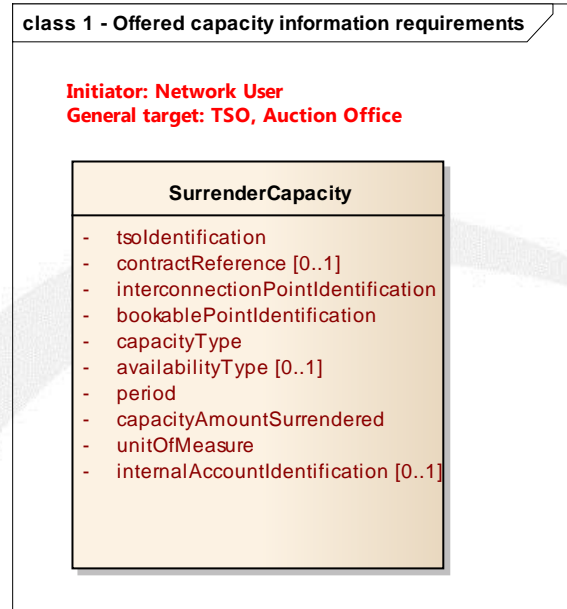
Figure 22: Transmission System Operator Offered capacity information requirements



815  
816

Figure 23: Offered capacity information requirements

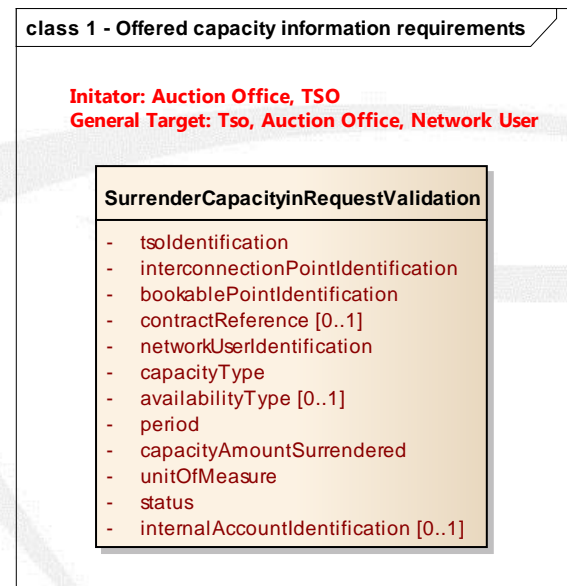
817 **3.6.5 Surrender capacity process**



818  
819

Figure 24: Surrendered capacity information requirements

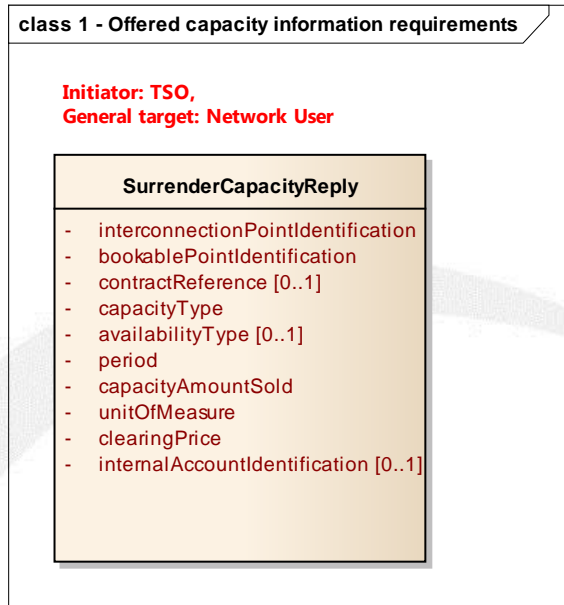
820



821  
822

Figure 25: Surrender capacity request validation requirements

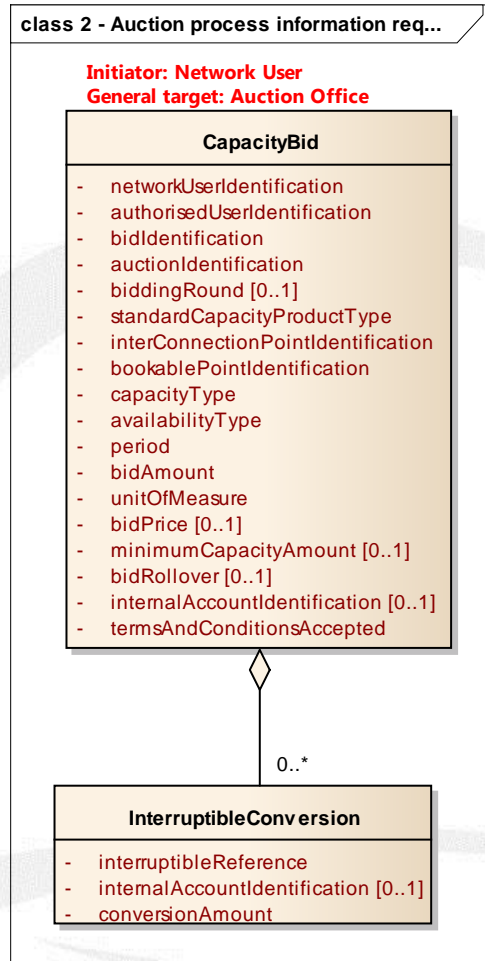




823  
824

**Figure 26: Surrender capacity result requirements**

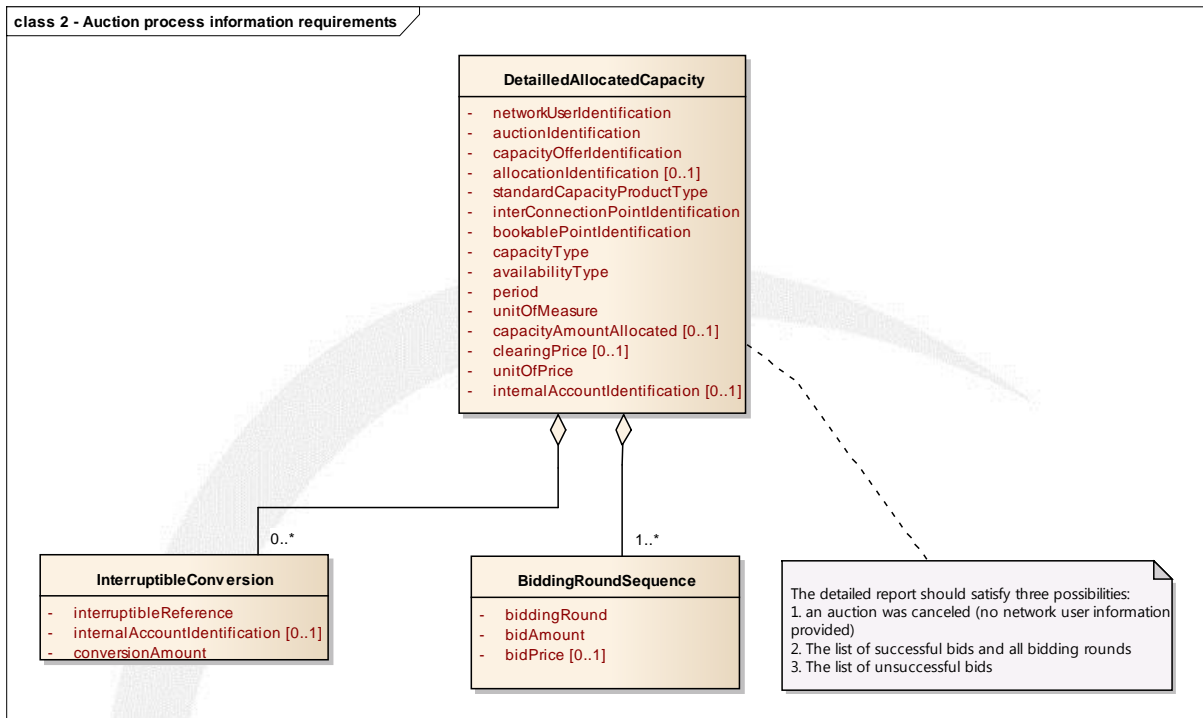
825 **3.6.6 Auction process**



826

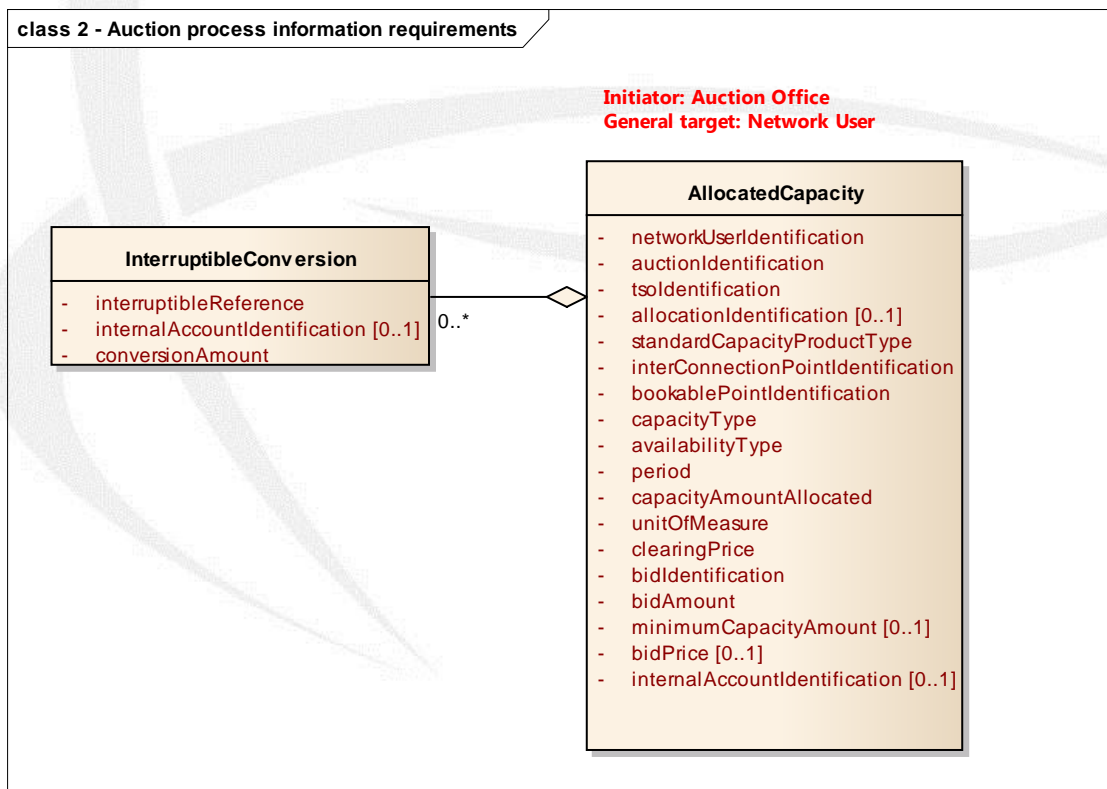
827

Figure 27: Bid information requirements



828  
829

Figure 28: Detailed capacity allocated information requirements



830  
831

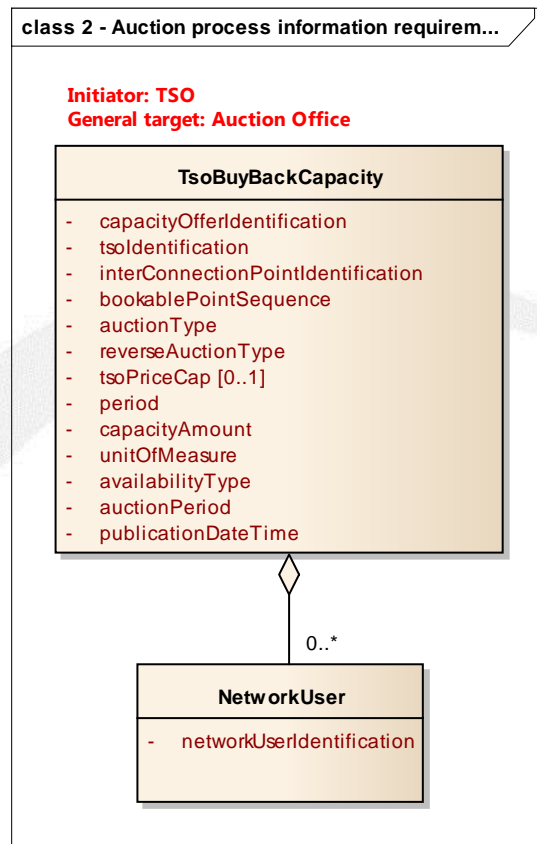
Figure 29: Allocated capacity information requirements



832

833

Figure 30: Aggregated auction results

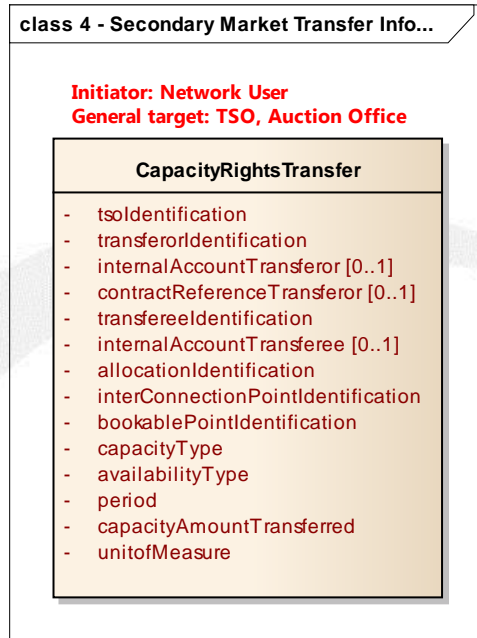


834

835

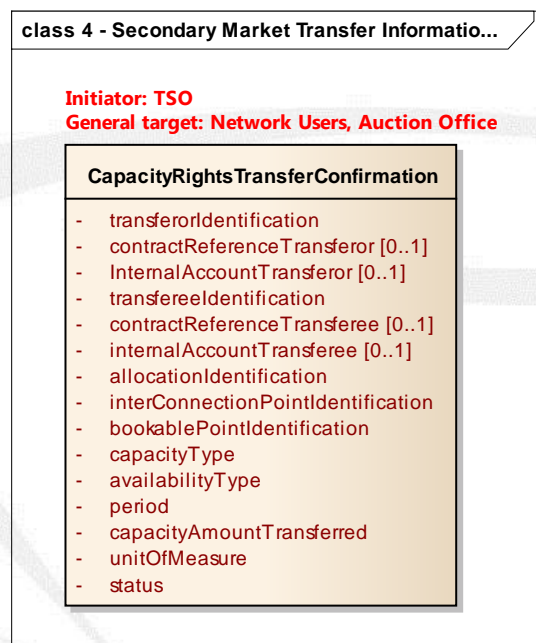
Figure 31: Transmission System Operator Buy back capacity information requirements

836 **3.6.7 Secondary market transfer process**



837  
838

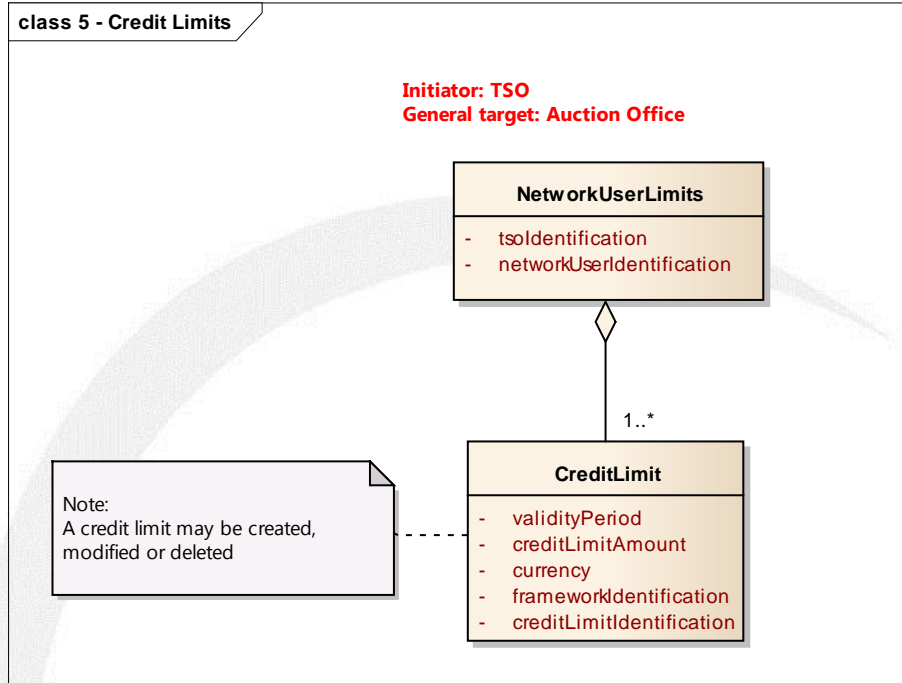
Figure 32: Secondary market capacity rights transfer information requirements



839  
840

Figure 33: Secondary market capacity rights transfer confirmation information requirements

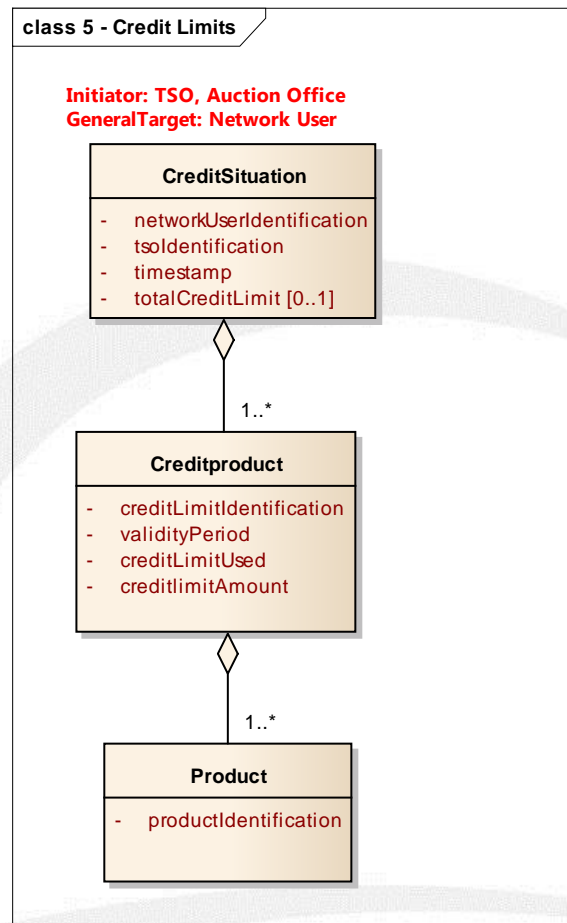
841 **3.6.8 Credit limit process**



842  
843

Figure 34: Network User credit limit information requirements





844  
845

Figure 35: Network User credit situation requirements

846 **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	Not Applicable
Network User Registration	Registered Network User	Transmission System Operator	Private	Not Applicable
Network User Registration to Auction Office	Network User	Auction Office	Private	Not Applicable
Approved Network Users	Auction Office	Transmission System Operator	Private	Not Applicable
Approved Network Users	Transmission System Operator	Auction Office	Private	Not Applicable
Approved Network Users	Auction Office	Registered Network User	Private	Not Applicable
Surrender Capacity Rights	Registered Network User	Auction Office	Private	Interactive
Surrender Capacity Rights	Auction Office	Transmission System Operator	Private	Not Applicable
Offered Capacity	Transmission System Operator	Auction Office	Private	Not Applicable
Offered Capacity	Auction Office	Transmission System Operator	Private	Not Applicable
Offered Capacity	Auction Office	Registered Network User	Public	Interactive
Credit Limit	Transmission System Operator	Auction Office	Private	Not Applicable
Credit Limit	Auction Office	Transmission System Operator	Private	Not Applicable
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	Not Applicable
Aggregated Auction Results	Auction Office	All	Public	Interactive
Surrendered Capacity Sold	Auction Office	Transmission System Operator	Private	Not Applicable
Surrendered Capacity Sold	Transmission System Operator	Registered Network User	Private	Document Based
Reverse Auction Requirements	Transmission System Operator	Auction Office	Private	Not Applicable
Reverse Auction Bid	Registered Network User	Auction Office	Private	Interactive

Allocate Reverse Auction Results	Auction Office	Transmission System Operator	Private	Not Applicable
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

847  
848  
849

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