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

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Version 18 2016-07-26

10 **Log of changes**

Change	Date of change	Issuer of change
Inserted clarification of the Common Data Exchange Solutions Inserted the Common Data Exchange Solution Table	12 April 2016	ENTSOG
V17 Updated clarification of the Common Data Exchange Solutions Updated the Common Data Exchange Solution Table	22 June 2016	ENTSOG
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 Reworded the description on Manage Credit limit – section 3.2.6 Updated the Network User Workflow – section 3.3.3.2 Updated the Auction Process Workflow – section 3.3.3.5 Updated and inclusion of Definitions – section 3.5 Updated requirements for Bookable Point administration process – section 3.6.1 Updated requirements for Network User registration process – section 3.6.2 Updated requirements for Offered Capacity process – section 3.6.4 Updated requirements for Auction process – section 3.6.6 Updated requirements for Secondary Market Transfer process – section 3.6.7	26 July 2016	ENTSOG

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134 **1 Introduction**

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

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

147 **2 Scope**

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

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

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

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

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

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

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



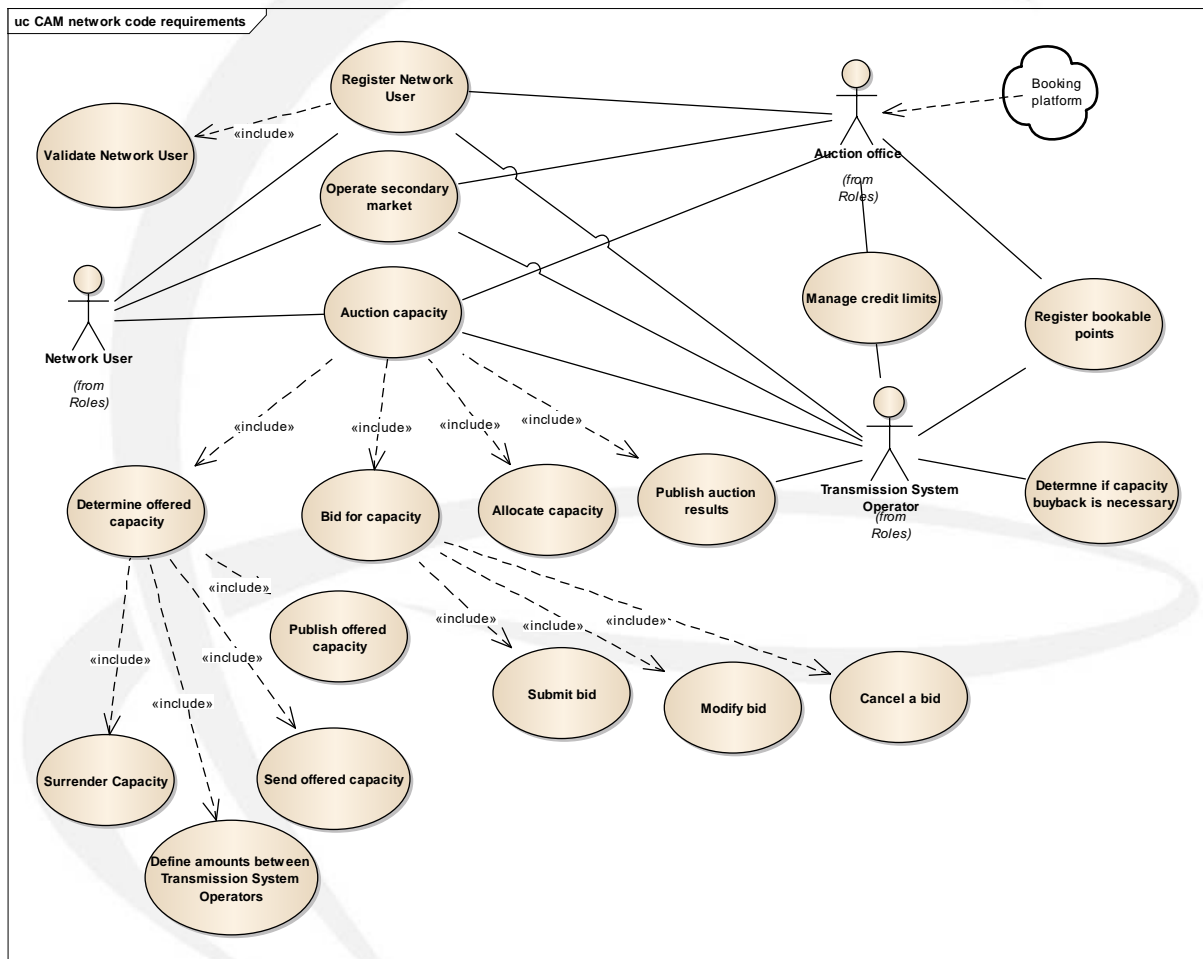
173 **3 Business Requirements**

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

176 **3.1 CAM/CMP requirements**

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

180



181

182

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

183 **3.1.1 List of actors**

184 **3.1.1.1 Auction Office**

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

188 **3.1.1.2 Network User**

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

193 **3.1.1.3 Transmission System Operator**

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

199 **3.1.1.4 Booking platform**

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

202 It is managed by an Auction Office.

203 **3.2 Use case detail**

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

208 **3.2.1 Register Network User (not referenced in the CAM/CMP regulation)**

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

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

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

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

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

228 **3.2.1.1 Validate Network User registration**

229 The Transmission System Operator validates the information received.

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

235 **3.2.2 Register Bookable Points**

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

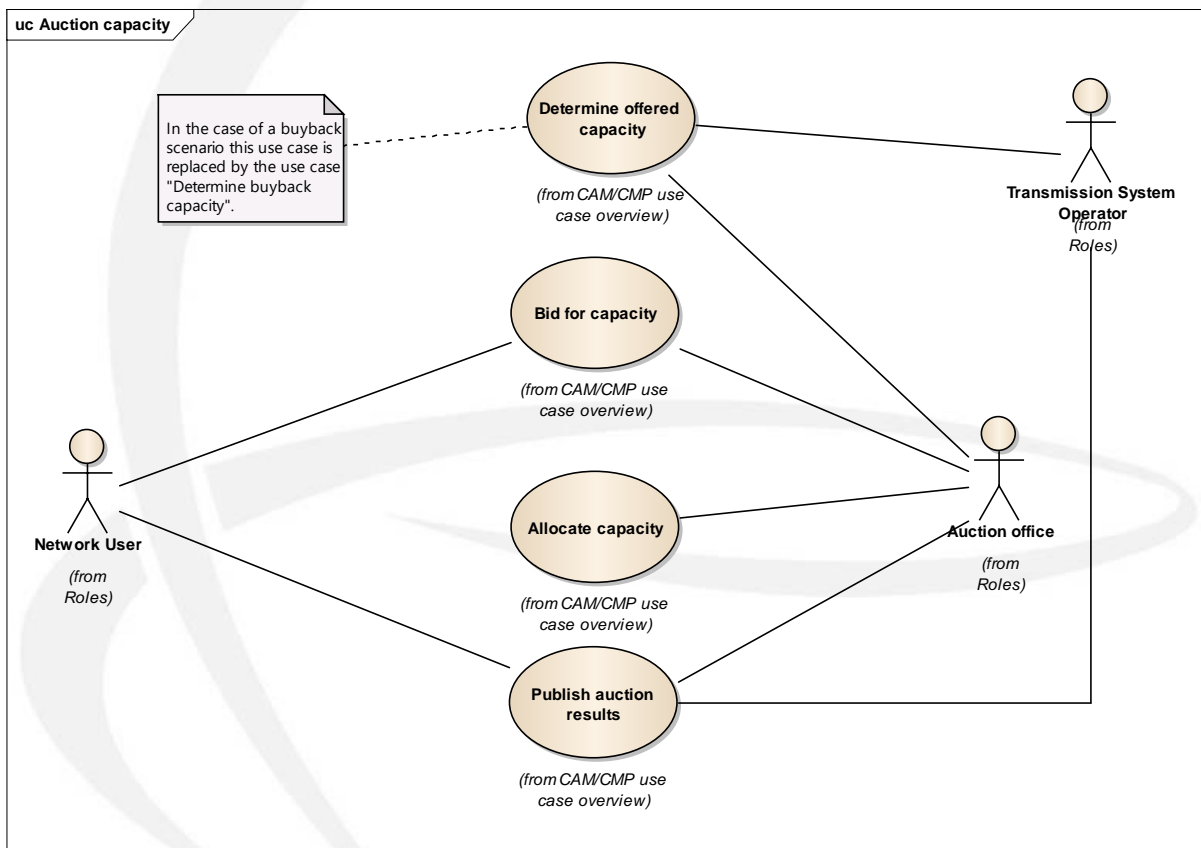
240 A bookable point is defined by several items (see definition in chapter 3.5).

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

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

243 3.2.3 Auction capacity

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



250

251

Figure 2: the auction capacity use case

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

253 **3.2.3.1 Determine offered capacity**

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

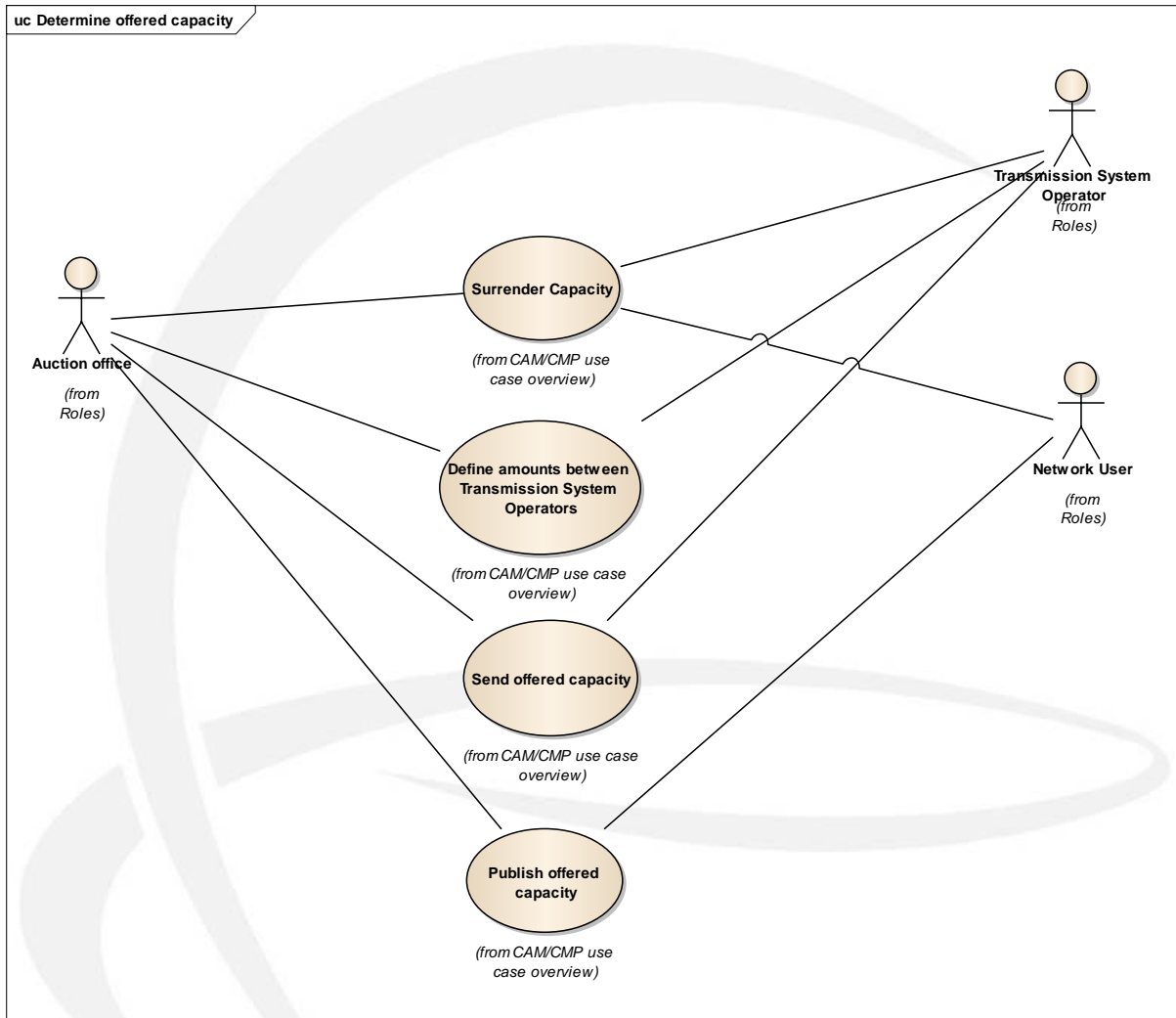
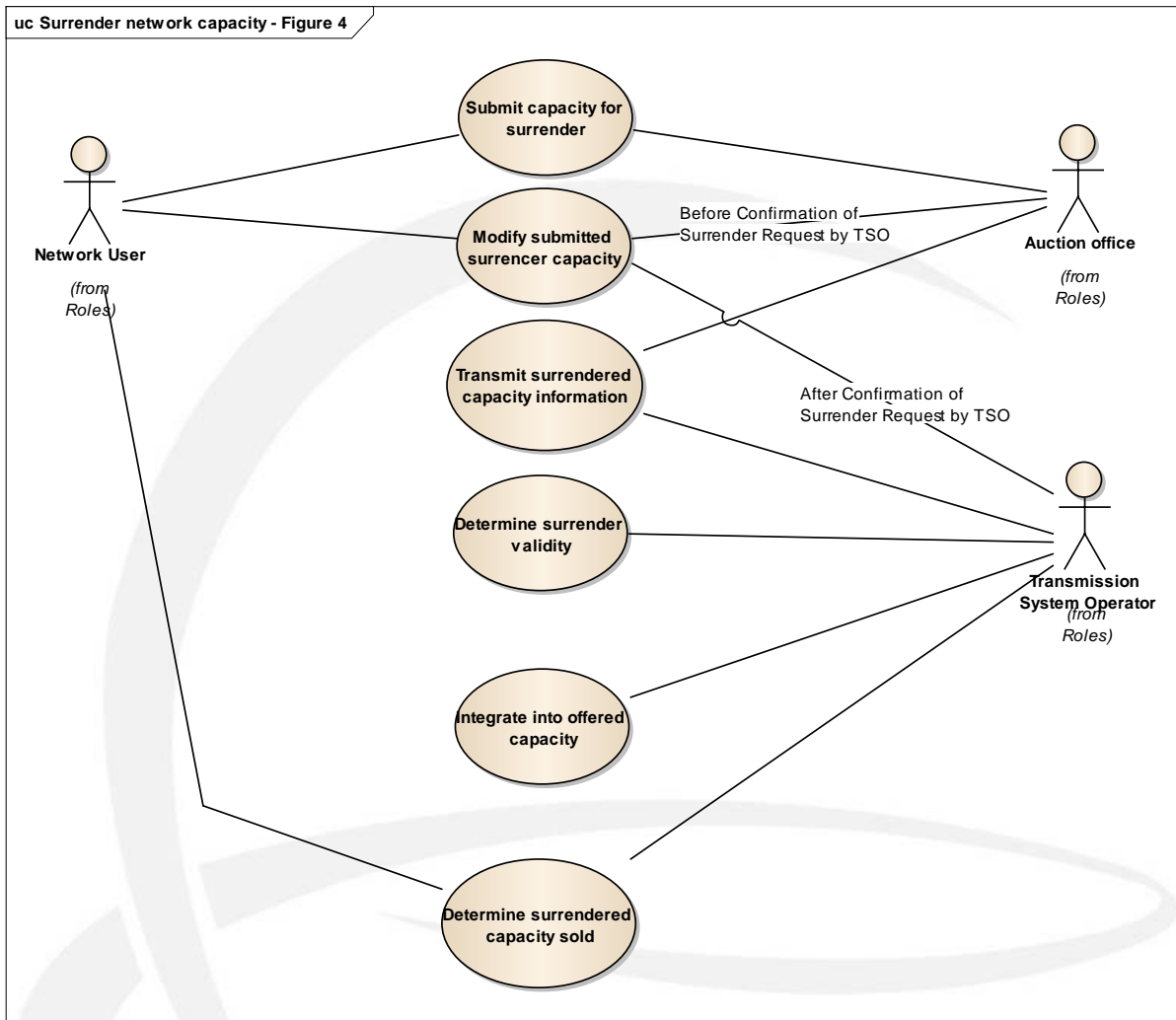


Figure 3: Determine offered capacity use case

257
258
259 Once the Transmission System Operator has defined the Offered Capacity it is transmitted
260 to the Auction Office.

261 **3.2.3.1.1 Surrender capacity**



262
263

Figure 4: CMP surrender network capacity use case

264 **3.2.3.1.1.1 Submit capacity for surrender**

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

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

274 **3.2.3.1.1.2 Transmit surrendered capacity information**

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

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

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

281 **3.2.3.1.1.3 Determine surrender validity**

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

283 **3.2.3.1.1.4 Modify a surrender**

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

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

291 **3.2.3.1.1.5 Integrate into Offered Capacity**

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

294 **3.2.3.1.1.6 Determine surrendered capacity sold**

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

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

300 **3.2.3.1.2 Define amount between Transmission System Operators**

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

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

307 1st option:

308 As default rule, the Transmission System Operators shall decide to let the Auction
309 Office determine the bundled and unbundled capacity that makes up the established

310 offered capacity. Each Transmission System Operator at each side of the IP shall
311 inform the Auction Office of the offered capacity. The Auction Office shall apply the
312 lesser rule in order to determine the bundled capacity.

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

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

318 2nd option:

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

324 **3.2.3.1.3 Send offered capacity**

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

327 **3.2.3.1.4 Publish offered capacity**

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

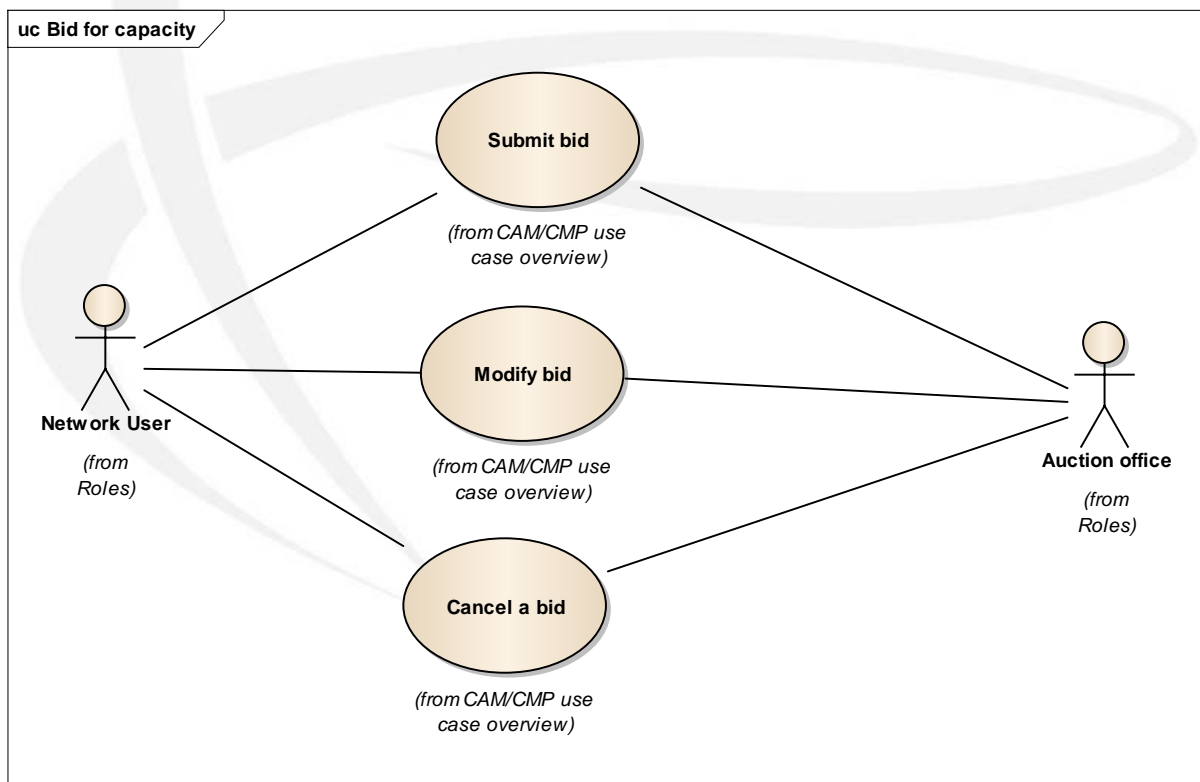
331 The Network Users are also informed in the publication of any starting price and, in the case
332 of ascending clock auctions, the value of the large price step and the small price step for the
333 bidding rounds.

334 **3.2.3.2 Bid for capacity**

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

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

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



345

346

Figure 5: bid for capacity use case

347 **3.2.3.2.1 Submit bid**

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

353 **3.2.3.2.2 Modify bid**

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

356 **3.2.3.2.3 Cancel a bid**

357 The Network User may at any time before the closure of a bidding round cancel a bid placed
358 earlier in that round according to the requirements stated in Article 17 CAM NC and Article
359 18 CAM NC.

360 Exceptional cases in which a Network User cannot cancel a bid are bidding rounds with
361 small price steps in ascending clock auctions according to the requirements stated in Article
362 17.

363 **3.2.3.3 Allocate capacity**

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

366 **3.2.3.4 Publish auction results**

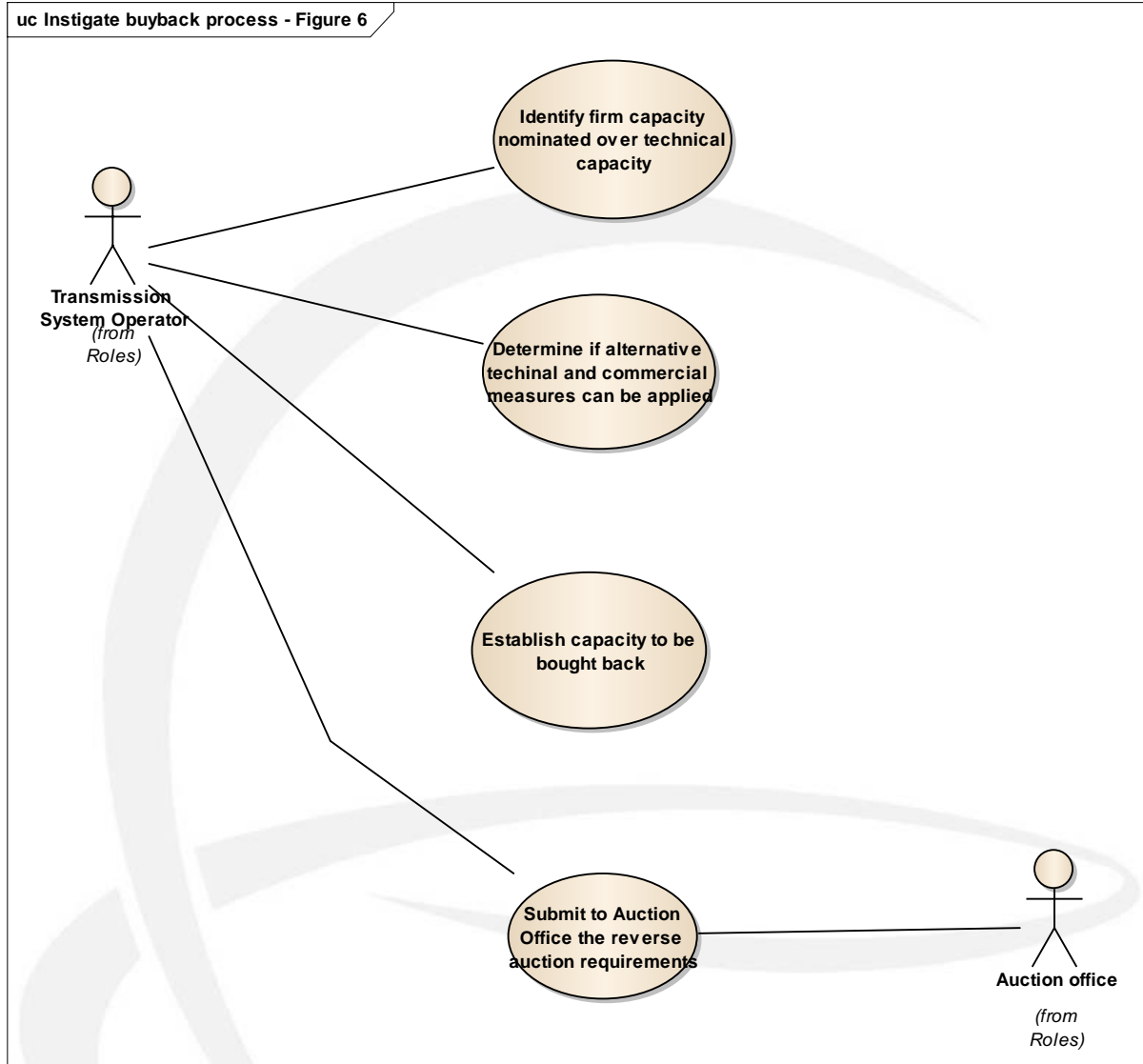
367 Network Users are informed by the Auction Office of the results of the bids that they have
368 submitted.

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

370 The Auction Office provides the Transmission System Operators with the detailed auction
371 results.

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

374 **3.2.4 Determine if capacity buyback is necessary**



375
376

Figure 6: Reverse auction use case

377 **3.2.4.1 Identify firm capacity nominated over technical capacity**

378 The Transmission System Operator shall identify firm capacity nominated over technical
379 capacity.

380 **3.2.4.2 Determine if alternative technical and commercial measures can be**
381 **applied**

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

384 **3.2.4.3 Establish capacity to be bought back**

385 The Transmission System Operator determines the amount of capacity that will have to be
386 bought back to re-establish the situation, without taking into consideration whether the
387 capacity is bundled or not.

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

391 There are two types of buy back;

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

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

396 **3.2.4.4 Submit to Auction Office the reverse auction requirements**

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

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

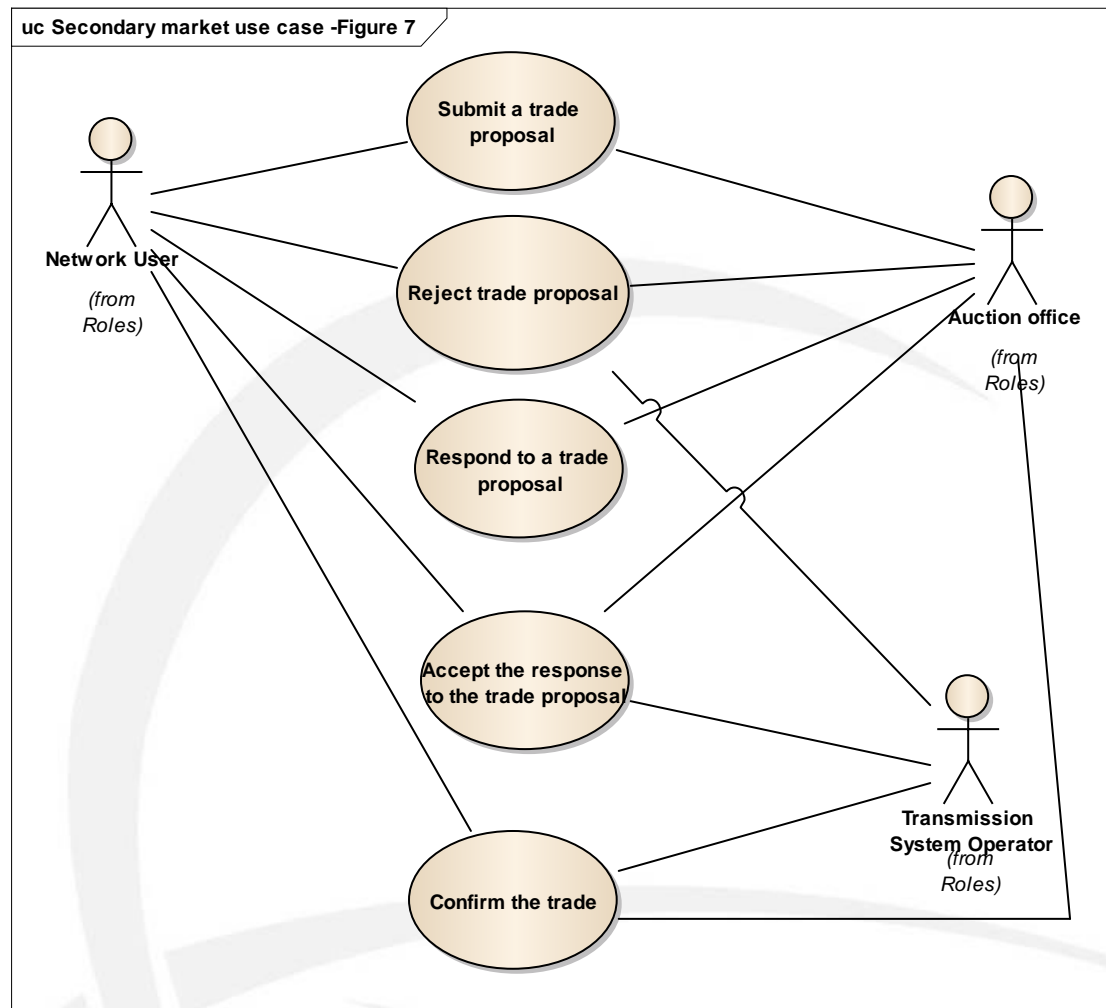
403 The use cases of submit bid, modify bid and cancel bid are the same except that the auction
404 type is generally a uniform price auction where the seller may provide in the bid the
405 capacity for sale and its price. Local market rules may determine that any other kind of
406 auction mechanism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

407 **3.2.5 Operate secondary market (not referenced in the CAM/CMP 408 regulation)**

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

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

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



416

417

Figure 7: Secondary market capacity

418 3.2.5.1 Submit a Trade Proposal

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

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

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

430 **3.2.5.2 Reject a Trade Proposal**

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

437 **3.2.5.3 Respond to a Trade Proposal**

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

440 **3.2.5.4 Accept the response to a Trade Proposal (conditional to Transmission 441 System Operator approval)**

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

446 **3.2.5.5 Confirm a Trade**

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

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

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

456 **3.2.6 Manage credit limits (not referenced in the CAM/CMP regulation)**

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

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

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

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

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

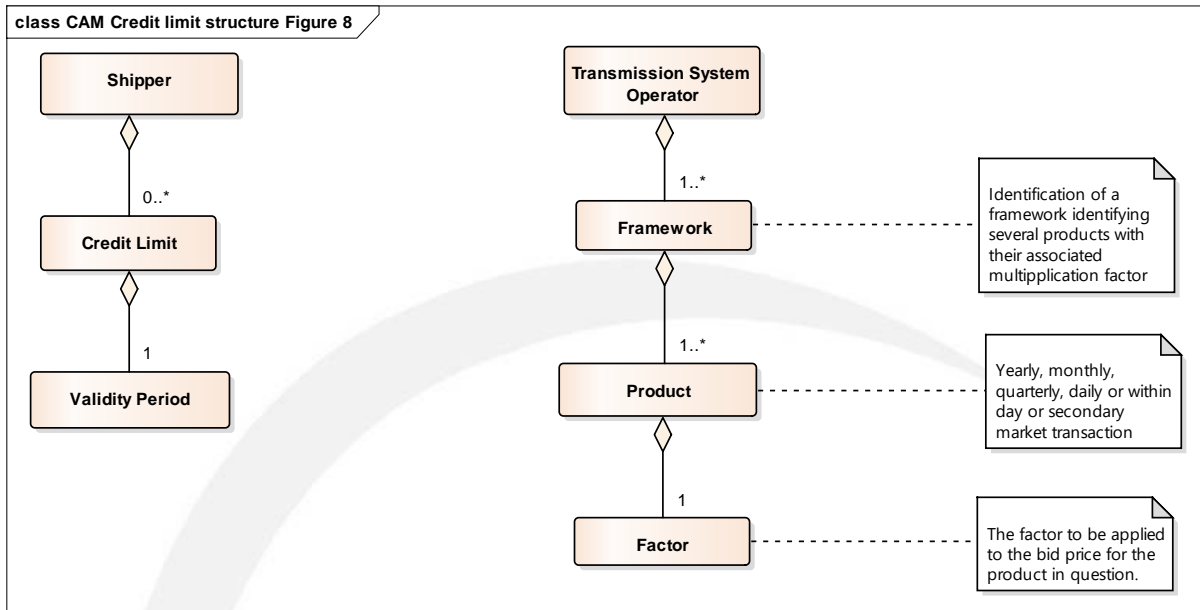
469 Network Users may be able to consult their credit limit information on the booking platform
470 if such a right is accorded by the Transmission System Operator. The financial value for a
471 given Network User's bid associated to a specific product is determined by the
472 multiplication of the unitary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

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

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

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

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

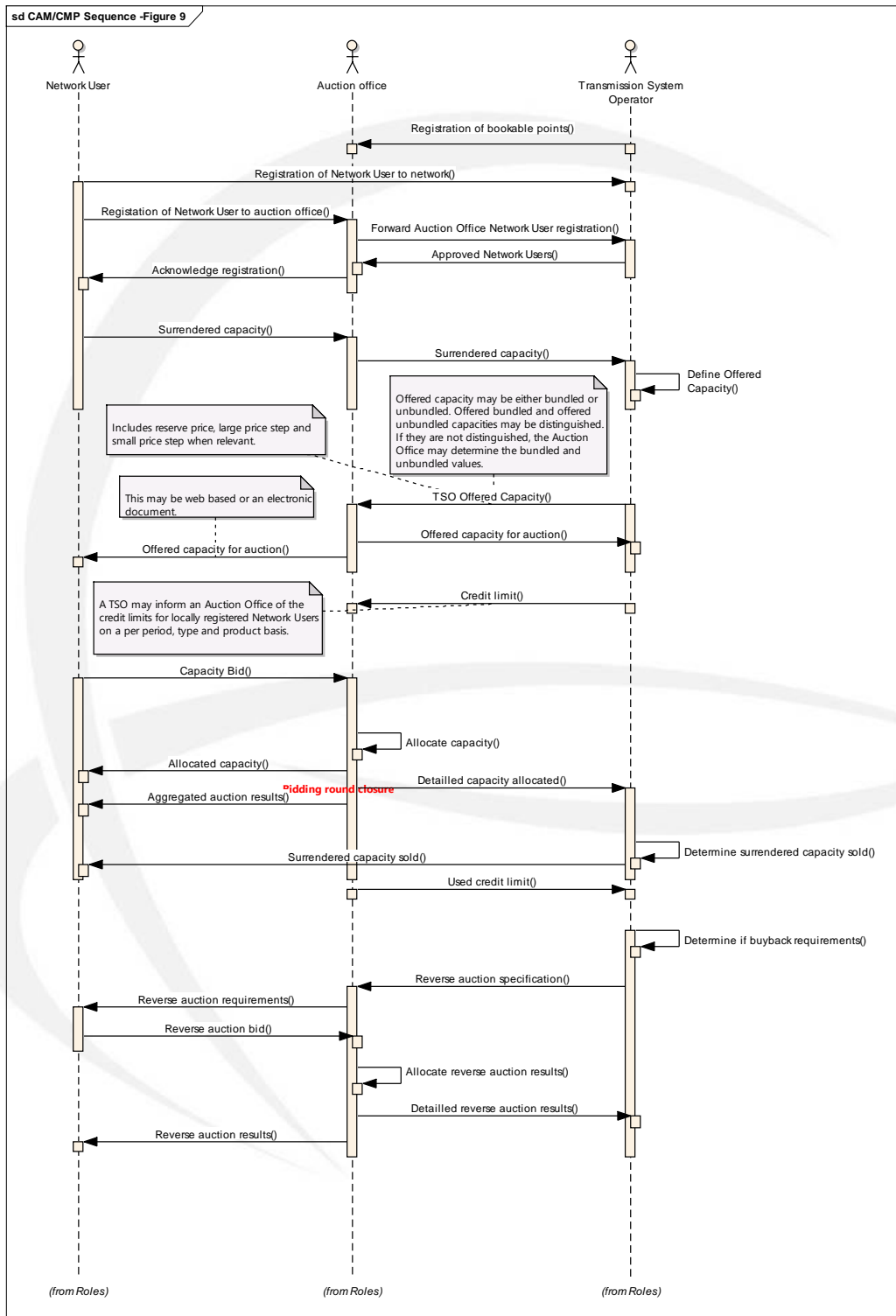


491
492

Figure 8: Credit limit requirements

493 **3.3 Information flow definition**

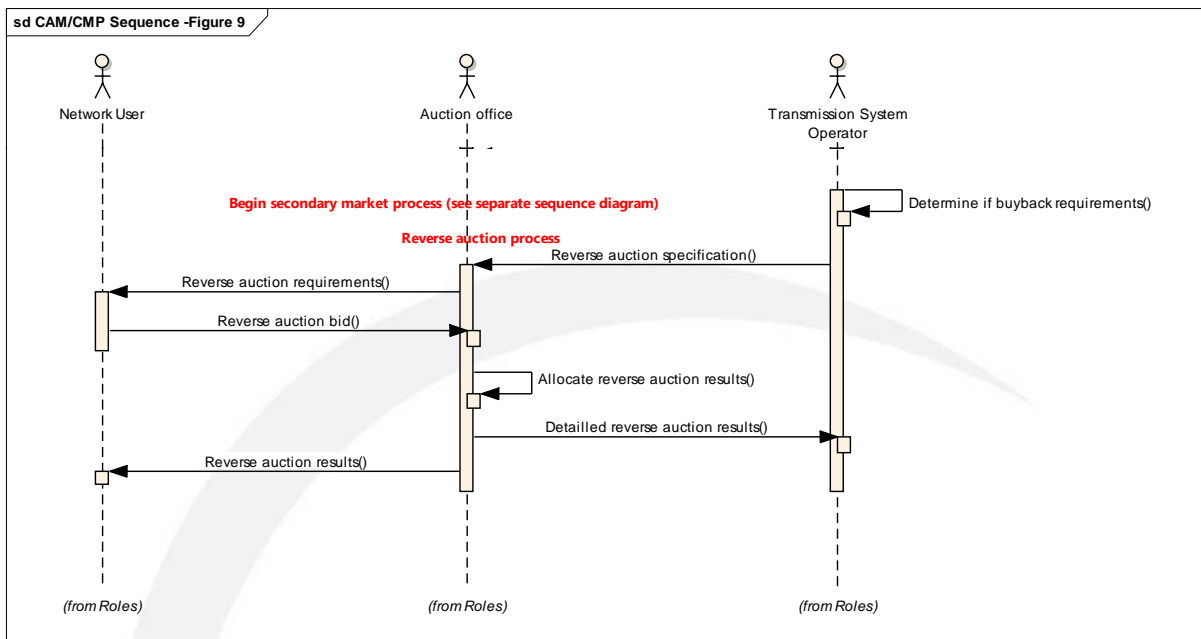
494 **3.3.1 CAM/CMP Sequence flow**



495

496

Figure 9: Information flow sequence



497
498

Figure 10: Information flow sequence

3.3.1.1 Bookable point registration

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

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

504

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

3.3.1.2 Network User registration to Transmission System Operator

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

508 The data exchange solution for this data exchange is to be negotiated between the
509 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	Recommended - Interactive

510 3.3.1.3 Network User registration to Auction Office

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

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

515

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

516 3.3.1.4 Approved Network Users

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

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

522

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

523 3.3.1.5 Surrender capacity rights

524 Prior to a given auction period a Network User may surrender capacity rights that he holds
525 for the intended period of the auction (dependent on national regulations). The capacity to
526 be surrendered is sent to the Auction Office for transmission to all involved Transmission
527 System Operators. Once verified the capacity will be incorporated into the total offered
528 capacity for the next auction product.

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

531

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

532

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

536

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

537 3.3.1.6 Offered capacity

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

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

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

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

548

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

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

551

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

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

552 3.3.1.7 Credit limit

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

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

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

562 The data exchange solutions between the Auction Office and the Transmission System
563 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
564 data exchange solution is to be negotiated between the parties:
565

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

566 3.3.1.8 Capacity bid

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

571 The common data exchange solution for this data exchange is shown below:
572

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

573 **3.3.1.9 Allocated capacity**

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

577 The common data exchange solution for this data exchange is shown below:
578

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

579 **3.3.1.10 Detailed capacity allocated**

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

582 The data exchange solutions between the Auction Office and the Transmission System
583 Operator are not part of the Network Code for Interoperability and Data Exchange Rules the
584 data exchange solution is to be negotiated between the parties:
585

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

586 **3.3.1.11 Aggregated auction results**

587 This represents the total aggregated values for the auction (at least the clearing price and
588 total capacity sold) and is intended for use by any market participant. (refer to section
589 3.2.3.4)

590 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

591 **3.3.1.12 Surrendered capacity sold**

592 When the Transmission System Operator receives the detailed results of the auction it
593 determines if the capacity sold is greater than the Transmission System Operator's available
594 technical capacity. If this is the case the Transmission System Operator allocates the
595 remaining sold capacity to the Network Users that have surrendered capacity. (refer to
596 section 3.2.3.1.1.6)

597 The Transmission System Operator will inform the Network User about the Surrendered
598 Capacity Sold.

599 The common data exchange solution between Transmission System Operator and the
600 registered Network user is shown below:
601

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

602 3.3.1.13 Reverse auction requirements

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

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

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

610 3.3.1.14 Reverse auction bid

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

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

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

615 3.3.1.15 Allocate reverse auction results

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

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

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
Allocate Reverse Auction Results	Auction Office	Transmission System Operator	Private	Recommendation - Document Based

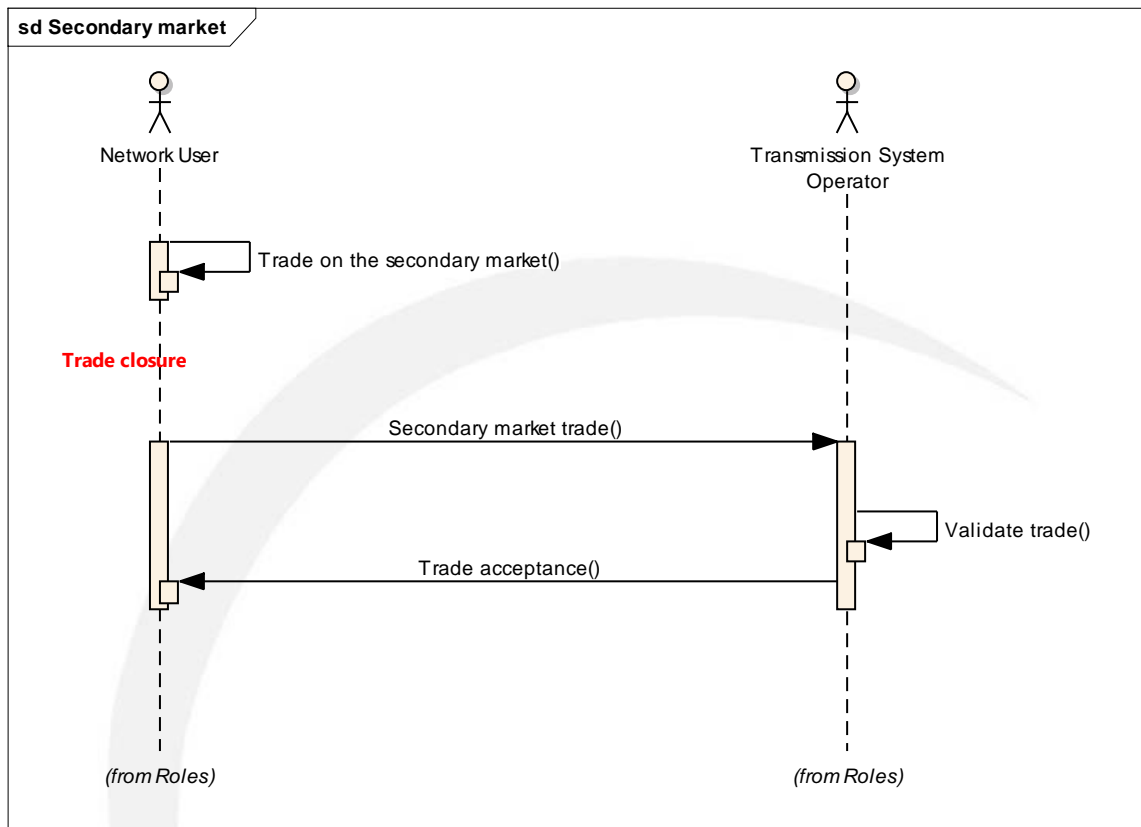
624
625 The common data exchange solution for this data exchange is shown below:
626

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

627 3.3.2 Secondary market sales

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

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



635
636

Figure 11: Secondary market sequence

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

640 The common data exchange solution for the data exchange between the Registered
641 Network User or Auction Office on behalf of the Registered Network User and the
642 Transmission System Operator is shown below:
643

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

644 The Transmission System Operator validates the trade information. Once the trade
645 submission is deemed valid, the Transmission System Operator confirms the trade. The
646 Transmission System Operator informs the Network Users or the Auction Office, who is
647 acting on behalf of the Network Users, about the confirmation.

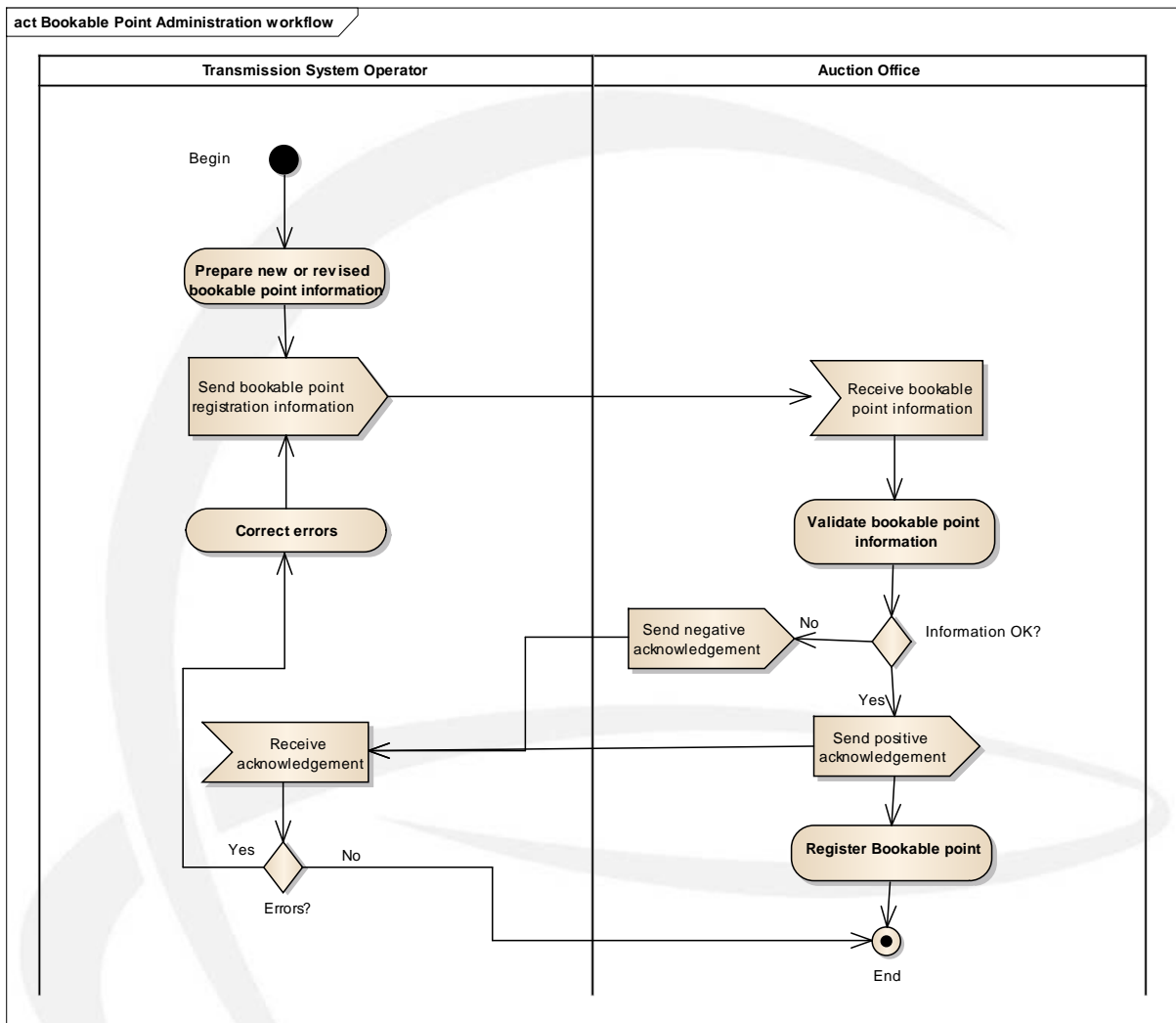
648 In the case of error the Network Users are informed and take the necessary corrective
649 action.

650 The common data exchange solution for this data exchange is shown below:
651

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

652 **3.3.3 CAM/CMP Workflow**

653 **3.3.3.1 Bookable point Administration process**

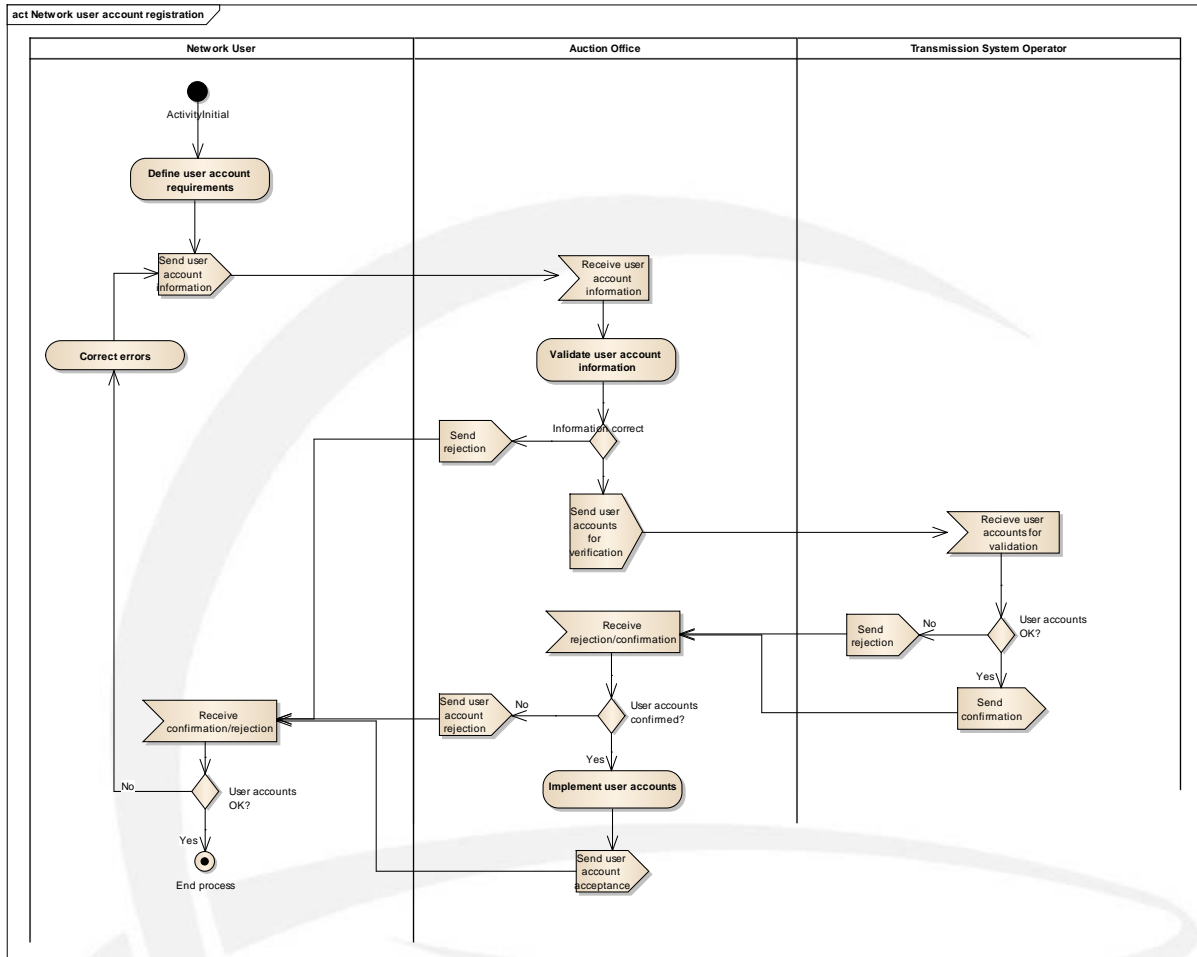


654
655

Figure 12: Bookable point Administration workflow

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

660 **3.3.3.2 Network User Registration process**



661
662

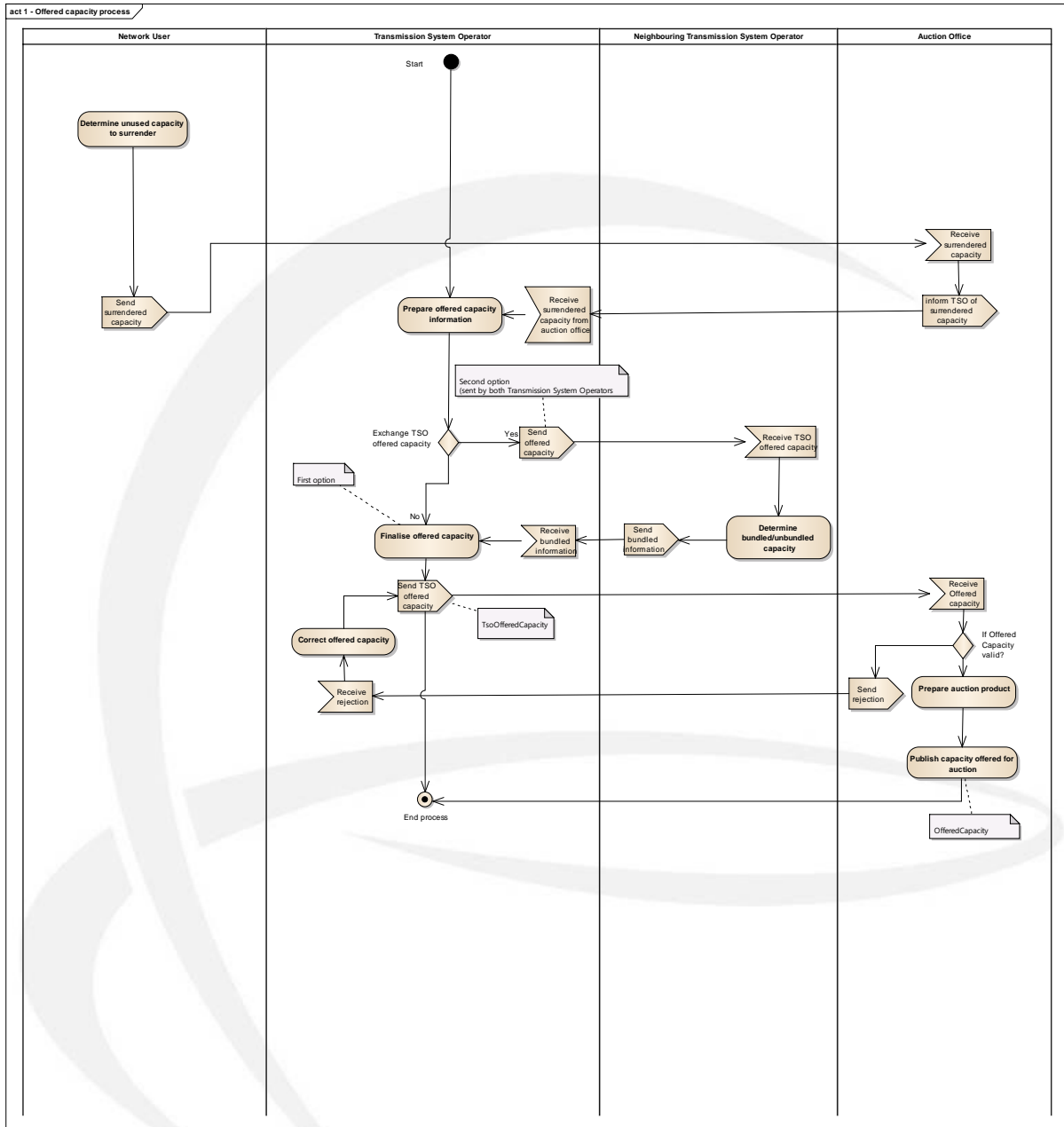
Figure 13: Network User Registration workflow

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

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

667 Network User accounts are provided by the Network User or the Transmission System
668 Operator on behalf of the Network User to the Auction Office if required by the
669 Transmission System Operator. The Auction Office validates the registration data and
670 forwards the valid requests to the identified Transmission System Operator for approval. The
671 Transmission System Operator confirms/rejects the approval request. Once confirmed, the
672 registration information is then sent to the Network User.

673 **3.3.3.3 Offered capacity process**



674
675

Figure 14: Offered capacity workflow

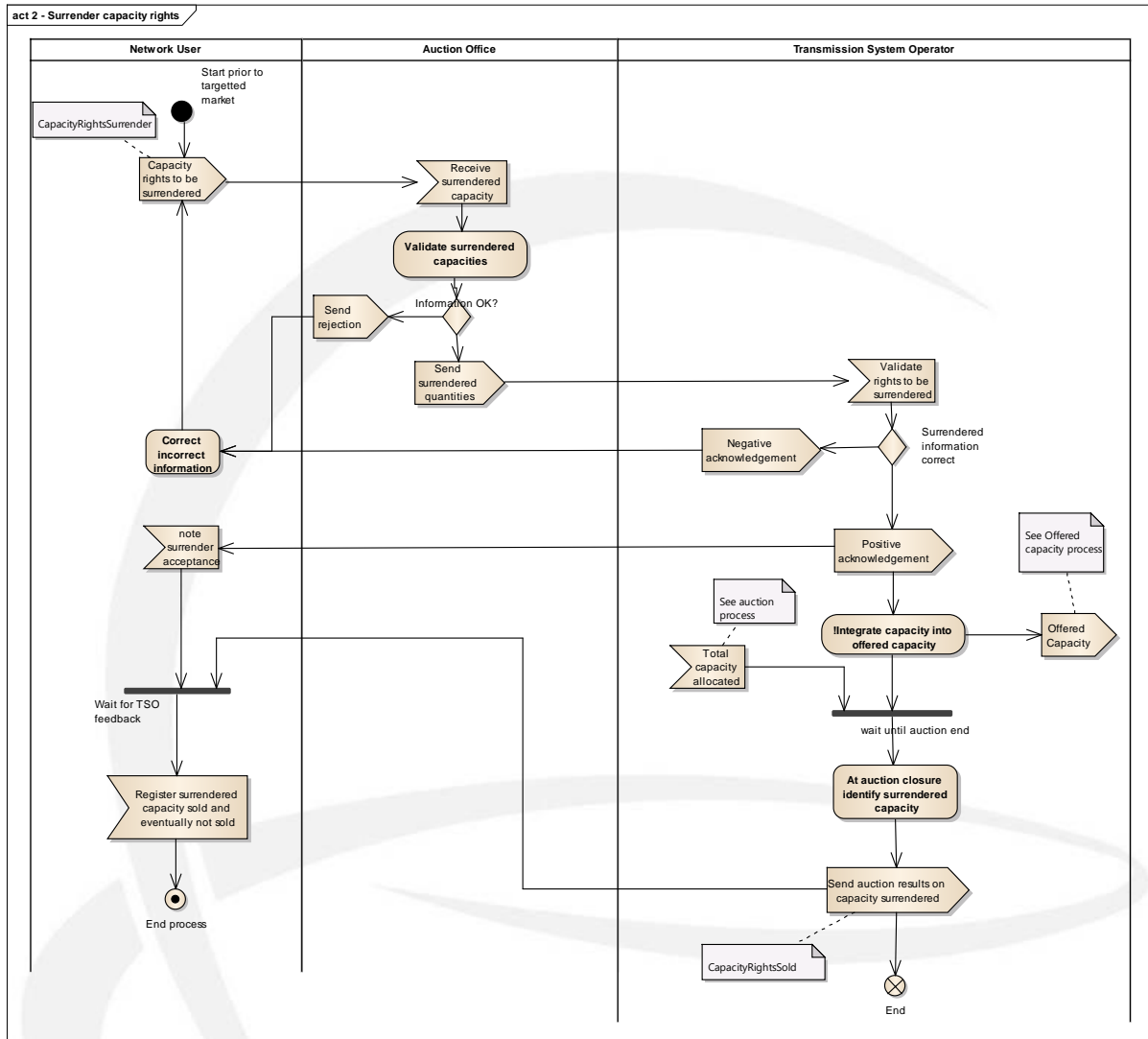
676 The determination of offered capacity begins on a cyclic basis depending on the standard
677 capacity product.

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

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

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

687 **3.3.3.4 Surrender capacity process**



688
689

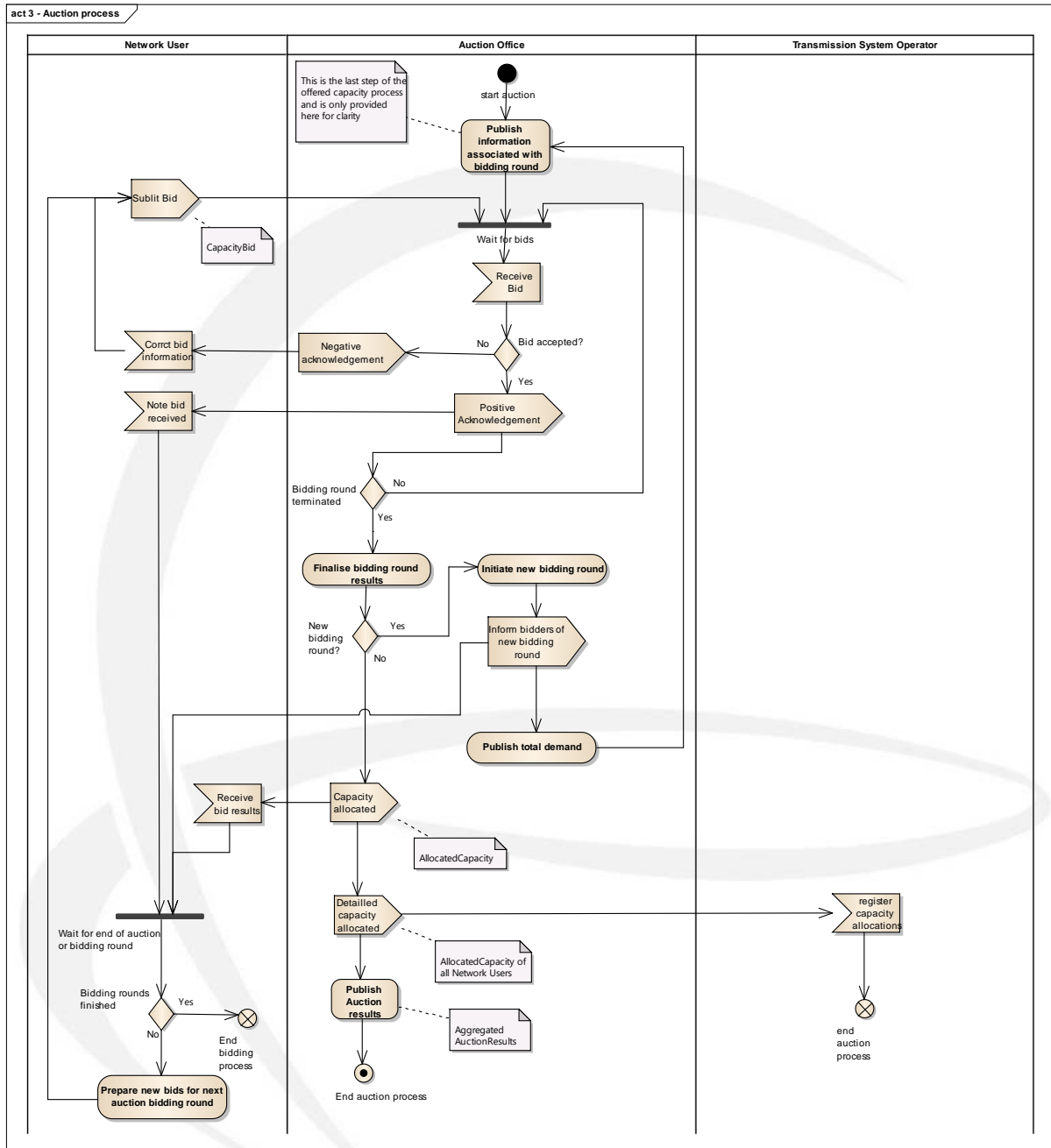
Figure 15: Surrender capacity process

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

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

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

698 **3.3.3.5 Auction process**



699

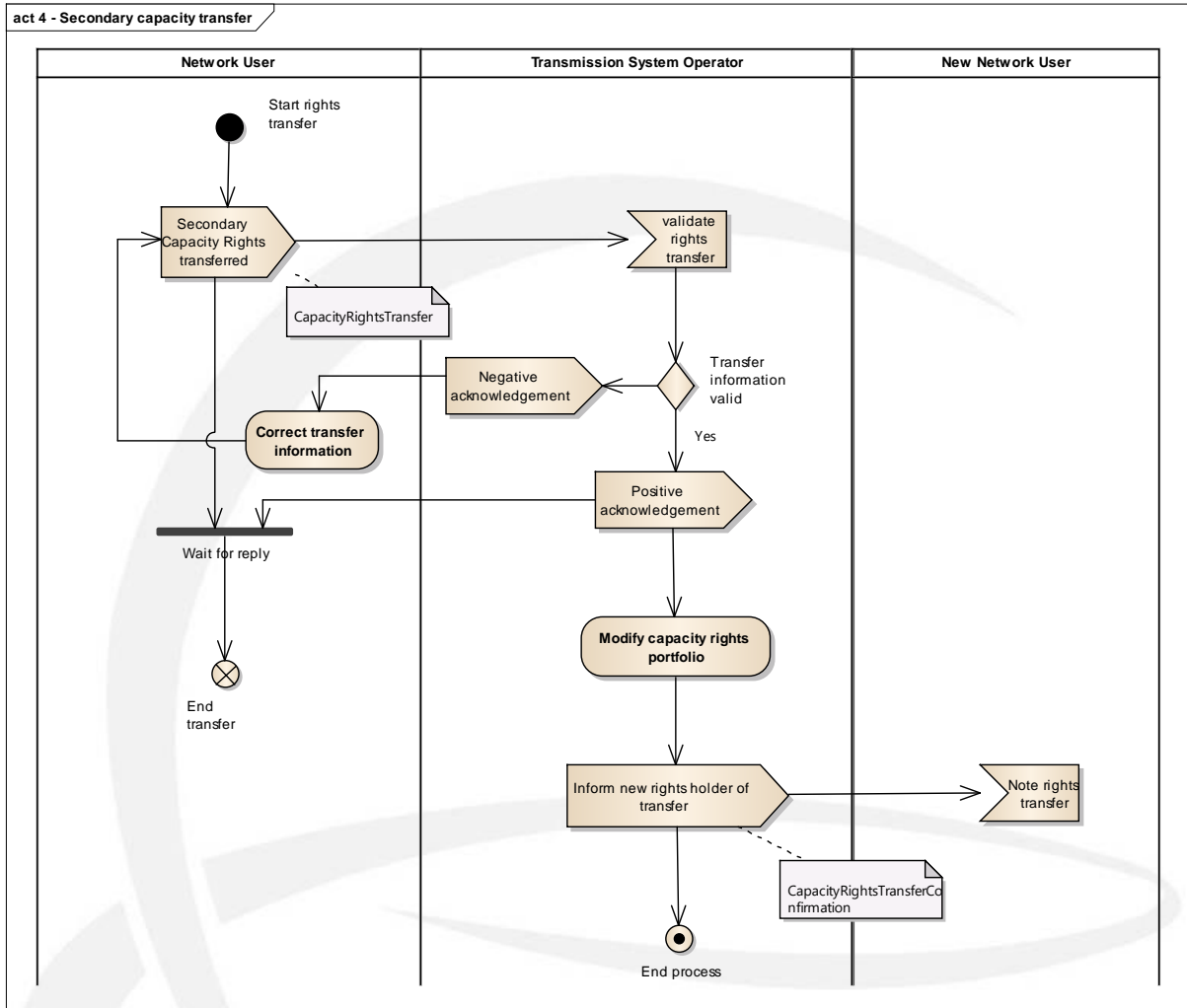
700

Figure 16: Auction workflow

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

- 705 The Auction Office validates each bid and informs the bid submitter of the outcome of the
706 validation process. In the case of a rejection, the Network User may correct the bid
707 information and resubmit it to the Auction Office before the bidding round closure.
- 708 In the case of the bid being successfully validated the Network User awaits the outcome of
709 the auction. However, during the bidding round it is possible for the Network User to submit
710 additional bids in the case of uniform price auctions, to make modifications to existing bids
711 or to cancel an existing bid.
- 712 The Auction Office manages the bids received and any changes provided until the bidding
713 round closes.
- 714 Once the bidding round closes, the Auction Office determines the situation between the
715 capacity requested and the capacity offered.
- 716 The opening of a new bidding round in case of an ascending clock auction is subject to
717 Article 17 CAM NC.
- 718 A Transmission System Operator can send to the Auction Office a request to cancel an
719 ongoing auction due to a force majeure. The Auction Office cancels the auction and informs
720 all involved Transmission System Operators and Network Users about the auction
721 cancellation.
- 722 Prior to beginning the new bidding round, the Network Users that participated in the
723 previous bidding round are informed that a new bidding round will take place with a new
724 price step. In addition, information on the previous bidding round is published on the
725 booking platform website.
- 726 At the closure of the auction, the Auction Office allocates the capacity respecting market
727 rules and informs each Network User of the outcome of the auction. The Auction Office also
728 provides the complete list of allocations to the Transmission System Operators.
- 729 In a final step the Auction Office publishes the results of the auction.
- 730 The bidding in the reverse auction takes place in a similar fashion as an ordinary auction.
731 When the auction closes the Auction Office processes all the bids and then may provide the
732 list of validated bids to the Transmission System Operator.
- 733 The Auction Office then informs the Network Users of their successful bids.

734 **3.3.3.6 Secondary market trade process**



735
736

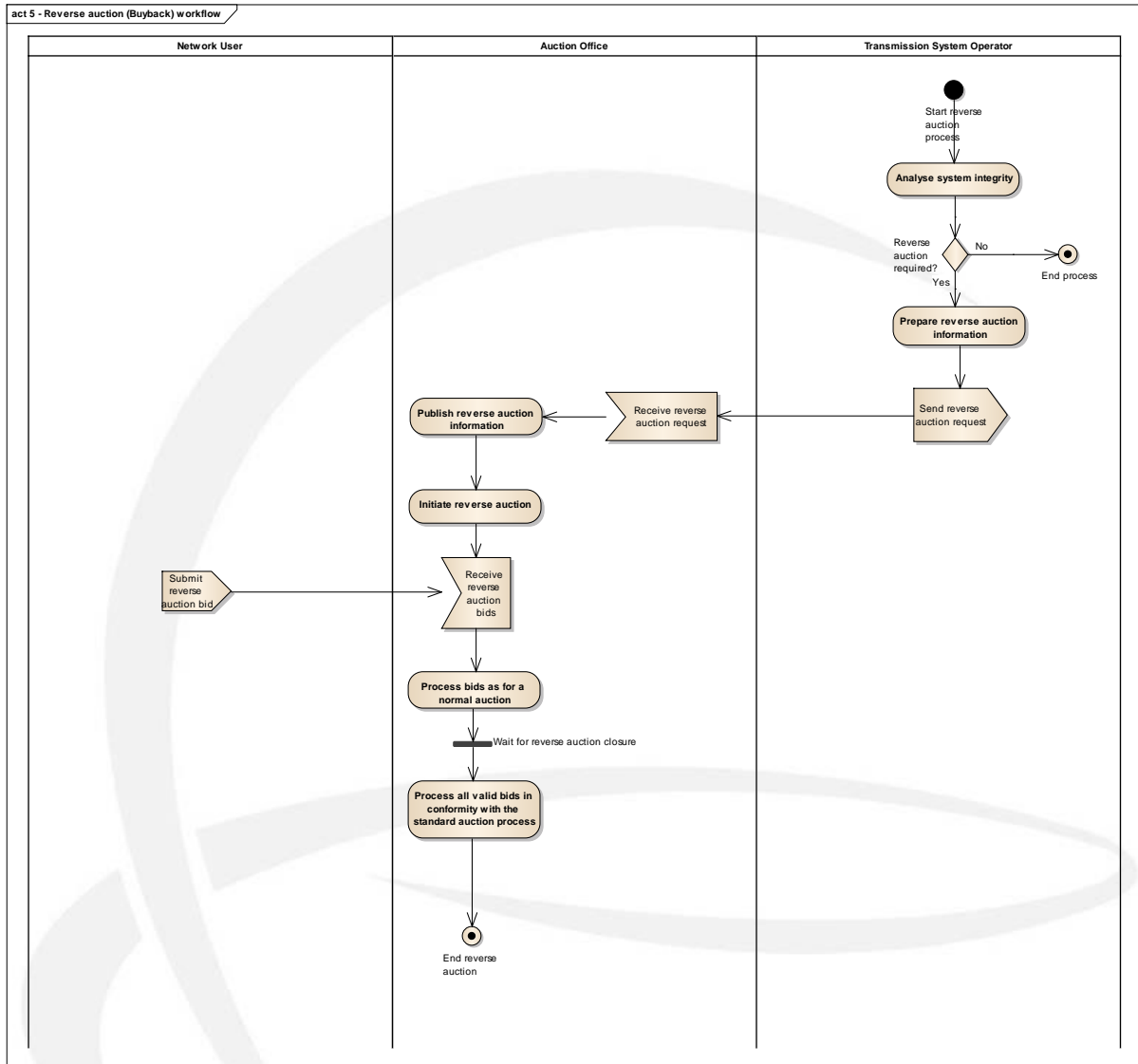
Figure 17: Secondary market transfer process

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

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

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

745 **3.3.3.7 Reverse auction process**



746
747

Figure 18: Reverse auction workflow

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

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

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

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

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

758 **3.4 Information model requirements**

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



762 **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>
BiddingRound	<p>The identification of the auction round where the capacity rights were allocated in an</p>

Name	Description
	<p>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
BookablePointIdentification	A sequential number distinguishing one entity from another, for example for distinguishing bookable points

Name	Description
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
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	The price that successful Network Users shall pay at a specific auction to the concerned

Name	Description
	Transmission System Operator 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.
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
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

Name	Description
	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
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 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</p>

Name	Description
	ToMarketArea (see definition).
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.
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

Name	Description
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 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

Name	Description
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 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 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

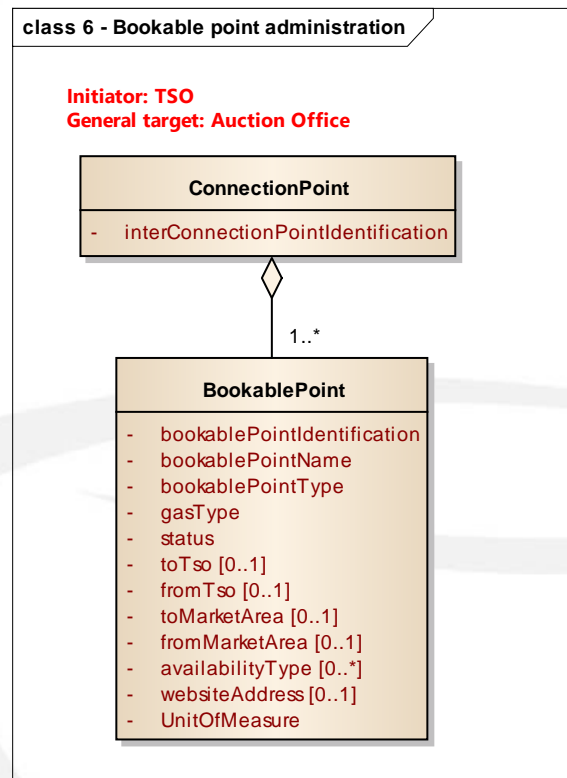
Name	Description
UnderlyingSurcharge	Only used in secondary trades - is the surcharge of the primary transaction underlying the secondary market deal
UnderlyingTariff	Only used in secondary trades - is the regulated charge of the primary transaction underlying the secondary market deal
UnitOfMeasure	The unit of measure in which the capacity amount is expressed
UnitOfPrice	The unit of measure in which the price is expressed
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

763 **3.6 Requirements per process**

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

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

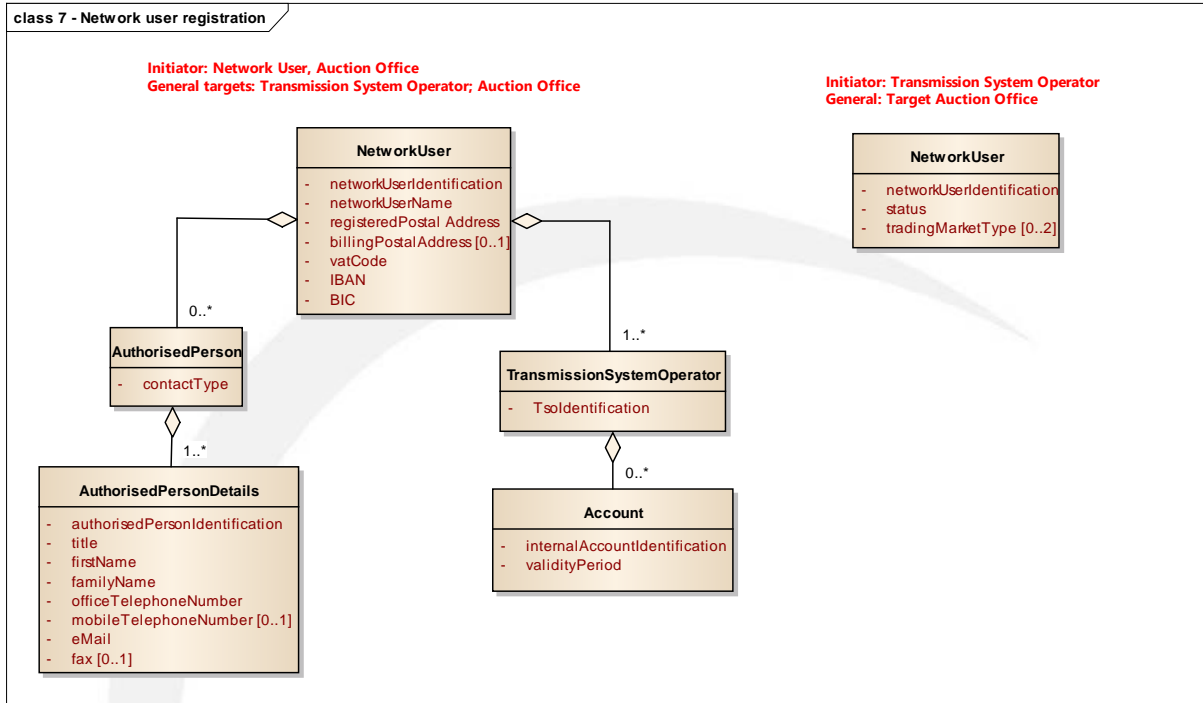
772 **3.6.1 Bookable point administration process**



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Figure 19: Bookable point administration requirements

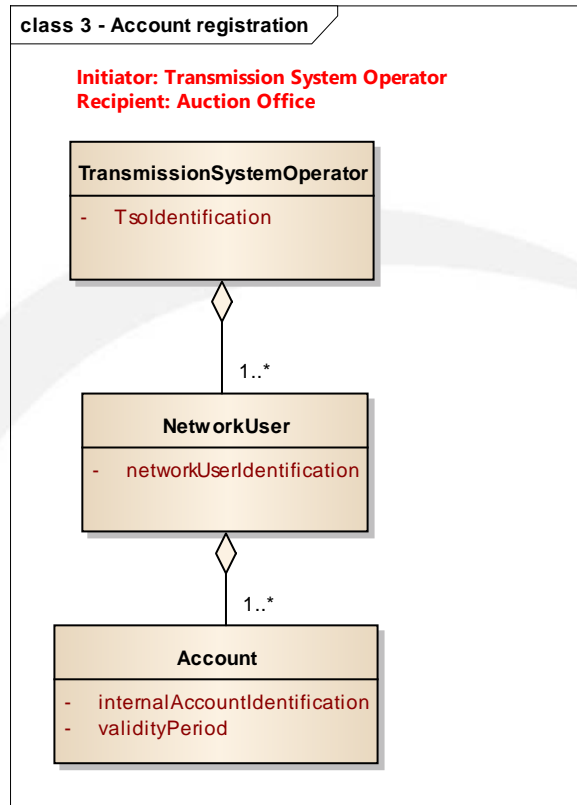
775 **3.6.2 Network User Registration process**



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Figure 20: Network User registration requirements

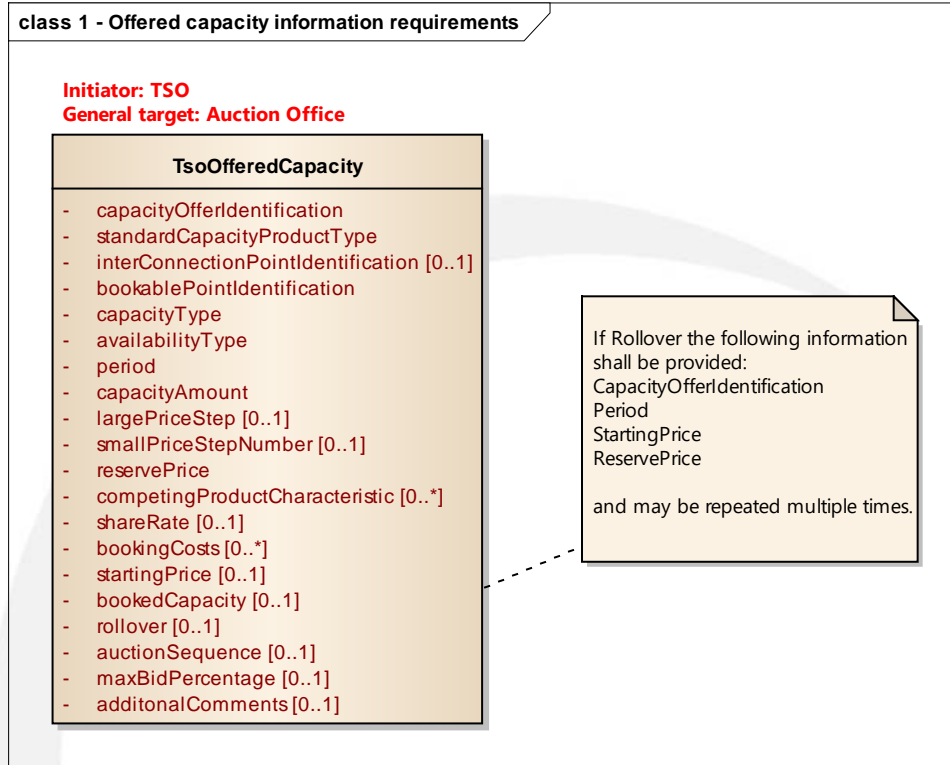
778 **3.6.3 Account Registration process**



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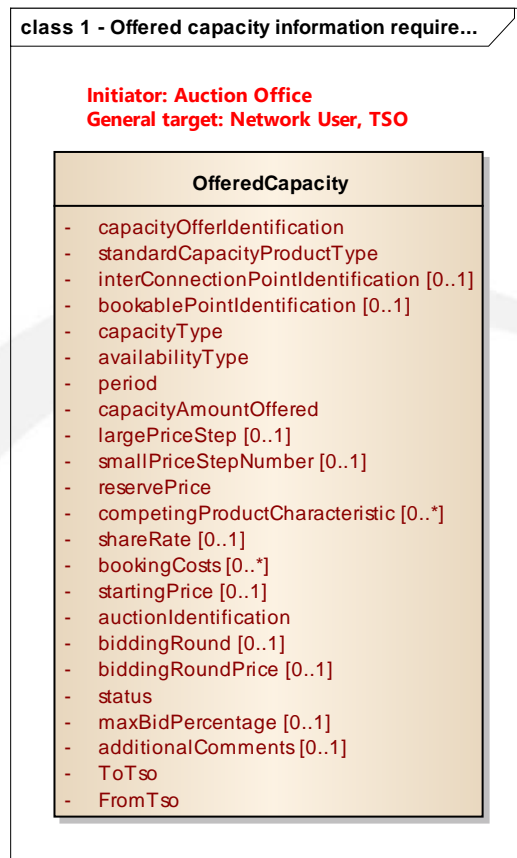
Figure 21: Account registration requirements

781 **3.6.4 Offered capacity process**



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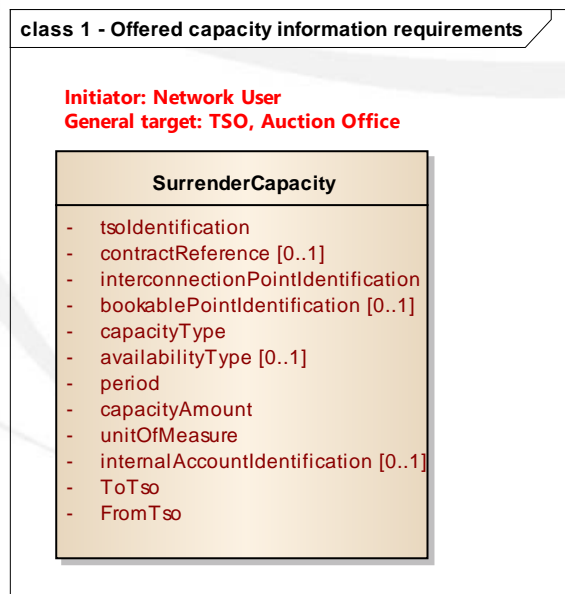
Figure 22: Transmission System Operator Offered capacity information requirements



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Figure 23: Offered capacity information requirements

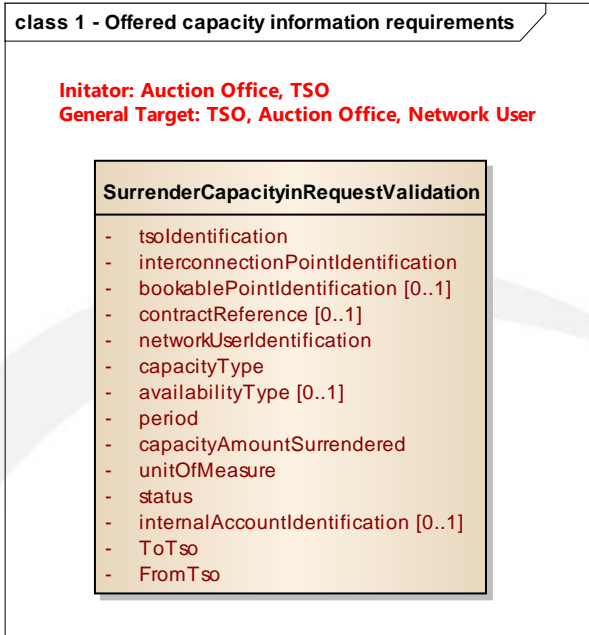
787 3.6.5 Surrender capacity process



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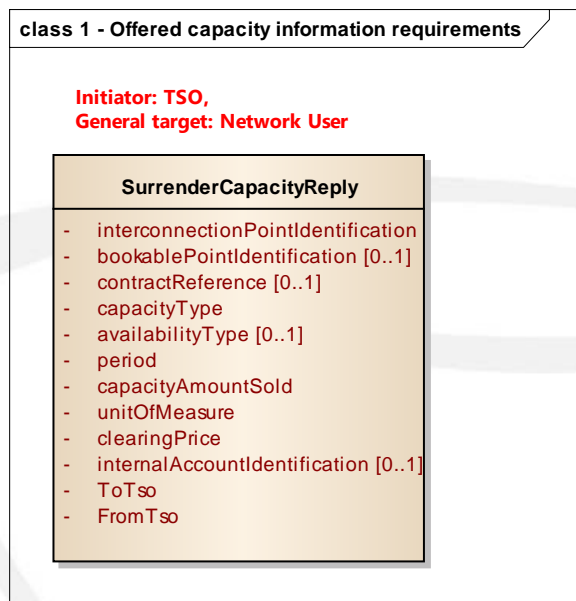
Figure 24: Surrendered capacity information requirements

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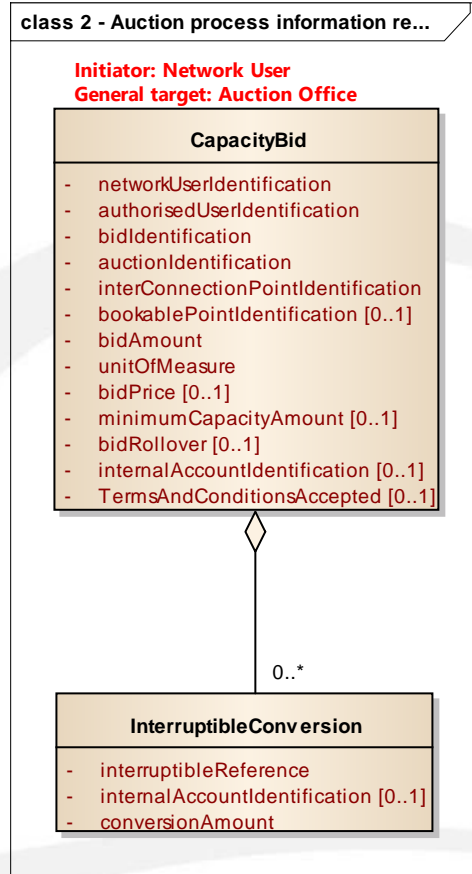
Figure 25: Surrender capacity request validation requirements



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Figure 26: Surrender capacity result requirements

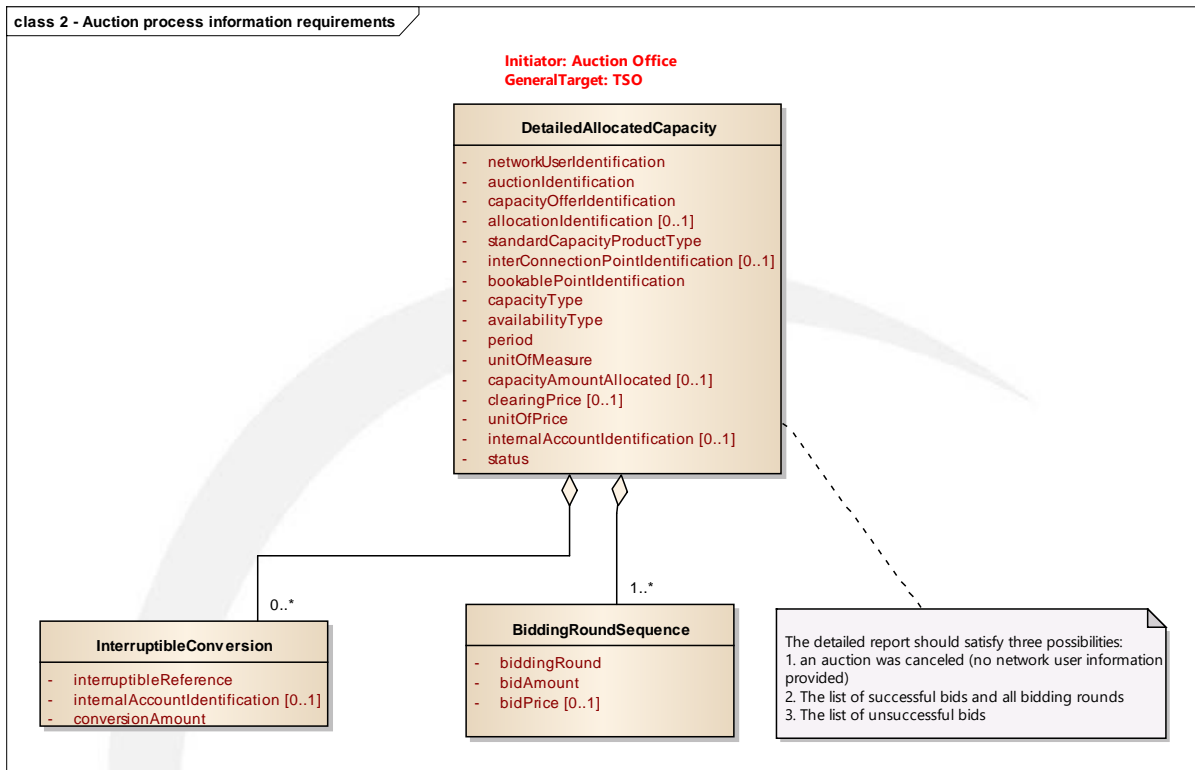
795 **3.6.6 Auction process**



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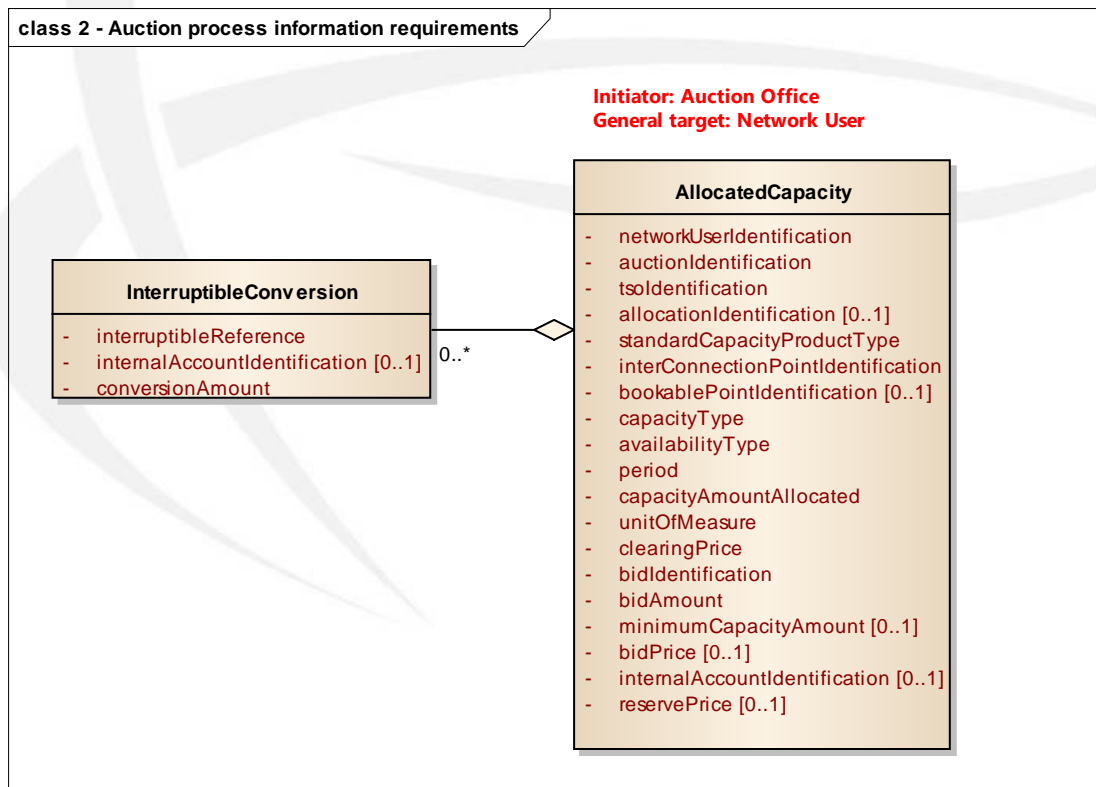
Figure 27: Bid information requirements



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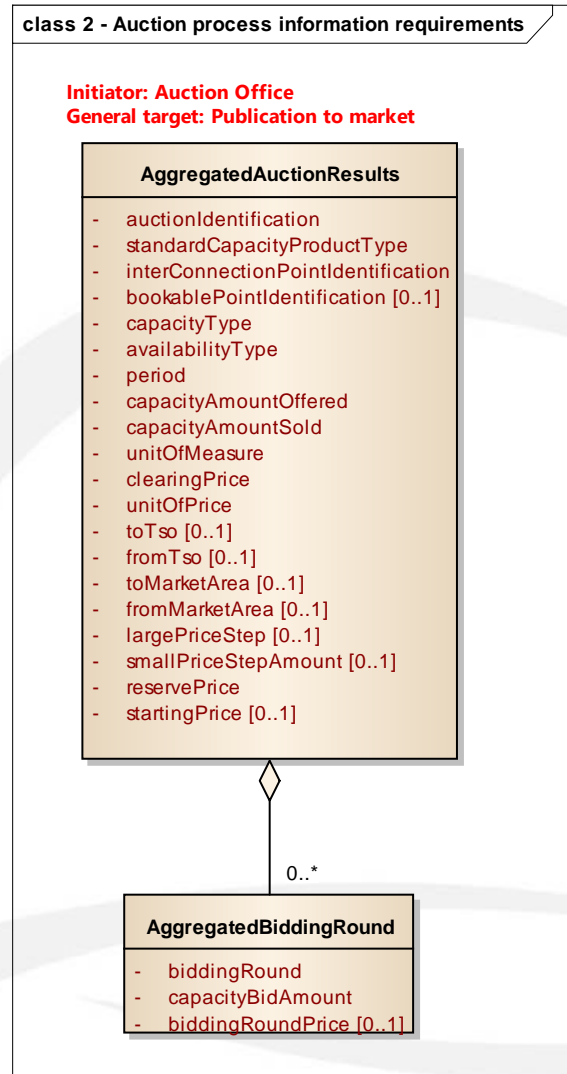
Figure 28: Detailed capacity allocated information requirements



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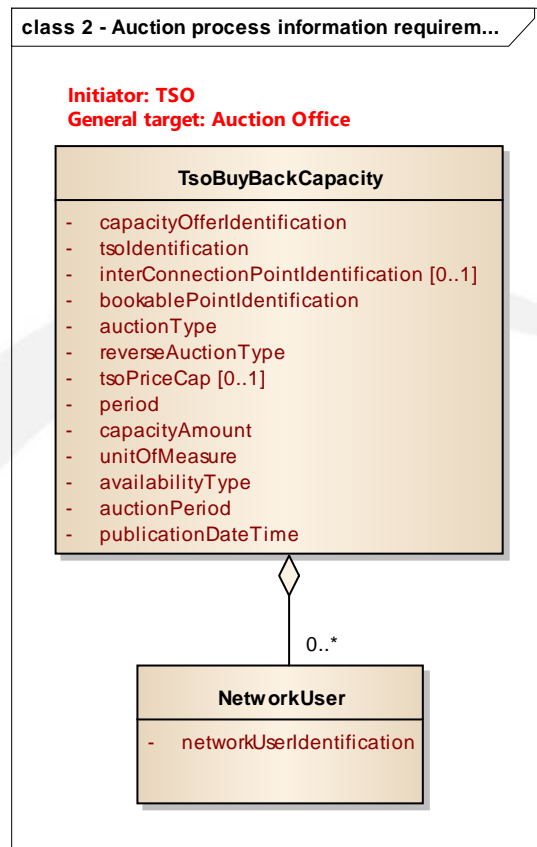
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Figure 29: Allocated capacity information requirements



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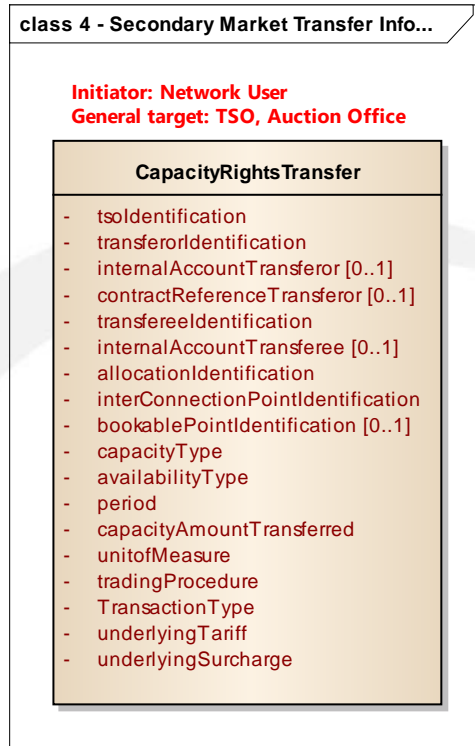
Figure 30: Aggregated auction results



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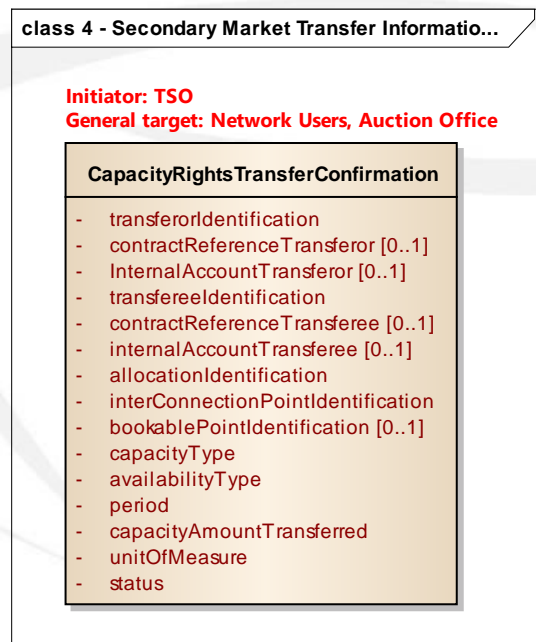
Figure 31: Transmission System Operator Buy back capacity information requirements

806 **3.6.7 Secondary market transfer process**



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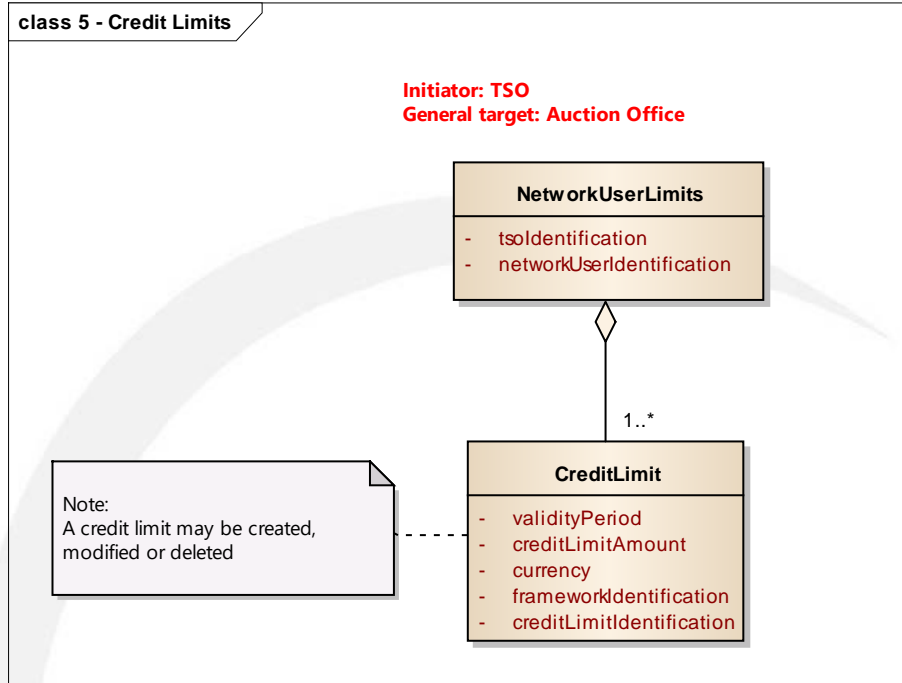
Figure 32: Secondary market capacity rights transfer information requirements



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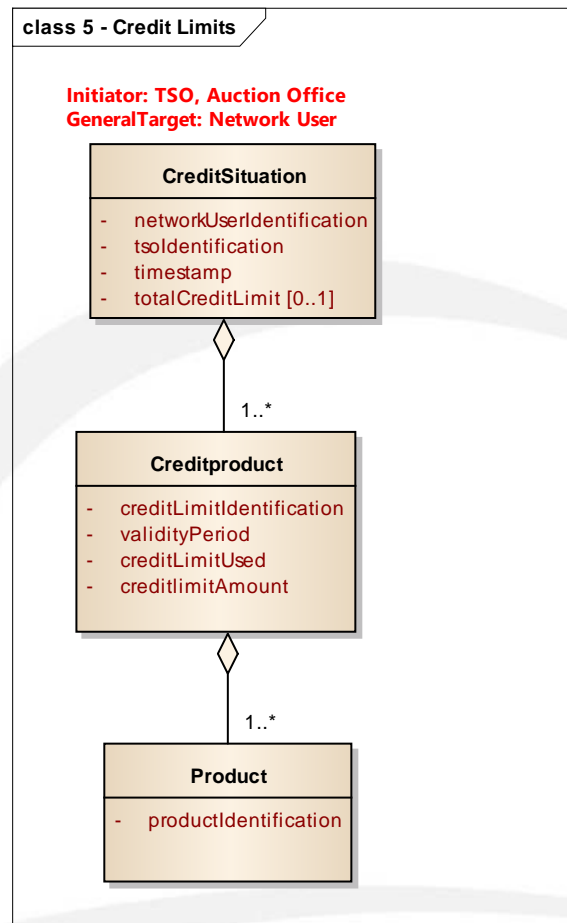
Figure 33: Secondary market capacity rights transfer confirmation information requirements

812 **3.6.8 Credit limit process**



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Figure 34: Network User credit limit information requirements



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Figure 35: Network User credit situation requirements

817 **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	Recommendation - Interactive
Network User Registration	Registered Network User	Transmission System Operator	Private	Recommendation - Interactive
Network User Registration to Auction Office	Network User	Auction Office	Private	Recommendation - Interactive
Approved Network Users	Auction Office	Transmission System Operator	Private	Recommendation – Document Based
Approved Network Users	Transmission System Operator	Auction Office	Private	Recommendation - Interactive
Approved Network Users	Auction Office	Registered Network User	Private	Recommendation - Interactive
Surrender Capacity Rights	Registered Network User	Auction Office	Private	Interactive
Surrender Capacity Rights	Auction Office	Transmission System Operator	Private	Recommendation – Document Based
Offered Capacity	Transmission System Operator	Auction Office	Private	Recommendation – Document Based
Offered Capacity	Auction Office	Transmission System Operator	Private	Recommendation – Document Based
Offered Capacity	Auction Office	Registered Network User	Public	Interactive
Credit Limit	Transmission System Operator	Auction Office	Private	Recommendation - Document Based
Credit Limit	Auction Office	Transmission System Operator	Private	Recommendation - 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	Recommendation - 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	Recommendation - Document Based
Reverse Auction Bid	Registered Network User	Auction Office	Private	Interactive
Allocate Reverse Auction Results	Auction Office	Transmission System Operator	Private	Recommendation - 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

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