

Allocation of forward capacities

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Summary

- Network codes/Market codes
- Forward Capacity Allocation
- Harmonised Allocation Rules
- SEE CAO:
 - Auction process
 - Workflow diagram
 - Reporting/Data exchange

Network codes

1. Market codes
 - FCA GL, CACM GL, EB GL
2. Connection codes
 - RfG NC, DC NC, HVDC NC
3. Operation codes
 - SO GL, ER NC

Market Codes

FCA

Forward
Capacity
Allocation

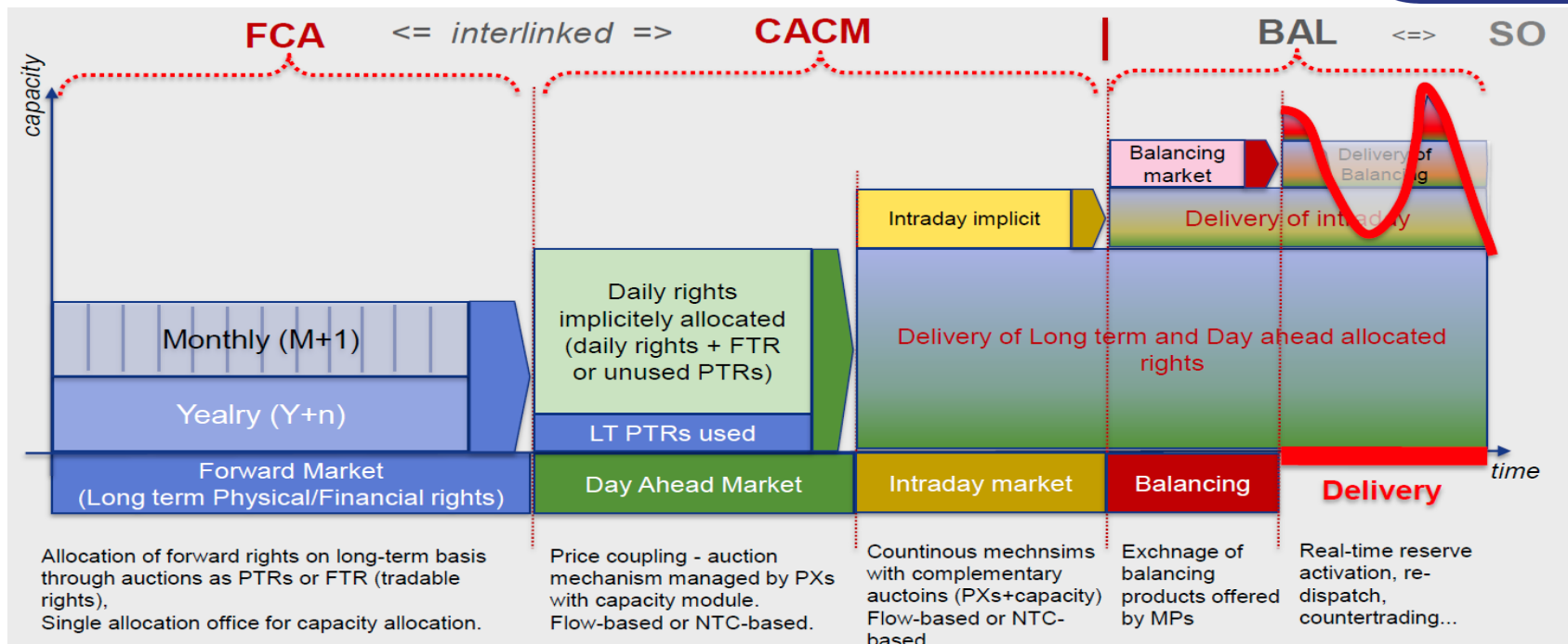
CACM

Capacity
Allocation and
Congestion
Management

EB

Balancing

Market Codes



FCA guideline

- REGULATION (EU) 2016/1719 on establishing a guideline on forward capacity allocation
 - Rules on cross-zonal capacity allocation
 - Forward markets (Yearly, monthly)
 - PTR or FTR (option/obligation)
 - Explicit auctions, marginal price
 - Daily allocation – subject of CACM
 - Creation of Harmonised Allocation Rules by the TSOs

FCA in SEE

EU Member States

- FCA binding from Oct 2016
- FCA early implementation EU
 - Jan 2016 with EU HAR
- 'best practice'

Non-EU countries:

- FCA still not binding
- FCA early implementation SEE
 - Jan 2018 with SEE CAO HAR set of rules
- once adopted in Energy Community acquis - binding for Contracting Parties

Harmonised Allocation Rules

- EU TSOs prepared Harmonised Allocation Rules following the guidelines in FCA
 - ONLY forward markets –
 - yearly and monthly auctions
 - Secondary market (transfer, return)
 - UIOSI
 - Compensation regimes (curtailments)

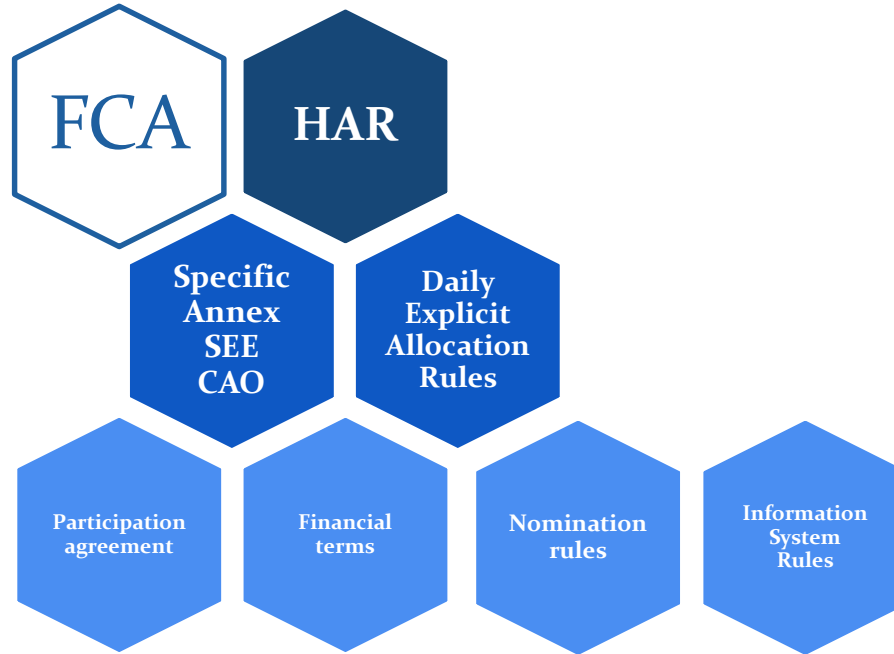
Secondary market

- Transfer and Return
 - optional
- Use-It-Or-Sell-It-Principle
 - Automated process, in case traders do not announce intention to use their long term transmission rights

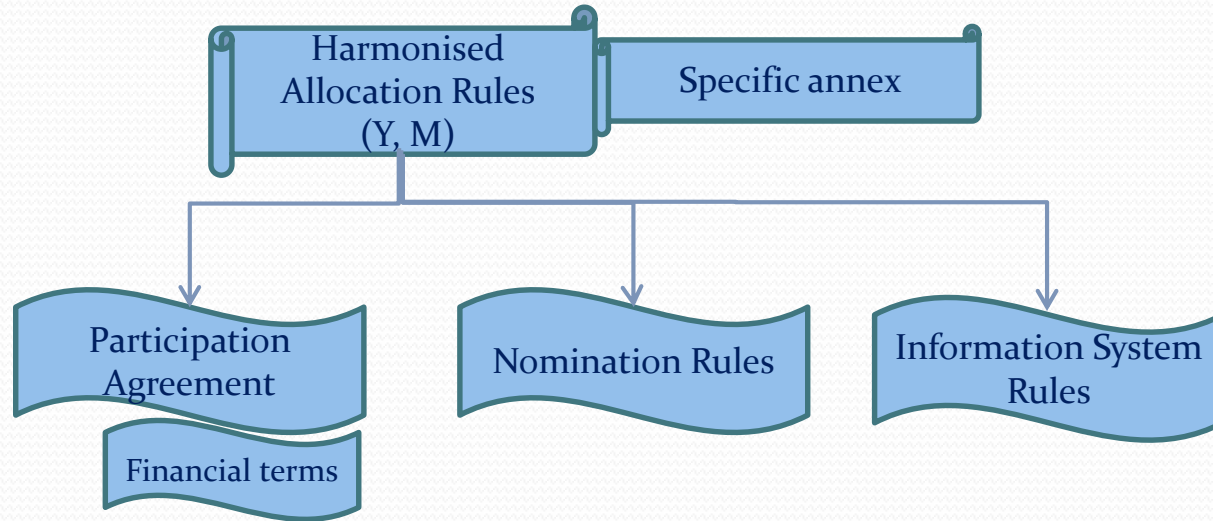
HAR in SEE CAO

- Early implementation during 2017:
 - Decision of SEE CAO BoD
- Establishment of working group
 - Ad hoc task force SEE HAR
 - SEE CAO and ENTSO-E Regional group SEE
- Preparation of SEE CAO HAR set of rules
- Approval of HAR by SEE NRAs
- Allocation Tool setup – DAMAS HAR upgrade
- SEE CAO - Allocation Platform

SEE CAO HAR set of rules



SEE CAO HAR set of rules



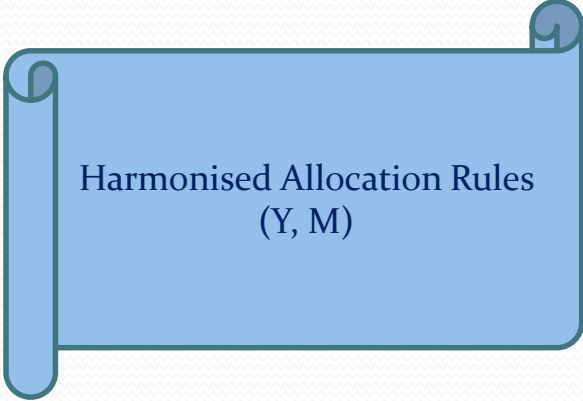
SEE CAO HAR set of rules

- I. Harmonised allocation rules for long-term transmission rights
- II. Specific Annex for the Bidding Zone borders serviced by SEE
CAO
- III. Participation Agreement
- IV. Financial terms
- V. Nomination Rules
- VI. Information System Rules
- VII. Rules for explicit Daily Capacity Allocation on Bidding Zone
borders serviced by SEE CAO

SEE CAO HAR set of rules

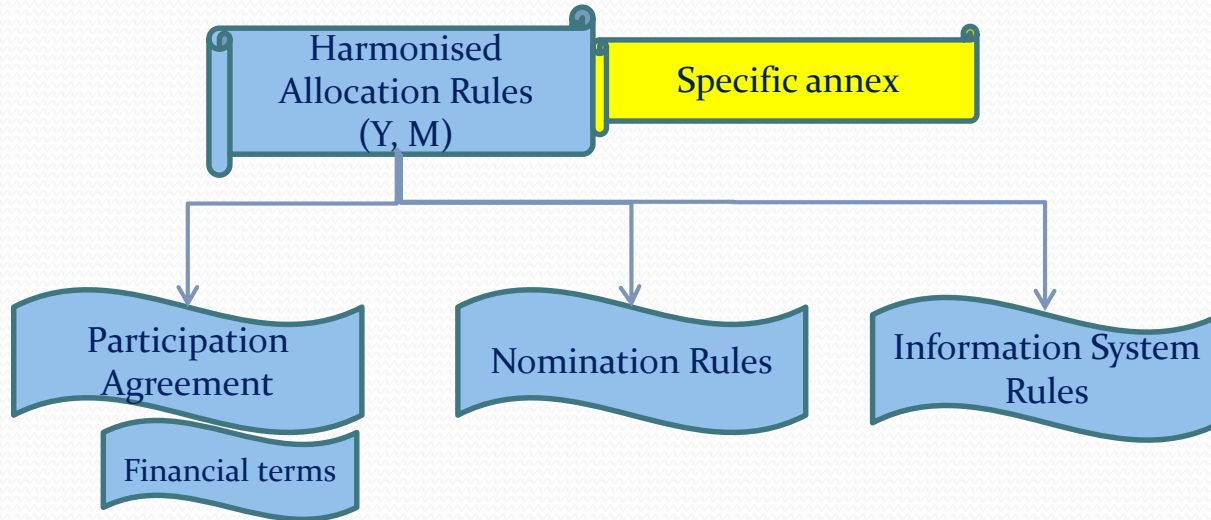
I Harmonised Allocation Rules

- Long Term (Yearly and Monthly) Auction
- Allocation of Long Term Transmission Rights
- Resale (Y M)
- Transfer
- Curtailment of:
 - Long term transmission rights
 - Nominations
 - UIOSI



Harmonised Allocation Rules
(Y, M)

SEE CAO HAR set of rules

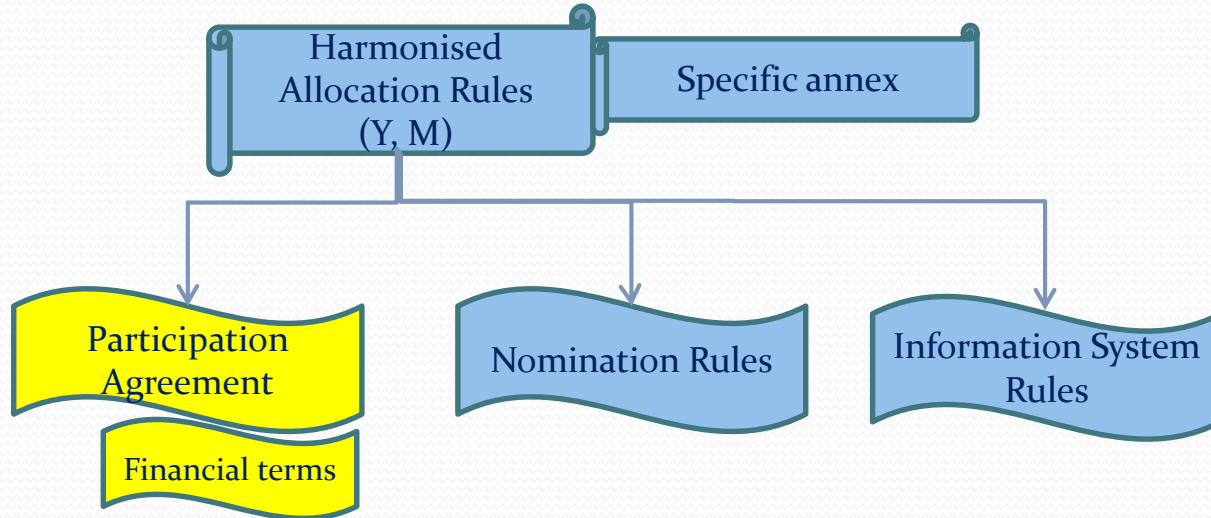


SEE CAO HAR set of rules

II Specific Annex SEE CAO

- Regional specificities
- Derogations from HAR
- Technical, legal and financial exemptions
- Curtailment regimes
- List of Bidding Zone borders

SEE CAO HAR set of rules



SEE CAO HAR set of rules

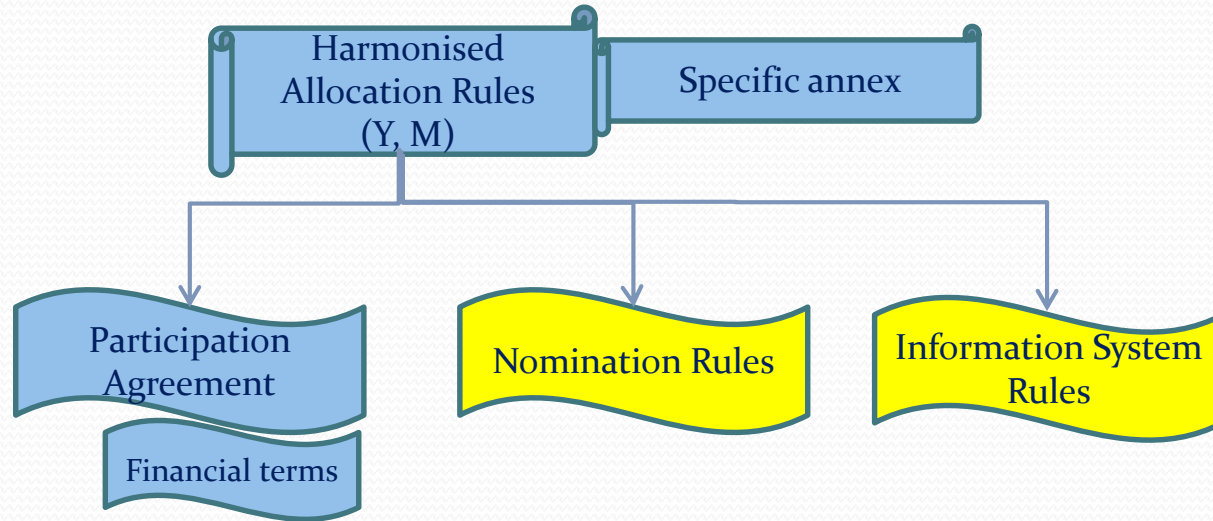
III Participation Agreement

- Contract between SEE CAO and Market Participant
- Market Participant eligibility with at least one TSO in SEE CAO

IV Financial terms

- Bank guarantee template
- Deposit contract template

SEE CAO HAR set of rules



SEE CAO HAR set of rules

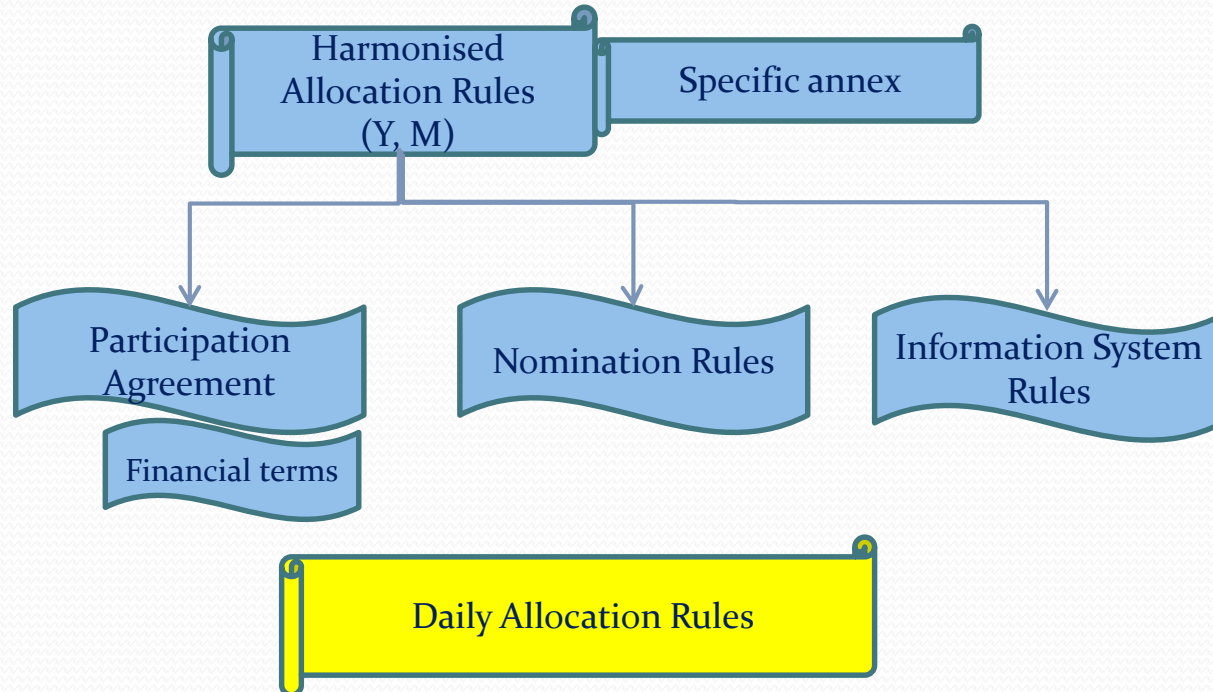
V Nomination Rules

- Type of transmission rights:
 - Physical Transmission Rights on all BZB
 - Financial Transmission Rights to be introduced with market coupling
- LT and D Nomination principle per BZB

VI Information System Rules

- DAMAS Auction Tool

SEE CAO HAR set of rules



SEE CAO HAR set of rules

VII Daily Capacity Allocation

- Explicit daily auction
- UIOSI
- No transfer
- No curtailment

Daily allocation in SEE CAO



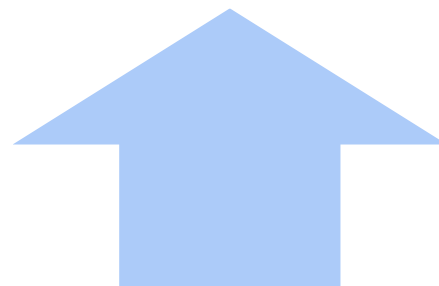
Until CACM implementation:

- Explicit daily auctions
- Performed by SEE CAO

CACM implementation in SEE

Upon CACM implementation:

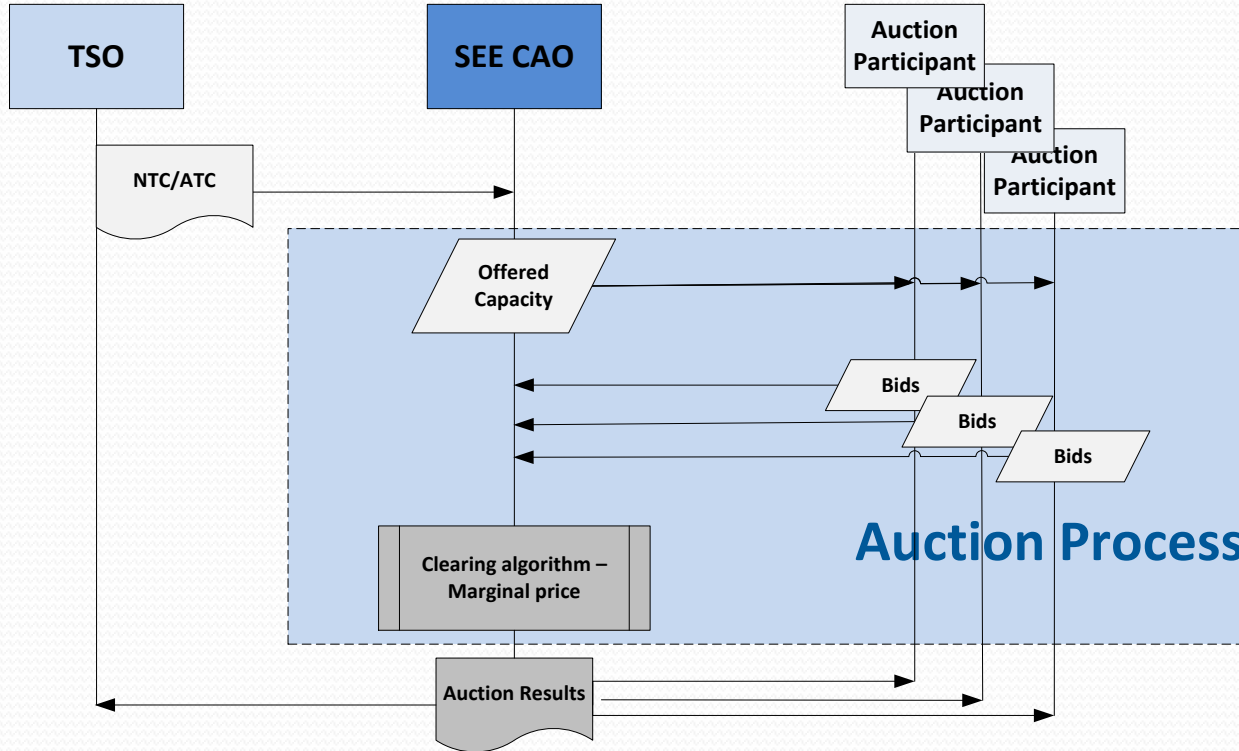
- Implicit daily auctions (PX/MC)
- 'Shadow' explicit D auctions in SEE CAO



SEE CAO operational processes

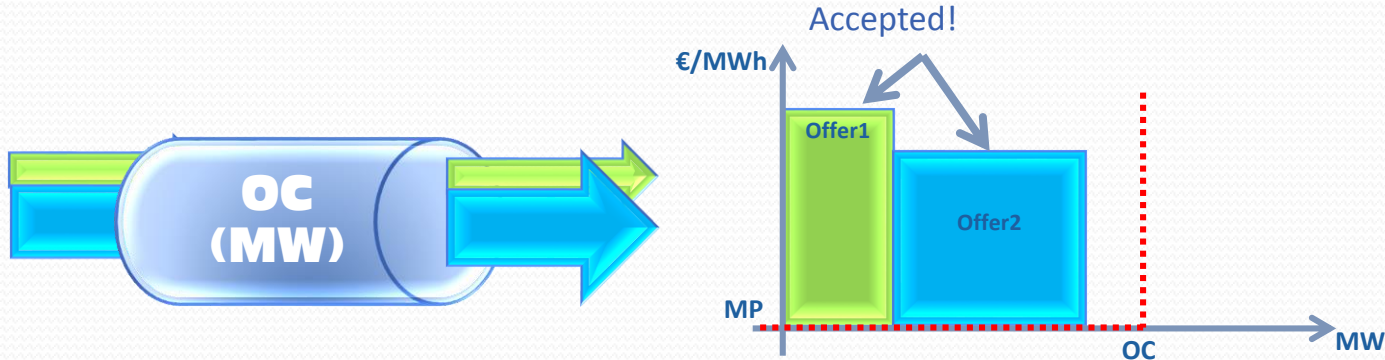
- Auction process
 - Clearing algorithm
- Workflow diagram
 - Yearly, monthly and daily timeframe
 - Calculation of offered capacity

Auction process



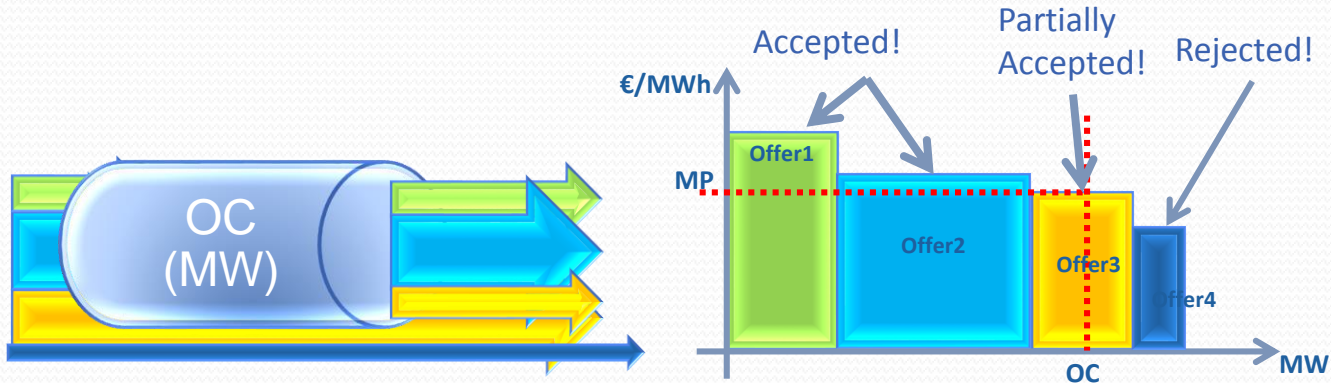
Auction process

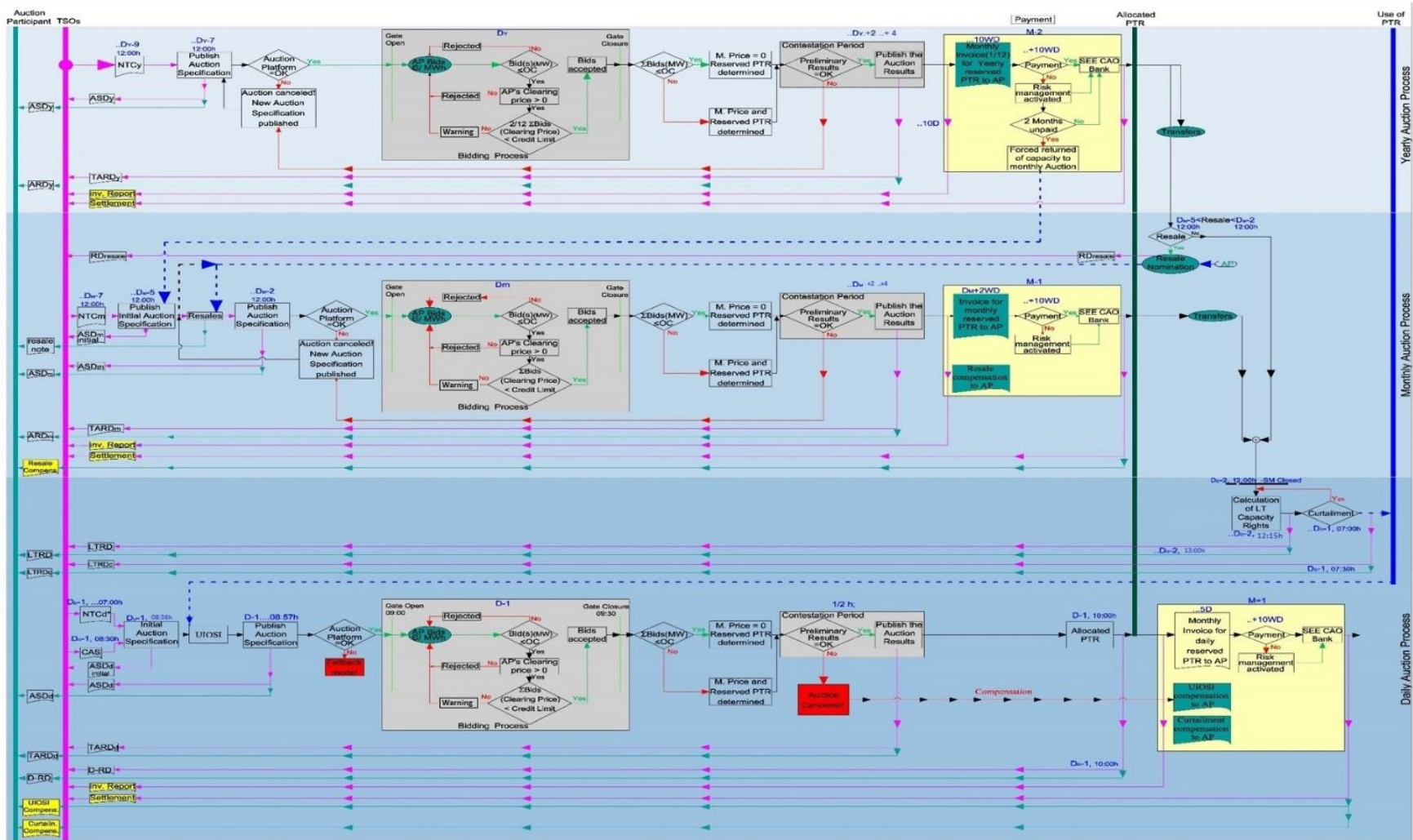
- Offered capacity (OC): MW
 - Bids:
 - Requested capacity (RC): MW
 - Bid price: €/MWh
- ✓ $RC < OC$
 - ✓ Marginal Price = 0
 - ✓ No congestion
 - ✓ No incomes for TSOs



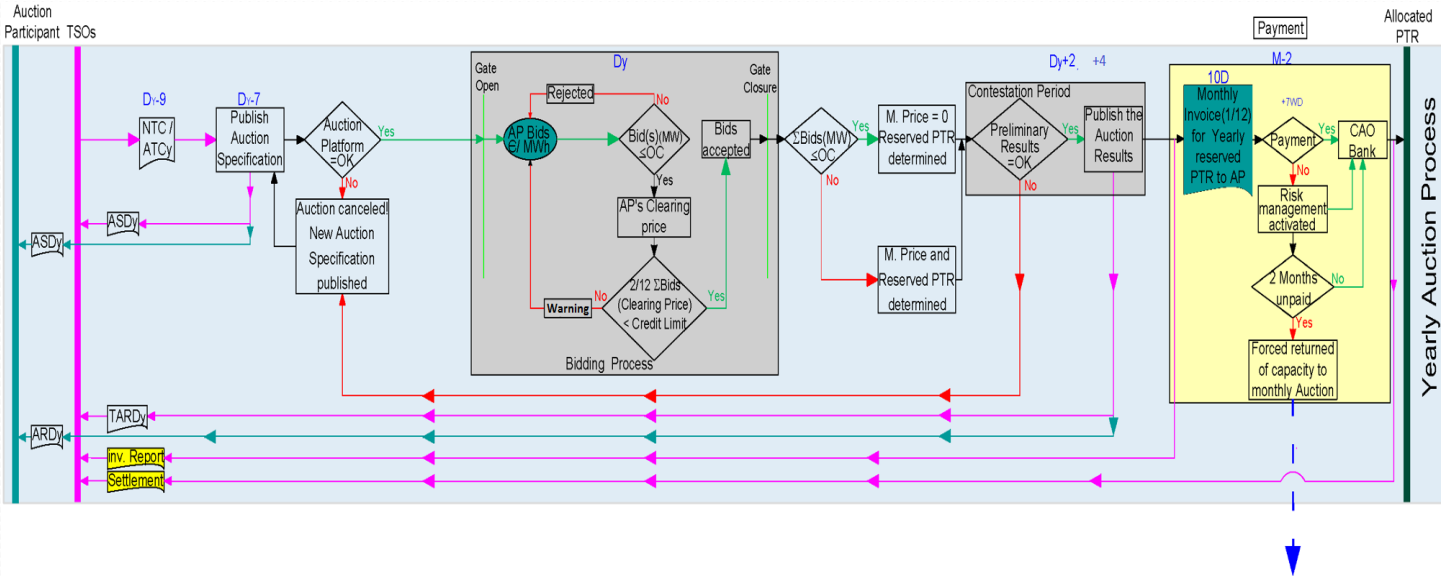
Auction process

- Offered capacity (OC): MW
- Bids:
 - Requested capacity (RC): MW
 - Bid price: €/MWh
- Congestion → Marginal Price



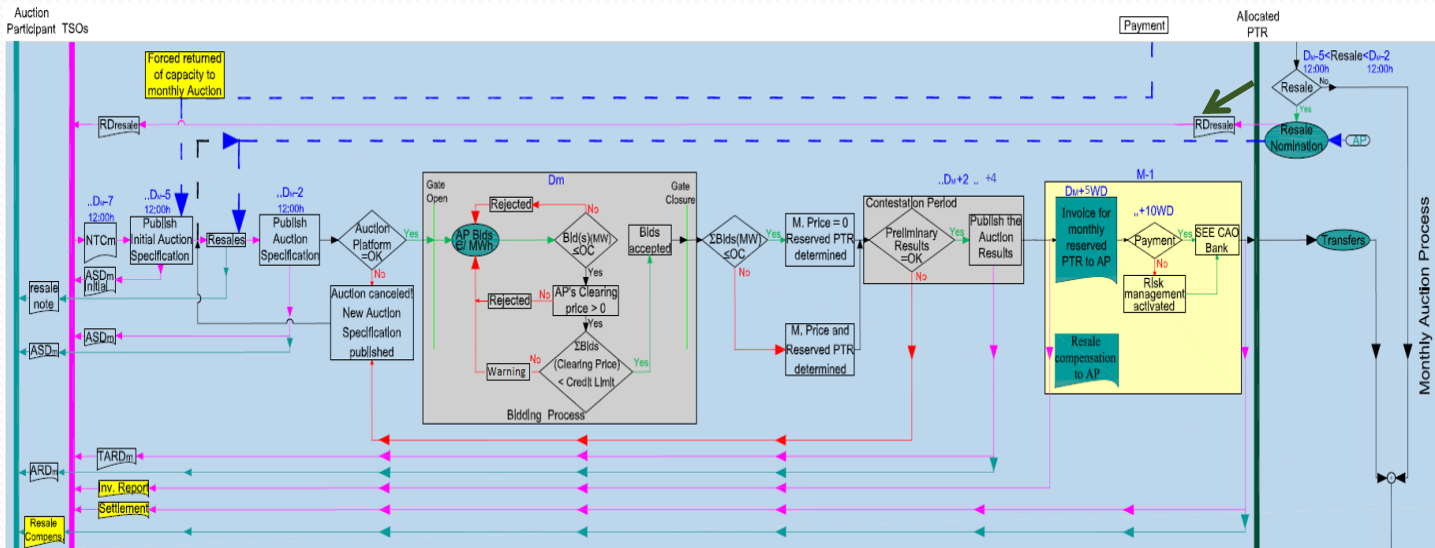


Workflow diagram (Yearly auction)



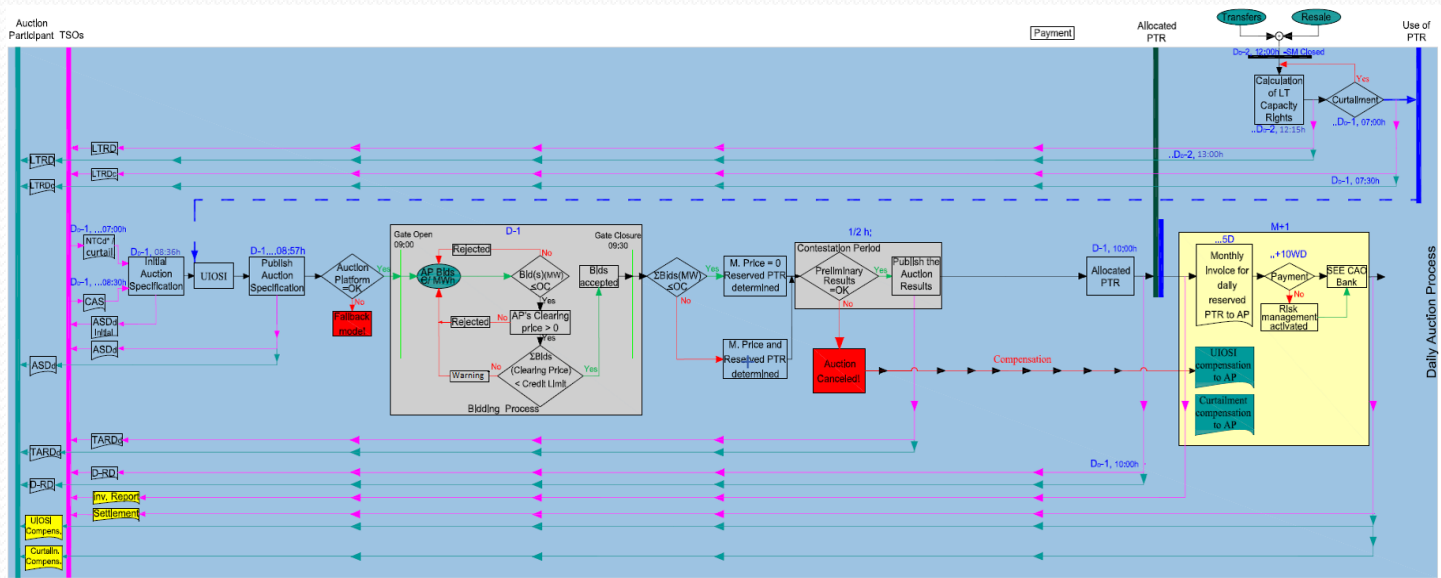
Final Offered Capacity = NTCy

Workflow diagram (Monthly auction)



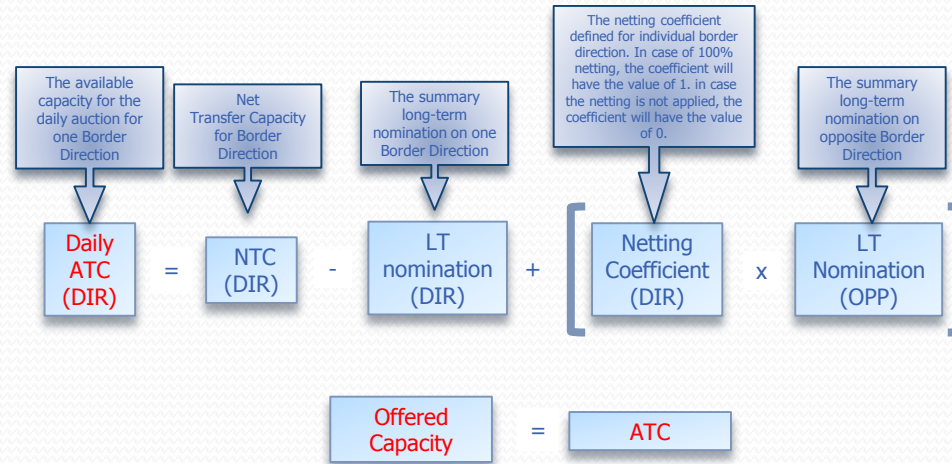
$$\text{Final Offered Capacity} = \text{ATCm} + \text{Forced return} + \text{Resale}$$

Workflow diagram (Daily auction)



- Netting procedure for calculation of daily ATC

Workflow diagram (Daily auction)



- Netting procedure for calculation of daily ATC

Reporting – EMFIP

- REGULATION (EU) No 543/2013 on submission and publication of data in electricity markets
- ENTSO-E Transparency platform
- SEE CAO submits data on behalf of TSOs

Reporting – EMFIP

Explicit Allocations - Day Ahead

Offered Day-ahead Transfer Capacity [11.1]
 Explicit Allocations - Use of the Transfer Capacity [12.1.A] (daily)

Day Range

From

To

Border - Control Area

Border - Bidding Zone

Border - Bidding Zone Aggregation

Area

- Bosnia and Herz. (BA) ▼
- BZNIBA - BZNIHR
- BZNIBA - BZNIME
- BZNIBA - BZNIRS

- Bulgaria (BG) ▼
- Croatia (HR) ▼
- Czech Republic (CZ) ▼
- Denmark (DK) ▼
- Estonia (EE) ▼
- Finland (FI) ▼
- France (FR) ▼

Show fullscreen

Time interval	Class.		BZNIHR > BZNIBA				BZNIBA > BZNIHR				
	Cat. ?	Seq. ?	OC ?	RC ?	AC ?	Price ?	OC ?	RC ?	AC ?	Price ?	
			[MW]	[MW]	[MW]	[EUR/MW]	[MW]	[MW]	[MW]	[EUR/MW]	
14.04.2015 00:00 - 15.04.2015 00:00 (CET)	Hourly	1	<u>1258</u> (VARY)	<u>640</u>	<u>640</u>	<u>0.00</u>	<u>192</u> (VARY)	<u>684</u> (VARY)	<u>192</u> (VARY)	<u>12.10</u> (VARY)	+
15.04.2015 00:00 - 16.04.2015 00:00 (CET)	Hourly	1	<u>1235</u> (VARY)	<u>865</u> (VARY)	<u>865</u> (VARY)	<u>0.00</u>	<u>215</u> (VARY)	<u>433</u> (VARY)	<u>215</u> (VARY)	<u>0.17</u> (VARY)	+
16.04.2015 00:00 - 17.04.2015 00:00 (CET)	Hourly	1	<u>1265</u> (VARY)	<u>884</u>	<u>884</u>	<u>0.00</u>	<u>185</u> (VARY)	<u>481</u> (VARY)	<u>184</u> (VARY)	<u>0.21</u>	+
17.04.2015 00:00 - 18.04.2015 00:00 (CET)	Hourly	1	<u>1255</u> (VARY)	<u>843</u> (VARY)	<u>843</u> (VARY)	<u>0.00</u>	<u>195</u> (VARY)	<u>434</u> (VARY)	<u>195</u> (VARY)	<u>0.50</u> (VARY)	+

Reporting– EMFIP

➤ Transmission Explicit Allocation

➤ Day Ahead

- Offered,
- Requested
- Allocated
- Auction Price

➤ Long/Medium Term

- Offered,
- Requested
- Allocated
- Auction Price

➤ Allocation Revenue

➤ AAC – Already Allocated Capacity

➤ Auction Configuration

Reporting – REMIT

- Regulation (EU) No 1227/2011 on wholesale energy market integrity and transparency
- Reporting to ACER's ARIS system
- SEE CAO submits data as **Registered Reporting Mechanism**
 - on behalf of EU TSOs
 - on the borders with EU Member States
 - 4 out of 6 SEE CAO borders

Reporting – REMIT

Electricity Transportation contracts

on behalf of TSOs:

- Long Term Total Allocation
- Long Term Bids
- Daily Total Allocation
- Daily Bids

on behalf of Market Participants:

- Transfer Rights time series
- Resale Rights time series

Data exchange

SEE CAO ↔ TSOs

SEE CAO ↔ Auction participants

ECAN - ENTSO-E Capacity Allocation and Nomination
Standard (.xml)

Other formats (.pdf, .xls)



Thank you for your attention!

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