Allocation of forward capacities

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Coordinated Auction Office in South East Europe

Training Course on Electricity Markets and Trading
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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

FCA

HAR

Specific Annex SEE CAO

Daily Explicit Allocation Rules

Participation agreement

Financial terms

Nomination rules

Information System Rules
SEE CAO HAR set of rules

- Harmonised Allocation Rules (Y, M)
  - Participation Agreement
    - Financial terms
  - Specific annex
    - Nomination Rules
    - Information System 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
SEE CAO HAR set of rules

Harmonised Allocation Rules (Y, M)

- Participation Agreement
  - Financial terms
- Nomination Rules
- Information System Rules

Specific annex
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

Harmonised Allocation Rules (Y, M)

Participation Agreement
Financial terms

Nomination Rules

Specific annex

Information System 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

- Harmonised Allocation Rules (Y, M)
  - Participation Agreement
  - Financial terms
  - Specific annex
  - Nomination Rules
  - Information System 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

- Harmonised Allocation Rules (Y, M)
  - Participation Agreement
  - Financial terms
  - Specific annex
  - Nomination Rules
  - Information System Rules
  - Daily Allocation 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

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

TSO

NTC/ATC

SEE CAO

Offered Capacity

Clearing algorithm – Marginal price

Auction Participant

Bids

Auction Participant

Bids

Auction Participant

Bids

Auction Participant

Auction Results
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

![Diagram of auction process]

- Offer1
- Offer2
- Offer3
- Offer4

Accepted!
Partially Accepted!
Rejected!
Workflow diagram (Yearly auction)
Workflow diagram (Monthly auction)
Workflow diagram (Daily auction)

- Netting procedure for calculation of daily ATC
Workflow diagram (Daily auction)

- Netting procedure for calculation of daily ATC

\[ \text{Offered Capacity} = \text{ATC} \]

\[ \text{Daily ATC (DIR)} = \text{Net Transfer Capacity (DIR)} - \text{LT nomination (DIR)} + \left( \text{Netting Coefficient (DIR)} \times \text{LT Nomination (OPP)} \right) \]
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
### 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: 14.04.2015
- To: 07.05.2015

#### Area
- Bosnia and Herz. (BA)
- BZNBA - BZNHR
- BZNBA - BZNIMF
- BZNBA - BZNRS
- Bulgaria (BG)
- Croatia (HR)
- Czech Republic (CZ)
- Denmark (DK)
- Estonia (EE)
- Finland (FI)
- France (FR)

#### Time Interval

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Reporting – EMFIP

### Transmission Explicit Allocation

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<th>Day Ahead</th>
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<td>Offered,</td>
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<td>Requested,</td>
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<td>Allocated,</td>
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<tr>
<td>Auction Price</td>
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<th>Long/Medium Term</th>
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<td>Offered,</td>
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<td>Requested,</td>
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<tr>
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<tr>
<td>Auction Price</td>
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### 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

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<td>- Long Term Total Allocation</td>
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<tr>
<td>- Long Term Bids</td>
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<tr>
<td>- Daily Total Allocation</td>
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<tr>
<td>- Daily Bids</td>
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<th>On behalf of Market Participants:</th>
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<td>- Transfer Rights time series</td>
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<tr>
<td>- Resale Rights time series</td>
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</table>
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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