

Network Code on Capacity Allocation Mechanism – NC CAM

Commission Regulation (EU) 2017/459

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Kiev, 5th December 2019



Contents

1. Legal basis and development
2. Subjects of NC CAM
3. Wrap-up

Legal basis and development

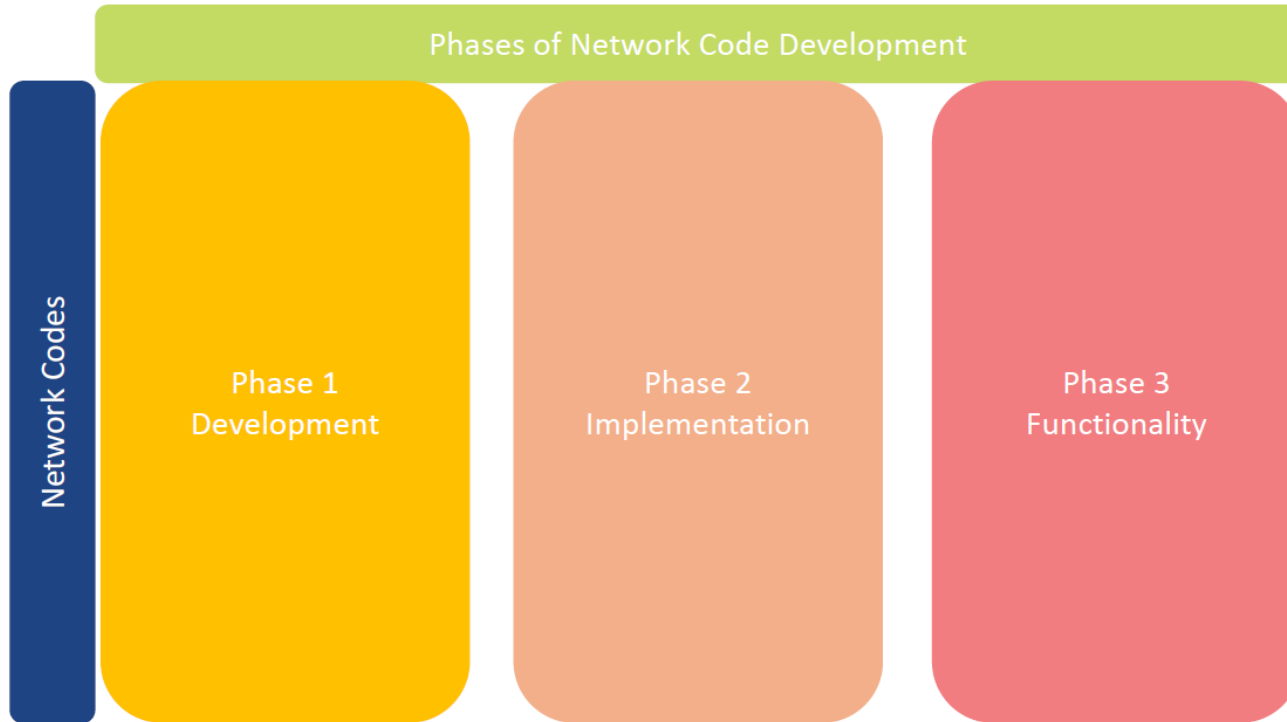
EU-COM	3rd EU Package (2009)		
ACER	Directive 2009/73/EC Rules for the internal market	Regulation EC 713/2009 Establishing ACER	Regulation EU 715/2009 Access conditions
ENTSOG	Framework Guidelines on Capacity Allocation Mechanisms (03.08.2011)	Framework Guidelines on Gas Balancing (18.10.2011)	Framework Guidelines on Interoperability and Data Exchange Rules (26.07.2012)
	Network Code on Capacity Allocation Mechanisms (first version: 14.10.2013) (latest version: 16.03.2017)	Network Code on Gas Balancing (26.03.2014)	Network Code on Interoperability and data exchange (30.04.2015)

Legal Basis and Development

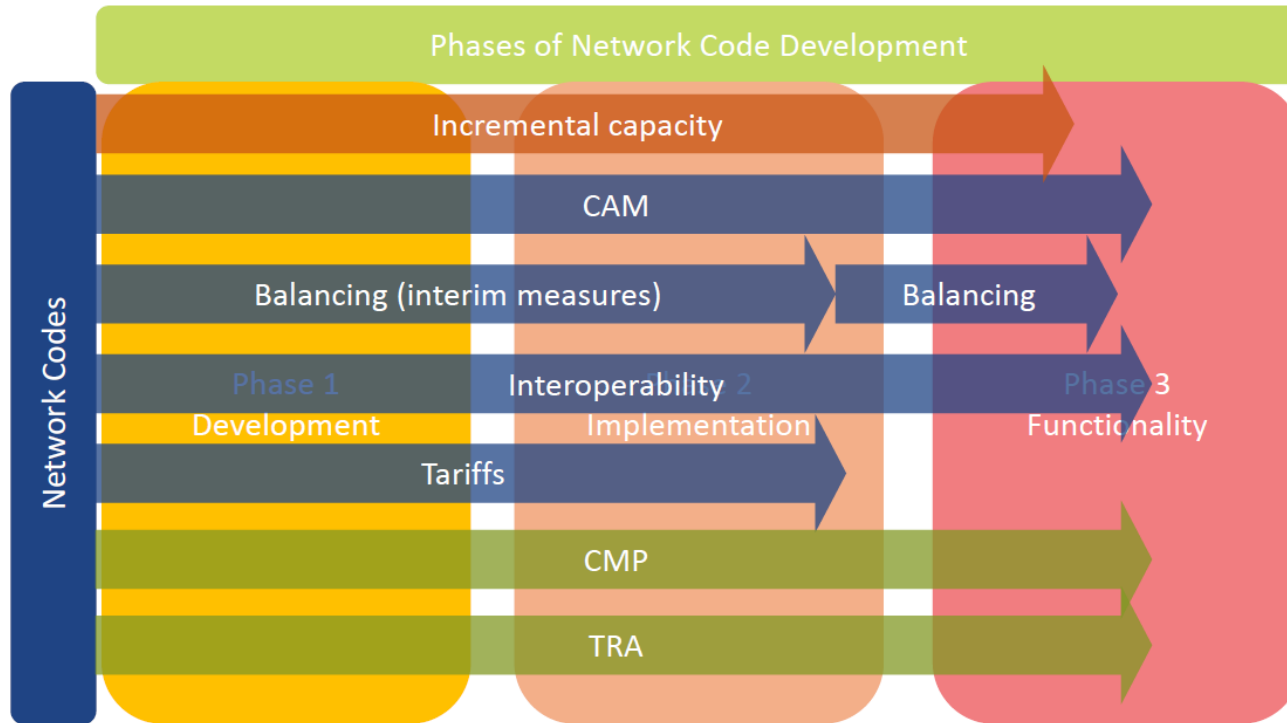
Roles and responsibilities in NC development process

- **European Commission:** Sets priorities
- **ACER:** develops Framework Guidelines (FG) defining scope and objective
- **ENTSOG:** develops NC in line with FG
- **Network users/stakeholders:** Involved via consultation
- **ACER:** Checks NC on consistency with FG and gives recommendation to EC
- **EC:** Adopts the NC
- **Member States:** Final vote via comitology process





Legal Basis and Development

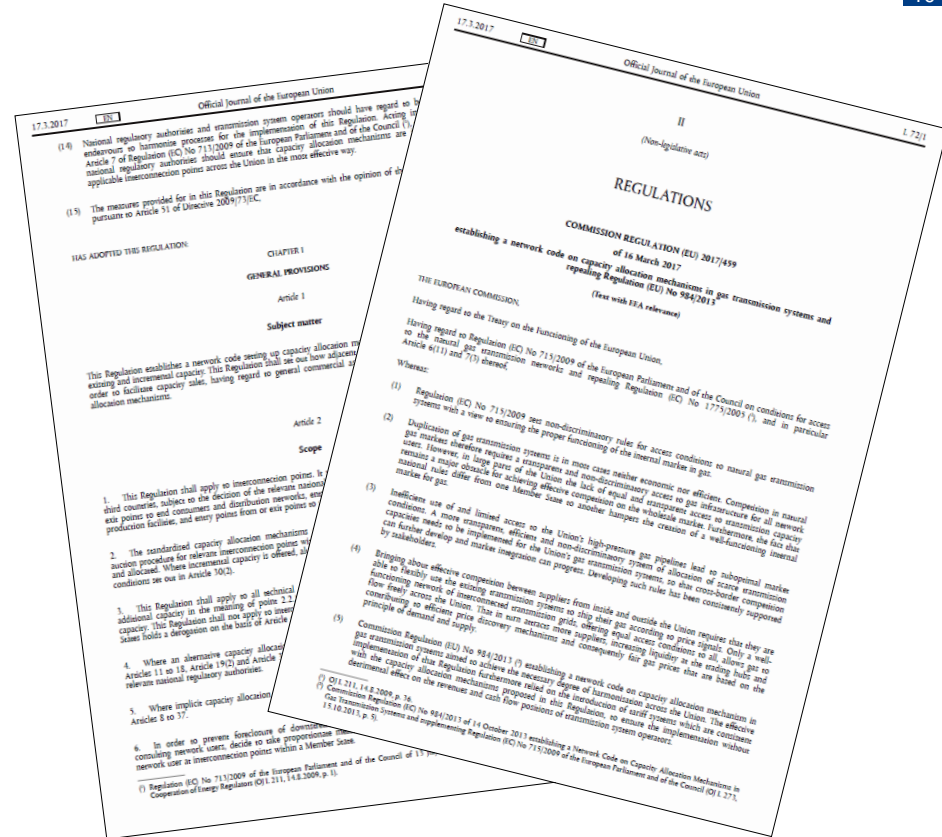


Subjects of NC CAM

Commission Regulation EU 2017/459

Subjects of NC CAM

1. General Provisions
2. Principles of Cooperation
3. Allocation of Firm Capacity Products
4. Bundling of Capacity at Interconnection Points
5. Incremental Capacity Process
6. Interruptible Capacity
7. Capacity Booking Platforms
8. Final Provisions



General Provisions and Principles of Cooperation

General Provisions

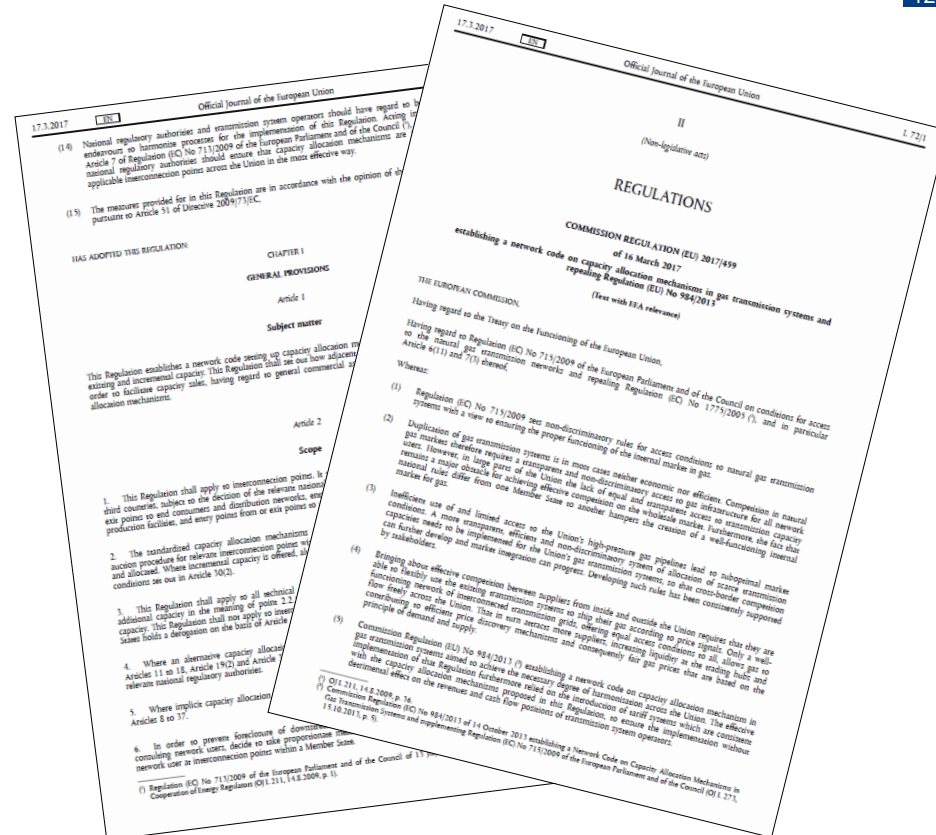
- Subject matter:
 - Standardized capacity allocation mechanisms
 - Including auction procedures
 - Scope:
 - Interconnection points
 - Firm and interruptible capacity
-

Principles of Cooperation

- Coordination of maintenance:
 - Compulsory cooperation to avoid reductions in capacity offers
- Standardisation of communication:
 - In particular to/with booking platform
- Capacity calculation and maximisation
 - Offer of the maximum bundled capacity

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Allocation of Firm Capacity Products

Standard capacity products:

▪ Yearly:

- Gas year (October – October)
- 5 to 15 years ahead
- Auction: Once a year (1st Monday of July)

▪ Quarterly:

Start of auction	Number of auctioned quarters
1st Monday of August	4
1st Monday of November	3
1st Monday of February	2
1st Monday of May	1

▪ Monthly:

- 1 month ahead
- Auction: 3rd Monday of each month

▪ Daily:

- 1 day ahead
- Auction: 15:30 till 17:00 (UTC)

▪ Within-day:

- Rest of the day product
- 1st round closes at 1:30 (UTC) last round closes at 0:30 (UTC)

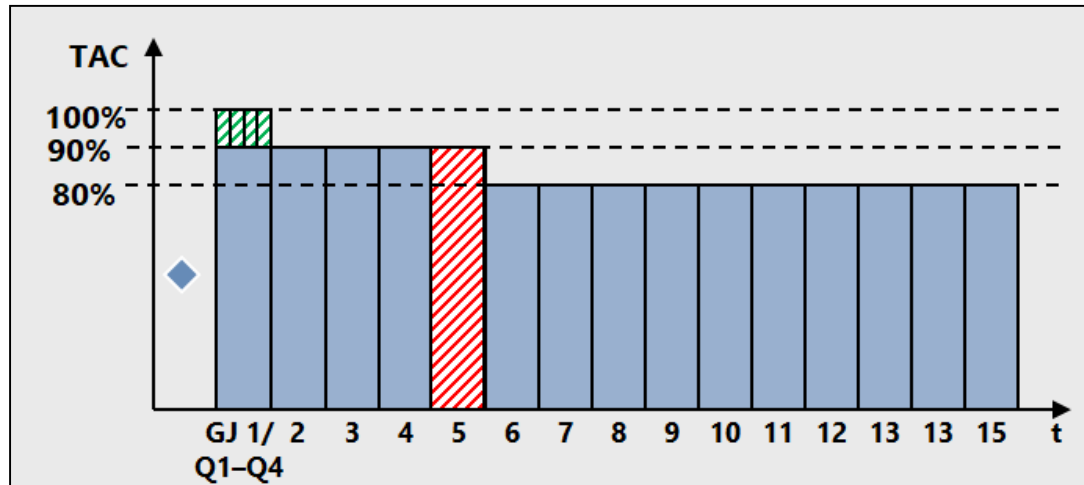
ENTSOG Auction calendar:

<https://www.entsog.eu/en/index/index/module/search?q=calendar>

Allocation of Firm Capacity Products

Reservation quotas

- Period ≤ 1 year: 100 % of available capacity bookable
- Period > 1 year: 90 % of available capacity bookable
- Period > 5 years: 80 % of available capacity bookable



Allocation of Firm Capacity Products

Ascending clock algorithm

- Yearly, quarterly and monthly products
- Publication of auction details according to the auction calendar
- Number of bidding rounds depends on the demand of all participating shippers
- Bids are placed at a given price (→ submission of an amount of capacity)
- The price steps of the auction are set by the TSOs

Uniform price auctions

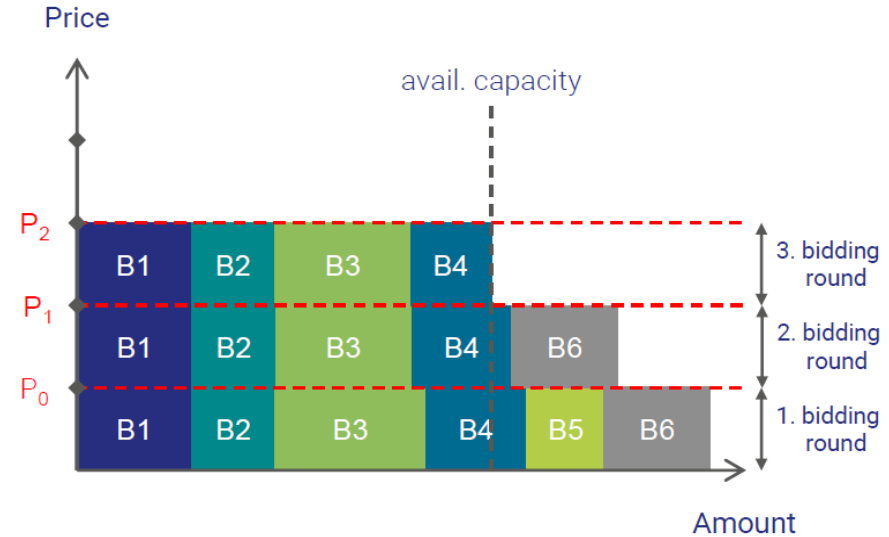
- Day-ahead and within day
- Publication of the auction with the start of the auction
- One bidding round
- Bid = combination of capacity amount and surcharge
- TC can place up to 10 bids per auction



Allocation of Firm Capacity Products

Ascending clock algorithm

- Sum of all placed bids in the bidding round is higher than the available capacity (oversell) → the auction continues with the next bidding round
- A large price step is applied and shipper can place bids at the new price
- If the total demand of all placed bids in the bidding round is equal to the available capacity: capacity contracts are concluded
- The clearing price of the auction in this example is P_2 (Regulated Tariff + 2 large price steps)



Legend:

P_0 Regulated Tariff
 B1 - Bn Bid 1 to Bid n

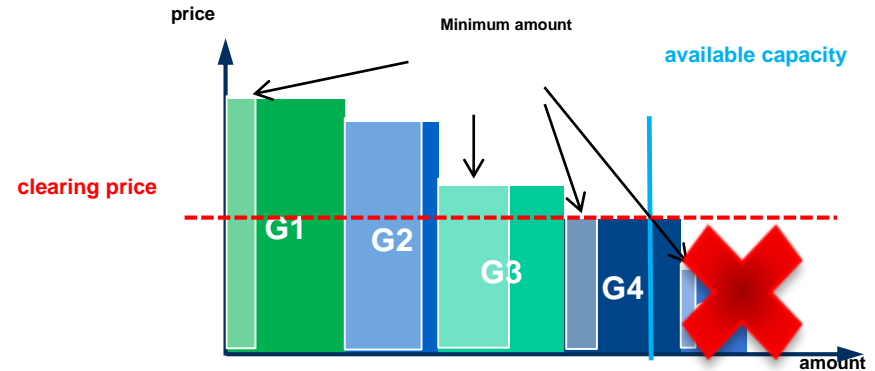
3. Bidding round:

- B4 reduces the bid
- B6 does not place a bid
- Sum of all bids equals the available capacity
- The auction closes at clearing price P_2

Allocation of Firm Capacity Products

Uniform price algorithm

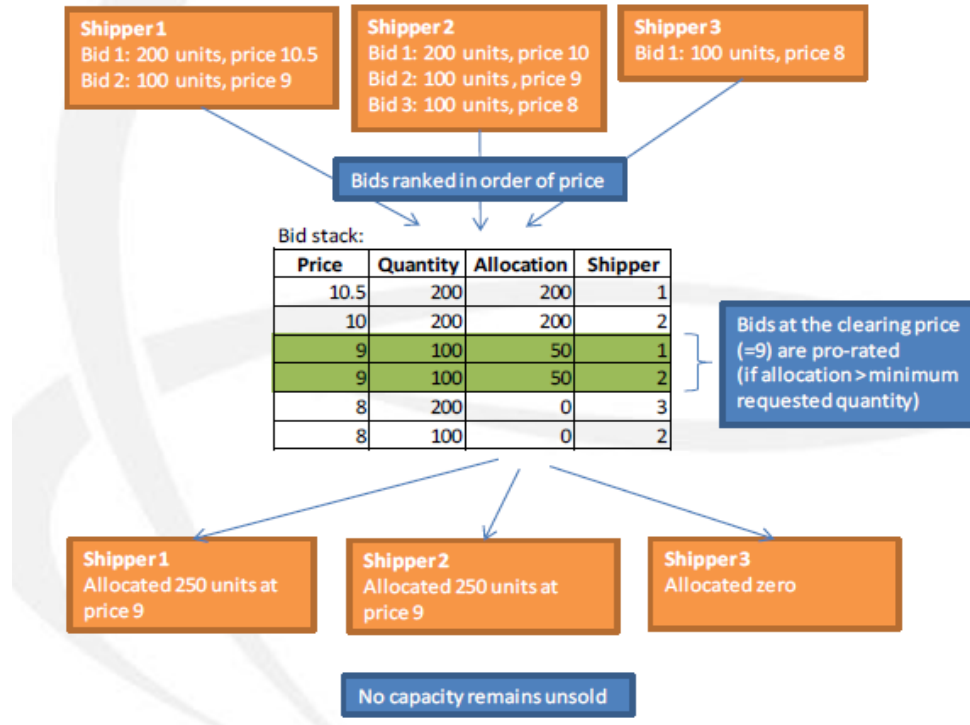
- Day-ahead and within-day
- Bid = combination of capacity amount and surcharge
- Bids by all shippers are evaluated in a descending order according to the willingness to pay
- Allocation of capacity is done after the bidding round is closed
- The lowest surcharge of all successful bids is considered the clearing price
- Depending on the received bids the clearing price is determined by either the fill-or-kill procedure or the pro-rata procedure



Allocation of Firm Capacity Products

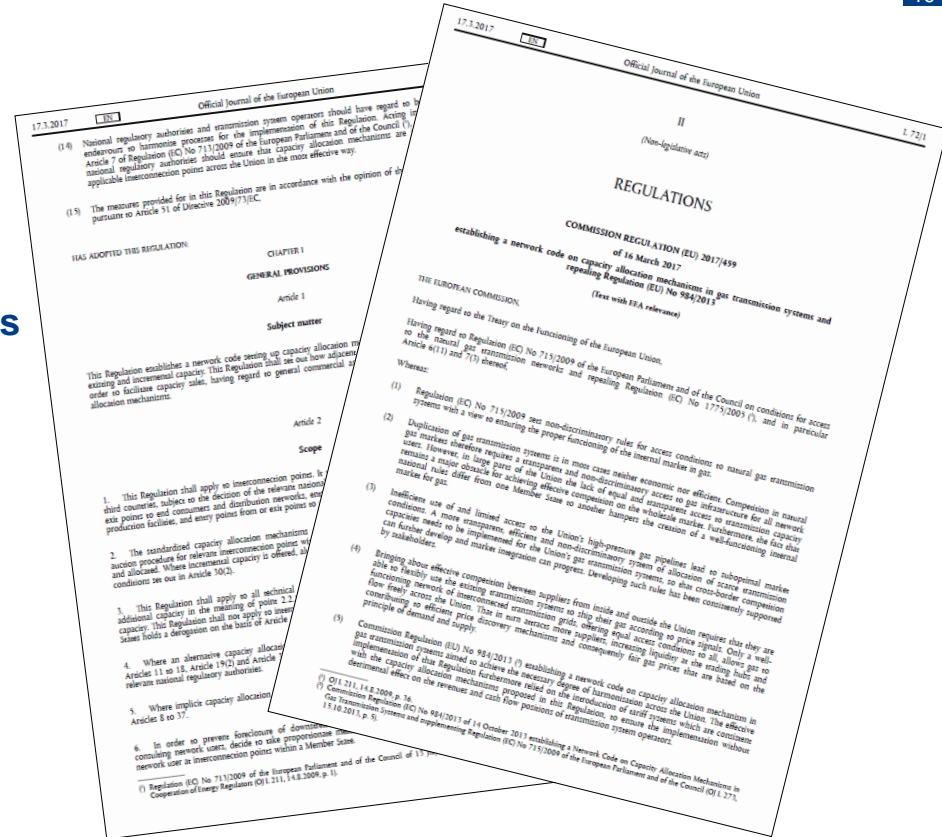
Uniform price algorithm – Detailed example

- Day-ahead
- 500 unit available



Subjects of NC CAM

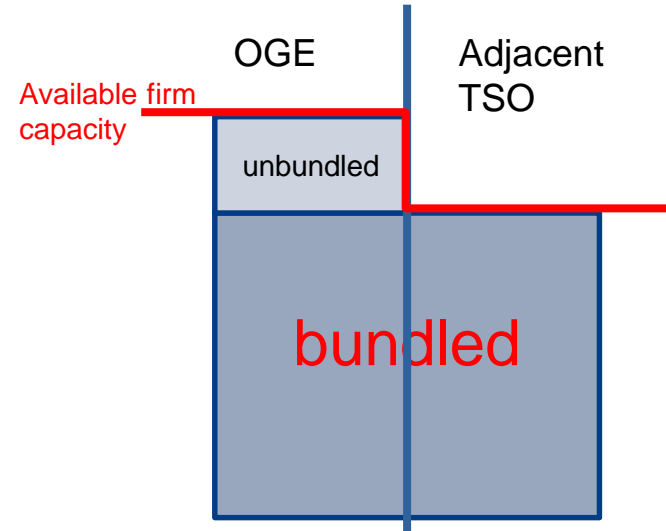
1. General Provisions
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Bundling of Capacity at Interconnection Points

Bundled capacity products

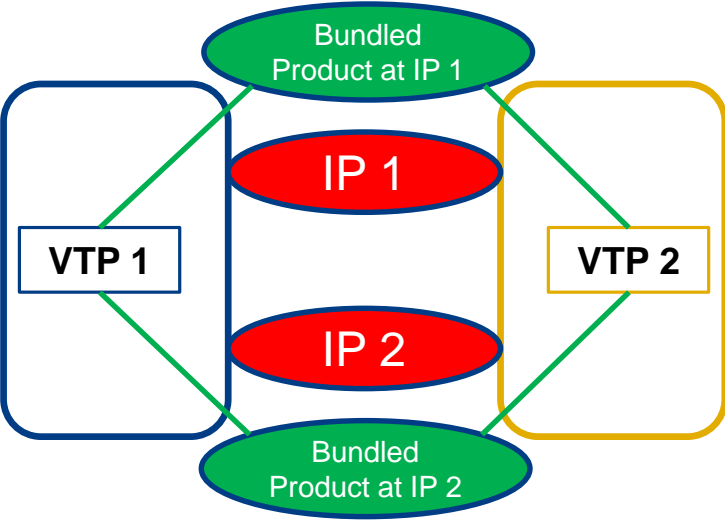
- Jointly offered by adjacent TSOs
- Joint nomination procedure shall be established
- Bundled capacity can only be resold as bundled capacity
- Capacity overhang on one side is offered as firm unbundled capacity
- Establishing of virtual interconnection points (VIP)



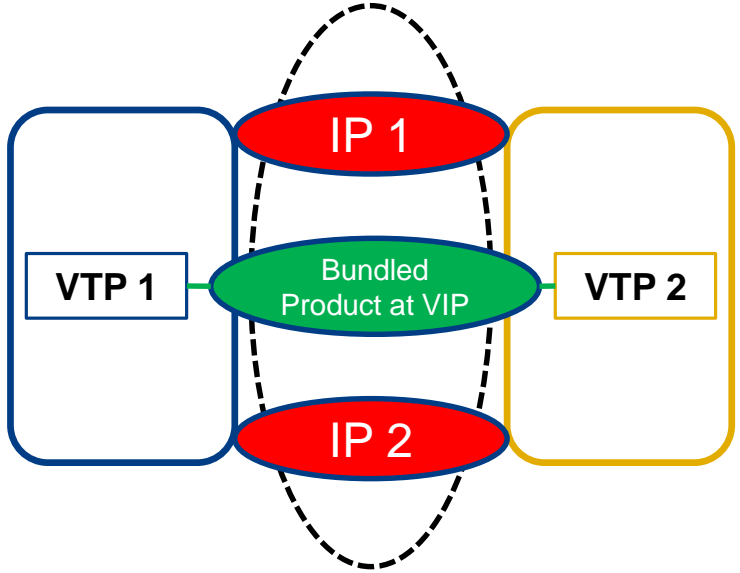
Bundling of Capacity at Interconnection Points

Establishing of virtual interconnection points – two (or more) IPs connecting the same E/E-system

- Two separate bundled products at both IPs



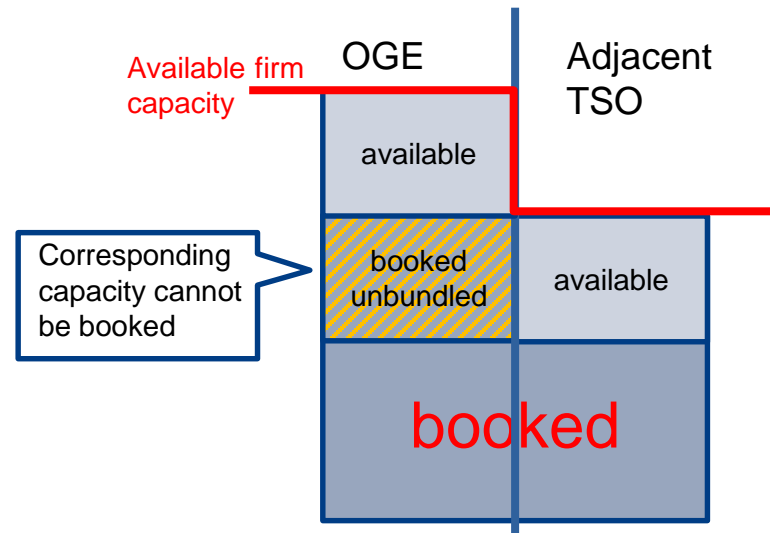
- One bundled product at VIP



Bundling of Capacity at Interconnection Points

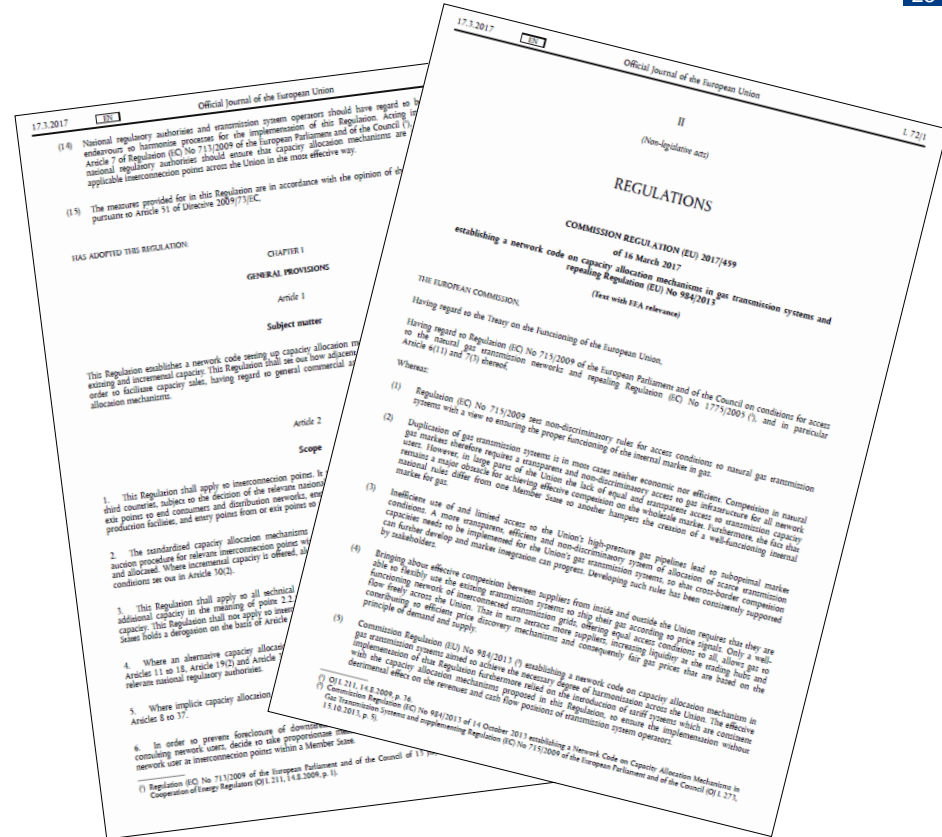
Bundling of contracted capacity

- Network users holding unbundled capacity products on both sides of an IP shall make best efforts to bundle it
- Capacity conversion mechanism
 - Conversion from unbundled to bundled capacity
 - Acquisition of bundled and simultaneous return of (old) unbundled
 - Free of charge
 - Yearly, monthly, quarterly



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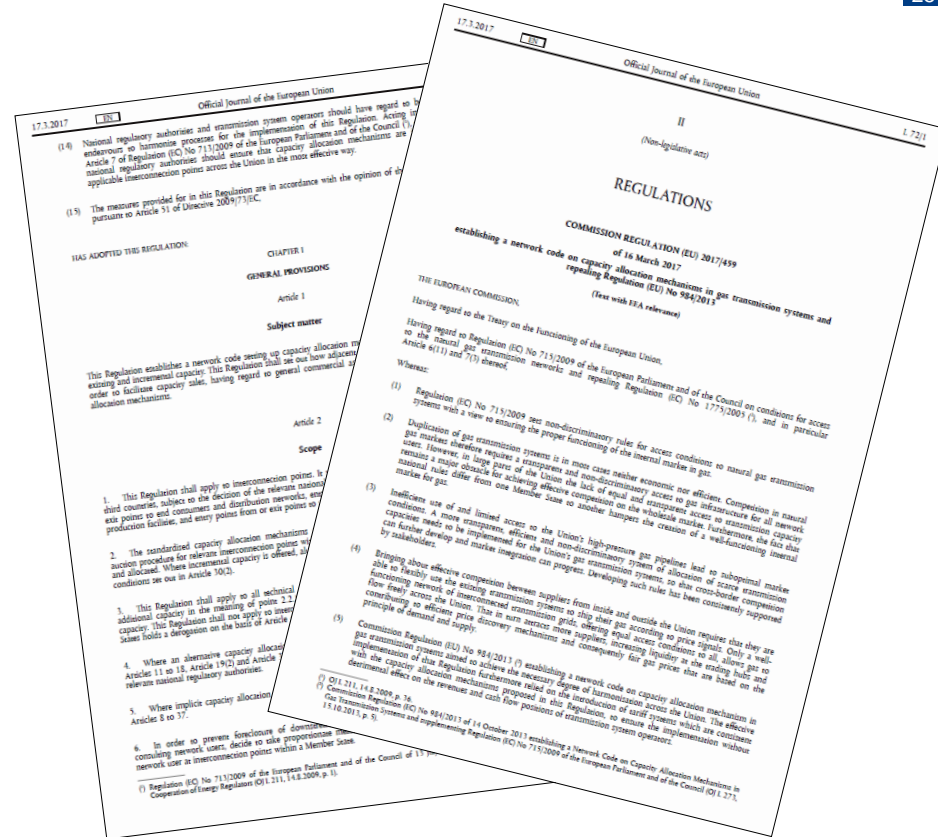


**Let's skip the
process for now**



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Interruptible Capacity

Yearly, quarterly, monthly products

- Optional offer
- Conditions. Firm capacity is:
 - a) Sold at an auction premium
 - b) Sold out
 - c) Not offered

DA products

- Obligatory offer
- Conditions. Firm capacity is:
 - a) Sold out
 - b) Not offered

→ Allocated via auction process

Within-day products

- Obligatory offer
 - Only offered if firm capacity is sold out
- Allocated via over-nomination procedure

With the exception of within-day interruptible capacity, all dates for interruptible capacity auctions shall be detailed within the auction calendar

Interruptible Capacity

Interruption lead-times

- To be defined by respective TSOs
- Default minimum lead-time 45 minutes after start of renomination cycle

Coordination of interruptions

- Order by timestamp of booking
- In case of identical ranking → pro-rata reduction

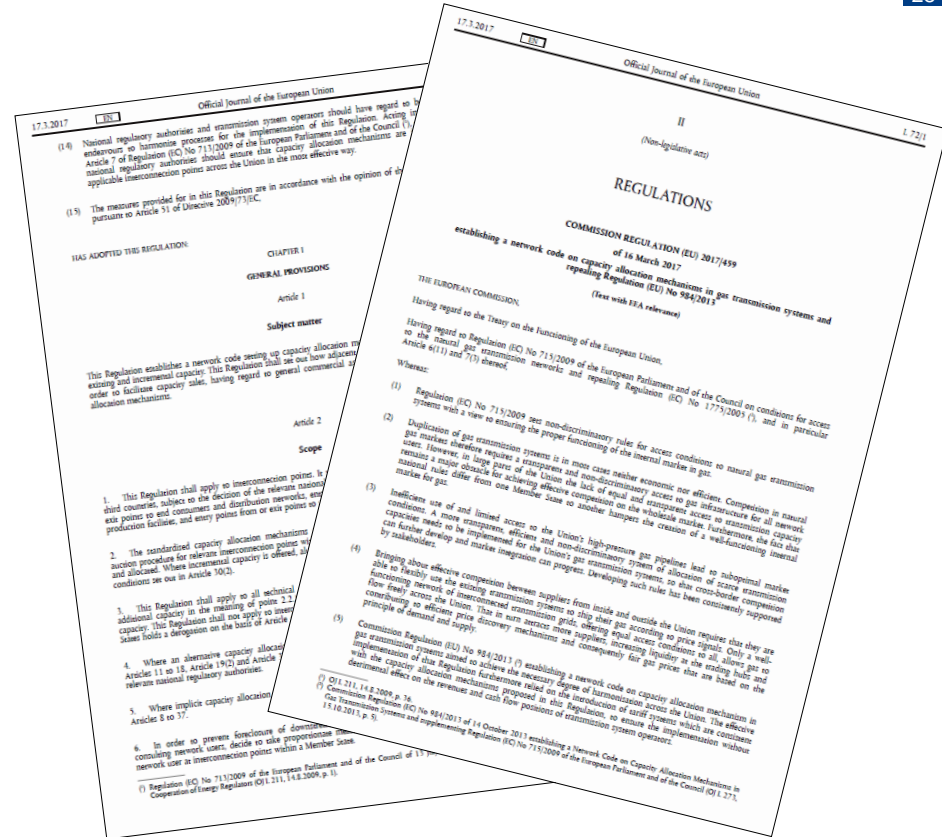
Reasons for interruptions

- Reasons have to be included in
 - Interruptible transport contracts, or
 - GTC



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Capacity Booking Platforms

Platform

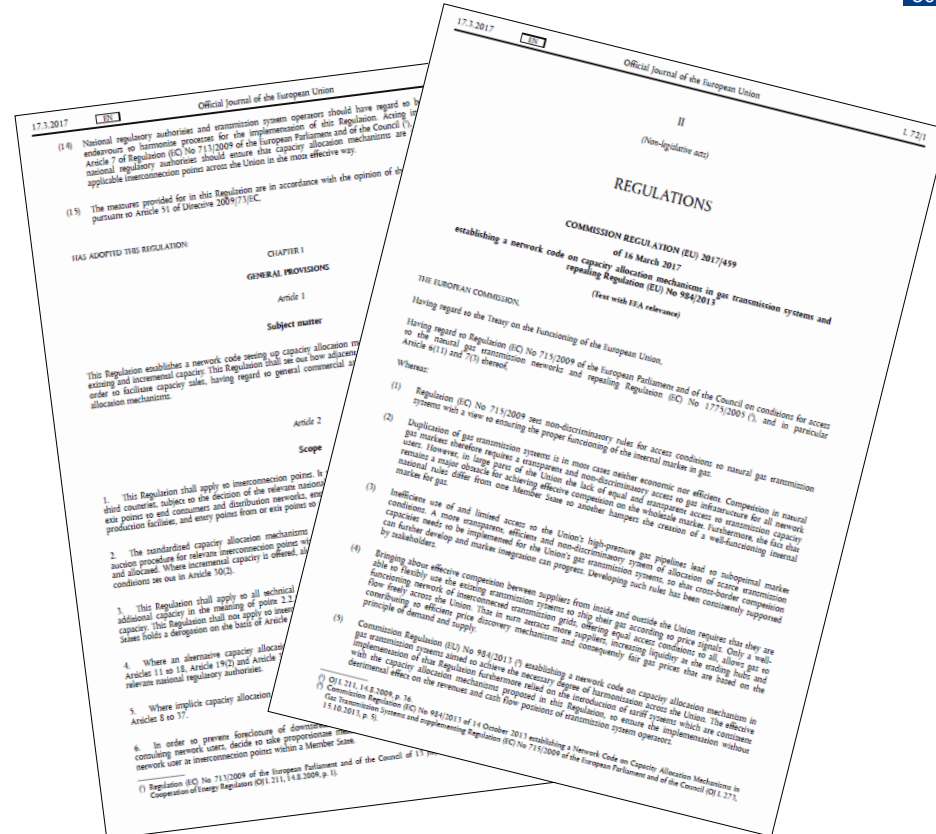
- One or limited number of joint platforms
- Web based
- Operated by TSO or via third party
- Rules for booking platforms:
 - Allocation acc. to NC CAM rules
 - Provide platform for secondary capacity
 - *Capacity at one (V)IP shall be offered at one booking platform*

→ Contractual agreement to use one platform for both sides of each (V)IP



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Final Provisions

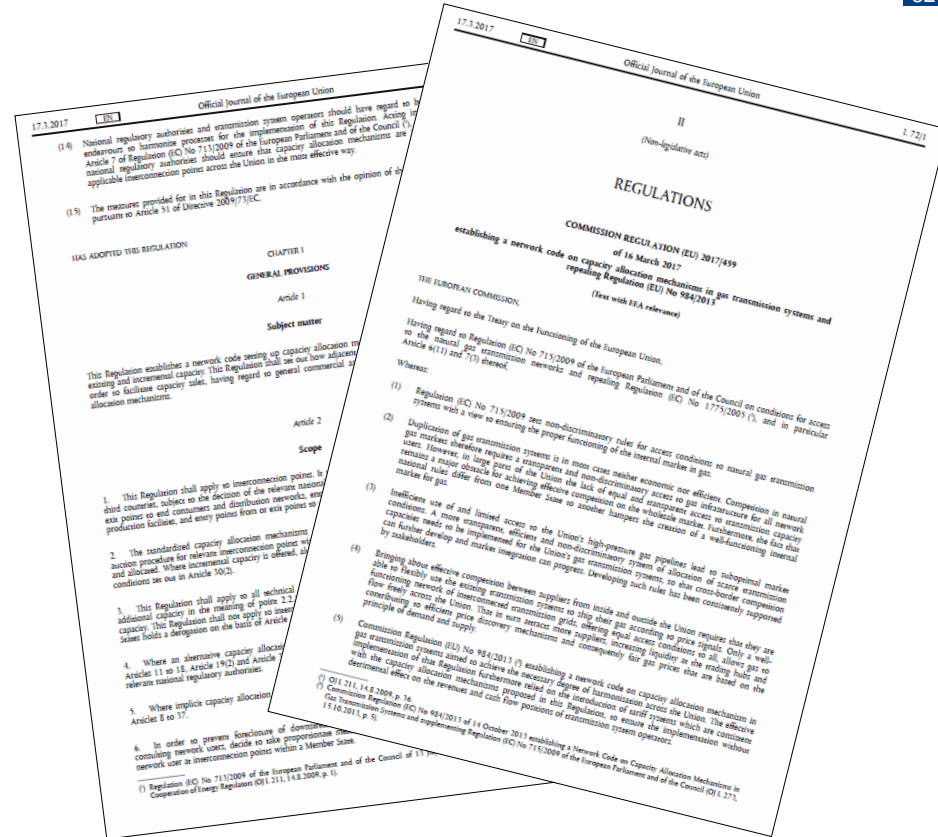
Implementation monitoring

- ENTSOG has to assist ACER in its monitoring duties
- TSOs have to submit all relevant information to ENTSOG



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What is incremental capacity?

“a possible increase in technical capacity that may be offered based on investment or long term capacity optimization and subsequently allocated subject to the positive outcome of an economic test”

- At existing IPs
- By establishing a new IP
- A physical reverse flow capacity at an IP, which has not being offered before

Incremental Capacity Process

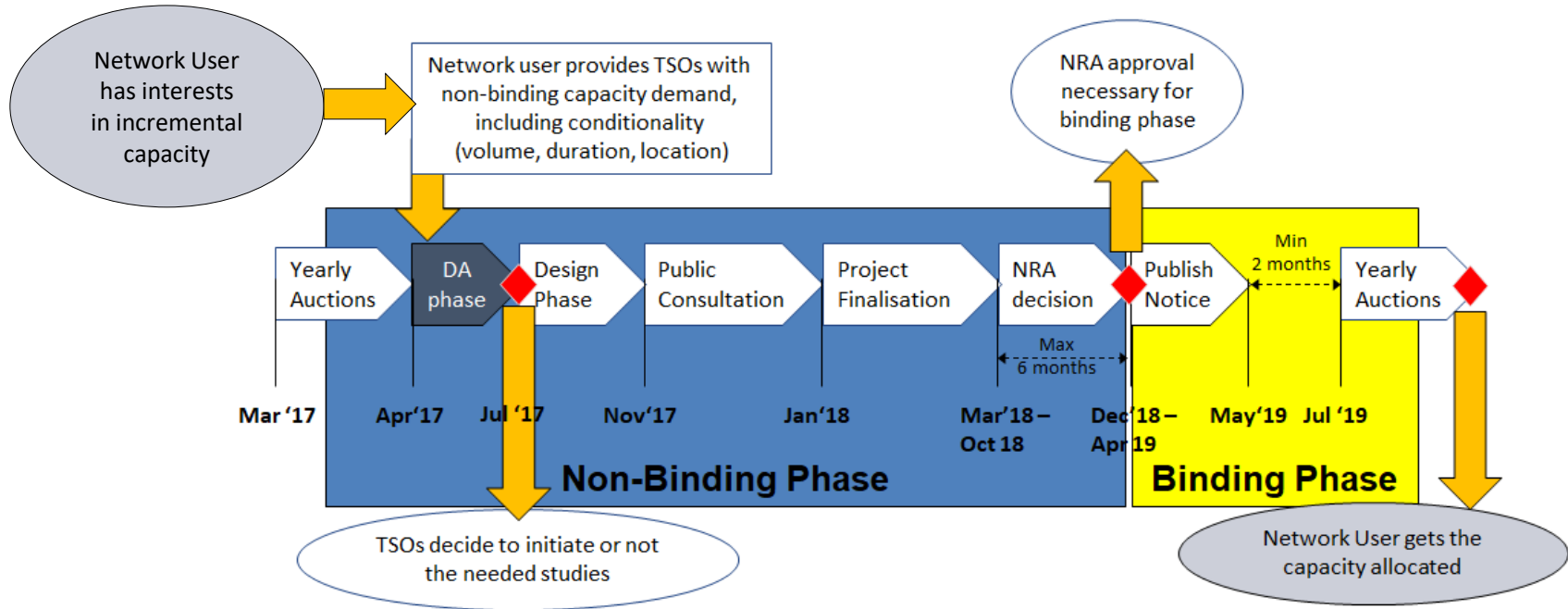
Objective of Incremental Proposal

“to establish a market-base procedure to satisfy all economically reasonable and technically feasible demand for capacity”

- Jointly with stakeholders, ENTSOG developed a standardised and coherent process for the realisation of incremental capacity
- Core is a harmonised and simultaneous assessment of demand for incremental capacity across the EU
- Intensive cooperation and coordination between TSOs, NRAs and network users

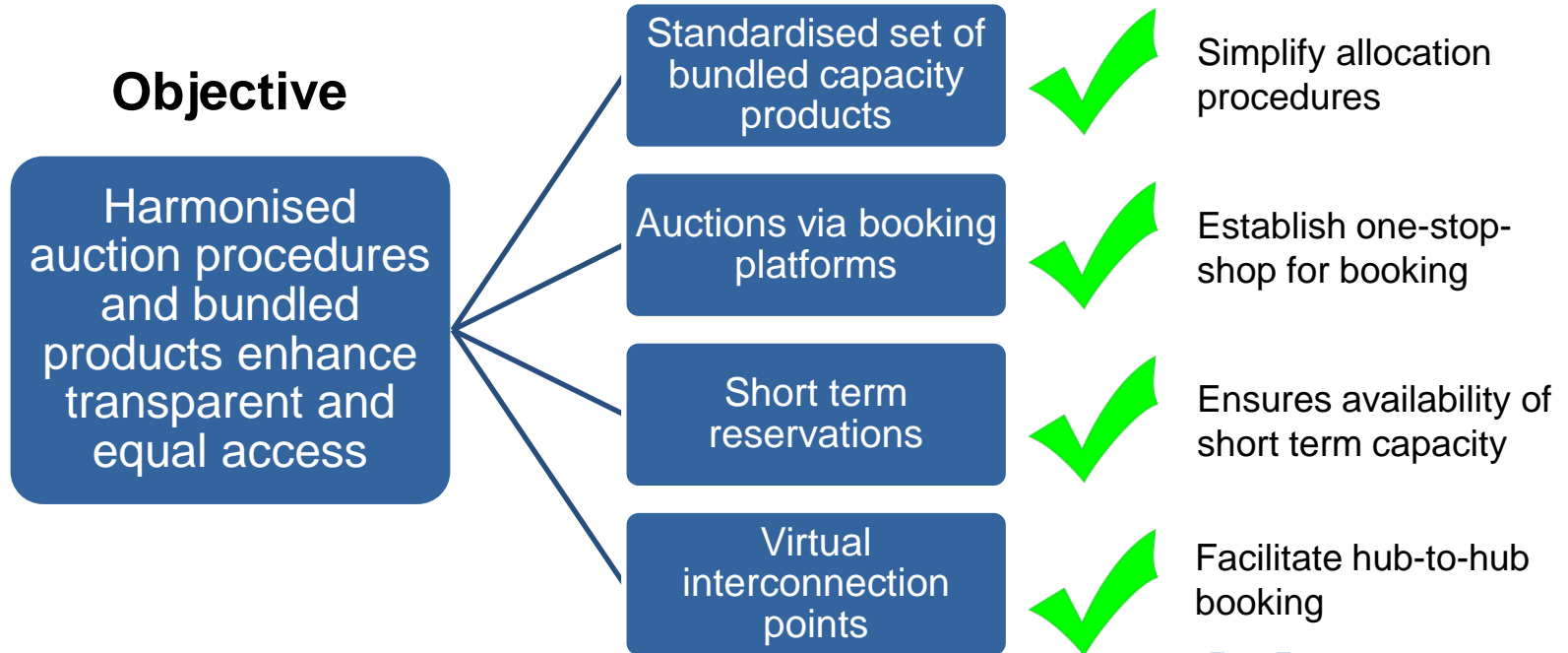
Incremental Capacity Process

Timeline



Wrap-up

Capacity Allocation Mechanisms, applicable since 11/2015



Thank you very much