



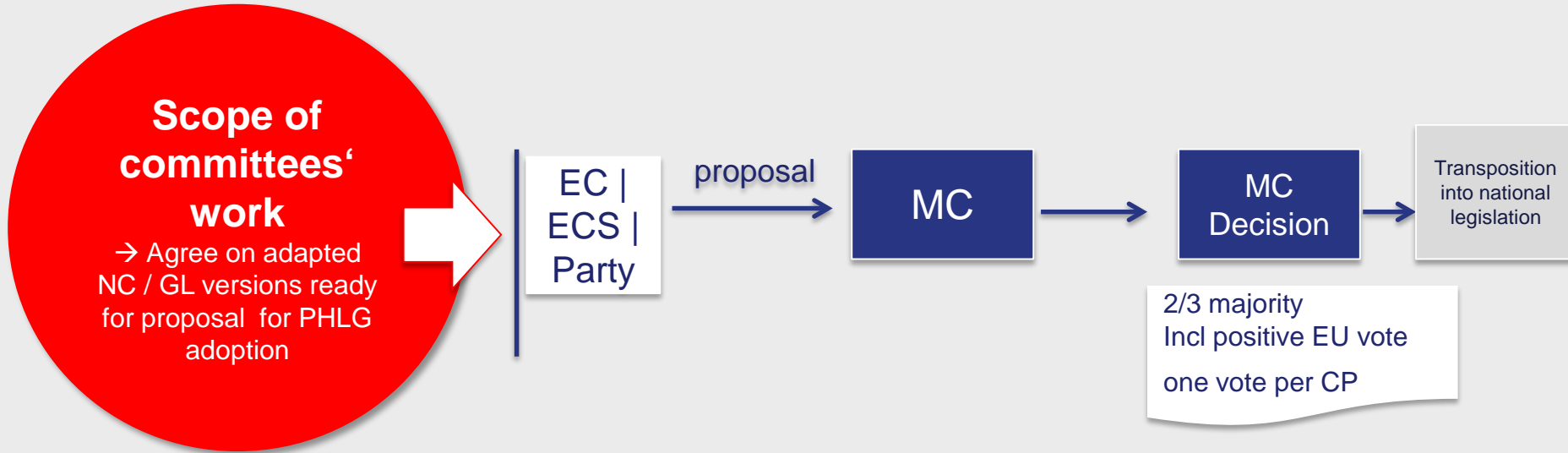
Bringing market guidelines in the Energy Community

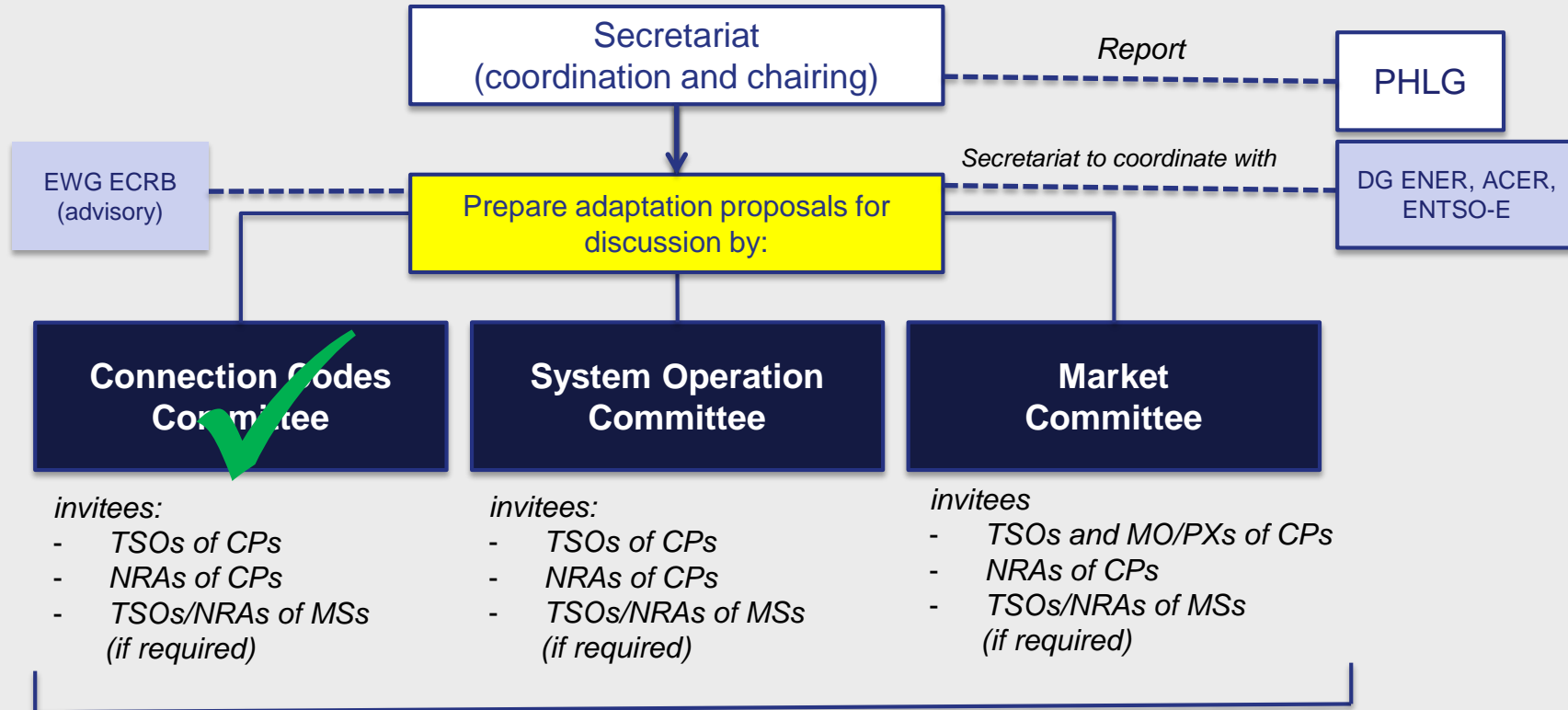
Energy Community Secretariat

Agenda

1. Procedures
2. Introduction
3. Geographical scope
4. CCRs
5. Methodologies – existing vs new | pan-European vs regional
6. Voting
7. Others

1. Procedure





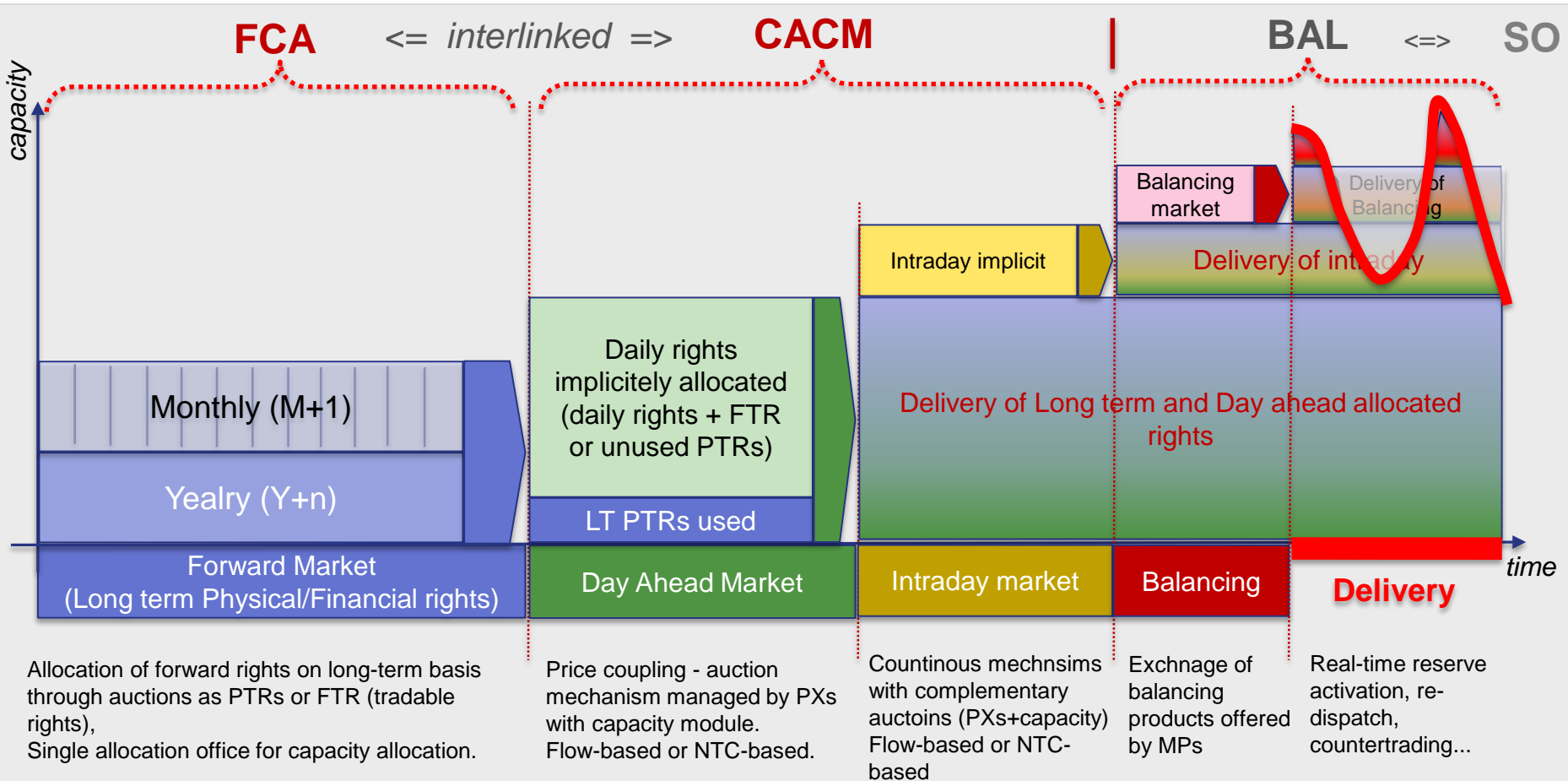
All: open for participation by DG ENER, ACER, ENTSO-E

- **Standard adaptations**
 - EC → ECS | ACER → ECRB | MS → CP
- **ad-hoc adaptations**
- **Implementation in one step**
- **Implementation deadlines**
- **Reciprocity relevant**
 - Title III
 - Alternative Title IV

2. Introduction

- Electricity Regulation 714/2009 (part of 3rd package) adopted by the MC in October 2011
 - Third package sets the basis for a liberalized market (unbundling, non-discriminatory access, etc.)
 - **Network codes and guidelines** established according to EU 714/2009 sets to target model for European market
 - Requirements for forward cross-zonal transmission rights
 - DAM through single and IDM through continuous market coupling algorithm
 - European and regional balancing platforms and close system operation coordination
 - ... and technical and operational requirements

Target model = market network codes



FCA

Forward Capacity Allocation

In force in the EU



*Establish a framework for the calculation and allocation of cross-zonal capacity, and for cross-zonal trading, in **forward markets***

CACM

Capacity Allocation and Congestion Management

In force in the EU



*Establish cross-border EU electricity markets in the **day-ahead and intraday** timeframes, as well as methods for the calculation of cross-zonal capacity*



Approach discussed so far for EnC

- Discussed with stakeholders from the Contracting Parties:
 - Geographic scope and how to deal with reciprocity (EU-CP)
 - Transfer of pan-EU methodologies
 - Regulatory oversight
- Outcome of discussions:
 - A scope that integrates EU-CP interconnections with legal certainty
 - Harmonized and using EU solutions for pan-European processes
 - Regional processes incorporating EU-CP interconnections
 - ACER for MSs / ECRB for CPs / for MS-CP interconnections [?]

3. Geographical scope

Cross-zonal applicability

■ ■ EU CACM

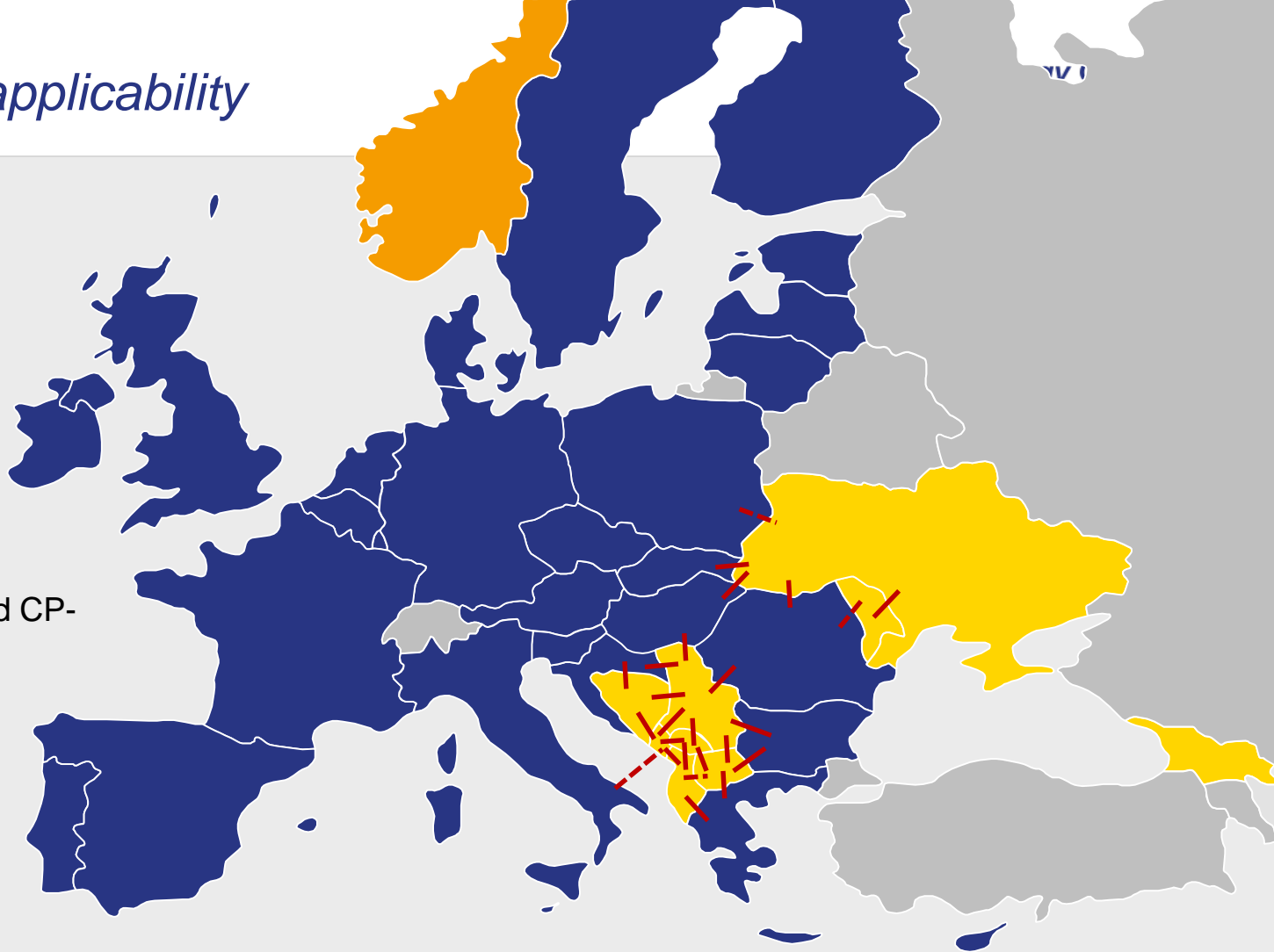
■ ■ EnC CACM

■ ■ EnC CACM

“switching on” of CPs and CP-MS interconnections

■ European Union

■ Contracting Parties

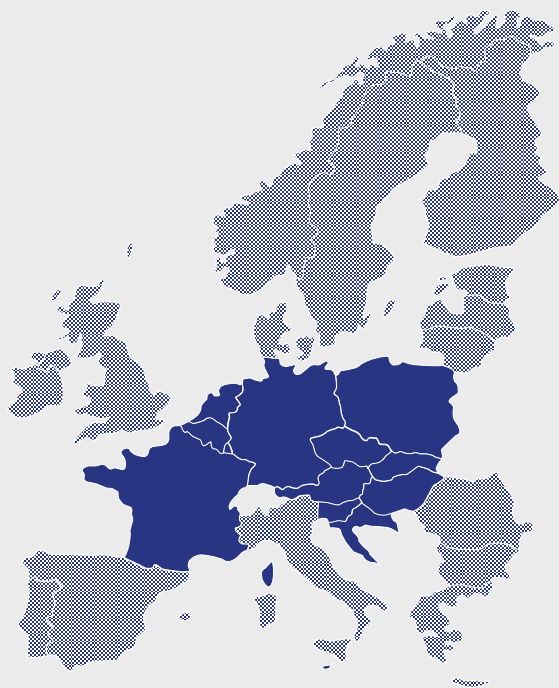


4. CCRs

Definition of CCR – key for implementation

- EU CACM required TSOs, within 3 months from the entry into force of CACM, to develop a proposal for determination of CCRs
 - CCRs = geographic areas in which coordinated capacity calculation applies
 - Each bidding-zone border attributed to a CCR
- 17 Nov 2016 ACER decided on EU CCRs after failure by NRAs to reach an agreement on the CCRs proposals submitted by the TSOs
- 10 CCRs are defined(only MS-MS borders)
- ACER's decision and ENTSO-E's explanatory document provides for future SEE CCR 10th which includes also MS-CP borders in SEE

CCR 3: CORE



CCR 5: GRIT



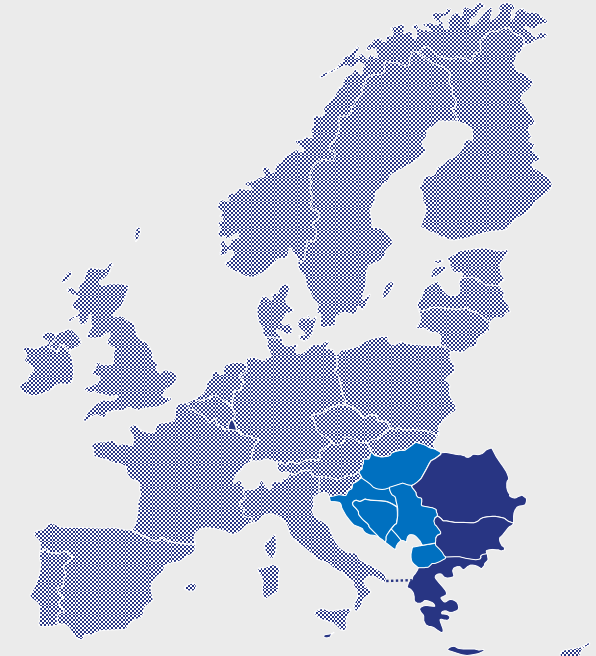
CCR 10: SEE



CCR SEE (ACER's decision)

- ACER's decision on CCRs (pursuant to Article 9.11 of the CACM)
 - Article 14: CCR SEE includes bidding zone borders between: GR-BG and BG-RO
 - Recital 84: *“Since the CACM Regulation aims at extending market coupling beyond the EU borders (ref to CACM Article 20.4), the Agency stresses the importance to prepare the **future extension of CCRs to third countries** well in advance. The Agency therefore welcomes that the CCRs Proposal provides for a planning for the future extension of the current CCRs, including to third countries (ref to **“Explanatory document to all TSOs’ proposal for Capacity Calculation Regions - CCRs” of 29.10.2015**).*
 - *“CACM Art. 20.4: No later than six months after at least all South East Europe Energy Community Contracting Parties participate in the single day-ahead coupling, the TSOs from at least **Croatia, Romania, Bulgaria and Greece** shall jointly submit a proposal to introduce a common capacity calculation methodology using the flow-based approach for the day-ahead and intraday market time-frame. The proposal shall provide for an implementation date of the common capacity calculation methodology using the flow-based approach of no longer than two years after the participation of all SEE Energy Community Contracting Parties in the single day-ahead coupling. The TSOs from Member States which have borders with other regions are encouraged to join the initiatives to implement a common flow-based capacity calculation methodology with these regions.*

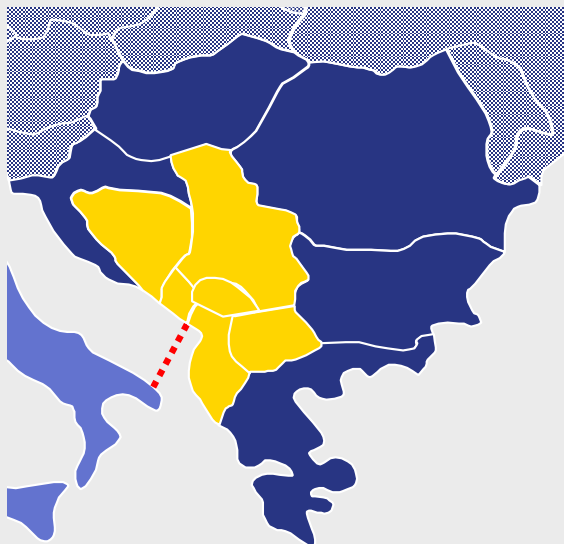
- **Future composition of CCRs including non-EU bidding zone borders** (Annex 1 to the Explanatory ... document)
 - Establishes the basis for the future implementation of the CACM Regulation by non-EU TSOs/non-EU regulatory authorities
 - Facilitates the early implementation by non-EU TSOs and the cooperation of the EU and non-EU NRAs;
 - **Involved TSOs (EU and non-EU) will start working together based on the CCR composition presented in Annex 1 to achieve the targets set in the CACM**
 - CCR SEE including non-EU bidding zone borders as fig below (excluding HU-RO and HU-HR)
- *The bidding zone borders will be included in the CCR SEE in the future, subject to the fulfilment of the legal requirements for the application of CACM Regulation*
- *The bidding zone border IT-ME will be included in the CCR SEE when the interconnection between Italy and Montenegro is commissioned (expected to be in 2017/2018) and subject to the fulfilment of any other legal requirements for the application of the CACM Regulation by Montenegro*



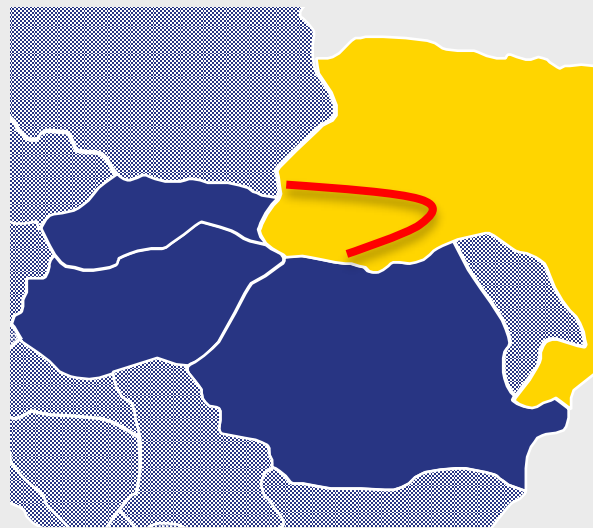
Source: Explanatory document to all TSOs' proposal for CCR

- Article 15 of CACM requires **definition of CCRs**
 - As ACER's decision covers only MSs, the decision cannot be incorporated in the Energy Community acquis as such
 - Title III specific decision is needed by the Ministerial Council/PHLG in order to set the basis for CACM and FCA implementation
 - This could come together with the CACM/FCA Regulation or subsequent to that
- Article 48 of FCA requires **establishment of the single allocation platform**
 - SEE CAO is already established and operational, which includes most of CPs and two MSs
 - SEE CAO would be the single allocation platform for the CPs, open to MSs participation on MS-CP borders
 - Separate Title III specific decision is needed for this (MC or PHLG)

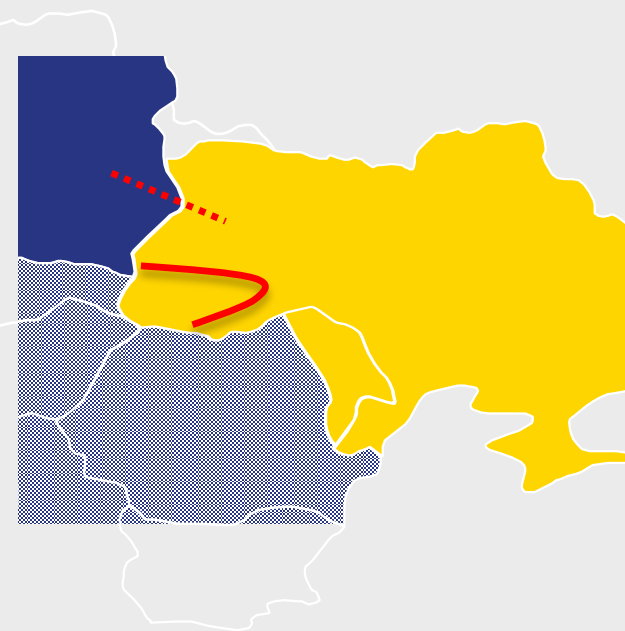
Shadow SEE CCR (+IT)



Burstyn CCR



UAMO CCR (+PL)



- CCRs include only the CP-CP & CP-MS borders
- MS-MS borders are covered in CCRs defined by ACER

5. Methodologies

EU: high-level structure of market network codes

All TSOs /(NEMOs)
All NRAs

Pan-European
terms & conditions /
methodologies /
platforms



Relevant TSOs
/(NEMOs) & NRAs

Regional (CCR)
terms & conditions /
methodologies /
platforms

Example of
a region



Relevant TSOs
/(NEMOs) & NRAs

National (CCR)
terms & conditions /
methodologies /
platforms



EC intervenes when no agreement is reached on proposals by TSOs / NEMOs



ENTSO-E's role in assessments, drafting, facilitation, coordination, reporting, etc.



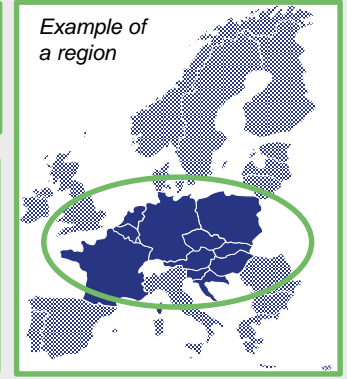
ACER's role in adopting methodologies in case of failure by TSOs/NRAs

Adapted approach for the EnC

All TSOs /(NEMOs)
All NRAs



Relevant TSOs
/(NEMOs) & NRAs



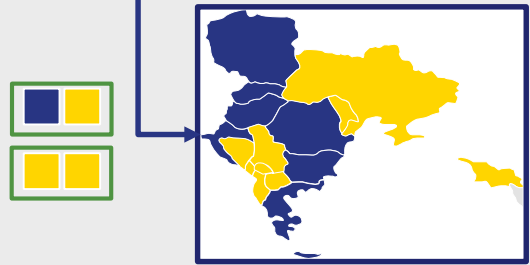
Relevant TSOs
/(NEMOs) & NRAs

Pan-European
terms & conditions /
methodologies /
platforms

Regional (CCR)
terms & conditions /
methodologies /
platforms

National (CCR)
terms & conditions /
methodologies /
platforms

Transfer through PHLG decision
applicable on Title III (CP-CP, CP-MS)



Developed on regional level and
applicable on Title III (CP-CP, CP-MS)

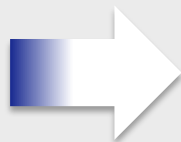


National
implementation
applicable on CPs



6. Voting

EU CACM
TSOs/NEMOs voting



EnC CACM
TSOs/NEMOs voting

Pan-European methodologies:

- Qualified majority
55% of MS + 65% of population of the EU

Regional methodologies:

- Qualified majority of the region
72% of MS + 65% of population of the region

Region <5: consensus

Pan-European methodologies:

- *Unchanged taken as part of EU acquis, applicable under PHLG decision requiring national transposition in CPs*

Regional methodologies:

- Qualified majority of the region
2/3 of the CPs/MSs of the region

Region <3: consensus

Agreeing on methodologies: Approval

EU CACM
NRA's approval



EnC CACM
NRAs approval

Failure to agree on proposal by TSOs/NEMOs, first NRAs, ACER and then EC intervenes

Pan-European & regional methodologies:

Approval by all relevant NRA (opinion by ACER)

If no agreement, ACER adopts the decision

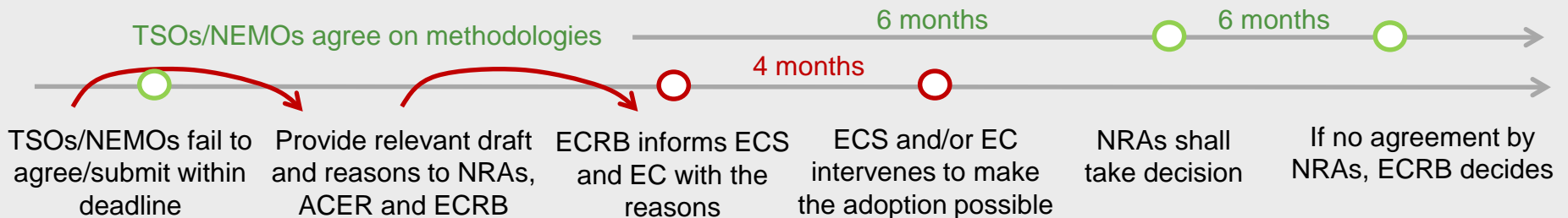
Failure to agree on proposal by TSOs/NEMOs, first NRAs, ECRB and then ECS (+EC as necessary) intervenes

Pan-European come as decisions under Title III

Regional methodologies:

Approval by all relevant NRA (opinion by ECRB)

If no agreement, ECRB adopts the decision



Standard adaptation+



=>



ECS (+EC as necessary) intervenes when no agreement is reached on proposals by TSOs / NEMOs



=>



*ECRB's role in adopting methodologies in case of failure by TSOs/NRAs
ACER's role is for information only*

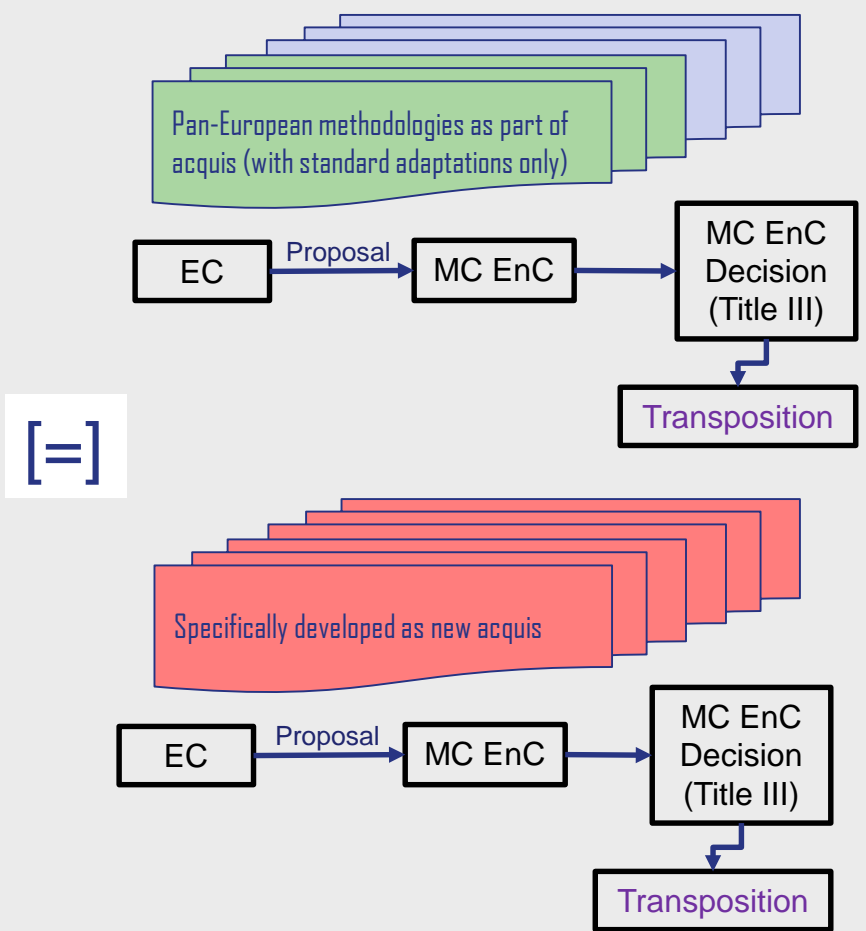
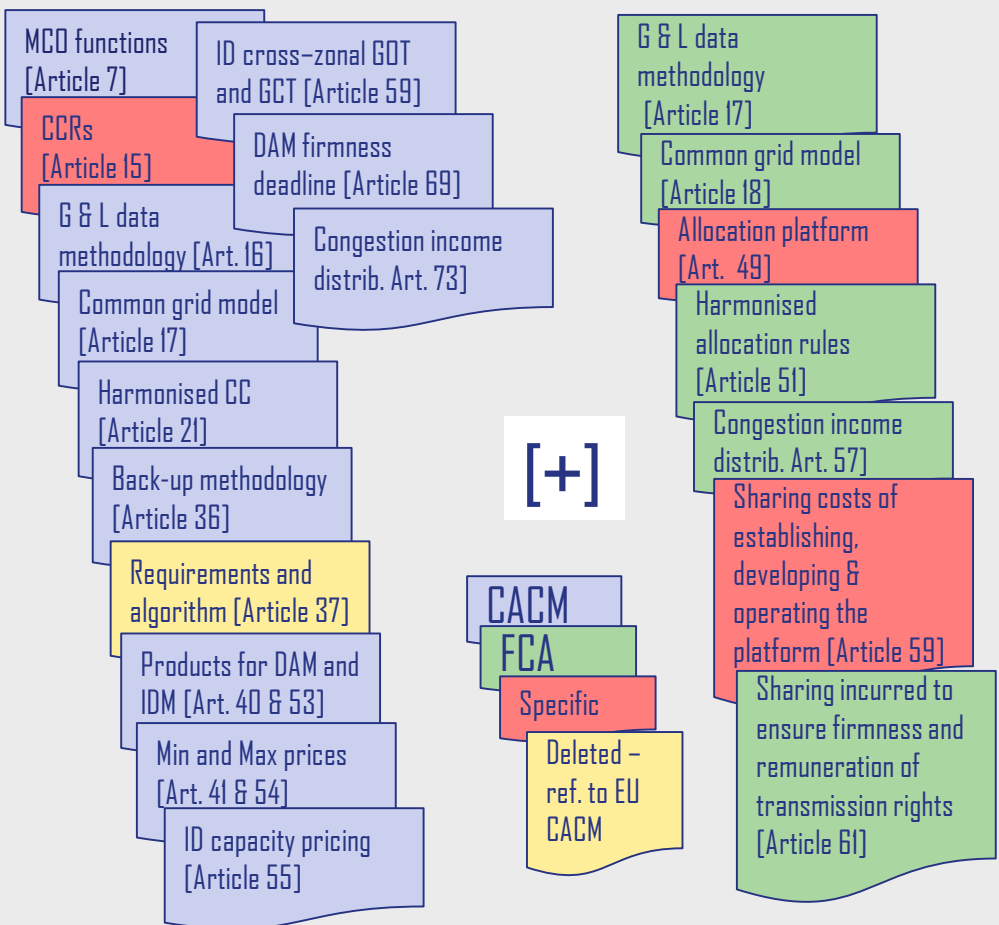


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*ENTSO-E's role in assessments, drafting, facilitation, coordination, reporting, etc.
Requirements coordinated with EU CACM*

Pan-European methodologies



Examples of adaptations (pan-European)

CACM

Article 15

Capacity calculation regions

1. ~~By three months after the entry into force of this Regulation all TSOs shall jointly develop a common proposal regarding the determination of eCapacity calculation regions shall be defined as listed in the Annex of this Regulation. The proposal shall be subject to consultation in accordance with Article 12.~~

Article 16

Generation and load data provision methodology

1. ~~By 10 months after the entry into force of this Regulation all TSOs shall jointly develop a proposal for implement the a single methodology for the delivery of the generation and load data required to establish the common grid model as adopted by [xxx], which shall be subject to consultation in accordance with Article 12. The proposal shall include a justification based on the objectives of this Regulation for requiring the information,~~

Article 17

Common grid model methodology

1. ~~By 10 months after the entering into force of this Regulation all TSOs shall jointly develop a implement the proposal for a common grid model methodology as adopted by [xxx]. The proposal shall be subject to consultation in accordance with Article 1;~~
2. 'common grid model' means ~~a the~~ Union-wide data set agreed between various TSOs according to Regulation 1222/2015 describing the main characteristic of the power system (generation, loads and grid topology) and rules for changing these characteristics during the capacity calculation process;

Article 40

Products accommodated

1. ~~No later than 18 months after the entry into force of this Regulation NEMOs shall submit a joint proposal concerning products that can be taken into account in the single day-ahead coupling. NEMOs shall ensure that orders resulting from the these products available submitted to the price coupling algorithm are expressed in euros and make reference to the market time.~~

FCA

Article 17

Generation and load data provision methodology

1. ~~No later than six months after the approval of the generation and load data provision methodology established for the day-ahead and intraday time frames referred to in Article 9(6) of Regulation (EU) 2015/1222, all TSOs shall jointly develop implement a proposal for a the single generation and load data provision methodology for delivering the generation and load data required to establish the common grid model for long-term time frames as adopted by [MC decision xxx]. The proposal shall be subject to consultation in accordance with Article 6. The methodology shall take into account and complement the generation and load data provision methodology according to Article 16 of Regulation (EU) 2015/1222.~~
2. ~~When developing For~~ the generation and load data provision methodology, the requirements set in Article 16 of Regulation (EU) 2015/1222 shall apply.]

Article 51

Introduction of harmonised allocation rules

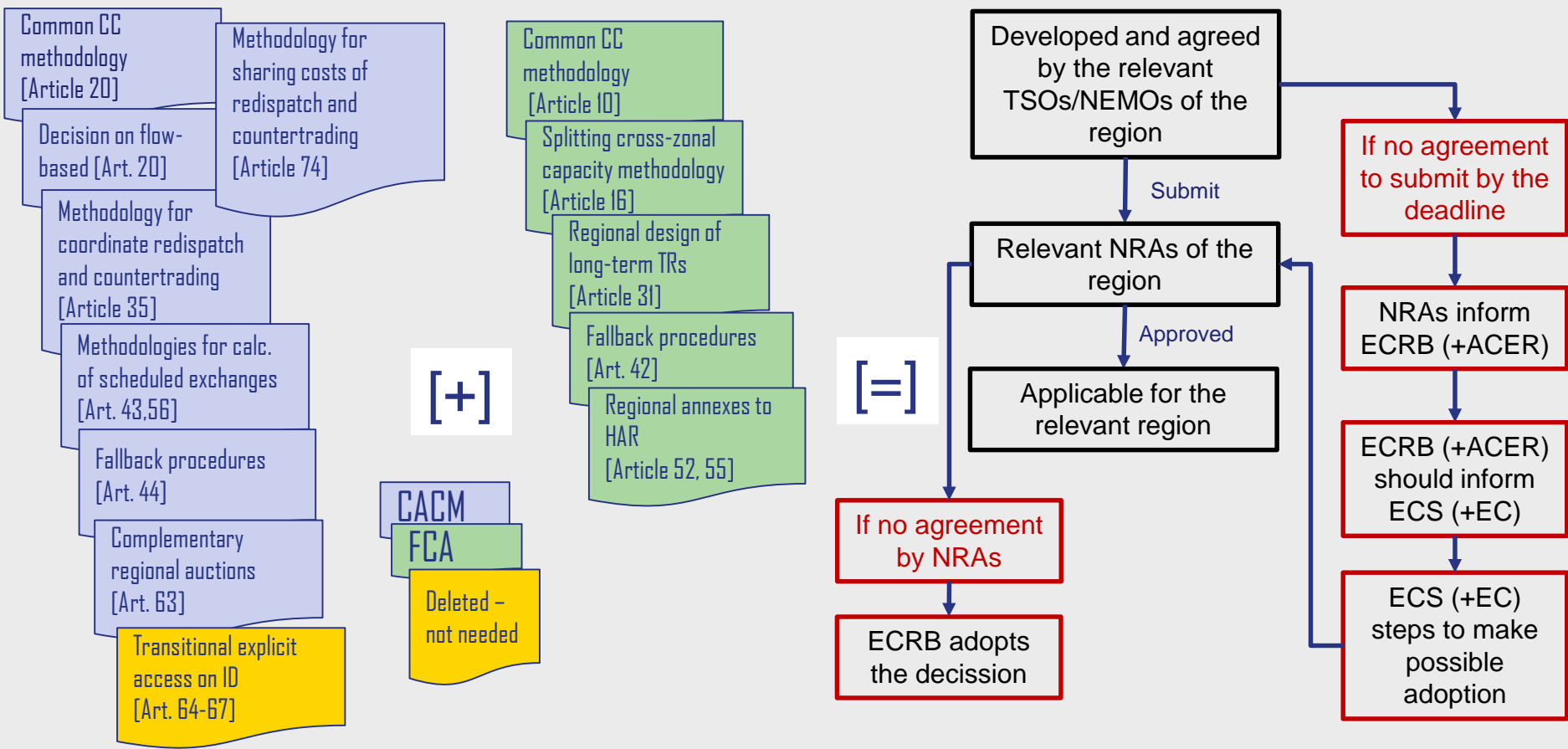
1. ~~Within six months after the entry into force of this Regulation, all TSOs shall jointly develop a proposal for implement harmonised allocation rules for long-term transmission rights in accordance with [MC decision xx] pursuant to Article 52(2). A month before the expiry of deadline for national transposition of the harmonized allocation rules and if necessary, TSOs shall develop regional and bidding zone border specific requirements of each capacity calculation region pursuant to Article 52(3). The proposal shall be subject to consultation in accordance with Article 6. This proposal shall include regional and bidding zone border specific requirements if developed by the TSOs of each capacity calculation region pursuant to Article 52(3).~~

Article 57

Congestion income distribution methodology

1. Within six months after the expiry of the deadline for national transposition of approval of the methodology for sharing congestion income referred to in Article 9(6) of Regulation (EU) 2015/1222, all TSOs subject to this Regulation shall jointly develop a proposal for implement a methodology for sharing congestion income from forward capacity allocation as adopted by the [MC decision xxx].

Regional methodologies



CACM

Article 20

Introduction of flow-based capacity calculation methodology

1. For the day-ahead market time-frame and intraday market time-frame the approach used in the common capacity calculation methodologies shall be a flow-based approach, except where the requirement under paragraph 7 is met.
2. ~~No later than 10 months after the approval of the proposal for a~~ capacity calculation region in accordance with Article 15(1), all TSOs in each capacity calculation region shall submit a proposal for a common coordinated capacity calculation methodology within the respective region. The proposal shall be subject to consultation in accordance with Article 12. The proposal for the capacity calculation methodology within regions pursuant to this paragraph in capacity calculation regions defined in accordance with Article 15(1) based on the 'North-

Article 35

Coordinated redispatching and countertrading

1. Within ~~16 months~~ after the ~~regulatory~~ approval on capacity calculation regions referred to in Article 15, all the TSOs in each capacity calculation region shall develop a proposal for a common methodology for coordinated redispatching and countertrading. The proposal shall be subject to consultation in accordance with Article 12.

Article 44

Establishment of fallback procedures

By ~~16 months~~ after the ~~expiry of the deadline for transposition, entry into force~~ of this Regulation, each TSO, in coordination with all the other TSOs in the capacity calculation region, shall develop a proposal for robust and timely fallback procedures to ensure efficient, transparent and non-discriminatory capacity allocation in the event that the single day-ahead coupling process is unable to produce results.

The proposal for the establishment of fallback procedures shall be subject to consultation in accordance with Article 12.

FCA

Article 10

Capacity calculation methodology

1. No later than six months after the approval of the common coordinated capacity calculation methodology referred to in Article 9(7) of Regulation (EU) 2015/1222, all TSOs in each capacity calculation region shall submit a proposal for a common capacity calculation methodology for long-term time frames within the respective region. The proposal shall be subject to consultation in accordance with Article 6.

Article 16

Methodology for splitting long-term cross-zonal capacity

1. No later than the submission of the capacity calculation methodology referred to in Article 10, the TSOs of each capacity calculation region shall jointly develop a proposal for a methodology for splitting long-term cross-zonal capacity in a coordinated manner between different long-term time frames within the respective region. The proposal shall be subject to consultation in accordance with Article 6.

Single allocation platform

Article 48

Establishment

1. All TSOs subject to this regulation shall ensure that the single allocation platform is operational and complies with the functional requirements specified in Article 49 within 12 months after the approval of the proposal for a common set of requirements and for the establishment of the single allocation platform. The competent regulatory authorities may extend this period upon request from the relevant TSOs due to delays relating to public procurement procedures by a period of no more than 6 months.

- (4) 'single allocation platform' means the ~~European~~ platform established by all TSOs of Contracting Parties, and as the case may be Member States, for forward capacity allocation of interconnection under the scope of this Regulations;

7. Others

NEMOs under CACM

- National requirement
 - The adapted (EnC) part will be applicable only to Contracting Parties
- CPs designate NEMO(s) by 4 months after transposition deadline
- At least 1 NEMO for initial term of 4 years / if monopoly annual designation
- Designation body – NRAs, also monitoring of compliance etc. / if monopoly approval of fees
- Designation criteria:
 - Has adequate resources (financial, technical, infrastructure, communication, contractual,...)
 - Allow open access to info regarding NEMO's tasks / non-discriminatory access
 - Unbundled accounts of activity under this regulation with other activity, including business separation from market participants
 - Able to provide/contract clearing & settlement service
 - Recognition of NEMO designation (if no monopoly) – only among CPs (Title II) – NRAs need to exchange info among them

List of designated
NEMOS
maintained by
ECRB

- After two year from transposition, ENTSO-E drafts the report on capacity calculation and allocation – submitted to ECRB (CACM Art, 31; FCA Art. 26)
- ENTSO-E to draft such report on every second year – if requested by ECRB
 - ECRB shall aim to coordinate such request with ACER (effectively requested when ACER requests it)
- Requirements what the report should contain are the same as for EU CACM/FCA
- For reporting TSOs should use the statistical and quality indicators agreed by the TSOs of the EU MSs.

Bidding zone configuration

- Applicable only to CPs (CACM Chapter 2, FCA Chapter 3).
 - All details and process specified in CACM
- Review may be launched by ECRB, NRAs, TSOs, CP, etc.
- The same bidding zone borders should apply in all timeframes
- ECRB should assess the efficiency of the existing bidding zone configuration in the CPs every 3 years.
- ECRB requests ENTSO-E for technical report. Request to be coordinated with ACER (for EU MSs)
- ENTSO-E to deliver to ECRB the technical report 9 months after the ECRB request

The background is a satellite-style image of the Earth at night, showing city lights. Overlaid on this are numerous glowing blue lines that represent energy transmission or a network, connecting various points across the globe.

Thank you!

www.energy-community.org

Background slides

Network codes and guidelines in the EU

- A set of rules drafted by ENTSO-E
 - Connection codes (RfG, DC, HVDC), system operation codes (SO, E&R) and market network codes (CACM, FCA, EB)
- ACER’s role – guidance to facilitate the harmonization, integration and efficiency of the European electricity market.
- EC works on and adopts proposals - then NCs are adopted by the Council and the EU Parliament before becoming legally binding & directly applicable for MSs



https://electricity.network-codes.eu/network_codes/