



CACM Guideline

Victor Saenz de Miera



Executive summary

- **What is it?** The Capacity Allocation and Congestion Management Guideline (CACM Guideline) is in the 1st network code that has been approved by Member States in the official adoption process at EU level.
- **What is the objective of this Guideline?** The objective is to establish harmonised rules at EU level, implementing the EU 'Target Model' for the allocation of cross-border transmission capacity, in the day-ahead and intraday timeframes.
- **What does this Guideline include?** It includes detailed provisions on
 - Day ahead market coupling processes
 - Intraday capacity allocation processes
 - Bidding zones reviews and capacity calculation methodologies
- **How was this Guideline prepared?** The initial drafting has been done by ENTSO-E, along with consultations of stakeholders and opinion of ACER (Agency of Regulators). Draft has been revised by the European Commission, before adoption by Member States.
- **How will it be applicable?** This will become a binding regulation, it includes important tasks for PXs, TSOs and fully involves Market Parties.

CACM Guideline GENERAL INTRODUCTION

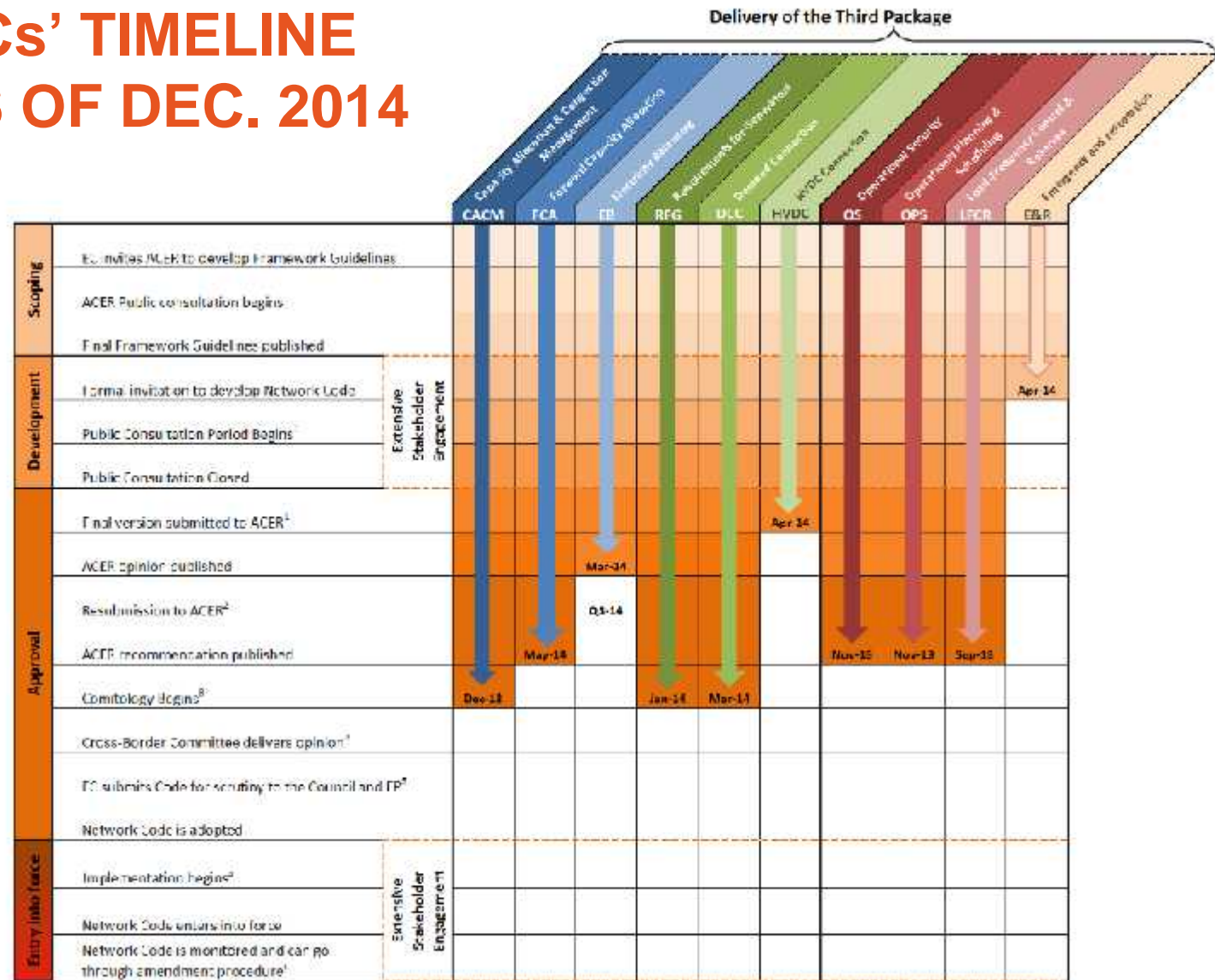
- Capacity Allocation and Congestion Management Guideline (CACM Guideline)
- Main object and purpose for the CACM, scope of application
- Antecedents: EC-714/2009 and Framework Guideline FG-2011-E-002
- Relationship of CACM with the Forward Capacity Allocation NC

- **The CACM NC has been reclassified as a Guideline**

- **Reason:** most methodologies refer to external Annexes that cannot be included
- **Consequence:** Guideline amendments development initiative correspond to the EC
- **However:** [Whereas 32](#) promises EC will consult with ACER/ENTSOE and other stakeholders and [Art.9\(13\)](#) enables Nominated Electricity Market Operators, ie. PXs and TSOs to request amendments on the methodologies they develop [...]

- **CACM Guideline voted positively on Dec. 5th 2014 Electricity Cross Border Committee > from there to Legal Review and ratification in the European Parliament**
- Within 6 months it should be adopted, only some few minor changes are expected now (legal check, typos, consistency...)
- This is the first market NC/guideline of the 3rd Package to be voted: Forward Capacity Allocation and Electricity Balancing NC will follow soon in 2015 (as per EC/ACER Priorities)

ENTSOE NCs' TIMELINE STATUS AS OF DEC. 2014



CACM Guideline - MAIN INTRODUCED FEATURES

- **Multiple PXs competition within one Member State (passport authorisations, all the exceptions should be explained and see fee regulation or sanctions if not removed)**
- **A regulated Market Coupling Operator Function re-assignable from PX's (default assignee) to ENTSOE or other entities in case of delayed delivery**
- **New procedures for EU and Regional decision making (qualified majority voting for TSOs –with few exceptions- and ACER as fall-back decision-maker for NRAs). Cascading deadlines system for delivery of common methods and terms and conditions**
- **New capacity calculations region definition deadline (3 months after CACM entry into force)**
- **Generalised preference for FB in Day-Ahead and Intra-Day. Cascading timelines for FB implementation (Nordics and other few can keep NTC if more efficient). Harmonised Coordinated Capacity Calculation FB-NTC across all capacity calculation regions by 31/12/2020**
- **Intra-Day solution based on continuous trading, transitory explicit auctions, complementary regional auctions (implicit)**
- **Tri-annual reassessment of Bidding Zone performance. Bidding zone study implemented in two steps (fixing of assumptions/scenarios and analysis). Decision by Member States (or NRAs) on Bidding Zones reconfiguration in 6 months**
- **Cost sharing of cross-border remedial actions and method for congestion income distribution**

ANNEX CACM Guideline MAIN CONTENTS

1. **Whereas**
2. General Provisions
3. Governance
4. Adoption Process
5. Capacity Calculation
6. Bidding Zones
7. Coordinated Re-dispatch and Counter-trading
8. Algorithm Development
9. Single Day-Ahead Market Coupling
10. Single Intra-Day Market Coupling
11. Transitional Arrangements ()
12. **Clearing & Settlement Single Day-Ahead/Intra-Day Market Coupling**
13. Firmness Provisions
14. Cost Arrangements
15. **Delegation Of Tasks & Monitoring**



2. GENERAL PROVISIONS

- **Subject & matter of scope (Cross Border issues for CACM in Day-Ahead & Intra-Day)**
- **Member States may assign obligations to 1 or more different TSOs present**
- **Switzerland > participation to Single Market Coupling depending on intergovernmental agreement with EU (+ EC decision based on ACER opinion)**

- **Cascading deadlines > some after entry into force / some after other prior deadlines required for their implementation**
- **Definitions > ENTSOE Metadata Repository > Other initiatives**

- **Objectives of Capacity Allocation and Congestion Management**
 - **Efficiency / Welfare / Safety ...**



3. GOVERNANCE (1/2)

- **Please notice all this Section is the result of direct EU Commission Drafting (former 'Governance Guideline'), its contents do not come from ENTSOE**
- **Nominated (designated) Electricity Market Operators, Market Coupling Operator and TSOs functional description (roles and tasks)**
- **Market Coupling Operator function:**
 - Regulated / assigned to Nominated Electricity Market Operators by default / can be reassigned by EC to ENTSOE or other entity if the function delivery does not meet its pre-defined timeline specs. Art 7(6)
 - Art 7(3) 8 months after entry into force Nominated Electricity Market Operators submit to all NRAs & ACER a Market Coupling Operator implementation plan (max 12 months for full implementation)
- **Nominated Electricity Market Operators + TSOs meetings for Single Day-Ahead/Intra-Day Market Coupling management**
- **Stakeholder involvement** requested by the Guideline
- **Consultation included for the Proposal of Terms & Conditions or Methodologies (1 month) where explicitly requested by the Guideline**

3. GOVERNANCE (2/2)

Nominated Electricity Market Operators Designation & Competition

- 4 months after entry into force min 1 Nominated Electricity Market Operator designated by Member States for each connected Bidding Zone
- Yearly applications allowed (except within national monopolies)
- Initial designation period is 4 years > Nominated Electricity Market Operator (un)designation criteria

- **Non-discrimination > the “Passport” (un)designation by Member States’**

- **Exceptions:**

- National monopoly > fees regulation by NRA
- Technical difficulties / Trading rules not compatible

- **BUT exceptions must be:**

- Communicated to EC/ACER
- Duly justified by the proposer + Accompanied by a removal plan

- 2 years after entry into force EC Report on Competition and potential sanctions
- If National Legal Monopoly is existing > the best criteria-complying Nominated Electricity Market Operator must be designated



4. ADOPTION PROCESS (1/2)

- **Qualified Majority Voting for pan-European decisions**
 - **New Lisbon Treaty rules will be applied: double majority with 55% of Member States and 65% of the population; blocking minority of at least 4 Member States**

- **Qualified Majority Voting for regional decisions**
 - **Capacity calculation regions of 5 Member States or less and Nominated Electricity Market Operators are QMV-exempted (consensus)**
 - **Rest: 72% of Member States and 65% of the population; blocking minority of at least the min number of TSOs representing 35% of the population of participating Member States plus a TSO representing one additional Member State**

4. ADOPTION PROCESS (2/2)

- **There is an exhaustive list of which Art goes to which approval**
- **NRAs > 6 months for approval of Terms & Conditions / Methodologies**
 - ACER can submit an opinion: requested (3m) or not requested (anytime)
 - NRAs are obliged to consider ACER opinions
 - ACER is the fall-back decision-maker (6 months) in case NRAs cannot decide
- **Amendments can be requested by NRAs**
 - 2 months for Nominated Electricity Market Operators and/or TSOs to submit them
 - 2 months for NRAs to approve /reject them
 - ACER as fall-back decision-maker too (6 months)
- **TSOs & Nominated Electricity Market Operators can propose amendments on their own**
- **There shall be Consultation of all amendment proposals**



5. CAPACITY CALCULATION (1/2)

- Defines the timeframes for the Guideline as Day-Ahead & Intra-Day
- Art 14 > new Capacity Calculation Regions shall be defined 3m after entry into force
 - Borders in one Capacity Calculation Region, TSOs can be in several
 - Common FB Capacity Calculation Region subject to efficiency Cost Benefit Analysis
- Generators and Load Data Provision Methodology
- Common Grid Model methodology at European level
- Scenarios & Individual Grid Model requirements
- High level requirements for the Capacity Calculation Methodology and its all its associated elements: Reliability Margins, Generation Shift Keys, inputs, remedial actions in Capacity Calculation, validation of Cross Border capacities, processes in general (...)
- Capacity Calculation Methodologies (FB or NTC), timelines & areas of application:
 - FB everywhere, except if the area is not in FB area list & TSOs demonstrate FB is not yet as safe and efficient as NTC (otherwise just eligibility for temporary postponement) / FB areas list: NWE/CWE-CEE, North Italian Borders and certain SEE States
 - Common FB Capacity Calculation Region merge as default (efficiency condition), NRAs may request Cost Benefit Analysis
- Biennial Report on Capacity Calculation (2 years after entry into force and subsequently biannually if ACER requests so)

5. CAPACITY CALCULATION (2/2)

- **No later than 10 months after Capacity Calculation Regions approval (Art 14(1): 3 months after entry into force) > Proposal for Capacity Calculation Method (consulted too) > + 6 months Parallel Run**
 - If areas are in FB list (prior slide) this must be accompanied by a framework for coordinated FB
 - Italy can ask NRAs for a FB postponement of up to 6 months after Switzerland joins Single Market Coupling
 - Bidding Zones within Italy and Italy-Greece border not necessarily included within FB

- **When all SEE Energy Community contracting parties join Single Day-Ahead Market Coupling:**
 - Coordinated Capacity Calculation proposal (FB) in 6 months: at least CRO, ROM, BUL & GR (2 years for FB implementation)

- **When adjacent Capacity Calculation Regions apply FB within same synchronous area:**
 - These (two or more) will be automatically considered to be the same Capacity Calculation Region
 - In 6 months from the last FB go-live, they must produce a joint FB Coordinated Capacity Calculation proposal
 - **Timeline must lead to coordinated FB**
 - Day-Ahead Market Coupling implementation in max 12 months
 - Intra-Day Market Coupling in 18 months

- **The cases in the two general bullets above can request NRAs to postpone FB implementation if TSOs can demonstrate that FB is not more efficient under equal safety levels**
- **FB tool for Market Parties interaction between cross zonal capacities and commercial exchanges**
- **Must harmonise Capacity Calculation methods FB-NTC across Capacity Calculation Regions by 31/12/2020**



6. Bidding ZONES

- **Tech. Report: tri-annual review of Bidding Zones performance**
- **Decision to launch the Bidding Zone Study (NRA(s), TSO(s), Member States)**
- **Bidding Zone Study configured as a two-step process:**
 - **Step 1: method design, assumptions and proposal of the alternative Bidding Zone configurations for comparison (subject to NRA approval in 3 months)**
 - **Step 2: Evaluation of the Bidding Zone configurations according to the Guideline criteria, share the results in Consultation and submit report to Member States (within 15 months from launch)**
- **Bidding Zone Study shall consider TYNDP (as per Guideline request in Art 32)**
- **Criteria for alternative Bidding Zone configurations comparison is in Art 32 (Bidding Zones)**
- **Criteria for the current Bidding Zone performance in Art 33 (TR)**
- **Decision to keep/alter the Bidding Zone configuration 6 months after the Bidding Zones Study delivery corresponds to the Member States (can be delegated to the involved NRAs)**



7. COORDINATED RE-DISPATCH AND COUNTER-TRADING

- General requirements specified in Art 34
- It covers the re-dispatch and counter-trading actions of Cross Border relevance
- 16m after Capacity Calculation Regions NRA approval all TSOs within each Capacity Calculation Region shall develop a common methodology for Coordinated re-dispatch and counter-trading (this Proposal is to be consulted)
- 26m after Capacity Calculation Regions NRA approval all TSOs within each Capacity Calculation Region shall develop a report assessing the harmonisation level achieved (this shall be consulted too)
- TSOs shall abstain from unilateral re-dispatch and counter-trading of Cross Border relevance
- Generation units & loads shall ex-ante provide all relevant info



8-10. ALGORITHM DEVELOPMENT & SINGLE (DAY-AHEAD / INTRA-DAY) MARKET COUPLING

Algorithm Development:

- Algorithm proposal by Nominated Electricity Market Operators (compliant with TSO requirements)
- Must be submitted to NRAs by 18 months after entry into force max
- No later than 2 years after approval of the proposal, review on performance
 - To be repeated every subsequent 2 years if ACER requests it

Single Day-Ahead / Intra-Day Market Coupling deals with:

- Single Day-Ahead / Intra-Day Coupling Process, operation and delivery of results
- Continuous Trading Matching Algorithm, objectives and inputs to it
- Algorithm objectives, inputs, the max. and min. prices in Day-Ahead / Intra-Day, etc.
- Requirements for the pricing of Intra-Day capacity
- Products accommodated and review process by Nominated Electricity Market Operators (biannual consultation)
- Methodology for the calculation of Day-Ahead/Intra-Day scheduled exchanges and fallback procedures
- Complementary Intra-Day regional auctions permitted (subject to NRA approval and **non-interference conditions** with the pan-EU Intra-Day solution)



11. TRANSITIONAL ARRANGEMENTS

- **Transitional arrangements for Intra-Day: explicit allocation via the Capacity Management Module at Bidding Zone Borders requesting it**
 - Removal > when non-standard Intra-Day products will be developed
- **Delay of application for Ireland & Northern Ireland**
 - Until 31/12/2017 (due to their Island system character)
 - These shall however make preparatory transitional arrangements
 - Quarterly progress reports to ACER or upon ad hoc request



13. FIRMNESS PROVISIONS

- **Day-Ahead Firmness Deadline: no later than 30 minutes before Day-Ahead Market Gate Closure Time (which is D-1 @noon)**
- **Day-Ahead Cross-Border Capacity is firm after Day-Ahead Firmness Deadline**
- **Intra-Day Cross-Border Capacity is firm as from its allocation**

- **Force Majeure and Emergency Situation provisions**
 - General rules for TSO behavior under such conditions
 - Implicit allocation: no financial Damage or benefit for Central Counter Parties or Shipping Agents from imbalances due to the curtailment
 - Force Majeure under explicit allocation: initial price paid compensation to Market Parties
 - Emergency Situation under explicit allocation: price difference compensation to Market Parties. If one Bidding Zone price is not calculated: initial price paid compensation to Market Parties



14. COST ARRANGEMENTS

- **Capacity Calculation common methodology for Cost Sharing of Re-Dispatch & Counter-Trading remedial actions of cross border relevance and requirements (16 months after Capacity Calculation Regions approval) –harmonised across regions by 31/12/2018**
- **EU methodology for sharing of Congestion Income (12 months after entry into force)**
- **Other CACM Guideline cost recovery provisions**
 - **Set up & operate & amend the Single (Day-Ahead / Intra-Day) Market Coupling**
 - Yearly Report to NRAs: common cost sharing between Nominated Electricity Market Operators & TSOs for all Member States
 - **Clearing & Settlement costs**
 - **Set up & operation of the Capacity Calculation Calculator**
 - **Costs of ensuring Firmness**



CONCLUSIONS AND CACM CHALLENGES AHEAD

- **CACM has been a positive step in terms of fulfilment of ENTSOE mission for NC/GL drafting and support to the EC/ACER collaborating with PXs and all other stakeholders**
- **ENTSOE has increased stakeholder participation and Consultations within the process of NC/GL drafting. The CACM GL itself foresees Consultation of all major methods and proposals**
- **Stakeholder Involvement (Art 9b)** – *“The Agency, in close cooperation with ENTSO for electricity, shall organise stakeholder involvement regarding single day-ahead and intraday coupling and other aspects of the implementation of this Regulation. This shall include regular meetings with stakeholders to identify problems and propose improvements notably related to the single day-ahead and intraday coupling. This shall not replace the stakeholder consultations in accordance with Article 10”*
- **CACM GL needs now to be implemented nationally**