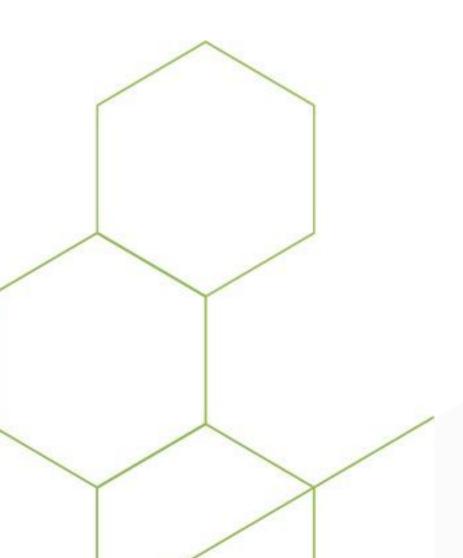


Enhancing cross-border trading in SEE CCR via optimal coordination

10th Cross Border Trading and Balancing Market Forum February 6th, 2025. Berlin

Public data



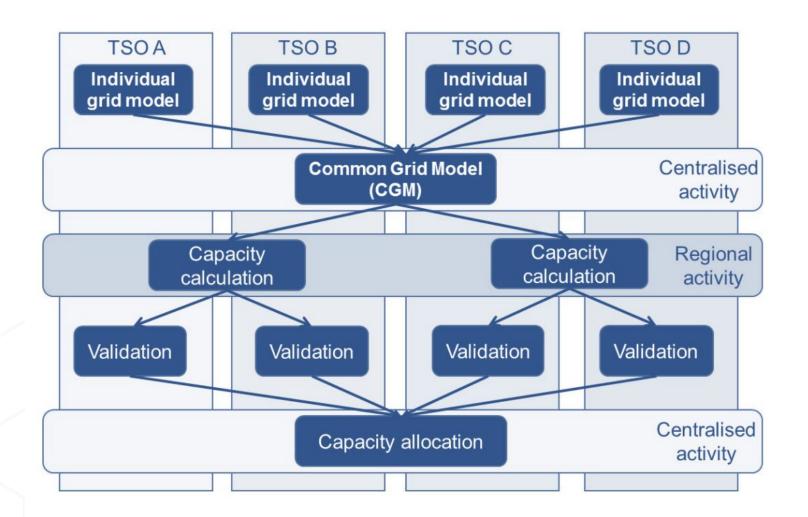


The Coordinated Capacity Calculation process

And why is it so important?



Overview of CCC



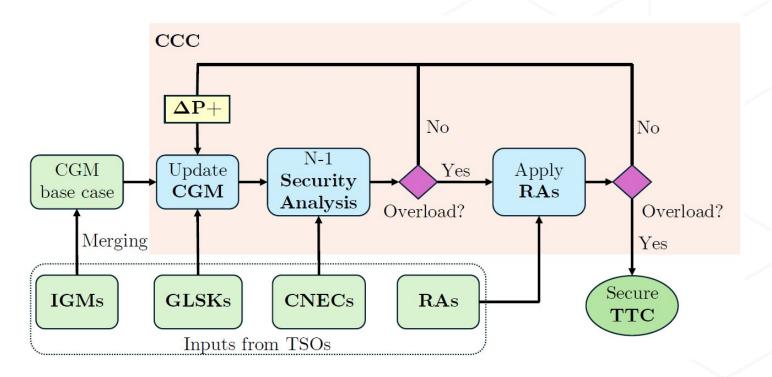






The CCC of the Southeast Europe (SEE)

- The CCC of the SEE Capacity Calculation Region (CCR) is based on the cNTC method
- The Total Transfer Capacity
 (TTC) is calculated using an
 Iterative procedure, taking into
 account grid constraints
- Net Transfer Capacity (NTC) is computed using the derived TTC and splitting factors



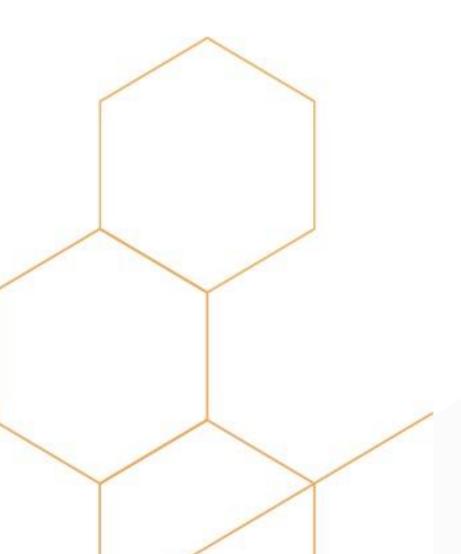




The 70% Rule

- According to Article 16(8) of the Regulation (EU) 2019/943 the minimum capacity shall be 70% of the transmission capacity respecting operational security limits after deduction of contingencies
- The minimum capacity is translated on a margin on the limiting CNEC and if the margin of the limiting CNEC is below the minimum margin 70% (or any other the TSOs defined through a derogation), then the NTC is adjusted to comply with this minimum criterion.





The 70% Rule of the SEE CCR

1st regional redispatch in the EU





The 70% Rule of the SEE CCR

- The TTC is initially calculated using the existing CCC process
- After the calculation of the TTC, the margin of the limiting CNEC is evaluated
- Margin available for cross-zonal trade (MACZT)

MACZT = MCCC + MNCC ≥ 70% Fmax

- "margin from coordinated capacity calculation" (MCCC), i.e. capacity available for cross-zonal trade within the considered coordination area
- "margin from non-coordinated capacity calculation" (MNCC), i.e. the capacity available for cross-zonal trade outside the considered coordination area

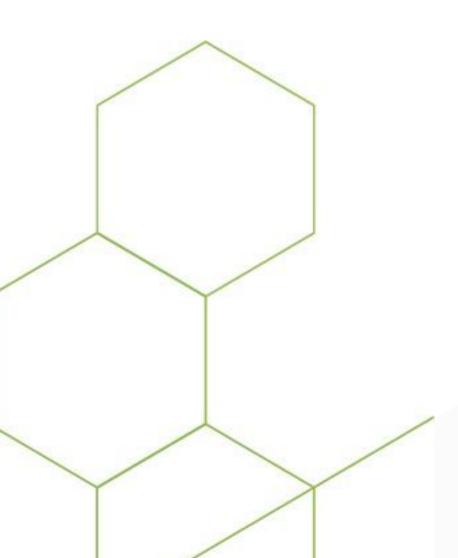




The 70% Rule of the SEE CCR

- In case the margin is below 70%, then the net transfer capacity has to be adjusted to meet the 70% criterion
- This **adjustment requires** an **optimization** procedure to define appropriate remedial actions that ensure the security of the power system
 - Non-costly remedial actions
 - Redispatch (on regional level). The first CCR with regional redispatch.





Detailed process / Implementation by N-SIDE

What is the implementation approach?





Implementation

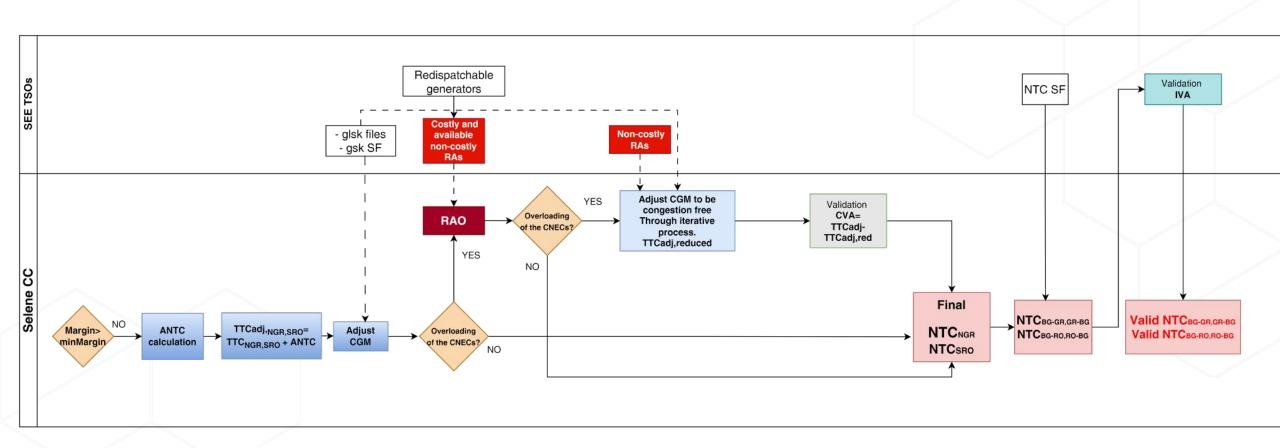
When the 70% target is not met for a specific timestamp, then the following NTC adjustment process is followed:

- The adjusted NTC is computed
- The adjusted TTC is derived
- A new CGM is developed that reflects the adjusted TTC value
- The new CGM is checked for overloads in case of contingencies
 - If no violations are identified, then the process ends
 - Otherwise, remedial action optimization is performed. A two step approach is foreseen.
 In the first step only non-costly RAs are considered. If these RAs are not adequate,
 then regional redispatch is performed.
- If the available redispatch resources are not adequate to meet the 70% rule (respecting simultaneously all grid constraints), then the TTC is reduced via an iterative procedure to guarantee the maximum possible (secure) TTC





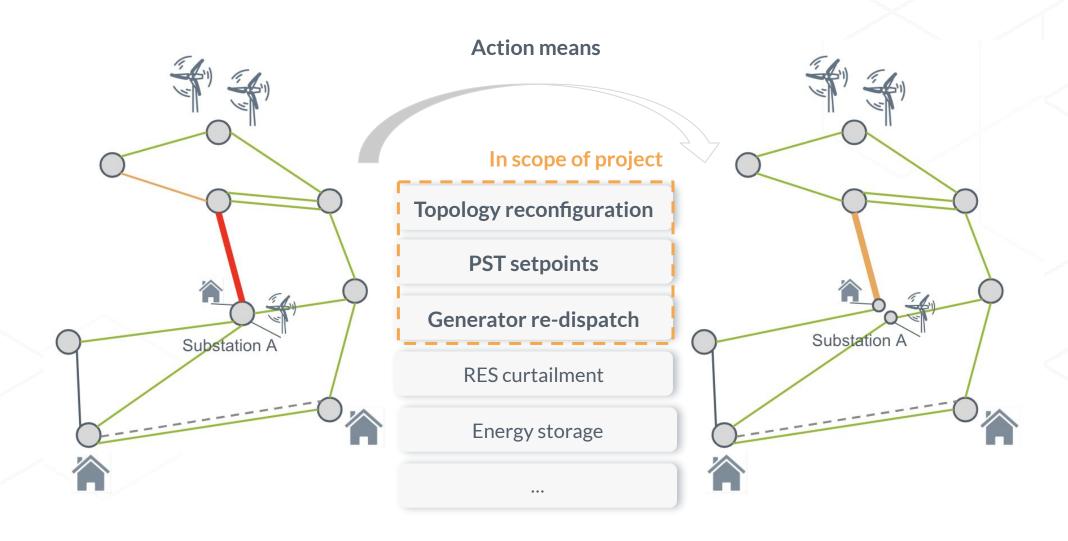
The 70% Rule of SEE CCR – High Level Description







Both costly and non-costly actions are optimized



Expected impact of the solution



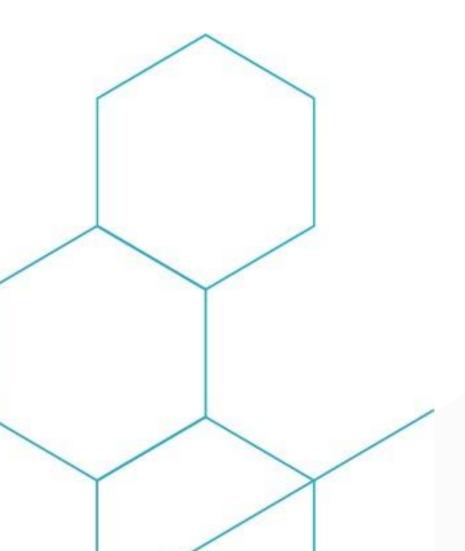


Increasing the frequency of cases complying with the 70% rule (or the alternative derogation)



Increasing the TTC provided to the DA market



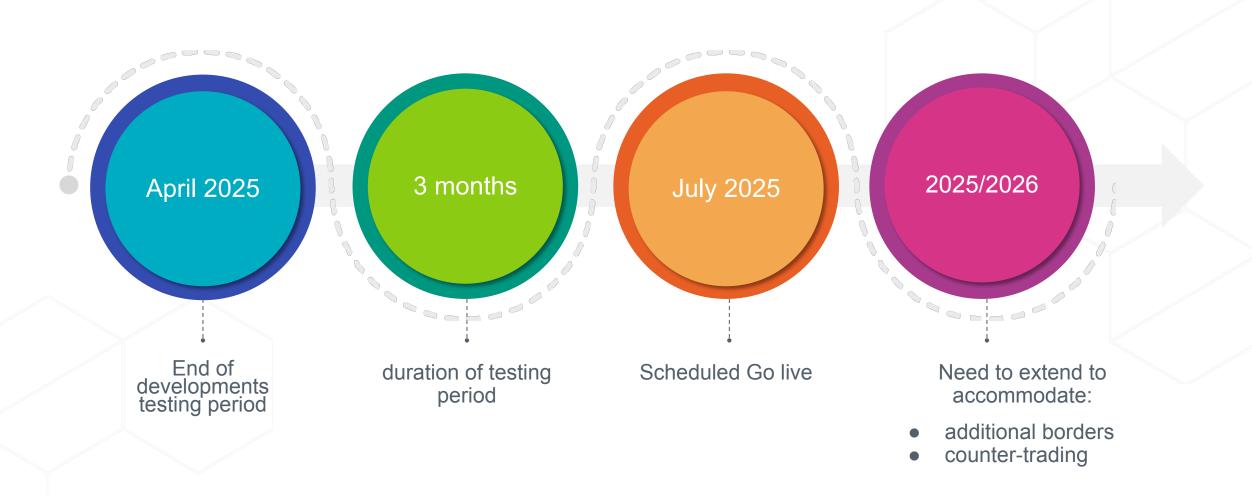


Next Steps

What happens now?

Next Steps









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