Regional Group Summary

Continental Central East

Final version after public consultation and ACER opinion - October 2019

entsoe

Reliable Sustainable Connected

The regional group Continental Central East (CCE) consists of the following countries: Austria, Croatia, Czech Republic, Germany, Hungary, Poland, Romania, Slovakia and Slovenia.

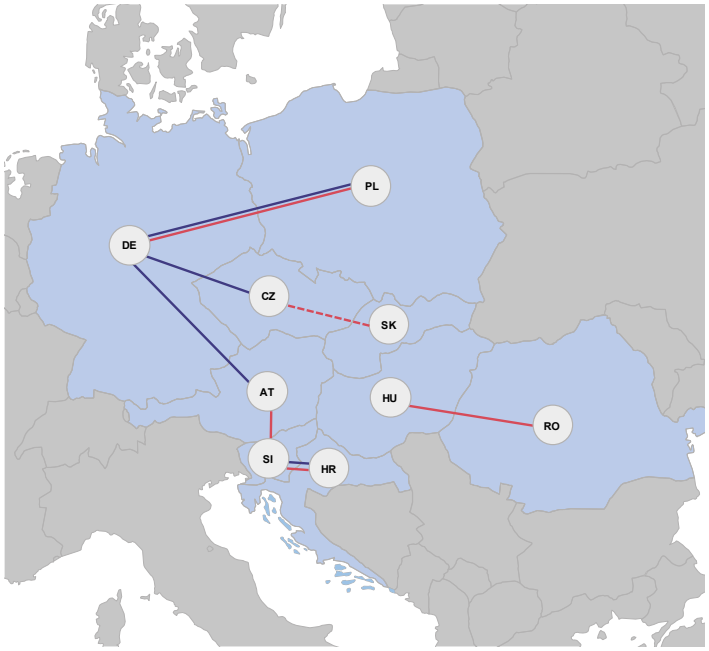
The main drivers and challenges that the CCE region will have to cope with in the future development scenarios are mainly generation mix change and extension of synchronously connected Europe–Ukrainian and Moldovan power systems, as well as the Baltic's synchronous connection to Continental Europe.

These challenges are imposing the need for transmission grid development, in order to maintain the security and reliability of the future European interconnected transmission system's operation.

2040 Needs

The map below shows potential needs for additional capacity increases in 2040 – beyond the 2020 grid.

Summary of capacity increases from 2020 to 2040



Increases already identified in TYNDP 2016[1]
Increases beyond 2030 in only one scenario
Increases beyond 2030 in at least 2 scenarios

— The capacity increase on DE-PL, DE-CZ, DE-AT and SI-HR cross-border profiles have already been identified in the TYNDP 2016 by introduction of the new transmission projects.
— Further capacity increase to improve market integration has been identified on the cross-border profiles DE-PL, AT-SI, SI-HR and HU-RO and to improve security of supply on the CZ-SK cross-border profile too.

More information can be found in the Regional Investment Plan 2017 of this regional group and in the European System Need Report 2017.

— https://www.entsoe.eu/Documents/TYNDP%20documents/TYNDP2018/rgip_CCE.pdf
— https://www.entsoe.eu/Documents/TYNDP%20documents/TYNDP2018/energy_power_system_2040.pdf

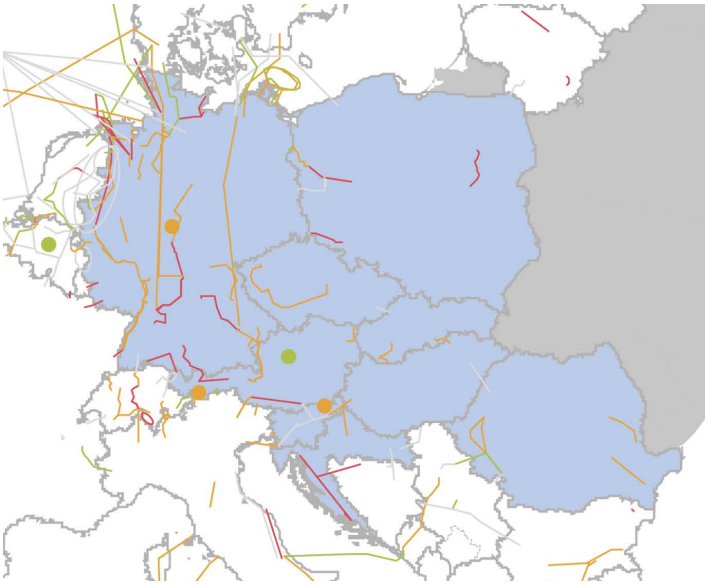
[1] Reference capacities of TYNDP 2016 for 2030 which for some borders had been adjusted for the TYNDP 2018 purpose. Projects commissioned in 2020 are not included as increases.

The following system needs have been identified:

— Insufficient integration of renewables into the power systems, as high amounts of curtailed energy occurred in a couple of the power systems.
— Insufficient security of supply, as high amounts of Energy Not Served occurred in a couple of the power systems.
— High price differences between the market areas.
— High CO_2 emissions.
— Cross-border and internal bottlenecks.

Projects

The map below shows all the promoted projects that will be analysed with the CBA methodology in the TYNDP 2018.



Under consideration
In permitting
Planned but not yet permitting
Under construction

Benefits

Increasing capacities at the borders, as shown on the map to the left, would have a significant impact on the ENTSO-E electrical system and society as a whole.

Up to 33 €/MWh
reduction in marginal costs of electricity generation

12 to 45 TWh
less curtailed renewable energy

11 to 36 Mton
reduction in CO_2

Up to 180 GWh
reduction in Energy Not Served