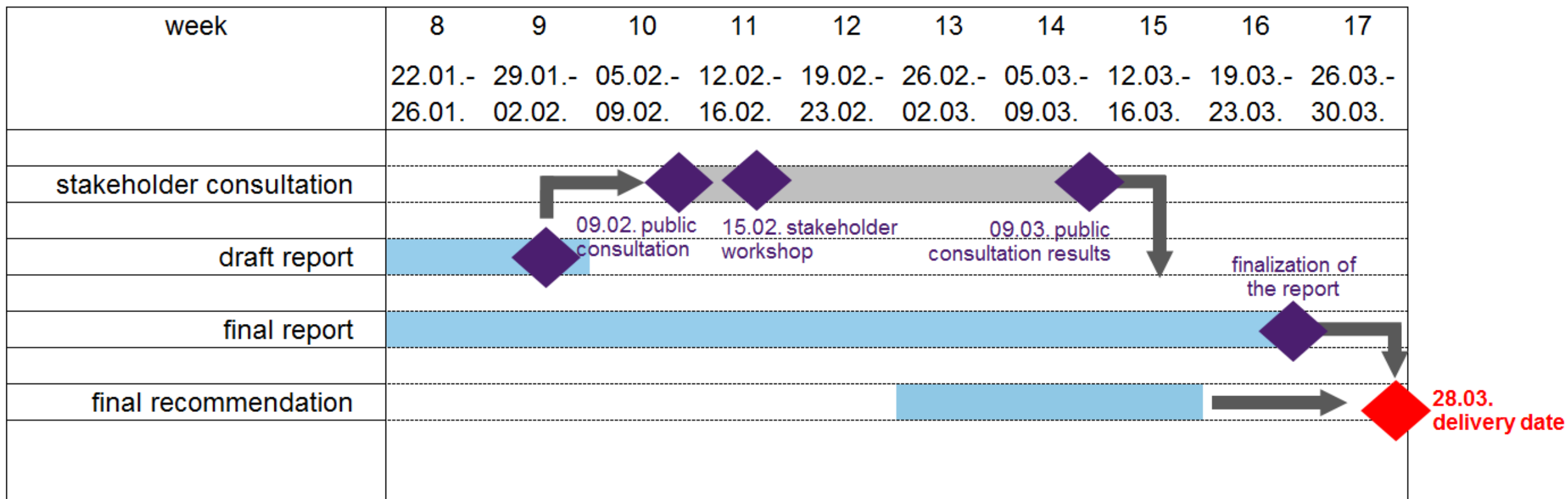


BIDDING ZONE REVIEW

MESC

06.03.2018

Timeline



The draft BZ review report for consultation



1. Executive Summary
2. Introduction
3. Future scenario assumptions
4. Analyzed bidding zone configurations
5. Evaluation according to the CACM criteria
6. Identification of challenges
7. Stakeholder consultation and involvement

Summary of the evaluation

All results, figures and tables shown in this report are no firm basis for drawing conclusions and have to be interpreted against the assumptions explained in this report.

Bidding Zone Configuration (evaluation compared to current bidding zone configuration)	DE/AT Split	Big Country Split	Big Country Split 2	Small Country Merge
Network security				
Operational security	(+)	(+)	(+)	(-)
Security of Supply (for the entire system, short-term)	(0)	(0)	(0)	(0)
Degree of uncertainty in cross-zonal capacity calculation	(0)	(0)	(0)	(0)
Market efficiency				
Economic efficiency	(0)	(0)	(0)	(0)
Firmness costs	(-)	(-)	(-)	(+)
Market liquidity	(-)	(-)	(-)	(+)
Market concentration and market power	(-)	(-)	(-)	(+)
Effective competition	(0)	(0)	(0)	(0)
Price signals for building infrastructure	(0/+) ^a	(0/+) ^a	(0/+) ^a	(0/-) ^a
Accuracy and robustness of price signals	(0)	(0)	(0)	(0)
Long-term hedging	(-) ^b	(-) ^b	(-) ^b	(+) ^b
Transition and transaction costs	(-)	(-)	(-)	(-)
Infrastructure costs	Reference to investment costs as published in the TYNDP 2016			
Market outcome in comparison to corrective measures	(+) ^c	(+) ^c	(+) ^c	(-) ^c
Adverse effects of internal transactions on other bidding zones	(+) ^d	(+) ^d	(+) ^d	(-) ^d
Impact on the operation and efficiency of the balancing mechanisms and imbalance settlement processes	(0/-)	(-)	(-)	(0/-)
Stability and robustness of bidding zones				
Stability and robustness of bidding zones over time	(0)	(-) ^a	(-) ^a	(0)
Consistency across capacity calculation time frames	(0)	(0)	(0)	(0)
Assignment of generation and load units to bidding zones	(0)	(-)	(-)	(0)
Location and frequency of congestion (market and grid)	(+)	(+)	(+)	(-)

^a The importance differs between borders/countries and the effectiveness of the signal is low, given the incompatible lead times between market prices and grid investment decisions which are characterised by long construction periods and approval processes.

^b Alternative long-term hedging instruments (such as system price or trading hubs) that might mitigate the negative impact are to be investigated.

^c There can be no further distinction between the splits without further quantitative analyses.

^d This assessment considers loop flows, but does not consider any adverse market effects linked to loop flows.

^e For Germany, grid investment planning foresees the building of high voltage direct current (HVDC) links moving towards a copper plate. The intention of these grid investments is to resolve any relevant congestion that might justify a split of the German bidding zone. This makes the Big Country Split less stable but does not consider any adverse market effects linked to loop flows.

In light of the above considerations and needs for adapting and developing the simulation environment further, the evaluation presented in this First Edition of the Bidding Zone Review does not provide sufficient evidence for a modification of or for maintaining of the current bidding zone configuration. Hence, the participating TSOs recommend that, given the lack of clear evidence, the current bidding zone delimitation be maintained.

This recommendation should in no way be interpreted as an endorsement of or an objection against the pending split of the German/Luxembourgian and Austrian bidding zones, where TSOs respect all relevant regulatory decisions, e. g. the decision of the Agency for the Cooperation of Energy Regulators no 06/2016 of 17 November 2016 on the electricity transmission system operators' proposal for the determination of capacity calculation regions and the requests of the regulatory authorities of Germany and Austria.

key insights and outlook

improvements need to focus in particular on the following aspects:

- » essential market design features (especially regarding the design of the capacity calculation approach, e. g. base case approach, CBCO selection, GSK strategy)
- » representation of local characteristics (e. g. nodal allocation of relevant parameters, inclusion of the 220 kV infrastructure)
- » comprehensive sensitivity analyses

The 15 months allowed for the review process, as specified in EU Regulation 1222/2015, does not provide sufficient time to accommodate such comprehensive analyses.

example for the counter-intuitive
OS indicator

Bidding Zone Configuration	2020W SOAF	2025P SOAF
Status Quo	35,237	143,995
Small Country Merge	113,653	130,086
DE/AT Split	125,439	104,537
Big Country Split	35,993	29,191
Big Country Split 2	112,061	138,464