


ACER

 Agency for the Cooperation
of Energy Regulators

The 2017 Annual Report on Monitoring the Electricity and Natural Gas Markets

Main insights

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Brussels, 5 December 2018

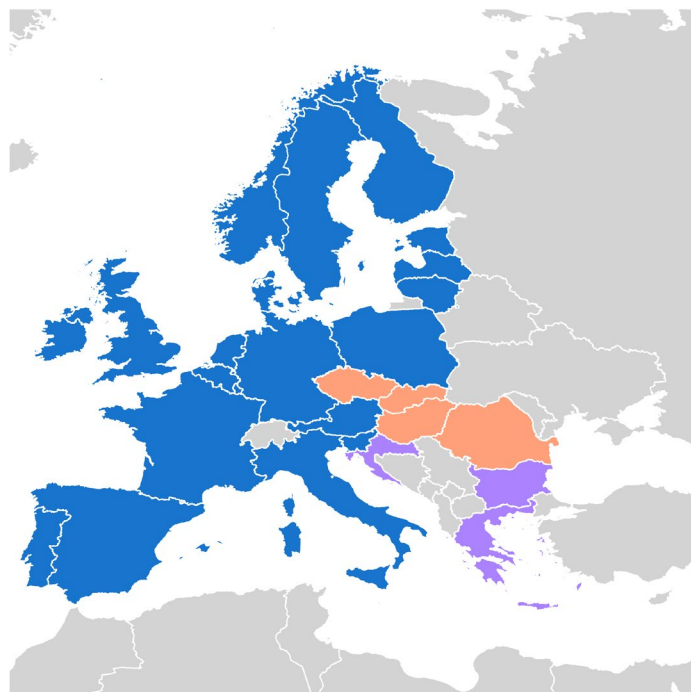
Outline

- How efficiently the available cross-zonal capacity is being used?
- How much capacity is made available for cross-zonal trade?
- Other aspects of market integration:
 - Market liquidity: Forward/ID markets
 - CMs and SoS issues

The completion of DA and ID markets integration through market coupling is getting closer...

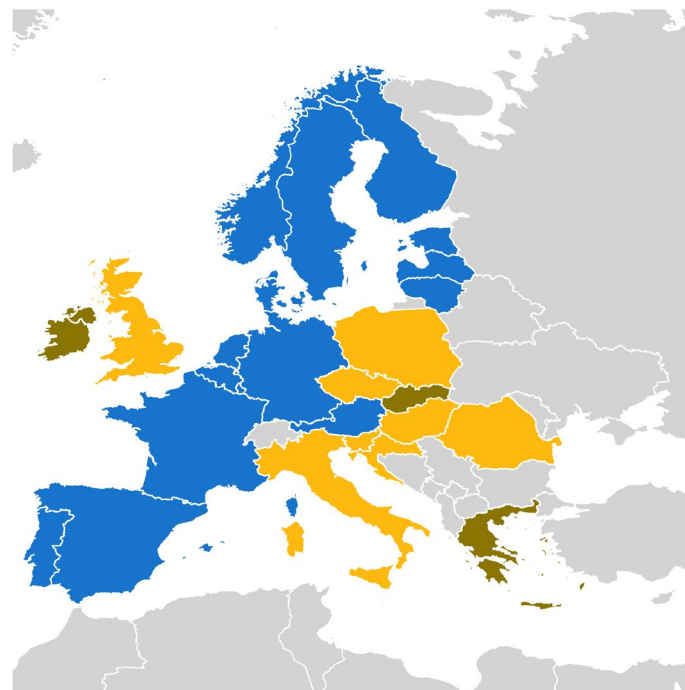
Implementation status of single DA and ID market coupling (Oct. 2018)

Day-ahead



4MMC MRC Not Coupled Yet

Intraday

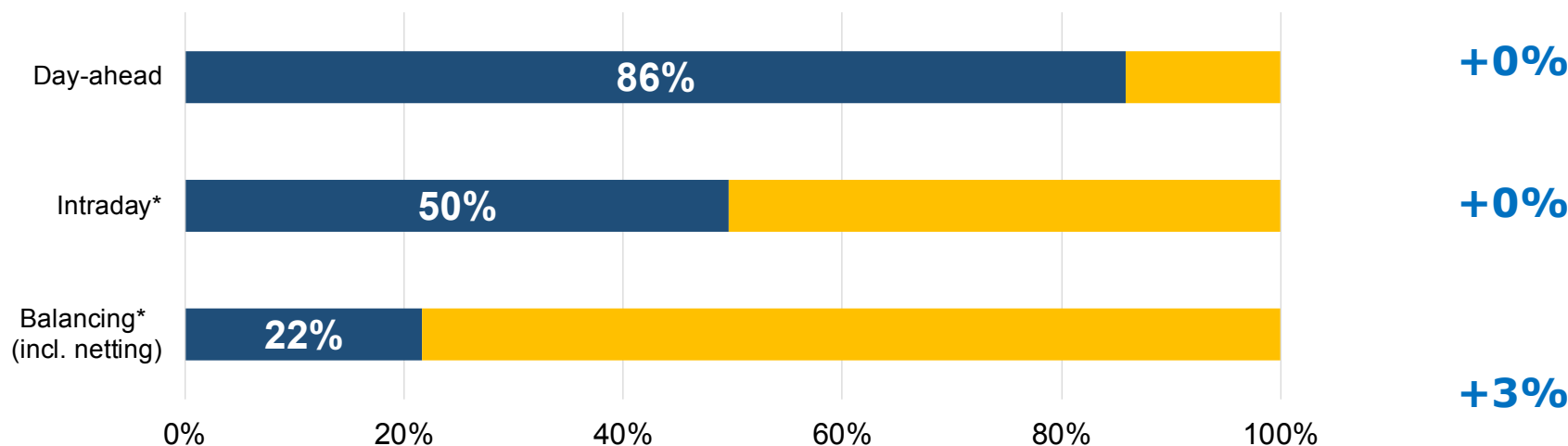


First Wave Second Wave Third Wave

As a result, the (limited) cross-border capacity made available to the market is used very efficiently in the DA timeframe. In the ID and balancing timeframes there is significant room for improvement.

Efficient use of interconnectors in the different timeframes in 2016 (%)

Yearly change
(2017/2016)



Note: * ID and balancing values are based on a selection of EU borders.

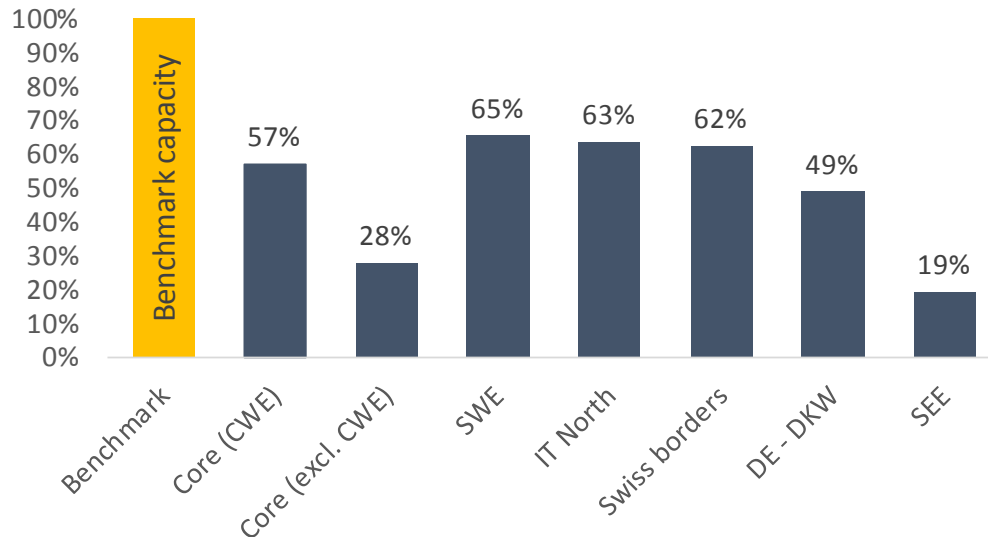
Source: ACER calculations based on ENTSO-E, NRAs and Vulcanus (2017).

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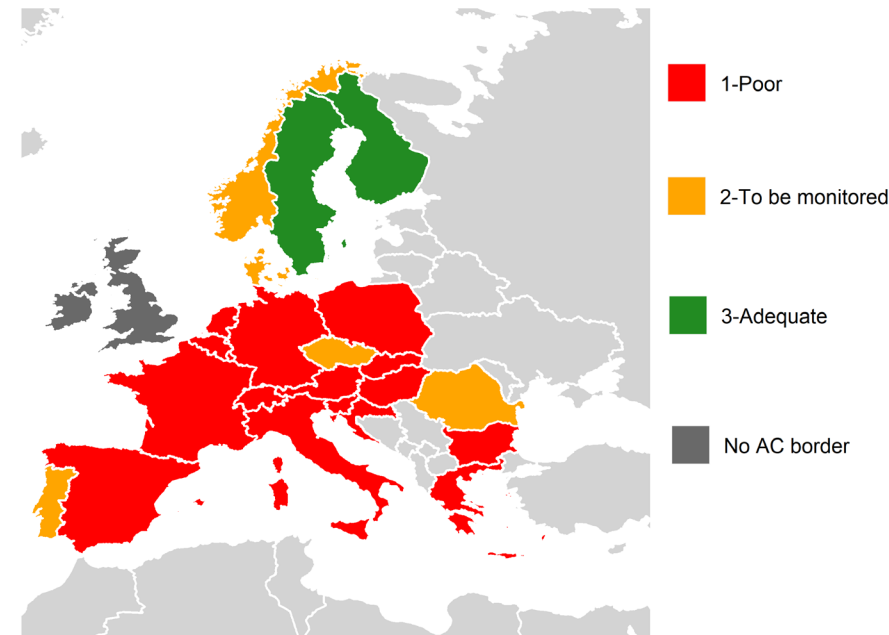
...BUT the low level of cross-zonal capacity made available for trading remained the main barrier to market integration

Ratio of available tradable capacity to benchmark capacity on HVAC borders per CCR – 2017 (%)



Note: *The benchmark capacity is calculated by ACER as the capacity which could be made available while preserving operational security. The Agency extensively consulted with stakeholders, including TSOs and ENTSO-E, in order to elaborate the methodology underlying the calculation of benchmark capacities. The full methodology is available at <https://www.acer.europa.eu/en/Electricity/Market%20monitoring/Documents/ACER%20Methodological%20paper%20-%20Benchmark%20cross-zonal%20capacity%20calculation.pdf>

National performance regarding capacity made available for trading on AC borders in Europe – 2015-2017



Note: Performance was assessed by comparing cross-zonal capacity made available for trading to benchmark capacity on HVAC borders in 2016, and by price convergence in the period 2015-2017. For more details on the scoring methodology, please consult the MMR.

Underlying causes for low cross-border capacity

Illustrative facts

How much?	What?	Why?
✗ 86%	Share of relevant congestions located inside BZs (CWE, 2017)	Internal congestions addressed by limiting cross-border exchanges
✗ 87%	Share of network capacities in relevant network elements consumed by internal exchanges (CWE, 2017)	Lack of rules to avoid discrimination, leading to free-riding on neighbours (LFs)
✗ >2 bn €	Spent per year to handle internal constraints (50% of these costs in Germany)	The problem is so serious that TSOs still need to apply RAs to preserve internal exchanges

Main recommendations:

- BZ configuration:** Improvements should be investigated with priority where the problem is more severe, i.e. the German BZ (involving the Core and Hansa regions) and to a lesser extent in the SWE region. However launching a BZ review process is not advisable at the moment.
- Capacity calculation methodologies** need to be significantly improved to address the **discrimination** issue.
- Increase **the level of coordination** in capacity calculation (including the implementation of FB where relevant)

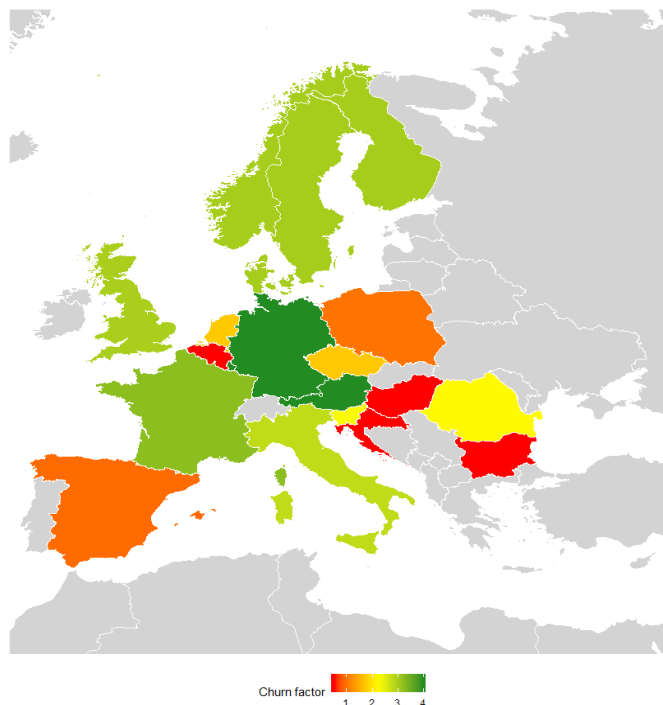
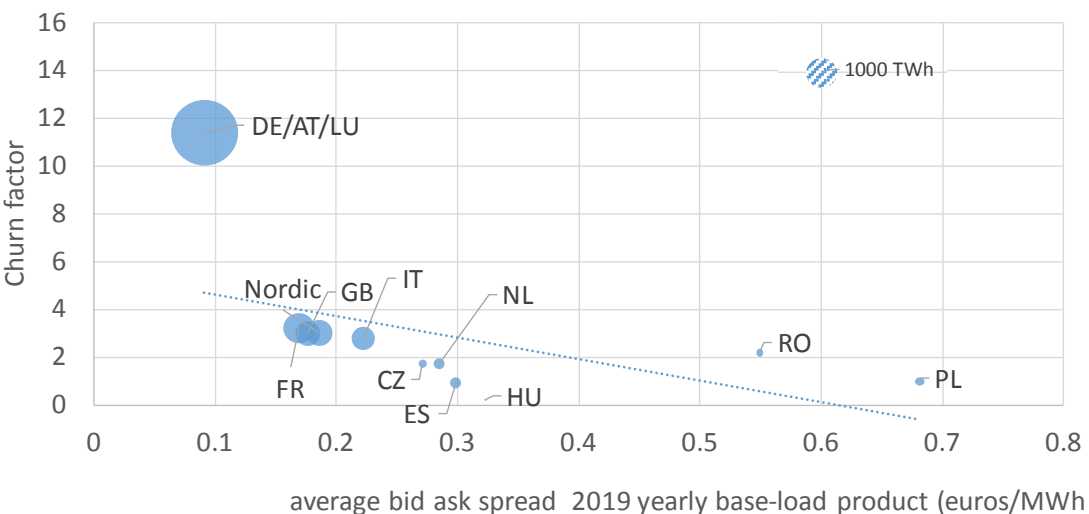
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Forward markets liquidity levels diverge significantly across Europe. A direct correlation between the size of bidding zones and liquidity cannot be established.

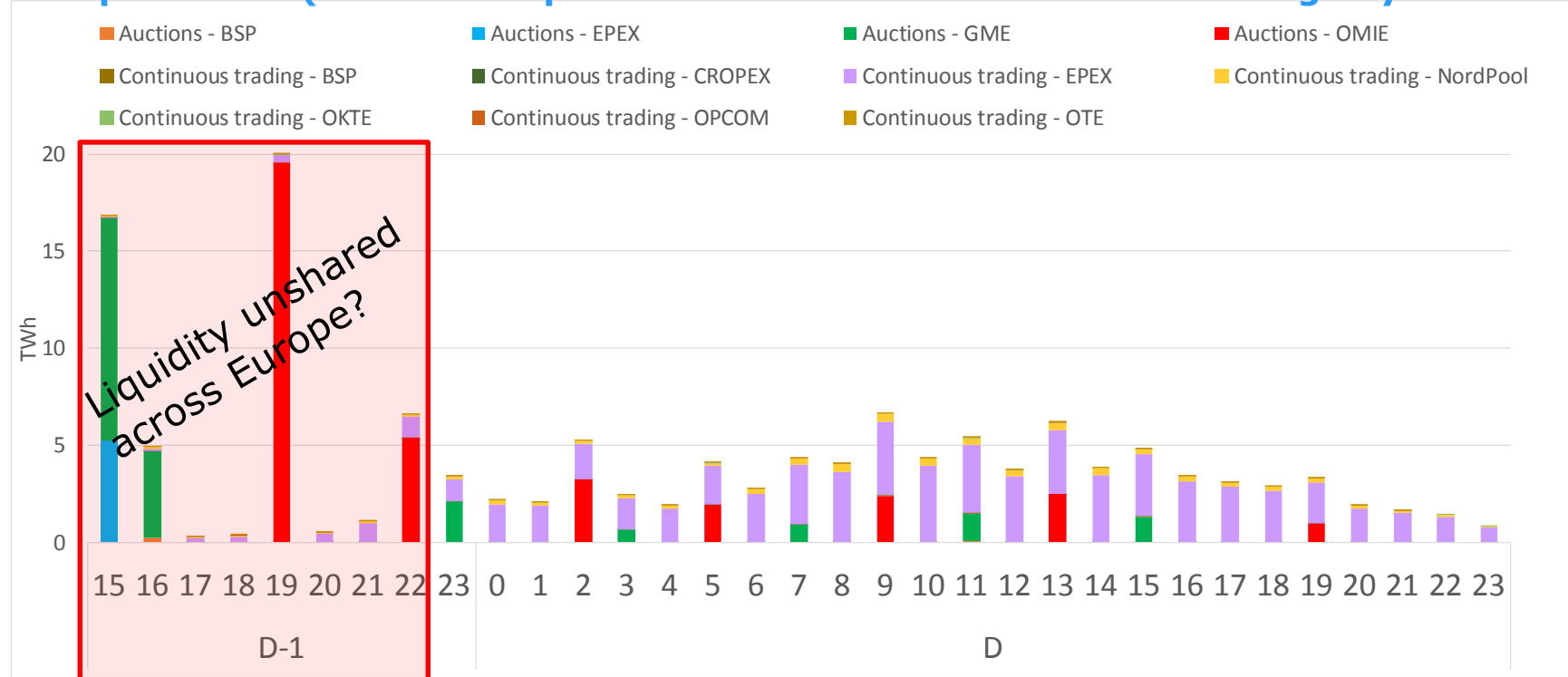
Churn factors, volumes (2017) and bid-ask spreads (yearly product, 2019) in forward markets – (TWh and euros/MWh)

Churn factors in forward markets – 2017



The distribution of ID liquidity supports the case for a harmonised IDCZGOT as early as possible in order to limit the isolation of national markets at times of high liquidity.

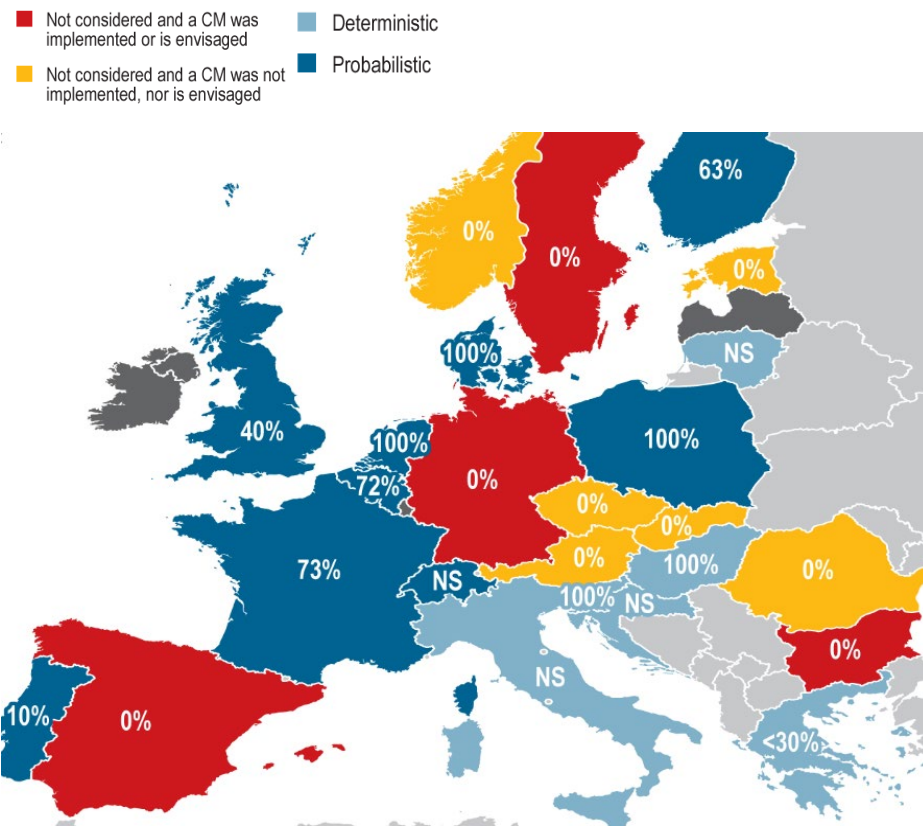
Distribution of total ID volumes per trading hour, per trading system and NEMO in Europe – 2017 (% volumes per hour when trade occurred on trading day D-1 and D)



A relatively late opening of cross-zonal ID trade, would leave more than 1/3 of ID liquidity unshared across borders. In some markets (e.g. Italy or Spain), this share would be well above 50% of ID trades.

National adequacy assessments continued to underestimate the contribution of interconnectors to SoS, while capacity mechanisms continued to emerge in an uncoordinated manner.

Treatment of interconnectors in generation adequacy assessments in Europe – 2016



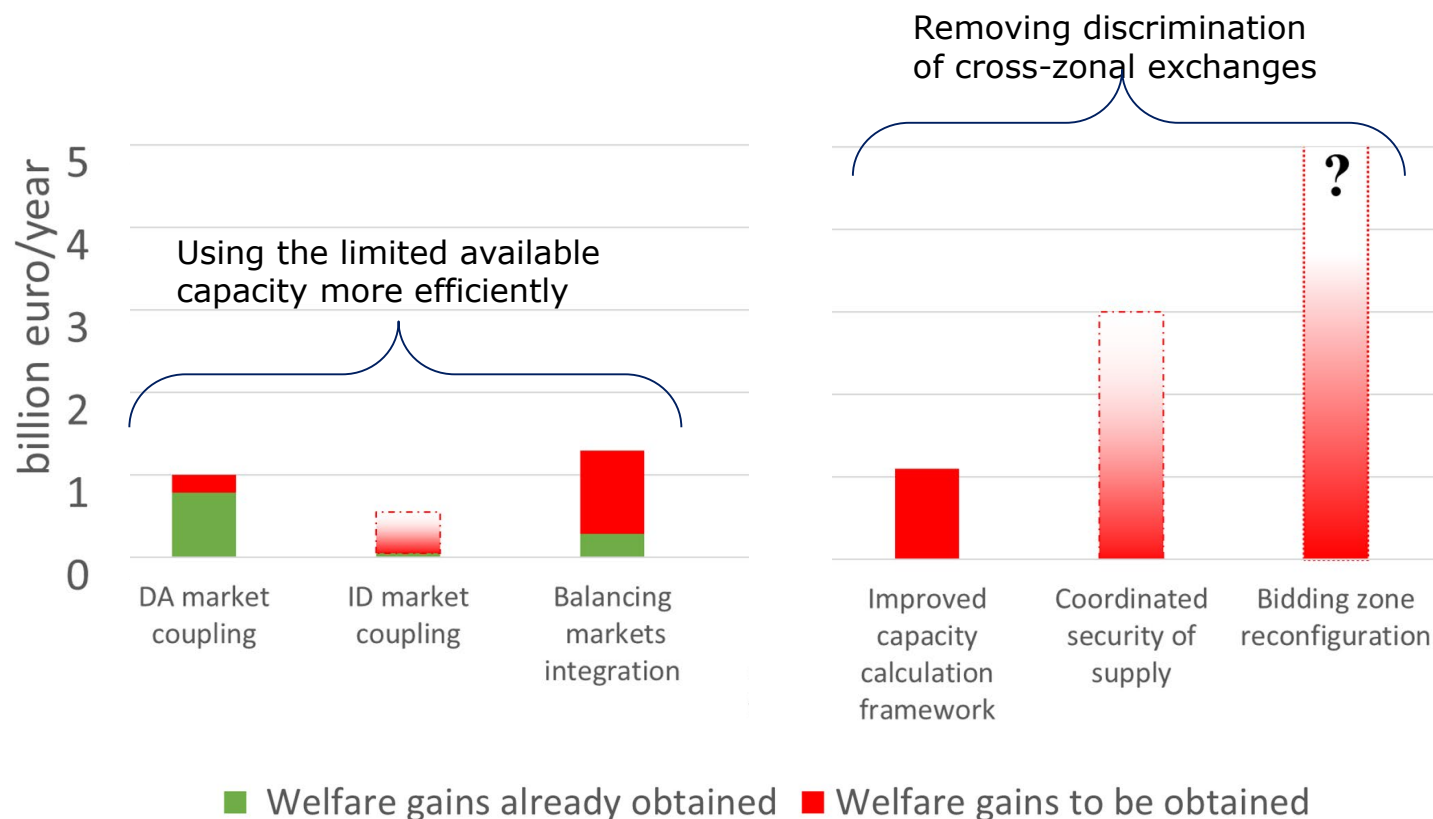
Background: heterogenous capacity mechanisms continued to emerge in Europe in 2017 (six mechanisms approved by the EC in February 2018).

Facts: more than **2 billion euros** to be spent in capacity mechanisms in Europe in 2018, while the charges to finance capacity mechanisms are becoming a noticeable share of the wholesale prices (e.g. more than 30% of day-ahead prices in Ireland, around 5% in Greece and France).

Note: The percentages represent the ratios between the net contribution of interconnectors at times of stress, as considered in national assessments, and the average commercial import capacities. These percentages do not represent the actual contribution (in MW) which can be negligible on some borders (e.g. on some of the Polish borders)

Any step to remove the discrimination of cross-zonal exchanges will bring significant benefits to end-consumers

Social welfare* benefits already obtained and to be obtained from various actions intended to increase EU markets integration

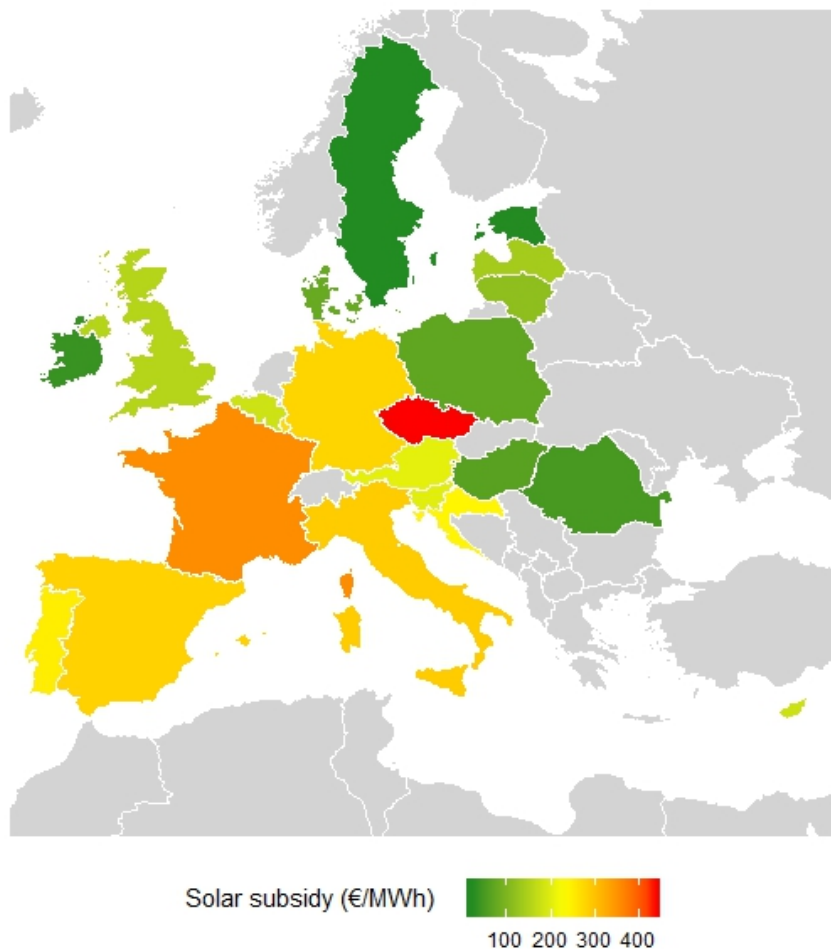


Note: *Gross benefits. The fading color for some categories reflect that the welfare gains are based on third party estimations and/or subject to considerable uncertainty.

Source: ENTSO-E, NRAs, NEMOs, Vulcanus and ACER calculations

A small alignment of national RES support schemes could render considerable benefits at the EU level

Financial support per unit of gross electricity produced from solar generation units in 2015 [€/MWh]



Thank you for your attention

www.acer.europa.eu

www.ceer.eu

MMR link

<http://www.acer.europa.eu/en/Electricity/Market%20monitoring/Pages/Current-edition.aspx>