

ENTSO-E assessment on Long-Term markets

Undervaluation Analysis



Agenda

1. Methodology
2. Assumptions
3. Main results for All TSOs
4. Detailed results by border
5. Cumulated results sorted by border

1. Methodology

- Turnout of Long-Term Transmission Rights (LTTRs) products for traders are calculated with the following formula:

Congestion Income Loss [€]

$$= (\text{Option_Spread_DA} - \text{LTTR_Auction_Result}) [\text{€/MWh}] * \text{Capacity_Auctioned}' [\text{MW}] * \text{\#Hours} [h]$$

- A positive value means that TSOs would have been better off in terms of congestion income [CI] without auctioning LTTRs (i.e. situation with pure DA Congestion Income)
- A positive value means that traders with allocated capacity made money out of the LTTRs product under the assumption of a pure speculative strategy (i.e. entering a position via LTTR, unhedged afterwards via futures/forward markets)
 - For a trader using LTTRs as a hedge, the above is only one part of the puzzle (i.e. there is a missing leg from what the aim of the hedge was - i.e. originating from an original long/short position for a producer/consumer)

2. Assumptions

Borders considered

- CH and UK borders are excluded of the calculation

Maintenance periods

- Maintenance periods for Yearly & Monthly auctions are only considered via a global parameter for all borders set at 8000 hours (i.e. availability of 91.3%)
 - No specific maintenance periods per border are considered in the calculation
 - In reality the capacity is not fixed at the auctioned value for the all product period, this is leading to calculation approximations in applying the correct price spread to the correct period.

Assumption for 2022

- Only DA prices actuals and related monthly LTTRs auctions for the period 01.01.2022-30.09.2022 were considered.
- Underlying assumption is that the average spread and average specific results observed in the period 2022 Q1+Q2+Q3 will be the same for Q4 2022.

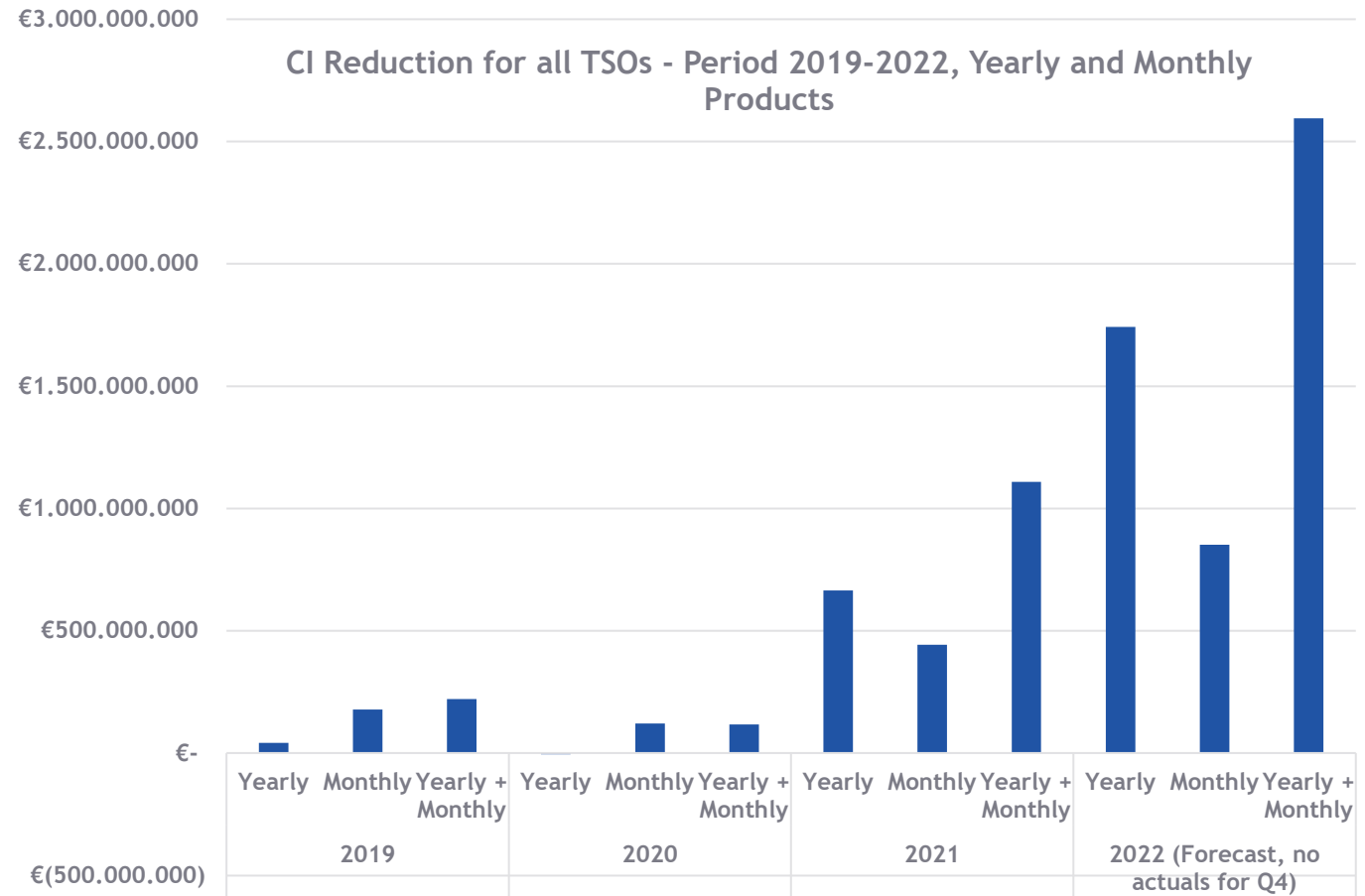
Monthly Products

- A volume weighted average auction price is calculated for all monthly auctions and applied to the average auction monthly volumes. This is leading to calculation approximations in applying the correct price spread to the correct period.

3. Main Results

CI Loss for All TSOs over the period 2019-2022

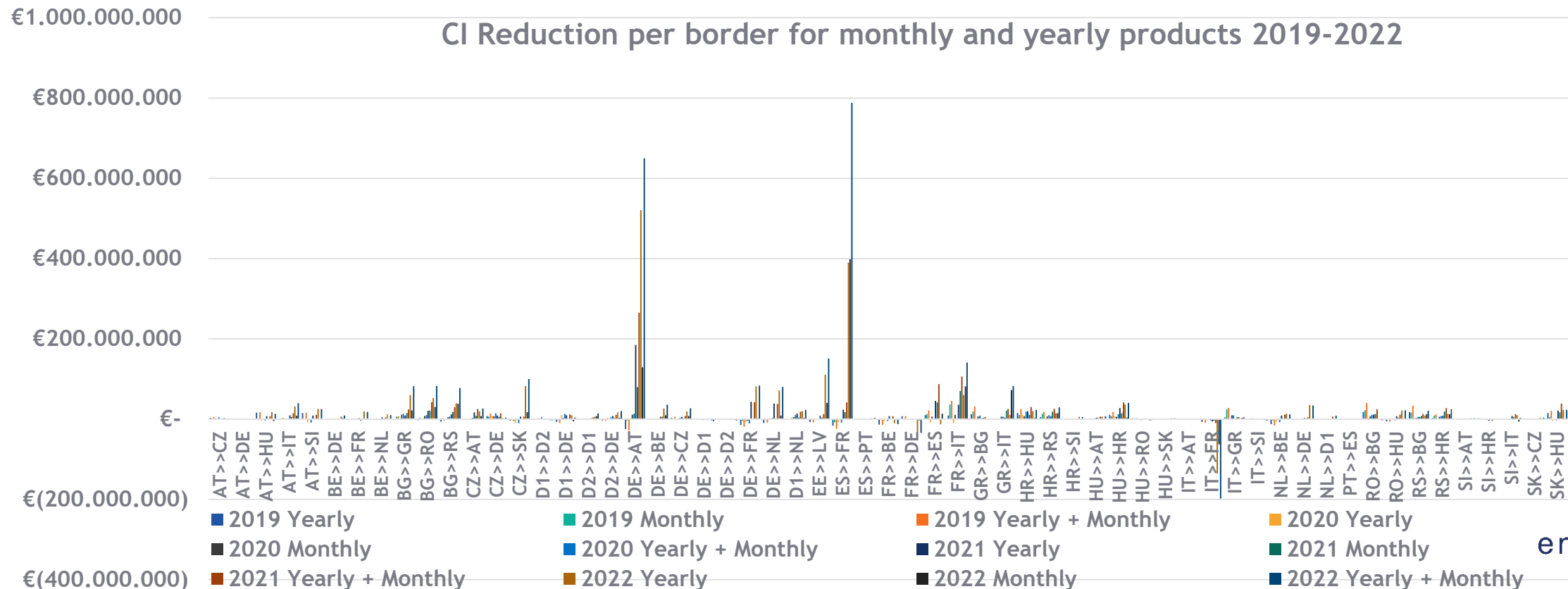
- On a helicopter view over all borders, undervaluation was present for the whole period (i.e. positive value)
- Cumulated CI loss over the period is 4.04 b€
 - 2021 (1.1 b€) and 2022 (2.6 b€) being the main bulk
 - For 2021 the LT CI Loss represented around 21% of the overall Congestion Income (Day-Ahead and Long Term)
- Split between Yearly/Monthly is heterogeneous
 - For 2019 and 2020, monthly values are higher than the yearly ones
 - For 2021 and 2022 monthly values are lower than the yearly ones



4. Detailed results by border

Results are heterogeneous on border level and varying over time and products, this can be explained by:

- Differences in volumes auctioned per border
 - for ex: Yearly 2022 DE-> AT: 2940 MW vs. Yearly 2022 IT -> GR: 50 MW
- Differences in spreads (i.e. DA option spread – LTTR)
 - for ex: Yearly 2022 EE-> LV: 46.06 €/MWh vs Yearly 2022 AT->DE 0.06 €/MWh



5. Cumulated results sorted by border

Results are heterogeneous on border level

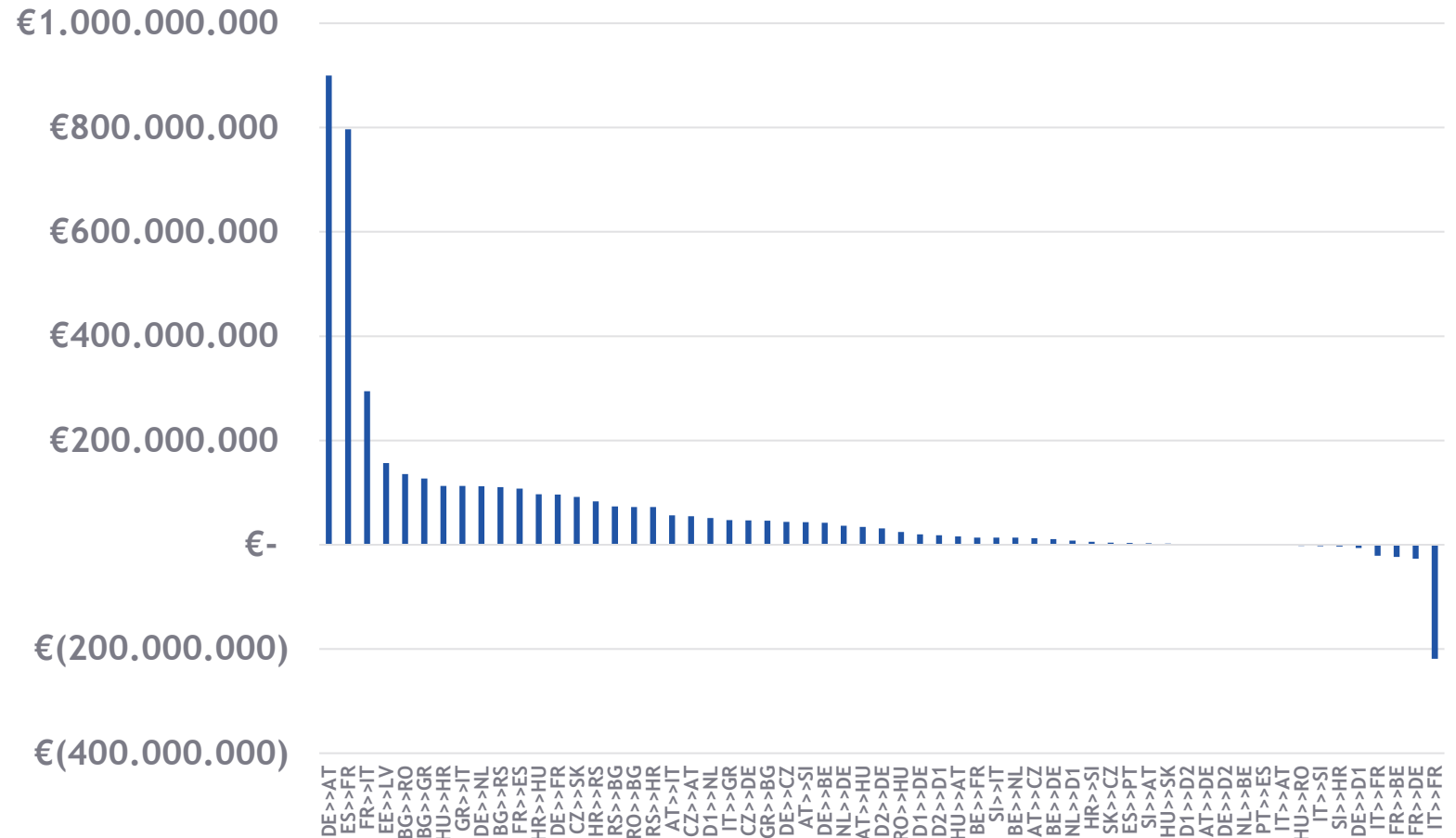
Cumulated Sum 19-22 per Border (Monthly+Yearly products)

Top 3 “Losers” Cumulated period

- DE-AT: 900 m€
- ES-FR: 797 m€
- FR-IT: 294 m€

Top 3 “Winners” Cumulated period

- IT-FR: -219 m€
- FR-DE: -27 m€
- FR-BE: -23.5 m€



Long-Term Flow-Based Allocation

Update



Long-Term Flow-Based Allocation

Next workshop with market participants by beginning of 2023

The TSOs together with JAO have been progressing on the Long-Term Flow-Based Allocation project since September mainly focusing on:

- **Preparing the HAR amendment** (submitted for public consultation on 07.12);
- Aligning with ACER on the **SAP, CID and FRC proposals** for amendments;
- Liaising with Core and Nordic CCRs and their Long-Term Capacity Calculation processes;
- Investigating the impact on internal TSO processes;
- Assessing the new auction processes and the potential new timings (*work ongoing*);

Exact date of the workshop yet to be confirmed.

3. Detailed results by border: zoom

