

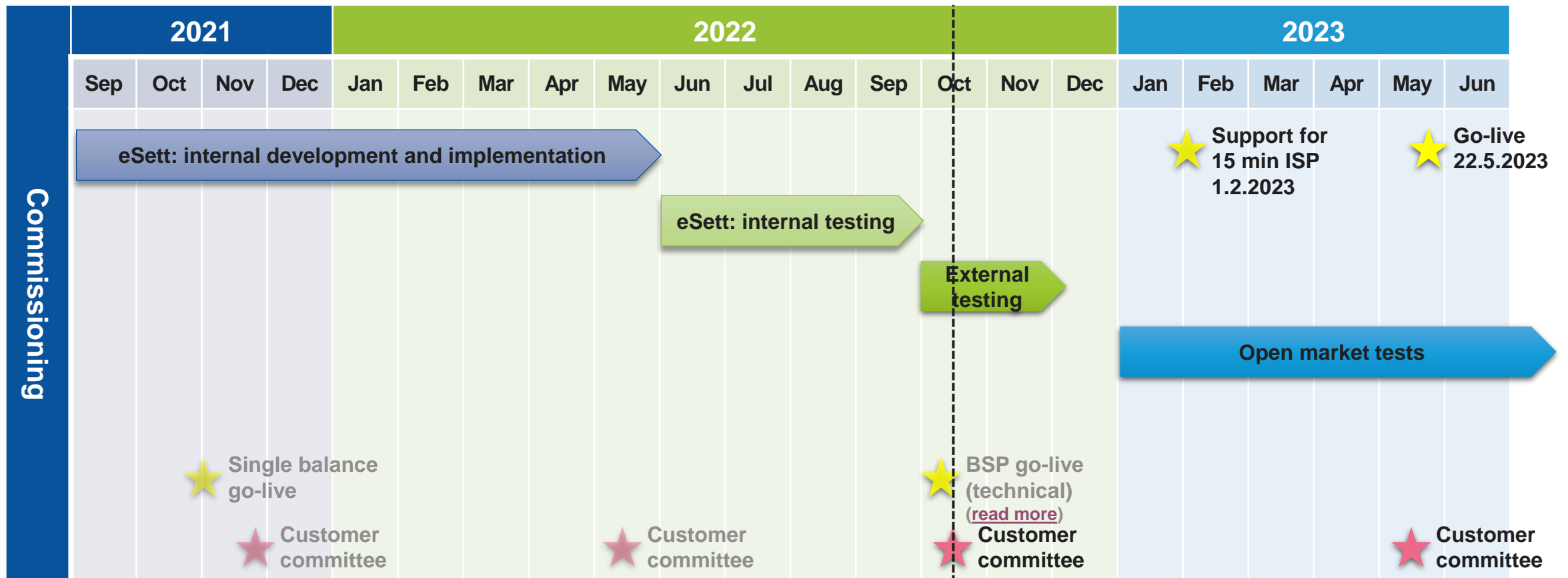
15-minute Imbalance Settlement Period

Recap on the project and its latest changes

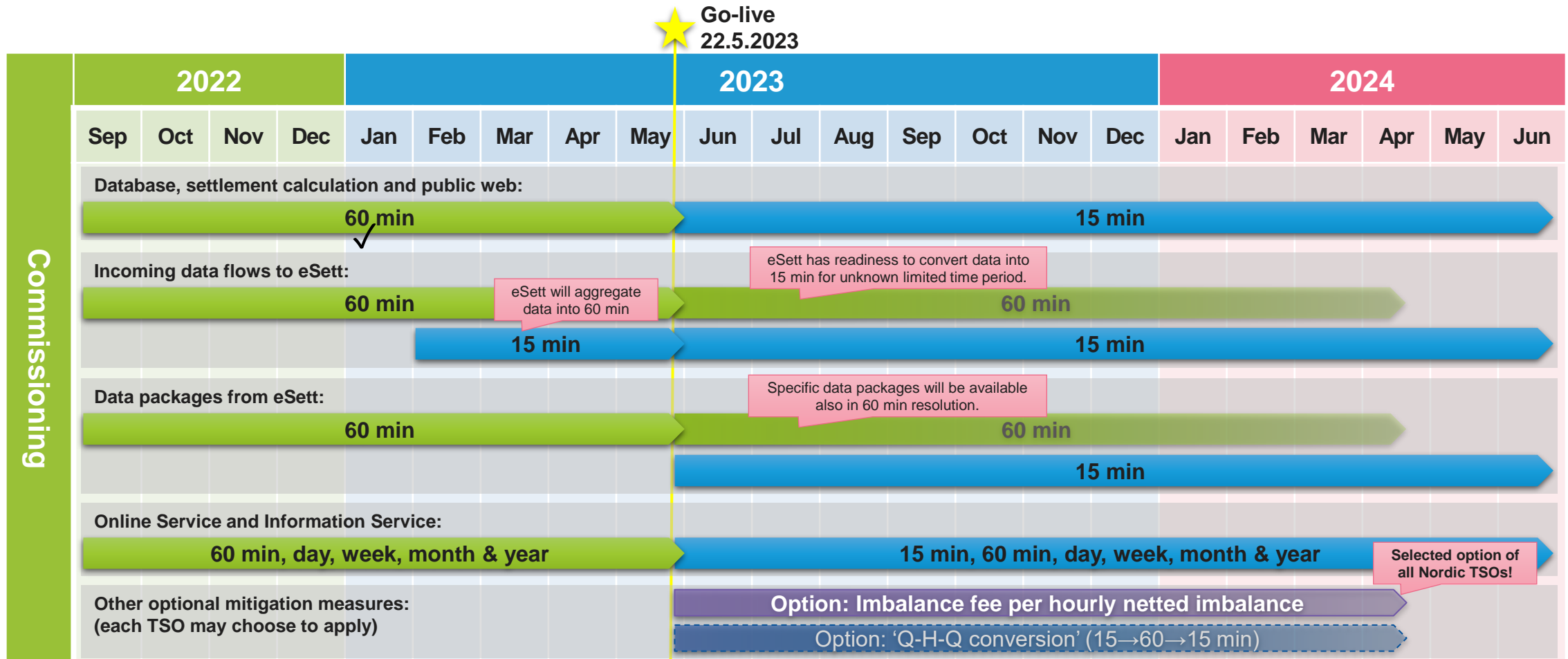
Tuomas Pulkkinen | 13.10.2022



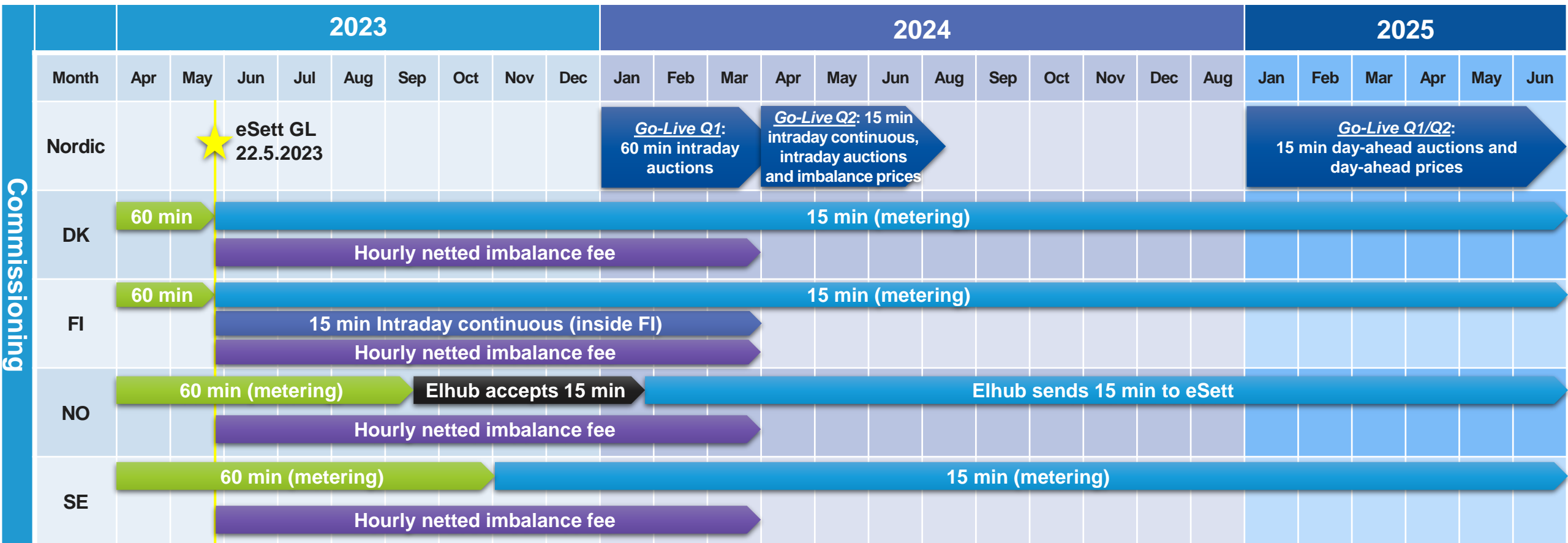
15 min Commissioning Time Schedule – eSett



15 min Commissioning Time Schedule – eSett’s resolutions



15 min Commissioning Time Schedule – Nordic and National Timelines*



Nordic and National Milestones

Nordic milestones:

- *60 min intraday auctions:* Q1/2024
- *15 min for imbalance prices, intraday continuous and intraday auctions:* Q2/2024
- *15 min day-ahead auctions and prices:* estimated in 2025

Denmark:

- *DataHub:* Will accept 15 min data from Q2 2023 and then will provide 15 min values to eSett.

Finland:

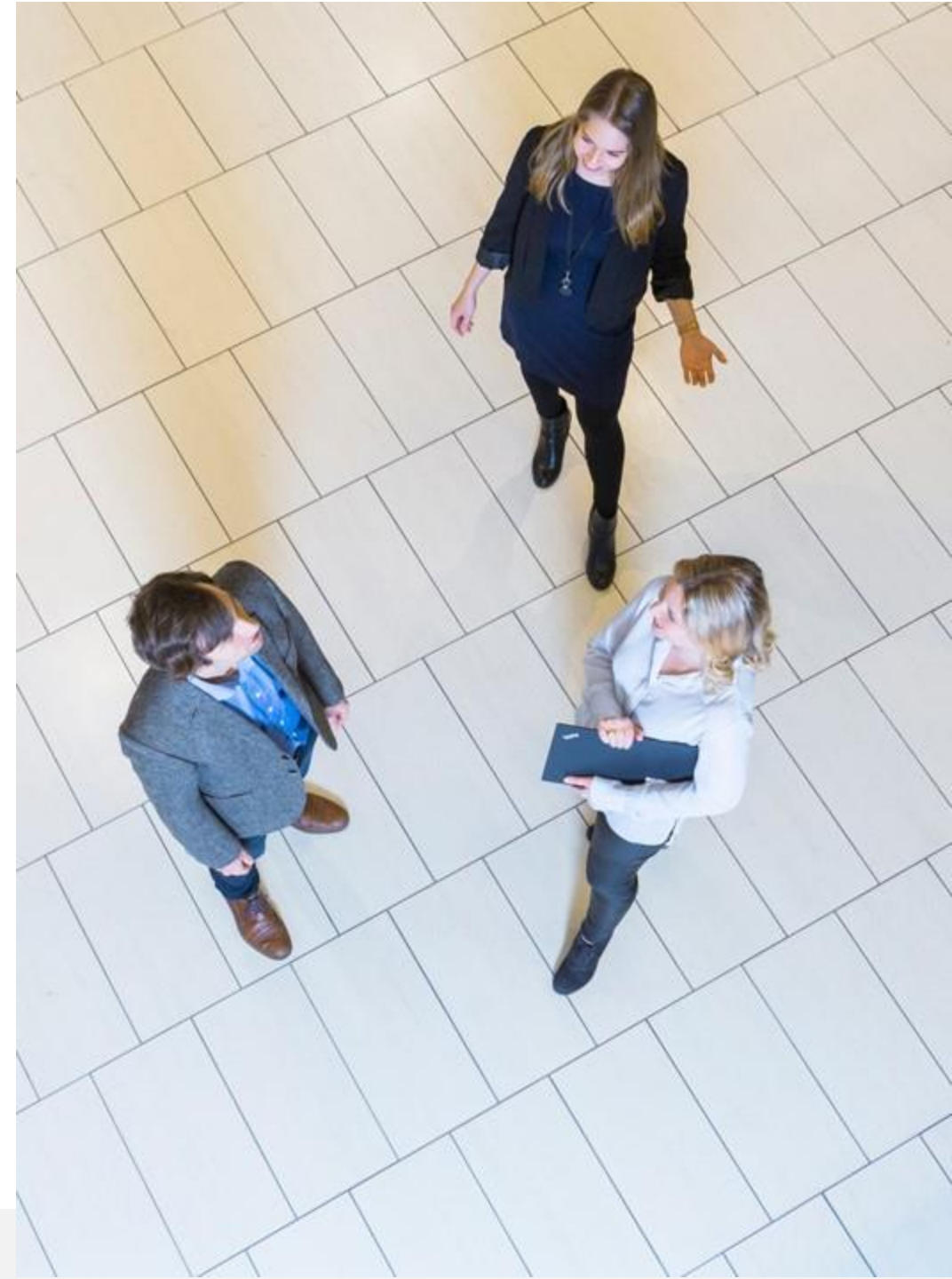
- *Datahub:* Will accept 15 min data from 1.1.2023 and will provide 15 min values to eSett latest from 22.5.2023.
 - Aggregated into hourly data by eSett before go-live.
- *Energy metering:* 15 min from 22.5.2023 (VNA 767/2021).

Norway:

- *Elhub:* Will accept 15 min data from 18.9.2023 and will provide 15 min values to eSett from 22.1.2024
 - Values converted into 15 min data by eSett between 22.5.2023 and 22.1.2024.

Sweden:

- *Energy metering and reporting:* 15 min from 1.11.2023 (Förordning 1999:716)



What will happen on 22.5.2023?

- eSett's system and calculations switches to 15 min
- eSett is still able to receive data in 60 min resolution (subject to the local regulation)
 - eSett converts it into 15 min resolution
- Imbalance price will be same for each quarter within an hour
 - In combination with "Hourly netted imbalance fee" the financial settlement won't change.
- Outbound data is *mainly* on 15 min, but most of the data can still be received and viewed also on hourly level.
 - See list of 60 min Data Packages in the [commissioning plan](#).
- Bilateral Trade gate closure in Finland switches from 20 min to 0 min.
- Reporting resolution may or may not change for following:
 - Bilateral Trades (BRPs)
 - Cross-country MGA Exchanges (Datahubs and some DSOs)

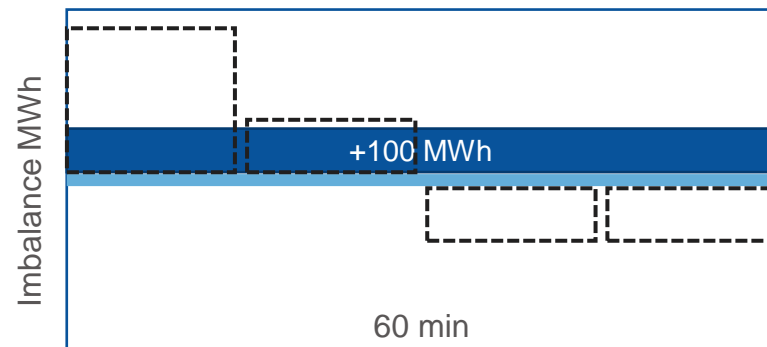


Example: Imbalance costs during the intermediate period

No uncontrollable costs for BRPs due to intermediate solution

Today: Imbalance settlement period 60 min, single price model

Imbalance price 50 €/MWh (example)



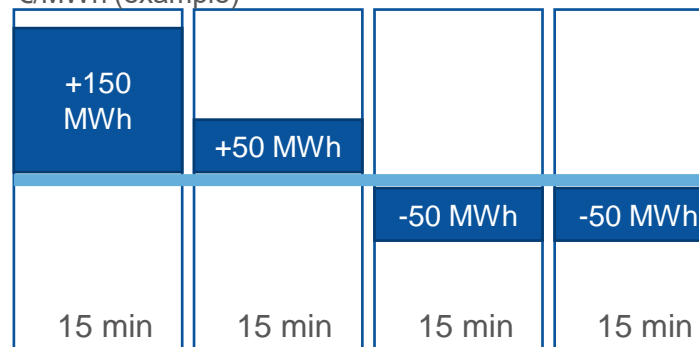
BRP imbalance cost over an hour

$$+100 \text{ MWh} \times 50 \text{ €/MWh} = +5000 \text{ €}$$

5000 €

Applied in all Nordic countries.

Country option: "Hourly netted imbalance fee"
From 22.5.2023 until 15 min imbalance prices & 15 min cross-border intraday market
"Actual quarterly imbalances"
 Same imbalance price for each quarter of an hour 50 €/MWh (example)

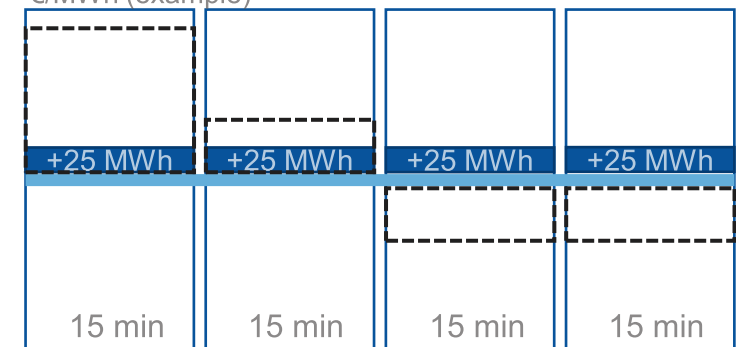


BRP imbalance cost over an hour

$$\begin{aligned} +150 \text{ MWh} \times 50 \text{ €/MWh} &= +7500 \text{ €} \\ +50 \text{ MWh} \times 50 \text{ €/MWh} &= +2500 \text{ €} \\ -50 \text{ MWh} \times 50 \text{ €/MWh} &= -2500 \text{ €} \\ -50 \text{ MWh} \times 50 \text{ €/MWh} &= -2500 \text{ €} \\ \hline &= \mathbf{5000 \text{ €}} \end{aligned}$$

Not applied.

Country option: "Q-H-Q Conversion"
From 22.5.2023 until 15 min imbalance prices & 15 min cross-border intraday market
"Identical quarterly imbalances"
 Same imbalance price for each quarter of an hour 50 €/MWh (example)

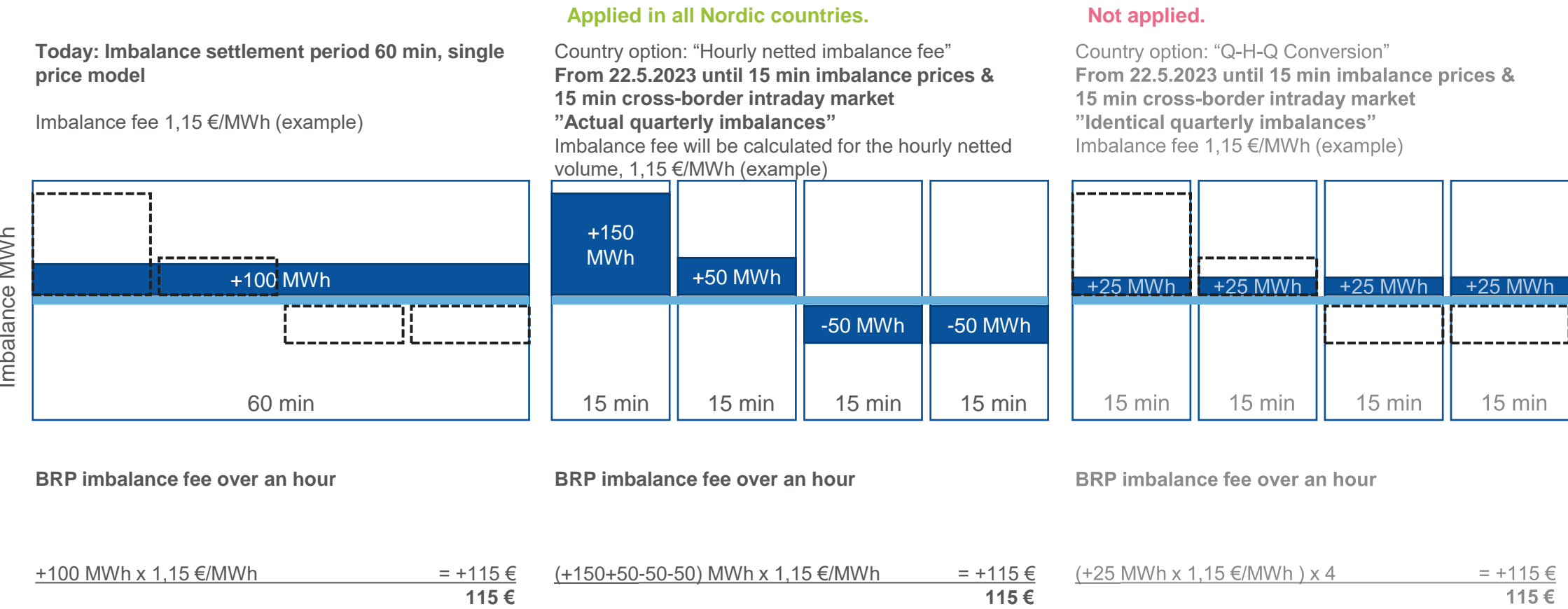


BRP imbalance cost over an hour

$$\begin{aligned} +25 \text{ MWh} \times 50 \text{ €/MWh} &= +1250 \text{ €} \\ +25 \text{ MWh} \times 50 \text{ €/MWh} &= +1250 \text{ €} \\ +25 \text{ MWh} \times 50 \text{ €/MWh} &= +1250 \text{ €} \\ +25 \text{ MWh} \times 50 \text{ €/MWh} &= +1250 \text{ €} \\ \hline &= \mathbf{5000 \text{ €}} \end{aligned}$$

Example: Imbalance fee during the intermediate period

No uncontrollable costs for BRPs due to intermediate solution



Open Market Tests

- A possibility for all market parties to test with production-like structures
 - transitioning from 60 min to 15 min.
 - i.e. 15 min go-live will be set to a date, possibly to Monday 30.01.2023.
 - use of 15 min ISP.
- Starts in January 2023 and lasts at least until the following autumn.
- Participation requires contacting eSett.
- The settlement results in this phase **will not be** comparable with production.
- “Free testing” for market parties.
 - eSett can provide guidelines on what could be useful to test.





WE SETTLE, TOGETHER!

