

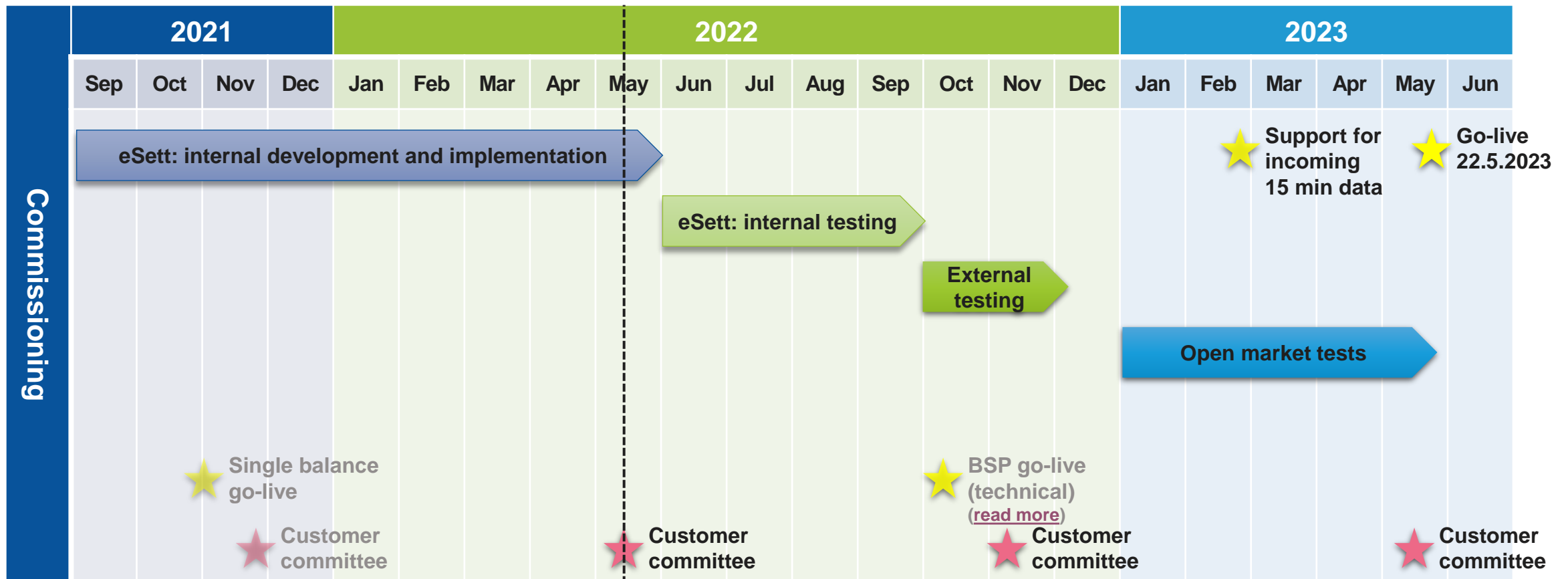
15-minute Imbalance Settlement Period

Recap on the project and its latest changes

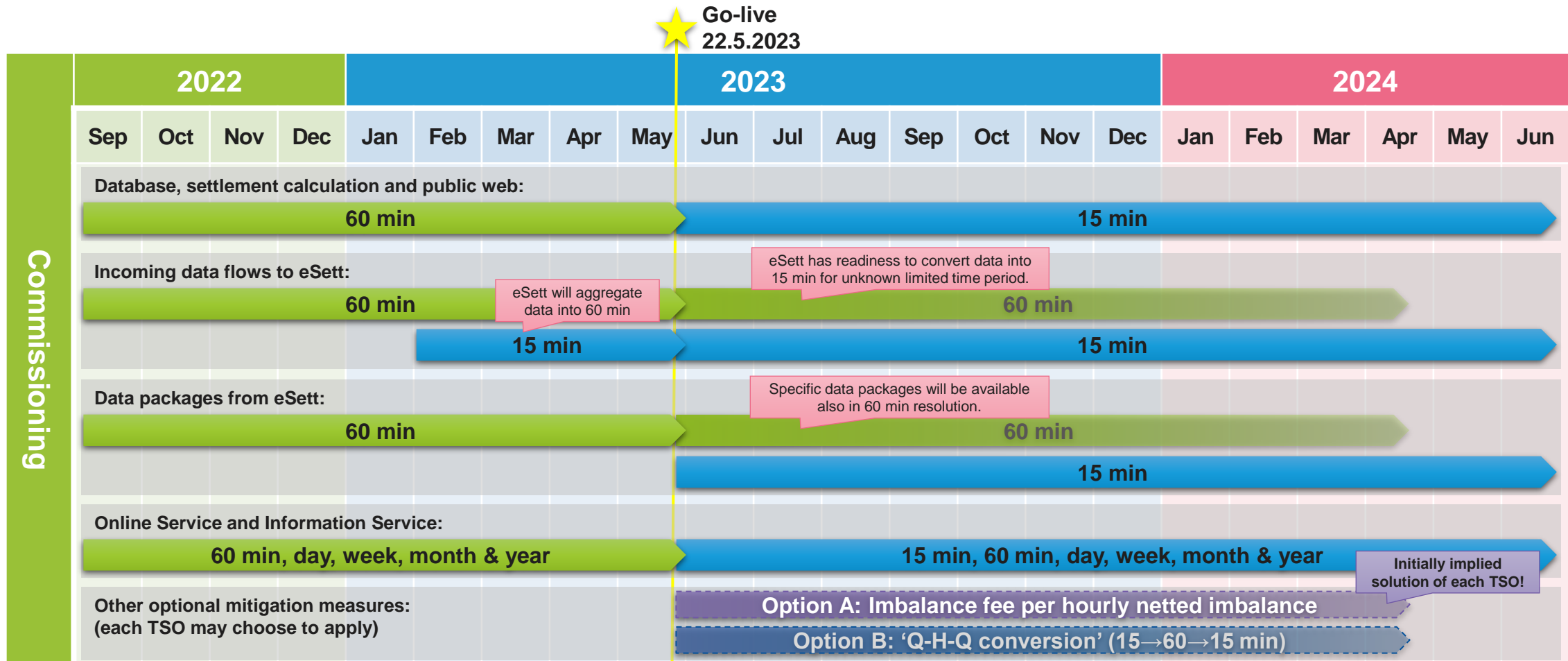
Tuomas Pulkkinen | 12.05.2022



15 min Commissioning Time Schedule



15 min Commissioning Time Schedule – Resolutions



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.
 - In combination with "Q-H-Q conversion" the energy quantities won't change.
 - 15 min data is displayed and sent out, but it is purely hourly data converted into 15 min slots.
- 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](#).
- Each TSO will coordinate with eSett to align on the options, next steps and communication needs.

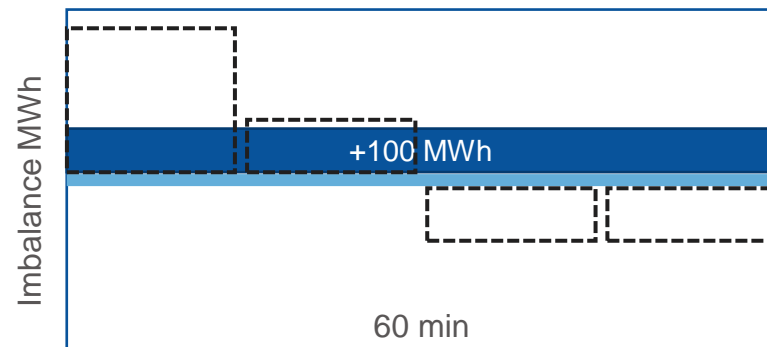


Example: Imbalance costs during the intermediate period

No uncontrollable costs for BRPs due to intermediate solution

Today: Imbalance settlement period 60 min, single price model

Imbalance price 50 €/MWh (example)

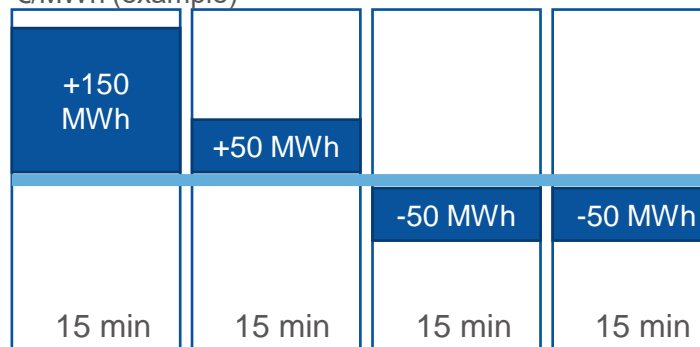


BRP imbalance cost over an hour

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

5000 €

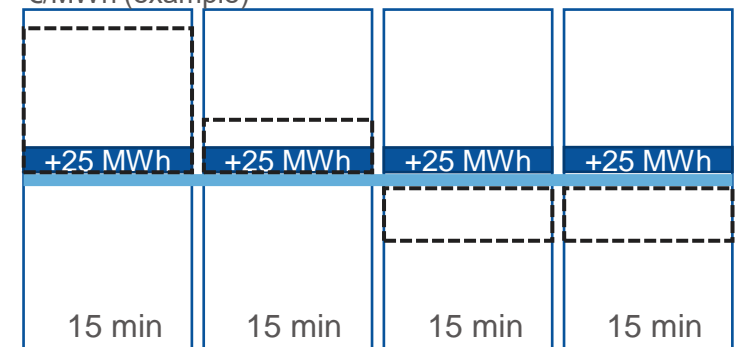
Country option: "Hourly netted imbalance fee"
From 22.5.2023 until 15 min imbalance prices & 15 min cross-border intraday market
"Actual quarterly imbalances"
 Same imbalance price for each quarter of an hour 50 €/MWh (example)



BRP imbalance cost over an hour

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

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

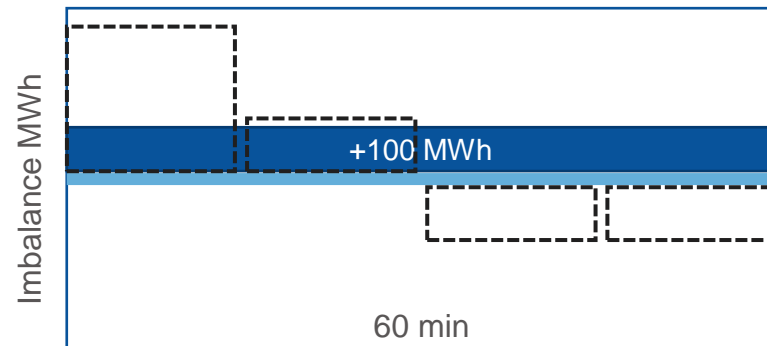
$$\begin{aligned}
 &+25 \text{ MWh} \times 50 \text{ €/MWh} &&= +1250 \text{ €} \\
 &+25 \text{ MWh} \times 50 \text{ €/MWh} &&= +1250 \text{ €} \\
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 &+25 \text{ MWh} \times 50 \text{ €/MWh} &&= +1250 \text{ €} \\
 \hline
 &&&\mathbf{5000 \text{ €}}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

Example: Imbalance fee during the intermediate period

No uncontrollable costs for BRPs due to intermediate solution

Today: Imbalance settlement period 60 min, single price model

Imbalance fee 1,15 €/MWh (example)



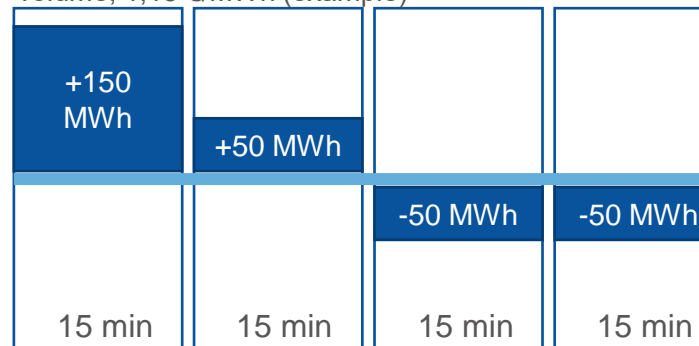
BRP imbalance fee over an hour

$$+100 \text{ MWh} \times 1,15 \text{ €/MWh} = +115 \text{ €}$$

115 €

Country option: "Hourly netted imbalance fee"
From 22.5.2023 until 15 min imbalance prices & 15 min cross-border intraday market
"Actual quarterly imbalances"

Imbalance fee will be calculated for the hourly netted volume, 1,15 €/MWh (example)



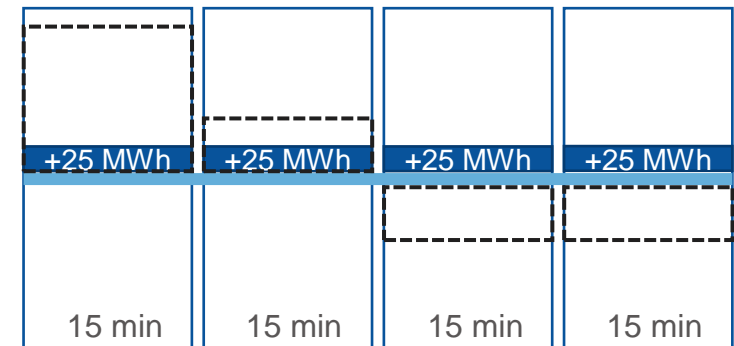
BRP imbalance fee over an hour

$$(+150 + 50 - 50 - 50) \text{ MWh} \times 1,15 \text{ €/MWh} = +115 \text{ €}$$

115 €

Country option: "Q-H-Q Conversion"
From 22.5.2023 until 15 min imbalance prices & 15 min cross-border intraday market
"Identical quarterly imbalances"

Imbalance fee 1,15 €/MWh (example)



BRP imbalance fee over an hour

$$(+25 \text{ MWh} \times 1,15 \text{ €/MWh}) \times 4 = +115 \text{ €}$$

115 €

National Milestones

Denmark:

- *DataHub*: Will accept 15 min data by the end of 2022 and will provide 15 min values to eSett before 22.5.2023.
 - Aggregated into hourly data by eSett before go-live.

Finland:

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

Norway:

- TBD

Sweden:

- Svenska kraftnät has proposed to postpone the requirement of 15 min metering and reporting to 1.11.2023





WE SETTLE, TOGETHER!

