

# Transition to 15 min imbalance settlement period (ISP)

11.05.2021 / Janne Heikka

Visit [nordicbalancingmodel.net](https://nordicbalancingmodel.net)



# Agenda

Background

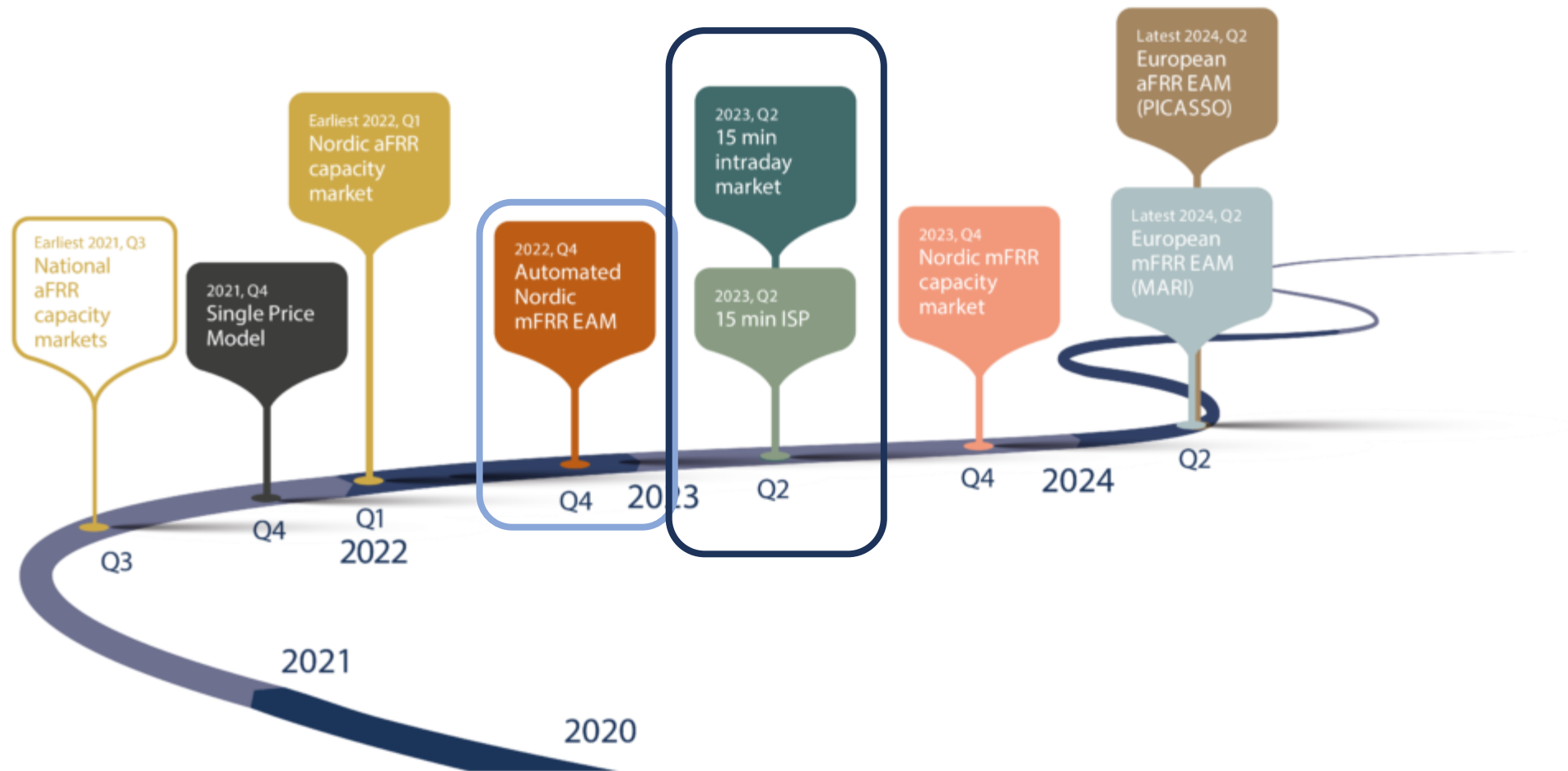
Time schedule

Implementation of 15min ISP

Energy metering and datahubs

Stakeholder communication

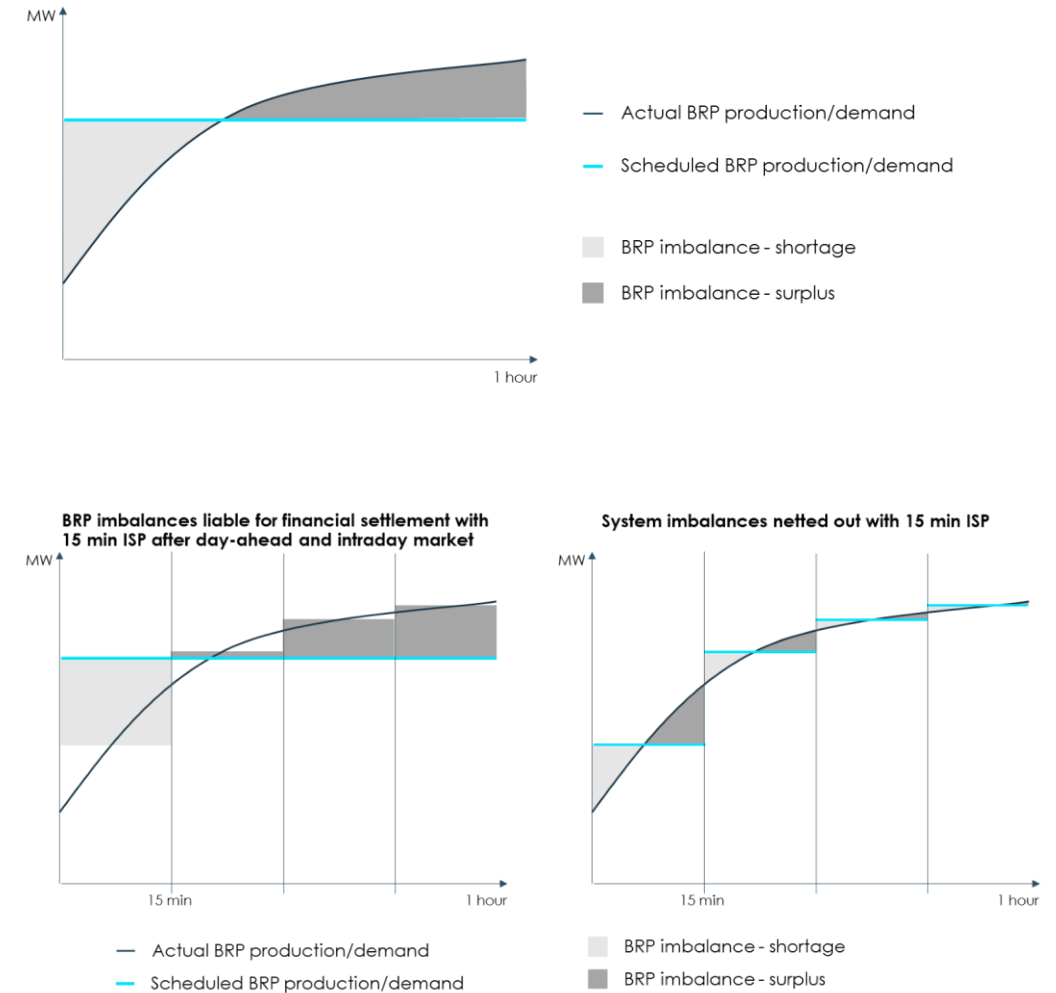
# Nordic Balancing Model (NBM) roadmap





# Why 15min ISP

- Market model adapts to the changing power system
  - *Green transition* – increasing amount of intermittent energy
- Incentivising maintaining the balance in more *real time* for more cost-efficient power system
- Increased possibilities for ancillary services
- Electricity market harmonization in Europe
- European legislation (EBGL, electricity balancing guideline)



# What is 15min ISP - scope

**Energy metering (country specific)**  
Basis of actual 15min ISP

**Balancing market**  
Secure operations & correct imbalance price

**Wholesale market (First ID, then DA)**  
Possibility for BRPs to set balance



**eSett**  
DENMARK, FINLAND, NORWAY AND SWEDEN  
**NORDIC IMBALANCE  
SETTLEMENT**

# Derogations granted in the Nordics

Energinet, Fingrid and Svenska kraftnät requested for derogation from implementing 15 min ISP according to time schedule given in EBGL (18.12.2020).

Respective NRAs granted the derogations in 16.3.2021 until 22.5.2023.

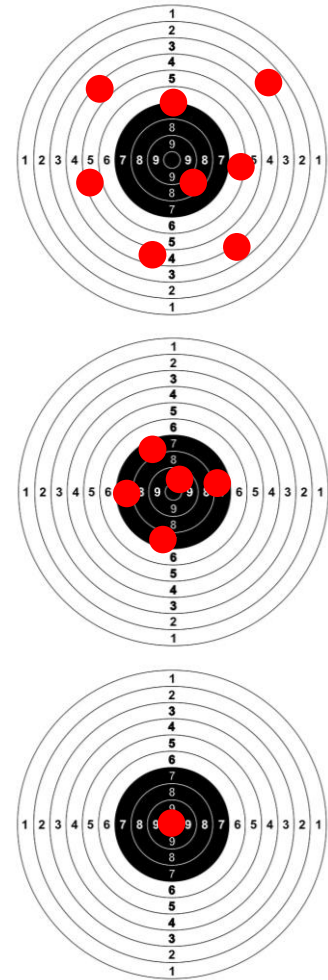
Norway is moving to 15 min ISP at the same time.

**The Nordic go-live of 15min ISP – 22.5.2023**  
**00.00 CET!**

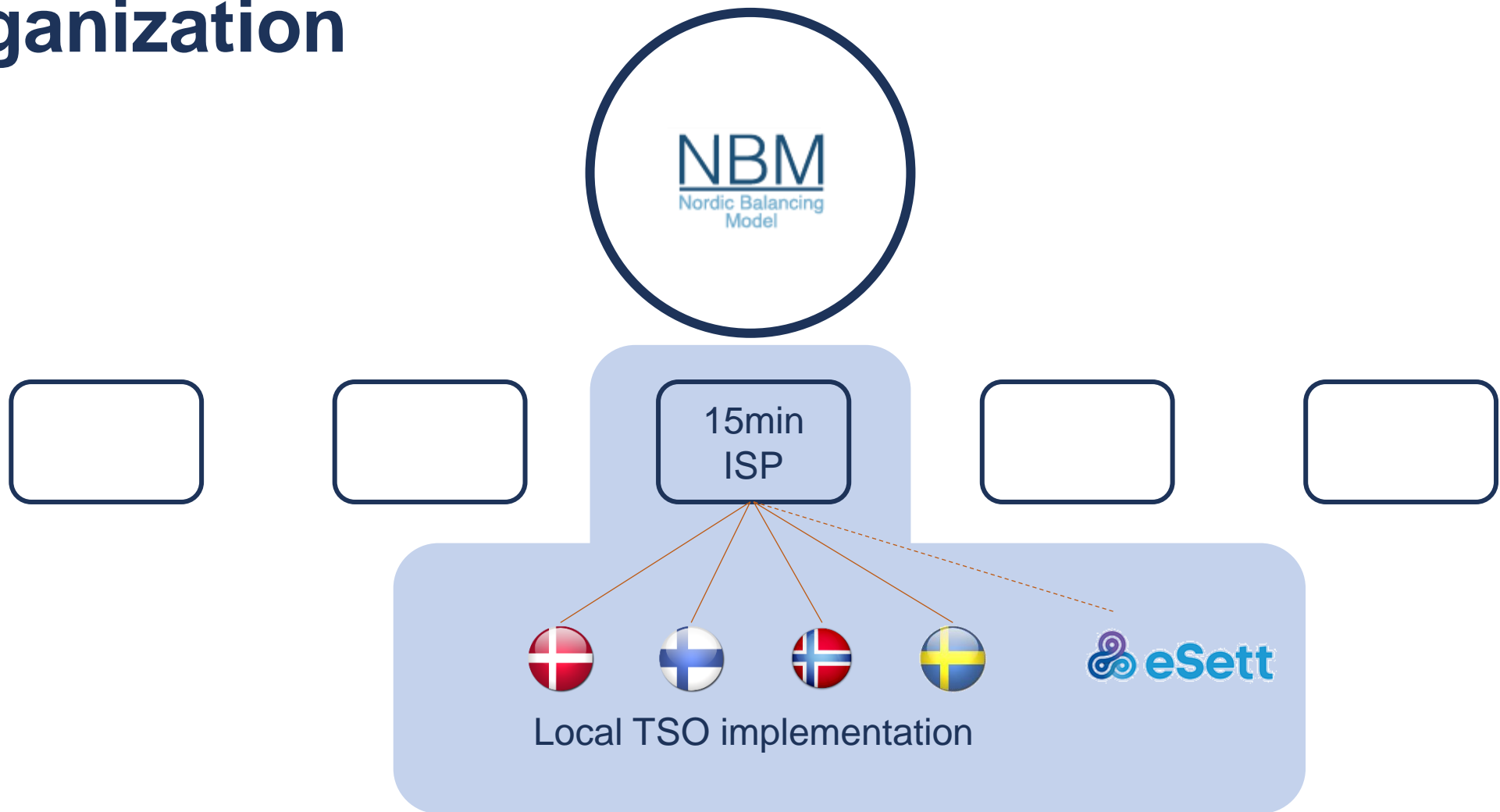


# Why 22.5.2023 00.00 CET?

- NBM roadmap early 2019: Q4 2022
- Revised roadmap, after stakeholder consultation: Q2 2023
- As late in Q2 2023 as possible, not too close to summer
- Beginning of imbalance settlement period - Monday 00.00 CET), not next to any Nordic holiday



# Organization

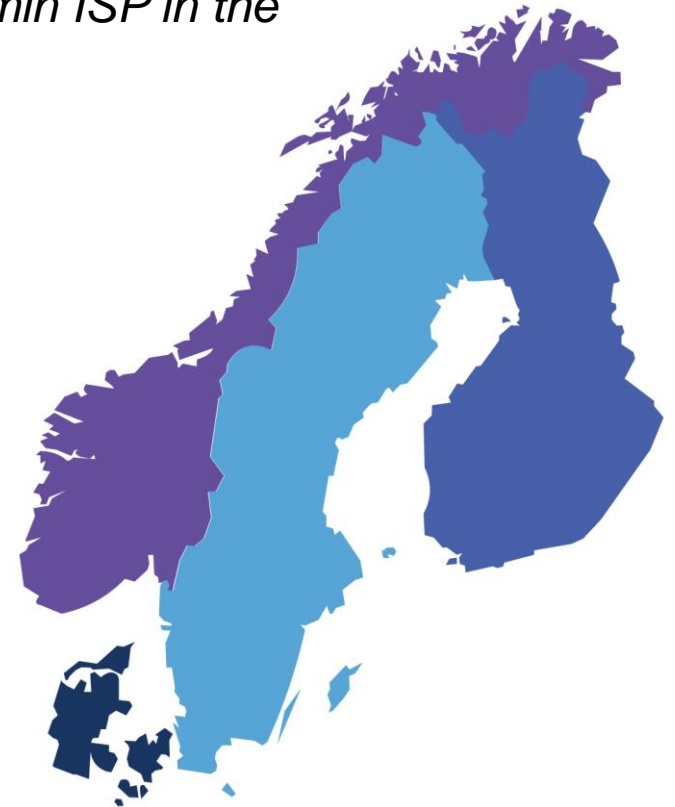




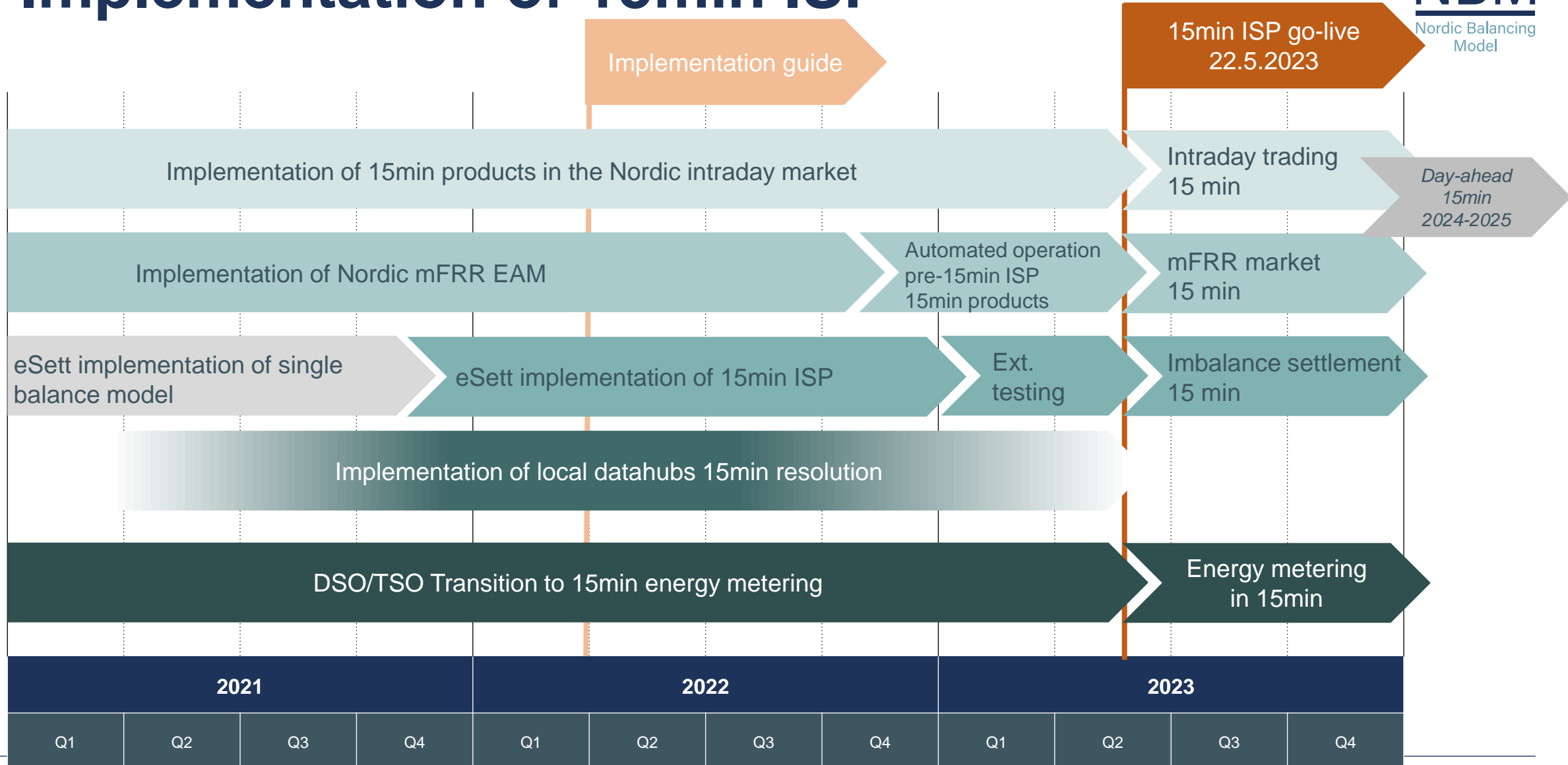
# NBM 15 min ISP project

*Goal to ensure simultaneous, successful, and safe implementation of 15min ISP in the Nordics by 22.5.2023 00.00 CET.*

- Monitoring local implementation projects
- Coordinating common tasks and activities
- Communicating to stakeholders on a Nordic level



# Implementation of 15min ISP



# Bidding in mFRR

Q4 / 2022

22.5.2023

Q3/2023-Q2/2024

	Today	Automated operation, pre 15 min ISP	After 15 min ISP but before connection to MARI	When connecting to MARI
Currency	EUR and local currency	EUR	EUR	EUR
Maximum/minimum price (EUR/MWh)	5000/no minimum price	5000/no minimum price	5000/no minimum price	99 999/-99 999
Price granularity (EUR)	0.01 or 0.5	0.01 or 0.5 <sup>1</sup>	0.01	0.01
<b>Minimum bid size (MW)</b>	5 or 10	1 or 10	1	1
Maximum bid size (MW)	none or 50	9 999 (technical limit)	9 999 (technical limit)	9 999 (technical limit)
Bid granularity (MW)	1	1	1	1
Activation granularity (MW)	1	1 or 0.1 <sup>4</sup>	1	1
<b>BSP bid time resolution for price and volume (minutes).</b>	60 and 15	15 and 60	15	15
<b>Marginal price resolution (minutes)</b>	60	60	15	15



# Bidding at wholesale markets

- Will be specified by NEMOs at later stage in detail

Intraday market  
15min MTU  
22.5.2023

Intraday auctions  
15min MTU  
Q3/2023-2024

Day-ahead market  
15min MTU  
2024-2025

**Intraday 15min**

**Day-ahead 1h**

22.5.2023 ~ 2024-2025

1h bid  
12:00-13:00

100 MW  
50 €/MWh

100 MWh  
5000 €

25 MW  
1250 €

25 MW  
1250 €

25 MW  
1250 €

25 MWh  
1250 €

15min bid  
12:45-13:00

100 MW  
50 €/MWh

25 MWh  
1250 €

**Intraday 15min**

**Day-ahead 15min**

2024-2025 →

15min bid  
12:45-13:00

100 MW  
50 €/MWh

25 MWh  
1250 €

15min bid  
12:45-13:00

100 MW  
50 €/MWh

25 MWh  
1250 €



**eSett**

# Country specific – Denmark

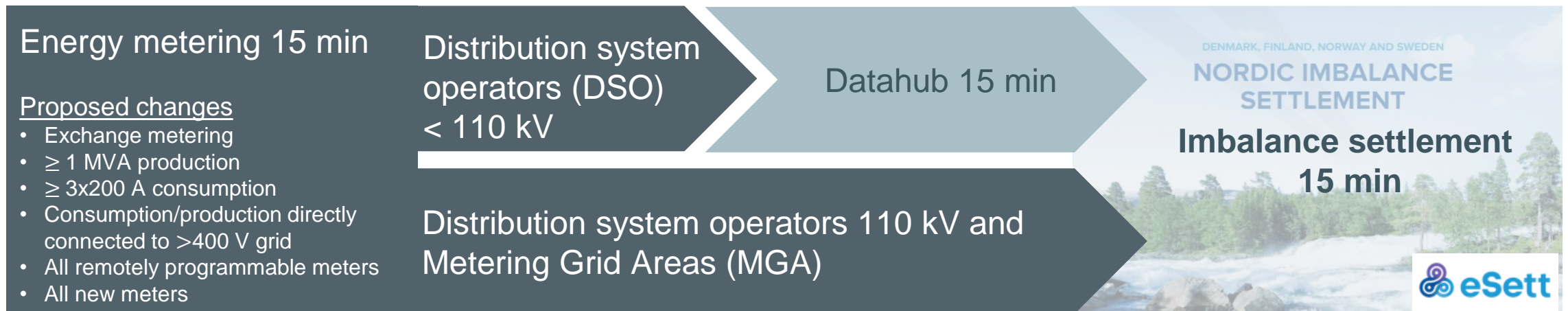
- Datahub is currently updated to version 3.0.
  - The new DataHub will be able to receive 15 minute data for all metering points
  - The DataHub will profile hourly values into 15 minutes values at aggregation level in the exchange with eSett.
- Energy metering requirements have to be set by Energinet
  - Currently not decided to which extent 15 minute values will be mandatory. Most likely it will be all exchange, most production and large consumers. Also data that is used to document 15 minute ancillary services must be provided in 15 minute resolution.

# Country specific – Finland

15 min ISP introduction video

[www.fingrid.fi/varttitase](http://www.fingrid.fi/varttitase)

- Datahub (60 min) go live 21.2.2022
  - Datahub will be ready to receive 15 min values from the beginning of 2023
- Energy metering related legislation amendments are pending (~Q2 2021)
  - Stepwise transition to 15 min metering until 2028





# Country specific – Norway

- The Elhub is preparing for 15 min ISP
  - Gradually phasing in 15 min values – will be able to receive 15 min values 6 months ahead of transition
  - Profiling gives all parties an incentive to be in balance
  - Monitoring implementation of DSOs
- 15 min metering in high voltage grids, exchange between grid areas and production
  - Summary of consultation and proposed regulatory changes sent from the regulator to the ministry 19 January

# Country specific – Sweden

- Energy metering and reporting
  - Svk is currently working on a proposal for the metering ordinance. It will then be submitted to the ministry of infrastructure for the referral process and final decision.
  - In short it will entail requirement of 15 min metering and reporting for all production, all consumption above 63 A main fuse and MGA exchange meters.
    - Additionally, consumption below 63 A fuse that are not in the consumption profile and fulfill the new functional requirements shall also meter with 15 min resolution.
    - The excluded hourly measured consumption points shall be reported with 15 min resolution by the DSOs, as will the consumption profile.
  - The new ordinance is currently being planned to take effect April – May 2023.
- [15 minuters tidsupplösning | Svenska kraftnät \(svk.se\)](#)

# Stakeholder communication

- National communication by TSOs
  - Focus on local implementation
- Nordic communication by NBM
  - Focus on common activities
  - NBM stakeholder reference group
  - Nordic webinar planned in June
- Implementation guide Q1 2022
  - Public consultation Q4 2021





# Thank you! Questions?

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