



28.11.2025

Fingrid Oyj

Changes to balancing service providers and balance responsible parties 11/2025 – summary

BSP & BRP Webinar 28.11.2025

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Agenda

- Background
- Changes, by topic:
 - Changes in reserves during Q4/2025
 - BRP imbalance deviation pricing changes
 - Send for confirmation: 05/2025 package
 - Consultation:
 - Independent Aggregator
 - MARI
 - Summary
- Follow-up:
 - How to participate?



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Background: Why changes?

Changes in Balance Responsible Parties and Reserve Suppliers, including:

- Increase in the number of parties and service providers
- New roles, new business models and chained supply chains
- Large-scale utilization of information systems and central control systems
- Increase in new technologies online and in the market (in particular small and/or dispersed sites)

Changes in the operating environment of the TSO, including:

- Changes in the electricity system and electricity market
- Legislative amendments
- Updating contracts



Background1: FG-EV BSP & BRP changes compilation:

Topic	Objective/Content	Applies	Step (20.11)	Hearing (FG)	Planned Entry into force
Changes to reserves Q4/2025	Changes related to the mFRR reserve	mFRR BSP, BRP	In production/coming to production Q4/2025	-	Q4/2025
Changes in the pricing of balance responsible parties	Imbalance pricing updates	BRP	Stakeholder consultation	21.11.2025-22.12.2025	*Q1/2026?
"Megapaketti12025_5"	Corrections and updates to the terms and conditions to take into account the changed operational situation	Kaikki reservit ja BRP	To be confirmed by the Energy Authority (as of 10.11.2025)	13.5.–12.6.2025	*1.9.2026
Itsenäinen aggregointi (IA)	Independent aggregation to mFRR reserve, corrections	aFRR, mFRR BRP	Stakeholder consultation	21.11.2025-22.12.2025	*Q4/2026-Q1/2027
MARI	Changes to the mFRR reserve caused by the MARI connection	mFRR, BRP	Stakeholder consultation	21.11.2025-22.12.2025	*Q1/2027

***Fingrid confirms the content and entry into force with a separate notification**

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Changes in the mFRR Energy Market during Q4/2025

Floating Deadband in mFRR Requests

- From 6.11. Fingrid is piloting a floating ± 50 MW deadband in mFRR requests
- The deadband is activated when the change between consecutive FRR requests would be less than 50 MW
- The goal is to reduce changes in the amount of mFRR activated in Finland.
 - No direct impact on individual operator activations (this also depends on the prices of the bids)
- Based on the first weeks, the deadband has not reduced changes in mFRR activation as expected
- Fingrid will continue the pilot until the end of the year and keep analyzing the deadband

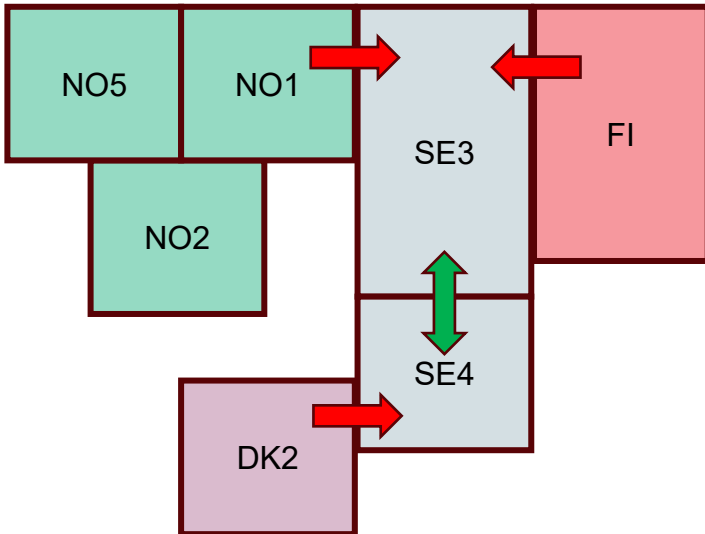
Green = Finland's mFRR regulation request
Blue = Finland's balance error (counter value)



Last spring...

Before bid selection

- Upregulation need in all the zones in the picture
- All zones except SE3 and SE4 have many upregulation bids available
- No cross-border transmission capacity available for import to SE3 and SE4

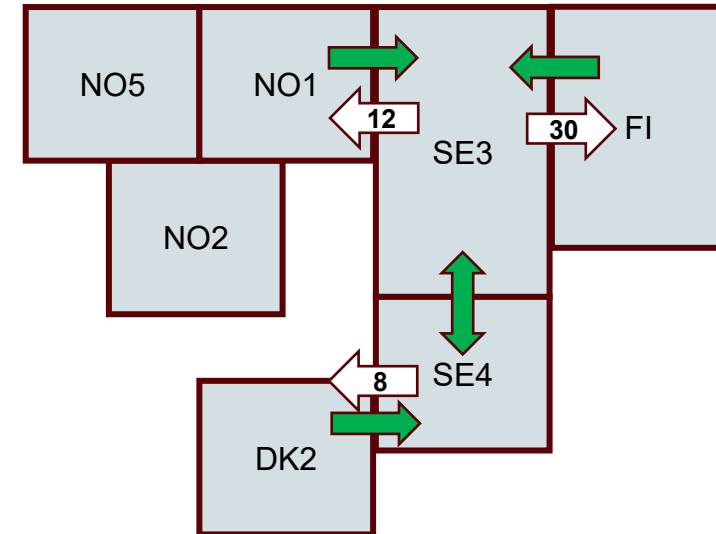


- SE3 must select an indivisible bid to meet regulation needs
- Bid size is 100 MW
- Balancing need is exceeded by 50 MW as a result
- This energy is transferred to other areas, where less upward regulation is activated or even activation in the opposite direction is required

➡ mFRR ATC > 0
➡ mFRR ATC = 0

After bid selection

- Balancing needs are satisfied
- Several upregulation bids were skipped in NO/FI/DK2 areas
- Since there is transmission capacity available after bid selection, the whole area is interpreted as a bottleneck-free area = same price in all areas



Algorithm Change to Fix Illogical Price Spread

- A new version of the Nordic mFRR energy market algorithm was introduced on 25.11.
 - The definition of a bottleneck-free area was changed so that a border is considered a bottleneck if transmission capacity limited energy exchange at any stage of the offer selection process.
 - No changes to offer selection logic
 - The regulation need is still aimed to be met (satisfy needs, maximize socioeconomic benefit)
- The price of the indivisible offer should not spread illogically
- Delays in price publication and need for manual corrections should be reduced significantly

Real-time publication of mFRR energy prices

- Fingrid will start real-time publication of mFRR energy prices at the beginning of December
 - More real-time information about the state of the electricity system
 - Removal of insider information
- Three new datasets will be published in open data:
 - mFRR Scheduled Activation Price – real-time publication (400): 7.5 min before market time unit
 - mFRR Direct Activation Upward Regulation Price – real-time publication (ID 401): at the time of direct activation
 - mFRR Direct Activation Downward Regulation Price – real-time publication (ID 402): at the time of direct activation
 - Price is based on either Nordic market results or local selections
 - Prices may not be final mFRR energy prices!
- Separate notification will be given about the start of publication.
- Publication may be interrupted if it affects security of supply or the predictability of the power system negatively

Changes to BRP imbalance pricing



28.11.2025

Jukka Kakkonen

Consultation: Change proposal to BRP imbalance pricing

webinar on the consultation

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Proposal and estimated impacts

- Fingrid proposes a change where the consideration of aFRR and mFRR price components in determining the imbalance price would be modified to a joint volume-weighted average approach.
- The calculation of the imbalance price for each imbalance settlement period would use the volumes for both components fulfilling the balancing need in Finland's bidding zone (*satisfied demand*).
- The goal is to ensure a more justified determination of system balancing costs in situations where aFRR and mFRR activations occur in different proportions relative to supply

Estimated impacts of the change:

- The imbalance price difference compared to the day-ahead market price will decrease on average.
- Imbalance costs for Balance Responsible Parties (BRPs) will decrease.
- BRPs' collateral requirements will decrease slightly.
- Fingrid's balance service revenue from imbalance energy trading will decrease.
- Fingrid's balance service revenue through production, consumption, and imbalance volume fee components will increase.

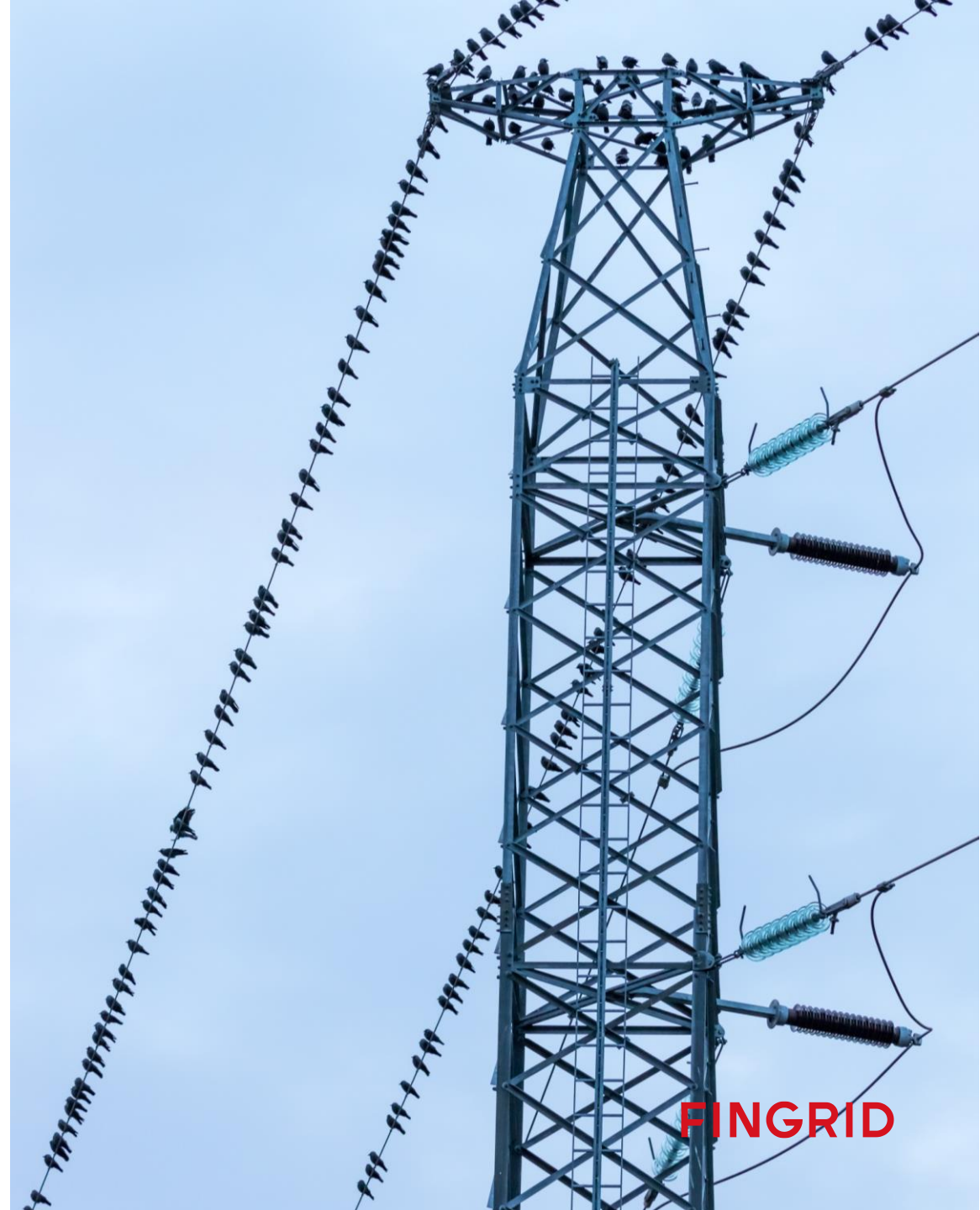
Other topics

- The change in price determination does not require a terms and conditions amendment.
- Change would have an impact also to balance service providers
 - When the activation prices of mFRR or aFRR are unusually high, the financial incentives for fully activating the most expensive bids are weakened, as the imbalance price can be lower than the reserve activation price.
- The pricing mechanism will be reviewed again:
 - In the Nordic accession to the MARI platform
 - In the implementation of the area control error model alongside Sweden's and Norway's PICASSO accession.
- Link to the consultation: [Changes to Balancing Service Providers and Balance Responsible Parties 11/2025 - summary – Fingrid](#)
- Fingrid wishes feedback to the proposal- both positive and negative

05/2025-Reserve package

Background:

- In May 2025, Fingrid launched a consolidated process ("Mega Package") in which updates were sought to the content of the contract terms and conditions of aFRR, FCR, FFR and mFRR balancing service providers and balance responsible parties. Link to previous news: <https://www.fingrid.fi/en/news/news/2025/consultation-on-changes-to-the-terms-and-conditions-of-reserve-suppliers-and-balance-responsible-parties-052025/>
- Justification for the proposed amendments:
 - Deficiencies/repair needs identified by Fingrid and customers in the current terms and conditions
 - Changed operating environment:
 - Lots of new actors and targets, new technologies
 - Changes in the control methods of sites and operators (e.g. IT-based central control)
 - Changes in the security environment



Recap 2025/05: "Mega package" the most significant changes proposed

- Balance Responsible parties:
 - Increased BRP minimum collaterals
 - Treatment of small-scale production and energy storage in imbalance settlement
 - Independent aggregator compensation model in imbalance settlement
- Balancing service providers:
 - Balancing service providers notification requirement of resource reserve use to connecting DSO
 - Balancing service providers (resource) grid code completion and notification requirement
 - The reserve supplier or its authorised representative must be available to Fingrid by telephone during the validity period of the accepted reserve bids
 - mFRR-energy Price determination changes (in moments of counter-activations)
 - mFRR 15 min activation time is removed
 - aFRR ja mFRR flexible procurement volume (in moments of scarcity)
 - Clarifying the deadline for capacity billing
 - Reserve security of supply requirements

The most significant changes based on the consultation responses

- The entry into force of the physical security requirements of the security of supply requirements has been increased to 10 MW per product-specific approved capacity of the reserve site/system. In addition, several specifications to other requirements have been presented.
- Capacity billing schedule will not be tightened
- Maintain the possibility to net the production of backup power equipment in consumption, for equipment intended only for disturbances
- Corrections and clarifications of content, terminology and requirements
- Changes to operating models (e.g. updates to the publication of information) that do not cause changes to the terms and conditions of the contract
- Detailed consultation statements and their consideration in the final terms and conditions specified in the document: *"kuuleminen tasevastaavien ja reservitoimittajien ehdoista ja edellytyksistä 5/2025 – koonti ja vastaukset (toimitettu energiaviraston vahvistettavaksi)"*
- The proposed amendments to the terms and conditions of balance responsible parties and balancing service providers (Appendix 1) are preliminarily planned to enter into force simultaneously on 1 September 2026, but no later than 12 months after the Energy Authority's confirmation. At this stage, no further action is required from the parties. Fingrid confirms the content and entry into force with a separate notification.

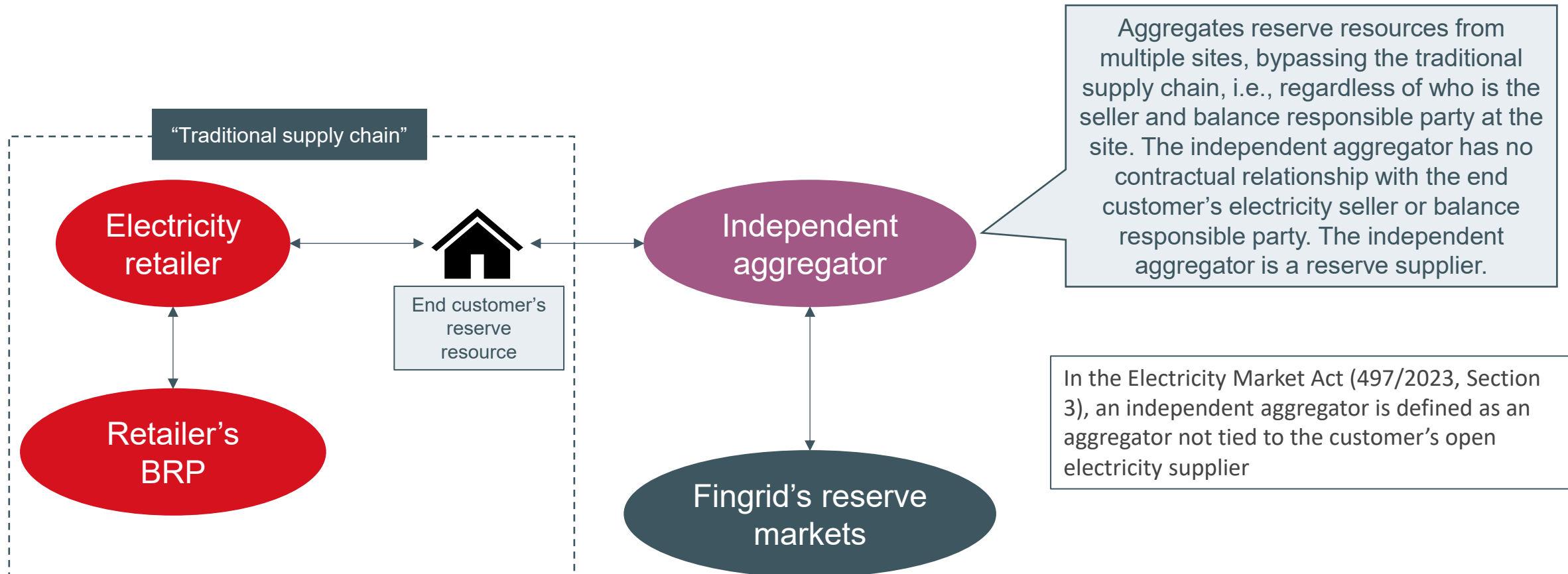
Upcoming Changes in terms and conditions (Independent Aggregator, MARI)

An aerial night view of a city, likely Helsinki, featuring a large Ferris wheel, a cathedral, and various urban buildings. The scene is illuminated by city lights, creating a vibrant night-time atmosphere.

Model for Independent Aggregation

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Independent Aggregator in Reserve Markets



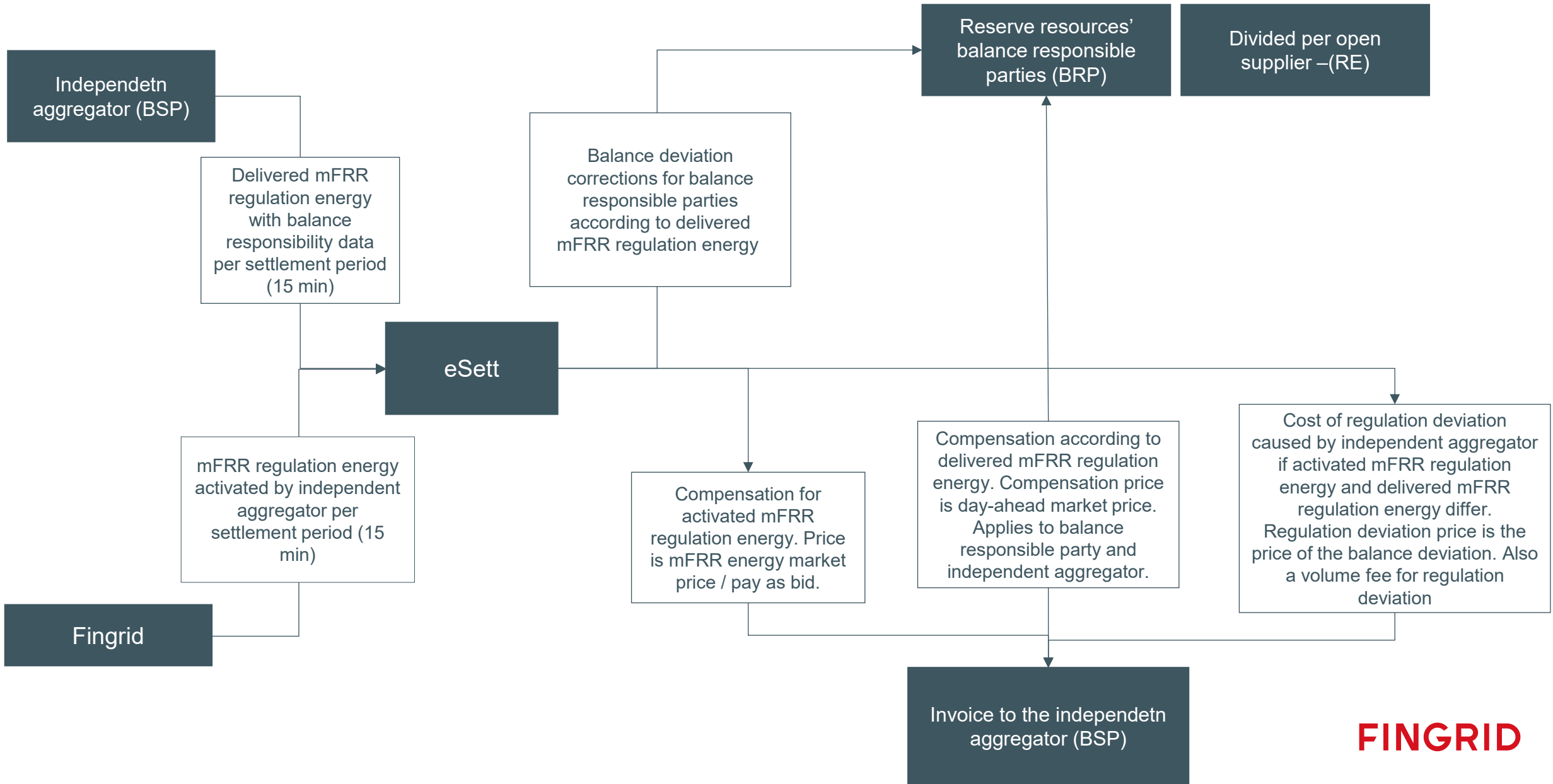
Upcoming changes

- Upcoming changes to independent aggregation terms do not affect current operators in the mFRR market (if the operator continues to aggregate reserve resources from one balance in the same regulation object)
- Enables aggregation of reserve resources from different balances into the same regulation object (contractual or independent aggregation). A balancing service provider can aggregate resources from their own balance and act as both a contractual reserve supplier and an independent aggregator
- Expands mFRR reserve aggregation possibilities by introducing the independent aggregation model
 - Compensation model and balance deviation corrections
 - Independent aggregator's financial responsibility for regulation deviations
 - The model is similar to the independent aggregation model introduced in aFRR on 5.6.2025
- Linear collateral requirement for independent aggregators in mFRR and aFRR reserves
- New delivered regulation energy message for independent aggregators and reserve suppliers aggregating from multiple balances in the same regulation object


Upcoming Changes

- Datahub has introduced a new authorization functionality for site balance responsibility data as of 11.11.2025. If the independent aggregator's reserve resource is at a distribution network site, the independent aggregator must use Datahub authorization to retrieve and transmit site balance responsibility data. Other reserve suppliers can also use the authorization functionality
- Verification and approval process for mFRR technical requirements (Appendix 2) will include requirements related to independent aggregation: the independent aggregator must present calculation of delivered regulation energy and related reference power per regulation object, divided by balance responsibility, and a description of how the reserve supplier maintains up-to-date balance responsibility data for its reserve resources. Also planning to add real-time reference power transmission per regulation object for independent aggregators.

Independent aggregator



Estimated schedule

	2025		2026											
	11	12	1	2	3	4	5	6	7	8	9	10	11	12
mFRR independent aggregator		Cons.	FG	Regulator (EV) approval						FG?	EV?			

The schedule will be specified as the implementation progresses

An aerial night view of a city, likely Helsinki, featuring a large Ferris wheel, a cathedral, and various urban buildings. The word "MARI" is overlaid in the center.

MARI

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Key Changes to mFRR Terms and conditions

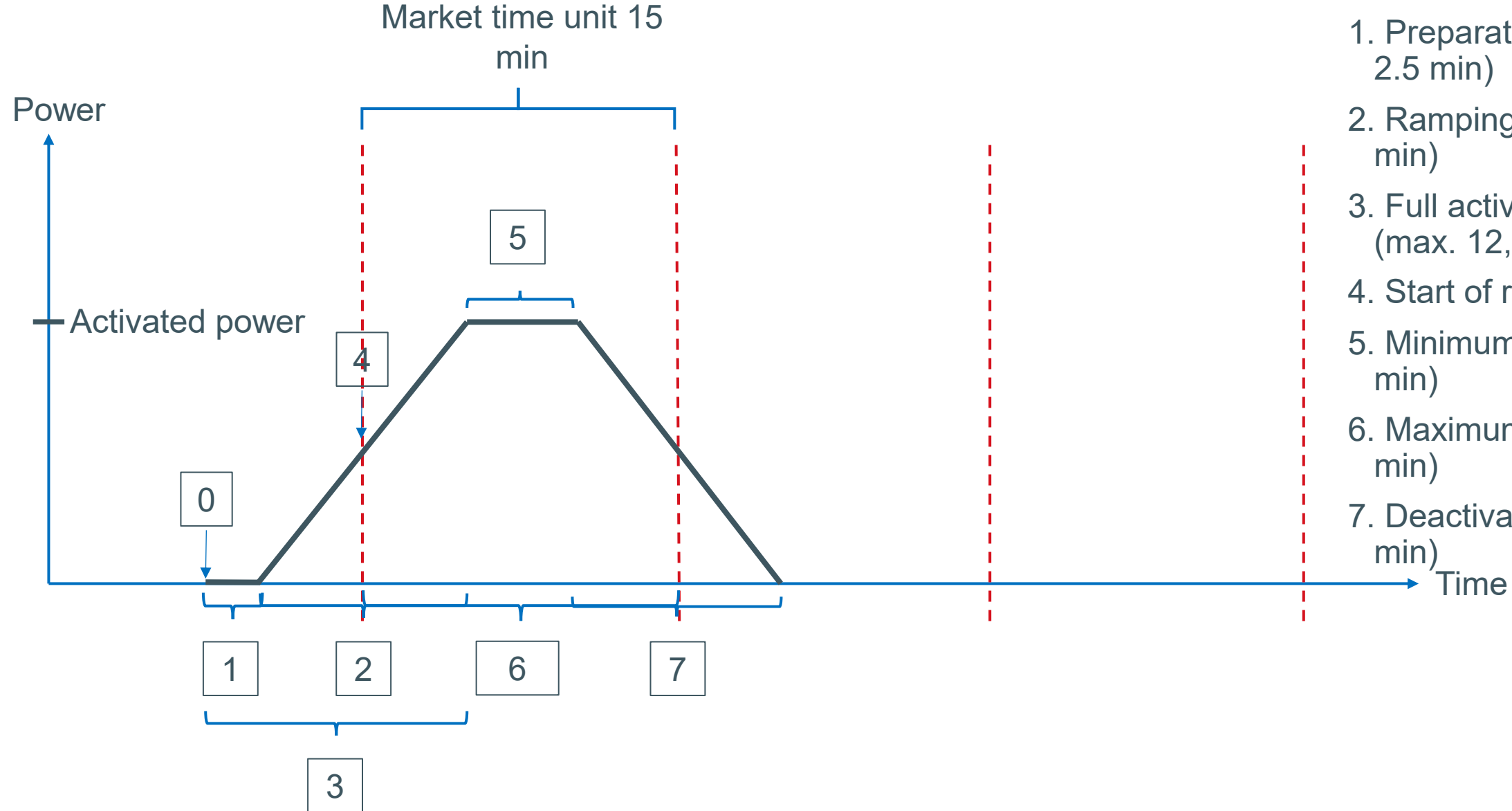
- From Nordic to European marketplace
- Standard product for mFRR energy introduced, key changes:
 - Bid gate closure time 25 min before market unit
 - Minimum and maximum prices according to ACER decision $\pm 15,000$ €/MWh
 - Direct activation primarily via common marketplace
 - Separate prices for scheduled and direct activation

Features of the mFRR Standard Product

mFRR-standardituote	
Bid gate closure	Qh-25 min
Activation type	Scheduled or direct activation
Activation time	Max 12,5 min
<i>Preparation time</i>	<i>Max 2,5 min</i>
<i>Ramping time</i>	<i>Max 10 min</i>
<i>Deactivation time</i>	<i>Max 10 min</i>
<i>Maximum duration at activated power</i>	<i>15 min</i>
<i>Minimum duration at activated power</i>	<i>5 min</i>
Minimum bid size	1 MW
Bid granularity	1 MW
Maximum bid size	9999 MW
Maximum/minimum price	+/- 15 000€/MWh
Price Granularity	0,01 €/MWh

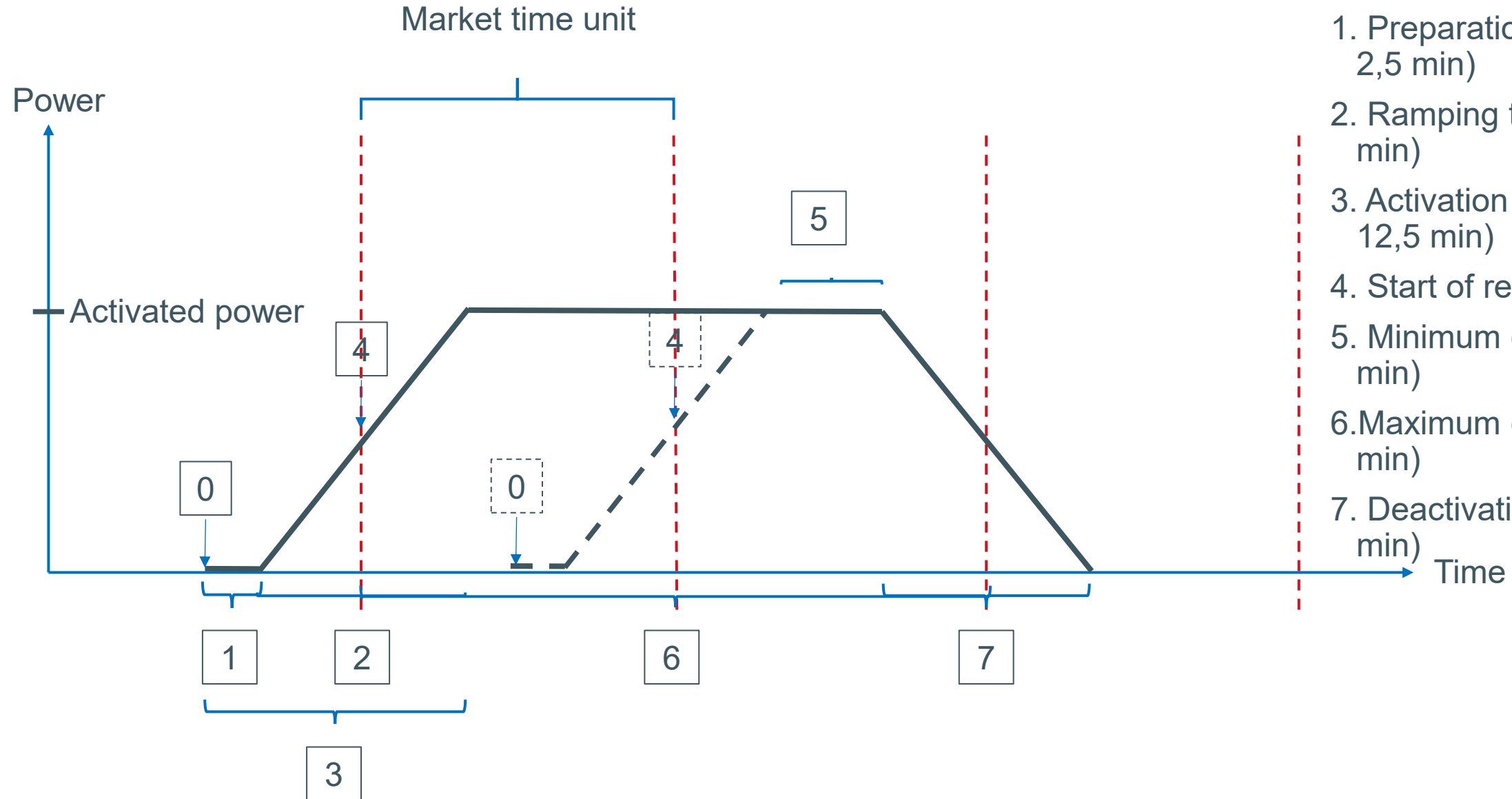
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Scheduled activation



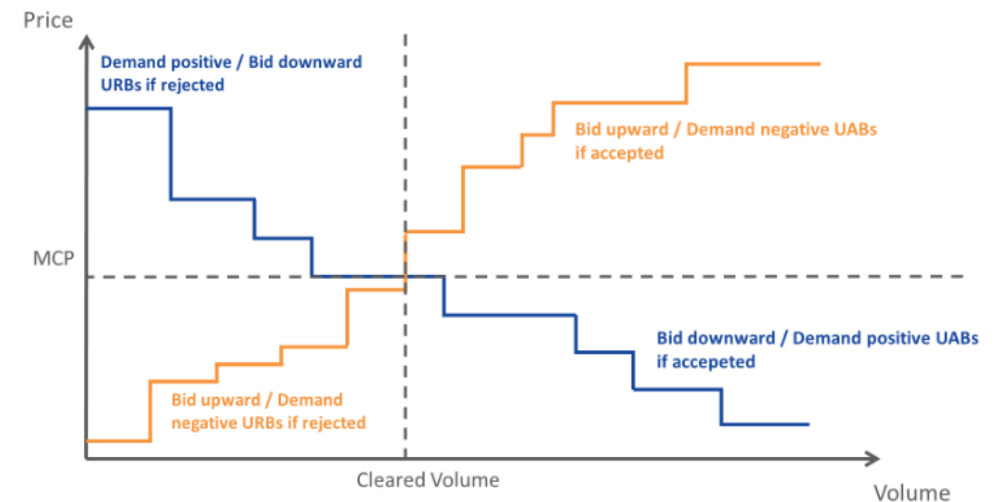
0. Moment of activation
1. Preparation time (max 2.5 min)
2. Ramping time (max. 10 min)
3. Full activation time (max. 12,5 min)
4. Start of regulation trade
5. Minimum duration (5 min)
6. Maximum duration(15 min)
7. Deactivation (enint. 10 min)

Direct activation



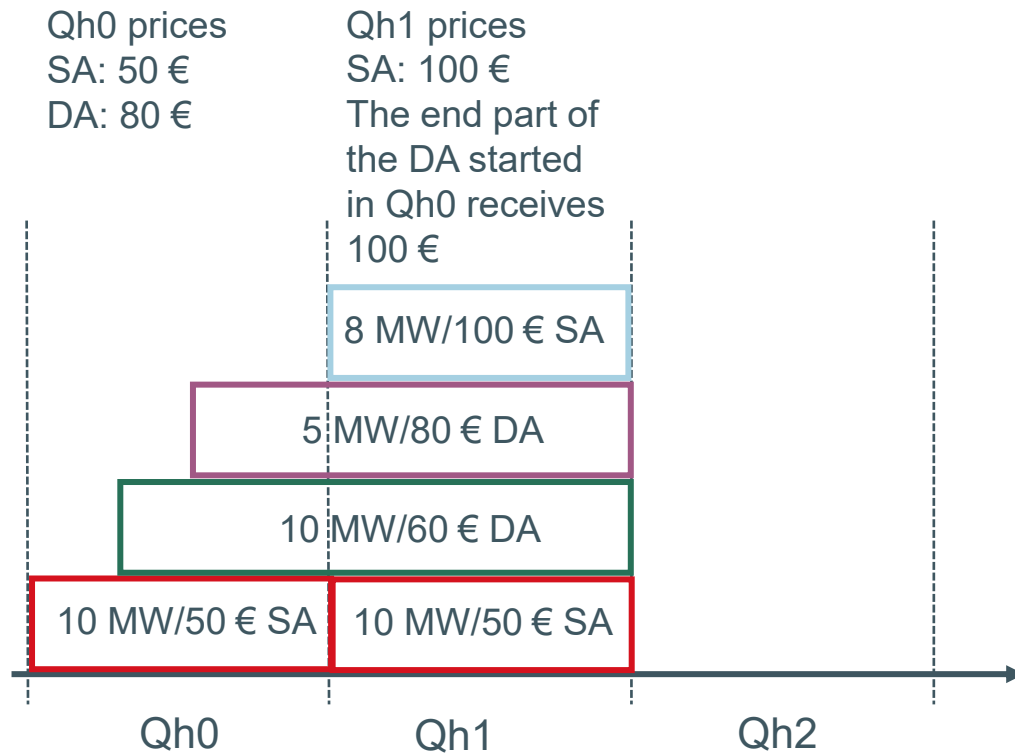
Scheduled and direct activation prices

- According to the pricing methodology
 - Marginal price for scheduled activation
 - Marginal price for direct activation up or down in each optimization round
- Prices are obtained from MARI or, in exceptional cases, based on locally selected bids
 - Principles are similar to the Nordic mFRR energy market
- Scheduled activation price is used for both directions
- Direct activation can have multiple prices per market period
- The highest sets the upward regulation price, the lowest sets the downward regulation price

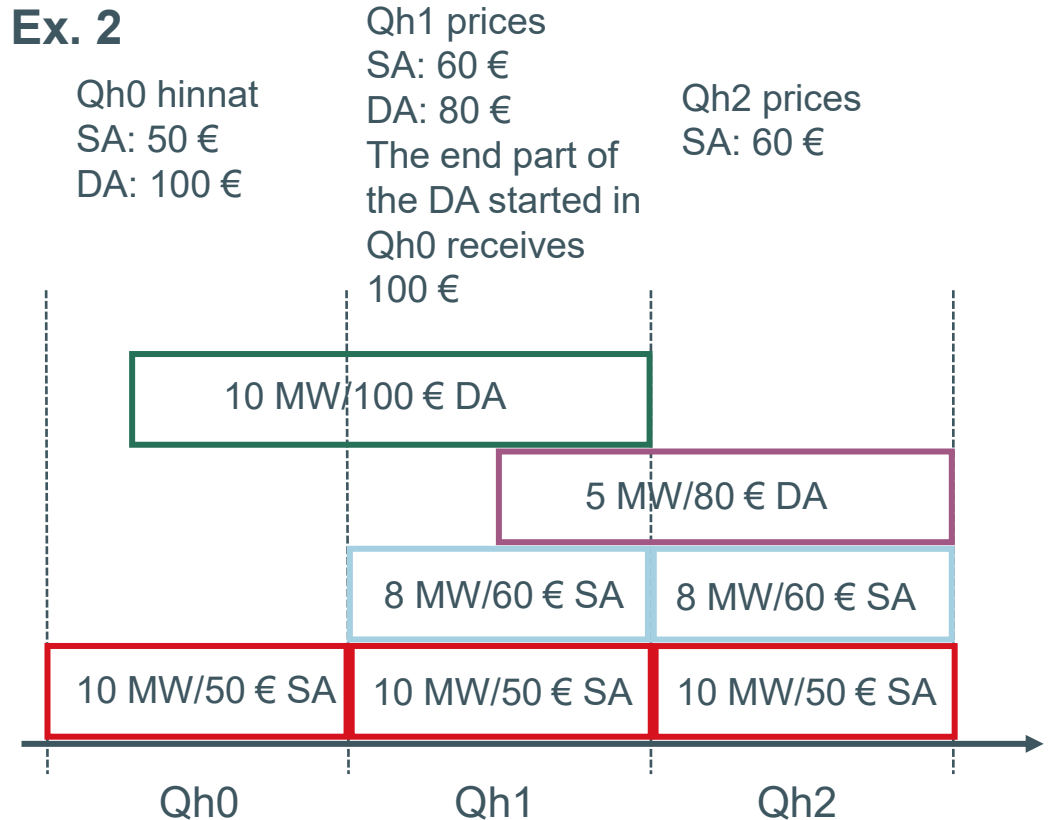


Examples of Scheduled and Direct Activation Prices

Ex. 1



Ex. 2



Proposed changes to the terms and conditions for balance responsible parties

Appendix 1, Part 1: fingrid oyj's general terms and conditions concerning balance management:

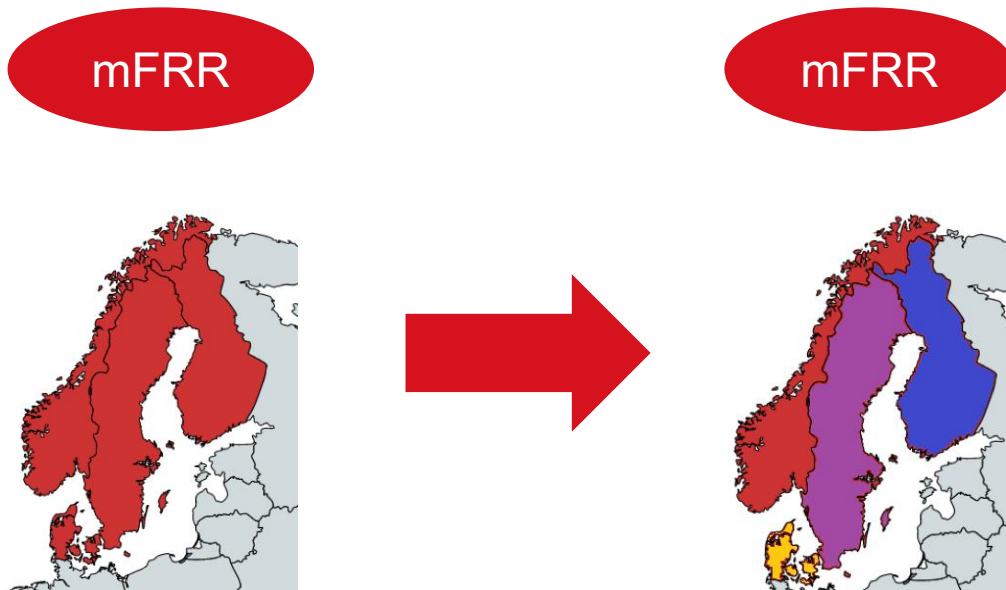
- Submission of production plans
- Pricing of power trades

Appendix 2: Fee components and determination of fees:

- Determining the dominating direction
- Incentivizing component
- Determining the value of avoided activation

Determination of the dominating direction

- The determination of the dominating direction will change when joining the MARI trading platform.
- Currently: Based on the mFRR energy activated in the uncongested area.
- MARI: By bidding zone and based on the satisfied demand of mFRR energy.
- Satisfied demand = Finland's forecasted balancing energy demand for mFRR that has been satisfied on the trading platform/market.



Incentivising component

- Currently, the imbalance price is set based on the value of avoided activation and the incentive component when there is no dominating direction from mFRR.
- The incentive component will be discontinued when joining the MARI trading platform.
- Currently: Value of avoided activation + incentive component = Finland's day-ahead market price.
- MARI: The incentive component will be removed, and the imbalance price will be directly based on the value of avoided activation (when there is no dominating direction from mFRR).

Value of avoided activation (VoAA)

- Currently: needed if there was no mFRR -regulation or if there was an equal amount of regulation in both directions (uncongested area)
- MARI: The value of avoided activation is needed when an imbalance price area(bidding zone) has no demand or no balancing energy activated for its direction.

Cases when VoAA is needed when in MARI:

- No mFRR demand in the bidding zone
- The total demand of the bidding zone is netted
- The total demand in the uncongested area is netted
- The net satisfied demand for the bidding zone is exactly zero

Value of avoided activation (VoAA)

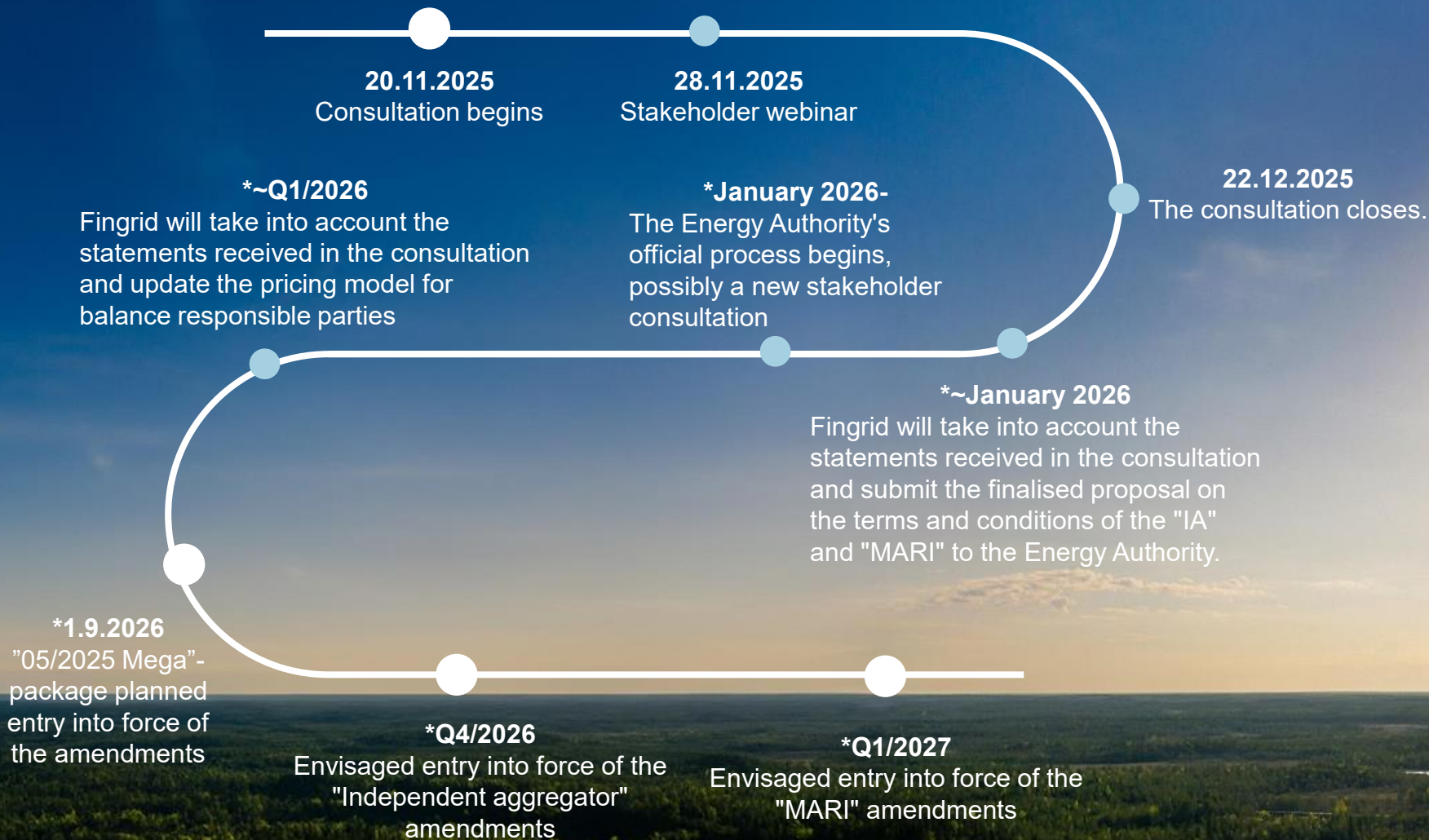
- The demand of the bidding zone is fully netted – no balancing energy activation for that bidding zone (more likely case)
 - Currently: The value of avoided activation shall be calculated as the average of the first available up-regulation and down-regulation bids in the mFRR energy market in the Finland bidding zone
 - MARI: The price for the value of the avoided activation will be set as same as the scheduled activation price in the mFRR energy market
- In a situation where the scheduled activation price of the mFRR energy market is not available for the settlement period, the value of avoided activation is calculated based on Finland's local up- and down-regulation bids in the mFRR energy market.

Balance management

- It is specified that production plans must also be prepared and submitted for energy storage facilities. Energy storage is treated in terms of production status according to the same principles as power plants.
- Production plans must be submitted to Fingrid no later than 25 minutes before the start of each balance settlement period. If trading takes place on intraday markets after this, the plans must be updated.
- The pricing of power trades takes into account the mFRR changes regarding the determination of up- and down-regulation prices. The prices for scheduled and direct activations are separated according to European mFRR energy market practices. For power trades, the most advantageous of the following prices for the balance responsible party is used
 - The day-ahead market price for Finland's bidding zone, adjusted to be 10% more favorable for the balance responsible party
 - The scheduled activation price
 - The direct activation price for up-regulation (when Fingrid is buying electricity) or the direct activation price for down-regulation (when Fingrid is selling electricity).

Summary

Schedule: Changes in balancing service providers and balance responsible parties 11/2025



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* Fingrid confirms the content and entry into force with a separate notification

Next steps

How to participate in consultations?

- Please submit the statements in writing to Fingrid by 22 December 2025 by email to verkkosaannot[at]fingrid.fi, with the subject line:
 - "BRP and BSP consultation 11/2025"
- A statement form can be used when issuing statements.
- Additional information:
<https://www.fingrid.fi/en/news/news/2025/changes-to-balancing-service-providers-and-balance-responsible-parties-112025---summary/>

