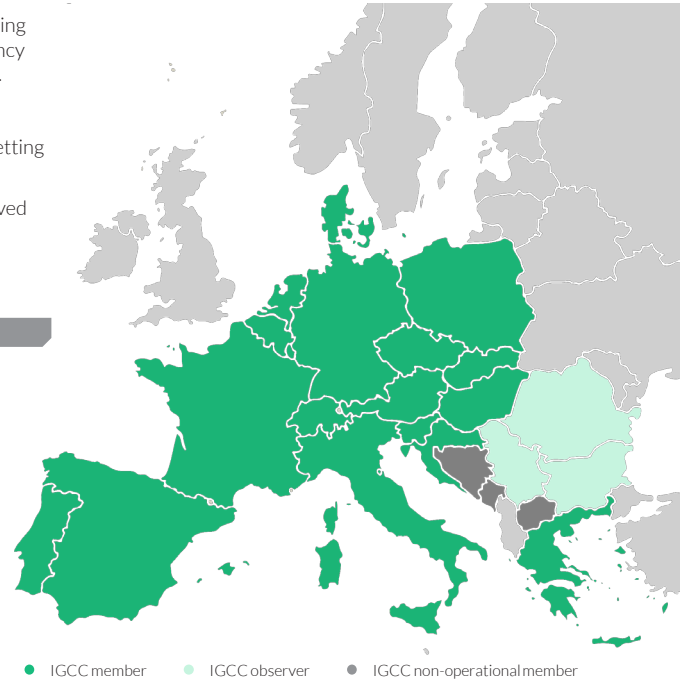


# IGCC – International Grid Control

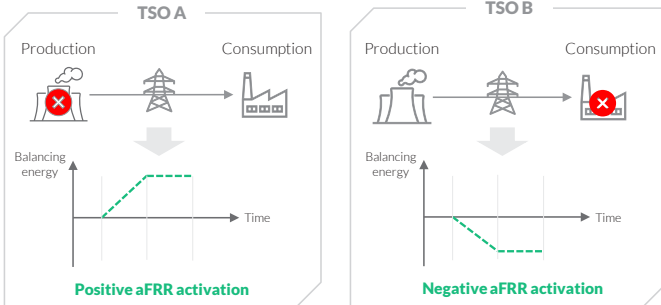
**Facts**

- Objective: European Platform for reducing overall volume of activated balancing reserves in Europe and avoiding simultaneous activation of automatic frequency restoration reserve (aFRR) in opposite directions - imbalance netting process.
- Launched as regional project in 2010.
- Chosen by ENTSO-E in 2016 to become European Platform for Imbalance Netting according to Article 22 of EB-GL.
- Currently 24 countries with 27 Transmission System Operators (TSOs) involved in project. Thereof 20 operational members and 4 non-operational members.
- On 24<sup>th</sup> June 2021 it was announced that IGCC fulfilled all requirements and accomplishes the target of creating a European Imbalance Platform.

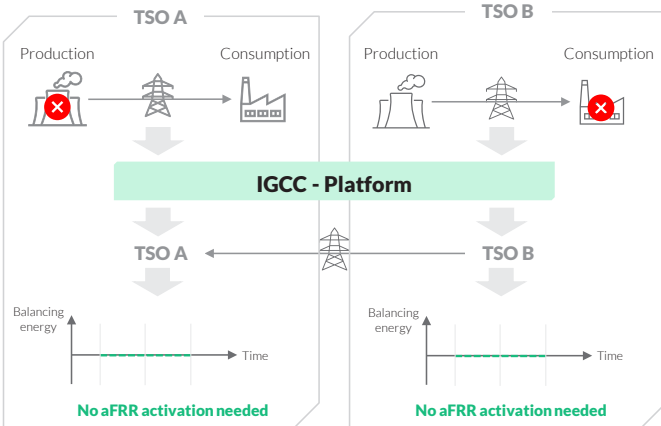


## Implementation Framework

### Situation without Imbalance Netting



### Situation with Imbalance Netting



- IGCC can avoid activation of counteracting aFRR through real-time optimization, if cross-border capacity is available.
- Advantage: Saving of activated aFRR and lower aFRR costs for all parties.

**Basic Principle**

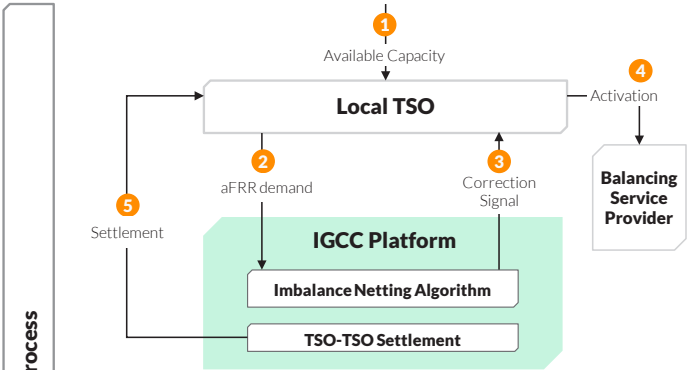
**Settlement**

### Pricing & Settlement

#### Harmonization through standard pricing & settlement

- Share gained benefits through reduced activation: Opportunity prices need to be determined and used for settlement.
- Settlement period of 15 minutes.

## IGCC Process



**Process**

- Available capacity coming from intraday timeframe and previous balancing timeframes.
- Each TSO communicates imbalance netting cross-border capacity limits and aFRR demand of its Load Frequency Control area (LFC) to platform.
- Platform calculates correction signal and sends it to LFC of each TSO and returns cross-border exchanges to members.
- TSO sends aFRR activation signal to Balancing Service Provider (BSP), taking into account the correction signal.
- TSO-TSO settlement function calculates settlement amounts and sends them to TSOs.

The IGCC Platform leads to **savings of counteracting aFRR of up to 1,025 GWh per month** in 2021 for the participating countries, resulting in monthly savings in value of € 22 million.

**Impact:** The platform is already live but concerns mainly TSOs. BSPs do not participate and do not have to adopt their systems and processes.

## Roadmap, as of 24.04.21

