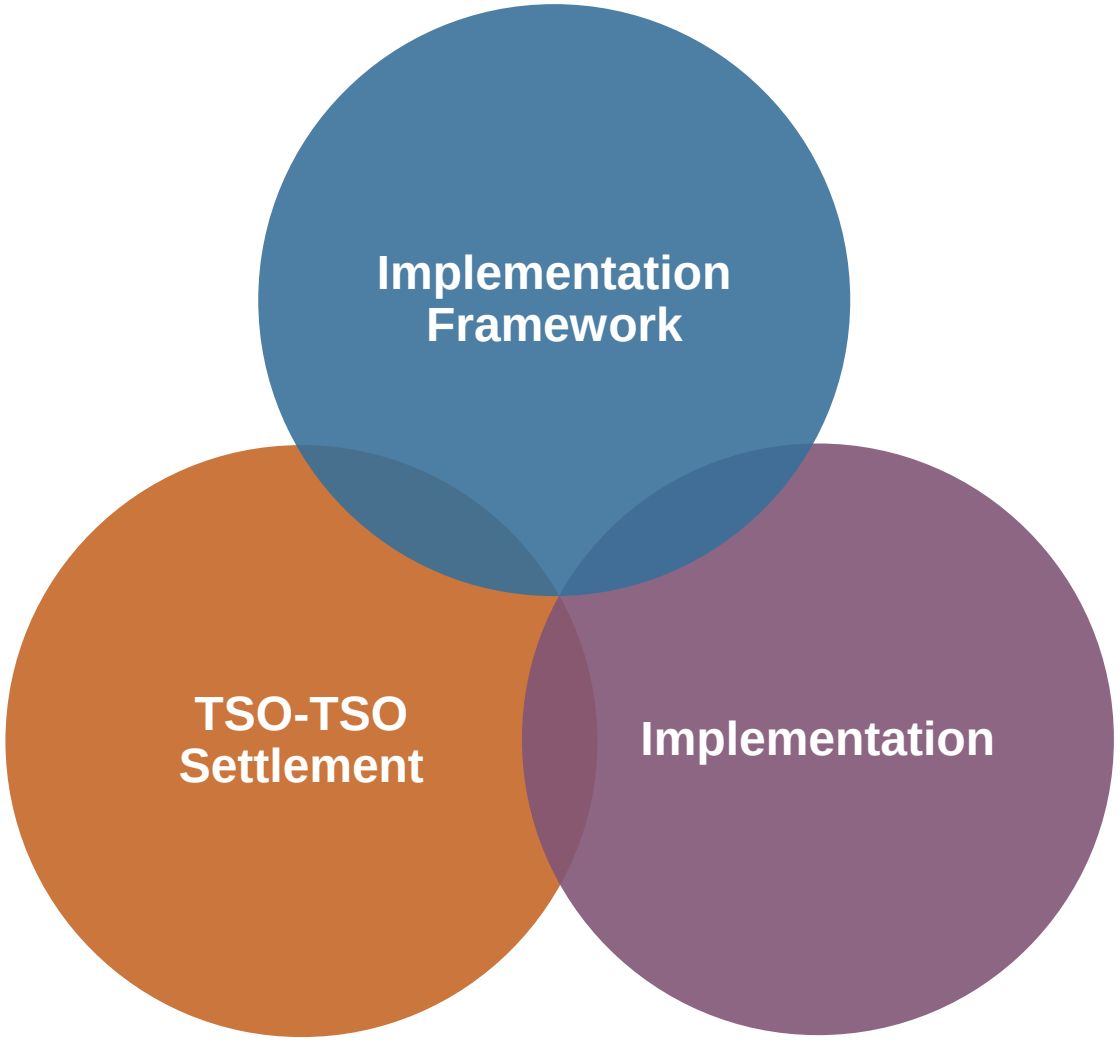
Imbalance Netting Platform

Markus Maurer

Balancing Stakeholder Group

GLEB

Requirements



Implementation Framework

By **six months after entry into force** of this Regulation, all TSOs shall develop a **proposal** for the **implementation framework** for a European platform for the imbalance netting process.

TSO-TSO Settlement

By **one year after the entry into force** of this Regulation, all TSOs shall develop a **proposal** for common **settlement** rules applicable to all **intended exchanges** of energy

Implementation

By **one year after the approval** of (…) the implementation framework (..), all TSOs performing the automatic frequency restoration (..) **shall use** the European platform to perform the imbalance netting process, at least for the **Continental Europe** synchronous area.

Implementation Framework

Requirements

GLEB Art. 22 - Requirements

The proposal in paragraph 1 shall include at least:

- the **high level design** of the European platform;
- the **roadmap** and **timelines** for the implementation of the European platform;
- the **definition of functions** required to operate the European platform;
- the proposed rules concerning the **governance and operation** of the European platform, (…)
- the proposed **designation of the entity** or entities that will perform the functions defined in the proposal
- the **framework for harmonisation of the terms and conditions** related to balancing set up pursuant to Article 18
- the detailed **principles** for **sharing the common costs**, including the detailed categorisation of common costs, in accordance with Article 23
- the **description of the algorithm** for the operation of imbalance netting process function in accordance with Article 58.

Implementation Framework

Structure and content

Implementation Framework - Structure

- Whereas
- Article 1: Subject matter and scope
- Article 2: Definitions and interpretation
- Article 3: High-Level design of the IN-Platform
- Article 4: Implementation of the IN-Platform
- Article 5: Functions of the IN-Platform
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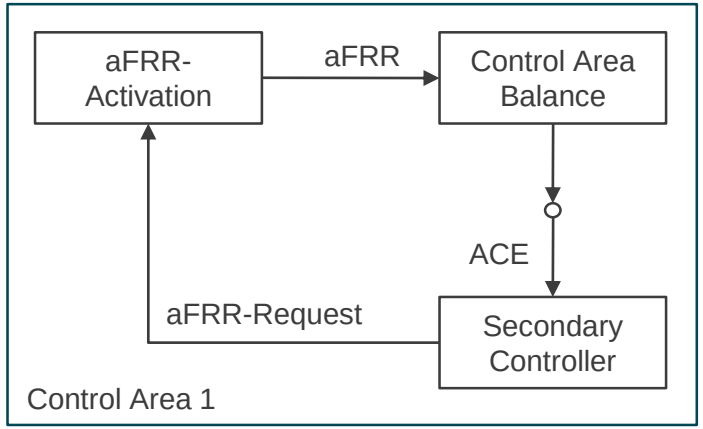
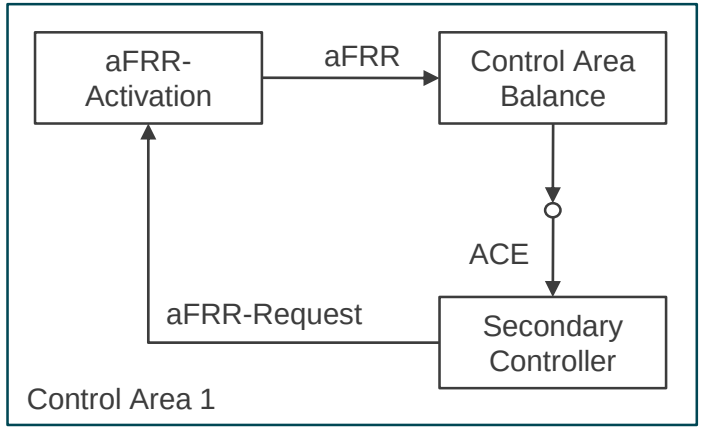
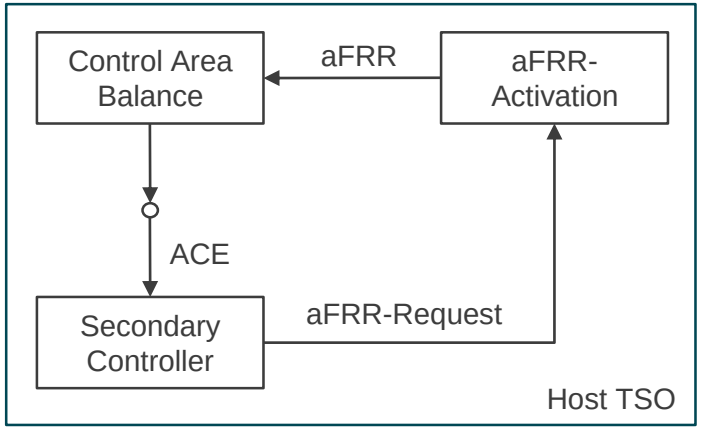
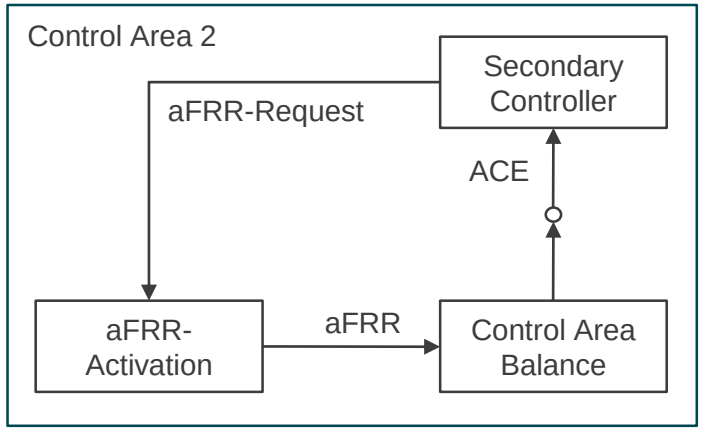
High-Level design of the IN-Platform

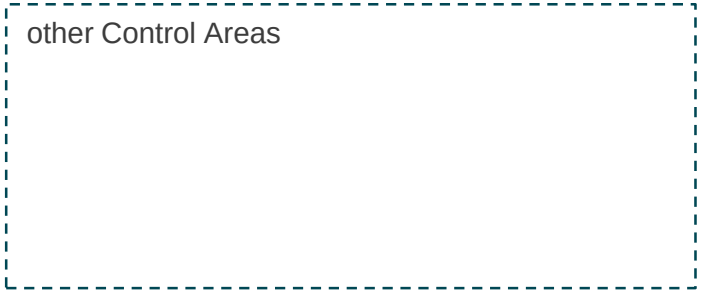


High-Level design of the IN-Platform

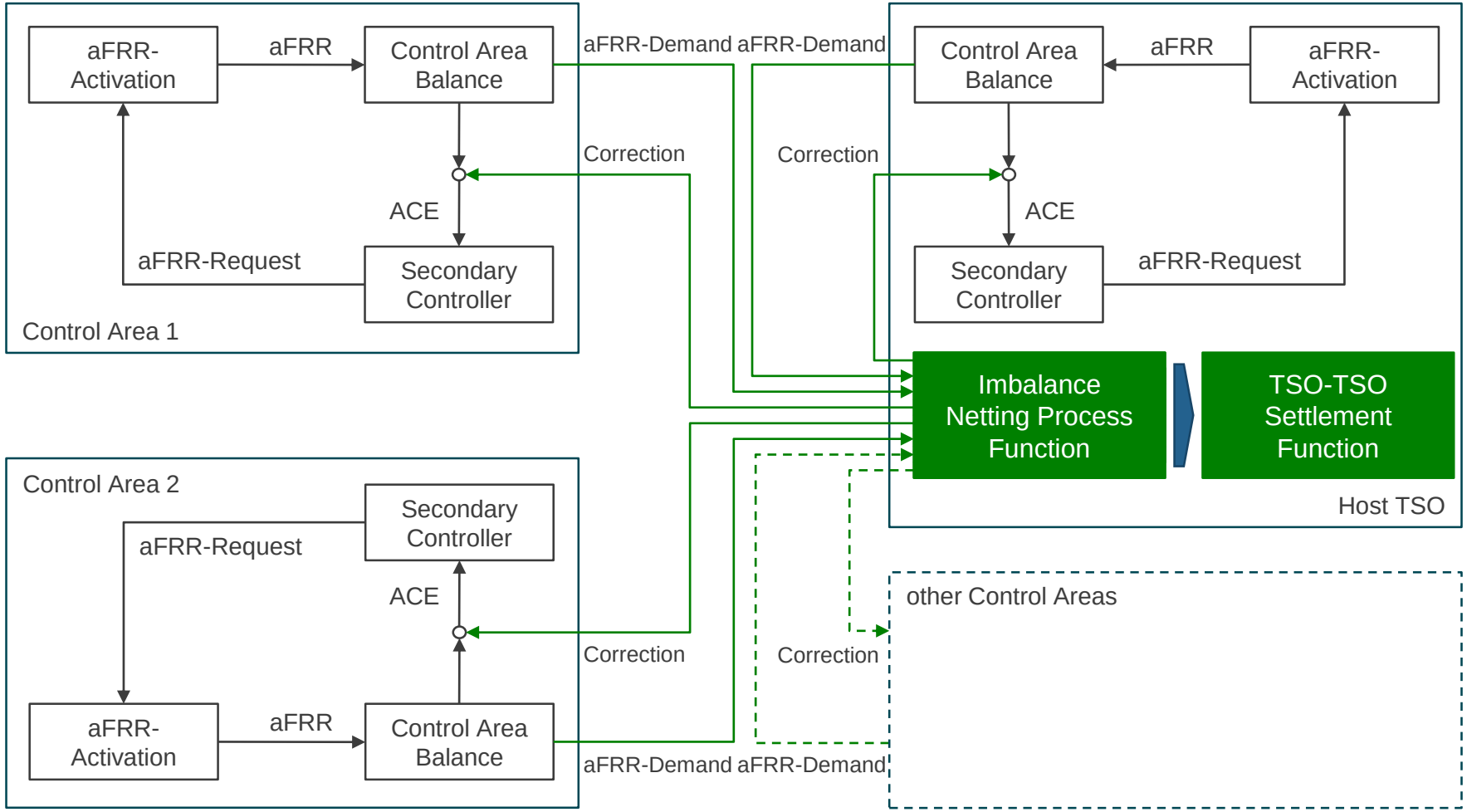








High-Level design of the IN-Platform



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Implementation of the IN-platform

1. Existing project **IGCC** is the **implementation project** which will become the IN-Platform
2. Designation of entity: all TSOs shall designate the entity responsible for operating the IN-Platform within 6 months after approval of the Implementation Framework
3. Adaption of IGCC: all member TSOs shall **amend the IGCC** to **fulfil** the **Implementation Framework** (…)
4. Development and adaptation: all member TSOs shall **implement** all **necessary amendments** to the functionalities of IGCC in accordance with the Implementation Framework no later than eleven months
5. Testing: the host TSO and every member TSO (…) shall **test the functions** of the IN-Platform (…). The testing shall be successfully finished by eleven months after the approval of the Implementation Framework
6. Go-live: all member TSOs shall **make the IN-Platform** as an adaption of IGCC **operational** at latest by **one year after the approval** of the Implementation Framework;
7. National implementation: all member TSOs shall **complete the implementation** of necessary changes at the latest by eleven months after the approval of the IF
8. Accession to the IN-Platform: all TSOs performing aFRR shall **strive for an early accession** to the existing IGCC platform. All TSOs shall use the IN-Platform at the latest twelve months after the approval of the Implementation Framework, i.e. accede to IGCC and use it by this deadline

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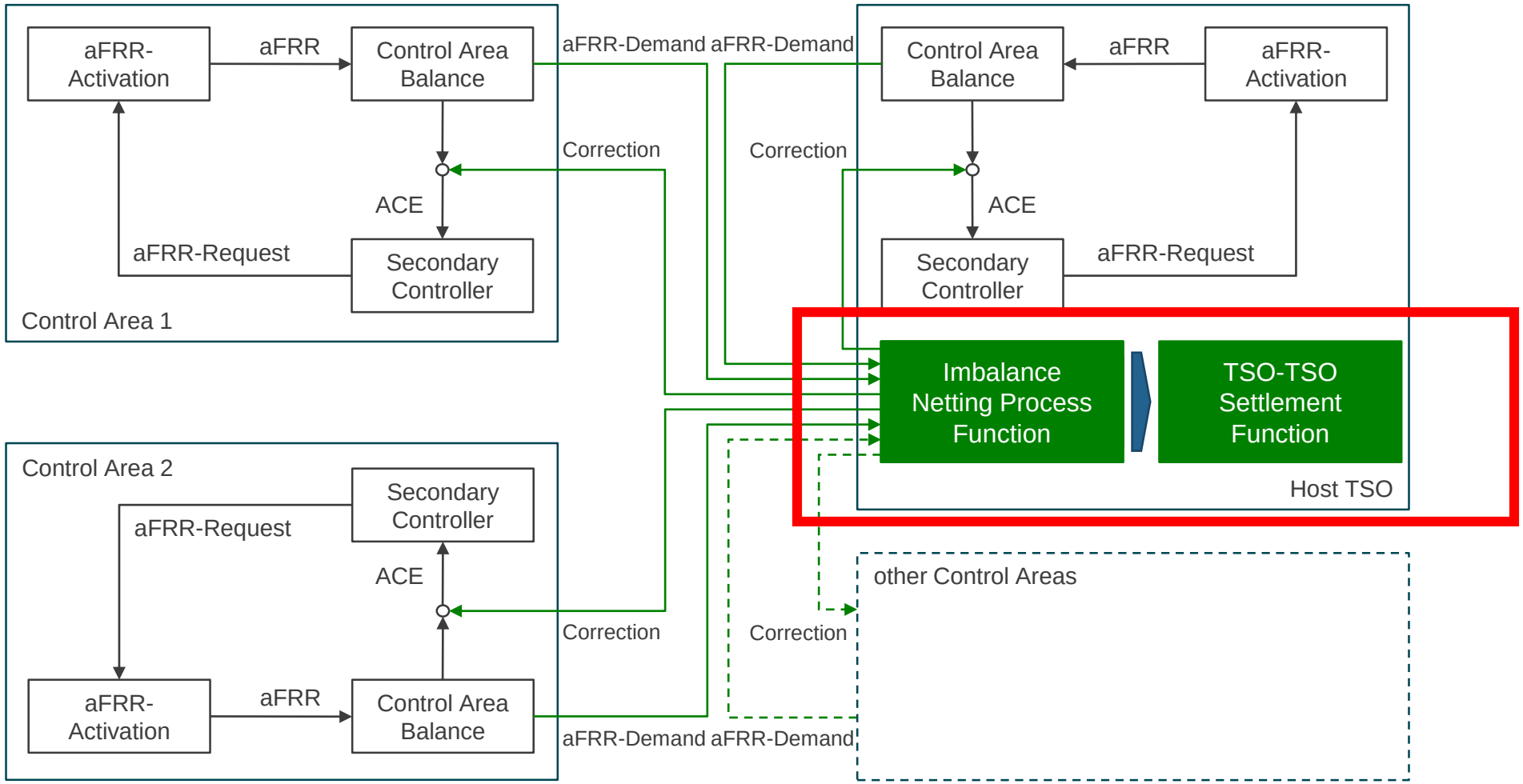
Functions of the IN-Platform



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Governance

Decision making

Steering Committee
- The decision making body
- Superior body to the EG
- Meets at least once per year

entsoe
Reliable Sustainable Connected

Market Committee & System Operation Committee
- All TSO decisions

Expert - working level

Expert Group
- The expert body
- Proposes and evaluates concepts
- Meets regularly

Expert Group Convener
- Organization of the EG work
- Single point of contact between SC and EG

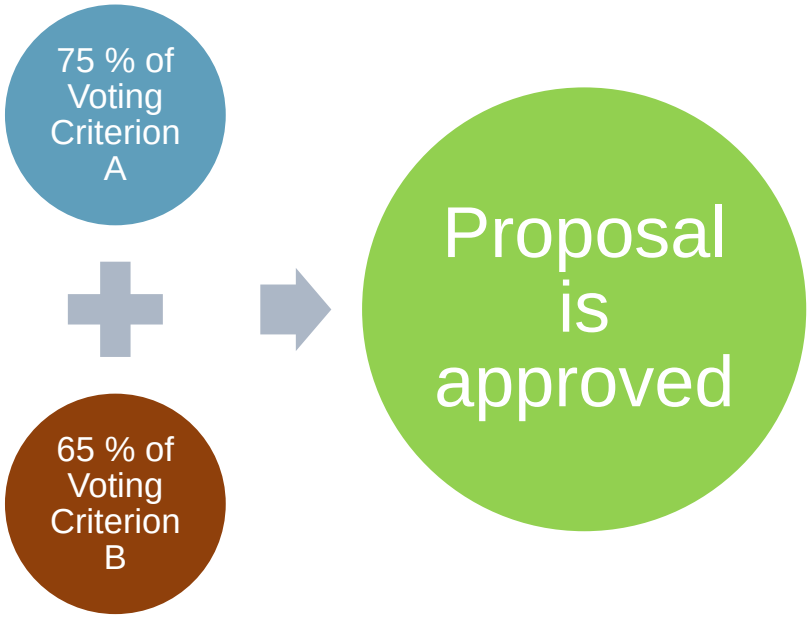
Facilitating Party
- Supports work within the EG and SC

- 1. Round: Striving for unanimity
- 2. Round: Qualified majority based on criteria defined in GL EB

  Current Numbers in IGCC MLA differ, IGCC MLA has to be adapted

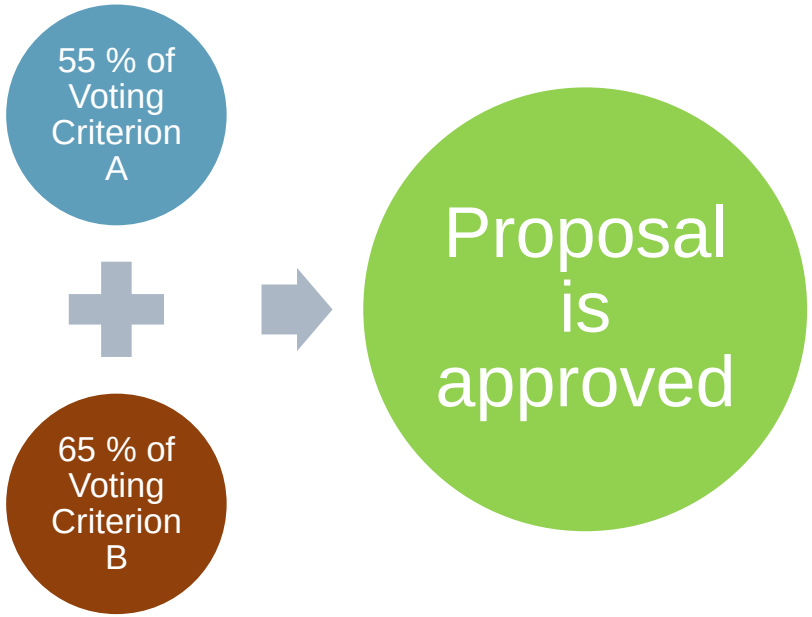
Current IGCC Numbers

criterion A: Vote per country
criterion B: Number of inhabitants



GL EB Numbers

criterion A: Vote per country
criterion B: Number of inhabitants



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Proposal of entity

Appointing one or more TSOs to operate the imbalance netting process function on behalf of all TSOs;

Reasoning

1. The imbalance netting process function of IGCC is already implemented and operates the imbalance netting process of 11 TSOs, by this further implementation costs can be saved.
2. IGCC is in operation since 2010 – the Host TSO of IGCC and the TSOs have gained a comprehensive operational experience in operation of the imbalance netting process.
3. Due to the impact on operational security, implementation of real-time processes and their coordination must be allocated within the infrastructure of the TSOs and fulfil the respective infrastructure security and reliability requirements.
4. A close interaction with other realtime operational processes is ensured.

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Cost sharing

Common costs include costs resulting from the SC decisions on proposals related to:

- **implementation of new functionalities** in the imbalance netting process function which have an **impact on** the **intended or unintended exchange** of energy;
- **implementation of new functionalities** in the TSO-TSO settlement function which have an **impact on the TSO-TSO settlement**;
- commissioning of joint studies;
- **operational costs** related to the operation of the imbalance netting process function which are **agreed as common costs by Member TSOs** in accordance with the decision process.
- **operational costs** related to the operation of the TSO-TSO settlement function which are **agreed as common costs by Member TSOs** in accordance with the decision process.
- All **participating TSOs** shall **pay its share of costs** (only for implementation) **also retrospectively** (only changes which will come after the **approval of the implementation framework**)

Due to historical evolution of IN, algorithm is owned by TransnetBW

For avoidance of any doubts: Historical implementation costs before approval of the implementation framework will not be shared amongst TSOs

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Principles of the algorithm I

- Proportional distribution
- Non discrimination

- Each TSO calculates the Demand and the Limits of its LFC Area;
- The Demands and Limits are sent to the imbalance netting process function;
- The imbalance netting process function calculates the Corrections whilst respecting the Limits; and
- The Corrections are sent to the TSOs and are used by them;

Principles of the algorithm II – Optimization regions

- Optimization regions allowed for control blocks with prior access to transmission capacities
- **aFRR cooperations** can form an **optimization region** with prior access to transmission capacities.
- The optimal distribution of activations in an optimization region obtained as a result of an aFRR cooperation shall be respected by the imbalance netting optimization process function, without reducing the overall netting volume
- In case an aFRR cooperation forms an optimization region, the remaining TSO are also allowed to participate in an optimization region
- This is valid as long as the **geographical region** of the member TSOs participating in the **IN-platform** differs from the **geographical region** of the member TSOs participating in the **aFRR-platform**
- In case the aFRR-platform is implemented, the IN-platform can be merged into the aFRR-platform.

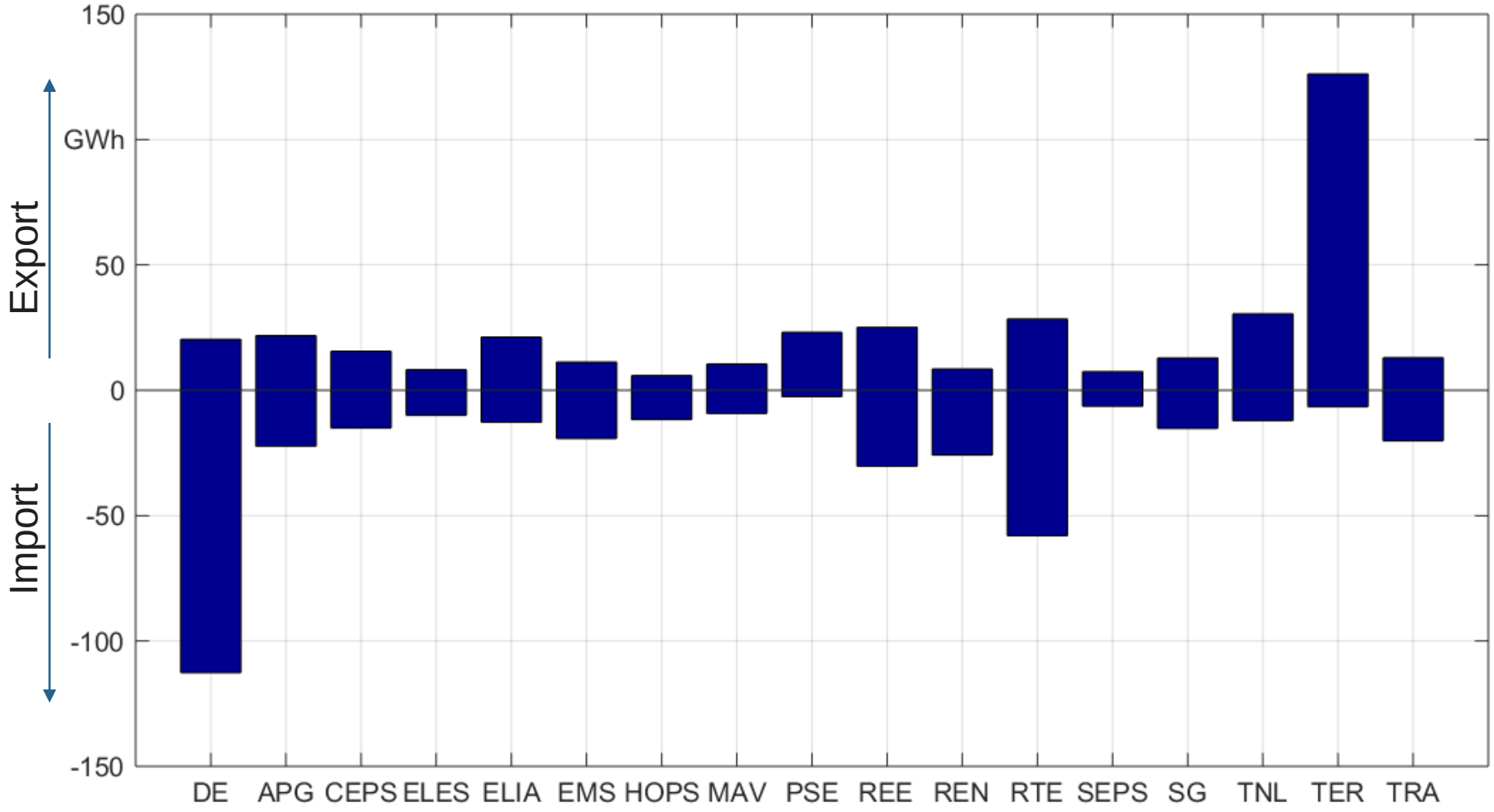
Required changes for IGCC

Requirement from GL EB	GL EB Article	Change in IGCC MLA	Adaption in IGCC algorithm
Governance – EG & SC	Art. 22	No	No
Governance – Decision making	Art. 4	Yes	No
Definition of functions	Art. 22	No	No
Proposal of entity	Art. 22	No	No
Sharing of costs	Art. 23	Yes	No
Algorithm – Basic principles	Art. 22	No	No
Algorithm – Optimization regions	Art. 22	Yes	No
Designation of entity	Art. 22	No	No
Settlement	Art. 50	Possible	No

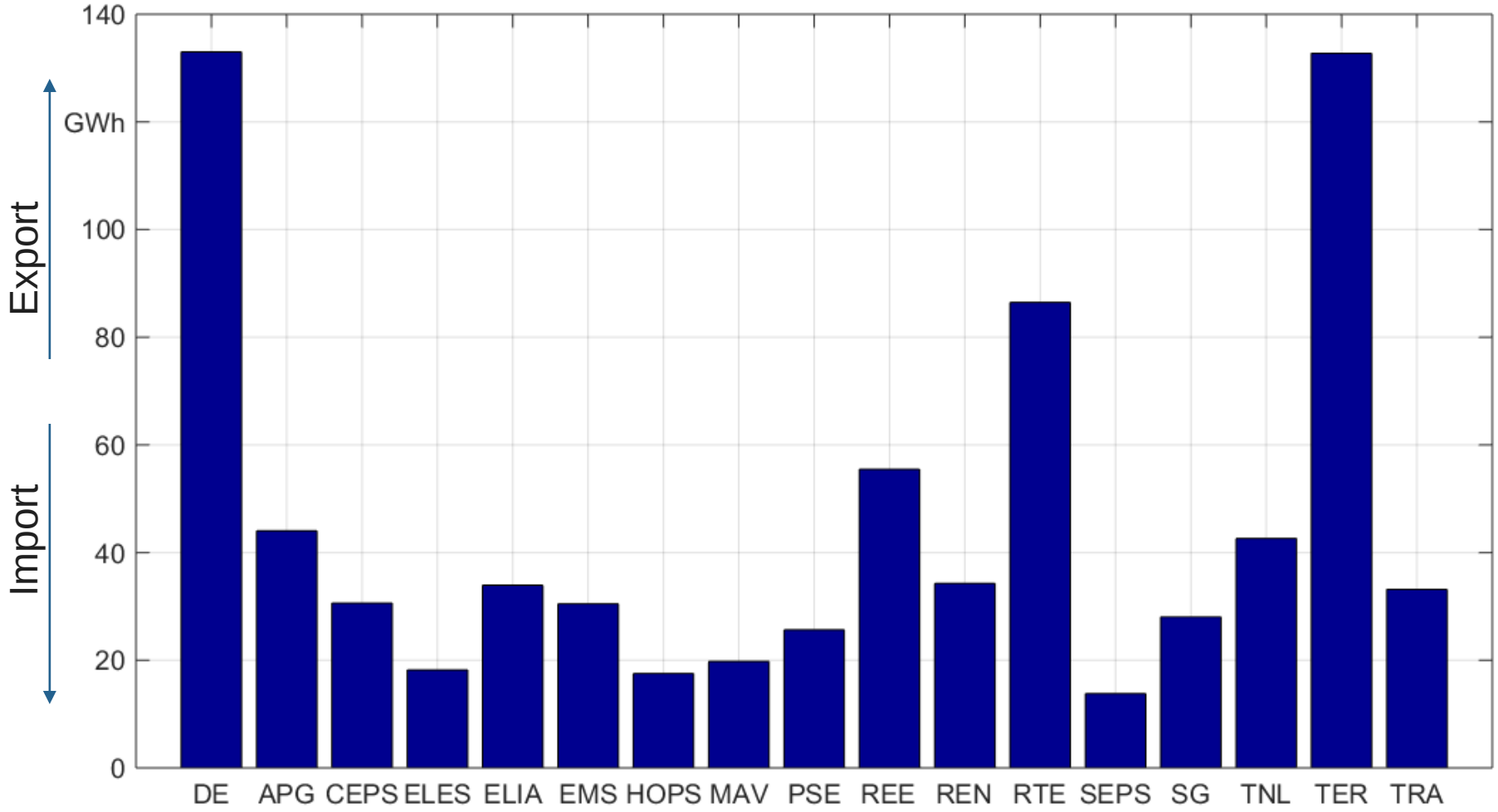
Impact Assessment

Preliminary results

Impact Assessment - Expected benefits – monthly netted volumes



Impact Assessment - Expected benefits – monthly netted volumes



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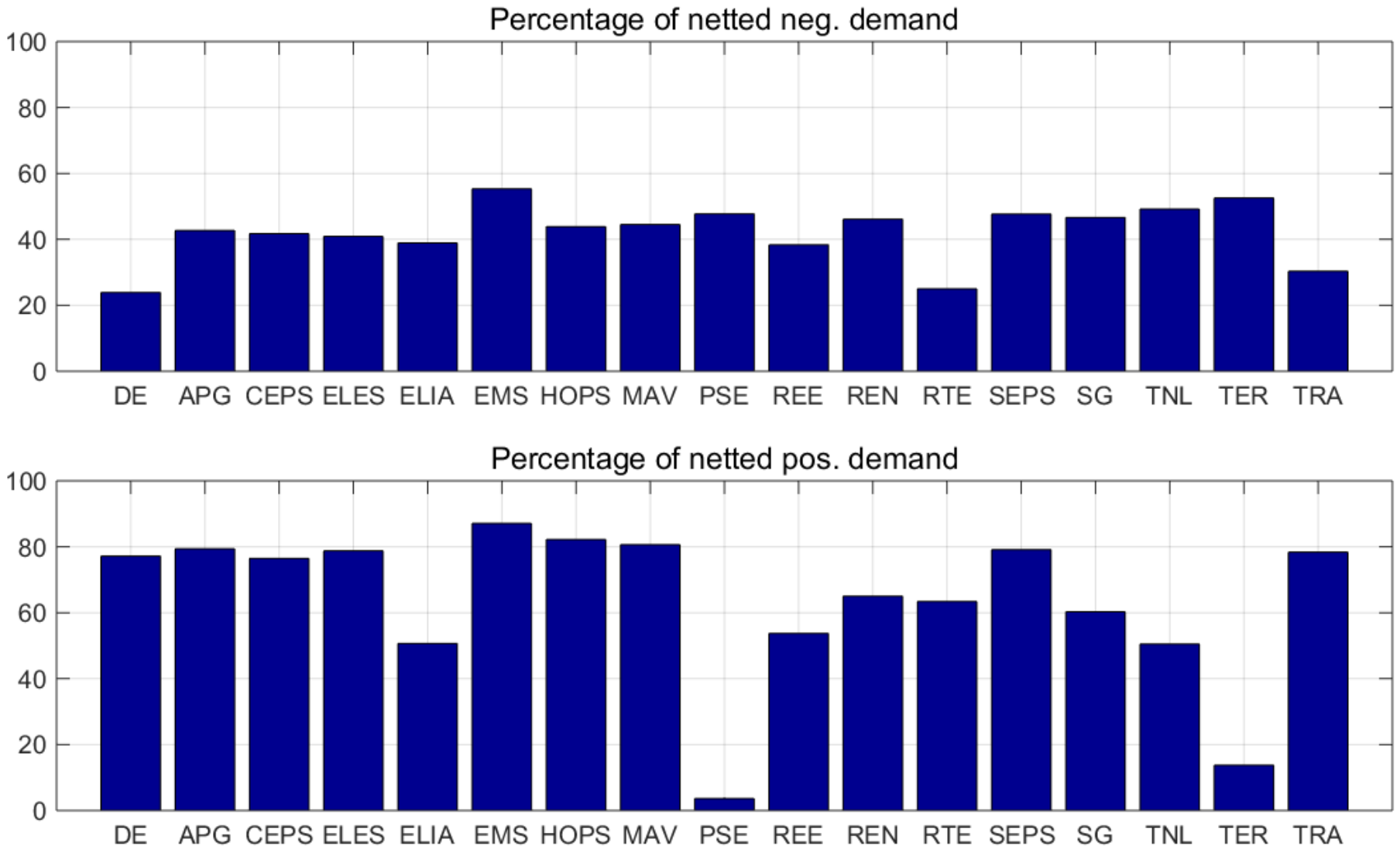
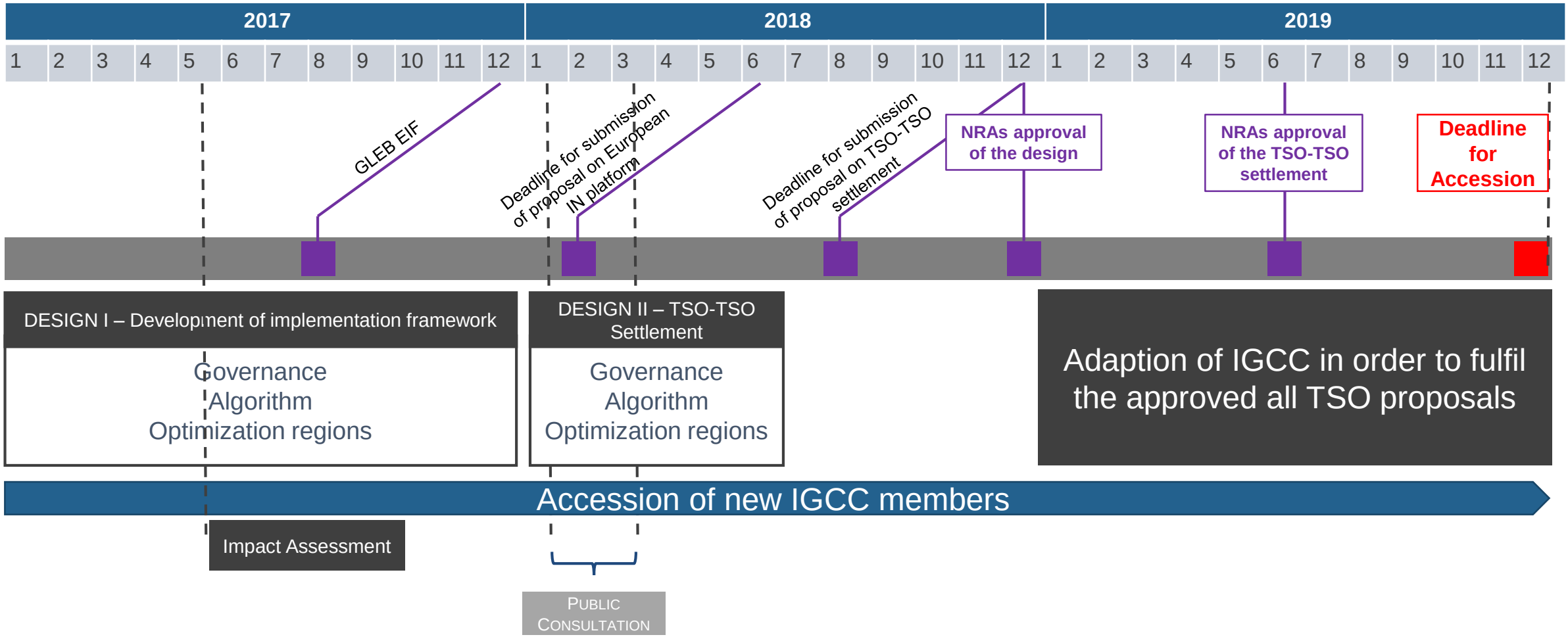


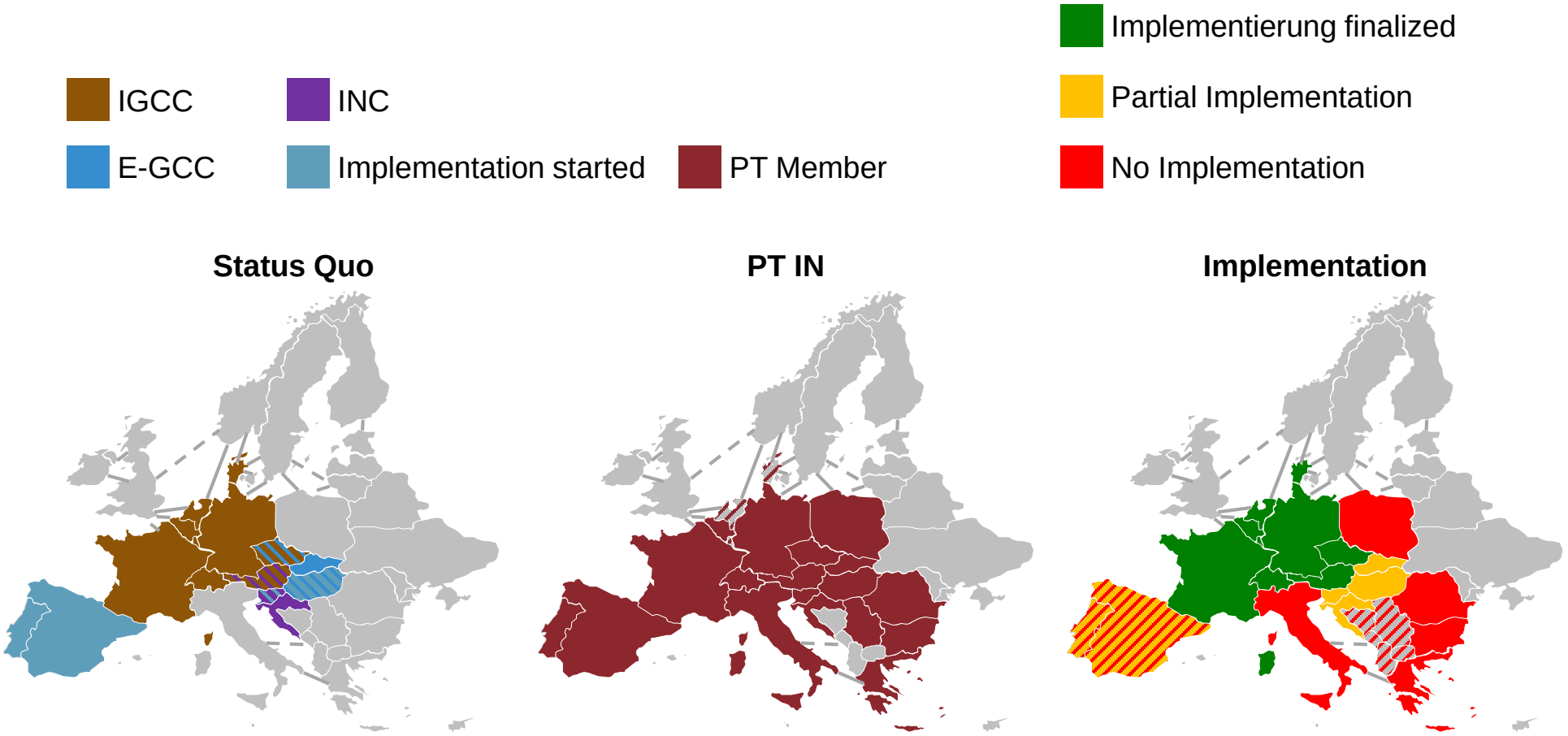
Next steps

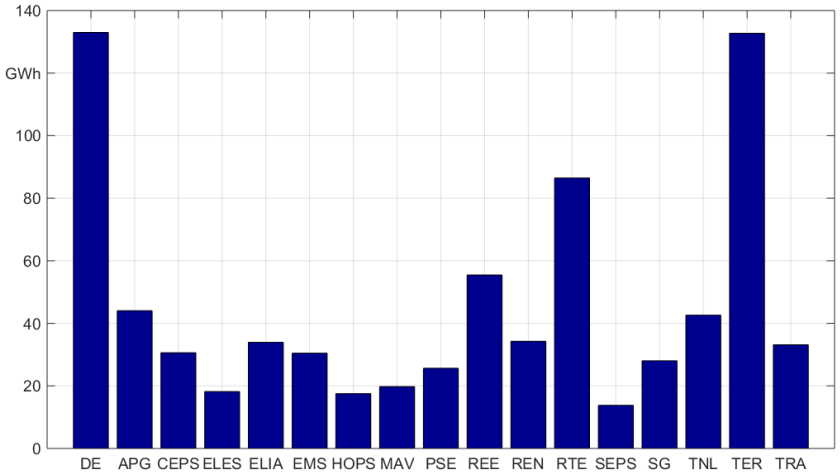
Timeline

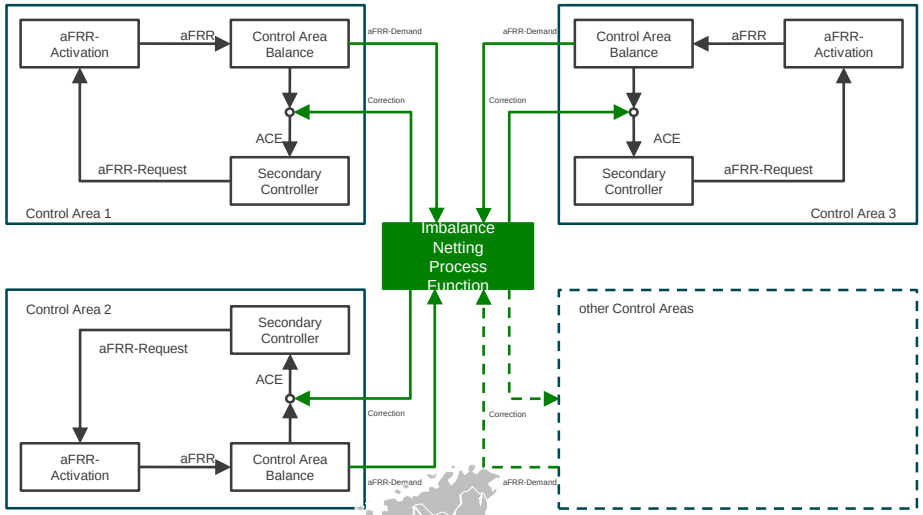
Next steps - timeline



Implementation plan







Thank you for your attention

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