UPDATE ON IMBALANCE NETTING

Balancing Stakeholder Group 28.09.2017

Project Team Imbalance Netting

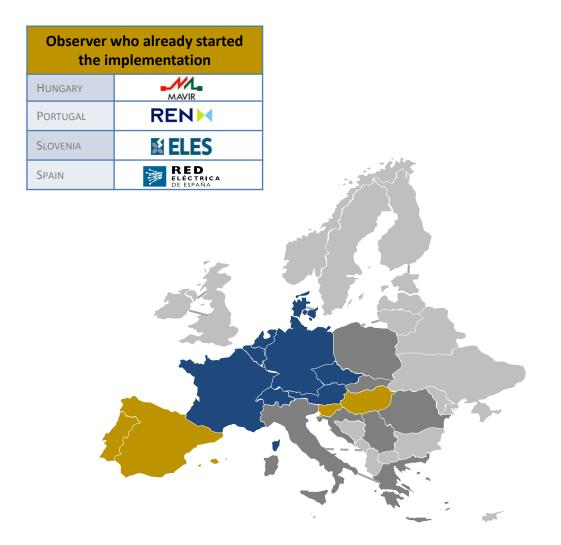
Brussels, 2017/09/28



IGCC - Involved TSOs

MEMBERS	
Austria	APC
Belgium	Celia
CZECH REPUBLIC	čep s
Denmark	ENERGINET
FRANCE	Ree
GERMANY	TENNET TRANSNET BW
Netherland	TENNET Taking power further
Switzerland	swissgrid

OBSERVERS	
CROATIA	M HOPS
GREECE	Admie
İTALY	Terna Rete Italia
Romania	À
POLAND	25=
SERBIA	≯ EM C
Slovakia	and the support





GL EB - Requirements

Proposal on Implementation Framework

- Whereas
- Article 1: Subject matter and scope
- Article 2: Definitions and interpretation
- Article 3: Application of this proposal
- Article 4: High-Level design
- Article 5: Roadmap & Timeline
- Article 6: Definition of functions
- Article 7: Rules concerning the governance and the operation
- Article 8: Proposal of entity
- Article 9: Framework for harmonization of the terms and conditions
- Article 10: Detailed principles for sharing the common costs
- Article 11: Description of the algorithm

Designation of entity

Proposal on settlement of intended exchange

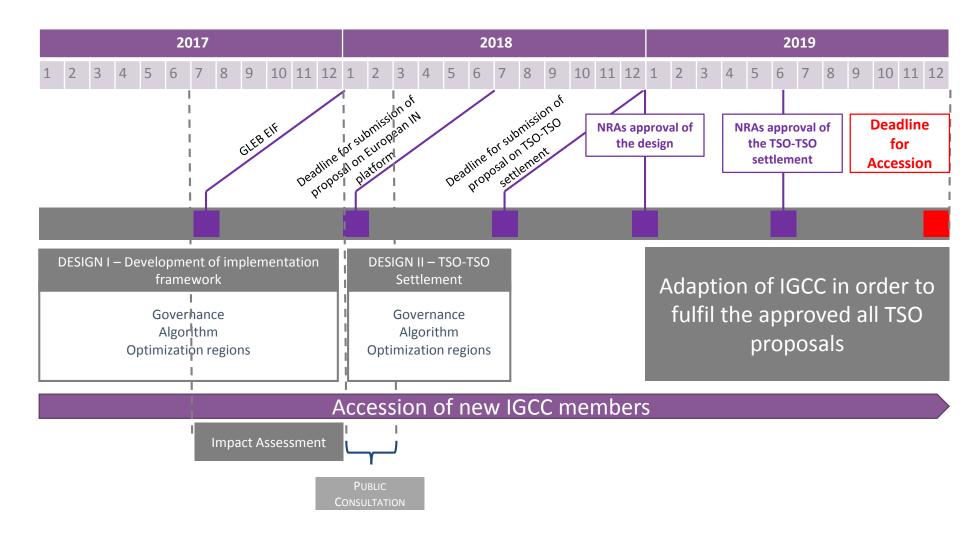
- Proposal for settlement is independent from the implementation framework
- Should be aligned (but not equal) with the settlement of intended exchange for other balancing qualities (RR, mFRR, aFRR)

Implementation and use of platform

• For imbalance netting the implementation is an adaption of the existing platform of IGCC



Timeline according to GL EB





Roadmap

- 1. Implementation Framework to be agreed by all TSOs
- 2. Implementation Framework to be approved by all NRAs
- 3. IGCC to be adapted accordingly if necessary to fulfil the Implementation Framework
 - IGCC MLA, algorithm and settlement to be adapted by the current and expected member TSOs of IGCC
- 4. IGCC to fulfil all requirements of the GL EB to the European platform for imbalance netting
- 5. IGCC will be the European platform for imbalance netting
- 6. All TSOs performing aFRR, at least from Continental Europe, will become Member of the European platform for imbalance netting after having signed the IGCC MLA
- 7. TSOs are encouraged to join IGCC at an earlier stage, even before any amendments due to Implementation Framework have been implemented



Imbalance Netting – Decision making

- 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 75 % of Criterion A **Proposal** approved 65 % of Voting Criterion B

GL EB Numbers

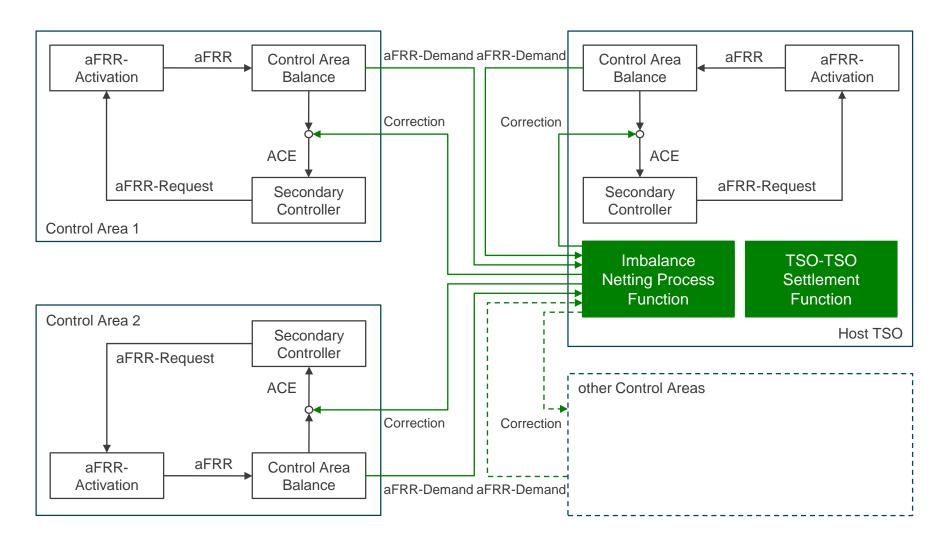
criterion A: Vote per country

criterion B: Number of inhabitants





Proposal of functions





Proposal of entity

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

Reasoning

- 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.
- A close interaction with other realtime operational processes is ensured.



Principles of the algorithm

- 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;

Pre-netting and optimization regions

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
- In case an aFRR cooperation forms an optimization region, the remaining TSO are also allowed to participate in one optimization region

By this proposal the early accession to aFRR cooperations and the early implementation of the GL EB is incentivized

Not yet decided, discussion ongoing



Next steps

- Finalize proposal for the implementation framework for European platform for the imbalance netting process
- **Develop proposal for the settlement of intended exchange:** Proposal for settlement is independent from the implementation framework. Should be aligned (but not equal) with the settlement of intended exchange for other balancing qualities (RR, mFRR, aFRR)
- **Start consultation**: The consultation on the proposal for the implementation framework will be done after entry into force of the Guideline on Electricity Balancing (Q1/2018)
- All TSOs final approval of proposal for the implementation framework for a European platform for the imbalance netting process: The adapted proposal will be submitted for approval of All TSOs.
- NRA approval: Six months after entry into force of the Guideline on Electricity balancing all TSO will hand in the all TSO proposal for the implementation framework for a European platform for the imbalance netting process and seek approval from the NRAs.
- Implementation: After approval of the NRAs all continental European TSOs will start the
 implementation by adapting the IGCC to fulfil the implementation framework. Accession to
 the IGCC has to be at the latest one year after approval of the implementation framework.
 An early accession to the IGCC by several members would accelerate and ease up the
 implementation.