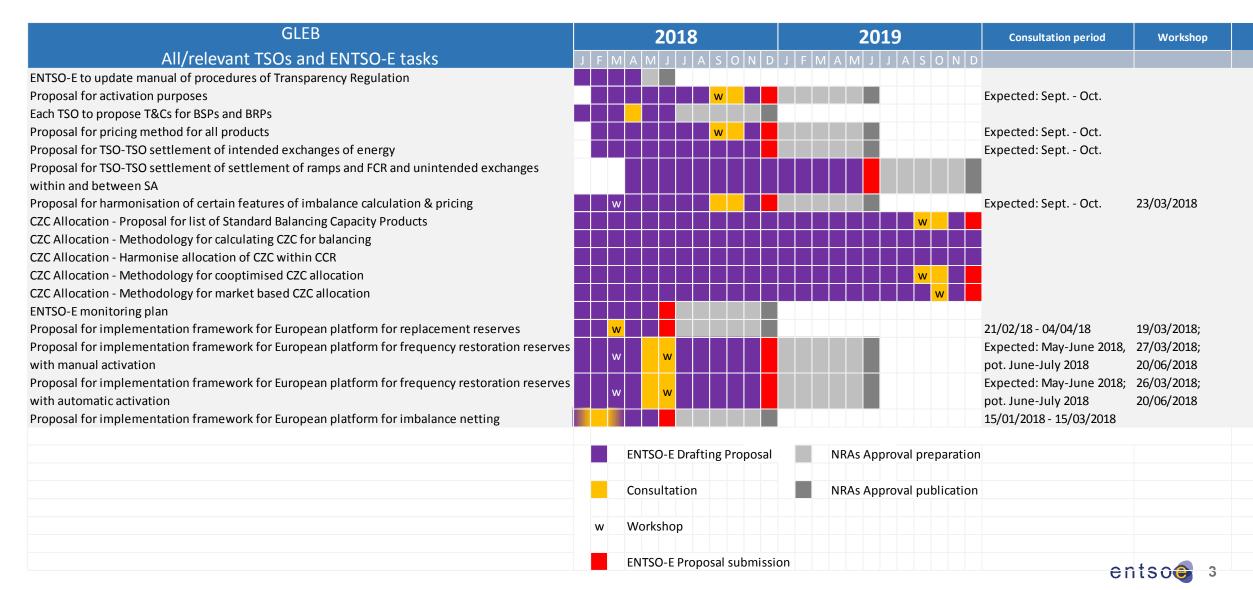
MESC - GLEB update

06 March 2018

High Level Planning



High Level Planning



Overview members of IPs



Imbalance netting - IGCC

Croatia

Greece

Hungary

Italy

Poland

Portugal

Romania

Serbia

Slovakia

Slovenia

Spain

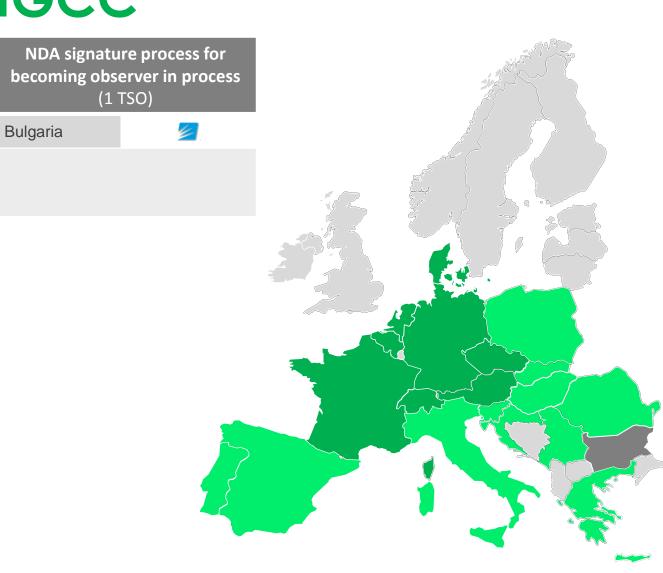
IGCC observers

(11 TSOs)

AAMHE

IGCC members (11 TSOs) **APG** Austria elia Belgium ČEPS,a.s. Czech Republic ENERGINET DK Denmark amprion Germany France Tennet The Netherlands Switzerland swissgrid **Facilitating party role** (PMO) **ENTSO-E** entso







aFRR - PICASSO

17G

elia

ČEDS,a.s.

ENERGINET DK

FINGRID

TENNET TR™NSNETBW

MAVIR

Tennet

Statnett

ELES

RED ELÉCTRICA DE ESPAÑA

SVENSKA KRAFTNÄT

PICASSO members (16 TSOs)

Austria

Belgium

Czech Republic

Denmark

Finland

France

Germany

Hungary

The Netherlands

Norway

Slovenia

Spain

Sweden

PICASSO observers (8 TSOs + ENTSO-E)

Bulgaria

Croatia

Greece

Poland

Portugal

Romania

Slovakia

Switzerland

ENTSO-E

M HOPS

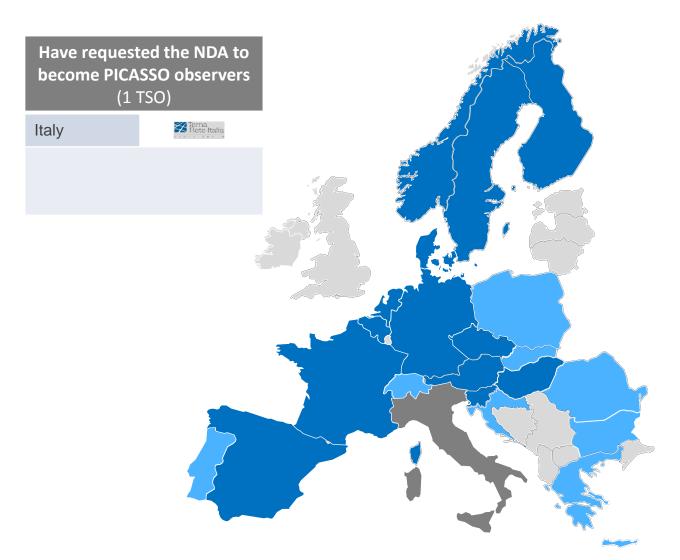
<u></u>
Дадине

RENM



swissgrid





mFRR - MARI



Latvia





Replacement Reserves - TERRE

Sweden

TERRE members (6 TSOs) France Great Britain Italy Portugal Spain Switzerland Swissgrid

Participants under the RR IF and not yet TERRE members

Bulgaria
Hungary
Poland
Romania





SVENSKA KRAFTNÄT



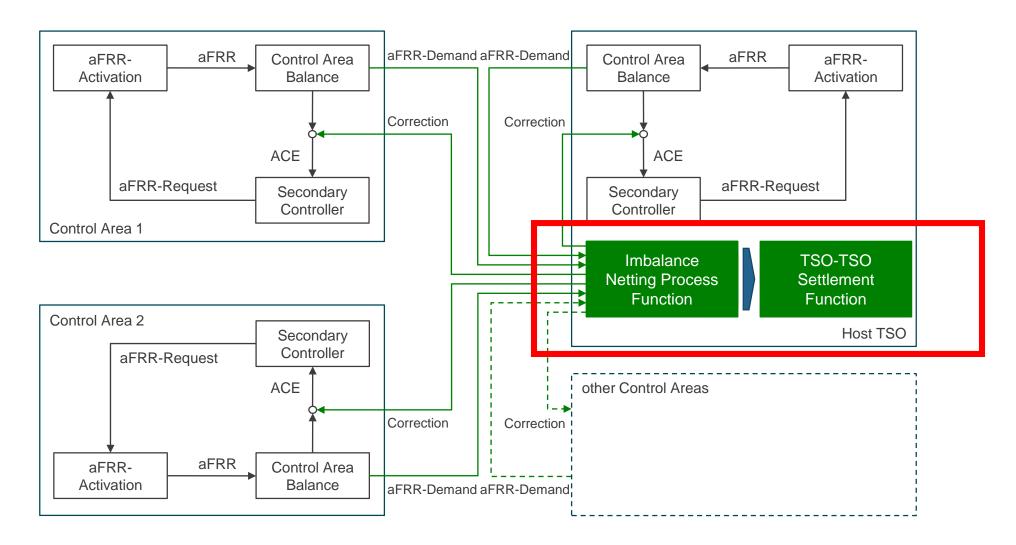
Imbalance Netting



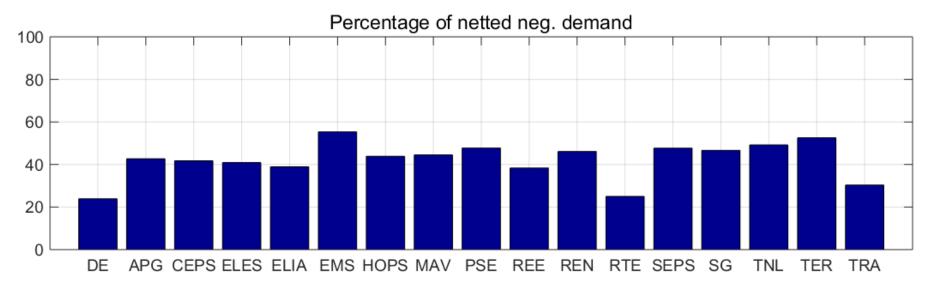
Implementation Framework - Structure

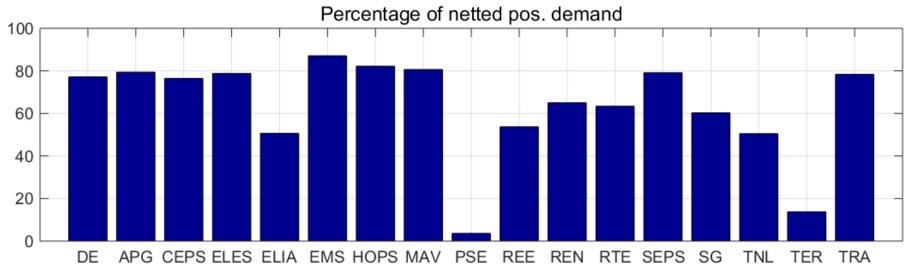
- Whereas
- Article 1: Subject matter and scope
- Article 2: Definitions and interpretation
- Article 3: High-Level design of the IN-Platform
- Article 4: Implementation of the IN-Platform
- Article 5: Functions of the IN-Platform
- Article 6: Governance
- Article 7: Decision making
- Article 8: Proposal for entity or entities
- Article 9: Framework for harmonization of the terms and conditions
- Article 10: Categorization of costs and detailed principles for sharing the common costs
- Article 11: Description of the algorithm for the operation of imbalance netting process function

Functions of the IN-Platform

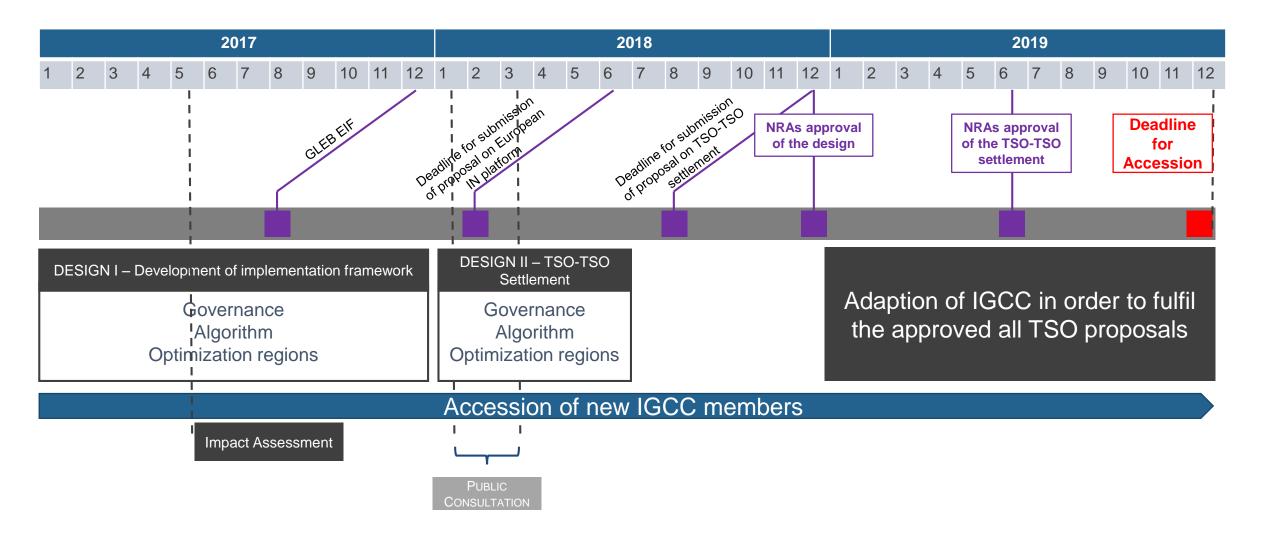


Impact Assessment - Expected benefits – monthly netted volumes

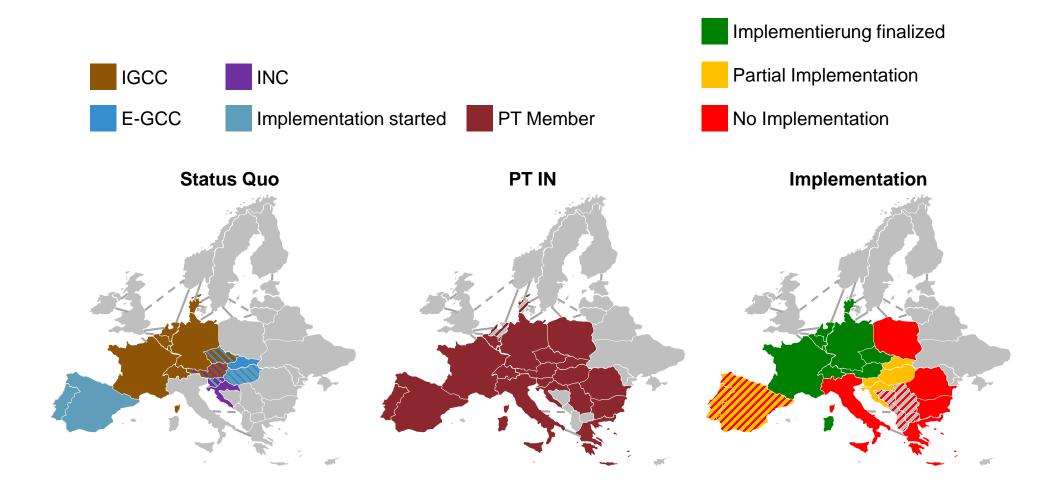




Next steps - timeline



Implementation plan



Replacement Reserves



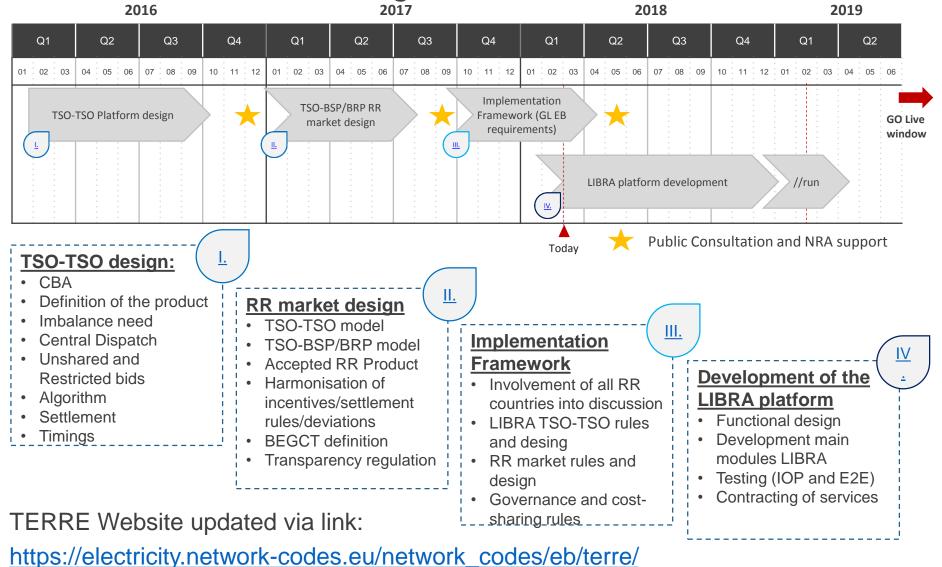
Replacement Reserves

Public Consultation link: consultation for the implementation framework for European platform for replacement reserves

Next TERRE Stakeholder Workshop on RR IF link: <u>registration is open</u>

- As required by the GLEB, all TSOs using RR have 6
 months after the EIF of GLEB to submit a proposal for the
 RRIF. The deadline is thus 18 June 2018.
- The work is handled by the TERRE project, in which all TSOs using Replacement Reserves are represented. It must be noticed that ESO joined the project in January 2018.
- In addition, an explanatory note to the RRIF has been written to help stakeholders' understanding.

Introduction and Project current state



TERRE consultation feedback

High level planning past consultation on RR market design



TSO-TSO Model

- Marginal Price
- Congestion rent management
- Timings: XB scheduling step of 60' with target of 15'
- Allowance of Counter-Activations
- UAB/URB treatment
- Need flexibility
- Interconnection controllability

TSO-BSP/BRP Model

- Accepted RR balancing product definition
- Harmonization of settlement rules
- Harmonization of incentives
- BEGCT definition

Transparency

- National publications
- Publications on ENTSO-e transparency platform

At a working level, the NRAs sent their « Common Opinion » on the TSOs submission.

TERRE consultation feedback

- Counter Activation
- BEGCT
- Increasing of RR daily clearings number (48 or 96)
- Reduction of XB Scheduling Step for Balancing market
- Local/National Stakeholder involvement

The TSOs are still assessing the NRAs opinion paper.

The current version of the RR IF doesn't tackle all NRA proposals

- Drafted with 11 TSOs (6 TSOs was involved in the 2 previous consultations)
- The RR IF includes mainly what the GL EB required for the "RR Platform"

LIBRA platform – description and status

Lot B1: Tendering closed / development started

Optimization/Clearing algorithm

- Optimization of the bids using CMOL
- Optimization of the available CZ interconnections

Lot B2: Tendering closed / development started

IT interface/data management

Interface scalable up to 50 TSOs

Lot C: Tendering Ongoing



Hosting

- External party will be contracted for hosting the LIBRA activities
- Flexibility on changing the hosting party towards other suppliers or TSOs
- Flexibility on upgrading the hardware following future demand

Lot D



IT monitoring service

- Monitoring of the Optimization module initially 24/7, with the possibility to decrease to 8/7 after the // run
- Monitoring of the IT interface: 24/7
- SLAs and contracting in case of failure

Lot C: Tendering Ongoing



Financial Settlement

- Financial settlement externally contracted
- Monthly billing system between TSOs through a centralized clearing house
- Flexibility to add new TSOs

Lot F: Tendering closed / work started

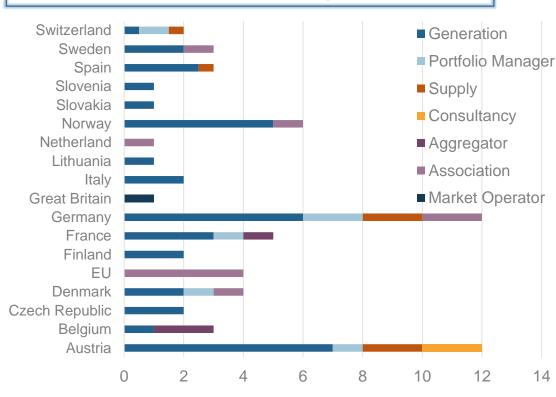
TESTING

MARI & PICASSO

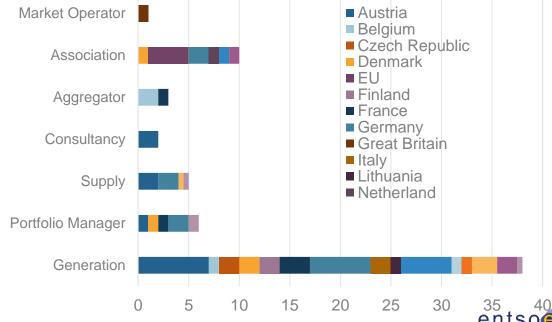


MARI - General Statistics I

- ► There were released consultation questionnaire including 45 questions, across 65 stakeholders from 17 countries.
- ► The market roles of stakeholders were identified by themselves to 7 categories.
- Majority of stakeholders is presented in Germany and Austria, and major role is the generation.







PICASSO - Consultation Feedback

General Statistics |

- There were released consultation questionnaire including 67 questions, across 58 stakeholders from 13 countries.
- ► The market roles of stakeholders were identified by themselves to 6 categories.
- Majority of stakeholders is presented in Germany and Austria, and major role is the generation.

Countries of Origin:

