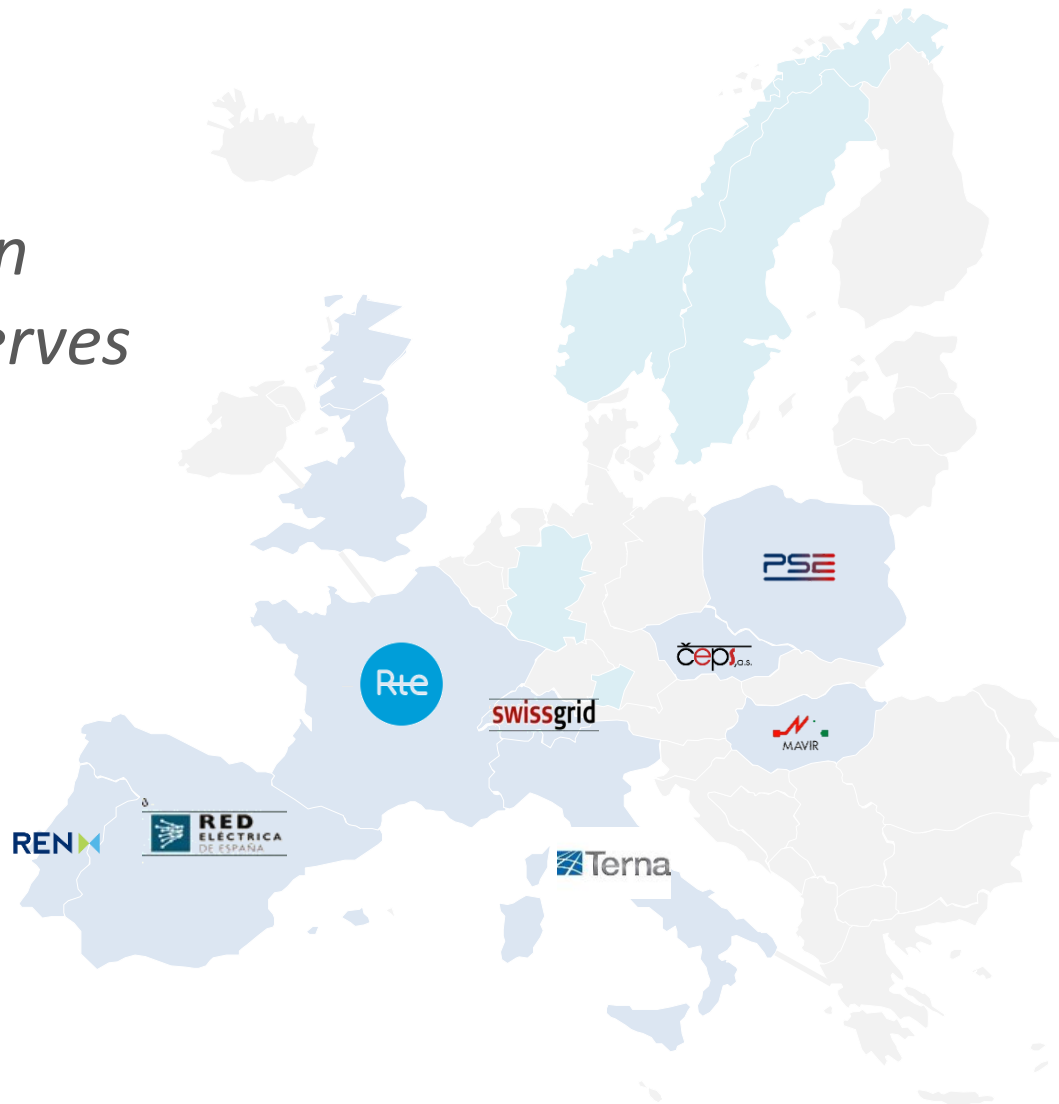


# TERRE

## *Trans European Replacement Reserves Exchange*

### TERRE Stakeholder Workshop

8<sup>th</sup> December 2022



# Agenda

## TERRE Stakeholder Workshop

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#	TOPICS	Timing (CET)
1	Introduction from TSOs	11:45
2	Last main project milestones and developments of the LIBRA platform	11:50
3	RR process and its upcoming evolutions	12:00
4	Questions & Answers	12:10
End of the meeting		12:15



# **Topic 1: Introduction from TSOs**

# 1. Introduction

## TERRE project - Participating TSOs

### TERRE Members

#### ■ Region 1

- France (RTE)
- Italy (TERNA)
- Portugal (REN)
- Spain (REE)
- Switzerland (SG)

#### ■ Region 2

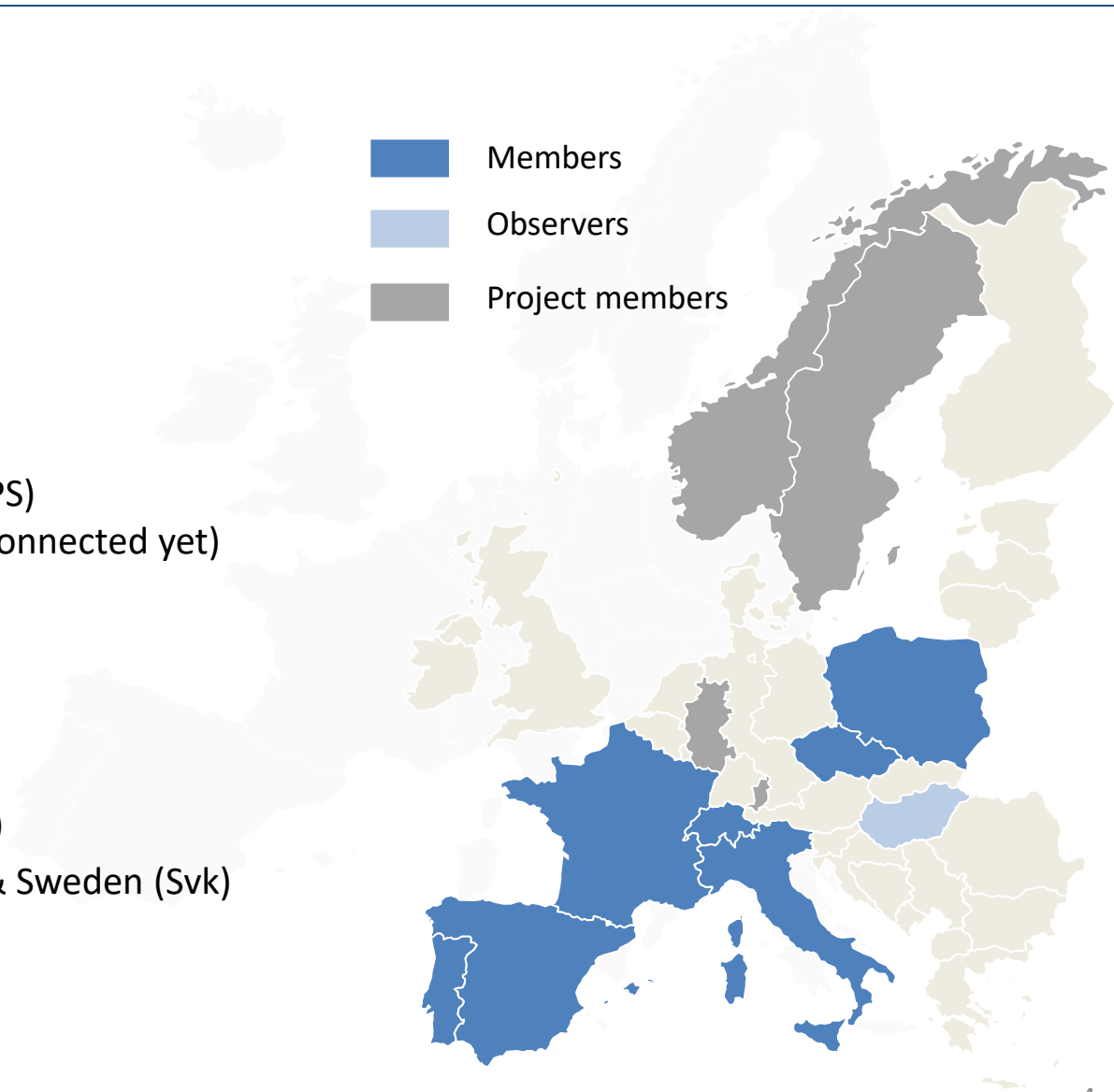
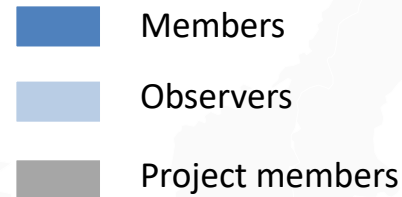
- Czech Republic (CEPS)
- Poland (PSE) (not connected yet)

#### ■ Observers

- Hungary (MAVIR)

### Project Members

- Germany (Amprion)
- Norway (Statnett) & Sweden (Svk)



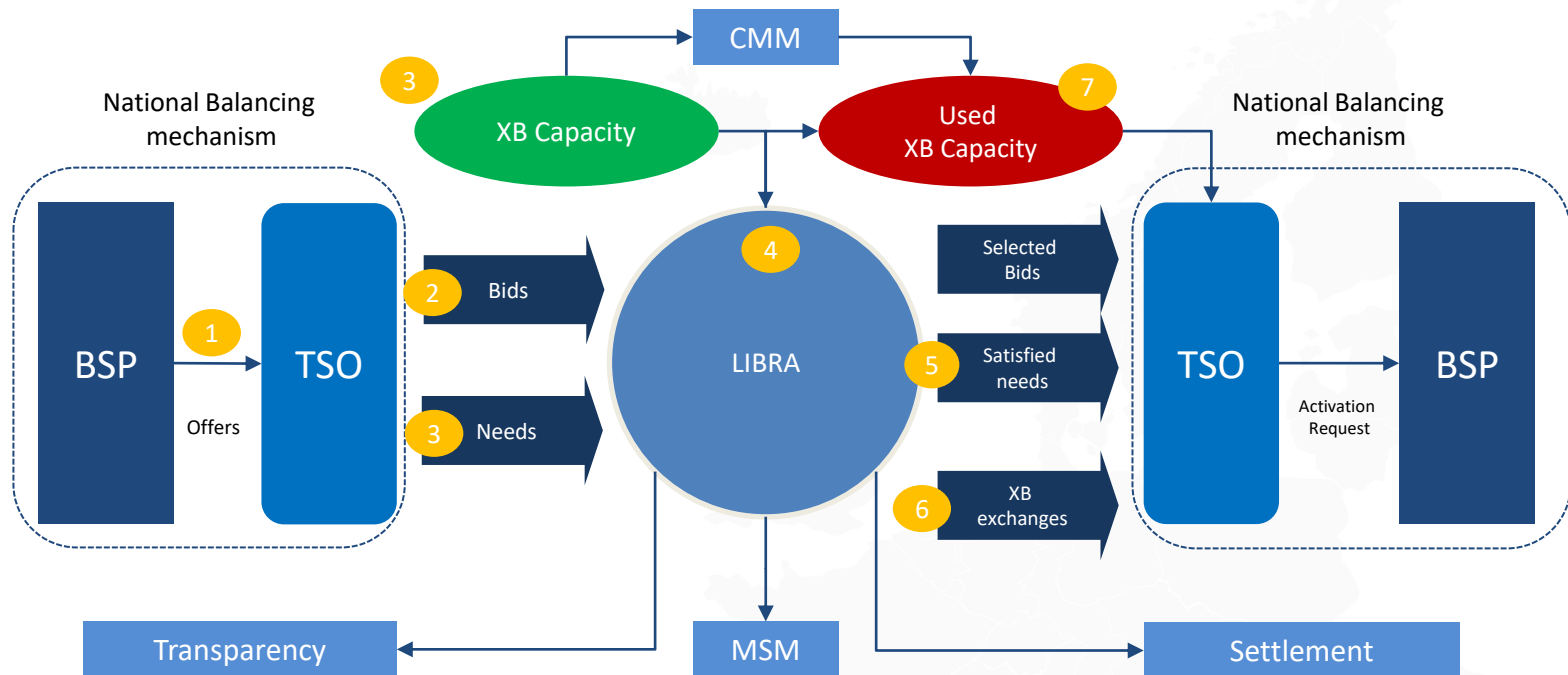
# 1. Introduction

## Accession timeline – past and foreseen

Country	TSO	Date of accession
Czech Republic	ČEPS a.s.	6 January 2020
Spain	REE - Red Eléctrica de España S.A.U	3 March 2020
Portugal	REN – Rede Eléctrica Nacional, S.A	29 September 2020
Switzerland	Swissgrid AG	8 October 2020
France	RTE - Réseau de Transport d'Electricité	2 December 2020
Italy	Terna - Rete Elettrica Nazionale SpA	13 January 2021
Great Britain	National Grid Electricity System Operator Ltd	<i>Exit from the project</i>
Poland	PSE - Polskie Sieci Elektroenergetyczne S.A.	<i>Q1/Q2 2024</i>

# 1. Introduction

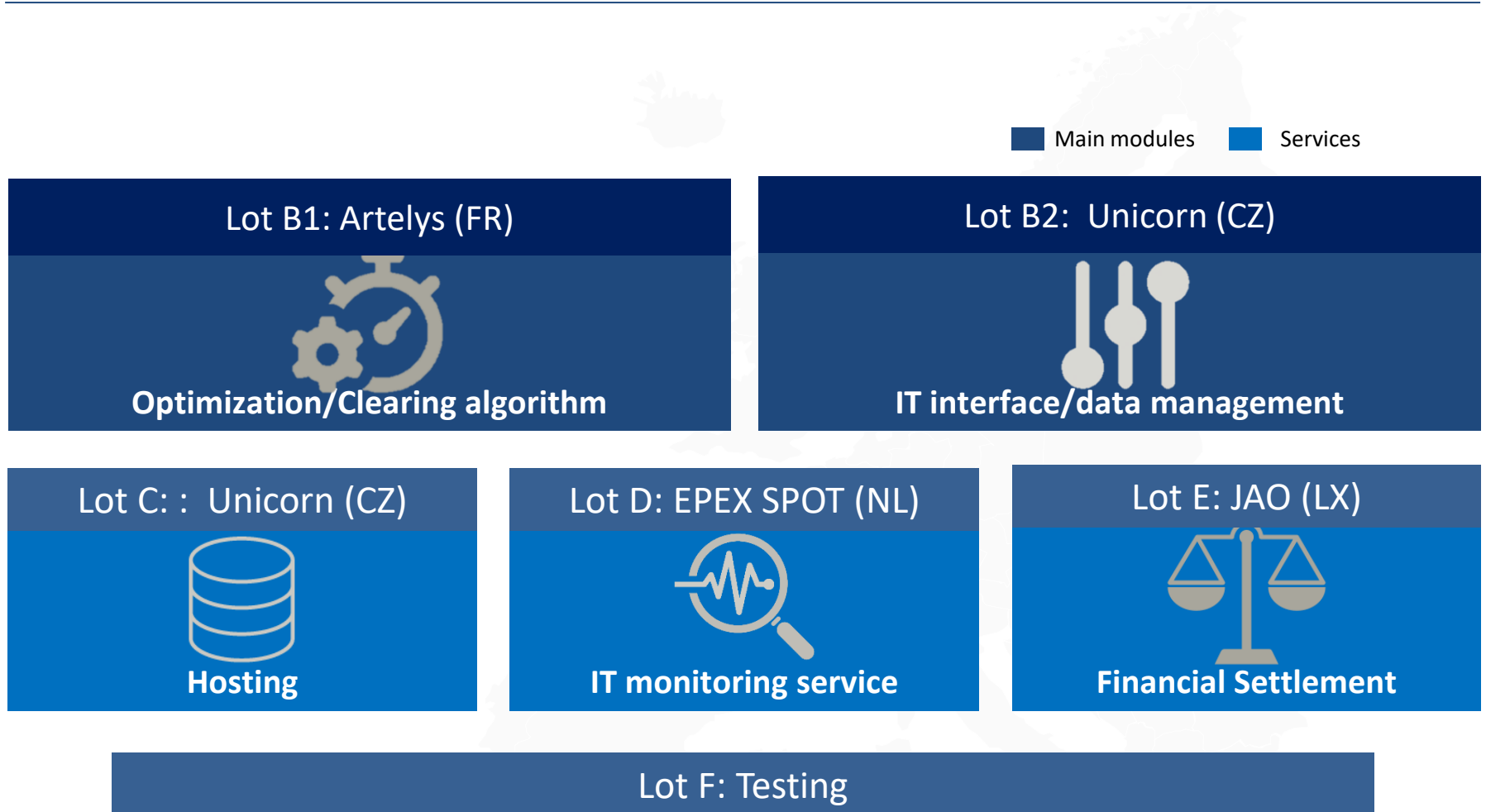
## RR process overview



1. TSO receive bids from BSPs from their local balancing area/bidding zone.
2. TSOs put the valid RR bids on the LIBRA platform
3. TSOs send their needs and ATC values to the platform.
4. Platform runs the algorithm with offers and needs.
5. Communication of accepted offers, satisfied needs and marginal prices
6. Calculation of the bilateral exchanges between balancing areas and TSO-TSO settlement.
7. Residual ATC and net positions are communicated to TSOs

# 1. Introduction

## LIBRA platform overview



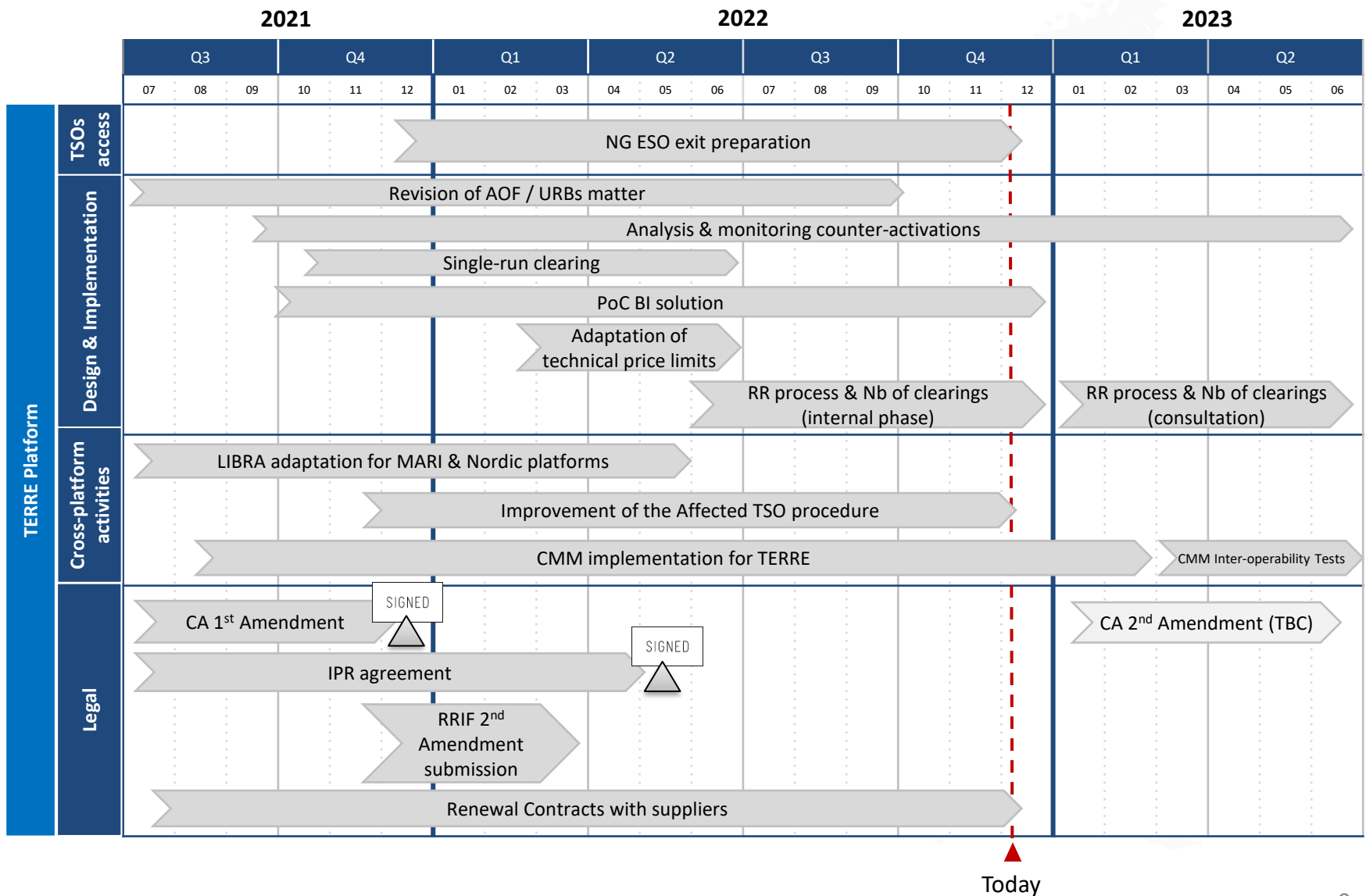


## **Topic 2: Last main project milestones and developments of the LIBRA platform**



## 2. Last main project milestones and developments of the LIBRA platform

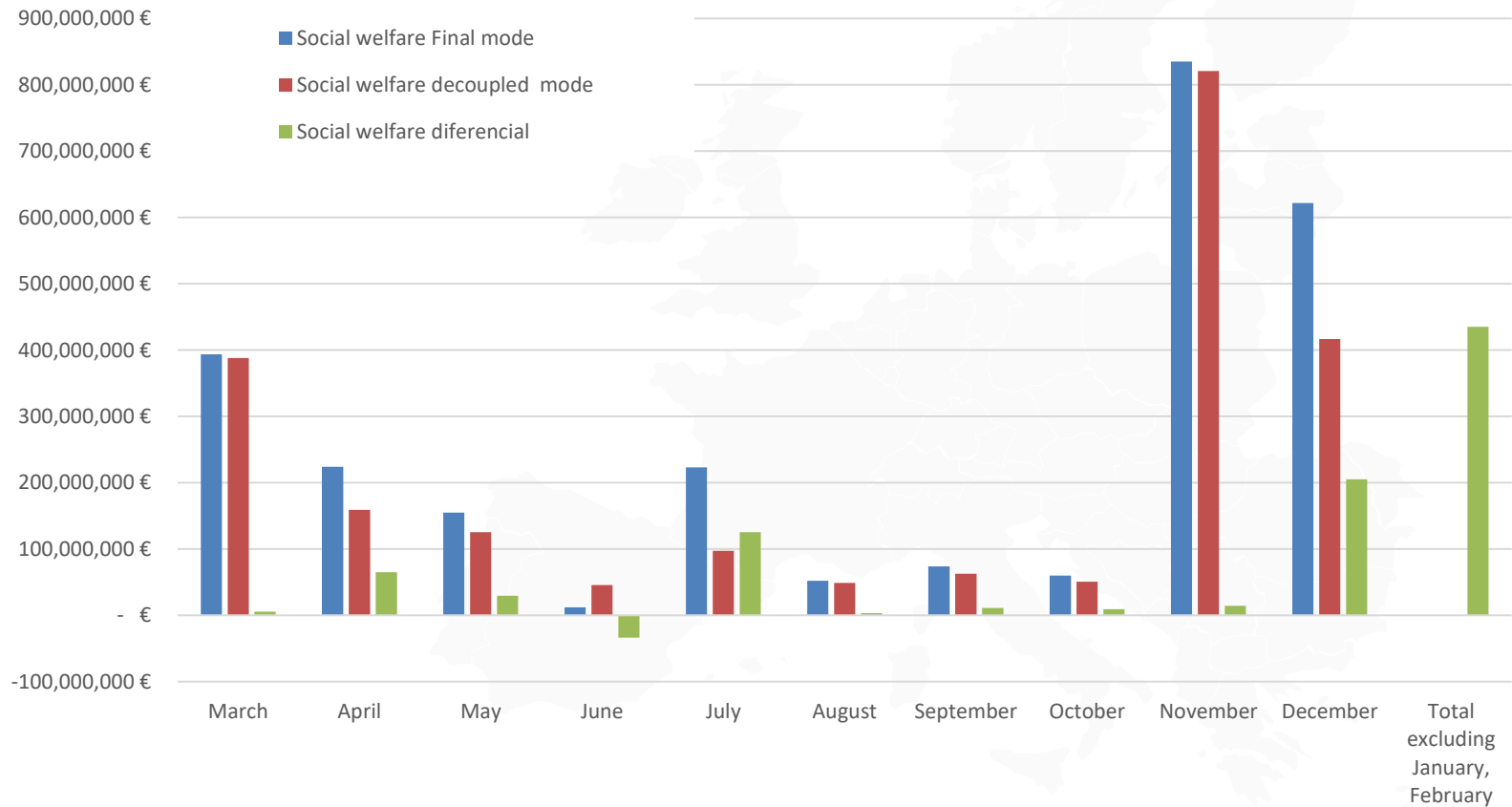
### Overview ongoing and future tasks



## 2. Last main project milestones and developments of the LIBRA platform

### 2021 Social Welfare

Comparison of monthly Social welfare Final vs. Decoupled Social welfare differential



**Important to note:** within the 500M EUR of WS gain it is not possible to distinguish the share of satisfied inelastic demand compared to the "real" SW gain.

## 2. Last main project milestones and developments of the LIBRA platform

### Key figures of last month – Volumes and accepted bids

#### Volume of requested needs and submitted bids by TSO per reporting period

TSO	RR+ needs	RR+ offers	RR- needs	RR- offers
REE	225 778	3 193 047	78 644	4 890 324
REN	25 502	1 200 636	100 274	637 277
RTE	46 250	262 467	52 950	349 799
Swissgrid	3 158	2 003 226	6 895	790 949
Terna	100 873	2 827 966	99 279	3 523 979
<b>Total</b>	<b>401 561</b>	<b>9 487 342</b>	<b>338 042</b>	<b>10 192 328</b>

#### Total volume of energy of accepted RR+ & RR- bids (MWh)

● Volume of accepted RR+ bids ● Volume of accepted RR- bids



Volume of accepted RR+ bids    Volume of accepted RR- bids

335 665

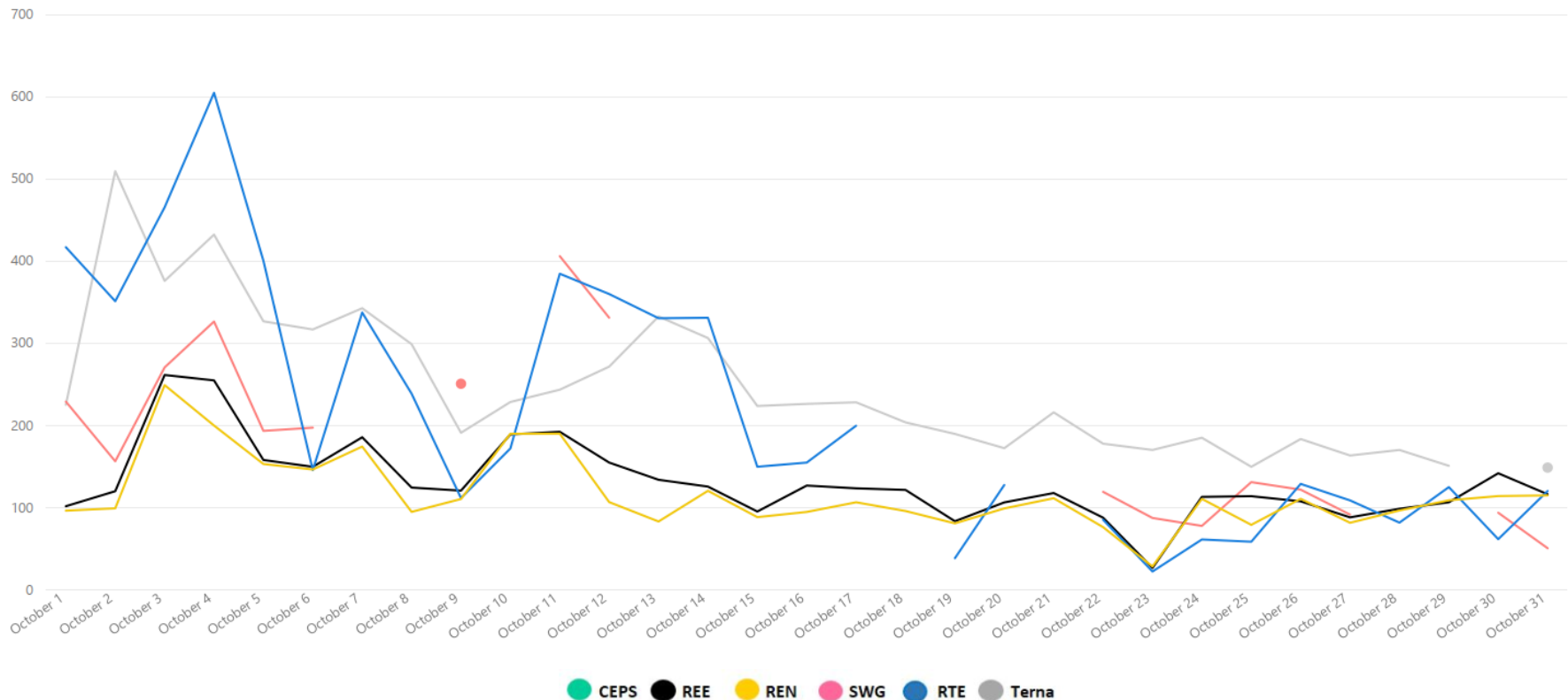
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## 2. Last main project milestones and developments of the LIBRA platform

### Key figures of last months – Price evolution

#### Price range for satisfied needs per reporting period (EUR/MWh)

Average daily price amount €/MWh

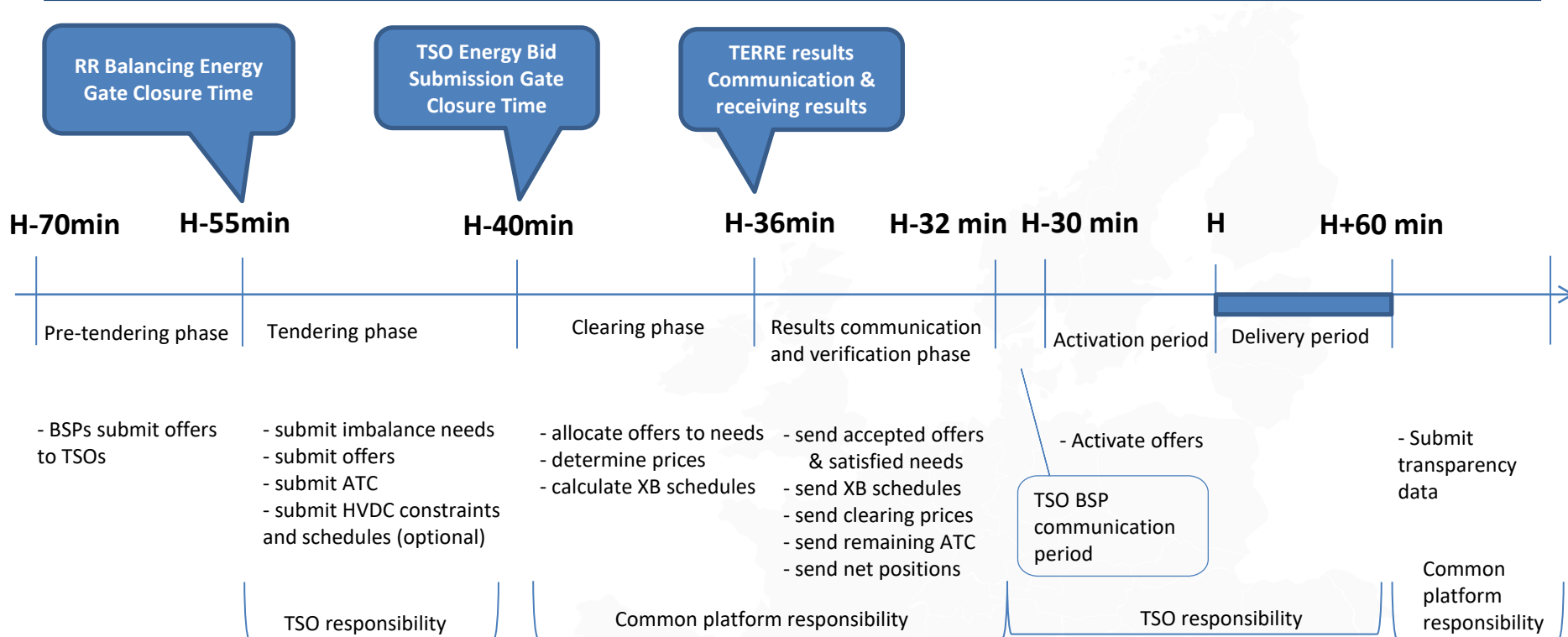




## **Topic 3: RR Process and its upcoming evolutions**

### 3. RR process description

#### Timeline



#### RR process consists of the following phases:

- Pre-tendering phase
- Tendering phase
- Clearing phase
- Results communication and verification phase
- Activation phase
- Delivery phase

## 3. RR process description

### Monitoring counter activations and URBs

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#### Monitoring counter activations

- For the 2<sup>nd</sup> amendment of the RRIF, TSOs provided a detailed report on counter activations (explanatory document).
- TSOs allow counter activations but implemented KPIs to monitor them and report to NRAs.

#### Monitoring URBs

- In the last IG meetings, several possible measures have been discussed in order to reduce the amount of URBs.
- It has been concluded, that it would be necessary to better monitor URBs in order to evaluate if a change would be needed.
- Therefore, the KPI calculation will be directly implemented in the AOF. And should be available around Q2 2023.

## 2. RR process description

### Main evolution: increase the number of clearings

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#### ■ RR IF Article 11.5:

(1) All RR TSOs shall harmonise number of daily clearings:

- (a) At the go-live of the RR-Platform, the number of daily gates will be 24. The RR TSOs will reduce the cross-border scheduling steps to less than 60 minutes for the borders included in the Region. The deadline will be the date required by the EBGL for using the European Platform for exchange of mFRR which is still subject for possible derogation and the date required by the CACM regulation for the intraday cross zonal gate closure frequency definition.
- (b) Starting from this deadline, the cross-border scheduling step will be 15 minutes, therefore an increase of the number of daily gates, may be evaluated taking into account the maturity of the European balancing market at that time.

#### ■ Boundary conditions

- From the RR IF
  - Cross boarder scheduling step must be 15 minutes once all RR TSOs are using MARI
  - The number of daily clearings can be increased
- From 96 gates for Cross Zonal Intraday
  - 24 gates for TERRE is not compatible with 96 gates for CZ ID. Therefore the number of TERRE gates must be increased to 48 or 96.
  - Underlying assumption: TSO need time between CZ ID result communication and TERRE TSO gate closure time. TSOs with time consuming grid analysis in between need up to 15min.

#### ■ Resulting constraints for implementation timing

- The number of RR gates can only be increased, once all RR TSOs have reduced the ISP to 30 min for 48 gates or 15min for 96 gates.
- The number of CZ ID gates can only be increased, once the number of TERRE gates is increased



## 2. RR process description

### Main evolution: increase the number of clearings

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#### Current status

- TERRE project has selected two main possible options to be implemented at the end of 2024/beginning of 2025.
- Both options have been presented to RR NRAs on the 28<sup>th</sup> December

#### Next steps

- Presentation during EB IG (March 2023)
- Launch a Public consultation at the end of Q1 2023



## **Topic 4: Questions and answers**