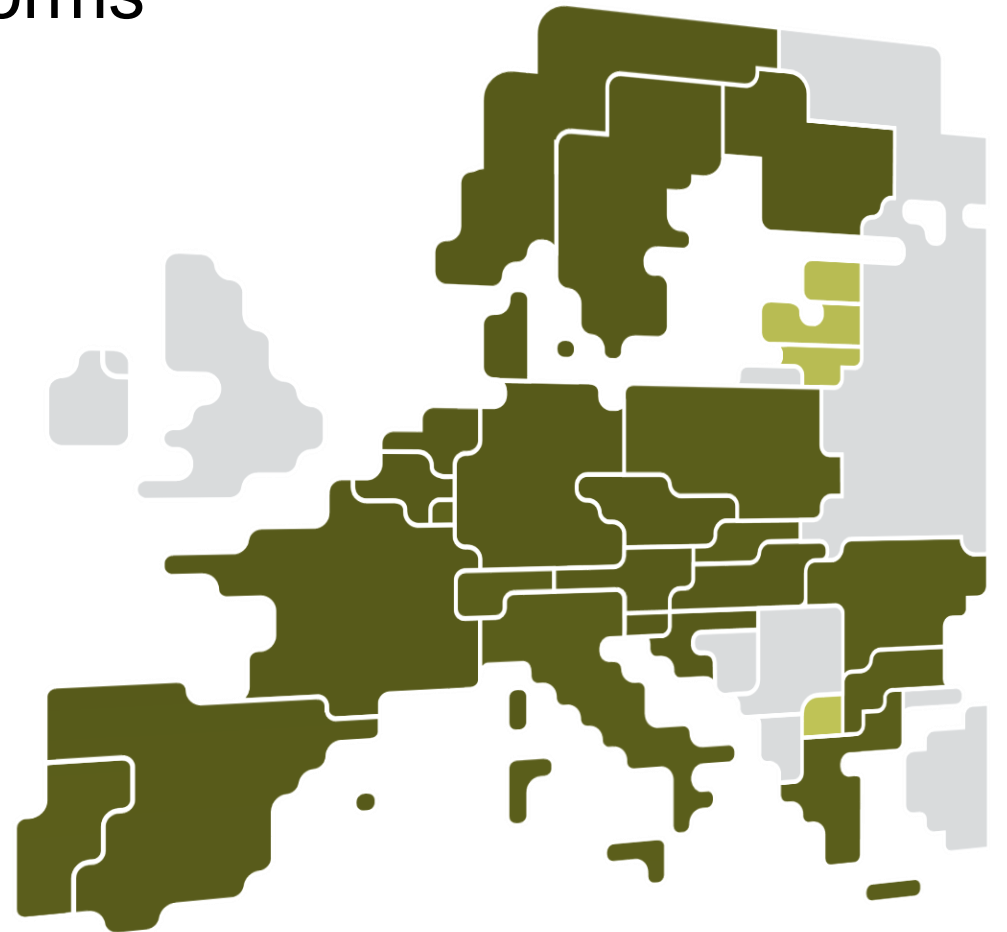




Update on Balancing Platforms

September 20th, 2023

Energy Community Balancing Workshop




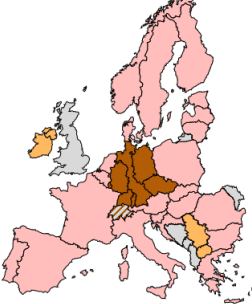
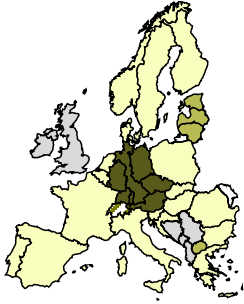

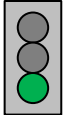
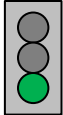
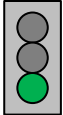
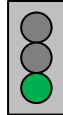
AGENDA

1. Status-quo in the EU
2. Implementation frameworks
3. Integration approach for EnC Contracting Parties TSOs - Relevant contracts/agreement and adherence

1. STATUS QUO IN THE EU

Introduction

Overview on current status of European Balancing Platforms

	IGCC	MARI	PICASSO	TERRE
Balancing service	IN	mFRR	aFRR	RR
Participants				
Target area	Continental Europe	Europe	≥ Continental Europe	≥ RR TSOs
Go-live	24/06/2021 & operational since 01/10/2011	05/10/2022	22/06/2022	29/09/2020
Status				

- » European domestic market (at least) for balancing energy has been established in 2022.
- » European market design has significantly changed the local procurement rules.

Accession Roadmap

MARI example

- The accession of member TSOs to mFRR-Platform (MARI) is planned in accordance with the following accession roadmap.
- MARI member TSOs and ENTSO-E share this accession roadmap for informative purposes only and does not, in any case, represent a firm, binding or definitive position of MARI on the content.
- The content is subject to change as the implementation progresses and new information becomes available.
- In particular, feasibility of the present accession roadmap may depend on final detailed accession planning and possible operational and/or technical constraints that would result in the maximum number of parallel accessions.

Last updated on 20 April 2023 based on latest information available.

mFRR-Platform Accession Roadmap			2023												2024			
			1	2	3	4	5	6	7	8	9	10	11	12	Q1	Q2	Q3	Q4
mFRRIF	5.4.(b)(ii)	AOF																
	5.4.(b)(ii)	TSO-TSO Settlement																
	5.4.(b)(vi)	Testing functions & mFRR operation																
mFRR-Platform	5.4.(b)(iii)	TSOs Interoperability tests																
	5.4.(b)(iv)	Operational tests (parallel run)																
	5.4.(b)(v)	TSOs Connection / Go-live																
	5.4.(b)(vi)	mFRR-Platform Go-live																
Country	Derogation deadline ¹	TSO	1	2	3	4	5	6	7	8	9	10	11	12	Q1	Q2	Q3	Q4
Germany		50Hz/Amprion/ TenneT Gmbh/ TransnetBW																
Greece	24.7.2024	IPTO ²																
Austria		APG																
Latvia	24.7.2024	AST ³																
Czech republic		CEPS																
Estonia	24.7.2024	ELERING ³																
Slovenia		ELES																
Belgium	24.7.2024	Elia ⁴																
Denmark	24.7.2024	Energinet ⁵																
Bulgaria	30.6.2024	ESO ⁶																
Finland	24.7.2024	Fingrid ³																
Croatia	24.7.2024	HOPS ⁷																
Lithuania	24.7.2024	LITGRID ³																
Hungary	24.7.2024	MAVIR ⁸																
Poland	24.07.2024	PSE ⁹																
Spain	24.07.2024	RE ¹⁰																
Portugal	24.07.2024	REN																
France	24.07.2024	RTE ¹¹																
Slovakia	24.07.2024	SEPS ¹²																
Sweden	24.07.2024	SVK ³																
Netherlands		TenneT BV ¹³																
Italy	24.7.2024	Terna ¹⁴																
Romania	01.03.2024	Transelectrica ¹⁵																
EEA																		
Norway	24.07.2024	Statnett ³																
Non-EU Member State																		
Switzerland		Swissgrid ¹⁵																

Accession Roadmap

PICASSO example

- The accession of member TSOs to aFRR-Platform (PICASSO) is planned in accordance with the following accession roadmap.
- PICASSO member TSOs and ENTSO-E Share this accession roadmap for informative purposes only and it does not, in any case, represent a firm, binding or definitive position of PICASSO on the content.
- The content is subject to change as the implementation progresses and new information becomes available.
- In particular, the feasibility of the present accession roadmap may depend on final detailed accession planning and possible operational and/or technical constraints that would result in the number of parallel accessions.

aFRR-Platform Accession Roadmap Last updated on 28/04/2023 based on latest information available.

			2023												2024			
			1	2	3	4	5	6	7	8	9	10	11	12	Q1	Q2	Q3	Q4
aFRRIF			[Green bar]															
5.4.(b)(ii)	AOF (done)		[Green bar]															
5.4.(b)(ii)	TSO-TSO settlement (done)		[Green bar]															
5.4.(b)(vi)	Testing functions & aFRR operation (done)		[Green bar]															
5.4.(b)(iii)	TSOs interoperability test (done)		[Green bar]															
5.4.(b)(iv)	Operational test (parallel run) (done)		[Green bar]															
5.4.(b)(v)	TSOs Connection to aFRR platform / Go-live		[Green bar]															
5.4.(b)(vi)	aFRR-Platform Go-live (done)		[Green bar]															

			2023												2024			
Country	Derogation deadline	TSO	1	2	3	4	5	6	7	8	9	10	11	12	Q1	Q2	Q3	Q4
EU:																		
Austria		APG	[Green bar]															
Belgium ¹	24.07.2024	Elia	[Yellow bar]															
Bulgaria	30.06.2024	ESO	[Yellow bar]															
Croatia	24.07.2024	HOPS	[Yellow bar]															
Czech republic		CEPS	[Green bar]															
Denmark ²	24.07.2024	Energinet	[Yellow bar]															
Finland ²	24.07.2024	Fingrid	[Yellow bar]															
France	24.07.2024	RTE	[Green bar]															
Germany		50Hz AMP, TNG, TTG	[Green bar]															
Greece	24.07.2024	ADMIE	[Yellow bar]															
Hungary	24.07.2024	MAVIR	[Yellow bar]															
Italy	24.07.2023	Terna	[Yellow bar]															
Netherlands ³	24.07.2024	TenneT BV	[Yellow bar]															
Poland	24.07.2024	PSE	[Yellow bar]															
Portugal		REN	[Yellow bar]															
Romania	01.03.2024	Transelectrica	[Yellow bar]															
Slovakia	24.07.2024	SEPS	[Yellow bar]															
Slovenia		ELES	[Yellow bar]															
Spain	24.07.2024	REE	[Yellow bar]															
Sweden ²	24.07.2024	SVK	[Yellow bar]															
EEA:																		
Norway ²	24.07.2024	Statnett	[Yellow bar]															
Non-EU:																		
Switzerland ⁴		Swissgrid	[Green bar]															

[Yellow bar]	5.4.(b)(i)	National terms and conditions development
[Light Green bar]	5.4.(b)(i)	National terms and conditions entry into force
[Orange bar]	5.4.(b)(iii)	Interoperability tests between TSO and aFRR-Platform
[Green bar]	5.4.(b)(v)	TSO connection to aFRR-platform / Go-live
[Red bar]	5.4.(b)(vi)	EBGL Article 62 Derogation considered/requested/granted (new deadline listed)

1) A first version of the T&C has entered into force early May when local bidding has been adapted and a second one will enter into force when ELIA will connect to PICASSO. 2) The plan presented in this roadmap shall be regarded as a preliminary, non-binding estimate. The planned connection time is expected in Q2 2024. 3) TenneT NL aims for implementation and go-live by July 2024 and has been granted a derogation until then. However, there is a real risk that the final derogation will take place even later than the requested derogation period. If TenneT takes these risks into account, TenneT expects to participate in the summer of 2025 to participate in the aFRR platform and TenneT will enter into discussions with relevant stakeholders if it becomes clear that the risks already in the planning manifest themselves. 4) The technical readiness of Swissgrid has been acknowledged. The participation of Switzerland in the aFRR-Platform is regulated based on article 1.6 and 1.7 of the EB Regulation and currently the subject of litigation by Swissgrid at the Court of Justice of the European Union.

2. IMPLEMENTATION FRAMEWORKS

TERRE

- Implementation framework for the exchange of balancing energy from Replacement Reserves
- Article 19 of Commission Regulation (EU) 2017/ 2195

MARI

- Implementation framework for the European platform or the exchange of balancing energy from frequency restoration reserves with manual activation
- Article 20 of Commission Regulation (EU) 2017/ 2195

PICASSO

- Implementation framework for the European platform or the exchange of balancing energy from frequency restoration reserves with automatic activation
- Article 21 of Commission Regulation (EU) 2017/ 2195

Imbalance Netting

- Implementation framework for the European platform for the Imbalance Netting process
- Article 22 of Commission Regulation (EU) 2017/ 2195

Implementation Frameworks

General overview

- **High-level design** of the RR-Platform/ mFRR-Platform/ aFRR-Platform / IN-Platform
- **Roadmaps** - The timeline and roadmap for the implementation of the Platforms
- **Functions** of the RR/FRR-Platform – AOF, TSO-TSO settlement function, CMF
IN – Platform - Imbalance Netting process function, CMF
- **Standard balancing energy product** - definition for RR/mFRR/aFRR
- **BEGOT** and **GCT** for the standard balancing energy product bids - RR/mFRR/aFRR – for BSPs
- **TSO energy bid submission GCT** and **changes** of the standard balancing energy product bids
- **CMOL** - to be organized by the AOF - RR/mFRR/aFRR
- **Description of the AOF** - RR/mFRR/aFRR
- **Fall-back procedure** – in line with art. 146(8) SO GL – IN-Platform
- **Designation of entity** – AOF, TSO- TSO settlement, CMF (common function for all Platforms)
- **Transparency and reporting** – Balancing Detailed Data Description
- **Governance and decision-making process** – Principle Agreement, Platforms Cooperation Agreements
- Categorization of costs and detailed principles for sharing the common and regional costs - Principle Agreement, Platforms Cooperation Agreements, Common Service Provider Agreement

3. Integration approach for EnC Contracting Parties TSOs – Relevant contracts/ agreements and adherence

Integration approach

General overview



Integration approach

Global NDA

1. Global Balancing Platforms NDA - Exchange information

- To allow discussions between BPs and applicant about observership and share contracts the applicant observer needs to adhere to an NDA.
- To ensure an efficient process, a Global NDA is currently being elaborated and will replace existing (one-sided) NDAs.

Initial signature round

- Member TSOs, EnC TSOs who are already observers or applicant observers to one or more BP: will be included in the initial signature round of the “Global Balancing Platforms NDA” that shall start beginning of Q4/2023.

Accession letter

- EnC TSOs who will not be part of this initial signature round, if any: will be asked to adhere to the “Global Balancing Platforms NDA” via the NDA accession letter.

Integration approach

General overview



Integration approach

Become Observer

2. Become Observer – comply with criteria prior adherence as Observer to Principal Agreement and Platform Cooperation Agreement

- Observership will be granted to EnC TSOs individually upon written request of the applicant.
- To become Observer the applicant needs to adhere to the Principal Agreement (PA) and Platform Cooperation Agreement (PCA) by signing the accession letter as observer. Article 10 PA draws the criteria that a TSO that wants to become observers must comply with:

Criteria art. 10. PA	Interpretation
a) such accession is provided for in the EBGL, the 'Treaty establishing Energy Community' or similar treaties;	Criteria fulfilled <ul style="list-style-type: none">• By the December 2022 Agreement between EU and EnC, and• If transposition of GL EB, GL SO etc. into national regulation has started• Confirmation to be provided by EnC Secretariat.
b) if applicable, the relevant NRA(s) or other competent authority(ies) (both from the perspective of the existing Parties and of new party requesting the accession) approve the accession or did not object to the accession;	<ul style="list-style-type: none">• Existing BP parties: for those countries who require this, the respective TSO will arrange for its NRA approval/ confirmation that NRA does not object that EnC TSOs become observers.• By signing the PA and PCA as Observer, the EnC TSO confirms that their NRA or other relevant authority either does not object the adherence as observer or implicitly confirms that there is no such requirement to ask its NRA for approval. <i>(When providing the PA for accession, this will be stated in the invitation letter.)</i>
c) it has adhered to or has put in place all other agreements or arrangements required to be able to perform its obligations under the Agreement	<ul style="list-style-type: none">• Signing Global NDA, PCAs

Integration approach

Become Observer

If all criteria listed on the previous slide are complied with and the applicant was granted a positive decision by the relevant SC in line with art. 14 PCA:

- the applicant adheres to the PCA by signing the accession letter as Observer
- the applicant adheres to the PA by signing the accession letter as Observer

Observer's rights:

- Observers are granted read access to SharePoint
- Observers are added to email distribution list (as needed)
- Observers do not have any voting rights
- Each Observer shall have access to the decisions of the respective Balancing Platform Steering Committee and shall be allowed to attend the meetings of relevant working groups

Integration approach

General overview



Integration approach

Become Member

3. Become Member – comply with criteria prior adherence as Member to Cooperation Agreements

- Membership will be granted to EnC TSOs via a harmonised approach: in order to minimise coordination effort for the existing BP parties, all EnC TSOs to become Members of IN, MARI and PICASSO (and TERRE if wished) via a coordinated approach.
- To become Member, the applicant needs to adhere to the Principal Agreement (PA) by signing the accession letter as member. Same as for observership, Article 10 PA draws the criteria that a TSO that applies for membership must comply with:

Criteria art. 10. PA	Interpretation
a) such accession is provided for in the EBGL, the 'Treaty establishing Energy Community' or similar treaties;	<ul style="list-style-type: none">• Criteria fulfilled - by the December 2022 Agreement between EU and EnC,• Confirmation whether, transposition of GL EB, GL SO etc. into national regulation was completed,• Confirmation to be provided by the EnC Secretariat that transposition was completed
b) if applicable, the relevant NRA(s) or other competent authority(ies) (both from the perspective of the existing Parties and of new party requesting the accession) approve the accession or did not object to the accession;	<ul style="list-style-type: none">• Existing BP parties: for those countries who require this, the respective TSO will arrange for its NRA approval/ confirmation that NRA does not object that EnC TSOs become members and for their future accession• By signing the PA and PCA as Member, the EnC TSO confirms that their NRA or other relevant authority either does not object the adherence as member as the future accession or implicitly confirms that there is no such requirement to ask its NRA for approval. <i>(When providing the PA for accession, this will be stated in the invitation letter.)</i>
c) it has adhered to or has put in place all other agreements or arrangements required to be able to perform its obligations under the Agreement	<ul style="list-style-type: none">• Signing the agreements listed in the table on the next slide

Integration approach

Become Member

Additionally, EnC TSOs need to adhere to the following agreements (list might not be exhaustive):

Balancing Platform	Agreements to adhere to
IN (IGCC)	Cooperation Agreement on International Grid Control Cooperation (IGCC CA)
MARI	MARI PCA, MARI Common Service Provider Agreement (CSPA), CMM CSPA, MARI TSO-TSO invoicing agreement (TIA), IPR Agreement*, MSM SLA
PICASSO	PICASSO PCA, PICASSO CSPA, PICASSO TIA
TERRE	TERRE Cooperation Agreement (TERRE CA)

If all criteria listed on the previous slide are complied with and the applicant was granted a positive decision by the relevant SC:

- the applicant adheres to the PCA by signing the accession letter as Member
- the applicant adheres to the PA by signing the accession letter as Member

Member's rights/duties:

- Members are granted full access to SharePoint and added to all email distribution lists.
- Members have voting rights.
- starting to share (new) establishment costs from that moment onwards

*According to art. 2.2(5) IPR it is not mandatory: "In case a new TSO enters the TERRE Project (as TERRE Member or Project Member) and/or the MARI Project and/or the Fifty Project, and/or another Regional Balancing Implementation Project, it shall have the option to either:

1. Fully enter into this Agreement and become co-owner of the rights to the Common Results and the IT Solution in accordance with Article 2.1(1) of this Agreement, or;
2. Remain outside of this Agreement and only pay for the right to use the Background, the Common Results and the IT Solution, as agreed between the members of the relevant Regional Balancing Implementation Projects.,,

Integration approach

General overview



Integration approach

Go-live date approval (based on the Picasso example)

4. Go-live date approval

Verification of go-live checklist by OC/OPSCOM, OC/OPSCOM approval

Respective OPSCOM shall base approval of accession date on:

- Approved accession script
- Successful platform Go-Live
- Fulfillment of all accession relevant points from the Go-Live checklist
- Successful regression tests (from respective IOTs) on the production system (first accessions)
- Successful pre-production tests (from respective IOTs) (all other accessions)
- Green light from all project bodies (EG/TWG, OWG, ITWG, TTWG) and the CSP

4. Become Participating TSO Picasso Accession

Definition

Concerns the accession of a Member TSO after the platform Go-Live, in accordance with PCA art. 7, para. 5

Contractual prerequisites

Accession notification from the Member TSO (PCA art. 7 para 5 sub a), i-iv)

An agreed planning by PICASSO SC within which the conditions and the legal requirements for the accession should be fulfilled. (PCA art. 7, para. 5 sub b)

Decision

PICASSO SC must approve accession if contractual prerequisites* are fulfilled and shall then also not oppose accession (PCA art. 7 para 5 sub c) and d))

* Contractual preconditions

- Confirmed accession date and confirmed go-live readiness planning in the LIP monitor
- Test end report from the IOT in which the acceding TSO fully participated
- Accession readiness declaration from the TSO to the respective SC (by e-mail) one week in advance to the scheduled SC approval date
- Accession readiness declaration from the CSP to the respective SC (by e-mail) one week in advance to the scheduled SC approval date
- Individual assessment by member TSOs of fulfillment (ref. art. 16.2 & 5.2.i of the PA) of the legal criteria for accession

Integration approach

Historical costs

The general principles for historical costs: Principal Agreement

- **PA, art. 8.1:** „General principles Cost sharing, reporting, settlement and invoicing under this Agreement shall be done in accordance with EBGL and the details are set forth in the respective Implementation Framework and Platform Cooperation Agreement. The Member TSOs shall ensure cost efficiency and shall cooperate to avoid unnecessary costs and identify and implement efficient solutions. The Member TSOs shall ensure that costs are in line with, EBGL, more specifically costs shall be reasonable, efficient and proportionate. The costs arising from the PICASSO, IGCC, TERRE and MARI projects shall be differentiated into National Costs, Common Costs and Regional Costs.“
- **PA, art 8.2:** "If a Party becomes a Member TSO to a Platform, or if a TSO becomes an Observer to a Platform, this Party c.q. TSO shall have to contribute to the Common and Regional Costs in the same way existing Member TSOs c.q. Observers contribute. The amount of the contribution of such new Member TSO c.q. Observer, and the historical costs it may be due, shall be recalculated by the concerned Steering Committee."
- **MARI/ Picasso PCA, art 14:** “Without prejudice to any historical payments due by a Party, and unless the MARI/Picasso Steering Committee decides otherwise, the Observers do not contribute in the Common Costs and the Regional Costs. The Observers shall each bear their own National Costs.”

Historical costs:

- Establishment costs,
- Amending costs,
- Operation costs,
- Costs incurred before the approval of the proposal for the implementation frameworks directly related to the development and implementation of this project.

Cost sharing principles: EU EBGL/ EnC EBGL

- **Art. 23(6):** “The cost sharing principles shall apply to costs contributing to the establishing, amending and operating the European platforms from the approval of the proposal for the relevant implementation frameworks pursuant to Articles 19(1), 20(1), 21(1) and 22(1). In case the implementation frameworks propose that existing projects shall evolve into a European platform, all TSOs participating in the existing projects may propose that a share of the costs incurred before the approval of the proposal for the implementation frameworks directly related to the development and implementation of this project and assessed as reasonable, efficient and proportionate is considered as part of the common costs pursuant to paragraph 2(a).”