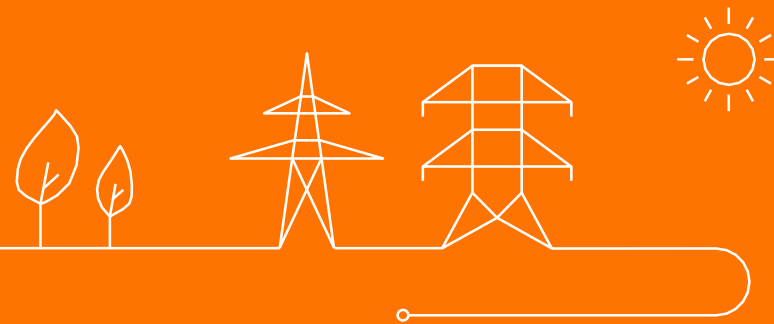


# Users' Group

## Plenary meeting of the Elia Users' Group

Thursday, 9 June



- 1. Approval of the minutes of the Users' Group plenary meeting of 8 March 2022**
- 2. Federal Development Plan**
- 3. Grid losses:** compensation coefficients in kind 2023
- 4. WG Belgian Grid:** state of play of ongoing work
- 5. WG Consumer-Centric Market Design:** state of play of ongoing work
- 6. WG Balancing:** state of play of ongoing work
  - 6.1.** TF MOG II Workshop on balancing and market integration
  - 6.2.** Workshop on incentives related to the analysis, design and implementation of FCR evolutions pursuant to SOGL art 154(2)

**6.3.** Workshops on dynamic procurement strategies for FRR

**7. WG Adequacy:** state of play of ongoing work

**8. WG System Operations & European Market Design:** state of play of ongoing work

**8.1.** Workshop on improvement of the quality of input data for congestion management

**9. Miscellaneous**

**9.1.** Public consultations – feedback process

**9.2.** Ongoing public consultation & next plenary meeting: Tuesday 4/10 – 1 p.m. to 5 p.m.



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# What is the Federal Development Plan?

- 10 year time horizon, once every 4 years
- Covers 110 to 380 kV
- Estimation of future grid capacity needs: why adapting the grid?
- The corresponding investment program to meet the needs: which grid adjustments?
- Approval by Federal Minister of Energy
- Consultation of CREG, Marine Minister, Regional Ministers of Energy & general public
- Legally binding for Elia
- Coherence with ENTSO-e's TYNDP checked by NRA



# Methodology

	What ?	External Stakeholders
1 Scenarios	<ul style="list-style-type: none"> <li>Link with TYNDP</li> <li>Elia's own assessment</li> <li><b>Separate Public consultation</b></li> </ul>	Taskforce scenarios <span style="background-color: red; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span>
2 Perform studies	<ul style="list-style-type: none"> <li>Market and grid studies</li> <li>Identify needs and solutions</li> <li>Assess projects</li> </ul>	<div style="border: 2px dashed red; padding: 10px;"> <div style="text-align: right;"><span style="background-color: red; color: white; padding: 2px 5px; border-radius: 3px;">NEW</span></div> <p>Federal Planning Bureau and DG Energy are consulted and informed + CREG is informed</p> </div>
3 Gather Storylines	<ul style="list-style-type: none"> <li>Gather information about existing programs and new needs</li> <li>Build understandable storylines</li> </ul>	
4 Draft Document	<ul style="list-style-type: none"> <li>Text and layouting</li> <li>Executive summary and key messages</li> </ul>	
5 Perform SEA	<ul style="list-style-type: none"> <li>Methodology definition</li> <li>Perform SEA for each project</li> <li>Draw conclusions and key messages</li> </ul>	<div style="border: 2px dashed red; padding: 10px; text-align: center;">SEA committee</div>
6 Consult Authorities	<ul style="list-style-type: none"> <li>Advice CREG and Marine minister</li> <li>Federal committees (SEA, FRDO)</li> <li>Regions (Regional governments)</li> </ul>	<div style="border: 2px dashed red; padding: 10px; text-align: center;">Open period for comments from any stakeholder</div>
7 Public consultation	<ul style="list-style-type: none"> <li>Public consultation</li> <li>All information is online</li> </ul>	
8 Update & finalize	<ul style="list-style-type: none"> <li>Text and lay-outing</li> <li>Executive summary and Key messages</li> <li>Submission to Minister of Energy</li> </ul>	<div style="border: 2px dashed red; padding: 10px;">Federal Planning Bureau, DG Energy and SEA committee + informal stakeholders</div>

# High level planning



(\*) With FPS Economy, Federal Plan Bureau, CREG – started in 2021 and remains active at all stage of the process  
 (\*\*) A public consultation was organized on the scenarios  
 (\*\*\*) Strategic Environmental Assessment



# Ventilus Users' Group

9 juni 2022

# Ventilus: RUP en vergunning

Voorziede timing  
door de Vlaamse  
Regering  
(bij startnota in 2019)



2019

Federaal ontwikkelingsplan 2020-2030  
Opgenomen in Vlaams regeerakkoord

Start RUP-procedure:

1. Goedkeuring en publicatie Startnota
2. Publieke consultatie (april-juni 2019)

2019-2022  
studies, adviezen, rapporten

Technologie dubbelcheck (2020)  
Intendant (2021-2022): publicatie eindrapport 18 mei

**Volgende stap**

Beslissing Vlaamse regering over doorstart RUP-procedure

3. Scopingnota: uitvoeren effectenstudies en tracé-keuze



# Overzicht van studies, adviezen en rapporten voor Ventilus

## Ter voorbereiding van de startnota Ventilus:

- Elia (2018): [Technologiestudie Stevin-Avelgem \(Ventilus\) en Avelgem-Centrum \(Boucle du Hainaut\)](#)
- Mott Mac Donald (2018): [Elia Future Grid 2030 - Technology Review and Benchmarking Study](#)
- Mott Mac Donald (2019): [Elia Future Grid 2030 - Comparison of Technology Options](#)
- Academici (2019): [Bijkomend advies - Advies over technologiestudie uitgevoerd door Elia](#)
- Elia (2019): [Brochure - Korte samenvatting technologiestudie voor Ventilus](#)

## Dubbelcheck van de technologiekeuze Ventilus:

- Elia (2020): [Studie rapport - Ventilus in gelijkstroom](#)
- Elia (2020): [Studie rapport - Ventilus in wisselstroom](#)
- Manitoba (2020): [Technische nota - Technical Challenges & Risks of HDVC Transmission for Ventilus](#)
- EnergyVille (2020): [Technische nota - Resonance and Transient Behavior of Extensive Cable Grid](#)
- Expertengroep Technologie (2020): [Samenvattend rapport - Conclusie experten over gelijkstroom](#)
- Expertengroep Technologie (2020): [Samenvattend rapport - Conclusie experten over wisselstroom](#)
- HVDC Centre Schotland (2020): [Bijkomend advies - Conclusie HVDC Centre over gelijkstroom](#)
- Planteam Ventilus (2020): [Presentatie - Terugkoppeling aan stakeholdergroep Ventilus](#)

## Intendant Ventilus aangesteld door Vlaamse Regering:

- Rapportage van de expert van het team van de intendant [www.ventilusintendant.be](http://www.ventilusintendant.be)

# Verskillende experts met altijd dezelfde conclusies

**1.** Ventilus kan **maximum 8 kilometer ondergronds in wisselstroom**, kan afhankelijk warmtegeleiding van grond opgetrokken worden tot **12 kilometer**



**Conclusie experts Vlaamse Regering:** “Elia behoort daarmee tot een selecte kring van netbeheerders die wel degelijk bereid zijn om de limieten op te zoeken wat technisch haalbaar is, zonder evenwel onverantwoorde risico’s te nemen.”

**2.** Ventilus kan **niet in gelijkstroom** want dit brengt onaanvaardbare risico’s met zich mee



**Conclusie experts Vlaamse Regering:** “De technologie is niet voldoende betrouwbaar om volledig te integreren in het elektriciteitsnet. Bestaande toepassingen zijn niet vergelijkbaar met de behoeften voor het Ventilus project. Dit staat in schril contrast met de maturiteit en garanties die een bovengrondse wisselstroomverbinding kan bieden.”

**3.** **380kV-net in wisselstroom afwerken** om nieuwe aansluitingen vanuit Noordzee in gelijkstroom én ondergronds mogelijk te maken



**Expert Mart Van der Meijden:** “In Nederland heeft TenneT eerst het ganse net in de basis robuust en stabiel gemaakt (Ventilus heeft hetzelfde doel). In het sterke Nederlandse net zijn nu wel HVDC oplossingen denkbaar zoals door de burgerplatformen wordt geopperd. Echter heeft het 380kV-net in Midden België en West-Vlaanderen deze statuur nog niet.”

**4.** **Opsplitsen plandoelstellingen heeft geen zin.** Want voor vermazing Stevin-lijn is altijd een bovengrondse luchtlijn in wisselstroom nodig



**Team Intendant:** “De door de burgerplatformen voorgestelde veranderingen aan de plandoelstellingen, geven geen aanleiding tot andere opties om de benodigde transmissiecapaciteit uit te bouwen. Er is geen reden om de procedure te herzien door een koppeling van de plandoelstellingen”

# Advies intendant: Knoop doorhakken en hand reiken

## Bovengrondse hoogspanningslijn is enige toekomstgerichte oplossing

- **Verder uitstel** van beslissing zal het **draagvlak niet verhogen**
- **Beslissing neemt de onzekerheid weg** voor veel mensen die nu in zoekzones wonen
- Voorstel voor verschillende **milderende maatregelen**  
o.a. elektromagnetische velden: betere regelgeving en meetsysteem voor transparante monitoring en handhaving



**Belangrijke stap verwacht komende weken**

**Beslissing Vlaamse regering over doorstart RUP-procedure**

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# Coefficients of compensation in kind 2023

- The Federal Grid Code provides in a compensation in kind of the federal losses
- Elia has committed to publish the coefficients before the end of June Y-1
- The coefficients of the compensation in kind takes into account:
  - Expected losses for year Y
  - Any deficit/surplus from the past in order to strive towards neutrality

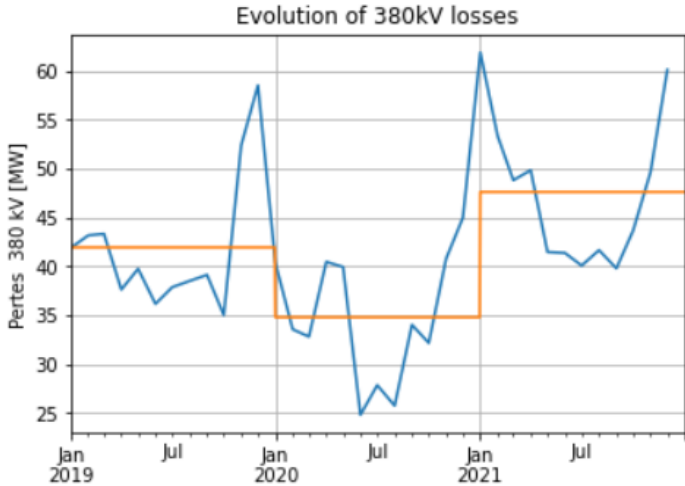
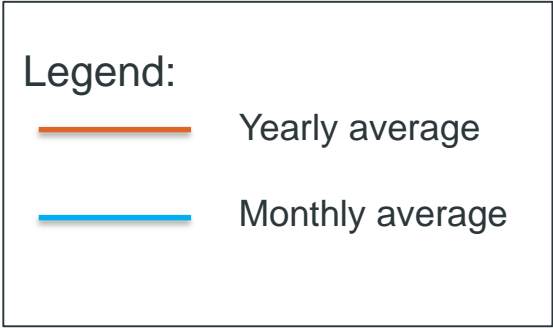
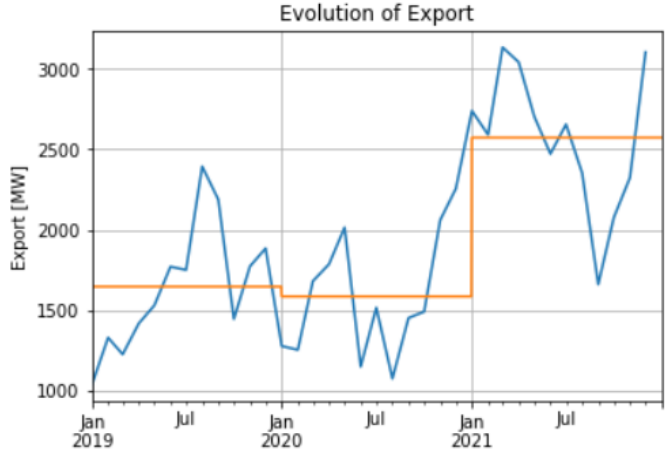
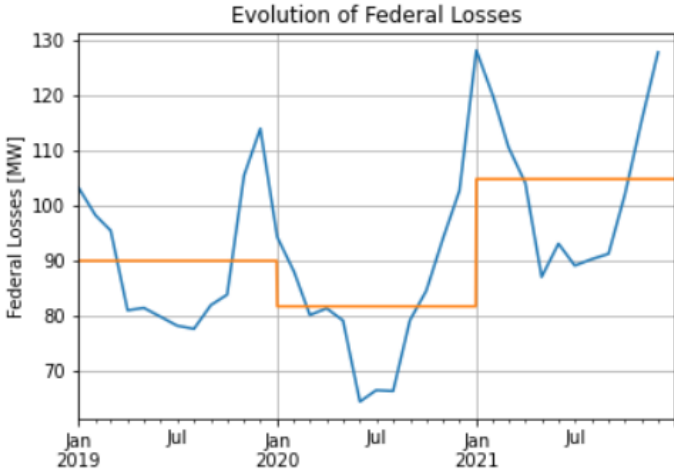
# Coefficients of compensation in kind 2023

	2020	2021	2022	2023
Losses EHV in GWh	717	920	972*	1027*

- Federal losses trend has been « up » since 2020, following various network developments taken into operations as from 2020 on :
  - New PST @Zandvliet
  - HVDC link Alegro
  - New HTLS (Horta-Avelin / Rilland-Zandvliet)
  - Increase of the offshore production
- However, despite the increase of the % for 2022 compared to 2021, we observe that recent % for losses compensation is not matching the increasing trend, resulting in a deficit being accumulated.
- Also, the trend of increasing federal losses is believed to continue for the next years.

\*partially (2022) or fully (2023) forecasted

# Recent evolution of losses and influencing factors



- Evolution of Federal Losses highly linked to the evolution of the losses in the 380kV
- One major factor of the increase is the international flows, e.g. the evolution of the export (incl. effect of Alegro)



# Coefficients of compensation in kind 2023

	2020	2021	2022	2023
Losses EHV in GWh (*)	717	920	972	1027
Compensation in-kind in GWh (*) (non accumulated)	809	837	898	1122
Peak coefficient %	1,45%	1,35%	1,45%	1,8%
Offpeak coefficient %	1,35%	1,35%	1,45%	1,8%

→ Elia aligns coefficient upwards :

- Coefficient of 1,65% required in order to cover the federal losses of the current year
- Additional increase of 0,15% in order to cover (already a part of) the deficit

→ Final coefficient for 2023 is 1,8%

\*partially (2022) or fully (2023) forecasted



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# WG Belgian Grid

- Sinds de laatste plenaire vergadering van 8 maart  
⇒ één vergadering WG Belgian Grid gehad op 1 april
- De belangrijkste onderwerpen:



**K.B. FTR vs. gedragscode**



**Toegangscontract**



**Aansluitingscontract**

- Volgende vergadering WG Belgian Grid is op **23 juni**



## Toegangscontract



- Publieke consultatie 2.0. (8 februari tot 13 maart)
- **4 niet confidentiële reacties** ontvangen (BASF, BOP, FEBEG en FEBELIEC)
- Toegangscontract werd afgewerkt op basis van de reacties van de marktpartijen

### Next steps

- 25/04: ter **goedkeuring** voorgelegd aan de regulatoren.

## Aansluitingscontract



- Draft van Deel A (Definities en algemene voorwaarden) verzonden door Elia midden februari 2022
  - Feedback ontvangen van de regulatoren en enkele marktpartijen (FEBEG, BASF & FEBELIEC)
  - Discussie over Deel A (Definities en algemene voorwaarden)
- Aandachtspunt:** de aansprakelijkheidsclausules werden in Elia's ontwerp niet gewijzigd, aangezien zij deel uitmaakten van een afzonderlijk traject
- Na besprekingen met FORBEG zullen de aansprakelijkheidsclausules worden aangepakt in het kader van de huidige herziening;
  - Gevolg: Elia zal herziene verantwoordelijkheidsclausules voorstellen op basis van (vroegere) besprekingen met de CREG.

### Next steps – timing

- Deel A (Definities en algemene voorwaarden): Elia zal een nieuw ontwerp voorstellen naar aanleiding van de ontvangen opmerkingen en de daaropvolgende besprekingen;
- Deel B (Technische voorwaarden en bijlagen): wordt momenteel door Elia herzien/geherformuleerd.

# Opsplitsing K.B. FTR – CREG gedragscode



## K.B. FTR

**Deel 3: Aansluiting** (maximumcapaciteitsdrempelwaarden technische eisen – grotendeels)

**Deel 4: Toegang tot het transmissienet** (enkele artikels gelinkt aan veiligheid)

**Deel 6: Beheer van het transmissienet**

**Deel 8: Publieke distributienetten**

**Deel 10: Registratie van gegevens**

- Alle algemene technische eisen en afgeleide die op generieke wijze kunnen vastgesteld m.b.t. veiligheid, ontwerp en exploitatie

## Gedragscode

**Deel 2: Planning**

**Deel 3: Aansluiting** (technische eisen – verwijzing naar specificaties in aansluitingscontract + realisatie van de aansluiting)

**Deel 4: Toegang tot het transmissienet**

**Deel 5: Evenwicht** (BRP en BSP)

**Deel 6: Beheer van het transmissienet** (non-balancing ondersteunende diensten: VSP, RSP, DSP, Congestiebeheer en coördinatie, OPA, SA)

**Deel 7: Meteropnames & metingen**

**Deel 8: Publieke distributienetten** (aansluiting, toegang, ondersteunende diensten)

**Deel 10: Registratie van gegevens** (algemeen + bijlage 3)

# Gedragcode deel Aansluiting en Toegang – Voorstel Elia



- Voornamelijk beperkt tot **opkuis, coherentie en uniformiseren**
- Behalve:
  - **Gedeelde aansluiting** art. 154 – art. 156
  - **Substantiële modernisering** art. 160 – art. 163
  - **Integratie drop-off procedure** art.198
- Draft versie voorstel => leden WG Belgain Grid (2 weken tijd voor input)
- Daarna verzonden => CREG voor integratie
- Formele consultatie door CREG: **juni 2022** (FOD Economie doet geen publieke consultatie)
- Inwerkingtreding: **3 september 2022**

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# Working Group CCMD (Consumer Centric Market Design)

ELIA – 5 May 2022



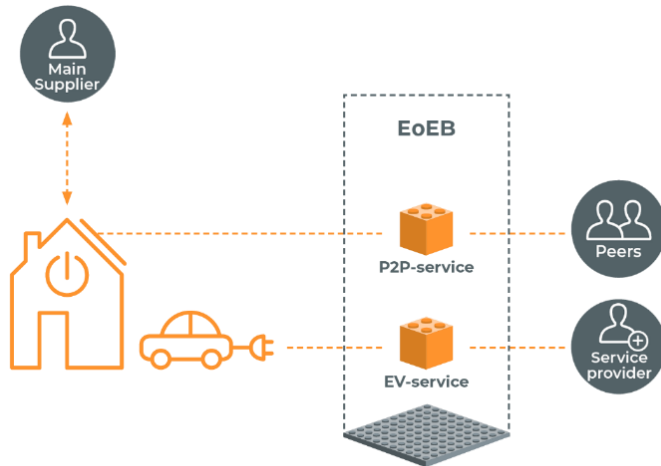
# Roadmap and Elia's ambitions



# The Working Group CCMD intends to discuss and implement the two key features identified to deliver major benefits

## Exchange of Energy Blocks (EoEB)

A decentralized exchange of energy blocks between consumers and many other parties, **on & behind the meter**



## A real-time market price to reveal the true value of flexibility to consumers



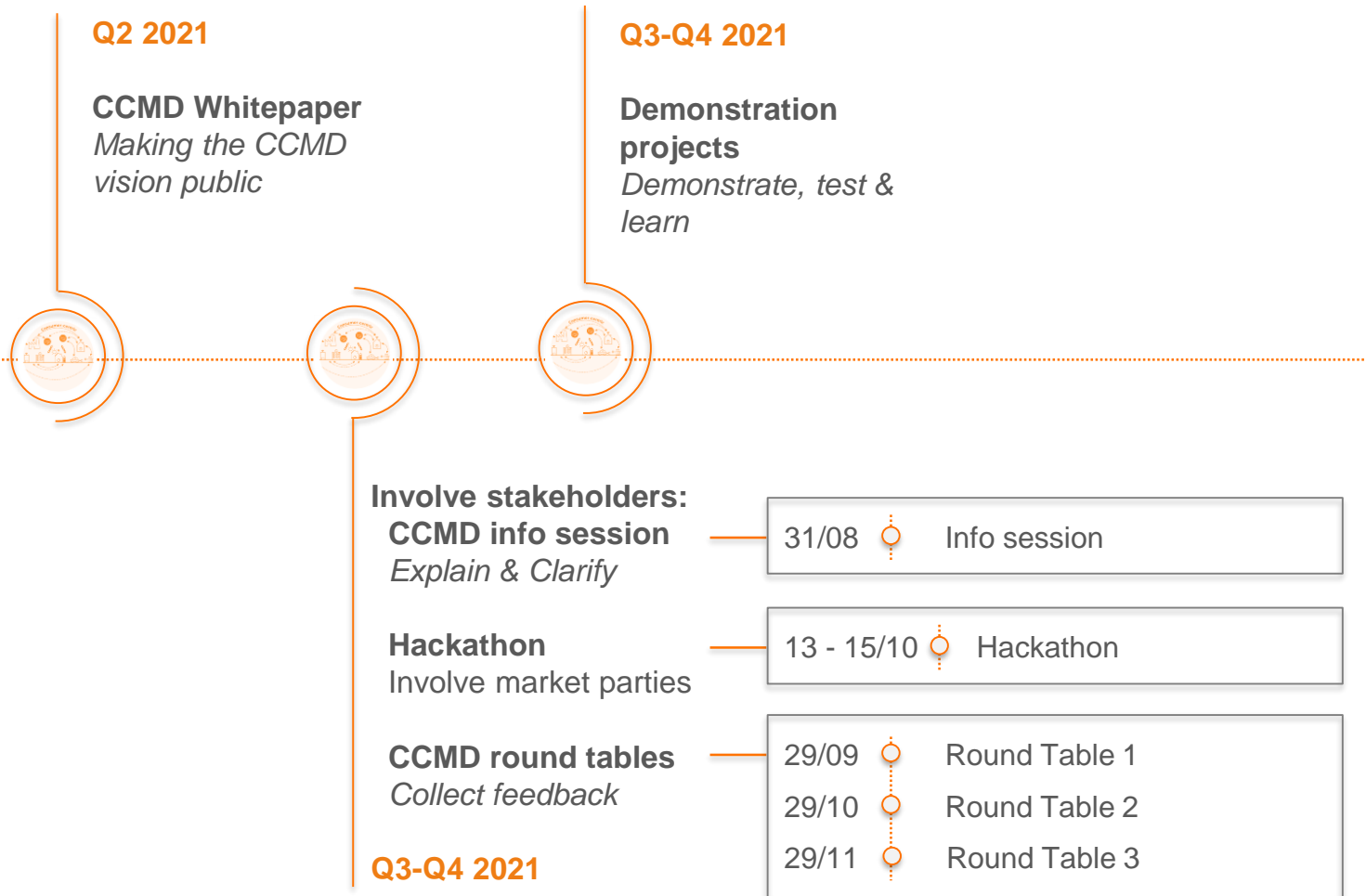
Facilitating the **development of additional flexibility** (through an EoEB platform) should come **altogether** with the development of a clear incentive, the **real-time price**



**EoEB & RTP (design and implementation) will be discussed in the WG CCMD**



# Consumer Centric Market Design: a lot has been done...



➤ Many stakeholders expressed interest for this upgraded market design enabling **flexibility behind the meter** and “**energy-as-a-service**” coupled to the valorization of **real-time price**

**ELIA is now ready to define the next steps towards a phased implementation!**



# The round tables on Consumer-Centric vision ended up with following work-packages

<b>Market Design</b>	Roles and responsibilities
	Consumer (=end user) protection
<b>Exchange of Energy Blocks (EoEB)</b>	Design & implementation
	Integration in existing systems
<b>Real-Time Price (RTP)</b>	Design
	Evolution of required publications
	Evolution of BRP settlement process
<b>Market Enablers</b>	DSO co-creation
	Grid fee & taxes
	Data Access Management
	Metering/Measurement Device Requirements



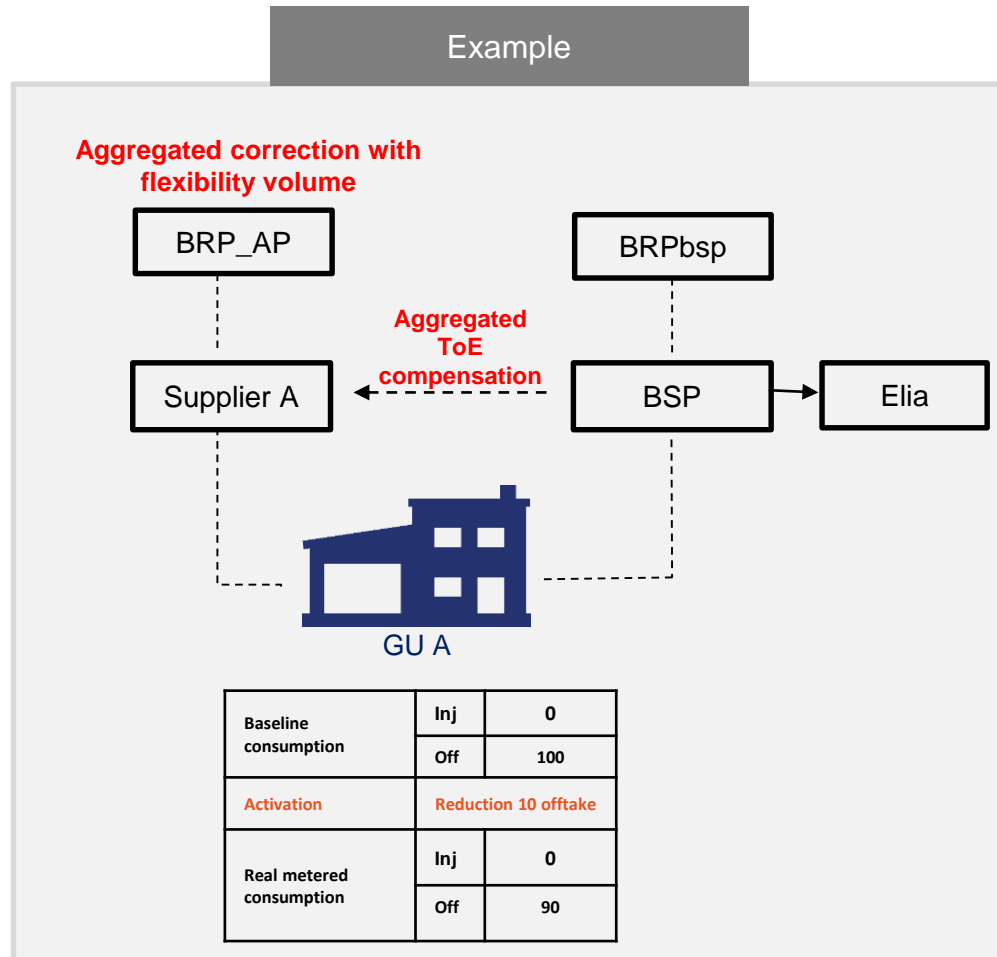
# Consumer Centric Market Design: ... but still a lot to do!





# How CCMD can make flexibility seamless?

## How does ToE currently work for MV and HV grid users?



1. Supplier A sources 100 MW on the electricity market to cover the expected consumption of grid user A
2. At the moment of delivery, the BSP activates 10 MW of flexibility by demanding a decrease in net-offtake of the GU
3. Instead of consuming the expected 100 MW, the GU consumes 10 MW less than foreseen. As a result:
  - Supplier A can no longer invoice the foreseen 100MW
  - BRP\_AP is left with an imbalance in his perimeter
4. ToE prescribes that the intervention of an FSP may not be detrimental to other parties. This implies:
  - An **aggregated correction** of the perimeter of the BRP\_AP with the flexibility volume
  - An **aggregated compensation** between FSP and the Supplier for any sourced but not sold energy

## At low voltage level, the current ToE framework has some important limitations

Elia believes the CCMD can address (among others) the following key limitations observed in the existing framework

1

Ensure an **easy market access** for new FSPs, independent from the Supplier and BRP<sub>source</sub>

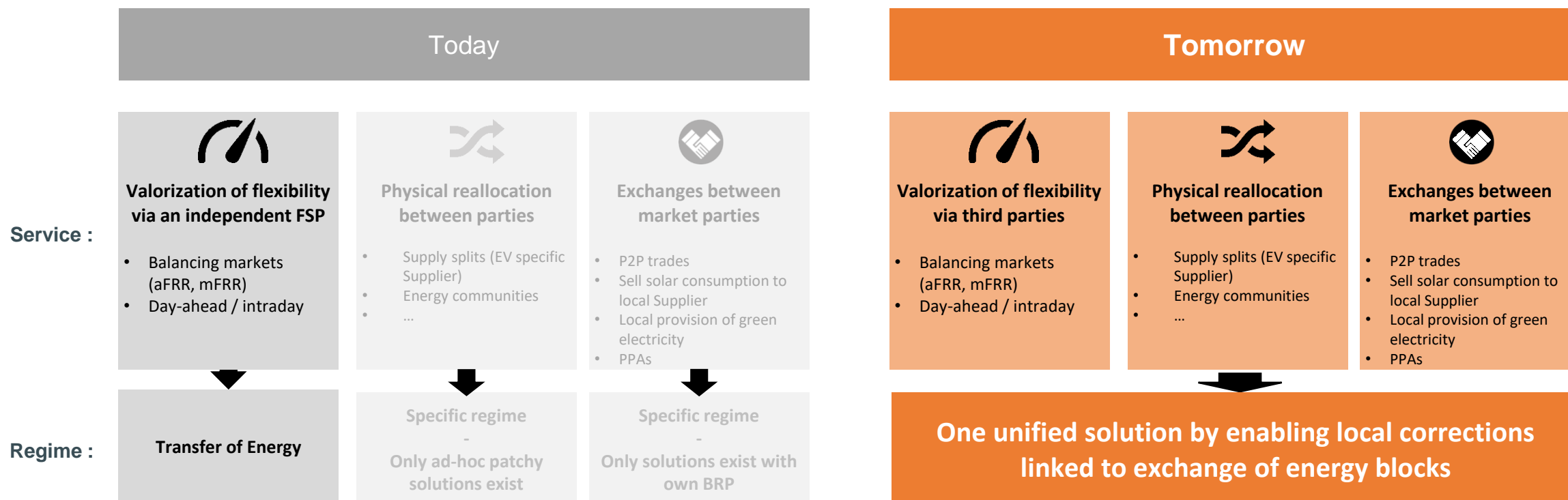
2

Facilitate the development of new services and business models via one **unified framework**

3

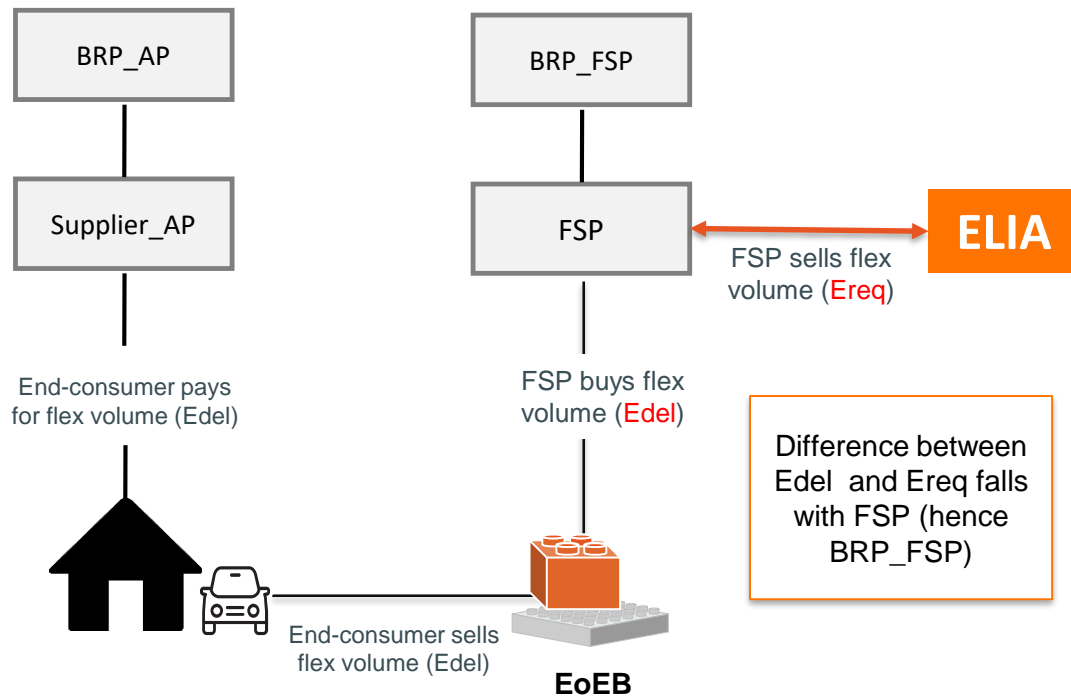
Ensure a **correct compensation** for the Supplier considering the increasing diversity of supply contracts

# CCMD provides a unified solution to facilitate the development of new services and business models that will unlock additional flexibility (implicit as well as explicit)





## The local correction will be based on the **delivered flexibility volume (Edel)**



By correcting with the **delivered energy volume (Edel)** calculated by the SO, CCMD ensures that:

- Balance responsibility associated to a non-perfect delivery is carried by the BRPfsp
- the risk of gaming and manipulation is reduced since Edel is calculated by the SO

This way, a **trusted framework** is put in place while ensuring widespread market acceptance.

\* Hence the difference between Ereq and Edel

## In a nutshell

CCMD addresses (among others) the limitations that were observed in the existing framework:



Ensure an easy market access for new FSPs, independent from the Supplier and BRP<sub>source</sub>



Facilitate the development of new services and business models via one unified framework



Ensure a correct compensation for the Supplier considering the increasing diversity of supply contracts



# Conclusion and next steps

## First conclusions

- CCMD makes flexibility seamless. CCMD addresses (among others) the limitations that were observed in the existing framework:
  - ✓ Ensure an easy market access for new FSPs, independent from the Supplier and BRPsource
  - ✓ Facilitate the development of new services and business models via one unified framework
  - ✓ Ensure a correct compensation for the Supplier considering the increasing diversity of supply contracts
- CCMD tested out through a real use case validate consumer appetite on a large scale



## Next Steps

- Take under consideration first remarks/feedback
- Present the benefits of CCMD in case of a supply split in the next Working Group CCMD (Proposal: 22/06 – altogether with WG Bal)
- Moving towards a common T-DSO market consultation



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## 6. WG Balancing



## ❖ Imbalance Price – changes to aFRR component in the context of connection to PICASSO

- ❖ *A first proposal was presented on WG Bal 24/03. Based on the feedback of stakeholders, a final proposal was presented on WG Bal 05/05.*
  - ❖ *The WG Balancing supported the final proposal of Elia*
  - ❖ *Elia submitted the Balancing Rules to CREG for approval **without further public consultation to not jeopardize the connection to PICASSO.***
- ❖ *The final proposal is subject to **monitoring and an evaluation moment** is planned at the latest one year after the EIF.*

## ❖ Relaxation of DA Obligation – first observation for DA Imbalances up to 50% of BRPs' portfolio size

- ❖ *A few **BRPs adapted their behavior and actively used** the possibility to have imbalances in Day-Ahead. BRPs **closed their position during the ID** timeframe, as a result there was no impact on the RT System Imbalances .*

## ❖ Incentive: Evolution of Daily Balancing Schedules

- ❖ *The role of the BRP and the context in which it provides its Daily Balancing Schedules are changing significantly:*
  1. *BRP=Scheduling Agent (SA) will evolve into **BRP ≠ SA in the context of iCAROS evolutions***
  2. *Ongoing gradual **relaxation of the day-ahead balance obligation***
- ❖ *The goal of the incentive will be to:*
  3. ***Identify and analyze the impact** of recent and future evolutions on the process for the submission of the Daily Balancing Schedule*
  4. ***Propose the adaptation**, removal or addition of the submission of the Daily Balancing Schedules to ensure the needed and identified data*
  5. *Assess the effort required for the implementation of the proposal and **propose a realistic implementation plan***



# Year overview 2021

## ❖ Year overview 2021

- **ToE statistics:** *In 2021, major switch of DPs from ToE Regime to Opt-Out Regime to allow participation in both balancing services (aFRR and mFRR)*
- **Balancing Energy:**
  - *Total balancing energy activated is slightly higher than previous year*
  - *Small increase of average price for both mFRR STD and mFRR Flex energy bids*
  - *Non-Contracted mFRR Energy Bids DP<sub>PG</sub>: no offers in 2021*
- **aFRR Activation Control:** *Similar performance of BSPs compared to previous year*
- **mFRR Activation Control:** *In general a good delivery of mFRR energy is observed*
- **FRCE target:** *Respect in 2021 of limits of SOGL requirement for FRCE levels 1 and 2*

## ❖ DARE dimensioning results for 2021

- *The FRR needs are mainly set by the dimensioning incident, i.e. nuclear power plant outage in upward direction and Nemo Link outage in downward direction*
- *Improvement in the methodology to forecast of the import/export direction of Nemo Link has been implemented in April 2022*
- *The procurement of downward mFRR capacity still cannot be justified at this stage*



# Update on new aFRR, mFRR and iCAROS

## ❖ aFRR Go-Live Step 1 (local) & aFRR design

- **aFRR Capacity:** Auctions are operated since the 2nd of May in line with the new design
- **aFRR Energy:** First activation based on the new bidding took place on the 4<sup>th</sup> of May
- **aFRR Energy Management Strategy (EMS) Requirements:** requirements are being finalized based on latest feedback of stakeholders.

## ❖ mFRR design & iCAROS

- **mFRR design note (stable version):** feedback received from stakeholders.

## ❖ Update of roadmap 2021-2022 - MARI & iCAROS:

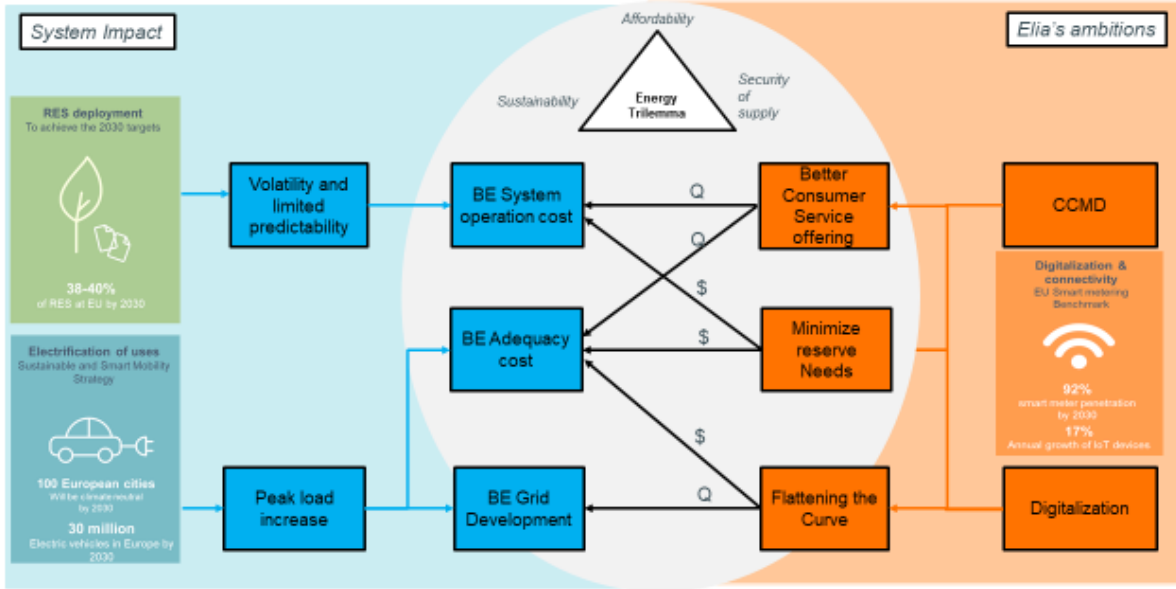
### ❖ aFRR Go-Live Step 2 (connection to PICASSO)

- Connection planned in June postponed to September and decision to connect depending on the results of the observation run
- Observation runs to be discussed with stakeholders in WG Bal on 15<sup>th</sup> of September
- **Balancing rules' approval is a pre-requisite to the connection to PICASSO**

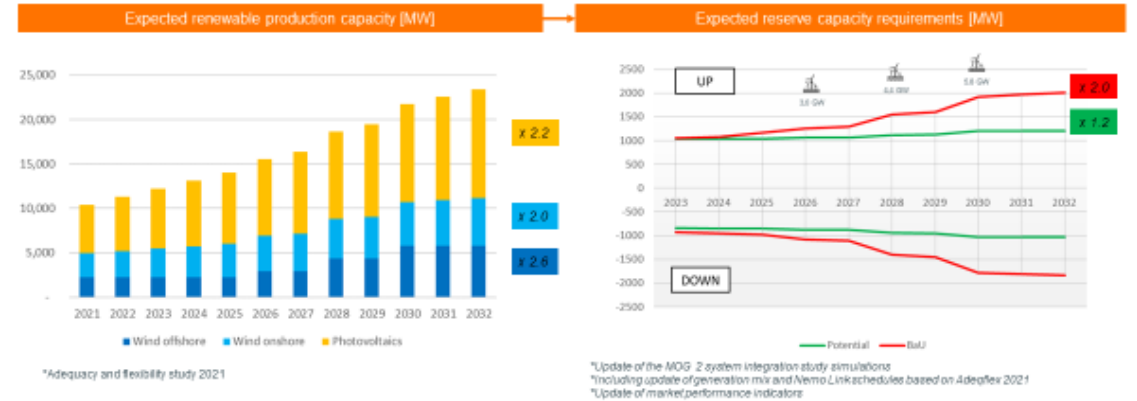


# Benefit Analysis Consumer Centric Market Design

## CCMD Value Capture Model



Several studies of Elia (Adequacy and Flexibility Study, MOG 2 System Integration) demonstrate increasing reserve capacity needs following variable renewable generation. New simulations based on latest renewable scenario estimate **€ 2.0** in the 'BaU' market integration scenario or **€ 1.2** in the 'Pot' scenario



Under current market requirements, these additional reserve requirements will impact system operation costs in terms of additional balancing capacity procurements, as well as additional volumes to be rewarded in the CRM

Gains M€ / year [MIN - MAX]	2025	2028	2030	2032	2035
1.A. CRM volume savings	5 - 6	16 - 22	27 - 36	30 - 40	30 - 40
1.B. Upward mFRR BC savings	10 - 11	34 - 36	64 - 69	71 - 77	104 - 113
1.C. Downward mFRR BC savings	-	4 - 22	7 - 33	7 - 37	7 - 36
2.A. Flattening the Curve	-	15 - 45	20 - 60	26 - 75	26 - 75
<b>TOTAL</b>	<b>15 - 17</b>	<b>69 - 125</b>	<b>118 - 198</b>	<b>134 - 229</b>	<b>167 - 246</b>

### Savings description

all things being equal more of the installed capacity can participate in adequacy instead of reserve and save on new capacity needs

lower balancing capacity needs result in lower costs for reserve (upward)

lower balancing capacity needs result in lower costs for reserve (downward)

residual peak demand is lower therefore adequacy needs are lower and so are CRM costs

Over time, an enhanced, Consumer Centric Market Design, has the potential to avoid **≥200M€/Y** system operation and adequacy costs compared to a BaU approach. To timely reap these benefits, implementation needs to start **now**

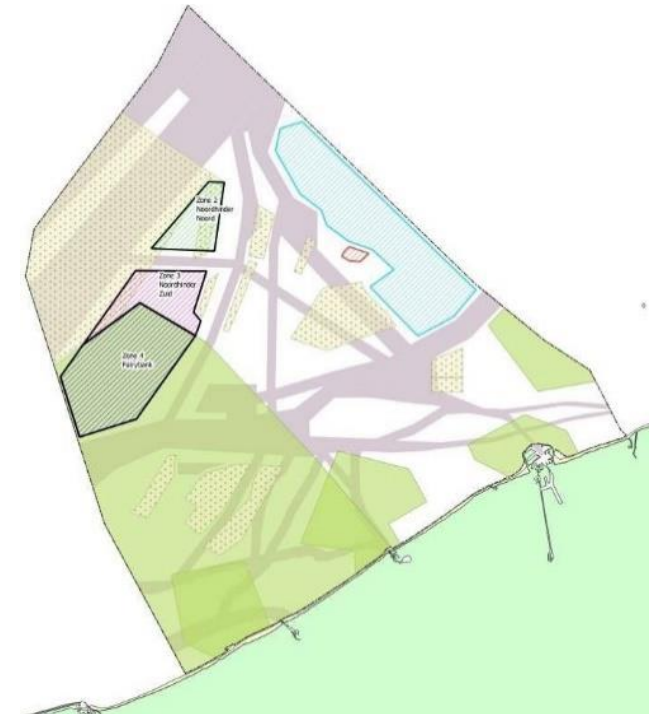
\*Based on extrapolated prices from 2021 (higher bound) and 2020 (lower bound)

## 6.1 TF MOG II workshop



# TF MOG II workshop

- The task force is resuming its work after having been put on hold
- Higher ambitions: from 4.4 GW offshore wind to 5.8 GW
- Broader scope
  - System and balancing integration
  - Market integration
  - Connection requirements (voltage management, protection philosophy...)



How to balance the system with such level of offshore capacity?

How to most efficiently integrate the offshore capacity into the market?

What are the grid connection requirements?

# TF MOG II workshop

- **The first meeting took place on April 1<sup>st</sup>**
  - **Balancing integration**
    - Presentation of the scope, timeline and approach
    - Reminder of the previous study
    - Simulations with DTU have been launched based on the presented assumptions and the received feedback
  - **Market integration**
    - Introduction of the concept of offshore bidding zone arising from the forthcoming hybrid interconnection setup on MOG II
    - Development of the challenges: price risk, possibly mitigated by CfD, and volume risk
- **Next meeting: 24<sup>th</sup> June**
  - **Tentative agenda**
    - Introduction related to connection requirements
    - Dynamic and Harmonic challenge
    - Balancing integration: presentation of the DTU simulations
    - Market integration: continuation of the discussion on offshore bidding zone

## 6.2 Workshop on incentive related to the Analysis, design and implementation of FCR evolutions pursuant to SOGL art 154(2)



# Workshop on incentive related to the Analysis, design and implementation of FCR evolutions pursuant to SOGL art 154(2)

On 30th of June 2021, all NRAs of SACE approved the **Additional Properties of FCR** pursuant to SOGL art. 154(2) which mainly put additional **obligations for system security reasons** on:

- ❖ Decentralized assets
- ❖ Assets with Limited Energy Reservoir.

Objective and scope of the incentive:

- Analyze and propose designs deviating from the proposed standard solution in order to **remove entry barriers for BSP** as long as the **minimum needs of Elia are satisfied**, given the specific context of Elia's LFC Block.
- The proposal of design shall **analyze the impact** of those evolutions on the development of a **competitive national FCR market**, on the **participation of end-consumers on low voltage, Demand Side Response (DSM) and storage**.
  - Kick off and introduction on 27<sup>th</sup> of January
  - **Workshop** with the stakeholders on 20<sup>th</sup> of April
  - **Public consultation** from 29<sup>th</sup> of April to 30<sup>th</sup> of May
  - Presentation of results in next WG Balancing on 22<sup>nd</sup> of June





## 6.3 Workshops on dynamic procurement strategies for FRR



# Workshops on dynamic procurement strategies for FRR

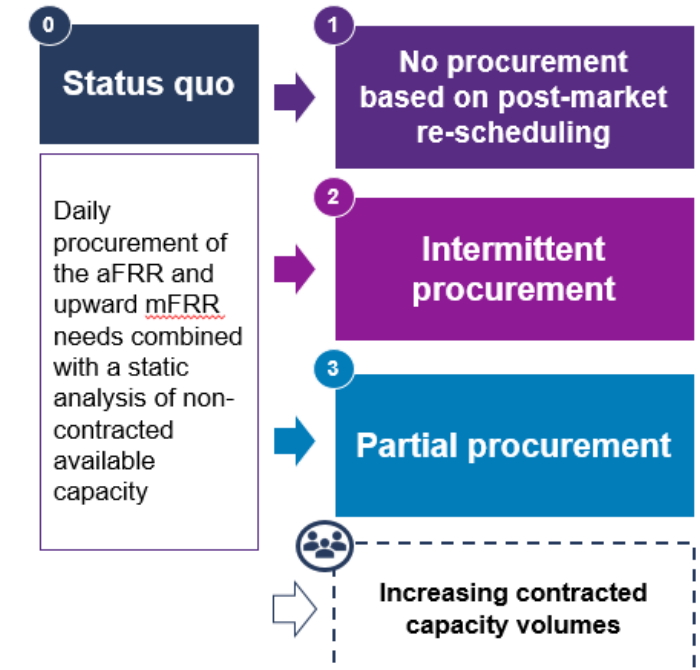
- ❖ Elia launched a study to qualitatively examine possible solutions for the **consideration of non-contracted balancing energy bids in the allocation of balancing means** and to identify, for each approach, the benefits and risks for the parties involved, as well as the possible impact on market functioning

- ❖ 2 workshops were organized:

- ❖ 21/4: discuss **possible solutions** for a dynamic procurement and market impact
- ❖ 10/5: in depth discussion of feedback of the market parties

- ❖ Next steps:

- ❖ Market parties are invited to submit any additional comments until the end of June
- ❖ Elia will then publish a report for consultation in September



# Agenda

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2. **Federal Development Plan**
3. **Grid losses:** compensation coefficients in kind 2023
4. **WG Belgian Grid:** state of play of ongoing work
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**7. WG Adequacy:** state of play of ongoing work

**8. WG System Operations & European Market Design:** state of play of ongoing work

8.1. Workshop on improvement of the quality of input data for congestion management

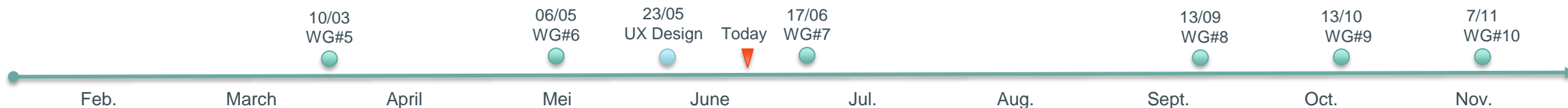
**9. Miscellaneous**

9.1. Public consultations – feedback process

9.2. Ongoing public consultation & next plenary meeting: Tuesday 4/10 – 1 p.m. to 5 p.m.



# WG Adequacy – Status ongoing work

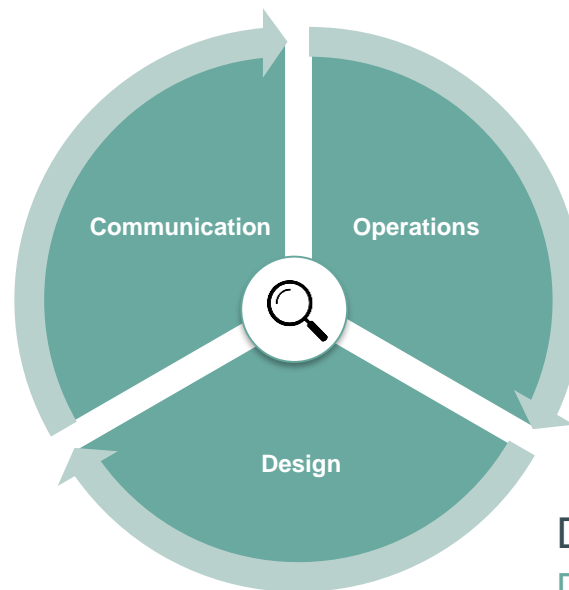


Capacity **Contracts** : *Launch and Report*

Scenarios, sensitivities and data for the **CRM parameters** calculation for the Y-4 Auction with Delivery Period 2027-2028 : *Launch*

Technical and economic analysis of CRM auction bids and results : *Report presentation by Haulogy*

Discussion on public consultations



Deep-Dive Operations

**CMU Evolution** in Time

UX Design Session on **Secondary Market**

Deep-Dive Design

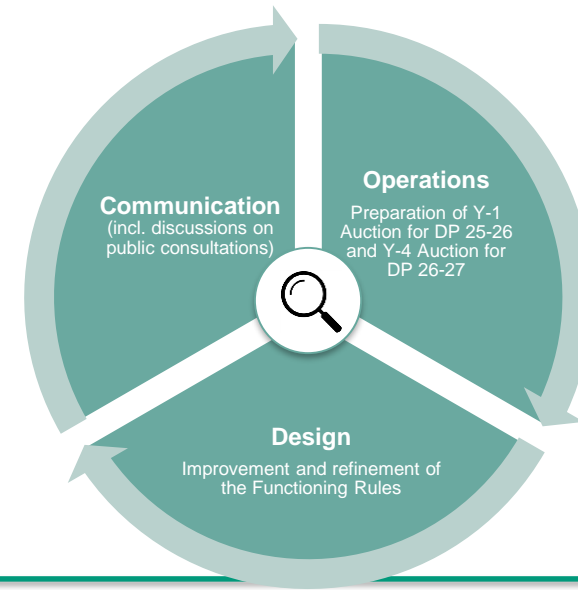
**Availability Monitoring**



# WG Adequacy – Status ongoing work

CRM Process

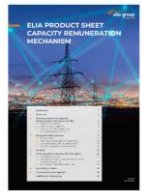
Implementation



Ministerial Decree: [Instruction Y-4](#) [Auction DP 26](#)  
Functioning Rules [v0.2](#)

CRM CC – updated [version](#) sent to CREG

Communication to Stakeholders/ Candidates and update of materials



User Manual Prequalification File Submission  
Version 16.05.2022

Prequalification & Financial Securities

2<sup>d</sup> Auction Y-4

16/05: Platform Available

15/06: Deadline Submission PQ files

01/09: Deadline FS Submission & start bidding

15/09: Deadline PQ results

30/09: Deadline bid submission

Feb.

March

April

Mei

June

Jul.

Aug.

Sept.

Oct.

Nov.

Development PQ and FS platforms

Development Auction

and Secondary Market



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## 8. WG EMD-SO

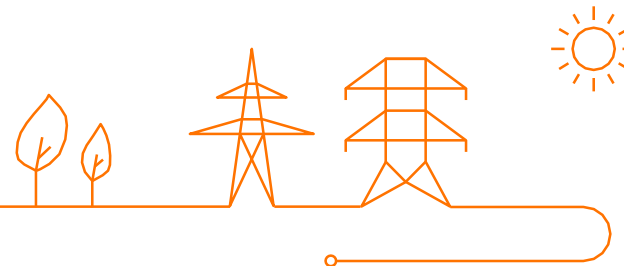


# WG EMD-SO

- **Latest meeting took place on March 31<sup>st</sup>**

## European Market Design

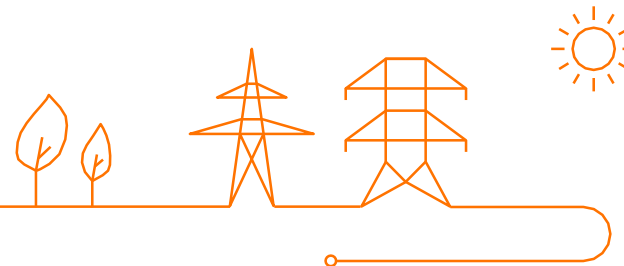
- **Core flow-based market coupling go-live**
  - The results of the Core external parallel run were discussed, a few days prior to regional decision to go-live (go-live initially planned on April 20<sup>th</sup>)
  - Market participants, CREG and Elia shared their concerns about the results
    - Lack of robustness: frequent triggering of local or regional fall-back processes leading to very low capacities
    - Low/unknown capacities for intraday, also due to a parallel decision process at ACER side on intraday methodology
    - Frequent violation of the absolute minimum RAM of 20%, not being monitored anymore as in CWE while being an undue discrimination concern
  - As consequence, Elia, together with other TSOs and NEMOs, called to postpone the go-live





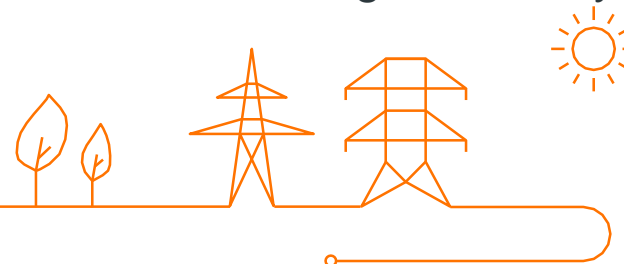
## WG EMD-SO

- As reported in Core Consultative Group on June 1<sup>st</sup>, this postponement triggered the right discussions and commitments
  - An increased robustness of the processes demonstrated
  - Significantly improved intraday capacities, especially to avoid zero capacities (simultaneously). Very important for Belgium and to be monitored further after go-live
  - Dedicated reporting focusing on undue discrimination (RAM lower than 20% or even RAM equal to zero) to trigger the right discussions to improve the processes
- The go-live took place on June 8<sup>th</sup>, for first trading day on June 9<sup>th</sup>
  - This is not the end of the story: the monitoring of the efficiency and effectivity of the process should continue and WG EMD can serve to continue to align efficiently Belgian views



# WG EMD-SO

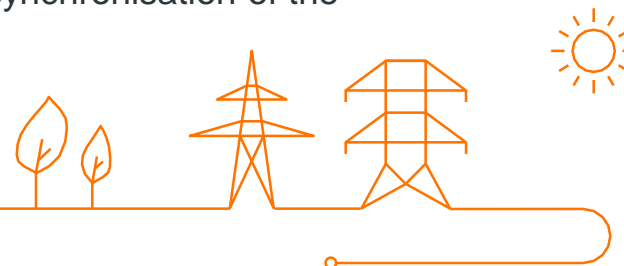
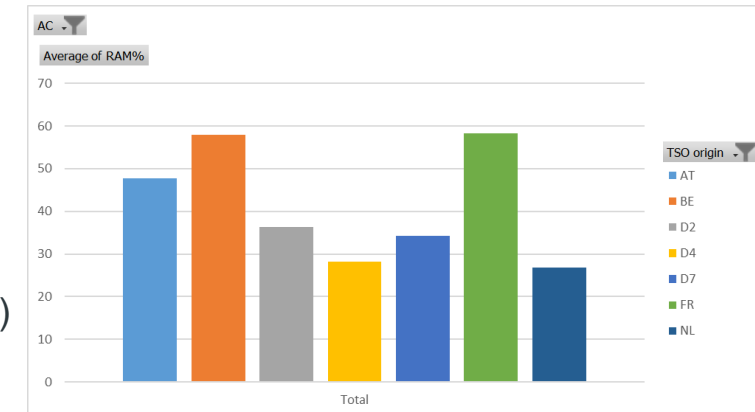
- **70% MACZT Compliance Report**
  - CREG presented their report on the compliance with the 70% rule (MACZT – Margin Available for Cross Zonal Trade)
    - *In general, the available margins on network elements comply with the legal obligations: 99,2% of all CNECs marked as compliant in 2021.*
    - *However, more hours are observed where at least one CNEC does not comply: only 62,2% of MTUs marked as compliant in 2021. This represents a clear step back, however, the broader context needs to be taken into account. In particular, the situation on the axis Mercator – Doel – Zandvliet is considered here.*
    - *Notwithstanding these problems, there do not seem to be structural congestions (aspect of time) nor extremely low values (aspect of intensity).*
- **Intraday Market evolution: Status, statistics and planning**
  - A status update is given
  - ID market keep gaining importance: 85% of the volume in organised day-ahead market, 15% in organised intraday market



# WG EMD-SO

## System operation

- Operational report 2021
  - A comprehensive report giving insight on operational and market situation has been shared and presented with WG SO
  - E.g.: congestion costs, physical cross-border flows, intraday ATCs, PST taps, loading of the backbone, frequency, voltage, loop flows, ACE and system imbalance, energy mix, load profile, flow-based limiting elements,
- MinRAM results 2021
  - The results of minRAM are presented, allowing showing that Elia achieves its objectives:
    1. Reducing the MTUs on which a Belgian element is limiting (<15% of time) this even when impacting planned outages are organized (in summer period)
    2. Achieving a high price convergence rate (>50% of time)
    3. When Belgian elements are limiting, this is with a relative high RAM (total average ~60%)
- Ukraine synchronization
  - The challenges and timeline having led to the successful synchronisation of the Ukrainian grid on March 16<sup>th</sup> have been presented
- **Next meeting: June 17<sup>th</sup>**



## 8.1. Workshop on improvement of the quality of input data for congestion management



## Incentive: Improve the quality of input data for congestion management

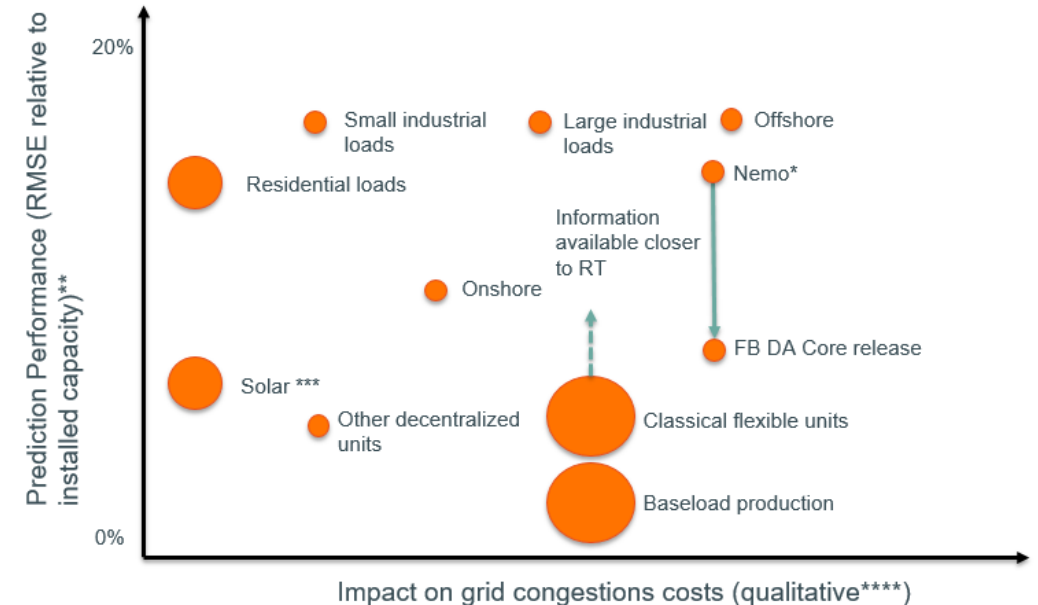
### Goal of the incentive

- **Transparency** on congestion forecast today (IGM) and modelling practices
- Transparency on forecast quality (insights in input, model and output data)
- Root-cause **analysis** on deviations in forecast compared to Real Time
- Look into **solutions** to improve the forecasts
  - Short-term implementation
  - Long-term roadmap

Workshop: 30/05

Public consultation: 10/6-15/7

### Mapping of first opportunities

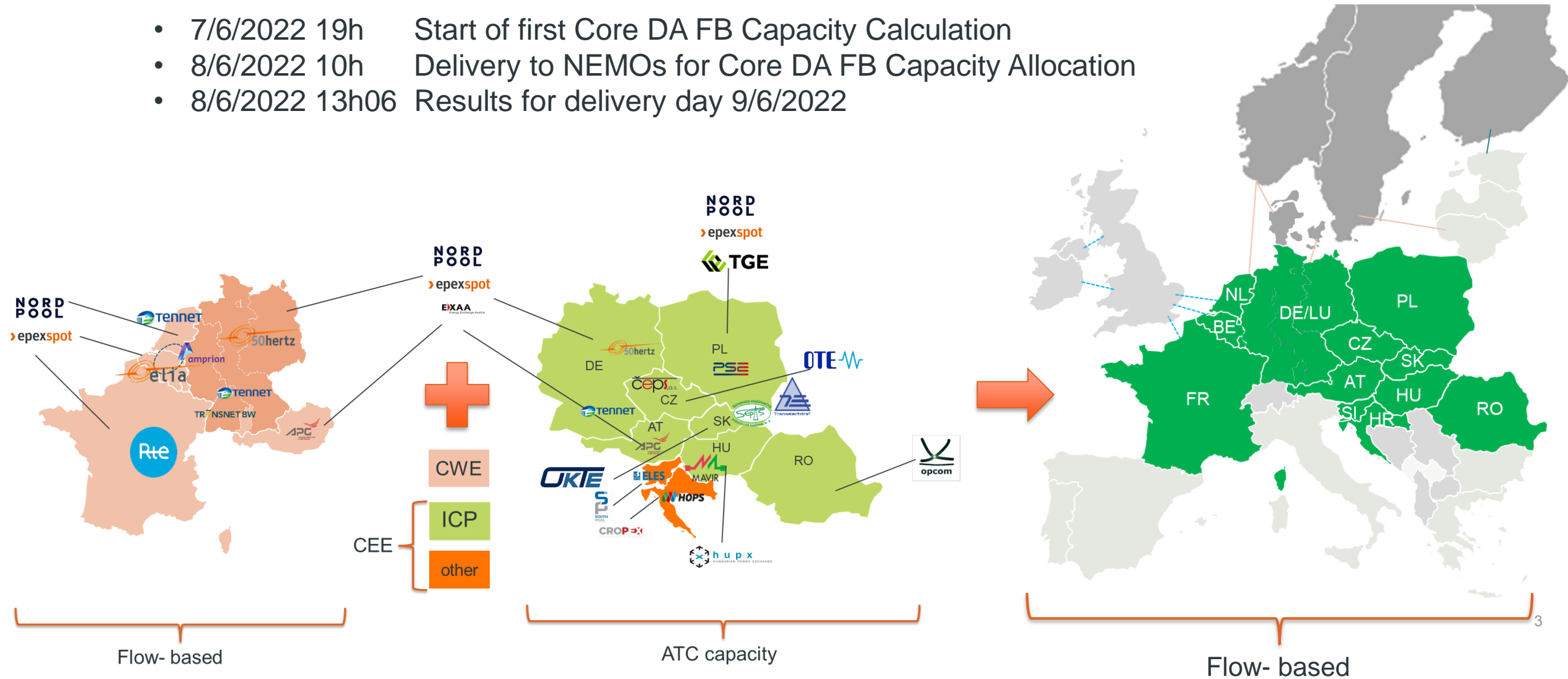




**Core Day-ahead FB Market Coupling  
Go Live 08/06/2021**

# Core CCR: Go Live Day-ahead Flow-based

- 7/6/2022 19h Start of first Core DA FB Capacity Calculation
- 8/6/2022 10h Delivery to NEMOs for Core DA FB Capacity Allocation
- 8/6/2022 13h06 Results for delivery day 9/6/2022



# Core CCR: Go Live Day-ahead Flow-based

## Operational feedback from the first 2 Business Days:

- BD 9/6/2022
  - **Go Live was a success**
  - Operationally some minor and non critical issues
    - Small delay in the Initial FB computation (merging of Individual Grid Model issue: (input data issue for 2 TSOs)
    - Small delay in the publication of pre-final FB computation results (**fixed**)
    - Small delay in the publication of NL-DK1 and NL-NO2 capacities (**fixed**)
    - MC results published 10' later than expected (non-Core related delay in validation of results) (**fixed**)
    - Nomination delay for EPEX/ECC in Belgium → nomination gates extended for 15minutes (**fixed**)
- BD 10/6/2022
  - **Second day success**
  - Operationally some minor and non critical issues
    - Small issue in merging of Individual Grid Model (input data issue for 2 TSOs)
    - Nomination delay (15') linked to communication issue between NEMO (BSP) and Core TSO Common System (**fixed**)



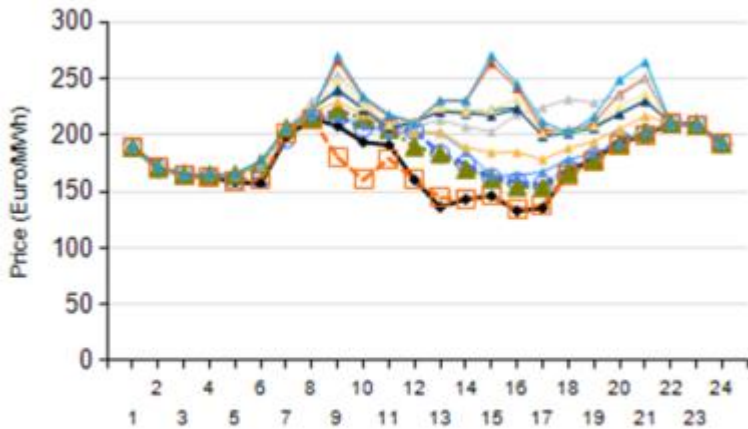
# Core CCR: Go Live Day-ahead Flow-based

## Market results from the first 2 Business Days

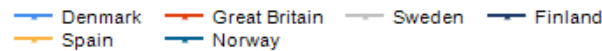
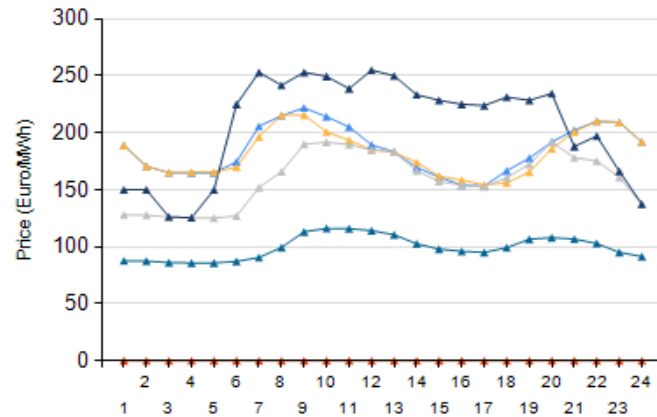
- Too early to draw conclusions
- Trend to price convergence in the Core Region
- Belgian net exporter for BD 9/6 and 10/6
- Huge net position spread for Germany (10000MW on 9/6, 13300MW on 10/6 – mainly net importer from CWE but exporter to CEE)

### BD 09/06/2022

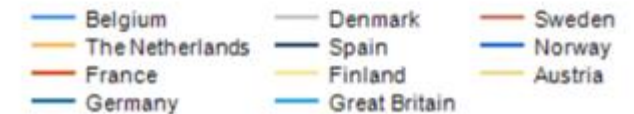
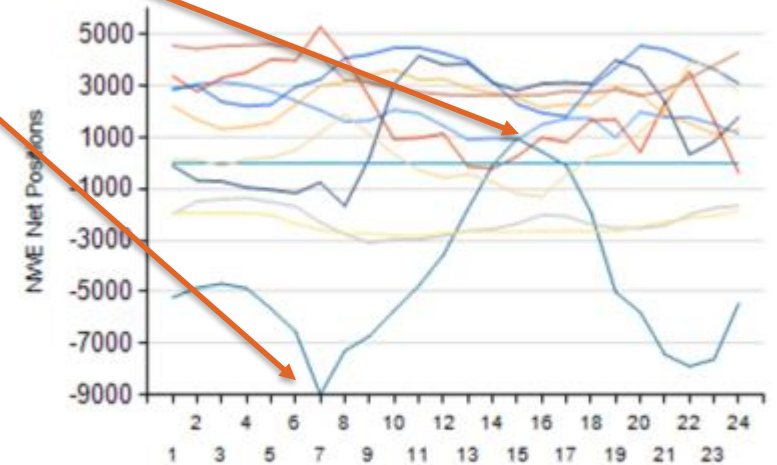
#### Core Prices



#### SDAC Prices



#### SDAC Net Positions



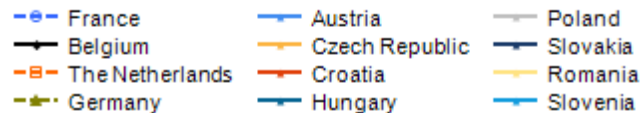
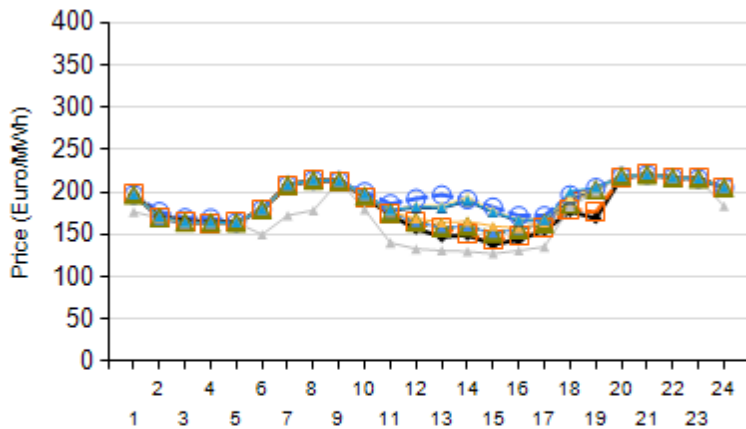
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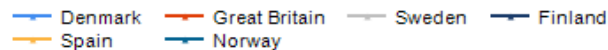
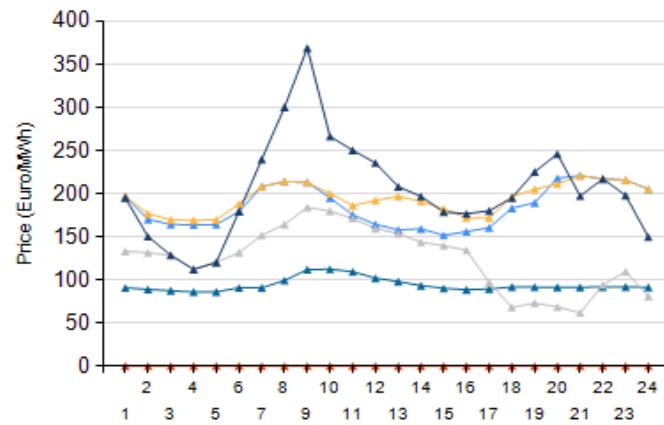
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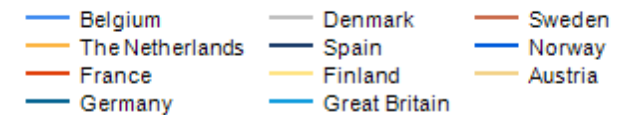
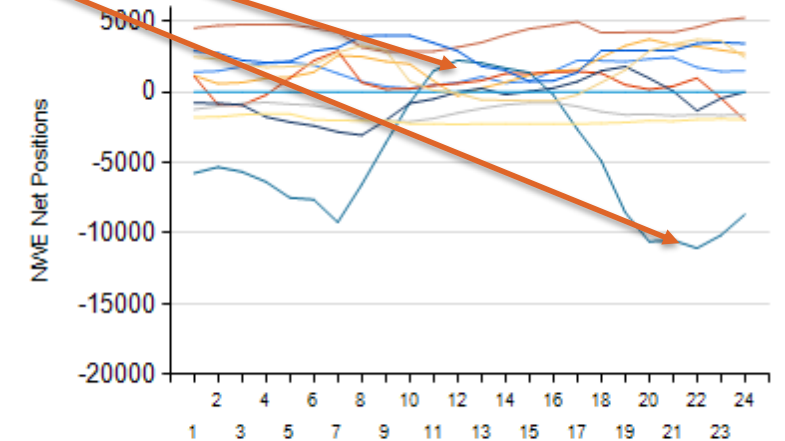
#### Core Prices



#### SDAC Prices



#### SDAC Net Positions



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## Miscellaneous

### Ongoing public consultation

- **16/05 – 16/06** Proposal for amendment to Elia's LFC block operational agreement

### Next plenary meeting

- Next plenary meeting: 4 October - 2 p.m. to 5 p.m.

