

# Nemo Link Annual Forum

London

3<sup>rd</sup> October 2023

**nemolink**

# Agenda



**Operational Performance**



**Market Update & Commercial Performance**



**Regulatory Update**



**Elia Update**



**Customer Feedback**



**JAO Update**



**RNP Update**



**Looking ahead and Q&A**

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**slido.com**  
**#4246 022**



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for Q&A and feedback

# Some of our Nemo Link team members



**Bert Maes**  
CEO



**Lisa Kettle**  
Operations  
Director



**Bart Goethals**  
Chief Commercial  
Officer



**Alayne Rushton**  
Finance Manager



**Sarah Hoskins**  
Legal Manager



**Scott Maybury**  
Systems Manager



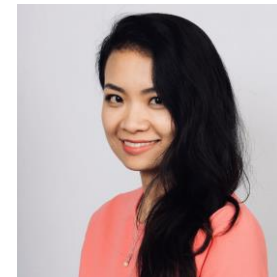
**Michele Jordan**  
Customer  
Engagement Partner



**Petr Musil**  
Senior Systems  
Analyst



**Pieter-Jan  
Marsboom**  
Product and  
Services Manager



**Munti Nguyen**  
Customer, Policy and  
Regulation Manager



Welcome our guests



**Frederik Johnsen**  
*CEO*


**Adam Majsa**  
*Senior Admin Operator*



**Nicolas Koelman**  
Key Account Manager &  
Customer Success Manager

**Amandine Leroux**  
Manager Implementation  
Consumer Centric Market





# Opening address

## Lisa Kettle, Operations Director





# Operational Performance |

Lisa Kettle, Operations Director

Nemo Link Annual Forum - 03 October 2023



# Safety



Another year of operation with no LTI's – 1703 days total



Safety Management Systems Project for UK



Covid Impacts Navigated



Safe to Say



# Operations 2023

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✓ 96.97% YTD Availability

📅 Planned Outage Ongoing

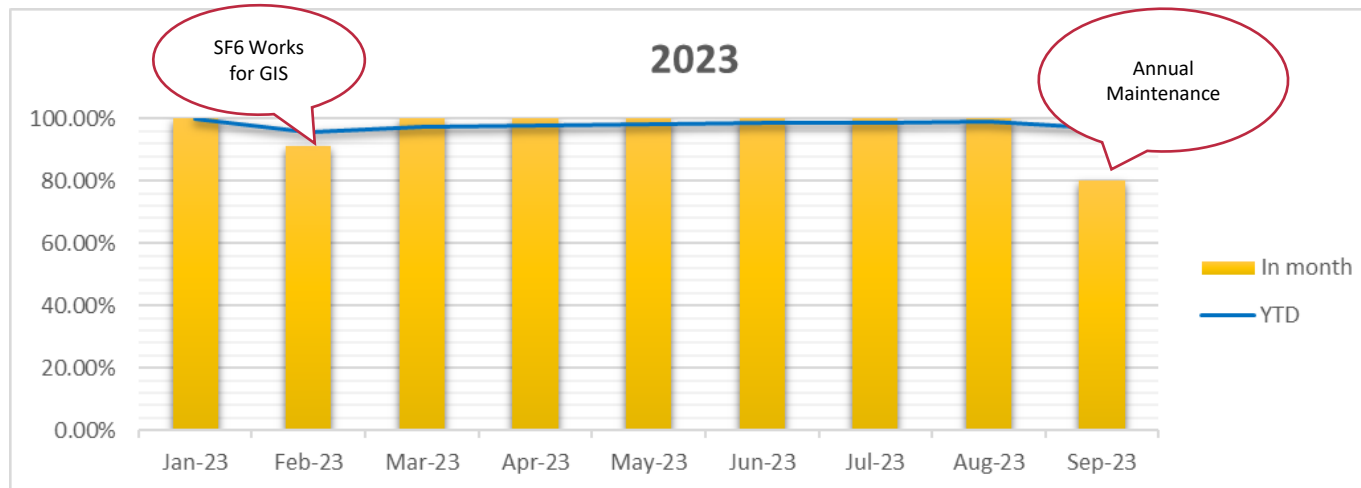
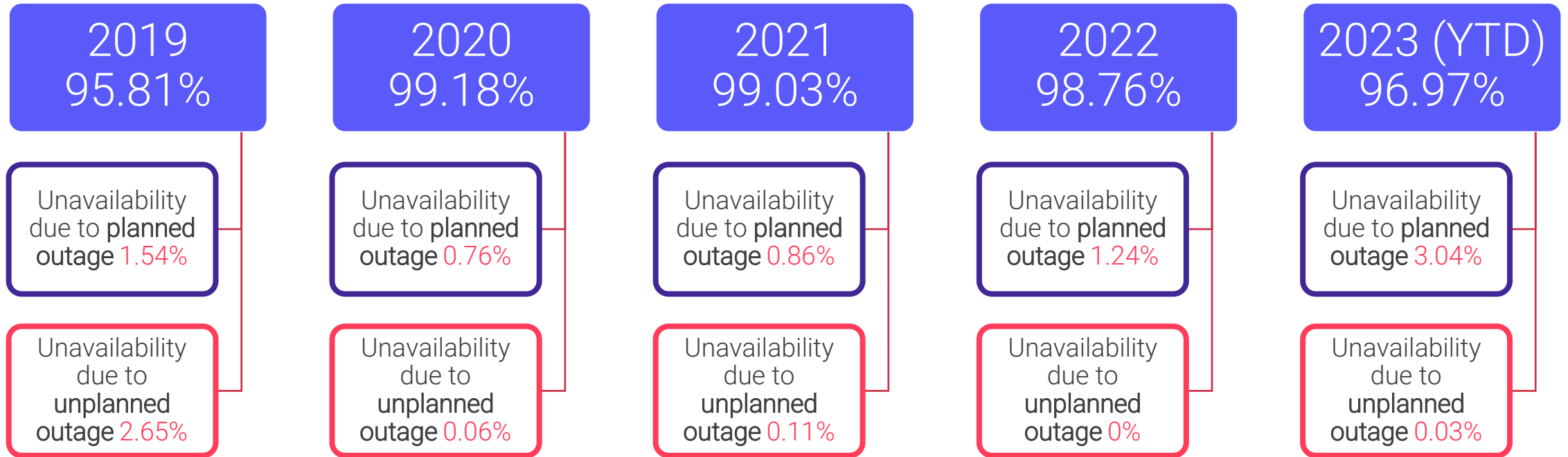
🧠 Robotics Innovation Project

👍 2 years without a trip

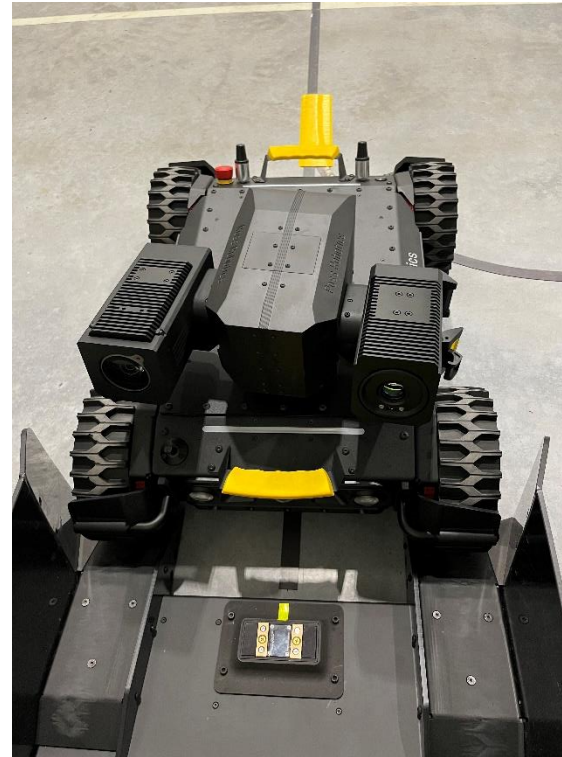
📊 Annual Cable Survey Completed



# Nemo Link's availability to date







Ross Robotics Installation, Belgium.





Cable Review, Belgium.



# Converter Works







Continued focus on safety – launch of new Safety Rules / Management Systems



Continue to collaborate and build relationships with our key strategic suppliers



Embed new contracts and support agreements for our 2024 Operating Model



Further enhancements to physical and cyber security

# 2024 & Beyond

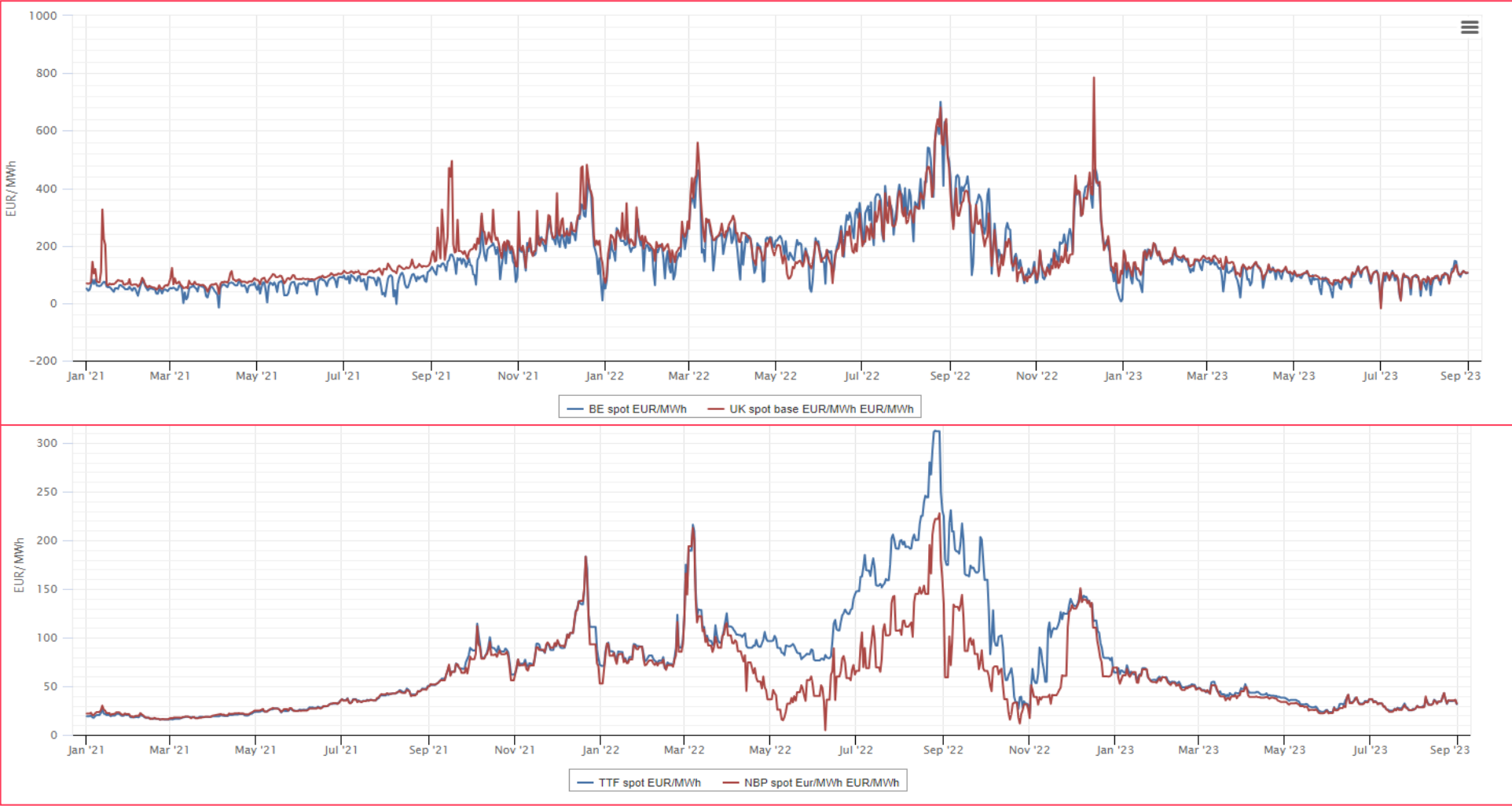




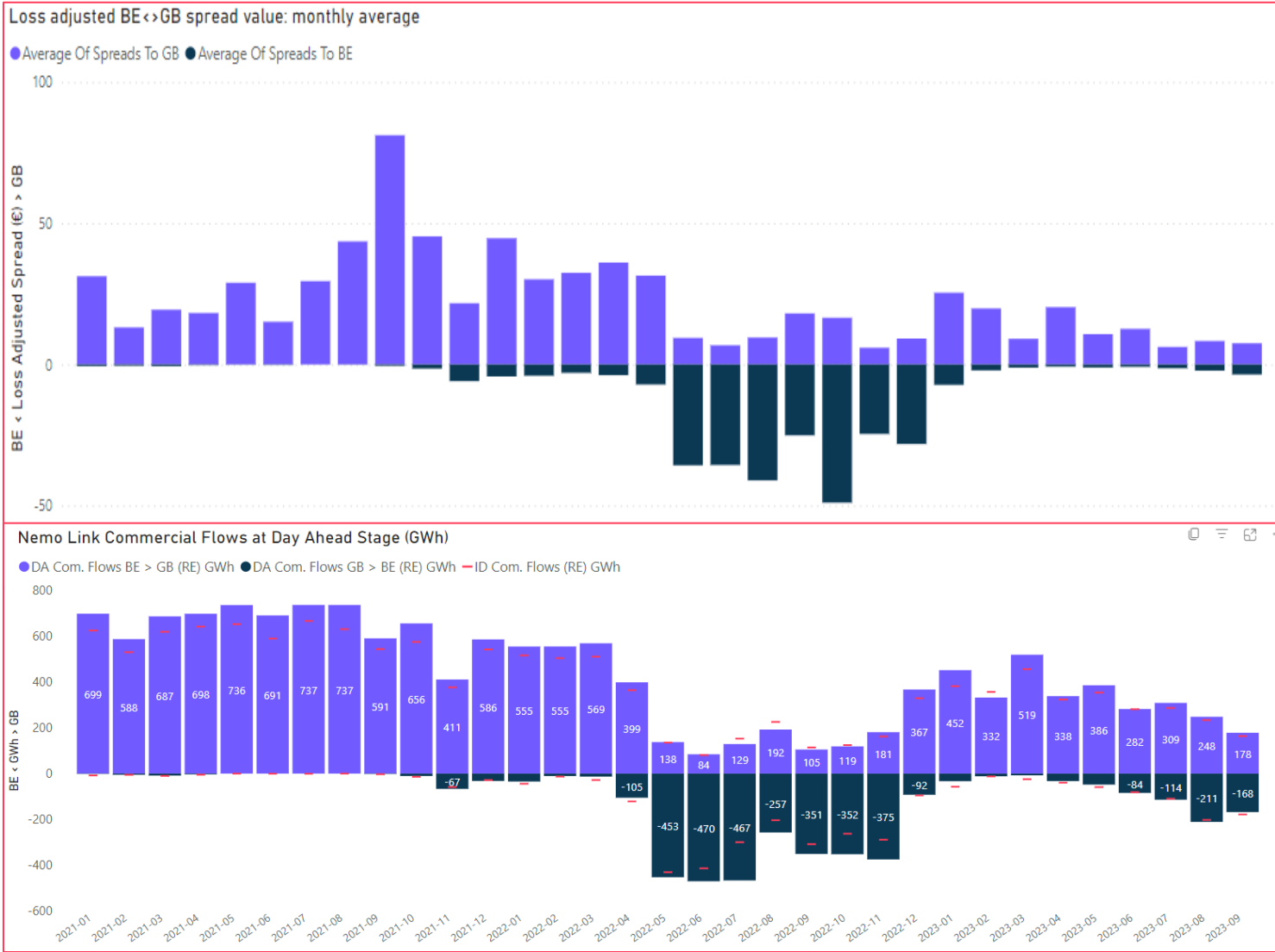
# Market Update

Pieter-Jan Marsboom, Product & Services Manager

# Market price evolution



# BE-GB spreads have decreased

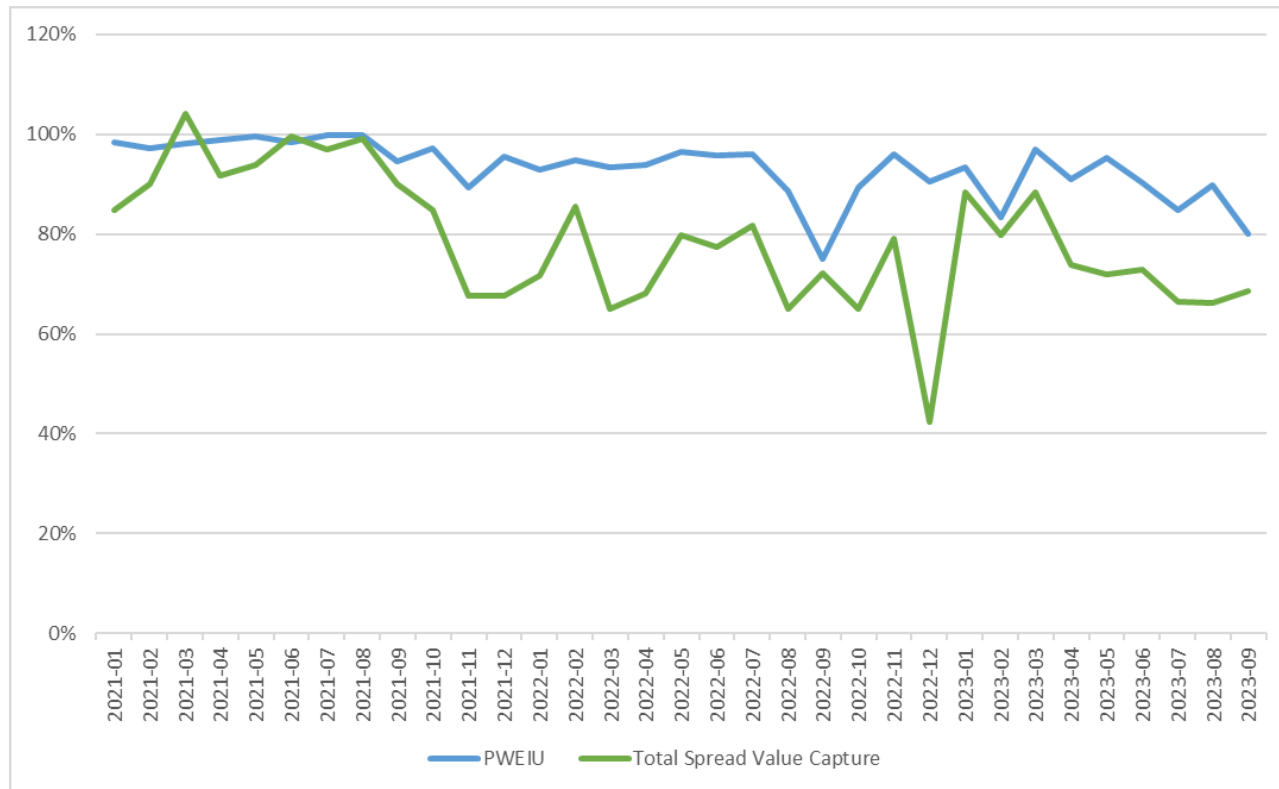


# Day ahead auction & flow efficiency remains low



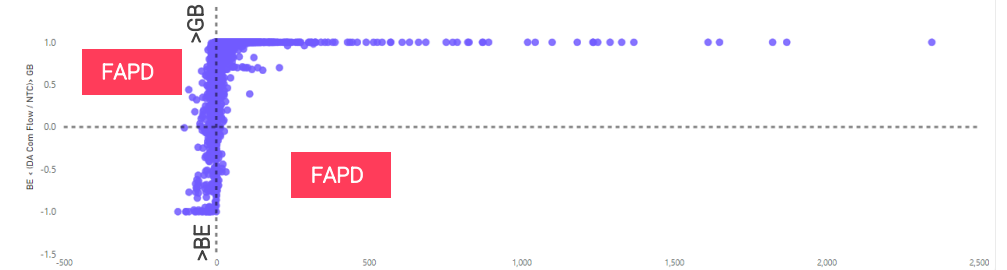
## Nemo Link explicit DA efficiency

- total spread value capture (auctions)
- price weighted efficiency interconnector use (PWEIU of flow nominations)

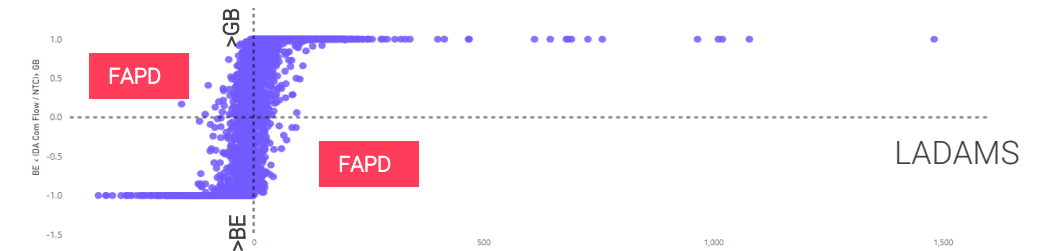


## Nemo Link explicit DA flow efficiency

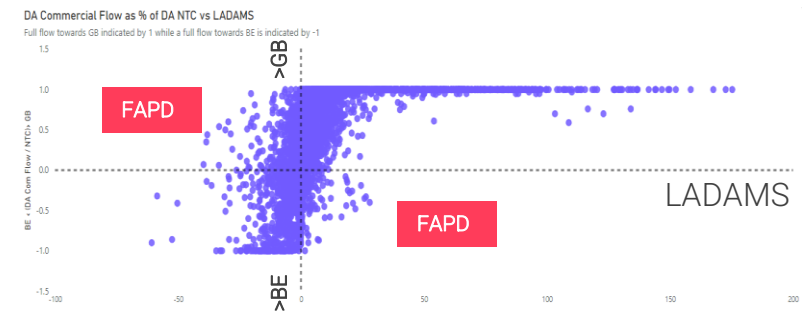
2021 - DA commercial flow as % DA NTC



2022 - DA commercial flow as % DA NTC



2023 - DA commercial flow as % DA NTC



LADAMS: Loss Adjusted Market Spread

FAPD

Flow against Price Direction

# Drivers for increasing day-ahead discount

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*Nemo Link day-ahead auction prices represented just 71% (2022) and 75% (2023 YTD) of the loss-adjusted spread.*

*What are, in your opinion, the key drivers of this lower spread capture?*

1. As traders we struggle to forecast the spread amid volatile market conditions
2. It's more difficult to forecast prices when the spread is low – currently the case
3. There's not enough time to optimise our capacity bids on an hourly resolution
4. It's difficult to optimise with the frequent flow reversals
5. Other (please add comments on the Q&A page)

# 2024 forward spread has dropped until YTD 2023

Forwards for delivery 2024-01 to 2024-12



Cal 24 auctions overview			
Auction date	Capacity		
	BE>GB	GB>BE	
2023/01/24	100 MW	100 MW	16.08 €
2023/03/14	100 MW	100 MW	25.4 €
2023/04/25	75 MW	50 MW	15.33 €
2023/06/13	75 MW	53MW	10.1€
2023/09/12	100 MW	75MW	9.65€
2023/11/21	NA		NA



# First Y+2 product – CAL 2025 launched in 2023



- Interest expressed by market parties end 2022 / early 2023
  - ▶ succesful first two auctions organised in 2023 thusfar
- 3rd auction scheduled – expected 50MW
- Intrinsic value calculation based on weighted monthly forward prices

Cal 25 auctions overview

Auction date	Capacity BE>GB / GB>BE	BE>GB	GB>BE
2023/06/08	50 MW / 50 MW	9.16 €	8.5 €
2023/09/26	50 MW / 50 MW	9.16 €	6.85 €
2023/11/15	Expected 50MW	NA	NA

Intrinsic value over multiple trade dates



A hand holding a pen pointing to a candlestick chart on a screen. The chart is displayed on a grid background. The pen is black and the hand is in silhouette. The background is dark with a grid pattern and some blurred candlestick bars in red and blue.

# Commercial Update

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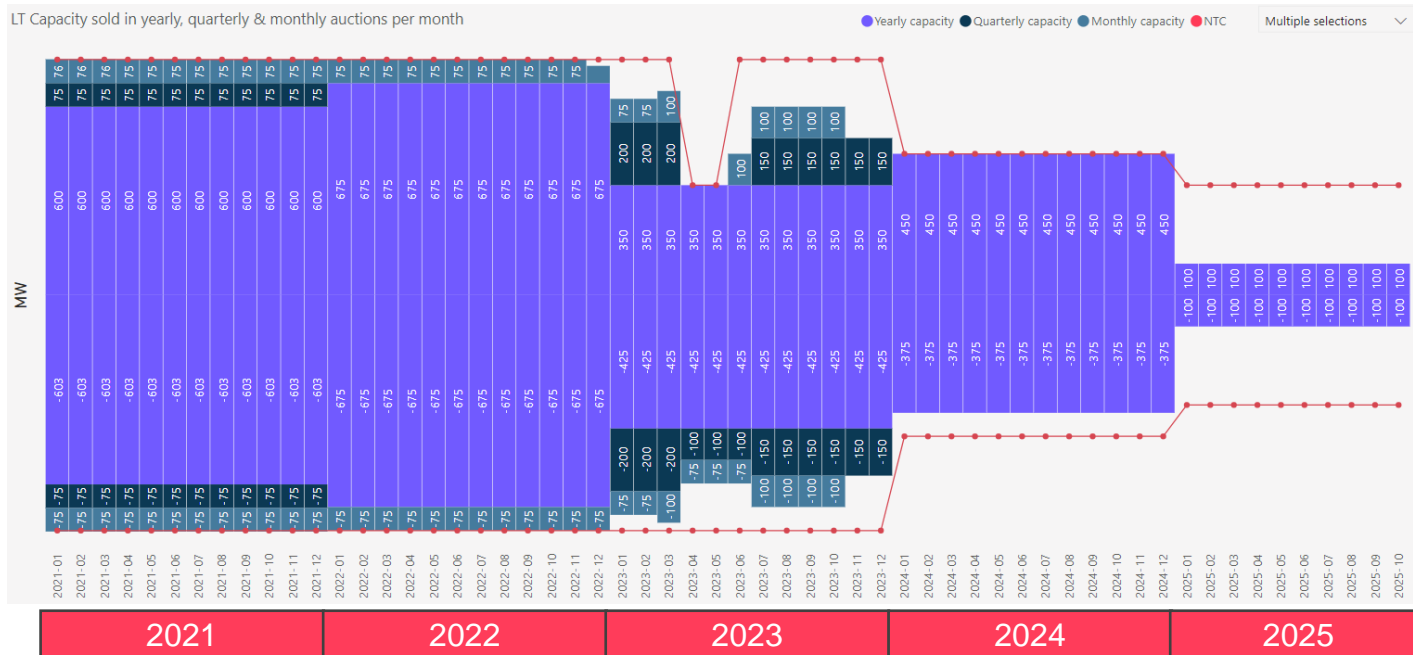
**nemolink**



# Long Term Auctions

Pieter-Jan Marsboom, Product & Services Manager

# LT auctions



## LT NTC

- Gradually released by Elia throughout year
  - EU coordination finished towards Nov '23
  - Outage planning to maximise XB capacities
- At present\*
  - LT NTC = 450MW for CAL24 and 350MW for CAL25

\*in theory 350MW up to formal calculation in Nov

## 2023 Auctions

Annals	Quarterlies	Monthlies
<ul style="list-style-type: none"> <li>- <b>&lt;NEW&gt;</b> 3x Y+2 auctions for CAL2025                             <ul style="list-style-type: none"> <li>- Expected volumes = 3x 50MW symmetric</li> <li>- Next Y+2 auction 15t Nov</li> </ul> </li> <li>- 5/6 Y+1 auctions for 2024 delivery year                             <ul style="list-style-type: none"> <li>- BE&gt;GB: 75- 100MW ; GB&gt;BE: 50-100MW</li> <li>- Next Y+1 auction 21 Nov</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- 2 x 2 Quarterly auctions: 75 to 200MW symmetric</li> <li>- Q2 2023 auction cancelled towards GB (NTC)</li> <li>- First Quarterly auction for Q1 '24 - coming in 29 Nov '23</li> </ul>	<ul style="list-style-type: none"> <li>- 8 Monthly Auctions BE&gt;GB; 10 Monthly Auctions GB&gt;BE: 75 – 100MW</li> <li>- April/May cancelled towards GB (NTC)</li> <li>- 2 remaining 2023 MAs target 100MW each</li> <li>- First Monthly auction for 2024: 5th Dec '23</li> </ul>

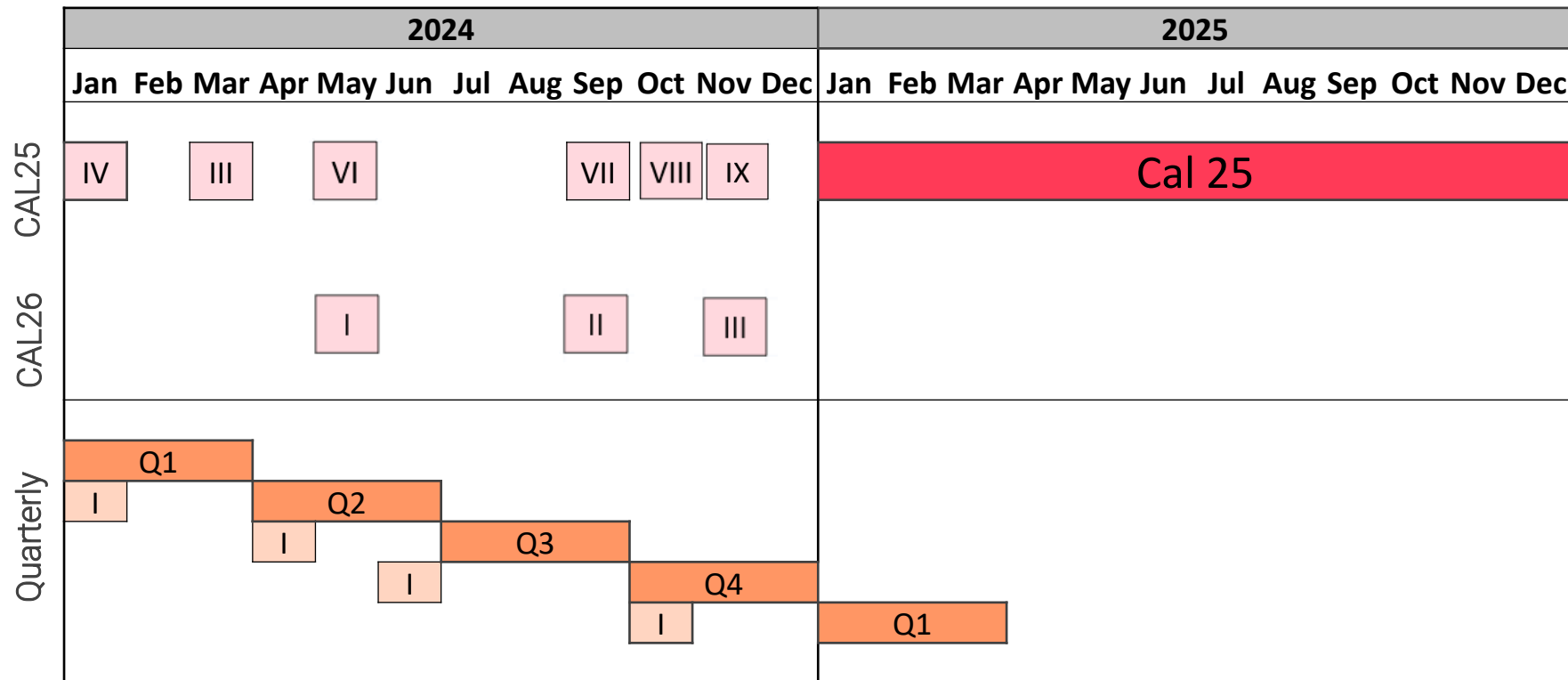
# 2024 Auction Calendar

## Auction calendar

- Draft calendar for annuals shared by JAO mid Sept '23
- JAO to publish calendar draft for QA/MA by end Oct '23
- Final version on NLL website by 'Nov 23
- Draft annuals auction dates in appendix

## Auction design

- Timings
  - Auction dates spread evenly at different moments across the year
  - Gate opening – Gate closing timings: harmonised to 14:00 & typically from Monday-Tuesday
- Frequency & volumes
  - Yearly: around 6 auctions; +/- every 2 months; 50MW min
  - Quarterly: at least 1 auction per quarter; +/- 3 months prior; 50 – 100MW
  - Monthly: 1 auction per month; +/- 1 month prior; 50MW – 100MW
  - Concurrent auctions in both directions (asymmetric volumes possible)



# Future product development?

*Nemo Link's auction products are perceived as adequate following customer surveys.*

*Taking into account the border specific situation, what is in your opinion, the most interesting product for further consideration (if any)?*

1. Y+3 product
2. Seasonal
3. Weekly
4. Weekend
5. Long term Peak / Off-peak
6. Other (please add comments on the Q&A page)
7. None of the above

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# 2024 Auction Calendar – Yearly Product (DRAFT)

Bidding Month	Interconnector	Product	Horizon	Auction Start	Time (of the opening)	Auction End	Time (of the End)	Dispute period
September 2023	NLL-BE-GB	Y BASE 4	2024	11/09/2023	14:00	12/09/2023	14:00	2-2 days
September 2023	NLL-GB-BE	Y BASE 4	2024	11/09/2023	14:00	12/09/2023	14:00	2-2 days
September 2023	NLL-BE-GB	Y BASE 2	2025	25/09/2023	14:10	26/09/2023	14:10	2-2 days
September 2023	NLL-GB-BE	Y BASE 2	2025	25/09/2023	14:10	26/09/2023	14:10	2-2 days
November 2023	NLL-BE-GB	Y BASE 3	2025	14/11/2023	14:10	15/11/2023	14:10	2-2 days
November 2023	NLL-GB-BE	Y BASE 3	2025	14/11/2023	14:10	15/11/2023	14:10	2-2 days
November 2023	NLL-BE-GB	Y BASE 5	2024	20/11/2023	14:00	21/11/2023	14:00	2-2 days
November 2023	NLL-GB-BE	Y BASE 5	2024	20/11/2023	14:00	21/11/2023	14:00	2-2 days
January 2024	NLL-BE-GB	Y BASE 4	2025	29/01/2024	14:00	30/01/2024	14:00	2-2 days
January 2024	NLL-GB-BE	Y BASE 4	2025	29/01/2024	14:00	30/01/2024	14:00	2-2 days
March 2024	NLL-BE-GB	Y BASE 5	2025	25/03/2024	14:00	26/03/2024	14:00	2-2 days
March 2024	NLL-GB-BE	Y BASE 5	2025	25/03/2024	14:00	26/03/2024	14:00	2-2 days
May 2024	NLL-BE-GB	Y BASE 1	2026	07/05/2024	14:00	08/05/2024	14:00	2-2 days
May 2024	NLL-GB-BE	Y BASE 1	2026	07/05/2024	14:00	08/05/2024	14:00	2-2 days
May 2024	NLL-BE-GB	Y BASE 6	2025	20/05/2024	14:00	21/05/2024	14:00	2-2 days
May 2024	NLL-GB-BE	Y BASE 6	2025	20/05/2024	14:00	21/05/2024	14:00	2-2 days
September 2024	NLL-BE-GB	Y BASE 2	2026	09/09/2024	14:00	10/09/2024	14:00	2-2 days
September 2024	NLL-GB-BE	Y BASE 2	2026	09/09/2024	14:00	10/09/2024	14:00	2-2 days
September 2024	NLL-BE-GB	Y BASE 7	2025	16/09/2024	14:00	17/09/2024	14:00	2-2 days
September 2024	NLL-BE-GB	Y BASE 7	2025	16/09/2024	14:00	17/09/2024	14:00	2-2 days
October 2024	NLL-BE-GB	Y BASE 8	2025	14/10/2024	14:00	15/10/2024	14:00	2-2 days
October 2024	NLL-GB-BE	Y BASE 8	2025	14/10/2024	14:00	15/10/2024	14:00	2-2 days
November 2024	NLL-BE-GB	Y BASE 9	2025	12/11/2024	14:00	13/11/2024	14:00	2-2 days
November 2024	NLL-GB-BE	Y BASE 9	2025	12/11/2024	14:00	13/11/2024	14:00	2-2 days
November 2024	NLL-BE-GB	Y BASE 3	2026	18/11/2024	14:00	19/11/2024	14:00	2-2 days
November 2024	NLL-GB-BE	Y BASE 3	2026	19/11/2024	14:00	19/11/2024	14:00	2-2 days

# Access Rules Changes

Munti Nguyen, Customer, Policy and Regulation Manager



# Access Rules Changes



Went live **1<sup>st</sup> January 2023**

1. Returning to a Loss Adjusted Day Ahead Market Spread (LADAMS) based compensation for curtailments *ensuring operation remains within operational security limits* before the firmness deadline

2. Enabling Long Term right returns in months with a planned maintenance period

3. Clarifying the **treatment of allocated rights** when the JAO Participation Agreement has been suspended

4. Earlier opening of the Long Term nomination gate brought forward from 16:30 CET D-2 to 13:30 CET D-2

# Returning to Loss Adjusted Market Spread

For curtailment under operational security limits before DAFD

## Formula:

If  $GBDAMP > BEDAMP$ ,  $LADAMS = (1-LF/2)*GBDAMP - (1+LF/2)*BEDAMP$   
If  $BEDAMP > GBDAMP$ ,  $LADAMS = (1-LF/2)*BEDAMP - (1+LF/2)*GBDAMP$

**LADAMS** is the Loss Adjusted Day Ahead Market Spread

**BEDAMP** is the Belgian Day Ahead Market Price

**GBDAMP** is the GB Day Ahead Market Price and is calculated either:

- **volume weighted day ahead** data received from the Epex Spot GB DA market price and the Nord Pool N2EX GB DA market price;

or

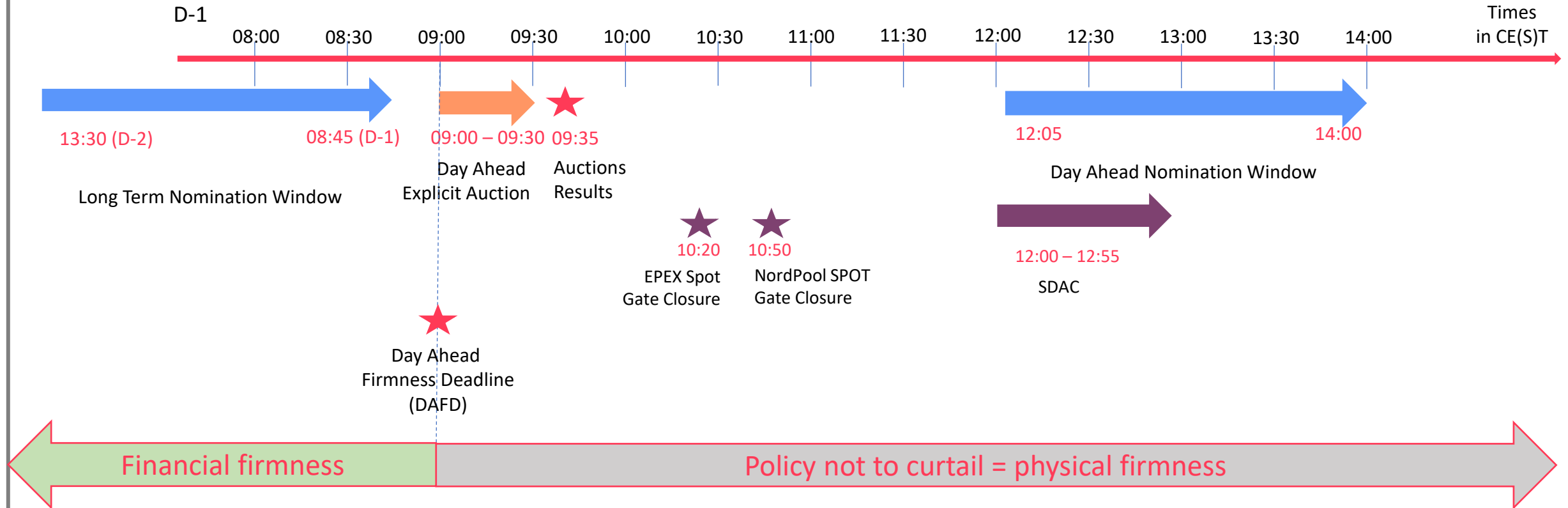
- **GB reference price** when GB single price is re-introduced

**LF** is the Loss Factor as published on the Nemo Link website.

## Subject to:

The compensation payable in respect of Long Term Transmission Rights shall be subject to **monthly caps of total revenues** occurred in the relevant month.

## Long Term and Day Ahead timings



## Firmness Policy – in the event of a trip on Nemo Link Interconnector

- ❖ Compensation for curtailment under **Operational Security Limits** before **09:00 CE(ST)T D-1 (DAFD) = Loss Adjusted Market Spread (LADAMS)**
- ❖ Long Term Nominations will not be curtailed (**physically firm**) after **09:00 CE(S)T D-1 (DAFD)**
- ❖ Day Ahead Capacity will be **firm** from **09:00 CE(S)T D-1 (DAFD)**

# Treatment of Curtailment (Access Rules)



	Curtailment	Compensation
Before LT Gate Closure (8:45 CET D-1)	<ul style="list-style-type: none"> <li>❖ Can be curtailed under Operational Security Limits or Force Majeure</li> </ul>	<ul style="list-style-type: none"> <li>❖ LADAMS for curtailment under Operational Security Limits</li> <li>❖ Initial Price Paid for Force Majeure</li> </ul>
Between LT Gate Closure to DAFD (8:45 - 9:00 CET D-1)	<ul style="list-style-type: none"> <li>❖ Can be curtailed under Operational Security Limits or Force Majeure</li> <li>❖ Curtailment shall be applied on a <b>pro rata basis</b> to both <u>nominated and not nominated</u> Physical Transmission Rights (<i>article 57, chapter 9 LT rules</i>)</li> </ul>	<ul style="list-style-type: none"> <li>❖ LADAMS for curtailment under Operational Security Limits</li> <li>❖ Initial Price Paid for Force Majeure</li> </ul>
After DAFD (after 9:00 CET D-1)	<ul style="list-style-type: none"> <li>❖ Can be curtailed under Emergency Situation or Force Majeure</li> </ul>	<ul style="list-style-type: none"> <li>❖ Initial Price Paid</li> </ul>

# Treatment of Curtailment (Policy)

- in the event of a trip on the Nemo Link Interconnector
- excluding curtailments initiated by onshore TSO's

	Curtailment	Compensation
Before LT Gate Closure (8:45 CET D-1)  <i>(*) In practice, the capacity curtailment deadline on JAO is 8:30 CET D-1 (automatically) and 7:30 CET D-1 (manually)</i>	<ul style="list-style-type: none"> <li>❖ LT Capacity Curtailment</li> </ul>	<ul style="list-style-type: none"> <li>❖ LADAMS for curtailment under Operational Security Limits</li> <li>❖ Initial Price Paid for Force Majeure</li> </ul>
Between LT Gate Closure to DAFD (8:45 - 9:00 CET D-1)  <i>(*)Very unlikely this will happen due to system constrains</i>	<ul style="list-style-type: none"> <li>❖ Curtailment shall be applied on a <b>pro rata basis</b> to both <u>nominated and not nominated</u> Physical Transmission Rights</li> </ul>	<ul style="list-style-type: none"> <li>❖ LADAMS for curtailment under Operational Security Limits</li> <li>❖ Initial Price Paid for Force Majeure</li> </ul>
After DAFD – after Final ID gate closure (for delivery period which final ID gates are closed)	<ul style="list-style-type: none"> <li>❖ No curtailment (LT, DA and ID nominations are firm)</li> </ul>	<ul style="list-style-type: none"> <li>❖ No impact</li> </ul>
After DAFD – before Final ID gate closure (for delivery periods which ID gates are still open)	<ul style="list-style-type: none"> <li>❖ No curtailment on LT and DA</li> <li>❖ Intraday capacity curtailment</li> </ul>	<ul style="list-style-type: none"> <li>❖ No impact on LT and DA</li> <li>❖ ID initial price paid for impacted parties</li> </ul>

# Communications

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- REMIT notification  
<https://bmreports.com/bmrs/?q=remit>
- Elia's Insider Information Platform IIP (future)  
<https://www.eliagroup.eu/en/elia-group-iip>
- If capacity curtailment are enacted, customers will be notified as soon as possible by the RNP Helpdesk **by email** and **new rights documents** will be issued by JAO





# Regulatory Updates

Nemo Link Annual Forum - 03 October 2023

**nemolink**





# Multi-Regional Loose Volume Coupling (MRLVC) Update

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Munti Nguyen, Customer, Policy and Regulation Manager



# EU-UK Trade and Cooperation Agreement – Energy (Recap)

## Trade and Cooperation Agreement

### Energy

### Other Areas

#### Electricity Trading over Interconnectors

##### *Regulation Fundamentals*

- No Discrimination

##### *New Trade Arrangements*

- Based upon “Multi-Region Loose Volume Coupling”
- TSOs to develop
- Day Ahead to be priority

#### TSO and Regulatory Cooperation

##### *TSOs*

- ENTSO’s Replacement
- Security of Supply

##### *Regulators*

- ACER Replacement
- Market Transparency (REMIT)

#### North Sea Grid Cooperation

- Restore North Sea Energy Cooperation Group
- Multipurpose projects
- Maritime planning
- Support framework and finance

- Tariff & Quota Free Trade in Goods
- Transport
- Fisheries
- Union Programmes
- Social Security
- Law enforcement & Judicial cooperation
- Movement of People

## New EU-UK Governance

- Partnership Council (Ministerial Level)
- Specialised Committee for Energy (BEIS & EC)
- Replacements for ACER and ENTSOe/g



# MRLVC Original Timeline



## Phase 1: Cost Benefit Analysis (April 2021):

[https://www.nemolink.co.uk/wp-content/uploads/2021/04/MRLVC\\_CBA\\_summary\\_report\\_April\\_2021\\_final\\_publication.pdf](https://www.nemolink.co.uk/wp-content/uploads/2021/04/MRLVC_CBA_summary_report_April_2021_final_publication.pdf)

### Key Results of the CBA:

- A well designed Multi-Region Loose Volume Coupling (MRLVC) trading arrangement is able to offer improved economic welfare compared to explicit auctions
- It should use common order books for MRLVC and SDAC in order to minimise flows against price difference
- It requires a highly accurate BBZ (Bordering Bidding Zone) forecast to estimate the flows from non-adjacent bidding zones
- It likely requires either an earlier gate closure time for SDAC, or later publication time for SDAC result. Overall it should limit timing/process impacts on SDAC in order to maintain its stability and not increase decoupling risks
- Following industry feedback, in May 2021 the CBA and all feedback was sent to BEIS and the European Commission

# MRLVC – 2023 progress

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On *10<sup>th</sup> February 2023* the UK TSO's and ENTSO-E were tasked with providing a joint answer to a set of **technical questions** to the European Commission and the **Department for Energy, Security and Net Zero (UK)** on the proposed trading solution MRLVC

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**Responses from the TSO group** to the technical questions on MRLVC submitted on *10<sup>th</sup> July 2023*

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The work builds upon the **Cost Benefit Analysis (CBA)** carried out in the spring of 2021 and seeks to **further investigate and provide insights into the possible MRLVC design options** which were proposed and assessed in the CBA.

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The **Specialised Committee of Energy** will meet *in the autumn this year* to discuss **next steps**



***No clear directions for MRLVC at this stage, however, it's not yet off the table***





# EU CBAM

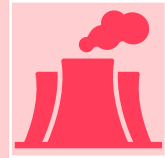
Michele Jordan, Customer Engagement Partner

## What is CBAM?

*The EU CBAM will apply from 1st January 2026, following a transitional period from 1 October 2023 until 31 December 2025, initially covering products from six sectors, including Electricity.*



## Carbon Border Adjustment Mechanism (CBAM)



The EU CBAM would apply a carbon price for imports at the "border" to avoid "carbon leakage"



Importers will need to report on the emission content of goods and purchase CBAM certificates for non-EU products



During the transitional period, the reporting process will apply without the requirement to purchase certificates.

# CBAM So Far



**16 May 2023**

The CBAM regulation officially entered into force.

**17 Aug 2023**

The European Commission adopted the rules governing the implementation of the (CBAM) during its transitional phase.

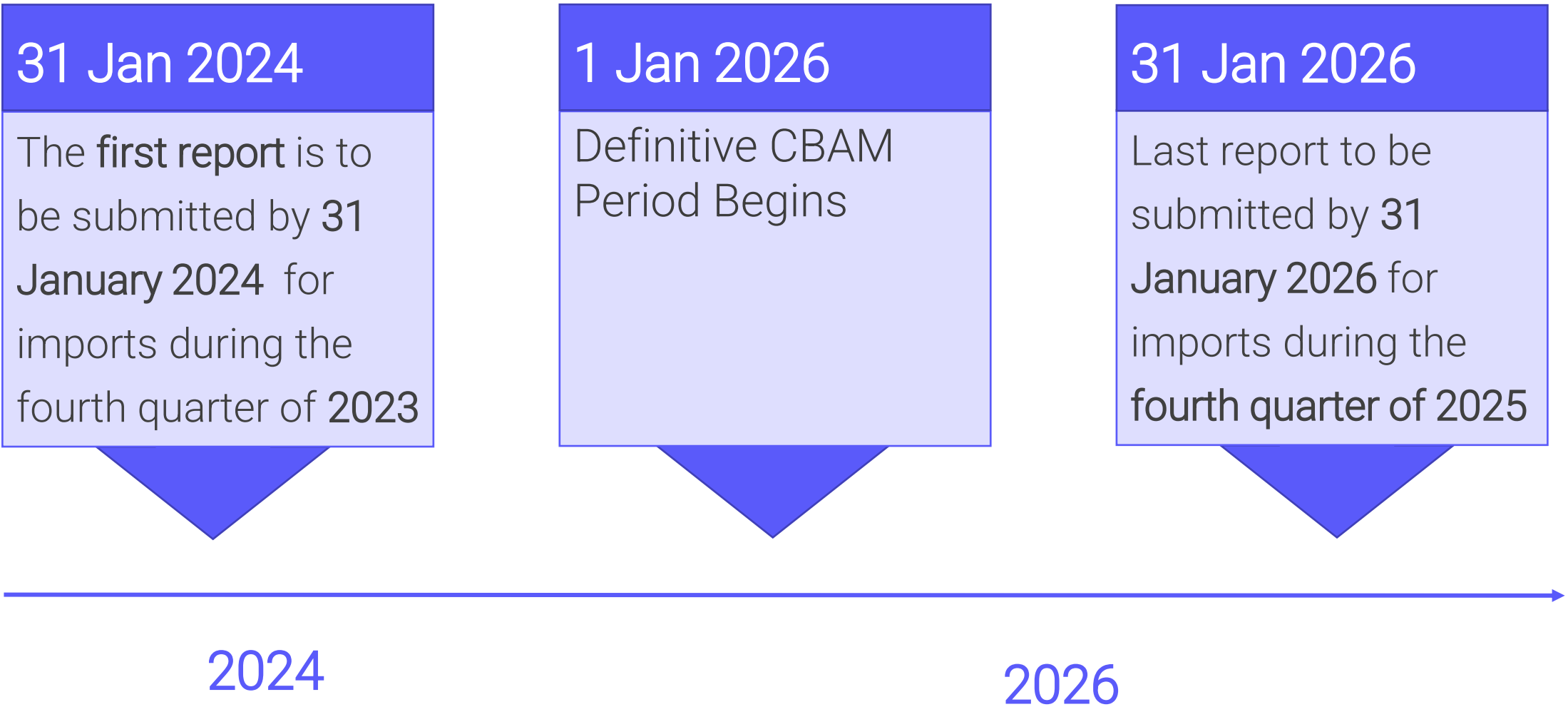
**1 Oct 2023**

Transitional period began **1 Oct** and will run until **31 Dec 2025**. Importers to report on direct emissions and carbon price due for these emissions

**2023**



# CBAM Transitional Period Timeline



Have your company started looking into CBAM Reporting for importing flows into EU?



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**#4246 022**



# The Transitional Period Reporting



- The reporting declarant must provide a 'CBAM report' on a **quarterly basis**, to the European Commission via the CBAM Transitional Registry.
- Reporting will occur on a quarterly basis from **1 October 2023 until 31 December 2025**
- Should be submitted no later than **one month** after the **end of the quarter**.

**During the transitional period importers, or an indirect customs representatives, are to report on:**

- ✓ The quantity of imported electricity
- ✓ Embedded emissions  
(IEA Emission Factor)
- ✓ Any carbon price **due** in the country of origin for those emissions



# Reporting Obligations



The first quarterly report for the period **October to December 2023**, is due to be submitted on the CBAM Transitional Registry by **31 January 2024**.



The last quarterly report for the period **October to December 2025**, is due to be submitted on the CBAM Transitional Registry by **31 January 2026**.

# Who, What, Where and When?



## Who is responsible?

The reporting declarant:

The importer or an indirect customs agent

No authorisation needed yet



## What needs to be reported?

Information on the goods:

- Quantity
- CN code
- Country of origin
- Information on the emissions: *IEA Data published by the EU Commission*
- Information on carbon price due in country on origin



## Where to report?

Request log in via the CBAM transitional registry portal

- Fill out mandatory fields in the registry
- Indicate if the report is by importer or on behalf of an importer



## When to report?

- Quarterly from 31<sup>st</sup> January 2024
- Submit the report no later than 1 month after the quarter



# Emissions Factors Explained For Electricity

## Default Values

**A** GB CO2 emission factor based on data from the International Energy Agency (IEA)

*OR*

**B** EU CO2 emission factor of the EU based on IEA data, if no value is available for the country of origin (UK)

*OR*

**C** CO2 emission factor based on reliable data demonstrated by the reporting declarant, if the values are lower than under (A) and (B) and if a specific methodology is user

## Actual Values

**D** CO2 emission factor based on actual CO2 Emissions of the installations, if certain conditions are met



# Calculating Emissions for Electricity



Emissions related to electricity  
produced  
*expressed in t CO2*

=

Electricity produced  
*expressed in MWh*

X

*Emission factor for  
electricity applied  
expressed in t CO2/MWh  
or t CO2/TJ*

# Flexibility in the Transitional Period



- The Transitional period has been designed as a 'learning phase' for all and to facilitate smooth roll out of the mechanism after the 2025
- There is some flexibility during the transitional period to allow reporters to understand the process. These flexibilities include the following:

**2**

**Months**

Modifications can be made within **two months** of the end of the relevant reporting quarter.

**1<sup>st</sup>**

**2 CBAM Reports**

may be modified until the submission deadline for the third CBAM report, **31 July 2024**

**1**

**Month**

After the deadlines possibility to request reopening for correction within one month.

# Reporting obligations Transitional Period vs Definitive Period



## Transitional phase

*October 2023 - December 2025*

### CBAM report containing the following:

- Total quantity of goods imported during the preceding quarter
- Total embedded direct and indirect emissions in those goods
- The carbon price due in the country of origin for the embedded emissions

**Report to be submitted each quarter**

## Definitive period

*January 2026 onwards*

### CBAM declaration containing the following:

- Total quantity of goods imported during the preceding calendar year
- Total embedded emissions in those goods
- Emissions to be verified by EU accredited verifier
- Total number of CBAM certificated to be surrendered
- The carbon price effectively paid in the country of origin for the embedded emissions

**Declaration to be submitted each year**

# Definitive CBAM Process 2026 – Onwards



# Definitive CBAM Process 2026 – Onwards



- A number of Implementing Acts and Delegating Acts to be finalised in 2024 and 2025
- Information collected during the Transitional Phase will allow to further specify and finalise methodology and find synergies with existing monitoring schemes
  - Information collected will feed into the review of the mechanism and provide further clarity of the functioning
  - Flexibilities reflect the above and aim to introduce openness and balancing a smooth introduction with information needs
- During the definitive period importers will need to report on the emission content of goods and purchase equivalent CBAM certificates for non-EU products
- The first reporting date will be **31<sup>st</sup> May 2027** for the year 2026

# CBAM Definitive Process

## Step 1. Registration

Traders will need to register for the status of authorised CBAM declarant.

Where an importer is not established in a Member State, an indirect customs representative shall submit the application for an authorisation.



## Step 2. Declare emissions

By 31st May each year (for the first time in 2027 for the year 2026) the Importer should submit a CBAM Declaration including:

- Quantity of electricity to be traded, expressed in megawatt-hours
- Total embedded emissions (or UK Average emissions for electricity)
- Total number of certificates after the reduction due to the UK Carbon Price
- Copies of verification reports, issued by accredited verifiers



## Step 3. Claim a reduction for the UK Carbon Price

The Importer may claim a reduction for the number of CBAM Certificates based on the UK Carbon price paid.

**The Importer needs to keep records**, verified by an independent person, required to demonstrate emissions were subject to a carbon price, and **evidence of payment**. Records must be kept until the fourth year.



# CBAM Definitive Process

## Step 4. Purchase corresponding CBAM Certificates

The Importer is required to keep CBAM certificates from a on a common central platform established by the member state. The price will correspond to the average closing price of the EU ETS for each calendar week.

Records need to be kept until the **end of the fourth year** after the declaration.



## Step 5. Verifying Emissions

The Importer shall ensure that the total embedded emissions declared in the CBAM declaration submitted are verified.



## Step 6. Surrender of CBAM certificates

By 31 May of each year, for the first time in 2027 for the year 2026, the Importer shall surrender a number of CBAM certificates to the competent authority that corresponds to the embedded emissions declared.



## Step 7. Resale of Certificates

The number of certificates subject to re-purchase is limited to **one third of the total CBAM certificates purchased** by the Trader during the previous calendar year.

**Certificates are valid for up to two years** and so any further excess certificates could be used the following year.

**After two years, on 30 June, any remaining CBAM Certificates will be cancelled.**

# CBAM Impacts

Bart Goethals, Chief Commercial Officer



# What do you see as potential impacts of EU CBAM?



Join at  
**slido.com**  
**#4246 022**



# Issues with the current EU CBAM regulation



- Key issues with the enduring regulation:
  - CO2 content
    - Usage of default emission factors based upon thermal power plants + historical data
    - Usage of actual emission factors does not seem possible given the conditions set (e.g. PPA, no congestion, ... )
    - Netting does not seem possible (e.g. between timescales) --> Tax on electricity that does not even enter the EU.
  - Offsetting of the carbon price
    - How to evidence the carbon price paid given the way most electricity is traded?
    - How to evidence a carbon price is paid for CO2 emissions that did not occur (e.g. if the majority is green energy)?
    - **risk of double/unnecessary taxation**
- What are we doing about this:
  - Common qualitative/quantitative impact study initiated with most of the other interconnectors/impacted EU TSOs
  - Lobby/policy towards the key stakeholders (EC, ember states, DESNZ, ACER...)
- Optimal outcome: Exemption for the UK (e.g. after relinking the ETS schemes)
- Other improvements: mutual recognition of the carbon schemes to relax the price evidencing



Tea/Coffee Break

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# Imbalance prices Current situation & way forward

London

03/10/2023



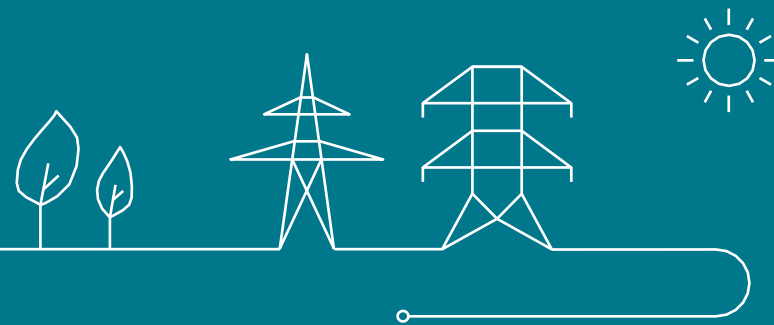


## Agenda

- 2023 Facts & Figures
- Coupling to European Balancing Energy platforms: MARI (mFRR) and PICASSO (aFRR)
- Tomorrow: Real Time Price ('RTP')

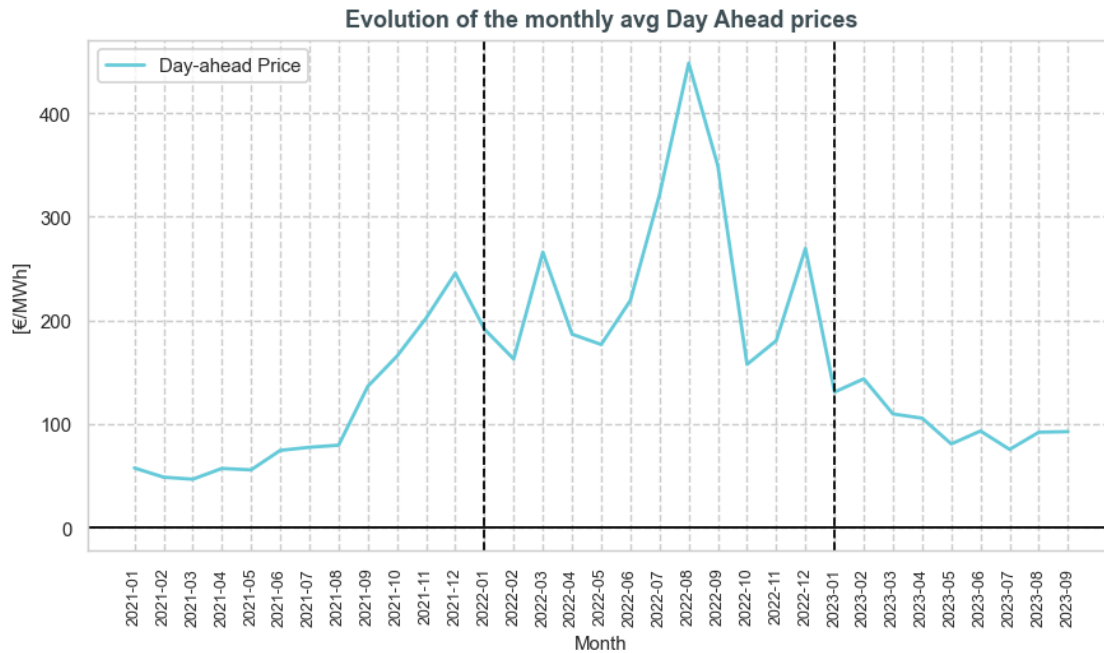


# 2023 Facts & Figures

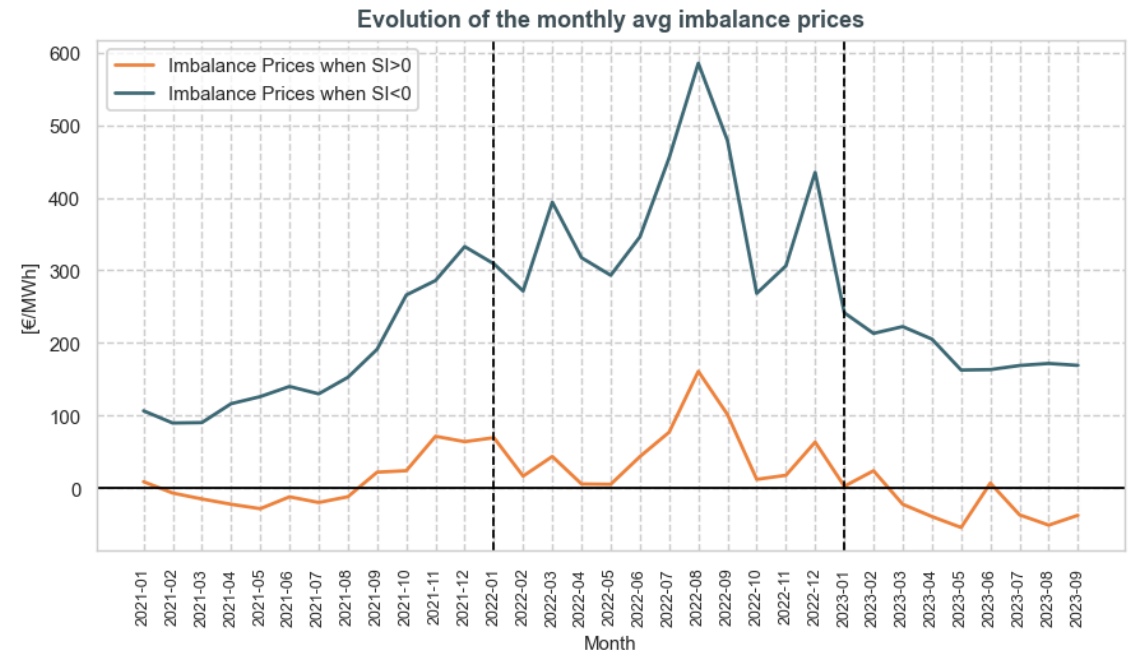


# Day-ahead market prices & Imbalances prices

## Day Ahead Prices



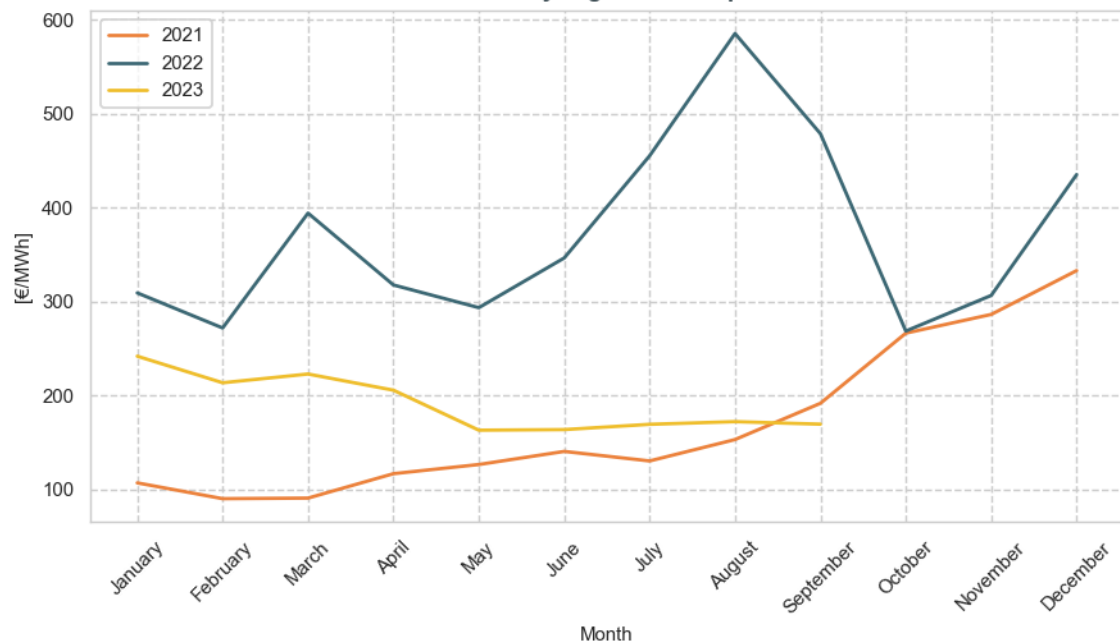
## Imbalance Prices



# Imbalance prices

## When System is short

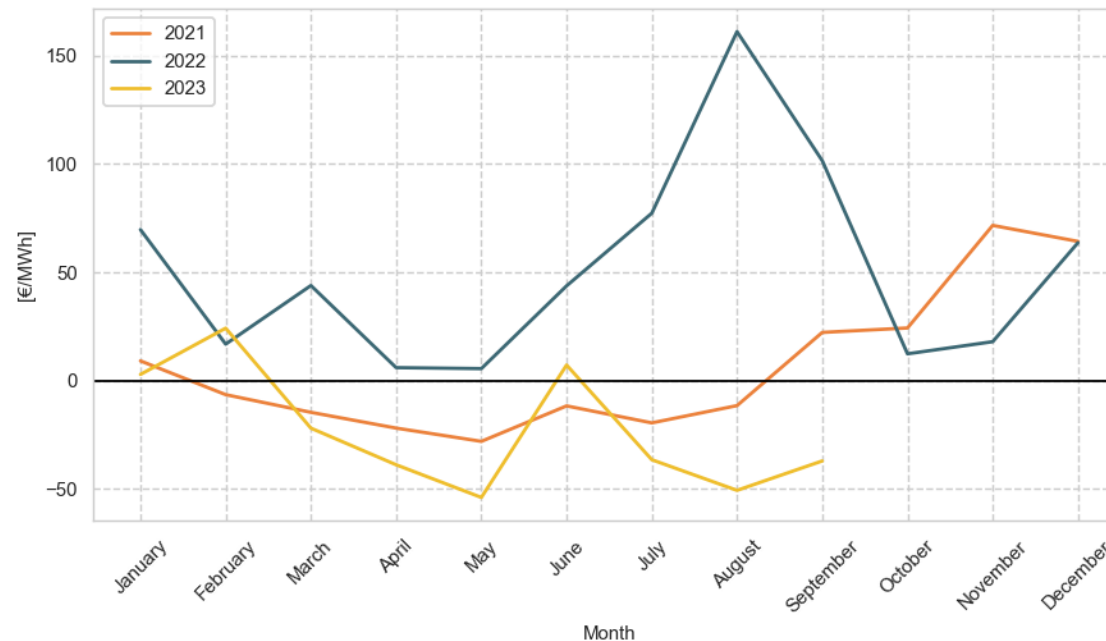
Evolution of the monthly avg imbalance prices when SI < 0



2023: decrease vs 2022, but still correlated to high energy market spot prices

## When System is long

Evolution of the monthly avg imbalance prices when SI > 0



2023: high ratio of negative prices is correlated to inclusion of new technologies in balancing services



## 2023 REX on BRP Relaxation DA/ID

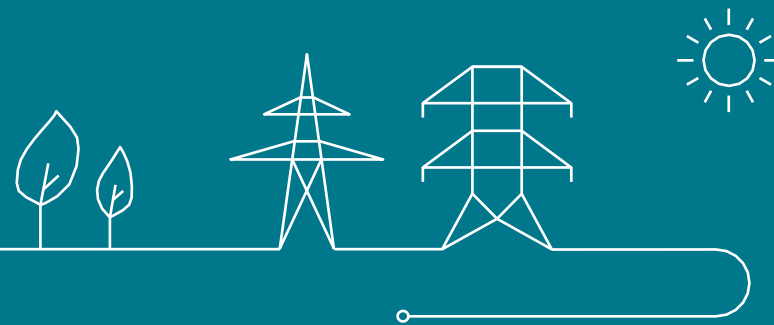
- In December 2021, Elia started the progressive relaxation of the day-ahead balance obligation for BRPs according to the following implementation plan:
- The possibility to have DA imbalances was:
  - extensively used by a limited number of BRPs (mostly traders)
  - occasionally used by other BRPs
- Trader BRPs who took open position in DA always managed to close their position before RT **(mandatory)**



The maximal authorized day-ahead imbalance will remain at 100% of the size of the portfolio of the BRP, except if:

- An amendment to the T&C BRP would be proposed relative to the day-ahead balance obligation
- A significant negative impact on the reliability, safety or efficiency of the grid would be detected resulting from the relaxation of the day-ahead balance obligation, and in response to which Elia, with approval of the CREG, would reduce the maximum authorized relative day-ahead imbalance.

# Coupling to European Balancing Energy platforms: MARI (mFRR) and PICASSO (aFRR)



# Coupling to European Energy Balancing platforms: MARI (mFRR) and PICASSO (aFRR)

The project MARI (mFRR) is in implementation phase and (soon) testing phases with the BSP (balancing services providers) stakeholders and aiming for a Go Live in February 2024 & April 2024.



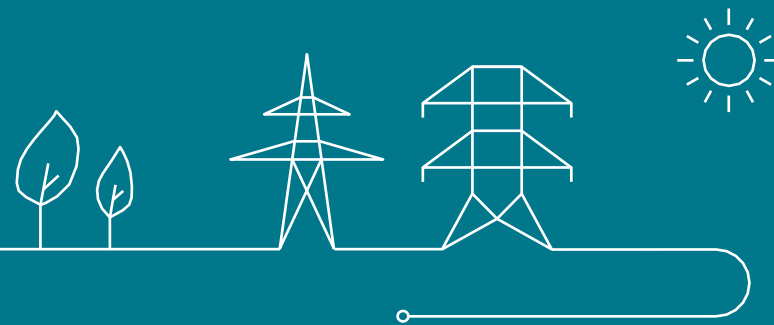
Connection to PICASSO (aFRR) is foreseen in June 2024.



Imbalance price formula will be adapted to include in the 'MIP' and the 'MDP' the aFRR components with PICASSO and the mFRR components with MARI

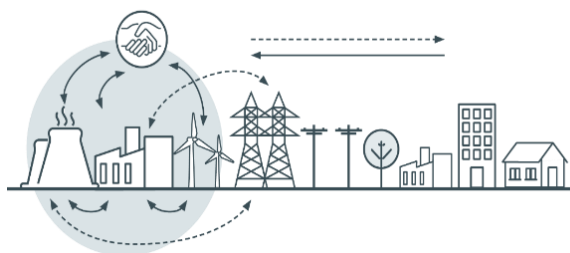
T&C BRP submitted to CREG for approval

# Tomorrow: Real Time Price ('RTP')

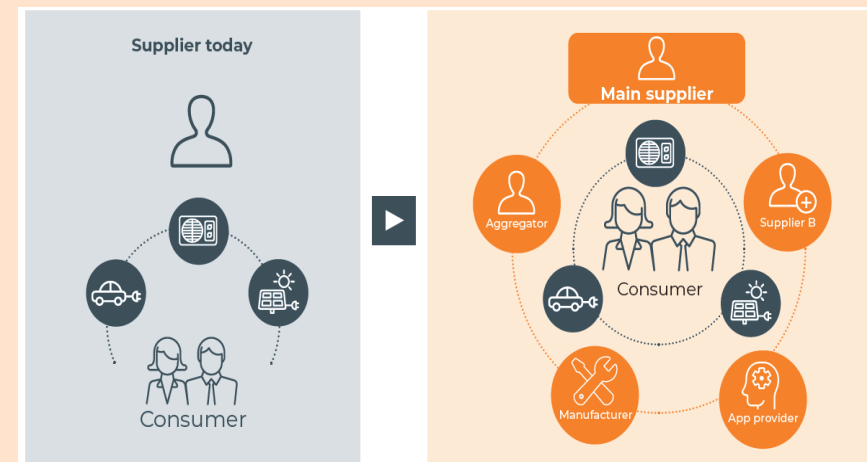


# The roadmap to net zero implies a paradigm shift

Generation follows consumption



**Demand will follow generation**



- ✓ Empowered end-prosumers
- ✓ Generic service model
- ✓ Robust and simple market model





# Supporting the paradigm shift with a real-time price..

Flexible assets need a **clear signal** to determine the right moment to engage flexibility :



- ✓ **Explicit activation** by System Operator



Flexibility  
“volume based”

Flexibility  
“price based”

- ✓ **Implicit financial incentive, or Real-Time Price**



Elia Group is engaged in an **evolution of the imbalance price** in order to trigger a given reaction from the market to **support the system needs**

- From a penalty to **an incentive**
- From a real-time/ex-post calculation to **an ex-ante indicator**
- From a multiple to **a single key indicator**



**Real-Time Price**

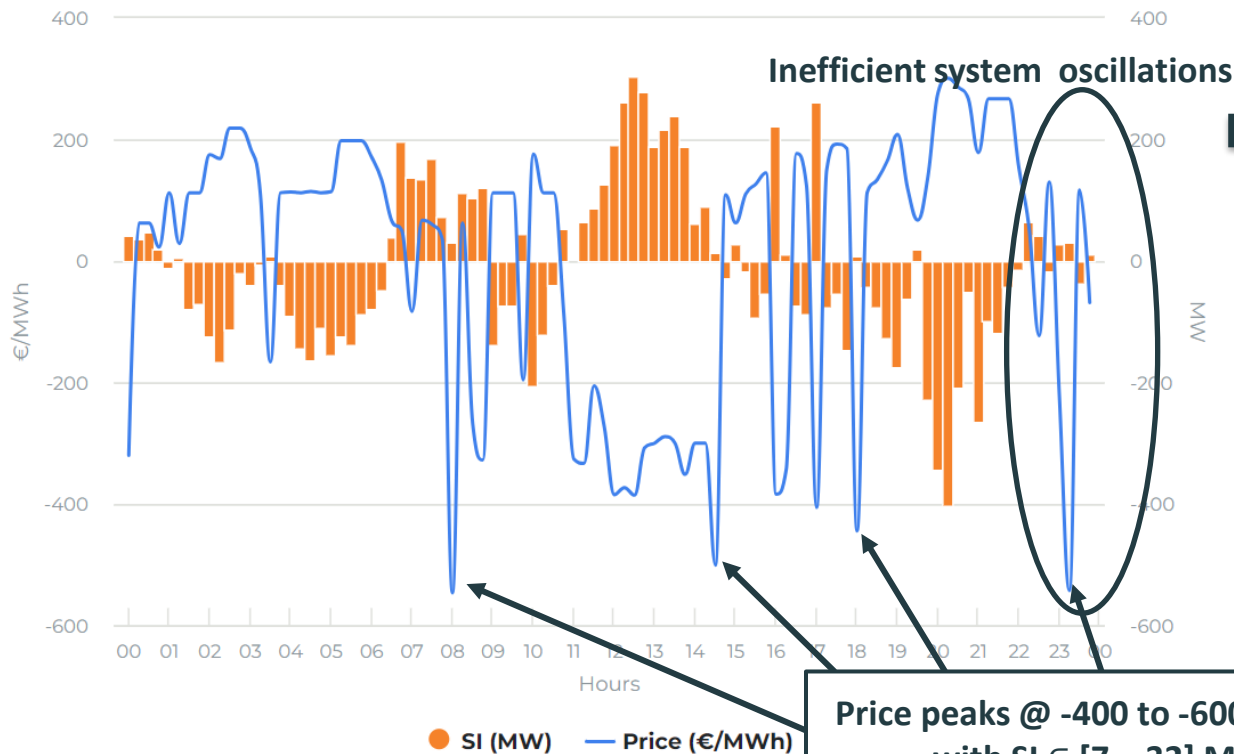
**Unlock flexibility thanks to a reliable financial incentive**

*"We have growing opportunities to help the system in RT, but we need a clear price signal"*

**Current Imbalance Price**

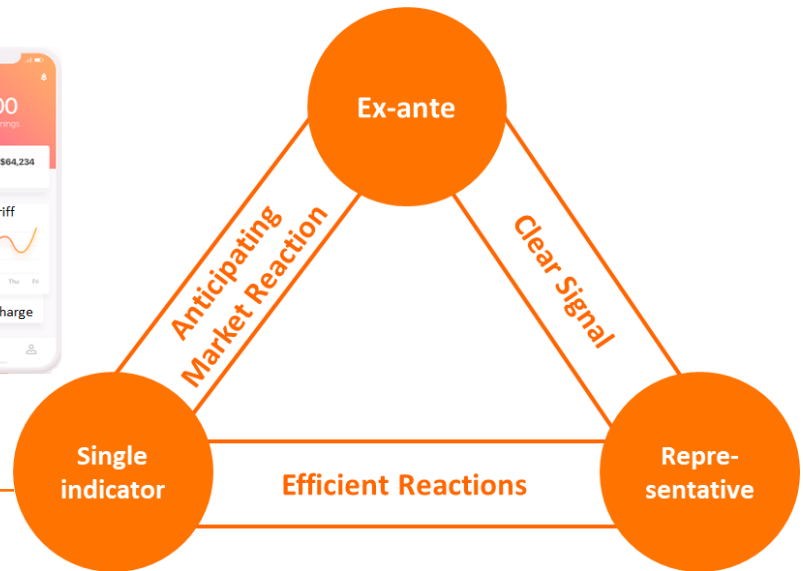
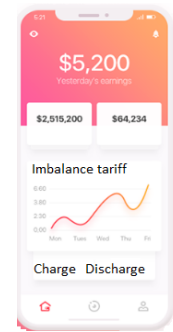
- ✓ Not representative of the system needs
- ✓ Characterized by inefficient oscillations (induced by inadequate price signal)

Imbalance prices on 14/08/2023



- ✓ From a penalty to **an incentive**
- ✓ From a real-time/ex-post calculation to **an ex-ante indicator**
- ✓ From a multiple to a **single key indicator**

**Price peaks @ -400 to -600€/MWh with SI ∈ [7 - 32] MW**



# New service: direct access to market

*Built on **Multiple BRPs** and **Real-Time Price** for a **full optimization on market prices***

- ✓ **reducing complexity** to access the DA/ID markets
- ✓ **Propagate the real-time price** for a full economical optimization of a flexible asset over all time horizons
- ✓ **lower financial and infrastructure requirements** to accommodate smaller portfolios, or even asset level



**Design note  
publication 20<sup>th</sup> of  
October**

A hand is shown in the lower-left corner, interacting with a futuristic digital interface. The interface features three large, glowing circular icons representing different customer feedback states: a smiling face (positive), a neutral face (neutral), and a frowning face (negative). Below these icons are three square buttons with arrows pointing down. The background is a dark blue, abstract digital space with glowing lines and particles.

# Customer Feedback

Munti Nguyen, Customer, Policy and Regulation Manager

# Customer Survey Results

## February 2023

**nemolink**



# Customer Survey Overview



2 weeks



20 responses



14 customers

## Key Survey Areas

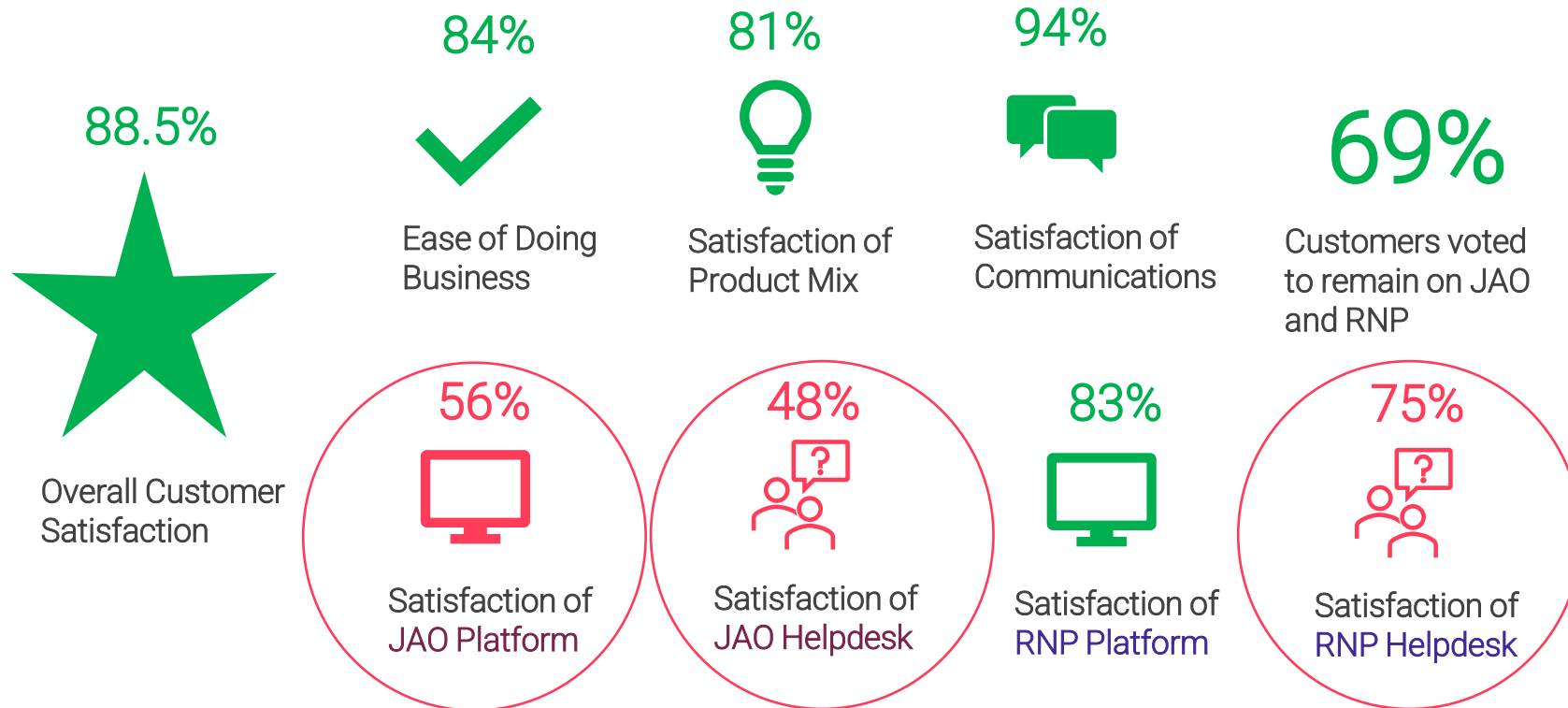
Overall	Products & Communications	JAO	RNP	Continuous improvement
❖ Customer Satisfaction	❖ Product Mix	❖ Auction Platform	❖ Nomination Platform	Options for future platform(s)
❖ Ease of doing business	❖ Communications	❖ Helpdesk services	❖ Helpdesk services	

**We are reviewing our long term strategy for our trading systems. What would you prefer our auction and nomination platform to be in the future?**

1. Auctions on JAO and Nominations on RNP
2. Auctions on a Common Platform (not JAO) and Nominations on RNP (or similar common nomination platform)
3. A combined Auction and Nomination Platform for Multiple GB Interconnectors
4. Nemo Link Individual Auction and Nomination Platform
5. Other



# Survey Results Summary



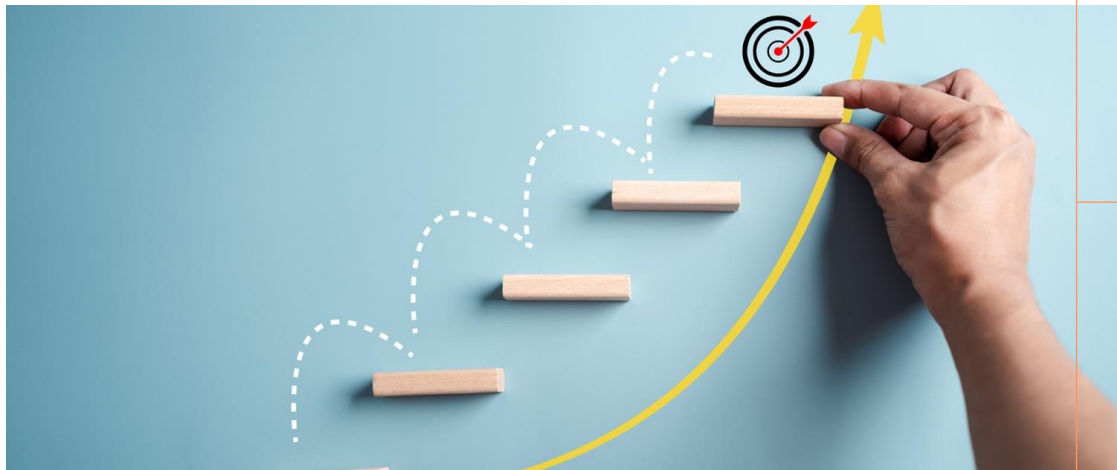


# What works well



	Comments
<b>Overall &amp; Ease of doing business</b>	<ul style="list-style-type: none"><li>✓ Efficient and Clear communication</li><li>✓ Approachable customer service &amp; fast response</li><li>✓ Customer kept in mind, always listening and explaining thought processes</li><li>✓ Auction reminders are very useful</li></ul>
<b>Products</b>	<ul style="list-style-type: none"><li>✓ All relevant products (timeframes) are available.</li><li>✓ Happy with Nemo Link Long Term product range</li></ul>
<b>JAO</b>	<p><b>Platform</b></p> <ul style="list-style-type: none"><li>✓ API works well</li><li>✓ Can be slow at times or have issues sending out auction results. Seen some issues in the past. But generally OK.</li><li>✓ Easy to use, used a lot for other products as well: familiar</li></ul> <p><b>Helpdesk</b></p> <ul style="list-style-type: none"><li>✓ Easy to access Jira ticketing system</li><li>✓ satisfied with their prompt and helpful answers</li></ul>
<b>RNP</b>	<p><b>Platform</b></p> <ul style="list-style-type: none"><li>✓ Simple and easy to use, works very well</li><li>✓ API implementation is good, certificate renewal easily.</li></ul> <p><b>Helpdesk</b></p> <ul style="list-style-type: none"><li>✓ Quick to respond</li><li>✓ Most of the time, they are helpful at short notice and solve it quickly.</li></ul>

# What to improve



## COMMENTS

### Overall & Ease of doing business

- Certificate valid only for 1 year
- Outage periods aligning with whole weeks (not 6 days or 8!)

### Products

- Would like more Long Term capacity.
- More Calendar +1 and even Calendar +2
- Timings for ID auction 1 is inconvenient for NGESO trades, customer preferred an earlier auction time.

### JAO Platform

- Slow, tedious process, and not very user-friendly.
- Very poorly programmed/designed
- Platform out-dated
- Other functions would be useful, like the ability to easily extract capacity rights for a period of great than one day

### Helpdesk

- Problems outside office hours if we cannot login to the platform
- Lack of sense of urgency
- No 24/7 support on a platform that is used for 24/7 operations
- Not always quick to resolve problems

### RNP Platform

- Very stable but GUI could be more user-friendly. Nomination process can be tedious and waste valuable time.
- Some minor annoyances where you have to select multiple things to view one screen that definitely could be simplified but overall quite good.

### Helpdesk

- Sometimes issues in communication.
- Not aware of the flows of cables during outages, effect on the positions/nominations/curtailments.



# Turning feedback into action

## You said

Would like more longer term products.

Outage period aligned with whole week

Like our clear communications

JAO's feedback on system and helpdesk

RNP's feedback on system and helpdesk

## We did

Y+2 Products launched this year

For 2024 and future outages, maintenance periods are set to the full week of the outage

Will continue to share regular communications

Met JAO's senior managers to discuss feedback received  
Monthly account calls with JAO set up  
JAO's improvement plans (*to be shared by JAO later on..*)

More trainings on RNP Helpdesk implemented  
Requirements captured for next phase

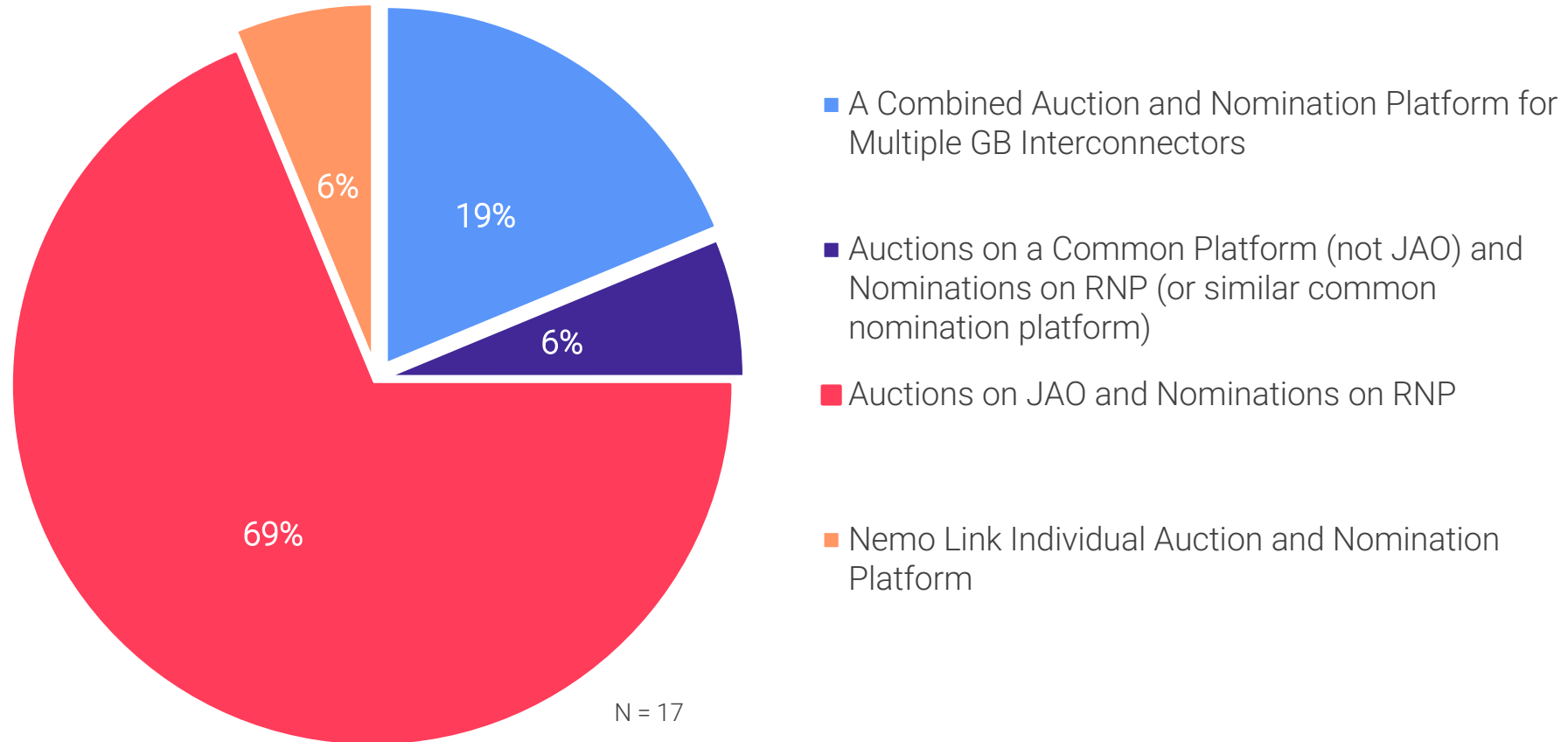




# Feedback considered

You said	We did
<p>Timings for ID auction 1 is inconvenient for NGESO trades, customer preferred an earlier auction time.</p>	<ul style="list-style-type: none"><li>• <b>Reason for this:</b> due to Elia's ID Capacity Calculation which cannot be performed earlier → late NTCs sending to Nemo Link</li><li>• <b>Consideration:</b> Nemo Link considered splitting ID auction 1 into 2 auctions<ul style="list-style-type: none"><li>○ 1<sup>st</sup> window with capacity that brings back the Interconnector to 0 flow.</li><li>○ 2<sup>nd</sup> window with remaining capacity released by the TSOs' NTCs.</li></ul></li><li>• <b>Action:</b> The Customer Team tested the idea with Intraday customers (and the customer with the feedback)</li><li>• <b>Customer Feedback:</b> While it may create opportunities to acquire some capacities earlier, this would add another auction during a busy period with little benefits → no appetite for this</li></ul>
<p>Certificate valid for longer than one year</p>	<ul style="list-style-type: none"><li>• <b>Reason for this:</b> due to security requirements</li><li>• <b>Solution considered:</b> moving to Multi-factor Authenticator in the next phase of RNP</li></ul>

# What would you prefer our auction and nomination platform to be in the future?



# What would you prefer our auction and nomination platform to be in the future? - Comments



## Feedback to Remain on JAO and RNP

### Auctions on JAO and Nominations on RNP

Comments from Intraday, Day Ahead Short Term and Long Term Products  
(8 companies)

- System already set up on JAO + RNP
- Least implementation effort. "It works" currently, so if there is no other reason to change it could be left like this.
- As long as the documentation on the implementation is proper and setting up is easy there is no preference besides the current (which already works).
- Even though they are not perfect systems, neither JAO nor RNP it is still easier for us to continue auctions with JAO and scheduling in RNP. We use JAO for other borders and interconnectors and we have set up automatic communication with them, which has made the whole process easier. Having one system for everything is better.
- Good to have all on one or two platforms as this limits
- Numbers of API / individual certificate connections, Logins, Certificates and later renewal process for all needed certificates , Financial securities which needs to be sufficient for auctions we would like to take a part in, Support teams
- Strong preference to keep things as they are. We use both JAO and RNP for many other borders, so keeping the number of systems and auction platforms to a minimum is very useful.
- Only improvement needed is JAO procedures when technical issues

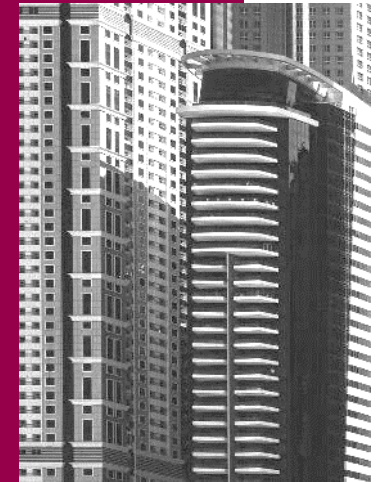
# CUSTOMER FORUM

3.10.2023



# JAO'S ROLE IN EU ELECTRICITY MARKET

- JAO is the leading service provider for Transmission System Operators (TSOs) in the European electricity market located in Luxembourg.
- Our services extend to TSOs in the EU, Norway, Switzerland, the Balkans, Turkey, and interconnectors between the EU and the UK.
- Operational and Financial Services





# FACTS



33.8 bn  
Net turnover (EUR)



20k+  
Auctions per year



430+  
Market participants



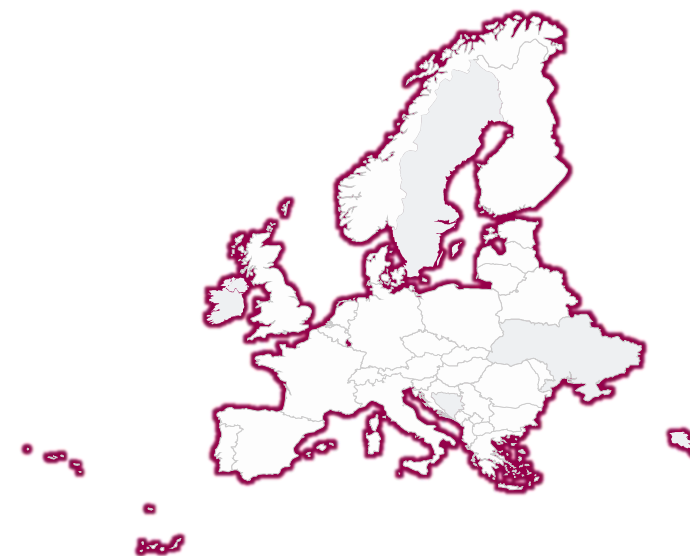
47  
TSOs customers



85  
Employees

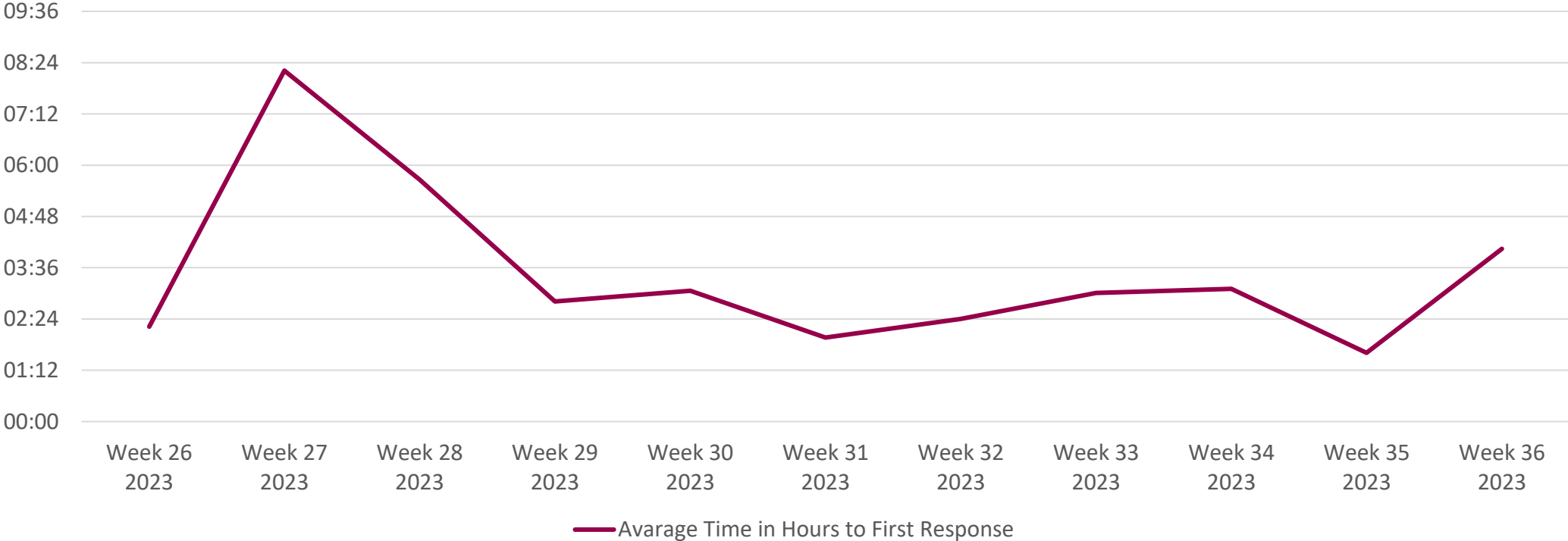


100%  
Auction tool availability

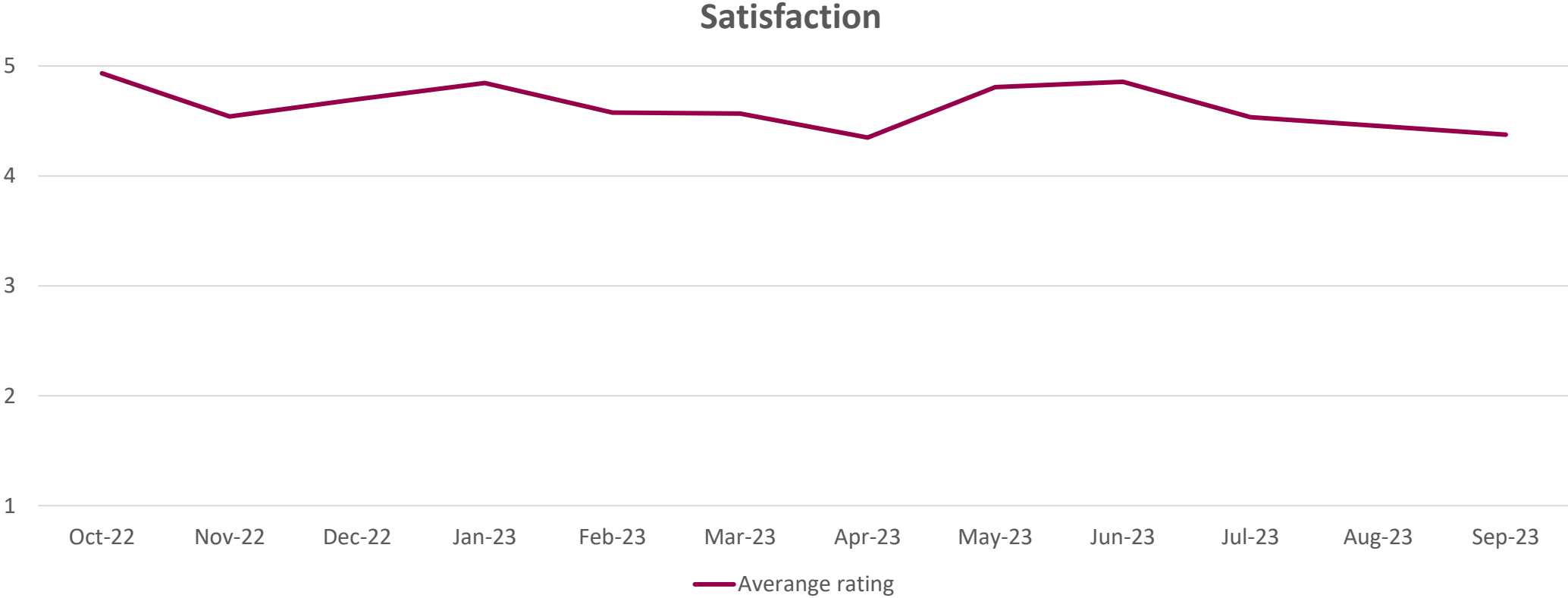


# CUSTOMER SERVICE

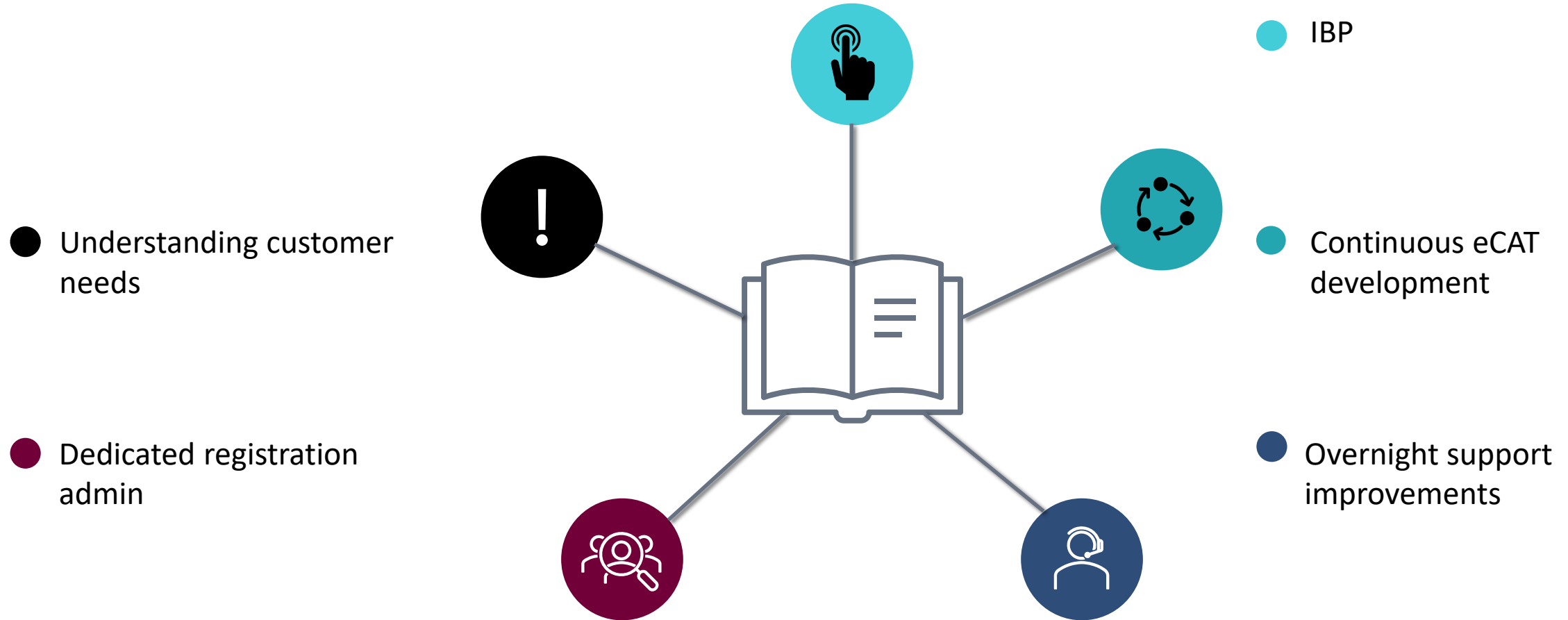
### Time to first response



# CUSTOMER SERVICE



# MAIN AREAS OF FOCUS IN 2023



# eCAT IMPROVEMENTS

To access to the capacity auction system,  
please login.

User name:

Password:

TimeZone:  ▼

Language:  ▼

[▶ Reset password](#) [▶ Log in](#)

Password reset is now  
available for users in Trader  
User Interface without  
contacting JAO



# eCAT IMPROVEMENTS

Overview of entitlements available in Trader UI



## eCAT SYSTEM

File Auction Bid Capacity right Secondary market Programming authorizations Settlement Entitlements Bulletin Board Options

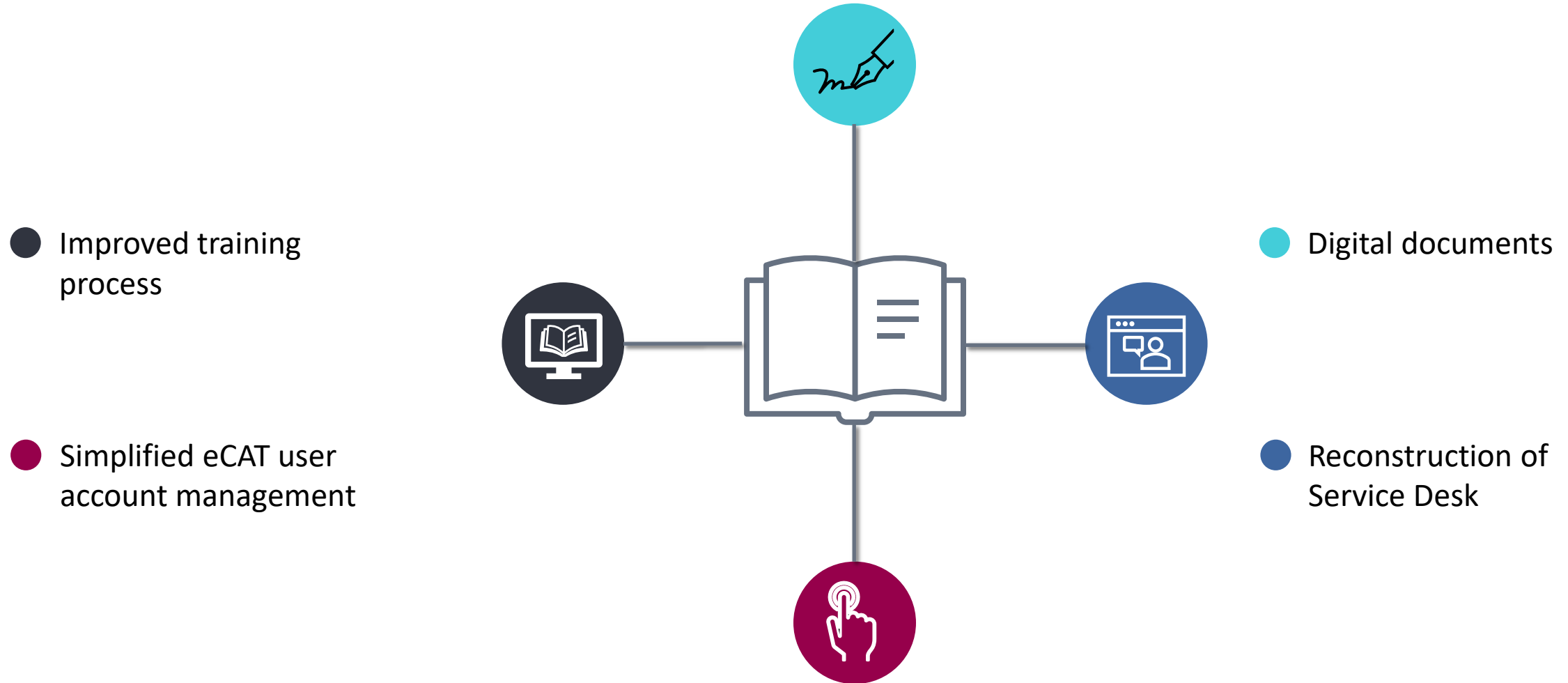
### Entitlements

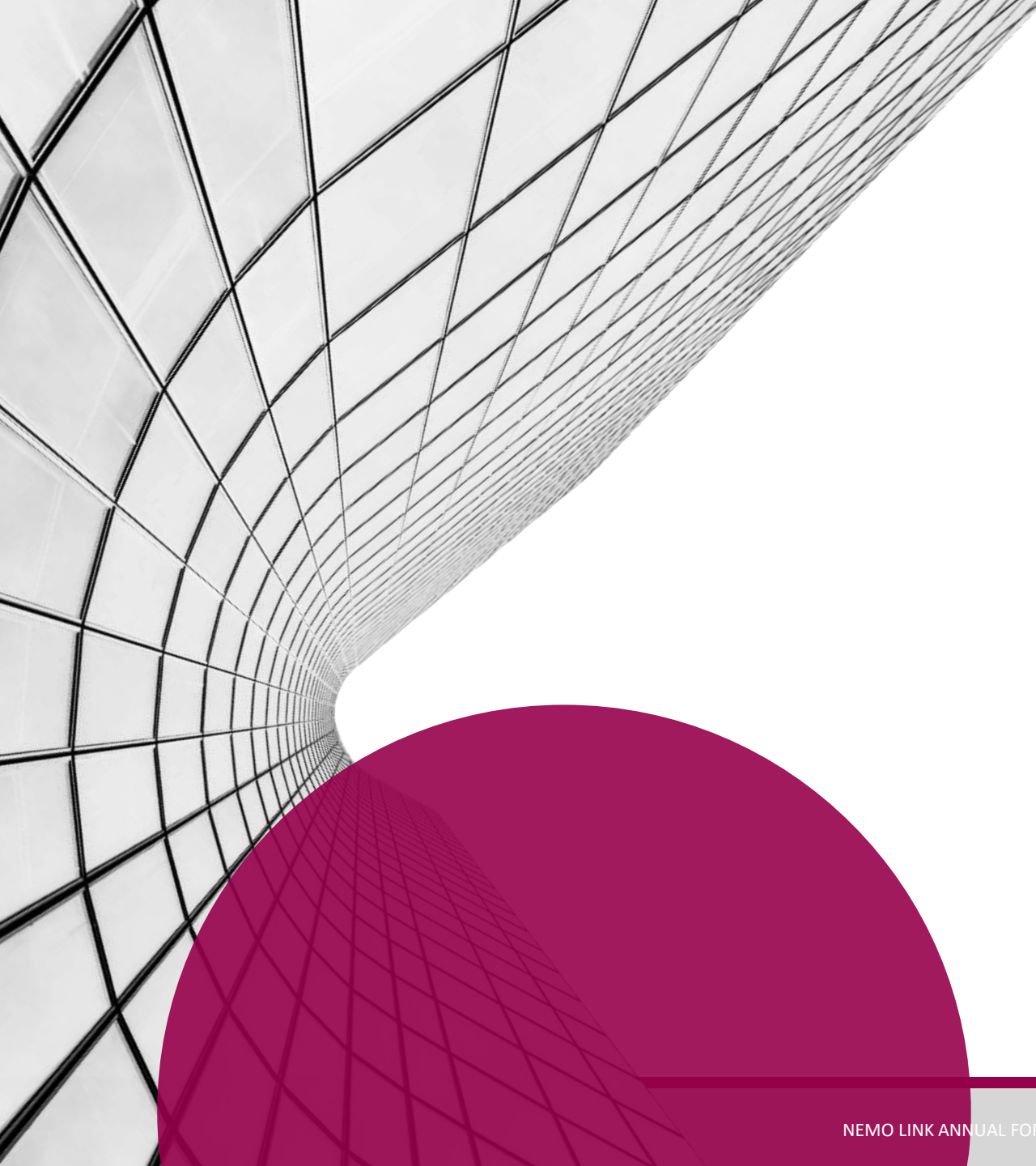
- Long Term
- Daily
- Intraday
- Shadow

▶ Refresh

Corridor code	Horizon name	Is Entitled?	Effective day	Termination day
BDL-GB-NL	Intraday	<input type="checkbox"/>	1999-12-31 23:00:00	2036-12-31 23:00:00
BDL-NL-GB	Intraday	<input type="checkbox"/>	1999-12-31 23:00:00	2036-12-31 23:00:00
CH-IT	Intraday	<input checked="" type="checkbox"/>	1999-12-31 23:00:00	2036-12-31 23:00:00
EL1-FR-GB	Intraday	<input type="checkbox"/>	1999-12-31 23:00:00	2036-12-31 23:00:00

# MAIN AREAS OF FOCUS IN 2024





Q&A



THANK YOU!





# RNP Update

Scott Maybury, Systems Manager



# RNP Improvements

Join at  
**slido.com**  
**#4247 188**



## Key RNP Updates in 2023



- Increased resilience for overnight intraday auctions
- Successful joining of Viking Link on RNP without impact
- Successful departure of BritNed from RNP
- RNP Database and firewall optimization to increase RNP stability

## Coming soon...

- Imminent launch of an RFI on RNP replacement
- Further increasing of RNP security

Join at  
**slido.com**  
**#4246 022**



**nemolink**

Nemo Link Annual Forum - 03 October 2023

**How do you use RNP platform the most?**  
**- via GUI (web-interface)**  
**- via API (web-services)**

Join at  
**slido.com**  
**#4246 022**





**What's the most  
important  
feature for GUI?**

Join at  
**slido.com**  
**#4246 022**



**API Functionality  
– is there  
anything that  
RNP is not  
currently offered  
that you would  
like to see?**


Join at  
**slido.com**  
**#4246 022**





**The following have been included in the system replacement requirements –**

Join at  
**slido.com**  
**#4246 022**



**is there anything you'd like to see that we've not got listed here?**

Improved API and interfaces


Increased security

Improved performance, availability and resilience

Users can create, manage and reset their own accounts

Improved UI – polished customisable screens and dashboards, create custom data tables, dark mode

Notifications and resending of values in case of curtailments



# Looking Ahead & Q&A

Nemo Link Annual Forum - 03 October 2023

**nemolink**



# Summary and Thank you Bert Maes

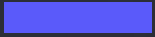






# Drinks Reception

16:30 – 18:30 SkyLounge



# 18:30 – 22:00 Dinner

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18:30 – 22:00 Dinner







# Appendix - CBAM

# Appendix – EU CBAM



# EU CBAM Article 7 – Calculating Embedded Emissions

## Article 7

- The EU’s preferred method for calculating the embedded emissions in electricity is to use a default average:  
*“average CO2 emission factor in tonnes of CO2 per megawatt-hour of **price-setting sources** in the third country...”*  
(Annex III, point 4.2).
- In recommended amendments to the draft proposal, the European Parliament even proposes to amend this to use  
*“the average emission intensity of the **10% worst performing installations** producing electricity in the third country, group of third countries or region within a third country”*.
- This means that any electricity imported into the EU, including from renewable sources, would be charged for CBAM Certificates proportionate to the average carbon content of energy production in the UK.
- Even where the exporter has paid UK ETS + CPS it is unlikely to be for the “UK Annual Average”.
- There could be a further problem for an exporter of very low carbon electricity, that would not be able to prove any UK ETS + CPS, whereas a coal-fired exporter would not have an issue.

# EU CBAM Article 9 – Reduction based on carbon price paid in the country of origin



## Article 9

- Provides details of a methodology allowing importers to the EU to claim a reduction in the CBAM certificates required based on a carbon price paid in the country of origin (UK).
- The process to claim a reduction in certificates would involve the importer keeping records, verified by an independent person, to **demonstrate emissions were subject to a carbon price**, as well as **evidence of payment**. This does not consider the specificities of the wholesale electricity markets.
- In general, UK electricity imported into the EU is traded anonymously on electricity exchanges, and is often traded in aggregated blocks. It would therefore **be impossible to verify the carbon price already paid** as in the UK this is often paid by the initial producer(s)
- Under the current wording of the proposal it is therefore impossible to claim a reduction in the CBAM certificates required.
- Exporters from the UK would be liable for the full cost of the EU CBAM (at the cost of the EU ETS price) when the carbon cost would already have been paid in the UK (UK ETS and CPS), which we see as a double taxation.





## EU CBAM Annex 2 - Possibility of Exemption

There are two pathways to exemption from the application of CBAM to electricity imports:

- Annex 2, Section A: Applies to Third Countries that participate in the EU ETS or have an emission trading system linked to the EU ETS
- Annex 2, Section B: Applies to Third Countries that have an electricity market which is integrated with the EU's internal market for electricity through market coupling, follows EU energy law and has committed to climate neutrality by 2050
- Great Britain / United Kingdom is not currently eligible for an exemption under either pathway.

Linking the EU ETS and UK ETS, would allow the UK to move towards exemption under Annex 2, Section A.

This may not be a solution in the short term, but if achievable would provide an enduring solution to the issues highlighted above with the current CBAM design. This approach is likely to deliver the most optimal outcome regarding electricity trade.