

Sixth Market Coupling Consultative Group

Workshop

27 June 2024

Agenda



ТІМЕ	DURATION	SESSION	PRESENTER
09:00 - 09:10	10 min	Welcome, review of the action points logged in the last meeting	Hélène Robaye, Thomas Van Den Broucke, Pierre Milon (MCCG Convenors)
09:10 - 10:10	60 min	SDAC and SIDC 15 min Market Time Unit (MTU)	
		- 15 min MTU implementation	Jaime Ponz García Comendador & Martim Stilwell (SIDC OPSCOM Chairs) Adèle Roy, François-Xavier Detraz, & Benjamin Mossot (SDAC QARM Convenors)
		 SDAC - Written description of 15minMTU products and cross-product matching rules 	Joël Hoeksema (PCR MSD Convenor)
		- Questions from market parties (overview of time resolutions per NEMO, smart block usage)	Hélène Robaye (MCCG MPs Convenor) Pierre Milon (MCCG Convenor) Adèle Roy, François-Xavier Detraz, & Benjamin Mossot (SDAC QARM Convenors)
10:10 - 10:30	20 min	SDAC operational timings	
		 Impact of additional computation time on operational timings of the SDAC process 	Mario Pession (SDAC OPSCOM Chair)
		- Second auction process reconsideration	Pierre Milon (MCCG Convenor)
10:30 - 10:40	10 min	Reflection on the Decoupling training session with market parties	Balint Csuri (SDAC OPSCOM Chair) Hélène Robaye (MCCG MPs Convenor)
10:40 - 10:50	10 min	COFFEE BREAK	



Agenda

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TIME	DURATION	SESSION	PRESENTER
10:50 - 11:35	45 min	SIDC Intraday Auctions (IDAs)	
		- First experience with IDAs after go-live: MCSC	Jaime Ponz García Comendador & Martim Stilwell (SIDC OPSCOM Charis)
			Jean-Michel Reghem (SIDC QARM Convenor)
		- First experience with IDAs after go-live: MPs	Hélène Robaye (MCCG MPs Convenor)
11:35 – 11:45	10 min	Updates on methodologies' updates and consultations	Chiara Vitelli (NEMO Tech TF Convenor)
		- Update for SIDC Products Methodology	
		- Update for SDAC Product Methodology	
11:45 – 11:55	10 min	SDAC-SIDC Roadmap	André Estermann, Cosimo Campidoglio, Ondřej Máca (MCSC Chairs)
		- MCSC main take-aways from June 2024 MESC	
		- SDAC-SIDC Roadmap and key projects	
11:55 - 12:15	20 min	Co-optimisation	
		- MCSC co-optimisation R&D update	Timo Suhonen & Marja Eronen (SDAC MSD Convenors)
		- MCSC TSO co-optimisation standpoint	Gerard Doorman (TSO Co-optimisation SPoC)
		 Market parties' update on the algorithm amendment for co-optimisation 	Hélène Robaye (MCCG MPs Convenor)
12:15 - 12:25	10 min	AOB - Implementation of 30-minute IDGCT	Thomas Van Den Broucke (MCCG Convenor)
12:25 - 12:30	5 min	Closure	Hélène Robaye, Thomas Van Den Broucke, Pierre Milon (MCCG Convenors)



Welcome by Co-convenors of MCCG

The MCCG is led by three Co-convenors:

Market participants Co-convenor:

Hélène Robaye, Head of Regulation and Market Design, Eurelectric - ENGIE

TSO Co-convenor:

Thomas Van Den Broucke, Manager Offshore & Interconnectors market concepts, ELIA

NEMO Co-convenor: Pierre Milon, Executive Expert Market Coupling & Integration, EPEX SPOT

MoM & review of action points

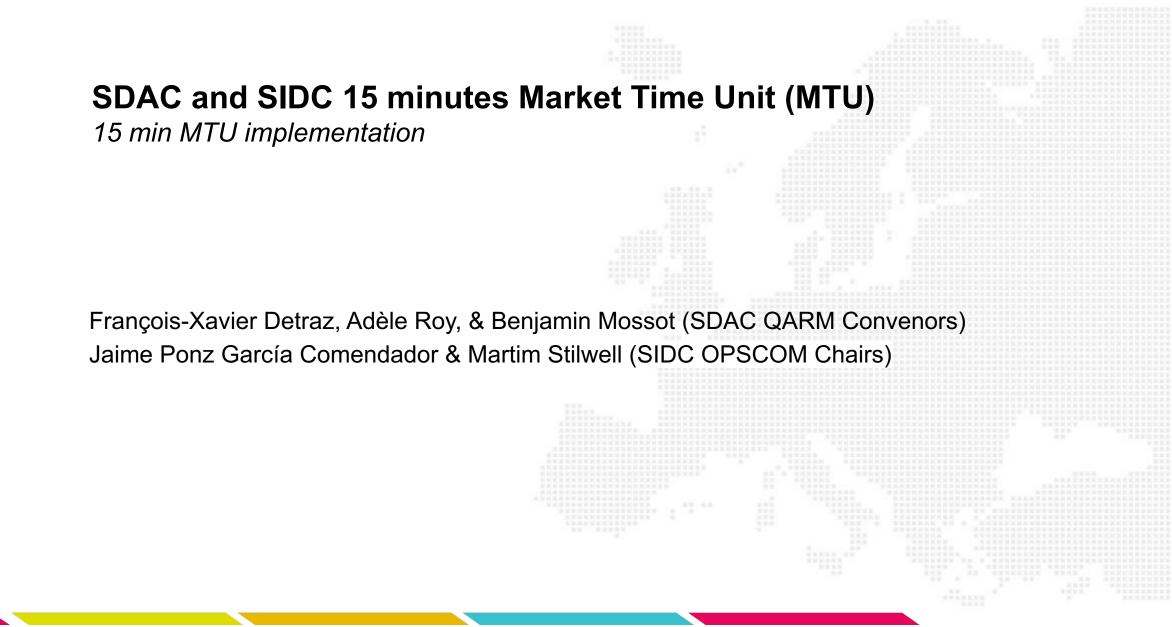


MoM of previous MCCG were available on NEMO Committee [LINK] & ENTSO-E website [LINK]

Overview of action points of the last MCCG:

Date	Responsible	Description	Deadline/Status
26/02/2024	TSOs and NEMOs	Clarify by when will the proposed deadlines for DA results publication be confirmed	Q2 2024 MCCG
26/02/2024	NEMOs	Come back on the next steps associated to SDAC second auction removal proposal	Q2 2024 MCCG
26/02/2024	TSOs and NEMOs	Propose detailed windows for 15' MTU member testing and clarify the 15' MTU transition plan for SIDC continuous, SIDC IDAs, and SDAC as a part of the 15' MTU transition plan	Q2 2024 MCCG
26/02/2024	NEMOs	Prepare an enhanced version of the EUPHEMIA public description, including a written description of products and rules in view of 15minMTU implementation	Q2 2024 MCCG
26/02/2024	Market parties	Further clarify their question/concerns on 15minMTU and (DA?) balancing obligation that exists today (including the specific country) and why the switch to 15minMTU would make such an obligation more difficult/different then in the 60 min context	Q2 2024 MCCG
26/02/2024	NEMOs	Ask individual market parties about their expected usage of smart block products in view of increased time granularity of flexible assets and share the data with PCR ALG	Q2 2024 MCCG
26/02/2024	MCCG Conveners in cooperation with SDAC MSD Conveners	Follow-up on the expectation of high block usage from market parties	Q2 2024 MCCG





From 60 min MTU to 15 min MTU Go-live sequence

Underlying assumption – go-live sequence

- ISP switch is the prerequisite for 15 MTU implementation. NEMOs ought to provide trading possibilities following the ISP switch.
- The following go-live sequence shall be followed for implementation of 15' MTU following the ISP switch in bidding zones, resulting with the final 15 MTU switch in SDAC for all bidding zones at once.
- The transition for SIDC will foresee sequential go-live windows organized in batches of borders and bidding zones, while SDAC was announced a few years ago to proceed with a single go-live.
- SIDC and IDA switch needs to take place <u>at the latest</u> by SDAC big bang implementation to respect the sequence. Central systems are ready for the switch.

15 min ID (CT + IDA)

- Simultaneous switch ID continuous + IDA.
- Already live in some bidding zones and borders. Organization in go-live windows for the remaining bidding zones and borders.
- Member testing will be scheduled for each window.

15 min DA

- Dedicated member testing phase will be planned.
- One go-live moment ('big-bang approach').
- This switch ends the transition to 15'.



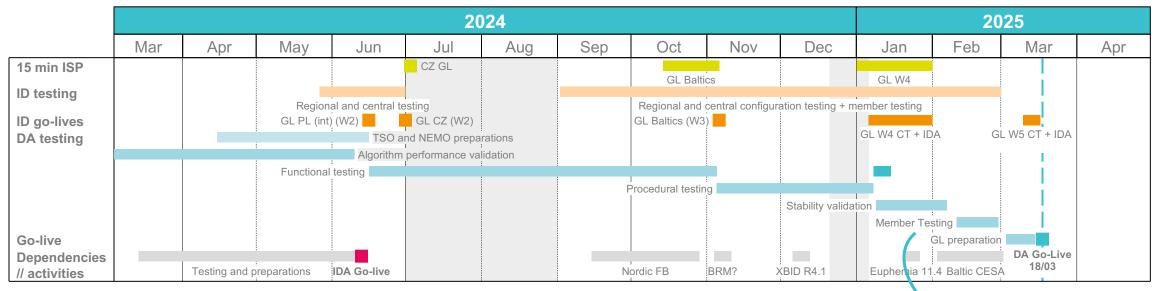


15 min MTU 15 min MTU test planning



Implementation planning of 15 min MTU

- The switch to 15 min MTU requires changes in almost all local, regional and central systems.
- Important changes are 15 min ISP and 15 min MTU in the ID markets. IDCT & IDA systems will be adapted to 15min resolution as per the timeline below.



Note: Designations 'W2', 'W3', etc., refer to go-live 'Window 2', 'Window 3', etc.

More details on member testing will be shared in fall 2024

15 min MTU Overview of planned go-lives

Go-live per bidding zone

Bidding zone	15 min ISP	Planned Go-live date ID CT & IDA	GL date DA
Spain	30/11/2024	18/03/2025	18/03/2025
Norway (All BZs)	07/01/2025	January 2025	18/03/2025
Hungary	Implemented	Implemented	18/03/2025
Northern Ireland	N/A	30' MTU in January	30' min GL
Netherlands	Implemented	Implemented	18/03/2025
Sweden (All BZs)	07/01/2025	Implemented	18/03/2025
Croatia	Implemented	Implemented	18/03/2025
France	01/01/2025	January 2025	18/03/2025
Romania	Implemented	Implemented	18/03/2025
Bulgaria	Implemented	Implemented	18/03/2025
Greece	Implemented	18/03/2025	18/03/2025
Italian BZ	01/01/2025	January 2025	18/03/2025
Denmark (All BZs)	01/12/2024	Implemented	18/03/2025
Czech Republic	01/07/2024	01/07/2024	18/03/2025
Belgium	Implemented	Implemented	18/03/2025
Slovakia	Implemented	Implemented	18/03/2025
Austria	Implemented	Implemented	18/03/2025
Latvia	06/11/2024	06/11/2024	18/03/2025
Portugal	30/11/2024	18/03/2025	18/03/2025
Finland	Implemented	Implemented	18/03/2025
Republic Of Ireland	N/A	30' MTU in January	30' min GL
Lithuania	01/10/2024	06/11/2024	18/03/2025
Estonia	06/11/2024	06/11/2024	18/03/2025
Poland	Implemented	Implemented	18/03/2025
Germany	Implemented	Implemented	18/03/2025
Slovenia	Implemented	Implemented	1803/2025

Go-live per border	Border	Planned Go-live date ID CT & IDA	GL window	GL date DA
	CZ-AT	01/07/2024	W2	18/03/2025
	CZ-DE	01/07/2024	W2	18/03/2025
	CZ-DE	01/07/2024	W2	18/03/2025
	CZ-PL	01/07/2024	W2	18/03/2025
	SI-HR	Jan 2024	W2	18/03/2025
	HR-HU	Jan 2024	W1	18/03/2025
	GR-BG	Mar 2025	W5	18/03/2025
	ES-PT	18/03/2025	W5	18/03/2025
	IT-CP-AT	Jan 2025	W4	18/03/2025
	IT-CP-SI	Jan 2025	W4	18/03/2025
	IT-GR-GR	N/A	Exception*	Stays in '60
	DE-DK1	January 2025	W4	18/03/2025
	DE-NO2	January 2025	W4	18/03/2025
	IT internal borders	Jan 2025	W4	
	DE-BE	Live	W0	18/03/2025
	BE-NL	Live	W0	18/03/2025
	DE-NL	Live	W0	18/03/2025
	DE-FR	Q1 2025	W4	18/03/2025
	FR-BE	Q1 2025	W4	18/03/2025
	FR-ES	18/03/2025	W5	18/03/2025
	IT-CP-FR	Q1 2025	W4	18/03/2025
	DE-FR	Q1 2025	W4	18/03/2025
	DE-DK2	January 2025	W4	18/03/2025
	EE-FI	January 2025	W4	18/03/2025
	DK1-DK2	January 2025	W4	18/03/2025
	DK1-NO2	January 2025	W4	18/03/2025
	DK1-SE3	January 2025	W4	18/03/2025
	DK1-NL	January 2025	W4	18/03/2025
	DK2-SE4	January 2025	W4	18/03/2025
	FI-SE1	January 2025	W4	18/03/2025
	FI-SE3	January 2025	W4	18/03/2025
	NO1-NO2	January 2025	W4	18/03/2025
	NO1-NO3	January 2025	W4	18/03/2025
	NO1-NO5	January 2025	W4	18/03/2025
	NO1-SE3	January 2025	W4	18/03/2025
	NO2-NO5	January 2025	W4	18/03/2025
	NO2-NL	January 2025	W4	18/03/2025
	NO3-NO4	January 2025	W4	18/03/2025
	NO3-NO5	January 2025	W4	18/03/2025
	NO3-SE2	January 2025	W4	18/03/2025
	NO4-SE1	January 2025	W4	18/03/2025
	NO4-SE2	January 2025	W4	18/03/2025
	SE1-SE2	January 2025	W4	18/03/2025
	SE2-SE3	January 2025	W4	18/03/2025
	SE3-SE4	January 2025	W4	18/03/2025
	HU-AT	Live	W0	18/03/2025
	HU-RO	Live	W0	18/03/2025
	HU-SI	Live	W0	18/03/2025
	DE-PL	January 2025	W4	18/03/2025
	DE-AT	Live	W0	18/03/2025
	LV-LT	06/11/2024	W3	18/03/2025
	EE-LV	06/11/2024	W3	18/03/2025
	SI-AT	Live	W0	18/03/2025
	LT-SE4	January 2025	W4	18/03/2025
	LT-PL	January 2025	W4	18/03/2025
	PL-SE4	January 2025	W4	18/03/2025
	SK-CZ	01/07/2024	W2	18/03/2025
	SK-62 SK-HU	Live	W0	18/03/2025
	SK-PL	January 2025	W0 W4	18/03/2025
	RO-BG	Live	W0	18/03/2025
	RU-BG	LIVE	VVU	10/03/2029

* Due to technical limitation of the HVDC cable, 60min MTU/OTU will be maintained.



15 min MTU in ID (CT and IDA) *Live*

Borders: DE-BE, BE-NL, DE-NL, HU-AT, HU-RO, HU-SI, DE-AT, SI-AT, SK-HU, RO-BG, SI-HR, HR-HU

Bidding zones: Austria, Belgium, Bulgaria, Germany, Netherlands, Romania, Slovakia, Slovenia, Croatia, Hungary, Denmark, Sweden, Finland, Poland Border on 15 min MTU
Border on 30 min MTU
Border on 60 min MTU
BZ on 15 min MTU

BZ on 30 min MTU BZ on 60 min MTU

Not part of SIDC coupling



15 min MTU in ID (CT and IDA) Go-live: 01/07/2024

Borders: DE-BE, BE-NL, DE-NL, HU-AT, HU-RO, HU-SI, DE-AT, SI-AT, SK-HU, RO-BG, SI-HR, HR-HU **+ CZ-AT, CZ-DE, SK-CZ**

Bidding zones: Austria, Belgium, Bulgaria, Germany, Netherlands, Romania, Slovakia, Slovenia, Denmark, Sweden, Finland, Croatia, Hungary, Poland + **Czech Republic** Border on 15 min MTU
Border on 30 min MTU
Border on 60 min MTU
BZ on 15 min MTU
BZ on 30 min MTU
BZ on 60 min MTU

Not part of SIDC coupling



15 min MTU in ID (CT and IDA) Planned go-live: 06/11/2024

Borders: DE-BE, BE-NL, DE-NL, HU-AT, HU-RO, HU-SI, DE-AT, SI-AT, SK-HU, RO-BG, SI-HR, HR-HU, CZ-AT, CZ-DE, SK-CZ **+ LV-LT, EE-LV**

Bidding zones: Austria, Belgium, Bulgaria, Germany, Netherlands, Romania, Slovakia, Slovenia, Denmark, Sweden, Finland, Croatia, Hungary, Poland, Czech Republic

+ Estonia, Latvia, Lithuania

Border on 15 min MTU
Border on 30 min MTU

— Border on 60 min MTU

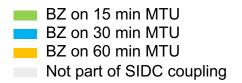
BZ on 15 min MTU
BZ on 30 min MTU
BZ on 60 min MTU
Not part of SIDC coupling



15 min MTU in ID (CT and IDA) Planned go-live: January 2025

Borders: DE-BE, BE-NL, DE-NL, HU-AT, HU-RO, HU-SI, DE-AT, SI-AT, SK-HU, RO-BG, SI-HR, HR-HU, CZ-AT, CZ-DE, SK-CZ, LV- LT, EE-LV + IT-CP-AT, IT-CP-SI; IT internal borders, IT-CP-FR, DE-FR, FR-BE, DK1-DK2, DK1-NO2, DK1-SE3, DK2-SE4, FI-SE1, FI-SE3, NO1-NO2, NO1-NO3, NO1-NO5, NO1-SE3, NO2-NO5, NO3-NO4, NO3-NO5, NO3-SE2, NO4-SE1, NO4-SE2, SE1-SE2, SE2-SE3, SE3-SE4, DE-DK2, DK1-NL, EE-FI, LT-SE4, DE-DK1, PL-SE4, DE-NO2; NO2-NL, CZ-PL, DE-PL, LT-PL, SK-PL

Bidding zones: Austria, Belgium, Bulgaria, Germany, Netherlands, Romania, Slovakia, Slovenia, Denmark, Sweden, Finland, Croatia, Hungary, Poland, Czech Republic, Estonia, Latvia, Lithuania **+ Norway**, **France, Italy** Border on 15 min MTU
 Border on 30 min MTU
 Border on 60 min MTU

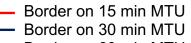




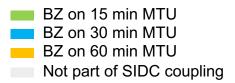
15 min MTU in ID (CT and IDA) Planned go-live: 18/03/2025 aligned with DA

All borders & bidding zones

*IT-GR-GR & IT-SARD-IT CODC will remain at 60'MTU & OTU due to technical limitation of the HVDC cable.



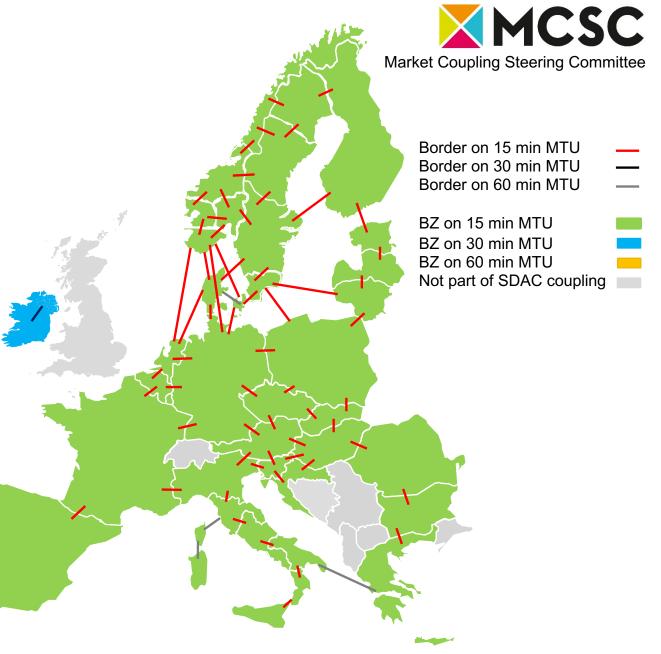
— Border on 60 min MTU



15 min MTU in DA Overview of expected changes

Go-live strategy

- The change to 15 min MTU is complex: it requires changes to all systems within the SDAC and SIDC process. Especially within SDAC, the change implies a significant performance challenge.
- To manage the performance within SDAC, TSOs and NEMOs have found that a big-bang go-live (all bidding areas at the same time) is the optimal solution.
- Therefore, at the go-live moment, all bidding zones will transition to 15 min MTU, as illustrated on the right.
 - This is with exception of the SEM area, which will transition to 30 min MTU.



note: import/export areas not considered here



SDAC and SIDC 15 minutes Market Time Unit (MTU)

SDAC – Written description of 15minMTU products and cross-product matching rules

Joël Hoeksema (PCR MSD Convenor)





The link to the Euphemia public description is expected to be available shortly before MCCG.



SDAC and SIDC 15 minutes Market Time Unit (MTU)

SDAC - Written description of 15minMTU products and cross-product matching rules

- During MCCG on 26th Feb 2024, Market parties inquired about further details on products and rules in view of the 15minMTU implementation.
- The updated Euphemia public description will be / has been made available today through the websites of all individual NEMOs as well as centrally on the NEMO Committee website:
 - o <Add link to NEMO Committee website of updated Euphemia public description once available>
- The updates relate to the support of 15' MTU including cross product matching of different time resolutions.

• Changes include:

- $_{\odot}$ Order acceptance rules, also in the context of the 15' MTU.
- The need to allow for curves submitted at coarser time resolution than that of the bidding zone to be paradoxically rejected (to ensure all published prices respect the minimum and maximum prices of the markets and avoid introducing 15' / 30' / 60' prices that suggest arbitrage opportunities).
- $_{\odot}$ Extended LTA inclusion.







Pending questions on 15' MTU (I/II)

Timeline / planning:

- **Go-live:** It is imperative to have a clear and fixed go-live date as far as possible from the holiday and winter season. This impacts a lot Market participants (developments, contracts, etc). Hence:
 - What will be the go-live date ?
 - If a date is given now, can we still expect delays to be announced later, or are you confident with this date?
 - Will action be taken if some markets participants are not ready?
 - $\circ~$ Will action be taken if some NEMOs are not ready? If TSOs are not ready?
 - In countries currently not with a 15' MTU, is a step-wise approach (SIDC switch then SDAC switch) will be chosen or a big bang approach ?
- Fallback/rollback procedures: Requested by MPs if something doesn't work as expected.
 - What is the status on these points?
- **Member testing:** Details of the Member testing have been announced for Q2 2024, with no specific date, raising planning concerns.
 - When will simulations/tests be organised ?
 - When will the parallel run be accessible to market participants (considering the earlier, the better)?
 - Will the outcomes, particularly in terms of liquidity assessment from the current internal parallel run, be made public?

Processes:

- **Consultation on products:** Every two years the consultation format is restrictive, can lead to misunderstandings and could be more effective.
 - Could a more inclusive mode of consultation with stakeholders be envisaged (e.g., dedicated workshop with an interactive Q&A session, drafting committee, etc.)?
- **2nd auction removal:** We support any initiative to identify erroneous bid before auction results are published. A "safety net" for SDAC to handle manifest errors is essential.
 - $\circ\,$ We welcome more information on the selection tool for this is needed. What are the next steps?
 - $\circ~$ How will NEMOs decide when bids are significantly wrong?
 - How will market messages be published?
 - o How will the second calculation work in detail?
 - What level of harmonization of practices between NEMOs can be expected?



Pending questions on 15' MTU (II/II)

Algorithm / products / indexes:

- **Euphemia**: We urge NEMOs to provide the updated description of Euphemia on how the central coupling algorithm is handling the products.
 - When will it be provided?
 - **Time calculation extension**: Are the +3min for the final results publication and +6min for the preliminary results publication confirmed?
- Products and indexes: NEMOs provided time resolution of products they will offer in 2025.
 - Can you firmly confirm the product offer (15/30/60 granularity) for both SDAC and SIDC (continuous + IDAs) starting from 2025 ?
 - Could we have a broader catalogue (other types of products such as smart block orders)?
 - Could each NEMO clearly indicate whether it will provide indexes other than the 15-minute index (e.g. a 60-minute index)?
 - If some NEMOs provide a 60-minute index, how will it be calculated and published (publication, decimal rounding, etc.)?
 - \circ How will the hourly index be established in bidding zones with multiple NEMOs?
 - Will they cooperate on one index or will there be multiple hourly indices for the same bidding zone?
- Smart blocks limits: No significant increase in the limits of smart blocks is foreseen at the moment → problematic to optimize flex in a 96-time buckets environment.
 - Is there a timetable that can be provided regarding the intention to increase smart block limits?

- Procedures and system: Highly relevant for project planning and resource allocation, but still unknown: Rules and procedures for 15-minute bidding, alterations to trading system interfaces, system development, etc.
 - When will these be disclosed?

Adjacent impacts:

- **Nomination deadlines** remain a challenge for Market Participants; encourage maintaining dialogue between TSOs and MPs to address this issue.
- **Non-EU borders:** At this stage, there is no clarity regarding day-ahead capacities at non-EU borders following the 15min MTU implementation (e.g., GB, Switzerland, Serbia).
- **JAO**: It's also unclear what JAO plans for the cables are and if they will transition to 15min.
 - Could you provide more clarity on this? What does this mean ? Referring to the interconnection scheduling step?
- **Legislation**: Many legal provisions are tied to hourly day-ahead prices. It is currently unclear if this remains unchanged after the 15min MTU go-live, or if legislation needs to be changed to reflect 15min day-ahead prices or an index based on 15/30/60min products.
 - Could you provide more clarity on this?



SDAC and SIDC 15 minutes Market Time Unit (MTU)

Time resolution of products proposed by NEMOs when 15'MTU is implemented in SDAC

Based on the request from market parties, MCSC NEMOs have provided their input in the survey on time resolution of the products that NEMOs will propose as of 15' MTU go-live in SDAC in 2025.

The following highlights can be observed:

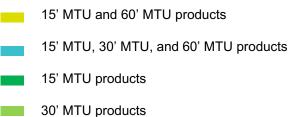
- 15' MTU is confirmed (except Ireland);
- Most of the NEMOs will keep the hourly products alive except:
 - SEMO Px (derogation is granted, 15' MTU will not be implemented in 2025 in Ireland)
 - OMIE (ES, PT)
- 30' MTU will be proposed by some NEMOs on top of 15' and 60' granularities.

1 – NORDPOOL and EPEX SPOT 2 – EXAA proposed 15'MTU and 60' MTU









NEMOs	Covered BZs	15' MTU	30' MTU	60' MTU
BSP	SI	\checkmark		\checkmark
CROPEX	HR	\checkmark		\checkmark
EPEX SPOT	NO, SE, FI, DK, PL, DE- LU,NL, BE, FR, AT	\checkmark	\checkmark	\checkmark
EXAA	AT, DE	\checkmark		\checkmark
GME	IT	\checkmark	\checkmark	\checkmark
HEnEx	GR	\checkmark		\checkmark
нирх	HU	\checkmark		\checkmark
IBEX	BG	\checkmark		\checkmark
NORDPOOL	NO, SE, FI, DK, EE, LT, LV, PL, DE-LU, NL, BE, FR, AT	\checkmark	\checkmark	\checkmark
ОКТЕ	SK	\checkmark		\checkmark
OMIE	ES, PT	\checkmark		
орсом	RO	\checkmark	\checkmark	\checkmark
ΟΤΕ	CZ	\checkmark		\checkmark
SEMOPx	IE, NI		\checkmark	
TGE	PL	\checkmark	\checkmark	\checkmark

21



SDAC and SIDC 15 minutes Market Time Unit (MTU) SDAC rollback plan and corrective measures

- As a part of the 15minMTU implementation, MCSC TSOs and NEMOs are preparing SDAC rollback plan and corrective measures.
- Rollback plan
 - The rollback will be a switch back to a 60-minute configuration, to the systems and product specifications as they were the day before the declaration of rollback.
 - This is not the exact same set-up as is used today because of the following:
 - 1. Between now and the 15minMTU go-live, several **products** will be either changed or discontinued.
 - 2. Some **systems** might also be upgraded to new versions before the go-live; or will not be downgraded in a rollback.
 - 3. Regarding the operatonal **timings**, the set-up applicable after potential rollback is to be clarified.
 - Currently, NEMOs and TSOs are investigating the impact of a rollback on the different subsystems. This impact assessment will be used to create a rollback plan, which is then validated by all NEMOs and TSOs.
- Corrective measures
 - Work is ongoing also on the corrective measures for deployment in case correction of potential problems with the Euphemia algorithm performance after the 15minMTU go-live are needed.

Summary:

- The rollback will be a switch back to a 60-minute configuration, to the systems and product specifications as they were the day before the declaration of rollback.
- MCSC TSOs and NEMOs are working on SDAC rollback plan and a set of corrective measures to be deployed in case 15minMTU go-live encounters issues.
- More information will be available in the next MCCG subject to MCSC approval.





SDAC operational timings

Mario Pession (SDAC OPSCOM Chair) Pierre Milon (MCCG Convenor)





SDAC Operational timings Impact of additional computation time on operational timings of the SDAC process

- Single Day-Ahead Market Coupling timings will be slightly impacted by 15 min MTU and this will be visible from market parties' perspective.
- Since MCCG of 20th Oct 2023, both NEMOs and TSOs have put efforts into optimizing the computation time and the subsequent sub-processes to minimise the shift of the Publication time of the results.
- As a positive result, time available for market parties for providing different nominations to TSOs might remain almost the same as it is today: Shift of the final results publication is envisioned only for 3 minutes instead of 13 minutes in the design presented in 2023. Shift of the preliminary results publication is envisioned for 6 minutes. This has not been agreed yet nor tested, NEMOs and TSOs are working on this proposal which is subject to successful testing.
- NEMOs and TSOs are still working on the optimization of the partial decoupling deadline in order to wait sufficient time before declaring it, but also not to declare it too late in order not to end up in a full decoupling situation. More details will be available after summer 2024.
- The validation of the updated timings will be done as a part of testing scheduled between the end of 2024 and beginning of 2025.

Summary:

 Final technical proposal for the optimization of operational timings will be approved by NEMOs & TSOs in an MCSC meeting subject to successful testing scheduled between the end of 2024 and beginning of 2025, providing insights also into operational processes with 15minMTU.





SDAC Operational timings Second auction process reconsideration

Background

- NEMOs engaged together with Market Parties in the last two MCCG on the reconsideration of the SDAC second auction process
- The consultation ended on 15/01/2024, and all pros/cons were subject to analysis before a decision is made
- Potential alternative was presented to market participants MCCG conveners, and the focus was done on the management of major bidding mistakes. NEMOs reinforced their operational processes as well as individual checks to prevent bidding errors to influence the market results.

Published documents

- Consultation report [LINK]
- FAQs document on Second Auctions [LINK]

Way forward

- In light of all comments received, NEMOs decided to decommission the Second Auction process and to advertise again publicly the safety nets against bidding errors. This change will be applied by January 2025 for SDAC except for Baltic bidding zones which will wait for the introduction of 15' MTU in SDAC
- NEMOs publish a presentation on the management of bidding errors as well as a dedicated FAQ.

Summary:

- Decision to remove the second auction process by January 2025 except of Baltic (linked with introduction of 15' MTU to the Baltic).
- NEMOs publish documents describing the functioning of the alternative and improvement made against trading errors.



Reflection on the Decoupling training session with market parties

Balint Csuri (SDAC OPSCOM Chair) Hélène Robaye (MCCG MPs Convenor)





Reflection on the Decoupling training session with market parties MCSC



Background:

- On 20/03/2024, the Single Day-Ahead Market Coupling (SDAC) Decoupling training session with market participants was successfully completed (<u>ENTSO-E</u>; <u>NEMO</u> <u>Committee</u>).
- The organisation of the decoupling training sessions was established to give market parties the opportunity to practice rarely occurring fallback scenarios, for instance Shadow Auctions and the Nomination afterwards.
- · These training sessions also provide valuable practice opportunities to operational parties of the Market Coupling.

Main observations from the MCSC parties:

- For the 20/03 SDAC Decoupling training, the interest from market parties was notably high (76 registered companies with JAO). However, during the Nomination of acquired capacities, TSOs have noted a lower participation.
- During the TSO evaluation of the session, several other observations were noted, such as:
 - o Several nomination attempts were unsuccessful, due to errors in the submissions;
 - Some examples exhibited missed deadlines;
 - Incorrect XMLs were submitted;
 - CAI code was missing (illegal characters included);
 - o Incorrect process type was observed in the XML.

The aim of today:

- · Discuss the usefulness of the training.
- Inquire on other scenarios that might be interesting for market parties to perform.

Note: The next partial decoupling training will not be organised by SDAC OPSCOM but will be performed as a part of the DA 15 min MTU Market Parties testing.

Summary:

- Organisation of decoupling training sessions provides unique opportunity for market and MCSC parties to jointly practice rarely occurring fallback scenarios.
- During 20/03 SDAC Decoupling training, relatively high participation from market parties as well as several challenges when working on the training scenarios were observed.



Reflection on the Decoupling training session with market parties Market parties

- Market participants mentioned that the decoupling test is essential for them as it is a learning and training opportunity for their team members.
- In addition, the decoupling test is a good exercise to check their readiness as decoupling does not happen very often.
 - 1. Check the required accesses
 - 2. Ensure that the configurations in their nomination of physical transit are still up to date
 - 3. Test communication with different TSOs, particularly after the cross-border auction.
- Market participants request a new session (for instance in Q4 2024?) to simulate 2025 conditions, including the 15-minute MTU. Offering several time slots would be welcome to accommodate different working hours.





Sixth Market Coupling Consultative Group meeting

COFFEE BREAK

27 June 2024



SIDC Intraday Auctions (IDAs)

First experience with IDAs after go-live

Jaime Ponz García Comendador & Martim Stilwell (SIDC OPSCOM Chairs) Jean-Michel Reghem (SIDC QARM Convenor) Hélène Robaye (MCCG MPs Convenor)



SIDC Intraday Auctions (IDAs)

First experience with IDAs after go-live: MCSC



- 13 June 2024 marks a significant milestone in the European electricity market as NEMOs and TSOs organised the successful go-live of the first pan-European Intraday Auctions (IDAs), with the 15 min MTU being already tradeable in many bidding zones and borders from the launch.
- Unlike the Continuous Intraday Market which required four waves between 2018 2022 to cover the entire geographical scope the implementation of IDAs was achieved in one single, coordinated effort. This was the first Big-Bang Go-Live approach applied in such a pan-European project, with the exception of Romanian borders.
- Landscape of the project represents development / modification and testing of:

Coordination with dozens of service providers on all project levels

- Testing phases encompassed thousands of numerous test cases, focused on the various aspects of system performance and integration. These required integration and readiness of all the involved systems at pre-agreed times. In terms of human resources, hundreds of very highly skilled and multidisciplinary experts have been involved in different project stages, the testing phase being one of the most intensive ones in terms of human effort.
- After the first 7 days in operations, all IDAs were successfully executed except the first one due to initial technical challenges that were swiftly
 resolved locally by the operators on duty. The robustness of IDAs is continuously monitored for potential improvements to assure the continuous
 stability of IDAs.
- With this first experience with IDAs in operation, further timing optimization to speed up the process has already taken place and will **continue to be monitored for potential improvements**. Additionally, operational staff is evolvingly improving the process efficiency with each executed IDA.
- More information will be provided in the upcoming MCCG meeting after longer period of IDA monitoring IDAs in operations.







Testing

- Simulation environment of some NEMOs was not always available before IDAs go live.
- Some parties found the member testing really short and most of the tests were cancelled, so we could not really test our application in a decent way.

Publication

- Delay in the publication of curves and blocks for delivery 14/06/24.
- Some inconsistencies between data published on JAO and ENTSOE for IDA2/IDCC(b) values (not linked directly with the go live but published values are very important).

Nominations

- There was a change of logic used by ECC for physical deliveries in Germany (and Austria), for volumes traded on IDAs. This is not something that was communicated before go-live.
- In essence, the Intraday auctions volumes have historically been nominated against the ECC intraday perimeter. For IDAs, we
 received a communication on the day that these should now be nominated vs the ECC day-ahead perimeter, which had
 systems/set-up logic implications for us. We suspect this impacted other trading counterparts as well it would be very useful to
 get this validated (or not) by other members.

Liquidity

- Liquidity is low in small countries such as Belgium and the Netherlands, better in Germany, high in France but could be temporarily high because there is currently too much power on the grid.
- In general, low liquidity has led to an increase in the number of PRBs since go-live.

SIDC Intraday Auctions (IDAs) First experience with IDAs after go-live: Market parties (II/II)



IDA cancellation

- **IDA 1** cancellation
 - Communication about the event was correct. However, some NEMOs communicated later than others.
 - Not very clear: Partial decoupling was announced but all regions were decoupled.
 - o Could we have more clarity on the event?
 - Testing conducted previously with members did not particularly help market participants to understand this event.
 - o Fallback mechanisms: All went well as the XBID was subsequently opened.
- IDA 2 (13/06) experienced some delays in the clearing results (but was not cancelled) and therefore went well.
- To address the **IDA cancellation, what is the best back-up option?** Certain market participants support the introduction of a local backup auction, at least for Germany, as a fallback option and to provide an auction-based clearing price for indexed contracts.

General feedback

- Closing positions on the intraday market has become more complex, especially in the Netherlands, due to large bid-ask spreads observed during the auction uncoupling periods. We see a risk of lower liquidity as a market participant might tend to stop position closing during auction time to counter that situation.
- There's **confusion on the exchange side**: It's unclear if border capacities are zero for the hour before the delivery period of the auction, e.g., 23:00-00:00 for the auction that happens at 15:00. Nordpool sometimes refer to this as the "ramping" hour. Sometimes they zero the capacities for this hour and sometimes they don't. We believe this only affects regions where the auction is for hourly products. Any clarity here would be welcome.
- Iberian region: During the go-live day, XBID was suspended between IDA1 and IDA2, regret the lack of communication and explanations are welcome.
- Considering the impact of the auctions on continuous trading (40-minute suspension), it would be highly beneficial to work on shortening this time window.
- IT problems with auction API at some NEMOs during the weeks before PAN-IDA Go Live.
- Some market participants have appreciated the helpful and prompt customer support from certain NEMOs.







Update for SIDC Products Methodology

- 1) NEMOs approved the proposal for amendments to ACER Decision 05/2020 Annex-I on SIDC Products terms and conditions on NC of 29/05. Most of the updates for IDAs and relevant/in-line with the SDAC PM.
- 2) Public Consultation period: 30/05 30/06 → extended until 04/07. <u>Already open @ NEMOs website</u>.
- 3) Public Consultation results: expected by mid-July 2024.

4) Main updates for the proposal:

- The 'Whereas' section is updated for the frequent updating of the SIDC PM including supporting considerations for the proposed amendments due to the 15min MTU products adoption and activation for the IDAs.
- Rephrasing/clarification improvements of existing content and adaptation of certain terms defined for usage in the document. Rearranged existing content/provisions for continuous trading and the intraday auctions from relevant specific for the case articles.
- Term "calendar day" is replaced by "delivery day" as the relevant power contracts are defined in the physical delivery day domain (uniformly in CET time for each bidding zone).
- Content relevant to the acceptance/rejection criteria of demand/supply curves due to the Cross Product Matching is added in the renumbered Article 6 for "Aggregated MTU Orders for the IDAs".
- Rephrasing/clarification improvement in the acceptance rules of Linked Block Orders. Added explicit reference on possible combinations of Linked Block and Exclusive Group Orders. Added clarifications for using Linked Block Orders and Exclusive Groups of Block Orders with Block Orders defined over different MTUs (re-numbered Article 7).
- The MIC/MP/Load gradient and conditions description is removed in the event of Scalable Complex Orders introduction (as described for the SDAC case and this is the case also for the IDAs\SIDC) (re-numbered Article 7).
- Introduced the Scalable Complex Orders (MIC/MP/Load gradient and conditions) description and their acceptance/rejection criteria (renumbered Article 7).
- Included Appendix for the list of NEMOs for which the SIDC Products methodology applied for.



Update for SDAC Products Methodology

• Update progress/status/targets:

- Public Consultation Report: published <u>at NEMOs website @ 26/04</u>.
- Submission of NEMOs proposal to ACER on 26/04/2024.
- Final <u>NEMOs proposal</u> and <u>Explanatory Note</u> @ ACER website.
- Amendment process notice & <u>decision process</u> (a) ACER website.
- Currently on the working level, meetings of NEMOs and ACER are taking place to finalize the amendments.
- ACER to decide on the proposed amendments by September 2024.



SDAC Products Methodology – Items included in the final proposal

PUN Orders removal from Optional products

- PUN Orders are removed from the SDAC PM text (Definition and Article 5). Whereas section updated with reference to the process followed in Italy by ARERA and Ministry of Environment and Energy Security for setting up criterial and rule to apply zonal prices to final consumers as of January 1, 2025.
- Clarifications provided to the PC report regarding the definition of the "PUN index GME" (average of zonal prices weighted for the volumes purchased as part of electricity withdrawal portfolios in the various geographic zones, reference index for pricing long-term contracts).

Capability of combining SBOs defined with different MTUs in Complex Block Orders (request from PC)

 Although the SDAC PM text is considered properly structured, and this capability should be clearly understood from references provided, and there is no such restriction in the SDAC PM text, we have included a clarification in Article 5(1a) that such combination is feasible for Linked and Exclusive Group Block Orders.

✓ Paradoxically rejected Curve Orders and distinction on 15' vs 30' Blocks

- We have retained the simplified description in Article 3(5) that "Any other in-the-money MTU order submitted to a coarser MTU than the bidding zone granularity may be paradoxically rejected (not accepted in-the-money MTU order)".
- We have provided a simplified description in the PC report for the way EUPHEMIA is applying the rejection criteria (distinction on semi/fully paradoxically rejection) and some possible tie-breaks. <u>More technical details to be provided for in the EUPHEMIA public description</u> (updated version draft already issued).

✓ 6-months fallback period for Algorithm support on COs

- Retained the initial proposal for the 6 months fallback period.
- Reversal from SCOs to COs to be considered as a last resort safety measure in case all other less Corrective Measures intrusive measures fail.

ALL NEMO COMMITTEE

SDAC Products Methodology - Items not included in the final proposal

× Mandatory vs Optional products (request from PC)

- Retained the existing distinction for mandatory (x-MTU, Simple Blocks) vs Optional (CBOs, COs, SCOs, etc) although MPs in their
 responses to the public consultation support making optional products equally available as mandatory and apply "harmonization
 rules between PXs".
- <u>Possibility of applying Corrective Measures including options between any possible Optional products is governed by Algorithm</u> <u>methodology and retained (out of the scope of SDAC PM public consultation).</u>

× Increase the number of Blocks per portfolio (request from PC)

• Recognize the complexity introduced by the 15min MTU. NEMOs are in favor of following-up a conservative approach on extending such existing products usage parameters. Considering adequate experience from the introduction of the 15min MTU in SDAC, the usage parameters of such products may be re-evaluated following a standard RfC process according to the existing Algorithm methodology provisions.

× Introduce Complex Block Orders in Iberia (request from PC)

• Selection of optional products/order types offered by specific NEMOs under the competence and control of National Regulators is considered outside of the scope of this public consultation.







SDAC-SIDC Roadmap: MCSC main takeaways from June 2024 MESC

Background

- MCSC aims to keep the planning of central projects and implementations triggered by regional and local projects up to date.
- The integrated view on the MCSC planning until the end of 2025 provides holistic view on the MCSC pipeline and implementation.

MCSC Planning and ACER prioritisation exercise

- MCSC planning and available details on the implementation projects were provided to ACER on several occasions.
- ACER informed MCSC and MESC participants that "due to the lack of relevant inputs from the SDAC, SIDC and Nordic TSOs project pipelines, we have decided to conclude this year's project prioritisation exercise only with the deliverables that have been duly submitted in the agreed timeframe, i.e. the ACER-NRAs deliverables and the Regulatory Projects Planning prepared by the Core TSOs " (to be presented in the upcoming MESC meeting).
- MCSC parties are open to discuss how the prioritisation exercise shall be improved in the future and what inputs were missing in order to provide valid contributions to this round of exercise.

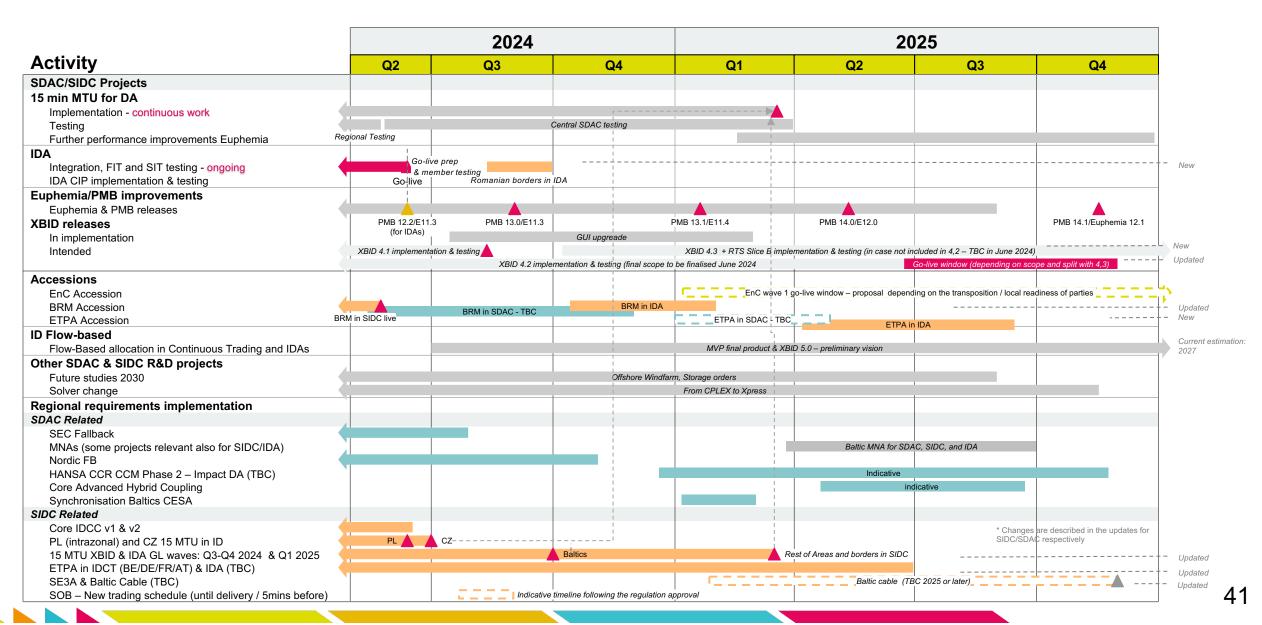
The latest available information was provided to ACER during Q4 2023 - Q2 2024. See next slide.

MESC 2024 takeaways

• Further refinement of the joint vision for the day-ahead and intraday market coupling is needed. Correspondingly, adequate prioritization of available resources shall be ensured.

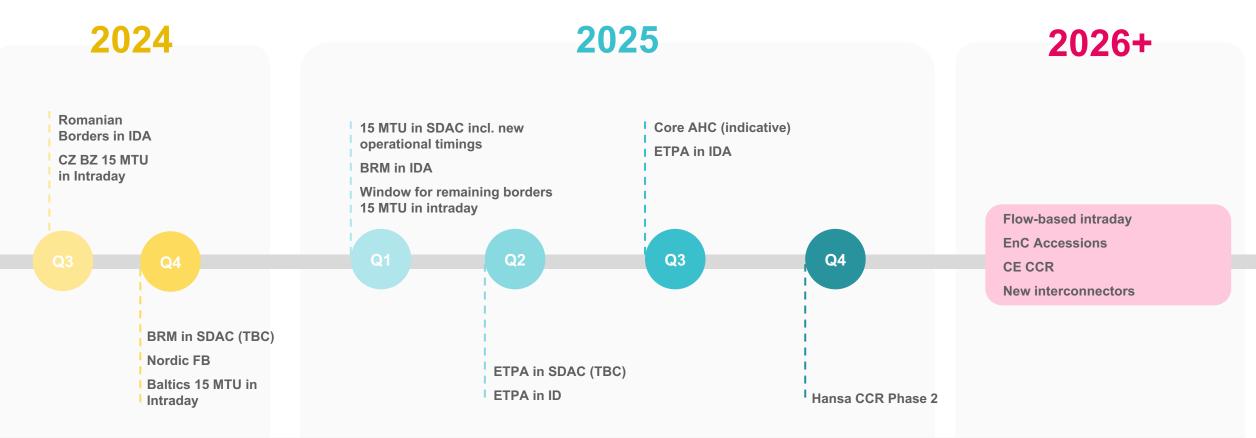
SDAC-SIDC Roadmap





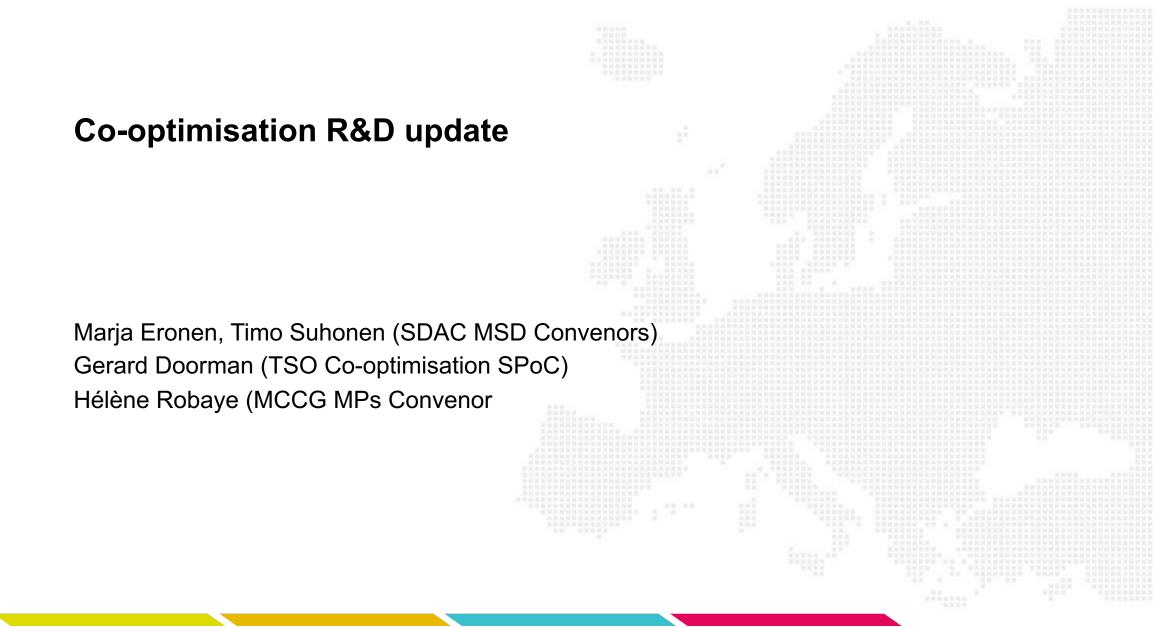
MCSC Timeline | Key projects





20 % of the pipeline = Continuous improvements, maintenance, performance optimisation, scheduled releases & ad-hoc requests





MCSC co-optimization R&D update



Current status

- MCSC NEMOs and TSOs agreed to start the Co-optimisation R&D; first two steps in 2024:
 - First phase of the R&D is a **conceptual study to identify a suitable approach for co-optimization regarding the bidding structure** and its impact on the market design, operational security, governance as well as legal aspects.
 - Following the conceptual study, a first prototyping phase shall be launched to secure having a sufficiently clear definition of requirements and of their HL implications performance assessment of the co-optimized market coupling system using the selected design.
- Scoping of the R&D prototype is ongoing in parallel.
 - High-level requirements and the initial bid design have been drafted based on the conceptual study and will be further specified.

Interaction with market parties

- NEMOs and TSOs intend to use MCCG framework to have dedicated sessions to interact with market participants about the key co-optimization design elements, especially about the bidding structure.
- MPs' involvement is expected:
 - 1. Focusing on the co-optimization impacts on the market,
 - 2. MPs' feedback on the co-optimization implementation.

Next steps

- Target for the design completion is set by the end of Q3/2024 (following the conceptual study and design choice); development of the prototype shall start in fall 2024.
- Final R&D report to be ready for MCSC / SDAC review by the end of 2024.
- Reporting to ACER to take place before the end of Q1/2025.
- Update to market participants to be provided in the upcoming MCCG meetings.

Next R&D Phase

- The next R&D phase scoping shall start during the spring/summer 2025.
 - Learning from 1st R&D outcome, ACER and market participants input shall be incorporated into the second R&D planning.
- Target of the second prototype is to provide key indicators of the co-optimized market coupling system.

MCSC TSO Co-optimisation standpoint

- Co-optimisation strongly affects the procurement of balancing capacity, and as such system balancing, which is essential for reliable system operation.
- So far, focus has mainly been on the increased welfare effect of co-optimisation (and to some extent, bid structures).
 - Although from a theoretical point of view, co-optimisation is expected to increase welfare, TSOs see the benefit as less probable than the ACER study suggests. The reason is that the modelling of the alternative solutions is incorrect / unrealistic.
- Besides the welfare effects, many other issues should also be clarified, e.g.:
 - <u>Pricing</u>. Because of the non-convex nature of the problem, prices are not a natural outcome of the optimization. How can satisfactory
 prices be determined from the viewpoint of incentives for bidding, investment, fairness, etc.?
 - <u>System operation</u>. How to ensure that sufficient balancing capacity is available for operation in all bidding zones? What if the (cooptimised) BC market does not clear and/or SDAC does not clear? Fallback solutions?
 - o Market operation and impact on market participants.
- Impacts on storage and demand response assets should be analyzed and solved.

Summary:

- TSOs acknowledge the theoretical positive effects of co-optimisation (coordination effects) and are willing to play a constructive role in its further assessment and development.
- However, but the above and other related issues should be solved before making a final decision about the implementation of cooptimisation.



Update on the algorithm amendment for co-optimisation Market parties' views on co-optimisation

The co-optimisation welfare study shows that more research is needed before we can move ahead. We agree with MCSC's proposal to move forward with R&D. Scoping will be an essential aspect and MPs would like to be consulted more thoroughly on this.

A Running spot markets and balancing capacity mechanisms simultaneously sounds tempting but is tricky in practice. This project risks degrading performances of the spot market, and levels of welfare gains are still unclear if we consider implementation challenges and compromises that could need to be done.

We need more research to:

- Reduce the complexity of the co-optimisation process or find ways to make it manageable for market participants and day-ahead market coupling (SDAC) without compromising on economic efficiency;
- ✓ **Project a fair picture of the future electricity mix**, with more renewables, storage and demand-response;
- Evaluate true welfare creation by considering all "real world" constraints (including ID timeframes, multilateral linking, etc.).



- ✓ Further include MPs in the design definition, starting with the R&D scoping and definition of needs.
- ✓ Put on hold the implementation process until technical feasibility is proven by NEMOs and TSOs.
- ✓ Any deadline for implementation and any prioritisation should be discussed in the MESC and MCCG ahead of a firm decision.



AOB



Implementation of 30-minute IDGCT

- According to Article 8, from 1 January 2026, the intraday cross-zonal gate closure time shall not be more than 30 minutes ahead of real time, with possible derogations subject to a justification by the TSOs and authorization by the national regulatory authorities (NRAs)."
- MCSC TSOs are currently assessing their implementation approach and the impact of a switch to 30 min IDGCT on the different local and regional systems. TSOs are also evaluating on a national level whether they will apply for the possible derogations. The impact assessment are matters that fall into the national or regional responsibility of the TSOs as well as the derogation process, as this is to be submitted to the NRAs in each country. MCSC TSOs however aim to have the overview of the different local processes and expect to provide clarity on the planning of the implementation in the last MCCG in 2024.



Closing remarks



Closing remarks, further information

The minutes of the meeting will be available on the NEMO Committee and ENTSO-E website. The links will be sent out via email.

The next meeting will be scheduled in Q4 2024 (TBS), details & date will be shared soon.



SIXTH MARKET COUPLING CONSULTATIVE GROUP WORKSHOP

THANK YOU FOR YOUR PARTICIPATION

27 JUNE 2024