Market Coupling Steering Committee

Market Coupling Consultative Group meeting

19 June 2023

Agenda – morning session

TOPICS
MORNING SESSION (9:00 – 12:15)
Welcome, review of the action points logged in the last meeting
MCSC: Status of the prioritization exercise until 2026 and beyond
MCSC: Status of SDAC/SIDC operational process review
SDAC: Non-Uniform Pricing (NUP) study Publication, R&D freeze, and its consequences
SDAC: 15 min Market Time Unit (MTU) Status, next steps, high-level technical insights
SDAC: Market situation April/May 2023 Overview of processes, 2nd Auction (and its impact), lessons learnt
LUNCH BREAK (12:15 – 13:00)

Agenda – afternoon session

AFTERNOON SESSION (13:00 – 15:00)
SIDC: 15 min Market Time Unit (MTU) Map of time resolutions in Europe in SIDC continuous as well as future SIDC IDAs
SIDC: Intraday Auctions (IDA) Implementation status and progress made in the last 6 months; Block order types offering by the NEMOs; Timings of the Normal Day scenario; Publication of block execution status for IDAs; Timeline, focus member testing window; Mapping of expected capacity calculation methods (recalculation vs leftovers vs “0”) per border
AOB Update on MRLVC: information on ongoing technical assessment; Impact of the introduction of FB CC in ID; Planned update of Euphemia document following the 15min MTU and corresponding document for IDAs
Closure

Market Coupling Steering Committee

Welcome

Introduction of the Market Coupling Consultative Group (MCCG)

Lorenzo Biglia, Thomas Van Den Broucke, Pierre Milon

MCCG co-convenors

19 June 2023

Welcome - by co-convenors of MCCG

The MCCG is led by three co-convenors:

Market participants co-convenor:
Lorenzo Biglia, EFET

TSO co-convenor:
Thomas Van Den Broucke, Elia

NEMO co-convenor:
Pierre Milon, EPEX SPOT

MoM & review of action points

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MoM of previous MCCG were available on NEMO committee Link & Entso-e website: Link

Overview of action points of the last MCCG:

List of action points

No	Date	Respon-sible	Description	Deadline/ Status
3	01/12/2022	NEMOs and TSOs	NEMOs and TSOs to come back on the potential measures selected in order to extend the calculation time of SDAC algorithm beyond 17 mins. Discussion will take place during next MCCG #3	May 2023
4	01/12/2022	NEMOs	NEMOs to modify the map published on NEMO Committee website in order to include the description of what is being published (curves, blocks, execution status etc). A detailed map per BZ and per NEMO is needed.	Q1 2023
5	01/12/2022	NEMOs and TSOs	With regards to SDAC product setup in 15 MTU implementation context, NEMOs and TSOs to come back in a written form on: - the different possible options and their respective impacts - the indicators that can be monitored (example : PRBs, price volatility) - how Market Participants will be involved in the discussions To be discussed latest in MCCG #3	May 2023
6	01/12/2022	NEMOs and TSOs	With regards to NUP, prepare quantitative estimates of key indicators (PABs, magnitude and frequency of side-payment, impact on market price, etc). Next discussion is planned for MCCG #3	May 2023
7	01/12/2022	NEMOs and TSOs	With regards to curtailment management in SDAC, NEMOs and TSOs will answer to market participants on the questions listed in section 8 and prepare a map of which countries do not have a merit order curtailment	January 2023
8	01/12/2022	NEMOs and TSOs	With regards to the products offered in SIDC IDAs, NEMOs and TSOS to inform market participants on the results of the study #3 in order to discuss the NEMOs and TSOs recommendation	When study #3 results are available
9	01/12/2022	NEMOs	Nemo to come back with more information on the decision taken to increase the price threshold for book reopening	Q1 2023
10	01/12/022	MCCG speakers and experts	The answers to all the questions of MCCG#2 raised in written mode during the workshop (via GoToWebinar) will be answered in a written mode to all participants and will be published on NEMOs Committee and ENTSOE websites.	

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Prioritization exercise

Cosimo Campidoglio, Ondrej Maca, André Estermann

MCSC Co-chairs

Prioritization exercise

Background

- Following discussion in MESC in December 2022, a project prioritisation exercise was carried out as part of the broader discussion concerning MCSC deliveries and respective implementation timelines running in parallel on local, regional and pan-European level
- A dedicated MESC meeting took place on 10/05/2023: slides available on following link

MCSC input

- **A prioritization methodology was proposed by ACER**
  - MCSC NEMOs & TSOs provided their feedback & inputs during the MESC meeting 15/05.
  - ACER expressed the intention to conclude on this prioritization methodology at the MESC meeting on 05/07

- **Scope & timeline of prioritization**:
  - Current project timeline until 2025 will remain intact
  - Prioritization Methodology to apply on projects 2026 onwards

- **MCSC preparation & next steps**:
  - Concerning projects timeline until 2025: Preparations ongoing for procedural & timings decisions for the D-1 window with aim of improving reliability of IDA and SDAC 15 min MTU go live

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SDAC/SIDC Operational timings

TSO co-convenor:
Thomas Van Den Broucke, EU Market & Offshore, Elia

NEMO co-convenor:
Pierre Milon, Head of Market Coupling Projects & Algorithm, EPEX SPOT

SDAC/SIDC Operational timings

- The SIDC timings under "Happy Day" are presented in the SIDC IDAs section

- MCSC NEMOs and TSOs are currently working on improvement of processes and dependencies managements improvement in light of two major projects impacting the operational timings:

  – **SDAC 15' MTU**
    - Extension of the algorithm calculation time. As a consequence, impact on the publication of market results
    - Consideration of exceptional processes such as partial decoupling, second auction, full decoupling

  – **Pan-EU SIDC IDAs**
    - Fallback mechanisms management in case of SDAC delays (especially IDA 1)

- MCSC Parties will come back in the subsequent MCCG in October 2023 with the clarity on all those points

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SDAC
Non-Uniform Pricing (NUP) concept

Timo Suhonen and Marja Eronen

SDAC MSD

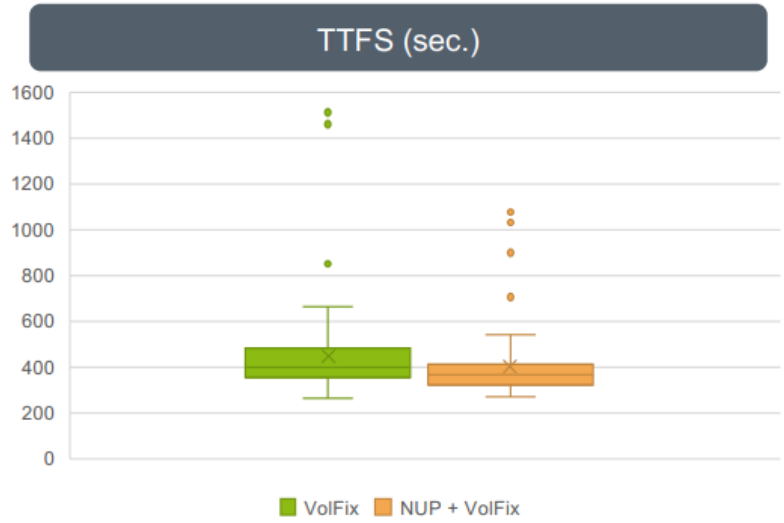
SDAC

SDAC: NUP study and achievements

- SDAC has completed a cycle of studies for Non-Uniform Pricing
- The outcome has been shared with ACER and is published at NEMO-Committee web page and shall be shortly available also from ENTSO-E web page

  https://www.nemo-committee.eu/assets/files/sdac-non-uniform-pricing-explanatory-note.pdf

- **Simulations with the last NUP implementation indicate:**
  - The average of TTFS* is improved by 10%
    - The reduction of TTFS is dependent on data used
  - The average number of PRBs go down from 11.9 (Euphemia) to 7.4 (NUP prototype)
  - The average number of PRSCOs go down from 0.8 (Euphemia) to 0.3 (NUP prototype)
  - The average welfare is increased by 0.0001%



	Average TTFS (min:sec)	Median TTFS (min:sec)	Max TTFS (min:sec)
Euphemia with Volume fixes	07:30	06:41	25:11
NUP with Volume Fixes	06:45	06:06	17:58
Performance improvements (%)	10%	8,8%	28,6%

*TTFS – Time to First Solution

SDAC: NUP – freeze of the work and its context

- Overall conclusions of the cycle of studies
  - NUP design is a good asset to have available for the future when SDAC needs yet another leap forward with performance.
  - The side payments could be covered within the market. However, the exact side payment methodology is not decided yet.

- Despite positive results, the benefits are not strong enough to plead for an introduction in the SDAC in the near future:
  - There is further work to be done in several areas before NUP could be taken into production.
  - At this point (as we're approaching the 15min go live) the implementation would have meant a second disruption for the market, while the performance gains are no game changer
  - Another key point, the current legislation (CACM regulation) does not allow the NUP – it could potentially become an option with the CACM 2.0
    - The last CACM 2.0 (WIP) version is foreseeing it, but it is not yet finalized and likely all the steps would not be accomplished prior the 15 min implementation in SDAC

- **To summarize, the NUP work is currently discontinued. SDAC may get back to the topic at the later phase if it is seen valuable.**

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SDAC: 15 minutes Market Time Unit (MTU) roadmap overview

Timo Suhonen and Marja Eronen

SDAC MSD

15 min MTU implementation in SDAC

General update:

- MSD has performed simulations with several different go live scenarios during H1 2023. Detailed analysis of the results is still on-going and shall be completed during the summer.
- The following slides provide high-level overview about where we stand at this point and an indication what the go live could look like.
- Technical readiness for the go live in Q1/2025 is on track

Status of the mandatory go live enablers

- Distributing computing in algorithm calculation:
  - Go live will take place already for SIDC IDAs in 2024
- Removal of PUN in Italy
  - MCSC has approved the letter to ARERA that SDAC will disable PUN calculation from market coupling system as 01.01.2025.
- Replacement of COs with SCOs
  - Implemented in Ireland in January 2023
  - Public Consultation is done in Iberian peninsula and SDAC is waiting the response from the local NRAs
- Calculation time extension
  - The MCSC will approve the target calculation time in September 2025.

15 min MTU implementation in SDAC

Update on product offering:

On high level the simulation data shows that Euphemia can tolerate few options for the go live

- **The market participants can continue to use block / scalable complex orders as today**
  - Complex orders to be replaced with Scalable Complex Orders
  - Extensive use of the block orders will have negative impact to market coupling process and to results
    - *Calculation time challenges and unnecessary PRBs*
- **15min and 60min curve orders can co-exist**
  - Extensive use of 60min curves will lead to performance challenges

Full details shall be provided at later phase once the analysis is completed

15 min MTU implementation in SDAC

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Update on extended algorithm calculation time:

As extension on calculation time is mandatory in comparison with the current 17', the calculation time has been evaluated within SDAC and following options have discussed

- **30min calculation time**
  - With optimal go live configurations (BZ MTU and product configuration) the simulation data shows that the 30min is sufficient to find at least one solution

- **40/45min calculation time**
  - More complex configurations can be used if the calculation time will be extended to 40/45min

The simulations have also indicated that the calculation time is significantly dependent on market data used

- A safety buffer in timing must be considered to avoid unnecessary calculation time extensions

15 min MTU implementation in SDAC

Interdependency between the product offering and calculation time: Implication and findings

As indicated before, the calculation time is dependent on the products offered / used on the market.

- The simulations indicate that when the product ratio between 15min and 60min orders moves from 80/20 (15min/60min) towards 20/80 ratio, the calculation time must be extended at least to 40min and in some cases we will not get results within the first hour.

- Equally if there is only 15min curve orders but there is extensive use of block orders to mimic the 60min curve orders, the performance of the algorithm suffers significantly.

- In a case where several BZs remain at 60min MTU (especially in area where LTA is used) the performance is compromised

- More details and full proposal will be available once the data analysis is completed.

- **Conclusion :**
  - **In theory, a combination of 15/30/60 products is possible in SDAC by Q1 2025.**
  - **Still, a "balanced" usage of 15/60' time resolutions is a key factor**

15 min MTU implementation in SDAC

Next steps:

- MSD will continue the analysis of the data and shall prepare more detailed presentation for the market participants. Results will include all the qualitative indicators that were requested by members associations (PRBs, etc)

- A new MCCG meeting should be organized in October 2023 to have detailed discussion about products, performance, calculation time and other related interlinked topics.

- The go live configuration of products needs to be finalized during the 2nd half of 2023

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SDAC: Operation events and future timings

Mario Pession

SDAC OPSCOM

SDAC: Exceptional events in operations

- In the last 6 months no particular incidents happened apart from the last second auction events.

- Some delays in publication of results (preliminary and/or final) happened and few events related to pre-coupling.

- 4 events of second auctions happened in the last months due to low prices in Netherlands (below the threshold –150 EUR):
  - 18th of April
  - 26th, 27th and 28th of May.

SDAC: Operation events – focus second auction process

In all the 4 second auctions events the process was followed according to the procedures:

- informing market participants,
- reopening of the order books for 15 minutes,
- recollection of the updated order books,
- re-execution of calculation and confirmation processes.

During the confirmation steps, for reason that were totally independent from the second auction itself, on the 18th of April (final confirmation by TSOs) and on the 27th of May (preliminary confirmation by NEMOs), some events happened that caused a delay in the process which make the process approaching the full decoupling deadline (that is currently set at 14.20).

- The 13.50 message (*further delay of the session*, which indicates that it's possible a full decoupling) are always sent at that time independently from the point at which the process is. Therefore during a second auction process, it is normal that the message is received by market participants.

SDAC: Operation events – focus second auction process and lessons learnt

- The general outcome of the whole process of the second auction is in any case under evaluation:
  - Prices are in general remaining at the same level of the first run (the final prices were in any case also after the process, under the low threshold).
  - Risk of the whole process is increasing due to the fact that the calculation starts around one hour later than the normal process.
  - NEMOs have reacted to the event and the low threshold that triggers a second auction has been decreased in several countries from -150€/MWh to -500€/MWh in order to reduce the frequency of such an event, in order to keep second auction process an exceptional process.
  - With the future extension of the calculation due to the 15MTU go-live, the whole second auction process is in any case under evaluation if it can be supported or not (with the current timing of the process and based on the events just described, it seems very hard to be able to support such a process - risk of reaching a full decoupling will increase a lot).
  - **Discussion will be organized with market participants in order to improve this process and discuss operational principles (efficiency, risk of application, outcome of recent survey, etc)**

SDAC: Future 2025 timings

- In the last 6 months in SDAC there have been some studies regarding the effect that an extension of the calculation time will have on the global process.

- The 3 main cases that have been analysed are the following:
  - Normal process
  - Second auction
  - Partial decoupling

- An extension of the calculation time will bring to a review of the timeline: in the normal process, results will be published later, while for the partial decoupling the deadline will be anticipated so that after the event there is sufficient time for bringing to the end the process

SDAC: Future 2025 timings

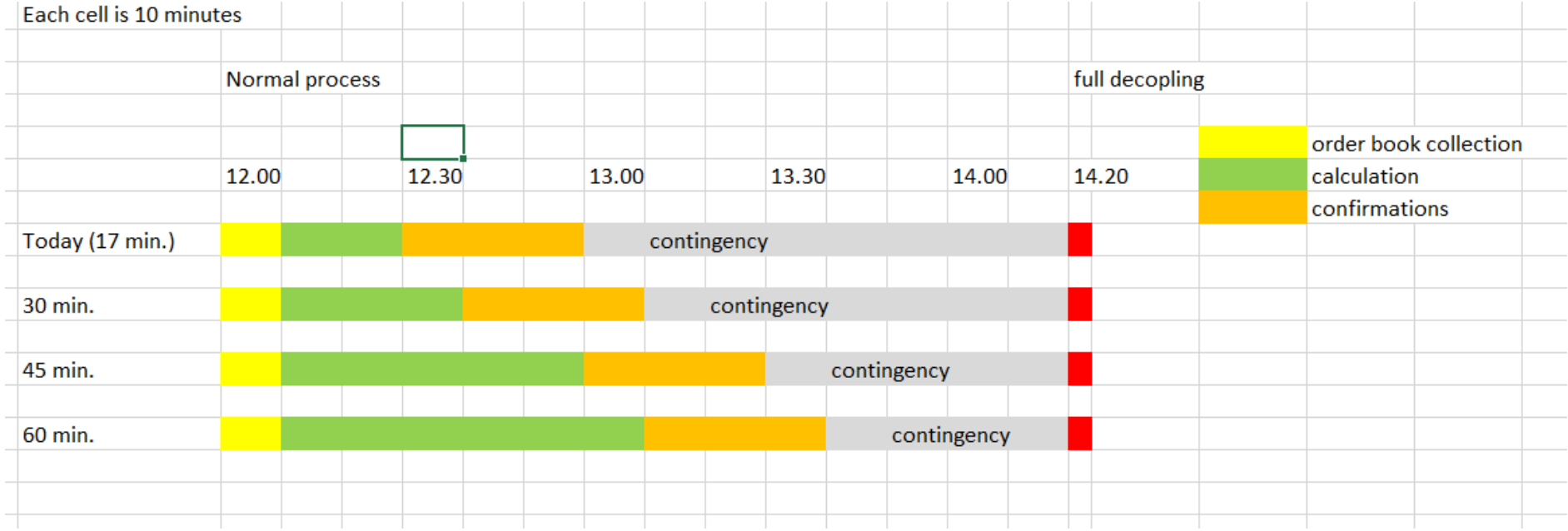
- For the second auction, the situation is complicated because as facts have demonstrated, it's already not so easy to handle it with a 17 minutes calculation time. Extending that time (considering that in this case 2 different calculations are needed, seems to be quite complicated.

- In general, if the time allocated for SDAC will remain the same (from 12.00 to 14.20), with the extension of calculation time, contingency for handling unexpected events is decreasing

- Hypothesis with calculation time of 30, 45 and 60 minutes have been done (see next slides)

a) Alternative option on computation time

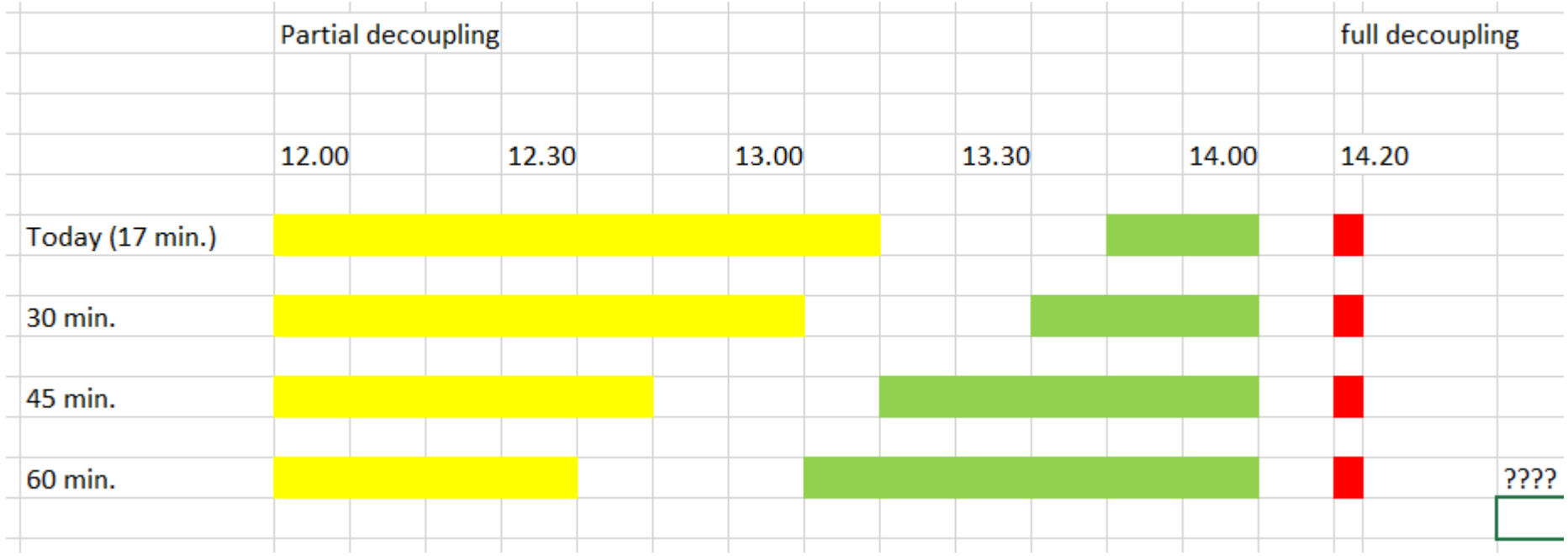
Normal day:



With an extension in calculation, contingency time is reduced.

a) Alternative option on computation time

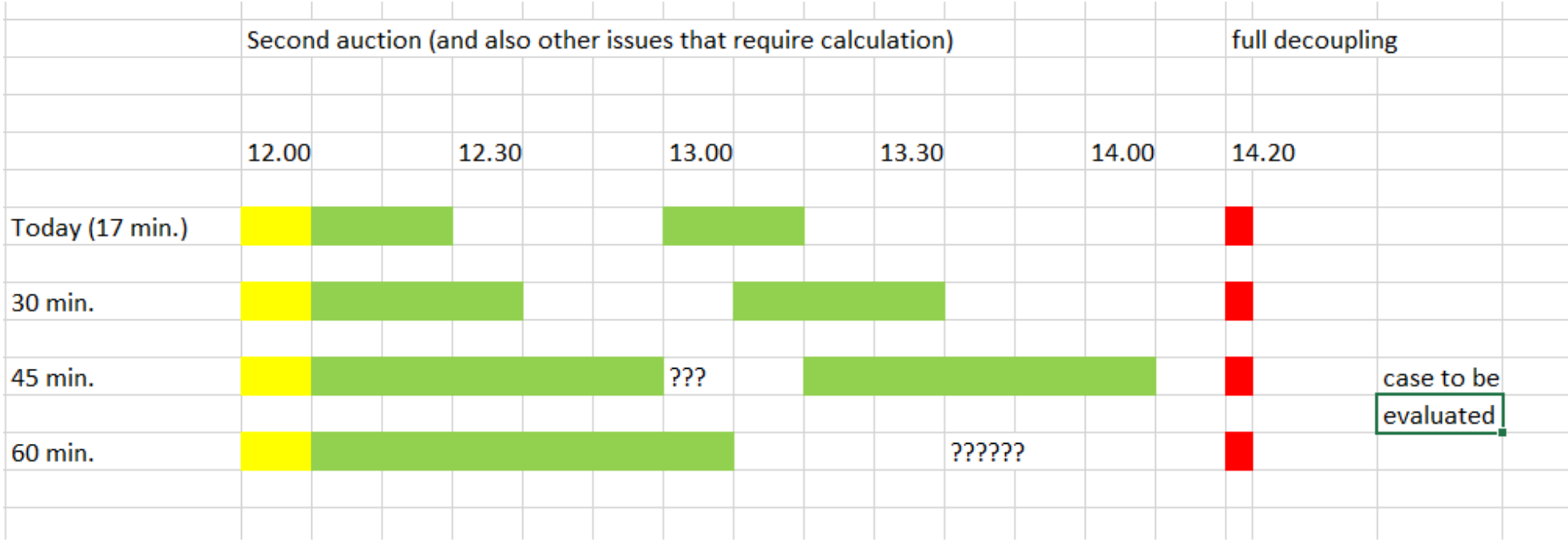
Partial decoupling:



Partial decoupling deadline has to be anticipated of a period equal the time is added to calculation (in this way the same risk is kept as when 17 minutes are dedicated to the calculation)

a) Alternative option on computation time

Second auction:



Last events indicated that trying to fit a calculation time of 45 minutes seems very difficult (also 30 minutes could be not easy)

SDAC: Future 2025 timings

- **Any feedback from market participants?**

- MCSC is already considering if it's possible to shorten some part of the process or to optimize some part of it.

Market Coupling Steering Committee

Market Coupling Consultative Group meeting

LUNCH BREAK

19th June 2023

Agenda – afternoon session

AFTERNOON SESSION (13:00 – 15:00)
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SIDC: Intraday Auctions (IDA) Implementation status and progress made in the last 6 months; Block order types offering by the NEMOs; Timings of the Normal Day scenario; Publication of block execution status for IDAs; Timeline, focus member testing window; Mapping of expected capacity calculation methods (recalculation vs leftovers vs “0”) per border
AOB Update on MRLVC: information on ongoing technical assessment; Impact of the introduction of FB CC in ID; Planned update of Euphemia document following the 15min MTU and corresponding document for IDAs
Closure

Market Coupling Steering Committee

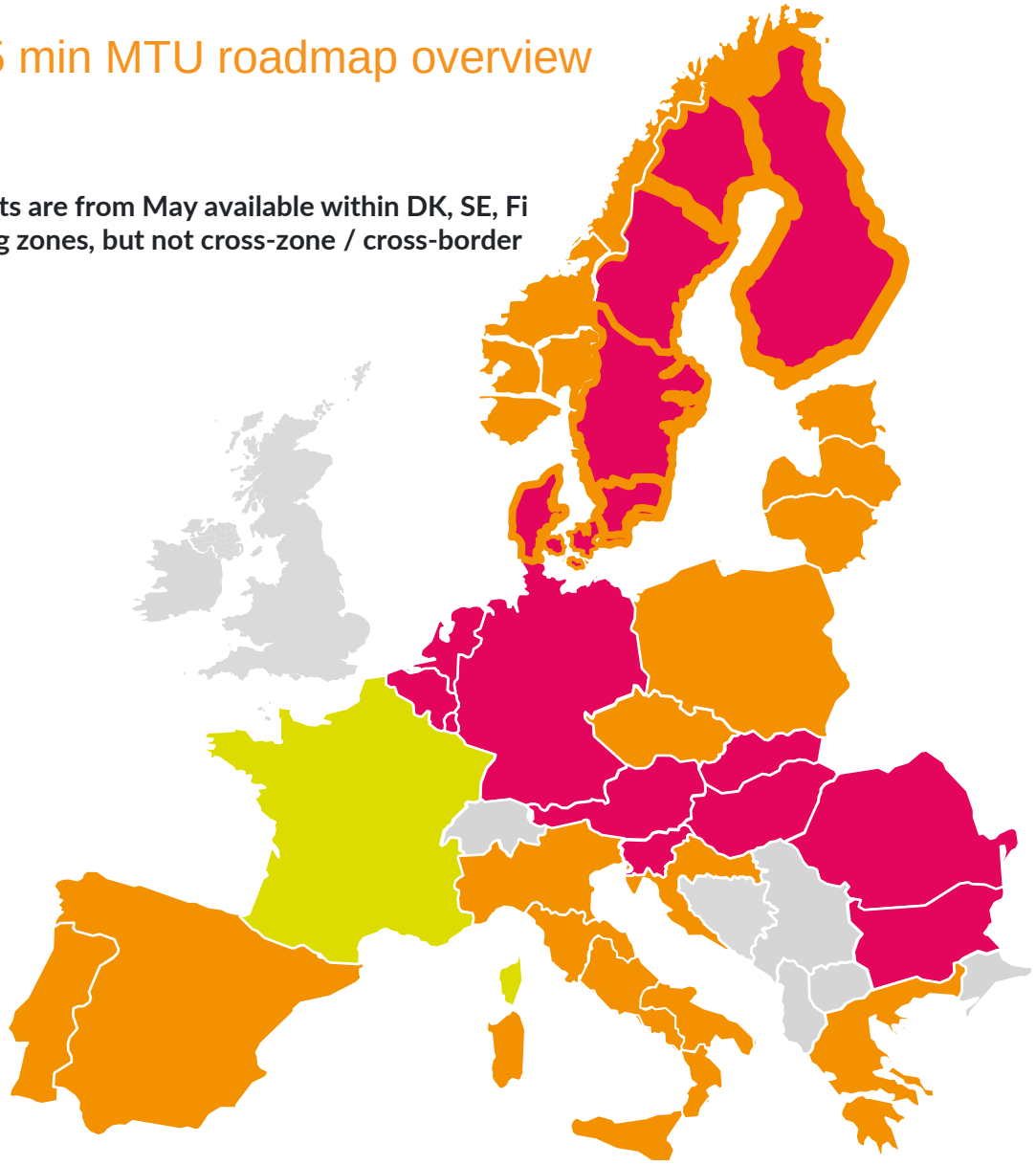
15 minutes Market Time Unit (MTU) roadmap overview

Jaime Ponz García Comendador

SIDC OPSCOM Chair

SIDC: 15 min MTU roadmap overview

15-min products are from May available within DK, SE, Fi internal bidding zones, but not cross-zone / cross-border



Lowest product granularity in particular BZs

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

Note 1: Hourly products are available in every SIDC country

Note 2: 30-min products are currently tradable across the borders FR-DE, DE-NL, DE-BE, FR-BE and BE-NL.

Note 3: 15-min products are currently tradable across the borders BE-NL, BE-DE, NL-DE, AT-DE, AT-HU, AT-SI, AT-SK, HU-SK, HU-RO, BG-RO.

Upcoming 15m MTU go-lives in countries that are already in SIDC.

- Nordic Area cross-border – 2024 H1
- Poland intra-zonal – H1 2024
- Croatia cross-border (HR-SI, HR-HU) – Q1 2024

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SIDC – IDAs: progress on implementation

David Myska and Lara Visone

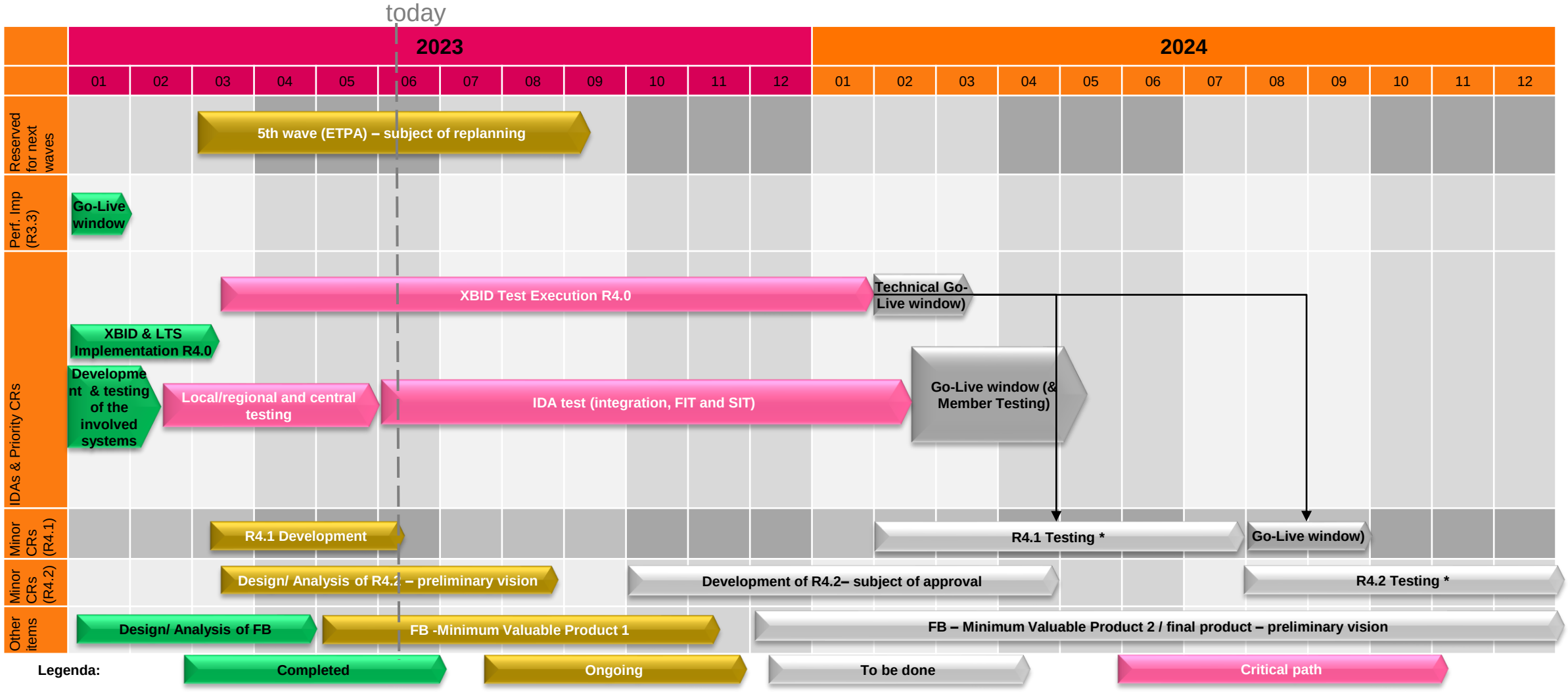
SIDC MSD

Vladimir Satek

SIDC QARM

IDA implementation project timeline

Release for IDAs & IDA POMs (R4.0), Priority CRs (R4.1) , Priority CRs (R4.2), FB

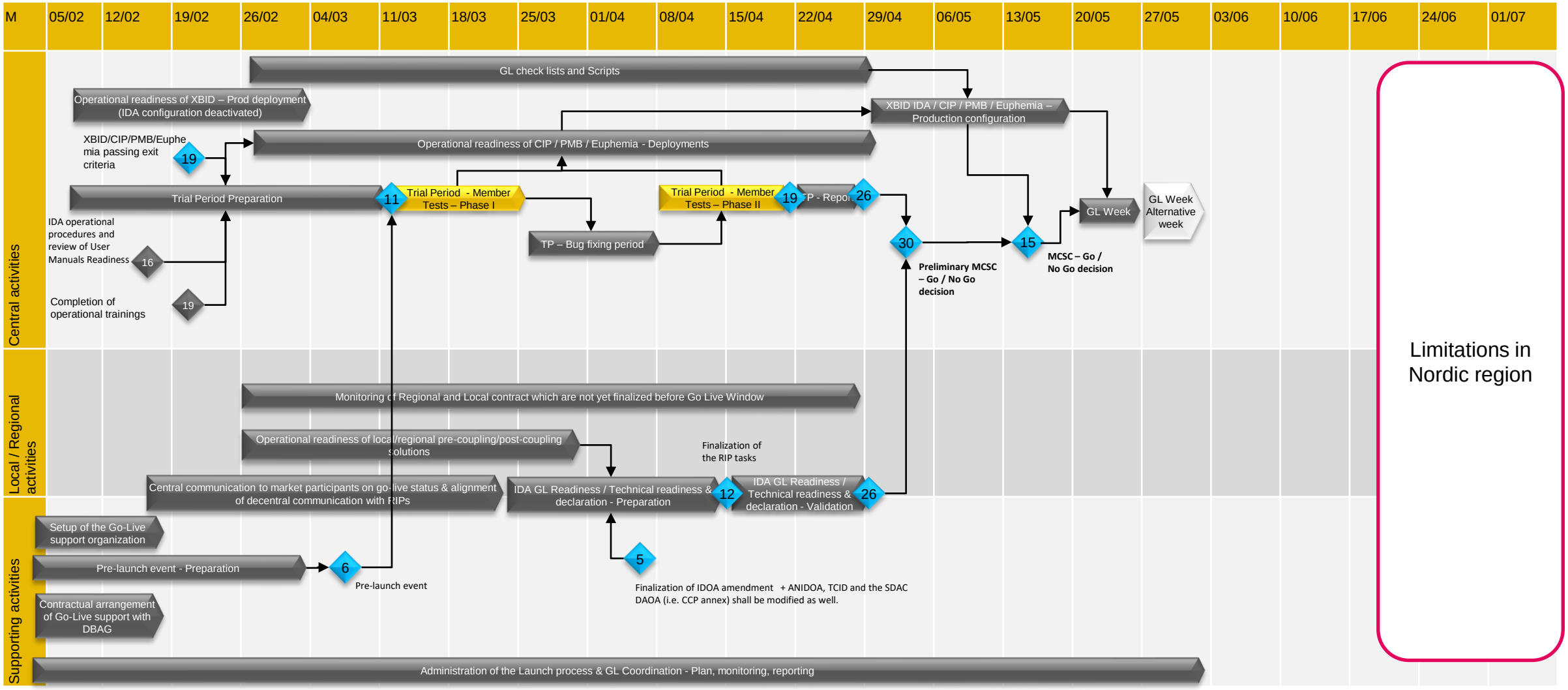


IDA implementation project timeline – Progress achieved

- **Progress on IDAs**
  - **Functional specification and development of all systems supporting IDAs is finalized.**
  - **Functional testing of a system for continuous trading**, which prepares network data for IDAs, (XBID) is progressing with good results in line with the plan.
  - **Functional testing of action-based systems** for exchange of the messages (CIP) is completed. Functional testing of other systems such as PMB/Euphemia poses limited risks (PMB) for which mitigation measures are under clarification.
  - Preparation of the **scenarios for non-functional testing of the whole chain** – e.g. connectivity testing, End 2 End Testing, procedural testing (on top of IDA procedures also procedures for continuous and auction trading are subject of review) including testing of the dependencies of the trading timeframes (Day-Ahead → IDAs → Continuous trading) is almost completed.
  - **Regional Integration Projects** (RIPs) are proceeding in line with the plan with limited issues one of them being **Polish Balancing Market Reform**, which, due to a local need of synchronization with IDAs, may lead to the delay of IDA Go Live. Reporting and monitoring of RIP progress towards the central project is fully established.
  - Detailed planning of so-called IDA Go Live window is established (see the next slide).
- **Progress on other developments**
  - Implementation of R4.1 is almost completed
  - Implementation of the Flow based – Minimum Valuable Product has started
- **5th wave (ETPA):**
  - The planned Go Live of the 5th wave as of 14/06 was not successful due to some technical local issues. The analysis of the root cause is ongoing and the new planning will be elaborated in the coming period.

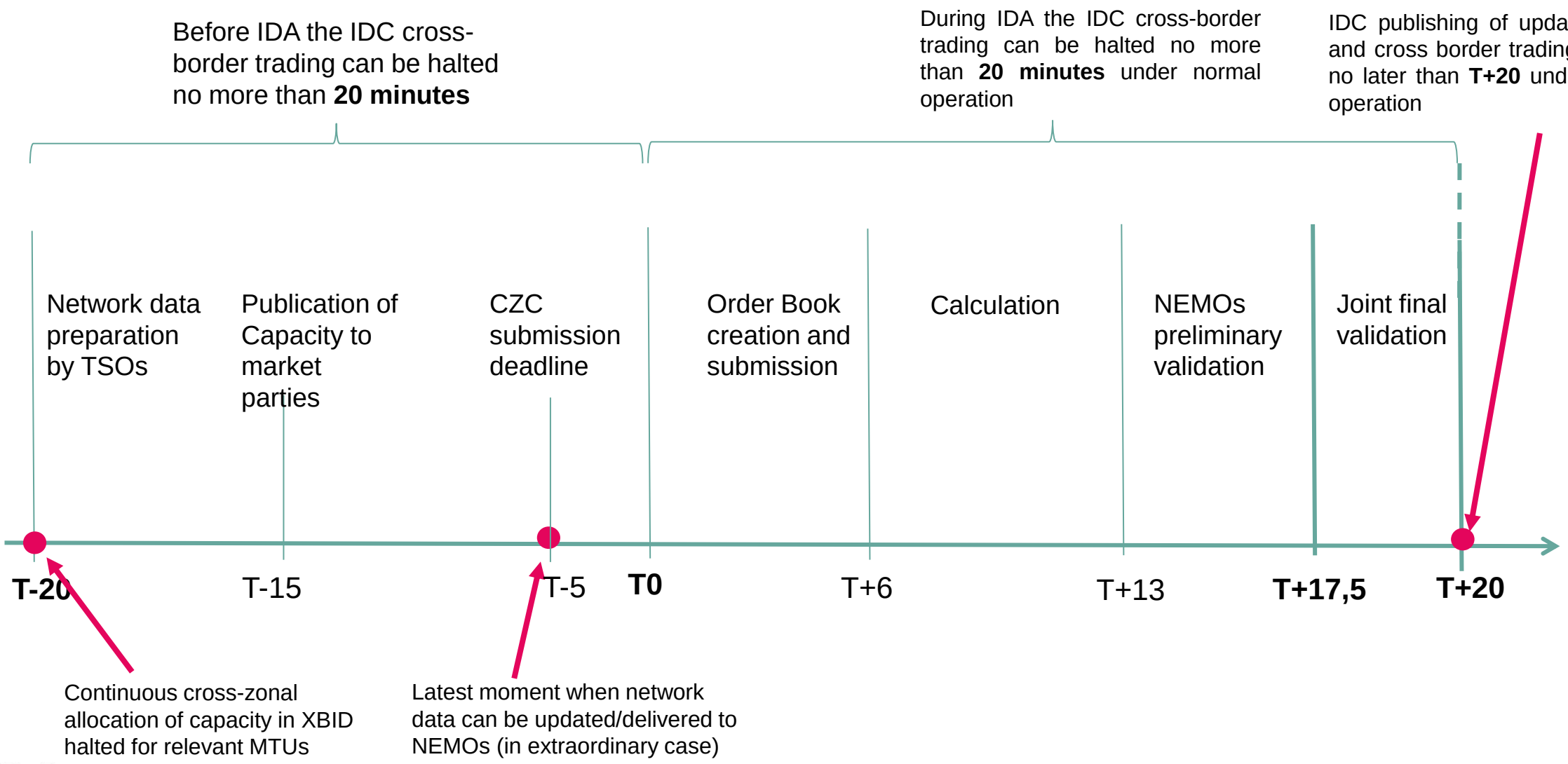
*15 min MTU for IDA will be operational before the 15 min MTU for DA

IDA Go Live Preparation Timeline



Limitations in Nordic region

Timings of the Normal Day scenario



Process irregularities handling

- IDA results are late due to longer calculation time (or other possible delays)
  - IDA is cancelled if the IDA results are not delivered by GCT + 27
  - Specific process steps delays and possible reactions to them will be addressed by procedures
- XBID CMM reject IDA results
  - IDA is cancelled automatically in XBID at the same time as normal end of IDA i.e. GCT + 20
- Partial (de)coupling
  a) in case of issues experienced by a NEMO, the NEMO is decoupled and other NEMOs will be either automatically decoupled together with it or stay in the session, depending on configuration - the expected configuration is that GME and OMIE stay coupled, and all other NEMOs will decouple, in case of a missing order book. The configuration reflects the impossibility, due to the short time available in IDA, of re-opening the OBKs (common practice that gives Market Participants the possibility to adjust their bids due to the unexpected changes of market topology – less capacity available)
  b) the decoupled borders are kept closed in XBID CMM until the end of IDA auction → no continuous cross-border

  Soon after Go live, point b) will be replaced by resuming of cross-border continuous trading on decoupled borders as soon as possible after declaration of partial decoupling, without waiting for the completeness of IDA session for parties that stayed in coupling.
- IDA result reversion
  - Situation may theoretically occur when XBID confirms the IDA results correctness, but IDA is cancelled by NEMOs e.g. due to claim of Market Participant in Spain
  - In this case IDA CIP issue an instruction to XBID to revert (remove) IDA results

Mapping of expected capacity calculation methods for IDA

- **Background**
  - Network data preparation for IDA by TSOs is taking place regularly within 5 minutes time window at the beginning of each IDA session (from GCT-20 to GCT-15). However, this process should not be mixed up with capacity calculation processes.
  - In advance of an IDA, TSOs might perform a recalculation of capacities in line with the regional capacity calculation methodology (CCM).
  - For IDA1 continuous allocation results are not impacting the capacity calculation on the other hand the calculation is dependent on DA processes completion
- **Status**
  - In view of above stated where the capacity recalculation is (temporarily) not foreseen “leftovers” of capacity will be offered meaning e.g.
    - capacity from DA after deduction of DA allocations for IDA1 (in line with regional CCMs) or
    - capacity for ID allocation after simple deduction of continuous allocations and IDA1 allocations for IDA2
  - Capacity recalculation prior IDA (intended to be released for IDA) is planned for number of borders in particular for IDA2 and IDA3 to be introduced later in 2024. Related process are under implementation by relevant TSOs in the respective capacity calculation regions (e.g. in CORE and Nordics); more details on this can be obtained via the stakeholder management channels of the CCRs

Block order types offering by the NEMOs (1/2)

Performance test phase organized with EUPHEMIA

- Three performance test phases organized
  - Phase 1 included combination of 60, 30, 15 min products curve orders, simple block order (C01), Merit Order (without PUN) in each individual bidding zones
  - Phase 2 included curve orders reducing the products offered in each BZ to the product corresponding to time resolution of bidding zone, simple block order (C01), Merit Order (without PUN) in combination with
    - Linked block orders (C02) or
    - Exclusive group block (C04) or
    - Scalable Complex orders

    Phase 2 has not explicitly addressed combined effect of Linked block, Exclusive group block and Scalable Complex orders
  - Phase 2 vs Phase 1 results: Calculation times show significant benefit of reducing the products offered in each BZ to the product corresponding to time resolution of bidding zone. Calculation time interval is more stable/narrow also comparing different scenarios regarding orders volume
  - Phase 3 addressed combined effect of Linked block, Exclusive group block and Scalable Complex orders with simple block order (C01), Merit Order (without PUN) and curve orders corresponding to the time resolution of each individual bidding zone

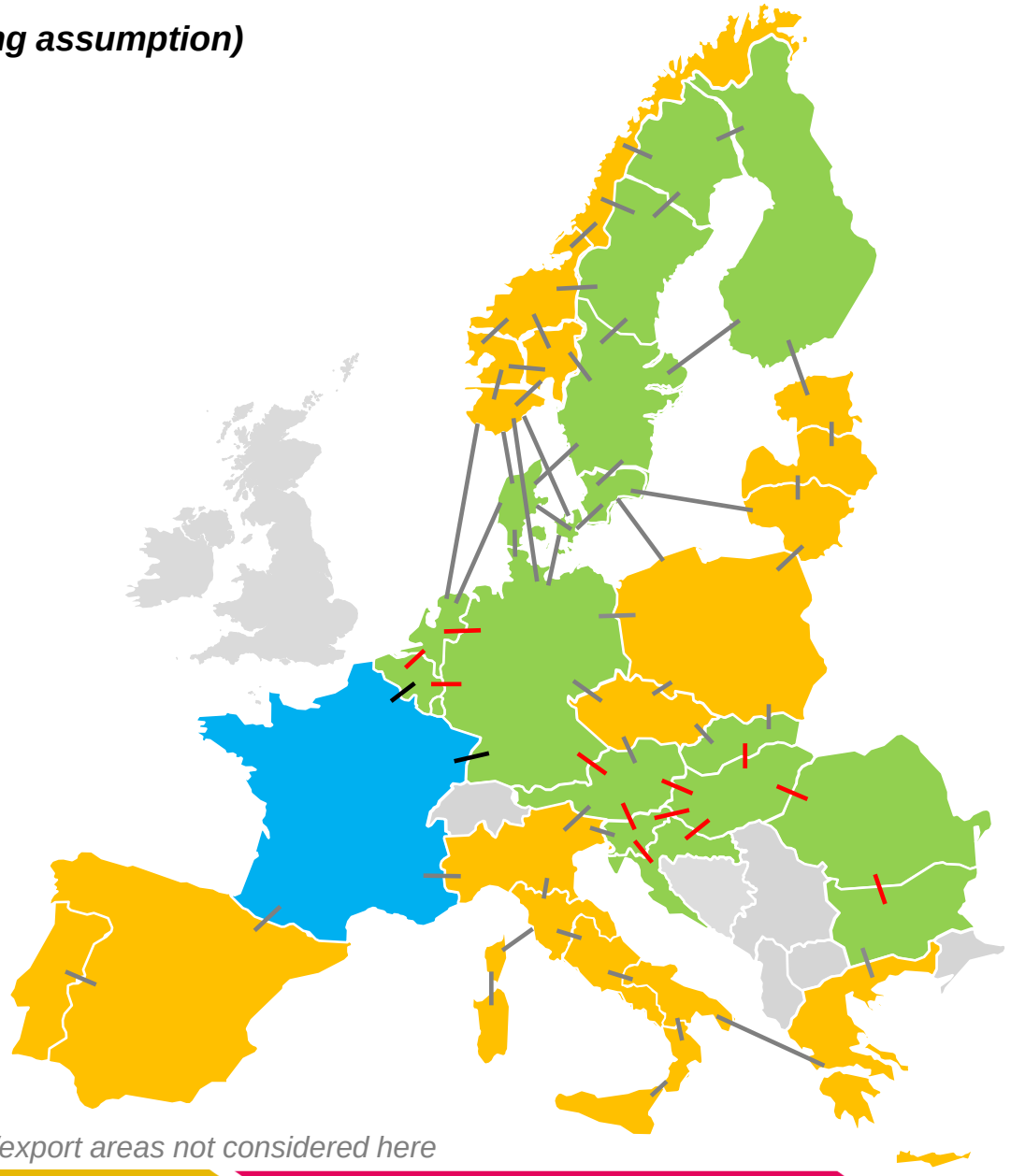
Block order types offering by the NEMOs (2/2)

- Considering the performance tests with EUPHEMIA completed in May 2023 following setup is agreed by SIDC parties for IDA go-live
  - Simple orders of **only one time resolution will be allowed in each BZ** for IDAs Go-Live
    - This restriction is required to meet the Algorithm methodology requirements on IDA process timeline
    - Party willing to trade 60min product in BZ allowing only the 15min product shall use opportunity of block order
    - Cross-product matching is supported by EUPHEMIA i.e. 15min products placed in one BZ and 60min products placed in other BZ are matching together in IDA
  - Additional order types to be supported as of Go-Live by NEMOs are simple block order and Merit Order (PUN excluded)
  - Order types to be supported upon NEMO individual readiness are Linked block order, Exclusive group block order, Scalable complex orders.
- As the IDA results calculation time is dependent mainly on topology (calculation time is increasing with switch of BZs to 15 min), orders volume and share of block orders regular monitoring would be required after go-live to reflect an operational experience and further address possible risks. Additional calculation time optimization is foreseen in relation to ongoing performance improvements of EUPHEMIA supporting 15min MTU introduction for DA.

*15 min MTU for IDA will be operational before the 15 min MTU for DA

Go-Live

Q2 2024 (working assumption)



BZB on 15 min MTU
BZB on 30 min MTU
BZB on 60 min MTU

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

AT, BE, BG, FR, DE, NL, SI, SK areas will have to manage several BZB resolutions

note: import/export areas not considered here

Full transfer to 15 min MTU

At the latest Q1 2025 (working assumption)*

- BZB on 15 min MTU
- BZB on 30 min MTU
- BZB on 60 min MTU

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

note: import/export areas not considered here

* Transfer to status presented in this figure may happen in several steps where individual BZs and BZBs will switch to 15 min MTU

AOB

- MRLVC
- Flow Based in SIDC
- Planned update of Euphemia document following the 15 min MTU and corresponding document for IDAs

AOB - MRLVC

- In February 2023 EU and UK TSOs received a list of technical questions from European commission and UK government (DESNZ) concerning MRLVC which were to be answered within 5 months after receipt. Final report will be delivered to EC and UK government is 10th of July

- The list of questions are focused on technical aspects providing aiming to provide more clarification for a possible implementation of MRLVC as foreseen in the TCA. It only makes a comparison to current explicit trading arrangements in place today on several GB-EU borders. Other alternatives are not in scope of the current exercise

- Scope of the questions targeted following domains, which are a follow up of the CBA performed in 2021 :
  - Preliminary Order Book option
  - Common Order Book option
  - MCO of MRLVC
  - Bidding Zone Border Flow Forecast methodology
  - Implementation timeline & costs for establishment of MRLVC

  UK and EU TSOs, with involvement of NEMOs, are intensively working on this topic and jointly preparing answers to the questions received in cooperation with MCSC parties

  MCSC TSOs and NEMOs already previously shared their concerns and views on the MRLVC market model and its implications in case of an implementation. Based on the insights of the current exercise this position is not changed and the concerns remain. Furthermore, there are also the concern on the future scalability of MRLVC (e.g. on offshore ambitions).

AOB - Flow Based in SIDC

- A distinction is to be made between introduction of Flow Based Capacity Calculation and Flow Based Allocation foreseen in the market coupling (either ID Auctions or ID continuous trading). These are two different projects, handled by different governances, regulation and different project timelines

	ID Flow Based Capacity Calculation	ID Flow Based Allocation (in ID Auctions & ID continuous trading)
Capacity calculation	New Flow-based domain calculation in ID timeframe (IDCC1: D-1 21h45, IDCC2 D 9h45) ATC/NTC extraction as second step to provide capacity to SIDC IDCT and IDA2/3 IDA1 capacity based on ATC/NTC extraction on Core Day-ahead FB domain(DA leftover) as per Core IDCC Methodology	Regions calculating with capacity with FlowBased can submit FB domains to SIDC IDCT and IDA without ATC extraction
Capacity Allocation	Allocation based on NTC-based capacity provided by TSOs (all regions provide ATC, also Core)	Allocation based on FB domain for those regions that provide FB parameters Other borders remains in NTC-based capacity
Go live date	End of 2023 or 2024 for IDCC1 in Core CCR. 2024 or 2025 for IDCC2 (dependent on ongoing regulatory escalation on 2nd and 3rd amendment of IDCC Methodology of Core)	Current planning : 2026
Governance	Regional project on CCR level (Core is in implementation phase)	Market coupling Steering Committee - SIDC
Comments	* Core IDCC is independent and transparent for SIDC IDA implementation and SIDC Flow-based allocation projects. Thanks to ATC/NTC extraction, SIDC IDA/IDCT will receive needed NTC-based capacities before and after IDCC. SIDC Flow-based allocation implementation should however go live after Core IDCC1. * Nordic CCR have similar projects for Nordic ID Flow-based CC. Planning is under discussion	* Market coupling results for IDA will be based on FB market coupling for those regions providing FB CC data as input. And FB pricing principles will apply on them as they are applicable today in the DA market where FB market allocation is performed. * Flow-based continuous trading will consider flow-based allocation within the flow-based regions instead of border-to-border allocation. Routing algorithm will be adapted to cope with the new constraints. The concept of trade-based and continuous trading will however continue to be applied, transparently for market parties.

AOB - Planned update of Euphemia document following the 15 min MTU and corresponding document for IDAs

- Expectations of Market Participants to be clarified

- NEMOs will review in 2023 potential gaps between the latest public description and the requirements of the recent or future initiatives.

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 in the fall, details will be shared in the summer.