

Minutes MCCG

Date / Place 07/06/2022, 9:00 – 16:15 CET, GoToWebinar call

Status	Version	Date	Comment
Draft	1	08/06/2022	Draft minutes circulated to MCCG
Draft	2	21/06/2022	Addition from convenors and leaders
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Present staff (chairs, speakers, experts, convenors)

Helene Robaye, Javier Barrantes, Pierre Milon – MCCG Co-convenors
Miha Pregl, Jean Verseille, Stefano Alaimo – MCSC Co-chairs
Mario Pession – SDAC and ANDOA OPSCOM Chair
François Lucas – SDAC MSD Co-leader
Timo Suhonen – ANDOA PMB Leader
Fabian Heus – 15 min MTU Implementation Coordination Group Leader
Hilde Rosenblad – NEMO Committee Technical TF Co-leader
Dávid Barta – SIDC OPSCOM Chair
David Myska – SIDC MSD Leader
Auke Van Der Zijden – SIDC MSD Expert
Ludivine Marcenac – ENTSO-E
Vladimir Satek – SIDC TFLD
Tjacka Bus – SDAC OPSCOM PMO
Cosimo Campidoglio – NEMO Committee Technical TF Co-leader
Kata Fehér – MCSC Communication TFLD
Viktor Rideg - HUPX

Number of the participants:

registered: around 270

at the beginning: around 170

at the end: around 100



0. Meeting agenda

Topics			
Morning session 9:00 – 11:40			speaker, experts
1	Welcome Recap of the Terms of Reference Presenting the co-convenors	9:00 – 9:10	Helene Robaye, Javier Barrantes, Pierre Milon – MCCG Co-convenors
2	High level overview of the new Market Coupling organization	9:10 – 9:30	Miha Pregl, Jean Verseille, Stefano Alaimo – MCSC Co-chairs
3	SDAC: Impact analysis for 20 minutes extension	9:30 – 9:55	Mario Pession – SDAC and ANDOA OPSCOM Chair
4	SDAC: Non Uniform Pricing (NUP) con- cept	9:55 – 10:45	François Lucas – SDAC MSD Co-lea- der
5	SDAC publication of aggregated curves: publication of execution status of blocks	10:45 – 11:15	Miha Pregl – SDAC Co-chair Timo Suhonen – ANDOA PMB Leader
6	SDAC & SIDC 15 minutes Market Time Unit (MTU) roadmap overview	11:15 – 11:40	Fabian Heus – 15 min MTU Implemen- tation Coordination Group Leader Dávid Barta – SIDC OPSCOM Chair
Lunch break		11:40 – 14:00	
Afternoon session 14:00 – 16:15			
7	SIDC: Result of consultation on SIDC Product	14:00 – 14:15	Hilde Rosenblad – NEMO Technical TF Co-leader
8	SIDC: Cross Product Matching (CPM): presenting the concept	14:15 – 15:15	David Myska – SIDC MSD Leader Auke Van Der Zijden – MSD Expert
9	SIDC: Intraday Auctions (IDAs)	15:15 – 15:45	David Myska – SIDC MSD Leader
10	Announcement of consultation on Har- monised Maximum and Minimum Clear- ing Prices (HMMCP) Methodology for SDAC and SIDC	15:45 – 16:00	Hilde Rosenblad – NEMO Technical TF Co-leader
11	Closure	16:00 – 16:15	Helene Robaye, Javier Barrantes Pierre Milon – MCCG Co-convenors

List of action points

No	Date	Re- sponsi- ble	Description	Deadline/ Status
	07/06/2022	MCCG speakers and experts	The answers to all the questions 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.	27/06/2022
1	07/06/2022	Members	Contribute to the open consultation HMMCP methodology : https://www.nemo-committee.eu/public-consultations/open-public-consultation-on-harmonized-maximum-and-minimum-clearing-prices-for-sdac-and-for-sidc	15/07/2022



2	07/06/2022	NEMOs and TSOs	NEMOs and TSOs to come back with completed Q/A documents	24/06/2022
3				

1. Welcome

2. MCSC overview

- Q: What is the frequency of MCSC meetings, and are MCSC decisions made public?
- A: The Intention is to organize similar MCCG meetings twice a year. The next one will be scheduled in late Autumn 2022, stakeholders will be informed in due time and similar process will be followed.
- Q: on SDAC, is the go-live of the HR-HU border still foreseen tomorrow with Core go-live?
- A: As it was planned HR-HU border is included in the CORE flow-based region, that went live on 8th June 2022 (first trading day). Capacity is allocated from day 1 of CORE FB operations.

3. SDAC: 20 minutes extension

- Q: Is there a clear cut-off point as of when – the cancellation of the second auction is decided? How will this be communicated by the NEMOs?
- A: Only the second auction after SDAC full decoupling is being removed, where it was performed before 8th June 2022 (CORE FB go-live) and where nominations deadlines did not allow this process to be maintained after extension of the SDAC decoupling deadlines. This is valid for the CWE region as well as Hungary. The relevant NEMOs are taking care of the communication directly with their market participants, in addition to this joint SDAC announcement.
- Q: What happens for the rest of the markets then, are there NEMOs or bidding areas still proposing a second auction after full decoupling?
- A: The second auction after full decoupling is still supported by Ireland, Greece and Czechia even after 8th June 2022, but each run will be assessed individually by the relevant NEMO, depending on the actual circumstances.

4. SDAC NUP concept

The speaker says that in the example the price is divided by two but in real the impact should/will be lower.

The speaker clarifies that complex orders might not be compatible with the NUP mechanism that is why the alternative is Scalable Complex orders.

- Q: On 15-min complexities, 1) can more computation power help here? (e.g. using super computers) 2) with PTFDs getting more and more detailed (i.e. more number of rows and more constraints), is there any limitation from this side? has there been any study?



- A: More computation can indeed help to better manage the 15' situation, but this is not a game changer. SDAC already envisages the use of distributed computing (usage of several high computational capability machines), but there are still a number of bottlenecks, e.g.: non-decomposable mathematical problems, software limitations in the commercial solvers being used, memory bus limitations on processors. Today, moving to supercomputers would be vain as Euphemia would not be in a position to benefit from such computational power.
 - On this aspect, NUP would provide some benefits as this approach could allow dissociating the main optimization step (welfare & volume maximization) from the subsequent ones. I.e. volume and pricing determination would now become independent, which could allow for a better usage of parallelization (no direct dependency between these steps, unlike today's situation).
 - PTDF indeed adds complexity compared to a simpler ATC modelling, and performance is correlated to the number of constraints being submitted. However significant R&D has been performed since several years and is being continued. Significant improvements were reached (sometimes transparent from an external perspective), allowing to well manage its complexity. There is direct involvement between TSOs, NEMOs and the algorithm provider on these aspects to make sure this still performs well after 15' introduction.
- Q: If the NUP increases performance, why there is a requirement to remove complex orders?
- A: Complex Orders (COs) are not compatible with the NUP approach. The reason is that in Euphemia optimization approach, market clearing prices (MCPs) are not expressed in the first optimization step but only subsequently. As part of COs, one may define a so-called "Minimum Income Condition" (MIC) that requires MCPs to be defined to be enforced. Thus, one may reject during price determination step a solution containing a CO whose MIC cannot be satisfied while it was initially accepted

For sake of clarity and in order to avoid confusion on the naming convention, Complex Orders are different from Linked and Exclusive families of blocks.

- Q: Do you have an estimation of Paradoxically Accepted Blocks (PAB) to be compensated? What is the expected potential impact on DA prices?
- A: The expectation is that the number of paradoxically-rejected bids remain low as well as the contributions that may impact the orders being in-the-money. This is however being further assessed as it is unknown whether there might be some adjustments in trading behaviour once moving to NUP. The NUP design is also being elaborated so that the reference prices still being computed remain as close as possible to current price determination.
- Q: What is the difference between "compensation" and "contribution" in what you just said (slide 36)?
- A: "Compensations" refer to the amounts that market participants having paradoxically accepted orders would receive to cover their losses. "Contributions", in the context presented during the meeting (foreseeing a market-based financially-neutral approach), refer to the amounts that market participants having in-the-money accepted orders would redistribute to cover compensations. The sum of contributions should equal the compensations.



- Q: The side payments are internalized in the market in the solution that is presented. Could they also come from an external source (e.g. network tariffs)?
- A: Other compensation schemes could indeed be foreseen, with contributions coming from other sources: a fixed fee, supporting schemes, congestion income, tariffs...

- Q: Could you give an example where there are simultaneously PABs and PRBs?
- A: From the example provided during the meeting, you may imagine an 5th order being called "E". This can be a fill-or-kill sell block order of 5MWh with 16€ limit price. In the current setup (strict linear pricing), compared to the initial solution, E would be accepted and D would be executed with 5MWh less. This would result in the same MCP of 40€ as D is still the marginal order. D would still generate the same surplus of 300€. But compared to the initial example, there would be an additional (producer) surplus of $(40-16)*5=120€$ for order E, hence a total welfare of 420€. Now, in the NUP context, it would appear that E is rejected and the solution would remain unchanged compared to the initial example. The reason is that C would still be favoured as it induces a large part of the welfare (the 700€ welfare solution would still be higher than the 420€ one). Executing E would allow E to benefit from a 5€ price difference (hence generate 25€ of surplus), but it would in turn impose that 5MWh more are matched between C and B while C is losing money (it is losing 5€/MWh, hence 25€ here in total while E only generates 20€ in addition). It is therefore preferable to reject E, and one end up having a solution where both a PAB (order C) and a PRB (order E) are present.

- Q: Do you have an idea when this solution would be ready for an operational go-live? Would it fit the deadline for moving to 15' products (i.e. 2025)?
- A: NUP is not compliant with current CACM regulation, and will only become compatible if the updates made in the draft CACM 2.0 to allow for such a model would be approved. The impacts of NUP is still under assessment, hence a precise timeline is not yet clear. The expectations are that 2025 might be realistic provided there are no blocking points (design, performance validation, legal/regulatory aspects, market participants acceptance, implementation, contract updates, go-live preparation etc.) but still challenging on top of the finalization of 15' preparation. Still, NUP is also perceived as a promising mid-term solution to enhance scalability in light of other future changes.

- Q: could you describe what "scalable complex orders" are?
- A: Scalable Complex Orders (SCOs) are described in the [Euphemia public description](#). These orders are close to Complex Orders, but the variable term of a Minimum Income Condition is now replaced with a Minimum Acceptance Volume per hour. This change allows to remove the dependency of this order from the market clearing prices, and new execution conditions can be fully expressed already in the initial welfare maximization problem.

5. SDAC publication of aggregated curves

- Q: On the execution status of blocks, H2 2022 is planned as implementation date. Does it come with a specific Euphemia update?
- A: Yes, the PCR SDAC releases that will support this requirement will be EUPHEMIA 11.2 and associated software PMB 12.0. These releases are expected to go-live during Autumn 2022.



- Q: Can you clarify if anonymised linked block orders will be published in a way that retains the information about how the families of orders are linked?
- A: Linked blocks are published, but the link information is not up-to-date in anonymised data.
- Q: For aggregated bidding curves, will there be a grace period similar to some of the JAO data?
- A: The process of publication on NEMO websites is not impacted by this enhancement and will still consider the same deadline: curves will be published less than 4 hours after publications of the market coupling results.

6. 15 minutes MTU roadmap

6.1) SDAC

Important post meeting note following a Market Coupling Steering Committee that was held on 14th and 15th of June

The MCSC welcomes the recommendations provided by NRAs and ACER. The MCSC mandates SDAC MSD and 15MTU Implementation Coordination Group as soon as possible to replan for a big-bang go-live in 2025 and to revert to the MCSC at September's meeting with an updated plan and preconditions (including the back-up plan, if one Member state is delayed) on what a big-bang means and to start initiatives (i.e., R&D) if required to support the new implementation plan. No go-live of 15 MTU in SDAC will take place before 2025.

- Q: Concerning the 30'/60' products, is it correct to say that from the algorithm point of view, they are necessarily considered as block orders (the optimization being performed with only one elementary time unit)? In that case, keeping 30'/60' products is only a question of submission format and ease of use of the interface for the MP?
- A: In the two solutions (only 15' or as well 30'/60' products, there are differences in terms of blocks to be accepted or rejected.

Several options are being considered and under investigation: 1) implement 30'/60' curve products in addition to the 15' curve products 2) only allow for 15' curve products, hence requiring that blocks are used to submit orders spanning several periods 3) investigate new products

- Q: what explain the delay for some BZ like CZ or FR or IT ?
- A: The assignment of a bidding zone in any of the go-live waves is based on the Imbalance Settlement Period-derogation granted by the individual NRAs to individual TSOs as the NEMOs are to provide the market participants with the opportunity to provide orders with the same granularity as the ISP. For e.g. France this happens to be a derogation until and including 31 December 2024. This also implies that the third go-live wave is not to be seen as a 'NEMO delay': as long as the ISP is not modified, 15 and 30 MTU products cannot be proposed and capacity cannot be allocated at another granularity than 60 mins on the bidding zone borders.



- Q: how will the DA result looks in future to we see all products (hourly, 15 min and 30 min) as results, and is there a starting date with the 15 Min Products for DA? Thanks
- A: Prices will be published at a 15' resolution, and execution details will be provided accordingly. NEMOs will further communicate on these aspects in due time.
- Q: Will the clearing price be the same either if: we submit a 60min product as 15min block, Or we submit a 60min product as curve?
- A: The clearing price will be the same (modulo some price rounding effects). The major difference is that a block can be paradoxically rejected, while the linear orders cannot.

6.2) SIDC – no question

7. SIDC results on consultation

- The speaker clarify what is meant by complex orders because it seems that there was some misunderstanding by some stakeholders.

A: From Euphemia public description: (section 5.3)

A complex order is a set of simple supply stepwise hourly orders (which are referred to as hourly sub-orders) belonging to a single market participant, spreading out along different periods and are subject to a complex condition that affects the set of hourly sub-orders as a whole.

Complex conditions are of two types: Minimum Income Condition (with or without scheduled stop), and Load Gradient.

Furthermore, each complex order will also be associated with a hash: this hash can then be used for settling ties between identical complex orders submitted by different NEMOs in the same bidding zone. More information is available in paragraph 5.2.5.

Minimum Income Condition and Load Gradient can be combined in a complex order.

Complex Orders do not include smart blocks like exclusive or linked families.

- Q: What do you think about Eurelectric proposal to distinguish products traded in a sufficient number of countries and not with the current classification mandatory / optional ?

A: The current classification of the products into 'Mandatory products' and 'Optional products' is decided by ACER and based on ACER interpretation of Article 53 in the CACM Regulation which products that are mandatory. (contracts covering one MTU and Simple block orders). See point (37) and point (38) of the ACER decision on Intraday Products - Jan 2020

At this stage, we are still in a situation where we think all products can be accommodated in the IDA auction.

- Q: what is the complex block orders status (mandatory vs optional) in IDAs?
- A: Complex Block orders are defined as Optional products. This is the same both for IDAs and for SDAC auction. Reference to Article 7 in the Annex1 SIDC Products' Methodology to the ACER Decision 5/2020 (the SIDC Products methodology).

Because some confusion exist, it is precised that the status is the same for the exclusive and linked families of blocks : it is seen as optional product by AER in its decision. This is valid for SIDC IDAs and SDAC.



8. SIDC CPM

Important post meeting note following a Market Coupling Steering Committee that was held on 14th and 15th of June

The MCSC welcomes the recommendations provided by NRAs and ACER, which do not consider CPM as a regulatory obligation. MCSC decided to put on hold all activities related to SIDC continuous CPM and to put priority on the mandatory SIDC Pan-EU IntraDay auctions.

- Q: Can you detail what a mini auction is ?
A: A mini auction (in other words SOB auction) is meant to describe the process when cross-border capacities are being released (when TSO increase the capacity or as a result of netting of flows caused by continuous trading) in XBID solution. Orders suddenly become possible to be matched, leading to cross-borders transactions where related set of orders are matched following auction concept all together rather than continuous market concept 1:1 (for further details see [public description of the algorithm](#))
- Q: Will the shadow and virtual orders disappear once the 15min ISP/MTU is implemented in all countries ?
A: With the proposed design for CPM the shadow and virtual orders would be kept also when the 15min ISP/MTU is implemented in all countries.
- Q: Will the creation of these shadow/virtual order and this CPM process introduce extra latency in the process or are additional computing capacities planned?
A: Yes this would increase considerably latencies and computing times subsequently it would have very significant impact to system performance and therefore severe performance improvements to the XBID version of CPM would be needed to keep the current level of performance, reducing feasibility to introduce other future functionalities such as losses or flow-base with relevant performance impact.
- Q: Do you confirm that "User defined Blocks" are excluded from CPM? Only "single MTU bids - 1*15min / 1*30min or 1*60min" will be part of CPM ?
A: Yes "User defined Blocks" would be excluded from CPM solution (due to too much performance impact). Yes 15min, 30min and 60min orders would be able to match with each other. See the answer
- Q: What is the reason user defined order are out of scope ?
A: Initially User defined orders were part of the design of CPM in XBID. During the assessment of the service provider of XBID it was found that matching of 15/30/60min orders with user defined orders has too much performance impact (on top of the already required performance improvement of CPM in general). The service provider couldn't find acceptable solutions to cope with the performance impact without degradation of current SLAs. Based on this the decision was made to exclude User defined order in the design to try to make CPM solution technically feasible.
- Q: Is it possible that quantities do not match in virtual and shadow orders? On slide 68, virtual order, it seems there is an overlap on the selected sell orders, because the sum of sell quantity (9+11) is more than the buy quantity (15). Similarly on slide 69, shadow order, the buy and sell quantity do not match.
A: No that is not possible. The virtual and shadow orders take the lowest quantity (MW) of the precursor orders. In the example of the virtual orders, two virtual orders are created,



one for the 60min orderbook in APG and one of the 30min orderbook in APG. From the three precursor orders of the virtual orders in the 60min orderbook order ID 3 has the smallest quantity (9). While from the two precursor orders of the virtual orders in the 30min orderbook, the order ID 2 has the smallest quantity (11). Therefore there is a difference in quantities between two different virtual orders. Later when these orders are matched, the matched quantity will not be more than 9 or 11. For the shadow order example, there is only one shadow order, where order ID 1 has the smallest quantity (9).

- Q: What is the timeline of implementation of CPM in European countries?
- A: Please see the statement at the beginning of the section, mentioning that NEMOs and TSOs will follow the ACER recommendation and will not implement the Cross Product Matching functionality in XBID.

- Q: In theory, you could create unlimited amount of shadow orders - eventually each quarter together with other quarters averages an hour - where do you draw the line?
- A: A limitation is built in line with specific reasonable rules defined to make solution technically feasible. This includes both the (a) only use the best & (b) use only once (quantity) for this orderbook, while allowing the same order to be used in another orderbook. This principle also applies to virtual orders.

- Q: On appetite of MPs for CPM: EFET started to ask for CPM 2 years ago. In comparison, we've always been critical of the added value of IDAs in terms of social welfare. We were already surprised that CPM needed so long to be developed, and we mentioned at MESC meetings that we would like to see this project sped up. Hence, the earlier we could get CPM, the better. Option 1 seems to be the option on the table that delivers CPM the earliest, hence we would support it over option 2.
- A: CPM as a very complex functionality was part of R&D to clarify the central system and local system changes design and identify impact of implementation to performance. NEMOs and TSOs consulted the impact of CPM implementation with NRAs (implementation timeline, financial aspects, impact to IDAs implementation timeline) and priorities are to be set in line with outcomes of this consultation. Based on NRAs/ACER recommendation received after the WS the work on CPM implementation is put on hold by NEMOs and TSOs in order to secure the SIDC IDAs timeline which is a legal obligation.

- Q: How can the quantities on the matched orders on the buy and sell side not be the same? (in case of shadow you mentioned it takes the order with minimum quantity, does that mean part of buy quantity is not satisfied and just skipped or ignored? how about virtual order)
- A: The quantity (MW) of the buy and sell side of a trade will (stay) the same. It can't happen that one of the sides has a higher or lower quantity. The same principles, about quantity, is followed as today. Hence quantity needs to be equal on both sides of a trade and partial match of orders can happen (the remaining quantity of the order will be updated / remain in the orderbook).

Extended clarification regarding existing i.e. recently functioning alternatives if CPM is not implemented:

- Linked basket orders



- Four 15min orders can be placed as “linked basket order” instead of 60min order which means that MP interested to trade 60min in the Bidding zone where 15min products are available can create linked basket order in the 15min orderbook ensuring that either all four 15min orders are matched (i.e. mirror matching of 60 min order in 60min OBK) or this four 15min orders are “killed” i.e. cancelled automatically by the system
- This would not allow to trigger such a trade on an interconnector of 30, 60min resolution as 15min order cannot use such interconnector
- Aggressor only, match within the underlying (=15min) orderbook
- Order does not stay in the market if not matched (Fill or Kill)
- User defined blocks
 - Initiator or Aggressor (All or Nothing), match occur only within the user defined block orderbook, i.e. there is no use of the trading opportunities in the 15, 30, 60min OBK for this order
 - Order stay in the user defined block market if not matched

9. SIDC IDAs

The speaker clarifies that the algorithm used in the IDAs will be the same than SDAC (Euphemia).

The speaker clarifies that the ATC mode will be used until Flow Based allocation can be used in production.

- Q: On slide 87 on shared order books within a bidding zone during XBID interruption: why do you say that SOB "may be allowed", when the ACER decision on ID pricing methodology (art. 4.4) mandates it?
- Q: As ACER deems it "important", uninterrupted XBID during IDA within a BZ should be the base case. However it is not clear from the slide 87 whether it will be implemented. Any additional info ?

A: NEMOs have no common view yet on the topic, however NEMOs will come back to Market Participants on their views in September.

- Q: Can the NEMOs shorten the interruption time of the IDAs?
- A; No. Current performance tests results show that even without inclusion of the optional products it is challenging to fit to existing Algorithm Methodology requirements.
- Q: As a market party present in a smaller and less liquid bidding zone (Belgium), I still think that 60 min of XBID halt is a catastrophe that will not be compensated by any eventual benefits of IDA
- A: Implementation of IDAs follow the requirements presented in the Algorithm Methodology approve by ACER
- Q: Is it possible to buy the capacity and do not use it? If yes have you considered the social welfare impact?
- A: No, it is not possible. IDA is about implicit allocation i.e. capacity is reserved for a trade concluded by matching orders placed by NEMOs
- Q: What time are the auctions planed during the day?



- A: There are 3 sessions. IDA1 with GCT at 15:00, IDA2 with GCT at 22:00 and IDA3 with GCT at 10:00. Please to the capacity pricing methodology.

- Q: Can we trade 60 min products or 15 min products in IDA? Which products can be traded in IDAs?
- A: All simple products i.e. 15, 30, 60 min products and also simple (incl. curtailable) block-orders will be included. Optional products are not confirmed yet.

10. MCSC public consultation on HMMCP

Individual members as well as associations are invited to contribute to the consultation on the HMMCP methodology. It is open until 15th July, all documents can found on the NEMO Committee website : <https://www.nemo-committee.eu/public-consultations/open-public-consultation-on-harmonized-maximum-and-minimum-clearing-prices-for-sdac-and-for-sidc>

