## **CACM 2.0 Amendment Advocacy Report**

Position paper following the consultation on amendments proposed by ACER to the Capacity Allocation and Congestion Management guidelines







### **Foreword**

These slides have been built on the basis of the close interaction with ACER during 2021 and have been updated based on the recommendation issued on the 21 December.

NEMOs and TSOs will provide additional views during the EC consultation and commit to be available during the comitology process

NEMOs and TSOs are dedicated to continue the implementation of any improvements to the governance of the Market Coupling as highlighted in the first MCSC press release.



### **Disclaimer**

These slides summarise joint NEMOs\* and TSOs position on topics related to the MCO organisation and governance.

For topics where a joint position was not reached, TSOs prepared a separate presentation. NEMOs have already expressed their option about other topics, such as Clearing and Settlement and Cost issues, during the dedicated Workshop on CACM Amendment, which was held on 25th October 2021, and during previous communications between NEMOs and NRAs representatives.

\* The slides do not reflect the position of NASDAQ.



## **CACM** amendments on MCO organisation







### **MCO Organisation**

#### **Executive Summary**

ACER's proposal for the MCO organisation aims at answering 4 types of shortcomings it identified: slow implementation, difficult regulatory oversight and conflict of interest, risky operational security, and possible absence of MCO services in a region. ACER introduces a solution in which all those tasks are dealt with by a single legal entity.

A critical review of ACER proposal shows that the proposed measures do not address the identified issues:

- Implementation delays due to escalations are a governance issue that can be dealt with without the necessity to create new entities;
- Implementation delays due to lack of resources in the current decentralised organisation will not be solved by the creation of new entities;
- Improvements to the regulatory oversight are partial in terms of costs and absent in terms of accountability;
- Operational security is at risk with entities created ex nihilo whose expertise will take time to reach the required level;
- The continuity of MCO services cannot be cost-effectively ensured through the introduction of a regulated pan-European last resort NEMO.

More generally, ACER's proposals could imply higher costs of several nature: cost of transition, cost of inefficiencies in operation, cost of higher operational risks.

All TSOs and NEMOs'\* proposal, on the contrary, builds upon the proven successes of the current organisation and addresses its alleged shortcomings.

- Governance: revised governance comparable to ACER's proposal and yearly update of the Workplan;
- Regulatory oversight: joint non-compliance assessment by all-NRAs;
- Operational security: maintaining the rotational MCO system and dealing locally with local issues.

ACER's proposal for the revision of the MCO should be line with legal principles such as subsidiarity/proportionality, freedom to conduct a business and boundaries of implementing acts.





## ACER's proposal for the MCO organisation



### **Current shortcomings of the MCO organisation according to ACER**



#### Slow implementation

Current MCO organisation not fit for the future challenges in market coupling

Disagreements between responsible parties associated to requests to NRAs/ACER/EC ("escalations")

Lack of resources of NEMOs impose that implementation projects are addressed one after the other, with risks of 'waiting line' delays



### Difficult regulatory oversight and conflict of interest

Conflict of interest with the bundling of MCO tasks and competitive NEMOs tasks

Difficult to identify costs related to the MCO activities only

Difficult to monitor of the MCO performance and enforce relevant obligations

Algorithms used by the market coupling lack transparency



#### Risky operational security

Market coupling failed three times in recent years which was caused by individual NEMOs

Problems in a single NEMO should not cause market coupling failure in EU or wider region

Problems have a higher probability of occurring with increasing complexity in the future



## Possible absence of MCO services in some bidding zones

Market coupling not secure from absence of a NEMO in a bidding zone if:

- 1. No NEMO applies for designation in a MS
- 2. No NEMO wants to passport in a MS
- 3. NEMO revocation (option provided in CACM Regulation)
- I. NEMO default (bankruptcy)





### **ACER's proposed organisation**

In order to solve the shortcomings that ACER has identified, it proposes a revised organisation, focusing on the creation of Single Legal Entity (the MCO) unbundled from NEMOs and TSOs.

#### "One-stop-shop organisation"

All the previous tasks (MCO, development of algorithms and products, fallback, last resort) are performed by a single MCO entity at EU level, established by all NEMOs and TSOs.

Tasks	Responsibility
Development (algorithms, systems, procedures, products, functionalities, performance)	SLE
Operation (coupling through algos, validation and publication, co-opt, back-up)	SLE
Post coupling (fall-back, congestion income, inter-NEMO Clearing & Settlement)	SLE
Post coupling (validating results, managing orders, contact market participants, Clearing & Settlement, schedules)	NEMOs
Pre coupling (managing orders of market participants locally, sending orders to MCO)	NEMOs

## Critical review of ACER's proposal in light of identified shortcomings



## Critical review of the appropriateness of ACER's proposals in light of identified shortcomings



Implementation delays due to escalations are a governance issue that can be dealt with without the necessity to create new entities

Implementation delays due to lack of resources in the current decentralised organisation will not be solved by the creation of new entities, but only via additional resources, i.e. more appropriate identification of common costs and target-oriented allocation of these costs via regulatory mechanisms

Improvements to the regulatory oversight are partial in terms of costs and absent in terms of accountability;

Operational security is at risk with entities created *ex nihilo* whose expertise will take time to reach the required level

The continuity of MCO services cannot be cost-effectively solved through the introduction of a regulated pan-European last resort NEMO



## The creation of new entities does not improve the decision-making process in itself, a QMV can be introduced without new entities



TSOs and NEMOs will still oversee decisions on products and algorithms just as in the current organisation (any other arrangement would contradict the primary legislation on electricity, i.e, Art.7 of Regulation 2019/943)



ACER introduces Qualified Majority Voting ("QMV") which could indeed drastically improve decision-making and avoid escalations



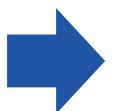
However, introducing QMV does not necessitate creating new entities. In fact, the QMV is already being implemented by TSOs and NEMOs\*





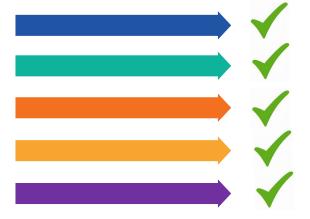
## Dedicated MCO entities will hinder the ability to run parallel implementation projects

- **Decentralised implementation** of projects to regional level **is not simply a legacy** of the original start up of the projects but is necessary to cope with national or regional TSOs pre-coupling or post-coupling processes. Proposed changes will not change anything to this
- Decentralised implementation is an effective way to streamline, parallelize and reduce the time and
  costs of the projects, whenever this is possible. Decentralised NEMOs operational auction MCO model
  has proven to be very resilient.
- Centralisation will not reduce the interdependencies between projects which sometimes causes cascade effects
- Centralisation will de facto necessitate increased resources to perform several implementation projects at the same time, or this will create a bottleneck at the level of the central entity

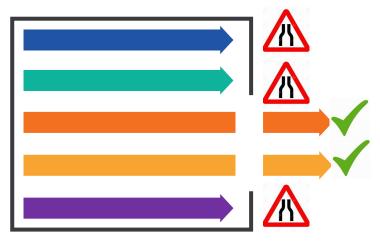


The 15-min market time unit ("MTU") implementation illustrates the benefits of decentralised organisation in implementing central MCO related pan-EU changes (see next slide).





Limited resources and central organisation could create bottleneck





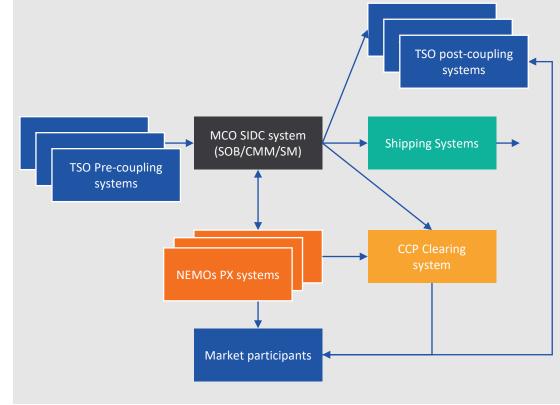
## Dedicated entities will hinder the ability to run parallel implementation projects

Because the MCO central function is only a piece of market coupling overall process, many projects would not be benefitting from the creation of single legal MCO entity.

- The 15-min MTU project implementation affects MCO systems, regional systems and local systems of each TSO and NEMO needing to adapt capacity inputs, processing of post coupling results, etc.
- Moreover, strong local specificities require transition arrangements and local adaptations. In Nordic for instance, HVDC cables require that TSOs match their own systems to the 15-min MTU. Also, the transition to flow-based capacity calculation imposes specific transition arrangements to deliver the 15-min MTU from all parties.
- When jointly performing the MCO AND being in charge of local systems issues NEMOs and TSOs can come up with solutions taking into account central/MCO needs and local/regional needs.
- The ACER proposal will complicate things as it will mean one additional entity, little aware of regional issues, placed at the centre (see. black box on the right scheme) that will have to develop the MCO systems but which will be heavily dependent on NEMOs and TSOs for implementing the change.

Many other such projects would be more efficiently handled with TSOs and NEMOs performing MCO and local implementation – flow-based implementation, co-optimization of capacity with balancing, etc.

SIDC operation involves many local systems of TSOs and NEMOs MCO entity only concerned with MCO system (black box in graph below)





## The proposed organisation fails to practically separate MCO tasks and TSOs and NEMOs tasks

ACER's proposed solution splits the liability and the operation of the MCO tasks: TSOs and NEMOs would steer the evolutions of the MCO function through joint decision-making. While most but not all costs would be transferred to MCO entities.

#### Single legal entity

TSOs and NEMOs will continue to participate/ be impacted by MCO activities and incur costs that should be taken into account in the regulated costs base of the MCO



ACER's proposed separation of tasks will only be partial in terms of costs while the liability will remain with TSOs and NEMOs.

Therefore, the regulatory oversight of costs is not significantly improved, and difficulties in cases of non-compliance are the same as today.



## The creation of MCO entities does not improve the operational security of market coupling



Until now, no critical failure of the MCO function has ever happened.

→ The only three decoupling episodes which happened in the last 7 years (1 out of 1000 sessions for DA) were due to local technical issues at NEMOs that do not relate to the centralised MCO function.

Despite formal centralization, multiple entities would still be necessary to ensure operational security, dissipating any perceived benefit of centralization.

- → Operational security stems from the redundancy in operations, which goes beyond having a coordinator and one back up
- → This benefit has been shown several times in the past when the solution for the daily coupling has been provided by one of the other operational NEMOs included in the rotational calendar



Centralisation would create new operational risks.

- → A single MCO entity means a single point of failure, meaning any incident would have far-reaching consequences
- → Unbundling leads to loss of expertise and synergies, which is not advisable at a time of important changes in the power systems



## The continuity of MCO services cannot be cost-effectively solved through the introduction of a regulated pan-European last resort NEMO

A Last Resort NEMO ("LRN") would likely imply very high costs, for potential benefits only materialising with a very limited probability

- The cost would be high: to be able to intervene "overnight", the LRN should be established with personnel, trading platform and EU wide default contractual arrangements already signed with all EU MPs (bids collection, settlement) and TSOs (congestion rent management, scheduling).
- Benefits are highly unlikely to arise: NEMO designation ensures sound financial systems are in place to avoid NEMO failure. A designation criteria could provide a minimum notice period to ensure the relevant MSs can provide alternative solution in case of NEMO retirement. Furthermore, according to ACER, the amendments proposed regarding NEMO designation and passporting entail a "reduced risk of being left without a NEMO".

Unlikely benefits

**High costs** 

Cost of a trading platform

Cost of personnel

Signing contracts with all TSOs

Signing contracts with all market participants

LRN used if all NEMOs simultaneously fail

LRN used if all NEMOs simultaneously retire





A cost-benefit analysis establishing the necessity or cost-effectiveness of a Last Resort NEMO has not been produced.

## The continuity of MCO services cannot be cost-effectively solved through the introduction of a regulated pan-European last resort NEMO

#### ACER's Last Resort NEMO proposal leaves some key questions unanswered:

How to manage conflict of interest in assigning the LRN nomination to NEMOs/TSOs?

Would be assigned the temporary voting powers for its BZs?

Which entity would non-MCO functions be assigned to?

How would costs be recovered?

Ultimately, a Last resort NEMO could lead to the creation of a monopoly pan-European NEMO further down the line, with unproven necessity



## Critical review of ACER's proposal: costs

### Critical review of ACER's proposal: Cost of transition

1. Implementation would take time, and costs are high

Creating **new MCO entities** in charge of **complex tasks** requires...

...Building the **necessary skills** of the new MC operators...

...Building resilient infrastructure...

... which has a **high cost** and **could take years** to implement.

- 2. Transition arrangements would increase implementation costs significantly
- During the transition period, the current framework would run in parallel with the future entities which could be in place for a long time. As a result:
  - 1. The current MCO cost\* would be increased during the transition period (parallel runs)
- 2. Ongoing and future implementations would be disrupted and delay the delivery of market coupling benefits to consumers and markets

3. Added time and resources needed by transition in current MCO parties resulting in inefficiencies at TSOs and NEMOs level

4. For SIDC, need to potentially **rebuild the infrastructure** to avoid private ownership





### Critical review of ACER's proposal: Cost of transition

3. Implementation would disrupt future implementations

According to Annex 3 of the ACER Recommendation "The introduction of this new entity may cause severe damages in the collaboration of all parties hampering future developments".



### Critical review of ACER's proposal: Cost of inefficiencies

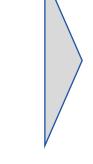
#### **Inefficiencies identified with ACER's proposal**

Infrastructure



- The exiting infrastructure has evolved to accommodate increasing volumes and market coupling over the years.
- This infrastructure would remain unused which is inefficient.

HR



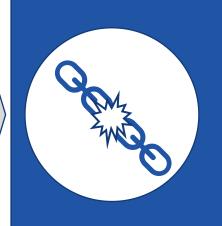
- NEMOs have direct access to market participants, performing MCO tasks with market and local understanding
- This fosters innovation in algorithms and interface performance, trading product development reflected in market coupling performance
- Unbundling MCO functions loses this source of synergy which improves market coupling



### Critical review of ACER's proposal: Cost from higher operational risks



Proposed changes introduce additional and unnecessary interfaces between TSOs, NEMOs, and the MCO entities



This adds potential sources of failure in the process, by lengthening the chain of necessary operations and communications



**Establishing a SLE clearly introduces a single point of failure**, unless the right level of redundancy in calculation and IT infrastructure is determined. The assessment of the right redundancy to ensure operational security as well as the associated costs has not been made.



## All TSOs and NEMOs\* counterproposal

<sup>\*</sup> The slides do not reflect the position of NASDAQ.



## The current organisation has been successful in delivering increased welfare to market participants

- The largest market integration and the most reliable system in the world thanks to a common energy regulatory framework, interconnected networks and integrated markets.
  - A resilient, liquid and well-functioning market connecting Member States

Tight cooperation among NEMOs and TSOs



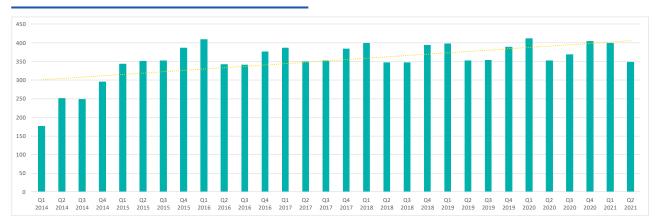


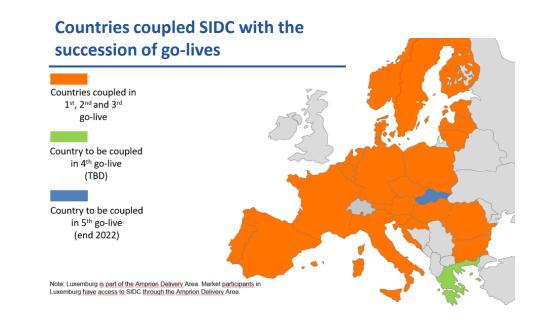
The largest market integration and the most reliable system in the world thanks to a common energy regulatory framework, interconnected networks and integrated markets.

Since first go-live in 2014, the limited regional project has grown into fully pan-european single Day-Ahead Coupling.

Since go live in June 2018, SIDC has been extended to 23 countries; extension to the last 2 countries depends on the development of the local systems

### Single Day Ahead market coupling clearing volumes (TWh), 2014-2021







#### A resilient, liquid and well-functioning market connecting Member States

### Operational track record

#### **Success rates**

SDAC

3 partial decoupling incidents in almost 8 years of operation (1 out of 1000 sessions)



**SIDC** 

~37h unplanned downtime visible to the market in 3.5 years of continuous operation





#### **Tight cooperation among NEMOs and TSOs**

#### NEMOs and TSOs were proactive in implementing market coupling since day one



 Market coupling is historically a bottom up TSOs and NEMOs coordinated initiative with a continuous governance improvement even before CACM Framework Guidelines were drafted

#### NEMOs and TSOs are proactively working on a new governance for MCO, day-ahead and intraday.



- Process started in 2019
- It continued in 2020 2021 despite COVID-19
- Institutional and working level relations between NEMOs and TSOs are further strengthening

#### NEMOs and TSOs → One sole voice



- In governance: Market Coupling Steering Committee meetings
- In contractual reality, TSOs and NEMOs have the same equal responsibility for MCO assets
- Higher degree of expertise TOGETHER
- Mutual trust



## TSOs and NEMOs counterproposal builds on the proven successes of the MCO organisation and introduces improvements

TSOs and NEMOs built an "evolutionary" counterproposal that addresses each of the shortcomings



**Slow implementation** 

 Revised more efficient governance to ACER's proposal



Difficult regulatory oversight and conflict of interest

- Each NEMO and TSO responsible for MCO
- Joint noncompliance assessment by all-NRAs



**Risky operational security** 

- Maintaining rotational arrangement
- Local procedures more beneficial than Last Resort NEMO



Possible absence of MCO services in some bidding zones

NEMO
 designation
 criteria and notice
 period



# Evolutionary proposal from NEMOs and TSOs improves the speed of implementation through revised governance in line with ACER's proposal

#### **Evolutionary proposal**

#### Joint Qualified Majority Voting\* [ = ACER's proposal]

Decision made when "All NEMO arrangements" and "All TSOs arrangements" coincide. This is built on the current "Joint Governance arrangements".

If a decision is not reached, all NEMOs and all TSOs vote based on the Joint QMV rule.

#### **Qualified Majority Voting among NEMOs**

NEMO QMV is computed assigning 1 vote to each NEMO and is reached when 75% of votes converge.

Qualified Majority Voting among TSOs [ = ACER's proposal]



Evolutionary proposal from NEMOs and TSOs will abate cases for escalations and accelerate the decision-making process, eliminating blocking positions by individual parties.



**Tighter control of implementations** with the **regular update of Yearly Workplan** to ACER and NRAs, including:

- Planning of all projects included in the Roadmap;
- Planning of local testing;
- Clear indication of responsible parties and timings;
- Periodic reporting to NRAs/ACER/EC

<sup>\*</sup> See also MC SC press release (TSOs and NEMOs significantly enhance their cooperation around market coupling in the day-ahead and intraday timeframe (entsoe.eu))





# Evolutionary proposal from NEMOs and TSOs provides better regulatory oversight through improved accountability without a complete overhaul of the current organisation

#### **Evolutionary proposal**

- MCO function tasks will be jointly decided and implemented by all NEMOs and TSOs.
- Each NEMO and TSO must be responsible for any non-fulfilment of MCO function task jointly decided and implemented.
- Any non-compliance related to the MCO function would be jointly assessed by All NRAs.

CACM amendments should provide all NRAs with a sound legal framework to perform joint assessment of non-compliance, whereby NRAs coordinated assessment would be the basis for national enforcement in case of non-fulfilment of MCO function changes

In the current CACM framework, all NRAs already coordinate their position for the approval of TCM. For instance, with respect to topics like "Aggregated Curves" and "Transit Shipping", all NRAs have formalised common positions on CACM implementation



**Evolutionary proposal from NEMOs and TSOs improves regulatory oversight** with **additional provisions for accountability**, as well as through a **regulation of arrangements for Clearing and Settlement** 





## **Evolutionary proposal from NEMOs and TSOs maintains a rotational model to avoid decoupling due to central MCO function**



**Evolutionary proposal:** Maintaining a rotational system across NEMOs for the MCO function

1. The 3 SDAC partial decoupling issues were caused by technical failures at local level

2. There are regional disparities in operational measures, due to different regional requirements/ models (e.g. auction timings)

3. The rotational system is beneficial: in the past, SDAC solutions have been found by NEMOs other than the Coordinator/Back up

Past decoupling issues had to be solved locally and local disparities will remain, requiring decentralised organisation



#### **Conclusion**

- 1. The organisation of the MCO has to be revised in a manner coherent with the objectives of article 3 of the CACM regulation, notably fostering operational security.
  - 2. TSOs and NEMOs' proposal answers the perceived shortcomings of the current organisation in a secure and non-disruptive way.
    - **3. TSOs and NEMOs call for a detailed impact assessment of options** proposed by stakeholders before any decision is made on the revision of the MCO organisation in the CACM regulation
      - **4.** ACER's proposal for the revision of the MCO should be line with such legal principles as subsidiarity/proportionality, freedom to conduct a business and boundaries of implementing acts



### **Glossary**

- "API": application programming interface
- "BZ": bidding zone
- "CCP": central counterparty clearing house
- "CMM": capacity management module
- "DAOA": day-ahead operation agreement
- "EC": European Commission
- "EU": European Union
- "HVDC": high-voltage direct current
- "IDOA": intraday operation agreement
- "JDMB": joint decision-making body
- "MCO": market coupling operation
- "MCSC": market coupling steering committee
- "MS": member State
- "NEMO": nominated electricity market operator
- "NRA": national regulatory authority
- "SDAC": single day-ahead coupling
- "SIDC": single intraday coupling
- "SM": shipping module
- "SOB": shared order book