REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

on the development of single day-ahead and intraday coupling in the Member States and the development of competition between NEMOs in accordance with Article 5(3) of Commission Regulation 2015/1222 (CACM)

{SWD(2018) 376 final}
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I. Introduction

On 14 August 2015 the Commission Regulation (EU) 2015/1222 establishing a Guideline on Capacity Allocation and Congestion Management (CACM) entered into force\(^1\). Pursuant to Article 5(3) of CACM the Commission shall forward a report to the European Parliament and the Council in accordance with Article 24 of Regulation (EC) No 714/2009 on the development of single day-ahead and intraday coupling in the Member States, with particular emphasis on the development of competition between nominated electricity market operators (NEMOs).

Pursuant to Article 5(3) CACM the Commission shall, on the basis of that report, notably evaluate if the exemption to allow national legal monopolies\(^2\) or the continued refusal of a Member State to allow cross-border trading by a NEMO designated in another Member State\(^3\) is still justified. In case the Commission deems that this is not the case, it may consider appropriate legislative or other appropriate measures to further increase competition and trade between and within Member States. The Commission shall also evaluate the governance of the single day-ahead and intraday coupling, with particular emphasis on the transparency of the market coupling operator (MCO) functions carried jointly by the NEMOs. If the Commission deems that there is ambiguity in carrying out the monopolistic MCO functions and other NEMO tasks, the Commission may consider appropriate legislative or other appropriate measures to further increase transparency and efficient functioning of single day-ahead and intraday coupling.

As part of the monitoring of the progress with the development of day-ahead and intraday coupling made in the last years and in accordance with Article 5(3) of the CACM Regulation, the Commission forwards this report and the accompanying staff working document to the European Parliament and the Council. The particular focus of this report is on the development of competition between NEMOs, while the Commission also provides a preliminary assessment and evaluation of the governance of single day-ahead and single intraday coupling established by the CACM Regulation, with particular emphasis on the transparency of the MCO functions carried jointly by the NEMOs. A more detailed description of the Commission's assessment is presented in a Staff Working Document accompanying this report\(^4\). This report is without prejudice to possible future conclusions based on further experience notably with the implementation of the single intraday coupling.

II. Main drivers for the single day-ahead and single intraday coupling

In order for the single day ahead and single intraday coupling to be implemented, several actors and functions play a crucial role.

To implement single day-ahead and intraday coupling, the available cross-border capacity needs to be calculated in a coordinated manner by the Transmission System Operators (TSO). For this purpose, the TSOs have to establish a common grid model including estimates on generation, load and network status for each hour. The available capacity should normally be calculated according to the so-called flow-based calculation methodology, which takes into account that electricity can flow via different

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\(^1\) OJ L 197, 25.7.2015, p. 24–72.
\(^2\) See Article 5(1), first subparagraph of CACM.
\(^3\) See Article 5(1), third subparagraph of CACM.
\(^4\) SWD(2018) 376
paths and optimises the available capacity in highly interdependent grids. The available cross-border capacity is one of the key inputs into the further calculation process. In this process all Union bids and offers are collected and they are matched by power exchanges, taking into account available cross-border capacity in an economically optimal manner. Single day-ahead and intraday coupling ensures that power usually flows from low-price to high-price areas.

The MCO is a function assigned to power exchanges, i.e. the NEMOs, by CACM. This function should use a specific algorithm to match bids and offers in an optimal manner. The results of the calculation should be made available to all NEMOs on a non-discriminatory basis. Based on the results as calculated by the MCO, the NEMOs should inform their clients of the successful bids and offers and the energy should then be transferred across the network according to the results of the capacity calculation.

For efficiency reasons and in order to implement single day-ahead and intraday coupling as soon as possible, CACM encourages the use of existing market operators and already implemented solutions where appropriate, without precluding competition from new operators. However, the Commission, in cooperation with the Agency for the Cooperation of Energy Regulators (Agency) may create or appoint a single regulated entity to perform common MCO functions relating to the market operation of single day-ahead and intraday coupling.

In order to promote the completion and efficient functioning of the internal market in electricity and to ensure the optimal management, coordinated operation and sound technical development of the electricity transmission system in the Union, close cooperation between TSOs, NEMOs and national regulatory authorities (NRAs) is essential. In particular, synergies arising from existing capacity allocation and congestion management projects should be exploited which have been contributing to the development of the internal market in electricity.

III. Summary of the analysis

Regarding the single day-ahead coupling, the so-called "Price Coupling of Regions" (PCR) solution, designed by a regional project before the entry into force of CACM, served as basis for the implementation of the pan-European single day-ahead coupling. Even though the PCR is by now applied in the vast majority of the Member States, the system regularly needed modifications in light of the increasing operational complexity in recent years, and further changes are still necessary in order for the PCR to become fully CACM compliant.

Regarding the development of the single intraday coupling, the Cross-Border Intraday (XBID) project is the basis for the implementation of the pan-European single intraday coupling under CACM. During its development phase not all TSOs and NEMOs form part of the XBID project, but the remaining TSOs and NEMOs were already associated in the development of the project and adhered to it in order to comply with CACM and the MCO plan. Such adherence took effect from the launch of the XBID on 12 June 2018 covering at a first stage 14 European countries. The XBID project will enable the single continuous intraday trading with a stepwise approach across the entire European Union.

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5 Recital 4ff of CACM.
6 Recitals 14 and 15 of CACM.
7 Recital 25 of CACM.
Regarding the development of competition between NEMOs, so far the majority of the Member States bound by CACM decided to apply a competitive NEMO model, i.e. the default model for NEMO designation as prescribed in CACM. Since the entry into force of CACM the number of power exchanges which are willing to become active in other Member States has increased. However, competition in the single day-ahead and single intraday coupling will, once applied, still be limited, due to the existence of legal monopolies in several countries.

On the governance structure of the market coupling projects, the existing solutions (PCR and XBID) had a specific governance structure, as they started on the basis of voluntary early implementation projects, whereby a group of TSOs and power exchanges was jointly leading these projects. The CACM Regulation sets a general framework for such cooperation and provides some principles to avoid discrimination, while the development of the details of the cooperation was left to the NEMOs, in cooperation with TSOs. At the same time CACM assigns certain tasks to NEMOs for developing and operating the so-called MCO functions for the single day-ahead and single intraday coupling. The MCO function is not part of the competitive activities of the NEMOs, but it is designed as a regulated function that ensures the efficient matching of orders within and across bidding zones for all NEMOs in the European Union through the implicit allocation of cross-zonal capacity. Several complex technical methodologies and terms and conditions have to be developed and implemented by NEMOs and/or TSOs and approved by NRAs at a pan-European, regional or national level in order for the MCO function to fulfil its tasks.

The implementation of the single day-ahead and intraday coupling has faced delays so far due to several challenges related to the governance, such as the increasing number of involved parties, the need for new arrangements for cost sharing and cost recovery in accordance with CACM and other governance issues, such as the need to find adequate decision-making rules. Other challenges may also arise in terms of efficiency in the operation of the algorithm with the increased number of NEMOs competent to perform these tasks, and new functionalities required to comply with CACM in future. NRAs have to ensure the ability of the NEMOs, or of a third party assigned with this task, to be able to perform the MCO function in accordance with the legal framework.

A complexity in the implementation of the MCO plan lies also in the fact that under CACM, NEMOs are mainly responsible for the development of the single-day ahead and single intraday coupling solutions, while the TSOs are mainly responsible for the calculation and allocation of cross-zonal capacity. A clear determination of tasks, responsibilities and cost sharing/cost recovery arrangements may help to allow for a smoother cooperation between NEMOs and TSOs. Today, the concrete arrangements depend on TSOs/NEMOs proposals and approvals at pan-European, regional or sometimes national level. Experience gathered so far shows that legal uncertainties around issues such as cost sharing or cost recovery, and a lack of harmonisation of governance-related issues led to delays and significant disagreement among relevant parties at several occasions.

In addition, the implementation of the various methodologies required for the market coupling has proven to be challenging. While deciding on such matters, it is essential to ensure that NEMOs are treated in a non-discriminatory way and that the current solutions are compliant with the CACM requirements (or they can be further developed to be compliant).
IV. Preliminary conclusions

The Commission’s experience with NEMOs competition remains limited at this date, notably due to the delay in the implementation of all regulatory and technical steps necessary to allow competition among NEMOs in the single day-ahead and the single intraday coupling. From the preliminary experience so far, notably in the field of day-ahead market coupling, the competition model could be implemented by the majority of Member States in the Union without major obstacles. Thus, there are no manifest reasons to change the approach chosen by CACM and to exclude competition at this stage.

At the same time, due to the ongoing implementation at the time of publication of this report and as NEMOs competition has not yet started or shown its full effect in the Member States where no monopoly exists, the Commission will not take a conclusive view at this stage on whether it is justified to abolish the possibility for Member States to provide for a legal monopoly. The possibility to apply the monopoly model and to refuse the trading services by a NEMO designated in another Member State is still considered as an exception to the default competition model. However, the monopoly NEMO exception under the CACM does not impair or limit in any way the application of the competition rules enshrined in the Treaty on the Functioning of the European Union (Treaty). In particular, the application of the Treaty’s provisions on competition apply broadly to the conduct of the NEMOs on the market, including risks of cross-subsidisation, and any Member State measure granting NEMO’s exclusive rights. Therefore, as non-discrimination and a level playing field among competitive and monopoly NEMOs need to be ensured, the Commission under the Treaty’s and CACM provisions will continue to monitor the progress of day-ahead and intraday market coupling, as well as the effects of NEMO competition in the European Union.

Regarding the governance of the single day ahead and single intraday coupling the preliminary analysis of the progress made so far shows that the roles and responsibilities of NEMOs and TSOs in the development and operation of the coupling solutions need to be better clarified. While CACM appoints NEMOs with the main responsibility for these tasks, TSOs should be more involved and have a decisive role in technical requirements related to capacity calculation and allocation. Moreover, the experience shows that the MCO function plays a central role for the completion of the target model and the enhancement of NEMOs’ competition. Therefore, the Commission sees a need to continue the discussion on the challenges faced so far and assess the various options for a potential change in the governance of the MCO function.

The Commission remains strongly committed to continuing the work towards the creation of the single day-ahead and single intraday coupling in order to bring further benefits to European citizens through market integration. When it comes to fully reaping the potential of cross-border trade, the best recipe remains the full and timely implementation of CACM.