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proposal

Multiple NEMO Arrangement (MNA) for the Croatian bidding zone in accordance with Article 45 and Article 57 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management

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THE CROATIAN TRANSMISSION SYSTEM OPERATOR, TAKING INTO ACCOUNT THE FOLLOWING,

Whereas

- (1) Croatian Transmission System Operator Plc., (hereafter referred to as “HOPS”) in its role as Transmission System Operator, has developed Multi Nemo Arrangement (hereafter referred to as “MNA”) for the Croatian bidding zone. These arrangements define the framework for cooperation between HOPS and the related Nominated Electricity Market Operators (hereafter referred to individually as “NEMO” and collectively as “NEMOs”) as well between related NEMOs.
- (2) MNA takes into account the general principles and goals set in Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management and its amendment by Commission Implementing Regulation (EU) 2021/280 of 22 February 2021 (hereafter referred to as the “CACM Regulation”). The goal of the CACM Regulation is the coordination and harmonization of capacity calculation and allocation in the day-ahead and intraday cross-border markets. To facilitate these aims, it is necessary to develop arrangements for providing non-discriminatory access to cross-zonal capacity in cases of more than one NEMO in one bidding zone.
- (3) This document is developed by HOPS in accordance with Article 45 and 57 of the CACM Regulation, which constitute the legal basis for this MNA and define its specific requirements for the MNA. Article 45 relates to the day-ahead capacity allocation and article 57 of the CACM Regulation has identical content but relates to the intraday capacity allocation:

“1. TSOs in bidding zones where more than one NEMO is designated and/or offers trading services, or where interconnectors which are not operated by TSOs certified according to Article 3 of Regulation (EC) No 714/2009 exist, shall develop a proposal for cross-zonal capacity allocation and other necessary arrangements for such bidding zones in cooperation with concerned TSOs, NEMOs and operators of interconnectors who are not certified as TSOs to ensure that the relevant NEMOs and interconnectors provide the necessary data and financial coverage for such arrangements. These arrangements must allow additional TSOs and NEMOs to join these arrangements.”
- (4) Article 2 (26) and 2 (27) of the CACM Regulation define the single day-ahead and intraday coupling:

“‘single day-ahead coupling’ means the auctioning process where collected orders are matched and cross-zonal capacity is allocated simultaneously for different bidding zones in the day-ahead market;”

“‘single intraday coupling’ means the continuous process where collected orders are matched and cross-zonal capacity is allocated simultaneously for different bidding zones in the intraday market.”

- (5) Article 4 (5) of the CACM Regulation states that:
- “A NEMO designated in one Member State shall have the right to offer day-ahead and intraday trading services with delivery in another Member State. The trading rules in the latter Member State shall apply without the need for designation as a NEMO in that Member State.”*
- (6) In regards to regulatory approval, Article 9(8) of the CACM Regulation states:
- “The following terms and conditions or methodologies and any amendments thereof shall be subject to individual approval by each regulatory authority or other competent authority of the Member State concerned:[...]*
- (d) where applicable, the proposal for cross-zonal capacity allocation and other arrangements in accordance with Articles 45 and 57.”*
- (7) Article 9(9) of the CACM Regulation requires that the expected impact of the MNA on the objectives of the CACM Regulation is described. The impact is presented below (points (8) to (13) of this Whereas Section).
- (8) The MNA contributes to and does not in any way hamper the achievement of the objectives of Article 3 of the CACM Regulation. In particular, this MNA serves the objectives providing non-discriminatory access to cross-zonal capacity (Article 3(j) of the CACM Regulation), creating a level playing field for NEMOs (Article 3(i) of the CACM Regulation) and respecting the need for a fair and orderly market and fair and orderly price formation (Article 3(h) of the CACM Regulation).
- (9) According to Article 77(1) of the CACM Regulation all clearing and settlement costs incurred by central counter parties and shipping agents shall be recoverable by means of fees or other appropriate mechanisms if they are reasonable and proportionate.
- (10) To ensure the effective implementation and operation of this MNA, close coordination between TSOs and NEMOs is essential according to Article 45 and Article 57 of the CACM Regulation. The content of this MNA was developed following a public consultation and in collaboration with all NEMOs who have been designated in Croatia at the time of submitting this MNA proposal to the Croatian national regulatory authority.
- (11) In Croatia, the role of the Electricity Market Operator is performed by a separate entity, Croatian electricity market operator Ltd. (HROTE). All NEMOs, central counterparties (“CCPs”) and shipping agent (“SA”) must comply with the provisions of the applicable regulation *Rules on electricity market organization* (Official Gazette of the Republic of Croatia, No. 107/19 and 36/20) and the Rules on wholesale electricity market organization which shall enter into force upon the termination of the validity of *Rules on electricity market organization* (Official Gazette of the Republic of Croatia, No. 107/19 and 36/20) (hereinafter collectively referred to as: “Market Rules”), which govern, inter alia the method for the implementation of public utility service of the electricity market operator.
- (12) In accordance with its role as the transmission system operator, HOPS is, at the time of adoption of these Rules, a member of Capacity Calculation Regions Core (hereafter referred to as “CCR Core”). For the execution of processes related to the day-ahead and intraday electricity markets, HOPS

utilizes the regional Coordinated Capacity Calculation tool (CCct), into which all Croatian CCR Core borders, have been included.

Croatian CCR Core borders:

Bidding Zone Border	TSOs	
HR – SI	HOPS	ELES
HR – HU	HOPS	MAVIR

- (13) For the single day-ahead coupling (SDAC), the single-market objectives are achieved by creating a NEMO trading hub for each designated NEMO within the Croatian bidding zone. For the purpose of the day-ahead price-coupling algorithm, no explicit cross-zonal allocation constraints are applied between NEMO hubs within the same bidding zone (i.e., hub-to-hub links inside the bidding zone are treated as unconstrained for the allocation process). This ensures that orders submitted to different NEMO hubs in the same bidding zone are equally considered when allocating cross-zonal capacity across bidding-zone borders, thereby supporting fair and orderly market functioning and price formation. Post-coupling arrangements (e.g., designation of preferred shippers, physical/financial shipping and settlement) ensure the physical and financial implementation of cross-zonal scheduled exchanges and complement the pre-coupling equal-access approach. During the pre-coupling phase the Coordinated Capacity Calculator (CCC) publishes the cross-zonal capacities (CZCs/ACs) used by NEMOs for market coupling processes, consistent with the MCO Plan and the MCO functions established under Article 7(3) of the CACM Regulation.
- (14) Regarding the intraday timeframe, a European project called “XBID Market Project” was launched by power exchanges in cooperation with the TSOs to create an integrated intraday cross-zonal market, enabling the implementation of the Single Intraday Market Coupling solution (SIDC). For the intraday continuous market coupling the objectives of the Article 3(i) and 3(j) of the CACM Regulation are met with Single Intraday Market Coupling (SIDC) continuous trading mechanism. In this process, all orders from all bidding zones and all NEMOs are entered into the Shared Order Book (SOB), and the Capacity Management Module (CMM) ensures that cross-zonal capacity is allocated in real time to each order, on a first-come-first-served basis. No specific additional arrangements are required for pre-coupling or matching phases in case of several NEMOs operating within a bidding zone. In addition to the continuous trading mechanism, three Intraday Auctions (IDAs) have been integrated into the Single Intraday Market Coupling (SIDC) process.
- (15) Regarding the objective of transparency and reliability of information (Article 3(f) of the CACM Regulation), the arrangements proposed in this MNA shall be the basis for market coupling in the most transparent way. With regard to the arrangements, reliability and transparency is ensured as data is provided allowing for all NEMOs to access this data and by following the verification process to ensure that correct data is used.
- (16) In conclusion, this MNA contributes to the general objectives of the CACM Regulation to the benefit of all market participants and electricity consumers.
- (17) Any future requirements or changes may arise as a result of newly adopted EU or Croatian national legislation or any other relevant change affecting the content of this MNA, which could impact the roles, responsibilities, or conditions applicable to NEMOs.

- (18) The rights and obligations, as well as the exercise of competences by NEMOs, CCPs, and SAs under this MNA, when delegated pursuant to CACM Regulation, shall remain subject to the Croatian national legislation. This MNA shall be interpreted and applied in conformity with such legislation and does not confer any additional rights beyond those envisaged by the Croatian national legislation. In case of delegation of tasks, each NEMO, CCP, and SA must comply with all conditions required under the Croatian national legislation for performing their respective roles in the Croatian market. These requirements fall outside the scope of this MNA, which applies only subject to such compliance.

SUBMITS THE FOLLOWING MNA PROPOSAL TO Croatian Energy Regulatory Agency:

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Article 1

Subject matter and scope

Arrangements described in this MNA concerning more than one NEMO in one bidding zone are in accordance with articles 45 and 57 of the CACM Regulation.

Article 2

Definitions and interpretation

1. For the purposes of this MNA, the terms used shall have the meaning of the definitions included in Article 2 of the CACM Regulation.
2. In addition, in this MNA, the following terms shall have the meaning below:
 - a) “Bidding Zone Reference Day-Ahead Price” means a reference price for the day-ahead timeframe, calculated by the TSO, in case of different NEMO Hub prices in the bidding Zone;
 - b) “Croatian NEMO” means a NEMO either designated in Croatia or designated in another Member State and allowed to offer trading services in the day-ahead and/or intraday timeframe(s) in Croatia (Passporting NEMO).
 - c) “Core Capacity Calculation tool” (hereafter referred to as “CCCT”) means the joint tool for coordinated calculation of cross-border transmission capacities in the Core capacity calculation region for day-ahead and intraday;
 - d) “Electricity Market Operator” means, HROTE Ltd., the legal entity designated by Croatian legislation to perform the public service of electricity market operator, responsible for market organization and the transparent functioning of the electricity market;
 - e) “NEMO Trading Hub” means a virtual trading point collecting all orders received by a NEMO with delivery in a specific scheduling area;
 - f) “Pre-coupling” means procedures before Market Coupling Operator (hereafter referred to as “MCO”) functions are executed for single day-ahead or intraday coupling;
 - g) “Post-coupling” means procedures after MCO functions have been executed for single day-ahead or intraday coupling;
 - h) “Single Day-ahead Price” means the price resulting from the MCO function for the day-ahead timeframe, i.e. the unrounded price prior to the application of rounding rules to calculate the price for individual NEMO Trading Hubs;
 - i) “Preferred shipper” (hereafter referred to as “pSA”) means the entity or entities with the task of transferring net positions between different central counter parties;
 - j) “Market time unit” (MTU) means the period for which the market price is established or the shortest possible common time period for the two bidding zones, if their market time units are different;
3. In this MNA, unless the context requires otherwise:
 - a) the singular indicates the plural and vice versa;
 - b) the headings are inserted for convenience only and do not affect the interpretation of this

- proposal and
- c) any reference in this MNA to EU or Croatian national laws, subordinate regulations, and general acts, as well as all definitions containing such references, shall be interpreted as references (or definitions) to the laws, subordinate regulations, and general acts that are in force at the time of the conclusion of this MNA, including their subsequent amendments and supplements, or to other regulations and acts that replace them, provided that such amendments and supplements, or later regulations and acts, may be applied to this MNA in accordance with their transitional and final provisions.

Article 3

Application of this MNA

This MNA applies to Pre-coupling, Coupling and Post-coupling arrangements, which shall enable more than one NEMO in the Croatian bidding zone access to cross-zonal capacity in the day-ahead and intraday timeframe.

Article 4

Single day-ahead coupling arrangements

1. Each NEMO offering services in Croatia shall be a full member of single day-ahead coupling and implement the single day-ahead coupling process in accordance with the CACM Regulation.
2. Each NEMO, CCP and SA providing services within Croatia bidding zone shall comply with all conditions and obligations laid down in *Market Rules*. Non-compliance with these provisions shall preclude the NEMO from carrying out any operational activities on the electricity market within the Republic of Croatia.
3. There shall be one hub for each NEMO per bidding zone. Such hub shall be connected to the order book of the concerned NEMO. There shall be no limitations as to how many transactions can take place between the hubs in a bidding zone. Each NEMO in the Croatian bidding zone shall send its orders to the single day-ahead price coupling.
4. Each NEMO shall ensure that the operation of the hubs and the submission of orders to the single day-ahead price coupling are carried out in accordance with harmonized technical and procedural requirements. These requirements shall include, but are not limited to, the alignment of operational timelines, communication protocols, and in line with the capacity calculation processes, ensuring consistent and non-discriminatory participation of NEMOs within the Croatian bidding zone.

Article 5

Pre-coupling arrangements for single day-ahead coupling

1. The relevant coordinated capacity calculator established in accordance with Article 27(2) of the CACM Regulation (hereafter referred to as “CCC”) shall be responsible for providing the cross-zonal

capacities (hereafter referred to as “CZC”) and allocation constraints (hereafter referred to as “AC”) for the Croatian bidding zone borders to the Market Coupling Operator (MCO) functions in accordance with Article 46(1) of the CACM Regulation, for the purpose of publication and allocation by the relevant NEMOs.

2. In accordance with Article 30(3) of the CACM Regulation, the Coordinated Capacity Calculator (CCC) shall deliver the validated cross-zonal capacities (CZCs) and, where applicable, allocation constraints (ACs) to the Market Coupling Operator (MCO) functions for the purpose of capacity allocation in the Single Day-Ahead Coupling (SDAC). Pursuant to Article 46(1) of the CACM Regulation, the relevant Transmission System Operators (TSOs) and the CCC shall ensure that the CZCs and ACs for the Croatian bidding zone borders are provided to all Nominated Electricity Market Operators (NEMOs) participating in the SDAC process, to be used as inputs to the price coupling algorithm in accordance with Article 47 of the CACM Regulation.
3. The relevant NEMOs shall be responsible for the necessary arrangements between them in order to process the information. Format and timing for sending of the CZCs and ACs to the MCO functions shall follow the corresponding single day-ahead coupling and/or NEMO procedures.
4. The CCC shall validate that the correct CZCs and ACs are used as input for the calculations by the MCO functions. The MCO functions shall provide relevant information back to the CCC to ensure that the CCC can make this validation.
5. Each NEMO offering services in the Croatian bidding zone shall submit the orders to the MCO functions in accordance with Article 47 of the CACM Regulation.
6. HOPS shall define the content, file formats and exchange protocols for data exchange between HOPS and the NEMOs in the Croatian bidding zone. Detailed information is provided within the relevant central, regional and local implementation guides and documents.

Article 6

Delivery and validation of single day-ahead results

Each NEMO offering services in the Croatian bidding zone shall deliver the single day-ahead coupling results to HOPS and the CCC in accordance with Article 48 of the CACM Regulation. HOPS is responsible for verifying that the results have been calculated within the validated CZCs and ACs. Each NEMO offering services in the Croatian bidding zone shall ensure and verify that the single day-ahead coupling results are based on the orders submitted by that NEMO and that these orders have been correctly represented in the coupling algorithm.

Article 7

Post-coupling: roles and responsibilities

1. In accordance with Article 7(1) and Article 68(1) and (2) of the CACM Regulation, each NEMO offering services in the Croatian bidding zone shall be responsible for ensuring clearing and settlement of energy exchanges resulting from the single day-ahead coupling. Such clearing and settlement shall be performed either directly by the NEMO acting as a Central Counter Party (CCP) or by a designated CCP acting on its behalf in accordance with Croatian national legislation.

2. In accordance with Article 68(3) and (6) of the CACM Regulation CCPs shall act as counterparties to each other for exchange of energy between them in accordance with the market coupling results with regard to the financial rights and obligations arising from these energy exchanges.
3. Under the “Preferred shipper” model to be used on the Croatian bidding zone borders, NEMOs must organise shipping either themselves, or by their CCPs.
4. If no agreement is reached, the shipping arrangements shall be decided by the regulatory authorities responsible for the bidding zones between which the clearing and settlement of the energy exchange is needed.
5. NEMOs or their designated CCPs shall designate their preferred shipper/preferred shipping agent (pSA). It is possible and permissible for a CCP to act as its own shipper. The pSA acts as physical counter party responsible for the delivery and receipt of energy between CCPs within or across bidding zones, in accordance with Article 68(6) of the CACM Regulation. The role of the pSA is limited to physical shipping; the financial settlement of both intra-zonal and cross-zonal energy exchanges remains under the responsibility of the CCPs.
6. The pSA of the delivering/exporting CCP is responsible for the activities of shipping to the receiving/importing CCP.
7. According to Article 68(7) and (8) of the CACM Regulation CCPs and/or their designated pSA, are responsible for the collection of congestion income, from both day-ahead and intraday markets, and if any, for transfer to the TSOs or to the entity acting on behalf of the TSOs according to the requirements of CACM Regulation.
8. The TSOs are responsible for ensuring the correct allocation and use of congestion income in accordance with the Congestion Income Distribution Methodology (CIDM) established under Article 73 of the CACM Regulation and approved by the relevant regulatory authorities.
9. HOPS in the Croatian bidding zone applies the principle of ‘Nomination on Behalf’ with respect to all scheduled exchanges resulting from Single Intraday Market Coupling (SIDC) of Intraday Continuous Trading.
10. Even for the scheduled exchanges where the principle of Nomination on Behalf is applied, SAs shall submit their own nominations to HOPS for the purpose of backup. HOPS, acting as the Croatian TSO, shall ensure that all such nominations are consistent with and aligned to the validated Market coupling results in SIDC– Rights documents issued by CORE TSO. In case of inconsistencies due to late, wrong or non-nomination of HOPS in case of Nomination on Behalf adjacent TSOs will align on correct values.
11. Each CCP and/or their SA offering services in the Croatian bidding zone shall be compliant with Market Rules and shall comply with the terms and conditions set for balancing and imbalance settlement.

Article 8

Post-coupling: shipping arrangements

1. The CCPs acting in the Croatian bidding zone shall establish efficient and cost-effective arrangements for clearing and settlement between them in accordance with Article 77(2) of the CACM Regulation.
2. The shipping of energy exchanges resulting from the single day-ahead or single intraday coupling shall consist of:

- a. physical shipping: physical energy delivery through nominations according to the outcome of the single day-ahead or single intraday coupling between CCPs; and
 - b. financial shipping: financial settlement of the single day-ahead or intraday coupling results between CCPs.
3. The CCP or its designated pSA shall provide, based on the market coupling results and scheduled exchanges, all relevant nominations to be compliant with *Market Rules* and with the terms and conditions set for balancing and imbalance settlement. The nominations shall consist of
 - a. Internal commercial trade schedules between each CCP and its market participants, whose trades have been matched,
 - b. Internal commercial trade schedules between the CCPs, operating in the Croatian bidding zone,
 - c. External commercial trade schedules (cross-border nominations) to CCPs or pSAs in coupled scheduling areas outside of the Croatian bidding zone.

NEMOs shall ensure that all data and information provided to the Electricity Market Operator and HOPS are consistent with the data received from Single Day-Ahead and Intraday Market Coupling. In the event of any discrepancy, the data by HOPS shall prevail.

Article 9

Decoupling cases

1. Each NEMO offering services in Croatia for single day-ahead coupling shall allow its orders to be used for calculating and publishing unique clearing price for the Croatian bidding zone in accordance with the Article 45 and the Article 39(2) of the CACM Regulation. This obligation also applies in the fallback situation, in line with the procedures defined under Article 50 of the CACM Regulation.
2. Each NEMO offering services in Croatia for single day-ahead coupling shall allow its orders to be used under conditions set in Article 10(1) of this MNA for calculating and publishing one unconstrained reference price for each market time unit (hereafter referred to as “MTU”).
3. Different cases of decoupling situations leading to different consequences. The following paragraphs describe the main cases of decoupling.
4. A “normal coupling” occurs when the Croatian Bidding Zone is coupled on all its bidding zone borders and all Croatian NEMO Trading Hubs are coupled to the SDAC:
 - In such case the market coupling algorithm must consider that there is in effect no exchange limitation for matching orders from different NEMO Trading Hubs in the Croatian bidding zone. For day-ahead market coupling it results in a Single Day-ahead Price for the Croatian bidding zone.
5. A “partial decoupling” occurs when at least one of the following situations happens, but not both at the same time:

- a) the Croatian Bidding Zone is decoupled at least one (but not all) of its bidding zone borders, or
- b) at least one (but not all) Croatian NEMO Trading Hubs is decoupled from the Single Day-Ahead Coupling (SDAC).

In the event of “partial decoupling”:

- The market coupling algorithm shall continue to match orders from NEMO Trading Hubs that remain coupled, considering that there are no internal exchange limitations within the Croatian bidding zone between these hubs.
- A Single Day-Ahead Price shall still be calculated and published for the Croatian bidding zone in accordance with Article 39(2) CACM.
- In the situation that at least one (but not all) Croatian NEMO Hub is decoupled from the SDAC, all cross-zonal capacity is allocated in the SDAC via the coupled Croatian NEMOs.
- In the situation that Croatia is decoupled on at least one (but not all) of its bidding zone borders, the fallback solution for explicit allocation of cross-zonal capacity will be activated.
- Croatian NEMOs are responsible for ensuring access to the market coupling process for their exchange members. They must perform best efforts to avoid side effects of a technical issue within one Croatian NEMO preventing other Croatian NEMOs to participate to the market coupling; and
- For day-ahead market coupling, the Croatian NEMO(s) not participating in the market coupling shall not organise local auction but may offer to their market participants the possibility to have at least some of their volumes on their platform(s) settled at the Single Day-ahead Price by way of volume-allocation.

6. A “full decoupling” occurs when:

- a) the Single Day-Ahead Coupling (SDAC) auction is cancelled for the Croatian Bidding Zone, and
- b) no Croatian NEMO Trading Hub is coupled to the SDAC.

In the event of a full decoupling:

- Orders of Croatian NEMO Trading hubs cannot be matched with orders of NEMO Trading hubs in other bidding zones;
- Unless a fallback solution providing a Single Day-Ahead Price for the entire Croatian Bidding Zone is agreed by all Croatian NEMOs and HOPS, or is mandated by European or national law, the price of each NEMO Trading Hub shall be determined independently by the respective NEMO. This may result in different prices per NEMO Hub until such a fallback solution is implemented; and
- Where applicable, fallback solutions for explicit allocation of cross-zonal capacity shall be activated for the decoupled bidding zone borders, in accordance with Article 50 CACM and relevant national procedures.
- If applicable, fallback solutions reducing the risk of entering into a “full decoupling” situation should preferably and where possible be implemented in the MCO function.

Article 10

Price Reference for the Croatian Bidding Zone

Reference price for SDAC

1. For the day-ahead timeframe each Croatian NEMO shall be responsible for its price publication in accordance with Articles 39(2) and Article 62(2) of the CACM Regulation.
2. Except in the case of a full decoupling situation as defined under Article 9(6) of this Agreement, there shall be only one Single Day-Ahead Price applicable for the Croatian Bidding Zone, determined through the Single Day-Ahead Coupling (SDAC).
3. In the event of full decoupling resulting in different prices for different NEMO Trading Hubs of the Croatian bidding zone:
 - a. HOPS shall calculate a Bidding Zone Reference Day-Ahead Price for the Croatian bidding zone for each MTU unless and until all NEMOs and all TSOs agree and implement a fallback solution which provides for a Single Day Ahead Price in the Croatian Bidding Zone also in a “full decoupling” situation or European or national law or regulation mandates such a fallback solution. This Bidding Zone Reference Day-Ahead Price will be used by HOPS where required to fulfil its obligations.
 - b. The Bidding Zone Reference Day-Ahead Price is calculated as the volume weighted average price of the prices of the NEMO Trading Hubs in the Croatian bidding zone per relevant market time unit.
 - c. The orders of the members on a certain NEMO Trading Hub will be settled at the price of the concerned NEMO Trading Hub.
4. For the day-ahead timeframe each Croatian NEMO must provide HOPS the data from its NEMO Trading Hub required for the determination of the Bidding Zone Reference Day-Ahead Price for the Croatian bidding zone per relevant market time unit.

Table: Decoupling Scenarios and applicable prices

Case	Price on each NEMO Trading Hub	Bidding Zone Reference Day-Ahead Price
Croatia coupled on all its bidding zone borders	Single Day-ahead price	Single Day-ahead Price
Croatia partly decoupled	Single Day-ahead price	Single Day-ahead Price
Croatia fully decoupled	Price determined by each Croatian NEMO	Bidding Zone Reference Day-Ahead Price

Article 11

Price Reference for the Croatian Bidding Zone

Price for Intraday Timeframe

1. No reference price is applicable for intraday auctions (IDA's), as there is no local auction as a fallback in the event of partial or full decoupling of the Croatian Bidding Zone by Croatian NEMOs. In such cases, either at least one NEMO remains coupled and the Croatian price for the respective IDA is the clearing price from that auction, or there is no Croatian price determined for that IDA.

Article 12

Change of bidding zone configurations

1. Each NEMO offering services in Croatia for single day-ahead coupling shall be able to implement a change of bidding zone configuration in accordance with Article 32 and 33 of the CACM Regulation in its procedures no later than 4 weeks after the request for a change has been received.

Article 13

Single intraday coupling arrangements

1. Each NEMO offering services in Croatia shall be a full member of single intraday coupling (SIDC) and implement the single intraday coupling process in accordance with the CACM Regulation and Croatian national legislation.
2. There shall be one hub for each NEMO per bidding zone and each hub shall be connected to the order book of the concerned NEMO. There shall be no limitations as to how many transactions can take place between the hubs in a bidding zone.

Article 14

Pre-coupling arrangements for single intraday coupling

1. The CCCs shall provide CZCs and ACs for the Croatian bidding zone borders to the capacity management module (hereafter referred to as "CMM") in accordance with Article 58 of the CACM Regulation for IDCT.
2. The CCCs shall provide CZCs and ACs for the Croatian bidding zone borders to the capacity management module (hereafter referred to as "CMM") in accordance with Article 58 of the CACM Regulation for IDAs to relevant NEMOs for the purpose of processing in accordance with Article 7(2) of CACM Regulation the provided CZCs and ACs as part of the MCO functions to be carried out jointly with all NEMOs.
3. For IDAs, the relevant NEMOs shall be responsible for the necessary arrangements between

them in order to process the information. Format and timing for sending of the CZCs and ACs to the MCO functions shall follow the corresponding single day-ahead coupling, Intraday auctions and/or NEMO procedures.

4. For IDAs, the CCC shall validate that the correct CZCs and ACs are used as input for the calculations by the MCO functions. The MCO functions shall provide relevant information back to the CCC to ensure that the CCC can make this validation
5. Each NEMO offering services in the Croatian bidding zone shall submit the orders for a given market time unit for single matching immediately after the orders have been received from the market participants in accordance with Article 59(5) of the CACM Regulation.

Article 15

Delivery of single intraday results

1. Each NEMO offering services in the Croatian bidding zone shall deliver the single intraday coupling results to HOPS and the CCC in accordance with Article 60 of the CACM Regulation.
2. The results shall include for each market time unit net positions for the relevant NEMO Trading Hub in the Croatian bidding zone and net scheduled flow for each bidding zone border.

Article 16

Post-coupling arrangements for single intraday coupling

1. In accordance with Article 7(1) of CACM Regulation, the NEMOs shall be responsible for acting as CCPs for clearing and settlement of the exchange of energy in accordance with Article 68(1) and Article 68 (2) of the CACM Regulation.
2. Each CCP shall clear and settle the contracts, which are resulting from single intraday trading between the market participants in accordance with the CACM Regulation, in particular Article 68, and the applicable clearing and settlement arrangements. Based on the information resulting from the single intraday coupling, the CCP shall provide, the relevant post-coupling information necessary for NEMOs to fulfil their obligations under the *Market Rules*. Nominations shall consist of information related to transactions executed by market participants on the relevant NEMO, NEMO Hub net position and information related to cross-border nominations.
3. The CCPs acting in the Croatian bidding zone shall agree on clearing and settlement arrangements between them. The clearing and settlement shall be done in an efficient manner with as low cost as possible.
4. In accordance with Article 68 (3) and 68(6) of the CACM Regulation, CCPs shall act as counterparties to each other for the exchange of energy between bidding zones with regard to the financial rights and obligations arising from these energy exchanges. The preferred shipping agent shall act as a counter party between the different central counter parties for the exchange of energy.

Article 17

Fallback arrangements

1. Fallback procedures shall be initiated in accordance with Art. 50 of CACM Regulation.
2. In the case of a decoupling of one, more or all Croatian NEMO Trading Hubs from the SDAC or SIDC, regardless of whether SDAC or SIDC remains coupled with regard to the other NEMO Trading Hubs partially or fully decoupled on the level of Bidding Zones, the SDAC and/or SIDC fallback arrangement shall be applied to the decoupled NEMO Trading Hubs within the Croatian Bidding Zone.

Article 18

Cost sharing and cost recovery

1. According to Article 45 and 57 of the CACM Regulation, relevant NEMOs offering services in the single day-ahead and intraday coupling shall provide the necessary financial coverage for the arrangements concerning more than one NEMO in one bidding zone.
2. According to Article 77(1) of the CACM Regulation all costs incurred by CCPs and shipping agents shall be recoverable by means of fees or other appropriate mechanisms if they are reasonable and proportionate.
3. The cost sharing and cost recovery for costs incurred by designated NEMOs in Croatia for establishing, amending, and operating the single day-ahead and intraday market coupling does not fall within the scope of this proposal and shall be comprehensively addressed in a separate subsequent proposal.

Article 19

Publication and implementation of MNA

1. HOPS shall publish the MNA without undue delay after the national regulatory authority has approved the MNA Proposal.
2. The implementation of the MNA for the Croatian bidding zone is subject to:
 - a. regulatory approval of this MNA proposal;
 - b. compliance with TSO requirements concerning data exchange and scheduled exchanges and compliance to the Market Rules and
 - c. set-up of the contractual arrangements pursuant to Article 20 of this MNA.
3. The implementation of the MNA and consequently non-discriminatory access to cross-border capacities for all NEMOs active in Croatia for both the day-ahead and intraday timeframe shall be granted at the earliest possible date.
4. According to Article 9(13) of the CACM Regulation, HOPS may propose amendments to this MNA.

Article 20

Contractual arrangements

1. To ensure the implementation of this MNA, a contractual arrangement needs to be put in place between HOPS and each of the Croatian NEMOs. In case the CCPs and/or SAs are different entities than the Croatian NEMOs, additional contractual arrangements will be set up with HOPS, provided that such entities have complied with all applicable requirements under Croatian national legislation necessary for the performance of their delegated tasks on the Croatian market.
2. The contractual arrangements are divided into local and regional arrangements. The local contractual arrangements are to be set-up between HOPS and the relevant entities (NEMOs and/or CCPs and/or SA) active in the Croatian bidding zone. The regional arrangements are to be set up between HOPS, the relevant entities (NEMOs and/or CCPs and/or SA) active in the Croatian bidding zone and all other TSOs and/or relevant entities (NEMOs and/or CCPs and/or SA) in the region to which the arrangement applies.
3. HOPS and the relevant entities (NEMOs and/or CCPs and/or SA) active in Croatia, where required together with the TSOs and relevant entities (NEMOs and/or CCPs and/or SA) in other countries, will further elaborate on the governance principles to be included in the contractual arrangements, including, if applicable, principles on cost sharing and recovery in line with TITLE III, Chapter 3 of the CACM Regulation.
4. The terms and provisions for submitting internal and cross-border nominations to HOPS are described in the Balance Responsible Party (BRP) contract and consequently all entities submitting nominations towards HOPS in the framework of the single day-ahead and intraday coupling processes need to sign such a BRP contract.
6. List of the contractual arrangements will be provided by HOPS during the implementation phase.
7. This MNA proposal does not consider the contractual arrangements between the NEMOs and the entities defined as CCP or SA for the establishment of the necessary links between these entities, which remain the responsibility of the respective parties.

Article 21

Language

The reference language for this MNA shall be English. For the avoidance of doubt, where HOPS needs to translate this MNA into Croatian, in the event of inconsistencies between the English version published by HOPS in accordance with Article 9(14) of the CACM Regulation and any version in Croatian, HOPS shall, in accordance with national legislation, provide the relevant national regulatory authority with an updated translation of the MNA.