OPERATIONAL PROCEDURE

Procedure regarding the operation of the Intra-day Electricity Market / Intra-day Auctions

Written by:

Societatea Operatorul Pieței de Energie Electrică și de Gaze Naturale, OPCOM S.A.

13 June 2024

Translation disclaimer:

This translation has been carried out for the exclusive purpose of enabling the market rules to be read in English.

This translation shall not be considered binding for the Market Operator or Market participant under any circumstances or at any time. In the event of any discrepancies between this translation and the Romanian document, the Romanian version shall prevail.

REVISION CONTROL LIST

Revised document:

No.	Rev.	Data	The revision refers to changes made in accordance with the provisions of:

TABLE OF CONTENTS

1. SUBJECT MATTER

1.1. The aim of the procedure is to describe the trading process at a 15-minute resolution in three organized auctions for a delivery day within the framework of the Intra-day Market - Intra-day Auctions ("IDA"), according to the following operational schedule:

a) IDA1 (the 1st auction trading session) with gate closure for offering on day D-1 at **15:00 CET** for periods 1-96 of delivery day D [0h-24h];

b) IDA2 (the 2nd auction trading session) with gate closure for offering on day D-1 at **22:00 CET** for periods 1-96 of delivery day D [0h-24h];

c) IDA3 (the 3rd auction trading session) with gate closure for offering on day D at **10:00 CET** for periods 49-96 of delivery day D [12h-24h];

1.2. Trading on the Intra-day Auctions begins after the trading process on the Day-Ahead Market for delivery day D has been completed and it is complementary to continuous trading within the Single Intra-day Coupling of the Intra-day Markets ("**SIDC**"), allowing for the balance of the production units, consumption, and/or contracts, as well as establishing the interconnected capacity prices under congestion conditions.

2. SCOPE

2.1. This procedure applies to:

2.1.1. the Intra-day Market Participants;

2.1.2. the Day Ahead Market Operator for electricity and natural gas, OPCOM S.A.;

2.1.3. the Transmission and System Operator;

2.2. This procedure complements the procedural framework for participation in the Intra-day Market by establishing the specific process of the auction trading mechanism (IDA).

2.3. All aspects related to participation in IDA are reported in CET hours.

3. ACRONYMS

ANRE	-	The National Regulatory Authority in the field of Energy;
CORE CCCt	-	*The TSO management function.* The IT system of the TSOs is responsible for integrating the coupling results and carrying out post-coupling activities within IDA.
CMM		*The TSO management function.* The IT system of the TSOs is responsible for the coordinated calculation of capacities and for verifying the coupling results from the perspective of the TSOs.
CET	-	Central European Time;
CORE CIP	-	Central Interface Point – Common organized environment used for exchanging information between CORE CCCt and the local trading systems of the NEMOs, with bidirectional communication;
IDA CIP		Central Interface Point – Common organized environment used for exchanging information between CMM and the local trading systems of the NEMOs, with bidirectional communication;

CZC	-	Cross Zonal Capacity;
Core CCR	-	The Core Capacity Calculation Region, which includes, according to ACER Decision No. 6/2016, with subsequent amendments, the interconnections between the offering zones of the following EU member states: Austria, Belgium, Croatia, Czech Republic, France, Germany, Hungary, Luxembourg, Netherlands, Poland, Romania, Slovakia, and Slovenia;
CORE MO	-	CORE Market Operator;
Euphemia	-	Pan-European Hybrid Electricity Market Integration Algorithm;
IDA	-	Intra-Day Auctions
GCT	-	Gate Closure Time;
NTC	-	Net Transfer Capacity;
OPE	-	Balancing Market Operator;
NEMO	-	Designated Electricity Market Operator for the Intra-day Market (also referred to as "power exchange");
TSO	-	Transmission System Operator;
MCP-IDA	-	Market Clearing Price for a given IDA session;
BRP	-	Balancing Responsible Party;
PRE-IDA		Balancing Responsible Party established by OPCOM S.A. for managing exchanges with other BRPs from IDA;
IDM	-	Intra-day Market;
SIDC	-	Single Intra-Day Coupling;
NPS	-	National Power System.

4. DEFINITIONS

4.1. For the purposes of this Procedure, terms and expressions used, other than those provided below in this chapter, shall have the meanings defined in Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management, Regulation (EU) 2019/943 of the European Parliament and of the Council of 5th of June 2019 of the internal market for electricity (recast) (hereinafter Regulation 943/2019), and Law no. 123/2012 on electricity and natural gas, as subsequently amended and supplemented.

4.2. For the purposes of this procedure, the following terms are additionally defined:

4.2.1. *ACER* – The Agency for the Cooperation of Energy Regulators;
4.2.2. *Aggregation* - Role performed by a legal or individual entity that combines the energy produced by multiple eenrgy sources in order to sell, buy or bid on any of the electricity markets, in accordance with art. 2 point 18 of Directive (EU) 2019/944;
4.2.3. *Agregator* – Market participant holder of the license for aggregation activity or involved in aggregation, as defined in Article 2 point 18 from Directive (EU) 2019/944, designated by the customers (members) of the aggregation that trades electricity and is entitled to all the rights provided for in the Agreement for participation

in the Short-Term Electricity Markets (Day-Ahead Market and Intra-day Market), as well as those provided for in national regulations and/ or of the European Union corresponding to participation in the electricity market.

4.2.4. *Accepted communication channel* - Website, email, telephone;

4.2.5. *Access certificate to the IDA system* - A digital certificate that provides acces to the IDA trading system and will be provided to participants upon registration on the Intra-day Market (IDM);

4.2.6. *Backup Solution* – The actions carried out by the coupling operator in parallel with the coordinator, with the purpose of taking over its responsibilities, in the event of an incident, for example: information cannot be produced/transmitted, validation cannot be completed before the target deadline, or it is expected not to be completed before the target deadline, etc;

4.2.7. *Bidding Zone* – A geographical area where market participants can transfer energy without the need for verification of compliance with the available capacity on the interconnection and the allocation of this capacity;

4.2.8. *Buyer's Surplus* – An economic concept reflecting the difference between the maximum amount the buyer would have been willing to pay for the purchased energy, according to the offers submitted, and the amount actually paid by the buyer for it;

4.2.9. *Closing Time of Offering in IDA* – The time by which offers on IDA can be submitted to the NEMO, on the trading day preceding the delivery day for the IDA1 and IDA2 auction sessions, respectively on the delivery day for the IDA3 auction session, synonymous with the closing time of the IDA offer register;

4.2.10. *Congestion* – A situation where an interconnection cannot handle all physical flows resulting from international exchanges due to market participants' offers, caused by insufficient capacity on interconnections and/or on the network elements of the involved national transmission systems;

4.2.11. *Congestion Rent on Interconnection Lines* – The products sum of the difference between the PIP-IDA of the importing zone and the PIP-IDA of the exporting zone for each interconnection and the energy flow on that interconnection resulting from Trades on IDA, representing the monetary value of interconnection capacities resulting from implicit allocation;

4.2.12. *Coordinator* – The coupling operator tasked, based on the rotational principle, with the responsibility of matching offers and determining the results of market coupling;

4.2.13. *Delivery Day – A* given day on which the delivery/consumption of the traded energy occurs in the three IDA trading sessions (IDA1, IDA2, and IDA3);

4.2.14. *Designated Electricity Market Operator (NEMO)* – An entity designated by the competent authority to perform tasks related to the single coupling of markets for the next day (in accordance with Regulation (EU) 2015/1222). OPCOM S.A. is the NEMO in the offering zone of Romania;

4.2.15. *Early Decoupling* – Partial decoupling in a situation where the need to decouple a bidding zone or a NEMO is known in advance, caused among other things by planned maintenance or critical issues with local trading systems that are not resolved before the start of the IDA trading session.

4.2.16. *Execution of an Offer* – Establishing a Trade within the IDA by the participant who submitted an offer, following the execution of the coupling algorithm;

4.2.17. *Final Confirmation* – Communication sent by the NEMO in the coupled market regarding the acceptance or rejection of the coupling algorithm results following the validation of flows on network elements taking into account the declared transmission capacities. If the coupling results are accepted, the final confirmation is positive; otherwise, it is negative, the responsibility for validation being on the TSOs side;

4.2.18. *Financial Guarantee* – Monetary sums and/or financial instruments intended for payment obligations of IDA participants to the NEMO, accepted by the NEMO based on the provisions of a public procedure;

4.2.19. *Gate in the Trading System* – A state associated with a specific process carried out within the trading system, which allows for specific actions related to that process. The state of the trading system allows for the execution of relevant actions exclusively during the period when the gate is open. The offering gate allows for the submission of offers into the trading system;

4.2.20. *Generation of Interdependent Block Offers (related offers)* – The level associated with a block offer within the family of interdependent block offers;

4.2.21. *Incident Committee* – A structure composed of executive representatives from power exchanges, TSOs, and third parties involved in market coupling, responsible for coordination and decision-making in the event of daily market coupling operational incidents;

4.2.22. *Independent Block Offer* – A block offer whose execution is not conditioned by and/or does not condition the execution of another block offer for the same IDA auction session;

4.2.23. *Interdependent Block Offers* – Block offers linked one with each other, where the acceptance of one (the child offer) can only occur if the other block offer (the parent offer) from the IDA participant for the respective trading day and the same IDA auction session has been accepted;

4.2.24. *Interconnection* – The set of facilities and equipment through which exchanges of energy is made between the power systems represented as bidding zones;

4.2.25. *Implicit Auction* – Trading of energy along with the allocation of capacity within the same trading session, through the execution of the unique coupling algorithm;

4.2.26. *IDA Participant* – A participant in the intraday electricity market who complies with the participation agreement related to this trading modality, as well as the corresponding national and/or community regulations applicable to participation in the energy market;

4.2.27. *Implicit IDA Participant* – A participant who fulfills the role of a shipping agent in the coupling mechanism and who does not have the right to submit offers;

4.2.28. *Market Coupling Function* – A set of operations that includes the use of the unique matching algorithm approved at the European level by all regulatory authorities, called Euphemia, aiming to achieve a common matching of offers and determining the results of market coupling;

4.2.29. *Matching Process Gate* – A state of the trading system associated with the process of establishing Trades on IDA, specifically determining the traded quantities by allocating them to each participant's portfolio using the results provided by the coupling algorithm (MCP-IDA, cross-border energy flows, and net position for each trading zone);

4.2.30. *Maximum Price of the Price Scale* – The maximum value of prices at which offers can be submitted;

4.2.31. *Minimum Price of the Price Scale* – The minimum value of prices at which offers can be submitted;

4.2.32. *Net Position* – The quantitative balance of all sales and purchases resulting from the coupling mechanism, for a trading interval, in a biddinz zone;

4.2.33. *Normal Procedure* – The daily procedure encompassing the actions of operators involved in the market coupling mechanism in the event that no issues arise and all operations proceed automatically;

4.2.34. *Own communication channels* - All data transmission/reception systems owned by the NEMO, IDA participants, and the TSO;

4.2.35. *Participant Identification Code* - An alphanumeric code allocated by the NEMO to a participant's user for identification in the IDA;

4.2.36. *Party Involved in the Coupling Project* – NEMO or transport system operator participating in SIDC;

4.2.37. *Preliminary Confirmation* – Communication sent by the NEMO in the coupled market regarding the acceptance or rejection of the market coupling algorithm results following the validation of portfolio allocations. If the coupling results are accepted by the NEMO, the preliminary confirmation is positive; otherwise, it is negative;

4.2.38. *Participation Agreement in Short-Term Energy Markets (Day Ahead Market and Intra-day Market)* – Contract concluded between the NEMO and a participant in one of the Short-Term Energy Markets (Day Ahead Market and Intra-day Market), which includes the respective rights and obligations of the NEMO and of the participant;

4.2.39. *Partial Decoupling Known During the Coupling Session* – The situation in which, for a specific delivery day and for a specific IDA session, it is not possible to implicitly allocate cross-border transport capacity (network data being used as input data in the coupling algorithm represented by available capacities on the interconnection) or it is not possible to submit the anonymized order book (also used as input data in the algorithm execution). In accordance with procedural regulations and decisions taken at the IDA project level, except for certain NEMOs, all other NEMOs in the aforementioned situation will be decoupled;

4.2.40. *Price Coupling Mechanism within Intra-day Auctions (IDA)* – A coordinated mechanism, part of the Intra-day Market, for correlating all demand and supply curves provided by power exchanges and block offers, through which energy trades for a specific delivery day are determined through implicit auction, taking into account the interconnection capacity provided by TSOs, and through which its implicit allocation is made using a single software application incorporating the unique coupling algorithm;

4.2.41. *Physical Notification* – Information within the trading system made available to BRPs responsible for balancing towards IDA participants, containing aggregated energy volumes for the trades performedin CET hours by respective members of the rBRP, for each 15-minute interval of the delivery day. The NEMO, acting as an IDA BRP, sends physical notifications to the TSOs as well;

4.2.42. *Quantitative Trading Limit* – The maximum quantity (average hourly power) of energy accepted by the NEMO as the sum of quantities from a participant's offers on the IDA, established according to their prior request;

4.2.43. *Results Publication* – In the context of this procedure, making Trade confirmations available to participants for each individual IDA session;

4.2.44. *Seller's Surplus* – An economic concept reflecting the difference between the amount received by the seller for the sold energy and the minimum amount the seller would have been willing to accept for it, according to the offers submitted;

4.2.45. *Shipping Agent* - The role fulfilled by the TSO in the Single Intra-day Market Coupling mechanism according to applicable regulations;

4.2.46. *SIDC (Single Intra-day Coupling)* - According to European legislation, it refers to the process by which collected orders are correlated and interzonal capacity is allocated simultaneously for different offering zones in the intraday market;

4.2.47. *Trade Identification Code* - A unique code assigned to the Trade by the IDA trading system;

4.2.48. *Trade Confirmation* – Information issued by the IDA trading system and made available to the participant, displaying the firm trades concluded by them for each IDA auction session corresponding to a given delivery day;

4.2.49. *Trading Day* – The day on which Trades are established in the three IDA trading sessions (IDA1, IDA2, and IDA3) for a given delivery day;

4.2.50. *Trading Interval* – A 15-minute period during which an individual trade can be concluded on IDA, with the time resolution within the IDA for offering/trading being 15 minutes;

4.2.51. *IDA Trading System* – An information system established and maintained by the NEMO for the purpose of conducting Trades on IDA, similar to the one implemented on the Day-ahead Market;

4.2.52. *TSOs Management Function (CMM)* – IT system of the TSOs responsible for calculating capacities and verifying coupling results, as well as validating flows on network elements in relation to declared transport capacities, for each individual IDA session;

4.2.53. *Value Trading Limit* – The maximum summed value of price-quantity pairs and block purchase offers at positive prices and/or block sell offers at negative prices, accepted for an IDA participant, corresponding to their available financial guarantees;

5. REFERENCE DOCUMENTS

5.1. Electricity and Natural Gas Law no. 123/10.07.2012, with subsequent amendments and completions;

5.2. Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing guidelines on capacity allocation and congestion management;

5.3. Order of the NRA President of no. 29 of 31.01.2018 approving the document Proposal of all NEMOs for the products that can be considered by NEMOs in the intraday coupling process, in compliance with Article 53 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing guidelines on capacity allocation and congestion management;

5.4. Order of the NRA President no. 30/31.01.2018 approving the document Proposal of all NEMOs for the Reserve Methodology, in accordance with Article 36(3) of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing guidelines on capacity allocation and congestion management, published in the Official Gazette of Romania, Part I, no. 141 of 14.02.2018;

5.5. ACER Decision no. 5/30.01.2020 regarding the Proposal of all NEMOs for the products that can be considered by NEMOs in the single intraday market coupling process;

5.6. ACER Decision no. 2/10.01.2023 regarding the NEMO Methodology concerning the harmonized minimum and maximum clearing prices applicable to the single intraday market coupling;

5.7. Short-Term Electricity Markets Participation Agreement for(Day-Ahead Market and Intra-day Market);

5.8. Operational Procedure regarding the establishment, verification, and use of financial guarantees for participation in the Intra-day Energy Market - Auction Trading (IDA);

5.9. Operational Procedure regarding the collections and payments related to Trades on the Intra-day Electricity Market - Auction Trading (IDA);

5.10. IDA user Guide for participants (IDA);

5.11. Procedure regarding participants' registration at centralized electricity markets administered by OPCOM S.A.;

5.12. Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for energy;

5.13. NRA Order no. 65/2020 regarding the amendment and completion of certain orders of the President of the National Energy Regulatory Authority;

5.14. NRA Decision no. 883 of 15.05.2024 regarding the establishment of the method for transferring net positions resulting from the allocation of cross-border capacities between the offering zone Romania and other offering zones in the single intraday coupling of electricity markets;

6. METHOD

6.1. IDA PARTICIPATION

6.1.1. Participation in the implicit trading mechanism IDA is voluntary, being allowed for participants registered at the Intra-day Electricity Market (IDM).

6.1.2. To fulfill the role of shipping agent, the TSO must register as an implicit market participant in IDM. As an implicit participant, the TSO cannot submit energy offers on the intraday horizon.

6.1.3. To be able to participate in IDA, an applicant must be registered in the IDM by the NEMO in accordance with the provisions of a public procedure developed by the NEMO for this purpose.

6.1.4. Transmission systems operators can become participants in IDM and may submit offers for IDA only for the purpose of fulfilling their functions explicitly provided by legislation.

6.1.5. (1) A market participant can carry out energy trades on IDM either individually or in an aggregated manner.

(2) In the case of aggregated participation, the Aggregator communicates to the NEMO the structure of the aggregation, and NEMO includes it, as an annex, in the Short-Term Energy Energy Market Agreement (Day-Ahead Market and Intra-day Market). The aggregator notifies the NEMO whenever there are changes to the aggregation..

6.1.6. The IDA participant who intends to submit buy offers with positive prices or sell offers with negative prices must:

- submit a financial guarantee to the NEMO, according to the Procedure regarding the establishment, verification and use of financial guarantees ;
- open a cash account at a commercial bank frpm Romania and establish a Direct Debit Mandate with the relevant bank.

6.1.7. NEMO establishes the content of the Short-Term Energy Market Participation Agreement (Day-Ahead Market and Intra-day Market), which must include the rights and responsibilities of both NEMO and the IDM participant. Registration as an IDM participant becomes effective after the signing of the Agreement by both parties, starting from its entry into force date.

6.1.8. Each participant in IDA receives a unique identification code.

6.1.9. A market participant may withdraw from the IDM, and the NEMO may suspend or revoke their registration, resulting in the inability to submit offers in IDA if they no longer meet the registration requirements or fail to comply with the Participation Agreement/applicable rules.

6.1.10. Withdrawing, suspending, or revoking a participant from the IDM does not exempt the parties from fulfilling their obligations incurred on the IDM, and thus, implicitly, within the IDA, until that moment.

6.1.11. NEMO prepares and maintains a register of the offers, containing relevant information about each participant fromIDA, and through which their offers are managed.

6.2. GENERAL ASPECTS

6.2.1. An offer is accepted only if it is submitted by a participant or by NEMO on their behalf, if mandated to do so, specifically if the offer contains the participant's identification code provided at registration.

6.2.2. In IDA, firm energy trades are concluded for each trading interval of the corresponding delivery day, based on the offers submitted by the market participants, for each IDA session. OPCOM manages and facilitates trading within the IDM as the designated NEMO for the Romanian bidding zone.

6.2.3. IDA Trades are carried out by matching buy and sell offers through the implicit auction mechanism agreed for the European single coupling solution, after going through the stages of offering, validation, and aggregation of offers, prior to their matching.

6.2.4. NEMO acts as a counterparty for each participant trading within IDA.

6.2.5. Trades are completed through the physical delivery of energy into the NPS on the delivery day.

6.2.6. The delivery of energy is considered accomplished through the transmission of physical notifications in accordance with the provisions of the *Production and Dispatch Scheduling Regulation* and the related TSO procedures.

6.2.7. For the purpose of fulfilling scheduling and notification tasks towards the TSO and for the physical settlement of trades concluded on IDA, NEMO registers as a BRP dedicated to trades concluded on IDA, acting as a counterparty for these trades.

6.2.8. For the purpose of integrating the role of the shipping agent and implicit participant on IDA of the TSO into the balancing market, the TSO registers a separate BRP for trades recorded in this capacity.

6.2.9. No other members can enter the BRP registered by the NEMO, and all trades are executed through block exchanges notified to other BRPs in the balancing market system administered by the TSO.

6.2.10. Energy delivery is made at any injection or extraction point of the NPS.

6.2.11. Trades concluded on the IDA at positive prices entail an obligation for the respective IDM participant to deliver energy if the trades were based on sell offers or an obligation to accept the delivery of energy if the trades concluded were based on buy offers, in accordance with the specifications of the respective trade.

6.2.12. Trades can be concluded at negative prices. A Trade at a negative price signifies the provision of a service for the acquisition of energy from the party receiving the energy to the party delivering it, without implying the delivery of goods by the party delivering the energy (the seller pays for the buyer's acquisition of the energy).

6.2.13. Each Trade on IDA refers to a trading interval, which is a quarter of an hour of a given delivery day, with the first trading interval being the interval between 00:00 CET and 00:15 CET (1:00 - 1:15, Romanian time).

6.2.14. The delivery day consists of 96 trading intervals, except for the day when switch to summer time, which has 100 trading intervals, and the day when switching to winter time, which has 92 trading intervals.

6.2.15. The trading mechanism within the IDA is the implicit auction, which involves trading energy simultaneously with the allocation of capacity.

6.2.16. The principles of the auction mechanism applied to offers are as follows:

a) The correlation of offers is carried out according to a transparent method corresponding to the agreed coupling mechanism and by which publicly known principles are implemented;

b) The correlation of offers ensures a non-discriminatory environment for participants;

c) The correlation of offers is carried out in accordance with their specifications;

d) The results of the auction are published within a reasonable period after the closing time of the offering window defined within the IDA.

6.2.17. The algorithm used for matching offers and determining the MCP-IDA in the market coupling process is based on the principle of maximizing social welfare at the level of the coupled markets, namely the sum of the seller's surplus, the buyer's surplus, and the congestion rent on the interconnection lines, if applicable.

6.2.18. By using such an algorithm, the efficient allocation of resources in the energy market and the interconnection capacities in the coupled regions is pursued, considering all offers submitted into each of the coupled markets and all information regarding the available capacities on the interconnection.

6.2.19. The algorithm used for market coupling (Euphemia) is the one recommended by ACER for price coupling of regions, namely the one used by Euphemia or any successor that meets the same performance criteria, based on its endorsement by ACER and by all governments, regulatory authorities, energy exchanges and TSOs of the participating states in the coupling.

6.2.20. The coupling solution for the SIDC area through IDA considers the use of a single algorithm for the entire European internal market, ensuring fair and transparent price determination and cross-border capacity allocation. It adheres to the principle of decentralized data sharing, ensuring robustness and operational stability, as well as individual responsibility of the exchanges, through the exchange of anonymized offers and interzonal transfer capacities between power exchanges for calculating zonal prices and other reference prices, as well as electricity flows between bidding zones for all the ones included in the mechanism.

6.2.21. The purpose of the Euphemia algorithm is to determine the block offers that are executed and those that remain unexecuted, as well as to determine zonal trading prices and net positions in offering zones, so as to maximize social welfare at the level of the coupled regions generated by the execution of offers, while ensuring that the energy flows generated by offer execution do not exceed the capacity of the relevant network elements.

6.2.22. The Euphemia algorithm treats all offers of the same type equally, with competing block offers being tested in a random order. The Euphemia algorithm takes into account the configuration of interconnections between transmission networks, which are modeled as constraints that must be adhered to the final solution.

6.2.23. For market coupling, the maximum quantity of electricity exchanged between bidding zones is determined based on the offer registerd for each bidding zone and network data provided in the form of a model based on interconnection capacities.

6.2.24. The existence of block offers, which are accepted only if the specific pre-established conditions for each market are met on all intervals included in the definition period, transforms the problem into a complex one. The solution involves using a combinatorial optimization algorithm modeled as a mixed-integer quadratic discrete programming problem to solve the main objective of maximizing welfare.

6.2.25. As a general rule, a block offer is executed or not based on comparing its price with the weighted average of the market clearing prices for the relevant trading intervals, weighted by the quantities considered as energy from each trading interval within the block definition period. Given the complexity of the problem, it is possible for a block offer not to be executed (paradoxically rejected) even if its price would have allowed execution at the market clearing price.

6.2.26. The following conditions are met for the coupled market area: the clearing price of the market in the importing bidding zone is normally higher or equal to the closing price of the market in the exporting bidding zone, and if the import or export flow is less than the available interconnection capacity, the clearing prices in the two zones are equal.

6.2.27. The algorithm stops in the following cases:

a) all possible solutions have been explored, in which case the optimal result is determined;

b) the time limit has been reached;

c) the maximum number of iterations have been reached.

6.2.28. The Euphemia algorithm yields the following results:

a) the clearing price corresponding to each offering zone;

b) the net position corresponding to each bidding zone;

c) the electricity flows through each interconnection, corresponding to the Trades on IDA;

d) the executed quantities for each block offer.

6.2.29. NEMO uses the results provided by Euphemia to determine the Trades related to each participant of the IDA.

6.2.30. The market coupling process consists of three stages in terms of the chronological order of operations: pre-coupling stage, coupling stage, and post-coupling stage. The main activities of each stage are presented below:

A) Pre-coupling stage

6.2.31. In the pre-coupling stage, the following actions are ensured:

a) Coordinated determination of the capacity values on the interconnection between bidding zones available for each of the implicit IDA session (referred hereafter as CZC);

b) Publishing the relevant CZC values for market participants;

c) Offers submission by market participants;

d) Collection of offers, their aggregation and anonymization after the closing time of the offering gate.

6.2.32. All coordinated pre-coupling activities of the TSOs are covered by the management function at the TSO level, hereinafter referred to as CMM. It ensures the coordinated preparation of capacities used as input data in the market coupling process, based on data provided by the TSOs.

6.2.33. The TSOs perform the coordinated capacity calculation on interconnection level and determine the CZC parameters through the centralized module CMM of the TSOs and provide this information to the NEMOs through a computerized environment called the Central Interface Point (CIP), which represents the module ensuring the exchangeof flows in a bidirectional way beyween both the TSOs and NEMOs.

6.2.34. Participants in IDA submit/modify offers to sell or buy energy for a given delivery day. Offering for the IDA sesions is done within a trading system similar to the one used on the Day-Ahead Market and it is done separately from offering for the continuous matching mechanism.

6.2.35. At the closing time of the IDA session gate (GCT), NEMO closes the offer registry.

6.2.36. Until the closing time of the offer registry, participants in the IDA can submit/modify/cancel sell or purchase offers, with the trading system considering the latest version of each participant's offer. After this time, offers can no longer be modified or canceled, becoming firm and irrevocable.

6.2.37. After the closure of the offer registry, NEMO aggregates the anonymized sales and purchase curves based on the step offers collected from participants and provides this information, along with block offers, to the Coordinator. All offers are anonymized beforehand.

6.2.38. NEMO determines the sell curve by combining all price-quantity pairs from step sale offers, sorted in ascending order of prices, starting from the pair with the lowest price to the one with the highest price.

6.2.39. NEMO determines the buy curve by combining all price-quantity pairs from step purchase offers, sorted in descending order of prices, starting from the pair with the highest price to the one with the lowest price.

B) Coupling Stage

6.2.40. In the coupling stage, the following actions are ensured:

a) Transmitting the aggregated offers, including block offers, anonymized, by the NEMO to the coordinator;

b) Running the coupling algorithm and distributing the coupling results to the NEMOs by the coordinator, for validation;

c) Determining the quantities traded by allocating the coupling results to each participant's portfolio, by each NEMO;

d) Transmitting the coupling results from all NEMOs to the CMM through the CIP and processing the file provided by the NEMO according to the rotational scheme integrated into the CIP for validation of the resulting flows from running the coupling algorithm;

e) Results publication.

6.2.41. The matching of offers, in accordance with the principles of Euphemia, is carried out daily by the Coordinator, a role provided by a NEMO within the areas involved in coupling, if it is a full member of PCR, based on the rotational principle; the matching process is also carried out in parallel by a coupling operator who has PCR assets installed, constituting the backup solution to ensure the validation of the results.

6.2.42. The market coupling function is under the governance of all NEMOs and is provided by those NEMOs that are co-owners of PCR assets.

6.2.43. The energy exchange that provides the backup solution can take over the coupling session and fulfill the Coordinator role .

C) The post-coupling stage

6.2.44. In the post-coupling stage, the following actions are ensured:

a) Determination and transmission of physical notifications by NEMO to the TSO per delivery day;

b) Settlement of Trades at the local market level;

c) Settlement of bilateral Trades between TSOs based on the flows resulting from the coupling mechanism;

d) Determining congestion revenue and distributing it among TSOs.

6.2.45. If issues arise during the coupling process preventing the provision of necessary input data for the Euphemia algorithm to perform the coupling calculation (the anonymized offer register and the CZC values on each interconnection) by a NEMO, in accordance with decisions and regulations within the European project, all bidding zones except for some will be decoupled.

6.2.46. (1) Considering the trading and trading resolution of 15 minutes in the Romanian bidding zone each IDA1, IDA2, and IDA3 session, the physical notifications related to trades concluded are aggregated after each IDA session (the notification for IDA2 will contain the aggregated net position taking into account the trades perfrmed for IDA1, and similarly, the physical notification generated after IDA3 will contain the aggregated net position considering the Trades made for IDA1 and IDA2) for each delivery day by reporting to CET hours for 96 intervals of 15 minutes (100/92 intervals, on DST days, as applicable).

(2) Since trading in CET hours on the coupled day-ahead market makes 24 CET hour of a delivery day (D) from the IDA trading perspective to represent hour 1, Romania's time for the following delivery day (D+1), whenever changes occur in assuming balancing responsibility regarding the participants trading within the IDA (whose validity is reported for the delivery day considered in Romania's time), after sending the physical notifications of block exchanges resulting from trading on IDA in CET hours for the delivery day D, the NEMO will resend to OPE and the responsible parties affected by these changes, the updated physical notifications of block exchanges for the four 15-minute intervals within the 1-hour interval in Romania's time for the following delivery day (D+1). The update refers to the modification of the balancing responsibility assumption valid from the 1-hour interval in

Romania's time for the following delivery day (D+1). After updating the values the balancing market platform for the four 15-minute intervals within the 1-hour interval in Romania's time for the following delivery day (D+1), the BRPs will consider these new updated values.

6.3. OFFERING WITHIN THE IDA

6.3.1. Provisions of this section apply to the participants submitting offers within the IDA and to NEMO in the activity of offering, respectively, validating offers for the daily energy trading on the IDA in the operation in a coupled regime.

A) IDA offers characteristics

6.3.2. An offer expresses the firm commitment of the participant in the IDA to enter into a contract for selling or buying of energy if the offer price is positive, or for buting and selling of the energy takeover service if the offering price is negative.

6.3.3. Offers for buying/selling energy are made at an aggregated level for each participant's portfolio.

6.3.4. The participant can only submit offers for the upcoming IDA session (offers cannot be submitted in advance for subsequent IDA sessions), during the offering period, which is 1 hour for each of the IDA1, IDA2, and IDA3 sessions.

6.3.5. An offer is defined by at least one price-quantity pair. The quantity is expressed in MW with one decimal place, and the price is expressed in lei with two decimal places.

6.3.6. NEMO publishes on its website the price scale limits expressed in lei, valid for the next delivery day, no later than two hours after the National Bank of Romania (BNR) publishes the leu/euro exchange rate valid for that delivery day.

6.3.7. Each price-quantity pair of a purchase step offer for a trading interval defines the maximum unit price at which the IDA participant is willing to buy a quantity of energy that does not exceed the quantity mentioned in the price-quantity pair.

6.3.8. Each price-quantity pair of a sale step offer for a trading interval defines the minimum unit price at which the IDA participant is willing to sell a quantity of energy that does not exceed the quantity mentioned in the price-quantity pair.

6.3.9. Offers are made with reference to CET (Central European Time), meaning the first trading interval is between 00:00 and 00:15 CET.

6.3.10. Offers are made for the national bidding zone, taking into account its operation in coupled mode.

6.3.11. Offers can be of the following categories:

a) stepwise offers;
b) block offers.

6.3.12. The way of submitting offers in the trading system is detailed in the *User Guide for Participants in implicit auctions on the intraday horizon (IDA)* published on the OPCOM S.A. website.

STEPWISE OFFERS

6.3.13. For each trading interval, a participant in IDA can submit only one buy stepwise offer and one sell stepwise offer.

6.3.14. A buy/sell stepwise offer can contain a maximum of 32 price-quantity pairs.

6.3.15. The price of each price-quantity pair reflects the trading price accepted by the seller/buyer for the energy offered in the respective stepwise offer at a lower/higher price.

6.3.16. The quantity in the offer is considered as the average hourly power for the respective trading interval (the offered/traded energy is to be one-quarter of the offered/traded average hourly power).

6.3.17. A price-quantity pair of a stepwise buy offer for a trading interval defines the maximum unit price at which the participant in IDA is willing to buy the quantity of energy from the price-quantity pair.

6.3.18. A price-quantity pair of a stepwise sell offer for a trading interval defines the minimum unit price at which the participant in IDA is willing to sell the quantity of energy from the price-quantity pair.

6.3.19. Participants in IDA can submit to NEMO a volume limit for the offered volume (considered as average hourly power), separately for buying and selling, applicable for each hour, regarding the maximum quantity they can offer on IDA, requesting NEMO to invalidate their own offers containing aggregated quantities (as average hourly power) exceeding this limit. In the absence of such requests from IDA participants, NEMO will use the technical limit.

6.3.20. Stepwise offers are independent and can be submitted for all 96 trading intervals, or 92 trading intervals on the transition day from winter schedule to summer schedule, and for 100 trading intervals on the transition day from summer schedule to winter schedule.

BLOCK OFFERS

6.3.21. A sell/buy block offer for in IDA is a combination of individual sell offers or a combination of individual buy offers containing to multiple trading intervals, whose execution is interdependent, namely all are executed or none. The block offer is characterized by a price limit and a volume (considered as average hourly power).

6.3.22. The price of the block offer reflects the average trading price corresponding to the quantity from the block offer accepted by the seller/buyer for the energy offered for that block at a lower/higher average price.

6.3.23. The quantity in the offer is considered as the average hourly power for the trading intervals in the block definition period (the offered/traded energy is to be one-quarter of the offered/traded average hourly power).

6.3.24. Block offers are defined by the number of intervals that form the block. The number of intervals in a block offer can be defined in the trading system by NEMO (predefined offers in the system) or by the participant. Predefined offers in the system are available to all participants. Block offers defined by the participant are available exclusively to the participant who defined them.

6.3.25. Block offers can be independent or interdependent. Block offers can be interdependent only if they are of the same type, namely only for sell or buy.

6.3.26. Two or more interdependent block offers form a family of block offers. A family of interdependent block offers consisting of two generations includes at least one 'parent' block offer (an offer that can be accepted by fulfilling the block offer execution condition independently of other offers) and one 'child' block offer (an offer whose acceptance is additionally conditioned on the acceptance of another block offer, called the 'parent' block offer).

6.3.27. Block offers implemented in the IDA trading system have the characteristics specified in Annex 1. These can be modified to implement other types of offers accepted by the Euphemia algorithm, in compliance with the procedures agreed upon by all NEMOs to ensure the Euphemia algorithm's performance at appropriate parameters in conditions of geographic extension of coupling, introduction of multi-NEMO arrangements, increased complexity of topology, flow-based coupling extension, etc., being published well in advance of application.

B) IDA OFFERS CONTENT

6.3.28. Stepwise offers at a 15-minute resolution submitted by IDA participants contain at least the following information:

a) the identification code of the IDA participant;
b) identification as a sell offer or a buy offer;
c) identification as a 15-minute resolution offer;
d) validity (delivery day, trading interval it refers to);
e) the quantity expressed as average hourly power, for each price-quantity pair;
f) the limit price, for each price-quantity pair;
g) the identification of the IDA session for which the offer is made.

6.3.29. Ofertele bloc transmise de către participanţii înregistraţi la IDA conţin următoarele informaţii, după caz:

a) participant's IDA identification code;
b) identification as a sell offer or a buy offer;
c) identification as a block offer;
d) code of the block offer on whose acceptance it is conditioned, if it is a child-type interdependent offer;
e) validity, namely the block definition period (delivery day, trading intervals it refers to, if applicable);
f) the quantity expressed as average hourly power for the intervals in the block definition period;
g) accepted limit price for the entire energy offered in the block;
h) identification of the IDA session for which the offer is made

C) IDA offers format

6.3.30. Buy offers and sell offers cannot be combined into a single offer.

6.3.31. The prices of sell/buy offers on IDA are input in Lei and are converted by the trading system to Euro/MWh, at the official exchange rate of Lei/Euro communicated by the National Bank of Romania (BNR) valid for the trading day.

6.3.32. Stepwise sell or buy offers on IDA are monotonous.

6.3.33. A monotonous sell offer consists of price-quantity pairs for a trading interval, where the prices mentioned in consecutive price-quantity pairs will be strictly increasing.

6.3.34. A monotonous buy offer consists of price-quantity pairs for a trading interval, where the prices mentioned in consecutive price-quantity pairs will be strictly decreasing.

6.3.35. Offers can be submitted through the web interface of the IDA trading system or by uploading an **.xml** offer file containing all offers of a certain type (sell/buy).

6.3.36. In .**xml** format, a sell/buy offer file includes both stepwise offers and block offers. Registering a new offer as an **.xml** file replaces the entire existing offer (stepwise and/or block) in the trading system for a certain type (sell/buy).

D) Offer submission in the IDA trading system

6.3.37. The submission of offers can only be done if the limit prices in Lei of the price scale are published. The limit prices of the price scale, established at the level of the coupled region in Euro, are published in Lei, in the trading system and on OPCOMs website, as soon as the exchange rate is taken over.

6.3.38. The exchange rate is set by the National Bank of Romania (BNR) on each working day. For offering and trading on each trading day, the exchange rate set on the last working day before the delivery day applies. In the case of weekends (Saturdays and Sundays) or public holidays, the exchange rate set on the last working day will be valid for multiple delivery days, corresponding to the number of non-working days. Thus, for the weekend, the exchange rate set on Friday applies to trading for delivery days Saturday, Sunday, and Monday.

6.3.39. The price scale in Euro can be modified in accordance with decisions agreed upon at the level of the SDAC coupled zone, following the provisions of ACER Decision no. 2/10.01.2023 regarding the NEMO Methodology on minimum and maximum harmonized clearing prices applicable to the single intraday market coupling, with the new limit values being communicated to participants before the implementation of the new price scale in the offer validation process.

6.3.40. The hourly registration interval for offers for a delivery day for a particular IDA auction session opens one hour before the closing time of the offering gates defined for each IDA session separately. The offering gate for each IDA session is: for IDA1 - from 14:00 to 15:00 CET on day D-1 for delivery day D, for IDA2 - from 21:00 to 22:00 CET on day D-1 for delivery day D, and for IDA3 - from 09:00 to 10:00 CET on day D for delivery day D.

6.3.41. Before the closing time of the IDA offering gates, offers can be modified or canceled by the IDA participant who submitted them. Each change creates a new offer, with only the latest valid version of the offer being considered by the algorithm for establishing trades within IDA.

6.3.42. Offers can be submited by IDA participants:

a) through the web interface of the IDA application;
b) by uploading a **.xml** offer file compatible with the local trading system on IDA.

6.3.43. NEMO can register an offer (new or modified) in the trading system on behalf of the Participant if mandated to do so, namely in the situation where the participant, unable to technically upload the offer themselves, requests NEMO to upload the offer into the trading system on their behalf. NEMO will accept the submission of the offer on behalf of the Participant at their request transmitted during the offering interval of each IDA session, only if it is sent via email in **.xml** format and only if the request is sent from the participant's representatives according to the declared contact details ar registration as per *Procedure for registering participants in the centralized electricity markets administered by OPCOM S.A.*

6.3.44. NEMO can cancel an existing offer in the trading system for a specific IDA auction session on behalf of the Participant if mandated to do so, namely in the situation where the participant, unable to technically cancel the offer themselves, requests NEMO to cancel the offer in the trading system on their behalf. NEMO will accept the cancellation of the offer on behalf of the Participant at their request transmitted during the offering interval of each IDA session, only if the Participant makes the request via **email**, clearly specifying the type of offer (sell or buy), delivery day, and IDA auction session for which it was entered. NEMO can only cancel the entire offer for a specific type, sell or buy, namely all stepwise offers and all block offers for the direction, delivery day, and IDA session requested. NEMO will accept requests for offer cancellation only from the Participant's representatives with contact details declared according to the *Procedure for registering participants in the centralized electricity markets administered by OPCOM S.A*.

6.3.45. NEMO receives and registers offers in the order book, and after the closing time of the offering gate, the oofers are anonymized them for the purpose of applying the matching mechanism in the coupled operation.

6.3.46. After the closing time of the gates for the IDA session, offers can no longer be modified or canceled, as they are considered firm.

E) Offer validation

6.3.47. NEMO can establish and modify the trading limit for an IDA participant at any time, based on their available financial guarantees.

6.3.48. Trading limits are applied in the form of quantity limits or value limits.

6.3.49. Each IDA participant can request NEMO to invalidate offers that contain a total volume (considered as average hourly power) greater than a certain limit specified in advance by that IDA participant. IDA participants can specify different volume limits for buy offers and sell offers applicable to each IDA auction session through an official address sent to OPCOM S.A.

6.3.50. If the offer does not comply with the value of the trading limit set by NEMO according to the *Procedure regarding the establishment, verification, and use of financial guarantees for participation in the Intra-day Market - Trading by Auctions*, it is rejected. The IDA participant is notified of the rejection via a message sent by NEMO through the trading platform and can modify the offer to fall within the trading limits before the closing of the offering gates for each IDA auction session.

6.3.51. Offer validation is automatically performed by the IDA trading system according to the validation criteria imposed by the specifications regarding the content and format of offers and the rules applicable to offers in this Procedure.

6.3.52. The IT system will validate each submitted offer by checking the following criteria, without being limited to them:

a) The participant's right to trade on the IDA, which may be affected by the expiration of the license or the existence of a suspension or revocation valid at the time of offering;

b) The ability to offer for the delivery day and the active IDA auction session, i.e., the display of the offering gates and their status (open status) in the trading system interface;

c) The correct expression of quantities and prices in terms of the number of decimals;

d) The inclusion of offer prices within the price scale limits defined for a delivery day;

e) The inclusion of aggregated quantities at the trading interval level in the volume limit declared by the participant, if they have such a declaration;

f) The monotonicity of prices;

g) Compliance with the allowed number of price-quantity pairs per trading interval per participant in the case of stepwise offers;

h) Compliance with the allowed number of block offers per participant in the case of block offers;

i) Compliance with the maximum definition quantity for block offers;

j) Compliance with the value limits of the validation/available guarantee for buy offers with a positive price or sell offers with a negative price. The financial guarantee calculated according to the *Procedure regarding the establishment, verification, and use of financial guarantees for participation in the Intra-day Market - Trading by Auctions (IDA)* is updated daily before the IDA1 session. The available financial guarantee is validated by exclusively considering the offers of the active IDA session and the trades concluded in previous IDA sessions for the same delivery day.

6.3.53. In case of non-compliance with any of the validation criteria mentioned, the system will automatically invalidate the offer and notify the participant with a message explaining the reason for invalidation. The participant may correct and resubmit the offer or cancel an offer at any time during the offering period.

6.3.54. When uploading an offer via an **.xml** file, prior to checking the aforementioned validation criteria, the system will verify the compatibility of the **.xml** file with the system. In case of incompatibility, an error message will be displayed.

6.3.55. Given the specific approach of trading in CET hours within the implicit intraday auction (IDA) coupling mechanism, where the last CET hour of a delivery day (D) in IDA trading represents 1 AM in Romanian time for the next delivery day (D+1), participants whose balancing responsibility is not assumed by any Balance Responsible Entity (BRP) for the delivery day D+1 will not offer in IDA for intervals 93-96 (in CET) of the delivery day (D). NEMO has the right to cancel offers in these intervals, including block offers that include this interval and dependent block offers, for participants in this situation.

6.4 IDA TRADING

6.4.1. Within the mechanism of coupling through implicit capacity auction sessions (IDA) conducted over the SIDC horizon, NEMOs and TSOs are responsible for validating the results based on market principles: NEMOs from the perspective of allocation to offer portfolios and TSOs from the perspective of cross-border flows.

6.4.2. The principles for validating the coupling results are:

a) Stepwise offers for sale are not executed for quantities offered at prices higher than MCP-IDA;

b) Stepwise offers for purchase are not executed for quantities offered at prices lower than MCP-IDA;

c) Stepwise offers for sale are executed for quantities offered at prices strictly lower than MCP-IDA;

d) Stepwise offers for purchase are executed for quantities offered at prices strictly higher than MCP-IDA;

e) Stepwise offers may not be executed or may be partially executed for quantities offered for sale/purchase at prices equal to MCP-IDA;

f) A sell block offer for will not be executed if its price is higher than the average market clearing price resulting from the average of MCP-IDA published for the trading intervals to which the block offer refers, weighted by the volumes considered as energy for each trading interval in the block offer.

g) A block offer for purchase will not be executed if its price is lower than the average market clearing price resulting from the average of MCP-IDA published for the trading intervals to which the block offer refers, weighted by the volumes considered as energy for each trading interval in the block offer.

h) If the intersection of the buy curve with the sell curve occurs within a common price range, MCP-IDA is set at the midpoint of the common price range.

i) If the intersection of the buy curve with the sell curve occurs within a common quantity range, the traded quantity is the maximum of the common quantity range.

6.4.3. MCP-IDA results for the national bidding zone following the use of the algorithm for offer matching during the auction is the price at which all trades for a trading interval are concluded.

6.4.4. For the price-quantity pairs mentioned as executed, in the coupling results, a firm trade is established between the NEMO, on one hand, and the IDA participant, on the other hand, for the delivery of energy in the final executed quantity, in the national bidding zone, at the specified time (delivery day, trading interval) stated in the offer and at a price equal to the MCP-IDA set for the respective zone and time.

6.4.5. The quantity corresponding to the net position resulting from the trading related to the offers determines a trade between the NEMO and the Romanian TSO in its capacity as a shipping agent, at the MCP-IDA for the national bidding zone corresponding to the respective trading interval.

6.4.6. The delivery of energy related to trades concluded for a given delivery day within the IDA is considered completed upon the transmission to the Market Operator (OPE), within the physical notification transmission procedure of the TSOs according to the applicable regulations, of the corresponding block exchange expressed

in hourly average power, between the BRP-IDA and the BRP of which the IDA participant is a part of, respectively to the BRP of the shipping agent.

6.4.7. In the situation where no transactions are concluded at the level of the Romanian bidding area, no market closing price will be established.

6.4.8. In the situation where the Romania bidding zone is disconnected or the auction session is cancelled, intraday auctions are not organized at the local level.

6.5. OPERATION UNDER NORMAL CONDITIONS

6.5.1. Normal operation means the automatic execution of all actions related to market coupling without interruptions or delays in processes.

6.5.2. The TSOs in the CORE FB MC cooperation project agree on the available CZC values for the IDA auction sessions in coupled operation and transmits them to the CMM module. The Pre-Coupling TSO operator managing the CMM module elaborates the joint document with all available capacities on the interconnections involved in the coupling process and makes it available to the NEMOs through the CIP.

6.5.3. Each NEMO, based on local rules, publishes the relevant CZC values for the area in which it operates and which are available for the coupling process no later than GCT-2min.

6.5.4. In accordance with the procedures agreed within the IDA project, TSOs have the right to update CZC values if necessary, but no later than **14:55** CET for IDA1, **21:55 CET** for IDA2, and **09:55 CET** for IDA3.

6.5.5. Participants have the right to submit offers, modify, or cancel already registered offers in the trading system, respecting the provisions of *Section 6.3.: Offering within IDA*.

6.5.6. The NEMO provides participants in the IDA with the coupling results, in CET hours, through Trade confirmations, starting at **15:30 CET** for IDA1, **22:30 CET** for IDA2, and **10:30 CET** for IDA3.

6.5.7. The market clearing price corresponds to the intersection of the aggregation between buy and sell curves resulting from the combination of stepwise offers and block offers from participating national markets, within the available interconnection capacity.

6.5.8. Each Trade corresponds to the delivery of energy at a constant power (average hourly power) over the respective trading interval.

6.5.9. The NEMO sends physical notifications to the market operator (TSO) for each BRP, for each 15-minute settlement interval, related to trades concluded in IDA for a specific delivery day by the respective BRP members, in CET hours. The physical notification of block exchanges always includes 96 15-minute intervals (100/92 intervals on daylight saving time days, as applicable).

6.5.10. Any delay in the deadlines provided in the normal operation of the coupling process is notified to market participants and agreed procedures for the coupling process are applied.

6.6. SETTLEMENT

6.6.1. NEMO develops the procedures for carrying out the specific functions of settlement in accordance with the herein provisions.

6.6.2. Each applicant wishing to be registered as a participant in SIDC and to trade within IDA, including TSO as an implicit participant, must open a cash account at a commercial bank from Romania called hereinafter settlement bank.

6.6.3. NEMO opens a dedicated central account for IDA at a commercial bank in Romania, for payments related to trades concluded on IDA.

6.6.4. TSO as a shipping agent opens, for payment purposes, for trades concluded, a lei account at a commercial bank from Romania and opens a direct mandate debit. account.

6.6.5. A Market Particpant in IDA/IDM, before submitting offers to sell with negative prices/offers to buy electricity with positive prices, the direct debit payment mandate concluded with its settlement bank that allows NEMO to collect the amounts to which it is entitled in accordance with the settlement notes.

6.6.6. NEMO has the right to request the IDA participant to provide a financial guarantee before the participant submits offers to buy with positive prices or offers to sell with negative prices. The implicit participant is not obliged to provide financial guarantees, but takes all measures to ensure that settlement deadlines are not exceeded due to lack of availability in its settlement accounts.

6.6.7. TSO as a shipping agent establishes the payment and collection terms for payment obligations and rights, respectively, to/from the neighboring TSOs based on the net value of cross-border flows on IDA on the respective interconnection, taking into account the payment/collection terms of NEMO and the partner TSO, and ensures the necessary funds are available in the settlement accounts to ensure smooth settlement on IDA.

6.6.8. For each IDA participant, NEMO determines daily the value in lei of payment obligations/collection rights by summing the products of the quantities and prices for all trades that the respective IDM participant has concluded with NEMO on IDA for the corresponding delivery day.

6.6.9. Separately for each IDM participant and for each delivery day, NEMO prepares a daily settlement note containing all values to be debited or credited to the central account of IDA.

6.6.10. TSO does not pay fees to NEMO for trading on IDA as an implicit participant in PI.

6.6.11. NEMO provides each IDM participant, the daily settlement note and transmits direct debit instructions to the bank where the central account of IDA is held.

6.6.12. Settlement notes must be settled through the direct debit mechanism within the deadlines publicly made available therough the procedure developed with this purpose by the NEMO. Payments are considered made on the date on which the corresponding values are debited or credited to the central account of IDA.

6.7. CZC VALUES PUBLICATIONS

6.7.1. Under normal operation, the ATC values are published at GCT-2min for each IDA session.

6.7.2. Due to technical reasons or issues arising in the process of determining or transferring the ATC values file, or due to issues identified in advance with the local trading solution of OPCOM, which result either in the cancellation of an IDA session or in the early decoupling of OPCOM as per Chapter 6.10, the ATC values will no longer be published.

6.8. PARTIAL DECOUPLING KNOWN DURING THE COUPLING SESSION

6.8.1. In normal operation, the results of the coupling process are distributed to entities in the SIDC coupling process (NEMO and TSO) for each IDA session. These are validated by NEMOs from the perspective of coupling principles and portfolio allocations in relation to the offers submitted, and subsequently sent at 15:17:30 CET for IDA1, 22:17:30 CET for IDA2, and 10:17:30 CET for IDA3 to TSOs for validation from the perspective of cross-border flows against the declared cross-border transport capacities.

6.8.2. In normal operation, the preliminary results of the coupling process are available to participants after their validation as soon as possible but no earlier than 15:17:30 CET for IDA1, 22:17:30 CET for IDA2, and 10:17:30

CET for IDA3. OPCOM publishes the results of the coupling process on the website as soon as they are available and validated.

6.8.3. As a result of technical problems in the IT systems or in the communication process between the entities involved, which make it impossible to transmit the anonymized order book and CZC values as input data for the coupling calculation, a situation of partial decoupling known during the coupling session is declared.

6.8.4. In case such a dysfunctionality of the coupled markets is encountered, in accordance with those agreed at the European project level, except for some areas, all bidding zones that are part of the IDA framework will be decoupled, transmitting to market participants the information ***IDA_JOINT_07****: IDA Partial Decoupling*.

6.8.5. In such a situation, for the Romanian market area and for a specific IDA auction session, the local auction is not conducted, the energy offers of market participants are canceled, and thefinancial guarantees are reinitialized to the original value and can be usedfor trading in the next chronological IDA auction session.

6.9. EARLY PARTIAL DECOUPLING (KNOWN IN ADVANCE)

6.9.1. When, for a certain delivery day and for a specific IDA session, a NEMO in a bidding zone that is part of the IDA topology encounters situations (planned maintenance in advance, critical dysfunctions of trading systems, etc.) that lead to the impossibility of transmitting, on behalf of that NEMO, the necessary input data for the calculation, this will result in decoupling known in advance.

6.9.2. Participants will be notified prior to the gate closure time for each IDA session about such a critical situation through the message ***IDA_JOINT_07****: IDA Partial Decoupling*.

6.9.3. In such a situation, for the Romanian market area and for a specific IDA session, the local auction will not be conducted, the energy offers of market participants will be canceled, and the financial guarantees will be reibitialized to the original value and can be used for trading in the next chronological IDA auction session.

6.10. CANCELLATION OF AN IDA AUCTION SESSION FOR A SPECIFIC DELIVERY DAY

6.10.1. In various situations of deviation from IDA procedural provisions, an IDA auction session for a certain delivery day may be canceled due to planned maintenance or issues/malfunctions of central systems.

6.10.2. Market participants will be informed about the cancellation of the IDA auction session for a certain delivery day by receiving the message **IDA_JOINT_09**: IDA Cancellation.

6.10.3. In such a situation, for the Romanian market area and for a specific IDA auction session, the local auction will not be conducted. Consequently, participants' electricity offers will be canceled, and the financial guarantees will be reibitialized to the original value and can be used for trading in the next chronological IDA auction session.

6.11. DETERMINING TRADING QUANTITIES AND PRICES

A) Used Algorithm

6.11.1. For trading within the IDA in a coupled regime, the Euphemia algorithm is used as in in Day Ahead Market, which aims to maximize social welfare at the level of coupled markets.

6.11.2. Trading takes place daily through the three IDA sessions according to the rules agreed upon at the European coupled zone level.

B) Specific Rules Regarding Price Determination

6.11.3. In the case of coupled market operation, the price is set in Euros with 2 (two) decimal places by the coupling algorithm. The price is converted to lei using the same exchange rate used to convert offers from the national offering area to create the order book. The price thus obtained and rounded to 2 (two) decimal places represents the clearing price for the trades concuded in the relevand bidding area.

6.11.4. NEMO completes the step offer curves as follows:

a) If the highest sell price through sell offers is lower than the maximum price of the price scale for IDA, then a fictitious sell pair will be added with a quantity equal to zero and a price equal to the maximum price of the scale;

b) If the lowest buy price through buy offers is higher than the minimum price of the price scale for IDA, then a fictitious buy pair will be added with a quantity equal to zero and a price equal to the minimum price of the scale.

C) Principles for Executing Offers and Determining Traded Quantities

6.11.5. Stepwise sell offers at a lower price and stepwise buy offers at a higher price than MCP-IDA are executed in full.

6.11.6. Stepwise sell offers at a higher price and stepwise buy offers at a lower price than MCP-IDA are rejected.

6.11.7. Stepwise offers may not be executed or may be partially or fully executed for the quantities offered for sell/buy at prices equal to MCP-IDA.

6.11.8. Execution condition of a block offer: for the sell block offer, it is accepted if the average price per MWh traded within the block is at least equal to the offer price of the block, and for the buy block offer, the average price per MWh traded within the block is at most equal to the offer price of the block. It is specified that the offered/traded volume of the block is considered as average hourly power, while the average price is related to energy.

6.11.9. In principle, an independent block offer is executed if the block offer condition is met. The possible situations of execution or non-execution of block offers are as follows:

a) an independent block offer is not executed if the block offer condition is not met;

b) an independent block offer may not be executed even if the block offer condition is met. These offers are rejected by running the coupling algorithm and are called paradoxically rejected block offers;

c) an interdependent block offer that is a "parent" block offer (an offer whose acceptance can be made by fulfilling the block offer condition independently of other offers) may be executed even if the block offer condition is not met in the situation where the "child" block offer (an offer whose acceptance is additionally conditioned by the acceptance of another block offer, called a "parent" block offer) completes the average price per MW traded within the block so that, overall, the condition of executing interdependent block offers is respected, namely the average price per MWh traded for sell block offers is at least equal to the offer price of the blocks, and for buy block offers, the average price per MWh traded is at most equal to the offer price of the blocks.

6.12. TRADE CONFIRMATION

A) Issuing Trade Confirmations

6.12.1. Trades within the IDA are concluded for a specific delivery day and represent firm commitments of the IDA participants.

6.12.2. Each trade corresponds to a trading interval expressed in CET hours for the delivery day and an IDA session for which the trade has been concluded.

6.12.3. At 15:17:30 CET for IDA1, 22:17:30 CET for IDA2, and 10:17:30 CET for IDA3, the results of the coupling process validated by all Nemo from the perspective of portfolio allocation are transmitted to TSO for validation of cross-border flows against the declared capacities. Following this validation, the results of the coupling process are final, and Nemo makes them available to the participants no earlier than **15:30 CET for IDA1, 22:30 for IDA2, and 10:30 for IDA3**, separately for each trading interval and IDA session for the delivery day for all IDA auction sessions that have not been canceled, expressed in CET hours.

6.12.4. Trade confirmations are automatically generated by the IDA trading system as soon as the matching gate is closed and the gate for publishing trade results is opened (making trade confirmations available to participants).

6.12.5. Trade confirmations made available to participants will contain the following information:

- Delivery day;
- IDA auction session;
- Offer type: stepwise offer (SQB) or block offer (BLB);
- Offer direction: sale or purchase;
- Trading interval, or block definition interval in CET hours for which the trade has been concluded;
- Trade identification code;
- Version of the offer submiited for the trade;
- Offer details: price-quantity pairs;
- Traded quantity and MCP-IDA.

B) Cancellation of Trade Confirmations

6.12.6. In the event of dysfunctionality as presented in chapters 6.9, 6.10, and 6.11, trade confirmations will not be available. Participants will be notified through relevant messages.

6.12.7. In cases where participants cannot access trade confirmations, NEMO will notify the participants and TSO of the situation, open communication channels via email as provided in Section 6.13: Emergency Situations, and transmit trade confirmations as soon as possible.

6.13. EMERGENCY SITUATIONS

6.13.1. Emergency situations regarding the malfunctioning of the trading system and the communication channels of both NEMO and IDA participants apply when at least one of the following situations occurs in this market:

a) When due to the malfunctioning or defective operation of their own communication channels, one or more IDA participants cannot submit sell/buy offers for a specific IDA session or cannot receive Trade confirmations from the NEMO;

b) When due to the malfunctioning or defective operation of their own communication channels, NEMO cannot receive offers submitted by IDA participants or cannot send trade confirmations to them and physical notifications to TSO.

6.13.2. The responsibilities of NEMO, TSO, and IDA participants regarding the mentioned emergency cases are specified in the following table:

Nr. crt.	Case 6.13.1.	Action	Responsible
1	a)	Opening an alternative internet access communication channel	IDA Participants and TSO
2		Notification of Nemo via email regarding the situation and sending the attached data with the notification email and/or receiving data via email from Nemo	
3	b)	Opening an alternative internet access communication channel	NEMO
4		Notification of TSO and market participants via email regarding the situation created, transmission and/or reception of data via email to/from Nemo	

6.14. NEMO COMMUNICATION DURING THE COUPLING PROCESS

6.14.1. NEMO conducts communication with the partners involved in the coupling process strictly adhering to the provisions of the operational procedures agreed upon at the IDA level.

6.14.2. IDA participants will be informed as soon as possible about any event related to the trading process in which they are involved, through the trading platform, email, OPCOMs website, depending on the situation.

6.14.3. NEMO ensures constant communication with IDA participants through operational communications whose content is agreed upon at the central project level to ensure equal and simultaneous information for all participants in the coupled markets and efficient trading process.

6.14.4. The operational messages agreed upon in the coupling process at the IDA level, as well as locally adapted messages for communication with IDA participants, are presented in the Operational Messages document available on the OPCOM website under the *Trading menu - Products / Intra-day Market / Auction Trading (IDA) / Procedures*.

6. ANNEX

ANNEX 1 – TYPES OF OFFERS AVAILABLE IN THE LOCAL TRADING SYSTEM

1. In the IDA trading system, independent block offers and interdependent block offers can be introduced.

2. The characteristics of block offers implemented in the trading system are as follows:

2.1. *All-or-Nothing* type, meaning block offers can be either accepted in their entirety or, if not, rejected entirely;

2.2. The block definition period consists of a minimum of 2 trading intervals;

2.3. The block definition period consists of consecutive trading intervals;

2.4. The block definition price is the unit offering price, respectively:

a) The minimum accepted price per MWh for all energy offered in a sell block;

b) The maximum offered price per MWh for all energy offered in a buy block.

2.5. The block definition quantity is the same for all trading intervals within the block definition period and is expressed as average hourly power.

3. Characteristics of interdependent block offers:

3.1. The "child" block offer is a block offer whose acceptance depends on the acceptance of another block offer, called the "parent" block offer";

3.2. The Euphemia algorithm allows the execution of a block offer family where, in the case of sell block offers, the total value of the "parent" block, calculated at MCP-IDA, is less than the offer value, or in the case of buy block offers, it is greater than the offer value, provided that the value of the "child" offer compensates, in terms of welfare, for this difference. The value of the offer is calculated as the product of the offer price and the quantity of energy resulting from the offered average power amended with the corresponding time period;

4. Limits corresponding to block offers:

4.1. The minimum block definition quantity is **0.1 MW**;

4.2. The maximum block definition quantity is **400 MW**, this value can be adjusted to maintain acceptable performance of the coupling algorithm, based on the common procedure of all NEMOs developed in the context of implementing Regulation (EU) 2015/1222;

4.3. The maximum number of block offers is **100** per participant, of which the total maximum number of interdependent block offers (for example, those related in a parent-child relationship) is **15**. These limits can be adjusted to maintain acceptable performance of the coupling algorithm, based on the common procedure of all NEMOs developed in the context of implementing Regulation (EU) 2015/1222;

4.4. The "parent" block offer can have only one "child" block offer;

4.5. The "child" block offer can have only one "parent" block offer;

4.6. A block offer family can have a maximum of three generations of interdependent block offers, i.e., a maximum of 3 interdependent block offers.

5. The maximum price of the price scale is **+9.999 Euro/MWh**, and the minimum price of the price scale is **-9.999 Euro/MWh**; these values can be modified following the agreement of all power exchanges and regulatory authorities / by ACER decision.

ANNEX 2 – CHRONOLOGICAL SEQUENCE OF TIME STAMPS

The chronological sequence of normal actions and deadlines for communication transmission on the platform and/or via email:

Time [CET]	Message Code	Message Subject
at the begining of XBID maintenance period	IDA_JOINT_09	Cancellation of IDA known in advance due to planned maintenance of the XBID system or IDA CIP
*GCT-25min	IDA_JOINT_09	Cancellation of IDA in advance due to critical issues regarding IDA modules or XBIF systems (CMM) that will not be solved before the start of IDA.
IDA OBK GCT-2min	IDA_JOINT_07	Partial decoupling due to network data reasons
IDA1: 15:00 CET IDA2: 22:00 CET IDA3: 10:00 CET		Closing time of the offering phase (Closing of the Order Book)
GCT+12min	IDA_JOINT_07	Partial decoupling due to order book reasons
GCT+17min30s	IDA_JOINT_08	Delay in publishingof the market coupling results
GCT+20min	-	Deadline for transmitting final market coupling results under normal operating conditions.
IDA GCT+30min	IDA_JOINT_09	Cancellation of IDA during market coupling session
	POST_ExC_IDA_JOINT_07	Additional information regarding Partial Decoupling of IDA
	POST_ExC_IDA_JOINT_08	Additional information regarding the delay in publishing IDA results
	POST_ExC_IDA_JOINT_09	Additional information regarding IDA Cancellation

*Note
IDA1: Closing time of the offering phase for offer submission on day D-1 at 15:00 CET for delivery on day D [0:00-24:00].
IDA2: Closing time of the offering phase for offer submission on day D-1 at 22:00 CET for delivery on day D [0:00-24:00].
IDA3: Closing time of the offering phase for offer submission on day D at 10:00 CET for delivery on day D [12:00-24:00].

ANNEX 3 – RIGHTS AND RESPONSIBILITIES IN OFFER TRANSMISSION AND VALIDATION ON IDA

1. IDA Participant Rights

1.1. To submit offers to sell and/or buy electricity within IDA;

1.2. To declare limit volumes for each 15-minute interval applicable to their own offers (separately for sale and purchase), with modifications possible only upon prior written notification sent to NEMO;

1.3. To modify or cancel their own emergy offers and submit new versions during offer submission hours within an IDA session according to the provisions of the Procedure;

1.4. If unable to access the IDA trading system, to submit their own energy offer in **.xml** format by email and request NEMO to upload it on their behalf into the IDA trading system for a specific IDA auction session, complying with the provisions of this procedure;

1.5. If unable to access the IDA trading system, to request NEMO to cancel offers on their behalf, complying with the provisions of this procedure;

1.6. To be informed through messages displayed by the IDAtrading system regarding the validation or invalidation of their offers;

1.7. To access trade confirmations for each delivery day and IDA auction session, reported in CET hours through the IDA trading system;

1.8. To request NEMO to send the trade confirmations through alternative channels in case the participant cannot access the trading system;

1.9. In the case of aggregate participation, the aggregator is the participant trading electricity and is entitled to all rights provided in the Participation Agreement in Short-Term Electricity Markets (Day-Ahead Market and Intra-day Market), as well as those provided in the national and/or European Union regulations corresponding to participation in the electricity market;

1.10. To access daily Settlement Notes (in CET hours) and request NEMO to send them through alternative communication channels (email) in case the sFTP channel cannot be accessed;

1.11. To collect the net collection rights value specified in the daily Settlement Notes and document, monthly, the collection of rights and the payment of reciprocal equal value settlement obligations;

1.12. To submit to NEMO for energy sales trades recorded during the delivery month, the invoice for "service provision" for the purchase of energy (in CET hours), from the delivery month, at negative prices;

2. IDA Participant Responsibilities

2.1. To comply with the provisions of this Procedure regarding the conditions and modality of submitting offers for electric energy in the IDA trading system;

2.2. To adhere to the format and framework content of energy offers for each IDA auction session as provided in this Procedure;

2.3. To submit energy offers for IDA only during the offer submission intervals specified in this Procedure;

2.4. To verify the accuracy of the data in the **.xml** file of the offer before transmitting it to NEMO for submission in the trading system on behalf of the IDA participant;

2.5. Not to submit offers for intervals 93-96 of a delivery day if the participant no longer meets the balancing responsibility conditions for that interval;

2.6. To verify if the offer transmitted for IDA has been loaded into the trading system;

2.7. To verify the correctness of the data recorded in the IDA trading system in terms of quantities and prices immediately after entering the offer;

2.8. To verify if the offer transmitted for IDA has been validated;

2.9. To redo the offer for IDA and resend it to the trading system if it has not been validated;

2.10. To immediately contact NEMO if no notification is received from them about the validation or invalidation of the offer within 15 minutes from the official offer submission (the moment the offer is entered into the trading system);

2.11. To inform NEMO about the occurrence of a situation where they cannot access trade confirmations;

2.12. To ensure the necessary financial availability for debiting their account opened with the Settlement Bank, at the net value of payment obligations provided through the Daily Settlement Notes;

2.13. To periodically check the records in the System Logs within IDA, accessible in the trading system;

2.14. To promptly notify NEMO of connectivity issues with the IDA software application and to timely transmit the offer in **.xml** format by email for uploading it into the trading system by the NEMO on their behalf;

2.15. To maintain an updated list of authorized persons in relation to OPCOM S.A. as per the provisions of the *Procedure for registering participants in centralized electricity markets managed by OPCOM S.A.*;

2.16. In the case of aggregate participation, the aggregator is the participant who trades electricity and who assumes all obligations provided in the Short-Term Electricity Market Participation Agreement (Day-Ahead Market and Intra-day Market – Continuous Trading), as well as those provided in national and/or European Union regulations corresponding to participation in the electric energy market.

3. NEMO rights

3.1. To invalidate energy offers for IDA that do not comply with the provisions of this Procedure regarding validity, content, format, and offer transmission time;

3.2. To refuse to upload/cancel offers in/out of the trading system at the Participant's request if they do not comply with the provisions of this Procedure regarding offer format as specified in the *Procedure for registering participants in centralized electricity markets managed by OPCOM S.A.;*

3.3. To invalidate the dailybuy offers at a positive price or the sell offer at a negative price if its value exceeds the financial guarantee/available value in accordance with the *Short-Term Electricity Market Participation Agreement (Day-Ahead Market, Intra-day Market)* and with the *Procedure regarding the establishment, verification, and use of financial guarantees for participation in the Intra-day Market for electric energy – Auction Trading (IDA)*;

3.4. To invalidate participant offers if they do not meet the conditions for balancing responsibility;

3.5. To enter offers into the IDA trading system for a specific auction session at the participant's request and on their behalf only if the participant cannot access the IDA trading system;

3.6. To collect the net collection rights value specified in the daily settlement notes by sending the corresponding direct debit instructions to the central account bank and to document, monthly, the collection of rights and the payment of offsetting obligations in equal and reciprocal value;

3.7. To submit to NEMO for registered energy sales trades during the delivery month, the invoice for *"service provision"* for the purchase of electric energy (in CET hours) from the delivery month at negative prices;

3.8. To request the execution of the bank guarantee letter if the IDA participant has not ensured the necessary financial availability for debiting their account opened with the settlement bank.

4. NEMO responsibilities

4.1. To validate/invalidate the energy offers submitted by participants to the IDA according to the provisions of this Procedure;

4.2. To inform the participant about the validation or motivated invalidation of an offer through operational messages issued by the IDA's IT system;

4.3. To provide the participant with Trade confirmations for each delivery day and each IDA auction session, or as agreed, reported in CET hours;

4.4. To notify the participant of any delay in publishing the coupling results compared to the scheduled publication time;

4.5. To transmit Trade confirmations through alternative communication channels to the participant who has requested this under the conditions provided by this procedure;

4.6. To fully pay the net obligations specified in the Daily Settlement Notes through payment orders issued to credit the bank account opened by the IDA participant at a commercial bank in Romania;

4.7. To provide the participants with this Procedure and inform them of any subsequent modifications made to this Procedure.