POLICY GUIDELINES

of the Energy Community Secretariat*

On the Promotion of Organised Electricity Markets in the Contracting Parties

PG 03 / 2015 / 24 September 2015

* developed with the support of an ad-hoc working group comprising academia and industry professionals listed at the end of the document
1. Purpose

The Energy Community *acquis communautaire* establishes the foundations for electricity market integration in its Parties. In particular the Third Energy Package puts increased emphasis on coordinated cooperation as key to achieve this. The *Regulation on Capacity Allocation and Congestion Management* ("CACM Regulation")\(^1\) is a significant regulatory measure establishing a single mechanism for the cross-border trade of electricity for the day-ahead and intraday timeframes. Its impact on the transmission of electricity, creation of competition and finally integration of wholesale markets is likely to translate into the single most important market reform in the Energy Community in the years to come.

The CACM Regulation is pivotal to the entire Energy Community, as its provisions govern the functioning of a single mechanism for the day-ahead and intraday markets for wholesale electricity. Large parts of the Regulation aim at coupling of the electricity markets of the Member States of the European Union and are hence assuming the existence of organised market structures in the markets-to-be-integrated. The lack of such organised market structure in the Contracting Parties may be an impediment for a timely implementation of the Regulation’s requirements.

These Guidelines aim at facilitating the establishment of organised market structures in the Contracting Parties by providing guidance on the harmonised development of the institutions, processes and compatible rules needed to reach the targets foreseen.

In order to create a single regulatory space for trade in electricity pursuant to Article 2(b) of the Treaty establishing the Energy Community, and to avoid any discrimination pursuant to its Article 7, three elements are needed:

- First, the CACM Regulation will need to be adopted into the *acquis* of the Energy Community, in a timely manner, in which transposition and implementation deadlines for the Contracting Parties should be as short as possible. Moreover, timely transposition and implementation in the Contracting Parties is essential. These steps are vital for establishing the needed degree of legal certainty;
- Second, the legal and factual barriers to electricity market integration and liberalisation will need to be abandoned in the Contracting Parties in order to allow for the creation of a level playing field; and
- Third, the underlying markets allowing for coupling need to be established.

The present Policy Guidelines address particularly the latter two dimensions. It is important to underline that the recommendations of this document are based on the assumption that the CACM Regulation is implemented in the Contracting Parties and its requirements are foreseen as a prerequisite. Building on this, the present Policy Guidelines aim at giving guidance on specific implementation aspects that are to be provided and / or abolished in the Contracting Parties’ national market framework in order to allow for competitive spot electricity markets on national basis and, consequently, coupling of markets across borders. To this extent, competitive national market structures are understood as condition sine qua non for development of cross-border and regional integration.

The present Policy Guidelines are without prejudice to the interpretation of Energy Community law in accordance with the case law of the Court of Justice of the European Union or guidance given by the Ministerial Council under Article 94 of the Treaty.

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\(^1\) OJ L 197 of 27.7.2015, p 14 et seq.
2. Policy Guidelines

2.1 Summary of Recommendations to the Contracting Parties

The following steps and measures summarize the recommendations of the present Policy Guidelines to the Contracting Parties preconditional to the establishment of liquid and functioning organised electricity markets:

1. Facilitate the adoption of the CACM Regulation into the Energy Community acquis.
2. Create a legal and regulatory framework that
   a. incentivises the operation of an organised market;
   b. is clear to whether the operation of an organised market is treated as monopoly or competitive business;
   c. abolishes discriminatory barriers to market participation and market activity; and
   d. does not limit market activity of national or foreign market participants;
3. Develop a price deregulation strategy and implement it.
4. Introduce a market-based balancing regime with a fair and comprehensive balance responsibility and settlement process.
5. Promote the closer cooperation of TSOs with its neighbours and the introduction of close to real-time processes.
6. Analyse and amend related legal acts when necessary, including those related to taxation, to abolish potential barriers to the establishment and operation of and market activity at an organised market, i.e. abandon all discriminatory requirements.
7. Decide on the best way to promote liquidity in the short-term before coupling spot markets with the rest of the Energy Community.
8. Decide on the implementation of an early nomination process, i.e. running the so-called NEMO nomination process as foreseen in the CACM Regulation, for finding one or more electricity market operators servicing the national market.
9. Identify and abandon potential barriers to the operation of clearing and settlement processes by foreign entities.

2.2. Introduction

Market integration is a central target of the Energy Community, comprising both the Member States of the EU and the Contracting Parties. The CACM Regulation’s single market coupling concept is clearly meant as a pan-European project, including the Energy Community countries. Beyond legalities, the single market coupling concept of the CACM Regulation also from a technical point of view calls for involvement of all TSOs of the interconnected electricity grid if sub-optimal configurations (as, e.g., related to the design of Capacity Calculation Regions) due to introduction of artificial boundaries on EU borders is to be avoided. The Regulation’s central market integration functionality can hence be assumed by establishing a single mechanism for the most important timeframes. It moreover facilitates sufficiently compatible market designs.

In the light of the above said, it will be essential that solutions and methodologies already developed
on EU level under the CACM Regulation are also applied by the Contracting Parties. The development of parallel or even conflicting Energy Community specific methodologies clearly stands against the target of pan-European single market coupling. As a matter of legal and ownership principle, this, however, will also require adequate involvement of Energy Community addressees of the CACM Regulation’s norms in methodology development.

In the following, the solutions and requirements foreseen by the CACM Regulation are treated as a prerequisite. At the time of drafting the present Policy Guidelines, European day-ahead market coupling is reality and has to be regarded as focal point for the electricity market integration in the Energy Community. Further developments regarding the integration of intraday markets will additionally be facilitated with the creation of organised day-ahead markets, as processes closer to real-time will have to be established and operated.

It needs to be noted that the recommendations of the present Policy Guideline can also be applied on bilateral basis for markets not yet synchronised with ENTSO-E’s Synchronous Area Continental Europe, namely Moldova and Ukraine.

2.3. Structural Prerequisites

The aim of this chapter and the Policy Guidelines in general, is to provide a framework for a functioning market setup without being overly prescriptive in details. The remaining design freedom and the national approach chosen depends on political, societal and sector fundamentals that form a condition for the successful establishment of organised market structures in the respective Contracting Party. Also crucial for the successful integration of spot market in the Energy Community, but not elaborated in further detail here, is the continued and improved cooperation between National Regulatory Authorities (NRAs) and Transmission System Operators (TSOs) at regional level, making best use of existing cooperation structures of ACER and ENTSO-E. Discussions about an early involvement of Contracting Parties’ entities in developing the CACM Regulation’s deliverables and approval procedures are crucial in promoting ownership and applicability across the EU’s borders.

Political will and active engagement of NRAs in designing market structures will remain a key prerequisite. Political commitment to implement the recommendations of the present Policy Guidelines must derive not only from the Energy Community acquis but also the so-called “soft measures” to which the Western Balkan 6 countries committed to at the 2015 summit.

Another element which is not discussed in the present Policy Guidelines is the question of the definition of bidding zones in relation to organised markets, as related mechanism for their review are foreseen under the CACM Regulation. In order to avoid potentially conflicting recommendations, a more detailed elaboration on the bidding zone configuration is out of the scope of these Policy Guidelines but the present Policy Guideline recommends following the related mechanisms foreseen under the CACM Regulation.

2.3.1 Legal Requirements

One of the most important prerequisites for the creation of a truly integrated Energy Community electricity market, comprising the EU and the Energy Community Contracting Parties is aligning the legal framework. This entails the timely adoption and implementation of all legal acts comprising the EU electricity acquis, including the 3rd Energy Package, as well as all related Guidelines and Network Codes. For the latter, it is of utmost importance that the implementation gap between the EU Member States and the Contracting Parties does not widen due to legal uncertainty as a consequence of a
staggered incorporation into the Energy Community *acquis*. Applying this to the requirements for spot markets, it means that the central re-regulatory measure, the CACM Regulation, shall be adopted for the Energy Community in its entirety, and at best with the smallest possible time delay\(^2\).

The positive evolution in the EU towards coupled day-ahead markets, implementing a part of the target model, has happened without any legally binding Code or Regulation in place. For the Energy Community Contracting Parties this example is not applicable, as the EU parties implementing the coupling projects had awareness of the coming targets and were in expectation of binding regulations. The Code (now CACM Regulation) provided valuable answers to most of the questions that surround the establishment of organised and coupled markets. The cost sharing keys proposed by the CACM Regulation, for example, help in implementation projects that have a cooperative nature. For that, the adoption and application of the CACM Regulation’s provisions into the legal framework of the Contracting Parties is at the heart of these recommendations.

The observation, that the difference in the legal framework creates obstacles for the completion of the internal market by implementing its Target Model, is provided by the CACM Regulation itself, by stipulating that for example the countries forming part of the 8\(^{th}\) region are only to develop a flow-based methodology once the Contracting Parties have joined the single day-ahead coupling\(^3\). The general notion of all Network Codes is that more cooperation between the operators of the interconnected grid is necessary. Differences in the legal and regulatory framework should be kept at a minimum for a minimal time.

Besides the creation of new binding obligations to overcome the integration deadlock in the 8\(^{th}\) region, especially in the Contracting Parties, the national legal and regulatory obstacles that impede market entry, free price formation and competition will need to be removed:

- The market participation requirements should not foresee any form of *preferential treatment* of incumbent or national market participants\(^4\) over others. Identifying and abandoning these barriers to market integration will be one of the main challenges in the next step of moving closer to the single day-ahead coupling.
- Another legal barrier to the functioning of coupled organised markets is non-harmonised tax systems or double-taxation, which unduly discriminate between market participants, or diminish their liquidity through long-lasting refunding procedures.\(^5\)
- In countries where discriminatory fees, tariffs or other direct or indirect costs on the cross-border exchange of electricity hinder fair competition, these will obviously need to be abandoned. Such discriminating measures directly impacting the traded commodity are obviously in contradiction with fair competition.
- Other discriminatory provisions refer to the operation of an organised market: with regard to below recommendation to seek cooperation with existing and well established EU partners for the

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\(^2\) Cf. the related recommendations of the Energy Community Regulatory Board (ECRB, implementation of the European Network Codes in the Energy Community, 2013) and Energy Community Electricity Forum (Athens Forum 2014, conclusions paragraph 3; Athens Forum 2013, conclusions paragraph 14). The Energy Community Council in context with adopting the Third Energy Package (ref. Decision 2011/02/MC-EnC) agreed that “Network Codes should be adopted by the Energy Community as soon as possible after adoption on EU level” and mandated the PHLG to adopt a Procedural Act defining the rules for adoption of Network Codes in the Energy Community (cf. conclusions of the 9th Ministerial Council, paragraph 11). PHLG and ECRB have adopted related Procedural Acts (cf. PA 01/2012 PHLG-EnC and PA 2012/02 ECRB-EnC).\(^6\)


\(^4\) An example for this is that the legal framework should allow for market activity without any requirement for opening a subsidiary in the domestic jurisdiction.

\(^5\) For more information on establishing a functioning level of harmonisation of value added tax, please see the Policy Guidelines on for treatment of Value Added Tax on transactions related to cross border trade of electricity in the Contracting Parties of the Energy Community, available here: https://www.energy-community.org/portal/page/portal/OC36150867403810E053C92FA8C0DB3F.
operation of organised markets in the Contracting Parties, be this power exchanges or clearing houses, national laws\(^6\) shall not prevent the outsourcing of any of the functionalities, especially with regard to clearing and settlement.

- Also, any form of *regulatory intervention in market based price setting* on production, wholesale and balancing level needs to be abolished (cf. chapter 2.2.2).

The best approach in identifying the legal and regulatory barriers to the establishment of organised market structures in the Contracting Parties that will form part of the single day-ahead coupling, is that the legislative and regulatory authorities within the Contracting Parties assess potential conflicts between the CACM’s provisions and existing legal obligations before the transposition into national law in order to avoid conflicting rules. Such conflicting elements may be unique in each Contracting Party, as the CACM Regulation was not drafted in a spirit to provide a solution to all potential elements hampering market functioning.

### 2.3.2 Requirements for Market Functioning

This chapter covers three different areas of requirements for the long-term functioning of market operation. It differentiates between structural pre-conditions, like a profitable PX business model, preliminary measures to be taken to ensure a stable legal and regulatory framework, and continuously needed instruments, like staffing, training, or the avoidance of barriers to trade on the market.

Coupling of the day-ahead markets of the relatively small and at times illiquid and incumbent dominated markets of the Contracting Parties will be the **single best means to bring liquidity** into the SEE region and allow for competitive price formation. Before reaching this point, however, three strategies may prove successful in promoting liquidity at an early stage. First, the creation of sufficient incentives to participate in the market through the complete withdrawal of distortions to competition, reliable processes and participatory governance can be considered a way to attract volumes to be traded at the spot market. Second, an obligation to trade at the organised market in the form of quotas may be an alternative to a more laissez-faire approach. There, a certain share of available capacity is to be sold or bought at the exchange. Third, a model combining bilateral physical contracts and a spot market, where the segregation of tradable volumes between timeframes and trading patterns is avoided, can create a higher level of liquidity in an isolated market.

In general, the **volumes traded** on a power exchange depend on several factors: the number and variety of traded products, quality of services, consumption and generation level in a bidding area, facilities offered in the settlement process regarding the collateralisation of a trade, the maturity of market places, transparency, affordability of fees, free market access, and non-discriminatory procedures, rules, and laws.

The mid-term **profitability of a power exchange**, or the operation of an organised market, is an important precondition for the sustainable operation and functioning of the market. It is closely related to the volume of transactions and fees, but also to institutional and operational costs. Profitability has to be projected on a time horizon with forecasting the factors mentioned above. Such a projection of the development of trade activity should be included in business plans covering all costs from launching and later operating. A power exchange’s income from trading activities (membership fees or transaction fees) needs to be higher than the expenses of a power exchange (trading platform, clearing operations, employees, all costs related to operations) in the long run. In the short run after

\(^6\) Like discriminatory company registration or seat requirements for companies intending to be active in the relevant Contracting Party in operating the organised market or being responsible for clearing and settlement.
the establishment of activity, profitability should not be expected to be reached immediately. For the majority of market areas, this profitability can be expected to come, the latest with the operation of a coupled market, where liquidity will suffice for the long-term financing. Some markets may, however, not allow for the profitable operation of a local power exchange. For these cases, servicing through external partners is the key to bring down operational costs. Financing through regulated fees for these cases, would hamper the competitive price formation in micro-markets even more, and is because of that, not considered a reasonable solution for very small markets.

All market participants should be entitled to buy and sell at the market, i.e. there should be no one-sided restrictions:

- For an interim period it may be admitted to have a second set of trading licenses (besides the existing ones) which have to be easily obtained. Existing licenses, discriminatory regulatory fees or seat requirements may constitute a barrier to market entry, even though they are designed to serve certain other reasonable functions.
- In any case, foreign market participants should be recognised easily for domestic wholesale market activity. Where no trade licenses exist in the home market of the foreign market participant, a simplified procedure for granting a trading permission should be implemented. No such thing as seat requirements, discriminatory license fees or regulatory fees should exist.
- It is necessary to eliminate any form of discriminatory subsidies stemming from legal or regulatory provisions that discriminate between different kinds of consumers or market participants and have the form of price regulation, unfair balance responsibility, or unequal tax treatment.

Quota requirements (as % of installed and available capacity by any market participant to be obligatorily traded on the day-ahead market) are possibly a reasonable recommendation to create some liquidity at the beginning. Such quotas would, nevertheless, require careful design, so as not to cause unintended consequences with their introduction. For the time being, until more sophisticated products and co-optimisation across these will be developed, OTC transactions will continue to play an important role for trading activity, and the introduction of organised market structures will and should not change this in the short run. The discretion of market participants to trade OTC will remain an alternative to an organised market. In turn this means that no complete obligation for all market participants to only be active at the organised market is reasonable to create liquidity at the beginning. At a later stage when products are more mature and markets are coupled, no such obligation will be needed either, as incentives for trade activity at the power exchange provide for sufficient competition and increased liquidity.

An important driver for liquidity at an early stage is that state-owned companies, which face a high level of price regulation at the moment, will have to be given incentives through an economic need to participate in the organised market and an interest in portfolio optimisation. This can be done through contracts with incumbent generators ensuring significant market activity, abandoning of price regulation of the generation, the introduction of fair and non-discriminatory balance responsibility, or a light quota regulation. An option for all system operators to market losses at an organised market adds to liquidity. TSOs and DSOs will need to be allowed to participate in the market (e.g. for purchasing and selling electricity for optimised covering of losses, for unplanned outages or countertrading). The organised market for the marketing of losses cannot exclusively be the day-ahead market, but such trading will also take place in other timeframes.

An alternative to the “quota approach”, especially for very small markets, could be to implement a model combining bilateral physical contracts and spot market. It assumes the establishment of an organised market place for day-ahead trading, in which a physical matching of all spot and modelling
of some or all long-term trades is performed. It allows for volumes contracted in (bilateral) OTC deals to also be nominated by the generator in the day-ahead market, while providing a chance for the generator to supply his customer with power purchased at the power exchange instead of necessarily generating with own capacities. The modelling of bilateral physical contracts into the day-ahead market, thus allows for all freedoms of contractual relationships in a bilateral market while contributing to the liquidity of the day-ahead market. At the same time, it provides an incentive for spot market activity for market participants away from OTC deals, for trades that can be covered with standard products. Nevertheless, market participants will still have the freedom to choose where, with whom and how they trade. Mitigation strategies may still be needed for such a model where market power exists on either side of the market.

The selling and buying of electricity from renewable energy sources requires organised markets close to real-time due to their largely intermittent nature and the challenges in forecasting their feed-in. At the same time, the marketing of renewables is adding to liquidity on the market and promotes its functioning – a win-win situation for marketable renewables and the market.

Any form of price regulation is detrimental to the signalling effects of prices and distorts their incentivising effects. For that, the Contracting Parties’ regulators and ministries should develop a deregulation strategy which is based on the development of the day-ahead markets and goes in parallel with the establishment of an organised market and the subsequent coupling. In a first step, it is likely that some market participants are still active in two spheres, the regulated business and the organised market. Stepwise deregulation of prices all along the supply chain is essential.7

Not only for the change of a market structure towards an organised day-ahead and intraday market requires sufficient technical, personnel and institutional capacities, but also its successful operation and monitoring. Requirements in capacity and institution building in many Contracting Parties are significant and need to be carefully taken into account in any start-up phase. Besides building capacities within the TSO, the market participants and a potential new operator, especially the role of the NRA is pivotal by being active and independent. Appropriate financing of state entities and adequate staffing of all key players needs to be ensured.

Any restriction of market activity, especially for the incumbents, needs to be abolished. Public procurement restrictions or price limits for the incumbents’ or any other market participants’ activity have to be abolished (cf. chapter 2.2). Market activity on the PX will have to be recognised as an alternative to public procurement or tendering requirements for incumbents where they still exist. Alternatively, state-owned companies’ purchase and sale of electricity shall not be subject to public procurement law5. National banking rules on national and international transfers for the financial settlement of trades should not result in undue limitations to trade, for example through the reduction of available trading volumes resulting from longer transaction cycles, or additional transaction costs from transfer fees.

In total, all measures needed to foster liquid price formation through competition aim at making market prices reliable and to reflect the underlying scarcity of a resource at a given time for a given delivery time.

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5 Compare to the Energy Law of Montenegro explicitly stating that the public procurement law shall not apply.
2.4 Governance

2.4.1 Ownership, operation, finance

When discussing the set-up and governance structure of an entity operating an organised market, the chosen business model will provide the answers to most design questions and options. The present Policy Guidelines should not foreclose any of these options, but provide recommendations how to effectively establish an organised market structure in the Contracting Parties. In turn, this implies that each initiative, be it private or public, may turn out to successfully establish an organised market. Due to the fact that various successful models of governance and ownership of market operators of organised markets are in place in Europe today, no limiting recommendation regarding ownership is provided here.

Besides the necessity to reform the national legal and regulatory framework, where the involvement of authorities is crucial (cf. chapter 2.2), most other elements can be made successfully without direct ownership involvement of the state or public companies. Moreover, the establishment of an organised market does not require the creation of a new institution per se. A cost-effective solution in this endeavour could be the mere creation of a trading hub by an existing power exchange, given the cooperation of the national system operator and regulator. A clear vision and political support, however, is key to enable the emergence of this model for the Contracting Parties. In any case, a regulatory landscape is to be created which fosters the emergence of power exchange functionalities, but does not prescribe how the ownership structure should be. In countries where until now no power exchange emerged, it is likely that the legal environment was not beneficial for it, or markets are simply too small and hence not providing sufficient tradable capacity for profitable operation. Contracting Parties are free to choose what path they intend to go, by either requiring the nomination of a national or foreign power exchange to service the national market, foresee the establishment of a national power exchange by law, or ensure that the regulatory framework provides sufficient incentives for the emergence of power exchange activity.

Regarding the start-up financing for the establishment of an organised market, various options are possible: a regulatory fee (only in the case of national legal monopolies), financing through members’ fees, or third party financing, possibly in combination with an ownership option. Refinancing of implementation costs through handling fees is, however, not recommended in order not to introduce disproportionate transaction costs. The country specific choice of the start-up financing model is subject to investors’ interest and political decision; a general template model can therefore not be provided by the present Policy Guideline. Also, the specific regulatory model (in the case of a national monopoly) has to be designed on a case by case basis.

Irrespective of whether the establishment of an organised market is promoted by the servicing from existing exchanges or the creation of new institutions, each establishment process should be inclusive and transparent. Support by both political decision-makers and industry is crucial. Cooperation with the respective industry’s key players is important, especially the incumbents’ support is essential for the Contracting Parties in their potential function as liquidity providers.

2.4.2 Rules governing trading activity and market entry

A comprehensive set of rules governing market entry, trading activity, product development and market oversight is needed for operating an organised market which is suitably designed to swiftly couple with connected markets. Joining existing market couplings that have a well established
structure and standards for these rules offers not only a focal point, but should deliver all guiding principles in order to ensure a harmonised set of rules, ready for coupling. In brief, market coupling will lead to sufficiently harmonised trading rules. No additional regulation of these will be required.

Nevertheless, a few elements will facilitate market participation:

- All documents should be made available in English, what at best is also the language of working documents. All standard contracts between the power exchanges or operators of the organised market and the market participants should also be in English.

- Despite the fact that rules for the supervision of market activity or market surveillance practices will be needed, as well as a code of conduct developed by the operator of the trading platform to be followed by the market participants, the present Policy Guidelines recommend the adoption of the REMIT Regulation\(^9\) into the legal framework of Contracting Parties. In order to avoid discrimination between market participations, the same standards for market monitoring should be applicable in an integrated market. Following existing European standards may lead to lower implementation and transaction costs as compared to a separate and potentially different scheme resulting in undue discrimination and hampering overall market monitoring.

- In general, quality in trading and security for clearing and settlement should be coming from the internal rules agreed between the parties running the processes and those participating in the market. Most importantly, the contractual requirements from the side of the power exchange, the TSOs (requirements for balance responsible parties) and, in case separately organised, the clearing house provide for the most important elements and constitute market participation requirements which do not require further regulation. It is in the interest of all parties to have functioning markets based on the best possible rules; existing standards have largely proved this. Still, market participation requirements should provide for low market entry barriers and receive regulatory facilitation to be harmonised and gradually reduced where outdated. Where these rules provide for all minimum requirements, no additional trading licenses should be required.

2.5 Products

At the beginning of activity of the organised market, it is recommended to stick to the products prescribed in the CACM Regulation. Spot products, especially day-ahead with hourly contracts, should be tradable in a first stage and when liquidity is raising other contracts such as block bids can be introduced. After that, more complex, more variable close to real-time delivery and forward products should be introduced when and if requested by the market in order to allow maximum space for market participants to balance in open markets, hedge future delivery or fulfill special demand patterns. Continuous, open and transparent communication and consultation with market participants is crucial for the adequate development of market places and products. The development of new or other non-standard products should not be limited by legal means.

The price ranges of standard products are to be harmonised in the single day-ahead coupling in any case in order to allow for competition. Negative prices will need to be allowed in the laws and imbalance rules, where this is not the case.

As a general rule, more standardised products mean more liquidity on the trading hub. However, as long as markets are not coupled, a gate closure time different to the one applied in the multi regional coupling or other neighbouring initiatives may be an advantage in order to attract market participants,

provided that this does not imply significant additional implementation costs. With the coupling of markets, all these differences will disappear, as products have to be harmonised in order to be brought to coupling.

2.6 Processes

2.6.1 Financial Processes

As outlined above, establishing a reverse charge mechanism for value added tax between coupled markets should be considered. In any case, refunding of taxes should be operated in a fast way so as not to create cash flow problems for the market participants and entities operating the market.

Concluding transactions within organised markets requires secure settling and clearing through a clearing counterparty, either internally within the operator of the market or organised through an external clearing house. Being an active participant on the market entails being exposed to diverse risks, including temporary loss of accounting liquidity or, at worst, bankruptcy. Materialisation of these risks jeopardises executing a contract and creates distrust among counterparties. Therefore the existence of robust mechanisms that guarantee financially robust clearing positions is of utmost importance to the sound development of the market.

The system recommended below by the present Policy Guidelines is based on risk mitigation facilities already developed in the electricity wholesale markets in the EU. In addition, operating clearing and settlement processes requires expertise and displays significant economies of scale. It is an area where partial or complete outsourcing to a third party is the most efficient solution. Still, it may be an option for new entities operating markets in the Contracting Parties to sign responsible for some customer-focused elements in these processes for an initial period, like billing and collection, as long as this does not result in disproportional risks and limitations for market activity. Therefore, seeking cooperation with parties that already have experience in risk management and operate according to international standards is crucial. The operation of an in-house settlement and clearing is considered a less efficient option for emerging markets due to a lack of expertise and operational experience. Operational synergies, risk sharing and potentially lower establishment costs add to that. However, there shall be of course no limits on freedom of choice.

The risk model within a clearing house – serving as a central counterparty

- Should be based on fund collection with a view to set up indemnity against potential defaults. This system could be either designed by involving clearing members (commercial banks covering the default risk of a market participant) or by direct membership of the market participant to the clearing house. In the first case the clearing members serve as further safeguard to the market and could provide settlement services – e.g. currency conversion – to market participants.

- Ought to rest upon several levels:
  1. The first one, daily transaction settlement, is required to perform day-by-day operation on the spot market. If a market participant fails to fulfil its payment obligation, it is no longer allowed to trade. To minimise payment exposures it is crucial to have a short payment cycle, e.g. T+1 (day after the transaction).
  2. The collateral margin constitutes a second level and its role is to guarantee settlement of upcoming transactions. A market participant is obliged to regularly provide money (as collaterals) or other types of collateral – e.g. bank guarantees – in amounts required according to the risk model of the clearing house and adequate for the contracts being made in the future.
If a market participant fails to fulfil its payment obligation, then a clearing house utilizes the collaterals in order to ensure the clearing process.

3. It may however occur that the collaterals of a market participant do not suffice to clear the transaction. If this is the case, then the clearing house is allowed to use funds lodged by the market participant in default in the common guarantee fund (a pool) in order to meet claims of another market participant.

4. If the amount of money lodged by the market participant in default in the guarantee fund is not sufficient to clear the transaction, it is recommended to enable the clearing house to use funds lodged by other market participants in the guarantee fund (lender of last resort). Furthermore the clearing house itself may contribute with its own resources to the common guarantee fund. After implementation, the risk mitigation system needs to be regularly reviewed and be subject to improvements where necessary.

Nonetheless, not all risks can be avoided. Firstly, through the above recommended measures there is a hazard resulting from the perception of market participants by financial institutions, including clearing houses. This perception can be affected to a large extent by the perception of the economic and financial condition (rating) of an owner of a market participant or a bank it deposits money in. It can then translate into higher requirements with regard to the cost of collaterals a market participant is obliged to deliver. The situation of a market participant may be further deteriorated by not becoming a member of a clearing house and thus be prevented from actively participating in the market or only being able to participate at higher transaction costs. Consequently, market liquidity and competition is likely to remain at a low level. This risk could be curtailed, if the exchange trading systems support pre-trade limits: in this case members could trade on the exchange irrespectively of their rating and creditworthiness based on securities provided before the trade. Secondly, bidding at the spot market requires substantial accounting liquidity regardless of whether a transaction is concluded or not. A short payment cycle, an appropriate margin model and the acceptance of different types of collaterals (e.g. bank guarantees) will help save liquidity of the market participant.

2.6.2 Technical Processes

The central prerequisite for coupling with the multi regional coupling is applying the same optimisation algorithm, which at the time of drafting of the present guidelines is called Euphemia. The easiest way this can be achieved is by finding cooperation partners that operate trading platforms applying this algorithm. It can be expected that the functionalities of the single algorithm used are suitable to be applied for the Contracting Parties in the Synchronous Area Continental Europe. For Moldova and Ukraine this needs to be analysed before application.

Besides that, the introduction of market coupling in the Contracting Parties will create significant adaptation pressure on TSO processes. These will have to be increasingly automated (scheduling and capacity calculation), tightly coordinated (capacity calculation, model merging, cross-border re-dispatching) and as close to real-time as possible. Also here, the CACM Regulation contains sufficient requirements to ensure the proper functioning of operation. Early communication of the implementation requirements towards the entire electricity industry is needed to ensure timely adaptation of processes. The improvement of capacity calculation through close to real-time processes and increased cooperation will lead to increased capacities available to the market, allowing for better competition and more liquidity. It needs to be ensured that an adequate part of the capacity is made available to the day-ahead timeframe. Continuously assessing available capacity is indispensable, where the trading activity will also shift closer to real-time.
The introduction of **flow-based capacity calculation** will add to that, even though the capacities between the different types of calculation and allocation methods are not comparable. Where common congestion revenues are being used for common endeavours like cross-border re-dispatching, additional optimisation of grid usage can be achieved in the sense of the need to have a single optimisation of a single system.

### 2.7. Applying the CACM Regulation’s NEMO designation process

In many Contracting Parties no legal and regulatory clarity on the form of governance with regard to monopolistic versus competitive regulation of the operation of an organised electricity market exist. For that, the present Guidelines propose that Contracting Parties use the outcome of the CACM Regulation's NEMO designation process as a means to decide about the regulatory approach to apply. In any case, such process should be applied based on a clear legal mandate enshrined in the primary or secondary law(s). Such incorporation of a new NRA responsibility would follow from the adoption, transposition and implementation of the CACM Regulation into Energy Community *acquis*, but may also stem from legislative amendments resulting from Inter-governmental agreements between Contracting Parties committed to couple their markets or from unilateral action. Based on the outcome of the designation process, the laws should foresee different options how to regulate the operation of an organised market: With more than one competent and consequently nominated applicant, a competitive model should be applicable with reduced regulatory interference. In case none or one applicant will be nominated as a result of the designation process, a national monopoly structure exists which should result into appropriate regulation and regulatory oversight. In case no market operator was nominated, the respective Contracting Party should launch a national initiative to establish a power exchange responsible for the establishment and operation of the day-ahead electricity market, serve as NEMO for the coupling and consequently offer products for other timeframes, too. What is important in order to achieve a satisfactory level of legal and regulatory certainty for potential applicants is that sufficient clarity about the regulatory and governance models following from the designation process are contained in primary and secondary acts adopted beforehand. Without providing all available information about the potential form of regulation, detailed information on the extent of regulation in each model, these forms of business risks cannot be anticipated and would exacerbate the willingness to service a Contracting Party’s market. Best practice examples of applying the NEMO designation process exists, as well as examples of a carefully designed legal and regulatory framework providing cooperation incentives. Below graph shows how such process should look like and lead to an institutional setting fit for the establishment of an organised electricity market.
Graph 1: Flowchart view of proposed actions
3. Credits

The ad-hoc working group supporting the Energy Community Secretariat with the drafting of the present Policy Guidelines consisted of the following members:\(^{10}\):

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In addition, the working group received valuable support from experts nominated from OPCOM and members of the Electricity Working Group of the Energy Community Regulatory Board.

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\(^{10}\) Based on applications received following a call for participation addressed by the Energy Community Secretariat to all EU PXs and related Energy Community stakeholders. The draft Policy Guidelines have been publically consulted (15.7.-11.9.2015). Reflection of consultation input is available at [www.energy-community.org](http://www.energy-community.org).