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REVISIONS HISTORY

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1 INTRODUCTION

This report is the first deliverable (corresponding to Output 1.1) of:

- Outcome 1 – “Compliance with the European framework of the Cypriot legislative and regulatory framework concerning the electricity market”

foreseen by the Grant Agreement:

- Implementation of the EU regulatory framework in the area of electricity in Cyprus.

The goal of the deliverable is to:

- Review of the existing legislation, regulatory decisions, trade and settlement rules and transmission and distribution rules.
- Report on the related gap analysis with EU legislation, network codes and guidelines.

To this aim, the following documents have been taken as a reference:

- Regulation EU 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) (hereinafter the “IEM Regulation” or “Regulation”).
- Directive EU 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast) (hereinafter the “IEM Directive” or “Directive”).
- Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast).
- Regulation (EU) 2017/2195 establishing a guideline on electricity balancing.
- Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management.
- The latest versions¹ of the Trade and Settlement Rules and of the Transmission and Distribution Rules² issued by the TSOC.
- The draft Law for the Regulation of the Electricity Market and its final approved version voted on 7/10/2021 (hereinafter the “Cypriot Law”).

¹ Versions 2.1.0 and 2.2.0, which include demand side response and storage respectively, are available only in Greek language. However, integrative notes on these specific topics have been made available in English language (unofficial translation) by the TSOC.

² Version 4.0.0 has been provided in English language (unofficial translation). However, this version was revised by versions 4.0.1 (changes with respect to Demand Response), 4.0.2 and 4.0.3 which have not been translated. Also, CERA has approved versions 5.0.0, 5.1.0 and 5.2.0 which have not entered into force.

References will be made also to the deliverables results of the following actions carried out by RSE to the benefit of MECI and already financed by the Directorate General for Structural Reform Support (i.e. DG REFORM) of the Europe Commission:

- SRSS/C2016/005 - “Technical and policy/regulation support to the Ministry of Energy, Commerce, Industry and Tourism with regard to its participation in the process for amending the existing Trade and Settlement Electricity Market Rules”, carried out in 2016 and in 2017;
- SRSS/S2017/048 - “Technical support to improve the penetration of renewable energy sources and energy efficiency in Cyprus”
 - Work package 1 – “Review and amendment of the Trade and Settlement Electricity Market Rules”, carried out in 2018 and in 2019.

The analysis reported in the following will be focused on the most relevant issues concerning the electricity market reform, that are:

- aggregation,
- energy communities,
- storage systems,
- intraday market,
- imbalance settlement period,
- balancing market data publication,
- technical bidding limits,
- capacity mechanisms,
- priority dispatch.

Finally, the compliance of specific articles between the Cypriot Law and the IEM Directive will be discussed.

2 AGGREGATION

The IEM Directive contains specific provisions to support the development of aggregation:

- (39) Customers should be allowed to make full use of the advantages of aggregation of production and supply over larger regions and benefit from cross-border competition. Market participants engaged in aggregation are likely to play an important role as intermediaries between customer groups and the market. Member States should be free to choose the appropriate implementation model and approach to governance for independent aggregation while respecting the general principles set out in this Directive. Such a model or approach could include choosing market-based or regulatory principles which provide solutions to comply with this Directive, such as models where imbalances are settled or where perimeter corrections are introduced. The chosen model should contain transparent and fair rules to allow independent aggregators to fulfil their roles as intermediaries and to ensure that the final customer adequately benefits from their activities.
- Article 2 – Definitions – 18. ‘aggregation’ means a function performed by a natural or legal person who combines multiple customer loads or generated electricity for sale, purchase or auction in any electricity market.
- Article 2 – Definitions – 19. ‘independent aggregator’ means a market participant engaged in aggregation who is not affiliated to the customer's supplier.
- Article 2 – Definitions – 20. ‘demand response’ means the change of electricity load by final customers from their normal or current consumption patterns in response to market signals, including in response to time-variable electricity prices or incentive payments, or in response to the acceptance of the final customer's bid to sell demand reduction or increase at a price in an organized market as defined in point (4) of Article 2 of Commission Implementing Regulation (EU) No 1348/2014 (17), whether alone or through aggregation;
- Article 13 – Aggregation contract – 1. Member States shall ensure that all customers are free to purchase and sell electricity services, including aggregation, other than supply, independently from their electricity supply contract and from an electricity undertaking of their choice.
- Article 15 – Active customers – 2.a. Member States shall ensure that active customers are: (a) entitled to operate either directly or through aggregation (where in Article 2 – Definitions – 8. ‘active customer’ means a final customer, or a group of jointly acting final customers, who consumes or stores electricity generated within its premises located within confined boundaries or, where permitted by a Member State, within other premises, or who sells self-generated electricity or participates in flexibility or energy efficiency schemes, provided that those activities do not constitute its primary commercial or professional activity).

- Article 16 – Energy communities³ - 3.a. Member States shall ensure that citizen energy communities: (a) are able to access all electricity markets, either directly or *through aggregation*, in a non-discriminatory manner.
- Article 17 – Demand response through aggregation:
 - 1. Member States shall allow and foster *participation of demand response through aggregation*. Member States shall allow final customers, including those offering demand response *through aggregation, to participate alongside producers in a non-discriminatory manner in all electricity markets*.
 - 2. Member States shall ensure that transmission system operators and distribution system operators, when procuring ancillary services, treat market participants engaged *in the aggregation of demand response* in a non-discriminatory manner alongside producers on the basis of their technical capabilities.
 - 3(d) *Market participants engaged in aggregation* shall be financially responsible for the imbalances that they cause in the electricity system; to that extent they *shall be balance responsible parties* or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943.
 - 4. Member States may require electricity undertakings or participating final customers to pay financial compensation to other market participants or to the market participants' balance responsible parties, if those market participants or balance responsible parties are directly affected by demand response activation. Such financial compensation shall not create a barrier to market entry for market *participants engaged in aggregation* or a barrier to flexibility. In such cases, the financial compensation shall be strictly limited to covering the resulting costs incurred by the suppliers of participating customers or the suppliers' balance responsible parties during the activation of demand response. The method for calculating compensation may take account of the benefits brought about by the independent aggregators to other market participants and, where it does so, the aggregators or participating customers may be required to contribute to such compensation but only where and to the extent that the benefits to all suppliers, customers and their balance responsible parties do not exceed the direct costs incurred. The calculation method shall be subject to approval by the regulatory authority or by another competent national authority.
 - 5. Member States shall ensure that regulatory authorities or, where their national legal system so requires, transmission system operators and distribution system operators,

³ Please see also the dedicate paragraph on Energy Communities

acting in close cooperation with market participants and final customers, establish the technical requirements for participation of demand response in all electricity markets on the basis of the technical characteristics of those markets and the capabilities of demand response. Such requirements shall cover participation involving aggregated loads.

- Article 31 – Tasks of distribution system operators – 8. The procurement of the products and services referred to in paragraph 6⁴ shall ensure the effective participation of all qualified market participants, including market participants offering energy from renewable sources, market participants engaged in demand response, operators of energy storage facilities and market participants engaged in aggregation, in particular by requiring regulatory authorities and distribution system operators in close cooperation with all market participants, as well as transmission system operators, to establish the technical requirements for participation in those markets on the basis of the technical characteristics of those markets and the capabilities of all market participants
- Article 40 – Tasks of transmission system operators – 4. In performing the task referred to in point (i) of paragraph 1⁵, transmission system operators shall procure balancing services subject to the following: (b) the participation of all qualified electricity undertakings and market participants, including market participants offering energy from renewable sources, market participants engaged in demand response, operators of energy storage facilities and market participants engaged in aggregation.

In addition, the IEM Regulation contains specific provisions to support the development of aggregation as well:

- Article 3 – Principles regarding the operation of electricity markets - (e) market participation of final customers and small enterprises shall be enabled by aggregation of generation from multiple power-generating facilities or load from multiple demand response facilities to provide joint offers on the electricity market and be jointly operated in the electricity system, in accordance with Union competition law.
- Article 6 – Balancing Market – 1. Balancing markets, including prequalification processes, shall be organised in such a way as to: (c) ensure non-discriminatory access to all market participants,

⁴ Where a distribution system operator is responsible for the procurement of products and services necessary for the efficient, reliable and secure operation of the distribution system, rules adopted by the distribution system operator for that purpose shall be objective, transparent and non-discriminatory, and shall be developed in coordination with transmission system operators and other relevant market participants.

⁵ Procuring ancillary services to ensure operational security.

individually or *through aggregation*, including for electricity generated from variable renewable energy sources, demand response and energy storage.

- Article 7 – Day-ahead and intraday markets – 2. Day-ahead and intraday markets shall: (h) be organised in such a way as to ensure that all markets participants are able to access the market individually or *through aggregation*.

Analyzing the Cypriot documentation provided by the Authorities, with reference to the previous TSRs (i.e. version 2.0.0), we observe that TSRs foresee the role of RES Aggregator defined as entity representing aggregately many RES Units possibly at different locations and operating outside National Grant Plans, for an overall aggregated size (installed capacity) of RES Units from 1 MW up to 20 MW, in line with CERA's decision no. 1/2015.

In principle, a maximum size of an aggregate should not be defined as well as the aggregation should not be limited to RES units since such limitations are not foreseen by the current European regulatory framework. Nevertheless, as reported in the previous RSE report *Revision and amendments to the new Trade and Settlement electricity market Rules in Cyprus* (Contract SRSS/S2017/048) issued in 2019, CERA stated that the 20 MW threshold has been set to avoid an excessive market concentration, given the small size of the Cyprus power system. Moreover, CERA also stated that *“this threshold could be increased, after gaining relevant experience with the operation of the market”*. We deem that such point of view is in line with the peculiarity of Cyprus, provided that, as the market will evolve, this threshold will be subject to review as it may prove too restrictive.

In addition, as far as the Transmission and Distribution Rules (TDRs) are concerned, although only the version 4.0.0 issued in 2013 has been provided in English by the TSOC, no specific indications on aggregation has been detected. However, the Cypriot Authorities have affirmed (by means of a dedicated e-mail sent on the 2nd of July 2021) that changes with respect to Demand Response have been included in the version 4.0.1 which has not been translated. Besides, as confirmed by the Cypriot Authorities on the 2nd of April 2021, in terms of framework, in 2019 a revision of the TSRs (the Trade and Settlement Rules that will become commercially operable in 2022) was carried out by the TSOC to include Demand Response.

In particular, the approved consolidated version 2.2.0 of TSRs defines the independent aggregator as *“any natural or legal person who participates in the electricity market active in the cumulative representation of RES Units and/or HECHP Units as an Aggregator for RES Units and HECHP Units or/and in cumulative representation of DR Loads as Demand Response Representative or/and the aggregation of electricity storage facilities as a Storage Representative”* and specifies that offers will be submitted by aggregators in the day-ahead market separately for each of the three aforementioned categories as they are considered different portfolios. With reference to the storage systems, we observe that in the *“Revision of the purchasing rules for the integration of electricity storage installation”* document (please see paragraph

on storage systems) a new definition for the Storage Representative is introduced which is the Independent Cumulative Representation Body that holds a relevant license and is active in the cumulative representation of Electricity Storage Facilities. Moreover, Electricity Storage Installations above 1 MW (and above 2 MWh) can participate directly in the market as an Operator of storage system. Storage Representative can represent a portfolio of Electricity Storage Installations above 1 MW and below 20 MW and having an energy capability of greater than 2 MWh per MW. Therefore, we can observe that 20 MW, which is also indicated in the storage system document, is the threshold that is shown in the aggregation.

In conclusion, the aggregation is allowed for RES units (from 1 to 20 MW), storage (from 1 to 20 MW) as well as demand response (i.e. demand response is entitled to participate in individual markets – both energy and ancillary services markets - by cumulative portfolios of at least 300 kVA each); however it's not allowed to mix these three types of resources in one single aggregate, despite the indication of the IEM directive (see article 6 (1.c) and 7.2). Nevertheless, in Cyprus aggregators are able to participate both to Energy and ancillary services markets, in line with the European regulatory context.

3 ENERGY COMMUNITIES

The IEM Directive introduces the concept of energy communities, that, as far as the electricity market is concerned, becomes a brand-new market player:

- (43) Distributed energy technologies and consumer empowerment have made community energy an effective and cost-efficient way to meet citizens' needs and expectations regarding energy sources, services and local participation. Community energy offers an inclusive option for all consumers to have a direct stake in producing, consuming or sharing energy. Community energy initiatives focus primarily on providing affordable energy of a specific kind, such as renewable energy, for their members or shareholders rather than on prioritizing profit-making like a traditional electricity undertaking. By directly engaging with consumers, community energy initiatives demonstrate their potential to facilitate the uptake of new technologies and consumption patterns, including smart distribution grids and demand response, in an integrated manner. Community energy can also advance energy efficiency at household level and help fight energy poverty through reduced consumption and lower supply tariffs. Community energy also enables certain groups of household customers to participate in the electricity markets, who otherwise might not have been able to do so. Where they have been successfully operated such initiatives have delivered economic, social and environmental benefits to the community that go beyond the mere benefits derived from the provision of energy services. This Directive aims to recognize certain categories of citizen energy initiatives at the Union level as 'citizen energy communities', in order to provide them with an enabling framework, fair treatment, a level playing field and a well-defined catalogue of rights and obligations. Household customers should be allowed to participate voluntarily in community energy initiatives as well as to leave them, without losing access to the network operated by the community energy initiative or losing their rights as consumers. Access to a citizen energy community's network should be granted on fair and cost-reflective terms.
- (46) Citizen energy communities constitute a new type of entity due to their membership structure, governance requirements and purpose. They should be allowed to operate on the market on a level playing field without distorting competition, and the rights and obligations applicable to the other electricity undertakings on the market should be applied to citizen energy communities in a non-discriminatory and proportionate manner. Those rights and obligations should apply in accordance with the roles that they undertake, such as the roles of final customers, producers, suppliers or distribution system operators. Citizen energy communities should not face regulatory restrictions when they apply existing or future information and communications technologies to share electricity produced using generation assets within the citizen energy community among

their members or shareholders based on market principles, for example by offsetting the energy component of members or shareholders using the generation available within the community, even over the public network, provided that both metering points belong to the community. Electricity sharing enables members or shareholders to be supplied with electricity from generating installations within the community without being in direct physical proximity to the generating installation and without being behind a single metering point. Where electricity is shared, the sharing should not affect the collection of network charges, tariffs and levies related to electricity flows. The sharing should be facilitated in accordance with the obligations and correct timeframes for balancing, metering and settlement. The provisions of this Directive on citizen energy communities do not interfere with the competence of Member States to design and implement policies relating to the energy sector in relation to network charges and tariffs, or to design and implement energy policy financing systems and cost sharing, provided that those policies are non-discriminatory and lawful.

- (47) This Directive empowers Member States to allow citizen energy communities to become distribution system operators either under the general regime or as ‘closed distribution system operators’. Once a citizen energy community is granted the status of a distribution system operator, it should be treated as, and be subject to the same obligations as, a distribution system operator. The provisions of this Directive on citizen energy communities only clarify aspects of distribution system operation that are likely to be relevant for citizen energy communities, while other aspects of distribution system operation apply in accordance with the rules relating to distribution system operators.
- Article 2 – Definitions – 11. ‘citizen energy community’ means a legal entity that:
 - a) is based on voluntary and open participation and is effectively controlled by members or shareholders that are natural persons, local authorities, including municipalities, or small enterprises;
 - b) has for its primary purpose to provide environmental, economic or social community benefits to its members or shareholders or to the local areas where it operates rather than to generate financial profits; and
 - c) may engage in generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders.
- Article 16 – Citizen Energy Communities:
 - 1. Member States shall provide an enabling regulatory framework for citizen energy communities ensuring that: (a) participation in a citizen energy community is open and voluntary; (b) members or shareholders of a citizen energy community are entitled to

leave the community, in which case Article 12 applies; (c) members or shareholders of a citizen energy community do not lose their rights and obligations as household customers or active customers; (d) subject to fair compensation as assessed by the regulatory authority, relevant distribution system operators cooperate with citizen energy communities to facilitate electricity transfers within citizen energy communities; (e) citizen energy communities are subject to non-discriminatory, fair, proportionate and transparent procedures and charges, including with respect to registration and licensing, and to transparent, non-discriminatory and cost-reflective network charges in accordance with Article 18 of Regulation (EU) 2019/943, ensuring that they contribute in an adequate and balanced way to the overall cost sharing of the system.

- 2. Member States may provide in the enabling regulatory framework that citizen energy communities: (a) are open to cross-border participation; (b) are entitled to own, establish, purchase or lease distribution networks and to autonomously manage them subject to conditions set out in paragraph 4 of this Article;
- 3. Member States shall ensure that citizen energy communities:
 - (a) are able to access all electricity markets, either directly or through aggregation, in a non-discriminatory manner;
 - (b) are treated in a non-discriminatory and proportionate manner with regard to their activities, rights and obligations as final customers, producers, suppliers, distribution system operators or market participants engaged in aggregation;
 - (c) are financially responsible for the imbalances they cause in the electricity system; to that extent they shall be balance responsible parties or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943;
 - d) with regard to consumption of self-generated electricity, citizen energy communities are treated like active customers in accordance with point (e) of Article 15(2);
 - (e) are entitled to arrange within the citizen energy community the sharing of electricity that is produced by the production units owned by the community, subject to other requirements laid down in this Article and subject to the community members retaining their rights and obligations as final customers.

For the purposes of point (e) of the first subparagraph, where electricity is shared, this shall be without prejudice to applicable network charges, tariffs and levies, in accordance with a transparent cost-benefit analysis of distributed energy resources developed by the competent national authority.

- 4. Member States may decide to grant citizen energy communities the right to manage distribution networks in their area of operation and establish the relevant procedures, without prejudice to Chapter IV or to other rules and regulations applying to distribution system operators. If such a right is granted, Member States shall ensure that citizen energy communities: (a) are entitled to conclude an agreement on the operation of their network with the relevant distribution system operator or transmission system operator to which their network is connected; (b) are subject to appropriate network charges at the connection points between their network and the distribution network outside the citizen energy community and that such network charges account separately for the electricity fed into the distribution network and the electricity consumed from the distribution network outside the citizen energy community in accordance with Article 59(7); (c) do not discriminate or harm customers who remain connected to the distribution system.

Besides, the concept of Energy Communities, in terms of Renewable Energy Communities, is described in the Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (i.e. RED II).

In details, as reported in recital, we observe:

- (67) Empowering jointly acting renewables self-consumers also provides opportunities for renewable energy communities to advance energy efficiency at household level and helps fight energy poverty through reduced consumption and lower supply tariffs. Member States should take appropriate advantage of that opportunity by, *inter alia*, assessing the possibility to enable participation by households that might otherwise not be able to participate, including vulnerable consumers and tenants.
- (70) The participation of local citizens and local authorities in renewable energy projects through renewable energy communities has resulted in substantial added value in terms of local acceptance of renewable energy and access to additional private capital which results in local investment, more choice for consumers and greater participation by citizens in the energy transition. Such local involvement is all the more crucial in a context of increasing renewable energy capacity. Measures to allow renewable energy communities to compete on an equal footing with other producers also aim to increase the participation of local citizens in renewable energy projects and therefore increase acceptance of renewable energy.

Moreover, the article no. 2 on definitions affirms:

- (16) 'renewable energy community' means a legal entity:
 - a) which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members

that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity;

- b) the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities;
- c) the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.

In addition, the article no. 22 of the RED II on Renewable energy communities' states:

1. Member States shall ensure that final customers, in particular household customers, are entitled to participate in a renewable energy community while maintaining their rights or obligations as final customers, and without being subject to unjustified or discriminatory conditions or procedures that would prevent their participation in a renewable energy community, provided that for private undertakings, their participation does not constitute their primary commercial or professional activity.
2. Member States shall ensure that renewable energy communities are entitled to:
 - a) produce, consume, store and sell renewable energy, including through renewables power purchase agreements;
 - b) share, within the renewable energy community, renewable energy that is produced by the production units owned by that renewable energy community, subject to the other requirements laid down in this Article and to maintaining the rights and obligations of the renewable energy community members as customers;
 - c) access all suitable energy markets both directly or through aggregation in a non-discriminatory manner.
3. Member States shall carry out an assessment of the existing barriers and potential of development of renewable energy communities in their territories.
4. Member States shall provide an enabling framework to promote and facilitate the development of renewable energy communities. That framework shall ensure, inter alia, that:
 - a) unjustified regulatory and administrative barriers to renewable energy communities are removed;
 - b) renewable energy communities that supply energy or provide aggregation or other commercial energy services are subject to the provisions relevant for such activities;
 - c) the relevant distribution system operator cooperates with renewable energy communities to facilitate energy transfers within renewable energy communities;
 - d) renewable energy communities are subject to fair, proportionate and transparent procedures, including registration and licensing procedures, and cost-reflective network

- charges, as well as relevant charges, levies and taxes, ensuring that they contribute, in an adequate, fair and balanced way, to the overall cost sharing of the system in line with a transparent cost-benefit analysis of distributed energy sources developed by the national competent authorities;
- e) renewable energy communities are not subject to discriminatory treatment with regard to their activities, rights and obligations as final customers, producers, suppliers, distribution system operators, or as other market participants;
 - f) the participation in the renewable energy communities is accessible to all consumers, including those in low-income or vulnerable households;
 - g) tools to facilitate access to finance and information are available;
 - h) regulatory and capacity-building support is provided to public authorities in enabling and setting up renewable energy communities, and in helping authorities to participate directly;
 - i) rules to secure the equal and non-discriminatory treatment of consumers that participate in the renewable energy community are in place.
5. The main elements of the enabling framework referred to in paragraph 4, and of its implementation, shall be part of the updates of the Member States' integrated national energy and climate plans and progress reports pursuant to Regulation (EU) 2018/1999.
6. Member States may provide for renewable energy communities to be open to cross-border participation.
7. Without prejudice to Articles 107 and 108 TFEU, Member States shall take into account specificities of renewable energy communities when designing support schemes in order to allow them to compete for support on an equal footing with other market participants.

To sum up, a comparison between Citizen Energy Communities (i.e. CEC) and Renewable Energy Communities (i.e. REC) is shown in the table below:

	CEC	REC
Energy	Electricity	Renewable energy
Membership	Any entity	Natural persons, local authorities, SMEs
Control	Effective control by natural persons, local authorities, <u>SEs</u>	Effective control by natural persons, local authorities, SMEs located in the proximity of the projects
Purpose	Primary purpose to provide environmental, economic or social community benefits for members or the local area	
Activities	Generation, storage, selling, sharing, aggregation or other energy services, distribution	

Figure 1 Comparison between CEC and REC⁶

In line with this regulatory framework, although CEC and REC⁷ have some points in common, they constitute different concepts. Therefore, these terms cannot be used interchangeably. This view has been confirmed by the Cypriot Authorities as well.

To sum up, with reference to the latest version of the TSRs, as reported by the Cypriot Authorities in the Q&A, the inclusion of CHP units, demand response as well as storage systems has been appreciated. However, no Energy Community scheme (neither Citizen Energy Communities – as per the IEM directive – nor Renewable Energy Communities – as per the RED II directive) has already been encompassed in such document. Indeed, it is reasonable to assume that such elements will be included in the Cypriot legislative and regulatory framework, as well as in the technical documents, once the transposition process of the EU directives will be completed.

⁶ European Commission: Energy communities – implementation of the Clean Energy Package.

⁷ The Bill for the transposition of the Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources, that includes the provisions concerning Renewable Energy Communities has been submitted to the Cypriot Parliament.

4 STORAGE SYSTEMS

The IEM Directive contains specific provisions to support the development of storage systems:

- (13) In order to foster competition and ensure the supply of electricity at the most competitive price, Member States and regulatory authorities should facilitate cross-border access for new suppliers of electricity from different energy sources as well as for new providers of generation, energy storage and demand response.
- (61) Distribution system operators have to cost-efficiently integrate new electricity generation, especially installations generating electricity from renewable sources, and new loads such as loads that result from heat pumps and electric vehicles. For that purpose, distribution system operators should be enabled, and provided with incentives, to use services from distributed energy resources such as demand response and energy storage, based on market procedures, in order to efficiently operate their networks and to avoid costly network expansions. Member States should put in place appropriate measures such as national network codes and market rules and should provide incentives to distribution system operators through network tariffs which do not create obstacles to flexibility or to the improvement of energy efficiency in the grid. Member States should also introduce network development plans for distribution systems in order to support the integration of installations generating electricity from renewable energy sources, facilitate the development of energy storage facilities and the electrification of the transport sector, and provide to system users adequate information regarding the anticipated expansions or upgrades of the network, as currently such procedures do not exist in the majority of Member States.
- (62) System operators should not own, develop, manage, or operate energy storage facilities. In the new electricity market design, energy storage services should be market-based and competitive. Consequently, cross-subsidization between energy storage and the regulated functions of distribution or transmission should be avoided. Such restrictions on the ownership of energy storage facilities is to prevent distortion of competition, to eliminate the risk of discrimination, to ensure fair access to energy storage services to all market participants and to foster the effective and efficient use of energy storage facilities, beyond the operation of the distribution or transmission system.
- Article 1 – Subject matter – This Directive establishes common rules for the generation, transmission, distribution, energy storage and supply of electricity, together with consumer protection provisions, with a view to creating truly integrated competitive, consumer-centred, flexible, fair and transparent electricity markets in the Union.
- Article 2 – Definitions:

- (10) ‘market participant’ means market participant as defined in point (25) of Article 2 of Regulation (EU) 2019/943: a natural or legal person who buys, sells or generates electricity, who is engaged in aggregation or who is an operator of demand response or energy storage services, including through the placing of orders to trade, in one or more electricity markets, including in balancing energy markets.
 - (11) ‘citizen energy community’ means a legal entity that (c) may engage in generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders.
 - (51) ‘fully integrated network components’ means network components that are integrated in the transmission or distribution system, including storage facilities, and that are used for the sole purpose of ensuring a secure and reliable operation of the transmission or distribution system, and not for balancing or congestion management.
 - (57) ‘electricity undertaking’ means a natural or legal person who carries out at least one of the following functions: generation, transmission, distribution, aggregation, demand response, energy storage, supply or purchase of electricity, and who is responsible for the commercial, technical or maintenance tasks related to those functions, but does not include final customers;
 - (59) ‘energy storage’ means, in the electricity system, deferring the final use of electricity to a moment later than when it was generated, or the conversion of electrical energy into a form of energy which can be stored, the storing of such energy, and the subsequent reconversion of such energy into electrical energy or use as another energy carrier;
 - (60) ‘energy storage facility’ means, in the electricity system, a facility where energy storage occurs.
- Article 31 – Tasks of distribution system operators – 8. The procurement of the products and services referred to in paragraph 6⁸ shall ensure the effective participation of all qualified market participants, including market participants offering energy from renewable sources, market participants engaged in demand response, operators of energy storage facilities and market participants engaged in aggregation, in particular by requiring regulatory authorities and distribution system operators in close cooperation with all market participants, as well as

⁸ Paragraph 6: “Where a distribution system operator is responsible for the procurement of products and services necessary for the efficient, reliable and secure operation of the distribution system, rules adopted by the distribution system operator for that purpose shall be objective, transparent and non-discriminatory, and shall be developed in coordination with transmission system operators and other relevant market participants”

transmission system operators, to establish the technical requirements for participation in those markets on the basis of the technical characteristics of those markets and the capabilities of all market participants.

- Article 32 – Incentives for the use of flexibility in distribution networks – 2. Distribution system operators, subject to approval by the regulatory authority, or the regulatory authority itself, shall, in a transparent and participatory process that includes all relevant system users and transmission system operators, establish the specifications for the flexibility services procured and, where appropriate, standardized market products for such services at least at national level. The specifications shall ensure the effective and non-discriminatory participation of all market participants, including market participants offering energy from renewable sources, market participants engaged in demand response, operators of energy storage facilities and market participants engaged in aggregation. Distribution system operators shall exchange all necessary information and shall coordinate with transmission system operators in order to ensure the optimal utilization of resources, to ensure the secure and efficient operation of the system and to facilitate market development. Distribution system operators shall be adequately remunerated for the procurement of such services to allow them to recover at least their reasonable corresponding costs, including the necessary information and communication technology expenses and infrastructure costs.
- Article 36 – Ownership of energy storage facilities by distribution system operators:
 - 1. Distribution system operators shall not own, develop, manage or operate energy storage facilities.
 - 2. By way of derogation from paragraph 1, Member States may allow distribution system operators to own, develop, manage or operate energy storage facilities, where they are fully integrated network components and the regulatory authority has granted its approval, or where all of the following conditions are fulfilled:
 - (a) other parties, following an open, transparent and non-discriminatory tendering procedure that is subject to review and approval by the regulatory authority, have not been awarded a right to own, develop, manage or operate such facilities, or could not deliver those services at a reasonable cost and in a timely manner;
 - (b) such facilities are necessary for the distribution system operators to fulfil their obligations under this Directive for the efficient, reliable and secure operation of the distribution system and the facilities are not used to buy or sell electricity in the electricity markets; and

- (c) the regulatory authority has assessed the necessity of such a derogation and has carried out an assessment of the tendering procedure, including the conditions of the tendering procedure, and has granted its approval.
- 3⁹. The regulatory authorities shall perform, at regular intervals or at least every five years, a public consultation on the existing energy storage facilities in order to assess the potential availability and interest in investing in such facilities. Where the public consultation, as assessed by the regulatory authority, indicates that third parties are able to own, develop, operate or manage such facilities in a cost-effective manner, the regulatory authority shall ensure that the distribution system operators' activities in this regard are phased out within 18 months. As part of the conditions of that procedure, regulatory authorities may allow the distribution system operators to receive reasonable compensation, in particular to recover the residual value of their investment in the energy storage facilities.
- Article 40 – Tasks of transmission system operators:
 - 1. Each transmission system operator shall be responsible for: (d) managing electricity flows on the system, taking into account exchanges with other interconnected systems. To that end, the transmission system operator shall be responsible for ensuring a secure, reliable and efficient electricity system and, in that context, for ensuring the availability of all necessary ancillary services, including those provided by demand response and energy storage facilities, insofar as such availability is independent from any other transmission systems with which its system is interconnected.

⁹ Paragraph 3 shall not apply to fully integrated network components or for the usual depreciation period of new battery storage facilities with a final investment decision until 4 July 2019, provided that such battery storage facilities are: (a) connected to the grid at the latest two years thereafter; (b) integrated into the distribution system; (c) used only for the reactive instantaneous restoration of network security in the case of network contingencies where such restoration measure starts immediately and ends when regular re-dispatch can solve the issue; and (d) not used to buy or sell electricity in the electricity markets, including balancing.

- 4¹⁰. In performing the task referred to in point (i)¹¹ of paragraph 1, transmission system operators shall procure balancing services subject to the following: (b) the participation of all qualified electricity undertakings and market participants, including market participants offering energy from renewable sources, market participants engaged in demand response, operators of energy storage facilities and market participants engaged in aggregation. For the purpose, regulatory authorities and transmission system operators shall, in close cooperation with all market participants, establish technical requirements for participation in those markets, on the basis of the technical characteristics of those markets.
- Article 42 – Decision-making powers regarding the connection of new generating installations and energy storage facilities to the transmission system:
 - 1. The transmission system operator shall establish and publish transparent and efficient procedures for non-discriminatory connection of new generating installations and energy storage facilities to the transmission system. Those procedures shall be subject to approval by the regulatory authorities.
 - 2. The transmission system operator shall not be entitled to refuse the connection of a new generating installation or energy storage facility on the grounds of possible future limitations to available network capacities, such as congestion in distant parts of the transmission system. The transmission system operator shall supply necessary information. This shall be without prejudice to the possibility for transmission system operators to limit the guaranteed connection capacity or to offer connections subject to operational limitations, in order to ensure economic efficiency regarding new generating installations or energy storage facilities, provided that such limitations have been approved by the regulatory authority. The regulatory authority shall ensure that any limitations in guaranteed connection capacity or operational limitations are introduced on the basis of transparent and non-discriminatory procedures and do not create undue barriers to market entry. Where the generating installation or energy storage facility bears the costs related to ensuring unlimited connection, no limitation shall apply.

¹⁰ Paragraph 4 shall apply to the provision of non-frequency ancillary services by transmission system operators, unless the regulatory authority has assessed that the market-based provision of non-frequency ancillary services is economically not efficient and has granted a derogation. In particular, the regulatory framework shall ensure that transmission system operators are able to procure such services from providers of demand response or energy storage and shall promote the uptake of energy efficiency measures, where such services cost-effectively alleviate the need to upgrade or replace electricity capacity and support the efficient and secure operation of the transmission system.

¹¹ Procuring ancillary services to ensure operational security.

- Article 51 – Network development and powers to make investment decisions – 3. When elaborating the ten-year network development plan, the transmission system operator shall fully take into account the potential for the use of demand response, energy storage facilities or other resources as alternatives to system expansion, as well as expected consumption, trade with other countries and investment plans for Union-wide and regional networks.
- Article 54 – Ownership of energy storage facilities by transmission system operators:
 - 1. Transmission system operators shall not own, develop, manage or operate energy storage facilities.
 - 2. By way of derogation from paragraph 1, Member States may allow transmission system operators to own, develop, manage or operate energy storage facilities, where they are fully integrated network components and the regulatory authority has granted its approval, or where all of the following conditions are fulfilled:
 - (a) other parties, following an open, transparent and non-discriminatory tendering procedure that is subject to review and approval by the regulatory authority, have not been awarded a right to own, develop, manage or operate such facilities, or could not deliver those services at a reasonable cost and in a timely manner;
 - (b) such facilities or non-frequency ancillary services are necessary for the transmission system operators to fulfil their obligations under this Directive for the efficient, reliable and secure operation of the transmission system and they are not used to buy or sell electricity in the electricity markets; and
 - (c) the regulatory authority has assessed the necessity of such a derogation, has carried out an ex-ante review of the applicability of a tendering procedure, including the conditions of the tendering procedure, and has granted its approval.
 - 4¹². The regulatory authorities shall perform, at regular intervals or at least every five years, a public consultation on the existing energy storage facilities in order to assess the potential availability and interest of other parties in investing in such facilities. Where the public consultation, as assessed by the regulatory authority, indicates that other parties are able to own, develop, operate or manage such facilities in a cost-effective manner, the regulatory authority shall ensure that transmission system operators' activities in this

¹² Paragraph 4 shall not apply to fully integrated network components or for the usual depreciation period of new battery storage facilities with a final investment decision until 2024, provided that such battery storage facilities are: (a) connected to the grid at the latest two years thereafter; (b) integrated into the transmission system; (c) used only for the reactive instantaneous restoration of network security in the case of network contingencies where such restoration measure starts immediately and ends when regular re-dispatch can solve the issue; and (d) not used to buy or sell electricity in the electricity markets, including balancing.

regard are phased-out within 18 months. As part of the conditions of that procedure, regulatory authorities may allow the transmission system operators to receive reasonable compensation, in particular to recover the residual value of their investment in the energy storage facilities.

- Article 58 – General objectives of the regulatory authority – (e) facilitating access to the network for new generation capacity and energy storage facilities, in particular removing barriers that could prevent access for new market entrants and of electricity from renewable sources.
- Article 59 – Duties and power of the regulatory authorities – (v) monitoring investment in generation and storage capacities in relation to security of supply.

In addition, the IEM Regulation contains specific provisions to support the development of storage systems as well:

- (7) In the past, electricity customers were purely passive, often buying electricity at regulated prices which had no direct relation to the market. In the future, customers need to be enabled to fully participate in the market on equal footing with other market participants and need to be empowered to manage their energy consumption. To integrate the growing share of renewable energy, the future electricity system should make use of all available sources of flexibility, particularly demand side solutions and energy storage, and should make use of digitalization through the integration of innovative technologies with the electricity system. To achieve effective decarbonization at the lowest cost, the future electricity system also needs to encourage energy efficiency. The completion of the internal energy market through the effective integration of renewable energy can drive investments in the long term and can contribute to delivering the objectives of the Energy Union and the 2030 climate and energy framework, as set out in the Commission communication of 22 January 2014 entitled ‘A policy framework for climate and energy in the period from 2020 to 2030’, and endorsed in the conclusions adopted by the European Council at its meeting on 23 and 24 October 2014.
- (22) Core market principles should set out that electricity prices are to be determined through demand and supply. Those prices should indicate when electricity is needed, thereby providing market-based incentives for investments into flexibility sources such as flexible generation, interconnection, demand response or energy storage.
- (23) While decarbonization of the electricity sector, with energy from renewable sources becoming a major part of the market, is one of the goals of the Energy Union, it is crucial that the market removes existing barriers to cross-border trade and encourages investments into supporting infrastructure, for example, more flexible generation, interconnection, demand response and energy storage. To support this shift to variable and distributed generation, and to

ensure that energy market principles are the basis for the Union's electricity markets of the future, a renewed focus on short-term markets and scarcity pricing is essential.

- (39) To provide for a level playing field between all market participants, network tariffs should be applied in a way which does not positively or negatively discriminate between production connected at the distribution level and production connected at the transmission level. Network tariffs should not discriminate against energy storage and should not create disincentives for participation in demand response or represent an obstacle to improving energy efficiency.
- Article 2 – Definitions – (25) ‘market participant’ means a natural or legal person who buys, sells or generates electricity, who is engaged in aggregation or who is an operator of demand response or energy storage services, including through the placing of orders to trade, in one or more electricity markets, including in balancing energy markets.
- Article 3 – Principles regarding the operation of electricity markets:
 - (g) market rules shall deliver appropriate investment incentives for generation, in particular for long-term investments in a decarbonized and sustainable electricity system, energy storage, energy efficiency and demand response to meet market needs, and shall facilitate fair competition thus ensuring security of supply.
 - (j) safe and sustainable generation, energy storage and demand response shall participate on equal footing in the market, under the requirements provided for in the Union law.
 - (m) market rules shall enable the efficient dispatch of generation assets, energy storage and demand response.
 - (n) market rules shall allow for entry and exit of electricity generation, energy storage and electricity supply undertakings based on those undertakings' assessment of the economic and financial viability of their operations.
- Article 6 – Balancing market – 1. Balancing markets, including prequalification processes, shall be organized in such a way as to:
 - (a) ensure effective non-discrimination between market participants taking account of the different technical needs of the electricity system and the different technical capabilities of generation sources, energy storage and demand response.
 - (c) ensure non-discriminatory access to all market participants, individually or through aggregation, including for electricity generated from variable renewable energy sources, demand response and energy storage.
- Article 8 – Trade on day-ahead and intraday markets – 3. NEMOs shall provide products for trading in day-ahead and intraday markets which are sufficiently small in size, with minimum bid sizes of 500 kW or less, to allow for the effective participation of demand-side response, energy storage and small-scale renewables including direct participation by customers.

- Article 13 – Re-dispatching – 1. The re-dispatching of generation and re-dispatching of demand response shall be based on objective, transparent and non-discriminatory criteria. It shall be open to all generation technologies, all energy storage and all demand response, including those located in other Member States unless technically not feasible.
- Article 18 – Charges for access to networks, use of networks and reinforcement – 1. “omissis”... the method used to determine the network charges shall neutrally support overall system efficiency over the long run through price signals to customers and producers and in particular be applied in a way which does not discriminate positively or negatively between production connected at the distribution level and production connected at the transmission level. The network charges shall not discriminate either positively or negatively against energy storage or aggregation and shall not create disincentives for self-generation, self-consumption or for participation in demand response.
- Article 22 – Design principles for capacity mechanisms – 1. Any capacity mechanism shall: (h) be open to participation of all resources that are capable of providing the required technical performance, including energy storage and demand side management.
- Article 55 – Tasks of the EU DSO entity – 1. The tasks of the EU DSO entity shall be the following:
 - (b) facilitating the integration of renewable energy resources, distributed generation and other resources embedded in the distribution network such as energy storage.
- Article 57 – Cooperation between distribution system operators and transmission system operators – 2. Distribution system operators and transmission system operators shall cooperate with each other in order to achieve coordinated access to resources such as distributed generation, energy storage or demand response that may support particular needs of both the distribution system operators and the transmission system operators.

To sum up, both the IEM Directive and the IEM Regulation – as described above – see the energy storage facilities as a key element to provide flexibility services to foster the integration of renewable energy sources and to guarantee security of supply. In addition, energy storage services should be market-based and competitive. Within this context, market rules should remove barriers or discriminations and deliver appropriate incentives to investments in storage facilities.

With reference to the Cypriot electricity market, the last version of the Trade and Settlement Rules - TSRs (i.e. version 2.2.0¹³), which has been submitted by the Cypriot TSO (i.e. TSOC) to the Cypriot National

¹³ This version is available only in Greek language. However, an interpretative note for storage (i.e. Revision of the Electricity Market Rules for Integrating Storage Installations) in English language (unofficial translation) has been made available by the TSOC.

Regulatory Authority (i.e. CERA) in July 2020 according to CERA Decision no. 03/2019¹⁴, although this has been pending for the approval of CERA, contains provisions to integrate the energy storage facilities.

In particular, the following main features have been highlighted:

- electricity storage facilities can be participating fully in the electricity markets (i.e. energy markets and dispatching services markets);
- electricity storage facilities will be included in a Register of Electricity Storage Plants according to their technical characteristics;
- electricity storage facilities will be included in the Register of Balancing Service Providers – BSPs according to their technical characteristics.

Moreover, electricity storage facilities have to be equipped with two-way metering devices (i.e. capable of measuring both energy injection and withdrawal flows), which will be able to send the measurement information at least every half-an-hour. Therefore, in addition to ensuring their continuous (24-hour) operation, it is possible to clear, accurately, the energy flows from/to the Transmission or Distribution System, depending on their connection.

Besides, the “Revision of the purchasing rules for the integration of the electricity storage installations¹⁵” document proposes amendments and additions of definitions in order to integrate the energy storage facilities as well as “storage installation managers” and “storage representatives”¹⁶. In details:

Topic	Cypriot Definitions
Storage Installation Manager	<p>“A new definition of the Storage Installation Manager is introduced as the Participant who holds a relevant license, in accordance with the provisions of the Law, and is active in the operation of an Electricity Storage Installation. A Storage Installation Manager is entitled to participate in the individual markets of the wholesale market, operating an Electricity Storage Installation with:</p> <p>1) Maximum Power Storage Installation Discharge/Filling Capacity of more than or equal to 1 and 1 MW respectively.</p>

¹⁴ This CERA decision is available only in Greek language. However, it is reasonable to assume that specific part on energy storage facilities, in line with such decision, has been transposed in the TSRs version 2.2.0. Therefore, an interpretative note for storage in English language (unofficial translation) has been made available, as shown in the previous footnote, by the TSOC.

¹⁵ Title of the interpretative note for storage (unofficial translation) by TSOC for a recent proposal regarding the amendment of the TSRs according to CERA Regulatory Decision no. 03/2019 (approval pending by CERA).

¹⁶ TDRs (5.3.0) and TSRs (2.2.0) with provisions for storage systems have been approved by CERA on 30/12/2021 and 5/1/2022 respectively.

	<p>2) Maximum Power Storage Installation Energy Availability of more than or equal to 2 MWh per MW Maximum Discharge Capacity Installation”</p>
<p>Storage Representative</p>	<p>“A new definition is introduced for the Storage Representative which is the Independent Cumulative Representation Body that holds a relevant license and is active in the cumulative representation of Electricity Storage Facilities. There are specific restrictions in relation to the obligation of the Storage Representative to represent a portfolio cumulatively of at least a specific size. A Storage Representative may represent any number of Electricity Storage Installations and shall be entitled to participate in the individual markets of the wholesale market, representing Power Storage Installations portfolios with:</p> <ol style="list-style-type: none"> 1) Maximum Power Storage Installation Discharge/Filling Capacity of more than or equal to 1 or 1 MW and less than 20 or 20 MW respectively; 2) Maximum Power Storage Installation Energy Availability of more than or equal to 2 MWh per MW Maximum Discharge Capacity Installation. <p>Also introduced is the restriction that Power Storage Facilities with a maximum discharge/loading capability of more than or equal to 50 kW and 50 kW respectively and less than 1 MW and 1 MW respectively and Maximum Energy Availability of less than 2 MWh per installed MW Maximum Discharge Capacity, are entitled to participate in the individual markets of the wholesale market, only through their participation in an Installation Portfolio”</p>

As mentioned above, we have appreciated that storage facilities have been included in the last version of both TSRs (version 2.2.0 approved by CERA on 05/01/2022) and TDRs (version 5.3.0 approved by CERA on 30/12/2021).

Furthermore, we observe that 20 MW, which is mentioned in the above table, is the threshold that is mentioned also as far as aggregation is concerned (please see the aggregation paragraph for additional comments). No specific indication, relating to the installation of storage systems by the TSO as well as by the DSO, has been detected in the English versions of the above-mentioned documents we analyzed.

In addition, for the sake of completeness, we suggest showing in the Cypriot Regulatory Documents that energy storage facilities may be engaged in aggregation with other generation or flexible demand response resources as well.

5 INTRADAY MARKET

This topic is deeply described into the Capacity Allocation and Congestion Management – CACM Guideline issued by the European Commission on the 24th of July 2015. In particular, CACM GL is the key regulation outlining the design and integration of the Day-Ahead Market (DAM) and Intra-Day Market (IDM) at European level. IDM and DAM are both managed by Power Exchanges, which are labelled as NEMOs (i.e. Nominated Electricity Market Operators) in the EU, concept introduced by this Guideline.

According to CACM GL, continuous trading should be in place in the intraday time frame. In details:

- Article 36(1) states that all NEMOs shall develop, maintain, and operate the following algorithms:
 - a) a price coupling algorithm; b) a continuous trading matching algorithm.
- Article 59 affirms that:
 - (2) the intraday cross-zonal gate closure time shall be set in such a way that it: (a) maximizes market participants' opportunities for adjusting their balances by trading in the intraday market time- frame as close as possible to real time; and (b) provides TSOs and market participants with sufficient time for their scheduling and balancing processes in relation to network and operational security.
 - (3) one intraday cross-zonal gate closure time shall be established for each market time unit for a given bidding zone border. It shall be at most one hour before the start of the relevant market time unit and shall take into account the relevant balancing processes in relation to operational security.
 - (4) the intraday energy trading for a given market time unit for a bidding zone border shall start at the latest at the intraday cross-zonal gate opening time of the relevant bidding zone borders and shall be allowed until the intraday cross-zonal gate closure time.
- Article 63(2) states that complementary regional intraday auctions may be implemented within or between bidding zones in addition to the single intraday coupling solution referred to in Article 51. In order to hold regional intraday auctions, continuous trading within and between the relevant bidding zones may be stopped for a limited period of time before the intraday cross-zonal gate closure time, which shall not exceed the minimum time required to hold the auction and in any case 10 minutes. (4) The competent regulatory authorities may approve the proposal for complementary regional intraday auctions if the following conditions are met: (a) regional auctions shall not have an adverse impact on the liquidity of the single intraday coupling; (b) all cross-zonal capacity shall be allocated through the capacity management module; (c) the regional auction shall not introduce any undue discrimination between market participants from adjacent regions; (d) the timetables for regional auctions shall be consistent with single intraday coupling

to enable market participants to trade as close as possible to real-time; (e) regulatory authorities shall have consulted the market participants in the Member States concerned.

With reference to the Intraday Market, the IEM Regulation contains specific provisions. In details:

- Article 7 – Day-Ahead and Intraday markets – 1. Transmission system operators and NEMOs shall jointly organise the management of the integrated day-ahead and intraday markets in accordance with Regulation (EU) 2015/1222. Transmission system operators and NEMOs shall cooperate at Union level or, where more appropriate, at a regional level in order to maximise the efficiency and effectiveness of Union electricity day-ahead and intraday trading. The obligation to cooperate shall be without prejudice to the application of Union competition law. In their functions relating to electricity trading, transmission system operators and NEMOs shall be subject to regulatory oversight by the regulatory authorities pursuant to Article 59 of Directive (EU) 2019/944 and ACER pursuant to Articles 4 and 8 of Regulation (EU) 2019/942.
- 2. Day-ahead and intraday markets shall:
 - a) be organised in such a way as to be non-discriminatory;
 - b) maximise the ability of all market participants to manage imbalances;
 - c) maximise the opportunities for all market participants to participate in cross-zonal trade in as close as possible to real time across all bidding zones;
 - d) provide prices that reflect market fundamentals, including the real time value of energy, on which market participants are able to rely when agreeing on longer-term hedging products;
 - e) ensure operational security while allowing for maximum use of transmission capacity;
 - f) be transparent while at the same time protecting the confidentiality of commercially sensitive information and ensuring trading occurs in an anonymous manner;
 - g) make no distinction between trades made within a bidding zone and across bidding zones; and
 - h) be organised in such a way as to ensure that all markets participants are able to access the market individually or through aggregation.
- Article 8 – Trade on Day-ahead and Intraday markets:
 - 1) NEMOs shall allow market participants to trade energy as close to real time as possible and at least up to the intraday cross-zonal gate closure time.
 - 2) NEMOs shall provide market participants with the opportunity to trade in energy in time intervals which are at least as short as the imbalance settlement period for both day-ahead and intraday markets.
 - 3) NEMOs shall provide products for trading in day-ahead and intraday markets which are sufficiently small in size, with minimum bid sizes of 500 kW or less, to allow for the

effective participation of demand-side response, energy storage and small-scale renewables including direct participation by customers.

- 4) By 1 January 2021, the imbalance settlement period shall be 15 minutes in all scheduling areas, unless regulatory authorities have granted a derogation or an exemption. Derogations may be granted only until 31 December 2024. From 1 January 2025, the imbalance settlement period shall not exceed 30 minutes where an exemption has been granted by all the regulatory authorities within a synchronous area.

Nevertheless, in line with the article 64 “Derogations” of the IEM Regulation, the aforementioned articles shall not apply to Cyprus until its transmission system is connected to other Member States’ transmission systems via interconnections. In addition, if the transmission system of Cyprus is not connected to other Member States’ transmission systems by means of interconnections by 1 January 2026, Cyprus shall assess the need for derogation from those provisions and may submit a request to prolong the derogation to the EU Commission. The Commission shall assess whether the application of the provisions risks causing substantial problems to the operation of the electricity system in Cyprus or whether their application in Cyprus is expected to provide benefits to the functioning of the market. On the basis of that assessment, the EU Commission shall issue a reasoned decision to prolong the derogation in full or in part.

The interconnection of the Cypriot transmission system with the ones of the other European Member States is tied to the implementation of the Eurasia Interconnector, a 1,500 km HVDC cable that will reach record depths of 2,700 meters below the level of the Mediterranean sea. The power line will consist of three sections: 310 km between Israel and Cyprus, 900 km between Cyprus and Crete and 310 km between Crete and the Hellenic Peninsula, already under construction by the Greek TSO IPTO.

As for the status of the project, the information provided to us by the Cypriot Authorities are the following:

- the project has been included in the 5th PCI List and a funding from CEF of 657 million € has been approved¹⁷;
- most permits related to the construction and operation of the project in Cyprus have been obtained by the Project Promoter;
- the project is expected to start construction in Q4 2022 and be completed and fully operational by Q4 2025¹⁸ (first phase, 1000 MW, 500 kV DC underwater electric cable)“.

¹⁷ https://ec.europa.eu/info/news/eu-invests-over-eu-1-billion-clean-energy-infrastructure-support-green-deal-2022-jan-26_en

https://ec.europa.eu/energy/sites/default/files/fifth_pci_list_19_november_2021_annex.pdf

<https://euroasia-interconnector.com/eu-funding-cef-of-e657million-for-the-euroasia-interconnector/>

¹⁸ According to <https://euroasia-interconnector.com/eu-funding-cef-of-e657million-for-the-euroasia-interconnector/> the commissioning is foreseen in the first half of 2026, while the same web site of the project in

Thus, it must be taken into account that several derogations granted to Cyprus by the IEM directive and regulation until the interconnection with the European power system will not be applicable in very few years.

Moreover, with reference to the documents which have been provided by the Cypriot Authorities, it has been observed that CERA's decision no. 1/2015 states that the Intra-Day Market should be implemented at "the latest within 24 months from the date the market starts operation under the new arrangements".

As far as the start of the market is concerned, on the basis of the current information shared between the parties, a tender for the implementation of the Market Management System was awarded in April 2020; the project is currently under implementation and the expected date of commissioning is October 2022. Taking into account this timeline, 24 months after October 2022 is October 2024, i.e. before the commissioning of the EuroAsia interconnector: this means that the intra-day market could be implemented before joining the Europe-wide Single Intra Day Coupling continuous trading market.

In addition, for the sake of completeness, no specific references to this topic have been detected in the latest Trade and Settlement Rules 2.2.0 issued by the TSOC.

6 IMBALANCE SETTLEMENT PERIOD

As specified by the article no. 8 “Trade on day-ahead and intraday markets” of the IEM Regulation, the imbalance settlement period:

- shall be 15 minutes, by 1 January 2021, in all scheduling areas unless regulatory authorities have granted a derogation or an exemption (derogations may be granted only until 31 December 2024);
- shall not exceed 30 minutes, from 1 January 2025, where an exemption has been granted by all the regulatory authorities within a synchronous area.

In addition, as reported by recital no. 13 of the IEM Regulation, the integration of balancing energy markets should facilitate the efficient functioning of the intraday market in order to provide the possibility for market participants to balance themselves as closely as possible to real time, enabled by the balancing energy gate closure times provided for in Article 24 of Regulation (EU) 2017/2195. Only the imbalances remaining after the end of the intraday market should be balanced by transmission system operators in the balancing market. Article 53 of Regulation (EU) 2017/2195 also provides for the harmonisation of the imbalance settlement period at 15 minutes in the Union. That harmonisation is intended to support intraday trading and foster the development of a number of trading products with the same delivery windows.

Nevertheless, as per the article 64 “Derogations” of the IEM Regulation, a 15-minute imbalance settlement period (ISP), which is laid down in the article no. 8, shall not apply to Cyprus until its transmission system is connected to other Member States’ transmission systems via interconnections. In addition, if the transmission system of Cyprus is not connected to other Member States’ transmission systems by means of interconnections by 1 January 2026, Cyprus shall assess the need for derogation from those provisions and may submit a request to prolong the derogation to the EU Commission. The Commission shall assess whether the application of the provisions risks causing substantial problems to the operation of the electricity system in Cyprus or whether their application in Cyprus is expected to provide benefits to the functioning of the market. On the basis of that assessment, the EU Commission shall issue a reasoned decision to prolong the derogation in full or in part.

As above mentioned, the EuroAsia interconnector should be commissioned in the first half of 2026, therefore after its commissioning no derogations will be allowed.

Besides, a specific indication on the imbalance settlement period is reported in the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing. Precisely, the article no. 53 states:

1. By three years after the entry into force of this Regulation, all TSOs shall apply the imbalance settlement period of 15 minutes in all scheduling areas while ensuring that all boundaries of market time unit shall coincide with boundaries of the imbalance settlement period.
2. The TSOs of a synchronous area may jointly request an exemption from the requirement laid down in paragraph 1.
3. Where the relevant regulatory authorities of a synchronous area grant an exemption from the requirement laid down in paragraph 1 upon a joint request of the TSOs in the concerned synchronous area or at their own initiative, they shall perform, in cooperation with the Agency and at least every three years, a cost-benefit analysis concerning the harmonisation of the imbalance settlement period within and between synchronous areas.

Regarding the Cypriot documents, although updated versions of the Trade and Settlement Rules, specifically versions no. 2.0.1, 2.1.0, and 2.2.0, have been issued, no updates have been proposed on this topic. However, as reported by the version 2.0.0¹⁹ of the Trade and Settlement Rules issued in May 2017, it is highlighted that:

- the trading period is a half-hourly period within the Trading Day. It coincides with the settlement period;
- the settlement period is a period of 30 minutes, which is used for calculation of settlement of energy delivered across the transmission system. It coincides with the Trading period.

In addition, as far as the definition of the settlement period is concerned, the version 4.0.0 of the Transmission and Distribution Rules (TDRs) refers to the Trade and Settlement Rules (TSRs).

¹⁹ For the sake of completeness, only this version of the TSRs has been provided in English language by the TSOC

7 BALANCING MARKET DATA PUBLICATION

As stated by the article 6 “Balancing market” of the IEM Regulation, Transmission System Operators (TSOs) or their delegated operators shall publish, as close to real time as possible but with a delay after delivery of no more than 30 minutes, the current system balance of their scheduling areas, the estimated imbalance prices and the estimated balancing energy prices.

However, in line with the article 64 “Derogations” of the IEM Regulation, the above-mentioned article shall not apply to Cyprus until its transmission system is connected to other Member States’ transmission systems via interconnections. In addition, if the transmission system of Cyprus is not connected to other Member States’ transmission systems by means of interconnections by 1 January 2026, Cyprus shall assess the need for derogation from those provisions and may submit a request to prolong the derogation to the EU Commission. The Commission shall assess whether the application of the provisions risks causing substantial problems to the operation of the electricity system in Cyprus or whether their application in Cyprus is expected to provide benefits to the functioning of the market. On the basis of that assessment, the EU Commission shall issue a reasoned decision to prolong the derogation in full or in part.

As above mentioned, the EuroAsia interconnector should be commissioned in the first half of 2026, therefore after its commissioning no derogations will be allowed.

Withing this context, it is worth mentioning that during the course of the previous SRSS/S2017/048 action carried out by RSE, TSOC provided the following opinion on this topic:

“TSRs provide for the publication of the cleared balancing energy prices at 12:00 on D+1. At the current state of the market this is considered sufficient, and thus, TSOC disagrees with the earlier publication of balancing market prices. This term will be re-evaluated in due course as the market evolves. When the system becomes interconnected the relevant provisions of the regulation will be applied.”

8 TECHNICAL BIDDING LIMITS

In line with the article 10 of the Balancing Regulation, all TSOs shall develop a proposal for a methodology to determine prices for the balancing energy that results from the activation of balancing energy bids for the frequency restoration process pursuant to Articles 143 and 147 of Regulation (EU) 2017/1485, and the reserve replacement process pursuant to Articles 144 and 148 of Regulation (EU) 2017/1485. Such methodology shall: (a) be based on marginal pricing (pay-as-cleared); (b) define how the activation of balancing energy bids activated for purposes other than balancing affects the balancing energy price, while also ensuring that at least balancing energy bids activated for internal congestion management shall not set the marginal price of balancing energy; (c) establish at least one price of balancing energy, for each imbalance settlement period; (d) give correct price signals and incentives to market participants; (e) take into account the pricing method in the day-ahead and intraday timeframes.

In case TSOs identify that technical price limits are needed for efficient functioning of the market, they may jointly develop as part of the above-mentioned proposal, a proposal for harmonised maximum and minimum balancing energy prices, including bidding and clearing prices, to be applied in all scheduling areas. In such a case, harmonised maximum and minimum balancing energy prices shall take into account the maximum and minimum clearing price for day-ahead and intraday timeframes pursuant to Regulation (EU) 2015/1222.

With reference to the technical bidding limits, as per article 10 of the IEM Regulation, we can observe:

1. There shall be neither a maximum nor a minimum limit to the wholesale electricity price. This provision shall apply, inter alia, to bidding and clearing in all timeframes and shall include balancing energy and imbalance prices, without prejudice to the technical price limits which may be applied in the balancing timeframe and in the day-ahead and intraday timeframes;
2. NEMOs may apply harmonised limits on maximum and minimum clearing prices for day-ahead and intraday timeframes. Those limits shall be sufficiently high so as not to unnecessarily restrict trade, shall be harmonised for the internal market and shall take into account the maximum value of lost load. NEMOs shall implement a transparent mechanism to adjust automatically the technical bidding limits in due time in the event that the set limits are expected to be reached. The adjusted higher limits shall remain applicable until further increases under that mechanism are required.
3. Transmission system operators shall not take any measures for the purpose of changing wholesale prices.
4. Regulatory authorities or, where a Member State has designated another competent authority for that purpose, such designated competent authorities, shall identify policies and measures applied within their territory that could contribute to indirectly restricting wholesale price formation,

including limiting bids relating to the activation of balancing energy, capacity mechanisms, measures by the transmission system operators, measures intended to challenge market outcomes, or to prevent the abuse of dominant positions or inefficiently defined bidding zones.

Analyzing the specific case of Cyprus, in line with the documents – which have been kindly provided by the Cypriot Authorities – it is highlighted that:

- the Administratively Defined Energy Offer Cap²⁰, which is set as the upper limit to the Offer Prices of all Orders, shall be established by decision of CERA as per the Trading and Settlement Rules version 2.0.0 issued in May 2017 by the TSOC;
- therefore, as shown in the Regulatory Decision no. 1/2015, CERA proposed to set the upper limit of the offers submitted to the Day-Ahead Market to 1000 €/MWh for an initial period. This is determined on the basis of the following:
 - the level of the capital expenditure the Day Ahead Market should be capable of supporting and
 - the need to avoid situations of extremely high prices, which create liquidity problems to the market.

Besides, no reference to the Value of Lost Load has been detected in the Cypriot Documents.

For this purpose, in the article 11 of the IEM Regulation, it is affirmed:

1. By 5 July 2020 where required for the purpose of setting a reliability standard in accordance with Article 25²¹ regulatory authorities or, where a Member State has designated another competent authority for that purpose, such designated competent authorities shall determine a single estimate of the value of lost load for their territory. That estimate shall be made publically available. Regulatory authorities or other designated competent authorities may determine different estimates per bidding zone if they have more than one bidding zone in their territory. Where a bidding zone consists of territories of more than one Member State, the concerned regulatory authorities or other designated competent authorities shall determine a single estimate of the value of lost load for that bidding zone. In determining the single estimate of the value of lost load,

²⁰ Administratively Defined Energy Offer Cap is the maximum acceptable price for the offers (for each step of the stepwise energy offers, (for each segment of the linear energy offers and for all block offers) submitted in the Day-Ahead Market.

²¹ The reliability standard shall be calculated using at least the value of lost load and the cost of new entry over a given timeframe and shall be expressed as ‘expected energy not served’ and ‘loss of load expectation’.

regulatory authorities or other designated competent authorities shall apply the methodology referred to in Article 23(6)²².

2. Regulatory authorities and designated competent authorities shall update their estimate of the value of lost load at least every five years, or earlier where they observe a significant change.

However, as per the article 64 “Derogations” of the IEM Regulation, article 10 as well as article 11 shall not apply to Cyprus until its transmission system is connected to other Member States’ transmission systems via interconnections.

²² By 5 January 2020, the ENTSO for Electricity shall submit to ACER a draft methodology for calculating: (a) the value of lost load; (b) the cost of new entry for generation, or demand response; and (c) the reliability standard referred to in Article 25. The methodology shall be based on transparent, objective and verifiable criteria.

9 CAPACITY MECHANISMS

To ensure **resource adequacy**, new rules on Capacity Mechanisms have been established by the IEM Regulation in order to remunerate **resources for their availability**.

As mentioned by the article no. 20, Member States with identified resource adequacy concerns shall develop and publish an implementation plan with a timeline for adopting measures to eliminate any identified **regulatory distortions or market failures** as a part of the State aid process. When addressing resource adequacy concerns, the Member States shall in particular take into account the principles set out in Article 3 and shall consider:

- a) **removing regulatory distortions;**
- b) **removing price caps** in accordance with Article 10;
- c) **introducing a shortage pricing function** for balancing energy as referred to in Article 44(3) of Regulation (EU) 2017/2195;
- d) **increasing interconnection and internal grid capacity** with a view to reaching at least their interconnection targets as referred in point (d)(1) of Article 4 of Regulation (EU) 2018/1999;
- e) **enabling self-generation, energy storage, demand side measures and energy efficiency** by adopting measures to eliminate any identified regulatory distortions;
- f) **ensuring cost-efficient and market-based** procurement of balancing and ancillary services;
- g) **removing regulated prices** where required by Article 5 of Directive (EU) 2019/944.

In addition, article no. 21 of the IEM Regulation states the following main elements:

- Before introducing capacity mechanisms, the Member States concerned shall conduct a comprehensive study of the possible effects of such mechanisms on the neighbouring Member States by consulting at least its neighbouring Member States to which they have a direct network connection and the stakeholders of those Member States;
- Member States shall assess whether a capacity mechanism in the form of strategic reserve is capable of addressing the resource adequacy concerns. Where this is not the case, Member States may implement a different type of capacity mechanism.
- Capacity mechanisms shall be temporary. They shall be approved by the Commission for no longer than 10 years.

In particular, in line with the article 22, any capacity mechanism shall:

- Be temporary;
- Not create undue market distortions and not limit cross-zonal trade;
- Not go beyond what is necessary to address the adequacy concerns referred to in article 20;
- Select capacity providers by means of a transparent, non-discriminatory and competitive process;
- Provide incentives for capacity providers to be available in times of expected system stress;

- Ensure that the remuneration is determined through the competitive process;
- Set out technical conditions for the participation of capacity providers in advance of the selection process;
- Be open to participation of all resources that are capable of providing the required technical performance, including energy storage and demand side management;
- Apply appropriate penalties to capacity providers that are not available in times of system stress.

In addition, in line with the aforementioned article, the design of **strategic reserve** shall meet the following main requirements:

- Where a capacity mechanism has been designed as a strategic reserve, the resources thereof are to be dispatched only if the transmission system operators are likely to exhaust their balancing resources to establish an equilibrium between demand and supply²³;
- The resources taking part in the strategic reserve are not to receive remuneration from the wholesale electricity markets or from the balancing markets.

Besides, in accordance with the paragraph no. 4 of the article 22, Capacity mechanisms shall incorporate the following requirements regarding CO₂ emission limits:

- a) **from 4 July 2019** at the latest, generation capacity that started commercial production on or after that date and that emits more than **550 g of CO₂ of fossil fuel origin per kWh of electricity** shall not be committed or to receive payments or commitments for future payments under a capacity mechanism;
- b) **from 1 July 2025** at the latest, generation capacity that started commercial production **before 4 July 2019 and that emits more than 550 g of CO₂ of fossil fuel origin per kWh of electricity and more than 350 kg CO₂ of fossil fuel origin on average per year per installed kW**e shall not be committed or receive payments or commitments for future payments under a capacity mechanism.

As per article no. 26, **capacity mechanisms** other than strategic reserves and where technically feasible, strategic reserves **shall be open to direct cross-border** participation of capacity providers located in another Member State. In addition, Transmission System Operators shall set the maximum entry capacity available for the participation of foreign capacity based on the recommendation of the regional coordination centre on an annual basis.

²³ The requirement of such point shall be without prejudice to the activation of resources before actual dispatch in order to respect the ramping constraints and operating requirements of the resources. The output of the strategic reserve during activation shall not be attributed to balance groups through wholesale markets and shall not change their imbalances.

Besides, Member States shall ensure that the entry capacity is allocated to eligible capacity providers in a transparent, non-discriminatory and market-based manner.

Analyzing the TSRs document – which has been provided by the TSOC – “contingency reserve” has been defined as follows: capacity which is contracted or may be contracted by the TSO, and is activated in accordance with terms and conditions of the integrated scheduling process, so that the system load and the ancillary services requirements are covered during extreme conditions²⁴. Contingency reserve is provided by contracted units. By means of the Contingency Reserve Contracts, a Participant reserves the whole generation capability of a Contracted Unit for the provision of Contingency Reserve, in accordance with the provisions of the relevant Contract. The generation capability of a Contracted Unit cannot be used for participation in any market process offering Energy, Balancing Energy and/or Ancillary Services.

Therefore, it is reasonable to assume that such contingency reserves are the same as the “strategic reserve” illustrated above. However, as per the article 64 “Derogations” of the IEM Regulation, the above-mentioned articles shall not apply to Cyprus until its transmission system is connected to other Member States’ transmission systems via interconnections.

²⁴ Extreme condition is any foreseen situation in the solution of the Integrated Scheduling Process which may lead to the expectation of insufficient generation and/or balancing resources to cover the system load and/or the upward FCR, aFRR and/or mFRR requirements for any reason. In extreme conditions, the solution of the Integrated Scheduling Process results in deficit(s) in covering the system load and/or the upward FCR, aFRR and/or mFRR requirements.

10 PRIORITY DISPATCH

As stated by the IEM Regulation, electricity from renewable sources from small²⁵ power-generating facilities should be granted priority dispatch²⁶ either via a specific priority order in the dispatching methodology or via legal or regulatory requirements for market operators to provide this electricity on the market. Priority dispatch which has been granted in the system operation services under the same economic conditions should be considered to comply with the IEM Regulation. In any case, priority dispatch should be deemed to be compatible with the participation in the electricity market of power-generating facilities using renewable energy sources.

Besides, article no. 12 of the IEM Regulation on dispatching of generation and demand response affirms:

1. The dispatching of power-generating facilities and demand response shall be non-discriminatory, transparent and market based.
2. Without prejudice to Articles 107, 108 and 109 TFEU, Member States shall ensure that when dispatching electricity generating installations, system operators shall give priority to generating installations using renewable energy sources to the extent permitted by the secure operation of the national electricity system, based on transparent and non-discriminatory criteria and where such power-generating facilities are either:
 - a) power-generating facilities that use renewable energy sources and have an installed electricity capacity of less than 400 kW; or
 - b) demonstration projects for innovative technologies, subject to approval by the regulatory authority, provided that such priority is limited to the time and extent necessary for achieving the demonstration purposes.
3. Member State may decide not to apply priority dispatch to power-generating facilities as referred to in point (a) of paragraph 2 with a start of operation at least six months after that decision, or to apply a lower minimum capacity than that set out under point (a) of paragraph 2, provided that:
 - a) It has well-functioning intraday and other wholesale and balancing markets and that those markets are fully accessible to all market participants in accordance with the IEM Regulation;
 - b) Redispatching rules and congestion management are transparent to all market participants;

²⁵ See in the following.

²⁶ Priority dispatch means, with regard to the self-dispatch model, the dispatch of power plants on the basis of criteria which are different from the economic order of bids and, with regard to the central dispatch model, the dispatch of power plants on the basis of criteria which are different from the economic order of bids and from network constraints, giving priority to the dispatch of particular generation technologies.

- c) The national contribution of the Member State towards the Union's binding overall target for share of energy from renewable sources is highlighted at the point c) of the paragraph no. 3 of the article 12;
 - d) the Member State has notified the planned derogation to the Commission setting out in detail how the conditions set out under points (a), (b) and (c) are fulfilled; and
 - e) the Member State has published the planned derogation, including the detailed reasoning for the granting of that derogation, taking due account of the protection of commercially sensitive information where required.
4. Without prejudice to Articles 107, 108 and 109 TFEU, Member States may provide for priority dispatch for electricity generated in power-generating facilities using high-efficiency cogeneration with an installed electricity capacity of less than 400 kW.
 5. For power-generating facilities commissioned as from 1 January 2026, point (a) of paragraph 2 shall apply only to power-generating facilities that use renewable energy sources and have an installed electricity capacity of less than 200 kW.
 6. Without prejudice to contracts concluded before 4 July 2019, power-generating facilities that use renewable energy sources or high-efficiency cogeneration and were commissioned before 4 July 2019 and, when commissioned, were subject to priority dispatch under Article 15(5) of Directive 2012/27/EU or Article 16(2) of Directive 2009/28/EC of the European Parliament and of the Council shall continue to benefit from priority dispatch. Priority dispatch shall no longer apply to such power-generating facilities from the date on which the power-generating facility becomes subject to significant modifications, which shall be deemed to be the case at least where a new connection agreement is required or where the generation capacity of the power-generating facility is increased.

Analyzing the TSRs document, which has been provided by TSOC, no priority dispatch has been detected. However, as per the article 64 "Derogations" of the IEM Regulation, the article no. 12 of the IEM Regulation shall not apply to Cyprus until its transmission system is connected to other Member States' transmission systems via interconnections.

11 COMPLIANCE OF SPECIFIC ARTICLES BETWEEN THE CYPRIOT LAW AND THE IEM DIRECTIVE

An analysis of the transposition of the specific articles of the Directive EU 2019/944 into the Cypriot Law has been carried out. In detail, this analysis regards the following articles of the IEM directive:

- Article 11 on dynamic electricity price contracts;
- Articles 13 and 17 on aggregation and independent aggregators including from demand response;
- Article 15 on active customers;
- Article 32 on incentives for the use of flexibility in distribution networks;
- Articles 36 and 54 on the ownership of energy storage facilities.

Therefore, a compliance analysis of the aforementioned topics is shown in the following table:

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
Entitlement to a dynamic electricity price contract	11	118	/	1. Member States shall ensure that the national regulatory framework enables suppliers to offer dynamic electricity price contracts. Member States shall ensure that final customers who have a smart meter installed can request to conclude a dynamic electricity price contract with at least one supplier and with every supplier that has more than 200 000 final customers.	1. The supplier with the highest number of final customers in the electricity market and any supplier with more than two hundred thousand (200.000) final customers shall allow final customers equipped with a smart meter to choose to enter into a dynamic electricity price contract. It is understood that offering this possibility to final customers who have a smart meter is optional for	<p style="text-align: center;">✓</p> Analyzing the transposition of the specific article of the IEM Directive into the Cypriot Law, we can observe that such article is compliant to the European one.

²⁷ The Law has been provided by the Cypriot Authorities in an unofficial English translation.

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>2. Member States shall ensure that final customers are fully informed by the suppliers of the opportunities, costs and risks of such dynamic electricity price contracts, and shall ensure that suppliers are required to provide information to the final customers accordingly, including with regard to the need to have an adequate electricity meter installed. Regulatory authorities shall monitor the market developments and assess the risks that the new products and services may entail and deal with abusive practices.</p> <p>3. Suppliers shall obtain each final customer's consent before that customer is switched to a dynamic electricity price contract.</p> <p>4. For at least a ten-year period after dynamic electricity price contracts become available, Member States or their regulatory authorities shall monitor, and shall publish an annual report on the main developments of such contracts, including market offers and the impact on consumers' Laws, and specifically the level of price volatility.</p>	<p>suppliers who do not meet the above criteria.</p> <p>2. Suppliers referred to in paragraph (1) shall be required to provide appropriate information to final customers on the opportunities, costs and risks of a dynamic electricity price contract, as well as on the need to install a smart meter..</p> <p>3. Suppliers shall obtain the consent of each final customer before that customer is transferred to a dynamic electricity price contract.</p> <p>4. CERA shall facilitate and monitor the implementation of the provisions of this Article by:</p> <p>(a) the adoption of a regulatory decision regulating the details of the provision of contracts;</p> <p>(b) monitoring market developments, assessing the risks that may arise from new products and services and considering any abusive practices;</p> <p>(c) monitoring and publishing an annual report, for a period of at least ten (10) years after dynamic electricity price contracts become available, on the main developments of those contracts including market offers and the impact</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
Aggregation contract	13	120	22 “principles governing regulated tariffs, fees and charges”	<p>1. Member States shall ensure that all customers are free to purchase and sell electricity services, including aggregation, other than supply, independently from their electricity supply contract and from an electricity undertaking of their choice.</p> <p>2. Member States shall ensure that, where a final customer wishes to conclude an aggregation contract, the final customer is entitled to do so without the consent of the final customer's electricity undertakings. Member States shall ensure that market participants engaged in aggregation fully inform customers of the terms and conditions of the contracts that they offer to them.</p> <p>3. Member States shall ensure that final customers are entitled to receive all relevant demand response data or data on supplied and sold electricity free of charge at least once every Lawing period if requested by the customer.</p> <p>4. Member States shall ensure that the rights referred to in paragraphs 2 and 3 are granted to final customers in a non-discriminatory manner as regards cost, effort or time. In particular, Member States shall ensure that customers are not subject to discriminatory technical and</p>	<p>on consumers' bills, in particular on the level of price volatility.</p> <p>1. All customers are free to buy and sell electric energy services, including aggregation but excluding supply, irrespective of the contract for the supply of electricity entered into by an electricity undertaking of their choice.</p> <p>2. A final customer wishing to enter into an aggregation contract in accordance with the provisions of paragraph (1) may do so without the consent of the electricity undertaking to which he is a party.</p> <p>3. Market participants engaged in aggregation shall fully inform clients of the terms and conditions of the contracts they offer them.</p> <p>4. Without prejudice to the provisions of Article 22(7), CERA shall ensure that the rights referred to in paragraphs (2) and (7)(c) of Article 22 are granted to final customers without discrimination as regards cost, effort or time, and in particular, customers are not subject to technical and administrative requirements, procedures and charges that discriminate against them by their supplier, on the basis of whether they</p>	<p style="text-align: center;">✓</p> <p>Analyzing the transposition of the specific article of the IEM Directive into the Cypriot Law, we can observe that, although the paragraph no. 3 has not been transposed explicitly, it has been re-called in the art. 22(7) of the Cypriot Law. Therefore, it is compliant to the European Directive.</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				administrative requirements, procedures or charges by their supplier on the basis of whether they have a contract with a market participant engaged in aggregation.	have a contract with a market participant engaged in aggregation.	
Active customers	15	122		<p>1. Member States shall ensure that final customers are entitled to act as active customers without being subject to disproportionate or discriminatory technical requirements, administrative requirements, procedures and charges, and to network charges that are not cost-reflective.</p> <p>2. Member States shall ensure that active customers are: (a) entitled to operate either directly or through aggregation; (b) entitled to sell self-generated electricity, including through power purchase agreements; (c) entitled to participate in flexibility schemes and energy efficiency schemes; (d) entitled to delegate to a third party the management of the installations required for their activities, including installation, operation, data handling and maintenance, without that third party being considered to be an active customer; (e) subject to cost-reflective, transparent and non-discriminatory network charges that account separately for the electricity fed into the grid and the electricity consumed from the grid, in accordance with Article 59(9) of this Directive and Article 18 of Regulation (EU) 2019/943,</p>	<p>1. Subject to the provisions of Article 22(8)(a), final customers shall be entitled to act as active customers and/or self-consumers without being subject to disproportionate or discriminatory technical requirements, administrative requirements and procedures.</p> <p>2. In order to achieve the objective of paragraph (1), CERA shall lay down by regulatory decision the framework required and ensure that active customers:</p> <p>(a) are entitled to pursue their activity directly or through aggregation;</p> <p>(b) are entitled to sell self-generated electricity, including through power purchase agreements;</p> <p>(c) be entitled to participate in flexibility and energy efficiency programmes;</p> <p>(d) have the right to entrust third parties with the management of the facilities necessary for their activities, including installation, operation, data management and maintenance without these parties being considered active customers;</p>	<p style="text-align: center;">✓</p> <p>Analyzing the transposition of the specific article of the IEM Directive into the Cypriot Law, we can observe that:</p> <ul style="list-style-type: none"> - self-consumers have been included, in addition to active customers, in the Cypriot Law; - paragraph 2(e) has been reported in the article 22(8) of the Cypriot Law specifically; - paragraph 5(b) has been reported in the article 22(9) of the Cypriot Law specifically; <p>However, it is reasonable to assume that no criticalities arise. Therefore, it is compliant with the European Directive.</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>ensuring that they contribute in an adequate and balanced way to the overall cost sharing of the system; (f) financially responsible for the imbalances they cause in the electricity system; to that extent they shall be balance responsible parties or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943.</p> <p>3. Member States may have different provisions applicable to individual and jointly acting active customers in their national law, provided that all rights and obligations under this Article apply to all active customers. Any difference in the treatment of jointly acting active customers shall be proportionate and duly justified.</p> <p>4. Member States that have existing schemes that do not account separately for the electricity fed into the grid and the electricity consumed from the grid, shall not grant new rights under such schemes after 31 December 2023. In any event, customers subject to existing schemes shall have the possibility at any time to opt for a new scheme that accounts separately for the electricity fed into the grid and the electricity consumed from the grid as the basis for calculating network charges.</p> <p>5. Member States shall ensure that active customers that own an energy storage facility:</p> <p>(a) have the right to a grid connection within a reasonable time after the request, provided that</p>	<p>(e) pay network charges in accordance with Article 22 (8) (b);</p> <p>(f) are financially responsible for the imbalances they cause in the electricity system and to that extent are balance responsible parties or delegate their balancing obligation;</p> <p>(g) Have systems that calculate separately the electricity fed into the grid and the electricity consumed from the grid.</p> <p>It shall be understood that no new rights shall be granted to systems that do not separately calculate the electricity fed into the grid and the electricity consumed from the grid after 31 December 2023 and that all customers subject to such schemes have the right of option under the provisions of Article 22(8)(c).</p> <p>3. CERA may include, within the framework of the provisions of paragraph (2), different provisions for individual and co-acting active clients, provided that all the rights and obligations provided for in this Article apply to all active customers and that any difference in treatment to jointly acting active clients is proportionate and duly justified.</p> <p>4. Where active customers own energy storage facilities:</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>all necessary conditions, such as balancing responsibility and adequate metering, are fulfilled; (b) are not subject to any double charges, including network charges, for stored electricity remaining within their premises or when providing flexibility services to system operators; (c) are not subject to disproportionate licensing requirements or fees; (d) are allowed to provide several services simultaneously, if technically feasible.</p>	<p>(a) have the right to connect to the grid within a reasonable period of time upon request, provided that all necessary conditions, such as balancing responsibility and adequate availability of meters, are met; (b) the fees or charges to which they may be subject shall be determined taking into account the provisions of Article 22(9)(a); (c) are not subject to disproportionate licensing requirements or fees; (d) are allowed to provide several services simultaneously, if technically feasible.</p>	
Citizen Energy communities	16	123		<p>1. Member States shall provide an enabling regulatory framework for citizen energy communities ensuring that: (a) participation in a citizen energy community is open and voluntary; (b) members or shareholders of a citizen energy community are entitled to leave the community, in which case Article 12 applies; (c) members or shareholders of a citizen energy community do not lose their rights and obligations as household customers or active customers; (d) subject to fair compensation as assessed by the regulatory authority, relevant distribution system operators cooperate with citizen energy communities to</p>	<p>1. Subject to the provisions of Article 5(1)(l) of the CERA, by regulatory decision, the CERA shall lay down a regulatory framework favourable to the energy communities of citizens and shall ensure that: (a) participation in a citizen energy community is open and voluntary; (b) the partners or members of the citizens' energy community may leave the community, where the provisions of Article 119, Article 22(6) and Article 22(7)(f) apply;</p>	<p style="text-align: center;">✓</p> <p>Analyzing the transposition of the specific article of the IEM Directive into the Cypriot Law, we can observe that: - Article 12, which is recalled in the IEM directive, has been transposed in the article 119 and 22 of the Cypriot Law; - Article 38, which is recalled in the IEM directive, has been</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>facilitate electricity transfers within citizen energy communities; (e) citizen energy communities are subject to non-discriminatory, fair, proportionate and transparent procedures and charges, including with respect to registration and licensing, and to transparent, non-discriminatory and cost- reflective network charges in accordance with Article 18 of Regulation (EU) 2019/943, ensuring that they contribute in an adequate and balanced way to the overall cost sharing of the system.</p> <p>2. Member States may provide in the enabling regulatory framework that citizen energy communities: (a) are open to cross-border participation; (b) are entitled to own, establish, purchase or lease distribution networks and to autonomously manage them subject to conditions set out in paragraph 4 of this Article; (c) are subject to the exemptions provided for in Article 38(2).</p> <p>3. Member States shall ensure that citizen energy communities: (a) are able to access all electricity markets, either directly or through aggregation, in a non-discriminatory manner; (b) are treated in a non-discriminatory and proportionate manner with regard to their activities, rights and obligations as final customers, producers, suppliers, distribution system operators or market participants engaged in aggregation; (c) are financially</p>	<p>(c) the citizens' energy community partners or members shall not lose their rights and obligations as household customers or active customers;</p> <p>(d) without prejudice to the provisions of Article 22 (10)(a), the DSO shall cooperate with citizen energy communities in order to facilitate electricity transport within citizen energy communities;</p> <p>(e) are subject to non-discriminatory, fair, proportionate and transparent procedures and charges, including for registration and licensing, and to network charges governed by the provisions of Article 22(10)(b);</p> <p>(f) are subject to the exceptions provided for in Article 56(3);</p> <p>(g) have access to all electricity markets either directly or through aggregation in a non-discriminatory manner;</p> <p>(h) are treated in a proportionate and non-discriminatory manner as regards their activities, rights and obligations as final customers, producers, suppliers or market participants engaged in aggregation;</p> <p>(i) they shall be responsible for balance, for imbalances they cause in the</p>	<p>transposed in the article 56 of the Cypriot Law;</p> <p>- Article 59(7), which is recalled in the IEM directive, has been transposed in the article 5(4) of the Cypriot Law;</p> <p>Without prejudice to Legal opinion, no criticalities are expected from a technical point of view.</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>responsible for the imbalances they cause in the electricity system; to that extent they shall be balance responsible parties or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943; (d) with regard to consumption of self-generated electricity, citizen energy communities are treated like active customers in accordance with point (e) of Article 15(2); (e) are entitled to arrange within the citizen energy community the sharing of electricity that is produced by the production units owned by the community, subject to other requirements laid down in this Article and subject to the community members retaining their rights and obligations as final customers. For the purposes of point (e) of the first subparagraph, where electricity is shared, this shall be without prejudice to applicable network charges, tariffs and levies, in accordance with a transparent cost-benefit analysis of distributed energy resources developed by the competent national authority.</p> <p>4. Member States may decide to grant citizen energy communities the right to manage distribution networks in their area of operation and establish the relevant procedures, without prejudice to Chapter IV or to other rules and regulations applying to distribution system operators. If such a right is granted, Member States shall ensure that citizen energy</p>	<p>electricity system and shall bear appropriate financial responsibility:</p> <p>(j) as regards the consumption of self-generated electricity, citizens' energy communities shall be treated as active customers and shall pay network charges in accordance with the provisions of Article 22 (8) (b);</p> <p>(k) are entitled to arrange within the citizen energy community the sharing of electricity that is produced by the production units owned by the community, subject to other requirements laid down in this Article and subject to the community members retaining their rights and obligations as final customers.</p> <p>2. The regulatory framework referred to in paragraph (1) shall lay down appropriate procedures for citizens' energy communities to:</p> <p>(a) be open to cross-border participation; and</p> <p>(b) have the right to own, establish, purchase or lease distribution networks and to manage them autonomously, without prejudice to the obligations applicable to distribution system operators, in such a way as to ensure that:</p> <p>(i) are entitled to conclude an agreement on the operation of their network with the</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>communities: (a) are entitled to conclude an agreement on the operation of their network with the relevant distribution system operator or transmission system operator to which their network is connected; (b) are subject to appropriate network charges at the connection points between their network and the distribution network outside the citizen energy community and that such network charges account separately for the electricity fed into the distribution network and the electricity consumed from the distribution network outside the citizen energy community in accordance with Article 59(7); (c) do not discriminate or harm customers who remain connected to the distribution system.</p>	<p>relevant distribution system operator or transmission system operator to which their network is connected; (ii) are subject to appropriate network charges at the connection points between their network and the distribution network outside the citizen energy community and that such network charges shall include separate information on the electricity fed into the distribution network and the electricity that is consumed by the distribution network outside the citizens' energy community, in accordance with the provisions of Article 5(7), and (iii) citizens energy communities do not discriminate or harm customers remaining connected to the distribution system.</p>	
Demand response through aggregation	17	124		<p>1. Member States shall allow and foster participation of demand response through aggregation. Member States shall allow final customers, including those offering demand response through aggregation, to participate alongside producers in a non-discriminatory manner in all electricity markets. 2. Member States shall ensure that transmission system operators and distribution system operators, when procuring ancillary services,</p>	<p>1. CERA shall set out in a regulatory decision the framework allowing and promoting the participation of demand response through aggregation, allowing final customers, including those offering demand response through aggregation, to participate jointly with electricity generators in all electricity markets in a non-discriminatory manner.</p>	<p style="text-align: center;">✓</p> <p>Analyzing the transposition of the specific article of the IEM Directive into the Cypriot Law, we can observe that: - paragraph 4 has been transposed in the article 22 of the Cypriot Law;</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>treat market participants engaged in the aggregation of demand response in a non-discriminatory manner alongside producers on the basis of their technical capabilities.</p> <p>3. Member States shall ensure that their relevant regulatory framework contains at least the following elements: (a) the right for each market participant engaged in aggregation, including independent aggregators, to enter electricity markets without the consent of other market participants; (b) non-discriminatory and transparent rules that clearly assign roles and responsibilities to all electricity undertakings and customers; (c) non-discriminatory and transparent rules and procedures for the exchange of data between market participants engaged in aggregation and other electricity undertakings that ensure easy access to data on equal and non-discriminatory terms while fully protecting commercially sensitive information and customers' personal data; (d) an obligation on market participants engaged in aggregation to be financially responsible for the imbalances that they cause in the electricity system; to that extent they shall be balance responsible parties or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943; (e) provision for final customers who have a contract with independent aggregators not to be subject to</p>	<p>2. The regulatory decision of CERA referred to in paragraph (1) shall ensure:</p> <p>(a) that the TSO and the DSO, when procuring ancillary services, treat market participants engaged in the aggregation of demand response together with generators on a non-discriminatory basis, on the basis of their technical capabilities;</p> <p>(b) the right of any market participant engaged in aggregation, including independent aggregators, to enter electricity markets without the consent of other market participants;</p> <p>(c) the existence of objective and transparent rules clearly assigning roles and responsibilities to all electricity undertakings and customers;</p> <p>(d) the existence of objective and transparent rules and procedures for the exchange of data between market participants engaged in aggregation and other electricity undertakings ensuring easy access to data on equal and non-discriminatory terms, while fully protecting commercial data and customers' personal data;</p> <p>(e) the obligation for market participants engaged in aggregation to be financially responsible for the imbalances they cause</p>	<p>Without prejudice to Legal opinion, no criticalities are expected from a technical point of view.</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>undue payments, penalties or other undue contractual restrictions by their suppliers; (f) a conflict resolution mechanism between market participants engaged in aggregation and other market participants, including responsibility for imbalances.</p> <p>4. Member States may require electricity undertakings or participating final customers to pay financial compensation to other market participants or to the market participants' balance responsible parties, if those market participants or balance responsible parties are directly affected by demand response activation. Such financial compensation shall not create a barrier to market entry for market participants engaged in aggregation or a barrier to flexibility. In such cases, the financial compensation shall be strictly limited to covering the resulting costs incurred by the suppliers of participating customers or the suppliers' balance responsible parties during the activation of demand response. The method for calculating compensation may take account of the benefits brought about by the independent aggregators to other market participants and, where it does so, the aggregators or participating customers may be required to contribute to such compensation but only where and to the extent that the benefits to all suppliers, customers and their balance</p>	<p>in the electricity system. To this extent they are balance responsible parties or delegate their balancing obligation;</p> <p>(f) final customers who have concluded a contract with independent aggregators shall not be burdened by payments in accordance with Article 22(11) (a), penalties or other unjustified contractual restrictions by their suppliers;</p> <p>(g) the existence of a dispute resolution mechanism between market participants engaged in aggregation and other market participants including responsibility for imbalances;</p> <p>(h) the payment of compensation in accordance with Article 22 (11) (b) and (c);</p> <p>(i) that the TSO and the DSO in close cooperation with market participants and final customers shall define the technical requirements, covering cumulative load participation, for the participation of demand response in all electricity markets on the basis of the technical characteristics of those markets and the technical capabilities of demand response.</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>responsible parties do not exceed the direct costs incurred. The calculation method shall be subject to approval by the regulatory authority or by another competent national authority.</p> <p>5. Member States shall ensure that regulatory authorities or, where their national legal system so requires, transmission system operators and distribution system operators, acting in close cooperation with market participants and final customers, establish the technical requirements for participation of demand response in all electricity markets on the basis of the technical characteristics of those markets and the capabilities of demand response. Such requirements shall cover participation involving aggregated loads.</p>		
Incentives for the use of flexibility in distribution networks	32	50	/	<p>1. Member States shall provide the necessary regulatory framework to allow and provide incentives to distribution system operators to procure flexibility services, including congestion management in their areas, in order to improve efficiencies in the operation and development of the distribution system. In particular, the regulatory framework shall ensure that distribution system operators are able to procure such services from providers of distributed generation, demand response or energy storage and shall promote the uptake of energy efficiency measures, where such</p>	<p>(1) (a) CERA shall by regulatory decision define the regulatory framework allowing and incentivising the DSO to procure flexibility services, including congestion management, in order to improve efficiency in the operation and development of the distribution system.</p> <p>(b) The regulatory framework shall ensure that the DSO can procure services from sources, such as distributed generation, demand response or energy storage, and consider energy efficiency measures where such services reduce in a</p>	<p style="text-align: center;">✓</p> <p>Without prejudice to Legal opinion, no criticalities are expected from a technical point of view.</p> <p>In addition, we observe positively that in the Cypriot Law the assessment at least every four years of the potential of district heating or cooling systems to provide balancing services</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>services cost-effectively alleviate the need to upgrade or replace electricity capacity and support the efficient and secure operation of the distribution system. Distribution system operators shall procure such services in accordance with transparent, non-discriminatory and market-based procedures unless the regulatory authorities have established that the procurement of such services is not economically efficient or that such procurement would lead to severe market distortions or to higher congestion.</p> <p>2. Distribution system operators, subject to approval by the regulatory authority, or the regulatory authority itself, shall, in a transparent and participatory process that includes all relevant system users and transmission system operators, establish the specifications for the flexibility services procured and, where appropriate, standardized market products for such services at least at national level. The specifications shall ensure the effective and non-discriminatory participation of all market participants, including market participants offering energy from renewable sources, market participants engaged in demand response, operators of energy storage facilities and market participants engaged in aggregation. Distribution system operators shall exchange all necessary information and shall coordinate with</p>	<p>cost-effective manner the need to upgrade or replace electricity capacity and which enhance the efficient and secure operation of the distribution system.</p> <p>(c) The DSO shall procure these services according to transparent, non-discriminatory and market-based procedures, unless CERA has determined that the procurement of those services is not cost-effective or where such procurement leads to serious market distortions or greater congestion.</p> <p>(2) (a) The DSO shall prepare within a transparent and participatory process involving all relevant system users and the TSO and submit to CERA the specifications for the flexibility services provided and, where appropriate, standardised market products for those services at least at national level.</p> <p>(b) The specifications referred to in paragraph (a) shall ensure effective and non-discriminatory participation of all market participants, including market participants providing energy from renewable sources, market participants engaged in demand response, operators of energy storage facilities and market participants engaged in aggregation.</p>	<p>and other system services has been included. Although this is not foreseen in the IEM Directive, no criticalities are expected from a technical point of view.</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>transmission system operators in order to ensure the optimal utilization of resources, to ensure the secure and efficient operation of the system and to facilitate market development. Distribution system operators shall be adequately remunerated for the procurement of such services to allow them to recover at least their reasonable corresponding costs, including the necessary information and communication technology expenses and infrastructure costs.</p> <p>3. The development of a distribution system shall be based on a transparent network development plan that the distribution system operator shall publish at least every two years and shall submit to the regulatory authority. The network development plan shall provide transparency on the medium and long-term flexibility services needed, and shall set out the planned investments for the next five-to-ten years, with particular emphasis on the main distribution infrastructure which is required in order to connect new generation capacity and new loads, including recharging points for electric vehicles. The network development plan shall also include the use of demand response, energy efficiency, energy storage facilities or other resources that the distribution system operator is to use as an alternative to system expansion.</p>	<p>(c) The DSO and the TSO shall exchange all necessary information and coordinate with a view to optimising the use of sources, ensuring the secure and efficient operation of the system and facilitating market development.</p> <p>(d) CERA shall ensure that the DSO is adequately remunerated for the procurement of these services, so as to recover at least the corresponding reasonable costs, including inter alia, having regard to the necessary technologies expenditure..</p> <p>(3) (a) The DSO shall prepare a transparent ten-year distribution network development plan which it shall submit to CERA every two years and publish it at least every two years.</p> <p>(b)The distribution network development plan shall provide transparency on the medium and long term flexibility services necessary and shall include the investments foreseen for the next ten (10) years, with a particular focus on the key distribution infrastructure needed to connect new generation capacity to new loads, such as recharging points for electric vehicles, as well as to make use of demand response, energy efficiency, energy storage facilities or other sources</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>4. The distribution system operator shall consult all relevant system users and the relevant transmission system operators on the network development plan. The distribution system operator shall publish the results of the consultation process along with the network development plan and submit the results of the consultation and the network development plan to the regulatory authority. The regulatory authority may request amendments to the plan.</p> <p>5. Member States may decide not to apply the obligation set out in paragraph 3 to integrated electricity undertakings which serve less than 100 000 connected customers, or which serve small isolated systems.</p>	<p>used by the DSO as an alternative to system expansion.</p> <p>(c) CERA shall ensure that the 10-year distribution network development plan is consistent with the objectives, policies and measures set out within the NECP drawn up in accordance with Regulation (EU) 2018/1999 and approved by the Council of Ministers.</p> <p>(4) The DSO shall consult all relevant system users and the TSO on the ten-year distribution network development plan. The DSO shall publish the results of the consultation process in conjunction with the ten-year distribution network development plan and shall both submit to CERA, which may request amendments to that plan.</p> <p>(5) The DSO shall assess at least every four (4) years, in cooperation with the operators of district heating or cooling systems in their respective areas, the potential of district heating or cooling systems to provide balancing services and other system services, including demand response and storage of excess electricity produced from renewable sources, and shall consider whether the use of this potential is more secure and cost-effective than alternatives.</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
Ownership of storage facilities by DSOs	36	53	/	<p>1. Distribution system operators shall not own, develop, manage or operate energy storage facilities.</p> <p>2. By way of derogation from paragraph 1, Member States may allow distribution system operators to own, develop, manage or operate energy storage facilities, where they are fully integrated network components and the regulatory authority has granted its approval, or where all of the following conditions are fulfilled: (a) other parties, following an open, transparent and non-discriminatory tendering procedure that is subject to review and approval by the regulatory authority, have not been awarded a right to own, develop, manage or operate such facilities, or could not deliver those services at a reasonable cost and in a timely manner; (b) such facilities are necessary for the distribution system operators to fulfil their obligations under this Directive for the efficient, reliable and secure operation of the distribution system and the facilities are not used to buy or sell electricity in the electricity markets; and (c) the regulatory authority has assessed the necessity of such a derogation and has carried out an assessment of the tendering procedure, including the conditions of the tendering procedure, and has granted its approval. The regulatory authority may draw up guidelines or procurement clauses to help</p>	<p>(1) The DSO may not own, develop, manage or operate energy storage facilities.</p> <p>(2) By way of derogation from paragraph (1), the Minister shall, after consulting CERA, by means of a notification published in the Government Gazette of the Republic of Cyprus, authorise the DSO to own, develop, manage or operate energy storage facilities which are fully integrated network elements and provided that CERA has given its approval or if all of the following conditions are met:</p> <p>(a) the other parties that participated in an open and transparent and non-discriminatory bidding process conducted by the DSO, which is subject to review and approval by CERA in accordance with paragraph (c) and carried out in accordance with the guidelines established pursuant to paragraph (3), have not acquired the right to own, develop, manage or operate such facilities or could not provide such services at a reasonable cost and in a timely manner;</p> <p>(b) The facilities in question are necessary for the DSO to fulfil its obligations under this Law for the</p>	<p style="text-align: center;">✓</p> <p>Analyzing the transposition of the specific article of the IEM Directive into the Cypriot Law, we can observe that such article is compliant with the Directive one.</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>distribution system operators ensure a fair tendering procedure.</p> <p>3. The regulatory authorities shall perform, at regular intervals or at least every five years, a public consultation on the existing energy storage facilities in order to assess the potential availability and interest in investing in such facilities. Where the public consultation, as assessed by the regulatory authority, indicates that third parties are able to own, develop, operate or manage such facilities in a cost-effective manner, the regulatory authority shall ensure that the distribution system operators' activities in this regard are phased out within 18 months. As part of the conditions of that procedure, regulatory authorities may allow the distribution system operators to receive reasonable compensation, in particular to recover the residual value of their investment in the energy storage facilities.</p> <p>4. Paragraph 3 shall not apply to fully integrated network components or for the usual depreciation period of new battery storage facilities with a final investment decision until 4 July 2019, provided that such battery storage facilities are: (a) connected to the grid at the latest two years thereafter; (b) integrated into the distribution system; (c) used only for the reactive instantaneous restoration of network security in the case of</p>	<p>efficient, reliable and secure operation of the distribution system and the facilities are not used to buy or sell electricity on electricity markets; and</p> <p>(c) CERA has assessed the necessity of this derogation and has carried out an assessment of the tender process, including the conditions of this procedure, and has given its approval.</p> <p>(3) CERA shall draw up guidelines or clauses for public procurement, with the aim of helping the DSO to ensure a fair bidding process in accordance with the provisions of paragraph (a) of paragraph (2).</p> <p>(4) (a) CERA shall conduct a public consultation on existing energy storage facilities at regular intervals or at least every three (3) years, with a view to assessing the potential availability and interest of investments in such facilities.</p> <p>(b) Where the public consultation, as assessed by CERA, shows that third parties are able to own, develop, operate or manage such facilities in a cost-effective manner, CERA shall ensure that the relevant DSO activities are phased out within eighteen (18) months. Under the conditions for this process, CERA may allow the DSO to receive reasonable</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				network contingencies where such restoration measure starts immediately and ends when regular re-dispatch can solve the issue; and (d) not used to buy or sell electricity in the electricity markets, including balancing.	compensation, namely to recover the residual value of its investment in energy storage facilities. (5) Paragraph (4) shall not apply to fully integrated network elements or for the normal depreciation period of new battery energy storage facilities with a final investment decision before 4 July 2019, which: (a) are connected to the network at the latest two years after; (b) are integrated into the distribution network; (c) are used exclusively for the immediate restoration of network security in case of network emergencies, if such remedial action starts immediately and ends when regular redispatching can solve the problem; and (d) if they are not used to buy or sell electricity in electricity markets, including balancing.	
Ownership of storage facilities by TSOs	54	82	/	1. Transmission system operators shall not own, develop, manage or operate energy storage facilities. 2. By way of derogation from paragraph 1, Member States may allow transmission system operators to own, develop, manage or operate energy storage facilities, where they are fully	(1) The TSOC may not own, develop, manage or operate energy storage facilities. (2) By way of derogation from paragraph (1), the Minister shall, after consulting CERA, by means of a notification published in the Government Gazette of	<p style="text-align: center;">✓</p> <p>Analyzing the transposition of the specific article of the IEM Directive into the Cypriot Law, we can observe that, without prejudice to Legal opinion,</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>integrated network components and the regulatory authority has granted its approval, or where all of the following conditions are fulfilled: (a) other parties, following an open, transparent and non-discriminatory tendering procedure that is subject to review and approval by the regulatory authority, have not been awarded a right to own, develop, manage or operate such facilities, or could not deliver those services at a reasonable cost and in a timely manner; (b) such facilities or non-frequency ancillary services are necessary for the transmission system operators to fulfil their obligations under this Directive for the efficient, reliable and secure operation of the transmission system and they are not used to buy or sell electricity in the electricity markets; and (c) the regulatory authority has assessed the necessity of such a derogation, has carried out an <i>ex ante</i> review of the applicability of a tendering procedure, including the conditions of the tendering procedure, and has granted its approval. The regulatory authority may draw up guidelines or procurement clauses to help transmission system operators ensure a fair tendering procedure. 3. The decision to grant a derogation shall be notified to the Commission and ACER together with relevant information about the request and the reasons for granting the derogation.</p>	<p>the Republic of Cyprus, authorise the TSOC to own, develop, manage or operate energy storage facilities which are fully integrated network elements, provided that CERA has given its approval or if all of the following conditions are met: (a) the other parties that participated in an open and transparent and non-discriminatory bidding process conducted by the TSOC and which is subject to review and approval by CERA in accordance with paragraph (c) and carried out in accordance with the guidelines established pursuant to paragraph (3), have not acquired the right to own, develop, control, manage or operate such facilities or could not provide such services at a reasonable cost and in a timely manner; (b) Such non-frequency facilities or ancillary services are necessary in order for the TSOC to fulfil its obligations under this Law for the efficient, reliable and secure operation of the transmission system, and shall not be used for the purchase or sale of electricity on electricity markets; and (c) CERA has assessed the necessity of this derogation, has carried out an <i>ex ante</i></p>	<p>no criticalities are expected from a technical point of view.</p>

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				<p>4. The regulatory authorities shall perform, at regular intervals or at least every five years, a public consultation on the existing energy storage facilities in order to assess the potential availability and interest of other parties in investing in such facilities. Where the public consultation, as assessed by the regulatory authority, indicates that other parties are able to own, develop, operate or manage such facilities in a cost-effective manner, the regulatory authority shall ensure that transmission system operators' activities in this regard are phased-out within 18 months. As part of the conditions of that procedure, regulatory authorities may allow the transmission system operators to receive reasonable compensation, in particular to recover the residual value of their investment in the energy storage facilities.</p> <p>5. Paragraph 4 shall not apply to fully integrated network components or for the usual depreciation period of new battery storage facilities with a final investment decision until 2024, provided that such battery storage facilities are: (a) connected to the grid at the latest two years thereafter; (b) integrated into the transmission system; (c) used only for the reactive instantaneous restoration of network security in the case of network contingencies where such restoration measure starts immediately and ends when regular re-dispatch</p>	<p>examination of the applicability of the tender procedure, including the conditions of this tender procedure, and has given its approval.</p> <p>(3) CERA shall draw up guidelines or clauses for public procurement to help the TSOC ensure a fair bidding process, in accordance with the provisions of paragraph (a) of paragraph (2).</p> <p>(4) CERA shall notify its decision to grant a derogation and all relevant information concerning the request and the reasons for granting the derogation to the Commission and ACER.</p> <p>(5) (a) CERA shall carry out at regular intervals or at least every five years a public consultation on existing energy storage facilities in order to assess the potential availability and interest of investment in such facilities.</p> <p>(b) Where the public consultation, following an assessment by CERA, shows that third parties are able to own, develop, operate or manage such facilities in a cost-effective manner, CERA shall ensure the phase-out within 18 months of the relevant activities of the TSOC. Under the terms of this procedure, CERA may allow the TSOC to receive reasonable compensation,</p>	

Topic	IEM Dir art.	Cypriot Law art.	Additional reference Cypriot Law art.	IEM Directive	Cypriot Law ²⁷	Comments
				can solve the issue; and (d) not used to buy or sell electricity in the electricity markets, including balancing.	namely the residual value of the investment in energy storage facilities. (6) Paragraph (5) shall not apply to fully integrated network elements or for the normal depreciation period of new battery energy storage facilities with a final investment decision up to the year 2024, which: (a) are connected to the network at the latest two years after; (b) are integrated into the transmission network; (c) are used exclusively for the immediate restoration of network security in case of network emergencies, if such remedial action starts immediately and ends when regular redispatching can solve the problem; and (d) if it is not used to buy or sell electricity in electricity markets, including balancing	

In conclusion, as shown in the above table – without prejudice to Legal opinion – no specific criticalities are expected from a technical point of view. Therefore, these specific articles are compliant to the Directive EU 2019/944.

12 POINTS OF ATTENTION FROM THE ANALYSIS

The aim of this paragraph is to highlight the main issues detected from the analysis of the review of the existing legislation, regulatory decisions, trade and settlement rules and transmission and distribution rules to report on the related gap analysis with EU legislation, network codes and guidelines.

Topic	Points of attention
Aggregation	<ul style="list-style-type: none"> • Possibility to aggregate only RES/HECHP and storage as well as demand response • Impossibility to make aggregates composed of different types of resources (generators, loads, storage systems) • Aggregate threshold between 1 and 20 MW
Energy communities	<ul style="list-style-type: none"> • No Energy Community scheme (neither Citizen Energy Communities – as per the IEM directive – nor Renewable Energy Communities – as per the RED II directive) has already been encompassed in the Cypriot regulatory framework
Storage systems	<ul style="list-style-type: none"> • No specific indication, relating to the installation of storage systems by TSO as well as by DSO, has been detected in the Cypriot regulatory framework
Intraday market	<ul style="list-style-type: none"> • No specific indication of this topic has been detected in the latest Trade and Settlement Rules 2.2.0 issued by the TSOC • CERA’s decision no. 1/2015 states that Intra-Day Market should be implemented at “the latest within 24 months from the date the market starts operation under the new arrangements” • Intraday market shall not apply to Cyprus until its transmission system is connected to other Member States’ transmission systems via interconnections • This will happen with the commissioning of the EuroAsia Interconnector, expected in the first half of 2026
Imbalance settlement period	<ul style="list-style-type: none"> • The settlement period is a period of 30 minutes, which is used for calculation of settlement of energy delivered across the transmission system. It coincides with the trading period • A 15-minute imbalance settlement period (ISP) shall not apply to Cyprus until its transmission system is connected to other Member States’ transmission systems via interconnections
Balancing market data publication	<ul style="list-style-type: none"> • TSRs provide for the publication of the cleared balancing energy prices at 12:00 on D+1
Technical bidding limits	<ul style="list-style-type: none"> • No reference to the Value of Lost Load has been detected in the analyzed documents

	<ul style="list-style-type: none"> • This shall not apply to Cyprus until its transmission system is connected to other Member States' transmission systems via interconnections
Capacity mechanisms	<ul style="list-style-type: none"> • The Cypriot regulatory framework foresees a kind of “strategic reserve” (so called “contingency reserve”) • The European regulation about capacity mechanisms shall not apply to Cyprus until its transmission system is connected to other Member States' transmission systems via interconnections
Priority dispatch	<ul style="list-style-type: none"> • No priority dispatch has been detected in the Cypriot regulatory framework • The European regulation about priority dispatch shall not apply to Cyprus until its transmission system is connected to other Member States' transmission systems via interconnections
Compliance of specific articles between the Cypriot Law and the IEM Directive	<ul style="list-style-type: none"> • No specific criticalities are expected from a technical point of view, therefore, these specific articles are compliant with the Directive (EU) 2019/944