

# **Single Electricity Market (SEM)**

# **Consultation Paper on Aggregation**

**SEM-20-042** 

24 June 2020

# **EXECUTIVE SUMMARY**

In 2018 and 2019 the EU adopted a series of legislative acts known as the Clean Energy for All Europeans package which had a central objective of achieving a 40% reduction in EU greenhouse gas emissions by 2030 compared to 1990 levels. The Clean Energy Package (CEP) consists of eight legislative files, one of which being a recast Electricity Regulation (hereafter, the Regulation). The Regulation amends aspects of European wholesale electricity markets, progresses electricity market integration, and facilitates the transition to renewable energy. Having entered into force in July 2019, many of the articles in the Regulation applied from January 2020.

The Regulatory Authorities conducted a review to identify requirements which would require further action by the SEM Committee to ensure compliance with the Regulation and published the results of this review in a Roadmap to CEP Implementation (SEM-19-073) in December 2019. Part of this review highlighted the areas of Balance Responsibility and Aggregation may need further analysis or market updates to ensure compliance. An Information Paper on Balance Responsibility (SEM-20-027) was published in April 2020, as further reviews highlighted that no updates were needed to comply with these requirements, however the topic of Aggregation was identified as an individual topic which needed further review.

Aggregation is defined in the CEP as 'a function performed by a natural or legal person who combines multiple customer loads or generated electricity for sale' and independent Aggregators are 'market participant engaged in aggregation who is not affiliated to the customer's supplier'. Articles 6 and 7 of the Regulation require that Aggregators be facilitated non-discriminatory access to the balancing market and ex-ante markets respectively.

The RAs have identified two forms of 'aggregation' which exist in the SEM, which broadly fall under existing arrangements with Intermediaries in the Trading and Settlement Code, but which might be accompanied by ex-ante trading and other trading services, and Demand Side Response participants (for simplicity referred to as DSUs).

The purpose of this Consultation to highlight these two forms of 'aggregation' and seeks to get industry feedback on whether these market participants could be considered as Aggregators as defined in the CEP and to evaluate the current market conditions to ensure they have non-discriminatory market access.

Furthermore, there are future considerations with regards to aggregation which stem from the Electricity Directive (EU) 2019/944 which will require additional frameworks on aggregation to further define their rights and responsibilities for participation and interactions with final

customers. Part of this Consultation also seeks to ensure that there is enough preliminary framework in place in the SEM to facilitate future framework development as required by Electricity Directive (EU) 2019/944.

As a result, this Consultation will address the following questions and request further inputs and comments from industry on these topics.

- (i) Do the current market functions of Intermediaries and DSUs fulfil the requirements of an Aggregator as defined in the CEP?
- (ii) Do these market participants have fair and non-discriminatory access to the SEM?
- (iii) Is there enough regulatory oversight on existing market participants acting as Aggregators to ensure fair treatment of small units availing of their services
- (iv) Do the current market arrangements allow for future development of a framework on Aggregation as required under Article 17 of the Electricity Directive?

# CONTENTS

Execut	tive Summary	2
	troduction	
1.1	Background	5
1.2	Legislative Basis	7
1.3	Purpose of this Consultation Paper	9
2. Aç	ggregation in other Regions	10
_	ggregation in the SEM	
3.1	Intermediaries	12
3.2	DSUs	14
4. To	opics for Consultation	15
4.2	Defining the Aggregator	
4.3	Facilitation of Market Paricipation	17
4.4	Regulatory Oversight	18
4.5	Future Development on Aggregation	19
5. Su	ummary	19
	ext Steps	

## 2. INTRODUCTION

#### 2.1 BACKGROUND

In 2018 and 2019 the EU adopted a series of legislative acts known as the Clean Energy for All Europeans package which had a central objective of achieving a 40% reduction in EU greenhouse gas emissions by 2030 compared to 1990 levels. The Clean Energy Package (CEP) consists of eight legislative files, one of which being a recast Electricity Regulation (hereafter, the Regulation)<sup>1</sup>. The Regulation amends aspects of European wholesale electricity markets, progresses electricity market integration, and facilitates the transition to renewable energy. Having entered into force in July 2019, many of the articles in the Regulation applied from January 2020.

A high-level review was conducted by the RAs following the publication of the Regulation in 2019 to identify the areas of the legislation which could require actions to be taken by the SEM Committee with respect to the all-island SEM. The review found that the revised SEM, which went live on the 1 October 2018, is already compliant with many of the articles of the Regulation. However, the RA's review identified six key outstanding areas which required further review and possible action to be taken by the SEM Committee for the implementation of the key articles in the Regulation.

The SEM Committee published a Roadmap Information Paper<sup>2</sup> in December 2019 which outlined the six key areas of the Regulation which were expected to require action to be taken by the SEM Committee in 2020. Contained in these six key areas was the topic of Balance Responsibility, which was addressed in a SEMC Information Paper<sup>3</sup> published in April 2020

During this review on Balance Responsibility, it was decided that a separate review on the topic of aggregation would also be required as part of CEP implementation. As such, this Consultation is addressing the role of aggregation in the SEM today and considers the extent to which these arrangements may or may not align with the vision of aggregation in the CEP, which defines aggregation in the following ways:

- 'Aggregation' means a function performed by a natural or legal person who combines multiple customer loads or generated electricity for sale, and
- 'Independent Aggregator' means a market participant engaged in aggregation who is not affiliated to the customer's supplier<sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> Regulation (EU) 2019/943 on the internal market for electricity (recast)

<sup>&</sup>lt;sup>2</sup> <u>SEM-19-073</u> Roadmap to Clean Energy Package Implementation

<sup>&</sup>lt;sup>3</sup> SEM-20-033 Information Paper on Balance Responsibility in the SEM

<sup>&</sup>lt;sup>4</sup> Article 2(18) and 2(19) Definitions of Electricity Directive (EU) 2019/944

The Regulation outlines specific rights for these Aggregators in Article 6 on balancing markets and Article 7 on day ahead and intra-day markets. The paper addresses the implication of these definitions of aggregation and independent aggregator in the SEM and their rights under these Articles.

This paper's primary aim is to present the existing arrangements in the SEM that could be considered forms of aggregation under the CEP and identify if there is any need to further define the role of aggregators in the SEM.

Currently, the RAs have identified two forms of 'aggregation' which exist in the SEM, meaning that these market participants engage in actions which could fulfil the definition of Aggregator under the CEP. These broadly fall under existing arrangements with Intermediaries in the Trading and Settlement Code, but which might be accompanied by ex-ante trading and other trading services, Demand Side Response participants (for simplicity referred to as DSUs), and Aggregated Generator Units (AGUs)<sup>5</sup>. This Consultation will provide background on the activities of each of these market participants and will request feedback on whether these entities fulfil the requirements of aggregation as outlined in the CEP.

Additionally, it should be noted that this paper focuses on the Regulation of the CEP. The Electricity Directive (EU) 2019/944 also outlines specific requirements for the development of a framework with respect to the rights and requirements of aggregators, however the Directive presents topics which pertain more to jurisdictional issues in retail markets. The focus of this Consultation will be on matters dealing with aggregation on an all-island level which will have impacts on the wholesale market. It is anticipated that aggregation topics outlined in the Directive will be discussed jurisdictionally following this Consultation.

This Consultation will be open until 5 August 2020, and feedback on the options presented is welcome by industry participants and interested individuals. Responses may be published on the SEM Website, therefore any respondents who would not like their submission made public should mark their response as confidential. Comments and feedback should be sent to either Heather Pandich (<a href="mailto:hpandich@cru.ie">hpandich@cru.ie</a>) or Ian McClelland (<a href="mailto:lan.McClelland@uregni.gov.uk">lan.McClelland@uregni.gov.uk</a>).

<sup>&</sup>lt;sup>5</sup> There are several AGUs currently operating in the SEM. These units comprise many small generating units, primarily back-up generating units on commercial sites. These units currently receive an energy payment when they are dispatched and are also eligible for capacity payment where successful in a capacity auction. As this Units primarily use on-site generation not directly owned by the operator, they have many of the characteristics of DSUs. While there are differences in practice, for simplicity in this Consultation, we will consider AGUs within the concept of demand response.

### 2.2 LEGISLATIVE BASIS

The CEP Electricity Regulation contains many requirements aimed at developing competitive wholesale electricity markets which can be accessed by any interested industry participant. This is particularly seen in Article 6<sup>6</sup> on balancing market development and structure and Article 7<sup>7</sup> which provides requirements for the day ahead and intraday markets.

Both articles call for non-discriminatory access for various types of market participants. Specifically, Article 6 contains the following text.

- 1. Balancing markets, including prequalification processes, shall be organised in such a way as to:
  - (a) ensure effective non-discrimination between market participants taking into account of the different technical needs of the electricity system and the different technical capabilities of generation sources, energy storage and demand response;
  - (b) ensure that services are defined in a transparent and technologically neutral manner and are procured in a transparent, market-based manner;
  - (c) ensure non-discriminatory access to all market participants, individually or through aggregation, including electricity generated from variable renewable energy sources, demand response and energy storage;
  - (d) respect the need to accommodate the increasing share of variable generation, increased demand responsiveness and the advent of new technologies.

Similarly, Article 7 states the following.

- 1. 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;

<sup>&</sup>lt;sup>6</sup> Article 6(1) Balancing market of Regulation (EU) 2019/943

<sup>&</sup>lt;sup>7</sup> Article 7(1) Day-ahead and intraday markets of Regulation (EU) 2019/943

- (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 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 market participants are able to access the market individually or through aggregation.

As can be seen, both Articles in the Regulation refer to non-discriminatory access for individuals and those participating through aggregation.

Again, aggregation under the context of the CEP 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,' These functions can be performed by an existing market participant, such as a supplier or demand side unit (DSU). Additionally, the CEP states that these functions can be performed by an independent Aggregator.

As previously mentioned, the Electricity Directive does call for a framework to be developed around the treatment of aggregators. This requires the role of the aggregator to be clearly defined and that they should be able to freely enter the market as a participant and should be responsible for their imbalances, implying all-island consideration which is being addressed by the SEM Committee. These requirements are specifically outlined in Article 17<sup>8</sup> of the Directive which develops requirements around demand response through aggregation. The article states the following.

- 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;

<sup>&</sup>lt;sup>8</sup> Article 17 Demand response through aggregation of Directive (EU) 2019/944

- (b) non-discriminatory and transparent rules that clearly assign roles and responsibilities to all electricity undertakings and customers;
- (c) non-discriminatory and transparent riles 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 the Regulation (EU) 2019/943;
- (e) provision for final customers who have a contract with independent aggregators not to be subject to undue payments, penalties or other undue contractual restrictions by their suppliers;
- (f) conflict resolution mechanism between market participants engaged in aggregation and other market participants, including responsibility for imbalances.

The RAs have considered that due to these various legislative requirements, that this Consultation is needed to ensure compliance with the Regulation and the Directive with respect to the topic of aggregation.

## 2.3 PURPOSE OF THIS CONSULTATION PAPER

The purpose of this Consultation is to examine the existing arrangements in the SEM which could be considered forms of aggregation with respect to the requirements outlined in the Regulation and the Electricity Directive and additionally to ensure that entities which could be considered Aggregators as per the definition in the SEM are entitled to non-discriminatory access to the SEM as required under Articles 6 and 7 of the Regulation.

The RAs have identified two broad forms of aggregation in the SEM today. These market participants consist of Intermediaries, where a third party may represent multiple parties in the ex-ante markets and Trading and Settlement Code; and demand response participants<sup>9</sup>. Both entities can act on behalf of one or more other market participants as a registered participant in the SEM for the purpose of trading or settling imbalances on behalf of the market participant they represent.

This paper will provide some background on each of these arrangements and additionally highlight other existing forms of aggregation as means to compare how the existing SEM arrangements compare to other Member States and regions and subsequently help determine if the current arrangements can be considered compliant with the CEP Legislation, particularly that these Aggregators are provided non-discriminatory access to the SEM.

Intermediary Arrangements were also due to be reviewed following the implementation of the revised market arrangements which went live on 1 October 2018. These updates are being addressed in a separate Consultation, SEM-20-033 which is focusing on topics such as changing the eligibility criteria for Intermediaries, the application of Intermediary arrangements in ex-ante markets, and intermediary arrangements for suppliers and power purchase agreements.

The RAs are aware that any updates to the Intermediary Arrangements as a result of SEM-20-033 may impact the elements of the issues covered in this paper. However, the RAs are confident that it is more valuable for these processes to occur broadly in step to allow parties, and the SEM Committee, to consider the outcome of both consultations in tandem.

The primary questions which this Consultation seeks to address include the following:

- (i) Do the current market functions of Intermediaries and DSUs fulfil the requirements of an Aggregator as defined in the CEP?
- (ii) Do these market participants have fair and non-discriminatory access to the SEM?
- (iii) Is there enough regulatory oversight on existing market participants acting as Aggregators to ensure fair treatment of small units or customers availing of their services?
- (iv) Do the current market arrangements allow for future development of a framework on Aggregation as required under Article 17 of the Electricity Directive?

The following section discusses how aggregation is performed in other Member States and regions in order to provide an insight into the various roles Aggregators fulfil. This is then followed by an explanation of how current Intermediaries and DSUs participate in the SEM.

# 3. AGGREGATION IN OTHER REGIONS

The requirements under the CEP led to numerous minor and major market reforms across the EU as Member States adapted their market arrangements to comply with the new legislation. This included adopting new measures to incorporate the participation of Aggregators in the wholesale markets. Additionally, other jurisdictions beyond the EU are also working towards

developing frameworks which will enable wholesale market participation by third parties such as Aggregators.

Several forms of aggregation already exist throughout the EU and other regions. In Germany, for example, Aggregators can pool multiple renewable generation loads to submit bids on the market. The pooling of these intermittent generation loads (i.e. solar and wind) reduces the uncertainty of trying to forecast for an individual generator and allows for lower risks when submitting bids.

That example highlights aggregation of generation units, however many markets are also in the process of updating frameworks to provide for further aggregation services for demand side response, as is the case in the SEM. However, a few Member States have recently developed strategies or existing arrangements which allow aggregators involved in demand side response services to non-discriminatory access to the wholesale markets.

#### Aggregation in France

An aggregation framework has been in place in France since 2013. The nation passed the *Loi Brottes* which developed the NEBEF (Notification d'Echanges de Blocs d'Effacement) mechanism. This mechanism allowed third parties, such as Aggregators to pool demand side consumption loads and perform load-reduction without the permission of the site's supplier. The NEBEF mechanism enables Aggregators to bid directly into the ex-ante markets and aids specifying the revenues to be split between the consumer, the supplier and the aggregator in the balancing market.

Aggregators in France are also allowed to participate in the capacity market, by bidding levels of capacity which reflect the amount of consumption they expect can be reduced within their pooled demand side loads. They can also receive a specialised tender for any tertiary services which they can provide, which was developed by the TSO RTE.

#### Aggregation in Finland

Aggregation for DSR is possible in all markets, however Finland is identifying further solutions to facilitate participation by Aggregators in their electricity markets. In 2018, Finland's TSO Fingrid began to run a pilot project to introduce independent aggregators which provide services in manual frequency restoration reserves to the balancing energy market. This project was extended throughout 2019 to obtain more evidence and information, however, it is designed to test how independent aggregators can submit aggregated bids of another balance responsible party, how information is exchanged between different parties and how transactions are affected and the processes needed for imbalance adjustment.

#### Aggregation in the UK

Ofgem, the regulator in the UK, has identified the importance of facilitating market access for Aggregators. The primary challenge they faced was the fact that the role of the independent Aggregator was not defined anywhere in existing industry codes, which limited access to the Balancing Mechanism and other wholesale electricity markets.

To resolve this issue, the concept of Virtual Lead Parties (VLPs) was developed in 2018 for implementation in 2019 which enabled participation by third parties, such as Aggregators in the wholesale markets without the requirement of holding a supply licence. VLPs must comply with market rules but are allowed register secondary balancing market units of providing balancing services to the TERRE market as well as the Balancing Mechanism. It also allows the balancing market units to be aggregated independently of their supplier.

# 4. AGGREGATION IN THE SEM

Currently, aggregation roles in the SEM are subject to limited regulation and enforcement by the RAs. The primary reason for this is similar to the original underlying issue that the UK faced, such that there is no clear definition on the criteria to be considered an Aggregator in the SEM. There are several types of market participants, however, which currently partake in actions which could be attributed to Aggregators under the CEP. As mentioned, these include Intermediary arrangements and DSUs.

### 4.1 INTERMEDIARIES

As highlighted in Section 1.3, generation units have the option to enter into Intermediary arrangements for the purpose of delegating some of their responsibilities to another market participant, which alleviates the requirement for these individual units to be responsible for any imbalances they cause to the market. Intermediary roles in the SEM are usually fulfilled by either assestless traders or suppliers.

Currently, the option to enter into an Intermediary arrangement is only available to generation units and is subject to RA approval on a case by case basis. Generation units of any size can enter into these arrangements in order to delegate their responsibilities under the Trading and Settlement Code (TSC) to another market participant once they meet the SEM Committee's eligibility criteria. This also allows generator units supported by REFIT to contract with suppliers that may be part of the same parent company.

Intermediaries have bilateral agreements with the participant who delegates them to act on their behalf, however, a single Intermediary can have multiple agreements and is then subject to make their own decisions in the market with the generation loads from the entities which they represent. As a result, Intermediaries could potentially pool generation loads to make decisions in the SEM, so long as they comply with the requirements of the Trading and Settlement Code to which they are a Party. These functionalities are representative of an Aggregator, leading to the RAs consideration that they meet the requirements under the CEP.

Currently assetless traders and suppliers participate in the ex-ante markets on behalf of other market participants who may not have resources or financial capabilities of participating 10. However, they are not acting as Intermediaries in this regard as the current market arrangements do not facilitate participation by Intermediaries in ex-ante markets. These are purely financial arrangements to hedge small generators from movements in the balancing market price. Assetless traders enter into commercial agreements with generation, which are settled between the two parties. The assetless trader then operates on behalf of the generation unit in the ex-ante markets by paying SEMOpx registration fees and submitting bids in the day ahead and ex-ante markets. If a generator unit is in a commercial agreement with an assetless trader, there is no official connection between the activity conducted in the ex-ante markets and the balancing market due to the inability of Intermediaries to participate in the ex-ante markets.

The result of this disconnection is that assetless traders and suppliers may act on behalf of a generator in the ex-ante markets as a trader, but separately act as an Intermediary in the balancing market for the same generation unit. However, these two functions are not linked in the current market arrangements. The RAs initial view is that while this is a valuable service to small generators, this does not constitute aggregation as foreseen in the CEP.

Also, to note that although there is not explicit requirement for participation in capacity markets by Aggregators outlined in the Regulation, Intermediaries can participate in the SEM capacity market in a similar manner as Aggregators in the French market as highlighted in the previous section. Unlike the disconnect from the ex-ante markets to the balancing market, however,

\_

<sup>&</sup>lt;sup>10</sup> Additionally, any generation below the de minimis threshold of 10MW or renewable generator can avail of the services of the Agent of Last Resort (AoLR). The AoLR enables participation in ex-ante markets by eligible generator units by submitting bids on behalf of these units in the day ahead and intraday markets. The submitted bids are automatic and are based on either TSO forecast data or forecast data submitted by the generator unit themselves. Currently, few generator units participate in this service as the responsibility to pay SEMOpx for participation in the ex-ante markets is still required by the generator unit. These fees may be unattainable for small generation and this consequently may lead the generator unit to enter into a commercial agreement with an assetless trader instead. In that arrangement the assetless trader would then cover the costs of participating in the ex-ante markets on behalf of the generator unit.

Intermediaries which represent units in the capacity market must represent the same units in the balancing market.

In order to successfully enter into an Intermediary arrangement to enable participation in the SEM, the Generator owner and the Intermediary must first reach a commercial agreement to govern their relationship. This could include contracts such as a Power Purchase Agreement (PPA). Secondly, under the terms of the TSC (or Capacity Market Code in cases where Intermediaries are representing a unit in the Capacity Market), the arrangement must receive regulatory consent provided by the RAs which are granted in accordance with the criteria that are framed within the context of the SEM. Following RA approval, the both parties must submit a Form of Authority (which is outlined in Appendix C of the TSC<sup>11</sup>) to the market operator to provide evidence that both parties understand and agree to their contractual arrangements. These arrangements ensure that there is some form of regulatory oversight over the participation of Intermediaries acting in the SEM.

As noted, SEM-20-033 is reviewing these current arrangements alongside other considerations with regards to Intermediaries. Any conclusions drawn from that Consultation will be reflected in the considerations of this paper to ensure that any updates made to the existing Intermediary Arrangements are consistent with the steps taken to further develop aggregation in the SEM.

Intermediaries, however, are not the only existing market participants which fulfil functions similar to Aggregators. DSUs also need to be considered while developing a structured framework around aggregation.

#### **4.2 DSUS**

DSUs are existing market participants in the SEM, both of which are defined in the TSC and provide aggregation services to small scale demand side units.

A DSU is a unit which contracts with individual demand sites to aggregate their loads for the purpose of operating as a single DSU. The DSU Aggregator receives specialised dispatch instructions from the TSO as if it were a generator. They are then responsible for the coordination of the reduction of consumption from the individual demand sites based on the dispatch instructions received by the TSO.

DSUs are expected to submit Physical Notifications (PNs), technical offer data (TOD) and commercial offer data (COD) to the TSOs for the purpose settling imbalances. DSUs also can

<sup>&</sup>lt;sup>11</sup> Trading and Settlement Code: Appendix C: Form of Authority

participate in the ex-ante markets for the purposes of hedging against potential imbalances. If a DSU has a combined load of over 4 MW, they are also considered to be available for central dispatch and are required to comply with the relevant aspects of the Grid Code in addition to their requirements under the TSC.

DSUs can also participate in the capacity market, however in order to be qualified to participate, any new capacity provided by a DSU needs to be accompanied by a plan and a director's declaration in respect to how that capacity will be delivered.

All these functionalities could be applicable to the definition of aggregation as outlined in the CEP, and as such the RAs also consider the actions of DSUs to be considered forms of aggregation.

There have been provisions for DSUs in the SEM since 2007, however uptake picked up in 2011 following the publication of the RA's Demand Side Vision for 2020 in 2011<sup>12</sup>. However, they are not identified as a unique market participant and are required to become a licenced supplier for the purpose of participating in the SEM. This ensures that they are a regulated entity and their actions and behaviour in the market is monitored and subject to regulatory oversight.

Suppliers licences, however, have some conditions which may not be fit for purpose for DSUs and this leads to a consideration for this Consultation on whether DSUs are facilitated with non-discriminatory access to the market as required under the CEP. This topic will be presented again in Section 4.3 of this paper.

# 5. TOPICS FOR CONSULTATION

Although Intermediaries and DSUs fulfil some of the functionalities expected of an Aggregator, the role of the Aggregator is not explicitly defined in the SEM. This could have implications on future development of a framework concerning interactions between Aggregators and small-scale market participants such as Citizen Energy Communities or independently acting consumers.

This paper aims at determining whether the existing arrangements concerning Intermediaries and DSUs could fulfil the definition of aggregation as outlined in the CEP, and meet the requirements of non-discriminatory participation as required in Articles 6 and 7 of the Regulation, and finally whether these roles are clearly defined enough to ensure that any

<sup>12</sup> SEM-11-022 Demand Side Vision for 2020

future frameworks with regards to aggregation will capture the actions of these market participants.

As highlighted in Section 1.3, this paper seeks to address four questions pertaining to the topic of aggregation in the SEM. Again, these questions are,

- (i) Do the current market functions of Intermediaries and DSUs fulfil the requirements of an Aggregator as defined in the CEP?
- (ii) Do these market participants have fair and non-discriminatory access to the SEM?
- (iii) Is there enough regulatory oversight on existing market participants acting as Aggregators to ensure fair treatment of small units availing of their services?
- (iv) Do the current market arrangements allow for future development of a framework on Aggregation as required under Article 17 of the Electricity Directive?

### 5.2 DEFINING THE AGGREGATOR

If a more explicit definition is provided to identify Aggregators in the SEM, it is anticipated that there will be a clearer understanding of the services which are expected to be provided by Aggregators and additionally, will aid in any future development of a framework concerning the interaction between Aggregators and demand-side market participants such as individual consumers or energy communities.

This definition could come from declaring that existing market participants such as Intermediaries and DSUs meet the criteria for being considered an Aggregator, or it could come from explicitly defining a new market participant which fulfils the functionalities of an aggregator outlined in the CEP.

Based on the evidence provided in the previous sections which detail the functionalities and behaviours of Intermediaries and DSUs the RAs are considering that these types of market participants meet the criteria to be determined Aggregators as outlined in the CEP. However, the RAs are interested in Industry feedback with regards to this consideration and are posing the following open-ended questions for feedback for interested industry participants.

#### **Consultation Question 1:**

Do the existing Intermediary arrangements in the SEM meet the criteria for Aggregators outlined in the CEP?

#### **Consultation Question 2:**

Do the existing DSU arrangements in the SEM meet the criteria for Aggregators outlined in the CEP?

#### **Consultation Question 3:**

Should a formal definition of an Aggregator be developed which may or may not encapsulate these existing market participants for the purpose of developing an entity to fulfil aggregation functions which meets the criteria of an Independent Aggregator as defined in the CEP?

## 5.3 FACILITATION OF MARKET PARICIPATION

One of the primary reasons for the development of this paper was to ensure compliance with Articles 6 and 7 of the Regulation. As highlighted in Section 1.3, the articles call for non-discriminatory participation in both the ex-ante markets and balancing market for individuals and aggregators.

The following step after properly identifying the aggregator and its role, is then facilitating its non-discriminatory access to the SEM. Following the RAs consideration that Intermediaries and DSUs could be considered Aggregators as per the definition in the CEP, the RAs are requesting industry feedback on whether the current market arrangements allow for fair and non-discriminatory access by these market participants to participate in the SEM.

As noted, currently Intermediary arrangements are only applicable in the balancing market, however their participation in ex-ante markets is currently being reviewed. To ensure the requirements of the Regulation are met, participation in ex-ante markets by Intermediaries for the purpose of aggregation would have to be facilitated by the market.

With respect to DSUs, they currently access the market by obtaining a supplier licence and complying with the requirements set out under those conditions. As mentioned, these conditions may not necessarily be fit for purpose for the activities conducted by DSUs. As such, the RAs are questioning whether this could be considered discriminatory for participation in the SEM as there is no clear regulatory mechanism to facilitate participation by DSUs in the SEM.

With regards to these considerations, the RAs are posing to following questions for feedback from industry participants.

#### **Consultation Question 4:**

Do Intermediaries have non-discriminatory access to participate in the SEM?

#### **Consultation Question 5:**

Do DSUs have non-discriminatory access to participate in the SEM?

#### **Consultation Question 6:**

Are there updates which could be made to the existing market structure which would facilitate participation by Aggregators in a non-discriminatory manner?

# 5.4 REGULATORY OVERSIGHT

Since the role of the aggregator is not explicitly defined in the context of the SEM, there is not a strict method for regulatory oversight of Aggregator's activities. Currently this has not been an issue because Intermediaries and DSUs which fulfil aggregator-like functions are subject to regulatory oversight through other means.

As mentioned, Intermediaries are required to obtain RA approval before registering as a party to the TSC. They are bound by both this code and their contractual obligations which are outlined with the generator they represent in the market.

DSUs also are currently subject to regulatory oversight through their compliance with the supply licences which are issued to these entities for participation in the market. These licences ensure that RAs have regulatory oversight of their participation in the SEM. Additionally, DSUs are also obliged to register with the TSC and are subject to the rules and requirements outlined in that code.

Although these market participants are subject to some form of regulation, the RAs are concerned that there may not be enough oversight of Aggregators and their potential interactions with very small-scale generation. The Electricity Directive outlines that individual customers and energy communities shall be able to participate in aggregation<sup>13</sup>. It is anticipated that there will be a higher level of participation by these small-scale projects following the transposition of the Electricity Directive and Directive (EU) 2018/2001 on the promotion of use of energy from renewable sources (the Renewables Directive).

It is important to ensure that individual customers participating in aggregation are protected from larger market entities which may have more knowledge of the SEM and potentially could exploit such small customers. As such, the following open-ended question is posed for feedback from interested participants.

#### **Consultation Question 7:**

What form of regulatory oversight of Aggregators is most likely to ensure the protection of small-scale market participants involved in aggregation (e.g. Contractual Arrangements, Aggregator Licences, updated Forms of Authority, etc.

<sup>&</sup>lt;sup>13</sup> Article 15 Active customers and Article 16 Citizen Energy Communities of Directive (EU) 2019/944

## 5.5 Future Development on Aggregation

Further requirements under the Electricity Directive<sup>14</sup> necessitate the development of a framework to outline the rights and requirements to be applied to aggregation. These requirements primarily focus on forms of demand side aggregation; however, all forms of aggregation should be considered when developing a framework.

These matters are anticipated as having an impact at a retail consumer level, and as such are expected to be dealt with jurisdictionally. There will be all-island impacts, however, as the aggregators will be expected to participate in the SEM and be responsible for any imbalances they cause to the market as required by Article 5<sup>15</sup> of the Regulation.

This Consultation seeks to ensure that any future regulatory frameworks pertaining to aggregation are feasible with the expectations and requirements placed upon Aggregators for participation in the SEM. As such the RAs are posing the following questions with respect to existing aggregation services through Intermediaries and DSUs and potentially newly defined Aggregators.

#### **Consultation Question 8:**

Do you feel that the current framework for Intermediaries could be applied in future aggregation frameworks and is compliant with Article 17 of the Electricity?

#### **Consultation Question 9:**

Are there changes that could be made to the existing DSU framework that facilitates future frameworks for aggregation for demand-side response?

#### **Consultation Question 10:**

What other considerations should the RAs focus on prior to the implementation of Article 17 of the Directive?

## 6. SUMMARY

It is necessary that there will be some amendments to the current market structure to facilitate the non-discriminatory participation of aggregators in the SEM, however the extent to which existing participants are affected is subject to the level of implementation of the CEP requirements and the responses received by this Consultation.

<sup>&</sup>lt;sup>14</sup> Article 17 Aggregation through demand response of Directive (EU) 2019/944

<sup>&</sup>lt;sup>15</sup> Article 5 Balance responsibility of Regulation (EU) 2019/943

The following table summarises the RAs' consideration and highlights the topics for which the RAs are requesting feedback and comments.

Section	No.	Consultation Question
Defining the aggregator	1	Do the existing Intermediary arrangements in the SEM meet the criteria for Aggregators outlined in the CEP?
Defining the aggregator	2	Do the existing DSU arrangements in the SEM meet the criteria for Aggregators outlined in the CEP?
Defining the aggregator	3	Should a formal definition of an Aggregator be developed which may or may not encapsulate these existing market participants for the purpose of developing an entity to fulfil aggregation functions which meets the criteria of an Independent Aggregator as defined in the CEP?
Facilitation of Market Participation	4	Do Intermediaries have non-discriminatory access to participate in the SEM?
Facilitation of Market Participation	5	Do DSUs have non-discriminatory access to participate in the SEM?
Facilitation of Market Participation	6	Are there updates which could be made to the existing market structure which would facilitate participation by Aggregators in a non-discriminatory manner?
Regulatory Oversight	7	What form of regulatory oversight of Aggregators is most likely to ensure the protection of small-scale market participants involved in aggregation (e.g. Contractual Arrangements, Aggregator Licences, updated Forms of Authority, etc.
Future Development on Aggregation	8	Do you feel that the current framework for Intermediaries could be applied in future aggregation frameworks and is compliant with Article 17 of the Electricity?
Future Development on Aggregation	9	Are there changes that could be made to the existing DSU framework that facilitates future frameworks for aggregation for demand-side response?
Future Development on Aggregation	10	What other considerations should the RAs focus on prior to the implementation of Article 17 of the Directive?

## 7. NEXT STEPS

The RAs' will be continuing to implement various articles of the Clean Energy Package's Electricity Regulation and Electricity Directive in addition to pursuing implementation of the requirements pertaining to aggregation. With respect to this topic, however, the RAs plan to review the concept of aggregation and it's impacts at a consumer level, specifically pertaining to the potential interactions between aggregators, individual prosumers, jointly acting prosumers and energy communities. It is envisaged that there will be further communications around this topic later in 2020.

This Consultation, however, will be open until 5 August 2020 and any interested market participants or individuals seeking to provide feedback are welcome to provide responses to the questions and considerations raised by the RAs, as well as any additional views on the topic of the facilitation of aggregators in the SEM. Please provide any comments and feedback to Heather Pandich (<a href="mailto:hpandich@cru.ie">hpandich@cru.ie</a>) or Ian McClelland (<a href="mailto:lan.McClelland@uregni.gov.uk">lan.McClelland@uregni.gov.uk</a>). Participant responses may be published on the SEM Website alongside the SEM Committee Decision following this Consultation. Any respondents who wish to keep their responses private should mark their submissions as confidential.

It is anticipated that a Decision on the topics raised in this Consultation will be provided in Quarter 3 of 2020.