

*Contribution focusing on Demand Response
to the consultation VN / 372 /2021 on a proposed legislation
from the Finnish government to amend the Electricity Market Act*

The Ministry of Employment and Economy opened a public consultation on a draft government proposal to amend the Electricity Market Act in order to implement provisions from the European Directive on Electricity Market (EMD) including those on demand response aggregation and participation to electricity markets.

DR4EU is happy to provide a contribution focusing on demand response (DR). DR4EU is an informal association of companies¹ involved in developing DR in more than 20 countries in Europe and beyond, including Finland for several of our members.

While we welcome the provisions intended to open all electricity markets in Finland to DR, we would like to stress the concerns raised by the approach proposed regarding economic conditions set forth by the draft legislation, which **would not comply with the Directive**.

By looking carefully into the justifications given by the Consultation Document (CD), we will provide below an analysis of the shortcomings and suggest corrections to fit with the Finnish goal to develop flexibility and smart operations of the electricity system.

1. Key provision bound to impede DR and breach European legislation

The following provision would be fatal to DR development in Finland (page 133 of the CD²):

Aggregointi

72 a §

Itsenäisen aggregaattorin jouston aktiivinnista aiheutuneiden kustannusten korvaaminen

Itsenäinen aggregaattorin on korvattava sen toteuttaman jouston aktiivinnin aiheuttamat suorat kustannukset aggregaattorin asiakkaan avoimelle toimittajalle tai asiakkaan tasevastaavalle.

This would create a radical barrier to DR, and **breach the Directive** whereby:

- as per art.17-1 and 17-2, DR should participate in all electricity markets alongside producers, without any discrimination, including through aggregation. Conversely the above provision proposed in the CD would bias competition by creating a specific tax on DR independent aggregators only, not on others (including producers);
- as per art.17-4, a payment may be awarded to electricity suppliers to compensate costs incurred if any, but such compensation mechanism shall not create a barrier to demand response participation and aggregation. To this end, the burden should be shared among "electricity undertakings" as opposed to charging the compensation costs to DR aggregators.

¹ Entities most involved regarding this contribution are: Cathode, Energy Pool, FuseBox, Sympower and Voltalis.

² English translation: *Reimbursement of costs for activating the flexibility of an independent aggregator*

The independent aggregator must reimburse the direct costs of the aggregator's activation to the customer's electricity supplier or the customer's balance responsible party.

2. Erroneous justifications provided by the CD

2.1. No energy to be transferred

The CD refers to the old approach used several years ago by large incumbents to try to justify a compensation should be paid to them by independent aggregators (so as to block DR). According to this approach, as mentioned in the CD (p. 34) *"an independent aggregator would pay compensation to an open supplier for energy transferred from the electricity supplier's electricity balance to the independent aggregator's electricity balance"*.

Yet this approach was later abandoned and thus was not used in the directive as basis to establish a compensation (if any). The reason is simple: there is no energy to be transferred.

Obviously, should DR rely on energy transferred from others, DR would have to pay for such energy. Hence the Directive would make such payment mandatory. It doesn't: establishing a compensation mechanism is only an option for Member States. By the way, the justification is not based on energy, but on (possible) costs for suppliers or BRPs, and, as we'll see below, such costs depend on the 'model' adopted at national level ('corrected' or not).

There is no basis for any compensation on any energy transfer, simply because there is no energy when DR is used instead. Indeed, the more DR is used rather than generation, the less energy is generated and consumed. In short: the more demand is reduced by DR, the less energy. DR does not rely on energy transferred from others, DR is an alternative to energy.

2.2. No double payment

The CD (p.53) seems to refer to a situation where DR would be used for balancing, i.e. when Fingrid would activate DR to balance the grid in real time, e.g. to reduce consumption when there isn't enough generation. Here again, we see that DR occurs *because* there is no energy.

Yet the CD suggests DR would result in a cost for Fingrid who would have to pay twice, should Fingrid be responsible to pay compensation to suppliers/BRPs. *"In [such] model, the balance service provider could receive a payment from the balancing market, in addition to which the transmission system operator would pay for the balance electricity to the balance provider. From a systemic point of view, the same product would therefore be paid for twice."*

In fact, this is not accurate, because Fingrid would pay only once, i.e. for the balancing service provided by DR - and would select the BSP proposing DR only if cheaper than generation bids, so that Fingrid would save on balancing costs, thus saving for all consumers.

Finally, should the law request Fingrid to pay a compensation to suppliers incurring costs, then the law should allow Fingrid to pass on this cost to all suppliers in the settlement process.

It may be that the CD means that those consumers who participate to DR are rewarded twice, because (i) DR is paid by Fingrid as any balancing service and (ii) those consumers whose load is reduced consume less and therefore pay less. This is common sense and economically justified: obviously, consumers should not pay if they don't consume; besides, the balancing service they provide to Fingrid is competing with generation bids on the balancing market, and should be treated equally, so that the cheaper is used and paid its bidding price. This is how competition ensures the most effective use of the power system, at lower costs for all.

2.3. No electricity acquired by suppliers when DR is instead

The CD provides yet another justification (p. 77) to have a compensation paid to suppliers of consumers who reduce their consumption. The CD states that *"The financial compensation*

would [pay the open supplier] for the electricity acquired by the open supplier for the customer but not sold by the aggregator from the open supplier". This is not correct either.

Let's consider either case, whether DR is bought (a) by Fingrid for balancing, or (b) in the wholesale market i.e. by electricity suppliers.

(a) As we saw above, Fingrid will request demand reduction when generation is not sufficient to match consumption; in other words, electricity suppliers have not bought enough, and can't argue they should be paid for electricity they did not acquire.

(b) Alternatively, when DR is sold in the wholesale market, i.e. bought by suppliers instead of generation, suppliers buy less generation. Again, they cannot pretend they should be paid for the electricity they acquired, as they bought less thanks to DR.

In fact, the rationale for a compensation to suppliers (if any) is not that electricity is acquired, but rather that DR is acquired instead, of course at a lower cost, but also leading to less revenues for suppliers because participating customers consume less when curtailed. This is what led to the solution set forth in the Directive, taking into account benefits and costs.

It seems rather unfortunate that the CD would refer (p. 53) to three 'models' without taking into consideration the very one described in the Directive, known as the net benefit rule. The reason for this may be that, as mentioned by the CD (§4.1.4, pp 33-34), "*the proposal is based on a model recommended by the Smart Grid Working Group*" and this Group worked before the solution based on benefits and costs was negotiated, and the net benefit rule set forth.

3. Solution from the Clean energy package: benefits and costs - and no barrier to DR

In technical terms, DR is urgently needed throughout Europe to ensure security of supply and a more effective use of renewable (intermittent) energies, with less fossil fuels and emissions.

To this end, the Clean energy package provides for the participation of DR in all electricity markets alongside generation, on a competitive basis. In other words, consumers (via their aggregator) will be able to offer to consume less, and thus avoid expensive generation.

Having DR participate in wholesale markets has two consequences - benefits and costs:

(i) This competition from the demand side will take wholesale prices down, and thus benefit all suppliers (they'll save on their sourcing costs) and ultimately all consumers.

(ii) Buying DR is a cost for suppliers, cheaper than generation, but it does not provide them retail revenues, as curtailed customers do not consume.

Overall, as long as benefits brought by DR to suppliers are greater than costs, they end up with a net benefit that they may ultimately pass on to customers. Hence, there is no reason why DR would be required to 'compensate' suppliers who already have more benefits than costs. Such charge on DR would both be an overcompensation to suppliers, and an undue obstacle impeding DR although DR would be beneficial to all. This is why the Directive forbids to create a barrier to DR, and sets forth the net benefit rule³, whereby DR should not contribute to any compensation to suppliers, except if and to the extent that benefits would not exceed costs.

³ It should be highlighted that the net benefit rule is presented as an option for Member States willing to implement a compensation to suppliers - yet the only option set forth in the Directive. But in any case, Member States are not allowed to create a barrier to DR, as would result from charging DR the full compensation cost. This is why the Directive allows to share the burden among market parties, by requiring various '*electricity undertakings*' to contribute. DR aggregators are not even mentioned, but when describing the net benefit rule.

However, the Directive acknowledges that even when suppliers altogether benefit from DR, some suppliers may face more costs than others, namely those suppliers whose customers are participating and reduce their consumption. This is due to the 'perimeter correction' Member States may charge their balance sheet. Indeed, such 'correction' is allowed by Recital 39 of the Directive, and set forth in subsection 4 of article 72-a of the Finnish draft legislation. Yet it deprives these suppliers of the positive imbalance and related revenue from the TSO they would normally receive without such correction. This is why they end up with what they consider a cost, and may be granted a 'compensation' for such 'correction'.

Finally, such compensation would be paid to these suppliers bearing costs because they are charged such a 'correction'. Yet this compensation should not be paid by DR aggregators, because this would create a barrier to DR⁴. The compensation should be paid by all suppliers, because they all benefit from DR (*via* the reduction of market prices and their sourcing costs).

It should also be noted that these provisions should apply not only to independent aggregators, but also to suppliers operating as demand response aggregators, and activating DR, be it on request from the TSO for balancing purposes, or to participate in any market.

4. Recommendation

Based on our experience from operations of our members in more than twenty countries, and our strong involvement in the negotiation of the Clean energy package regarding DR as well as its implementation in national regulatory frameworks,

DR4EU would respectfully recommend that Finland would adopt a new legislation that would comply with the Directive and the net benefit rule as established therein.

This would mean changing the first sentence of article 72-a in chapter 10-a as follows:

Costs incurred during the activation of demand response may be compensated to the electricity suppliers of participating consumers or their balance sheet manager. This payment is then included in the financial settlements made by the TSO, so that the cost is shared among all electricity suppliers *pro rata* the consumption of their customers.

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⁴ The Directive (art.17-4) allows Member States to establish a compensation mechanism, but requires them not to create a barrier to DR. This requirement stemmed from the French experience. As mentioned by the CD, France allowed DR participation to all electricity markets as early as 2013. France also enforced a compensation to suppliers, and, unfortunately, charged its costs to DR aggregators rather than share it among suppliers. This proved a total failure and a radical barrier to DR, as numbers still show: volumes of DR sold in France remain very small and have been decreasing year after year (cf. numbers officially published by the French TSO here: <https://bilan-electrique-2020.rte-france.com/market-mechanisms-erasure/?lang=en>). It should be highlighted that the description of the French system provided by the CD (p.56) is surprisingly inaccurate.