

# Received free-form responses on consultation "Documenten Flexibiliteit" / "Documents Flexibilite"



## Public consultation on the opening of aFRR and CRM to low voltage grid users

02 June 2023

## **Executive summary**

Centrica thanks Synergrid for the opportunity to provide comments on the amended flexibility documents (C8/01, FSP-DSO contract, flexibility market guide). We recognise the significant effort from Synergrid and would like to share the following comments:

- We welcome Synergrid's commitment to unlock low-voltage flexibility.
- We ask Syngrid to clarify measurement requirements & harmonise them across regions.
- We urge the authorities to reform metering specifications to drive energy innovation.
- We have strong concerns about the lack of provisions for aggregation.
- We invite Synergrid to develop a framework for an efficient treatment of low-voltage asset requests.
- We see merit in a more stakeholder friendly consultation procedure.

## Centrica welcomes Synergrid's commitment to unlock low-voltage flexibility

As of early 2024, and subject to the necessary regulatory evolutions, Centrica considers onboarding several thousand low-voltage connected delivery points onto the aFRR service as a proof of concept. Upon a successful go-live, we anticipate a substantial increase in the number of delivery points in the course of the year.

Residential flexibility is crucial for a secure, sustainable, and cost-effective energy transition in Belgium. To achieve this, we need to access flexible assets at lower voltage levels and establish suitable metering options and an efficient transfer of energy framework.

We are pleased with the introduction of the 'fast-track' for aFRR low-voltage, as it represents the first step in unlocking new services for low-voltage connected assets. However, we must quickly implement a long-term solution that addresses the remaining limitations concerning the transfer of energy, local gateway, individualized data, metering requirements, and more.

By overcoming these challenges, we can fully harness the potential of residential flexibility and drive the energy transition forward. It is essential to act swiftly and decisively based on the lessons learned from the initial phase.



## Centrica asks Syngrid to clarify measurement requirements & harmonise them across regions

We have concerns regarding the mandatory requirement of SMR3 enabled metering in Flanders for the fast-track aFRR LV in 2023, while similar requirements are expected later in 2024 for Brussels and Wallonia. It is also unclear why the SMR3 requirement applies when an explicit opt-out agreement is in place.

To ensure a fair playing field between regions and avoid unnecessary implementation challenges for providers, we urge Synergrid to postpone additional measurement requirements until harmonization is achieved across all regions. Additionally, we recommend the inclusion of derogation schemes that allow specific arrangements between BSP/FSP and BRP/suppliers to bypass these requirements when they are deemed unnecessary.

By harmonising measurement requirements and providing flexibility in derogation, Synergrid can prevent regional disparities and streamline the implementation process for all stakeholders involved.

## Centrica urges the authorities to reform metering specifications to drive energy innovation

The stringent metering specifications imposed by the existing regulatory framework are hindering the development of residential flexibility. These requirements, designed for regular electricity supply, are disproportionate when measuring lower levels of energy in balancing reserves or capacity mechanisms. They result in high investment costs and lengthy lead times, discouraging providers from pursuing residential flexibility at the low-voltage level.

The current <u>technical requirements</u> for private meters require a power meter with an accuracy class of 0.25. The minimum cost of such a meter exceeds 250 EUR (excluding installation costs), which is a prohibitive additional cost for each residential installation. A multi-year payback period would be required to cover just the metering equipment for EV chargers, hot water heating,... These devices are capable to deliver the other technical requirements of the aFRR service. Existing installations would be excluded due to the economics and complexity of revisits to install metering equipment (the cost of an installer quickly exceeds 150 EUR).

To address this issue, we call upon all stakeholders involved - DSOs, Elia, regulators, and providers - to explore broader metering solutions at both the distribution and transmission levels, as well as within different reserves. One potential solution is the development of a new code of practice specifically tailored to metering flexibility services "behind-the-meter".

We can draw inspiration from the UK's recent <u>P375</u> code reform and <u>CoP11</u> accuracy standard review, which introduced different accuracy classes for different use cases. This approach unlocks the full potential of residential flexibility, encompassing small-scale renewable generation, battery storage, demand-side response, and electric vehicle chargepoints.

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CoP11 introduces different metering accuracy requirements based on the size of the asset and allows for the use of "asset meters" (which are embedded in the device). The table below illustrates the range of accuracy of embedded meters that Centrica has encountered with various manufacturers and device types.

Device type	Accuracy range	Notes
		Based on tests with devices from 8 manufacturers.
Residential batteries	3-6%	In Flanders, 33.258 <u>households</u> installed a battery in 2022 (conservatively this equates to 132 MW of installed capacity).
EV charge points	1-5%	Based on tests with 5 device manufacturers. Power metering is typically only available once per minute (not every second). By the end of 2023, it's <u>projected</u> there will be 125.000 fully electric EVs in BE.
Heat pumps	5-25%	Based on tests with devices from 4 manufacturers.
Electric heating (space heating & boilers)	2-7%	Based on tests with 5 manufacturers.

By embracing alternative metering options, we can remove the barriers that hinder the growth of residential flexibility and unlock its benefits for the energy system.

## Centrica has strong concerns about the lack of provisions for aggregation

The current proposal lacks provisions for aggregated delivery of flexibility from low-voltage connected assets. Individual participation in aFRR is expected, disregarding established concepts like 'virtual' delivery points in FCR. We fail to comprehend the rationale behind excluding proven solutions at this stage.

We strongly urge Synergrid to embrace a regulatory framework that supports aggregation right from the start. By doing so, we can unlock the full potential of low-voltage flexibility and maximize its benefits for the energy system.



## Centrica invites Synergrid to develop a framework for an efficient treatment of low-voltage asset requests

The lack of a specified Service Level Agreement (SLA) for onboarding low-voltage assets in aFRR is concerning. We understand the limitations of DSO resources and the uncertainty surrounding the number of market participants utilizing low-voltage flexibility. However, we firmly believe that in addition to the mentioned 'best effort' commitment, there should be an explicit reference to a *minimum* SLA in the market rules.

Furthermore, it is crucial to outline a clear process for queue management in case of bottlenecks. This ensures transparency and fairness in accessing and utilizing low-voltage flexibility.

We call upon Synergrid to address these issues and establish a comprehensive framework that guarantees timely and efficient treatment of requests from low-voltage assets.

## Centrica sees merit in a more stakeholder friendly consultation procedure

FEBELIEC and ODE have raised valid concerns about the current consultation procedure. The response form hinders meaningful feedback, and the consultation documents lack flexibility for amendments and collaboration. We invite Synergrid to consider the acceptance of fully formulated responses and the provision of editable consultation documents (.doc, .xls, .odt, etc.) in order to enhance the consultation process and ensure industry feedback is heard.



POSITION

Subject:	Synergrid Joint consultation of flexibility-related documents for the benefit of the network operators
Date:	2 June 2023
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This position sets out the comments and proposals of FEBEG and its members in the context of the joint consultation organised by Synergrid on the documents related to flexibility for the benefit of grid operators in response to the following developments:

- Opening of the Automatic Frequency Restoration Reserve (aFRR) to low voltage network users.
- Adjustment of the operating rules of the capacity remuneration mechanism (CRM).

## General assessment

FEBEG supports the general objective of opening the Automatic Frequency Restoration Reserve (aFRR) to low voltage network users.

However, FEBEG cannot accept that the modalities of application of this opening are not sufficiently explained and, in addition are made at the expenses of the suppliers and the BRPs associated. Unfortunately FEBEG notes that the practical application of this opening at low voltage level proposed by Synergrid would be carried out at least initially, in a temporary phase, on the basis of the opt-out or pass-through configuration.

For FEBEG, the opt-out, and certainly the existing ToE mechanism (as described in the Electricity law) is administratively too cumbersome for suppliers and BRP's and costly to implement on the distribution network. This mechanism is not a sustainable solution since:

- From an administrative point of view, it is very cumbersome and complex, and requires agreements between each supplier and each flexibility service provider, making its application on the distribution network undesirable and not feasible.
- Furthermore, the volumes of flexibility at low voltage level are expected to be relatively limited, so that the costs involved will also be (in perspective) much higher compared to the current application at high voltage level, which would be a major obstacle to attracting more flexibility to the market.

Therefore and as defended in the context of other initiatives, FEBEG pleads to move directly to the new mechanism of individual correction and financial compensation through the final customer, that its application is generalized also at the low voltage level and integrated in the regular market processes (Atrias).



For FEBEG, this new mechanism is the only one that will allow end customers to more easily value their flexibility and thus contribute to a greater supply of flexibility on the markets – including on the low voltage, in a sustainable and balanced way for all actors.

This being said, there is a major difference between the DSO and TSO level, since at TSO level we have metering at Delivery Point level (per Qh), while at DSO we have an allocation process. Many questions will have to be answered. How will the allocation to the delivery point be organized in practice, specifically, will it be allocated to the correct supplier/BRP at DSO level? How will the DSO's distinguish this? How will DSO have a clear view on which supplier/customer is impacted and how? For FEBEG individual customer/supplier informationis necessary to take into account in the allocation correction to ensure correct implementation.

While waiting for a quick generalization of the individual correction mechanism and financial compensation through the consumer on all voltage levels, FEBEG believes that an opening of the aFRR on the low voltage level based on the opt-out regime is an acceptable temporary solution. And this, under the explicit condition that the model evolves as soon as possible towards the individual correction regime and on the condition that the above concerns are addressed (regarding correct allocation). The Opt-Out mechanism can work on the condition that the suppliers/BRP receive info on the volumes involved (while still complex).

For the pass-through mechanism, FEBEG admits that it is not administratively complex, however, we estimate such mechanism does not fit for almost all of the DSO connected consumers, since a very good understanding of the energy market is a pre-requisite for this type of contract.

## <u>On metering</u>

Specifically on metering devices and requirements, FEBEG strongly encourages DSO and Elia to continue to work on a feasible and aligned regulatory framework to allow for semi-regulated metering devices and solutions, also behind the meter (for example, existing metering devices which are already in place within the flexible asset). Not only for aFRR or specific Elia products, but also for future flexibility services at the DSO level.

FEBEG also wishes to share some concerns regarding metering: according to us DSO meters (digital meters) are not synchronised with NTP (deviation up to 1 min is possible). If semiregulated meters will be allowed (in the future) for various services, these types of limitations need to be considered in the overall market design (for example, less strict ramp-up requirements).

## <u>SO – cooperation</u>

In addition to the above, and as a general comment, FEBEG ask the System Operators (DSO/TSO) to cooperate as much as possible, and align on general principles, definitions, implementation timelines, etc... for new regulation. (for example also on the CRM principles mentioned in the consultation).



POSITION

## **Detailed comments**

See excel-file in attachment.



## Febeliec answer to the Synergrid consultation on Flexibility

Febeliec would like to thank Synergrid for its consultation on flexibility, on the Market Guide Flexibility, the Synergrid Prescription C8/01 and the FSP-DSO Agreement.

Febeliec in general would like to insist that all public system operators do their utmost best to remove **all** barriers in order to ensure that **all** flexibility can find its way to **all** markets, towards frequency and non-frequency related products of system operators but also explicit and implicit participation in the energy markets. Febeliec finds the current proposals only a very small (positive!) step in this direction, as it will allow a.o. aFRR on low voltage, but it is by far not sufficient to attain the abovementioned ultimate goal. Febeliec thus wants to urge most strongly that all system operators and regulators accelerate their endeavors on unlocking all flexibility in the system to the benefit of all grid users through more efficiency and a lower overall system cost.

#### **Market Guide Flexibility**

Febeliec would like to make following comments on the Market Guide Flexibility. In general, and as will become clear from the comments below, the specific provisions for CDSs still need to be added, and it seems as if the overall reflection and analysis has not yet been conducted, which Febeliec regrets. Febeliec insists on the importance hereof, as most of current flexibility comes from industrial consumers (a.o. due to incomplete or not yet started smart meter roll-out to low voltage, not all products already available for all types of grid users, ...) and a substantial share of this flexibility is located within CDSs.

On the **definitions**: Febeliec insists that these are aligned as much as possible with the definitions used in other regulatory documents, in order to avoid any confusion. Febeliec refers a.o. to CMU, but also DSO (with the specific situation of CDSOs which are according to European legislation also DSOs and where any confusion between public and closed DSOs should be avoided; a definition of CDSO or specific specifications on the role of the CDSOs are lacking), HV, MV and LV (where HV is defined as up to but not including 380 kV (?) and where for MV no upper boundary is provided). As mentioned above, definitions for a CDS and CDSO are not included in the document.

On the **roles and responsibilities**: The market roles diagram is not really legible. Moreover, the role of the CDSO (if applicable) is not mentioned, where it is clear that a CDSO as relevant system operator for the grid users in its grid has a major role in the market roles diagram (if applicable). The same applies for the contracts between market parties diagram as the CDSO will also play a role there (if applicable). On 2.3.2.1, Febeliec suggests that an FRP *can have* (and not *has*) an agreement with one or more FSPs.

On the **flexibility product overview**, Febeliec regrets that for low voltage no mFRR, SDR and ToE in DA/ID are included. While Febeliec understands that participation from DSO-connected grid users to these products might not be possible today, it hopes that these will be added as soon as possible. On the **metering requirements** (3.2), Febeliec insists that not only the FRP and DSO need to define the relevant metering requirements, but that (when applicable) also the CDSO is included in this discussion. Moreover, Febeliec also most strongly insists that for flexibility products, not only metered values but also calculated values (based on metered values) should be allowed, insofar that a correct perimeter can be defined for the determination of delivery of the service (as is currently already the case on the Elia grids).

On **prequalification**, Febeliec insists that also the CDSO (when applicable) as relevant system operator for the grid users in his grid is included in the flow. The same applies for the **gateway** and its setup, as well as for **update and stop of the service** and so on.

On section **4.2.4**, while Febeliec regrets that for low voltage only 1 SDP-Flex can be registered per product and only at headpoint level (Febeliec considers this a barrier for full valorization of flexibility), it most strongly insists that such limitations are not acceptable on medium or high voltage.

On the **determination of the nominal reference power, prequalification checks and tests by the FRP and so on**, Febeliec again insists that also the CDSO (when applicable) as relevant system operator for the grid users in his grid is

Febeliec represents corporate energy consumers in Belgium for whom energy is a significant component of production costs and a key factor of competitiveness. Febeliec strives for competitive prices for electricity and natural gas for its members, and for more security of energy supply in the context of the energy transition. Febeliec's members are 5 sector federations and more than 40 companies from various sectors (chemistry and life sciences, petroleum products, glass, pulp & paper and cardboard, mining, textiles and wood processing, brick, non-ferrous metals, steel, transportation, construction materials, data centers, telecommunications). Together they represent some 80% of industrial electricity and natural gas consumption in Belgium and 225.000 jobs (<u>www.febeliec.be</u>).



included in the flow, in particular whenever tests are to be conducted, as these will also have an impact on the grid of the CDSO (in a similar approach as the procedure to include the DSO and for similar reasons).

On the annexes, Febeliec has not had the opportunity to deep dive in all documents, but already wants to explicitly refer to its comments on CDSOs and the need for their inclusion in several of the issues covered by the annexes.

### Synergrid Prescription C8/01

On the Synergrid Prescription C8/01, Febeliec a priori has no specific comments, except on the need in some cases for the inclusion of the CDSO (when applicable) as there might also be potentially impact on its operational safety.

#### **FSP-DSO Agreement**

On the FSP-DSO Agreement, Febeliec also explicitly wants to refer to the need in some cases for the inclusion of the CDSO (when applicable). This could for example include the identification (EAN), testing, activation of flexibility, metering, validation and so on. Febeliec refers in this context also to the other comments made above. Febeliec does not consider this a blocking point, but nevertheless provisions need to be included which reflect and accept the central role of the CDSO as relevant system operator for his grid users.



Brussels, May 1, 2023

## **ODE reaction on Synergrid consultation 'Flexibility Documents'**

ODE wants to thank Synergrid for involving the stakeholders in the development of these important steps towards the development of more flexibility and is always available for further discussions regarding this and other subjects.

## Market Guide Flexibility

ODE supports the expansion of aFRR to low voltage, this is a first step in the transition to a more flexible energy system that is getting ready for the integration of more renewable energy.

## One Service Delivery Point per access point on low voltage

ODE regrets that the current framework means that only one asset can participate in aFRR on low voltage. This is not a future-proof framework and should be adjusted as soon as possible. It does not take into account the fact that electric vehicles and (home) batteries that will participate in these services will be aggregated by different parties. As a result, the possibilities that electric vehicles, heat pumps, photovoltaics, water heaters and (home) batteries can offer will not be fully exploited and it would possibly hinder the participation of these assets. This stresses the urgency to proceed with the upcoming framework 'multiple supply contracts for adjustable appliances'. ODE would also like to see a timeline included within which multiple assets from different operators (aggregators) on the same access point are facilitated.

## Digital meter with SMR3 obligation

ODE understands that a digital meter is obligatory for participation in aFRR but wants to point out that this obligation might reduce initial participation on low voltage due to the financial benefits net metering has for prosumers and their right to refuse installation of a digital meters (until 2025). Also, the right to keep the analog meter for clients with exclusive night meters until 2028, typically for accumulation heating, means that these assets will most likely not soon take part in aFRR. SMR3 should be made the standard setting for all customers with digital meters and quarter hour values should be made available in the MijnFluvius platform automatically for all digital meters, no opt-in required. This creates more awareness about usage patterns and by that, more implicit reaction to price signals for people with variable contracts. It also creates opportunities for aggregators and flexibility service providers to analyze offtake and injection profiles, which is necessary to assess whether there is a business case for flexibility services. This will increase participation in aFRR and other flexibility products. If the increase in data flows is a problem, standard activation of SMR3 and quarter hour data in MijnFluvius could first be implemented in the commercial market segment since the cost benefit analysis from 2017 shows there is a lot of potential for flexibility. Further, the quarter hour values should be used in the allocation volumes.

## Synergrid regulation C8/01

## **Network Flex Study**

ODE supports the exemption of network flex studies on low voltage for connections <5 kVA (single phase) and <10 kVA (three phase). The 10kVA limit for residential customers might even be too low, considering the electrification of heating and mobility. This limit should best be increased in the near future. The entry barriers for residential and low voltage should be kept as low as possible and these connections have the right to fully use their connection capacity.

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### **Congestion zones**

Regarding the classification of congested zones, ODE pleads for a much more dynamic process and much shorter evaluation periods to assess the need for restrictions on flexibility as close to real-time as possible. Good and extensive coordination between grid operators, further digitalization and modernization of grid infrastructure can reduce the need for restrictions to a minimum. The current proposal will most probably limit the activation of flexibility much more than necessary and therefore reduce the potential of available flexible assets, thereby reducing the market liquidity and potentially increasing the overall cost of flexibility.

Furthermore, voltage information could be made available in the MijnFluvius portal since this is already measured by the digital meter. This would provide the offtaker with data that can help in designing and operating its' installations and usage patterns, thereby reducing local congestion risks. On top of that, the grid operator would get a very detailed status of the distribution grid and possible congestion risks. The grid operator would also get a better view on the distribution of single-phase connections on the different phases.

Capacity maps should be made publicly available as soon as possible to provide transparency on the available capacity and it should be made available in as detailed as possible form. ODE understands that this is a continuously improving process but stresses that the continuously increasing level of detail in the congestion maps in parallel with further digitalization of the distribution grid should also be reflected in the capacity maps.

ODE rests at your disposal for further consultation on this matter and would like to remain involved in further development of the regulations regarding flexibility.

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