

Smart Grids Task Force

Term of Reference

Working group "Deployment of demand side flexibility"

According to the Actions foreseen to boost the clean energy transition in the Commission Communication COM(2016)860final, in 2017 the Commission will establish stakeholder working groups under the Smart Grids Task Force to prepare the ground for future EU action, for example through network codes, on:

- demand response, including aggregation;
- energy-specific cybersecurity rules; and
- data exchange and settlement rules.

The Commission will report on the structure, scope and planning of the groups in summer 2017 and final results by the end of 2018.

1. Background

Following the decision of the 17/02/2017 Steering Committee meeting of the Smart Grids Task Force, a Working Group on Demand Response is to be formed with the overall task to collect information and investigate the necessary further steps for facilitating demand response at EU level.

EG3 has worked successfully during 2014 and 2015 on the topic of flexibility and demand response and its deliverables were published in 2015 (EG 3 report and Annex "Regulatory Recommendations for the Deployment of Flexibility"). This work will form the base for the current work and the relevant conclusions shall be considered by the Group.

Moreover, the Group will have to consider all relevant provisions currently in force and legislation proposed (Clean Energy for All Europeans Package). In particular, the following legislation is of relevance for the work of the Group:

- Electricity Directive 2009/72/EC and Gas Directive 2009/73/EC
- Energy Efficiency Directive 2012/27/EU
- Proposal for a revised Electricity Directive and a revised Electricity Regulation¹
- Network Code Demand Connection (Regulation (EU) 2016/1388)
- Guideline on electricity balancing (under validation)

Moreover, any other relevant EU legislative acts and network codes (adopted or under validation) should be considered as well as national regulation and recent studies on demand response, in particular the JRC report on the transposition of Art 15.8 EED in Member States.

2. Scope and Objectives of the working group

Demand side flexibility for the purpose of this exercise means the capacity of modifying the demand profile in a given area, during a given period of time, as a result of a wide range of signals (e.g.

¹ <http://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition>

market price, contractual arrangements etc.). The objectives of such modulation can vary, e.g. to voluntarily provide a remunerated service within the energy system, to save on energy expenses or to optimise internal portfolio.

The scope of the work is on the deployment of explicit demand response in Europe. This refers to enabling final customers to become active in the market but also to system operators to make best use of flexibility in order to ensure efficient system operation on a regional level. As such, aspects of the work should include but is not limited to:

- Access to flexibility (e.g. demand response products) through organised markets in order to ensure a level playing field between demand side flexibility and generation
- Use of demand side flexibility by system operators (DSOs and TSOs), including demand response and other flexibility services
- (Contractual) arrangements between final customers, aggregators, suppliers (or their BRPs) and possibly other actors in the following areas:
 - Information exchange and confidentiality
 - Transfer of Energy
 - Baseline methodology
 - Measurement and validation
 - Rebound effects
 - Consumer rights and contractual arrangements between aggregators and residential customers.

Implicit demand response will only be addressed in so far as it affects the deployment of explicit demand response.

The objective of the working group is to continue the work on the deployment of demand response at European level by identifying success stories and best regulatory practices across Europe. In this context, the group will also identify and analyse other issues linked to the wider concept of demand side flexibility. The aim should be the identification of remaining gaps that have to be addressed at EU level and propose what should be the scope of further and more specific EU action (i.e. network code) and which should be the areas that such EU actions will have to cover. Relevant outputs of the group, such as use cases, will be disseminated to the European Standardisation Organisations (ESOs), so that standardisation gaps can be identified and addressed.

The group will build on previous work of the Smart Grids Task Force, as well as on existing studies and market models for demand response in EU and worldwide. The existing and envisaged EU legislation - including network codes - shall be the main framework of the work.

3. Description of work and timeline

The Group will have to conclude its work and deliver the final results by the end of 2018. The findings will be summarised in three deliverables (reports) which will be submitted for approval to the Steering Committee of the Smart Grids Task Force at the end of 2017 and 2018, respectively. The following milestones and deliverables in order to keep the programme of work in schedule are defined:

1. Milestone 1 – Decision on approach and roadmap: 07/2017

2. Deliverable 1 – 1st Interim Report: by 12/2017
3. Deliverable 2 – 2nd Interim Report: by 06/2018
4. Deliverable 3 – Final Report: by 12/2018

The Group should aim to the identification of best practices and the definition of the areas that the EU action (including legislation) will have to cover in the coming years. The work will focus on the following tasks:

- Analyse existing market models of demand response participation in the energy markets. European and international experiences where demand response has been developed should be collected and best practices should be identified for each type of market. Emphasis should be given to explicit participation of demand response in the different markets. Relevant issues which are linked to the wider concept of demand side flexibility should also be analysed.
- In the context of the analysis of market models, the role of market actors (e.g. aggregators, suppliers, system operators) who are involved in demand response, their possible relations and interactions, as well as access and participation in the market for the various actors, shall also be analysed. A particular focus should be placed on the role of TSOs and DSOs in facilitating demand response under different market models and the areas which their coordination is required.
- Analyse in particular the role of active customers in the process which should not be limited to access to markets and service providers but also identify regulatory needs to protect final customers and ensure appropriate information and billing also with respect to new market participants such as aggregators.
- Identify the gaps of the legislative framework at EU level. The Group should look into existing and proposed provisions of EU legislation which refer or relate to demand response and identify gaps, based also on the analysis of existing cases and the identification of best practices.
- Propose the concrete areas and topics a future network code or any other EU action shall cover, in order to establish a framework that facilitates demand response deployment and regulates the interactions of the various actors in the market and equipment.

Based on the above description the Group will have to refine the detailed areas of work and define the outline of each deliverable within the first month of its work (1st milestone).

Consensus among all actors involved is essential in all steps of the process and especially in the Final Report. In case no full consensus can be reached on specific topics, the final report should clearly identify and describe the different viewpoints.

4. Organization and membership of the Group

The Group will consist of experts who have been designated by the participating organizations and will undertake its work by means of its own resources. The Commission will chair the Group and organise the necessary meetings.

In its first meeting, the Group will designate an Editorial Team which will consist of 3-5 members of the Group. The Editorial Team will be responsible for drafting the report based on input and

comments by the Group. The members of the Editorial Team may decide on any further working arrangements and allocation of work upon formation of the Team. It is foreseen that the Group will meet on average once every quarter (4 meetings per annum), while the Editorial Team can arrange separate meetings.

The Group members should be experts in the field at a high level in their organisation and market domain, and should be in a position to influence stakeholders, to foster partnerships and to leverage resources, as well as to demonstrate a high degree of commitment to the Group and ability to devote sufficient time to its activities. The Commission will inform the Smart Grids Task Force Steering Committee on the final Group composition and of any subsequent changes. The table below shows the proposed composition of this Working Group:

Working group "Deployment of demand response"
Chaired by the European Commission

EC	DG ENER	Manuel Sanchez Kai Tullius Kostas Stamatis Nicolas Kuen Axel Bierer Rados Horacek Remy Denos		
	DG CNECT	Patricia Arsene		
	DG COMP	Francesco Ferioli		
	DG JUST	Lara Blake		
	DG JRC	Ioulia Papaioannou Nikoleta Andreadou		
	DG RTD	Patrick Van Hove		
	INEA	Mariana Stantcheva		
		Association	Expert	Alternate
	Nomination of one expert and one alternate 1) no alternate 2) Multiple functional player 3) Covering the role of supplier 4) 2 experts and 2 alternates 5) EC ask BEUC case by case, according with the issue to discuss	CEER	Karin Alvehag - Swedish NRA	Stefan Voegel - Austrian NRA Louise van Rensburg - OFGEM
		CEDEC (1) (2)	Peter Hermans, CTO – Stedin	
EDSO (1)		Torsten Knop - Innogy		
Eurelectric (1) (3)		DSO issues: Markus Merkel, EWE Supplier issues: Alain Taccoen - EDF		
GEODE (1)		Jan Pedersen - Agder Energi		
ENTSO-E (4)		Hans Vanderbroucke - elia Mathilde Lallemand – ENTSO-E	Marco Foresti - ENTSO-E Colas Chabanne -Rte	
Orgalime/T&D		Renzo Coccioni - Schneider Electric	Sigrid Linher - ORGALIME	
ESMIG		Willem Strabbing - ESMIG	Patrick Gaiger-Smith, Green Energy Options	
BEUC (5)		Angeliki Malizou - BEUC Katrin Behnke - ANEC	Monika Stajnarova- BEUC	
ANEC				
SEDC		Frauke Thies - SEDC	Peter Schell - Restore	
ECOS		Thomas Willson - ECOS	Tomi Engel - Object Farm	
CECED		Mustafa Uğuz - ARÇELİK A.Ş.	Sanne Goossens - CECED	
EHC	Martin Bergemann - Siemens AG	Paolo Basso - EHI		
ebIX	Kees Sparreboom - TenneT	Vlatka Cordes		