The Benefits of Demand Response for Electricity Retailers and Consumers

Solutions and… way forward

EER – DR4EU joint event on 6th May 2021

Solutions

✓ The new DR industry is ready to contribute to the energy transition

- DR will benefit all suppliers and all consumers (not only those who participate)
  - A very effective way to save on costs and to increase reliability
  - Numbers show DR is a must-have
- Technologies are there for all consumers, proven at large scale
- Companies are ready to invest and operate aggregated DR in the markets
  - Electricity suppliers
  - Independent aggregators
  - Solution providers

✓ A clear framework from the Clean energy package…

- Directive 2019/944, particularly art.17 & 13, *recital 39*
  - *All consumers should be able to participate in DR*
  - Demand response through aggregation… both independent or not
  - DR to participate in all electricity markets, not only services to TSOs
  - *How to deal with balance responsibilities of suppliers: 'models'*
  - Possibility of a compensation to suppliers, and conditions
- Regulation 2019/943, particularly art.5, *recital 15*
  - *Balance responsibility of aggregators*

…yet to be transposed and implemented in Member States

Ex.: balance responsibility of aggregators
(Same as producers, to deliver volumes sold)

- Directive art.17

(d) an obligation on market participants engaged in aggregation to be financially responsible for the imbalances that they cause in the electricity system; to that extent they shall be balance responsible parties or shall delegate their balancing responsibility in accordance with Article 5 of Regulation (EU) 2019/943;

- Regulation art.5

1. All market participants shall be responsible for the imbalances they cause in the system ('balance responsibility'). To that end, market participants shall either be balance responsible parties or shall contractually delegate their responsibility to a balance responsible party of their choice. Each balance responsible party shall be financially responsible for its imbalances and shall strive to be balanced or shall help the electricity system to be balanced.

- Regulation recital 15

(15) Title V of Regulation (EU) 2017/2195 established that the general objective of imbalance settlement is to ensure that balance responsible parties keep their own balance or help restore the system balance in an efficient way and to provide incentives to market participants for keeping or helping to restore the system balance. To make balancing markets and the overall energy system fit for the integration of the increasing share of variable renewable energy, imbalance prices should reflect the real-time value of energy. All market participants should be financially responsible for the imbalances they cause in the system, representing the difference between the allocated volume and the final position in the market. For demand response aggregators, the allocated volume consists of the volume of energy physically activated by the participating customers' load, based on a defined measurement and baseline methodology.

Allocated volume for DR aggregators
= DR volumes delivered = change in consumers' load

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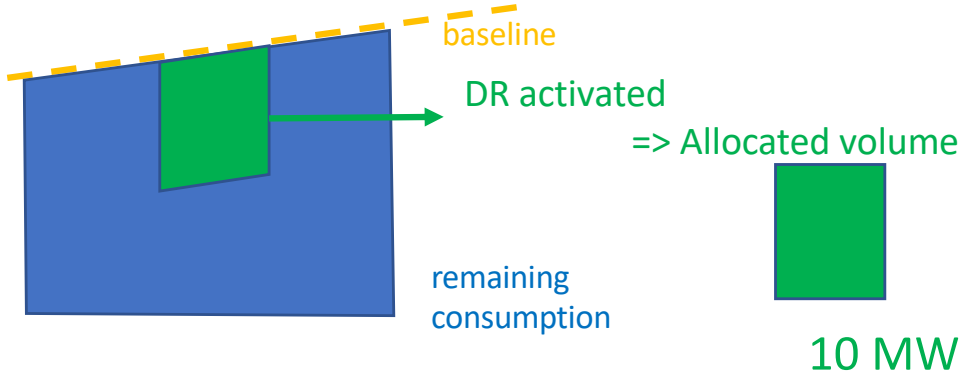
Physical delivery of DR



- Allocated volumes = volumes of DR physically delivered

To determine imbalances created in the system, compare allocated volume and sales

All market participants should be financially responsible for the imbalances they cause in the system, representing the difference between the allocated volume and the final position in the market.

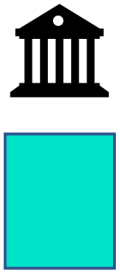
Physical delivery of DR

DR activated

=> Allocated volume

10 MWh

Sales in the market



MWh

=> €

10 MWh

Imbalance = allocated volumes – sales

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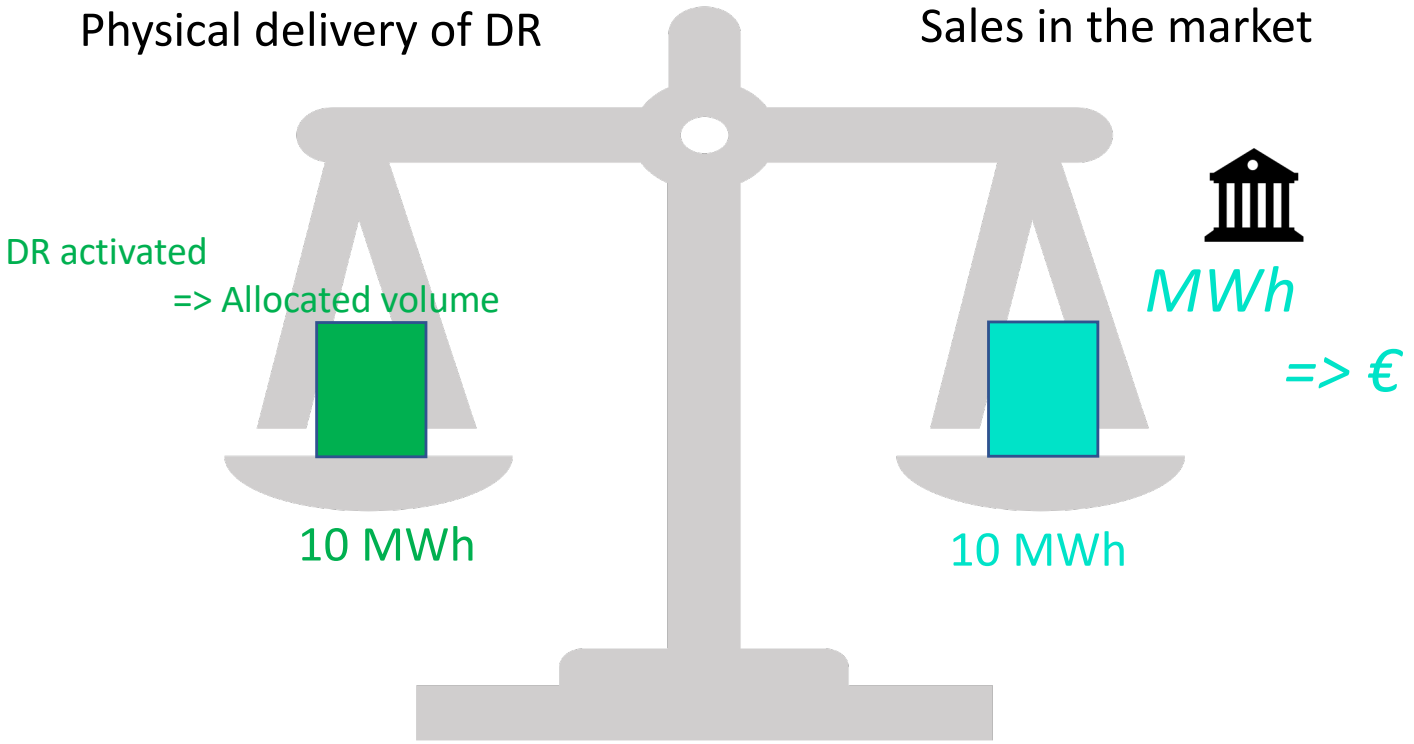
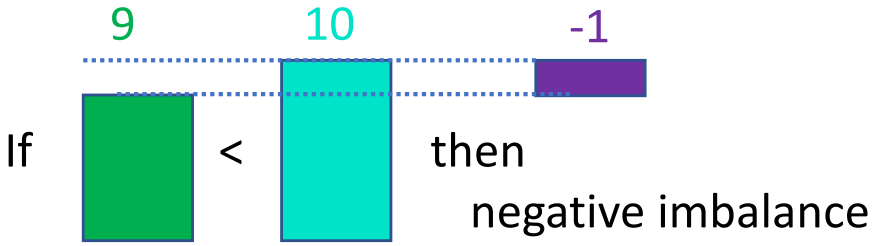
All market participants should be financially responsible for the imbalances they cause in the system, representing the difference between the allocated volume and the final position in the market.

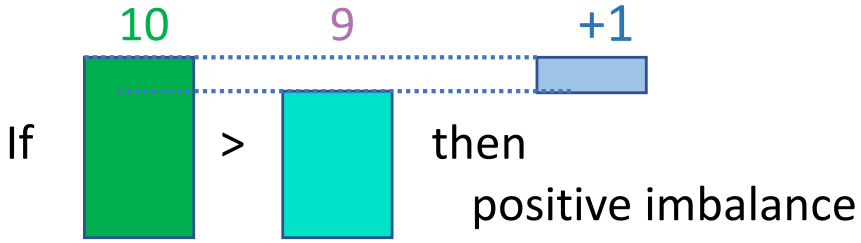


When allocated volume = sales, DR aggregator creates no imbalance

Imbalances occur when DR volumes delivered differ from MWh sold in the market

Physical delivery of DR > ? < Sales in the market





To determine one's imbalance position,
always compare sales and deliveries,
not impact on third parties

A first step last year

✓BIG – DR (2020)

Demand Response in the EU

Basic Implementation Guide

to the EU package *Clean Energy for all Europeans*

14 April 2020

✓Still available – request by e-mail at info@dr4eu.org

…more to come this year!

...and way forward

✓ National legislation and regulation need set forth key provisions

- Participation of DR in all electricity markets alongside production
- Balance responsibilities of DR aggregators when operating in day ahead
- Models for balance responsibility of suppliers
- Compensation to suppliers if any, and who should contribute
- How to measure "benefits for all suppliers, consumers and their BRPs"
- Participation of any consumer, independently from their supply contract
- Measurement and verification, including baseline methodologies
- Information to be shared with other market parties *vs* protected
- …

✓ A series of workshops to share experience on all these issues

- Starting in a couple of weeks (end of May / early June)
- With the kind participation of the European Commission (DGENER) and regulators (CEER) – *thanks to them!*
- Short sessions, more interactive: brief presentations, real Q&As
- Do send your wishes to us at info@dr4eu.org
- **You will be welcome!** *registrations will open soon*

…Stay tuned 🙂

DR4EU
DEMAND RESPONSE FOR EUROPE

EUROPEAN ENERGY RETAILERS
Network of Independent Energy & Solution Providers

The Benefits of Demand Response for Electricity Retailers and Consumers

PANEL 1: Setting the scene – the DR policy & regulatory framework in Europe

PANEL 2: Practical examples of Demand Response

On we go!