

CEER Approach to More Dynamic Regulation

8 April 2021

Following the Bridge to 2025 Conclusions Paper¹, CEER decided in 2018 to re-assess how to address the challenges that energy regulators are facing, particularly in the context of the energy transition. This was done by publicly consulting on a forward-looking 3-year strategy (the “3D Strategy”²) and draft proposals for the 2019 CEER Work Programme, the first year implementing the 3D Strategy.

The core elements of CEER’s current 3D Strategy are **Digitalisation** in the consumer interest; **Decarbonisation** at least cost; and **Dynamic regulation** (hereafter “DR”) for European solutions for adaptive regulation in a fast-changing world. Each of the “Ds” should be considered in conjunction with the other two. In CEER’s view, DR might notably be an efficient tool for decarbonisation and digitalisation that is capable of driving growth and innovation within the energy system.³

Furthermore, in their Bridge Beyond 2025 Conclusions Paper⁴, ACER (the EU Agency for the Cooperation of Energy Regulators) and CEER proposed to provide for an “**EU umbrella**” for **the sandbox approach**, allowing time-limited derogations with the view to generate information that is useful in the public interest and that there is no significant risk of a material impact on the wider market. The resulting lessons should be shared between National Regulatory Authorities (NRAs) to avoid the need to replicate the pilots in each Member State and to accelerate decisions on whether regulation or legislation needs to be adapted. This note gives an initial look at the use of DR tools amongst NRAs and related considerations.

CEER’s Strategic Objectives include designing effective regulatory oversight and implementing regulatory approaches dynamically for new business models and market actors, which an intelligent use of data (at the same time respectful of privacy principles) can facilitate and accelerate.

CEER considers that **regulation must be stable, but not static**, and coherent with the fast-changing environment and market evolutions that digitalisation and decarbonisation bring about, whilst continuing to protect the European energy consumers’ interests effectively and remaining predictable.

This **need for adaptive regulation** recently has been proven in the course of the implementation of Clean Energy for All Europeans package (CEP), where it became clear that the rules and ways NRAs use to regulate need to evolve to facilitate the changes proposed in the CEP. This is to ensure that consumers will be protected and empowered which will also contribute to the energy system transition and integration.

¹ [EU Agency for the Cooperation of Energy Regulators \(ACER\) A Bridge to 2025 Conclusions Paper](#), 19 September 2014.

² [CEER’s 3D Strategy \(2019-2022\)](#), Ref: C18-BM-124-04, 9 January 2019.

³ Dynamic regulation is also a major element of CEER’s proposed draft strategy for 2022-2025: <https://www.ceer.eu/public-consultation-on-new-strategy>

⁴ [ACER-CEER The Bridge Beyond 2025 Conclusions Paper, 19 November 2019](#).

In other words, DR can be defined as “**adaptive regulation**”, stimulating regulators to be enablers of the adaptation of the energy regulatory framework, in connection with the society-wide digitalisation trend, smart technologies, decarbonisation policies and decentralisation of energy generation.

Furthermore, CEER considers that there is a need to develop regulatory frameworks that balance the tension between **achieving regulatory goals without discouraging innovation**. In the energy sector, there is a need to have trials for innovative solutions for a future energy system which are, for instance, based on renewable energy, energy efficiency, decarbonisation and which are generally also highly digitised. Regulatory sandboxes, as well as other tools that the regulator can use for fostering innovation as described below, aim at offering temporary spaces in which solutions for technical, economic and regulatory challenges relating to the energy transition can be developed, tested and demonstrated.

In most of Member States, the **existing national legal and regulatory frameworks already allow for the development of innovation and/or incentive regulation**, in particular through tariff regulation and flexibility products. NRAs are continuously looking at and learning from existing tools of DR in other sectors. **NRAs have setup exchanges of information on cross-sectoral issues** (telecoms, transport, postal services, water) which mostly include topics such as prices and tariffs setting, innovative uses of energy, transport data, electric mobility, integration of renewables, fuels prices and market developments, consumer protection issues, digitalisation, cybersecurity, synergies and possibilities of reducing costs of the roll out of networks and energy storage⁵.

In many European countries, national governments and/or NRAs are also defining the goals to be achieved in terms of innovation and adaptive regulation in their strategic plans or orientation frameworks.

NRAs already rely on experimental regulatory tools to test and anticipate future evolutions such as 1) **regulatory sandboxes**, 2) **pilot projects** or 3) **pilot regulations**.

Some NRAs already have regulatory sandbox regimes or pilot projects in place; some others are in the process of setting these up. Pilot projects are put in place to trial on a local basis new and modern solutions (advanced measurement systems, self-consumption, electric vehicles, storage, flexibility, renewable energy sources (RES), etc.) or to contribute, more broadly, to the better functioning of the electricity wholesale market and system operation.

A more comprehensive approach to innovation is at the core of pilot regulations which are new and transitional regulatory frameworks put in place for a limited time frame (a few years) to consolidate experience and learn through these early applications before introducing a new regulatory regime. Pilot regulations are open to all market players willing to deploy innovation consistent with an innovative framework.

It appears that the **major trends driving DR** are: (increasing share of) RES generation, smart technologies such as adaptive thermostats, and other trends e.g. sector coupling, new uses for gas networks and deployment of electric vehicles.

⁵ CEER's [Partnership for the Enforcement of European Rights \(PEER\)](#) initiative aims to bring together interested authorities from various sector to share knowledge and exchange information.

Consumer involvement is key to support innovation and most NRAs take into consideration consumer views through consultations, transparent discussions or even through dedicated task forces or consultation bodies. Where innovation incentives are set through network tariff regulation, one of the objectives is very often to reduce overall costs paid by consumers, as addressed in the CEER paper on whole system approaches⁶. NRAs are in constant exchanges with stakeholders (i.e. regulated entities and market players) but also with academics, consumer representatives or other authorities (e.g. Think Smartgrids in France).

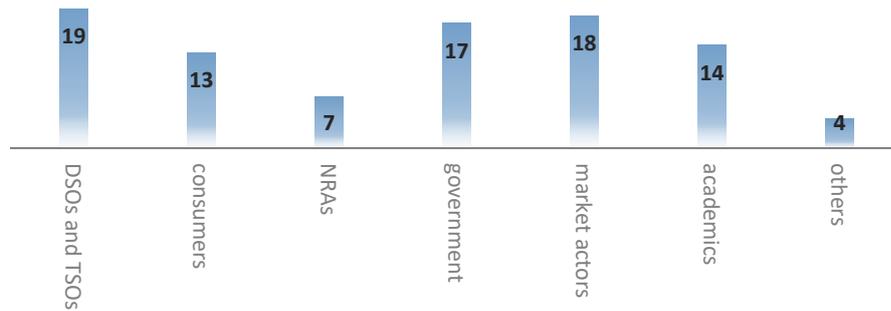


Figure 1 – Main cooperation partners of NRAs in regard to energy sector evolution

The main areas where **DR tools** have been implemented are the tariff structure, the price or revenue controls and smart metering. In many countries, NRAs are already implementing DR tools and four regulators have already implemented regulatory sandboxes. For countries which do not implement regulatory sandboxes, the following tools of DR are commonly used to implement the projects:

- “Classic regulation tools” such as output-based incentive regulation;
- Widening and innovating the participation/consultation of market participants in the process; or
- Pilot projects, pilot regulations and regulatory experiments.

The table below highlights seven examples of regulatory sandboxes and regulatory experiments that have already been put in place.

Country	Example
Austria	The Austrian NRA (E-Control) sets the functional requirements of smart meters in their ordinances and did not put down detailed technical specifications. This enables system operators to define their requirements for smart meter systems and adjust them flexibly according to new developments, e.g. if more efficient solutions become available through advances (such as increasing digitalisation).

⁶ [CEER Paper on Whole System Approaches](#), Ref: C19-DS-58-03, 30 June 2020.

Country	Example
France	The French NRA (CRE) and the French Ministry of Ecological and Solidarity Transition can select market participants on which to test innovative products or services with adapted regulatory requirements. The energy-climate law ⁷ allows the NRA to grant derogations from conditions of access to and use of networks and facilities for the experimental deployment of innovative technologies or services for energy transition and smart grids and infrastructure.
Germany	The digital Agenda for the Energy Transition (“ <u>SINTEG</u> ”) combines digitisation and experimentation. A key goal within the SINTEG programme is to obtain practical experience and to use this to enhance the regulatory framework. The Federal Government has, therefore, adopted an ordinance that provides a temporary framework for experimenting (SINTEG ordinance ⁸).
Italy	In Italy two recent initiatives of DR have been launched by the NRA (ARERA): 1) The pilot regulation on flexibility services (UVAM) aims at testing the voluntary participation in the ancillary services market (MSD) of small-scale and RES production units as well as flexible consumption units, including storage, currently not enabled to that market, on an aggregate basis. These constitute the Mixed Enabled Virtual Units (UVAM). The pilot regulation aims at testing to what extent widespread generation and final customers are really capable of providing flexibility resources on an aggregate basis. The results of the pilot regulation will be considered for subsequent regulatory innovation initiatives; 2) Regulatory experiments: Distribution System Operators (DSOs) can present a “regulatory experiment”, i.e. their own proposal for a new incentive scheme. In the regulatory experiment, the DSO may request a waiver to any of the several aspects of the incentive regulation (including valuation of energy not supplied, algorithms for calculating rewards and penalties, etc.), except the final target of continuity requested at the end of the four-year period of reference. The proposals submitted by DSOs are scrutinised and need to be approved (even with amendments) by the regulator. In case the “regulatory experiment” is approved, DSOs are relieved from the ordinary incentive regulation for four years.

⁷ [LOI n° 2019-1147 du 8 novembre 2019 relative à l'énergie et au climat](#) (Article 61), 8 November 2019.

⁸ [SINTEG-Verordnung](#), 14 June 2017.

Country	Example
Lithuania	<p>The Energy Innovation Pilot Environment (pilot environment) was introduced following amendments of the National Law on Energy adopted in April 2020, which includes new definitions for energy innovations. With these amendments, the Lithuanian NRA (VERT) will be responsible for the preparation of the procedures for the operation in the pilot environment, for the determination of criteria for definition of energy innovation, and for the measures incentivising innovations. Innovators will be allowed to operate in that pilot environment where there would be: no regulation of energy activities implementing innovation; exemption from sanctions; and guaranteed incentivising measures. The objective is to assess the potential impact of energy innovation on consumers and the energy sector, in order to identify potential regulatory deficiencies in energy innovation.</p>
The Netherlands	<p>In the Netherlands, a regulatory sandbox regime is in place to allow communities and homeowner associations to apply for legal exemptions. The request needs to be made by those actors but it can include DSOs. The sandbox application is assessed by the Netherlands Enterprise Agency (part of the Ministry of Economic Affairs) and the Dutch NRA (ACM).</p>
UK	<p>In 2017, the British NRA (Ofgem) launched its Innovation Sandbox Service as a means of experimenting with ways of enabling innovation which do not readily fit with the rulebook. It plays a role in supporting innovators in launching new low-carbon products and services. The sandbox service is aimed at helping innovators that want to offer something different to energy consumers: this can be a new product, service, business model or way of doing something. It can support innovators in undertaking trials or entering the market.</p>

Table 1 – National examples of regulatory sandboxes and regulatory experiments

CEER notes that in 2021, it is developing a report on dynamic regulation from the NRAs' perspective (tools and processes). This report will give a more in-depth look at many of the issues addressed in a brief and introductory way in this present document.
