

Report on the regulatory involvement in the implementation of different RES technologies

Katalin Véhmann dr.

international coordinator for energy


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to **map and describe** what **roles, competencies or mandates** the participating NRAs possess in RES regulation

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to set up an inventory of duties regulatory authorities may perform in the regulation of RES related issues and tasks

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to give an **overall picture** based on which each ERRA member can assess where they currently stand and what RES related regulatory tasks and challenges they might face in the future

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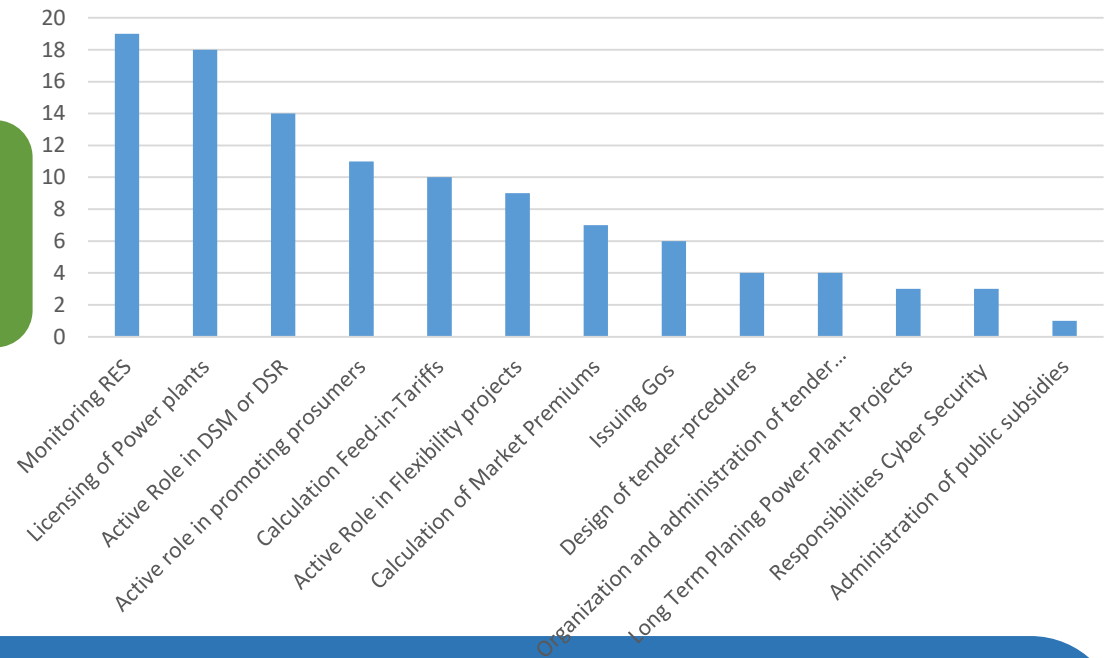
to pay special attention to those **innovative market, flexibility or digitalization related tasks** connected to RES integration

Survey: 1st half of 2021,
21 organisations
(countries) participated

Results derived from
the survey were
presented (June and
September 2021)

Drafting the report –
MEKH (end of 2021)

The activities of regulators



The first figure shows the results of the surveys conducted on the RES related regulatory activities and tasks in 2021.

The most common tasks of the regulatory authorities are the classical ones: **monitoring, licensing and FiT/market premium calculating activities.** Tender procedures, GOs, few flexibility projects can also be partly found among the NRAs' roles but other future-oriented activities like cybersecurity or long term planning of power plants are quite rare.

Tasks, laws, competencies and unspecified duties

- Most of the regulators' activities are based on laws, and in many cases regulators have additional competencies to specify duties of market participants
- Only few activities such as monitoring RES and activities in relation to DSM or DSR are not regulated by law in some cases.
- Activities in relation to tender procedures are rare although their legal base seems to be in place for more than half of the participating regulators.
- Unspecified duties (without clear legal mandate) occur rarely to almost all types of activities (except for tendering, long term planning, cybersecurity, public subsidies)

Strengths and weaknesses of the regulators' activities

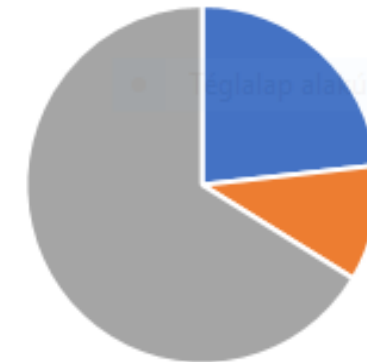
- More than a third of the activities are associated with **transparency**.
- Nearly a third of the activities are linked to **clear legal requirements**, and some of them were mentioned to be **effective** or **well allocated**.
- In some cases **missing resources, IT infrastructure** for different regulatory activities
- The majority also pointed out challenges referring to **missing legal base**. The missing legal base might refer also to secondary legislation or implementing rules, not directly to the primary law.

The activities are associated with...



■ Effective/efficient ■ Transparent ■ Clear legal requirements ■ well allocated

What is missing?



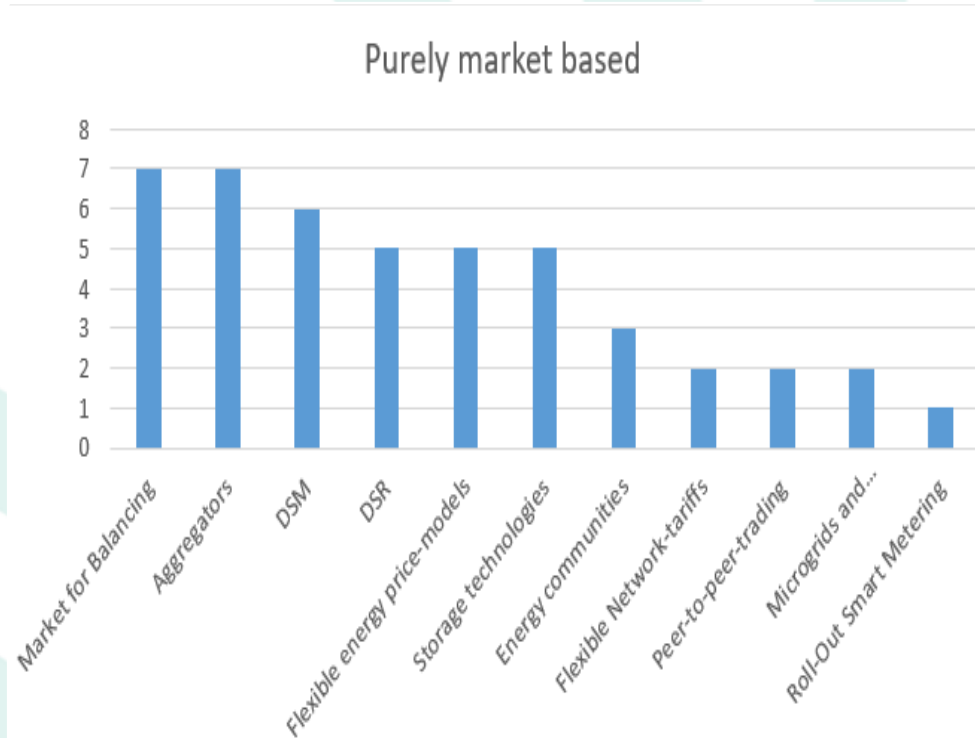
■ ressources ■ missing IT ■ missing legal base

Introduction and Regulators' involvement in new services/technologies

- **The participation** in future orientated services and technologies is **rather low**.
- For the majority of the NRAs involvement in the balancing markets is an important and widespread practice.
- Activities related to flexible network tariffs, DSM/DSR are relatively frequent. However, energy communities, peer-to-peer trading and power-to-X technologies are rarely in the regulators' focus.
- The practical evidence of the new services and technologies is in general **rather low**, especially in the cases of aggregators, flexible network tariffs, power-to-X technologies, energy communities and peer-to-peer trading.

Summary of the most relevant services/technologies: Smart metering roll-out, Market for Balancing, Microgrids and Microgeneration

- introduced largely to the same extent, i.e. in almost half of the countries
- the basic framework is more or less established, balancing markets are established in the widest scope of the countries
- for the balancing market both completely regulated and purely market based models are represented on relatively equal footing but with the highest regulatory involvement compared to the two other services.



The role of the market with regard to the new services/technologies

- Rather limited role
- More common: for balancing markets, aggregators, DSM/DSR activities – worth to follow up an improve
- Very little: flexible network tariffs, peer-to-peer trading, microgrids, microgeneration, smart metering

Conclusions

regulators have an **important role in promoting RES,**

regulators have **specific tasks** in many cases with **additional competences** vis-a-vis legal requirements;

regulators are **strongly limited by laws** but in some cases they miss legal requirements for specific tasks;

regulators are strongly focusing on **administration, monitoring and organisation of existing systems;**

regulators regard themselves as transparent and efficient;

regulators are sometimes missing **resources and IT infrastructure** for their activities;

regulators seem to have **limited involvement in new markets, services and technologies**

To efficiently manage all the RES policy related regulatory issues

- energy regulatory authorities **HAVE**
 - **system-level knowledge** and perspective **independent** from any political or market influence
 - wide, **multidisciplinary engineering, legal, economic skills** and **experience** in designing of complex systems, elaboration of legal and technical terms and conditions, introducing and implementing market based procedures and processes
- energy regulatory authorities **NEED**
 - **the necessary legal background**
 - **sufficient resources**

Thank you for your attention!

Katalin Véhmann dr.

E-mail: vehmannk@mekh.hu

Hungarian Energy and Public Utility Regulatory Authority

Clean energy, sustainable environment