

Implementation aspects of a regulatory scheme for efficiency and innovation

A Eurelectric response paper

March 2024

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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<https://fsr.eui.eu/consultation-on-implementation-aspects-of-a-regulatory-scheme-for-efficiency-and-innovation/>

Background

The Florence School of Regulation (FSR) launches a public consultation, on behalf of ACER, on the main implementation aspects of a possible scheme for incentive-based regulation of networks to promote efficiency and innovation in addressing electricity system needs.

In Spring 2023, FSR was tasked by ACER with the development of a regulatory scheme for the promotion of efficiency and innovation in addressing electricity system needs. FSR presented a proposal at June 2023 Copenhagen Forum, which was later detailed in a report for ACER.

In Fall 2023, FSR continued its work on the topic and consulted national regulatory authorities (NRAs), transmission system operators (TSOs) and the wider community of stakeholders on the general aspects of the proposed regulatory scheme.

Details matter

Encouraged by the generally positive reactions to the first consultation, FSR is exploring the main implementation aspects of the proposed regulatory scheme, such as the discount rate and the sharing factor to adopt or the time profile of the incentive, and would like to consult NRAs, TSOs and the wider community of stakeholders on them.

Consultation on implementation aspects of a regulatory scheme for efficiency and innovation by FSR (EUI)

Consultation questions

The following questions refers to the incentive scheme to promote more efficient innovative solutions to system needs described in the FSR Report of June 2023

(https://www.acer.europa.eu/en/Electricity/Infrastructure_and_network%20development/Infrastructure/Documents/Benefit_based_regulation_2023.pdf), outlined in Section 3 and whose implementation is exemplified in Section 5 of this consultation.

General Eurelectric remarks:

Eurelectric welcomes the initiative to put **incentive-based regulation** in the spotlight. Eurelectric would like to highlight that **innovative solutions should be incentivised if they are more efficient or even at equal cost to the standard way**.

We regret that the report **only focuses on TSOs and omits the DSO perspective**, though **the majority of renewable connections are happening on DSO level leading to more innovative solutions**.

Eurelectric supports that the **NRAs shall always invite network operators to identify system needs**, and the NRAs shall **include network operators' viewpoint on costs of both standard and innovative way of solutions to tackle system needs**. The **risk of future cost shall be split between network operators and network users**.

Eurelectric supports that **TSOs and DSOs shall be incentivised to use innovative solutions** and the **revenues** (difference between standard and innovative solutions) **shall be split**

between network operators and network users. Regarding the ratio of the split, Eurelectric suggest that the benefit ratio shall be fixed and preset +/- 50%, depending on the countries existing regulatory regime whether it already promoted innovation or it will start in the future.

FSR suggested that incentive is assessed over a time horizon equal to the economic life of the longest-living asset in the standard way. Eurelectric suggests a shorter time horizon tailored to innovative solutions' lifetime, as network operators will only invest in such new solutions if the regulatory environment is stable and the payback time reflects real lifetime.

Eurelectric also supports more incentives for timely deployment (bonus). Penalties shall only be applied if they exist for standard solutions and only after a grace period.

Consultation questions

a) Do you consider that the identification of the system need(s) to which the proposed scheme could be applied poses a significant challenge to regulators, also taking into account that TSOs might support such an identification?

☒ Yes ☐ No

The system is increasingly complex, with multiple factors that are not properly addressed at present.

b) If Yes: do you consider that such a challenge is greater than those associated with general transmission system planning?

☐ Yes ☒ No

Networks Operators should propose system needs to the NRA, including them into their business plans to be approved by the Authority. The Authority shall ensure that the proposed system needs are appropriate and delivered as planned, through adequate incentives. This concept is fully aligned with the TOTEX regulation.

c) If Yes: in which way?

d) Do you consider that the identification of the traditional standard solution to the identified system need(s) poses a significant challenge to regulators?

☒ Yes ☐ No

Yes, as a traditional solution has to be compared with an innovative one. As example: a deployment of a new 300 km-long line not only provides higher cross-border capacity, but also additional resiliency (n-1) and readiness for midterm additional flows that will appear with higher electrification and renewables; whereas dynamic line rating systems will just allow to increase the cross-border capacity. Hence, both measures might be implemented.

f) If Yes: do you consider that the experience in addressing similar system need(s) in the past can assist in identifying the traditional standard solution to such need(s)?

☒ Yes ☐ No

Yes, the current energy transition environment is more complex, and it is very challenging to isolate and identify a unique system need, instead system operators solve multiple needs at the same time with a unique asset.

g) If No: why? _____

h) Do you consider that the definition of the costs of the traditional standard solution to the identified system need(s) poses a significant challenge to regulators?

☒ Yes ☐ No.

Yes, especially in the current macroeconomic environment, with supply chain disruptions, high interest rates, geopolitical tensions, and high competition to attract capital and resources for the energy transition.

i) If Yes: do you consider that the experience and the unit cost indicators for electricity transmission investments provided by ACER could assist in overcoming this challenge?

☒ Yes ☐ No

j) If No: why? _____

k) Do you consider that regulators would find it difficult to assess and endorse the more efficient, innovative solutions to address the identified system needs proposed by the TSO(s)?

☒ Yes ☐ No

l) If Yes: do you think that such difficulties are greater than those involved in approving new investments to be included in the Regulatory Asset Base?

☐ Yes ☒ No

m) If Yes: in which respect?

n) In your views, which discount rate should be used to compute the net present value of the streams of annual allowed revenues related to the traditional efficient solution and the more efficient, innovative solution to the same system need(s)?

☒ the WACC

☐ the SRTP (approximated by the interest rate on government bonds)

☐ the social discount rate of 4% recommended by ACER for cost-benefit analysis

☐ Other

o) If Other: Please specify _____

p) Please explain the reasons for your choice of the discount rate

Eurelectric suggests the use of the local regulated WACC as a discount as it reflects country specific investment environment, and as this will guarantee a correct valuation of benefits that a solution will generate further in the future. The discount rate shall be fixed for at least a year or several years, e.g. fixed for the regulatory cycle, as investment are more probable to happen in a stable environment. However, the 4% discount rate recommended by ACER is also broadly adopted and predictable which promotes investments.

q) Do you consider that the sharing factor should be fixed or should vary – increasing or decreasing – with the extent of the saving delivered by the more efficient, innovative solution?

[O Fixed](#)

[O Increasing with the savings \(progressive\)](#)

[O Decreasing with the savings \(regressive\)](#)

r) What level or range for the sharing factor would you consider the most appropriate in the trade-off between providing effective incentives to TSOs and delivering cost-saving benefits to grid users?

[Eurelectric proposes +/- 50% benefit share which shall be adjusted to the local regulatory environment as some Member States are ahead of others in the regulatory framework for the promotion of innovation in which case below 50% benefit share might be adequate. Some regulatory schemes did not promote innovation so far in which cases above 50% benefit share could be applied.](#)

s) Please explain the reasons for your choice for the level or range of the sharing factor

[Eurelectric would like to address that incentives for innovation are even more urging in DSO Regulation as the majority of renewable connections are happening on DSO level causing enormous technical challenges for DSOs. TSOs and DSOs shall be incentivised, however, the revenues shall be split between network operators and network users. The sharing factor should be defined ex-ante by the network operator.](#)

[Eurelectric proposes +/- 50% benefit share which shall be adjusted to the local regulatory environment.](#)

[We also recommend incentives in regulation for DSOs to address the growing need for distribution infrastructures to meet the 2030-2050 RePower EU challenges.](#)

t) Which profile of the incentive would you consider the most appropriate in the trade-off between providing effective incentives to the TSO(s) and delivering cost-saving benefits to grid users?

[To make the innovative investments happen, the incentive should be paid in a time horizon reflecting innovative solutions' lifetime and it should be defined ex-ante \(predictable and stable regulation\).](#)

u) Please explain the reasons for your choice for the profile of the incentive to the TSO(s)

[Innovative solutions usually include more smart elements than the traditional ones. Smart asset have usually a shorter lifetime than standard assets. The incentive efficiency is maximised with a short term payback-time ensuring the system operators short implementation of the innovation and as a result a quick return of the benefits to the network users and operators.](#)

v) Is there any other aspect not mentioned in the previous questions which you consider particularly challenging for regulators in implementing the proposed scheme? Please, justify your answer.

[In ACER's proposal NRAs become even more involved in technological decision making as they give incentives to TSOs and DSOs for efficient, innovative investments. This implies that some of the responsibility for taking those decisions and for the result that those decisions will generate in terms of fostering the transition will be borne by the NRAs. This way the NRAs](#)

will ultimately and actively influence the resulting technology mix at the system operators. E.g. if too much incentivization was placed a solution that turn out not to be “future-proof” there will be a relative overinvestment and too little in technologies that proof to be more efficient long-term and vice versa.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



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