



## CEER Online Specialised Training on Network Incentive Regulation and Innovation

## **Two-week online training**

# **Online Classes:**

# 14:00-17:00 (CEST) on 13 April 2021 14:00-17:00 (CEST) on 14 April 2021 14:00-17:00 (CEST) on 15 April 2021

## COURSE PROGRAMME

#### Level B: Specialised Course

Energy network revenues and tariffs are set by energy regulators to help ensure value for money and security of supply. There is also a focus on incentivising a high quality network service. Competitive pressures through incentives are effective in leading companies to choose the strategies that ensure the best performances.

In addition, there are now significant developments impacting on the network businesses. Elements such as innovation, flexibility and digitalisation are potential ways to provide for network efficiency and other performance outcomes. Their benefits should, however, also be balanced with the costs for customers. There is also a clear distinction between incentives for DSOs and TSOs through allowed revenues and incentives for network users through network and connection tariffs.

Energy regulators must carefully evaluate the costs of regulated companies to determine a fair return on capital while ensuring that customers do not pay more than necessary. This allowed revenue (whose calculation methodology is determined nationally) is then recovered via network tariffs, themselves carefully designed to reflect the costs of serving network users. There is no single regulatory incentive model appropriate for the diverse set of DSOs and TSOs that exist across Europe. Energy regulators must decide on the inclusion and design of relevant elements in incentive schemes based on the regulatory framework and the characteristics of the industry in each Member State.

This tailor-made CEER's online training programme will help energy regulators deliver the expertise in setting network incentive regulation and supporting innovation. The programme will cover the principles of network incentive regulation in the context of significant developments impacting on the energy network such as innovation, flexibility and digitalisation. It will include specific case studies on how to design the incentive schemes at the transmission and distribution level and how to switch from cost plus to incentive-based regulation. It will discuss the regulatory frameworks and tools for regulators to support innovation in electricity and gas transmission infrastructure. In addition, the participants will be provided with the practical examples on how to use regulatory sandboxes to support innovation in the energy sector.



# **COURSE PROGRAMME**

#### Structure of the course:

- Week 1: Individual preparation to the course Literature review, reading materials, preparation of exercises and course work: ideally 6-13 April 2021
- Week 2: Three Online Sessions:
- Online Class 1 on Network Incentive Regulation Principles and Practices Part 1: 14:00-17:00 (CEST) on 13 April 2021
- Online Class 2 on Network Incentive Regulation Principles and Practices Part 2: 14:00-17:00 (CEST) on 14 April 2021
- Online Class 3 on Incentive Regulation and Innovation: 14:00-17:00 (CEST) on 15 April 2021

## Online Class 1, 14:00-17:00 (CEST) 13 April 2021

**14:00-14:20** Opening remarks, round-table introduction of the participants and introduction of the programme and the online format.

- Mr Alexander Lüdtke-Handjery, BNetzA, Germany, Course Director
- Ms Anh Tran, CEER Training Manager

#### **SESSION 1 NETWORK INCENTIVE REGULATION – PRINCIPLES AND PRACTICES**

Traditionally, cost-plus and rate-of-return models were widely used for tariff regulation purposes as the means for regulated companies to recover allowed revenues. However, these models were considered to lack incentives for regulated companies to minimise costs and, conversely, could lead to 'gold-plating' and inefficient investment choices. This led to the emergence of incentive-based regulatory approaches, including price controls, with penalty and reward tools linked to attempts to improve network performance. More recently, market trends such as innovation, flexibility and digitalisation are influencing the development of an output-based model, with the Clean Energy Package provides the frame for the new market design. These new challenges call for new design in setting incentive regulation by energy regulators.

**14:20-15:00** Principles of incentive regulation.

- a) New challenges call for new regulation smart networks, demand-side response, intermittent generation sources (renewables, distributed generation).
- b) Different models of incentive schemes in Europe to incentivise network utilities to deliver improvements (on cost efficiency, service levels, investments and research/development/demonstration, etc.).
- c) Similarities and differences in providing incentives for gas and electricity networks.





- d) Similarities and differences in providing incentives for transmission and distribution networks.
- Mr Matthew Roberts, Frontier Economics

#### Q&A

**15:00-15:30** Group work: How incentives work in practice.

Discussion in small groups to apply learning from issues addressed during the previous session.

Mr Matthew Roberts, Frontier Economics

Q&A

#### 15:30-15:45 Short break

- **15:45-16:30** National regulatory framework and practical experience on how to switch from cost plus to incentive-based regulation. Case study from Germany.
  - Mr Alexander Lüdtke-Handjery, BNetzA, Germany, Course Director

#### Q&A

**16:30-17:00** General discussion and wrap up of Online Class 1.

Mr Alexander Lüdtke-Handjery, BNetzA, Germany, Course Director

#### - END FIRST DAY -

#### Online Class 2, 14:00-17:00 (CEST) 14 April 2021

- **14:00-14:45** National case study in applying incentive tools: the role of regulation in the digitisation of electrical distribution grids and approach at ARERA.
  - Mr Samuele Larzeni, ARERA, Italy

Q&A

- **14:45-15:30** National case study in applying incentive tools: approach at NVE-RME regarding cost efficiency at the transmission and distribution level in Norway.
  - Mr Tore Langset, NVE-RME, Norway

Q&A





#### 15:30-15:45 Short break

- **15:45-16:15** Group work: Different incentive schemes in Europe and how they work in practice.
  - Mr Alexander Lüdtke-Handjery, BNetzA, Germany, Course Director
- **16:15-16:45** Challenges of digitalisation and incentives for use of flexibility for the energy sector and the role of energy regulators to design incentive-based regulation and setting regulated revenues to enable digitalisation and the use of flexibility.
  - Mr Veli-Pekka Saajo, Energiavirasto, Finland
  - Q&A

**16:45-17:00** General discussion and wrap up of Online Class 2.

• Mr Alexander Lüdtke-Handjery, BNetzA, Germany, Course Director

#### - END SECOND DAY -

## Online Class 3, 14:00-17:00 (CEST) 15 April 2021

#### SESSION 2 INCENTIVE REGULATION AND INNOVATION

More and more innovation is needed to keep up with the pace of changes in the energy markets. How do regulators approach and implement adaptive regulation and regulatory framework to ensure that regulatory models can support innovation and optimise the balance between flexibility and stability? As a main principle, regulators consider that regulation must be stable, but not static and coherent with the fast-changing environment and market evolutions whilst continuing to protect the European energy consumers' interests. The most commonly used tools by regulators to support innovation are regulatory sandboxes, pilot projects and pilot regulation which can be implemented via tariff regulation, exemptions and flexibility. This session will explore the link between incentive regulation and innovation and the regulatory frameworks and tools for regulators to support innovation in electricity and gas transmission infrastructure. It will include practical examples from different countries in using regulatory sandboxes to support innovation.

- **14:00-14:30** The regulatory frameworks and tools for regulators to support innovation in electricity transmission infrastructure.
  - a) The link between incentive regulation and innovation.
  - b) Tools available for regulators to support innovative projects in electricity transmission infrastructure.
  - c) Practical examples of regulatory frameworks for innovation in Member States.





 Mr Riccardo Vailati, ARERA, Italy, Chair CEER Electricity Infrastructure Work Stream

Q&A

- **14:30-15:00** The regulatory frameworks and tools for regulators to support innovation in gas transmission infrastructure.
  - d) The link between incentive regulation and innovation.
  - e) Tools available for regulators to support innovative projects in gas transmission infrastructure.
  - f) Practical examples of regulatory frameworks for innovation in Member States.
  - Ms Carola Millgramm, E-Control, Austria, Co-Chair CEER Gas Infrastructure Work Stream

Q&A

- **15:00-15:30** Group work: Different tools available for regulators to support innovative projects in Europe and how they work in practice.
  - Mr Alexander Lüdtke-Handjery, BNetzA, Germany, Course Director

15:30-15:45 Short break

- **15:45-16:15** Case study of using regulatory sandboxes to support innovative projects in France.
  - Mr Guillaume Magnien and Ms Natalia Baudry, CRE, France

Q&A

**16:15-16:45** Case study of innovation in the network price controls in the UK.

Ms Laura Hutton, Ofgem, UK

Q&A

16:45-17:00 Wrap-up of the course.

- Mr Alexander Lüdtke-Handjery, BNetzA, Germany, Course Director
- Ms Anh Tran, CEER Training Manager

- END OF THE COURSE -