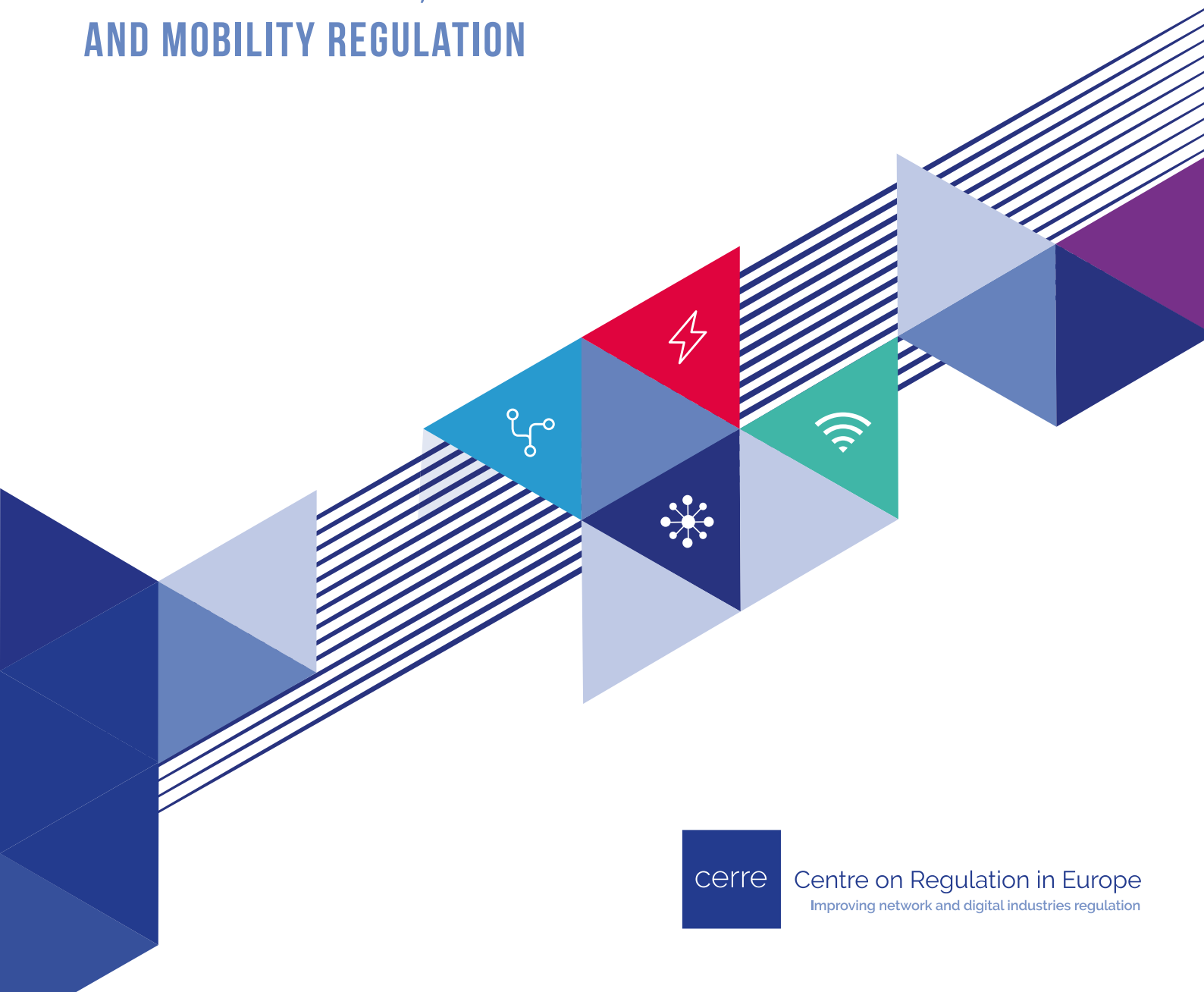


AMBITIONS FOR EUROPE 2024

RETHINKING DIGITAL, ENERGY
AND MOBILITY REGULATION



Centre on Regulation in Europe
Improving network and digital industries regulation





CONTENTS

FOREWORD FROM THE DIRECTOR GENERAL	4
SMART RULES AND INSTITUTIONS	6
AN INNOVATIVE DIGITAL EUROPE	8
A FAIR, EFFICIENT AND SUSTAINABLE ENERGY UNION	12
A DECARBONISED, DEPENDABLE MOBILITY SYSTEM FOR ALL	14
ABOUT THE AUTHORS	16
ABOUT CERRE	18



FOREWORD FROM THE DIRECTOR GENERAL

SMARTER REGULATION TO BRING EUROPE CLOSER TO ITS CITIZENS

The European project is going through a profound crisis. Rising inequalities, rapid digitalisation and the increasing impact of climate change are having unprecedented effects on our lives and our societies. The perceived lack of action around those issues is fuelling a deep distrust in traditional political forces and institutions. Regaining European citizens' trust is now a fundamental responsibility for the new EU leadership. Smarter regulation, which puts innovation, sustainability and fairness at its core, is crucial to empower EU citizens and restore trust in suffering democracies.

Delivering on Europe's climate, digital and mobility ambitions, as well as strongly defending European values of democracy, solidarity and the rule of law are challenging tasks. Yet they are achievable if European institutions act together in these critical sectors for the European economy and society. With the CERRE White Paper 2019-2024, CERRE's academic team has conducted an independent policy analysis and makes concrete recommendations for smarter regulation for the digital, energy and mobility sectors.

The ongoing digital revolution offers countless opportunities to improve Europe's economy and society. Much digital innovation comes from European start-ups. It is essential therefore that the EU secures the main ingredients for their take-up and scale-up, such as access to data, skills and computing power, as well as to risky capital. But the digital shift comes with its own challenges and threats. The economic power of some digital companies exceeds that of many EU Member States. To guarantee its digital sovereignty, Europe needs to replace national rules by common EU regulation that promotes innovation and fairness. To be effective, this regulation should possibly be enforced by a common EU regulator.

Waves of grassroots movements across Europe have clearly shown that urgent climate action and greater social justice go hand in hand. The energy transition indeed has a cost, which must be borne in a fair way, taking account of the European value of solidarity. European policies must from now on directly address citizens' concerns about the distribution of the cost of climate policies. This involves taking distributional effects into account in new policy design but also incorporating them into current legislation and regulation.

Europe's promotion of mobility of goods and people without properly pricing external costs, such as pollution, is one example of some of the fundamental incompatibilities of the Union's own decarbonisation ambitions. Restraining mobility is economically, socially and politically unacceptable, yet European policies must fairly and efficiently encompass those external costs.

Finally, with technologies and business models changing quickly and unpredictably, Europe will need to move from the detailed, micro regulation of yesterday to new, principle-based regulation. Regulatory authorities should test and experiment with new regulatory solutions in partnership with all stakeholders. Regulators, like all of us, should learn by doing, to the mutual benefit of service providers and customers.

In tune with today's reality, smarter regulation should be the hallmark of a European Union dedicated to working for its citizens. This will contribute to the much-needed consolidation of our democracy and to a stronger Europe.

Bruno Liebhaberg

This memo gathers CERRE's recommendations and ambitions for the 2019-2024 term of the European institutions. It is a summary of a detailed analysis developed by CERRE's academics.

www.cerre.eu/EUambitions



SMART RULES AND INSTITUTIONS



Scan for more info about
CERRE's ambitions for ever better regulation
www.cerre.eu/EUambitions

DEVELOP AGILE RULES TO KEEP UP WITH RAPID AND UNCERTAIN EVOLUTIONS

Today's economy is dynamic, global, more difficult to predict and subject to rapid changes in technologies and business models fuelled by accelerated innovation. Regulation and institutions should adapt to remain effective in delivering their core objectives, such as innovation, sustainability and fairness.

AMBITIONS

- ▶ Develop **flexible** and **principle-based regulation** to adapt to changing technologies and markets.
- ▶ Make use of **self or co-regulation** reflecting the views and the interests of all stakeholders to deal with the high **asymmetry of information** between the regulated firms and the regulators, and to deal with the **novelty of some regulatory issues**.
- ▶ Be more **experimental** when enforcing and designing rules, to gather evidence on what works best to achieve the desired outcomes, rather than immediately creating definitive remedies. For example, **regulatory sandboxes** allow for new business models to be tested in a 'safe environment'.

SEIZE THE OPPORTUNITIES OF DIGITAL TECHNOLOGIES TO IMPROVE REGULATION

Digital technologies such as big data and AI offer great opportunities to improve the performance and operations of regulatory authorities. These increasingly use technology for operations such as market surveillance and risk identification, in what is often referred to as 'RegTech'. While the development of RegTech presents many opportunities, it also raises ethical and legal issues that need to be addressed by the new European Commission.

AMBITIONS

- ▶ Make better use of **data-driven regulation** through greater data collection and big data analysis to improve the **performance of regulators** and **enable users** to make the market work better through well informed choices.
- ▶ Employ **artificial intelligence** techniques to improve regulators' operations such as compliance control or regulatory violation detection; and consider **compliance by design** where law and regulation are built into computer code.

STRIVE FOR FURTHER EU HARMONISATION AND EU ENFORCEMENT

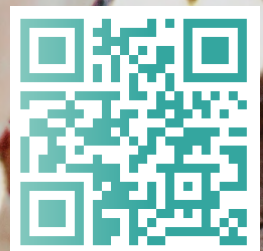
With the development of borderless digital technologies, the need for EU harmonisation of rules and enforcement is increasing. However, while more and more rules are harmonised at the EU level, they are enforced at the national level. To foster enforcement harmonisation, several EU networks of national regulators have been created and strengthened in recent years.

AMBITIONS

- ▶ Develop **unique rules at the European level** either through EU harmonisation or the mutual recognition of national rules, to make the internal market more credible and make regulation more effective when facing firms with global operations.
- ▶ Analyse whether an **EU regulator may be appropriate** where services are inherently borderless and firms are offering services in numerous EU Member States.



**AN INNOVATIVE
DIGITAL EUROPE**



Scan for more info about CERRE's ambitions for
the platform economy, media and connectivity
www.cerre.eu/EUambitions/digital

STIMULATE DIGITAL PLATFORMS' START-UP AND SCALE-UP

Digital platforms are powerful engines for growth and innovation and should be stimulated in Europe. While platforms rely on diverse business models, they have taken on a special role in the Internet economy. They are at the centre of policy debates as they exhibit some common economic characteristics such as inherent network effects, conglomerate effects within ecosystems or the collection and use of personal data that may challenge traditional regulatory approaches.

AMBITIONS

- ▶ Stimulate the **development of digital start-ups** in Europe by ensuring an **'innovation level-playing field'** and equal access to key digital innovation capabilities such as data, computing power, digital skills and risky capital.
- ▶ Stimulate **the scale-up of digital platforms** in Europe with **one set of rules as well as one enforcement** for the whole single market, possibly with the establishment of a single EU regulator for digital platforms.
- ▶ **Empower digital users** and ensure that they are **well informed** about the characteristics, as well as the monetary and non-monetary prices, of digital services. Ensure that they **can switch** between digital services through the development of service interoperability.
- ▶ Ensure a **safe Internet for all** by giving digital platforms appropriate incentives to detect and remove illegal and harmful content, while respecting fundamental rights.

ENSURE A DYNAMIC DATA AND AI SOCIETY THAT RESPECTS EU VALUES

As data is the new infrastructure for innovation, appropriate data governance is crucial for Europe's future. This is especially the case as data is one of the key ingredients for the development of AI, which itself is one of the most important economic, political and strategic challenges for Europe. The EU should ensure appropriate data governance and the development of AI in accordance with fundamental EU rights, values and liberties.

AMBITIONS

- ▶ Stimulate **data portability** by encouraging industry-led data mobility schemes and data sharing standards while preserving incentives to collect and store data.
- ▶ Make **data protection law fit for AI** by revisiting some of the fundamentals of privacy protection in light of the main characteristics of AI.
- ▶ Support **algorithmic explainability of AI** to inspire trust and the adoption of new technologies.

GRASP OPPORTUNITIES FOR NEW CONTENT CREATION AND DISSEMINATION FOR EUROPE'S CITIZENS

The media sector has radically changed from a nationally organised two-sided market model to an international and increasingly platform-based economy. European policies should play an instrumental role in dealing with the challenges and opportunities that this new market structure offers for content creation and consumption.

AMBITIONS

- ▶ Be more active in protecting **freedom of expression in Europe** and hold to account those Member States that fail to do so by making full use of **early warning mechanisms**.
- ▶ Safeguard the production and dissemination of **high-quality European content** through a coordinated European policy.
- ▶ Take a holistic approach to **assess the balance of power between those investing in content production and those aggregating and distributing it** and consider the extent to which EU law is contributing to a healthy balance.
- ▶ Discourage the economic or political profitability of **harmful and illegal content** through **transparent and accountable ex-post measures**.
- ▶ Enforce **transparency of ownership** structures to help safeguard **media pluralism**.

INVEST IN VERY HIGH CAPACITY DIGITAL INFRASTRUCTURE

The development of fixed and mobile very high capacity networks, such as fibre and 5G, is the prerequisite for the development of a thriving digital economy and society. The EU has just adopted a new rulebook for digital infrastructure that should now be implemented in the Member States with an investment- and innovation-driven spirit.

AMBITIONS

- ▶ **Unlock private investment** through effective implementation of the new rules. **Upgrade public investment** and resolve the misalignment between broadband ambitions and public funding commitments by revising the Broadband State Aid Guidelines to meet the 2025 connectivity targets.
- ▶ Provide the conditions for **investment and development of 5G infrastructure** while maintaining a competitive marketplace, in particular with speedy and efficient **spectrum allocation** and leverage the **virtualisation of networks** to maintain vibrant competition at the retail level despite fewer infrastructure players.
- ▶ Ensure the implementation of the **net neutrality principle does not prevent** the configuration of networks to match user needs and the **facilitation of cooperation with non-telecoms actors**, such as the automotive and healthcare industries.
- ▶ Increase the role of **demand-side** policies to deliver a faster adoption rate for digital technologies and promote the use of collective purchasing schemes.
- ▶ Realise the **Next Generation Internet** by fixing the old and accommodating the new with a more open and dependable Internet while addressing growing cybersecurity issues.





**A FAIR, EFFICIENT
AND SUSTAINABLE
ENERGY UNION**



Scan for more info about
CERRE's energy ambitions
www.cerre.eu/EUambitions/energy

FURTHER DEVELOP AN EFFICIENT SINGLE MARKET FOR ELECTRICITY AND GAS

The adoption of the Clean Energy Package represents an unprecedented EU-wide effort to rethink long-term policy and regulation. In the next five years, the strong climate change mitigation goal will be a driver for policymakers but also a source of complexity when addressing challenges in the energy system throughout Europe.

AMBITIONS

- ▶ **Expand the scope of the Emissions Trading System (ETS)** to include more sectors with at least 85% coverage and link it with similar schemes **around the world** to accelerate global decarbonisation.
- ▶ Strengthen demand-side policies to **improve the flexibility** of the electricity system by promoting demand-side inclusion in ancillary services markets.
- ▶ Build a coherent and long-term EU-wide regulatory framework for green gases and **hydrogen** and define the basis for **sector coupling**.
- ▶ Reinforce the **consumer agenda**, clarify the role of new actors (such as energy communities), and increase trust in the energy retail market for the long-term success of the EU energy market.

FOSTER INVESTMENTS FOR AN OPTIMISED INFRASTRUCTURE IN DECENTRALISED ENERGY SYSTEMS

Since the historic COP21 Summit, the European commitment to lead on climate change has consolidated the political ambition to decarbonise the European economy. Nevertheless, some crucial questions must still be solved such as the proper regulation of energy storage or the promotion of necessary infrastructure investments to adapt to new production and demand patterns.

AMBITIONS

- ▶ Foster optimal use of **monopoly energy networks** in the light of falling/flat overall energy demand.
- ▶ Encourage transmission owners to take **more risks in new projects** considering the uncertainty of future demand for energy networks.

- ▶ Implement fixed cost recovery that is fair to existing **network users** and encourage efficient use of the network.

- ▶ Stimulate **joint charging** for electricity and gas networks where this promotes heat decarbonisation.

- ▶ Increase energy **network interconnection** between European countries to fully complete a single European energy market.

- ▶ Boost **coordination between transmission and distribution** system operators to help create a level-playing field for market participation.

IMPROVE POLICY IMPLEMENTATION AND STRENGTHEN THE CONSUMER AGENDA

The Juncker Commission has marked one of the most ambitious terms for the deployment of integrated energy and climate policy. Europe now has to improve the implementation of existing regulation and policy instruments, better understand and manage distributional effects and strengthen the consumer agenda.

AMBITIONS

- ▶ Review the current **EU energy governance** structures and responsibilities to secure a smooth implementation of the Clean Energy Package.

- ▶ Take full account of the **social and distributional impacts of the energy transition** through the creation of a European Observatory that should monitor those impacts and recommend mitigation measures for current and future regulatory frameworks.

- ▶ Develop a framework for **energy data governance** that promotes broader energy policy goals through data transparency.

- ▶ Promote and spread good practices towards regulation and innovation by **national regulatory authorities (NRAs) in energy**.

- ▶ Promote innovation by NRAs with respect to national energy policy in order to generate regulatory innovation and **better alignment with citizen preferences**.



A DECARBONISED,
DEPENDABLE MOBILITY
SYSTEM FOR ALL



Scan for more info about
CERRE's mobility ambitions
www.cerre.eu/EUambitions/mobility

REGULATE TO ACHIEVE A DECARBONISED TRANSPORT SYSTEM

Decarbonising the European economy requires a sustainable mobility sector. Ambitious objectives have been set to reduce the environmental impacts of mobility without curbing the free movement of citizens or goods. To meet those objectives, policies should focus on achieving greater modal shift by making use of market-based incentives and pricing as well as focusing on technological change to lower vehicle emissions.

AMBITIONS

- ▶ Incentivise Member States to establish a **level-playing field** between transportation modes and assist them in implementing more efficient policies to achieve a **successful modal shift**.
- ▶ Develop EU and national mobility policies that fairly and efficiently internalise **external costs**, such as **pollution**, so that all modes of transport are priced to reflect those marginal social costs appropriately.
- ▶ Provide a sustained ambitious regulatory framework that allows for **technological** advances and the faster roll out of **electric** and **hybrid** vehicles.

GUARANTEE APPROPRIATE LEVELS OF COMPETITION, INVESTMENT AND PRICING FOR LONG DISTANCE MOBILITY

As the economy further globalises and Europe promotes citizens' movement, long-distance mobility has been increasing and the demand for it is likely to grow. All modes of transport benefit from these developments, regardless of their CO₂ emissions and impact on climate. The promotion of mobility of goods and people without properly pricing external costs, such as pollution, is fundamentally incompatible with Europe's decarbonisation ambitions.

AMBITIONS

- ▶ Complete the introduction of **competition in all modes of transport**, including for **rail**. Facilitate Member States' implementation of the fourth Railway Package and support **independent, empowered national regulators** to deliver appropriate reforms for their national markets.

- ▶ Support smarter, **economically viable investment** for improved rail infrastructure and carefully examine future investments – especially for **high-speed lines** – to determine the appropriate **mix of infrastructure upgrading and new build**.

- ▶ Make **distance-based charges** compulsory, and make the **ETS** a more reliable tool through an increased carbon price and reduce the number of free permits available. Consider an EU-wide approach to additional levies on airplane tickets or kerosene **fuel taxes** to fully internalise the **climate impact of various modes of mobility**.

IMPROVE URBAN MOBILITY TO GUARANTEE GREATER QUALITY OF LIFE TO CITIZENS

The impact of urban mobility on climate and citizens' health must be reduced. Sustainable public transit is an attractive solution. Yet it accounts for less than half of the mobility market, even in large cities. Digitalisation can help reduce costs and boost public transit in place of private vehicles. However, digitalisation alone is not enough and raises its own issues.

AMBITIONS

- ▶ Support the introduction of sustained, ambitious efforts to reduce the external costs of road traffic with **economic incentives**, such as tolls, which have proven to be more powerful than technical regulation in reducing traffic and pollutant emissions.
- ▶ Embrace carefully the opportunities of **digitalisation and shared mobility**, which can reduce congestion, pollution, and travel times, provided it primarily **replaces individual vehicles**. This requires a new division of labour between new and traditional mobility providers and a new regulation of mobility services.
- ▶ Make room for **shared mobility services** by using urban road space to promote these and introduce **urban road pricing** to encourage a shift from private cars.
- ▶ Address the challenges of the **collection and use of data** generated by mobility services and integrate new mobility providers into the public transit supply.

ABOUT THE AUTHORS

This memo is a summary of a detailed analysis developed independently by CERRE's academics.



Alexandre de Streel
CERRE Joint Academic
Director, Professor at
the University of Namur



Jan Krämer
CERRE Joint Academic
Director, Professor at
the University of Passau



Bruno Liebhaberg
CERRE Director General,
formerly Professor at
the Université Libre de
Bruxelles



Michael Pollitt
CERRE Joint Academic
Director, Professor
at the University of
Cambridge



Karen Donders
CERRE Research Fellow,
Lecturer at Vrije
Universiteit Brussel



Richard Feasey
CERRE Research Fellow,
Lecturer at University
College London



Wolter Lemstra
CERRE Research Fellow,
Associate Professor
at Nyenrode Business
Universiteit



Chris Nash
CERRE Research Fellow,
Professor at the University
of Leeds



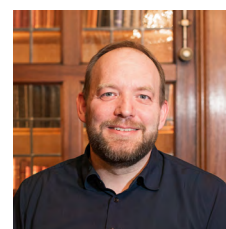
Monica Giuliatti
CERRE Research Fellow,
Professor at Loughborough
University



Chloé Le Coq
CERRE Research Fellow,
Professor at University
Paris 2 Panthéon-Assas



José Luis Moraga
CERRE Research Fellow,
Professor at Vrije
Universiteit Amsterdam



Bert Willems
CERRE Research Fellow,
Professor at Tilburg
University

This document was prepared with the support of the CERRE Secretariat: Lauriane Giet (Senior Communication Manager), John McSweeney (Senior Programme Manager), Máximo Miccinilli (Director, Energy), Jessica Galissaire (Project Manager).



Nils-Henrik von der Fehr
CERRE Joint Academic
Director, Professor
at the University of Oslo



Yves Crozet
CERRE Research Fellow,
Emeritus Professor
at the University of Lyon



Sally Broughton Micova
CERRE Research Fellow,
Lecturer at the University
of East Anglia



Friðrik Már Baldursson
CERRE Research Fellow,
Professor at Reykjavik
University



Catherine Banet
CERRE Research Fellow,
Professor at the University
of Oslo



Marc Bourreau
CERRE Joint Academic
Director, Professor
at Telecom ParisTech

ABOUT CERRE

The Centre on Regulation in Europe (CERRE) promotes ever-better regulation of network and digital industries in Europe and beyond.

We support rules that guarantee access to quality services at reasonable prices for all citizens, consumers and users today, while stimulating investments and innovation for tomorrow. These rules should safeguard citizens' rights and ensure strong consumer protection as well as appropriate competition between industry players.

The growing convergence and interactions between the energy, water, mobility, media, telecom and online economy sectors, create

new opportunities and challenges for regulation. CERRE's approach allows stakeholders, including policymakers and regulators, to actively adapt to fast changing technology, business models and markets. Although this memo focuses on the energy, digital and mobility sectors, CERRE continues to engage in other network industries, such as the water sector and other utilities.

The CERRE community supports applied research that guides political, regulatory and business leaders to take better decisions for all. To do so, CERRE develops and disseminates policy-oriented independent research undertaken by experienced economists, lawyers, engineers, political scientists and other acknowledged academics based all over Europe.



ACCESS THE CERRE WHITE PAPER 2019-2024

www.cerre.eu/EUambitions



SHARE ON SOCIAL MEDIA

@CERRE_ThinkTank



GET IN TOUCH WITH US

info@cerre.eu

* The views expressed in this memo do not necessarily correspond to those of CERRE's members.





Centre on Regulation in Europe
Improving network and digital industries regulation

Avenue Louise, 475 (box 10)
1050 Brussels, Belgium

 cerre.eu

 [@CERRE_ThinkTank](https://twitter.com/CERRE_ThinkTank)

 info@cerre.eu