

cerre

Centre on Regulation in Europe

# CERRE WHITE PAPER

## AMBITIONS FOR EUROPE 2024

---

September 2019

**SMART RULES &  
INSTITUTIONS**



# CONTENTS

INTRODUCTION .....	2
ADAPTIVE AND PRINCIPLES-BASED REGULATION .....	3
DIGITALLY-BASED REGULATION AND REGTECH .....	5
EU RULES AND ENFORCEMENT .....	6
ABOUT THE AUTHOR.....	8

## INTRODUCTION

The modern economy has several characteristics that should shape current and future regulatory design. It is **dynamic**, with rapid changes in technologies and business models fuelled by the increasing impact of innovation. It is **unpredictable**, with innovation which is often disruptive and difficult to anticipate. It is **global**, with many firms, in particular in the digital sector, offering their services all over the world.

To remain effective in delivering their core objectives, such as innovation, sustainability and fairness, our rules and institutions should adapt to this dynamism, unpredictability and global dimension.

They should also seize the opportunities of digital technologies such as big data and Artificial Intelligence (AI) to improve their effectiveness and efficiency. We propose three ambitions to adapt EU rules and institutions to the economy and society of the 21<sup>st</sup> century.

## Ambition #1: Adaptive and principles-based regulation

### *Principles-based rules*

Given the increasingly rapid and uncertain evolution of markets, **regulation should be principles-based** to adapt more easily as technologies and markets change.<sup>1</sup> This is the case of the e-Commerce Directive which is short and has remained robust while digital technologies have dramatically changed since the Directive was enacted nearly 20 years ago.<sup>2</sup> Those **principles should then be clarified through their implementation** by administrative and independent regulatory authorities, and if needed by the legal system, which are the best placed to apply the rules taking into account all the characteristics of the case submitted to them.

To be actionable and effective, the **principles of the rules need to be sufficiently clear** but this does not mean that the rules need to be detailed. In fact, detailed rules quickly become outdated because legislation moves more slowly than technology and markets, and this time lag has increased with the recent technological acceleration. When outdated, detailed rules often miss their objectives and, possibly, even backfire and stifle innovation.

Principles-based rules are also more easily **applicable in a horizontal manner** to all sectors of the economy and to all technologies. In general, this is preferable as it minimises distortions across or within economic sectors. Of course, rules which are sectoral or perhaps not technology-neutral may be justified when a sector or a technology raises particular challenges. However, their risks of economic or technology distortions are much higher.

### *Co-regulatory enforcement*

Principles-based rules may lead to less legal certainty that, in turn, may increase regulatory costs and reduce regulatory effectiveness. In this case, **rules need to be complemented with soft-law instruments** such as recommendations, guidelines, or codes of conduct. On the one hand, these instruments could clarify the application of the principles to cases presenting some specific characteristics. On the other hand, they are more flexible and easily adaptable than a legislative instrument, thereby reducing the costs of the time lag between technology and regulatory change.

Those soft-law instruments may be **adopted by enforcement authorities on the basis of their past experience in applying the principles-based rules to a series of past cases**. This is, for instance, the case of the numerous Guidelines adopted by the European Commission under the principles-based competition rules of the Treaty on the functioning on the European Union and the Merger Regulation<sup>3</sup>, or the Guidance adopted by the European Commission Services to clarify the application of consumer protection law.<sup>4</sup>

Soft-law instruments may also be **adopted by the stakeholders themselves**, either on their own initiative or at the request, or under the gentle pressure, of authorities. This is the case of **self- or co-regulatory Codes of Conduct**. In some cases, they are adopted to clarify the implementation of principles-based rules to new settings. In most of the cases, they are creating new obligations that are in line with, but go further than, existing principles-based legislation. In the EU, there is an

---

<sup>1</sup> As already proposed in several CERRE Reports such as in A. de Stree and P. Larouche, *An Integrated Regulatory Framework for Digital Networks and Service*, January 2016, available at: <https://www.cerre.eu/publications/integrated-regulatory-framework-digital-networks-and-services-0>

<sup>2</sup> Directive 2000/31 of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce), OJ [2000] L 178/1.

<sup>3</sup> <http://ec.europa.eu/competition/antitrust/legislation/legislation.html> and <http://ec.europa.eu/competition/mergers/legislation/legislation.html>

<sup>4</sup> DG Justice Guidance document of June 2014 on the Consumer Rights Directive, Commission Staff Working Document of 25 May 2016 on Guidance on the implementation/application of the Directive 2005/29 on Unfair commercial practices, SWD(2016) 163.

extensive use of such self- and co-regulation. For instance, several Codes of Conduct that have been adopted to reduce illegal or harmful content online.<sup>5</sup>

Self- and co-regulation can be very useful when the asymmetry of information between the regulators and the regulated groups is high, and/or when the regulatory issues are new and the authorities are unsure about the best regulatory remedies. However, **to be effective and legitimate, self- and co-regulatory rules need to reflect the views and the interests of all stakeholders** and not only that of the most powerful ones (i.e. self-regulation should not be self-serving) and the **implementation of the rules needs to be closely and regularly monitored** by the stakeholders involved and public authorities.

### **Experimental enforcement**

The asymmetry of information and the novelty of some regulatory issues should also lead **authorities and judges to be more experimental when implementing the rules and designing regulatory remedies**. NESTA, a UK innovation foundation, calls for 'anticipatory regulation' stating that: "When regulators have to take on new functions for which they lack an established playbook, or need to deal with uncertain market developments, a flexible, iterative learning approach is needed rather than a 'solve-and-leave' mentality. Where regulations are being developed for a new area or introduce substantial changes, it is difficult to know exactly what the impacts will be. Utilising a more experimental, trial and error approach, at least at the beginning, rather than immediately creating definitive rules can help build evidence on what works to achieve the desired outcomes. Standards, testbeds/sandboxes or exhorting best practice are different ways in which regulators can provide more flexible interventions."<sup>6</sup>

Similarly, Nobel Prize winner Jean Tirole has called for "more agile policies, such as business review letters (giving limited legal certainty to firms for a practice, subject to conditions set by the authorities) or regulatory sandboxes where new business models can be tested in a "safe" environment".<sup>7</sup> **Regulatory sandboxes** are now used, for instance, by the Financial Conduct Authority in the UK and allow financial businesses that need an authorisation to test innovative propositions in the market, with real consumers and with the help of the regulatory authority.<sup>8</sup>

Of course, experimental regulation raises a number of challenges, in particular in terms of feasibility, costs for the firms or information collection for the authorities. One of the main challenges is the inherent **tension between regulatory experimentation and legal predictability**.

During the experimentation phase, legal predictability may be low but this is the transient price to pay to find the most effective and efficient rules and remedies. In an environment that is changing rapidly and frequently, the determination of the best remedy may be more difficult, and hence more costly, but its benefit may also be higher.

### **Issues for policymakers**

- *Ensure that future rules are **principles-based**, to adapt easily to technology and market evolutions and **sufficiently clear** to be actionable and effective.*
- *Encourage the development of more experimental enforcement of regulation*

<sup>5</sup>As explained in A. de Streel, M. Buiten and M. Peitz, *The Liability of Online Platforms: Should exceptionalism end?* CERRE Policy Report, September 2018, available at: <https://www.cerre.eu/publications/liability-online-hosting-platforms-should-exceptionalism-end>

<sup>6</sup>Armstrong et al (2019) 'Renewing regulation 'Anticipatory regulation' in an age of disruption', NESTA, March 2019, p.27, available at: <https://www.nesta.org.uk/report/renewing-regulation-anticipatory-regulation-in-an-age-of-disruption/>

<sup>7</sup><https://www.livemint.com/Technology/XsqWUgy9tR4uaoME7xtITI/Regulating-the-disrupters-Jean-Tirole.html>

<sup>8</sup><https://www.fca.org.uk/firms/regulatory-sandbox>

## Ambition #2: Digitally-based regulation and RegTech

Digital technologies such as big data and AI offer important opportunities to improve the performance and the operations of regulatory authorities. This is often described as the concept of *RegTech*.

Although there is no single definition, RegTech includes, on the one hand, the use of technology by regulatory agencies for operations such as market surveillance as well as risk identification and monitoring (also known as 'SupTech') and, on the other hand, the use of technology by regulated entities to meet their regulatory and compliance requirements more effectively and efficiently.<sup>9</sup>

The use of digital technologies by regulatory agencies ranges from (i) data reporting and using big data analysis technologies, (ii) to the use of Artificial Intelligence, machine learning and natural language processing, (iii) to regulatory codification.

### Data-driven regulation

As data can be collected and processed at much lower costs than before, the use of big data techniques by regulatory authorities can improve the performance of their existing tasks and can facilitate new tasks that can help consumers and stakeholders to make the market work better. In July 2019, a group of French regulatory agencies adopted a Memo on **data-driven regulation**, defined as "using the power of information to understand the market and shed light on how it operates in a factual fashion, to then steer it more effectively in the right direction and better protect consumers and their rights in these different markets".<sup>10</sup>

According to the French authorities, better and more intensive use of data can, on the one hand, **amplify the regulator's capacity to act in its core area of responsibility, notably through better supervision** of market players and, on the other hand, **enable users to make better informed choices, thereby steering the market in the right direction**. This requires the scaling up of the human skills and technical capacities of regulators in collecting, storing and processing data.

### AI-driven regulation

The rapid progress of **different Artificial Intelligence techniques** (in particular deep learning and natural language processing techniques) **as well as visualisation techniques enables regulatory authorities to improve their operations**. As a side-effect, the use of AI tools by regulatory agencies will also improve their understanding of new technologies that they may need to regulate.

Currently, several financial regulators are exploring the potential of AI and visualisation techniques in a number of areas: to facilitate and improve reporting requirements by regulated firms and ease the compliance control of the regulator; to facilitate the understanding of complex regulation by regulated firms, protected consumers and users; or to enable more efficient detection of violations of the law.<sup>11</sup>

<sup>9</sup> G20/OECD Policy Guidance on Financial Consumer Protection Approaches in the Digital Age, 2018, p.16, available at: <https://www.oecd.org/finance/G20-OECD-Policy-Guidance-Financial-Consumer-Protection-Digital-Age-2018.pdf>. On the topic, see also the Conference organised by the Club of Regulators in cooperation with the OECD Network of Economic Regulators, *RegTechs: Feedback from the First Experiments*, available at: <http://chairgovreg.fondation-dauphine.fr/node/708>.

<sup>10</sup> Autorité de la concurrence, AMF, Arafér, Arcep, Arjel, CNIL, CRE, CSA, *Data-driven regulation*, July 2019, p.3, available at : <https://en.arcep.fr/news/press-releases/p/n/cooperation-between-regulators.html>

<sup>11</sup> The UK Financial Conduct Authority is very active on the topic : <https://www.fca.org.uk/firms/regtech>

### **Compliance by design**

Going one step further, in some cases, the **regulator could be replaced by computer code, when regulatory compliance is enshrined in the design of digital technologies**.<sup>12</sup> For instance, an obligation of privacy-by-design is now imposed by the GDPR.<sup>13</sup> Another, more obvious example, are the smart contracts based on blockchain and distributed ledger technologies that are automatically executed if some conditions, enshrined in the code, are met.<sup>14</sup> In those cases, compliance is automated and the role of the regulator is therefore by-passed or at least reduced.

The development of RegTech presents many opportunities that should be seized by European regulators. However, at the same time, RegTech raises a series of ethical and legal issues that need to be addressed by the next European Commission.

#### **Issues for policymakers**

- *Enable regulators to **seize the opportunities of digital technologies** to improve their operations.*
- *Consider whether future regulation can be transferred to the computer code, with **compliance by design**.*

### **Ambition #3: EU rules and enforcement**

It is **not enough to have good rules; they should ideally be adopted and enforced at the optimal level of governance**. There is an extensive literature on the optimal level of governance in the EU which should be determined on the basis of numerous criteria.<sup>15</sup> Some of those criteria, like heterogeneity of political preferences or the asymmetry of information, point towards the national or even local level while others, like the benefits of the single market or cross-border externalities point towards the European level.<sup>16</sup>

#### **One rule**

**When the benefits of the single market can be significant because of the opportunities for freedom of movement, rules should at least be unique** (with the country of origin principle) **and ideally decided at the EU level** (with a harmonisation of the national rules). This has been the main rationale of EU legislation in the network and digital industries over the last 30 years. This **approach is even more valid today as the digitisation of the economy** and of society makes more services borderless (just one click away) and, in turn, increases the benefits of the single market. In addition, more firms, in particular in the digital sector, are global players, and


<sup>12</sup> As famously proposed by the Harvard Professor Lawrence Lessig in *Code and Other Laws of the Cyberspace – Version 2.0*, 2006, Basic Book.

<sup>13</sup> Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46 (General Data Protection Regulation), OJ [2016] L 199/1, art. 25(1): "Taking into account the state of the art, the cost of implementation and the nature, scope, context and purposes of processing as well as the risks of varying likelihood and severity for rights and freedoms of natural persons posed by the processing, the controller shall, both at the time of the determination of the means for processing and at the time of the processing itself, *implement appropriate technical and organisational measures*, such as pseudonymisation, *which are designed to implement data-protection principles*, such as data minimisation, in an effective manner and to integrate the necessary safeguards into the processing in order to meet the requirements of this Regulation and protect the rights of data subjects" (our underlining)

<sup>14</sup> According to Wikipedia, a smart contract is: "a computer protocol intended to digitally facilitate, verify, or enforce the negotiation or performance of a contract. Smart contracts allow the performance of credible transactions without third parties. These transactions are trackable and irreversible".

<sup>15</sup> W. Oates, "An essay on fiscal federalism", *Journal of Economic Literature* 37(3), 1999, 1120-11149 and "Towards a Second-generation Theory of Fiscal Federalism", *International Tax and Public Finance* 12, 2005, 349-373. For an application on this theory to the EU: A. Alesina, A. Angeloni and I Schunnecht, "What Does the European Union Do?", *Public Choice* 123, 2005, 275-319.

<sup>16</sup> See also EPRS, *Mapping the Cost of Non-Europe: 2014-19*, 4<sup>th</sup> edition, December 2017, available at: [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS\\_STU\(2017\)603239](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_STU(2017)603239)



may have an annual turnover which is higher than the GDP of some EU Member States. In this case, the regulation of these firms needs to be decided and enforced at the EU level to be credible and effective.

### ***One enforcement***

**While more and more rules in the network and digital industries are decided at the EU level, they are in principle enforced at the national level** by national administrative or regulatory authorities and judges. Only exceptionally are the rules enforced at the EU level, for instance, in the case of competition law or the financial regulation and supervision of significant banks. With the development of EU integration and the recognition of the increased need for harmonisation of rules and enforcement, **several EU networks of national regulators** – such as the Body of European Regulators for Electronic Communications (BEREC), the European Regulators Group for Audio-visual Media Services (ERGA), the Agency for the Cooperation of Energy Regulators (ACER), the European Data Protection Board (EDPB) and the Consumer Protection Cooperation Network (CPC) - **have been created and strengthened** in recent years.

Many reforms are just being implemented, and one of the first tasks of the next European Commission will be to **assess the effectiveness of these reforms. The assessments should consider whether the strengthened EU networks of national regulators** contribute enough to the harmonisation of the enforcement of EU rules, in particular when the benefits of the single market are important.

In the digital sector, where services are inherently borderless and several firms have a global presence and offer their services in all the Member States, **an EU regulator, akin to the Federal Trade Commission in the US, may be appropriate.** This has already been done in the financial and banking sector with the recent establishment of an EU regulator (the Single Supervisory Mechanism within the European Central Bank) for significant banks in Europe.<sup>17</sup>

### ***Issues for policymakers***

- *Create a truly single market, governed by unique rules, with a common enforcement across Europe.*
- *Consider whether pan-European regulator(s) are required for sectors that are inherently borderless.*

---

<sup>17</sup> <https://www.bankingsupervision.europa.eu/about/thessm/html/index.en.html>



## ABOUT THE AUTHOR



**Alexandre de Streeel**

CERRE Joint Academic Director  
Professor, University of Namur

Alexandre de Streeel is Professor of European law at the Universities of Namur in Belgium and the Director of the Research Centre for Information, Law and Society (CRIDS), focusing his research on Regulation and Competition Law in the network industries.

He is Joint Academic Director at the Centre on Regulation in Europe (CERRE) in Brussels, member of the Scientific Committee of the Florence School of Regulation (FSR) at the European University Institute in Florence, Research Fellow at European Institute of Public Administration (EIPA) in Maastricht.

Alexandre regularly advises international organisations (such as the European Commission, European Parliament, OECD, EBRD) and national regulatory authorities on regulatory and competition issues in network industries. He is also an Assessor (member of the decisional body) at the Belgian Competition Authority.

## ABOUT CERRE

The Centre on Regulation in Europe (CERRE) is an independent Brussels-based think tank. We promote 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.

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.



cerre

Centre on Regulation in Europe

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

☎ +32 2 230 83 60

✉ info@cerre.eu

🌐 cerre.eu

🐦 @CERRE\_ThinkTank