



# Towards an Innovation Principle Endorsed by Better Regulation

European Political  
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Innovation is an essential element of the internal market. Defined by the objective of a “highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment” (Article 3 (3) TEU), innovation is a precondition of “sustainable and job-creating growth”.<sup>1</sup> It leads to higher productivity and competitiveness<sup>2</sup> while yielding social and environmental benefits.

By definition, innovation cannot be preordained. It takes place in response to diverse incentives. The policymaker’s task is not to pick winners but to ensure that the entire economy becomes more conducive to innovative outcomes. Regulation matters at all stages of the innovation cycle, from research and development, to diffusion, commercialisation, uptake, and beyond. A toolbox of innovation-enabling legislation is key to unleash the innovative potential of society, companies and individuals.

## Keeping Up with the Pace of Change

Innovation presupposes an element of novelty and experimentation. The pace of change, particularly in the case of disruptive innovation, may at times be at odds with the dynamics of regulatory processes. While regulation serves many purposes, it needs to be designed in a way that creates the best possible ecosystem for the flourishing of innovation. This will more and more often mean testing, learning and adapting public policies.

## Building an Innovation-Friendly Legislative Culture

Innovation is never created in a vacuum. It thrives in a conducive regulatory environment. However, the relationship between regulation and innovation is not straightforward. Regulation can hinder or enable innovation. What matters is flexibility by design, in addition to the certainty – and trust – it conveys. Sometimes it is lack of regulation that curbs innovation, not its excess.

## Innovation Principle for a Balanced Regulatory Approach

An innovation principle means ensuring that whenever policy is developed, the impact on innovation is fully assessed. The principle should provide guidance to ensure that the choice, design and regulatory tools foster innovation, rather than hamper it.

## Systemic Transformation in Regulatory Practice

For innovation to flourish, one-off actions are not sufficient. The regulatory chain needs to be geared towards supporting innovation from policy inception to implementation and impact assessment. In this regard the innovation principle is closely linked to the Better Regulation approach of the European Commission. The new practice needs to be reflected both with respect to the process of policy-making, as well as its content where greater scope for experimentation has to be created.

*EPSC Strategic Notes* are analytical papers on topics chosen by the President of the European Commission. They are produced by the European Political Strategy Centre (EPSC), the European Commission’s in-house think tank.

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## 1. Innovation Defined

Innovation can be defined by two elements. The first introduces the aspect of novelty: innovation is a new idea in relation to something that is established. This idea must find its way from theory to practice. As such innovation does not only relate to technical or scientific novelties, but may also pertain to processes and organisational change across sectors.

The second contains a teleological criterion: a technical novelty or a new approach can only be regarded as innovative if it brings economic and societal benefits. Against this backdrop, an innovation is to be understood as a process through which the novelty has to win social recognition and acceptance over time.

## 2. Innovation as a Political and Legal Principle

Undoubtedly, the choice to foster innovation in the decision making process is a political prerogative. An innovation principle is therefore about the political decision ensuring that the impact on innovation is fully assessed, whenever policy is being made. In this regard Union law may provide for the promotion of innovation. Notwithstanding, one may even think of a Treaty-based 'innovation principle' that provides legal guidance to ensure the right choice and appropriate application of regulatory tools.

Several aspects in Union Law allow for the assumption that an implicit innovation principle can be deduced from the Treaties by systemic and teleological interpretation:

according to **Article 3 (3) TEU** the EU 'shall promote scientific and technological advance.' In the context of the EU's industry policy (**Art. 173 TFEU**) 'innovation' is explicitly mentioned. For that purpose, in accordance with a system of open and competitive markets, the action of the EU and its Member States shall be aimed among others at

*'fostering better exploitation of the industrial potential of policies of **innovation**, research and technological development.'*

In this respect, **Art. 179 (1) TFEU** is also of interest. It sets the task of achieving a European research area by strengthening the scientific and technological bases. This shall encourage the Union, including its industry, to become more competitive.

In addition, the guarantees embodied in the **EU Charter of Fundamental Rights** are even more important for deducing an implicit innovation principle. The Charter stipulates the freedom of sciences (**Art. 13**), the freedom to choose an occupation and the right to engage in work (**Art. 15**) as well as the right to property, including intellectual property (**Art. 17**). These individual rights define important (pre-)conditions for innovation. As innovation largely arises from freely exercised economic and scientific activities, they spur experimentation and the development of new concepts and ideas.

### Two ways can be identified on how fundamental rights put innovation into practice:

Under the rule of law (Art. 2 TEU) fundamental rights imply a duty to respect freedom for state authorities. In their **subjective dimension** they serve as a benchmark for the assessment of all public action interfering with individual freedom. Any action taken by state authorities is considered as an intervention in individual freedom and, as such, faces the pressure of legitimation. Hence, in theory, a kind of **rule-and-exception logic** is embodied in each fundamental right. That is defined by the citizen's freedom



### How Fundamental Rights Work: The Rule-and-Exception Logic

If state authorities want to interfere in the scope of protection of a fundamental right, they are obliged to legitimise their action. On the contrary, the beneficiaries of the right do not need to justify their acts or omissions, as long as they act within the limits of their right. As a consequence, the **burden of proof** lies with public authorities wishing to regulate. They must prove their 'better right' to regulate.

Notwithstanding this, the exercise of fundamental rights is subject to limitations provided for by legislation (Art. 52 Charter of Fundamental Rights). Therefore, the concrete scope of protection results from the interplay between the good protected by the relevant fundamental right and the limiting statute (regulations, directives), which finds its concrete shape in the test of proportionality. With the objective to reach a fair balance, action of public authorities has to pass a three-level test: first, public action needs to be suitable for reaching the intended aim. Secondly, it has to prove to be necessary, in order to reach the intended aim. This means that no other available measure can reach the intended aim in a similarly effective but less freedom-limiting way. Thirdly, public action has to be appropriate. To that end, a fair balance between the intended aim and the protected interest enshrined in the fundamental right in question has to be proven by state authorities.

and the corresponding competence of public authorities to limit its scope for the sake of the protection of public goods. As a consequence, any measure taken by public authorities constitutes an interference with individual freedom, which must then be legitimated from a formal perspective by statutory law and from a substantive perspective with regards to citizens' fundamental rights.

Apart from this subjective dimension, fundamental rights may have as well an **objective dimension**, giving them the **effect of a principle**. In this regard they imply a legal duty to optimise the objective of the relevant individual right, while taking into account opposing principles and individual rights. As a principle, the above mentioned fundamental rights set out the positive obligation to facilitate the exercise of these rights when designing policies and making laws. This can be achieved, for example, through the creation of an innovation-enabling legal framework, infrastructure or the funding of promising ideas.

On these legal grounds, based on the interpretation of different norms, one may say that an **implicit Treaty-based innovation principle sets guidelines** for optimising the legal framework for innovation.

### 3. Keeping a Fair Balance Between Innovation and Regulation

**Optimising the legal framework for innovation implies** achieving a **fair balance** between the innovation principle and other Treaty-based principles. In this framework, public authorities decide on 'good' and 'bad' innovation.

**Art. 3 (3) TEU** states the objective of establishing an internal market. In this regard, an important tool of the EU is the harmonisation of national legislation (Art. 114 TFEU). However, the creation of the internal market is inseparably linked with the duty to adequately protect the environment, consumers' rights and health. The EU has to address all these objectives. Art. 3 (3) TEU does not permit to focus one-sidedly on economic benefits and higher growth. Legal and regulatory requirements have to aim at optimising outcomes in all policy fields and demand a high level of environmental, health and consumer protection

#### Treaty-Based Principles to Be Balanced with the Innovation Principle

**Art. 11 TFEU** states that environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development. This provision requires the integration of environmental protection measures also in policy fields that are traditionally not considered part of environmental policy. This is sometimes referred to as the "integration principle".

**Art. 191 TFEU** sets another important principle of European environmental law, which is of high relevance regarding innovation: the precautionary principle. Art. 191 Para. 2 TFEU as well as Art. 114 TFEU provide that the environmental policy of the EU shall aim at a high level of protection and should be based on the precautionary principle. The precautionary principle is basically about the management of risk. It applies notably in areas where scientific evidence is inconclusive or is contested between experts but a preliminary and objective scientific risk assessment raises justified concern that a substance, production process or product may cause harm to human health or the environment. Although the precautionary principle derives from environmental law, it is – according to the jurisdiction of the ECJ – a general principle of EU law, that includes economic and non-economic considerations. It provides therefore suitable tools and strategies to appropriately cope with risk.

Although the precautionary principle may be understood as a counter principle to the innovation principle, it is of particular importance for innovation, because especially at an early stage of a new technique or approach, the possibility of a risk often cannot be ruled out. It provides procedures and criteria to assess, appraise and manage risks. An integral part of the risk management, as envisaged by the precautionary principle, is the examination of the potential benefits and costs of action, or lack of action.

According to **Art. 168 TFEU**, every regulatory decision has to consider its impact on human health, while maintaining a high level of protection.

**Art. 12 TFEU** affirms that consumer protection requirements shall be taken into account in defining and implementing other Union policies and activities. **Art. 169 TFEU** provides that the promotion of consumers' interests and a high level of consumer protection are an objective of the European Union.

The significance of these objectives, as well as their legally binding character is confirmed by the **Charter of Fundamental Rights of the European Union**. The second sentence of **Art. 35 CFR** provides a high level of human health protection; **Art. 37 CFR** addresses the duties of authorities to protect the environment; and **Art. 38 CFR** requires a high level of consumer protection.

(Art. 114 (2) TFEU). This aspect is also highlighted by the key provisions of the TFEU on these matters.

Against this backdrop, the innovation principle will provide opportunities, if it is conceived in a **comprehensive manner**. It should aim at improving the overall societal well-being by enhancing the effectiveness, coherence and comprehensibility of regulation. However, if the innovation agenda focuses exclusively on competitiveness, that is on reducing costs to industry without considering social and environmental costs, it risks yielding *less* regulation instead of better results. Therefore, one has to draw a distinction between innovation affecting aspects of environmental, consumer and health protection on the one hand and issues rather technical in nature on the other. The former leave less room for flexibility, whereas the scope for the innovation principle is wider in rather technical matters.

Regulatory burdens are often perceived as a major obstacle to innovation. Hence, the objective of improving the legal framework is shared by the innovation principle and **Better Regulation policy**. Therefore, a close link exists between both, which has to be taken into account while implementing the innovation principle. The relationship between regulation and innovation is neither straightforward nor unidirectional: **regulation can simultaneously constrain and drive innovation**, whilst a lack of regulation may lead to **uncertainty**.

### Regulation as a Barrier to Innovation

Regulation can be a barrier to innovation. The most obvious reason is that **ineffective and incomprehensive regulation** can create 'red tape' that requires huge administrative efforts for business – and, incidentally, for administrative authorities as well. In this case regulation deprives entrepreneurs of resources and time that they could have used for more productive activities instead.

Furthermore, if regulation is **too rigid and inflexible** it may have negative impacts on innovation. Inflexible regulation can cause unnecessary financial burdens if it provides little scope for business to decide on *how* it can comply with a legal requirement in the least burdensome way. A good example for this may be the introduction of LED street lighting. The EU legislation for street lighting was based upon traditional technology, from which LED lighting technology diverged. It took more than two years to make the necessary legislative improvements to allow for the commercial introduction of this energy efficient alternative. **Prescriptive regulations**, such as technology standards, **stipulate not only the target but also ways of meeting the target**. Whilst these have the benefit of facilitating the enforcement of a regulation, they may not generate sufficient incentives for firms to seek to improve their product or service beyond the target, stifling innovation, particularly in its disruptive form.

**Regulation also acts as a barrier to innovation when it 'lags behind' innovation cycles.** Driverless cars are set to transform mobility and transportation in the future. There is now a need to demonstrate technological

### The Better Regulation Agenda of the European Commission

Following the political need to offer European citizens and businesses an interface with EU laws and regulations, the European Commission adopted the Better Regulation Agenda on 19 May 2015. The purpose of the initiative is to make EU law lighter, simpler and less costly by ensuring that the whole policy cycle is designed in a transparent manner and supported by the best available evidence.

To achieve the Better Regulation goals, the European Commission implemented the Regulatory Fitness and Performance programme (REFIT). Through a system of impact assessments, ex post evaluations, fitness checks and stakeholders consultations -- all subject to quality control by a newly created Regulatory Scrutiny Board (RSB) -- the European Commission tries to ensure a high quality of EU legislation that delivers maximum benefits with the least burden to citizens.

To better implement the simplification process, a REFIT Platform was established in 2015. Under the chairmanship of First Vice-President Frans Timmermans, it provides broad-based advice on suggestions to reduce regulatory burdens and simplify EU law while maintaining its objectives. The REFIT Platform includes 28 high-level experts from Member States and 20 high-level experts from social partners, business and civil society as well as from the European Economic and Social Committee and the Committee of the Regions.

In addition, on 13 April 2016 the European Parliament, the Council of the European Union and the European Commission signed a new [Inter-institutional Agreement \(IIA\) on Better Law-Making](#). The agreement - entered into force on the day of its signature - is extending the Better Regulation practices to the other EU institutions.

readiness, reliability and safety of such technologies. However, the demonstration phase is currently held back by existing legislation on vehicle safety approval. For instance, the relevant United Nations Regulation<sup>3</sup> permits automated steering functions in cars only up to a speed of 10 km/h. A draft amendment to increase driving speed is currently under discussion but this regulatory lag constrains the development of large-scale pilots in the EU.

Finally **complex and expansive market approval procedures** may constitute a costly burden for newcomers, especially as innovative ideas are often developed in niche companies with limited financial resources. In the worst case, an innovative idea might be obstructed by rigid regulation.

## Regulation as a Driver of Innovation

Regulation can also be a major driver of innovation – an aspect which is not always highlighted in public discourse.<sup>4</sup> For example, the general framework for finance and funding conditions, bankruptcy legislation or intellectual property rights set an important pre-condition for innovation.

In general terms, regulation is an important aspect of investment and planning for companies because it sets out **stability and certainty**. The rule of law, supported by fundamental rights, provides for a stable framework for investment and for companies to pursue business, and thus for innovation. For example, from the moment the establishment of a production plant is authorised, legal guarantees not only provide stable conditions for investment but they also set standards of protection with regard to externalities, that enable an enterprise to work on safe legal grounds. Similarly, while regulation on property rights safeguards innovation, regulation on products defines the terms and conditions for liabilities in case of damage to consumers or the environment. On balance, most companies appreciate this stability of investment conditions ensured by regulation.

But regulation ensures not only compliance with the market and the provision of public goods – it might as well be a push-factor for innovation, as illustrated by the following examples.

**Standard setting** may yield positive impacts by providing orientation both to the producer and the

## How the EU has Enabled and Spurred Innovation

- The 2009 Recommendation on **Radio Frequency Identification (RFID)** chips led to the adoption of EU-wide norms in 2014. Compared to the old bar code technology, RFID allows for the continuous transmission and more accurate information as well as more data storage. By standardising the rules for RFID applications the EU enables innovation for a wide range of purposes such as personal identification or access control (e.g. secure access in stadiums), for shopping (e.g. tagging of groceries), for inventory tracking and tracing (e.g. tracking luggage), and for payment (e.g. motorway tolls).<sup>5</sup>
- In June 2016, the European Commission adopted the Communication **“A European agenda for the collaborative economy”**.<sup>6</sup> It provides important guidelines for innovative business models in the new economy. These refer to market access, liability, consumer protection, labour law and tax liability. The Communication invites EU Member States to review and, where appropriate, revise existing legislation with the aim to harmonise the collaborative economy services offered to the market. This way EU citizens can similarly enjoy the services, regardless of whether they live in Sweden or Malta.
- One of the **best examples of regulatory decisions** that allowed Europe to lead the first stage of the Information Technology revolution is the **Global System for Mobile Communications, or GSM**. Endorsed by the Heads of State or Government in 1986, the adoption of a unified, open standard at the European level allowed for the rapid roll-out of mobile telecommunication. It gave Europe an edge over more fragmented markets, including that of the United States. The first GSM call in the world was made by the former Finnish Prime Minister Harri Holkeri to the mayor of Tampere Kaarina Suonio on 1 July 1991.
- Regulatory certainty can provide a strong impetus for innovation and investment. In view of an increasingly data-driven economy, the regulatory fragmentation on data protection has been a major stumbling block which created not only legal uncertainty but also prevented Europe from creating its own large Internet companies. 28 different national legislations on data protection have proven largely unworkable for investors, entrepreneurs and consumers, which is why there is anticipation that the forthcoming **General Data Protection Regulation (GDPR)** – due to become compulsory in the first half of 2018 – can have a transformative impact. A single rule book on data protection across the EU can unleash innovative potential and benefit companies that operate at the technological cutting-edge.

## Innovation Principle: Finding the Right Regulatory Mix

A successful innovation principle seeks to find the right balance between the following elements:

**Information:** Information plays a crucial role for market participants. Transparent and equal access to information is an important function and target of regulation. Regulatory standards or measurement requirements provide important information for entities that develop innovative products or services.

**Flexibility:** Flexible regulation provides outcome-oriented targets and empowers the concerned companies to decide about how they meet the target. It allows new methods and techniques to develop with the aim of compliance.

**Stringency:** A legal requirement can be regarded as stringent if it imposes strong obligations for firms or an industry. Legal stringency can indeed be a burden for companies and reduce their capacity for innovative activities. However stringent standards may at the same time set challenging targets and hence spur innovation. They can initially increase compliance costs of an industry, but induce modernisation in the longer term.

consumer. For the producer of a new product, standards can give guidance in how to design it. From the perspective of the customer, the information that an innovation meets the standards can make the yet unknown product more trustworthy. Standards allow for comparison and may therefore improve the market functioning.

**Stringency of regulation** can be as well an important driver for innovating business by fostering research in and use of modern techniques and procedures, effectively to end the use of outdated techniques.

In some cases, innovative developments occur in **under-regulated areas** or in regulatory vacuums. Uncertainty on the conditions of market access as well as on questions of liability is then perceived as a barrier to innovation.

## 4. Making the Innovation Principle Work

To reap the benefits of the innovation principle, there is a need to develop a differentiated approach. It is necessary to account for the different categories of regulation and ensure that synergies between policy areas are created.

**General regulation**, for example, affects innovative activities by providing the overall framework for business and research activities. It is applicable across sectors and encompasses primarily competition or procurement rules, and bankruptcy legislation. General regulation affects in particular the balance of expected risks and benefits associated with entrepreneurial efforts. **Innovation-specific rules**, on the other hand, aim at incentivising innovation, often by reducing the cost of innovative activities. Examples of this kind of regulation include funding rules or the regulation of technology transfer agreements. Finally, **sector-specific regulation** matters because different sectors have different capabilities and incentives to

innovate. Growing environmental and social concerns raise specific challenges and opportunities for policy, in particular by creating the right incentives to support circular economy objectives in the innovation process.

### A Life-Cycle Approach to Innovation

Importantly, 'EU regulation matters at all stages of the innovation process'<sup>7</sup>. In the **research and development phase**, it is essential to generate space for the pursuit of a variety of creative options. Rules on cooperation of universities or other research facilities with entrepreneurs, funding provisions, tax credits on research and development activities or pre-commercial procurement are all relevant to ensure the sharing of risks and benefits of research and development efforts between society and private entrepreneurs. Finding the right balance that encourages the openness of knowledge and ideas while simultaneously protecting the returns on investment of individual economic actors is hugely significant during the early stages of innovation.

During the **commercialisation phase**, a product or service is offered on the market and a partly different set of rules is at stake. It involves health, consumer and environmental protection standards as well as competition rules and sector-specific procedures for launching new products, such as authorisation requirements.

The **recycling phase** of the innovation cycle is a cornerstone of the shift towards a more resource-efficient economic model. Guaranteeing the right incentives to develop life-cycle approaches to innovation should be a key objective of regulation, particularly by fostering 'circular-by-design' eco-products. Eco-design regulation may be an additional requirement for the producer of a product for first use, but also facilitates innovative re-use approaches. Procurement rules, taxation of resource use, and funding of research and development in the field of circular economy are further instruments to spur innovation.

## An Innovation-Friendly Regulatory Framework

In order to support innovation, the Better Regulation Agenda should aim to:

- further improve the design of existing and future regulations as regards their impact on innovation
- achieve an optimal balance between predictability of the regulatory environment and adaptability to technological and scientific progress
- ensure an overall approach to the assessment of the combined impact of regulations, with a view of simplifying and increasing the effectiveness of the regulatory framework
- check implementation issues that can affect outcomes and increase dialogue with stakeholders
- search for future-proof, more forward-looking and innovation friendly approaches

## 5. Exploring a Full Range of Instruments and Tools

**The innovation principle**, understood as a positive obligation to facilitate innovation, **offers guidance on the process and content of regulation**. It is premised on the idea that well-designed regulation ensures the appropriate framework conditions to foster entrepreneurship and a culture of innovation. The innovation principle can be implemented through process as well as content. Both are of equal importance to achieve a qualitative change in the way that regulation can fuel innovation.

### Process-Related Innovation Principle: Better Regulation Agenda

In light of the perceived and actual regulatory burdens that constrain innovation in the EU, the **Better Regulation Agenda**, which aims to improve the EU's legal framework conditions, **represents an essential first step in assessing and tackling ways in which regulation, or lack thereof, may be constraining innovation**. The legal framework for the Better Regulation Agenda derives from the principles of subsidiarity and proportionality, as laid down in Art. 5 (3) and (4) TEU. The principle of subsidiarity governs the Union's competences by providing that the Union may only exercise its non-exclusive powers if (1) the Member States cannot sufficiently achieve the proposed action, and (2) the action can be implemented more successfully by the Union. Unless the above two conditions are met, the principle of subsidiarity would restrict ineffective, unnecessary and therefore burdensome regulation at Union level. In addition, the proportionality principle requires that Union action shall not go beyond what is strictly necessary to achieve a given objective. By imposing the choice of the least disruptive instrument, **the principle of proportionality protects innovative activities against excessive and abundant regulation**.

However, Better Regulation with regards to the objectives and principles of the Treaties cannot be an end in itself. It offers the tools to pursue public interest insofar as it seeks to balance growth and employment targets with other broader 'public good' priorities, such as the protection of human and environmental health.

In this regard, different tools can be identified. First of all, there is the **impact assessment in the legislative process**, which is now mandatory for Commission initiatives that are likely to have significant economic, environmental or social consequences. Among the types of impact that have to be identified, and if they prove to be significant, assessed, there is the impact on innovation. Constraints on the practice of the impact assessment often have to do with insufficient available data, limited ability to quantify results or limited comparability of different options. An innovation principle calls for a systematic scrutiny of the impact of regulatory proposals on innovative activities. Another benefit of impact assessment is its comprehensive approach, which requires the consideration of impacts on environmental, health and consumer protection. This implies that environmental and social costs are adequately assessed, even if they are often hard to quantify.

High hopes rest with the newly created **Regulatory Scrutiny Board (RSB)**, which is part of the European Commission and was set up on 1 July 2015. This independent body consists of three internal and three external members and is tasked with examining and issuing opinions of all the Commission's draft impact assessments, as well as undertake major evaluations and 'fitness checks' of existing legislation. Set up in an effort to provide 'quality control' for impact assessments this novel new structure will have to carefully weigh the different objectives of EU policy making, with innovation, job and growth creations certainly being major cornerstones of the Union's political goals.

To complement *ex ante* impact assessments of regulatory proposals, existing regulation should be subject as well to **ex post evaluation**. *Ex post* evaluation can provide

information about effectiveness, unintended impact, costs and benefits of regulation, as well as the accuracy of the estimates during the *ex ante* impact assessment. The European Commission has been trying to strengthen its capacity for *ex post* evaluations, which has led, *inter alia*, to the founding of a new Competence Centre on Microeconomic Evaluation (CC-ME), housed by the Joint Research Centre. It is tasked with enhancing the EU policy process through ex-post causal evaluation and data-driven microeconomic analysis.

In the context of emerging technologies, **experimental legislation** provides a tool to test new legal approaches. Today, technological and social developments create highly dynamic environments. Notably technological progress seems to further accelerate this process. Highly innovative fields have emerged, which are characterised from the legislator's point of view by lack of information, rapid changes, uncertainty and risks. Regulation needs to keep up with these developments in order to control emerging risks and remain relevant, while safeguarding the opportunities that these changes open up. Experimental regulation enables authorities to test new regulatory approaches and evaluate the outcome. These may take the form of dispositions that are enacted on an experimental basis, in derogation of existing law. This is already the case at the Member State level with reference to self-driving vehicles. France, Finland, and the Netherlands have adopted the necessary legal framework to enable testing of automated cars on public roads in 2015, whilst Germany and Sweden have opted for the introduction of special exemption procedures. An integral part of experimental legislation or regulation is the periodic revision, particularly when regulators must 'keep up' with the pace of technological or information change.

## Content-Related Innovation Principle: Synergy Between Tools

Where legislation lags behind market developments, the innovation principle approach can lead to the introduction of innovation-enabling aspects into the law.

Several tools by which the legislator can enable and foster innovation can be identified.

### Mutual Recognition and Country-Of-Origin Principle

**Mutual recognition and the country-of-origin principle were initially developed by the European Court of Justice to tackle barriers to the freedom of goods and services.** They are now among the tools available to legislators to incentivise competition among national regulatory systems. This competition in

turn can be a potent driver of innovation in the internal market. Notwithstanding the objectives of environmental, consumer and health protection, the concept of **mutual recognition** ensures that any product lawfully sold in one EU country can be sold in another, whilst the **country-of-origin principle** enables entities to trade in other Member States on the basis of their home country regulation. This is of particular importance with regards to online commerce and the Digital Single Market strategy, because online trading platforms ease intra-EU transactions, both for sellers and for consumers. Both of these legal concepts are especially advantageous for small and medium-sized enterprises that do not have the capacity to obtain legal advice help them to comply with foreign law.

### Standard Setting

Whilst standards can sometimes constrain innovation by locking in sub-optimal technologies, they may also contribute to innovation by: a) taking advantage of economies of scale by ensuring interoperability between products, b) reducing barriers to entry, c) guaranteeing certainty on market access for companies, d) pushing for research in new technologies and e) building network effects which increase scaling-up opportunities for innovation<sup>8</sup>. In addition, standards yield benefits to consumers and the environment by ensuring minimum quality or safety standards. This can increase trust and acceptance of consumers, a precondition for successful market access.

### Test of Alternatives

Another approach to enhance innovation is by means of the **test of alternatives**. Unlike in the traditional administrative procedure, in which an applicant submits a clearly defined request for authorisation, **the possibility can be created for the consideration of alternative solutions**. The test of alternatives is in a way related to the principle of proportionality because it seeks to determine the appropriate but least burdensome solution. However, the principle of proportionality contains a restriction of state actions, whereas the test of alternatives refers to the approvability of an application. The examination of alternatives has the potential to encourage innovation and search for new approaches to existing goals.

A test of alternatives is envisaged in the Environmental Impact Assessment Directive, albeit in a somewhat reduced form. Another example can be found in the REACH regulation. The REACH regulation provides that very hazardous chemicals, which cause considerable risks to human health or the environment, can obtain an authorisation only under the condition, that there are no suitable alternative substances or technologies.

## Flexibility With Regards to Binding Objectives

Another approach to incentivise innovation through regulation is to **focus on the outcomes**. Binding objectives set a target and possibly the criteria to be followed to achieve compliance, instead of prescribing the exact mechanisms by which compliance is obtained. They allow for flexibility and enable companies to develop a suitable and cost-effective way to comply. What is more, setting targets without prescribing the methods avoids the risk of creating lock-ins. Lock-ins may occur if the regulatory requirements refer to a specific technique to meet a target, leaving no room for other methods.

## Right to Challenge

Similar objectives lie behind the so-called right to challenge. It allows public organisations, local governments and possibly even Member States to **apply for an exemption from an existing rule or regulation**. To be granted this right, applicants have to show how they would be better able to deliver improved public outcomes. Companies could be granted the right to challenge regulatory requirements, if they can demonstrate that they can surpass a regulatory target, or that they can comply in the same way.

However, one has to consider carefully the areas where a right to challenge can be granted. If a company applies for an exemption from a requirement that prescribes a specific technique, by bringing forward the argument that it had developed a completely new technique which yields a much better outcome, the competent authorities will have to examine whether that new technique will not cause new risks to consumers and the environment. Although the burden of proof is on the applicant, it might be demanding for the authority to evaluate the case. Nevertheless, in specific instances a right to challenge may allow companies to derogate from legal requirements. This would increase openness of the legal framework with regards to innovation.

## Benchmarking and Best Practice

A comparative evaluation of performance, strategies or processes allows for the identification of the best approaches which can then become a benchmark. The legislator can use benchmarking to identify best performances and consider them in legislative decisions. A concrete example for benchmarking is the **Top Runner Approach** which was developed in Japan and became the inspiration for ecodesign legislation in the EU. It aims at establishing dynamic efficiency standards by adjusting regulation to benchmark products. Products that do not comply with a benchmark efficiency standard after a certain period can no longer be placed on the market. Another tool, which bears some resemblance

to benchmarking, is learning from best practice. Best practice examples provide a great potential to disseminate innovation. Learning by best practice requires a **systematic comparison** between Member States or authorities and even at a global level. Unlike the benchmark approach, which identifies the best performer of a particular group, the best practice approach aims at finding positive examples within the examined cases.

## Innovation Deals

Regulatory uncertainty identified by innovators can be addressed by means of interpretation of the existing legal framework. **Innovation Deals** are meant to involve the European Commission, the relevant Member State authorities as well as stakeholders **in finding ways to avoid potential barriers to innovation arising from existing EU law or Member State implementation**. Innovation Deals are inspired by the 'Green Deal' Programme of the Government of the Netherlands, where a large number of agreements were pursued and proved successful in supporting the national Green Growth policy by providing regulatory clarity for innovative solutions. Based on this experience and in cases where a regulatory obstacle can only be addressed at EU level, the European Commission could help national, regional or local authorities to identify and make use of the existing flexibility in the EU legislative framework or to implement specific legal provisions appropriately by providing clarification. The latter may concern actions which EU law already allows for and where confirmation or clarification of the legal position is sought. Innovation Deals would be restricted to innovative initiatives which struggle with limited access to the market but can, over time, potentially lead to extensive applicability.

## Sunset Clauses

Sunset clauses are a way of reacting to rapidly changing market conditions that the legislator cannot adequately anticipate. Sunset clauses can be defined as legal or regulatory provisions that shall be discontinued after a certain period, except if the renewal of the clause is requested. Sunset clauses bear resemblance to experimental legislation because they enable the legislator or regulator to 'try out' a new regulatory approach. This can be useful in a situation of great uncertainty and lack of information. **When little is known about a situation, a temporary legislative measure can be a better option than no legislative action**. What is more, sunset clauses may ease the decision of the legislator, because the decision is easily overturned. Sunset clauses expire automatically if the legislator or the regulatory authority does not actively renew them after a fixed period. Lawmakers can use sunset clauses to gather information and experience. For these reasons, sunset clauses can encourage quicker legislative or regulative changes in dynamic fields or under uncertain circumstances.

## Innovation Action Plans

A more proactive approach to spur innovation is entailed in the concept of an innovation-oriented action plan. **Action plans aim at implementing policy goals by providing a range of regulatory tools, often combined with funding programmes.** One example is the Eco-Innovation Action Plan launched by the Commission in 2011. The Eco-Innovation Action Plan aims at supporting innovative products, services and technologies which reduce the use of resources. The Commission identified limited market access as a major obstacle to these products and services. The Eco-Innovation Action Plan provides different tools to improve market access, for example through funded demonstration and market replication projects. It also addresses regulatory burdens, as well as identifies regulatory incentives. As a result, the concerned authorities, in particular the European Commission itself, have to review existing legislation to check for outdated standards or gaps with regards to the promotion of eco-innovative efforts.

## Conclusion

Regulation has the potential to drive innovation when it is well-designed, flexible and regularly updated to reflect market developments. To ensure that the regulatory process becomes more innovation-friendly, the innovation principle could be a guiding principle. This should not amount to a single intervention in support of innovation but ought to be part-and-parcel of the entire regulatory cycle. The innovation principle will gain acceptance if it is conceived in a comprehensive manner. If it focuses exclusively on competitiveness, that is, on reducing costs to industry without considering social and environmental costs, it risks yielding *less* regulation instead of *better* regulation. In a fair balance with other Treaty-based principles the innovation principle should be integrated throughout the regulatory life cycle and expressed through a range of instruments. The resulting cultural change will mean that innovation will be better accepted as a natural way of addressing Europe's societal challenges and improving its opportunities to prosper.

## Notes

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5. European Commission, COM(2016) 356 final, 2016.
6. European Court of Justice, Case C-362/14, Maximilian Schrems v. Data Protection Commissioner.
7. [http://ec.europa.eu/clima/policies/transport/vehicles/docs/evaluation\\_ldv\\_co2\\_regs\\_en.pdf](http://ec.europa.eu/clima/policies/transport/vehicles/docs/evaluation_ldv_co2_regs_en.pdf)
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