
## **The challenge ahead: Capitalising on Europe’s Intellectual assets to boost recovery and resilience**

**Intangible assets** such as inventions, artistic and cultural creations, brands, software, know-how, business processes and data **are the cornerstones of today’s economy**. Over the last two decades, the volume of annual investments in such ‘intellectual property products’[[1]](#footnote-2) increased by 87% in the EU, while the volume of tangible (non-residential) investments increased by only 30%. Investments in intangibles were also significantly less affected by the 2008 economic crisis[[2]](#footnote-3).

Intellectual property rights (IPRs), i.e. patents, trade marks, designs, copyright and neighbouring rights, geographical indications and plant variety rights, as well as trade secret protection rules, help entrepreneurs and companies valorise their intangible assets. In today’s economy, industrial products and processes increasingly rely on intangibles protected by IPRs, and sound intellectual property (IP) management has become part and parcel of any successful business strategy. **Industries that make intensive use of IP** play an essential role in the EU economy and **offer valuable and sustainable jobs** to society. IPR-intensive industries currently account for almost 45% of Europe’s GDP and directly contribute to the creation of almost 30% of all jobs[[3]](#footnote-4). Many of **Europe’s industrial ecosystems** cannot thrive without effective IP protection and effective tools to trade intangible assets.

IP is a key asset to be able to compete globally. World-wide, the number of IP filings is on the rise. The same trend can be noted in the EU. Between 2010 and 2019, the number of European patents granted rose from 58 000 to 137 000, approximately - although the rise is less marked than in other parts of the world, notably Asia, where economies are quickly catching up on IP generation.

The EU has the means to remain competitive in the global race for technological leadership. It also has a robust IP framework. For instance, a single application mechanism makes it possible to obtain and enforce trade mark, designs and plant variety protection across Europe. The quality of patents granted in Europe is among the highest in the world[[4]](#footnote-5). European innovators are frontrunners in green technologies[[5]](#footnote-6). Globally, they hold a major portion of green patents[[6]](#footnote-7) and have particularly strong IP portfolios in technologies such as climate change adaptation, carbon capture and storage, water and waste treatment[[7]](#footnote-8). European companies are also leaders in specific digital technologies, such as connectivity technologies.

There is a need to **further build on our strengths** by upgrading the EU’s framework, where needed, and putting in place well-calibrated IP policies to help companies capitalise on their inventions and creations, whilst at the same time ensuring that inventions and creations are serving economy and society at large. There is plenty of inventiveness and creativity in the EU: it is therefore necessary to maximise the incentives to bring out this potential and to **put our companies on track towards economic recovery**[[8]](#footnote-9) **and Europe’s global green and digital leadership**.

Some of the most important **social challenges** of our times, such as making green transition possible or ensuring proper healthcare for all, **cannot be addressed without innovative solutions**. The development of the renewable energy and low carbon energy ecosystems for instance hinges on the rapid development and deployment of cutting edge technologies, as well as effective tools for sharing critical intangibles, such as data. The development of a flourishing health ecosystem in Europe requires a transparent system of IP incentives, boosting innovation whilst ensuring effective access to affordable medicines. The cultural and creative sectors cannot thrive without effective IP protection[[9]](#footnote-10).

The COVID-19 crisis has illustrated EU’s dependence on critical innovations and technologies, and reminded Europe of the importance of effective IP rules and tools to secure a fast deployment of critical IP. IPRs, and their role in a competitive and innovative European pharmaceutical industry, are also part of the newPharmaceutical Strategy for Europe[[10]](#footnote-11).

The **technological revolution** – the data economy and society, the turn to artificial intelligence (AI), the growing importance of new technologies such as blockchain, 3D-printing and the Internet of Things (IoT) as well as the development of new business models such as the platform economy, and the data and circular economy - offers a unique window of opportunity to modernise our approach to protecting our intangible assets. In recent decades, there has been significant progress in creating a single market for IP, yielding many benefits for the EU economy. An array of tools is available to bring innovative solutions to society[[11]](#footnote-12). Yet many gaps and weaknesses still exist in the way EU companies protect intangible capital and lead it to bear fruit for European society.

We have identified **five challenges**:

* First, despite a lot of progress, part of the **EU’s IP system remains too fragmented**, with procedures that are complex and costly and that sometimes lack clarity.

European patents are subject to expensive national validation procedures and parallel litigation in multiple EU countries. For pharmaceuticals, protection through supplementary protection certificates (SPCs) is only available at national level. Design and geographical indication (GI) protection should be improved. Where registration is necessary to protect one’s IPRs, one-stop shop procedures, offering the right coverage, should be the norm, not the exception.

As part of the digital transformation, well-calibrated protection of designs in the digital environment becomes even more pressing. For instance to ensure a smooth uptake of 3D printing technologies, we need clarity on the protection of 3D printing files and on the limitations for the private use of designs. We need clear answers to new questions, such as how to protect inventions developed or implemented using AI,[[12]](#footnote-13) and how to ensure that repair and re-use are not blocked by unfair or excessively restrictive IP practices[[13]](#footnote-14). At the same time, we need to make more of the potential offered by new technologies such as AI and blockchain to increase the effectiveness of our IP systems.

* Second, too many companies, **in particular SMEs,** and too many researchers **do not make full use of the opportunities** offered by IP protection.

Only 9% of EU SMEs have registered IP rights. In the current crisis, IP registration numbers have dropped, to the detriment of companies’ competitiveness and resilience. Recent analysis shows that SMEs’ reluctance to use IP rights is largely due to lack of knowledge about IP[[14]](#footnote-15). Even if they use IPRs, they find the system too costly, complex and difficult to navigate.

In addition to the low levels of protection of their IP, SMEs are not taking full advantage of its commercial exploitation. Financial analysts and investors recognise IP as a key asset in the value of a firm and as an indicator of its technological and growth capabilities. Nevertheless, knowledge-intensive SMEs seeking to finance their operations often do not adopt appropriate IP strategies that would help valorise their intangible capital. For the financial sector, the valuation of a patent or trade mark is crucial; as the lender or investor is mainly interested in fungible collaterals[[15]](#footnote-16) and less attracted by the monopoly right itself.

Sound IP management is also needed to support the valorisation and deployment of R&D results in Europe. For example, although 26% of high-value research publications on AI comes from Europe, only 4 out of the top 30 applicants (13%) and 7% of businesses, engaged in AI patenting worldwide, are European[[16]](#footnote-17).

* Third, **tools to** **facilitate access to** **IP** (and therefore allow the take up and diffusion of technologies) **are insufficiently developed**.

The COVID-19 crisis illustrated our dependence on critical innovations and technologies, particularly in the health sector. The EU should further enhance itstools to make such innovations and technologies available, where needed, whilst ensuring a fair return on investment.

The licensing of standard-essential patents (SEPs) is often a cumbersome and costly exercise for both patent holders and technology implementers. Given the growing importance of SEPs (for instance, there are over 95 000 unique patents and patent applications supporting 5G[[17]](#footnote-18)), there is a need for a much clearer and more predictable framework, incentivising good faith negotiations rather than recourse to litigations.

Although data sharing is gaining importance in many sectors, the implications of the IP framework for data sharing remain to be clarified.

* Fourth, in spite of continued efforts to turn the tide, **counterfeiting and piracy are still thriving**, including by taking advantage of digital technologies.

Imports of counterfeit and pirated goods into the EU amount to as much as EUR 121 billion, representing up to 6.8% of EU imports in 2016 (against 5% of EU imports in 2013)[[18]](#footnote-19). Annually, this results in direct lost sales of EUR 50 billion and direct employment losses of 416 000 jobs[[19]](#footnote-20). Cyber theft of trade secrets accounts for an estimated EUR 60 billion of losses in the EU[[20]](#footnote-21).

* Finally, there is **lack of fair play at global level** and EU businesses often lose out when operating abroad.

Certain non-EU countries do not sufficiently protect IP, often to the harm of EU companies. **The EU must harness its potential to act as a global norm-setter.** It must step up efforts to fight abusive practices, such as bad-faith IP-registrations and other misappropriations of IP. Above all, it should lead by example: develop state-of-the art regulatory solutions to global issues such as the licensing of SEPs or the way data can be shared.

In response to these five challenges, and building on input provided by Member States and stakeholders[[21]](#footnote-22), this action plan identifies **five key focus areas,** with specific proposals for action to:

* upgrade the system for IP protection,
* incentivise the use and deployment of IP, notably by SMEs,
* facilitate access to and sharing of intangible assets while guaranteeing a fair return on investment,
* ensure better IP enforcement, and
* improve fair play at global level.

## **Better protection of IP**

A first priority is to **ensure that EU innovators have access to fast, effective and affordable protection tools.** To this end, we need to go for the extra mile to address the remaining fragmentation and reduce complexity. We must also make sure that our rulebook is fully in line with the needs of the new green and digital economy.

To make this happen, we need to secure the **launch of the unitary patent system**. This will create a one-stop shop for businesses, considerably simplifying patenting in the EU, boosting transparency and facilitating licensing. Obtaining a unitary patent (covering up to 25 Member States)[[22]](#footnote-23) and maintaining it for a typical duration will cost around EUR 10 000, about six times less than obtaining and maintaining equivalent protection today. In addition, centralised litigation before the new Unified Patent Court will improve legal certainty and avoid parallel proceedings in multiple Member States, considerably reducing litigation costs. The unitary patent system will thus be a key tool for the EU's industrial recovery, especially for the renewable energy, electronics, aerospace and defence, and mobility ecosystems.

The main missing step in ensuring the launch of the unitary patent system is Germany's ratification of the Unified Patent Court Agreement, now made possible as a result of a recent decision of the German Constitutional Court[[23]](#footnote-24). Once the ratification process is completed, the Commission will work together with the European Patent Office (EPO) and Member States to make the unitary patent system operational among the contracting Member States[[24]](#footnote-25). It will also encourage the Member States that have not yet engaged to join the new system.

Closely linked to patents are **supplementary protection certificates** (SPCs), which offer an additional period of IP protection for patented medicinal and plant protection products that are subject to lengthy clinical trials and market authorisation processes. After introducing an SPC “manufacturing waiver” in 2019[[25]](#footnote-26), the Commission has recently finalised a detailed evaluation of the SPC regime[[26]](#footnote-27). It demonstrates that, while the SPC system remains relevant, it suffers from fragmented implementation across Member States. This translates into inefficiencies and a lack of transparency and predictability, which hampers innovators and generic producers, and eventually harms patients. The Commission is assessing ways to address these pitfalls, including the possibility to introduce a unified SPC grant mechanism and/or create a unitary SPC title.

In the context of its new pharmaceutical strategy for Europe, the Commission is also looking closely at how to further optimise incentives and rewards to boost innovation, address unmet needs, foster affordability by ensuring a swift market launch as well as a continuous supply of medicines, including generics and biosimilars. Innovation in this area should match needs and become available to all patients that can benefit from it. In this context, it looks among others at the regime for orphan and paediatric medicines[[27]](#footnote-28) and the Bolar exemption[[28]](#footnote-29).

Following the successful reform of the EU trade mark legislation[[29]](#footnote-30), the Commission will **revise the EU legislation on design protection**. The aim is to improve the accessibility and affordability of design protection in the EU, especially for the textile, furniture and electronics ecosystems, and to ensure that the design protection regime better supports the transition to the digital and green economy. Design makes a product appealing and well-designed products give producers a significant competitive advantage. Results of the recent evaluation[[30]](#footnote-31) of the EU legislation on design protection[[31]](#footnote-32) show that, although EU design systems are functioning well overall, there are still shortcomings. Registration procedures are partly outdated and in some cases involve an unnecessary administrative burden. The protection of new forms of design (e.g. animated designs, graphical user interfaces) is not sufficiently clear. Also, a lack of clarity on the scope of design rights poses challenges, particularily in relation to the increasing use of 3D printing or for the enforcement of design rights against infringing goods transiting the EU. Finally, as a consequence of only partial harmonisation of design protection for component parts used for the repair of complex products, the economically important spare parts market continues to be strongly fragmented, severely distorting competition and hampering transition to a more sustainable and greener economy.

Europe also needs a **new approach to the way geographical indications (GIs) are protected**. GIs are names of products linked to the natural environment and the *know-how* of local producers. They are part of Europe's cultural heritage and contribute to the social, environmental and economic sustainability of the rural economy[[32]](#footnote-33), sometimes also referred to as the ‘rural IPR’. GIs have major economic value in the agriculture sector. In 2017, agri-food and drink products, whose names are protected by the EU as GIs, represented a sales value of EUR 74.76 billion within the EU, 7% of total sales in the European food and drink sector. Furthermore, GIs represent 15.5% of total EU agri-food exports, with a higher sales premium for protected product names[[33]](#footnote-34). However, there is still untapped potential. Current protection and enforcement rules could be more precise and the roles of Member States and the Commission in the registration process could be better identified. In addition, there are different GI systems for different types of agricultural products. Building on the results of the ongoing evaluation[[34]](#footnote-35), the Commission will look at ways to **strengthen,** **modernise, streamline and better enforce GIs for agricultural products, food, wines and spirits**.[[35]](#footnote-36)

Only some Member States have currently in place rules to ensure GI protection for non-agricultural products (such as handicrafts). At EU level, there is currently no uniform mechanism for the protection of such non-agricultural GIs, which are often an important part of local identity, attract tourism, retain unique skills and contribute to job creation. A recent study[[36]](#footnote-37) shows that a harmonised system for non-agricultural products would be beneficial for the EU economy. It would provide consumers with better visibility and authenticity indications for these products. It could help producers stay competitive and work together in niche markets, and give a boost to less developed regions[[37]](#footnote-38). For these reasons, as part of the overall reform of the GI system, the Commission will, on the basis of a thorough impact assessment of its potential costs and benefits, consider the feasibility of creating an **efficient and transparent** **EU GI protection system for non-agricultural products**. This would also enable the EU to fully benefit from the opportunities offered by the international system of appellations of origin and GIs[[38]](#footnote-39). Generally, it would give more of a head start when promoting the recognition of EU GIs worldwide.

The **Community Plant Variety Rights** (CPVR) system plays a crucial role for the EU economy as well. A robust plant variety rights system incentives breeders to develop new varieties, thus contributing to the achievement of the European Green Deal objectives and the United Nations sustainable development goals. The Commission will continue to **monitor the proper application of the system and seek to bring in further improvements, where needed**[[39]](#footnote-40). The 2011 evaluation of the CPVR legislation concluded that the system, which functions well overall, should be retained, albeit with some carefully targeted adjustments. This conclusion is supported by more recently identified shortcomings[[40]](#footnote-41) which could be tackled, after an evaluation, in a targeted revision of the legislation in the medium term.

In addition to the aforementioned reforms, the Commission will, together with stakeholders and IP offices, explore the **use** **of** **new technologies** such as AI and blockchain **to further improve the effectiveness of our IP systems.** In fact, new technologies can help facilitate the protection of IP[[41]](#footnote-42), improve transparency, allow for asmoother distribution of license fees,[[42]](#footnote-43) and more effectively tackle counterfeiting and piracy. To explore the full potential of new technologies and promote the uptake thereof, the Commission will encourage an **industry dialogue** to act as a sounding board and to accompany the many ongoing initiatives in this area.

In addition, the digital revolution requires **reflection on how and what is to be protected**. **AI technologies** are creating new works and inventions. In some cases, for instance in the cultural sector, the use of inventive machines may become the norm. These developments raise the question of what protection should be given to products created with the help of AI technologies. Discussions on the impact of AI on IPRs are ongoing both in Europe and internationally (see section 6). A study published today[[43]](#footnote-44) stresses the need to distinguish between inventions and creations generated with the help of AI technologies and the ones solely created by AI technologies. Whilst inventions and creations autonomously created by AI technologies are still mostly a matter for the future, the Commission takes the view that AI systems should not be treated as authors or inventors. This is also supported by the line taken by the EPO in the Dabus case.[[44]](#footnote-45) The study also shows that current EU IP framework and the European Patent Convention appear broadly suitable to address the challenges raised by AI-assisted inventions and creations. However, harmonisation gaps[[45]](#footnote-46) and room for improvement remain.[[46]](#footnote-47) These should be addressed in order for European excellence to blossom in AI. As a first step, the Commission will map and analyse all issues and engage in stakeholder discussions. The aforementioned industry dialogue could offer a useful forum in this context.

Finally, the Commission will  **ensure a coherent and cutting-edge application of the rules**, in co-operation with Member States and stakeholders.

In the area of **copyright**, the Commission is focusing on supporting the timely and effective transposition and implementation of the two newly adopted directives on the modernisation of the EU's copyright framework[[47]](#footnote-48). A crucial part of this work concerns the implementation of Article 17 of the Copyright Directive, which sets out a specific legal regime for the use of copyright-protected content by user-uploaded content sharing platforms. The Commission has carried out an extensive stakeholder dialogue to gather the views of relevant stakeholders on the main topics related to this article's application. Taking into account the results of the dialogue, the Commission will soon issue guidance to support Member States in implementing this provision. In relation to the existing EU copyright framework, the Commission will also work on a number of reports stemming from specific provisions such as review clauses set out in several EU copyright instruments, including the Term of Protection Directive, the Collective Rights Management Directive, the so-called “Marrakesh” Directive, and the Portability Regulation[[48]](#footnote-49).

For the quickly developing biotech market, the application of the **Biotech Directive**[[49]](#footnote-50) is key. Biotech patents offer crucial incentives, but should be issued in justified circumstances. The Biotech Directive offers a balanced framework in this respect, whose application will continue to be monitored by the Commission.[[50]](#footnote-51)

**To improve the way IPRs are protected in the EU, the Commission will:**

* support a rapid roll out of the **unitary patent** system, to create a one-stop-shop for patent protection and enforcement across the EU (2021),
* optimise the **supplementary protection certificates system,** to make it more transparent and efficient (Q1 2022),
* modernise the EU legislation on **industrial designs**, to make it more accessible and better support the transition to the digital and green economy (Q4 2021),
* strengthen the protection system for **geographical indications for agricultural products** to make it more effective and consider, on the basis of an impact assessment, whether to propose an EU protection system for **non-agricultural geographical indications** (Q4 2021),
* evaluate the **plant variety legislation** (Q4 2022).
1. **Promoting an effective use and deployment of IP, in particular by SMEs**

While smart IP strategies can act as a catalyst for growth, European innovators and creators often fail to grasp the benefits of IP. This critically undermines the EU’s capacity to innovate and bolster its resilience in key areas of the economy. Europe should further capitalise on the value of the knowledge our companies constantly create, develop and share, by helping them manage these assets more actively, and facilitating better access to equity and financing.

To achieve this, the Commission will:

* In the short-term, together with the EUIPO, offer financial support or **IP vouchers** for SMEs impacted by the COVID-19 crisis, helping them to manage their IP portfolios. The scheme, with a budget of EUR 20 million[[51]](#footnote-52) for one year, should become operational as from 1 January 2021 and will cover partial reimbursements for trade mark and design registration and for anIP scan (a review of the intangible assets of a company by a professional and some initial advice on how to manage those assets strategically).
* In parallel, it will further roll out[[52]](#footnote-53) tailor-made **IP advice** in the Horizon Europe programme, assisting innovative businesses at different stages of the R&I process. It will also explore possibilities to expand IP advice to other EU research and investment programmes, including the advisory hub under InvestEU. For a selected group of very innovative companies, the Commission will combine strategic advice with financial support to develop IP portfolios[[53]](#footnote-54).
* More broadly, and in cooperation with the EUIPO, provide one-stop shop access to information and advice about IP[[54]](#footnote-55).The EUIPO[[55]](#footnote-56) will develop a platform, the **European IP Information Centre**, which will be linked to the Single Digital Gateway and will offer access to all relevant information not only on IP formalities but also on related services (e.g. filing for domain name protection, registration of company names), while at the same time offer easy-to-use filing systems for SMEs. The Commission will also mainstream IP support and advice through its various SME support networks[[56]](#footnote-57) to reach out more effectively to small businesses.
* Finally, make it easier for SMEs to **leverage their IP when trying to get access to finance.** Although intangibles are often amongst the most valuable assets, a survey shows that not many SMEs benefit from their IP when trying to get access to finance.[[57]](#footnote-58)Banks and venture capital are reluctant to finance relying on IP as an asset and the COVID-19 crisis further increased this risk aversion. A recent study shows a clear gap in relation to financing SMEs using their intellectual assets[[58]](#footnote-59). The Commission will discuss with the financial community how IP valuation could help them to better take into account SMEs’ intellectual assets[[59]](#footnote-60). The ‘tech due diligence’ pilot project announced in the SME strategy will be a way to test IP evaluation in a broader technology-related context[[60]](#footnote-61). Building upon the experience with existing bank guarantee mechanisms[[61]](#footnote-62), the Commission will also explore how guarantees to support SMEs and creators in projects based on IP can be better used.

In addition to these SME-oriented activities, the Commission Communication on “A new ERA for Research and Innovation” [[62]](#footnote-63) highlights the need to turn the outcomes of Europe’s excellent research into disruptive innovation and **promote better IP management in the wider R&I community**; in this respect the Commission will launch an awareness-raising campaign to foster valorisation of IP in the valuation of companies by investors.For instance,the Commissionwill update its Recommendation on the management of intellectual property in knowledge transfer activities via the Guiding Principles for Knowledge Valorisation. This revision will be accompanied by a Code of Practice for smart use of IP and combined with InvestEU support to project holders via technical, financial and legal advice including on intellectual property.

Steps will also be taken to **ensure that publicly funded IP is used in a fair and effective manner**. The Commission has already launched a new platform to favour the valorisation of EU-funded R&I results[[63]](#footnote-64) and a platform presenting EU-supported R&I to tackle the spread of coronavirus and support preparedness for other outbreaks[[64]](#footnote-65). The aim is to **ensure that results achieved using EU funds are used to the benefit of the EU economy**. This is why, under the Horizon Europe programme, when IP on research results is to be exploited primarily in non-associated third countries, applicants will need to explain how this is still in the EU's interest[[65]](#footnote-66).

Furthermore, IP protection and broad diffusion of new technologies will continue to be a central element of R&I-related important projects of common European interest (IPCEIs) and funding under the European Regional Development Fund.

There is also a need to **improve the conditions for companies to protect and use IP in public procurement** with a view to stimulating innovation and boosting the economy. Member States should consider leaving IP ownership to the contractors where appropriate, unless there are overriding public interests at stake or incompatible open licensing strategies in place. As announced in the SME strategy, the Commission will clarify issues related to IP in public procurement in the update of the guidance on innovation procurement.

**To boost the uptake and use of IP, the Commission will:**

* provide, with the EUIPO, a scheme for **IP SME Vouchers** to finance IPR registration and strategic IP advice (Q1 2021),
* **roll out IP assistance services for SMEs** in the “Horizon Europe” programme and expand it to other EU programmes (2020+).

## **Easier access to and sharing of IP-protected assets**

In today’s economy, easier and faster access to knowledge, data and technologies, including IP-protected ones, is crucial. A resilient, green[[66]](#footnote-67) and competitive economy needs tools to facilitate access to critical IP protected technologies in times of crisis, to facilitate license copyright and standard-essential patents, and to promote data sharing.

* *Better tools to facilitate access to critical IP in times of crisis*

The **COVID-19 crisis** highlights the importance of an effective IP system, offering strong incentives to innovate and easy access to IP for technologies. R&D funding and incentives are needed to ensure the rapid development and availability of new technologies, such as vaccines or new treatments. Therefore, we must ensure with better tools that the IP system is allowing access to critical technologies, where and when necessary, while ensuring an adequate return on investment for innovators.

So far, the **COVID-19 crisis has shown the resilience of our IP system**. This is due, in large part, to strong commitment and co-operation between the public and private players and the various initiatives taken to boost the development and availability of vaccines and other critical supplies.

The Commission supports voluntary pooling and licensing of IP related to COVID-19 therapeutics and vaccines[[67]](#footnote-68), in line with the resolution of the World Health Assembly[[68]](#footnote-69). Such schemes should be based on a voluntary participation, ensuring broad and equitable access and allowing IP owners to recoup investments in a balanced way. The Commission has also taken steps to promote cooperation in the private sector to efficiently address the shortage of essential products and services[[69]](#footnote-70) and to ensure that the results of publicly-funded R&I programs in the EU and its Member States are made available, in particular to ramp up production of critical materials[[70]](#footnote-71).

Looking forward, however, the Commission sees a need to improve the **tools** in place **to cope with crisis situations**.

The Commission is looking into ways to incentivise the **rapid pooling of critical IP in times of crisis**, for instance through a novel licensing system making critical IP available in a controlled manner and on a temporary basis, so that the production of IP-protected products can be quickly ramped up including via repurposing manufacturing.

Finally, the Commission sees the need to ensure that **effective systems for issuing compulsory licenses** are in place, to be used **as a means of last resort** and a safety net, when all other efforts to make IP available have failed. The WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) provides for a possibility, under the conditions listed, to issue compulsory licences, *i.e.* government’s authority to grant permission to a party seeking use of a patented invention without the consent of the patent owner. The procedure can be fast-tracked in the case of national emergency. In combination with the Doha Declaration on the TRIPS Agreement and Public Health, it is clear that each WTO Member has not only the right to grant compulsory licences, but also the freedom to determine the grounds upon which such licences are granted.

In Europe, compulsory licensing is mainly governed by national law[[71]](#footnote-72). The Commission calls on Member States to ensure that the tools they have are as effective as possible, for instance, by putting in place fast-track procedures for issuing compulsory licenses in emergency situations. In addition, it sees a need for a stronger co-ordination in this area, to avoid distortive effects on innovation and trade. **Early co-ordination and information sharing** between Member States, e.g. on the duration of and royalties on any such licenses, should help secure maximum benefits whilst at the same time avoiding excessive distortions. The Commission will explore with Member States the possibility of creating an emergency co-ordination mechanism, to be triggered at short notice when Member States consider issuing a compulsory license.

* *Facilitating licensing of IP via enhanced transparency, notably as regards copyright*

To facilitate licensing and sharing of IP, there is a need for **more transparency on ownership** **and management** of all types of IP. The unitary patent will offer real progress in the field of patents.

Use of **high quality metadata and new technologies** such as blockchain could also help achieve more transparency and better rights data management, notably with regard to **copyright** and an improved identification of rights owners[[72]](#footnote-73).

The Commission is launching a study on copyright and new technologies, which will focus on copyright data management and artificial intelligence. The result from this study should be available in 2021. The Commission will further work with relevant stakeholders to promote the quality of copyright data and achieve a well-functioning **“copyright infrastructure**”[[73]](#footnote-74) (e.g. improve authoritative and updated information on right holders, terms and conditions and licensing opportunities)[[74]](#footnote-75).

* *Standard-essential patents*

**Standard-essential patents** (SEPs) are patents for technologies incorporated into standards. The amount of SEPs and the number of SEP owners is increasing (e.g., for mobile connectivity standards more than 25000 patent families[[75]](#footnote-76) have been declared to ETSI by an increasingly large group of SEP holders, and newly emerging technology standards often contain SEPs as well). SEPs play a crucial role in the development of 5G and the Internet of Things (IoT). Digital integration of objects, devices, sensors, and everyday items, with applications ranging from connected cars, health, energy to smart cities requires interoperable solutions based on standards.

In that context, it is essential to have stable, efficient and fair rules governing the licensing of SEPs. Despite the guidance provided in the SEPs Communication in 2017[[76]](#footnote-77), some businesses continue to find it difficult to agree on SEP licensing. This can frequently lead to disputes, in which patent holders claim that their SEP has been infringed and the other party complains that the patent holder has imposed unfair conditions on a licensing agreement. Although currently the biggest disputes seem to occur in the automotive sector, they may extend further as SEPs licensing is relevant also in the health, energy, smart manufacturing, digital and electronics ecosystems[[77]](#footnote-78).

In the short term, the Commission will facilitate industry-led initiatives to reduce frictions and litigations among players in specific sectors.

In parallel, building on the 2017 approach, the Commission will consider **reforms** to further clarify and improve the framework governing the declaration, licensing and enforcement of SEPs. The Commission will for instance explore the creation of an independent system of third-party essentiality checks in view of improving legal certainty and reducing litigation costs[[78]](#footnote-79). The possible reforms will take into account the experience with the guidance provided in the 2017 SEPs Communication and discussions with relevant stakeholders.

* *Promoting data sharing*

Finally, as set out in the Commission’s recent European Strategy for Data[[79]](#footnote-80), the EU needs a solid **framework to allow businesses to create, access, share and use data**. Between 2018 and 2025 the value of the EU data economy will almost triple, reaching EUR 829 billion and representing 5.8% of EU GDP[[80]](#footnote-81) in 2025. Given that some data can be protected by IP rights or as trade secrets, the Commission is currently evaluating the IP framework to ensure balance between the need to foster data sharing (e.g. to facilitate access and use of data by SMEs, to facilitate repairs) and the need to be able to safeguard legitimate interests.

Fostering data sharing requires a secure environment where businesses can keep investing in data generation and collection, while sharing them in a secure way, confident that their sensitive business data will not be acquired, used or disclosed unlawfully. The **Trade Secrets Directive**[[81]](#footnote-82) already provides effective tools for protection, but there may be a need to clarify its scope, e.g. which type of data or datasets could qualify as ‘trade secrets’, whether the current set of exceptions can support the data and green[[82]](#footnote-83) economy and whether and how the tools offered by the directive can be used to efficiently counter the unlawful acquisition, use and disclosure of data and datasets. With a view to clarifying these issues and identify best practices, the Commission has launched a study, with a specific focus on strategic sectors including the healthcare and automotive sectors. Based on the results, and as part of the Data Act[[83]](#footnote-84), the Commission will consider the need for further action, e.g. targeted guidance.

The **Database Directive**[[84]](#footnote-85) provides for *sui generis* protection for databases, which are the result of substantial investments. A recent evaluation[[85]](#footnote-86) showed that, while the Database Directive provides added value, it could be revisited to facilitate data access and use. Following up on the European Strategy for Data, the Commission will therefore review the directive, notably to facilitate the sharing of and trading in machine generated data and data generated in the context of rolling out the IoT. The review will take place alongside the Data Act[[86]](#footnote-87) and take into account initiatives of data sharing in the area of antitrust law[[87]](#footnote-88).

**To facilitate licensing and sharing of IP, the Commission will:**

* ensure **the availability of critical IP in times of crisis**, including via new licensing tools and a system to co-ordinate compulsory licensing (2021-22),
* improve **transparency and predictability in SEP licensing** via encouraging industry-led initiatives, in the most affected sectors, combined with possible reforms, including regulatory if and where needed, aiming to clarify and improve the SEPs framework and offer effective transparency tools (Q1 2022).
* promote **data access and sharing**, while safeguarding legitimate interests,via clarification of certain key provisions of the Trade Secrets Directive and a review of the Database Directive (Q3 2021).

## **Fighting IPR Infringements**

Effective enforcement is part of a well-functioning IP system. The Commission continues to closely **monitor the application of the Directive on the enforcement of IPRs**[[88]](#footnote-89) to ensure effective and balanced judicial redress. It works together with Members States and stakeholders to give effect to the recent Commission guidance[[89]](#footnote-90), for instance with a view to ensuring that – where all conditions are met, including that of proportionality – injunctions are applied uniformly and efficiently across Member States.

In the area of patents, the launch of the UPC should further facilitate and streamline patent right enforcement.

As regards counterfeiting and piracy, the Commission sees a clear need to step up efforts. In 2016, imports of counterfeit and pirated goods into the EU amounted to as much as EUR 121 billion, which represents up to 6.8% of EU imports (against 5% of EU imports in 2013)[[90]](#footnote-91). The presence of counterfeit products in the EU marketplace results in direct lost sales amounting to EUR 50 billion and direct employment losses of 416 000 jobs annually[[91]](#footnote-92). It also constitutes serious health, safety and security threats to consumers (e.g. fake face masks)[[92]](#footnote-93) and negatively impacts the environment[[93]](#footnote-94).

New forms of IP infringements have arisen on the internet, such as cyber theft of trade secrets (accounting for an estimated EUR 60 billion of losses in the EU[[94]](#footnote-95)), illegal internet protocol television (IPTV) and other forms of illegal (live) streaming. They raise particular challenges for manufacturing, the creative and cultural industries as well as the sports sector.

The Commission already announced that before the end of the year, new rules will **clarify and upgrade** **the responsibilities of online platforms** and remove disincentives for their voluntary actions to address illegal content (goods or services) they intermediate. The forthcoming proposal for the Digital Services Act package will aim to harmonise a set of specific, binding and proportionate obligations for digital services, enforced by a strengthened supervisory framework[[95]](#footnote-96).

In addition, **the capacity of law enforcement authorities has to be substantially strengthened.** Counterfeiting and piracy must become a higher priority. The Commission urges Member States and the Council to include IP crime among the priorities of the next EU Policy Cycle –European multidisciplinary platform against criminal threats(EMPACT)[[96]](#footnote-97), for the period 2022-2025. It plans to strengthen the enforcement of IPRs at EU level, by broadening the Commission’s mandate and assigning it to the European Anti-Fraud Office (OLAF), so that the latter does not only prevent counterfeit goods from entering the Single Market but can also act against illicit production of counterfeit goods within the EU[[97]](#footnote-98). The Commission also encourages all relevant stakeholders to continue exchanges with Europol to further improve the overall threat assessment and to foster effective and coordinated action against IP crime.

The Commission will also support Member States’ customs authorities in improving risk management and anti-fraud actions, in particular through the establishment of an EU layer of data analytics capabilities, by better equipping Member States with customs control equipment and by enhancing cooperation within the EU and with customs authorities of partner countries[[98]](#footnote-99).

The Commission will reinforce cooperation between all involved players – right holders, suppliers, various sets of intermediaries (e.g. online platforms, social media, the advertising industry, payment services, domain name registrars/registries, and transport and logistics companies) and public enforcement authorities (including administrative bodies, customs, police, market surveillance authorities and public prosecutors) to curb piracy and counterfeiting. To this end, it will establish an **EU Toolbox against counterfeiting**, based among others on reported practices and principles developed in the context of various industry-led initiatives[[99]](#footnote-100). The Toolbox will clarify roles and responsibilities and identify ways to work together. A fundamental element is the sharing of relevant data on products and traders, in compliance with EU data protection law, for which further guidance may be necessary[[100]](#footnote-101). The Toolbox will also promote the use of new technologies such as image recognition, artificial intelligence and blockchain[[101]](#footnote-102). Where appropriate, the Toolbox will be accompanied by benchmarks to make it possible to measure progress.

Building on the success of specific preventive and repressive actions against fake COVID-19 related products[[102]](#footnote-103), the Commission will promote **campaigns** to combat the entry of the most harmful counterfeit goods for consumers[[103]](#footnote-104) on the market.

Finally, the economic impact of the cyber theft of trade secrets could be drastically reduced by **promoting cybersecurity awareness and skilful IP management**. In line with its cyber-security skills and awareness-raising actions under the Security Union Strategy[[104]](#footnote-105),the Commission will, together with the EUIPO Member States and the business community, develop awareness tools and targeted guidance that will increase the resilience of EU businesses (and SMEs in particular) against cyber theft of trade secrets.

**To fight IPR infringements, the Commission will:**

* clarify and upgrade the **responsibilities of digital services, in particular online platforms**, through the Digital Services Act (Q4 2020),
* strengthen the role of OLAF in the fight against counterfeiting and piracy (2022),
* **establish an EU Toolbox against counterfeiting** setting out principles for joint action, cooperation and data sharing among right holders, intermediaries and law enforcement authorities (Q2 2022).

## **fair play at global level**

IP plays a major role in trade and investment and our relations with non-EU countries. IPR-intensive industries account for 93% of total EU exports of goods to the rest of the world[[105]](#footnote-106).A growing number of countries around the world use IP assets to bolster their development and national competitiveness. IP protection policies are gaining geo-political importance[[106]](#footnote-107).

Our businesses need to rely on a stable, global level playing field when competing abroad. However, evidence[[107]](#footnote-108) shows that our businesses still face great challenges when operating in non-EU countries, including weak IP rules and enforcement, forced technology transfer and other unfair practicessuch as limitations in IP ownership of joint research results, very broad extraterritorial anti-suit injunctions and cyber theft.

With its large single market, **the EU is in a unique position to act as a global standard-setter in IP.** It can and will continue to fight for a stable and effective global IP framework. At the same time, we need **to better protect ourselves against IP theft**, espionageand other misappropriations of IP originating in non-EU countries but affecting our European markets.. Member States should also pay particular attention to the effective protection of IP in critical technologies to ensure our resilience in strategic sectors*.*

To achieve this, the Commission will undertake the following actions:

In the context of **Free Trade Agreements** (FTAs), the Commission will continue to seek ambitious IP chapters with high standards of protection, to ensure a level playing field for EU businesses and boost economic growth. It will strive for the full implementation of the IP provisions in existing FTAs, including through dispute settlement and where applicable the use of the Trade Enforcement Regulation, once amended.

The Commission will make full use of **IP dialogues** with main trading partners and other priority countries, such as the United States, China, Republic of Korea, Thailand, Turkey and Brazil to promote reforms, and will further enhance the reach of its IP Key programmes offering technical co-operation in China, South East Asia and Latin America.

Whilst the Commission will continue to promote a global level playing field, it will step up efforts to protect EU companies against unfair practices. It will use as leverage the **Counterfeit and Piracy Watch List**[[108]](#footnote-109), which reports marketplaces and service providers allegedly engaging in, facilitating or benefiting from counterfeiting and piracy, and the **Third Country Report**[[109]](#footnote-110), which identifies third countries in which the state of IPR protection and enforcement (online and offline) gives rise to the greatest level of concern. Both the Watch List and the Report will be updated regularly, and actions to address identified shortcomings will be closely monitored.

In addition, the Commission, in its March 2020 Guidance concerning foreign direct investment and the protection of Europe’s strategic assets, called on all EU Member States to make full use of their **foreign investment screening** mechanisms and, for those Member States that currently do not have a screening mechanism, to set up a full fledged screening mechanism, in order to address relevant aspects of security and public order of foreign direct investments, which may involve critical IP assets in the European Union[[110]](#footnote-111).

The Commission also sees a need toensure that all non-EU countries and their businesses play by the rules,including when engaging with European research organisations**.** To this purpose, **new framework conditions for international research cooperation with entities in non-EU countries** will be developed. These will ensure a fair and non-distortive global innovation ecosystem based on a level playing field and reciprocity while maintaining high ethical and science integrity standards. In this respect, the Commission will set guidelines on foreign interference targeting EU Universities and Higher Education Institutions to raise awareness of possible IP theft while engaging in international cooperation (2021).

In terms of foreign policy, the Commission will, in cooperation with the High Representative and Member States, stand ready to use the restrictive measures available to counter private and government-sponsored **cyber espionage** aimed at acquiring cutting-edge European IP assets[[111]](#footnote-112).

It is of utmost importance that the **EU speaks with a strong and united voice in global fora** such as the World Intellectual Property Organisation (WIPO), the World Trade Organisation (WTO), the International Union for the Protection of New Varieties of Plants (UPOV), the World Health Organisation (WHO) and the Organisation for Economic Co-operation and Development (OECD). The Commission will work together with Member States and other stakeholders to find and defend global standards of IP protection and best possible solutions to new challenges, such as the need to ensure equitable access to treatments, vaccines and diagnostics in the fight against COVID-19. The WIPO debate on the implications of AI for IP is another unique opportunity for Europe to exercise influence at a moment where rule making is still taking place, which can have a long-lasting impact on the ongoing digital transformation of the world economy.

To protect the value of brands, the Commission will consider **EU accession to the Singapore Treaty on the Law of Trademarks**. The Commission will work with international partners to protect GIs worldwide through the WIPO multilateral Lisbon Registry. It will also step up its participation in global internet fora so that theinternational domain name system(DNS)fully respects IPRs, including GIs, and ensure that IP protection is also reflected appropriately in policies concerning the governance of the domain name space and access to information on registrants (“Whois” data). In the area of **copyright**, the Commission will continue to be actively involved in WIPO negotiations with the objective of reaching an agreement on a new treaty ensuring international protection to **broadcasting** organisations. It will also work towards securing the EU's ratification of the **WIPO Beijing Treaty** (signed by the EU in 2013), which grants international protection to audio-visual performances.

The Commission will continue to assist European companies abroad. In addition to the existing international **IP SME Helpdesks** in China, South East Asia and Latin America[[112]](#footnote-113), it will launch a new IP SME Helpdesk assisting European companies in India (early 2021).

Finally, the Commission will step up its efforts to offer qualified **technical assistance to help developing countries** make best use of IP to support their economic growth. For instance, as part of the IPR action plan for Africa, the Commission will promote better generation, protection and management of IP (including GIs[[113]](#footnote-114)) on this continent[[114]](#footnote-115).

## **Working together with Member States and Stakeholders**

The Commission counts on the European Parliament and the Council, as well as on all stakeholders, to support and help implement this action plan and the various actions it includes.

It also calls on Member States to develop their **national IP policies and strategies** in line with the objectives set out in this action plan, and make better protection and enforcement of IP a priority in their own efforts to secure economic recovery.

The Commission will also stimulate debate among all relevant players, in particular in relevant industrial ecosystems, to better connect IP policy to the changing realities and needs of EU industry, in line with the Commission's strategic foresight report[[115]](#footnote-116) and agenda. To achieve this the Commission will hold regular discussions on IP-related issues in the context of existing events and fora in which industrial policy is shaped.

**Appendix I**

**Contribution of IPR-intensive industries to employment
in industrial ecosystems**



Source: EUIPO and EC calculations based on study data IPR-intensive industries and economic performance in the European Union, EPO & EUIPO 2019

This graph presents the IPR-intensive industries’ contribution to employment in each of the industrial ecosystems. This explains for instance the apparent low IPR contribution to the health ecosystem. The very IPR-intensive pharmaceutical and medical devices sectors contribute to only 6% of employment, while the other sectors such as hospitals and medical care are not IPR intensive.

It is a contribution of IPR-owning companies to the employment in the EU. As such it shows part of the picture of IPR influence over the economy. It does not reflect a broader impact of intellectual property rights on companies that may not own themselves IPR, but use IPR protected inputs in their products or services (e.g. franchisees, technology licensees, subcontractors, hospitality or retail sector when sharing cultural industries products).

1. According to the SNA2008/ESA2010 standards, the Systems of National Accounts captures a range of specific intangible assets under the 'intellectual property products' asset category, such as R&D, mineral exploration, computer software and databases, entertainment, and literary and artistic originals. [↑](#footnote-ref-2)
2. Unlocking investment in intangible assets, [DG ECFIN discussion paper 047](https://ec.europa.eu/info/sites/info/files/economy-finance/dp047_en.pdf), May 2017. [↑](#footnote-ref-3)
3. [Intellectual property rights intensive industries and economic performance in the EU](https://www.epo.org/service-support/publications.html?pubid=201#tab3), EUIPO-EPO, 2019. [↑](#footnote-ref-4)
4. “Hidden treasures. Mapping Europe’s sources of competitive advantage in doing business”, D. Kalff, A. Renda, Centre for European Policy Studies (CEPS), Brussels 2019, p. 59; see also [EPO quality report 2018](http://documents.epo.org/projects/babylon/eponet.nsf/0/79B3608B5B4D3F71C125842D0040675A/%24File/quality_report_2018_en.pdf). [↑](#footnote-ref-5)
5. 2019 [EU Industrial R&D Investment Scoreboard](https://iri.jrc.ec.europa.eu/scoreboard/2019-eu-industrial-rd-investment-scoreboard). [↑](#footnote-ref-6)
6. Share of PCT applications in relation to societal challenges. See the section on climate and environment in the [Report on Science, Research and Innovation Performance of the EU](https://ec.europa.eu/info/research-and-innovation/strategy/support-policy-making/support-national-research-and-innovation-policy-making/srip-report_en) 2020. [↑](#footnote-ref-7)
7. See: [Climate change mitigation technologies in Europe – evidence from patent and economic data](http://documents.epo.org/projects/babylon/eponet.nsf/0/6A51029C350D3C8EC1257F110056B93F/%24File/climate_change_mitigation_technologies_europe_en.pdf), EPO 2015. [↑](#footnote-ref-8)
8. Studies show that small and medium-sized enterprises using IPRs grow faster and are more resilient to economic crises – [High-growth firms and intellectual property rights, EUIPO-EPO, 2019](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2019_High-growth_firms_and_intellectual_property_rights/2019_High-growth_firms_and_intellectual_property_rights_executive_summary_EN.pdf). [↑](#footnote-ref-9)
9. Appendix I contains a map presenting the role of IPR-intensive industries in the ecosystems. [↑](#footnote-ref-10)
10. [COM(2020) 761](https://ec.europa.eu/health/human-use/strategy_en) [↑](#footnote-ref-11)
11. For instance, a single application makes it possible today to protect a trade mark an industrial design or a plant variety across the whole EU, and there is a common set of rules on the protection of trade secrets. [↑](#footnote-ref-12)
12. Study on trends and developments in [Artificial Intelligence – Challenges to the IPR framework](http://data.europa.eu/doi/10.2759/458120), study conducted by IVIR and JIPP, November 2020. [↑](#footnote-ref-13)
13. [See the relevant requirements under the Eodesign implementing regulations introduced in October 2019](https://ec.europa.eu/commission/presscorner/detail/en/QANDA_19_5889) C(2019) 2120-7, C(2019) 5380, C(2019) 6843 [↑](#footnote-ref-14)
14. SMEs that did not own IP rights reported lack of knowledge about IP as the main reason for not seeking registration (38% of respondents). [Intellectual property SME scoreboard, EUIPO 2019](https://euipo.europa.eu/ohimportal/en/web/observatory/sme-scoreboard). [↑](#footnote-ref-15)
15. Its aim is often to sell or license it, thus monetizing the intangibles. [↑](#footnote-ref-16)
16. [Report Science, Research and Innovation Performance of the EU 2020](https://ec.europa.eu/info/research-and-innovation/strategy/support-policy-making/support-national-research-and-innovation-policy-making/srip-report_en). [↑](#footnote-ref-17)
17. [Fact finding study on patents declared to the 5G standard](https://www.iplytics.com/wp-content/uploads/2020/02/5G-patent-study_TU-Berlin_IPlytics-2020.pdf), IPlytics, 2020. [↑](#footnote-ref-18)
18. [Trends in Trade in Counterfeit and Pirated Goods](https://euipo.europa.eu/ohimportal/en/web/observatory/trends-in-trade-in-counterfeit-and-pirated-goods), OECD and EUIPO, 2019. [↑](#footnote-ref-19)
19. [Status Report on IPR infringement](https://euipo.europa.eu/ohimportal/en/web/observatory/status-reports-on-ip-infringement#Status_Report_2020), EUIPO, 2020: average annual figures, 2013-2017. [↑](#footnote-ref-20)
20. [The scale and impact of industrial espionage and theft of trade secrets through cyber](https://ec.europa.eu/docsroom/documents/34841), 2018. [↑](#footnote-ref-21)
21. This action plan builds on feedback received on its [roadmap](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12510-Intellectual-Property-Action-Plan) and input provided by Member States and stakeholders, both in writing and through discussions held during conferences on future IP policy, as well as targeted discussions within the Parliament and Council. [↑](#footnote-ref-22)
22. The unitary patent system is implemented through enhanced cooperation of 25 participating Member States (all EU Member States except for Spain and Croatia). [↑](#footnote-ref-23)
23. [Order of 13 February 2020](https://www.bundesverfassungsgericht.de/e/rs20200213_2bvr073917.html), 2 BvR 739/17, published on 20 March 2020. [↑](#footnote-ref-24)
24. Beyond Germany's ratification of the Agreement on the Unified Patent Court, Member States’ agreement to launch the 'period of provisional application' will also be required. This will make it possible to finalise the institutional and practical set-up of the Court, ahead of the full launch of the unitary patent system. In accordance with [Regulation (EU) N° 1257/2012](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012R1257&qid=1605100210098) implementing enhanced cooperation in the area of the creation of unitary patent protection, the Commission and the EPO will also need to conclude a working agreement providing for close cooperation on the operation of unitary patent system. The UK's withdrawal from the EU is not expected to hamper the launch of the unitary patent system. [↑](#footnote-ref-25)
25. [Regulation (EU) N° 2019/933](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0933&qid=1605100367650) amending Regulation (EC) N° 469/2009 concerning the supplementary protection certificate for medicinal products. [↑](#footnote-ref-26)
26. Evaluation of the EU Supplementary Protection Certificate system – SWD/2020/8508 [↑](#footnote-ref-27)
27. [A New Industrial Strategy for Europe](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1593086905382&uri=CELEX:52020DC0102), COM/2020/102 final, p.14; “[Roadmap Pharmaceuticals – safe and affordable medicines (new EU strategy)](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12421-Pharmaceutical-Strategy-Timely-patient-access-to-affordable-medicines)”. [↑](#footnote-ref-28)
28. The Bolar exemption is a defence for patent infringement especially relevant to drugs wherein a patented invention can be exploited - for a limited time before the end of the patent term - by a third party solely for research and testing purposes and to obtain the required regulatory approvals. [↑](#footnote-ref-29)
29. The European Parliament approved the trade mark reform package on 15 December 2015: <https://ec.europa.eu/growth/industry/policy/intellectual-property/trade-mark-protection_en>. [↑](#footnote-ref-30)
30. [Report on the evaluation of EU legislation on design protection](https://ec.europa.eu/growth/industry/policy/intellectual-property/industrial-design/protection_en). [↑](#footnote-ref-31)
31. [Directive 98/71/EC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31998L0071&qid=1605102715242) on the legal protection of designs and [Council Regulation (EC) N° 6/2002](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32002R0006&qid=1605102777807) on Community Designs. [↑](#footnote-ref-32)
32. See the [‘Farm to Fork’ strategy](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0381) announced by the Commission to reinforce the sustainability of criteria for GI indications. [↑](#footnote-ref-33)
33. [Evaluation of (agricultural) GI and Traditional Specialities Guaranteed protected in the EU](https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cmef/products-and-markets/economic-value-eu-quality-schemes-geographical-indications-gis-and-traditional-specialities-guaranteed-tsgs_en), 2019. [↑](#footnote-ref-34)
34. [Evaluation of (agricultural) GIs and Traditional Specialities Guaranteed protected in the EU](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/2029-Evaluation-of-Geographical-Indications-and-Traditional-Specialities-Guaranteed-protected-in-the-EU), 2019. [↑](#footnote-ref-35)
35. Revision of the EU geographical indications (GI) system in agricultural products and foodstuff, wines and spirit drinks ([IIA consultation](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12664-Revision-of-the-EU-geographical-indications-GI-systems-in-agricultural-products-and-foodstuffs-wines-and-spirit-drinks)). [↑](#footnote-ref-36)
36. [Economic aspects of geographical indication protection at the EU level for non-agricultural products](https://op.europa.eu/en/publication-detail/-/publication/c210fcc6-5463-11ea-aece-01aa75ed71a1/language-en/format-PDF/source-120480323), 2020. [↑](#footnote-ref-37)
37. More precisely, introducing EU-wide GI protection for non-agricultural products could in the longer term yield an overall expected increase in intra-EU trade of about 4.9-6.6 % of current intra-EU exports (EUR 37.6-50 billion). Predictions show that, with a uniform system, regional employment could rise by 0.12-0.14% and that 284 000-338 000 new jobs could be created in the EU as a whole. See [Geographical indications for non-agricultural products. Cost of non-Europe report](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/631764/EPRS_STU%282019%29631764_EN.pdf), 2019. [↑](#footnote-ref-38)
38. Based on the [Lisbon system for the international registration of appellations of origin and geographical indications](https://www.wipo.int/lisbon/en/) managed by World Intellectual Property Organisation. [↑](#footnote-ref-39)
39. [Intellectual property rights intensive industries and economic performance in the EU](https://www.epo.org/service-support/publications.html?pubid=201#tab3), EUIPO-EPO, 2019. [↑](#footnote-ref-40)
40. Identified notably from stakeholder inputs, analysis of EUCJ decisions, interinstitutional working group recommendations. [↑](#footnote-ref-41)
41. For example, by speeding up novelty searches and registration procedures. [↑](#footnote-ref-42)
42. Copyright metadata, as regards both IP ownership and licensing. [↑](#footnote-ref-43)
43. Study on trends and developments in [Artificial Intelligence – Challenges to the IPR framework](http://data.europa.eu/doi/10.2759/458120) – Study conducted by IVIR and JIPP, November 2020. [↑](#footnote-ref-44)
44. In 2018 two European patent applications were filed at the EPO. Both of them designated the “DABUS” machine as inventor. The two patent applications were refused by the EPO. The EPO considered that the inventor designated in a European patent must be a natural person. The EPO further understood the term inventor as referring to a natural according to an internationally applicable standard. These decisions have been appealed. [↑](#footnote-ref-45)
45. For instance, the study underlines the lack of harmonisation of rules on authorship and copyright ownership which can lead to divergent national solutions as regards AI-assisted works. [↑](#footnote-ref-46)
46. For instance, the study provides recommendations to adjust concepts of patent law, such as the inventive step and the disclosure obligation, to AI-assisted inventions. [↑](#footnote-ref-47)
47. [Directive (EU) 2019/790](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1558431447846&uri=CELEX:32019L0790) on copyright and related rights in the digital single market and amending Directives 96/9/EC and 2001/29/EC; [Directive (EU) 2019/789](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0789&qid=1605105244358) laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes, and amending Council Directive 93/83/EEC. Member States must transpose these Directives by 7 June 2021. [↑](#footnote-ref-48)
48. [Directive 2011/77/EU](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011L0077&qid=1605105177882) amending Directive 2006/116/EC on the term of protection of copyright and certain related rights; [Directive 2014/26/EU](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0026&qid=1605105311274) on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use; [Directive (EU) 2017/1564](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017L1564&qid=1605105393179) on certain permitted uses of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled; [Regulation (EU) 2017/1128](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R1128&qid=1605105470273) on cross-border portability of online content services. [↑](#footnote-ref-49)
49. [Directive 98/44/EC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31998L0044&qid=1605105545389) on the legal protection of biotechnological inventions. [↑](#footnote-ref-50)
50. Notably with a view to ensuring full implementation of the Commission’s [Notice on certain articles of Directive 98/44/EC of the European Parliament and of the Council on the legal protection of biotechnological inventions](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016XC1108%2801%29) of 3 November 2016, as endorsed by Parliament and Council, clarifying that products resulting from essentially biological processes cannot be patented. [↑](#footnote-ref-51)
51. From the COSME programme and mainly financed by the EUIPO surplus. [↑](#footnote-ref-52)
52. See for the current programme [IPA4SME](http://ipa4sme.eu/). [↑](#footnote-ref-53)
53. The Commission will test the concept in the project “[Closing the finance gap for IPR-driven start-ups and SMEs](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/innosup-10-2020)”. [↑](#footnote-ref-54)
54. So that every SME has easy access to advice, as stressed in the SME strategy. [↑](#footnote-ref-55)
55. This is an initiative under the EUIPOs SME programme which will be developed in cooperation with the European Union Intellectual Property Network (EUIPN) composed of the EUIPO and national IP offices of the EU Member States. [↑](#footnote-ref-56)
56. Such advisors are working through networks or advice providers in the Enterprise Europe Network, the Innovation Hubs, [Cluster Networks](https://www.clustercollaboration.eu/cluster-networks) or the InvestEU advisory hub (evolving from the current [European Investment Advisory Hub](https://eiah.eib.org/index.htm)). [↑](#footnote-ref-57)
57. According to the [EUIPO SME scoreboard](https://euipo.europa.eu/ohimportal/en/web/observatory/sme-scoreboard), 2019, only 13% of SMEs owning IP rights tried to use intangible assets to obtain finance: 9% successfully and 4% unsuccessfully. [↑](#footnote-ref-58)
58. Study on “[Financing intangibles: Is there a market failure?](https://op.europa.eu/en/publication-detail/-/publication/6a29075f-1f15-11eb-b57e-01aa75ed71a1)”, EC 2020. [↑](#footnote-ref-59)
59. This can be done within InvestEU and will build on experience gained through the project “Finance, learning, innovation and patenting for cultural and creative industries” and the study on “[Financing intangibles: Is there a market failure?](https://op.europa.eu/en/publication-detail/-/publication/6a29075f-1f15-11eb-b57e-01aa75ed71a1)”, EC 2020. [↑](#footnote-ref-60)
60. [Commission communication](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0103&from=EN), SME Strategy for a sustainable and digital Europe,COM(2020) 103 final, 10 March 2020. [↑](#footnote-ref-61)
61. See the [InnovFin SME Guarantee Facility](https://www.eif.org/what_we_do/guarantees/single_eu_debt_instrument/innovfin-guarantee-facility/) or the Culture and Creative Sectors Guarantee Facility. [↑](#footnote-ref-62)
62. [European Research Area (ERA) Communication](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A628%3AFIN). [↑](#footnote-ref-63)
63. See the [Horizon Results Platform](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-results-platform). [↑](#footnote-ref-64)
64. See [Coronavirus research and innovation](https://ec.europa.eu/info/research-and-innovation/research-area/health-research-and-innovation/coronavirus-research-and-innovation_en) platform. [↑](#footnote-ref-65)
65. Similarly, under the European Defence Fund (EDF) dedicated provisions have also been introduced to protect the results of financially supported R&D actions and their availability in the EU. These include an obligation to notify ex ante the Commssion in case of transfer of ownerhip of results and related IP (and of granting of exclusive licences for research actions) to non-associated third countries or third country entities, and an obligation to reimburse the EU funding in case such a transfer of results/IP would contravene the security and defence interests of the Union and its Member States or the objectives of the EDF. [↑](#footnote-ref-66)
66. In the field of environmental data (allowing for the development of life-cycle analysis), IPR-controlled data should be balanced with the public interest to calculate the environmental footprint of products and organisations. [↑](#footnote-ref-67)
67. [Commission communication](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0245&from=ES) - EU strategy for COVID-19 vaccines, COM(2020) 245 final, 17 June 2020. [↑](#footnote-ref-68)
68. [World Health Assembly Resolution 73](https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_CONF1Rev1-en.pdf). [↑](#footnote-ref-69)
69. [Commission communication](https://ec.europa.eu/info/sites/info/files/framework_communication_antitrust_issues_related_to_cooperation_between_competitors_in_covid-19.pdf) - Temporary Framework for assessing antitrust issues related to business cooperation in response to situations of urgency stemming from the current COVID-19 outbreak C(2020) 3200 final. [↑](#footnote-ref-70)
70. The [Manifesto for EU Covid-19 Research](https://ec.europa.eu/info/research-and-innovation/research-area/health-research-and-innovation/coronavirus-research-and-innovation/covid-research-manifesto_en), launched to maximise the accessibility of research results in the fight against COVID-19, has to date been supported by more than 600 organisations (such as universities, research institutes, private companies including SMEs and civil society organisations) and more than 1800 individuals from all over Europe and beyond. [↑](#footnote-ref-71)
71. The only exception is [Regulation (EC) N° 816/2006](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32006R0816&from=EN) which provides for a specific compulsory licence regime which implements Article 31bis of the TRIPS Agreement and concerns the manufacture of pharmaceutical products for export to countries with public health problems. [↑](#footnote-ref-72)
72. See also [Council document 15016/19](https://data.consilium.europa.eu/doc/document/ST-15016-2019-INIT/en/pdf) “Developing the Copyright Infrastructure - Stocktaking of work and progress under the Finnish Presidency”. [↑](#footnote-ref-73)
73. The set of rules, technologies and institutions that frame data management practices in the creative industries. [↑](#footnote-ref-74)
74. See “[SMART 2019/0038](https://etendering.ted.europa.eu/cft/cft-display.html?cftId=5859) – Study on Copyright and New technologies: copyright data management and Artificial Intelligence”. [↑](#footnote-ref-75)
75. [Landscape study of potentially essential patents disclosed to ETSI, 2020.](https://publications.jrc.ec.europa.eu/repository/handle/JRC121411) [↑](#footnote-ref-76)
76. [Commission communication](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017DC0712&from=EN) - Setting out the EU approach to Standard Essential Patents, COM(2017) 712 final, 29 November 2017. [↑](#footnote-ref-77)
77. As well as smart health, smart energy and the internet of things. [↑](#footnote-ref-78)
78. [Pilot study for essentiality assessment of Standard Essential Patents report](https://publications.jrc.ec.europa.eu/repository/handle/JRC119894)  [↑](#footnote-ref-79)
79. [Commission communication](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0066&from=EN) - A European Strategy for Data, (COM)2020 66 final, 19 February 2020. [↑](#footnote-ref-80)
80. See the [factsheet on the European Data Strategy](https://ec.europa.eu/commission/presscorner/detail/en/fs_20_283). [↑](#footnote-ref-81)
81. [Directive (EU) 2016/943](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016L0943&from=EN) on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure. [↑](#footnote-ref-82)
82. In the printers’ ink and toner cartridges sector, for example, a variety of arguments have been put forward largely by OEMs against the re-manufacture of their products by third parties, while independent remanufacturers (especially SMEs) do not have the resources available to engage in legal proceedings against large OEMs, even when the remanufacturer might be operating legally. This perceived threat may have a chilling effect on smaller companies wishing to enter the remanufacturing business. See: [study on the implementation of product design requirements set out in Article 4 of the WEEE Directive The case of re-usability of printer cartridges: final report](https://op.europa.eu/en/publication-detail/-/publication/17b7b664-15f0-11e8-9253-01aa75ed71a1), Kling et al, for the European Commission DG ENV, 2018. [↑](#footnote-ref-83)
83. The European Data Strategy foresees to explore the need for legislative action on issues that affect relations between actors in the data economy to provide incentives for cross-sector data sharing. Such issues (e.g. business-to-government data sharing, business-to-business data sharing through usage rights for co-generated data) could be taken forward in a Data Act (2021). [↑](#footnote-ref-84)
84. [Directive 96/9/EC](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:31996L0009&from=EN)on the legal protection of databases. [↑](#footnote-ref-85)
85. [Evaluation of Directive 96/9/EC](https://data.consilium.europa.eu/doc/document/ST-8467-2018-INIT/en/pdf) on the legal protection of databases, SWD(2018) 147 final. [↑](#footnote-ref-86)
86. [Commission Work Programme 2021](https://ec.europa.eu/info/publications/2021-commission-work-programme-key-documents_en). [↑](#footnote-ref-87)
87. Sharing data constitutes information exchange which must take place in accordance with antitrust rules as outlined in the Commission’s Horizontal Guidelines which explain which types of information may be shared. The current review of those guidelines will consider whether guidance is needed for data sharing for new forms of R&D collaboration. The Commission will also reflect on whether further guidance is needed on when access to data could be compelled under the essential facilities doctrine. [↑](#footnote-ref-88)
88. [Directive 2004/48/EC](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32004L0048&from=FR) on the enforcement of intellectual property rights. [↑](#footnote-ref-89)
89. Commission communication[Guidance on certain aspects of Directive 2004/48/EC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52017DC0708) on the enforcement of intellectual property rights, COM(2017) 708 final, 29 November 2017. [↑](#footnote-ref-90)
90. [Trends in trade in counterfeit and pirated goods](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/trends_in_trade_in_counterfeit_and_pirated_goods/trends_in_trade_in_counterfeit_and_pirated_goods_en.pdf), OECD and EUIPO, 2019. [↑](#footnote-ref-91)
91. [Status report on IPR infringement](https://euipo.europa.eu/ohimportal/en/web/observatory/status-reports-on-ip-infringement#Status_Report_2020), EUIPO, 2020: average annual figures, 2013-2017. [↑](#footnote-ref-92)
92. [Qualitative study on risks posed by counterfeits to consumers](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2019_Risks_Posed_by_Counterfeits_to_Consumers_Study/2019_Risks_Posed_by_Counterfeits_to_Consumers_Study.pdf), EUIPO 2019. [↑](#footnote-ref-93)
93. See operations carried out with the help of the European Anti-Fraud Office, e.g. seizure of 550 tons of illegal or counterfeit pesticides in 2019 as part of operation ‘Silver Axe IV’ (see [press release](https://www.europol.europa.eu/newsroom/news/operation-silver-axe-strikes-for-fourth-time-seizing-over-550-tonnes-of-illegal-pesticides)). [↑](#footnote-ref-94)
94. [The scale and impact of industrial espionage and theft of trade secrets through cyber](https://ec.europa.eu/docsroom/documents/34841), 2018. [↑](#footnote-ref-95)
95. See the [public consultation](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12417-Digital-Services-Act-deepening-the-Internal-Market-and-clarifying-responsibilities-for-digital-services) launched on 2 June 2020 and the follow-up. [↑](#footnote-ref-96)
96. [European multidisciplinary platform against criminal threats](https://www.europol.europa.eu/empact). [↑](#footnote-ref-97)
97. [Commission communication](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0094&from=EN) - Long term action plan for better implementation and enforcement of single market rules, COM(2020) 94 final, pp. 11-12, 10 March 2020. [↑](#footnote-ref-98)
98. See the [Customs Action Plan](https://ec.europa.eu/taxation_customs/sites/taxation/files/customs-action-plan-2020_en.pdf), COM(2020) 581 final, 28 September 2020. [↑](#footnote-ref-99)
99. See for example the recently published reports on the functioning of the [Memorandum of Understanding on the sale of counterfeit goods on the internet](https://ec.europa.eu/growth/industry/policy/intellectual-property/enforcement/memorandum-understanding-sale-counterfeit-goods-internet_en) and the [Memorandum of Understanding on online advertising and IPR](https://ec.europa.eu/growth/industry/policy/intellectual-property/enforcement/memorandum-of-understanding-online-advertising-ipr_en). [↑](#footnote-ref-100)
100. Further expanding the [IP enforcement portal](https://euipo.europa.eu/ohimportal/en/web/observatory/ip-enforcement-portal-home-page) managed by the EUIPO will also allow more effective exchange of data between all relevant players. For example, expansion will include the integration of data on IPRs not yet covered by the portal, such as plant variety rights and GIs. [↑](#footnote-ref-101)
101. See, for instance, the [Anti-Counterfeiting Blockathon Forum](https://euipo.europa.eu/ohimportal/en/news/-/action/view/4963920) of the EUIPO Observatory, which aims to build a common blockchain infrastructure where all parties (intermediaries, right holders and law enforcement authorities) can connect and share data to protect the supply chains against infiltration of counterfeit goods. [↑](#footnote-ref-102)
102. See: [OLAF launches enquiry into fake COVID-19 related products](https://ec.europa.eu/anti-fraud/media-corner/news/20-03-2020/olaf-launches-enquiry-fake-covid-19-related-products_en). See also: [Overview](https://www.europol.europa.eu/newsroom/news/how-criminals-profit-covid-19-pandemic) of the illegal activities and actions, and [Scams related to COVID-19](https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/scams-related-covid-19_en). [↑](#footnote-ref-103)
103. The European Consumer Centres work on educational material to raise awareness among consumers on the risks of counterfeit goods. [Tips and tricks to consumers](https://www.evz.de/en/shopping-internet/online-shopping/online-scams-and-counterfeit-goods.html%3B%20https%3A/fb.watch/1zwI0k2tjP/) and [ECC Report on counterfeiting](https://www.eccbelgium.be/press/press-releases/14032017-the-impact-of-counterfeiting-on-online-consumer-rights-in-europe). [↑](#footnote-ref-104)
104. Security Union Strategy, COM(2020) 605 final (page 25). [↑](#footnote-ref-105)
105. [2019 Status report on IPR infringement](https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2019_Status_Report_on_IPR_infringement/2019_Status_Report_on_IPR_infringement_en.pdf), European Observatory on Infringements of IPR, 2019. [↑](#footnote-ref-106)
106. See e.g. [Declaration adopted by G7 countries](https://www.consilium.europa.eu/en/press/press-releases/2019/08/26/g7-leaders-declaration-biarritz-26-august-2019/) in 2019. [↑](#footnote-ref-107)
107. [Report from the Commission](https://trade.ec.europa.eu/doclib/docs/2020/january/tradoc_158561.pdf) on the protection and enforcement of intellectual property rights in third countries, SWD(2019) 452 final/2. [↑](#footnote-ref-108)
108. [SWD(2018)492](https://trade.ec.europa.eu/doclib/docs/2018/december/tradoc_157564.pdf). [↑](#footnote-ref-109)
109. [SWD(2019)452](https://trade.ec.europa.eu/doclib/docs/2020/january/tradoc_158561.pdf). [↑](#footnote-ref-110)
110. [Commission communication](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020XC0326(03)&from=EN) – Guidance to the Member States concerning foreign direct investment and free movement of capital from third countries, and the protection of Europe’s strategic assets, ahead of the application of Regulation (EU) 2019/452 (FDI Screening Regulation) (2020/C 99 I/01). For example, technologies for the manufacture of PPEs or future vaccines. [↑](#footnote-ref-111)
111. [Council Decision (CFSP) 2020/1127](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020D1127). [↑](#footnote-ref-112)
112. [International IP SME Helpdesk](https://www.ipr-hub.eu/). [↑](#footnote-ref-113)
113. [Continental strategy for geographical indications in Africa 2018-2023](https://au.int/en/documents/20190214/continental-strategy-geographical-indications-africa-2018-2023). [↑](#footnote-ref-114)
114. [The Africa-EU Partnership](https://africa-eu-partnership.org/en/afcfta). [↑](#footnote-ref-115)
115. [2020 Strategic Foresight Report](https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy/strategic-foresight/2020-strategic-foresight-report_en). [↑](#footnote-ref-116)