MINISTÈRE
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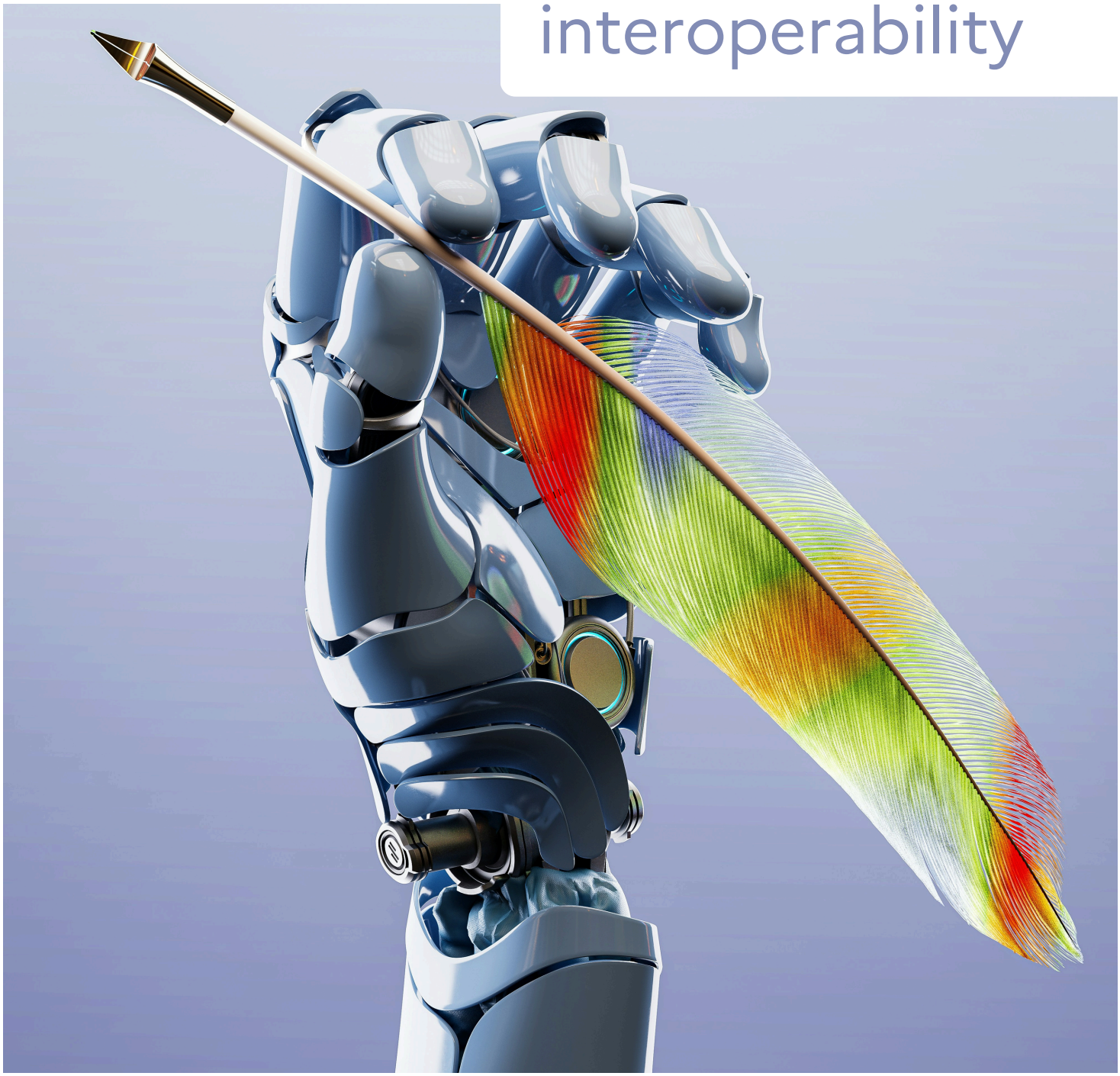
Mission report on interoperability



PRESENTED TO THE HIGH COUNCIL FOR LITERARY AND ARTISTIC PROPERTY

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SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

- More than seven years have passed since the publication of the last mission report on the interoperability of digital content presented by Jean-Philippe Mochon to the CSPLA in April 2017. The latter then called for urgent legislative intervention to remedy the lack of interoperability in the field of eBooks within the framework of the draft European directive on the supply of digital content and digital services to consumers.

- The mission's conviction is that since that date, interoperability has asserted itself as an increasingly central issue for the protection of literary and artistic property. Admittedly, software aside, the concept only occupies (still?) a modest place in the legal corpus of copyright and neighboring rights. But its guarantee has emerged in recent years as an essential project for the regulation of digital services in Europe and around the world, taking shape through the European regulation on digital markets (DMA) and the action of competition authorities vis-à-vis digital gatekeepers (Google, Apple, Meta and Amazon in the first place). Real obligations have been set and initiatives are emerging to impose them. These new interoperability requirements offer a historic opportunity to help correct the imbalances suffered by the cultural and creative sectors in their relationship with major digital players. They are therefore major challenges in meeting the objectives of protecting rights and financing creation set by literary and artistic property law. From press publishers to the ticketing and eBook sectors, many players have already become aware of this dimension. The ambition of this mission is to offer the keys to understanding and the tools to act in all the sectors concerned by creation in the digital economy.

- **Directive (EU) No. 2019/770 of 20 May 2019** as transposed into French law in the Consumer Code[1] **integrates the concept of interoperability, requires a guarantee to the consumer when it is provided for in the contract, but does not impose a general obligation of interoperability** on companies providing digital content and services to consumers.

- **Interoperability has become a binding legal obligation for certain technological operators** whose role is (excessively) central in the digital economy of cultural content and services, **in Regulation (EU) No 2022/1925 on contestable and fair markets in the digital markets (DMA)**. It is interesting to note that the first two investigations opened by the European Commission since the full entry into force of the DMA specifically relate to the interoperability of iOS features accessible to connected devices and the process of handling interoperability requests by Apple, which has chosen not to interoperate automatically (*interoperability upon request vs interoperability by design*).

- **This system was supplemented by Regulation (EU) No. 2023/2854** concerning harmonized rules on fair access to and use of data (**Data Act), which aims in particular at improving the**

[1] See in particular the introductory article (definition), article L.111-1 1° (pre-contractual information) and article L.224-25-13 (guarantee of conformity) of the Consumer Code.

interoperability of data and data sharing mechanisms and services in the European Union, in the cloud services and connected objects sector. **This system was notably strengthened in French Law No. 2024-449 of 21 May 2024** aimed at securing and regulating the digital space (SREN).

- **However, the level of interoperability that would enable achieving greater fairness in the equal distribution of economic value, greater balance of powers and contestability in the digital economy of cultural content and services remains unsatisfactory.**

- It is in this context that **this report intends to take stock of the concept of interoperability, the obstacles to its effective implementation in the economy of cultural creation in its various components, and the methods of strengthening its effectiveness through procedural and substantive recommendations.**

- It is hereby specified that this mission does not address the difficulties related to the interpretation and implementation of interoperability in software law. **The mission focused on the analysis of the expectations and difficulties encountered for the effective implementation of the interoperability obligation from the point of view of professionals in the creation of cultural content and services in their relations with structuring technological platforms in light of recent EU legislative developments.**

- Established by a mission letter dated May 14, 2024**, the mission conducted around twenty hearings in a few months with publishers, creators, technical and technological intermediaries, French and European institutions, associations, international standardization bodies, governmental and non-governmental experts**. Among the contributions received from the cultural sector, contributions were received from the book publishing (eBooks and audiobooks), radio, contemporary music, live events, press, and audiovisual sectors. The mission also heard from standardization bodies, operators of data spaces and interoperability solutions (ticketing, online advertising).

- **It emerges from the hearings held that interoperability is above all a way of managing heterogeneity. A three-dimensional (legal, technical or economic) and functional notion, it is used as a means of achieving a multiplicity of objectives including the contestability of markets and fairness.**

- I**t appears that all creators of cultural content and services in their diversity encounter difficulties linked to the total or partial absence of interoperability, in a differentiated manner** depending on the structure of the competition, the existence or not of applicable standards and norms, and the capacity to use these tools.

- From a legal perspective, the concept of interoperability is given different definitions in the legislative texts examined, which are neither uniform nor pursue the same purposes. **The texts reflect the absence of conceptual unity and the fact that interoperability is not an objective in itself, but rather a means of achieving an assigned purpose. The same observation is made when the concept is analyzed from a technical or technological angle, as well as from an economic perspective.** The mission observed and took into account the important literature carried out in all these areas over the last five years.

- **The main obstacles identified to interoperability are of two types: behavioral** when the lack of interoperability is the result of a unilateral decision by a company controlling a platform or an ecosystem, **or related to the level of standardization and normalization in the sector**.

- **The mission concludes that there is no need to create a single, uniform concept of interoperability. Its relevance, in other words its ability to achieve the objectives assigned to it, depends on its adaptability to the structure of the market in question and its level of standardization.**

- **Still, the work carried out highlights the need to approach the concept of interoperability in its three dimensions – legal, technical and economic, altogether.** A siloed approach to one of its three dimensions would lead to errors in the assessment of the situation in which interoperability should occur and under what conditions in an optimal manner.

- **Furthermore, the mission considers that there is a pressing need to strengthen the effectiveness of the interoperability obligation for the benefit of creators of digital cultural content and services within the European Union, in particular by making the online advertising market more competitive for the benefit of the online press and media publishers and by strengthening the effectiveness of neighboring rights. Effective access to data and their exploitation is only possible by promoting interoperability.**

- **To achieve a greater level of efficiency, the mission considers it useful to rely on a combination of tools of competition law and digital regulation, as well as procedural tools in order to meet the objectives and more fairly share the value of the economy of online cultural creation.**

- To strengthen the effectiveness of interoperability, the mission recommends two categories of measures:

Procedural measures

1) Following the Italian model[2], it is advisable to **create a presumption of economic dependence of publishers of online cultural contents and services on technological platforms** providing online intermediation services which distribute cultural content and services to end users. This tool was used for the first time by the Italian competition Authority in the context of negotiations between the copyright collective management organization (SIAE) and Meta. In the context of the collective negotiation of neighboring rights or the implementation of obligations of access to data and systems provided for in the DMA, this would reverse the burden of proof and would help rebalance the asymmetry of powers.

2) Following the German model[3] and in order to give French publishers of online content and services the ability to defend their rights **in a context of possible heterogeneous solutions within the Union, in particular in the context of the deployment of Generative AI, it is recommended to create the recognition by French courts of the binding effect of enforceable decisions taken by the European Commission or national competition authorities or courts of the European Union** on the basis of Articles 101 and 102 of the

[2] See the new Article 9 of Law No. 192 of 1998, §1 and 2, as amended by the Italian Law for the Market and Competition of 2022 (Law No. 118 of 5 August 2022).

[3] See Section 33b of the German Competition Act (GWB)

Treaty on the Functioning of the European Union or Articles 5, 6, 7 of Regulation 2022/1925 (DMA) or Articles 13, 33, 34 and 35 of Regulation No. 2023/2854 (Data Act) or finally, Articles 50 and 53 of the Regulation 2024/1689 (IA Act), to the extent that they establish the designation of a company as a gatekeeper, a violation of the texts referred to, injunctions or commitments, even interim measures, by these authorities or the existence of harm;

3) **To enable a more harmonious implementation of the provisions of the DMA relating to access to data and interoperability, it is recommended to recognize the professional organizations or unions representing publishers of cultural content and services, a right to be mandated as "authorized third parties" within the meaning of the same rules**, to request the communication of data, access to systems and negotiate any contractual provisions relating thereto;

4) Following the American model of **multistate actions** that can carry out investigations with a lead authority, it is recommended **to seize the opportunity of the current revision of Regulation No. 1/2003 to strengthen cooperation between competition authorities that are members of the European Competition Network by introducing the ability to engage in a European multistate action, thereby enabling an effective and enhanced cooperation between several authorities to carry out an investigation**. The evaluation report published by the European Commission highlights the inefficiencies linked to parallel investigations, fragmentation and the risk of divergences within the internal market;

5) In line with the recommendations of Mario Draghi's report[4] which highlights the importance of interoperability in stimulating innovation within the Union, **it is recommended to create a new competition tool establishing the power for the French competition Authority to conduct market investigations to analyze the impact of a decision or measure imposed unilaterally without reasonable notice or of a draft decision or measure impacting or likely to impact the functioning of competition on an entire ecosystem of businesses,** including **creators and publishers of online cultural content and services**, **and enable it to remedy any competitive dysfunctions or competitive concerns identified** by structural or quasi-structural measures relating in particular to access to data and interoperability.

Substantial measures

6) **Following the template of Article 33 of the Data Act, it is recommended to integrate a core of essential requirements to reach effective interoperability in the context of the application of the DMA. Such a template could serve as a basis for the European Commission in the context of the two ongoing DMA investigations into Apple** aimed at specifying its interoperability obligations and the process for requesting third-party access to interoperability mechanisms. **Such a transparent template would allow publishers** of online cultural content and services, beneficiaries of the DMA, **to better understand and assert their rights vis à vis major technology platforms**. This flexible system should be **supplemented by the creation of an obligation to provide information by written means**

[4] Draghi M. (2024) *The future of European competitiveness, Part B | In-depth analysis and recommendations*.

on tangible means, based on the requirements of Regulation No. 2019/1150 (Platform to Business);

7) Depending on the sectors of cultural creation concerned and their level of standardisation, it is recommended to **adapt the intensity of regulatory intervention to the level of standardization of the sector (infra section 2.2) and ensure supervision of the governance of the bodies responsible for these processes, the definition of standards and their adoption.**

8) **As an alternative remedy to a dismantling, it is recommended to consider disinteresting the technological intermediation platforms from the value of the transactions carried out through their platform services in order to address conflicts of interest and promote economic incentives to interoperate.** Such a quasi-structural measure would aim at refocusing technological intermediaries on their role of pure technical intermediation, and would promote economic models based on the intrinsic value of the intermediation service itself outside the value of the ecosystem in which it is inserted in order to restore freedom, flexibility and room for maneuver to publishers of cultural content and services, particularly in terms of pricing. Without intervening on the price itself, the **remuneration of technological intermediation would then no longer be based on a percentage of commission on the publisher's turnover but linked, for example, to the volumes of transactions that pass through the intermediation platform**.

9) **It is recommended to extend the criminal liability of natural persons referred to in Article L. 420-6 of the French Commercial Code to infringement** of Articles 5, 6, 7 of Regulation 2022/1925 (**DMA**) or Articles 13, 33, 34 and 35 of Regulation No. 2023/2854 (**Data Act**) or finally, Articles 50 and 53 of the Regulation 2024/1689 (**IA Act**).

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1. Now endowed with binding legal force, the three-dimensionality of the notion of interoperability raises issues of efficiency of critical importance for the equitable development of the online cultural and creative economy.

1. The work undertaken in the mission led to the identification of several dimensions of interoperability, closely linked to each other, namely a technical and technological dimension, an economic dimension and a legal dimension. The mission considers that the necessary intervention of public authorities in strengthening the effectiveness of the obligation of interoperability must take into account the three dimensions of the concept by analyzing, on a case-by-case basis, the situation of each segment of the cultural and creative industries in order to provide appropriate remedies.

1.1. In its technical dimension, it is the operators themselves who define the conditions and contours of the notion of interoperability

2. The concept of interoperability is deeply technical since its design and implementation require skills, protocols and processes that are mainly technical. However, technological development is not neutral and most often responds to commercial requirements. Thus, innovation and the strategic orientations that result from it seem to depend largely on design choices, which explains why the mission was naturally interested in the technical issues of interoperability.

3. The concept of interoperability covers a variety of solutions depending on the systems, content, formats and environments considered. All kinds of systems can be affected by interoperability (the electrical network, telecommunications, rail transport, etc.) but it is particularly in the digital domain that the issues relating to interoperability have become critical for players in the creative and media industries.

4. From a technical standpoint, it appears that no standardization body has or proposes a unique, universal and specific definition of interoperability. A standard is in fact defined by its "testability", in other words by its effective capacity to prove itself capable of fulfilling its function through a test. Writing a standard generally requires establishing a protocol and verification elements by means of a consensus. It is adoption that makes the standard, and this can only occur in the presence of protocols and verification elements. Interoperability nevertheless covers common meanings depending on the objective pursued [5].

    - interoperability **between IT systems (knowing how to understand each other)** refers to the ability of these systems to work together and is achieved at the infrastructure and software layers. This includes the design of programmatic interfaces that allow the exchange of data. In the digital sector, technical interoperability is often achieved by implementing

[5] The idea that interoperability can be implemented at different levels is present for example in Regulation (EU) **2024/1689 (IA Act)** or in Regulation (EU) 2024/903 of 13 March 2024 establishing measures to ensure a high level of public sector interoperability across the Union (Interoperable Europe Act). The latter text aims to develop interoperability in the public sector between administrations and in the field of digital public services by taking into account the "legal, organisational, semantic or technical aspects to enable cross-border interoperability". However, these levels are designed and defined for a use case (interoperability between Union entities and public sector bodies of the Member States) which does not fall within the scope of this mission.

application programming interfaces (APIs), which are software interfaces that allow one software or service to be "connected" to another software or service in order to exchange data and functionalities[6].

- **Semantic** interoperability **(knowing how to communicate)** aims at the coherence of meaning of the information exchanged, in particular via standardized ontologies and terminologies, and the ability of systems to interpret their content unequivocally.

- **Syntactic** interoperability **(being able to communicate)** consists of structuring and defining the formats of the files and data to be exchanged.

5. The mission distinguishes from interoperability the notion of **data portability,** which refers to the capacity to migrate data between two distinct environments[7].

6. The definition of interoperability norms and standards can take different forms, standards can be based on **consensus** and developed within recognized standards bodies[8], or private non-profit standards bodies[9], or by an *ad hoc consortium* of companies, or be **imposed unilaterally** by private operators with sufficient market power to force other players in a given sector to adopt it.

7. **Depending on the origin and accessibility of the standard, a distinction also exists between *open standards*** (*open source*), whose specifications are made publicly available (at least to a certain extent), ***and closed or proprietary standards,*** whose specifications are not made public or are subject to technical or contractual restrictions or both. However, even a proprietary standard can be open if these specifications are made accessible and public (this is the case, for example, of Adobe's PDF format, presented in 1992 and which became an ISO standard in 2008).

8. Standards can be concerned with **data formats** (the standard for representing information), **file formats** (the standard used for storing information), **protocols** (the standard used for transmitting information):

9. The origin of the standard, its access conditions and the accessibility of its specifications have central economic and legal consequences for the effective implementation of interoperability in the digital sector, in which the cultural and creative content economy is no exception. Among all the configurations analyzed, the mission identified three illustrations of how technical interoperability is achieved or hindered depending on the level of standardization of the cultural and creative economy sector concerned: i) catalog films marked by strong standardization and very advanced interoperability and ii) extended reality headsets, an emerging technology, with already mature standards on certain functionalities but dependent on a limited number of operating systems

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6 See API definition according to the CNIL: https://www.cnil.fr/fr/definition/interface-de-programmation-dapplication-api

7 PEReN (2021) Éclairage sur : l'interopérabilité, p. 1.

8 The term "recognized standardization body" refers to bodies approved by governmental authorities and is retained in European legislation in Regulation (EU) No 1025/2012 on European standardization. Examples of standardization bodies are: the French Association for Standardization (AFNOR) at the French level, the European Committee for Standardization (CEN) at the European level, and the International Organization for Standardization (ISO) at the international level.

9 Among which we can cite the World Wide Web Consortium (W3C).

covering a significant proportion of current and potential users, iii) archives in the process of being standardized.

Box 1: Technical standards in the catalogue film sector

The catalog film sector is characterized by a very strong standardization as well as a very rapid evolution of the different formats both physical and digital. Of all the sectors of creation, this sector appears to be one of the most accomplished in the techniques of interoperability of formats both for the purpose of conservation over time (circulation, restoration, digitization, storage) and for rebroadcasting on all media (TV, theater, digital), according to different quality levels (2K, 4K, 3D, etc.).

In this sector, there are as many technical standards as there are audiovisual production companies. There is therefore a real value chain for file creation, specialized and approved laboratories dedicated to the interoperability of different formats according to techniques that are constantly evolving. Traditionally, catalog owners keep the source files from which they create new formats intended for different media, taking into account the requirements of each broadcaster. However, over the last 4-5 years, there has been a trend towards storing source files outside the European Union, which poses longer-term interoperability issues.

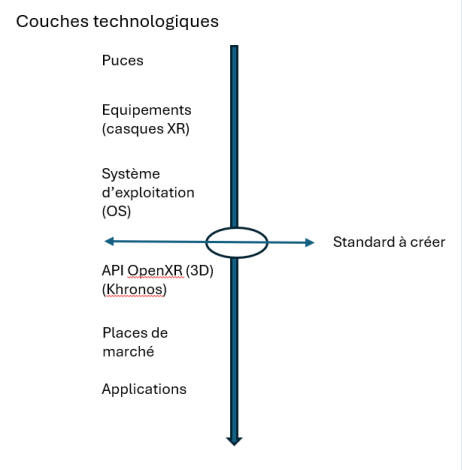
As it stands, the major issue in terms of interoperability in this sector is the cost of its implementation and its support by operators, as well as the environmental cost induced by these operations.

Box 2: Technical standards in the extended reality sector

Immersive technologies of extended reality (or "XR") including virtual reality (VR), augmented reality (AR) and mixed reality (MR) are in an advanced stage of development and the market now offers a wide range of products, platforms and connected devices for rich and engaging experiences. The market is largely dominated by digital giants such as Meta and Apple, however competing companies are enriching the offer on this booming market targeting in particular BtoB market segments, such as *Lynx*, a French company which designs and markets mixed reality headsets.

Virtual reality opens the way to new ways of consuming audiovisual and media content and to new challenges for the creative industries. The market is mainly structured on open standards, accessible to all players in the value chain, such as the OpenXR standard[10], developed within the Khronos consortium. Published in 2019, OpenXR is based on APIs and other software layers that are freely available and well documented so that developers can create applications/experiences for all platforms and headsets compatible with OpenXR. As it stands, Apple is the only player that has not integrated open standards but only closed standards. Developers must therefore use the technical documentation and tools provided by Apple without being able to use the APIs of the OpenXR standard.

The question of interoperability that therefore arises in the emerging sector of innovative distribution devices for cultural and creative content in extended reality is not so much whether there is a standard accessible to the market as who forces its application. As the market stands, two standards exist, one open, the other closed and attached to an ecosystem that is also closed. In any event, if it were necessary to introduce interoperability to promote optimal distribution and promotion of cultural and creative content across several operating systems, it would be appropriate to do so, based on feedback from the mission, at the level of a technological node or control point[11] such as the one identified below:



[10] Online at https://www.khronos.org/openxr/

[11] Caffarra C., Berjon R. (August 9, 2024) *Google is a Monopolist - Wrong and Right Ways to Think About Remedies*, Tech Policy Press.

Box 3: Logilab Archives and Opera – Doing business in culture

Logilab's project[12] aims to enable heterogeneous data to work together and connect different formats. In terms of method, Logilab defines pivot formats by mutual agreement, the standards developed by the World Wide Web Consortium (W3C) serve as links.

As part of the archives project, Logilab had to manage heterogeneous input data (EAD, XML, etc.), different representation choices. It created a pivot format, created an alignment as well as authorities in consultation with the archivists who best know the databases in question in order to align with external repositories (csv).

Logilab has also developed a project for the industrialization of a solution for structuring and disseminating cultural data promoting the "discoverability" of cultural events, in this case the Opera. Developed from programming and media data from 6 opera houses, in addition to the Réunion des Opéras de France (ROF): Opéra national de Bordeaux, Théâtre du Châtelet, Opéra de Limoges, Opéra-Comique, Opéra national du Capitole de Toulouse, Opéra de Rennes et le réseau du TMNlab / laboratoire Théâtres & Médiations Numériques.

Solutions for managing heterogeneity exist and are being developed in the cultural industry sectors in France.

[12] Online at https://www.logilab.fr/

1.2. Economically, interoperability is a question of incentives

10. Understanding the economic dimension of interoperability, particularly in digital markets, highlights the existence of **different degrees of interoperability**[13] ranging from no interoperability to the establishment of complete interoperability between distinct products and services. Partial or limited interoperability, concerning only certain functionalities of a platform, may find economic rationality due to the costs of interoperability (development and implementation of technical solutions) as well as as a factor of diversification between competing products and incentive for innovation for the development of alternative solutions and functionalities.

11. In the presence of such a "range of possible degrees of interoperability"[14], the fixing of a certain level of interoperability may have major consequences for the maintenance of effective competition in certain markets. **It does not emerge from the mission that a single or uniform approach to the interoperability requirement could be applicable in all sectors of cultural creation.**

12. **Economic studies focusing on the concept of interoperability have multiplied over the last five years,** in France, Europe and around the world[15].

13. Depending on the level of technical integration between different products and services, a distinction was made in the Cremer report (2019)[16] between three forms of interoperability in digital markets.

    - The first level is that of **protocol interoperability,** which refers to the ability of two complementary products and services to technically interconnect with each other. It consists in particular in allowing third-party companies to offer complementary products and services on a given platform (for example, application publishers on a mobile operating system) or for them to be interoperable with each other (for example, between interconnected objects in the Internet of Things). This type of interoperability may require the definition of standards and encourage competition and innovation within the various complementary markets.
      Full protocol interoperability corresponds to perfect interoperability between substitutable products or services. It allows the sharing of network effects between direct competitors by reducing the risk of lock-in.

    - From the protocol interoperability, we distinguish **data interoperability**[17] allowing continuous and automated access, if necessary in real time, to data generated by users of a

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13 Bourreau M., Krämer J., Buiten M. (2022) Interoperability in Digital Markets, Centre on Regulation of Europe (CERRE), p. 16.

14 Expression used in the Microsoft v Commission judgment of 2007 (§ 139). Paragraphs 207 et seq. of the judgment provide a clear illustration of how "interoperability is a metter of degree" (§210) – see CJEU, judgment of the Court of First Instance (Grand Chamber) of 17 September 2007, Case T-201/04, Microsoft v Commission.

15 See in particular: Crémer et al. (2019), Bourreau and de Streel (2019), Alexiadis and de Streel (2020), Riley C. (2020), Brown (2020), Cyphers and Doctorow (2021), Scott Morton et al. (2021), Bourreau et al. (2022), Cremer and others (2022), Beaudouin and others (2022), Lemley and others (2023) and Colangelo and Ribera Martínez (2024).

16 Crémer J., de Montjoye Y.-A., Schweitzer H. (2019) Competition Policy for the digital era, European Commission, Directorate-General for Competition.

17 According to J. Crémer et al. (2019), the concept of data interoperability would refer to a form of advanced portability, characterized by the automatic and real-time nature of data migration from one environment to another. The mission considers that interoperability is an

product or service. Data interoperability is achieved technically by setting up APIs (Application Programming Interfaces) to ensure the flow of data between distinct environments. It can have the effect of lowering barriers to entry and promoting the contestability of markets and the multi-hosting of users (the presence of users on competing platforms simultaneously).

14. Depending on the levels of the value chain where interoperable products and services are located, a distinction is also made between horizontal and vertical interoperability based on the work of Riley (2020)[18].

    - **Horizontal interoperability** refers to the ability to integrate substitutable products or services at the same level of the value chain (e.g. between e-readers). It promotes competition by reducing barriers to entry, facilitating multi-homing, and preventing structuring platforms from capturing network effects and locking user groups into a closed ecosystem. Horizontal interoperability can be symmetrical or asymmetrical, depending on whether interoperability is possible reciprocally between two environments or with only one of these two environments. Horizontal interoperability can have disadvantages such as **high implementation costs** or create disincentives for **innovation** and diversification **between** companies since interoperability would lead to homogenization between competing products, at least for the functionalities that would be interoperable[19].

    - **Vertical interoperability** concerns complementary products, located at different levels of the value chain, such as between an operating system and mobile applications for access to functionalities such as sending notifications to the user. Vertical interoperability can generate pro-competitive effects of different kinds by promoting diversification and competition on markets vertically integrated with the digital platform for the offer of products and services on the platform itself or complementary.

15. **Interoperability analysis can be carried out within a specific ecosystem,** namely the ability for professional users to benefit from all the functionalities of a certain platform, **interoperability between ecosystems**, namely interoperability between two platforms, for example the Apple iOS and Google Android operating systems.

16. **These classifications make it possible to highlight different market configurations and, above all, different types of incentives for economic operators to interoperate or, on the contrary, to favor strategies of controlled restrictions on interoperability.** Case law in competition matters makes it possible to illustrate this typology of configurations in a relatively systematic manner. This is particularly true of that relating to the anticipation of these incentives in the context of merger

essential condition for the effectiveness of data portability, since no data migration would be possible or useful if the exported data cannot be reused. Furthermore, recital 68 of the GDPR underlines the importance of implementing interoperable formats to make the right to data portability effective, enshrined in Article 20 of the GDPR, which consists of the user of a service obtaining personal data concerning him/her. However, as noted by PEReN, the right to portability of the GDPR cannot constitute a right to data interoperability. Moreover, in practice this obligation is generally implemented by a simple possibility of downloading a data archive, often difficult to access – see PEReN (2021) Éclairage sur : l'interopérabilité, p. 2.

[18] The categorization of interoperability according to the levels of the value chain concerned is notably attributed to the work of the economist Chris Riley, see in particular: Riley C. (2020) Unpacking interoperability in competition, Journal of Cyber Policy, 5(1), p. 95.

[19] Bourreau M. et al. (2022), p. 20-21.

control, the objective of which is to avoid the creation or strengthening of a dominant position. **Even if interoperability is only a means and not an end, the conditions of its implementation can facilitate or, on the contrary, hinder a healthier and fairer competitive market functioning.**

17. It is specified that **the mission included in its analysis not only the publishers of cultural and creative content and services but also the companies that allow them to market their cultural content and services online** and thus participate in the economy of their distribution, sometimes even as one of their pillars, either through online advertising as is notably the case for the online press, or through ticketing for live shows, or even operators recording book sales in France.

18. The mission observed that in the economy of online cultural and creative content and services, **creators are inserted into more or less closed ecosystems** such as those of Apple, Google, Amazon or even Microsoft or Meta **which raise questions of interoperability for all operators in a differentiated manner, horizontally and vertically, depending on their role in the value chain**. Some technological operators being vertically integrated, this explains the diversity of sometimes contradictory incentives that some describe as conflicts of interest since they are interested in the value of the transactions occurring on their platforms (Apple, Google, Amazon for example).

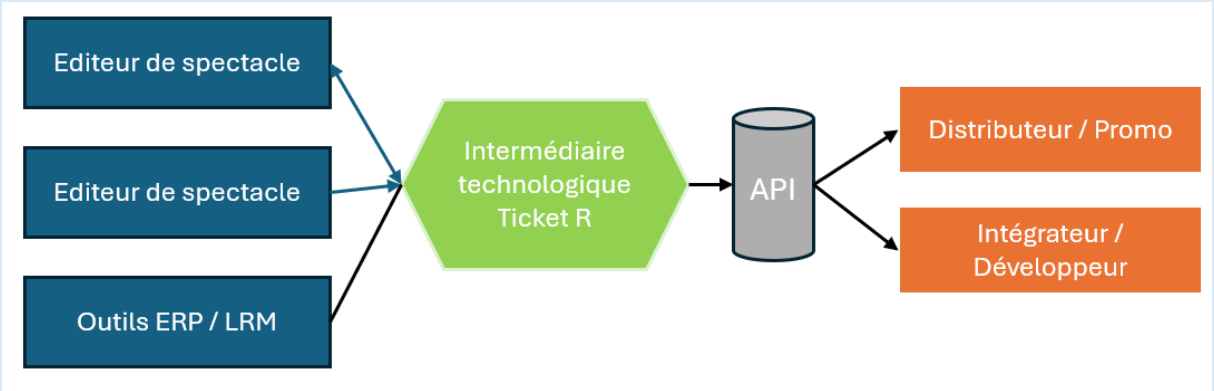
19. In this regard, the mission noted that live events ticketing operators had designed a solution and, above all, an economic model which contrasts precisely with that of the large, dominant technology companies presenting these risks of permanent conflicts of interest and contradictory incentives.

Box 4: Live show ticket office
A technological intermediary economic model not based on the value of transactions or the appropriation of data which places the publisher at the center of the value exchange

The mission heard from an innovative intermediary technology operator enabling live events promoters to optimize the management of their ticketing and therefore the marketing of their show to the public, managing the heterogeneity of their data to enable centralized management.

The mission noted that it is possible to design a competitive positioning different from that adopted by the digital giants with regard to the negative incentives generated by the economic models of intermediation based on commissions on the value of transactions passing through the platform. By decorrelating the rates linked to the intermediation service from the value of transactions passing through the platform, the operator of the latter would probably have less incentive to try to optimize transactions in its favor or in favor of its related services. Remedies relating to the pricing methods (and not the price itself) have already been set out in the decisional practice of competition authorities (see commitments in Decision 21-d-11, Google Ad tech, of the French competition authority).

Another extremely instructive feature of the alternative economic model mentioned by this operator, at the heart of the proposed solution would be the fundamental idea that the data generated from or on the platform does not belong to the technical intermediaries. This is a fundamental difference in approach from that of the large technological operators who appropriate such data by considering it as first-party data. Such a positioning would probably substantially reduce the incentives for data appropriation and would promote a better circulation of said data, to the ultimate benefit of the promoters of live shows in this case who could consider analyzing them for other uses (improving their performance, their ability to address the public in a more relevant way, or reducing the risks of non-filling live events venues).



Box 5: Online advertising on publisher sites - Combating restrictions on interoperability, promoting the flow of data and changing pricing arrangements

In the first and to date only final decision of a competition authority in the world, by a decision of June 7, 2021[20], the French Authority sanctioned Google for having implemented practices aimed at favoring its advertising server and its programmatic auction platform, through a combination of technical restrictions on interoperability and pricing at supra-competitive levels. As illustrated by the following diagram published by the Authority in its press release, Google is vertically integrated, moreover dominant, and present at the center of the non-search advertising value chain (DSP, SSP, Server), as can be a show ticketing operator. Interested in the value of transactions, this case illustrates how an integrated structure can bring a structural conflict of interest with the interests of its customers and generate incentives to restrict interoperability to its advantage, to the detriment of competitors and publishers.

The decision found that restrictions imposed by Google on interoperability between its services and the services of competing third parties provided it with benefits, in the conditions summarized below, in addition to impacting site publishers' revenues and pricing issues vis-à-vis site publishers.

239. Comparaison des conditions d'interopérabilité offerte par AdX à DFP vs serveurs publicitaires tiers :

Situation	Conditions d'interaction
DFP	**Avantages pour DFP** - comparaison en temps réel - latence minimale
Serveur tiers – configuration « AdX direct »	**Désavantages pour les serveurs tiers** - absence de comparaison en temps réel limitant le rendement - droit de dernier regard pour AdX
Serveur tiers – deuxième configuration	**Désavantages pour les serveurs tiers** - latence additionnelle - frais de serveur publicitaire additionnels - configuration peu connue et complexe - absence de documentation officielle

In several paragraphs[21], the Decision establishes that these restrictions have impacted the revenues of website publishers, whether or not they are Google customers, during the period. A restriction on the interoperability of a system can therefore impact the financing of these sites, sometimes to a considerable extent. Google has committed to making its systems more interoperable and to modifying its pricing terms as part of this Decision.

20 ADLC, Decision 21-D-11 of June 7, 2021, regarding practices implemented in the online advertising sector.

21 *Ibid*., in particular paragraph 408.

1.3. In the European legal order, interoperability has a dual meaning: heterogeneous and functional in the texts, it is defined through its degradation or absence in the decisional practice of competition authorities.

i. The European regulatory effort reflects the heterogeneity of the application conditions and the objectives that interoperability serves.

20. **Interoperability is a means and not an end.** This is how its definition seems to have been conceived in the various European texts that have targeted it.

21. The first definition of interoperability to appear in a European legislative text in the digital field dates back to 1991 in the **Software Directive**[22], which established a right to decompile software for the purposes of interoperability by way of derogation from the exercise of copyright [23]. The recitals of the "Software Directive" provide a definition of interoperability understood as *"the ability to exchange information and mutually to use the information which has been exchanged"*. This definition was replicated in the 2009 Software Directive[24]. In accordance with this Directive, a reproduction or translation of the code of a computer program may prove essential to enable the interoperability of all the elements of a computer system from different manufacturers.

22. The concept of interoperability is also referred to, without being strictly defined, in recital 54 of **Directive 2001/29 of 22 May 2001 on copyright and related rights,** specifies that "*the compatibility and interoperability of different systems must be encouraged" and that "it would be highly desirable to encourage the development of global systems*", but it does not impose any obligation on national legislators to establish a right to interoperability.

23. **Directive (EU) No. 2019/770[25] on contracts for the supply of digital content and digital services constitutes an instrument for consumer protection** in the European single digital market under construction[26], includes a definition in the consumer code in its introductory article, it is referred to in Article L.111-1 1° (pre-contractual information) and L.224-25-13 (guarantee of conformity). Within the meaning of the directive, interoperability is "the ability of the digital content or digital service to function with hardware or software different from those with which digital content or digital services of the same type are normally used"[27].

24. The Directive and its transposition measures into national law do not impose interoperability, nor do they create a right to interoperability. This system creates an obligation for the professional who provides the consumer with interoperable content or service to guarantee effective interoperability

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22 Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs.

23 The conditions for exercising this right to decompilation for the purposes of interoperability are set out in French law in Article L. 122-6-1-IV of the Intellectual Property Code.

24 Directive 2009/24/EC of 23 April 2009 on the legal protection of computer programs, recital 10.

25 Directive (EU) No 2019/770 of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services.

26 Building a European digital market is a policy initiated by the European Commission under the presidency of Mr Juncker with the Strategy for a Digital Single Market in Europe of 2015, relaunched in 2020 with the Strategy "Shaping Europe's digital future" under the presidency of Ms von der Leyen.

27 This definition is now retained by the Consumer Code in the 11th of the preliminary article following transposition order no. 2021-1247 of September 29, 2021, relating to the legal guarantee of conformity for goods, digital content and digital services.

when it is provided for in the contract and a pre-contractual information obligation. Its legal scope is both important for the consumer in his interactions with the professional who makes cultural and creative content available to him, but restricted to these obligations alone. The concept of interoperability is analysed here in the light of what would be normal use within the meaning of consumer law.

25. In 2022, **interoperability receives a new definition within the European regulation on digital markets**[28] (DMA) **and becomes a binding legal obligation**, **imposed** on a limited number of technology companies designated as "**gatekeepers**" **on certain so-called essential platform services**, themselves restrictively defined. Article 2, point 29 of the DMA, defines interoperability within the meaning of the regulation as: "*the ability to exchange information and mutually use the information which has been exchanged through interfaces or other solutions, so that all elements of hardware or software work with other hardware and software and with users in all the ways in which they are intended to function*".

26. **The scope of interoperability within the meaning of the DMA is much broader than that referred to in Directive 2019/770 and is mainly defined in Articles 5, 6 and 7 of the DMA.**

27. **The same obligation may have both a horizontal and vertical dimension when the gatekeeper is a vertically integrated operator** and may be both a supplier to the publisher of online cultural content and services and a competitor. This is the case *at least* for Apple, Google and Amazon, and in some cases Microsoft, particularly with regard to the development of Generative AI services integrated into essential platform services, whether or not linked to OpenAI.

28. **In the following table, the mission considered the notion of interoperability in its three dimensions: legal (on whom the obligation falls), technical (what type of connection must take place) and economic (what incentives determine the choice to interoperate)**.

29. It follows that for certain articles, the mission has chosen to retain a type of "vertical and horizontal" interoperability because even technically vertical, an interoperability obligation implemented by a vertically integrated operator can be hindered by economic incentives of a horizontal nature.

Interoperability obligations contained in the DMA			
Implied obligations	Interoperability type	**Explicit** obligations	Interoperability type
Article 5 (9)	Vertical and horizontal	Article 6 (4)	Vertical and horizontal
Article 5 (10)	Vertical and horizontal	Article 6 (7)	Vertical and horizontal
Article 6 (3)	Vertical	Article 7	Horizontal
Article 6 (6)	Horizontal		
Article 6 (8)	Vertical and horizontal		
Article 6 (9)	Horizontal		
Article 6 (10)	Vertical and horizontal		
Article 6 (11)	Horizontal		
Article 6 (12)	Vertical and horizontal		

[28] Regulation (EU) 2022/1925 of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act).

30. **Certain obligations, in particular those established by Article 6 of the DMA, are by their nature likely to be specified.** The Commission has the power to open a procedure provided for in Article 8 of the DMA on its own initiative or at the request of an gatekeeper. This procedure, which lasts six months from its opening, allows it to adopt an implementing act specifying the measures to be implemented to ensure compliance by the gatekeeper with its obligations under the DMA.

31. **The procedure provided for in Article 8 of the DMA has already been used in the context of the opening of two concurrent investigations concerning Apple on 19 September 2024[29], concerning both the interoperability conditions actually proposed and the conditions of access to the measures taken to ensure interoperability**. **The specification decisions are expected in March 2025.** Apple having indeed declared in July 2024 that it would not deploy its new Generative AI functionalities within the European Union until the concept and scope of the interoperability obligations within the meaning of the DMA were clarified. In October 2024, either during the course of these procedures, Apple announced that it would be ready to deploy its Generative AI functionalities in April 2025 within the European Union, or after the expected decision of the Commission.

[29] See the Commission press release: https://france.representation.ec.europa.eu/informations/la-commission-ouvre-deux-procedures-visant-preciser-les-obligations-dinteroperabilite-dapple-en-2024-09-19_fr

Box 6: DMA – Opening of two investigations into Apple's compliance with the interoperability obligation

On the basis of Article 8.2 of the DMA, on 19 September 2024, the European Commission opened two specification procedures aimed at clarifying Apple's obligations under Article 6.7 of the DMA to ensure the interoperability of software and hardware features of its iOS operating system.

The first procedure[30], relating to **the interoperability of iOS functionalities accessible to connected devices** (e.g. smart games, smartwatches or virtual reality headsets), aims to specify the modalities for effective compliance with Article 6.7 of the DMA. This includes in particular the definition of the interoperability solutions to be implemented, the means of technical implementation and the modalities of access by third-party developers.

The second procedure[31] concerns **the process for handling** third-party developers' interoperability requests set up by Apple to access the relevant interoperability features. The Commission notes, on the one hand, that in principle, in light of recital 65 of the DMA[32], Apple should ensure interoperability of its proprietary solutions from the outset, without the need for processes on individual third-party requests that could lead to long processing times, transaction costs and the disclosure of confidential information and which would allow Apple to maintain control over the process of handling requests and their outcomes. On the other hand, the Commission acknowledges that if a process for handling requests for access to interoperability features can be set up, this access request procedure must meet the requirements of timeliness, transparency and predictability, objectivity, fairness and non-discrimination.

32. Recital 96 of the DMA recognizes that the implementation of **certain obligations such as those related to data access, portability or interoperability could be facilitated by the use of technical standards**. To this end, Article 48 of the DMA provides **that the Commission may instruct European standardization bodies to develop appropriate standards** to facilitate the implementation of the obligations set out in the Regulation, including interoperability. This option has not yet been used by the Commission at the date of this report.

33. **Finally, the European Commission is also free to contribute to defining the contours of the concept of interoperability by considering that a lack, deterioration or insufficiency of interoperability constitutes an attempt to circumvent** the obligations provided for by the DMA by not relying on the concept or its scope but only on the result by relying on Article 13 of the DMA. This would be a kind of negative definition of the scope of the obligation of interoperability as is the case in particular from the decisional practice of the competition authorities (both *ex ante* in the area of merger control and anti-competitive practices).In 2023, Article 2(40) of the **Data Act[33] provides** a new definition of interoperability as the "*ability of two or more data spaces or*

30 Commission Decision of 19 September 2024, Case DMA.100203, C(2024) 6663 , (Apple, connected devices)

31 Commission Decision of 19 September 2024, Case DMA.100204, C(2024) 6661 (Apple, Process for Handling Interoperability Requests)

32 Recital 65 of the DMA, concerning the compliance of gatekeepers with their obligations, states that "gatekeepers should ensure the compliance with this Regulation ***by design***. Therefore, the necessary measures should be integrated as much as possible into the technological design used by the gatekeepers".

33 Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data and amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828 (Data Act).

communication networks, systems, connected products, applications, data processing services or components to exchange and use data in order to perform their functions". The Data Act aims to strengthen the data economy within the European Union by promoting the flow of data. **It devotes an entire chapter to interoperability, mainly focused on defining essential requirements and specifications to be met for interoperability within and between data spaces to be effective, particularly in cloud computing.** A cloud space is a data space within which these requirements and specifications must be met.

34. It is worth noting that among the **requirements deemed essential for effective interoperability within the meaning of the Data Act are included in Article 33**, in particular, the following provisions:
    - **the dataset content, use restrictions, licences,** data collection methodology, data quality and uncertainty **shall be sufficiently described**, where applicable, in a machine-readable format, to allow the recipient to find, access and use the data;
    - **the data structures, data formats, vocabularies,** classification schemes, taxonomies and code lists, where available, **shall be described** in a publicly available and consistent manner;
    - **the technical means to access the data, such as application programming interfaces, and their terms of use and quality of service shall be sufficiently described** to enable automatic access and transmission of data between parties, including continuously, in bulk download or in real-time in a machine-readable format where that is technically feasible and does not hamper the good functioning of the connected product;
    - where applicable, the means to enable the interoperability of tools for automating the execution of data sharing agreements, such as smart contracts shall be provided. where appropriate, **means enabling the interoperability of tools for the automatic execution** of data sharing agreements, such as smart contracts, **are provided**.

35. **As in the DMA, the Commission may request one or more European standardisation bodies to develop harmonized standards** which meet the said essential requirements, which demonstrates the need to take into account the multi-dimensional nature of interoperability in order to ensure its effectiveness.

36. **The mission considers that it emerges from these elements and from the requirements deemed *essential* in the Data Act that it is not enough to design interoperability for it to be effective. It is not enough to make thousands of APIs available without describing their content, parameters and uses, to satisfy the obligation to interoperate. User companies, such as publishers of cultural and creative content and services distributed online and their independent alternative technological partners, need to respect these essential requirements just as much in order to access a level of interoperability likely to promote their autonomy, the contestability of markets and a better value sharing.**
37. The AI Act[34] does not define interoperability but underpins its existence.

[34] Regulation (EU) 2024/1689 of 13 June 2024 establishing harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Regulation)

ii. European decisional practice enriches this notion of interoperability by defining its contours through its degradation or absence.

38. The mission considers that the concept of interoperability is at least as much defined by the texts as by the way in which its absence or lack could be identified in the decisional practice of the competition authorities both in terms of merger control (*ex ante*) and sanctioning anti-competitive practices (*ex post*).

39. In this regard, the deterioration of interoperability has been analyzed in detail in the context of the risks of conglomerate effects (effects linked to the complementarity of the activities of the companies involved) of merger in the digital sector. In this context, the risk concerns the relative deterioration of the conditions in which the products of third parties interact with those of the company resulting from the transaction. In terms of their legal classification, such practices constitute a form of tying of products from two separate but related markets operating within a broader system or ecosystem. The tie may be of a technical nature or of other forms, for example contractual[35].

40. In the **Google/Fitbit case**[36], the European Commission conducted an in-depth analysis of Google's ability to technically restrict the interoperability of its Android operating system with third-party devices, in this case smartwatch manufacturers, or to change its business model to implement such a restriction. The Commission did not only consider restrictions in access to features specific to the devices concerned (such as APIs relating to notifications, geolocation or proprietary and third-party applications, see §753 et seq. of the decision), but also the degradation of technical support that Google's teams could have provided to third-party developers requesting interoperability solutions (§763 et seq.).

41. In the **Microsoft/Activision decision Blizzard**[37], the restrictions on the interoperability of Activision Blizzard's video games (developer and publisher of video games) with consoles competing with the Xbox, Microsoft's console, were also taken into account (§390 and §872).

42. In terms of anti-competitive practices, it is worth noting as an example that in the **Google Ad Tech case**[38] of the French Competition Authority, the latter also analyzed the conditions under which Google restricted from a technical and contractual point of view access to its advertising stack to the detriment of website publishers and Google's competitors. The decision was accompanied by commitments from Google to remedy the interoperability deficiencies by establishing similar data transmission and optimization mechanisms and equal access to ad auction data.

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35 Definition of interoperability degradation appearing in Beaudouin Y., Genevaz S., Mernagh S., Slezeviciute A. (2022) Merger Enforcement in Digital and Tech Markets: an Overview of the European Commission's Practice, Competition policy brief, Issue 02/ 2022, p. 3. Hereinafter the original English version: "*Interoperability degradation refers to a relative deterioration of the conditions in which third parties' products interact with the merged entity's own products post-transaction (and/or viceversa). The* effect *of such a strategy is ultimately that customers would prefer the merged entity's combined products over those of rival suppliers. It is a form of technical tying between products belonging to distinct relevant markets that are closely related due to their interoperation in a broader system*."

36 Commission Decision of 17 December 2020 in Case M.9660 (Google/Fitbit) authorising the acquisition of Fitbit by Google, subject to commitments. See in particular paragraphs 749 et seq.

37 Commission Decision of 15 May 2023 in Case M.10646 (Microsoft/Activation Blizzard)

38 Competition Authority Decision No. 21-d-11 of June 7, 2021 relating to practices implemented in the online advertising sector.

43. **The mission considers that it results from the above that the decisional practice of the European competition authorities is consistent with the texts referred to above with regard to the essential requirements described for example in the Data Act to promote interoperability and contestability. Interoperability requires a set of measures, means, documents and readable information to be effective, and of a protean nature.**

2. The main obstacles to interoperability arise either from the unilateral behavior of a dominant player or from a lack of standardization in the sector.

44. As a preliminary observation, this mission considers that any restriction placed on interoperability by an entity other than the publisher of online cultural content or services undermine the legitimate exploitation of its rights, from which it must be protected by technical protective measures which shall themselves be interoperable.

45. The developments observed over the last five years in the cultural and creative content economy sector have placed the most powerful technological intermediaries at the center of value exchanges. This central role raises significant financial, economic and structural issues, and issues of cultural sovereignty, particularly in the online press and media sector, which justify ambitious and effective regulatory interventions, as was recently highlighted by the work carried out within the framework of the "Etats généraux de l'information".

46. This mission considers that however powerful these market players may be, they remain technical and technological intermediaries of which the creators of cultural and creative content are customers, suppliers and partners, but on which they must not depend. Strengthening the effectiveness of interoperability by combating the unilateral practices of certain market players and promoting an optimal level of standardization at different levels of the cultural creation economy is likely to allow for more contestability and fairness in the value sharing.

47. In the context of the work and hearings carried out by the mission, it emerged that the obstacles to effective interoperability are mainly of two types: i) the unilateral behavior of dominant players, particularly in a closed ecosystem on which publishers of cultural content and services are dependent, and ii) the absence or lack of standardization in the sector.

48. The example of catalogue films illustrates in particular that in the presence of a highly standardized industry managing a multiplicity of formats, interoperability arises in terms of costs and the opportunity to invest in the restoration and rebroadcasting of content compared to the profitability that can be expected. In the radio sector, particularly free radio, there is also a multiplicity of formats (DAB, FM, IP, Digital). Interoperability is necessary in this case to ensure territorial continuity. In this context, broadcasting on online platforms is here conceived as a form of simplification. In industries that are little or not at all standardized or in which dominant players maintain compartmentalized structuring ecosystems, standardization does not make it possible to streamline data exchanges. As a result, the behavior of such players is the determining factor influencing the functioning of the

market and, consequently, the value that accrues to publishers of online cultural content and services.

2.1. When it is the result of a unilateral decision by a dominant operator, the lack of interoperability is all the more difficult to contest, as the content publishers find themselves in a situation of dependency

49. This report does not intend to trace the evolution of case law articulating copyright and competition law in matters of restrictions on interoperability through the implementation of technological protection measures in particular. In a context of technological development, these measures are considered necessary by the creative industries to protect themselves against the risks of counterfeiting[39], such as piracy. At the same time, the implementation of technological protection measures may constitute an obstacle to interoperability and therefore have significant competitive implications, but only when they are carried out by dominant firms.

50. Interoperability between technological protection measures is also an essential condition for a legally acquired protected work to be able to be consumed in different environments. Directive 2001/29/EC of 22 May 2001 considered the question of the interoperability of technological protection measures as a requirement to be encouraged[40].

51. In order to prevent the implementation of technological protective measures (TPMs) from excessively restricting the use of protected works, French law[41] had entrusted the High Authority for the Dissemination of Works and the Protection of Rights on the Internet (HADOPI) with "*a regulatory and monitoring mission in the field of technological measures for the protection and identification of works and objects protected by copyright or by a related right* " (former Article L. 331-13 of the CPI). The current regime of technological protection measures, as set out in Law No. 2021-1382 of October 25, 2021 relating to the regulation and protection of access to cultural works in the digital age, now entrusts the French Regulatory Authority for Audiovisual and Digital Communication (ARCOM) with the mission of ensuring that TPMs do not result in hindering effective interoperability and disproportionate limitations on the use of a work[42]. Since 2009, the competent authorities have rarely been called upon to intervene in this area. In 2013, HADOPI issued an opinion[43] following the referral by the VideoLAN association, publisher of the VLC multimedia player, concerning the interoperability of TPMs affixed to Blu-Ray discs. In 2021, having received a request for dispute

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39 Cf. Impact study on the Draft law relating to the regulation and protection of access to cultural works in the digital age of April 7, 2021, p. 32 et seq.

40 Recital 54 of Directive 2001/29/EC: ' Significant progress has been made in the international standardisation of technical systems for the identification of protected works and subject matter in digital form. In an increasingly networked environment, existing differences in technical measures could lead to incompatibility of systems within the Community. Compatibility and interoperability of different systems should be encouraged. It would be highly desirable to encourage the development of universal systems'.

41 This legislation was introduced in 2009 by Law No. 2009-1311 of October 28, 2009 relating to the criminal protection of literary and artistic property on the Internet.

42 Article L. 331-28 of the CPI provides that Arcom "ensures that the technical measures referred to in Article L. 331-5 do not, due to their mutual incompatibility or their inability to interoperate, result in the use of a work being subject to additional limitations independent of those expressly decided by the holder of copyright in a work other than software or by the holder of a related right in a performance, phonogram, videogram, program or press publication."

43 HADOPI opinion no. 2013-2 issued following a referral from the VideoLAN association.

settlement [44], ARCOM declared itself incompetent to rule on the dispute between Cosmo and Sage over the implementation of an TPM, in this case an access code to a server.

52. **Recently, the French competition Authority had to examine restrictions on interoperability in the video game controller sector for PlayStation 4.** In Decision 23-D-14 of 20 December 2023 [45], **Sony** was fined for (i) its use of **technical countermeasures** affecting the operation of third-party video game controllers for PlayStation 4 and (ii) its **opaque licensing policy** aimed at preventing competitors from joining its partnership program by refusing to communicate access criteria to manufacturers who requested it. Once again, these practices led to limitations on interoperability between third-party controllers (those from third-party manufacturers who did not hold an official Sony license) and controllers manufactured by Sony or its licensees: the technical countermeasures in fact led to the "disconnection" of third-party controllers and therefore their incompatibility with the console. In this case, the Authority considered that the implementation of technological protection measures aimed at combating the counterfeiting of its intellectual property rights was disproportionate to this objective[46].

53. The decisional practice of competition authorities and recent digital regulation indeed largely address the issue of the lack or absence of interoperability both in its qualification and in the remedies to be applied to it. The notion of interoperability in digital ecosystems has become an essential component of the competition policy agenda and more generally in the digital strategy of the European Union. Digital regulation is geared towards greater openness, greater sharing and greater circulation of data to streamline the market, make it contestable and distribute value more fairly between the different operators.

54. In its most recent **Guidelines on the definition of the relevant market under competition law published in February 2024**[47], the Commission specifies that the **"degree of interoperability"** constitutes a factor in the analysis of the relevant market, which seems logical given the fact that it structures and promotes or prevents contestability and fairness. In this regard, according to the Commission, the degree of interoperability must be taken into account when assessing potential barriers to substitutability between two products and the existence of switching costs to potentially competing products[48]. According to the Guidelines, such a circumstance would arise, for example, "*where a subset of products does not work in conjunction with another product, so that switching products entails an additional cost for customers*"[49]. It is also clear from the Guidelines that such a parameter is particularly relevant for the assessment of substitutability in market definition **in the presence of multi-sided platforms**[50] **and digital ecosystems**[51].

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44 Deliberation No. 2021-09 of July 23, 2021 relating to the referral filed by the company Cosmos Consulting relating to the lack of software interoperability resulting from the implementation by the company Sage of a technological protection measure.

45 ADLC, decision no. 23-D-14 of December 20, 2023 relating to practices implemented in the sectors of eighth-generation static video game consoles and control accessories compatible with the PlayStation 4 console.

46 Ibid., pt. 271.

47 Communication from the Commission of 22 February 2024 on the definition of the relevant market for the purposes of Union competition law, C/2024/1645.

48 Ibid. paragraph 50.

49 Ibid. footnote n. 84.

50 Ibid. paragraph 98.

51 Ibid. paragraph 104.

55. By way of illustration, in the ***Google Android case***[52], the Commission was able to rule out the existence of a market including both mobile operating systems and application stores by observing, among other things, that if the choice of an app store is determined by the choice of a smartphone using a certain operating system, this is only because "a user cannot, for technical reasons, install an app store that has not been developed for that [operating system]"[53].

56. As regards the characterization of an abuse of this situation of economic power, the European judges derive a particular responsibility from any dominant undertaking not to undermine, by its conduct, effective and undistorted competition in the internal market[54].

57. The 2007 **Microsoft v Commission case**[55] is the case-law consecration of the refusal of interoperability as an abusive practice. In this case, the Commission considered that the refusal to provide the information essential to interoperability with its Windows PC operating system constituted an abuse of a dominant position within the meaning of Article 102 TFEU.

58. The essential facilities doctrine prohibits the refusal to supply an input that is of particular importance for the entry or expansion of competitors in a neighboring market, whether upstream, downstream or complementary to that in which the undertaking – the holder of the essential resource – exercises its dominance. It is clear from the case-law of the CJEU since the *Bronner case*[56] that a refusal to provide access to an essential infrastructure can only constitute an anti-competitive restriction if the following conditions are met: (i) access to the input is indispensable for the exercise of a competing activity in a neighboring market; (ii) there must be no actual or potential substitute for the indispensable input that cannot be replicated on reasonable terms by competitors; (iii) access to the input is granted under unfavorable and unfair conditions[57]; (iv) the refusal to supply must lead to the elimination of all actual and potential competition on the neighboring market, without it being necessary to demonstrate that the practice has the effect of foreclosing any competitor[58].

59. But the EU Court of Justice has clarified that the "Bronner test" does not apply to all types of access restrictions. In its 2021 *Slovak Telekom decision*, the Court held that the Bronner test does not apply in the presence of a **pre-existing regulatory obligation of access**[59].

60. In ***Google Shopping*** [60], the Court confirmed that not all access issues must be addressed by applying the Bronner test and the indispensable infrastructure standard. In this case, the Court noted that Google's practices did not amount to a "denial of access" within the meaning of the Bronner judgment, but that such access was subject to unfair and discriminatory access conditions designed

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52 Commission Decision of 18 July 2018 in Case AT. 40099 (Google Android).

53 *Ibid*. paragraph 299, point 2.

54 CJEU, judgment of the Court of 19 January 2023, case C-680/20, Unilever Italia, pt. 28.

55 CJEU, judgment of the Court of First Instance (Grand Chamber) of 17 September 2007, case T-201/04, Microsoft v. Commission.

56 CJEU, judgment of the Court of 26 November 1998, case C -7/97, *Bronner.*

57 See Microsoft judgment, para. 421, specifying that effective competition requires that Microsoft's competitors can access resources on an "equal footing."

58 Microsoft, para. 563.

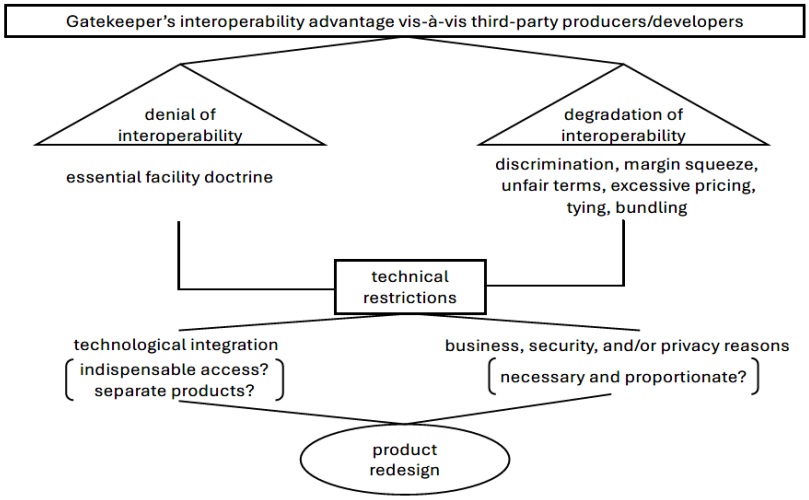
59 See CJEU, Judgment of the Court of 25 March 2021, Case C-165/19, *Slovak Telkom asc Commission,* pt. 54-60, recognising the existence of a regulatory obligation in the field of telecommunications for access to the local loop network of the party concerned aimed at encouraging the emergence and development of effective competition on the Slovak market for broadband Internet services.

60 CJEU, judgment of the Court of 10 September 2024, case C-48/22, *Google Shopping.*

to give Google's products preferential treatment over its competitors[61]. The fact that the Google Shopping platform was designed to be used by third parties is crucial in this decision.

61. In the context of a preliminary question referred by the Italian Council of State to the Court of Justice currently under examination in the ***Android Auto case***[62], the question arises whether the Bronner test applies to a situation[63] where access to the platform is "indispensable for **a more convenient use of the product or service** offered by the undertaking requesting access, especially where the essential function of the product that is the subject of the refusal to supply is to make it easier and more convenient to use existing products or services"[64].

62. Several hypotheses thus seem to be emerging[65], and total or partial restrictions on interoperability may or may not, depending on the circumstances, be subject to the Bronner test. The mission observed that the advantages gained by the dominant operator when it imposes a total refusal of interoperability or restrictions on it, are of various natures that the diagram below (Colangelo and Ribera Martinez (2024)) allows to illustrate and summarize.



63. At the French level, in Decision 21-D-11 of 7 June 2021 (*supra*, Box 5), the Authority sanctioned Google for self-preferential practices in the **display advertising market** consisting in particular of restrictions on interoperability between Google services and competing services. The limitations on interoperability had a significant impact on the revenues of website publishers, while at the same time the commission fees imposed on Google's client publishers were at supra-competitive levels. Google made commitments as part of this Decision to make its systems more interoperable and to modify its pricing terms vis-à-vis publishers.

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61 Ibid., para. 79 et seq.

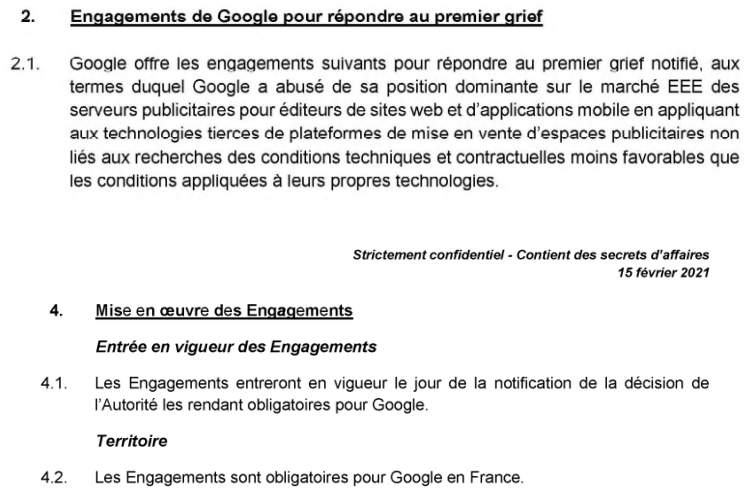
62 Italian Competition Authority, decision of 27 April 2021, case A529, *Android Auto*. The decision concerns the interoperability of the Andoid Auto platform with third-party applications for access to the car's display and car controls and voice commands.

63 Colangelo G., Ribera Martínez A. (2024) *Vertical Interoperability in Mobile Ecosystems: Will the DMA Deliver (What Competition Law Could Not)?,* DEEP-IN Research Paper 2024, p.11.

64 See the request for a preliminary ruling from the Consiglio di Stato of 7 April 2023 in Case C-233/23, Android Auto. The Opinion of Advocate General L. Medina on the question referred specifies on this point that "Article 102 TFEU must be interpreted as meaning that the conditions laid down in the judgment of 26 November 1998, Bronner (C-7/97, EU:C:1998:569) do not apply where the platform to which access is requested has not been developed by the dominant undertaking for its exclusive use, but has been conceived and designed with the aim of being nourished by apps of third-party developers. In such a situation, it is not necessary to demonstrate the indispensability of that platform for the neighbouring market" (see the Opinion of Advocate General Medina of 5 September 2024, Case C-233/23).

65 Colangelo G., Ribera Martínez A. (2024) *Vertical Interoperability in Mobile Ecosystems: Will the DMA Deliver (What Competition Law Could Not)?* , DEEP-IN Research Paper 2024. p.7 et seq.

64. The mission notes that while the objections formulated by the French Competition Authority concern the entire European Economic Area (EEA), Google's commitments only covered French territory (extracts).



2. **Engagements de Google pour répondre au premier grief**

2.1. Google offre les engagements suivants pour répondre au premier grief notifié, aux termes duquel Google a abusé de sa position dominante sur le marché EEE des serveurs publicitaires pour éditeurs de sites web et d'applications mobile en appliquant aux technologies tierces de plateformes de mise en vente d'espaces publicitaires non liés aux recherches des conditions techniques et contractuelles moins favorables que les conditions appliquées à leurs propres technologies.

Strictement confidentiel - Contient des secrets d'affaires
15 février 2021

4. **Mise en œuvre des Engagements**

Entrée en vigueur des Engagements

4.1. Les Engagements entreront en vigueur le jour de la notification de la décision de l'Autorité les rendant obligatoires pour Google.

Territoire

4.2. Les Engagements sont obligatoires pour Google en France.

65. In such a configuration, such a choice by Google could theoretically have the effect of leading a publisher that would have revenues in France and in other Member States through its websites to only be able to claim the benefit of these commitments for its French activities while the online advertising markets are European. Such a limitation in the ability of a publisher to benefit from the measures (commitments or injunctions) decided by a European competition authority is not new. When the Dutch competition Authority ordered[66]Apple, subject to a penalty payment, to modify contractual restrictions on the operation of its app store imposed on Dutch dating app publishers, it appeared impossible for French or European publishers of online content and services to benefit from these measures, while they are subject to the same restrictions as those criticized and the decision was based on national and European law.

66. **The mission considers that this is a significant flaw in the system for protecting the rights of publishers of cultural content and services, which requires that the capacity to carry out actions through a coalition of Member States of the European Union (European multistate action), with the possibility for the European Commission to also join in**, be established either as part of the review of Regulation 1/2003 currently being carried out by the Commission or at national level.

67. This mechanism exists in the United States and makes it possible to address two issues: the effective geographical coverage of competition authorities' decisions, as well as to increase the resources allocated to a case by drawing on the current resources of pooled competition authorities. Thus, if 3 agents from each authority of the 27 Member States participated, the team dedicated to the case on the competition authorities' side would be made up of 81 highly qualified people; if the Commission joined, this would lead to a team of 84 people. Such a coalition capacity would also make it possible to combat the fragmentation of the single internal market for competition and the risks of divergence.

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[66] Dutch Competition Authority, Press release, ACM: Apple changes unfair conditions, allows alternative payments methods in dating apps. Online at https://www.acm.nl/en/publications/acm-apple-changes-unfair- conditions-allows-alternative-payments-methods-dating-apps

68. A similar mechanism also exists in the system of central banks, which designate a lead authority to carry out coalition actions, for greater efficiency. The European Competition Network already allows the coordination of the actions of the competition authorities of the Member States; it could be used to develop these coalition actions.

69. **The need for such mutualized action is particularly acute when it comes to enabling the effective implementation of interoperability, both on the basis of competition law and that of the DMA. The mission emphasizes that this is particularly important when it comes to content, particularly online information, whose dissemination or invisibility may have a broader impact on democratic debate.**

70. On the basis of the DMA, the systemic concerns are all the more serious since it is only the gatekeepers of major essential technological platforms that are subject to the interoperability obligations. However, in this regard, the mission noted that certain sectors of the cultural and creative industries had been unilaterally excluded from the benefit of the provisions of the DMA by gatekeepers themselves, apparently applying a specious interpretation of its provisions which would appear - if asserted - to be an attempt to circumvent them.

Box 7 – Digital and audio books

In his report presented in 2017, Jean-Philippe Mochon stressed that while the eBook market was then an emerging market, it was characterized by a lack of interoperability. This lack of interoperability resulted from deliberate choices by international market players to favor proprietary solutions rather than interoperable standards.

Based on the evidence gathered during the mission, the conclusions of the 2017 report remain current.

Although all the elements of an interoperable system for digital books exist – publishing has several standards, including ePUB, adopted by almost all players in the book value chain and interoperable TPMs – the major international digital distribution operators (Apple and Amazon) have chosen not to provide books in ePUB format, thus contributing to the compartmentalization of the market.

At present, the audiobook is experiencing a growth that seems significant, but according to the elements collected during the mission, it would seem that Amazon has an 80% market share of the audiobook in France with its Audible service. This data does not take into account Spotify's entry into the audiobook market since October 2024 in France.

The competitive situation is made all the more worrying for publishers of eBooks and audiobooks because they lack information and data on the consumption of their content, the profile of Internet users who consult or are interested in it, purchase their content or simply interact with it. Yet, this is precisely the purpose of the provisions of Article 6 of the DMA from which publishers of digital and audio books should benefit.

The mission noted that publishers of eBooks and audiobooks have attempted to assert their rights to access data and therefore to interoperate with several gatekeepers. According to their information, these publishers are encountering a specious interpretation of what constitutes a beneficiary of the DMA. Publishers market their digital or audio books via authorized third parties, distributors or a subsidiary of

the gatekeeper itself. The latter would claim that under these conditions, publishers would not be entitled to benefit from the provisions of Article 6 of the DMA in particular, because the holder of this right of access and interoperability would be the authorized third party and not the publisher.

In other words, the gatekeeper who plays a dual role as a provider of the intermediation service qualified as an essential platform service and as a distributor authorized by the publisher, would shield the applicability of the DMA to the detriment of publishers of eBooks and audiobooks.

The mission considers that such an interpretation of the DMA would be openly contrary to the letter and spirit of this regulation. If proven, such an interpretation would appear to constitute a clear violation of this text, and *at the very least* an attempt at circumvention within the meaning of Article 13 of the DMA.

71. In its ***opinion on online advertising***[67], the Authority had also observed the existence of **obstacles to interoperability** in the advertising intermediation sector which "**can also be considered in terms of discrimination, transparency or bundling practices**"[68]. In addition, according to the Authority, there is the existence of **restrictions on access by publishers to data** relating to the use of their own service by users[69]. The Authority does not exclude the possibility that usage data may constitute an essential facility for the activity of the company seeking to access it and that a restriction on access may be discriminatory[70].

72. **The issue of barriers to interoperability also arose in a completely new way in the context of a market investigation opened by the British competition Authority (UK CMA) as part of Google's announced plan to remove third-party cookies and replace them with a suite of tools and APIs (the Privacy Sandbox).** This market investigation, of a very particular type, which responds to a precise timetable, to a requirement for transparency both with regard to third parties (publishers, ad tech, techs) and to the company itself, to consultations and a process of quasi-co-construction of an optimal solution taking into account all the interests present in the ecosystem, is not closed despite Google's announcement that it will give up imposing this project. Since 7 January 2021, the UK CMA has been assessing, corroborating, contradicting and discussing Google's project and highlighting in an equally transparent manner the concerns it raises which could ultimately lead to it notifying it of grievances.

73. In April 2024 monitoring report, the UK CMA highlighted, for example:

67 Competition Authority, Opinion No. 18-A-03 of March 6, 2018, on data processing in the online advertising sector.
68 Ibid., pt. 252.
69 Ibid., pt. 253.
70 Ibid., pt. 254.

Google's proposed approach to attribution differs from the approach taken by other browsers, which means that there may be limited interoperability of ARA with other solutions.	We remain concerned that lack of interoperability could harm competition by creating additional cost and complexity for businesses seeking to measure digital ads. Google needs to explain how it will continue its efforts to enhance greater interoperability of approaches to attribution and reporting over time.	We are aware that Microsoft has proposed implementing 'ARA with modifications for better parity with CPA billing' in Edge.[60] We remain keen to understand implications for interoperability and efforts to improve interoperability of approaches to attribution and reporting. We await Google's response on this point.

74. The mission notes that it is increasingly common for dominant operators to decide unilaterally to modify one or more operating parameters of their ecosystem, for varying reasons or sometimes without any particular reason, with or without notice or consultation with the operators of their ecosystems, in particular publishers of online cultural content and services and their providers of online advertising services or technological services more generally. There is no equivalent mechanism in France to that used by the UK CMA to deal with this type of configuration.

75. **The introduction of a market investigation mechanism (*new competition tool*) is proposed by Mario Draghi in the report commissioned by the European Commission to guide the new term of office.** The report does not say whether this tool should be created at European or national level. There are mechanisms of this nature in some Member States.

76. **The mission considers that a new competition tool could be useful** for:

- preserve the rights of French and European publishers of online content and services. Traditional competition investigations are neither transparent (secrecy of the investigation) nor participatory (they only give rise to targeted consultations within the framework of the investigation). A new competition tool would allow the Authority to consult the market and the company on the concerns that the project or decision raises in a transparent and publicly accessible manner;

- to conduct such a consultation within an entire digital ecosystem, not on the functioning of the market as in a sector inquiry, but on a decision or a draft unilateral decision of a dominant online intermediation services operator and/or gatekeeper.

- co-construct in dialogue, an optimal solution taking into account all the interests present with the company, the new competition tool would not have the vocation, like a competition investigation, to sanction *ex post* behavior, but the Authority would retain its capacity to do so if the company unilaterally decides to implement the project in full knowledge of the grievances that will be formulated to it.

77. Finally, **the mission noted that in the context of the deployment of generative artificial intelligence, industry players - some of whom were questioned by the French competition Authority for the purposes of its Opinion no. 24-A-05 - have expressed concerns about access**

to data. The Authority's opinion on generative AI sector states in this regard that "*on the one hand, models are getting bigger and bigger and training requires more and more data, raising fears that publicly-accessible data will not be sufficient in the future and that proprietary data held by a small number of operators will become more important. On the other hand, access to certain publicly-accessible data is creating legal uncertainties, as illustrated by the actions brought by several rights holders, such as the complaint filed by the New York Times against OpenAI and Microsoft*".

78. In the context of discussions on the development of technologies related to the rise of generative artificial intelligence, on the occasion of the G7 Antitrust held in Rome in October 2024, the competition authorities of the participating countries recognized that interoperability and the establishment of open standards can play an important role in promoting innovation, mitigating the phenomena of concentration of market power and consumer lock-in in closed ecosystems[71]. They also take into account arguments relating to the risks related to data protection and the security of AI models and systems.

79. **To the extent that the infrastructure layers of artificial intelligence, as well as the computing power and resources, are in the hands of a limited number of players who are already dominant in a number of digital markets, the mission agrees with the conclusions of the Competition Authority's opinion regarding the concern that these operators may abuse their position on these products and services**, some of which may compete directly with creators of online cultural content and services in their creative work, under unfair conditions, in addition to the fact that they may infringe copyright and related rights.

80. **Current market conditions – asymmetry of power, asymmetry of regulation, asymmetry of information – in the context of the creation or possible strengthening of closed, vertically integrated ecosystems, are such that they could lead to promoting incentives contrary to those of the business users of these platforms, to not interoperating** and to restricting the exchange of data that is essential.

81. **In the absence of interoperability, publishers of online cultural content and services find themselves in a state of dependence and at the mercy of the most powerful technological operators on aspects as structural as the very definition of their economic model, their pricing policy, their relations with end users, consumers, of their cultural content and services, of the essential exploitation of data**.

82. Dependent on their interfaces, on the contractual and commercial conditions imposed, on the technical restrictions of which publishers have little or no knowledge given the significant asymmetry of information, publishers are also dependent on their tools and ancillary services presented as more efficient but for which it is not possible in the absence of interoperability to verify the veracity of such records. They are also dependent on their ecosystems in which cultural content and services have a particularly important place in the eyes of users and society more generally, but whose value distribution is inversely proportional in terms of remuneration for the publisher.

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[71] G7 Competition Authorities and Policymakers' Summit (2024) Digital Competition Communiqué. https://en.agcm.it/dotcmsdoc/pressrelease/G7%202024%20-%20Digital%20Competition%20Communiqu%C3%A9.pdf

83. **The neighboring rights case is a particularly striking illustration of the exploitation by platforms of information asymmetry and restrictions on interoperability**, in addition to the inexhaustible experimentation of all possible fragmentations of online press operators into national categories which were never intended to serve any purposes other than those initially intended.

84. Over the last five years in the related rights licensing market, online press publishers have gone from a situation of total blindness regarding the information and data allowing them to assess their rights to remuneration, to a form of one-eyed state where, through perseverance and with the assistance of competition law for operators that this may concern, they have gained access to certain data. **Access to data, their readability, suitable for meeting the purpose pursued is a question of interoperability. When an operator refuses or restricts this interoperability, it deprives the rights available to online press publishers of effect.**

2.2. The second main obstacle to effective interoperability is an absence of lack of standardization in the cultural industry sector considered.

85. **The mission was very quickly and naturally led to examine the question of norms and standards as vectors of interoperability on the technical level.** Traditionally, standardization is in principle left to the freedom of operators in economic sectors, within the framework of national, European or international standardization organizations such as the W3C. Standardization can also be done through professional associations or *ad hoc consortia*.

86. Since the mission examined (2.1) the restrictions imposed on interoperability by way of a unilateral decision, these aspects are not addressed in this section. It will only be emphasized that **the processes of standardization are not exempt from competition law. In practice, it appears that standards are voluntary for some, but *de facto* mandatory for others when the company or companies that contributed to their definition have the means to impose their adoption.** This would only be possible because of their technological power and a sufficient deployment surface leading to mass adoption, which is a condition for the existence of the standard on a technical level. An operator such as Apple or Google, for example, has the capacity to impose a standard on the entire ecosystem of user companies by simply choosing to consider it a standard as the reference standard; the question then arises in terms of the incentives that such operators may actually or potentially have to impose or not standards and norms corresponding to their systems.

87. The management and use of data relating to the identification of works and authors and rights holders (metadata) in the digital environment is considered a major challenge by the European creative sectors. Although there are several standardization bodies and sector-specific standards, these are often not adequate for the identification of contents and copyright holders due to the lack of interoperable systems at European and global level. At European level, several initiatives aim to set up standardized data infrastructures and metadata related

to copyright aimed at making the management of licenses and revenue distribution more efficient[72].

88. The problem is not new, recital 54 of Directive 2001/29/EC on copyright and related rights already highlighted the importance of standardizing systems for identifying works[73]. The rise of artificial intelligence and the massive use of protected content used to train AI models now call for increased efforts to set up effective systems for safeguarding the rights of creative industries and a fair value sharing.

89. **A common framework for data at European level would therefore be desirable for interoperability of solutions for the protection and identification of cultural content across different legal systems and sectors of activity. To meet contemporary challenges, it seems necessary to be able to define, in a first step, common, reliable and sustainable formats for the description of metadata and then to develop technologies enabling rights management.**

90. In this regard, the mission was able to discover the work of the Copyright Infrastructure Task Force[74], a project born with the support of the Finnish and Estonian governments, aimed at promoting the definition of a common framework for data management. The Task Force is currently focusing on the establishment of a common system for opt-out declarations through standards that allow both the identification of the work and the authorization or refusal of reuse.

91. At the same time, projects to create an infrastructure for data management could enable the conclusion of smart licensing contracts, in an automatic, reliable and decentralized manner. This is the idea behind the creation of the *European Blockchain Services Infrastructure* (EBSI)[75], the main European public sector infrastructure based on blockchain.

92. The approach to standardization, its governance and its processes is at least as important as the presence or absence of standards to analyze the level of effective interoperability within an industry, particularly a cultural one. **In the current regulatory context that establishes interoperability obligations of different natures (vertical and horizontal), the challenge of standardization is to technically translate a legal standard, which is quite unusual.**

93. The standard traditionally starts from the technical side. Apart from cases where the standardization process has been confiscated for the benefit of a limited number of companies, for example with the aim of boycotting an operator or slowing down innovation in the context of a cartel or an abuse of an individual or collective dominant position, the standard itself is rarely the subject of a legal analysis.

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72 Council of the EU (20 December 2019) Developing the Copyright Infrastructure - Stocktaking of work and progress under the Finnish Presidency https://data.consilium.europa.eu/doc/document/ST-15016-2019-INIT/en /pdf

73 Recital 54 of Directive 2001/29/EC: "Important progress has been made in the international standardisation of technical systems of identification of works and protected subject-matter in digital format. In an increasingly networked environment, differences between technological measures could lead to an incompatibility of systems within the Community. Compatibility and interoperability of the different systems should be encouraged. It would be highly desirable to encourage the development of global systems."

74 Online at https://okm.fi/en/project?tunnus=OKM024:00/2024

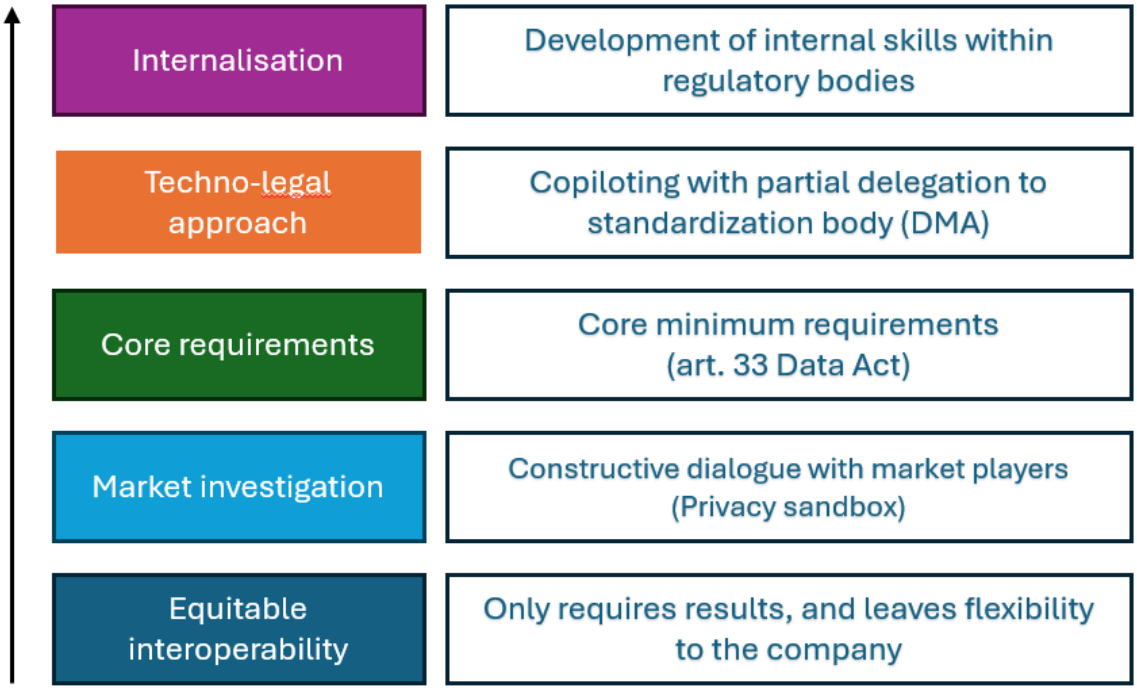
75 See the EBSI project at https://ec.europa.eu/digital-building-blocks/sites/display/EBSI/

94. **But the DMA and the Data Act, as far as their scope of application is concerned, both provide for the possibility of resorting to standardization by a European body in order to determine the standards that would enable compliance with the text. Standards that would serve in some way to establish a form of presumption of conformity when those liable for the interoperability obligation use it, under the prescribed conditions.**

95. **Standardization processes are not immune to the logic of domination, which should lead the French and European public authorities not to completely delegate standardization consisting of a technical translation of a legal standard. The mission considers that it is necessary for national and European authorities to maintain a certain degree of supervision** over these processes and definitions, and to internalize at least part of the technical competence to ensure that the definition reflects its legal meaning or does not prejudge the legal concept.

96. **Experiments are being conducted on the modalities of standardization aimed at translating a legal standard into its technical version. The so-called techno-legal approach was thus used by the California government** for the development of the technical translation of a law on the protection of privacy, the technical standardization of which was entrusted to the W3C. Reading the DMA and the Data Act, it appears that the same type of approach seems to be considered with European standardization bodies.

97. As part of the work carried out by the mission, several approaches to standardization were identified which technically translate a legal standard, which the following diagram summarizes as follows:



98. **Depending on the structure of the cultural industry market in which the absence or lack of interoperability arises, and on the existence or not of interoperable standards available, the mission considers that certain standardization approaches are more appropriate than others.**

3. Recommendations

99. **The mission concludes that there is no need to create a single, uniform concept of interoperability.** Its relevance, in other words its ability to achieve the objectives assigned to it, depends on its adaptability to the structure of the market in question and its level of standardization.

100. **However, the work carried out highlights the need to apprehend the concept of interoperability in its three dimensions – legal, technical and economic, altogether.** A siloed approach to one of its three dimensions would lead to errors in the assessment of the situation in which interoperability should occur and under what conditions in an optimal manner.

101. **The mission also concludes that there is an urgent need to strengthen the effectiveness of the interoperability obligation for the benefit of creators of digital cultural content and services within the European Union,** in particular by making the online advertising market more competitive for the benefit of the media and by strengthening the effectiveness of related rights. Effective access to data and its exploitation is only possible by promoting interoperability.

102. **To achieve a greater level of efficiency, the mission also concludes on the relevance and capacity of a combination of tools combining competition law and digital regulation, as well as procedural tools in order to meet the objectives of fair value sharing in the service of the economy of online cultural creation.**

103. To **strengthen** the effectiveness of interoperability, the mission recommends two categories of measures:

3.1. Procedural measures

1) Following the Italian model used for the first time in the negotiations between the copyright collective management body (SIAE) and Meta [76], **establish a presumption of economic dependence of publishers of online cultural content and services on technological platforms** that provide online intermediation services distributing cultural content and services to the end user.

   In the Annual Law for the Market and Competition of 2021, the Italian legislator has made significant changes to Article 9 of Law 192 of 1998 on subcontracting, which regulates **the abuse of economic dependence.** Although these provisions formally appear in a law on subcontracting, they are intended to apply to **any vertical relationship** where a company is in a position to determine, in its relations with another company, an excessive imbalance between the rights and obligations of the parties.

[76] See the new Article 9 of Law No. 192 of 1998, §1 and 2, as amended by the Italian Law for the Market and Competition of 2022 (Law No. 118 of 5 August 2022).

The reform, which came into force on 31 October 2022, introduces a **presumption of economic dependence** when "*a company uses the intermediation services provided by a digital platform that plays a decisive role in reaching end users and suppliers, also in terms of network effects and data availability*". As a result, **the burden of proof** of economic dependence is reversed for companies operating digital platform services. The "weak" party will only be required to demonstrate the decisive role in reaching end users and suppliers of the platform in question, which in the case of a gatekeeper within the meaning of the DMA or a dominant operator is facilitated.

The 2022 reform also draws up **a non-exhaustive list of abusive behaviors** that may be adopted by said platforms within the meaning of this provision, such as:

- provide insufficient information or data regarding the scope or quality of the service offered; and
- request undue unilateral benefits not justified by the nature or content of the activity carried out, or
- adopt practices that may discourage or prevent the use of an alternative supplier for the same service, even through the application of unilateral conditions or additional costs not provided for by existing contractual agreements or licenses.

In the context of collective negotiation of related rights or the implementation of obligations of access to data and systems provided for in the DMA, such a purely procedural mechanism would make it possible to reverse the burden of proof which remains refutable, which preserves the rights of the defense, while making it possible to remedy one of the imbalances between the forces present. Such a measure could be added in a new paragraph of article "L.442-1 IV" of the French Commercial Code;

2) Following the German model [77] and in order to give French publishers of creative and cultural online content and services the ability to assert their rights **in a context of possible heterogeneous solutions within the Union, in particular in the context of the deployment of Generative AI, establish the recognition by French courts of the binding effect of enforceable decisions taken by the European Commission or national competition authorities or courts of the European Union** taken on the basis of Articles 101 and 102 of the Treaty on the Functioning of the European Union or Articles 5, 6, 7 of Regulation 2022/1925 (DMA) or Articles 13, 33, 34 and 35 of Regulation No. 2023/2854 (Data Act) or finally, Articles 50 and 53 of the Regulation (AI Act), to the extent that they establish the designation of a company as an gatekeeper, a violation of the texts referred to, injunctions or commitments even as a conservatory, ordered by these authorities or even the existence of damages.

Such a measure would allow French publishers of cultural content and services to assert the rights they derive from European Union law and decisions made in their favor by national or European authorities other than French, before their judge without having to pursue the platforms in one or more Member States, where appropriate. This would make it possible, for example, to avoid having to refer a new investigation to the French Competition Authority

[77] See Section 33b of the German Competition Act (GWB).

if a competition authority, for example a Dutch one, were to issue a decision on the basis of Union law on a competition problem that it encounters with respect to the same operator in France.

The enforcement gaps in the current system were recently illustrated in the context of an experiment decided by Google to cut off access to a sample of online press content in several Member States, including France. The Syndicat de la Presse Magazine managed to obtain an interim measure to suspend this test in France before the Paris Commercial Court, based on the commitments made by Google before the French Competition Authority.

But other European press publishers located in other EU member states that do not have a decision from their national competition authority, or a commitment or injunction to ensure neutrality in other relationships between Google and publishers, have no recourse and are currently experiencing the disconnection. Danish publishers have expressed their astonishment at the situation.

When Apple was sanctioned by the Dutch Competition Authority and ordered to change its contractual conditions under penalty of a daily penalty payment, neither French publishers nor other European publishers were able to benefit from this measure, even though it was taken in a decision based on European Union law, because the injunction only applied to Dutch territory.

A mechanism for recognizing the enforceability of decisions of a Member State could allow, if not to resolve, at least to partially remedy this problem. Access to data is a component of the obligation to interoperate.

3) **To enable a more harmonious implementation of the provisions of the DMA relating to access to data and interoperability, to participate in the Commission's investigations, to recognize professional organizations or unions representing publishers of online cultural content and services, to be mandated as "authorized third parties" within the meaning of the same rules** , to request the communication of data, access to systems and negotiate any contractual provisions relating thereto.

Given the current structure of digital markets, publishers of online content and services find themselves in relationships of dependency with one or more platforms controlling access to essential closed ecosystems. In this context, no action – whether exploratory, pre-litigation or litigation – is completely free of concerns on the part of publishers of cultural content and services regarding the risks of reprisals. Partners, customers, suppliers, these reports dissuade publishers from acting individually, even to assert their rights.

This is why professional associations of publishers of online cultural content and services have taken over and have a major role to play in the effective implementation of the obligations under the DMA, particularly for the benefit of publishers and their authorized third parties. It should be recalled that it was associations that brought the case before the French Competition Authority and the Commercial Court in the related rights case, and it was French associations that were involved very early on in the implementation of the DMA with the European Commission. This pivotal role is crucial in the effective implementation of the obligations.

4) Following the American model of **coalitions of States** that can successfully conduct investigations with a lead authority (multistate actions), **seize the opportunity of the current revision of Regulation No. 1/2003 to strengthen cooperation between competition authorities that are members of the European Competition Network by allowing the ability to create enhanced cooperation between several authorities to successfully conduct an investigation**. The evaluation report published by the European Commission highlights the inefficiencies linked to parallel investigations, fragmentation and the risk of divergences within the internal market.

   Such a procedural measure would allow the pooling of resources between European authorities, means of investigation and broader geographical coverage of territories.

5) In line with the recommendations of Mario Draghi's report, [78]which highlights the importance of interoperability in stimulating innovation within the Union, **create a new competition tool establishing the power for the competition authority to conduct market investigations to analyze the impact of a decision, draft decision, measure or draft measure imposed unilaterally without reasonable notice, impacting or likely to impact the functioning of competition on an entire ecosystem of businesses. publishers of creative and cultural content and services**, **and enable it to remedy any competitive dysfunctions or competitive concerns identified** by structural or quasi-structural measures relating in particular to access to data and interoperability, within the framework of a transparent process of constructive dialogue involving the company and companies operating in the ecosystem.

3.2. Substantial measures

6) **Following the model of Article 33 of the Data Act, integrate a core of essential requirements required to promote effective interoperability understood in its three dimensions, within the framework of the application of the DMA. Such a minimum core could serve as a basis for the European Commission in the context of the two DMA investigations opened against Apple** aimed at specifying the latter's interoperability obligations and the process for requesting access to interoperability mechanisms.

   A transparent and publicly accessible base would allow publishers of online cultural content and services, beneficiaries of the DMA, **to better understand and assert their rights against large technology platforms** . This flexible system should be **supplemented by the establishment of an obligation to provide information by written means on tangible media** , based on the requirements of Regulation No. 2019/1150 Platform to business;

7) Depending on the sectors of cultural creation concerned and their level of standardization, **adapt the intensity of regulatory intervention to the level of standardization of the sector (diagram above) and ensure supervision of the governance of the organizations**

[78] Draghi M. (2024) The future of European competitiveness, Part B | In-depth analysis and recommendations.

responsible for these processes , the definition of standards and their adoption, or even internalize the competence to ensure even minimal supervision.

8) **Among the alternative remedies to a dismantling, disinterest the technological intermediation platforms from the value of the transactions carried out in order to address conflicts of interest and thus promote economic incentives to interoperate.**

   Such a quasi-structural measure would aim to refocus technological intermediaries on their role of pure technical intermediation, and would promote economic models based on the intrinsic value of the intermediation service itself outside the value ecosystem in which it is inserted in order to restore freedom, flexibility and room for maneuver to publishers of cultural content and services, particularly in terms of price. **The remuneration of technological intermediation would then no longer be based on a percentage of commission on the publisher's turnover but linked, for example, to the volumes of transactions that pass through the intermediation platform, as is the practice, for example, by providers of GDPR/ePrivacy consent collection windows (*Consent Management Platforms*) with publishers of online content and services;**

9) **Extend the criminal liability of natural persons referred to in Article L. 420-6 of the French Commercial Code to infringement** of Articles 5, 6, 7 of Regulation 2022/1925 (**DMA**) or Articles 13, 33, 34 and 35 of Regulation No. 2023/2854 (**Data Act**) or finally, Articles 50 and 53 of the Regulation 2024/1689 (**IA Act**).

   In French law, Article L 420-6 of the French Commercial Code provides for the possibility that a criminal court may be seized and convict any natural person who has taken a personal and decisive part in the design, organization or implementation of anti-competitive practices, agreements and abuse of a dominant position.

   In the digital environment, the liability of platforms and their managers is a major and nagging concern. In the context of the interoperability obligations created by the DMA, the Data Act and the AI Act which should contribute to a healthier and fairer functioning of digital markets, the mission considers that it is relevant to extend the criminal liability of Article L.420-6 of the French Commercial Code to violations of the obligations listed above.

APPENDIX

ANNEX 1 – MISSION LETTER

MINISTÈRE
DE LA CULTURE
Liberté
Égalité
Fraternité

CONSEIL SUPERIEUR DE LA PROPRIETE LITTERAIRE ET ARTISTIQUE

Paris, le 14 mai 2024

Madame Fayrouze MASMI-DAZI

OBJET : **Mission sur l'interopérabilité**

Madame,

La directive 2019/770 du 20 mai 2019 relative aux contrats de fourniture de contenus numériques et de services numériques définit l'interopérabilité comme « *la capacité du contenu numérique ou du service numérique à fonctionner avec du matériel informatique ou des logiciels différents de ceux avec lesquels des contenus numériques ou des services numériques de même type sont normalement utilisés*[1] ». Les fondements textuels de cette notion polymorphe se trouvent également à l'article 2 (29) du Digital Market Act[2], à l'article 2 (40) du Data Act[3], et au sein du futur règlement européen sur l'intelligence artificielle.

Entendue comme la faculté pour les contenus numériques légalement acquis de rester disponibles sans restriction d'accès ou de mise en œuvre quel que soit l'environnement logiciel ou matériel, l'interopérabilité des contenus constitue une forte attente du public comme des créateurs. Cette attente trouve une acuité renouvelée avec le développement des environnements souvent fermés proposés par les plateformes numériques.

L'appréhension de cette notion technique est pourtant particulièrement complexe, par le fait qu'elle se situe au carrefour du droit de la propriété intellectuelle, du droit de la consommation et du droit de la concurrence.

Il apparaît tout d'abord légitime que les titulaires de droits d'auteur et de droits voisins puissent s'appuyer sur la technologie pour interdire ou limiter matériellement l'accès ou l'utilisation non autorisés de leurs œuvres. Le recours à la technique est donc un moyen de lutter plus efficacement contre le piratage. La notion d'interopérabilité renvoie également à la possibilité pour un usager de consulter un contenu légalement acquis depuis le support de son choix[4].

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[1] Antérieurement, la directive du 23 avril 2009 concernant la protection juridique des programmes d'ordinateur a défini l'interopérabilité comme la capacité des éléments des logiciels et des matériels « *d'échanger des informations et d'utiliser mutuellement les informations échangées* » (considérant 10).

[2] Règlement (UE) 2022/1925 relatif aux marchés contestables et équitables dans le secteur numérique et modifiant les directives (UE) 2019/1937 et (UE) 2020/1828, Art.2 (29) : *'« Interopérabilité » : la capacité d'échanger des informations et d'utiliser mutuellement les informations échangées par le biais d'interfaces ou d'autres solutions, de telle sorte que tous les éléments du matériel informatique ou des logiciels fonctionnent de toutes les manières dont elles sont censées fonctionner avec d'autres matériels informatiques et logiciels ainsi qu'avec les utilisateurs ;'*

[3] Règlement (UE) 2023/2854 concernant des règles harmonisées portant sur l'équité de l'accès aux données et de l'utilisation des données et modifiant le règlement (UE) 2017/2394 et la directive (UE) 2020/1828, Art. 2 (40) : *' « interopérabilité » : la capacité d'au moins deux espaces de données ou réseaux de communication, systèmes, produits connectés, applications, services de traitement de données ou composants d'échanger et d'utiliser des données afin de remplir leurs fonctions ;'*

[4] https://www.arcom.fr/nous-connaitre-nos-missions/promouvoir-et-proteger-la-creation/la-regulation-des-mesures-techniques-de-protection

Pourtant, le refus de certains fabricants de mesures techniques de fournir les informations nécessaires à l'interopérabilité des produits et services empêche de nouveaux acteurs d'entrer sur le marché en proposant des systèmes techniques compatibles avec l'ensemble des produits et services disponibles sur le marché L'incompatibilité entre les systèmes développés pour mettre en œuvre ces mesures techniques est donc de nature à fausser la concurrence.

Malgré ce contexte, l'obligation juridique de l'interopérabilité apparaît limitée au niveau européen. Le considérant 34 de la directive 2001/29 du 22 mai 2001 précise que « *la compatibilité et l'interopérabilité des différents systèmes doivent être encouragés* » et qu'« *il serait très souhaitable que soit encouragée la mise au point de systèmes universels* », mais il ne met à la charge des législateurs nationaux aucune obligation d'instaurer un droit à l'interopérabilité.

En France, le législateur a posé le principe de l'absence d'obstacle à la mise en œuvre de l'interopérabilité en cas de recours à des mesures techniques de protection, principe assorti d'une procédure devant l'ARCOM en cas de refus de communication des informations essentielles à l'interopérabilité de ces mesures techniques. La loi élude néanmoins la question de l'accès du public sur tout type de support aux œuvres protégées dont il a fait l'acquisition.

A la lumière de ce contexte, je souhaite vous confier une mission pour faire le point sur le traitement de ce sujet sur le plan européen et international, ainsi que sur les propositions que la France pourrait porter dans ce débat.

Vous pourrez examiner les attentes et les enjeux que soulève l'interopérabilité dans les différents secteurs de la création. Que ce soit dans le domaine du livre, de la presse, du cinéma et de l'audiovisuel, de la musique ou des jeux vidéo, les différents secteurs, même s'ils sont tous marqués par l'émergence des plateformes de distribution numérique, obéissent à des modèles économiques particuliers. En fonction des attentes du public, des modes d'accès aux œuvres et des enjeux de diversité culturelle, l'exigence d'interopérabilité peut y revêtir une acuité plus ou moins forte et appeler des réponses différentes.

Pour mener cette mission, vous serez assistée de M. Umberto Valenza, en qualité de rapporteur. Vous pourrez également vous appuyer sur les services du ministère, et en particulier le secrétariat général (service des affaires juridiques et internationales) et la direction générale des médias et des industries culturelles. Vous procèderez aux auditions des membres du Conseil Supérieur ainsi que des entités et personnalités dont vous jugerez les contributions utiles.

Il serait souhaitable que vos travaux puissent être présentés d'ici le mois de décembre 2024, après avoir fait l'objet d'échanges avec les membres du CSPLA intéressés.

Je vous remercie d'avoir accepté cette mission et vous prie de croire, Madame, à l'expression de mes sentiments les meilleurs.

Olivier JAPIOT
Président du CSPLA

ANNEX 2 – HEARINGS & CONTRIBUTIONS

- *Autorité de la concurrence (ADLC)*
- *Autorité de régulation de la communication audiovisuelle et numérique (ARCOM)*
- *Conseil National du Numérique (CNNum)*
- *Copyright Infrastructure Task Force*
- *Office de l'Union européenne pour la propriété intellectuelle (EUIPO)*
- *Digital New Deal*
- *Federation of European Publishers (FEP)*
- *Institute for Digital Fundamental Rights – iDFRights*
- *Lynx*
- *Syndicat des catalogues de films de patrimoine (SCFP)*
- *Syndicat National des Radios Libres (SNRL)*
- *Syndicat National de l'Edition (SNE)*
- *Syndicat National des Auteurs et Compositeurs (SNAC)*
- *Ticketr*

Personalities who have particularly contributed to the mission

- **Alba Ribera Martínez**, Professor, *University of Villanueva*
- **Arno Pons**, Director-General, *Digital New Deal*
- **Christophe Betbeder**, Director-General, and **Sylvain Delfau**, Vice-President, *Syndicat National des Radios Libres (SNRL)*
- **Eddie Aubin**, Co-Founder and President, *Ticketr*
- **Jean-Marie Cavada** and **Colette Boukaert**, *IDFrigths*
- **Jean Cattan**, President, *Conseil National du Numérique (CNNum)*
- **Julien Chouraqui**, Legal Director, and **Catherine Blache**, Head of International Institutional Relations, *Syndicat National de l'Edition (SNE)*
- **Maïa Bensimon**, General Delegate, *Syndicat National des Auteurs et Compositeurs (SNAC)*
- **Nicolas Hauw**, EBSI-ELSA Project Manager, *European Union Intellectual Property Office (EUIPO)*
- **Philippe Rixhon**, Project Manager, *Copyright Infrastructure Task Force*
- **Quentin Deschandelliers**, Legal Advisor, *Federation of European Publishers (FEP)*
- **Robin Berjon**, independent expert within the *World Wide Web Consortium (W3C)*
- **Sabrina Joutard**, President, *Heritage Film Catalogs Union (SCFP)*
- **Marie-Anne Hurier**, Director of the Legal Department / Business Affairs, *SND (M6 Group)*
- **Stan Larroque**, Founder and CEO, *Lynx*
- **Tom Lebrun**, AI Standardisation Policy Lead, Standards Council of Canada (SCC)

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