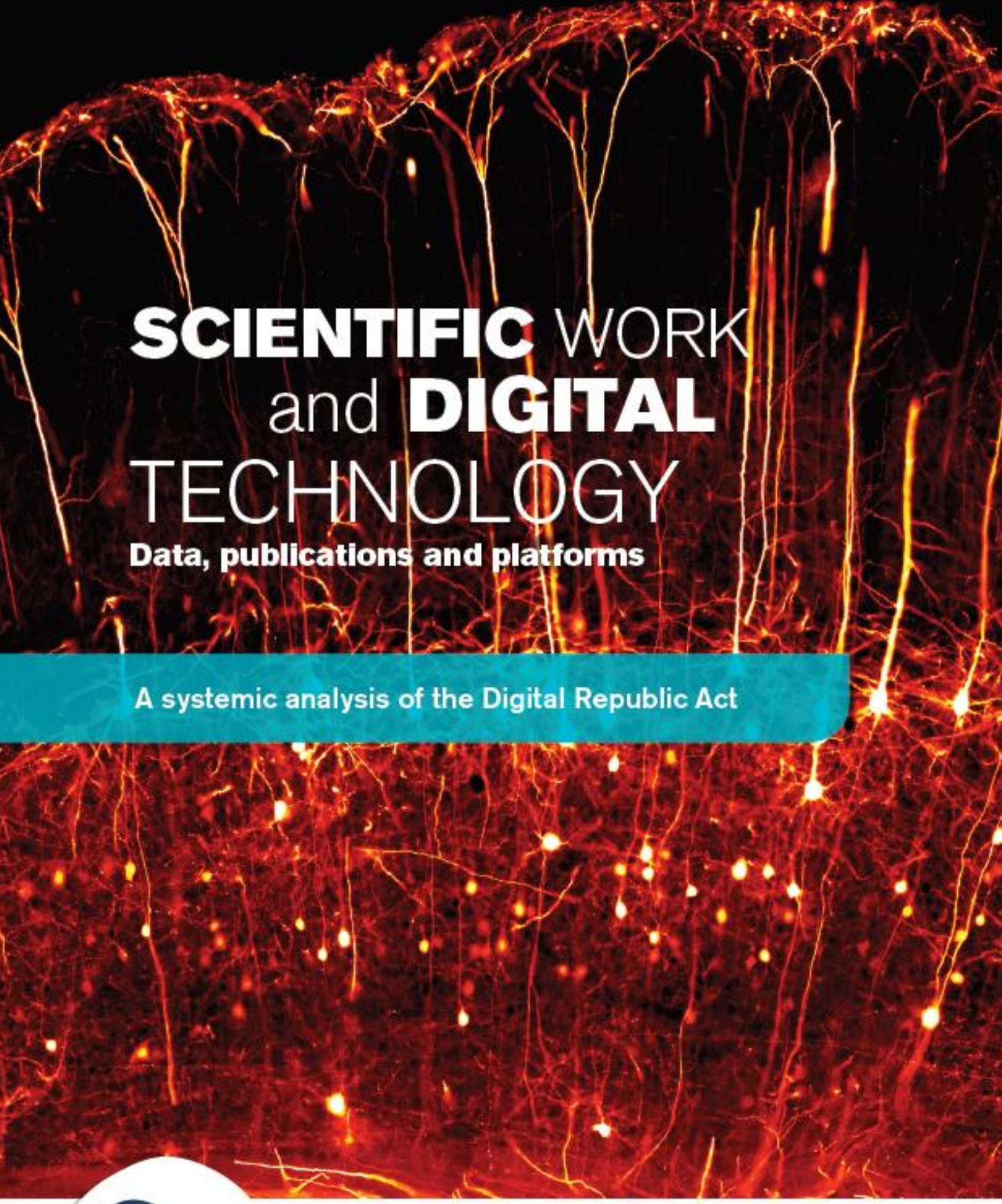

SCIENTIFIC WORK and DIGITAL TECHNOLOGY

Data, publications and platforms

A systemic analysis of the Digital Republic Act

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Direction de l'information scientifique et technique

SCIENTIFIC WORK AND DIGITAL TECHNOLOGY

Data, publications and platforms

A systemic analysis of the Digital Republic Act

Contents

Preamble

The provisions relating to science in the Digital Republic Act and the texts which refer to it are presented below: the aim is to present an overview of the new relationships between data and publications on public research platforms created by digital technologies.
This will provide all those involved – researchers, publishers, technicians, end-users, and other participants in digital scientific production – with a working document containing all their opinions of the new digital conditions for scientific work.
With the other partners in the ISTEX project, CNRS is leading initiatives that will give a physical reality to the new relationships between actors made possible by the Digital Republic Act.
In response to this working document, all initiatives from the world of public research are welcome to contribute to a national collaborative movement of construction. Please send your suggestions to the following address dist.contact@cnrs.fr.
In the immediate future, we propose to examine the creation of a set of GUIDELINES FOR SCIENTIFIC WORK WITH DIGITAL TECHNOLOGIES: by bringing together all those involved, this approach would allow the effective use of all the proposals on the new possibilities offered by a new legal instrument which is broad, very innovative, and complex.
CNRS will invite the CPU, the association EPRIST, ADBU, the ABES, the Couperin Consortium, and the BSN, in fact all participants in or associated with public research and scientific publication, to join it, if they wish, in this essential task of finding the best possible way of implementing and applying the choices of the Digital Republic Act.

Yours sincerely,
Renaud Fabre, Director of the CNRS DIST

Executive Summary

1. The Digital Republic Act (DRA) No. 2016-1321 of 7 October 2016, which came into force on 9 October 2016, includes two fundamental Articles concerning public research and the advent of Open Science:

- the introduction in the Research Code of a right to the secondary exploitation of scientific publications for researchers (Article 30);
- the creation of two new exceptions in the Intellectual Property Code, to copyright and to the right of the database creator, authorising text and data mining for purposes of public research (Article 38).

2. A precise definition of the scope of application of these provisions will be necessary to secure knowledge-sharing practices in science.

3. For this purpose, this systemic analysis proposes to identify the legal and regulatory provisions applicable to the three pivotal concepts concerning Open Science: the notions of "platform", "scientific texts" and "research data", as well as the relationships between these concepts:

- “platform", "scientific texts" and “research data" are governed or introduced by the Digital Republic Act (Articles 30 and 38 and also Articles 49 to 51), but also by other instruments such as the Intellectual Property Code, the decree founding CNRS, the Research Code or the Education Code. The obligations associated with these concepts, such as the obligation for platforms to operate in good faith as affirmed by the DRA, are also used in other areas of the law (principle of fairness of proof);
- the relationships between these three concepts also form self-contained legal regimes: open access, open data, scientific and technical information, open process;
- the overall system formed by these concepts and relationships must culminate in open science.

4. This systemic analysis is intended to bring out any deviations, contradictions, restrictions or inaccuracies to pave the way for recommendations for securing the field and creating a legal framework:

- securing the legal provisions by decree: beyond the application of Article 38 on the conditions for implementing text and data mining, certain expressions should be clarified in order to limit differences of interpretation;
- securing practices by offering researchers guidelines on application and good practice as well as by training and awareness sessions;

- structuring a framework for practices by drawing up an ethical charter and a model contract for scientific publications;
- supervision by an Agency for Open Science that would uphold the values of open science and support the needs of research at European level, in particular during discussions relating to the proposed Directive on copyright in the Digital Single Market, as well as at the international level, within bodies such as the United Nations Educational, Scientific and Cultural Organization.

1. Introduction

1.1 A systemic analysis of the provisions concerning public research …

5. The Digital Republic Act No. 2016-1321 of 7 October 2016, which came into force on 9 October 2016, introduces two fundamental Articles for public research and the advent of Open Science:

- the introduction in the Research Code of a right to secondary exploitation of scientific publications for researchers (Article 30);
- the creation of two new exceptions in the Intellectual Property Code, to copyright and to the right of the database creator, authorising text and data mining for purposes of public research (Article 38).

6. These two Articles open up new opportunities for researchers by speeding up access to and the sharing of knowledge, promoting trans-disciplinary research, facilitating the emergence of new research topics, promoting the development of TDM tools and innovation, etc.

7. But scientific study and public research are part of an overall process and are governed by a dense legislative procedure that must be fully understood in order to have a complete overview of the Acts affecting digital Scientific and Technical Information (STI), which is the aim of this systemic analysis.

1.2 … following the White Paper and the Strategic Guidelines for Implementation …

8. This analysis is an extension of work carried out by the National Centre for Scientific Research (CNRS), which included its partners in the ISTEX project (the Bibliographic Agency for Higher Education, Couperin, the University of Lorraine representing the Conference of University Presidents) and also involved a large number of researchers and actors in the field of public research.

9. The CNRS strategy document "A better sharing of knowledge"[1] revealed the need to catch up with regard to digital practices of scientific publication on the different platforms.

10. CNRS carried out a survey about the uses and needs of STI in research units among CNRS Unit Directors[2]; this survey was carried out by the CNRS Scientific and Technical Information Department in 2014 among 1250 units publishing articles. This survey

[1] http://www.cnrs.fr/dist/strategie-ist.htm
[2] http://www.cnrs.fr/dist/z-outils/documents/Enqu%C3%AAte%20DU%20-%20DIST%20mars%202015.pdf

identified the uses in the area of digital STI and the resulting needs (legal, technical, training, etc.).

11. The White Paper entitled "Open Science in a Digital Republic"[3], published in March 2016, offers a two-stage analysis:

- The first part provides an overview of the current situation of science in the digital environment, and notes:
  - the practices of researchers and their teams;
  - the shortcomings of the French legal system and the need for STI rights to be reformed. In particular, the existing legal framework is compared with foreign legislation (United States, United Kingdom, Germany, Japan, European Union);
  - the risks of misappropriation.

- in a second part, the White Paper makes a number of legal proposals in favour of Open Science and in particular calls for the adoption of a right to secondary exploitation of scientific publications and an exception to copyright and the right of the database producer, in favour of text and data mining in line with the provisions of the Digital Republic Act.

12. The objective of these "Strategic Guidelines for Implementation"[4], published in October 2016, only shortly after the Digital Republic Act, is to present all the scientific communities, parliamentarians, scientific publishers and the public in general with practical ways of implementing the new legal provisions introduced by the Digital Republic Act in the field of digital practices for science.

1.3 Definition of systemic analysis

13. The concept of systemic analysis is defined as being "based on a comprehensive approach to the problems or systems studied and focusing on the way their different elements interact"[5].

14. The starting point for a systemic approach is the concept of system. J. de Rosnay (1975) defines a system as "a set of interdependent elements, linked to one other by relationships such that if any single one is modified, the others are also affected and therefore the whole is transformed"[6].

[3] http://www.cnrs.fr/dist/z-outils/documents/2016%2003%2024%20Livre%20blanc%20Open%20Science.pdf
[4] http://www.cnrs.fr/dist/z-outils/documents/livre-blanc-loi-numerique.pdf
[5] *Dictionnaire actuel de l'éducation*, Richard Legendre, Guérin (Montréal) and Eska (Paris), 1993, 1500p, pp 95-96 [our translation]
[6] http://unt.unice.fr/uoh/espaces-publics-places/essentiel-methodologique-quest-ce-que-lanalyse-systemique-dun-espace/ [our translation]

15. Methodologies for systemic analysis have previously been used in the areas of psychology, the natural sciences, the engineering sciences, and the human and social sciences.

16. For example, systemic analysis is presented in the following manner in a thesis[7] defended in December 2009 to obtain the professional title of Project Leader in document engineering:

- "Depending on the areas studied (biology, economics, management, human sciences, informatics, etc.), a systemic analysis can differ in the forms it takes: study of models and behaviours, analysis of the interactions and consequences, analysis of the conditions under which a phenomenon is propagated, etc.; and in its outcomes: resolving situations of contradiction and conflict, representing systems and functional scenarios, improving performance, etc.

  It is based on the following concepts:
  - the system: a set of elements in dynamic interaction, organised for a given purpose;
  - the outcome: the activities of a system are only meaningful in terms of its outcomes;
  - the environment: the demarcation of the boundaries of a system conversely show those of its environment, which consists of non-system elements that can nonetheless influence it;
  - autonomy: this is measured by how much it depends on the environment, and can have different aspects: operational, functional and structural;
  - noise: disturbance stimulates the principle of self-organisation;
  - time: looking both backwards and forwards, self-regulation or evolution of the system;
  - representation: related to the position of the observer and any impact of this observation on the system.

  […]
  Concerning systemic analysis, the most important aspects are not the components of the system but the relations between them as well as the concept of dynamism: an organisation in evolution, in movement."

17. However, no methodology has been identified in the legal field. The systemic analysis reported here takes existing methodologies from other areas of the sciences, and especially the human and social sciences, as a basis for an implementation

[7] *Conservatoire national des arts et métiers, Institut national des techniques de la documentation* (National Conservatory of Arts and Trades, National Institute of documentation techniques). Thesis to obtain the professional title "Project Leader in document engineering", INTD Level I, presented and defended by Isabelle Plouviez on 14 December 2009. "*Analyser la pratique documentaire pour améliorer la qualité du service : le cahier des charges d'un SIGB*." Case study by Saint-Gobain Recherche [our translation]

methodology to help us understand the way digital STI systems are used in the world of public research and the interactions between three pivotal concepts:

- platform;
- scientific publications;
- scientific data.

1.4 The objectives of this systemic analysis

18. This systemic analysis had three objectives.

- verification;
- thoroughness;
- clarification.

1.4.1 Verification

19. The purpose of introducing specific provisions concerning scientific research was to install the foundations of a legal regime governing Open Science, guaranteeing free access and free reuse of data from public research.

20. It will be necessary to check whether this challenge has been met by analysing the pivotal concepts, the relationships between these concepts and any grey areas identified, before any recommendations can be issued.

1.4.2 Thoroughness

21. The first objective is to acquire an overview of all the legislative texts relating to these three pivotal concepts. Although these three concepts feature in the Digital Republic Act they also have their own regime established by other texts, notably the Research Code, the Code governing relations between the administration and the public, the Intellectual Property Code, the corresponding regulatory texts and the European statutes and draft legislation.

22. The interactions between these concepts also give rise to new concepts that themselves have their own legal regime.

1.4.3 Clarification

23. This systemic analysis also has a dual objective in terms of clarification:

- clarification of the scope of the provisions relating to Open Science, in particular in view of the drafting of the implementing decree of Article 38 of the Digital Republic Act on text and data mining;

- clarification of how best to ensure that science platforms provide researchers with clear and secure information for their research.

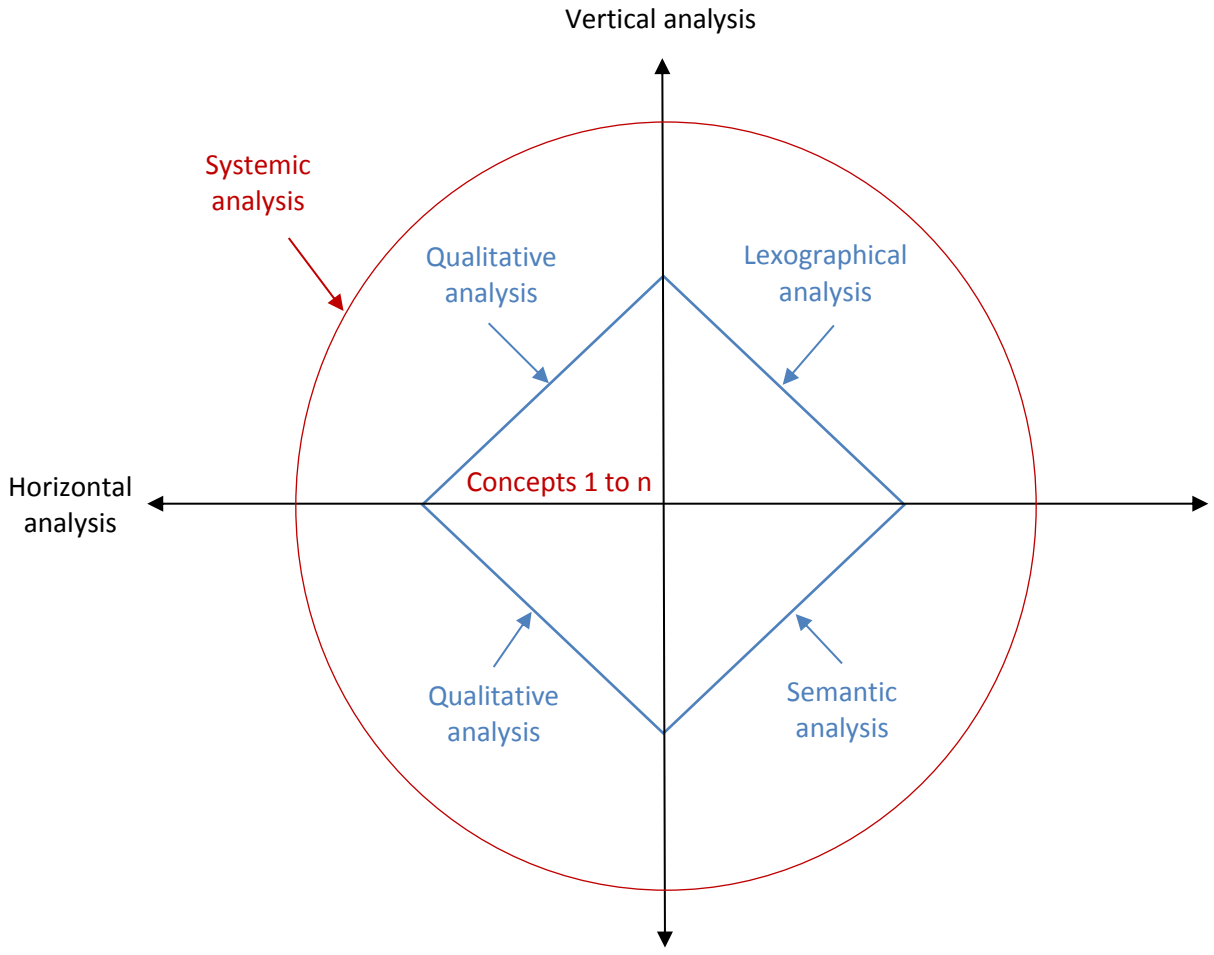
1.5 Methodology for systemic analysis of legal issues

1.5.1 General approach

24. Systemic analysis involves assessing the regulations relating to the pivotal concepts and taking into account the interactions between these concepts:

- internal interactions (within the Digital Republic Act itself) and interactions between other legislative texts (other Acts using the same concepts);
- positive interactions (consistency, contribution) and negative interactions (contradictions).

25. A theoretical diagram of the methodology used in this systemic analysis is illustrated below:



1.5.2 Scope of the analysis

26. The scope of the systemic analysis mainly includes the following legislative and regulatory instruments:

- Act No 2016-1321 of 7 October 2016 for a Digital Republic;
- Research Code;
- Intellectual Property Code;
- Code governing relations between the administration and the public, especially by consolidating the Act No 78-753 of 17 July 1978 on various measures to improve relations between the administration and the public and certain provisions of an administrative, social and fiscal nature, and the Act No 2015-1779 of 28 December 2015 on free access to and the terms of reuse of public sector information (the "Valter" Act).
- Education Code;
- Consumer Code;
- Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access;
- Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy;
- Decree No. 82-993 of 24 November 1982 on the organisation of the French National Centre for Scientific Research;
- Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

27. Other texts that could potentially be of interest for the analysis are also presented, such as studies, reports or the draft European Directive for Copyright in the Digital Single Market (COM 2016/593/Final) as well as parallel analyses.

1.5.3 Analysis of the pivotal concepts

28. Digital STI is based on three pivotal concepts that each feature in the Digital Republic Act. These concepts are:

- platform;
- research data;
- scientific texts.

29. Each of these three concepts has a specific legal regime, defined within several legal instruments. These three sets of rules will be presented one by one in order to identify any grey areas.

30. Each of the concepts is analysed from four viewpoints:

- quantitative: the number of times the term is used in the Digital Republic Act and the number of times it is used in other Acts;
- qualitative: the way in which the term is used in the Digital Republic Act and in other Acts regarding the subject which is the focus of this systemic analysis: Science;
- lexicographical: an identification of all the concept's different meanings in the Digital Republic Act and in other Acts;
- semantic: an analysis of the pivotal concept taken as a whole, in the light of the provision where it is found, the title of the chapter or section of the Act concerned, of the Code in which the provision is introduced or already present.

1.5.4 Analysis of the relationships between these concepts

31. Each of the relationships between these three concepts forms an aspect of the system and is covered by a legal qualification and a corresponding regime:

- the concepts of "platform" and "research data" combine to produce the notion of Open Data, understood as the opening up, the provision and the sharing of research data;

- the concepts of "platform" and "scientific texts" combine to produce the new right to secondary exploitation of scientific publications, otherwise known as Open Access;

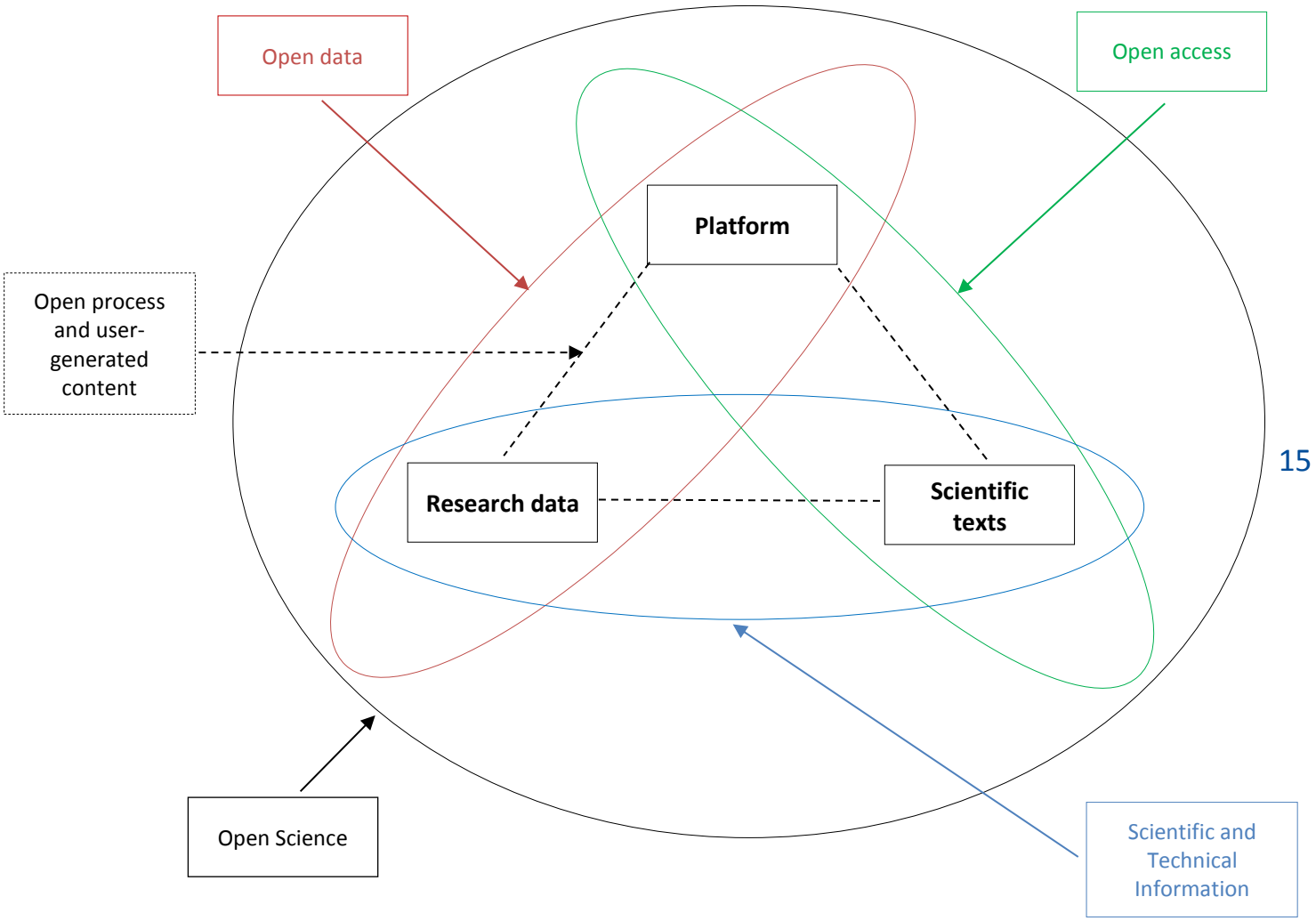
- the two concepts of "research data" and "scientific texts" combine to produce the notion of Scientific and Technical Information;

- the three concepts of "platform", "research data" and "scientific texts" combine to produce the notion of Open Process, in other words the possibility for researchers to access, make available and share STI on science platforms for the purpose of processing and exploration by digital tools that can generate automatic content, user-generated content such as meta-knowledge, meta-heuristics, metadata, and also the results derived therefrom;

- the overall system is what produces Open Science.

1.5.5 Diagram of the system

32. A theoretical diagram of the systemic analysis is illustrated below:



2. Identification of the pivotal concepts

2.1 Qualification

33. Digital technology is revolutionising access to and the sharing of scientific data, creating new opportunities to speed up scientific discoveries and their applications.

34. This dynamic is reflected in the multiplication of digital science platforms, where scientific texts and data can be posted and shared, with data-mining services and the production of new data and user-generated content with the help of processing algorithms and software.

35. The three pivotal concepts of this digital dynamic are:

- the platform: as a technical tool for depositing, sharing and processing scientific texts and research data;
- scientific texts: as publications and as tools for researchers;
- research data: as tools for researchers.

2.2 Approach

36. Each of these three concepts is analysed independently in the light of the legal and statutory texts listed in the section "Scope of the analysis". This systemic analysis of the concept is illustrated in the form of a table representing each concept from a quantitative, qualitative, lexicographical and semantic point of view in the texts analysed.

37. The concept and its legal regime are then placed in a historical context and analysed in relation to other texts, drafts, studies or in other legal areas.

38. The concept is then compared with the way it is considered in the Digital Republic Act, before being applied to the field of science.

3. Platform

3.1 Systemic analysis of the concept of "platform"

3.1.1 Analytical table

39. The systemic analysis of this term can be summarised as follows:

	Digital Republic Act, No 2016-1321	Research Code	Intellectual Property Code	Code governing relationships between the public and the administration	Education Code	Consumer Code	Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access	Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy	CNRS Founding Decree No. 82-993 of 24 November 1982	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001
Quantitative analysis	The word "platform" is used 12 times (including in the title).	0	0	0	0	The word "platform" is used 9 times.	0	0 (Use of the term "Online public communication service")	1	0
Qualitative analysis	"Online platform" or "digital platform" for products and services	/	/	/	/	Online platform for translation services. "Online platform" or "digital platform" for products and services	/	/	Documentary platform in the field of Science	17 /
Lexicographic analysis	Article 49[8]: definition.	/	/	/	/	Art. L.111-7: consolidation of Article 49 of the Digital Republic Act (DRA)	/	/	Means for distributing scientific documentation and publishing research work and data	/

[8] Online public communication service based on:
"1° The ranking or referencing, by means of computer algorithms, of content, goods or services proposed or posted online by third parties
"2° Or bringing together several parties for the purpose of selling goods, providing services, or exchanging or sharing content, goods or services.

	Digital Republic Act, No 2016-1321	Research Code	Intellectual Property Code	Code governing relationships between the public and the administration	Education Code	Consumer Code	Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access	Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy	CNRS Founding Decree No. 82-993 of 24 November 1982	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001
Semantic analysis	Articles 49, 50 and 51. Section on the obligation for platforms to act in good faith and on consumer information Consumer Code	/	/	/	/	Art. L112-8[9] Art. L.111-7 and L.111-7-1 Snapshot of the uses of the DRA. Book 1: consumer information and business practices Title 1: consumer information Chapter I: general obligation to provide precontractual information	/	/	Art. 2: the missions of the CNRS and definitions of the means of the CNRS for carrying out its missions	/

[9] Article L112-8 of the Consumer Code
Created by Act No. 2016-1321 of 7 October 2016 - Art. 105
Companies whose turnover is higher than a threshold defined by decree shall make any phone number – intended to receive calls from consumers to obtain the proper execution of a contract signed with a professional or the processing of a claim – accessible to persons who are deaf, hard of hearing, deaf and blind or aphasic by providing a written and visual simultaneous translation service as defined in IV of Article 105 of the Digital Republic Act, No. 2016-1321 of 7 October 2016, without additional cost to end users and at the expense of the companies concerned.
The telephone reception services concerned shall be directly accessible or, otherwise, via a dedicated **online platform** providing the simultaneous written and visual translation service. Accessibility shall either be provided directly by the company or entrusted by it, under its responsibility, to a specialised operator that shall implement and operate the service.

3.1.2 Summary

40. The concept of "platform" was introduced in the legislative arsenal by the "Digital Republic Act", which established a definition and corresponding obligations in the Consumer Code; until then, only the term "online public communication service" had a definition and a legal regime.

41. In order to gain a comprehensive view of this concept, it should be traced back to its legal origin.

42. The legal framework of the concept of platform was an initiative by the Prime Minister at the time, Manuel Valls, in a mission statement to the National Digital Council (CNNum) of 4 September 2014. In this statement the government undertook to take a stand in favour of digital issues and called on the CNNum to organise a broad national consultation on the impact of digital technologies on economic development, innovation, and fundamental rights and freedoms (Section 3.2.1, CNNum Opinion 2014-2). In particular, the statement proposed a consultation on:

- **the status of major digital platforms (consumer law, commercial and competition law, cybersecurity and data protection);**

43. A 2014 study by the Council of State also proposed the creation of a specific legal status (Section 3.2.2, Annual Report by the Council of State, 2014).

44. The "Macron" Act introduced a qualification similar to an intermediation service (Section 3.2.3: The "Macron" Act: an attempt to create a legal status for intermediation services); this status has since been repealed and replaced by that of platform within the meaning of the Digital Republic Act.

45. The "Lemaire" Act did indeed define the concept of platform and imposed two corresponding obligations: an duty to act in good faith and a duty of transparency (Section 3.3, The concept of "platform" in the Digital Republic Act).

46. The application of these elements to science platforms (Section 3.4, The concept of "platform" as applied to science platforms) was first proposed by the Decree founding the CNRS, amended on 16 September 2015.

3.2 The concept of "platform" before the Digital Republic Act

3.2.1 Opinion 2014-2 of the National Digital Council of 23 September 2014

47. Opinion 2014-2 of the CNNum of 23 September 2014 concerns the neutrality of platforms.

48. It concludes that it is necessary to "strengthen the effectiveness of rights concerning digital platforms".

> **Digital platforms are already governed by certain laws**. As they play an intermediary role and because of their position in the digital landscape, they have an influence on the relationships between the users and producers of goods and services. Many of the issues raised by this situation can be dealt with by making full use of existing legal instruments, in the consumer, commercial, competition, data protection, etc. by updating their application through case law. These various fields require the law to be adapted as appropriate for the ecosystems surrounding platforms: especially the effects of scale at a global level, the multimodal complexity of digital channels, their technical nature and the new problems related to data ownership and use-tracking.

49. The report advocates achieving this by imposing legal obligations on platforms, especially neutrality, acting in good faith, transparency, and the stability and sustainability of the model relative to its ecosystem.

50. In addition, platforms must participate in an open model of digital development.

51. They are also considered to be a way of achieving fiscal harmonisation and of regulating contractual practices.

52. The report recommends promoting these values in Europe and throughout the world, to foster the adoption of common standards.

3.2.2 Annual report by the Council of State for 2014: proposal for a legal status for platforms

53. In its annual 2014 report entitled "Digital technology and fundamental rights", the Council of State published 50 proposals to ensure that digital technology serves the rights of the individual and the general interest[10]:

54. **Giving "platforms" legal status.** Among these proposals, the Council of State suggested that the actors providing services for the classification or referencing of content, goods or services made available online by third parties be subject to a legal regime distinct from those for hosting or publishing services. The Council of State proposed the creation of a new legal category for "platforms" obliging them to act in good faith towards their users (non-professionals in the context of consumer affairs law and professionals in the context of competition law).

[10] 2014 Report by the Council of State, *Le numérique et les droits fondamentaux*, Documentation française, p272

55. **Differences compared to hosting and editing.** The Council of State considered that the legal regimes covering hosting and editing provided for by the Act for Confidence in the Digital Economy (LCEN) of 2004 cannot be applied to platforms.

56. A webhost is a natural or legal person “providing a service, even a free service, making available to the public by online public communication services, the storage of signals, texts, images, sounds or messages of any nature provided by the users of these services" (Article 6-1-2 of the LCEN).

57. As a result of this specific activity, which excludes any intervention by the webhost in the actual publication, the applicable legal regime is one of limited liability. The civil liability of webhosts may therefore only be invoked on the grounds of their activities or of the information stored at the request of their customers if they have "actual knowledge of the illicit nature or of facts or circumstances showing the illicit nature" of such information or activities or if, having been aware of this illicit nature, they have not acted promptly to remove the data or make access impossible.

58. The notion of publisher has arisen in parallel. Unlike the webhost, who only plays a passive role, the publisher is an active partner who controls and organises both the content to be published and the rate of publication[11].

59. For the Court of Justice of the European Union, the status of webhost “applies to an internet referencing service provider if that service provider has not played an active role of such a kind as to give it knowledge of, or control over, the data stored.”[12] The Court specifies that to obtain the status of host, the service provider’s role must be neutral, its behaviour must be purely technical, automatic and passive, and that this implies the absence of knowledge or control of the data that it stores.

60. There have been several disputes that obliged referencing sites such as Dailymotion or Ebay to defend their status of webhosts in order to benefit from a limited liability.[13]

61. The evolution of digital technologies, and particularly the growth of interactions on the Internet promoted by major players in the market, requires constant examination of the legal status granted to each type of actor.

62. The Digital Republic Act has adopted the proposals published by the Council of State in this report and stipulates that the operator of an online platform must act in good faith.

[11] In terms of criminal liability, the rules are virtually identical.
[12] CJEU, 23 March 2010 Google France SARL and Google Inc. versus Louis Vuitton Malletier SA e.a.
[13] Court of Cassation (French supreme court of appeal), Com., 3 May 2012, Appeal No. 11-10508, Cass. Civil Chamber 1, 17 February 2011, Appeal No. 09-67896.

3.2.3 The "Macron" Act: an attempt to create a legal status for intermediation services

63. The Act for growth, activity and equality of economic opportunity, known as the "*Loi Macron*"[14], introduced a status similar to that proposed by the Council of State by inserting in the Consumer Code certain obligations on online intermediation services.

64. Article L. 111-5-1 of the Consumer Code, which has since been repealed, stipulated:

- "Without prejudice to the obligations of information provided for in Article 19 of Act No. 2004-575 of 21 June 2004 for Confidence in the Digital Economy, any person whose activity consists in bringing together, by electronic means, different parties with a view to the sale of goods, the provision of services or the exchange or sharing of goods or services is required to provide information in good faith that is clear and transparent on the general terms and conditions of use of the intermediation service and on the procedures by which online offers are referenced, classified and de-referenced.

  When only consumers or non-professionals are brought together, the person referred to in the first paragraph of this Article is also required to provide information in good faith that is clear and transparent on the quality of the advertiser and the civil and fiscal rights and obligations of the parties.

  When professionals, vendors and service providers are brought together with consumers, the person referred to in the first paragraph of this Article is also required to provide the former with a space where they can give consumers the information laid down in Article L. 121-17.

  The content of this information and how it shall be communicated are fixed by decree."

65. The service concerned for bringing together, by electronic means, different parties for the purpose of selling goods, providing services, or exchanging or sharing content, goods or services, is similar to the concept of "platform" as understood by the Council of State. The Act also introduces obligations to act in good faith, and to provide clear and transparent information.

66. This provision was abrogated by Order No. 2016-301 of 14 March 2016 (Art. 34 V); the regime provided for in this Article has been revised by the Digital Republic Act (Articles 49, 50 and 51).

[14] Act No. 2015-990 of 6 August 2015 for growth, activity and equality of economic opportunity

3.3 The concept of “platform” in the Digital Republic Act

3.3.1 Giving “platforms” legal status

67. Section 3 of the Digital Republic Act, "Good faith on the part of platforms and information for consumers", comprises five articles and introduces the concept of “platform”:

- Article 49 provides a definition of the concept of “platform” as well as the corresponding obligations to act in good faith; this article is consolidated in Article L.111-7 of the Consumer Code;
- Article 50 lists special obligations for large-scale platforms with large numbers of connections; this article is consolidated in Article L.111-7-1 of the Consumer Code;
- Article 51 lists special obligations for "any person who provides or helps provide, for payment, (…) a digital platform, for the lease of a furnished property"; this article is consolidated in the Tourism Code.

68. While Article 51, known as the “Airbnb Amendment", cannot be applied to science platforms, it is interesting to analyse the content of Articles 49 and 50, which introduce a legal status for online platforms in the Consumer Code.

3.3.2 Defining what a platform actually is

69. **Definition**. The concept of online platform operator is defined as follows:

- An online platform operator is any natural or legal person proposing, on a professional basis, whether paid or unpaid, an online public communication service based on:
  1° The ranking or referencing, by means of computer algorithms, of content, goods or services proposed or posted online by third parties;
  2° Or bringing together different parties for the purpose of selling goods, providing services, or exchanging or sharing content, goods or services.”

70. The following conditions are necessary for qualifying a person as a platform operator:

- a natural or legal person;
- providing on a professional basis, but not necessarily paid;
- an online public communication service (under the meaning of the Act for Confidence in the Digital Economy[15]):

[15] Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy
Article 1: Online public communication is understood to include any transmission, requested by an individual, of digital data that are not of the nature of private correspondence, by an electronic communication process enabling the reciprocal exchange of information between the sender and the receiver

- the referencing or classification of content, goods or services posted online by third parties by means of computer algorithms (Youtube, Dailymotion),
- bringing different parties together (intermediation service) for the purpose of selling goods, exchanging services, or exchanging or sharing content, goods or services (Airbnb, Blablacar, etc.).

71. This is a single, cross-cutting definition and a primarily economic concept associated with the theory of two-sided markets. The concept is very broad, with a core idea, that of intermediation. The platforms referred to are those that gain a value in some form by offering services and interfaces, even free of charge, including search engines, social networks, content-sharing sites, market places, content-feed aggregators or price-comparison websites.

72. Certain criticisms were aired during parliamentary debates of the scope of application of the concept of platform:

- "The definition of online platform operators proposed by this article is too wide, in the opinion of many stakeholders interviewed, ranging from the GAFAs to the operators of telephone information and connection services, such as 118-218, including also such websites as the French online cinema-information service, Allociné. We feel that this definition of legal status fails to discriminate sufficiently and that instead of making a useful addition, as advocated by the Council of State in its 2014 annual report, it goes directly counter to the legal categories providing a structure for e-commerce, such as webhosts or content publishers."[16]

73. However, this extended qualification has been retained, mainly to avoid restricting the related obligations to only a few users, in a market in full expansion.

3.3.3 Obligation to act in good faith

74. The concept of good faith is defined as "fairness shown in fulfilling commitments, and abiding by the rules of honour and probity."[17]

75. Good faith is a necessary condition for a healthy market economy. It is present in general contract law but also in extra-contractual relationships.

76. The need for transparency and sincerity has become apparent in all areas of the law in recent years. More particularly, in areas involving both weak parties and parties regarded as strong, as in the case of consumer law.

[16] Opinion issued on behalf of the Economic Affairs Commission of the French National Assembly on the White Paper for a Digital Republic (No. 3318)
[17] http://www.cnrtl.fr/definition/loyauté

77. In French law, this concept can be found in the general law of obligations, procedural rules and also the rules governing economic relationships, especially labour law, company law, consumer law and competition law.

3.3.3.1 In the Consumer Code

78. **General.** In the context of the relationship between consumers and professionals, the obligation to act in good faith involves not considering the consumer as either a prey or an opponent but, as a person who must be informed and warned of threats to his/her interest. This is reflected by positive and negative obligations upon the professional:

- obligation to inform the consumer clearly;
- right to reconsider and right to withdraw;
- obligation not to mislead consumers;
- obligation not to abuse or exploit the vulnerability or weakness of consumers (abuse of weakness, unfair terms).

79. **Good faith and platforms.** The goal of the Act is to enable consumers to choose goods or services in an informed manner. Platforms clearly play an increasingly central role for whole sections of society. This key role necessarily implies greater responsibility.

80. This willingness to increase accountability and transparency with regard to the consumer is part of a broad trend at European level to promote an impartial market:

- “Greater transparency is also needed for users to understand how the information presented to them is filtered, shaped or personalised, especially when this information forms the basis of purchasing decisions or influences their participation in civic or democratic life. If consumers are properly informed of the nature of the products that they view or consume online, this assists the efficient functioning of markets and consumer welfare[18].”

81. The obligation to act in good faith introduced by Article 49 of the Act stipulates that:

- "Any operator of an online platform is required to give the consumer fair, clear and transparent information on:
  1° The general conditions of use of the intermediation service it offers and on the procedures for referencing, classifying and dereferencing the content, goods or services to which this service provides access;
  2° The existence of a contractual relationship, a shareholding link or remuneration in exchange for its services, when these could influence the classification or referencing of the content, goods or services offered or posted online;

[18] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. “Online Platforms and the Digital Single Market”, 25 May 2016

3° The quality of the advertiser and the civil and fiscal rights and obligations of the parties, when consumers are brought together with professionals or non-professionals."

82. This obligation to act in good faith relates both to the role played by the platform in presenting the information and on its links with the actors for which it presents certain information and offers.

83. By the nature of their activity, these platforms can be obliged to apply practices guiding the choice of consumers.

84. However, uninformed consumers may think that their choices are guided by neutral rules when this is not always the case. In the interests of transparency in respect of a party considered to be weak under French and European law, the new rules require platforms to act in good faith.

85. “Traditionally, EU consumer and marketing legislation has been designed to address transactions, in which there is a weaker party that needs to be protected (typically the consumer).” "[19]

86. Furthermore, a decree (scheduled for February 2017) is expected to specify the practical nature for information and more broadly the conditions of application of the new Article L. 111-7 of the Consumer Code, taking into account the nature of the activity of operators of online platforms. It is therefore possible that specialisations will be explained.

87. For any operator of an online platform whose activity consists in providing information for comparing the prices and characteristics of goods and services offered by professionals, this decree will also distinguish between information provided to consumers for the purpose of this comparison and advertising within the meaning of Article 20 of Act No. 2004-575 of 21 June 2004 for Confidence in the Digital Economy.

3.3.3.2 Good faith for platforms and competition

88. The digital economy and the emergence of platforms have brought about new practices in the marketplace. Competition law attempts, with difficulty, to regulate these.

89. It is possible for platforms to pursue real strategies to evict competitors and foreclose the market. Indeed, while the arrival of digital platforms has resulted in a multiplication of sources of information and greater transparency on prices, it also presents a real risk to freedom of competition, by facilitating collusion.

[19] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. “A European Agenda for the Collaborative Economy”, 2 July 2016.

90. Keeping the internet open and transparent requires new discussions on the role of digital platforms as actors in a competitive market. These issues require a consideration of how best to promote fair practices by platforms toward their competitors and users.

91. **Combating the abuse of a dominant position** Because of the effects of interwoven networks and the possibility of involvement at several levels, platforms can lock the market in their favour. Occupying the dominant position in a market is not reprehensible in itself, but certain actions on the part of dominant platforms are akin to genuine unfairness. Some proposals are intended to reassess our view of what constitutes reprehensible behaviour:

- adjust the criteria used to define domination: market share is generally used to characterise a dominant position, whereas this evaluation is not necessarily suitable for platforms. Indeed, the French Competition Authority took this view concerning its decision relating to the Booking.com platform[20] by taking into account more than just its market share: "Online Travel Agents (OTAS) are the principal channel for online reservations. According to the above-mentioned Phocuswright report, in Europe and for each year of the period 2011-2015, OTAs took approximately 70% of online hotel bookings, the remaining 30% being made on hotels' own websites";

- impose an unbundling strategy. This has been introduced by the European Commission to promote the opening of markets to greater competition in the energy sector. Under this strategy it was decided that all historic national operators, which until then had benefited from a monopoly, should divide their transport and supply activities in order to ensure free competition and make it easier for new players to enter the market. If this argument were applied to Google, it would force the separation of its search-engine activities from its other activities. Breaking up a de facto monopoly would avoid a system of concentration automatically involving foreclosure against competitors;

- the essential facilities doctrine: the concept of "essential facility" covers all facilities (whether physical or otherwise), held by a company in a dominant position, which are not easily replicable and access to which is essential to third parties to enable them to operate in the market. There is currently considerable discussion concerning the application of the doctrine of essential facilities to large digital platforms[21]. Discussions focus on precisely what constitutes an essential facility, on databases and on the algorithms that control access.

[20] Competition Authority, 21 April 2015 concerning the practices implemented by the companies Booking.com B.V., Booking.com France SAS and Booking.com Customer Service France SAS in the online hotel reservation sector

[21] Information Report No. 443 (2012-2013) by Ms Catherine Morin-Desailly, written on behalf of the Commission for European Affairs, filed on March 20, 2013 (p. 81), Report of the National Digital Council, *Neutralité des plateformes : réunir les conditions d'un environnement numérique ouvert et soutenable* (Neutrality of Platforms: Creating the Conditions for an Open and Sustainable Digital Environment, June 2014 (p 29)

3.3.3.3 The concept of “good faith”: a principle shared by several fields

92. Good faith is a concept present in many areas of law, helping establish a balance between the parties to a contractual relationship or between adversaries in the framework of a judicial procedure.

93. This principle imposes positive obligations on individuals that help regulate interactions and avoid abuse.

94. **Good faith and contracts.** The good faith required in contracts justifies the very existence of a contractual relationship. Agreements are based on undertakings given by each of the parties, which must be respected if the agreement is to have any meaning. As an example, the principle of “good faith” can be found in:

- **general contract law:** Article 1104 of the Civil Code resulting from Order No. 2016-131 of 10 February 2016 requires that "contracts must be negotiated, formalised and carried out in good faith." Although “good faith” is not defined legally, it is a framework concept to combat contractual imbalances and abuse. The obligation of fairness which is a corollary of the obligation to act in good faith applies equally to the negotiation, formulation and execution of the contract;

- **employment contracts:** Acting in good faith is a general default obligation that applies if no specific provisions have been inserted in the employment contract. Article L.1222-1 of the Labour Code requires that both the employer and the employee execute the contract in "good-faith".

95. **Good faith in procedures.** The principle of good faith can be found in legal proceedings and in civil, criminal and administrative procedures. There is no legal definition for the principle but it should be compared with certain procedural principles such as equality of arms, the rights of the defence, fair trial and the adversarial principle.

3.3.4 Obligation to disseminate best practice

96. Article 50 of the Digital Republic Act imposes an additional obligation on the operators of online platforms with large volumes of traffic; these must ensure that “consumers are informed of what constitutes good practice in order to help enforce the obligations of clarity, transparency and loyalty mentioned in Article L. 111-7".

97. The application of "good practice" in law has already proven its worth and was based on a voluntary approach and a regime of soft law. In this instance, the Act in question moves from a principle allowing professionals to opt out of "good practice" to an opt-in situation, forcing professionals to define good practice.

98. The text says nothing on the subject of an individual or a collective approach, the content or the enforceability of these good practices, and has been particularly criticized by the ACSEL[22].

99. **Provisions inserted into the Consumer Code.** These provisions concerning platforms and the obligations to act in good faith and disseminate the corresponding good practice have been inserted in the Consumer Code and are therefore applicable to the relationship between a professional and a consumer or a non-professional. The introductory Article of the Consumer Code defines these notions as follows:

- professional: any natural or legal person, public or private, which acts for purposes falling within the framework of its commercial, industrial, craft, or agricultural activity, or the learned professions, including when acting in the name of or on behalf of another professional;
- consumer: any natural person who acts for purposes unrelated to his or her commercial, industrial, craft or agricultural activity, or the learned professions;
- non-professional: any legal person which acts for purposes unrelated to his or her commercial, industrial, craft or agricultural activity, or the learned professions.

3.4 The concept of "platform" as applied to science platforms

3.4.1 Decree on the organisation of CNRS: mission to provide scientific data via documentary platforms

100. Decree No. 82-993 of 24 November 1982 on the organisation of the French National Centre for Scientific Research, amended by Decree No. 2015-1151 of 16 September 2015. This decree amends certain provisions relating to the missions of the institution, such as:

- explicitly adding a mission for conducting scientific assessments and expert appraisals;
- adding a mission to make procurements on behalf of others, thus giving CNRS a central purchasing role;
- specifying a mission to develop access to research work and data by "producing and distributing scientific documents and publishing research work and data, particularly by making documentary platforms available to the scientific and academic community and helping to enrich these platforms".

101. CNRS develops and uses a large number of platforms with a range of features: accepting the deposition of scientific data and work, providing access to scientific

[22] *Association pour le commerce et les services en ligne* http://www.acsel.asso.fr/analyse-du-projet-de-loi-pour-une-republique-numerique/#

documentation and publications, value-added information-processing services, thematic or multidisciplinary platforms.

102. CNRS's Directorate of Scientific and Technical Information undertook a census of scientific and technical platforms, the results of which are presented here: http://www.cnrs.fr/dist/acces-ist.html.

103. As STI is at the heart of research, access to this information and its circulation and availability is indispensable for effective scientific research. The provision of STI via platforms containing high-quality scientific resources and meeting the needs of researchers is therefore a priority.

3.4.2 Transposing these obligations into the Consumer Code

104. The provisions of the Consumer Code introduced by the Digital Republic Act are not applicable to science platforms.

105. However, the provisions and also the various legal applications of the concept of "good faith" and transparency may be transposed for application to the platforms developed by CNRS.

106. Indeed, the spirit of the Digital Republic Act is in favour of making data and knowledge "open" and of circulating them in an open digital environment respectful of its users.

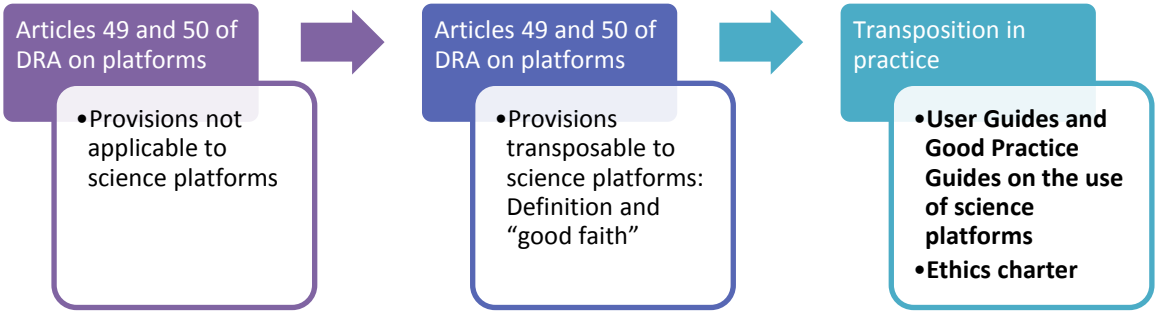
107. To achieve this aim, science platforms that provide research data and scientific texts, digital services and search algorithms, must pursue these objectives by supplying clear information to their users. A specific definition could be found for the concept of "Science platform" that would include services for depositing scientific data and writings as well as knowledge management.

108. Guidelines should be drawn up on how to supply users with information on the operation of science platforms, which could be applied in User Guides or Good Practice Guides for users of science platforms.

109. Although the users for whom CNRS platforms are intended are researchers, research organisations and scientists, these platforms are particularly important vectors for knowledge, especially because the release of data will generate new uses for science platforms.

110. Science platforms could also draw up ethics charters for users to adhere to. They would impose management principles and obligations on users to promote transparency and free access.

3.4.3 Summary diagram



4. Scientific texts

4.1 Systemic analysis of the concept of "scientific texts"

4.1.1 Analytical table

111. The systemic analysis of this term can be summarised as follows:

	Digital Republic Act, No 2016-1321	Research Code	Intellectual Property Code	Code governing relationships between the public and the administration	Education Code	Consumer Code	Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access	Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy	CNRS Founding Decree No. 82-993 of 24 November 1982	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001
Quantitative analysis	The term "scientific texts" is used 4 times	The term "scientific texts" is used once	The term "scientific texts" is used 3 times	/	/	/	/	/	/	/
Qualitative analysis	Scientific text resulting from research financed at least 50% by public funds and published in a journal produced at least once a year. Intellectual creation that can be protected by copyright	Scientific text resulting from research financed at least 50% by public funds and published in a journal produced at least once a year. Consolidation of Article 30 of the DRA	Intellectual creation that can be protected by copyright Consolidation of Article 38 of the DRA	/	/	/	/	/	/	/
Lexicographic analysis	/	/	Article L 112-2 Definition[23]	/	/	/	/	/	/	/

[23] Considered particularly as intellectual creations

	Digital Republic Act, No 2016-1321	Research Code	Intellectual Property Code	Code governing relationships between the public and the administration	Education Code	Consumer Code	Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access	Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy	CNRS Founding Decree No. 82-993 of 24 November 1982	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001
Semantic analysis	Articles 30 and 38 Research Code Intellectual Property Code	Art. L533-4: consolidation of Article 30 of the DRA TITLE III: Provisions concerning research institutions and organisations and their personnel Chapter III: The exploitation of the results of research by research institutions and organisations	Article L 112-2 Title I: The purpose of copyright Chapter II: Protected works Art. L122-5: consolidation of Article 38 of the DRA Title II: Authors' rights Chapter II: Economic rights Art. 342-3: consolidation of Article 38 of the DRA Title IV: The rights of database producers Chapter II: Scope of the protection	/	/	/	/	/	/	/

4.1.2 Summary

112. The concept of “scientific text” when applied to research does not fit the descriptions used by researchers themselves, who prefer such terms as “publications”, or “published scientific outputs”.

113. This notion refers back to Article L.112-2 of the Intellectual Property Code that provides copyright protection for "literary, artistic and scientific works”. Scientific text is considered as an intellectual creation, protected by copyright as originally expressed.

114. The notion occurs again in the Digital Republic Act, enhanced by certain conditions.

4.2 The concept of “scientific text” before the Digital Republic Act: the Intellectual Property Code

115. Copyright protects “intellectual creations” of all kinds, forms of expression, merit or destination[24].

116. Scientific texts are protected by copyright if they meet all of the following three conditions:

- a form of expression;
- that fits the description of intellectual creation;
- and can claim to be original.

4.2.1 Scientific text as opposed to scientific information

117. **Legal framework.** Article 2 of the WIPO Treaty as well as Article 9.2 of the TRIPS Agreements on copyright specify in similar terms that:

- “Copyright protection extends to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such"[25].

118. **Ideas and knowledge.** It is difficult to grant copyright to a concept or an idea, whatever its nature, because of its abstract and/or non-formalised nature. Ideas are therefore not protected by copyright and are considered to be in the public domain.

[24] Intellectual Property Code Art. L. 112-1
[25] WIPO treaty on copyright 20-12-1996, Art. 2; Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) contained in Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization (WTO) of the 15-4-1994, Art. 9.2.

119. "Knowledge is the fruit of theoretical and/or practical work intended to improve the understanding of natural or social facts"[26] [our translation]. Knowledge, being abstract and intangible, is also difficult to circumscribe. The very nature of knowledge means that it is a public asset that is difficult for private actors to control, other than by keeping it secret.

120. Ideas and knowledge belong to the public domain, are freely reusable by the public without prior authorisation, and therefore cannot be the subject of exclusive protection; only the original form in which they were expressed and published may be subject to copyright.

<table>
<tr><th>Information freely available to the public</th><th>Protectable information</th></tr>
<tr><td>Topical information is by nature freely available to all. The Court of Cassation has ruled that as soon as news is published in the media everyone has the right to repeat it and comment on it[27].</td><td rowspan="2">Inversely, data generated by human thought, for example data from the human sciences that require interpretation or presentation, and which therefore carry the stamp of the personality of the author or the observer, are a priori protected by law. Therefore, once published, an item of information generated by a survey or an investigation cannot become public property as long as the way it is expressed and presented differs from the way it appeared initially[28].</td></tr>
<tr><td>Public information is by nature and intention freely available to the public.</td></tr>
<tr><td>Raw data, unformatted, purely factual, i.e. presenting only the facts without interpretation or organisation, are freely reusable. This applies particularly to data from the exact sciences such as geographical, historical and scientific data. For example, it has been stated that the "prices of stocks and securities traded on the French market", made public by an organisation with a public service mission, "are public and cannot be appropriated"[29]; the same conclusion was reached about weather data, or historical facts[30]. Such data or items of information are public assets that fall within the public domain.</td><td>Trade secrets or confidential information, or information covered by professional secrecy are the exclusive property of the person who holds them, and their disclosure may lead to criminal, civil or administrative penalties where applicable.</td></tr>
<tr><td>A simple compilation of factual or objective information[31], technical information or information</td><td></td></tr>
</table>

[26] *Economie et Management* (quarterly review), June 2010 No. 136, "*La connaissance : un bien public mondial?*" by El Mouhoub Mouhoud, Professor of Economics at the University of Paris Dauphine
[27] Cass 8-8-1861 Havas / DP Gounouilhou 1862 1 Jur.136
[28] TGI (District Court) of Grenoble 9-5-1994 D 1985 IR 309, observation by Colombet
[29] Commercial Court of Compiègne 2-6-1989: Sté des Bourses françaises v. Option Service and Cote Desfosses Exp 1989 No. 120 p 316
[30] TGI (District Court) of Paris, 1st Chamber, 7-3-1990, Figueiro v. Zefirelli D.1991 summing up 87, observation by Colombet
[31] Commercial Court of Lyon, 30 July 1993, CIE c/ Comm'Back, LPA, 29 April 1995, p. 14, note by A. Latreille: "The electronic database accessible by Minitel cannot benefit from copyright protection as it only provides objective information on companies and cannot claim any originality, as it can present no evidence of creative or intellectual input."

Information freely available to the public	Protectable information
produced as the result of a mechanical process[32] cannot benefit from copyright protection. (However, while French law does not protect compilations as such, it protects databases that are capable of showing originality.)	

121. **Form of expression.** Only a work that formalises the idea or the knowledge it contains can be protected by copyright[33]/[34]. In this respect, Article L. 111-2 of the Intellectual Property Code (CPI) lays down that:

- "The work is deemed to have been created, whether or not it has been made public, by its very production, even in unfinished form, by the imagination of the author."

122. Copyright protection applies when the idea is presented sufficiently clearly for it to be represented in a perceptible form, but it must still be possible to describe this form of expression, by its nature, as an "intellectual creation".

4.2.2 "Intellectual creation"

123. **General legal framework.** Article L. 112-2 of the CPI provides a non-exhaustive list of the works considered to be intellectual creations and includes:

- 1° Books, pamphlets and other literary, artistic and scientific works;
  2° Lectures, addresses, sermons, courtroom pleading and other works of the same nature;
  8° Graphic and typographical works;
  9° Photographic works and those produced using techniques similar to photography;
  11° Illustrations, geographical maps;
  12° Drawings, sketches and models relating to geography, topography, architecture and science;
  13° Software, including preparatory design material.

[32] CA Paris, 4th Chamber, 16 January 1995, Mediapresse v. Joel Jordy, D. 1995. IR 65 "A simple compilation of information, not presented in an original manner, with no intellectual contribution either in its text or its graphics, cannot claim protection as an intellectual creation. This is especially the case of a list of products, brands and companies dealing in musical instruments and their accessories listed in a magazine or a list of the addresses of official or semi-official professional bodies, unformatted and/or listed alphabetically."

[33] Court of Cassation (French supreme court of appeal), Civil Chamber 1, 17-10-2000, RG No. 97-20820: "The protection of an idea as an intellectual creation supposes that the work springs, even if in unfinished form, from the imagination of the author."

[34] Both doctrine and sometimes even legal precedence/case law consider that the division between ideas and their formalisation is too radical. The courts have sometimes granted specific protection of copyright to an idea, thus rejecting the traditional position mentioned above (Paris CA, 4th Chamber, 16-1-1985). These decisions are in the minority and it is best to consider only the majority and traditional tendency in legal findings.

124. Furthermore, Article L.112-3 of the CPI extends the protection of intellectual property rights to databases “which, by the choice or arrangement of their contents, constitute intellectual creations”.

125. French legal precedent also describes as intellectual creations certain complex products comprising several intellectual creations, such as websites or video games.

126. **Scientific texts.** The law assimilates "scientific texts" with intellectual creations and the courts have accepted as intellectual creations such works as:

- a manual of economic science[35];
- a medical textbook[36];
- a history textbook[37];
- academic theses.

127. Scientific texts can include traditional, published books or publications in periodicals, in the form of “columns” or notes, in which case not just the text but also the summary, the abstract, the title appearing on the cover page, and the plan of the book can all be protected.

128. **Exclusion from the description “Intellectual creation”.** The concept of intellectual creation requires human intervention, so a document produced automatically by a system does not qualify as an intellectual creation. Several legal precedents concern photographs taken automatically by a machine, whether by a satellite, an aircraft or a photo booth, and which are excluded from protection, as the image was taken automatically, without anyone operating the camera.

4.2.3 How to assess originality

129. Only “original” intellectual creations are eligible for protection by copyright.

130. **The mark of the author’s own personality.** The originality of a work is assessed in the light of "the mark of the author’s own personality"[38]. The courts assess this according to a range of criteria, with the author being obliged to show how the creation is the result of his or her own choices and bears the stamp of his or her own personality.

131. The originality of a work is assessed regardless of the type (literary, scientific, etc.), the form of expression (written, oral, etc.), the merit (there is no assessment of the artistic or aesthetic value, nor of the moral character or otherwise of a work) or of the intended destination of the work (commercial or non-commercial)[39].

[35] CA Paris 21-11-1994: RIDA, April 1995, pp. 381 and 243, observation by Kéréver
[36] Cass civ 1 8-11-1983, source: Jcl civil annexe Fasc 1134 n°101
[37] CA Paris 9-3-1964, source: Jcl civil annexe Fasc 1134 n°101
[38] Cass com. 15-2-2005 No.02-16957.
[39] Intellectual Property Code Art. L. 112-1

132. However, the courts seem to be increasingly reluctant to admit the originality of creations, and consequently to grant them protection by copyright.

133. **The originality of scientific work.** Scientific works, classified as factual or educational, "whose value lies in their ability to represent reality and the information they contain", are also assessed for originality. It can be more difficult to detect the stamp of the author's personality because "the form, which is the only aspect of the work whose originality may merit copyright, depends to a considerable extent on the content"[40] and "the need to use language in a specific way leaves little room for an author to express his or her personality"[41].

134. The originality of a scientific work therefore depends on the characteristic choices in the way the subject is treated:

- a characteristic style;
- the development of the different ideas in the work and the way they are organised;
- the expression, that is to say the way in which the author expresses the ideas in the work;
- the author's own personal analysis;
- the choice of quotations;
- the selection of documents;
- the way sources are laid out.

135. Conversely, scientific texts cannot claim copyright protection if they lack all originality because:

- elements are imposed by constraints common to anyone working in the field in question;
- they only repeat scientific concepts that are mere ideas (and therefore cannot be protected by copyright);
- the ideas are organised according to simple scientific principles;
- the overall architecture is constrained by a scientific method;
- the vocabulary used is specific to the technical nature of the discipline.

136. **Jurisprudence.** Thus, the Court of Appeal of Riom, in a judgement of 11 January 2006[42], refused copyright protection to a scientific work entitled "*Manuel du préparateur en pharmacie*" (Guidebook for Pharmaceutical Technicians), on the grounds that while it is possible to protect a scientific work under condition of originality, "it is in the nature of scientific progress (…) that updated or new publications, containing the same data and

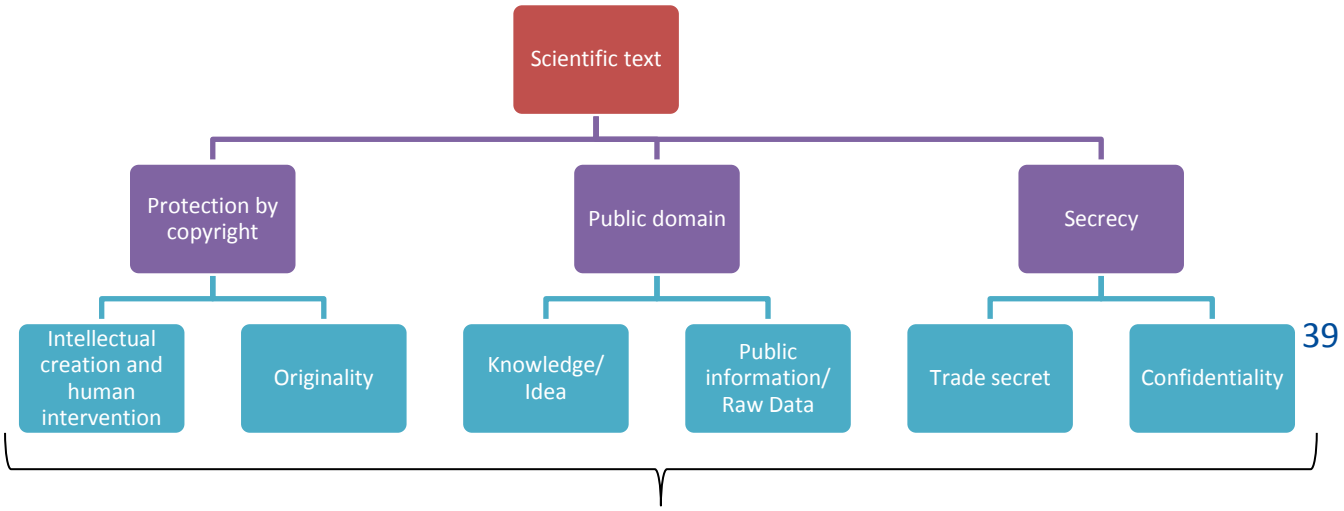
[40] Article entitled "*Quand l'œuvre scientifique est-elle originale ?*" in the Belgian review *Auteurs et Média*, July 2004
[41] Jcl civil annexe Fasc 1135 n°76 Œuvres scientifiques
[42] CA Riom 11-1-2006 Legrand v. Société Tec & Doc

having the same purpose, should appear and adapt the presentation of scientific or clinical knowledge and information that is already known and established".

137. However, while scientific works may be protected as an expression of human thought, they are not if they set out technical processes that are themselves not protected, in a commonplace or necessary form[43].

4.2.4 Summary diagram

138. The concept of scientific text from the point of view of copyright can be simplified as follows:



Information for researchers in the form of a User Guide or Good Practice Guide

4.3 The concept of "scientific texts" in the Digital Republic Act

139. Article 30 of the Digital Republic Act uses the expression "scientific texts" as it appears in the Intellectual Property Code and adds three conditions. As designated in Article 30, scientific text:

- must be the result of research;
- the research in question must be financed at least 50% by public funds;
- must be published in a journal produced at least once a year.

4.3.1 Research condition

140. Article 30 of the Act, consolidated in Article L.533-4 of the Research Code, focuses on scientific texts resulting from "research activity".

[43] TGI Paris, 30-4-1980, RIDA, Oct. 1980.

141. **No legal definition.** Although the Research Code governs the overall organisation of research, it does not define the term "research activity", or even the concept of research itself.

142. It is therefore necessary to consider the implicit meaning of the word “research”, which is used frequently in the Code.

143. The Larousse dictionary defines "research" as:
- the action of seeking to discover something, to acquire new knowledge;
- a combination of studies and work carried out methodically by a specialist with the goal of advancing knowledge;
- all activities pursued by researchers.

144. In the broad sense and by taking an overall view, research can be seen as operations aimed at "increasing knowledge". It seems impossible to dissociate this first level of meaning as used in the Code from operations to "exploit the findings" and thus take advantage of scientific progress and the "dissemination of scientific information" to both professionals and the public, inside and outside the educational context, who are consumers of science as knowledge.

145. **Areas.** In addition, in common practice, the areas covered by the concept of research activity seem to include all scientific fields, including the physical sciences, mathematics, the chemical sciences, the life sciences, the engineering sciences, the human and social sciences, and new information and communication technologies.

146. **Actors.** Researchers are the central actors in research, which is a major aspect of their profession. Depending on the area in which they work and the techniques specific to their speciality, they can practice a very diverse range of activities: define research subjects, develop protocols, perform experiments, or analyse and interpret the results.

147. **Field of application.** The absence of a definition of the term "research activities" in the Act means that there is no clear scope for the application of the provisions in Article 30. If this concept could be accepted in a broad sense it could be used to encompass a large part of the activity of researchers likely to give rise to scientific text.

4.3.2 Financing condition

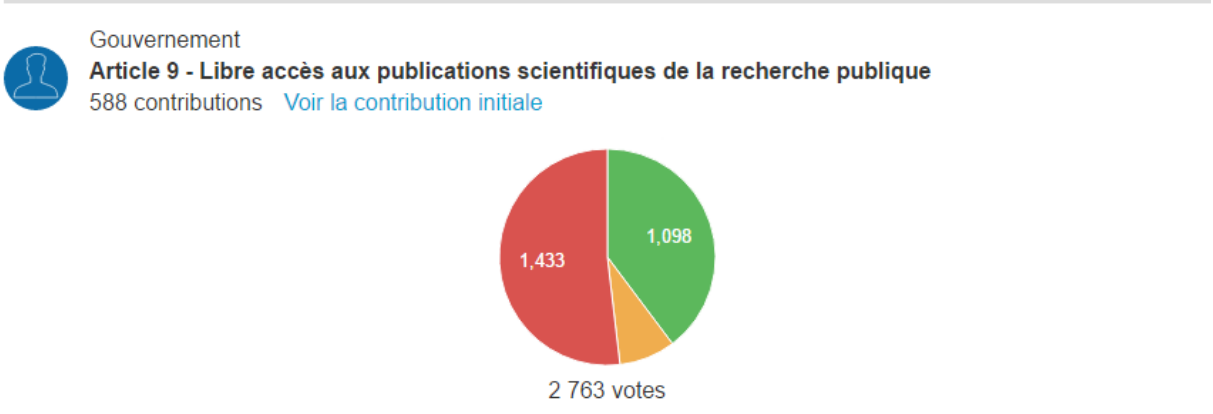
148. The Digital Republic Act concerns scientific text resulting from research activity financed at least 50% by public funds. Only these texts may benefit from the associated legal regime concerning the right to secondary exploitation (see Section 6.2 "Analysis of the relationship platform and scientific texts").

149. **Impact assessment.** On this subject, the impact assessment carried out in December 2015 for the Digital Republic Act specified:

- "By choosing a threshold of 50% as the proportion of public financing for research activities to be covered by the proposed measure, the Government has preferred a simple and quantifiable criterion that addresses the need to clearly make a distinction with the activities that are mainly privately financed, for which this Act is not intended. This criterion can easily be inserted (and therefore assessed) in agreements signed between public research bodies and companies. This is also the approach chosen by Germany and Italy, the main countries to have legislated on open access. Financing is calculated on the basis of a "Full Cost" analysis, which in particular takes into account the payroll costs associated with the research work."

150. **Outstanding issues.** There nonetheless remain certain issues concerning the scope of the term "research activity financed at least 50%" by grants from the State, local authorities or public institutions, grants from national funding agencies or funds from the European Union, because of the multiple potential sources of financing for research activities.

151. During the public consultation, some contributors had already submitted comments warning against the lack of clarity in the Act on funding issues.



Reactions concerning Article 9 – Free access to scientific publications of public research

44

("Notion of 50% financing unclear.")

152. Although the term "public financing" in the initial draft has been replaced by a list designating the public authorities responsible for granting funding, no system has been established to determine whether financing exceeds the threshold laid down in the Act.

153. For the moment, the wording specifies that the financing of one-off projects, particularly those receiving support from the National Research Agency (ANR), from a Labex or from the Horizon 2020 programme, falls within the scope of application of the Article.

154. However, it is also necessary to examine the case of scientific texts by researchers in a framework other than that of a specific project, which could be designated as routine activity for researchers[45].

155. Researchers are paid by the State for their research activity. Since this is clearly "public financing", should researchers' salaries be taken into account for calculating "research activity financed at least 50%"? 42

156. Furthermore, does work by researchers paid under the CIFRE scheme (for industrial training through research in France) benefit from the application of the Act? And what about research resulting from partnership contracts or joint public-private laboratories?

157. Since the objective is to achieve open access to publications, the Act should be interpreted broadly, to allow authors considerable freedom in the secondary exploitation of publications and thus facilitate a genuine sharing of knowledge.

158. In reality, the Act cannot currently be used to determine with certainty what types of research must be considered as financed from public funds.

4.3.3 Publication condition

159. An author cannot benefit from secondary exploitation of scientific text if the article has not been published "*in a journal produced at least once a year*".

[44] http://www.republique-numerique.fr/projects/projet-de-loinumerique/consultation/consultation/opinions/section-2-travaux-de-recherche-et-de-statistique/article-9-acces-aux-travaux-de-la-recherche-financee-par-des-fonds-publics
[45] https://scinfolex.com/2016/10/31/open-access-quelles-incidences-de-la-loi-republique-numerique/

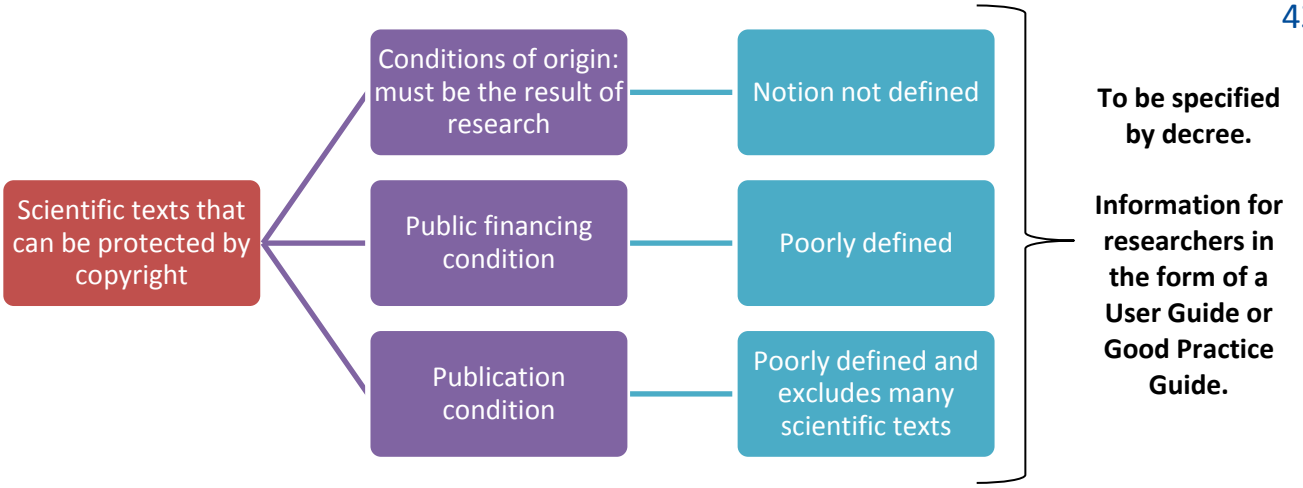
160. The notion of publication appears to cover articles, communications, reports, talks and comments published in a journal or magazine appearing at least annually.

161. These are scientific texts, so the problem is to determine what kind of work satisfies this condition, which means that, at first sight, one may exclude articles appearing in the general interest press. The question of what constitutes “extension” or outreach work could be raised to determine what does and does not belong to the category of scientific texts.

162. Regarding the frequency of publication, the wording chosen by the Act excludes both monographs and contributions to collective works.

163. It is therefore essential to examine the type of publication in which scientific text appears in order to determine whether it can undergo secondary exploitation.

4.3.4 Summary diagram



5. Research data

5.1 Systemic analysis of the concept of research data

5.1.1 Analytical table

164. The systemic analysis of this term can be summarised as follows:

	Digital Republic Act, No 2016-1321	Research Code	Intellectual Property Code	Code governing relationships between the public and the administration	Education Code	Consumer Code	Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access	Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy	CNRS Founding Decree No. 82-993 of 24 November 1982	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001
Quantitative analysis	The term "research data" is used twice The term "scientific data" is used once	The term "research data" is used once The term “scientific data” is used once (Consolidation of the provisions of the DRA)	The term "research data" is used once (Consolidation of the provisions of the DRA)	/	The term "scientific data" is used once	/	/	/	The term "research data" is used twice	/
Qualitative analysis	Research data and the financing conditions Data associated with a publication Research data resulting from a TDM activity	Research data and the financing conditions Data associated with a publication	Research data resulting from a TDM activity	/	“basic knowledge and the elements of a general culture including scientific and technical data"	/	/	/	Access to and dissemination of research work and data	/
Lexicographic analysis	Article 38 Definition[46]	/	Article L 122-5 Definition[47]	/	/	/	/	/	/	/

[46] Files produced at the conclusion of the research activities for which they were produced; these files constitute research data
[47] Identical to Note 3

	Digital Republic Act, No 2016-1321	Research Code	Intellectual Property Code	Code governing relationships between the public and the administration	Education Code	Consumer Code	Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access	Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy	CNRS Founding Decree No. 82-993 of 24 November 1982	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001
Semantic analysis	Articles 30 and 38 Intellectual Property Code Research Code	Article L533-4 Consolidation of Article 30 of the DRA TITLE III: Provisions concerning research institutions and organisations and their personnel Chapter III: The exploitation of the results of research by research institutions and organisations Article L112-1 TITLE I: Guidelines for research and technological development Institutional resources for public research. Chapter II: The goals and institutional resources for public research.	Article L122-5 Consolidation of Article 38 of the DRA TITLE II: Authors' rights Chapter II: Economic rights	/	Article L.121-4 TITLE II: The objectives and tasks of the public education service	/	/	/	Article 2: The missions of the CNRS and definitions of the means of the CNRS for carrying out its missions	45 /

5.1.2 Summary

165. The digital transition is marked by an explosion in the quantity of data that are available and accessible.

166. The methods used by researchers have changed drastically in recent years because of the development of new technologies and the increasing efficiency of scientific tools including sensors, telescopes, simulation processes, probes and digital measurement instruments. These new capabilities have resulted in the production of increasing quantities of data, mostly digital, which are subsequently exploited for research purposes.

167. The Digital Republic Act is designed to promote free access to these data when they are derived in part from public funding. It is necessary to examine the terms of the Act to determine its scope as applied to these data and whether it is possible to produce a definition.

5.2 The concept of "research data" before the Digital Republic Act: a concept derived from practice

5.2.1 Multiple expressions

168. The legal provisions, including those in the Digital Republic Act, use several expressions to qualify data resulting from the work of researchers, upstream and downstream:

- research data;
- scientific and technical data;
- data resulting from research activity;
- data included in or associated with scientific texts.

169. **Research Code.** The French Research Code defines the following, among other missions of public research (Article L.112-1 of the Research Code):

- "sharing and disseminating scientific knowledge";
- "open access to scientific data".

170. **Digital Republic Act.** Articles 30 and 38 of the Digital Republic Act use the terms:

- data resulting from research (Article 30 II);
- research data (Art. 30 III and Art. 38 1°);
- data included in or associated with scientific texts (Art 38 1° and 2°).

171. **Education Code.** Article L.121-4 of the Education Code states that the objective and mission of the state education system is as follows: "the purpose of school and university courses is to provide basic knowledge and the elements of general culture including scientific and technical data, to prepare [students] to acquire qualifications and to contribute to its development and adaptation throughout working life."

172. **CNRS founding decree.** Lastly, as one of its missions, CNRS must:

- develop scientific information and access to research work and data, preferably in French;
- produce and disseminate scientific documentation and publish research work and data.

173. The concept of "scientific and technical data" is more meaningful in technical than in legal terms, and describes the origin of the data, namely that it derives from scientific or technical work.

174. The expression "research data" also covers this idea, with the data deriving from research work. Moreover, "research data" are necessarily "data resulting from research activity". The first, more generic, term exactly covers the second. It would be preferable to simplify the expression while keeping the same meaning.

175. The three expressions "scientific data", "research data" and "data derived from research" seem to cover the same phenomenon.

176. The concept of "data included in or associated with scientific texts" on the other hand is much more restrictive and only refers to data relating to scientific texts.

5.2.2 No legal definition

177. The term "research data" is not defined in any legal or regulatory text.

178. In 2007, the Organisation for Economic Cooperation and Development (OECD)[48] examined the question of access to data from research financed by public funds. For this purpose, it came up with a definition that can be used to determine what is covered and excluded by this notion.

OECD PRINCIPLES AND GUIDELINES FOR ACCESS TO RESEARCH DATA FROM PUBLIC FUNDING – OECD, 2007

In the context of these Principles and Guidelines, "*research data*" are defined as factual records (numerical scores, textual records, images and sounds), used as primary

[48] http://www.oecd.org/sti/sci-tech/38500813.pdf

sources for scientific research, and that are commonly accepted in the scientific community as necessary to validate research findings. A research data set constitutes a systematic, partial representation of the subject being investigated.

This term does not cover the following: laboratory notebooks, preliminary analyses, and drafts of scientific papers, plans for future research, peer reviews, or personal communications with colleagues or physical objects (e.g. laboratory samples, strains of bacteria and test animals such as mice). Access to all of these products or outcomes of research is governed by different considerations than those dealt with here.

These Principles and Guidelines are principally aimed at research data in digital, computer-readable format. It is indeed in this format that the greatest potential lies for improvements in the efficient distribution of data and their application to research because the marginal costs of transmitting data through the Internet are close to zero. These Principles and Guidelines could also apply to analogue research data in situations where the marginal costs of giving access to such data can be kept reasonably low.

179. The Royal Society, in London, whose French equivalent is the Academy of Sciences, has also developed a definition of data in the field of science, available in the report "Science as an Open Enterprise" published in June 2012.[49]

SCIENCE AS AN OPEN ENTERPRISE – JUNE 2012

Data can be considered as: Qualitative or quantitative statements or numbers that are (or assumed to be) factual. Data may be raw or primary data (e.g. direct from measurement), or derivative of primary data, but are not yet the product of analysis or interpretation other than calculation. “They are therefore recordings of ‘given facts’, in digital, visual or descriptive form, on [which] an argument, a theory, a hypothesis or any other product of research is based. These data can be raw, cleaned or processed, and may be recorded in any format and on any media.”

180. The Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020 also provide a definition.

Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020

The expression “research data” refers to information, in particular facts or numbers, collected to be examined and considered as a basis for reasoning, discussion, or

[49] “Qualitative or quantitative statements or numbers that are (or assumed to be) factual. Data may be raw or primary data (e.g. direct from measurement), or derivative of primary data, but are not yet the product of analysis or interpretation other than calculation.” The Royal Society, Science as an open enterprise: summary report, The Royal Society, June 2012, p. 9.

calculation. In a research context, examples of data include statistics, results of experiments, measurements, observations resulting from fieldwork, survey results, interview recordings and images.

The focus is on research data [...] available in digital form.

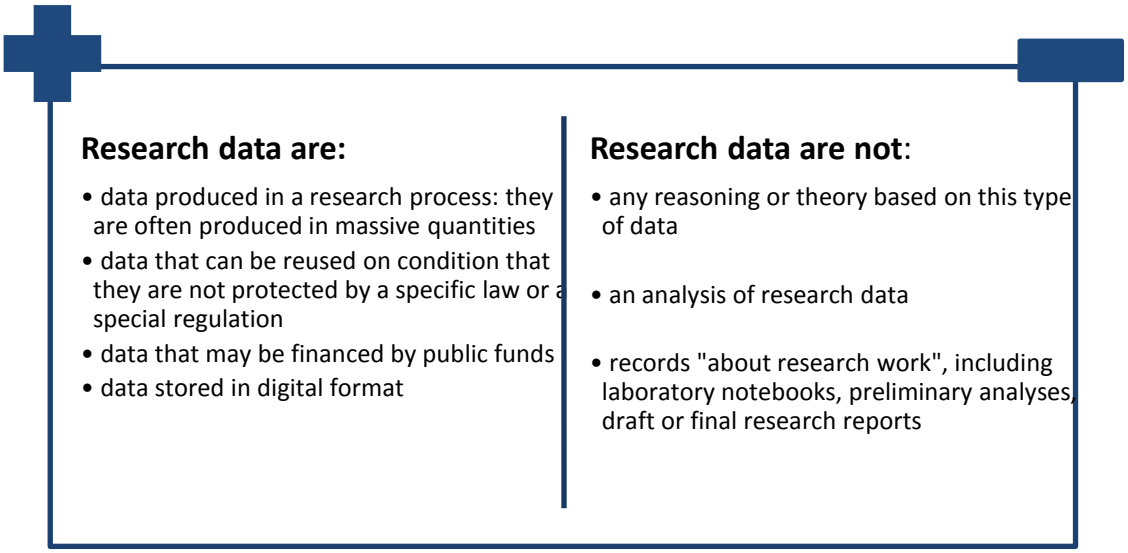
Users can normally access, mine, exploit, reproduce and disseminate openly accessible research data free of charge.

181. Page 49 of the impact assessment carried out in December 2015 proposes a definition of the concept of data in the following terms:

- "The following definition could be proposed: research data are all the factual data resulting from observations, surveys, corpora, archives, experiments or computational analyses, recorded in any format and on any media, in a raw form or after having been processed or combined, and on which the researcher's reasoning is based and which are deemed to be necessary for the validation of the results of the research."

49

182. On the basis of these definitions, a typology of research data can be established:



183. Data often have a longer life than the research project that created them. Researchers may continue to work on data after funding has ceased, follow-up projects can analyse or add to data, and data can be reused by other researchers.

184. Data that are well documented, preserved and shared are of inestimable value for the pursuit of scientific inquiry and increase opportunities for learning and innovation.

The lifecycle of research data[50]

5.3 The concept of "research data" in the Digital Republic Act

185. The concept of "research data" is mentioned twice in the Digital Republic Act, in Articles 30 and 38. Article 30 refers to data used in the work of a researcher, while Article 38 concerns both data used in the work of a researcher and data obtained from the automated data mining process: output data or user-generated content.

5.3.1 Research data in Article 30

186. Article 30 II stipulates:

> "II.- Once the data from a research activity financed at least 50% by grants allocated by the State, by regional or local authorities or public institutions, by grants from national funding agencies or by European Union funds, are no longer protected by specific rights, or special regulations, and they have been made public by the researcher, the research establishment or organisation, they can be freely reused."

187. **Funding.** A condition concerning the source of funding for the research is associated with the concept of data. Only data "from a research activity financed at least 50% by grants allocated by the State, by regional or local authorities or public institutions,

[50] UK Data Archive, "Research Data Lifecycle", http://data-archive.ac.uk/create-manage/life-cycle

by grants from national funding agencies or by European Union funds" are covered by Article 30 II and the principle of free re-use (see 6.1 Analysis of the relationship between "platform and research data").

188. This financing principle is the same as that for the scientific texts whose contours were analysed in Point 2.2.2 "Scientific texts in the Digital Republic Act" and 2.2.2.2 "Financing condition").

5.3.2 Research data in Article 38

189. **Data used for text and data mining.** The following may be used for text and data mining (TDM):

- texts;
- data included in or associated with scientific texts.

190. The concept of "text" has no clear legal definition. The French National Centre for Text and Lexical Resources defines this concept as a "series of linguistic signs constituting any written work" or even as "anything written by an author"[51]. The scope of this concept is unclear; did Parliament mean to include the concept of scientific texts? 51

191. The concept of data is much broader, covering textual, numerical and graphic data, photographs, video, sound, etc. However, the wording restricts the scope of this concept by linking the provenance of these data to scientific texts. Yet a great deal of data can be made available to researchers that have not necessarily appeared in a "scientific text", and large quantities of data other than text are available on the Internet.

192. A restrictive reading of this provision does not allow researchers to explore the mass of data and texts available, and necessary for them in their work.

193. **Data resulting from TDM.** Article 38 also describes as research data the files produced by data mining tools.

194. These output data, otherwise known as user-generated content, are considered to be research data, for the purposes of the legal regime provided for in Article 30 on free re-use (see Section 6.1 "Analysis of the relationship between platforms and research data").

5.3.3 CNRS's mission to provide access to research data

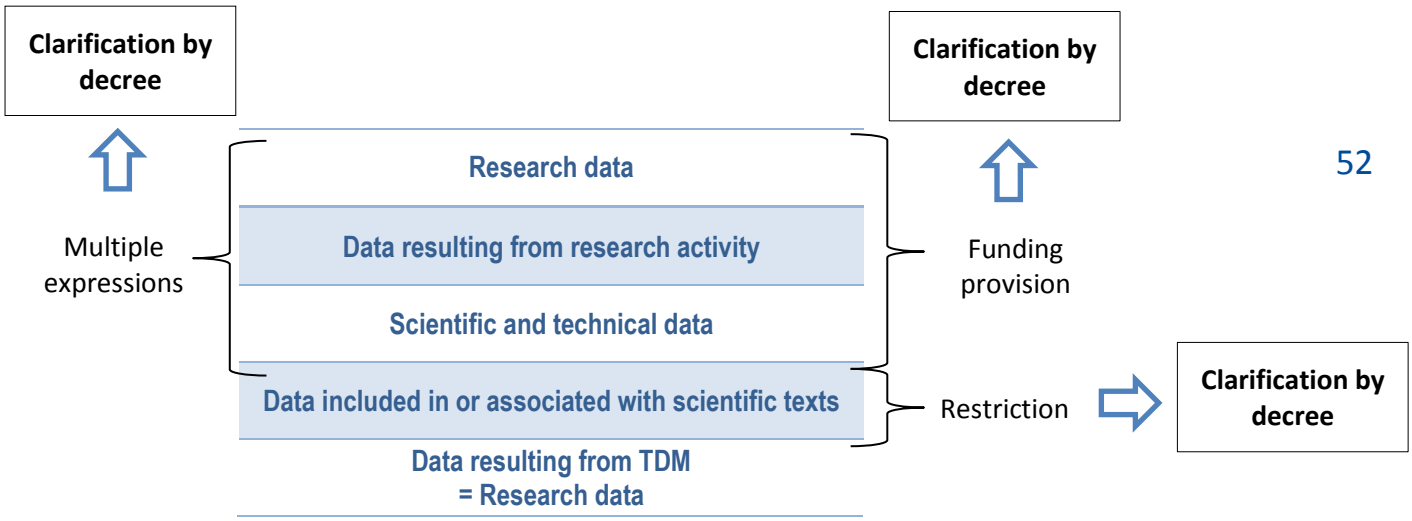
195. Decree No. 82-993 of 24 November 1982 on the organisation of the French National Centre for Scientific Research expressly mentions that a particular mission of the institution is to:

[51] http://www.cnrtl.fr/lexicographie/texte

- “develop scientific information and access to research work and data, preferably in French”;
- “produce and disseminate scientific documentation and publish research work and data, particularly by making documentary platforms available to the scientific and academic community and contributing to their enhancement.”

196. These two missions and the accompanying resources (with the exception of "to develop scientific information") were inserted by Decree No. 2015-1151 of 16 September 2015 amending the Decree of 1982, thus placing the notion of research data at the heart of the scientific activity of CNRS.

5.3.4 Summary diagram



6. Analysis of the relationships between the pivotal concepts

These three concepts have been used in France to create a mechanism combining open science, analysis of relationships and preparatory work with an impact assessment.

Open science = platform + data + texts

197. At this stage of the analysis, an in-depth study of the existing interactions between the three pivotal concepts analysed separately above is required. When these concepts are taken in pairs, they form a new self-contained legal concept. As expressed in the Digital Republic Act, this system can come into conflict with existing legal regimes.

198. Below each of the following relationships is analysed:

- platform and research data (3.1);
- platform and scientific texts (3.2);
- scientific texts and research data (3.3);
- platform, research data and scientific texts (3.4).

6.1 Analysis of the relationship between platform and research data: Open Data

199. The system set up by Article 30 establishes the principle of the free reuse of research data. This opening up of access to research data, although subject to certain conditions, is part of a broader movement toward open data, including the opening up of public data, a tendency that, since the Valter Act of December 2015, has been fully applicable to "teaching and research establishments and institutions".

200. The concept of open data is defined in the Official Journal of the French Republic as *"Data that an organisation makes available to all in the form of digital files in order to permit their reuse"*[52].

201. To determine whether or not the general principles of the opening up of public data apply to the opening up of research data, it is worth first comparing the objectives of open data with the objectives of opening up research data, and then to compare the general legal framework of open data with the specific framework of the opening up of research data.

6.1.1 Comparing the advantages of open data with the opening up of research data

202. **A global movement towards the opening up of public data.** The movement to open up access to data, otherwise known as "Open Data", first emerged in 1957-58 in the United States with the creation of the *World Data Center System*. The movement acquired legal status in 1966 with the passing of the *Freedom of Information Act*[53]. Then, in 2007, an amendment to this Act by the *Open Government Act* made the concepts of the transparency, governance and opening up of public data central to the work of the American government.

203. This movement was echoed in Europe, particularly in the public sector. In the United Kingdom, a project similar to the one conducted in the United States was officially launched in January 2010[54]. In France, the release of public-sector data has attracted considerable attention since 2009. The Etalab Mission was created in 2011 under the

[52] https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000028890784
[53] http://www.foia.gov/
[54] http://data.gov.uk/project

authority of the Prime Minister. Its brief is to oversee application of the policy in favour of openness and data sharing.

204. In this framework, Etalab administers the single interministerial webportal at data.gouv.fr, which is intended to collect and to make freely available all public information concerning the State, its public institutions, and the various local authorities and entities responsible, under public or private law, for a public service mission.

205. **The prospects held out by the opening up of public data.** The three main advantages claimed for open data are as follows:

- **Greater democracy**: easier access to public information of all kinds, the development of a more open, transparent and participatory democracy;
- **The modernisation** of administration services, public authorities and a more democratic approach to public action via the development of a new form of dialogue between the State and its citizens;
- **A more efficient economy** via the development of the digital economy and innovation, the creation of new services designed to overlay, pool or cross-link data, or the development of software applications.

206. **Opening up research data.** The movement in favour of sharing research data was initiated by the researchers themselves, who created their own data repositories for their respective disciplines. French examples include:

- Huma-Num, a “very large research infrastructure” in the human and social sciences;
- the Strasbourg Astronomical Data Centre (CDS), which hosts SIMBAD, the world astronomical reference database for the identification of astronomical objects;
- the PREDON project for data preservation.

207. The need to open up research data was stated in a joint declaration by G8 science ministers on 12 June 2013. They stated that international scientific collaboration is a new global challenge requiring the modification and improvement of research infrastructure in order to make published, peer-reviewed scientific data globally accessible. They proposed the following framework:

- a global research infrastructure;
- **an Open Data approach to scientific research;**
- broader access to the results of scientific research.

208. **The prospects held out by the opening up of research data.** The opening up of research data holds out the following five prospects:

- increasing the rate of scientific discoveries and innovations and a faster return on investment in research and development;
- fostering scientific cooperation and opportunities for interdisciplinary research;
- avoiding the duplication of experiments, encouraging the reuse of data and minimising the risk of data being lost;
- guaranteeing the integrity and reproducibility of research (better quality results, transparency concerning methodologies);
- free access to a mass of data, opening new fields of study that whoever produced the data had not even thought of (savings in time and resources)[55].

209. This observation and this need for openness and sharing of research data were reaffirmed by the CNRS Ethics Committee in its Opinion of 7 May 2015 on "The ethical issues of scientific data sharing". In particular, the Ethics Committee considers:

- "The movement in favour of data sharing (especially scientific data) must take into account the most recent government policies concerning open data, which for a few years now have aimed to facilitate the wide dissemination of data acquired through public financing, with various objectives and legal and ethical constraints."

210. **A comparison of the challenges faced**. The challenges facing open data on the one hand and research data on the other are very similar, the first concerning relations between government and citizens, the second concerning relations between the scientific communities but also the impact on society as a whole. These issues can be compared with those raised by platforms (Digital Republic Act: the consecration of a status for platforms).

The potential benefits of open data	The potential benefits of opening up research data	The potential benefits of platforms (as understood in the DRA)
Democracy/transparency issues	The prospects for scientific transparency and the quality of results The issues regarding the control and more rational use of public funds	Transparency/fairness/good practice
The outlook in terms of modernisation/dialogue	The prospects for scientific collaboration and transdisciplinary research	Sharing/collaboration/intermediation
The potential economic impact of innovation	The potential for scientific discovery and faster innovation	Increased quantity and speed of trade

[55] http://coop-ist.cirad.fr/gestion-de-l-information/gestion-des-donnees-de-la-recherche/rendre-publics-ses-jeux-de-donnees/2-qu-est-ce-que-l-ouverture-des-donnees-open-data

The potential benefits of open data are similar to those of opening up research data

The prospects held out by platforms, those held out by open data and those held out by opening up research data are all similar

6.1.2 The general regime governing open data versus the specific regime governing the opening up of research data

6.1.2.1 The general regime governing open data

211. **Legal framework.** Book III of the Code governing relations between the public and the administration, which came into force on 1 January 2016, is subtitled “Access to administrative documents and the reuse of public information” (Articles L.300-1 to L.327-1). These articles particularly consolidate:

- the provisions of the Digital Republic Act, including the creation of a principle that public data should be “open” by default;
- the provisions of Act No. 2015-1779 of 28 December 2015 on the free access to and the terms of reuse of public sector information (known as the Valter Act), which lays down in particular the principle that the reuse of public information should be free, and the withdrawal of the exception covering teaching and research establishments and institutions.
- Order No. 2005-650 of 6 June 2005, amending Act No. 78-753 of 17 July 1978[56] and transposing the European Directive of 17 November 2003[57], which grants special status to "public information";
- Act No. 78-753 of 17 July 1978 on the freedom of access to administrative documents and the reuse of public information.

212. **General principle.** In application of these provisions, any document produced or received, in the context of their public service mission, by the State or local authorities or by other entities under public or private law responsible for such a mission (L.300-2), must be made available to the public by online publication (L.311-1) and freely reusable (L.321-1). When documents are made available in electronic form, an open standard shall be used, such that the documents can be easily reused and exploited by an automated processing system.

213. **The entities concerned.** The public entities required to make public data openly available are the State, local authorities, and other entities under public law or private law, responsible for a public service mission.

[56] Act No. 78-753 of the 17-7-1978 as worded in Orders No. 2005-650 of 6 June 2005 and 2009-483 of 29 April 2009.
[57] Directive 2003/98/EC of 17 November 2003 on the re-use of public sector information.

214. The CADA Act (Commission on Access to Administrative Data) specifies that this Act is also applicable to:

- independent administrative authorities;
- organisations dependent on the state but that are not legal entities, such as the *Conseils des Prud'hommes* (labour dispute conciliation tribunals);
- local authorities and their groupings (inter-municipal cooperation bodies);
- public, national and local institutions regarding documents relating to the exercise of their public service mission.

215. Since the Valter Act of December 2015, the following have been added:

- teaching and research establishments and institutions;
- cultural institutions, agencies or services.

216. **The data concerned.** Any administrative document produced or received by the entities mentioned above (regardless of its date, place of storage, its form and the media on which it is stored) must be accessible to the public. Article L.300-2 gives a list of examples:

- "Included among such documents are records, reports, studies, minutes, statistics, instructions, circulars, ministerial briefing notes and responses, correspondence, opinions, forecasts, source codes and decisions."

217. In addition, Article L.312-1-1 stipulates that the following must also be placed online:

- 3° The databases, updated on a regular basis, that they produce or that they receive and that are not made public in any other way;
- 4° Data, regularly updated, whose publication is of economic, social, health or environmental interest.

218. **Online publication according to an open standard.** The term "open standard" is given a legal definition in Article 4 of the Act of 21 June 2004 for Confidence in the Digital Economy:

- "An open standard is taken to mean any communication, network or exchange protocol and any interoperable data format whose technical specifications are public and with no restriction of access or of implementation."[58]

219. In addition, "the term 'open standard' is enshrined in the *Référentiel Général d'Interopérabilité* (General Guidelines for Interoperability) or RGI, which applies to all

[58] Article 4 of Act No 2004-575 of 21 June 2004 for Confidence in the Digital Economy

public authorities, under the Order of 8 December 2005 and Decree No. 2007-284 of 2 March 2007.[59]

220. The purpose is to guarantee interoperability for both communication processes and electronic data. This therefore means the possibility of communicating without difficulty, regardless of the system used to create, transmit, modify and reuse the data.

221. The General Guidelines for Interoperability consider that an open standard should meet the following definition: "The functional and technical specification of the standard must be complete, public and without any restricted access or implementation. The specification should be available at zero cost (or at least at very low or negligible cost and without any restriction on its reuse, especially in the case of open-source software). It should be maintained by a non-profit-making organisation (standardisation body, forum, consortium, etc.). It should be developed on the basis of a decision-making process that is transparent, open and accessible to all interested parties. A schedule of developments should be published informing interested parties of the content of the subsequent versions. The rights of the standard should be on a rights-free basis and compatible with open-source and proprietary software."[60]

The main open standards[61]

- **Archival: Tar**
- **Audio: Ogg Vorbis (.ogg .oga), FLAC (.flac), Speex (.spx)**
- **Compression: gzip, bzip2, LZMA, 7z**
- **Multimedia container formats: Matroska (.mkv), Ogg (.ogg .ogv .oga .ogx)**
- **Image: PNG (.png), APNG (.png), SVG (.svg), MNG (.mng), OpenDocument Drawing (.odg), Windows bitmap (.bmp)**
- **Spreadsheet: OpenDocument spreadsheet (.ods)**
- **Raw text: ASCII (.txt) or without extension**
- **Formatted text: TeX, AbiWord (.abw), OpenDocument Text (.odt), Hypertext Markup Language (.htm or .html), XHTML (.xhtml), Cascade Style Sheets (.css)**
- **Video: Theora (.ogg .ogv), Dirac**
- **3D: X3D, Blender (.blend)**
- **Biomedical records: European Data Format (.edf)**

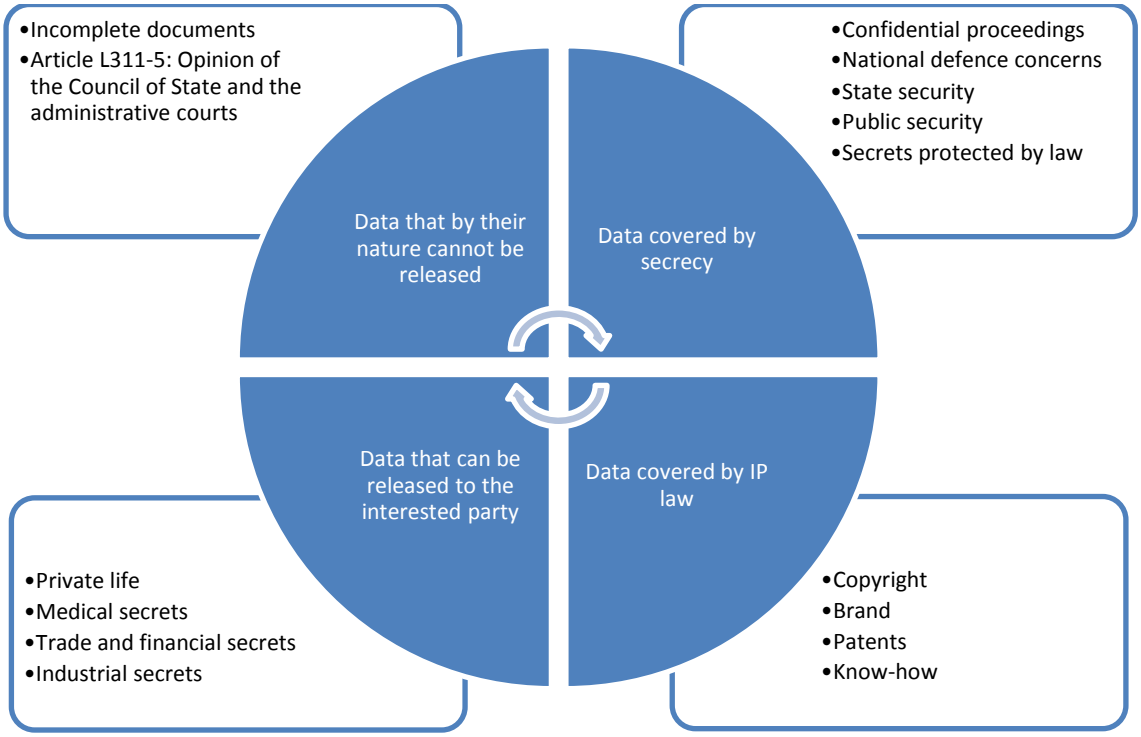
222. **Free reuse.** Article L.321-1 establishes as a general principle the free reuse of data held by the public entities cited, for any purpose whatsoever, including for commercial and private purposes.

223. It sets two conditions for this free reuse:

- the information must not be altered nor the meaning distorted;
- the source must be cited, with the date of the most recent update.

[59] White Paper for a Digital Republic – Impact Assessment – 9 December 2015
[60] General Guidelines for Interoperability – Version 2.0 – December 2015
[61] http://icp.ge.ch/sem/gelibredu/outils-libres/standards-ouverts

224. **Exceptions and Exemptions.** Some data are excluded from this obligation concerning availability and the right of reuse.



225. For data including personal information, Article L.322-2 stipulates that "the reuse of public information containing personal data is subject to the provisions of Act No. 78-17 of 6 January 1978 on informatics, digital files and freedom of access."

226. When administrative documents contain personal data, they may only be made public after anonymisation.

227. **Contractual framework.** When the use of public data is free of charge, it may, optionally, be subject to a user licence.

228. When reuse free of charge is subject to licence, Article 11 of the Digital Republic Act (L.323-2 of the Code for Relations between the Public and the Administration, or CRPA) provides that:

- "This licence is chosen from among those appearing on a list fixed by decree, which is revised every five years, after consultation with the local authorities and their groupings. If a government department wishes to use a licence not included on this list, it must be approved beforehand by the State, in accordance with the conditions laid down by decree."

229. The decree listing these licences is not included in this systemic analysis as published; the Etalab licence will no doubt be included in this list.

230. If reuse is subject to the payment of royalties, the licence must be drafted by the government department with due respect for the conditions laid down by Articles L.324-1 *et seq.* of the CRPA.

6.1.2.2 Specific regime covering the opening up of research data

231. **Legal framework.** The principle behind the opening up of research data is introduced by:

- Act No. 2015-1779 of 28 December 2015 on the free access to and the terms of reuse of public sector information (known as the Valter Act), which withdraws the exception covering teaching and research establishments and institutions;
- the combined provisions of the Digital Republic Act, creating a principle that public data should be "open" by default, and Articles 30 and 38 which establish the principle of the free use of research data.

232. **The entities concerned.** Teaching and research institutions are subject to the general principles of the opening up of public data as presented above. Therefore, any administrative document produced or received by a research institution such as CNRS must be made available to the public and published online in an open format.

233. **The data concerned.** What is the scope of these data subject to the principle of openness? Are research data covered by the open-data principle?

234. Accordingly, research and teaching institutions must implement nomenclature systems to identify what, in their own fields, should be regarded as an administrative document that is communicable, publishable and reusable.

235. However, this does not mean that all documents from research institutions can be communicated and reused with total freedom. To begin with, all unfinished documents, which do not fall within the framework of communicable documents, shall be excluded. Thus experimental work and its associated data, if not contained in a completed document, shall not be communicable.

236. Data that would be likely to affect industrial and commercial secrecy if disclosed may only be communicated to the person concerned under Article L.311-6 of the CRPA. Research can lead to the filing of a patent application or to the creation of literary and artistic copyright, rendering the document non-communicable to the public.

237. Concerning reuse, only public information may be reused, while information for which third parties hold intellectual property rights are excluded. According to some

assumptions, researchers may be considered as third parties with regard to their administrations, the documents they produce and that are covered by intellectual property rights, including their "own" scientific texts and databases.

238. **Research data.** The opening up of research data under Article 30 is subject to two conditions:

- that the researcher, the establishment or the research organisation voluntarily decides to make them public;
- that the data are not protected by a specific law or a special regulation: this condition refers to the application of exceptions and exemptions to the general regime, i.e. data protected by an intellectual property right, personal data, data relating to public security, and data protected by an Act.

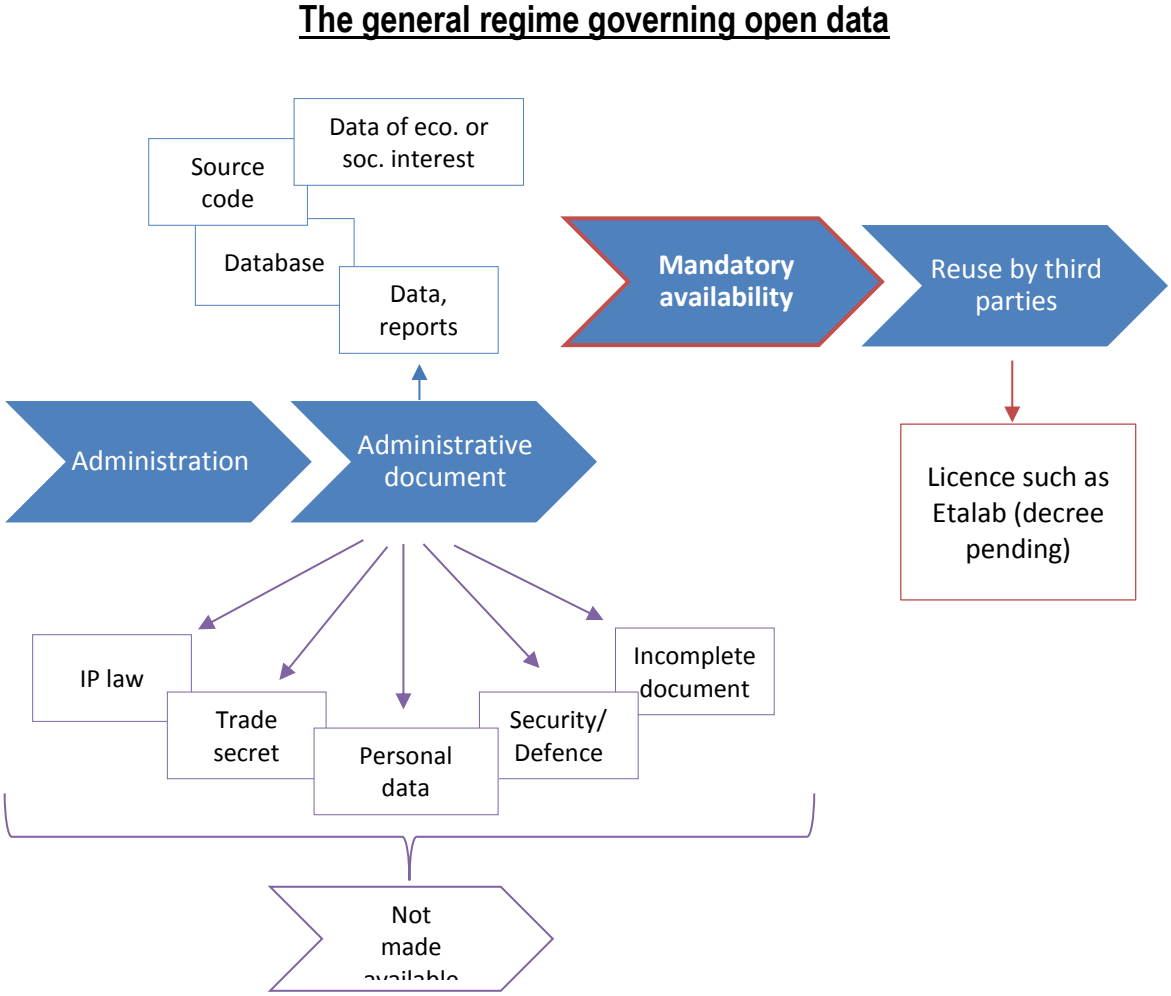
239. **Contractual framework.** Article 30 states that the reuse of research data is free; it does not impose any additional conditions for reuse and makes no reference to any obligation concerning user licences. Does the Act "create a new status, 'free in its native state', without the need to resort to the use of licences to implement this freedom"?[62].

240. It seems rather that parliament decided to fall back on the general law governing open data and the faculty of whoever produced the data to subject its use to a free licence. In any case, licences such as Etalab or ODbL are unsuitable for research data.

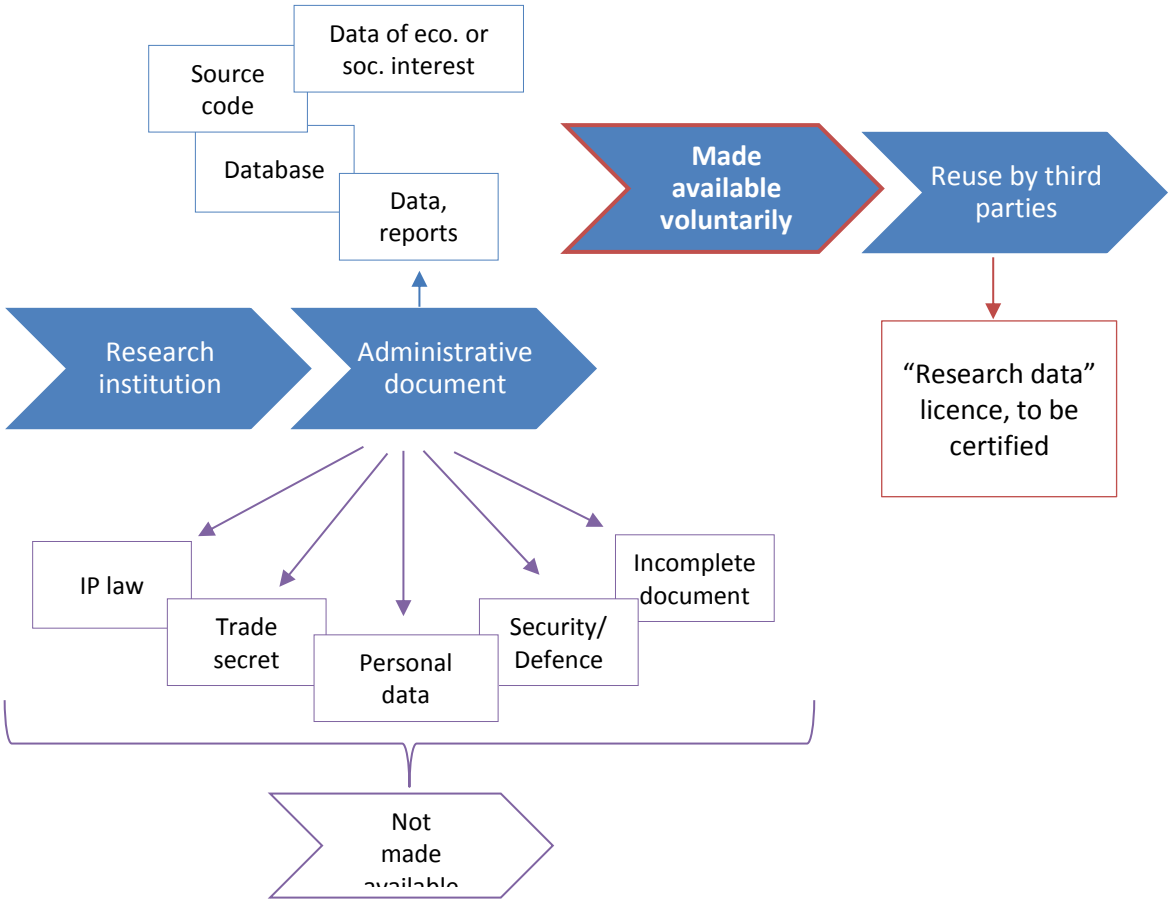
241. It would be preferable for public research to acquire a free licence for the reuse of research data, which will need to be certified by the State in application of the above-mentioned Article 11 of the Digital Republic Act.

[62] https://scinfolex.com/2016/11/03/quel-statut-pour-les-donnees-de-la-recherche-apres-la-loi-numerique

6.1.2.3 Summary diagram



Specific regime covering the opening up of research data



The principal difference between the general framework for open data and the specific framework for the opening up of research data is that the general framework makes availability mandatory while the specific framework leaves it voluntary.

242. Therefore, in order to ensure that this provision of research data is effective, it is necessary to:

- define a nomenclature system contained in **Application and Good Practice Guidelines** to make clear to researchers:
    - what must not be placed online because it is covered by a specific law or a special regulation;
    - what should not knowingly be placed online by the researcher for reasons such as exploitation, filing for patents, etc.;
    - what must be placed online so that it can be reused by third parties;
- define the ethical rules for making data available, in an **ethics charter**;

- define an **internal procedure for making data available**;
- **draft a user licence for research data, and have it certified.**

243. Furthermore, given the difficulty of circumscribing what is meant by research data, in its Opinion of 7 May 2015 the CNRS Ethics Committee advocates including in Etalab, alongside the network of experts, “the required ethical skills for defining data of interest to research".

6.2 Analysis of the relationship between platform and scientific texts: Open Access

244. The objective pursued by the creation of a right to open access and stated in the impact assessment (Page 50) of the Digital Republic Act is:

- “to achieve a better return on public investment in scientific research, by enabling researchers whose work is mainly financed by public funds to make their work rapidly available to the entire scientific community. Alongside the possibility for researchers to make the fruit of their work available is the new possibility for their colleagues to freely access the latest scientific findings in their fields of activity."

6.2.1 The creation of a right of secondary exploitation

245. The Digital Republic Act provides (Article 30, I) a right to the free provision of scientific publications, understood to mean the final version of the manuscript accepted for publication, after an embargo period (6 months for Science, Technology and Medicine and 12 months for the Human and Social Sciences), regardless of the terms of the contract between the researcher and the publisher (assignment of rights clause, duration, exclusivity).

246. These provisions are public policy and any clause to the contrary is deemed null and void (Article 30, IV).

6.2.1.1 The right to make work available: a prerogative of the author

247. Under the Digital Republic Act, researchers “have the right to make their published material available". The wording does not oblige researchers to use their right to secondary exploitation. It is a right that authors may choose to invoke or not.

248. This provision stems from a desire to achieve a balance between free access to knowledge and the rights of researchers concerning their writings.

249. Nevertheless, there are already systems that require researchers to make their publications available, such as the European Horizon 2020 programme, which makes this a necessary counterpart to research funding.[63]

[63] Guidelines on the Implementation of Open Access to Scientific Publications and Research Data [...] under Horizon 2020

250. Since 2010, the French Research Institute for Exploitation of the Sea (IFREMER) has made it mandatory for its researchers to deposit their publications, and also their grey literature – reports, records, etc. – in the institute's own archive, Archimer. The National Institute for Research in Computer Science and Control (INRIA) has imposed a similar obligation, requiring its researchers to deposit their publications in the HAL-INRIA archive since 2013. Other research organisations, such as CNRS and the National Institute of Health and Medical Research (INSERM), have chosen to offer incentives to ensure free access to the publications of their researchers.[64]

+ The rules and good practices for the provision of scientific texts should be specified in **Application Guidelines** drawn up for researchers.

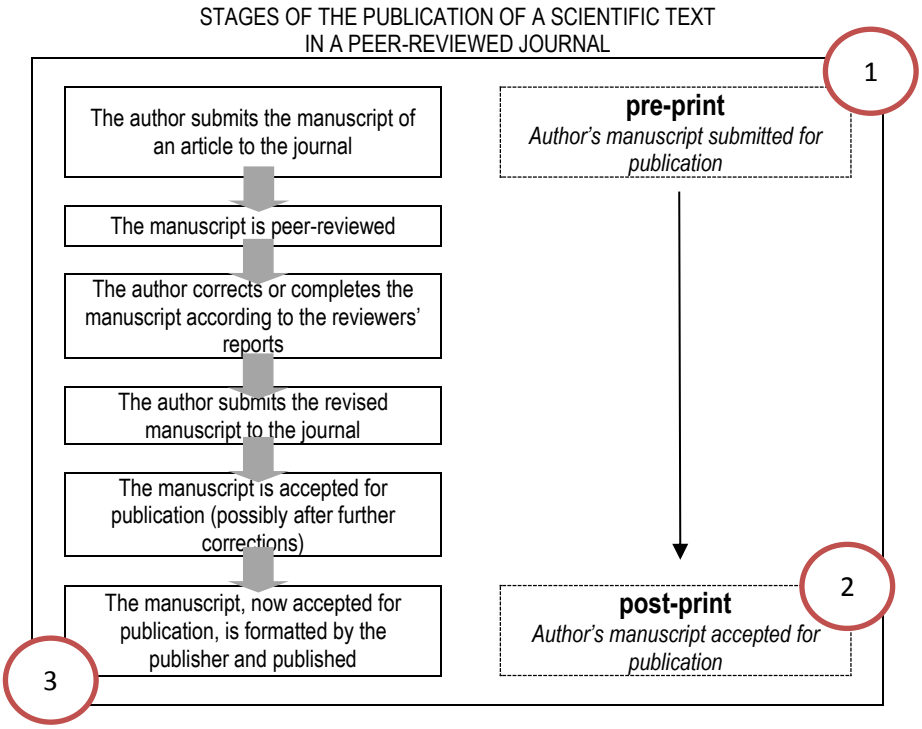
6.2.1.2 Which version of a scientific text is covered by a right of secondary exploitation?

251. Under Article 30 of the Digital Republic Act, the "final version of the manuscript accepted for publication" may be made available by the researcher in the framework of this right of secondary exploitation. This concept, in particular in the light of the usual stages of publication in the field of scientific research, is not entirely clear.

252. Scientific articles go through three stages:

1- pre-print, which corresponds to the submission of the manuscript to the journal;
2- post-print, which corresponds to the manuscript after all the corrections requested by the reviewers have been made and validated;
3- the publisher's version, which is the validated article laid out by the publisher (the author's text inserted in the journal's usual format with specific layout and pagination).

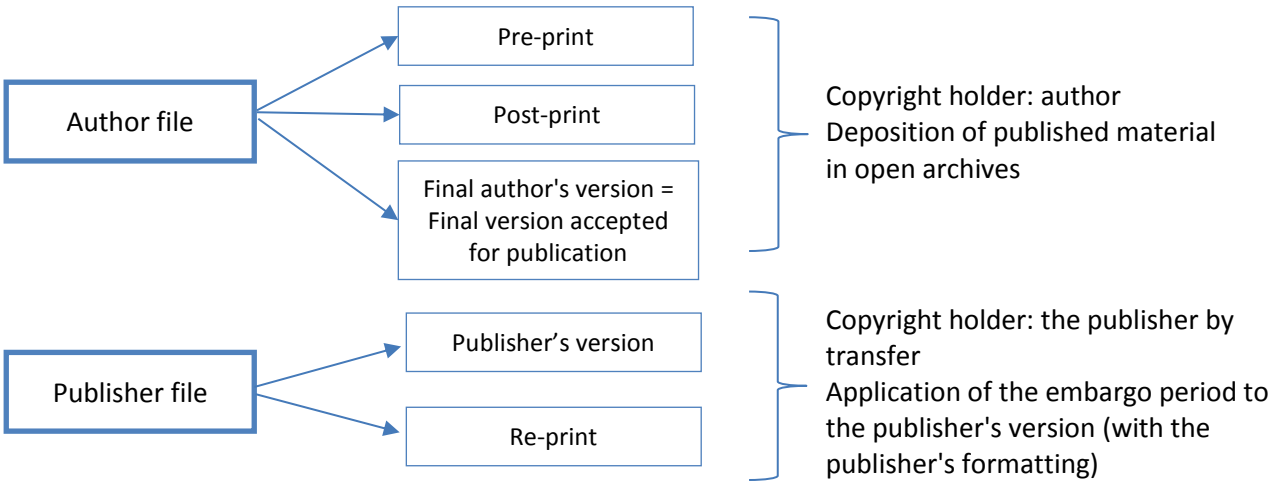
[64] http://www.assemblee-nationale.fr/14/rapports/r3389.asp



253. The concept of "final version of the manuscript accepted for publication" as used in the Digital Republic Act seems to mean the author's last version before publication, and therefore before formatting by the publisher.

254. Now, under the researchers' claim to copyright, the embargo period may only apply to the publisher's version of a scientific text and not to the author's version, even the final version. In other words, the only version subject to an embargo period should be the version amended and published by the publisher.

255. It is therefore necessary to resolve the difference between the concept of "final version", subject to an embargo period as specified in the Act, and the concept corresponding to the actual copyright enjoyed, illustrated in the following diagram:



+ This concept of "final version accepted for publication" covered by a right of secondary exploitation requires clarification by decree.

6.2.1.3 Respect for an embargo period

256. The Digital Republic Act introduces embargo periods of six and twelve months, at the end of which (at the latest) authors of publications may make their texts freely available.

257. The embargo periods laid down by the current Act are the maximum deadlines recommended by the European Commission: "In this case, the Commission will allow an embargo period of a maximum of six months, except for the social sciences and humanities where the maximum will be twelve months (due to publications' longer 'half-life')." (C(2012) 4890)[65]

258. The Digital Republic Act was intended to cover the entire field of science and it therefore seems that all scientific publications should be found in one or other of the two categories "the field of science, technology and medicine" and "the human and social sciences".

259. The question may arise of what embargo period should be applied to a social science text published in a physics journal. Would the intrinsic subject matter of the written text take precedence, or the main subject of the journal in which it is published?

[65] https://ec.europa.eu/research/science-society/document_library/pdf_06/era-communication-towards-better-access-to-scientific-information_en.pdf

260. “The general philosophy behind the Act rather seems to operate by taking into account the vehicle of the text rather than its intrinsic discipline. For a sociologist publishing in a physics journal, the 6-month embargo period applicable to science and technology would be chosen.”[i66]

+ Application Guidelines will be necessary, to establish the rules for calculating embargo periods.

6.2.2 Provisions of public policy

261. Article 30 of the Digital Republic Act stipulates:

- “IV. - The provisions of this Article are public policy and any clause to the contrary is deemed null and void.”

262. Furthermore, Point I of the Article creating this right of secondary exploitation stipulates that it applies "even if exclusive rights have been granted to a publisher".

263. These two provisions nullify the provisions of the Intellectual Property Code concerning publishing contracts, which are nominate contracts in which the author specifically transfers intellectual property rights to the publisher.

264. **Publishing contract.** Via a publishing contract, the author of a scientific text can transfer "under specified conditions to a person referred to as the publisher the right to manufacture or have manufactured a number of copies of the work, it being for the latter to ensure publication and dissemination thereof".

265. This is a nominate contract governed by Articles L.132-1 to L.132-17 of the Intellectual Property Code (CPI), which places major obligations on the publisher, including:

- a duty to publish: in the absence of publication, the contract will be terminated (Article L. 132-17 of the CPI);
- continuous and sustained exploitation: Article L.132-12 of the CPI imposes on the publisher the requirement to ensure the permanent availability of the work, and therefore to make automatic reprints, and to make or have made popular editions;
- accountability: Article L.132-13 specifies that “The publisher shall be required to render accounts.”

[66] https://scinfolex.com/2016/10/31/open-access-quelles-incidences-de-la-loi-republique-numerique/

266. Publishing implies the transfer of copyright to the publisher, and this assignment of rights, for the purpose specified, is what distinguishes publishing contracts from other contracts for the assignment of intellectual property rights.

267. Article L.132-8 of the Intellectual Property Code provides that "The author shall guarantee the publisher the undisturbed and, unless otherwise agreed, exclusive exercise of the right assigned."

268. **Remuneration.** Proportional remuneration is the counterpart of the transfer of rights to the publisher. The Act thus provides, as a principle, for the remuneration of the author proportionally "to revenue" or "to the products of exploitation". In other words, in order to protect authors and to allow them to participate in the success of their work, Article L. 132-5 of the Code provides for the remuneration of authors proportional to the exploitation of their work, which includes not only the direct publishing, but also the right of representation, the translation or adaptation of their work.

269. By the rule of proportional participation, parliament intended to protect authors against any assignment of exploitation rights that they might sign away for a paltry sum, when compared with the profits made by the publisher. Exceptionally, a lump sum remuneration may be paid, but only in the cases listed in Articles L. 131-4 and L. 132-6 of the CPI.

270. Authors may however contractually waive any claim to remuneration proportional to the exploitation of their work. Article L. 122-7 of the CPI relating to the transfer of rights concerning the reproduction of a work stipulates that such an assignment may be free. For this purpose, a clause for the transfer of the right of reproduction free of charge must appear explicitly in the publishing contract.

271. Any violation of the provisions relating to remuneration is subject to relative invalidity for a period of five years, with effect from the signature of the contract.

272. **Standard form contracts.** By assigning exclusive ownership rights for their articles to a publisher, author-researchers can no longer exploit, share or self-archive their articles, even free of charge and for the benefit of the scientific community. In the majority of cases, the contract signed is a standard form contract, providing for the exclusive assignment of rights with no mention of remuneration.

+ A **model contract for scientific publications**, created by ministerial Order, would reduce the problems of interpretation between conflicting provisions.

6.2.3 Enforcing the Act: a pending issue of timeframe

273. The Digital Republic Act establishes (Article 30, I) the principle of the free availability of scientific publications after an embargo period (6 months for Science, Technology and Medicine and 12 months for the Human and Social Sciences), regardless of the terms of the contract between the researcher and the publisher (assignment of rights clause, duration, exclusivity). These provisions are public policy and any clause to the contrary is deemed null and void (Article 30, IV).

274. These provisions are applicable immediately:

Measures in force	When	Text
 **Free access to scientific publications from public research**, under the right granted to researchers to distribute their articles after a short embargo period of 6 to 12 months, irrespective of the terms of the contract between the researcher and the journal publishing the article.	From 9 October 2016	Digital Republic Act No. 2016-1321 of 7 October 2016

67

275. Although the Digital Republic Act provides no transitional provisions and does not specify when the Act should come into force, the second version of the Bill of September 2015 provided that:

- "They [the provisions relating to open access] do not apply to contracts currently in force."

276. This provision, which was incompatible with the wide sharing of scientific knowledge, was removed.

277. In the absence of a provision, the general rules governing the timeframe for the application of the Act apply. The new Act is applicable "for the future" according to Article 2 of the Civil Code; it takes immediate and exclusive effect for the period subsequent to its entry into force.

278. However, there are a number of exceptions to this principle:

- The principle of the application of former laws to contracts that are still running may be rejected depending on an analysis of the origin of the obligation or the right whose enforcement is requested: if this obligation is legal, the new legislation

[67] http://www.economie.gouv.fr/republique-numerique

applies immediately; if it is contractual, this is not the case[68]. Now, the effects of a publishing contract do not result only from the desire of the Parties but from legal provisions laid down by Articles L.132-1 *et seq.* of the intellectual Property Code governing the publishing contract and including a principle of exclusive assignment;

- if an Act is public policy and addresses overriding public interest reasons: Article 30 is indeed of a public order and the higher interest of science can be described as an overriding public interest reason.

279. As a result of these two exceptions, the provisions of Article 30 relating to open access could be applied to current contracts and all scientific texts published before or after the entry into force of the Act could be made available, subject to respecting the imposed embargo periods.

+ Given the complexity of the issue of the timeframe for application of the Act, and in order to secure the practices of researchers, it would be beneficial to clarify this point via **an implementing decree**.

6.3 Analysis of the relationship between "scientific texts" and "research data": Scientific and Technical Information

6.3.1 The scope of STI

280. **Definition.** Scientific and Technical Information (STI) is defined as:

- "the sum of information produced by research that is necessary for scientific and industrial activity. By its nature, STI covers all scientific and technical sectors and can exist in multiple forms: articles, reviews and scientific textbooks, technical specifications describing manufacturing processes, technical documentation accompanying products, patent notices, bibliographic databases, grey literature, raw data databases, open archives and data repositories that are accessible on the Internet, through portals, etc."[69].

281. The STI Strategic Orientation Plan published by CNRS specifies that "In an era of digital technology, STI also involves the distribution of initial data and of data resulting

[68] See the Annual Report of the Court of Cassation 2014, Chapter 1. The Court of Cassation is the ultimate authority concerning the timeframe for the application of laws.

[69] CNRS STI Strategic Orientation Plan, concerning the definition by the French Ministry of Higher Education and Research (MESR), Service for Strategic and Territorial Co-ordination, Mission for Scientific and Technical Information and for Documentary Networks (MISTRD), *Le libre accès aux résultats de la recherche* (Open access to research findings), p. 8

from research, accompanied by information (metadata) allowing their re-use, both to validate results and for different aims to the initial ones"[70].

282. There is no legal definition or specific legal framework for STI, but the notion is used in several organisational frameworks. STI can cover a wide range of information and is covered by a diverse range of legal regimes.

6.3.2 The organisation of STI

283. The concept of STI is used in several organisational frameworks or in the description of the objectives and missions of certain institutions:

- There is a "Unit for Scientific and Technical Information and Documentary Networks" (MISTRD)[71] attached to the Service for Strategic and Territorial Co-ordination (Directorate General for Higher Education and professional insertion, MESR): it is responsible for proposing national policy in the field of scientific and technical information and for contributing to its implementation;

- Article D.714-29 of the Education Code resulting from Decree No. 2013-756 of 19 August 2013 stipulates that among the missions of libraries, in the framework of their contribution to the training and research activities of institutions, is "4° To develop digital documentary repositories, contribute to their production and promote their use; [and] participate in the development of scientific and technical information, including via the production, labelling and distribution of digital documents";

- Article L123-3 of the Education Code mentions, among the missions of the public higher education service: "the dissemination of scientific and technical information";

- The DIST – CNRS's Scientific and Technical Information Department: In July 2010, CNRS set up a Directorate dedicated to Scientific and Technical Information (DIST), which both develops policy and steers CNRS's activities regarding STI;

- The Institute of Scientific and Technical Information (INIST) is "a unit of CNRS whose mission is to facilitate access to results from the different fields of research from around the world, to encourage the exploitation of scientific production and to assist those working in higher education and research (ESR)"[72];

- the creation of "STI correspondents", especially in the human and social sciences;

[70] STI Strategic Orientation Plan, *Le libre accès aux résultats de la recherche* (Open access to research findings)., p. 9
[71] http://www.enseignementsup-recherche.gouv.fr/cid20438/les-missions-de-l-information-scientifique-et-technique.html
[72] http://www.inist.fr/?Presentation&lang=fr

- the consolidation of CNRS's Scientific and Technical Information portals (BiblioSciences, BiblioVie, BiblioSHS, BiblioST2I, BiblioPlanets, TitaneSciences) into a single portal;

- The ISTEX Excellence Initiative for Scientific and Technical Information project is part of the "Investments for the Future" programme, initiated by the Ministry of Higher Education and Research, which aims to strengthen French higher education and research on the world scene.
  This innovative project is led by four partners: the National Centre for Scientific Research (CNRS), the Bibliographic Agency for Higher Education (ABES), the Unified Consortium of University and Research Institutions for Access to Digital Publications (Couperin.org), and Lorraine University, acting on behalf of the Conference of University Presidents (CPU);

- EPRIST, the Association of STI managers from research organisations.

284. These different organisational and institutional frameworks for STI share the common goal of promoting STI.

6.3.3 STI: diverse types of information and diverse legal rules

285. To reuse the definition of the concept of STI given in Section 3.3.1 above, here are some examples of how various legal regimes can apply:

Type of STI	Regime
Articles, reviews and scientific textbooks	Copyright
Technical specifications describing manufacturing processes	No legal regime for ownership except for know-how
Technical documentation accompanying products	No legal regime for ownership except for know-how
Patent notices	Industrial property
Bibliographic databases	Copyright/Right of the database creator/Public data
Grey literature	Copyright
Raw data databases	No legal regime for ownership/Public data
Open archives and data repositories accessible on the Internet	Copyright
Portals	Web site providing access to a multitude of resources

6.3.4 STI: a need for ethics

286. The diversity of available scientific and technical information, the diversity of the corresponding regimes and the multiplication of data thanks to digital technology require that an ethical charter be drawn up. This charter would establish the ethical rules applicable throughout the scientific community while enabling everyone to benefit from the full value of their work and promoting respect for the authorship of researchers.

287. **CNRS Ethics Committee.** In 1994, CNRS set up an Ethics Committee (COMETS), an independent advisory body whose missions are:

- to lead discussions on the ethical aspects raised by the practice of research, its issues and its relationship with society;
- to raise awareness among researchers and staff about the importance of ethics;
- to issue opinions accompanied by recommendations.

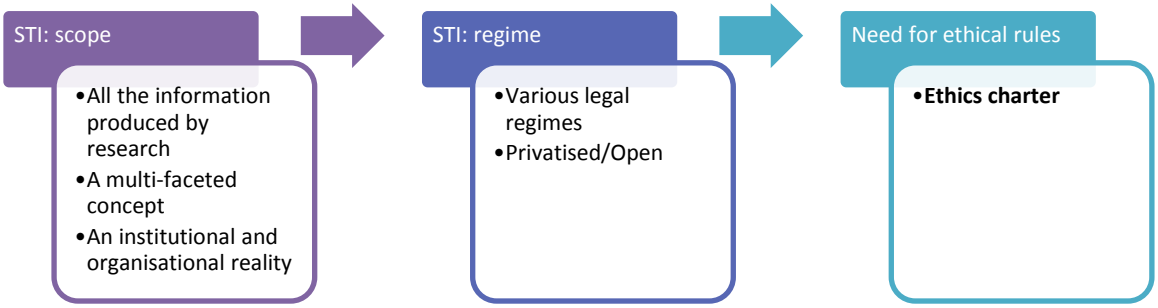
288. **COMEST.** In addition, the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), an advisory body and forum of reflection set up by UNESCO in 1998, "works in several areas: environmental ethics, with reference *inter alia* to climate change, biodiversity, water and disaster prevention; the ethics of nanotechnologies along with related new and emerging issues in converging technologies; ethical issues relating to the technologies of the information society; science ethics; and gender issues in the ethics of science and technology."[73]

289. In the framework of its Science Agenda – Framework for Action (World Conference on Science), UNESCO encourages governments and scientific organisations to set up adequate mechanisms to address ethical issues concerning the use of scientific knowledge, and to promote the creation of ethics committees by field of competence[74].

290. This lack of ethical benchmarks is also mentioned in CNRS's Strategic Orientation Plan[75].

[73] http://www.unesco.org/new/fr/social-and-human-sciences/themes/global-environmental-change/comest/
[74] "Science Agenda - Framework for Action", UNESCO, Points 71 to 77
[75] CNRS STI Strategic Orientation Plan, Pages 42 and 43

6.3.5 Summary diagram



6.4 Analysis of the relationship between "platform", "scientific texts" and "research data": Open Process

291. Scientific texts and research data have always been the pillars of scientific research. The advent of platforms and tools for the massive processing of data (tools for text and data mining) have revolutionised the work of scientists. As a result, researchers are today required to deal quickly with an infinite mass of data, to compare and combine data in different formats and to conduct transdisciplinary research.

292. To enable French researchers to perform text and data mining, parliament inserted in the Intellectual Property Code an exception to copyright and to the right of the database producer in favour of text and data mining (Article 38 of the Digital Republic Act).

293. This right to TDM on science platforms is also included in the Horizon 2020 Guidelines, and the draft European directive revising the InfoSoc Directive provides for the introduction of an exception to copyright in favour of TDM.

6.4.1 The legal enshrinement of TDM by the Digital Republic Act

294. Article 38 of the Digital Republic Act establishes a right to text and data mining by introducing an exception to copyright and to the right of database producers, under the following terms:

- The Intellectual Property Code is modified as follows:

  1° After the second subparagraph of 9° of Article L. 122-5, a 10° shall be inserted as follows:
  "10° Digital copies or reproductions made from a lawful source, in view of the exploration of texts and data included in or associated with scientific results for

public research needs, excluding any commercial purpose. A decree lays down the conditions under which the exploration of texts and data is implemented, as well as the terms for storage and communication of the files produced on conclusion of the research activities for which they were produced; these files constitute the research data;"

2° After 4° of Article L. 342-3, a 5° shall be inserted as follows:
"5° Digital copies or reproductions of the base made by a person with lawful access, in view of text and data mining included in or associated with scientific results in a research framework, excluding any commercial purpose. The storage and communication of technical copies resulting from processing, on conclusion of the research activities for which they were produced, are carried out by organisations appointed by decree. Other copies or reproductions are destroyed."

295. These two exceptions will only apply once the two implementing decrees have been published, which was initially expected in January, and then in February, 2017, but have not yet been published at the time of publication. Among other things, they should:

- set out the conditions under which the texts and data mining is implemented, as well as the terms for storage and communication of the files produced at the conclusion of the public research activities;
- designate the organisations responsible for the storage and communication of technical copies resulting from processing, at the conclusion of the scientific research activities.

6.4.1.1 Concept of date mining or exploration

296. The wording of Article 38 does not define the concept of data mining or exploration.

297. Furthermore, the use of the term "exploration" of texts and data in the first part of the text introducing an exception to copyright and then of "mining" (*fouille*) in the second part (creating an exception to the right of the database producer), may raise difficulties of interpretation.

+ The implementing decree could start by specifying that the concepts of exploration and mining cover the same practices.

6.4.1.2 Conditions for conducting TDM

298. Article 38 imposes conditions for text and data mining:

- **a positive purpose: "research"**. it should be noted that the new Article L.122-5 of the CPI requires that the purpose be "public research", while the new Article L.342-3 only uses the term "research", suggesting that it could also be private;

- **the exclusion of a commercial purpose**: “Unlike the situation in the United States or Japan, the exception may not be used for commercial purposes, which will exclude its application for projects co-financed by businesses or taking place in the framework of public-private partnerships. Indeed, it is more than likely that it will be impossible for research teams to entrust TDM operations to private subcontractors on a commercial basis."[76]

- **the scope of TDM**: both articles restrict exploration to text and “data included in or associated with scientific texts". What about data other than the texts which are not included in or associated with scientific texts, such as for example data from the Internet?

6.4.1.3 Legal qualification of research data resulting from TDM

299. **Voluntary “open access” regime**. Sub-paragraph 10° of Article L.122-5 of the Intellectual Property Code describes “files produced as the result of research” as research data. Output data, otherwise known as user-generated content, are therefore considered to be research data, as understood by Article 30 of the Digital Republic Act. The specific regime of research data made openly available voluntarily is thus applicable (see § 6.1.2.2). 77

300. The researcher or the research establishment or organisation decides voluntarily to make the data publicly available; this choice and this voluntary act thus preserve the possibility of exploiting the results of text and data mining.

301. **Preserving the right to exploit**. Article L.112-1 of the Research Code defines the goals of public research, including:

- "(b) **The exploitation of the results** of research for the benefit of society, which depends on innovation and technology transfer."

302. The opening up of research data must not impede the exploitation of results, especially in protecting results (by means of a trade secret or a patent) and via contracts for the licensing or assignment of intellectual property rights.

303. The exploitation of research increases the value of the results of research and development. The National Council for the Assessment of Higher Education (CNE, France) defines exploitation as the means for "making the results, knowledge and skills generated by research usable or marketable".[77] Consequently, the exploitation of research involves:

[76] https://scinfolex.com/tag/fouille-de-donnees/
[77] http://www.senat.fr/rap/r05-341/r05-3411.html

- bringing the world of research into contact with society and the world of business;
- giving added value to the results of research;
- returning to society the results of the research it has helped to finance.[78]

304. The qualification of research data and the corresponding legal regime together make it possible to achieve this goal of exploitation. These legal provisions must be accompanied by application and good practice guidelines for researchers and for research establishments or organisations; teams of exploitation specialists must also raise awareness among researchers concerning exploitation of user-generated content.

6.4.1.4 Points to be specified by decree

305. The wording of Article 38 leaves many uncertainties as to just how this "TDM exception" would work in practice, and the purpose of the decree(s) will be to provide precise answers to the following questions:

Theme	Question	Why?
The rules governing data mining as an exception to copyright and to the right of database producers	To what extent will it be possible to invoke this exception to counter contractual or technical restrictions that database providers might impose?	Unlike Article 30, the TDM exception is not public policy, so it would be possible to argue that the contract took precedence. The solution would be to specify in the Decree that these rules ***are*** public policy, in order to avoid giving rightholders recourse to contractual mechanisms.
	To what extent will database providers and publishers be able to continue to put in place technical protection measures?	Blocking access to content could also render the exception created by the Act largely ineffective. Therefore, the Decrees must set rules concerning technical limitations
The rules governing the storage and communication of files produced, which constitute new research data	To what extent will it be possible to archive and communicate the files generated by researchers and considered as research data?	The Act makes no reference to "representation" but only to "reproduction". It is therefore very likely that when publishing the results of their work, researchers

[78] https://www.univ-lille3.fr/recherche/valorisation/valorisation/

Theme	Question	Why?
		will have to remove the parts reproduced in order to respect the right of "representation" of the authors of the texts used for TDM. The “short quotation exception” could be applied to some reproductions, but this exemption cannot be applied to all the parts reproduced. One of the major challenges for establishing the TDM exception will involve setting the rules for communicating these research data.
The communication of research data	What are the means available?	
The storage of files obtained from a TDM activity.	Which organisation? Which trusted third party?	

6.4.2 Guidelines within the framework of Horizon 2020[79]

306. The Horizon 2020 programme was set up to strengthen the foundations of science and technology in Europe and better exploit the economic and industrial potential of policies for innovation, research and technology.

307. For the first time, Horizon 2020 brings together all the actions of the European Union in favour of research and innovation in a single programme.

308. The programme refocuses funding on three priorities:
- scientific excellence;
- industrial leadership;
- societal challenges.

[79] Guidelines on the Implementation of Open Access to Scientific Publications and Research Data [...] under Horizon 2020, Version 1.0, 11 December 2013 – Version 3.1, 25 August 2016 http://www.horizon2020.gouv.fr/cid82025/le-libre-acces-aux-publications-aux-donnees-recherche.html

309. The Europe 2020 Strategy promotes fuller and more extensive access to scientific publications and data. If information has been acquired thanks to public funds, European businesses and citizens should be allowed to take full advantage of it. The Commission therefore considers it necessary that information financed by public funds should be available on line without charge, for researchers, innovative enterprises and citizens.

310. The Commission has authorised access to and the reuse of research data generated by projects falling within the framework of the Horizon 2020 programme via a pilot scheme entitled "*Open Research Data*". The purpose of the operation is to make the research data generated in the projects funded in the framework of the Horizon 2020 programme accessible to the greatest possible number of users.

311. Funding recipients subject to the obligation must make the research data resulting from the funded project available free of charge.

Which data are concerned?

- "Underlying" data (the data necessary for the validation of the results presented in scientific publications) with the associated metadata.
- Any other data (for example, data that have been curated and that are not directly attributable to a publication, or raw data), including the associated metadata, as specified in the Data Management Plan

Where?

- In a research database – preferably a research data warehouse – to ensure that anyone from outside the project can have the following services free of charge:
  - access
  - exploration
  - extraction
  - exploitation
  - reproduction
  - dissemination.
- Users should be informed of the tools used by the beneficiaries of funding to validate the results (the software used, for example).

When?

- Data validating a publication must be deposited as soon as possible on the chosen research database.
- The other data must be filed according to the provisions in the Data Management Plan (DMP)
- The DMP is a project deliverable expected in the first 6 months of the life of the project (improvements to the DMP can also be subsequent deliverables). It describes how the research data collected or generated will be managed during and after the project (methodology, standards, etc.), which data will be shared or disseminated as open data, and also how the data will be stored.

Who?

- Principle: projects in the field of application of the pilot scheme and any projects wishing to join the scheme on a voluntary basis (the ***opt-in*** principle);
- Exception: projects may withdraw (or *opt out*) from the pilot scheme at the start of or during the project, with sufficient reason.
  These reasons must be explained in the Data Management Plan.

6.4.3 A TDM exception in the Copyright in the Digital Single Market Directive

312. **Proposed directive**. The proposed Directive on Copyright in the Digital Single Market (COM(2016) 593 final) was published by the European Commission on 14 September 2016.

313. Through this proposed Directive on copyright in the Digital Single Market (COM(2016) 593 final)[80], the Commission "proposes modern EU copyright rules for European culture to flourish and circulate". "The proposals will also bring tools for innovation to education, research and cultural heritage institutions."[81] The objective of this Directive is to adapt the provisions relating to copyright to the increasing use of digital technologies, in particular in the field of scientific research, noting the protean application of the provisions of the InfoSoc Directive and in particular the exceptions[82].

314. **Defining TDM.** Article 2 of the Directive offers a definition of the notion of text and data mining;

- "text and data mining means any automated analytical technique aiming to analyse text and data in digital form in order to generate information such as patterns, trends and correlations".

315. **Exception.** Article 3 introduces an exception to copyright and an exception to the right of the database creator in favour of text and data mining in the following terms:

Article 3

Text and data mining

1. Member States shall provide for an exception to the rights provided for in Article 2 of Directive 2001/29/EC, Articles 5(a) and 7(1) of Directive 96/9/EC and Article 11(1) of this Directive for reproductions and extractions made by research organisations in order to carry out text and data mining of works or other subject-matter to which they have lawful access for the purposes of scientific research.

2. Any contractual provision contrary to the exception provided for in paragraph 1 shall be unenforceable.

[80] Proposal for a Directive of the European Parliament and of the Council on copyright in the Digital Single Market http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016PC0593&from=EN

[81] Press release of 14 September 2016

[82] Introducing a TDM exception to copyright under English law, based on Article 5, 3a) of Directive 2001/29/EC of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (the InfoSoc Directive). An analysis of the texts of the Directive in their English and French version made it clear that the scope of the exception proposed is not the same depending on the language used.

3. Rightholders shall be allowed to apply measures to ensure the security and integrity of the networks and databases where the works or other subject-matter are hosted. Such measures shall not go beyond what is necessary to achieve that objective.

4. Member States shall encourage rightholders and research organisations to define commonly-agreed best practices concerning the application of the measures referred to in paragraph 3.

316. The French texts and the draft European Directive are compared in the table below:

	Draft Directive on copyright in the Digital Single Market	Digital Republic Act
Definition of TDM	Any automated analytical technique aiming to analyse text and data in digital form in order to generate information such as patterns, trends and correlations.	/
Materials subject to mining	Publications or other protected objects to which research organisations have lawful access. => The Directive covers all types of works and data.	Text and data included in or associated with scientific texts for research purposes. = > The Act limits mining to text and data included in or associated with scientific texts.
Conditions	Lawful access to the publications or other objects.	Lawful access to the texts and data.
Purpose of mining	Scientific research. The Directive places no limit on the commercial use of TDM.	The needs of public research, excluding any commercial purpose. The Act seems to exclude any commercial purpose and therefore any public/private partnership.
Exception for public policy	"Any contractual provision contrary to the exception provided for in paragraph 1 shall be unenforceable." The Directive explicitly stipulates that "Any contractual provision contrary to the exception provided for in paragraph 1 shall be unenforceable".	The wording of Article 38 does not state that the provisions are public policy.

Security of hosting arrangements	Rightholders shall be allowed to apply measures to ensure the security and integrity of the networks and databases where the works or other subject-matter are hosted. Such measures shall not go beyond what is necessary to achieve that objective.	(Awaiting the Implementation Decree.)
Definition of Good Practice	The text encourages research organisations and rightholders to work together to produce a definition of good practice.	/

317. The Commission specifies that the purpose of this text is to provide a legal clarification and a framework of fair competition so that European researchers can use innovative techniques for data analysis, thus enabling them to more quickly find innovative solutions in response to major challenges such as global epidemics and climate change, and promoting cross-border and interdisciplinary partnerships. This exception supports European competitiveness by promoting Open Science[83].

318. Carlos Moedas, European Commissioner for Research, Science and Innovation, has justified the need for this exception in the following manner:

"Science needs a copyright law that reflects the reality of the modern age. We must remove barriers that prevent scientists from digging deeper into the existing knowledge base. This proposed copyright exception will give researchers the freedom to pursue their work without fear of legal repercussions, and so allow our greatest minds to discover new solutions to major societal problems."

319. The text of the draft directive is broader than the French text, which still requires clarification concerning the practical implications in the fields of the communication and storage of data.

7. Recommendations

320. While Articles 30 and 38 of the Digital Republic Act represent a significant first step on the road to Open Science, our systemic analysis revealed that certain adjustments are necessary to ensure that researchers adopt secure practices.

321. Furthermore, this systemic analysis shows that there is a certain pliability in the pivotal concepts and in the legal regimes resulting from the interactions between these concepts:

[83] http://ec.europa.eu/research/index.cfm?pg=newsalert&year=2016&na=na-140916

- regarding the provisions of the Digital Republic Act, including the concept of "platform" and the opening up of public data (the generalisation of Open Data);
- regarding the peripheral laws such as the Code governing the relationship between the public and the administration, in particular the provisions relating to Open Data, as well as the proposed Directive on copyright in the Digital Single Market.

322. The general impetus of the system as a whole suggests the need to:

- secure legal texts and expressions and the conditions of implementation by decree;
- secure practices via:
  - an application guide;
  - a good practice guide;
  - an ethical charter;
  - raising awareness;
- create a framework for practices by drawing up a model contract for scientific publications;
- provide supervision by an Agency for Open Science.

7.1 Securing rights by decree

323. The expressions used in Articles 30 and 38 of the Digital Republic Act need to be clarified; furthermore, the question of whether these provisions should apply to earlier publications is a key issue:

Theme	Clarifications
Clarification of the concept of scientific texts	Condition of origin: scope of the concept of research activity. Financing condition Condition of publication in a journal produced at least once a year
Clarification of the concept of "final version accepted for publication"	This concept should designate the publisher's version[84].
Clarification of the concept of "research data"	Multiple expressions: - data resulting from research activity - research data - scientific and technical data - data included in or associated with scientific texts (restrictive)
Clarification of terminology	In French, the terms "*exploration*" and "*fouille*" (mining) cover the same practices
How will the provisions of	Retroactive application to works published before the

[84] See recommendation of the CNRS Scientific Board dated 24-1-2017 (annex)

Theme	Clarifications
Article 30 apply to contracts currently in force?	entry into force of the Act[85].

324. The wording of Article 38 leaves many uncertainties as to just how this "TDM exception" would work in practice, and the purpose of the decrees will be to provide precise answers to the following questions:

Theme	Clarification
The public nature of the TDM exception	Prohibition of getting round this exception contractually, and prohibition of technical measures of protection limiting the scope of this exception
The conditions under which the text and data mining is implemented	
The terms for storage and communication of the files produced at the conclusion of public research activities	
Designation of the organisations responsible for the storage and communication of technical copies resulting from processing, at the conclusion of scientific research	The principle of a network architecture connecting data curators within each scientific discipline could be introduced.

7.2 Securing practices

7.2.1 An Application Guide and a Good Practice Guide

325. In order to help researchers in their efforts to share their scientific texts, and also with text and data mining, an Application Guide and a Good Practice Guide should be written.

326. This guide should use clear language to explain the rights of researchers, the dangers to watch out for and what they are prohibited from doing in the application of their right to secondary exploitation, in the publication of research data, in the use of the text and data mining tools and in the possibility of exploiting research data, including user-generated content.

[85] See recommendation of the CNRS Scientific Board dated 24-1-2017 (annex)

327. This Application and Good Practice Guide should be backed up by training and awareness-raising sessions and also by an ethics charter for open science.

7.2.2 Training and awareness-raising

328. Training and awareness-raising sessions, as well as university-level teaching related to research and to text and data mining should be introduced to accompany the generalisation of data-sharing and data-mining practices.

329. Classroom sessions as well as e-learning should be used to enable researchers to secure these practices from both a legal and a technical point of view.

7.3 A structured framework for these practices

7.3.1 An ethics charter

330. An ethics charter is necessary to define the values behind access to and the sharing of scientific knowledge, provide a framework for practices and alert researchers to the need to respect such fundamental rights as secrecy, personal privacy or personal data, and also intellectual property.

331. The CNRS Ethics Committee, supported by the CNRS Scientific Board, is in favour of the introduction of an ethics charter for digital science.

332. An ethics committee would guarantee that this Charter is respected, in particular by ensuring that:

- its content is disseminated and understood;
- researchers are aware of the importance of ethics: "Researchers and all personnel involved in research must be trained to understand the ethical dimensions of data management, in particular in respect of private life, intellectual property, and the quality and integrity of data. They must be informed as to the current status and evolution of the legal rules concerning responsible sharing of data used"[86];
- opinions are issued with recommendations to clarify the principles expressed in the Charter.

7.3.2 A model contract for scientific publication

333. In order to guarantee the rights of researchers regarding their published material and to take into account the risks of contractual asymmetry, a decree could lay down a model contract for transferring copyright for use in public research.

[86] Opinion issued by COMETS, "The ethical issues of scientific data sharing", 7-6-2015

334. This contract would lay down the rules governing the relationship between the parties and protect researchers in their relationship with publishers. It would in particular guard against the risk of exclusive transfer, and guarantee the rights of researchers to:

- authorise the deposition and the reproduction in open archives of the publication in the author's version immediately, and in the publisher's version after expiry of an embargo period;
- allow the immediate exploration of the content of the article using digital data-processing tools;
- prevent all forms of private retention or reservation of ownership concerning the content of the article.

335. This contract could be promulgated by decree and thus have a regulatory status that could be imposed on the publisher for any scientific publication resulting from public research.

7.4 Supervision by an Agency for Open Science

336. A national agency could be created that would uphold the values of open science and promote these values in Europe and elsewhere.

337. In particular, it could provide a forum for collecting the points of view of public and private stakeholders in Open Science, while also securing and monitoring practices, defining good practice and verifying that all concerned abide by the ethical charter.

338. The Agency could also be responsible for writing a report on the impact of the principle of free access to scientific data on the scientific publishing market and on the circulation of ideas and scientific data.

339. It could also express the needs of research at European level, in particular in the framework of discussions relating to the proposal for a Directive on copyright in the Digital Single Market, as well as at the international level, before bodies such as the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Annexes

ANNEX 1: Digital Republic Act: Articles 30 and 38, Articles 49 to 51

ANNEX 2: Act for Confidence in the Digital Economy: Article 6

ANNEX 3: Code governing relationships between the public and the administration: BOOK III - Access to administrative documents and the reuse of public information

ANNEX 4: Intellectual Property Code, Article L. 112-2 and Article L. 132-1

ANNEX 5: CNRS Founding Decree No. 82-993 of 24 November 1982, Article 2

ANNEX 6: Recommendations of the CNRS Scientific Board on the interpretation of the Digital Republic Act (24-01-2017)

ANNEX 1: Digital Republic Act: Articles 30 and 38, Articles 49 to 51

Article 30

“Art. L. 533-4-I. – When a scientific text arising from a research activity financed at least 50% by grants allocated by the State, by regional or local authorities or public institutions, by grants from national funding agencies or by European Union funds is published in a periodical appearing at least once a year, its author, even after having granted exclusive rights to a publisher, has the right to make available free of charge in an open format, in digital form, subject to the agreement of any co-authors, all successive versions of the manuscript until the final version accepted for publication, as soon as the publisher itself makes the latter available free of charge in digital form, and, failing this, on expiry of a period running from the date of first publication. This period is six months for a publication in the field of the sciences, technology and medicine, and twelve months in that of the human and social sciences.
“The version made available in application of the first subparagraph may not be exploited in the framework of a commercial publishing activity.

“II. – Once the data from a research activity financed at least 50% by grants allocated by the State, by regional or local authorities or public institutions, by grants from national funding agencies or by European Union funds, are no longer protected by specific rights, or special regulations, and they have been made public by the researcher, the research establishment or organisation, they can be freely reused.

“III. – The publisher of a scientific text mentioned in I shall not limit the reuse of research data made public in the framework of its publication.

“IV. – The provisions of this Article are public policy and any clause to the contrary is deemed null and void.”

Article 38

1° After the second subparagraph of 9° of Article L. 122-5, a 10° shall be inserted as follows:
"10° Digital copies or reproductions made from a lawful source, in view of the exploration of texts and data included in or associated with scientific results for the needs of public research, excluding any commercial purpose. A decree lays down the conditions under which the exploration of texts and data is implemented, as well as the terms for storage and communication of the files produced on conclusion of the research activities for which they were produced; these files constitute the research data;"

2° After 4° of Article L. 342-3, a 5° shall be inserted as follows:
"5° Digital copies or reproductions of the base made by a person with lawful access, in view of text and data mining included in or associated with scientific results in a research

framework, excluding any commercial purpose. The storage and communication of technical copies resulting from processing, on conclusion of the research activities for which they were produced, are carried out by organisations appointed by decree. Other copies or reproductions are destroyed."

Article 49

I. The first book of the Consumer Code has been amended as follows:
1° Article L. 111-7 is worded as follows:
"Art. L. 111-7. - I. – An online platform operator is any natural or legal entity proposing, on a professional basis, whether paid or unpaid, an online public communication service based on:
“1° The ranking or referencing, by means of computer algorithms, of content, goods or services proposed or posted online by third parties;
“2° Or the bringing together of several parties for the purpose of selling goods, providing services, or exchanging or sharing content, goods or services.
"II. – Any operator of an online platform is required to give the consumer fair, clear and transparent information on:
“1° The general conditions of use of the intermediation service it offers and on the procedures for referencing, classifying and dereferencing the content, goods or services to which this service provides access;
“2° The existence of a contractual relationship, a shareholding link or remuneration in exchange for its services, if these could influence the classification or referencing of the content, goods or services offered or posted online;
“3° The quality of the advertiser and the civil and fiscal rights and obligations of the parties, when consumers are brought together with professionals or non-professionals.
“A decree shall specify the conditions of application of this Article, taking into account the nature of the activity of operators of online platforms.
“This decree shall specify, for any operator of an online platform whose activity consists in providing information for comparing the prices and characteristics of goods and services offered by professionals, the information provided to consumers for the purpose of this comparison and advertising within the meaning of Article 20 of Act No. 2004-575 of 21 June 2004 for Confidence in the Digital Economy.
“The decree shall also set the conditions under which, when professionals, vendors and service providers are brought together with consumers, the online platform operators shall provide the former with a space where they can give consumers the information laid down in Articles L. 221-5 and L. 221-6.”;

2° In the first subparagraph of Article L. 131-4, the words: “regarding activity involving the bringing together, by electronic means” are deleted.
II. - From the date of entry into force of the regulatory measures necessary for the application of Article L. 111-7 of the Consumer Code, in its version resulting from 1° of I of this Article, Articles L. 111-6 and L. 131-3 of the said Code are repealed.

Article 50

After Article L. 111-7 of the Consumer Code, an Article L. 111-7-1 shall be inserted as follows:

"Art. L 111-7-1. – The operators of online platforms the volume of whose activity exceeds a certain threshold of traffic set by decree shall draw up and inform consumers of good practice guidelines in order to help enforce the obligations of clarity, transparency and fairness mentioned in Article L. 111-7.
“The competent administrative authority may conduct investigations in accordance with the conditions laid down in Article L. 511-6 to assess and compare the practices of operators of online platforms mentioned in the first subparagraph of this Article. To this end, it may gather from these operators any information of use in the exercise of this mission. It shall periodically publish the results of these assessments and comparisons and also publish a list of any online platforms that do not comply with their obligations under Article L. 111-7.”

Article 51

The Tourism Code is amended as follows:
1° Article L. 324-1-1 is amended as follows:
a) The following reference is added at the beginning of the first subparagraph: “I. -”;
b) A “II” is added, worded as follows:
"II. - In municipalities where a change of use of residential premises is subject to prior authorisation within the meaning of Articles L. 631-7 and L. 631-9 of the Construction and Housing Code, the municipal council may decide to make any short-term rental of furnished premises for customers visiting but not residing in the area subject to a prior declaration requiring registration with the municipality.
“When implemented, this declaration requiring registration replaces the declaration referred to in I of this Article.
“The declaration shall be possible via an online service. The declaration may also be made by any other means decided by the municipal council.
“Upon receiving the declaration, the municipality shall immediately issue acknowledgement of receipt including a declaration number.
“A ministerial decree shall specify which information may be required for registration.”

2° A subparagraph is added to Article L. 324-2, worded as follows:
“Any offer for rental as mentioned in Article L. 324-1-1 shall include the declaration number mentioned in this Article.”

3° Article L. 324-2-1 is amended as follows:
a) The following reference is added at the beginning: “I. -”;
b) The following words are added: “, indicating whether or not the accommodation is used as his/her principal residence within the meaning of Article 2 of Act No. 89-462 of 6

July 1989, as well as, where applicable, the declaration number of the accommodation, obtained under II of Article L. 324-1-1 of this Code."
c) II and III are added, with the following wording:

"II. - Any entity which, for payment, engages in or assists with the mediation, negotiation or, via the provision of a digital platform, the letting of a furnished property subject to II of Article L. 324-1-1 and Articles L. 631-7 et seq. of the Construction and Housing Code shall publish in the announcement concerning the premises its declaration number, obtained by application of II of Article L. 324-1-1 of this Code.
" - The entity concerned shall ensure that the housing offered for lease or sub-lease is not rented for more than one hundred and twenty days per year via its intermediary when the accommodation is the main residence of the Lessor within the meaning of the above-mentioned Article 2 of Act No. 89-462 of 6 July 1989. To this end, when such an event is brought to its attention, it shall count the number of nights during which the accommodation is occupied, and inform the municipality in which the accommodation is rented, at the latter's request, annually. Beyond one hundred and twenty days of rental, the accommodation may no longer be rented out by its intermediary until the end of the current year.

"III. - The details of how to monitor for breaches of the obligations specified in II of this Article, and the corresponding penalties, shall be laid down by decree."

ANNEX 2: Act for Confidence in the Digital Economy: Article 6

Article 6

I.- 1° of Article L. 311-6 of the same Code is supplemented with the following words: ", which includes manufacturing secrets, economic and financial information and business or industrial strategies and is assessed taking into account, where appropriate, the fact that the public service mission of the government department referred to in the first subparagraph of Article L. 300-2 is subject to competition."
II. - Section 1 of Chapter III of Title I of Book III of the same Code is supplemented by Articles L. 312-1-1 to L. 312-1-3, worded as follows:

"Art. L. 312-1-1. - Subject to Articles L. 311-5 and L. 311-6 and when these documents are available in electronic form, the government departments mentioned in the first subparagraph of Article L. 300-2, with the exception of legal entities employing a number of agents or employees lower than a threshold fixed by decree, shall publish the following administrative documents online:
"1° The documents that they disclose in application of the procedures provided for in this Title, as well as their updated versions;
"2° The documents listed in the compendium mentioned in the first subparagraph of Article L. 322-6;
"3° The databases, updated on a regular basis, that they produce or that they receive and that are not made public in any other way;
"4° Data, regularly updated, whose publication is of economic, social, health or environmental interest.
"This Article does not apply to local authorities of less than 3,500 inhabitants.

"Art. L. 312-1-2. - Except where there are legislative or regulatory provisions to the contrary, when the documents and data referred to in Articles L. 312-1 or L. 312-1-1 contain information covered by Articles L. 311-5 or L. 311-6, they may only be made public after having been redacted to conceal such information.
"Except where there are legislative or regulatory provisions to the contrary or when the individuals concerned have consented, if the documents and data referred to in Articles L. 312-1 or L. 312-1-1 contain personal information, they may only be made public after having been redacted in such a way as to conceal the identities of these individuals. A list of the categories of documents that may be made public without having been redacted as mentioned above shall be established by decree issued after a reasoned opinion published by the French Data Protection Authority (CNIL).
"The government departments mentioned in the first subparagraph of Article L. 300-2 of this Code are not required to publish the public archives compiled from the selection operations provided for by Articles L. 212-2 and L. 212-3 of the Heritage Code.

"Art. L. 312-1-3. - With the exception of secrets protected by 2° of Article L. 311-5, the government departments mentioned in the first subparagraph of Article L. 300-2, with the

exception of legal entities with a number of civil servants or employees lower than a threshold fixed by decree, shall publish online the rules behind the main algorithms used to help them reach individual decisions."

III. - A Decree from the Council of State, issued on the basis of an Opinion by the Commission mentioned in Article L. 340.1 of the Code governing relationships between the public and the administration, shall lay down the implementation procedures for Articles L. 312-1 to L. 312-1-3 of the same Code.
IV. - The General Local Authorities Code is amended as follows:
1° Section 3 of Chapter II of the sole Title of Book I of the first part is repealed;
2° In the first paragraph of Article L. 1821-1, the reference: "L. 1112-23" is replaced by the reference: "L. 1112-22".
1° Section 3 of Chapter V of Title II of Book I of the Code governing the municipalities of New Caledonia is repealed;
VI.- "a" of Article L. 321-2 of the Code governing relationships between the public and the administration is amended as follows:
1° After the words: "a right", the following words are added: "for any person";
2° The following words are added: "in compliance with the requirements of Articles L. 312-1 to L. 312-1-2".
VII. - The first subparagraph of Article L. 322-2 of the same Code is deleted.
VIII. - In II *bis* of Article L. 1453-1 of the French Public Health Code, the references: "to Articles L. 321-1, L. 321-2, L. 322-1 and L. 322-2" are replaced by the reference: "to Article L. 322-1".

ANNEX 3: Code governing relationships between the public and the administration: Book III - Access to administrative documents and the reuse of public information

Article L300-1

The right of any person to information is specified and guaranteed by the provisions of Titles I, III and IV of this Book with regard to the freedom of access to administrative documents.

Article L300-2

Within the meaning of Titles I, III and IV of this Book, administrative documents is understood to mean documents produced or received, in the framework of their public service mission, by the State, local authorities and other entities under public or private law responsible for such a mission, irrespective of the date, place of conservation, form and supporting media of the documents concerned. Included among such documents are records, reports, studies, minutes, statistics, instructions, circulars, ministerial notes and responses, correspondence, notices, forecasts, source codes and decisions.

The acts and documents produced or received by parliamentary assemblies are governed by Order No. 58-1100 of 17 November 1958 relating to the operation of parliamentary assemblies.

Article L300-3

Titles I, II and IV of this Book shall also apply to documents relating to the management of the private domain of the State and that of local authorities.

Article L300-4

If documents are made available in electronic form in application of this Book, an open standard shall be used, such that the documents can be easily reused and exploited by an automated processing system.

Title I: OPEN ACCESS TO ADMINISTRATIVE DOCUMENTS

Chapter I: Disclosure of administrative documents

Section 1: Scope of the right of disclosure

Article L311-1

Subject to the provisions of Articles L. 311-5 and L. 311-6, the government departments mentioned in Article L. 300-2 are required to publish online or to disclose the

administrative documents that they hold to anyone requesting them, under the conditions laid down by this Book.

Article L311-2

The right of disclosure only applies to completed documents.
The right of disclosure does not concern documents for the preparation of an administrative decision while the decision is still being prepared. However, opinions required by statutory or regulatory texts, in view of which a decision is taken on a request likely to qualify for an individual decision that will grant rights, may be disclosed to the author of this request as soon as they are sent to the authority competent to decide on the request. When the reasons for the opinion are not given, they must also be disclosed to the author of the request in the event of an unfavourable opinion.
By way of derogation from the provisions of the previous subparagraph, the opinions on the comparative merits of two or more requests submitted to the government department concerned may not be disclosed until the administrative decision they are intended to inform has been taken.
The right of disclosure no longer applies when the documents have been made public.
The fact that administrative documents deemed disclosable under the terms of this Chapter have been placed in public archives does not impede the right to disclosure of the said documents at any time.
When a government department referred to in Article L. 300-2 receives a request to disclose an administrative document that it does not hold but which is held by another government department referred to in the same article, it shall transmit the request to the latter and shall notify the party concerned.
When a government department referred to in Article L. 300-2, or the Commission for Access to Administrative Documents, receives a request to disclose an administrative document likely to come under several of the access regimes mentioned in Articles L. 342-1 and L. 342-2, it shall be incumbent upon it to review the request in the light of all these regimes, with the exception of the regime provided for by Article L. 213-3 of the Heritage Code.
A government department is not obliged to respond to unreasonable requests, in particular if they are too numerous, repetitive or systematic.

Article L311-3

Subject to the provisions of the French Data Protection Act No. 78-17 of 6 January 1978, concerning personal data contained in files, any person has the right to learn about information contained in an administrative document ruling against him or her.
At the person's request, his or her observations concerning those conclusions shall be appended to the document concerned.
The use of an administrative document that does not take the above provisions into account is prohibited.

Article L311-3-1

Subject to application of 2° of Article L. 311-5, an individual decision taken on the basis of processing by an algorithm shall include an explicit reference informing the person concerned about it. The rules governing this processing and also the main features of its implementation shall be disclosed by the government department to the person concerned if he or she so requests.
The conditions of application of this Article shall be laid down by a Decree from the Council of State.

Article L311-4

Administrative documents are disclosed or published subject to literary and artistic copyright.

Article L311-5

The following may not be disclosed:
1° Opinions of the Council of State and the administrative courts, documents from the Court of Accounts referred to in Article L. 141-10 of the Code of financial jurisdictions and documents from the Regional Accounts Chambers referred to in Article L. 241-6 of the same Code, documents produced or held by the Competition Authority in the framework of the exercise of its powers of investigation, instruction and decision, documents produced or held by the High Authority for Transparency in Public Life in the framework of the missions provided for in Article 20 of Act No. 2013-907 of 11 October 2013 relating to transparency in public life, preparatory documents for the accreditation of health facilities provided for in Article L. 6113-6 of the Public Health Code, preparatory documents for the accreditation of health personnel provided for in Article L. 1414-3-3 of the Public Health Code, audit reports of the health institutions mentioned in Article 40 of Act No. 2000-1257 of 23 December 2000 on social security funding for 2001, and documents produced during the execution of a contract for the provision of services performed on behalf of one or more specific persons;
2° Other administrative documents which, if consulted or disclosed, would prejudice:
a) the confidentiality of the proceedings of the Government and of responsible authorities attached to the executive;
b) the confidentiality of national defence;
c) France's foreign policy dealings;
d) national security, public safety or the safety of persons or the security of the information systems of national or local government services;
e) the currency and public credit;
f) the conduct of proceedings before the courts or of activities preliminary to such proceedings, subject to authorisation by the competent authority;
g) inquiries by the competent services into any kind of offences;

h) or, with the exception of Article L.124-4 of the Environment Code, other secrets protected by legislation.

Article L311-6

Administrative documents that may only be disclosed to the person concerned include documents:
1° Which, if disclosed, could prejudice personal privacy, medical confidentiality, commercial or manufacturing secrets, including production methods, economic and financial information and business or industrial strategies and is assessed taking into account, where appropriate, the fact that the public service mission of the government department referred to in the first subparagraph of Article L. 300-2 is subject to competition;
2° Which include an assessment or value judgement on a physical person, named or easily identifiable;
3° Relating the behaviour of a person, if the disclosure of this behaviour might be detrimental to the person.
Information of a medical nature shall be disclosed to the person concerned, according to his or her choice, either directly or through the intermediary of a doctor designated by the person for this purpose, in compliance with the provisions of Article L. 1111-7 of the Public Health Code.

Article L311-7

When the request relates to a document containing details that may not be disclosed in application of Articles L. 311-5 and L. 311-6 but that it is possible to conceal or remove, the document shall be disclosed to the author of the request after concealment or removal of these details.

Section 2: Procedural instructions governing the right of disclosure

Article L311-9
Administrative documents may be accessed, as chosen by the applicant and subject to the technical possibilities open to the government department concerned:
1° By consultation on-site, free of charge, unless the storage of the document makes this impossible;
2° Insofar as reproduction is not prejudicial to the conservation of the document, by issuing a copy on a media support identical to that used by the government department or compatible with the latter and at the expense of the applicant, on condition that the cost does not exceed the cost of this reproduction, under conditions laid down by decree;
3° By email and free of charge when the document is available in digital form;
4° By online publication of the information, unless the documents may only be disclosed to the person concerned in application of Article L. 311-6.

[…]

Chapter II: Distribution of administrative documents

Section 1: General rules

Article L312-1

The government departments mentioned in Article L. 300-2 may make public the administrative documents that they produce or receive.

Article L312-1-1

Subject to Articles L. 311-5 and L. 311-6 and when these documents are available in electronic form, the government departments mentioned in the first subparagraph of Article L. 300-2, with the exception of legal entities with a number of civil servants or employees lower than a threshold fixed by decree, shall publish the following administrative documents online:
1° The documents that they communicate in application of the procedures provided for in this Title, as well as their updated versions;
2° The documents listed in the compendium mentioned in the first subparagraph of Article L. 322-6:
3° The databases, updated on a regular basis, that they produce or receive and that are not made public in any other way;
4° Data, regularly updated, whose publication is of economic, social, health or environmental interest.
This Article does not apply to local authorities of less than 3,500 inhabitants.

Article D312-1-1-1

The threshold provided for in Article L. 312-1-1 is set at 50 civil servants or employees expressed as full-time equivalents.

Article L312-1-2

Except where there are legislative or regulatory provisions to the contrary, when the documents and data referred to in Articles L. 312-1 or L. 312-1-1 contain information covered by Articles L. 311-5 or L. 311-6, they may only be made public after having been redacted to conceal such information.
Except where there are legislative or regulatory provisions to the contrary or when the individuals concerned have consented, if the documents and data referred to in Articles L. 312-1 or L. 312-1-1 contain personal information, they may only be made public after having been redacted in such a way as to conceal the identities of these individuals. A

list of the categories of documents that may be made public without having been redacted as mentioned above shall be established by decree issued after a reasoned opinion issued by the French Data Protection Authority (CNIL).
The government departments mentioned in the first subparagraph of Article L. 300-2 of this Code are not required to publish the public archives compiled from the selection operations provided for by Articles L. 212-2 and L. 212-3 of the Heritage Code.

Article L312-1-3

With the exception of secrets protected by 2° of Article L. 311-5, the government departments mentioned in the first subparagraph of Article L. 300-2, with the exception of legal entities with a number of civil servants or employees lower than a threshold fixed by decree, shall publish online the rules behind the main algorithms used to help them reach individual decisions.

Article D312-1-4

The threshold provided for in Article L. 312-1-3 is set at 50 civil servants or employees expressed as full-time equivalents.

Subsection 1: Rules of publication

[…]

Title II: REUSE OF PUBLIC INFORMATION

Chapter I: Scope of the right of reuse

Article L321-1

Public information contained in documents disclosed or published by the government departments mentioned in the first subparagraph of Article L. 300-2 can be used by any person who so wishes, for purposes other than those of the public service mission for whose needs the documents were produced or received.
The restrictions and conditions for this reuse are governed by this Title.

Article L321-2

For the application of this Title, the information contained in the following documents is not considered public information:
a) Documents whose disclosure is not a right granted to any person in application of Title I or other legislative provisions, unless this information is made public in compliance with the requirements of Articles L. 312-1 to L. 312-1-2;
(b) (Repealed)

c) Or documents containing material which is the intellectual property of third parties.
The exchange of information between government departments, for purposes related to the exercise of their public service missions, does not constitute reuse within the meaning of this Title.

Article L321-3

Subject to intellectual property rights held by third parties, the rights of the government departments mentioned in the first subparagraph of Article L. 300-2 of this Code, under Articles L. 342-1 and L. 342-2 of the Intellectual Property Code, shall not prevent the reuse of the content of databases made public by these government departments in application of 3° of Article L. 312-1-1 of this Code.

The first subparagraph of this Article is not applicable to databases produced or received by the government departments mentioned in the first subparagraph of Article L. 300-2 in the exercise of a public service mission of an industrial or commercial character subject to competition.

Chapter II: General rules

Article L322-1

Except with the consent of the government department concerned, the reuse of public information is subject to the condition that the latter is not altered, that its meaning is not distorted and that its sources and the date of its last update are mentioned.
The reuse of public information containing personal data is subject to compliance with the provisions of the Data Protection Act No. 78-17 of 6 January 1978.

Article R322-3

When reuse is only possible after the anonymisation of personal data, the holding authority shall proceed on condition that this operation does not require a disproportionate effort.

Article R*322-4

The failure of a government department to respond to a request concerning the reuse of public information under Articles L. 322-1, L. 322-2 and L. 325-1 shall be deemed to constitute an implied refusal.

Article L322-5

Any unfavourable decision concerning the reuse of public information shall be notified to the applicant in the form of a reasoned written decision containing the indication of avenues and permissible time-limits for appeals.

When a third party is the holder of intellectual property rights for a document containing public information, any government department that has helped produce the information or that is the document holder shall inform the person asking to reuse it of the identity of the natural or legal rightholder or, if this is unknown, the identity of the person from whom the information in question was obtained.

The second subparagraph does not apply to negative responses from libraries, including academic libraries, museums and archives.

Article L322-6

Government departments that produce or hold public information shall keep a directory of key documents in which this information is contained at the disposal of users. They shall publish an updated version of this directory every year.
The conditions for the reuse of public information as well as, where appropriate, the fees provided for in Articles L. 324-1 and L. 324-2 and the bases for calculation chosen for fixing the amount of these fees shall be made public, in an open standard, by the government departments mentioned in the first subparagraph of Article L. 300-2 which have produced or received this public information.

Article R322-7

The directory provided for in Article L. 322-6 specifies, for each of the documents identified, its exact title, its purpose, the date it was created, the conditions for its reuse and, if appropriate, the date and the purpose of any updates.

When the administrative authority has a website, it shall make the directory accessible online.

Article L323-1

The reuse of public data may, optionally, be subject to licence. This licence is mandatory when the reuse is subject to payment of a fee.

Article L323-2

This licence sets the conditions for the reuse of public information. These conditions may only place restrictions on reuse for reasons of general interest and proportionately. They may not have the effect of restricting competition, whether by design or otherwise.

Government departments that produce or hold documents containing public information that can be reused under the conditions laid down in this Chapter are required to first put standard licences, by electronic means, at the disposal of anyone interested in reusing this information.

The licensing conditions proposed to applicants are laid down by regulatory means.

When reuse free of charge requires the issuance of a licence, the license shall be chosen among those appearing on a list established by decree, revised every five years, after consultation with the local authorities and their groupings. When a government department wishes to use a licence not included in this list, it must be approved beforehand by the State, in accordance with the conditions laid down by decree.

Article R323-3

The clauses of licences issued by the government departments listed in Article L. 300-2 must at least specify the information to be reused, its source and date of provision, whether the reuse is of a commercial or non-commercial nature, and the licence-holder's rights and obligations, including the amount of the fee and the terms and conditions of payment.

Article R323-4

The request for a licence shall specify the purpose and the destination, whether commercial or non-commercial, of the planned reuse.

It may either be presented at the same time as the request for access to the document, or later.

The procedure provided for in Articles L. 343-1 to R. 343-5 shall be applicable.

Article R*323-5

Article R.*311-12 is applicable to requests for licences.

However, the failure of a government department or government administrative institution to reply within one month to a request for the issuance of a licence in accordance with a standard licence previously made available to interested persons and including a description of its purpose and its beneficiaries shall be deemed to constitute acceptance.

Article R323-6

The duration mentioned in Article R. 311-13 is applicable to requests for licences. In exceptional cases, this period may be extended by one month by reasoned decision of

the authority receiving the request because of the number of requests addressed to it or because of their complexity.

Article R323-7

The provisions of Article R. 311-10 are applicable when the public information is held on an electronic support medium by the government department receiving the request.

Chapter IV: Fee

Article L324-1

The reuse of public information is free of charge. However, the government departments listed in the first subparagraph of Article L. 300.2 may apply a fee for reuse when they are required to cover a substantial share of the costs related to the fulfilment of their public service missions from their own revenues.
The total product of the amount of this fee, calculated over an appropriate accounting period, shall not exceed the total amount of the costs related to the collection, production, placing at the disposal of the public or dissemination of their public information.
No fee for reuse may be set for information which has previously been the subject of an exclusivity agreement provided for in Chapter V.

Article L324-2

Reuse may also give rise to the payment of a fee when it concerns information from the digitisation of repositories or collections of libraries, including university libraries, museums and archives, and, if applicable, associated information when the latter is marketed jointly. The total product of the amount of this fee, calculated over an appropriate accounting period, shall not exceed the total amount of the costs related to the collection, production, provision or dissemination, or the storage of their information and the acquisition of intellectual property rights.

Article L324-3

The amount of the fees mentioned in Articles L. 324-1 and L. 324-2 shall be set according to objective, transparent, verifiable and non-discriminatory criteria. The amount shall be revised at least every five years.

Article L324-4

The amount of the fees mentioned in Articles L. 324-1 and L. 324-2 shall be set by a Decree from the Council of State, after receipt of an opinion by the competent authority. This Decree shall establish the list of categories of the government departments that, due to the nature of their activity and their funding conditions, may set fees in application of Article L. 324-1. The list of categories of government departments shall be revised at least every five years.

Article R324-4-1
The only bodies authorised to establish fees for reuse in application of Article L. 324-1 are the government departments and other entities listed in Article L. 300-2 and whose main activity is the collection, production, provision or dissemination of information to the public, when the costs related to this main activity are covered to at least 75% by tax revenues, allocations or grants.

Article R324-4-2
The total amount of the costs provided for in the second subparagraph of Article L. 324-1 is calculated on the basis of the average of these costs over the previous three budgetary or accounting years.

Article R324-4-3

The total amount of the costs provided for in Article L. 324-2 is calculated on the basis of the average of these costs over the previous three budgetary or accounting years. However, the costs related to digitisation operations and the acquisition of intellectual property rights may be taken into account on the basis of the average of these costs over the previous ten budgetary or accounting years.

Article R324-4-4
The costs specified in Articles L. 324-1 and L. 324-2 related to making publicly available or disseminating public information include, where applicable, the cost of anonymising the information.

Article R324-4-5
The methods for calculating fees for reuse shall be published in electronic form both on the website of the government department concerned and on a website run by the Prime Minister's services.

Article L324-5
If it is planned to charge a fee for the reuse of public information contained in documents produced or received by the State, the list of these types or categories of information shall previously be fixed by decree, after an opinion by the competent authority. The

same procedure is applicable to public State administrative institutions. The list of types and categories of information shall be revised every five years.

Article D324-5-1
The following types and categories of information may be subject to the payment of a fee for reuse within the meaning of Article L. 324-5:

CATEGORY OF INFORMATION	INFORMATION CONCERNED	GOVERNMENT BODY CONCERNED
Geographic information	Databases from airborne or satellite-borne sensors: orthophotos and ortho-images with a resolution of less than or equal to 50 cm; surface models with a resolution of less than 75 m.	National Institute of Geographic and Forestry Information (IGN)
Geographic information	Databases from sensors carried by land vehicles: images; surface models	National Institute of Geographic and Forestry Information (IGN)
Geographic information	Geographic databases with a geometric precision of less than 25 m.	National Institute of Geographic and Forestry Information (IGN)
Geographic information	Maps and map collections at scales greater than 1:1,000,000.	National Institute of Geographic and Forestry Information (IGN)
Geographic information	Cadastral databases (indicating individual plots)	National Institute of Geographic and Forestry Information (IGN)
Geographic information	Databases of geo-labelled addresses	National Institute of Geographic and Forestry Information (IGN)

Meteorological information	Observation data: observation data from networks of French weather stations coded in a format recommended by the World Meteorological Organization.	Météo-France
Meteorological information	Radar imaging: individual images from radars in France; national and international radar mosaics (reflectivity, water runoff).	Météo-France
Meteorological information	Radar data in polar coordinates: data from French radars expressed in polar coordinates (reflectivity, radial velocity).	Météo-France
Meteorological information	Wind profiles: vertical wind profiles measured by UHF or VHF radar, or any other system.	Météo-France
Meteorological information	Climate data: data processed and archived resulting from observation data.	Météo-France
Meteorological information	Climate products: reports, means, normal values, extremes, established series and parameters, calculated for a station or zone, based on climate data.	Météo-France
Meteorological information	Satellite data: interpolated data by processing other types of data with various algorithms. These data are provided for grid points.	Météo-France
Meteorological information	Forecasting models: output data from Météo-France's numerical simulation models of the atmosphere, the ocean surface, the snowpack or surface conditions.	Météo-France
Meteorological information	Expert forecasts: forecast data resulting from the expertise of Météo-France forecasters.	Météo-France

Information relating to the marine physical environment and its evolution	Bathymetric information: soundings; surface bathymetric modelling	French marine hydrographic and oceanographic service (SHOM)
Information relating to the marine physical environment and its evolution	Information about tides and currents: tide forecasts; observations and forecasts of sea surface level; tidal currents.	French marine hydrographic and oceanographic service (SHOM)
Information relating to the marine physical environment and its evolution	Cartographic information: Digital vector marine charts; digital geo-referenced images of marine charts	French marine hydrographic and oceanographic service (SHOM)
Information relating to the marine physical environment and its evolution	Other maritime and coastal information: maritime boundaries; types of sea bed; wrecks and obstructions; submarine cables and conduits; hydronomy	French marine hydrographic and oceanographic service (SHOM)
Information relating to the marine physical environment and its evolution	Nautical and regulatory information	French marine hydrographic and oceanographic service (SHOM)
Information relating to the marine physical environment and its evolution	Oceanographic information: digital observation data; ocean forecasting models	French marine hydrographic and oceanographic service (SHOM)
Data resulting from digitisation	Information resulting from the digitisation of repositories and collections of libraries, including university libraries, museums and archives, and, if applicable, associated information if the latter is marketed jointly.	The State and public State administrative institutions

Article L324-6

The reuse of public information produced by the public statistical service mentioned in Article 1 of Act No. 51-711 of 7 June 1951 on the obligation, the coordination and secrecy in the field of statistics may not give rise to the payment of a fee.

Article R324-6-1

Without prejudice to the publication of the directory mentioned in Article L. 322-4, the list referred to in Article L. 324-5 is made public on a website created under the authority of the Prime Minister, indicating either the person responsible for issues related to the reuse of public information referred to in Article L. 330-1, or, for public institutions that are not required to designate such a responsible person, the service competent to receive licence applications.

Article R324-7

The competent administrative authority mentioned in Articles L. 324-4 and L. 324-5 is the *Conseil d'orientation de l'édition publique et de l'information administrative* (Guidance council for state publishing and administrative information).

[…]

ANNEX 4: Intellectual Property Code, Article L. 112-2 and Article L. 132-1

Article L.112-2

The following, in particular, shall be considered works of the mind within the meaning of this Code:

1° books, pamphlets and other literary, artistic and scientific writings;
2° lectures, addresses, sermons, pleadings and other works of such nature;
3° dramatic or dramatico-musical works;
4° choreographic works, circus acts and feats and dumb-show works, the acting form of which is set down in writing or in other manner;
5° musical compositions with or without words;
6° cinematographic works and other works consisting of sequences of moving images, with or without sound, together referred to as audiovisual works;
7° works of drawing, painting, architecture, sculpture, engraving and lithography;
8° graphical and typographical works;
9° photographic works and works produced by techniques analogous to photography;
10° works of applied art;
11° illustrations, geographical maps;
12° plans, sketches and three-dimensional models relative to geography, topography, architecture and science;
13° software, including the preparatory design material;
14° creations of the seasonal industries of dress and articles of fashion. Industries which, by reason of the demands of fashion, frequently renew the form of their products, particularly the making of dresses, furs, underwear, embroidery, fashion, shoes, gloves, leather goods, the manufacture of fabrics of striking novelty or of special use in high fashion dressmaking, the products of manufacturers of articles of fashion and of footwear and the manufacture of fabrics for upholstery shall be deemed to be seasonal industries.

Article L.132-1

A publishing contract is a contract by which the author of a work of the mind or his successors in title assign under specified conditions to a person referred to as the publisher the right to manufacture or have manufactured a number of copies of the work, it being for the latter to ensure publication and dissemination thereof.

ANNEX 5: CNRS Founding Decree No. 82-993 of 24 November 1982, Article 2

Article 2

In the framework of the scientific policy defined by the Government, in relation with the nation's cultural, economic and social needs and in conjunction with the higher education and research institutions, CNRS's missions are as follows:

- to identify and to perform or have performed, alone or with its partners, all research of interest in the advancement of science as well as for the country's economic, social and cultural progress;
- to contribute to the application and exploration of the results of this research;
- to develop scientific information and access to research work and data, preferably in French;
- to participate in and support training in research and by research;
- to participate in the analysis of the national and international scientific situation and its prospects for development in view of shaping national policy in this area;
- to carry out assessments and expert appraisals on issues of a scientific nature.

To fulfil these missions, the French National Centre for Scientific Research may, in particular:

- create, manage and subsidise research units;
- contribute to the development of research undertaken in laboratories overseen by other public research organisations, universities and other institutions of higher education, state-owned companies, and private companies and research centres;
- implement technological R&D programmes;
- recruit and assign research personnel within the quota of positions authorised by the Finance Act;
- build and manage, as appropriate, major research equipment in the framework of national or international agreements;
- set up subsidiaries and take shares in other enterprises;
- participate, especially in the framework of research structures shared with other organisations or universities, in actions undertaken jointly with other official bodies, whether run by national or local authorities, French or foreign;
- play a central purchasing role within the meaning of the Public Procurement Code and Order No. 2005-649 of 6 June 2005 relating to contracts awarded by certain public or private entities not subject to the Public Contracts Code to meet the needs of other contracting authorities related to the management and operation of the public service of higher education, research, the exploitation of its results and technology transfer;
- participate in drawing up and implementing agreements on international scientific cooperation and cooperation for development;

- develop and disseminate scientific documentation and the publication of research work and data, particularly by making documentary platforms available to the scientific and academic community and contributing to their enhancement.

ANNEX 6: Recommendations of the CNRS Scientific Board on the interpretation of the Digital Republic Act (24-01-2017)

The Scientific Board welcomes the adoption of the Digital Republic Act, which should allow real progress regarding access to the results of research, for both the scientific community and the public.

It recommends, however, that the various bodies responsible for clarifying the interpretation of certain provisions of the Act take care to:

- ensure that it is applied retroactively to works published before the autumn of 2016;
- restrict the application of the embargo periods provided for by the Act to the "Publisher version" of the articles;
- authorise the preservation of the intermediate results of text and data mining operations and their deposition in archives accessible to researchers.

It is important that all or part of these provisions be found in the Decrees for implementing the Act.

Approved unanimously, with 1 abstention