



## CALL FOR PAPERS

### *Comparative law of digital infrastructures and activities* *Droit comparé des infrastructures et activités numériques*

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#### SCIENTIFIC ARGUMENT<sup>1</sup>

Digital law is no longer a new scientific subject. Multiple francophone publications already target certain economic sectors: blockchain<sup>2</sup> and platforms<sup>3</sup>, or more general issues: digital

<sup>1</sup> The bibliographical references are given as an indication and do not claim to be exhaustive.

<sup>2</sup> See, among many references, M. MEKKI, "Les mystères de la blockchain", *Dalloz*, 2017, p. 2160; F. MARMOZ (ed.), *Blockchain et droit*, Paris, Dalloz, coll. Thèmes, Commentaires et Actes, 2019, 108 p.; M. BEHAR-TOUCHAIS (ed.), *La Blockchain saisie par le droit*, vol. 1, Paris, IRJS, coll. Bibliothèque de l'IRJS - André TUNC, t. 108, 2019, 346 p.; A. COTIGA-RACCAH, H. JACQUEMIN, Y. POULLET (dir.), *Les blockchains et les smart contracts à l'épreuve du droit*, Brussels, Larcier, 2020, 496 p.; or D. LEGAIS, *Blockchain and digital assets*, Paris, LexisNexis, 2nd ed., 2021, 302 p.

<sup>3</sup> See e.g. V. NDIOR (ed.), *Droit et réseaux sociaux*, Paris, LEJEP, 2015, 201 p.; X. DELPECH (dir.), *L'émergence d'un droit des plateformes*, Paris, Dalloz, coll. Thèmes, Commentaires et Actes, 2021, 239 p.

sovereignty<sup>4</sup>, cybersecurity<sup>5</sup>, the digitalization of the State<sup>6</sup>, the emergence of an international law of the Internet<sup>7</sup>, etc. Nevertheless, the existing approaches, which are already numerous and rich, reveal two relative gaps.

On the one hand, the question of digital infrastructures is still more readily posed from the angle of geopolitics than law. The major manuals and reference works on digital law regularly avoid the subject<sup>8</sup>. However, the issue is economically massive<sup>9</sup>, politically sensitive and ecologically unavoidable<sup>10</sup>; as demonstrated by the attempts of States to attract investors likely to establish submarine cables<sup>11</sup> or energy competitive data centers on their territory and the investments of the States themselves in this sense<sup>12</sup>, or the disputes surrounding Starlink, which are likely to multiply in view of the company's numerous projects. To take just one topical example, at the beginning of 2021, ARCEP (the French electronic communications regulatory authority)

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<sup>4</sup> Beyond the reference work by P. BELLANGER, *La souveraineté numérique*, Paris, Stock, 2014, 253 p., see for example P. TÜRK, Ch. VALLAR (dir.), *La souveraineté numérique. Le concept, les enjeux*, Paris, mare & martin, 2017, p. 239. Understood as "the initial competence to control and regulate the digital" (J.-Ph. DEROSIER, "Les limites du concept de souveraineté numérique", in *ibid.* p. 87), the idea of "digital sovereignty" appears above all as a communicative notion, legally designating "more [...] a regulation" than anything else (*idem*). See also, in a similar vein, A.-Th. NORODOM, "Être ou ne pas être souverain, en droit, à l'ère numérique", in C. CASTETS-RENARD, V. NDIOR, L. RASS-MASSON (ed.), *Enjeux internationaux des activités numériques. Entre logique territoriale des États et puissance des acteurs privés*, Brussels, Larcier, coll. Création Information Communication, 2020, 202 p.

<sup>5</sup> In international law, see recently M. GRANGE, A.-Th. NORODOM (dir.), *Cyberattacks and International Law. Problèmes choisis*, Paris, Pedone, coll. Numérique et droit, 2018, 227 p.; more generally, see especially the new *Code de la cybersécurité* (dir. M. SEJEAN), 1<sup>ère</sup> édition 2022, Paris, Dalloz, 1140 p.

<sup>6</sup> See in particular the conference "Controlling the State in the Digital Era" organized on June 23 and 24, 2022 at the University of Lorraine, and the book to be published in 2023: Ph. COSSALTER, P. TIFINE (dir.), *Controlling the State in the Digital Era*, Brussels, Bruylant, coll. Droit Administratif / Administrative Law.

<sup>7</sup> V. SFDI, *Internet and International Law. Colloque de Rouen*, Paris, Pedone, 2013, 497 p.

<sup>8</sup> See for example Ch. FERAL-SCHUHL, *Cyberdroit - Le droit à l'épreuve de l'internet*, Paris, Dalloz, 8th ed, 2020, 1852 p. *Contra*, see chapter 8 "Réseaux et services de communications électroniques" of the new *Code du numérique 2022* (ed. F. MATTATIA, D. BERTHAULT, L. DEGOS), 1<sup>ère</sup> édition 2021, pp. 589-630. It should be noted, however, that there is no mention of submarine cables, for example. The question is more prevalent in international law, because of the proximity of these subjects to problems known to the discipline; see, for example, P. JACOB, "Architecture physique de l'internet et régulation", in C. CASTETS-RENARD, V. NDIOR, L. RASS-MASSON (dir.), *Enjeux internationaux des activités numériques. Entre logique territoriale des États et puissance des acteurs privés*, *op. cit.* 4pp. 53-61.

<sup>9</sup> The weight of the data center market, for example, continues to grow, with double-digit annual growth for several years and investments likely to reach \$18 billion in 2022; see "Data centers have reached record spending in just 3 years," *Lebigdata. fr*, June 22, 2022, online: <https://www.lebigdata.fr/data-centers-depenses-record> (link accessed November 22, 2022), despite the drop in data center construction in the United States due to the shortage of raw materials since the pandemic.

<sup>10</sup> See, for example, the *Climate Neutral Data Centre Pact*, a "self-regulatory initiative" of some 15 industry players that should make data centers carbon neutral by 2030 (<https://www.climateneutraldatacentre.net/self-regulatory-initiative/>). For a broader public overview of current issues, particularly ecological ones, see "Data Center: top trends and predictions for 2022," *Lebigdata. fr*, December 28, 2021, online: <https://www.lebigdata.fr/data-center-tendances-predictions-2022> (links consulted on November 22, 2022).

<sup>11</sup> In France, the investment incentive scheme for submarine cables has thus been the subject of debate and provisions within the ELAN law in order to facilitate administrative procedures (Article 224 of Law No. 2018-1021 of November 23, 2018 on the evolution of housing, development and the digital economy), as well as in the 2019 finance law in order to explicitly exclude electronic communications submarine cables from the scope of the preventive archaeology fee (Article 74 of Law No. 2018-1317 of December 28, 2018 on the finances for 2019).

<sup>12</sup> One example is the "MoleculaArXiv" exploratory research priority program and equipment (PEPR), led by the CNRS in France, which aims to invent new storage devices on DNA and artificial polymers. See "Faced with the explosion of data, France wants to equip itself with new DNA storage devices," *L'usine digitale*, June 3, 2022, online: <https://www.usine-digitale.fr/article/face-a-l-explosion-des-donnees-la-france-veut-se-doter-de-nouveaux-dispositifs-de-stockage-sur-adn.N2012277> (link consulted on November 22, 2022).

authorized *Starlink Internet Services Limited* to use radio frequencies to transmit signals between its thousands of satellites and fixed earth stations installed at residential customers' homes, to provide fixed broadband Internet access services throughout France. However, some associations criticized ARCEP for deciding without a public consultation. The French Council of State (Conseil d'État) ruled in their favor, noting that the authorization was "likely to have a significant impact on the market for the provision of broadband Internet access and to affect the interests of end users"<sup>13</sup>. Although ARCEP, following a public consultation, re-allocated frequencies to the applicant company in June 2022<sup>14</sup>, the consultation revealed, among the 12 institutional responses and the 2034 individual responses to the month-long consultation, numerous concerns in terms of - among others - environmental and competition law<sup>15</sup>. This case illustrates, among other things, that the questions of applicability of certain emerging principles in digital law (principle of participation, principle of taking into account the ecological impact of the infrastructure, etc.) are not always decided in domestic law, which invites a comparison of solutions.

Generally speaking, legal studies have therefore, and nevertheless, focused on the law of digital *activities*, sometimes neglecting the legal problems raised by its physical infrastructures. It seems to us, however, that the question of activities cannot be separated from infrastructural issues, so that a contemporary approach to digital law should, in a systemic perspective, integrate them. These latter issues are, moreover, eminently public, insofar as national administrative regimes for authorizing the establishment and maintenance of digital structures such as datacenters<sup>16</sup> or submarine cables<sup>17</sup> are at issue, regimes that vary from one State to another - depending, for example, on whether an economic operation related to the digital sector is classified as a "strategic" investment.

On the other hand, and according to another scientific point of view, there are few approaches to *comparative* digital law. The question of the construction of legal regimes allowing the regulation of the new uses of digital technology is often raised only at the national level, as international harmonization remains hypothetical in many areas. While several doctrinal approaches today consider the law of digital activities from a European perspective<sup>18</sup> - thanks

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<sup>13</sup> CE, April 5, 2022, *PRIARTEM and Agir pour l'environnement*, n° 455321, §4.

<sup>14</sup> ARCEP, Decision No. 2022-1102 of the French regulatory authority for electronic communications, post and press distribution dated May 25, 2022 granting an authorization to *Starlink Internet Services Limited* to use radio frequencies for a fixed satellite service network open to the public.

<sup>15</sup> See the responses to the online consultation: [https://www.arcep.fr/actualites/les-communiqués-de-  
presse/detail/n/frequences-020622.html](https://www.arcep.fr/actualites/les-communiqués-de-presse/detail/n/frequences-020622.html) (link accessed on November 22, 2022).

<sup>16</sup> The report of the LONGUET Commission thus indicated, in 2019, that "[f]rance is struggling to take the measure of the stakes of this international competition. In 2018, Norway, for example, announced its goal of becoming a "data center nation." To be attractive, most of the states involved in this race, from the United States to Thailand, via the countries of the European Economic Area, are acting on energy taxation; electricity consumption can account for 30% to 50% of the operating costs of a center. Norway has also introduced a property tax exemption for production equipment and installation equipment on industrial sites, which indirectly amounts to removing a majority of data center equipment from the scope of property tax" (Senate, *The Duty of Digital Sovereignty*, Report No. 7 (2019-2020) by Mr. Gérard LONGUET, made on behalf of the commission of inquiry, submitted on October 1, 2019, pp. 126-127).

<sup>17</sup> See the interactive map of world cables: <https://www.submarinecablemap.com/> (link accessed on November 22, 2022).

<sup>18</sup> See e.g. A. BLANDIN-OBERNESSER (ed.), *Droits et souveraineté numérique en Europe*, Brussels, Bruylant, 2016, 216 p.; C. Castets-Renard, *Droit du marché unique numérique et intelligence artificielle*, Brussels, Bruylant, coll. Droit de l'Union européenne - Manuels, 2020, 388 p.; B. BERTRAND (ed.), "L'Union européenne et le numérique", dossier published in *RTDEur*, 2021, n°2, pp. 245 et seq. For an English-language approach, T.-E. SYNODINOU, Ph. JOUGLEUX, Ch. MARKOU, Th. PRASITOU (dir.), *EU Internet Law in the Digital Era. Regulation and Enforcement*, Cham, Springer, 2020, 392 p.

to the GDPR<sup>19</sup> but also to the many recent texts or those currently being examined<sup>20</sup> - there is a lack of regional studies outside of Europe or studies that go beyond the opposition between the American and European regimes. Above all, there is no comprehensive work, either in French or in English<sup>21</sup>, offering a comparison of the main national laws relating to digital infrastructures and activities. Such a collection of knowledge is thus lacking in the doctrinal landscape, both with a view to a reflection on the possible emergence of an international digital law based on a *minimal* harmonization of national laws, and with a view to a study of the common principles structuring digital law.

The projected work aims to fill this doctrinal gap, by proposing a comparative study of the provisions of domestic law relating to several digital infrastructures (administrative regime for the installation of submarine cables and the allocation of frequencies necessary for the use of the Internet by satellite, the establishment of datacenters) and to certain essential digital activities (liability regime for Internet access providers; regulation of social networks/platforms; supervision of the use of blockchain)<sup>22</sup>. It will thus present a comparative overview that could be valuable to practitioners and researchers wishing to enrich their approach to digital law - or rights -.

Thanks to the synthesis work proposed at the end of each of the main sections of the book, it will also make it possible to identify common guidelines, or even emerging common principles, that could form the basis of future regional or international regimes in the sectors concerned.

## METHOD

Each contribution is expected to critically present the national legal regime applicable to the digital infrastructure/activity studied in a particular country. For each infrastructure or activity studied, the legal translations, mainly (but not exclusively) in administrative, constitutional and/or criminal law, of the political and strategic choices made in the face of the development of new technologies and their uses should be presented.

Contributors are also invited to highlight the problems of reconciliation, operated by legislators and judges, between the economic policies of openness in the face of the weight of the digital industry, the reactions of economic and legal protectionism, and the national appreciations of the great freedoms guaranteed by the State (for example: freedom of expression, freedom of enterprise, right to a healthy environment, protection of public health...). An introductory

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<sup>19</sup> C. DE TERWANGNE, K. ROSIER (eds.), *Le Règlement général sur la protection des données (RGPD / GDPR). Analyse approfondie*, Brussels, Larcier, 2018, 928 p.; O. TAMBOU, *Manuel de droit européen de la protection des données à caractère personnel*, Brussels, Bruylant, coll. Droit administratif / Administrative Law, 2020, 486 p.; B. BERTRAND, A. BENSAMOUN (dir.), *Le règlement général sur la protection des données : aspects institutionnels et matériels*, mare & martin, coll. Droit & science politique, 2020, 258 p.

<sup>20</sup> See for example B. BERTRAND, "Le modèle européen de partage de données", *Europe*, n° 2, February 2021, study 1.

<sup>21</sup> Some English-language works nevertheless offer a comparative vision of certain targeted digital sectors. See, for example, P. MEZEI, D. HAJDU, L. J. CAPOTE-PEREZ, J. QIN, *Comparative Digital Copyright Law*, Vandepias Publishing, 2020, 554 p.

<sup>22</sup> Certain subjects, such as the comparative law of the digitization of the State, are not dealt with in the proposed work, insofar as they call for developments that are difficult to reduce to a contribution by State, and because they are currently the subject of extensive research (see in particular Ph. COSSALTER, P. TIFINE, *Controlling the State in the Digital Era*, project cited above note 6).

contextualization of the main principles of the legal system studied, if it proves to be relevant for understanding the specificities of the regime analyzed, is welcome.

The critical orientation of the chapters is left to the discretion of the authors, particularly regarding the doctrinal and methodological choices made but remains important. The primary objective of each chapter is indeed to achieve both a complete presentation of the regimes analyzed, and a look at the major issues - including the gaps - that they raise, in terms of sources, (geo)political orientation, national and international litigation, effectiveness or enforcement.

## CONTRIBUTIONS AND SCHEDULE

The proposed contributions, which will always focus on the legal regime of a particular state, will be included in one of the sub-sections of the book:

Infrastructures section:

- The reception of submarine cables
- The allocation of frequencies dedicated to the Internet by satellite
- The implementation of data storage centers

Activities section:

- The responsibility of access and hosting providers
- Platform law
- Supervision of the uses of blockchain

Proposals for any of these infrastructures and activities are expected to be submitted, in particular but not exclusively in Argentine, Australian, British, Canadian, Chilean, Chinese, Colombian, Dutch, Egyptian, Indian, Italian, Japanese, Korean, Luxembourg, Moroccan, Mexican, Polish, Qatari, Russian, Saudi, Spanish, Swedish, Tunisian and Turkish law.

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Proposals for contributions, 500 words in length in English or French, outlining the proposed scheme, should be accompanied by a resume, and sent to [raphael.maurel@u-bourgogne.fr](mailto:raphael.maurel@u-bourgogne.fr) by **6 January 2023**.

The final contributions, from 20 to 30,000 signs including spaces, will be expected by **September 15, 2023**, for a publication of the book in the first half of 2024.

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