Vol. 9

University of Bologna Law Review

ISSUE 1. 2024

# Articles & Essays



## *Obiter Dictum*

Understanding the Foreign Subsidies Regulation

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• E-ISSN 2531-6133  Doi Https://doi.org/10.6092/issn.2531-6133/v9-n1-2024

UNIVERSITY OF BOLOGNA LAW REVIEW

E-ISSN 2531-6133

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The University of Bologna Law Review is a student-run, peer-reviewed, open access journal published by the University of Bologna, Department of Legal Studies. The Journal is published twice a year (all year around). Publication number E-ISSN 2531-6133. The Journal is hosted and mantained by AlmaDL.
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https://doi.org/10.6092/issn.2531-6133/19378

# Understanding the Foreign Subsidies Regulation

## INTRODUCTION

The Foreign Subsidies Regulation (FSR) is a new instrument through which the European Union seeks to ensure the level playing field in the internal market.[1] The FSR came about as a result of concerns about the effects of, especially, Chinese subsidies on the internal market of the European Union that could not be remedied using existing remedies. In particular, the FSR seeks to prevent distortions caused by foreign subsidies received by operators engaged in economic activity within the internal market.

In its design, the FSR is a hybrid instrument drawing on concepts under EU competition law (merger control and State aid law), the EU Basic Anti-Subsidy Regulation,[2] EU public procurement law and the WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement). Reflecting that hybrid character, the legal bases of the FSR are Article 114 of the Treaty on the Functioning of the European Union (TFEU) (internal market harmonisation) and Article 207 TFEU (common commercial policy). Nevertheless, in practice and in the academic commentary on the FSR, competition and public procurement lawyers are primarily active in the public discourse on this new autonomous instrument of the European Union. Trade lawyers appear to focus less on this new instrument. In part, this is understandable because mergers and participation in public tenders in the European Union are likely to be, in the short term, the main areas of economic activity affected by the new powers of the Commission and, where necessary, the remedies which the Commission may impose. This is especially confirmed by the fact that, at present, the notification-based tools are already being used. At the same time, the definition of a foreign subsidy in the FSR, the balancing test and the manner in which investigations (including in third countries) might be conducted are just a few examples of how the practice of trade remedy investigations might inform the application of the FSR.

[1] Regulation (EU) 2022/2560 of the European Parliament and of the Council of 14 December 2022 on foreign subsidies distorting the internal market OJ 2022 L 330, p. 1, recital 6.

[2] Regulation (EU) 2016/1037 of the European Parliament and of the Council of 8 June 2016 on protection against subsidised imports from countries not members of the European Union (Basic Anti-Subsidy Regulation) OJ 2016 L 176, p. 55.

## FILLING A GAP IN THE AVAILABLE REMEDIES

Existing EU trade and competition policy instruments were not designed to address the distortive effects of foreign subsidies.

The European Union – unlike other major trading partners granting subsidies – operates an elaborate State aid control mechanism, which prohibits the granting of aid by its Member States unless authorised by the Commission under (now) Article 107 TFEU. That model of controlling the granting of subsidies (that is, State aid) was developed because of the recognition of the importance of protecting undistorted competition for the functioning of the internal market. Moreover, there was an additional concern that certain Member States might trigger a "race to the bottom" by excessively subsidising domestic businesses with lasting effects on competition in the internal market. The same concerns persist today, especially as a result of various types of flexibility envisaged under EU State aid control and the incentives created for the Member States to contribute to, for example, the Green Deal Industrial Plan.

However, EU State aid control targets aid granted by the Member States, but not subsidies of third countries and their effects on competition in the internal market. Likewise, EU trade remedies legislation does not empower the European Union to take action against the effects of foreign subsidies (including on investment and trade in services) other than against imports of goods benefitting from those subsidies. The Basic Anti-Subsidy Regulation and Part V of the SCM Agreement only allow the European Union to impose countervailing duties on imports of subsidised goods into the European Union that cause or threaten to cause material injury to the EU industry. They do not address potentially distortive effects of subsidies granted by third countries on, notably, services, investments, or other financial flows within the internal market. This is also recognised by the FSR, which states that "[t]rade defence instruments enable the Commission to act when subsidised goods are imported into the Union, but not when foreign subsidies take the form of subsidised investments, or when services and financial flows are concerned."[3]

To fill this perceived gap, the FSR underlines that its objective is that of "establishing a harmonised framework to address distortions caused, directly or indirectly, by foreign subsidies, with a view to ensuring a level playing field, contributing to the resilience of the internal market and thereby EU's open strategic autonomy."[4] Moreover, the FSR is without prejudice to the application of EU competition law, the

[3] Regulation (EU) 2022/2560, *supra* note 2, Preamble, Recital 5.
[4] *Id.* Recital 7 and art. 1.

Basic Anti-Subsidy Regulation, the Foreign Direct Investment (FDI) Screening Regulation, the International Procurement Instrument (IPI), and Regulation 2019/712 (the Regulation on subsidies in air transport). In addition, recital 9 in the preamble to the FSR explicitly confirms that "[t]his Regulation should be applied and interpreted in light of the relevant Union legislation, including that relating to State aid, mergers and public procurement."

Those features explain why there is considerable uncertainty about how the FSR will be applied. In turn, those features affect the due diligence and other compliance obligations of companies and the preparatory steps that they must undertake for notifying transactions or otherwise anticipating the initiation of a Commission investigation into the distortive effects of foreign subsidies on competition in the internal market.

Against that background, the FSR offers means to redress (foreign) subsidies which are not already captured by existing EU and WTO subsidies regimes. Recital 69 FSR explicitly states that "[t]he implementation of this Regulation by the Union should comply with [. . .] the WTO Agreement" and that it "should complement the Union['s] effort to improve multilateral rules on addressing distortive subsidies." In the absence of progress in reforming multilateral disciplines on subsidies, the FSR already provides the European Union with an opportunity to collect information about the incidence and magnitude of subsidies worldwide. The FSR further allows the European Union to experiment with what might (or might not) become clear, justifiable, and practical rules on these subsidies. In fact, the European Union might intend to start building a critical mass within the WTO Membership for the approach reflected in the FSR and ultimately gain leverage in negotiations on multilateral reform. In effect, the FSR might prompt other WTO Members to re-evaluate the adequacy of the current SCM Agreement.

## THREE ENFORCEMENT TOOLS

The FSR enforcement regime is organised around three "tools" for the European Commission ("Commission") to investigate the distortive effects of foreign subsidies. Under the ex officio tool, the Commission may investigate the distortive effects of foreign subsidies on the internal market of its own initiative, regardless of the level of the subsidy or the economic activity in the European Union possibly affected by the subsidies. In essence, the ex officio tool must be understood as operating as a type of

catch-call control. So far, no ex officio investigation has been initiated. In addition, the FSR provides for two notification-based tools: the M&A tool and the public procurement tool. Within the scope of these two tools, concentrations and participation in a public procurement tender must be notified to the Commission under certain conditions, and the Commission may also request notification when notifications are not mandatory. Compliance with these novel notification requirements requires significant preparation and investment in due diligence from companies investing and operating in the European Union. Moreover, nothing in the FSR precludes the Commission from, in essence, using the powers under the new instrument to pursue the European Union's industrial policy goals. As things stand, notifications are being filed and pre-notification discussions are being organised. On 16 February 2024, the Commission announced that it had started its first in-depth investigation, under the public procurement tool, into subsidies received by a Chinese State-owned rolling stock manufacturer active in the rail transport sector.

## USING THE FSR EX OFFICIO TOOL

Whilst the notification-based tools are already being actively used, we await the first use of the ex officio tool. Although the FSR does not provide for a complaints mechanism, the Commission is nevertheless, on a gradual basis, starting to offer some insights on the sectors and contexts in which it might resort to that tool.

The European Union explicitly situates foreign subsidies within its Economic Security Strategy.[5] The European Union considers that its economic dependency on trading partners might pose risks to its economic security and thus its autonomy. The priorities of the EU Economic Security Strategy centre around: (i) promoting the European Union's competitiveness; (ii) protecting the European Union from commonly identified economic security risks; and (iii) partnering with like-minded countries.[6] The EU Economic Security Strategy identifies foreign subsidies as threats to the EU internal market and stresses that the Commission "is ready to deploy" the FSR to address the "weaponization of economic dependencies."[7]

[5] European Economic Security Strategy JOIN (2023) 20 final, at < https://data.consilium.europa.eu/doc/document/ST-10919-2023-INIT/en/pdf > (accessed 2 January 2024).
[6] *Id.* at 2–3.
[7] *Id.* at 7–8.

Moreover, various reports signal that the Commission might also use the ex officio tool to focus on sectors of economic activity that are central to the European Union's sustainability efforts. The 2023 Strategic Foresight Report states that "to achieve open strategic autonomy, including economic security", the European Union should make "better and more strategic use of [. . .] the regulation on foreign subsidies" whereby the European Union ensures "strong linkages between market access and high sustainability standards."[8] Similar to its climate-recalibrated enforcement of EU State aid rules, the Commission might focus on foreign subsidies that distort the EU internal market in view of the European Union's ambitions related to climate, environmental protection, and energy. Likewise, in the European Wind Power Action Plan,[9] the Commission announced that it would use the FSR tools to counter any foreign subsidisation of wind-related products on the EU market.[10] To that end, the Commission has explicitly encouraged the European wind industry to submit further evidence on foreign subsidies granted to their competitors.

Moreover, apart from China, the Commission has closely monitored other major subsidisers, including the United States. On 18 July 2023, Executive Vice-President Dombrovskis signalled that the European Union might adopt trade defence measures in respect of imports of US-originating goods subsidised under the Inflation Reduction Act (IRA).[11] The statement of Commissioner Dombrovskis indicates that the European Union is ready to recalibrate its common commercial policy instruments to protect its interests against any effect on trade and, ultimately, distortion in the internal market, including effects resulting from the commercial policies of its trade partners, such as the United States.

However, in recent years the European Union and its Member States have also decided to make significant amounts of State aid available in order to pursue industrial policy goals. More broadly, the global subsidies race has gained momentum in recent years. The participation of the Member States in this race limits the remedial scope of the FSR and undermines the general and undifferentiated narrative underlying the FSR that strict EU State aid control puts at a disadvantage European companies. In fact, if the

[8] Commission Communication to the European Parliament and the Council, "2023 Strategic Foresight Report: Sustainability and people's wellbeing at the heart of Europe's Open Strategic Autonomy" COM (2023) 376 final.

[9] Commission Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, "European Wind Power Action Plan" COM (2023) 669 final.

[10] *Id.* Action 12.

[11] European Commission, "Statement by Executive Vice-President Dombrovskis at the ECON Committee of the European Parliament on the EU's reaction to the US Inflation Reduction Act (IRA)" (18 July 2023), at <https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_23_3926> (accessed 2 January 2024).

European Union seeks to treat domestic and foreign subsidies on equal footing, this means that as the level of State aid control is loosened, the scrutiny of foreign subsidies is to be correspondingly weakened. Thus, if the European Union wants to facilitate the granting of State aid for various green (tech) projects and investments, the scrutiny of the subsidies given to its trade partners for those very purposes must likewise be weakened under the FSR. This should, especially, be the case since such aid benefits economic activity in the European Union. Moreover, if the European Union's trading partners increasingly make their (green) subsidies dependent on using local content, those subsidies promote investments at home – and not abroad. Against that type of subsidy – a main concern of the European Union – the FSR is not necessarily a strong response.

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* This Obiter Dictum is based on A. Reindl and I. Van Damme, *The EU Foreign Subsidies Regulation* (Concurrences, 2024).

VOLUME 9 ISSUE 1 ARTICLES & ESSAYS

UNIVERSITY OF BOLOGNA LAW REVIEW

https://doi.org/10.6092/issn.2531-6133/19638

Received: 26 Sept. 2023 | Accepted: 29 Jan. 2024 | Published: 30 May 2024

# The Devil is in the Procedure: Private Enforcement in the DMA and the DSA

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ABSTRACT

The regulation of the digital ecosystem is one of the priorities of the European Union, and the Digital Markets Act [hereinafter the DMA] and the Digital Services Act [hereinafter the DSA] are two of the main instruments used in this area. They aim at ensuring contestability, fairness, safety, and transparency in the digital single market by altering the power imbalances that characterised the relations between online platforms and individual and/or business users. In this context, the role of individuals will be paramount to the fulfillment of the obligations of both Regulations and private enforcement will be a crucial tool in this regard.

Against this framework, this paper aims at connecting the well-settled principles of EU law, namely, the principle of effective judicial protection and the *Rewe* principles, with the new developments in the digital atmosphere, specifically in terms of the private means of redress. To that end, this article will first give an overview of the DMA and the DSA, as well as the question of private enforcement under EU law. Second, the possibilities and conditions for individuals to enforce their rights correlative to the obligations laid down in the DMA and the DSA privately will be studied. Finally, this paper will compare the situation regarding private enforcement in both Regulations with the previous rules in this matter through a series of examples that will facilitate an understanding of the rationale behind the introduction of the new legal framework.

KEYWORDS

*DMA; DSA; Private Enforcement; Effective Judicial Protection; Rewe Principles*

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## INTRODUCTION

At the dawn of the Internet, hope was placed on its possibilities to provide more freedom, emancipation, and education.[1] Several decades later, the prevailing feeling seems more pessimistic. The online ecosystem has undeniably had many positive aspects, yet two pernicious trends have operated within it. As De Querol argues, we can observe, first, a centripetal force at the level of the companies that increasingly tend towards concentration and oligopolistic behaviours.[2] Second, from a societal point of view, the forces are diametrically the opposite, and the tendency is rather centrifugal. The Internet has, often, atomised individuals, dissolving some of their inter-personal links between them, and seems to have reinforced their biases and prejudices. The incapability or unwillingness to regulate, and sometimes the failure to adapt, existing norms has played a fundamental role in these processes. At the EU level, competition rules, on the one hand, have not been able to cope with the overconcentration of these markets.[3] On the other hand, sector-specific norms regulating digital services have also failed to give users the tools to claim transparency and accountability.

In this context, in 2022, two milestone pieces of legislation were published in the Official Journal of the European Union: The Digital Markets Act (Regulation (EU) 2022/1925) [Hereinafter the DMA] and the Digital Services Act (Regulation (EU) 2022/2065) [Hereinafter the DSA]. Both of them are part of a regulatory package aimed at limiting the tech firms' market power and making them subject to public authorities' and individual control.[4] To that end, the DMA and the DSA establish a series of obligations that give those firms clear indications as to the boundaries of their conduct vis-à-vis individuals and the economic environment of the EU. On the other side of the economic relationship, the objective of both Regulations is to provide consumers and users, whether individuals or businesses, with the necessary tools to assert their rights more clearly and with greater guarantees.

The content of the obligations of the DMA and the DSA, as well as their relationships with other existing rules, have been the primary focus of existing literature. While this is important from the point of view of the necessity of these rules, the novelty of the context they are called to deal with should not be a hindrance to respecting the principles and mandates of EU law. Among these fundamental norms enshrined in the constitutional core of the Union's legal order, procedural rules seem to

[1] *See* Ricardo de Querol, La gran fragmentación 12 (Arpa eds., 2023).
[2] *Id.*
[3] *Id.*
[4] *See* Peter Pitch, *Private Enforcement for the DSA/DGA/DMA Package*, Verfassungsblog (Sept. 3, 2021) https://verfassungsblog.de/power-dsa-dma-09/.

enjoy a privileged place. Not only because the Treaty on the Functioning of the European Union [hereinafter TFEU] aims at establishing "a complete system of legal remedies and procedures".[5] Also given that the EU is based on values such as the Rule of Law, as established in Article 2 on the Treaty on the European Union [hereinafter the TEU]. This is further specified in the second paragraph of Article 19(1) TEU,[6] that obliges Member States [hereinafter MS] to "provide remedies sufficient to ensure effective legal protection in the fields covered by EU law". It is nonetheless important to conduct a procedural analysis on the interactive nature between these pieces of EU legislation and national legal orders in light of the fundamental Union principles. This is essential to analyse how the latter will be translated into effective remedies at the disposal of individuals and companies that want to assert their rights conferred to them by the DSA and the DMA. The existing literature has not yet studied these procedural issues comprehensively and, especially not in comparison with the situation before the introduction of both Regulations. The analysis of this question is, however, of great importance as effective private enforcement is crucial to give individual and business users the tools to tackle the harmful effects of some of the types of behaviour of large tech companies.

In this context, this article aims at studying the possibilities, legal requirements, and extent of private enforcement of the rights conferred to individuals, correlative to the obligations of the DSA and the DMA,[7] and to analyse whether they are now better positioned to enforce their rights by private means in comparison to the previous legal framework. To that end, the first section gives some introductory remarks by offering an overview of both Regulations, their differences and cross-cutting elements, and an analysis of the conditions and rationale behind private enforcement under EU law. The second section studies, first in relation to the DMA and second to the DSA, the possibilities for individuals to enforce their rights by private means. The third section aims to give some examples that illustrate the differences between the previous rules before the introduction of both Regulations. Finally, this paper presents the results and discusses the limitations of the study.

[5] Case 294/83, Parti écologiste "Les Verts" v European Parliament, ECLI:EU:C:1986:166, ¶23 (Apr. 23, 1986).
[6] Case C-64/16, Associação Sindical dos Juízes Portugueses, ECLI:EU:C:2018:117, ¶32 (Feb. 27, 2018).
[7] Note that, for the purpose of this article, "individuals" will refer to both natural and legal persons.

# 1. FROM DIGITAL MARKETS TO REWE: PRELIMINARY REMARKS

## 1.1. THE DSA AND THE DMA: TWO SIDES OF THE SAME COIN

A first reading of the DSA and the DMA may suggest that both instruments contain not only different rules but also different targets when it comes to regulating the digital milieu. However, they should not be understood separately, but rather as a comprehensive system of obligations for firms operating in the digital environment, and a double-headed response to the common aim of mitigating the negative externalities and risks derived from their pernicious behaviour online. This is true both for the market structure and for natural and legal persons. Thus, the delimitation of their respective aims appears to be rather blurry.[8]

Both Regulations are harmonisation instruments based on Article 114 of the Treaty of the Functioniong of the European Union [TFEU]. The choice of this legal basis accounts for their objectives of "eliminat[ing] obstacles to the freedom to provide and receive services, including retail services, within the internal market",[9] as well as "safeguard[ing] and improv[ing] the functioning of the internal market [through] a targeted set of uniform, effective and proportionate mandatory rules [. . .] at Union level".[10] Whether they respond to the aim enshrined in this provision, or the meta-objective that is at the basis of their conception pointing to a different direction, is outside of the scope of this paper. However, it is relevant to note that the harmonised character of these rules, aiming at avoiding legal divergences between Member States, should be given special attention when considering the enforcement possibilities offered by both pieces of legislation.

Against this characterisation, the DSA and the DMA follow a similar regulatory model based on *macro-categories to which different obligations,*[11] conduct rules, control systems and penalties are assigned in accordance with their size or impact.[12] Therefore, the use of these sorts of catalogues inspired by sectoral regulation aims, not only at creating an incremental system of obligations and burdens for operators whose systemic

[8] *See* Martin Eifert et al., *Taming the Giants: the DMA/DSA Package*, 58 Common Market Law Review, 987, 989 (2021).
[9] Recital 8 DMA.
[10] Recital 4 DSA.
[11] *See* Antonio Davola, *The Digital Services Act, Published: A Good Start And – Yet – Just A Start*, Kluwer Competition Law Blog (Oct. 19, 2022) https://competitionlawblog.kluwercompetitionlaw.com/2022/10/19/the-digital-services-act-published-a-good-start-and-yet-just-a-start/.
[12] *Id.*

importance is greater but,[13] also to facilitate compliance, enforcement, and implementation.[14]

### 1.1.1. THE DMA

The DMA focuses in particular on promoting *fairness* and *contestability* in the market by regulating the conduct and power of the so-called gatekeepers.[15] While the rules established by this Regulation draw inspiration from traditional competition rules, the DMA has characteristics pertaining to many other fields (such as consumer law or data protection).[16] It seems therefore that the claim by some authors that the DMA is just a "sector-specific competition law"[17] is inconsistent with the particular objectives, substance, and legal basis of its rules.

The weak contestability of gatekeepers and the multiplication of unfair practices,[18] as well as the fragmented character of the regulatory framework, both horizontally (between different fields of EU law) and vertically (between the Union and its Member States), has led to the adoption of a harmonisation instrument. This instrument coexists with many of the pre-existing rules and has the objective of "ensur[ing] that markets, where gatekeepers are present are and remain *contestable* and *fair*, independently from the actual, potential or presumed effects of the conduct of a given gatekeeper covered by this Regulation on competition on a given market".[19]

Although some articles of the DMA are certainly inspired by past competition cases or Treaty competition rules, the Regulation goes further to establish a number of *ex-ante*, *numerus clausus* and *per se* obligations, with no need to define the conduct as harmful or to identify the relevant market in which the firm operates .[20]

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[13] *See* Matthias Leistner, *The Commission's vision for Europe's Digital Future: Proposals for the Data Governance Act, the Digital Markets Act and the Digital Services Act – A critical primer*, 16 Journal of Intellectual Property Law & Practice n.8 778, 779 (2021).

[14] See, among others, Recital 31 DMA and Recital 40 DSA.

[15] According to Article 3 of the DMA, a firm will be designated as a gatekeeper when it has "a significant impact on the internal market", it operates a "core platform service which is an important gateway for business users to reach end users" and "it enjoys an entrenched and durable position in its operations or it is foreseeable that it will enjoy such a position in near future" (the latter is the so-called "emerging gatekeeper").

[16] *See* Leistner, *supra* note 13, at 780.

[17] Nicolas Petit, *The Proposed Digital Markets Act (DMA): A Legal and Policy Review*, 12 Journal of European Competition Law & Practice n.7 529, 529 (2021).

[18] Recital 13.

[19] Recital 10.

[20] *See* Assimakis P. Komninos, *The Digital Markets Act and Private Enforcement: Proposals for an Optimal System of Enforcement*, in Eleanor M. Fox Liber Amicorum - Antitrust Ambassador to the World 425, 425 (Nicolas Charbit and Sébastien Gachot ed., 2021); Petit, *supra* note 22, at 538.

Based on the centrality of concepts of *fairness* and *contestability* in the architecture of the DMA, this piece of legislation contains several precise, self-executing obligations in its Articles 5, 6 and 7. For the purpose of this paper, these obligations can be divided *ratione materiae into the categories laid down in Table 1.*[21] Yet, it should be noted that such categories are not watertight compartments but are often interrelated.

| Type of Obligations | Articles |
|---|---|
| Anticompetitive or unfair agreements or practices | Article 5(3), (4), (5), (7), and (8), and Article 6(4), (5), (6), and (12). |
| Data-related rules | Article 5(2), 6(2), (9), (10), and (11). |
| Interoperability obligations | Article 6(7), and Article 7. |
| Transparency and users' empowerment rules | Article 5(6), (9) and (10), and Article 6(3), (8), and (13). |
| Reporting rules | Articles 14(1) and 15(1). |

Figure 1: Categories of the DMA Obligations *Ratione Materiae*

### 1.1.2. THE DSA

The main objective of the DSA is to enhance consumers' protection and rights and to set clear rules in terms of *transparency* and *accountability.*[22] In the last years, online platforms have experienced an enormous transformation both in terms of their roles,[23] and in terms of the risks linked to their use. Thus the DSA aims at ensuring a "safe, predictable and trusted online environment; addressing the dissemination of illegal content online and the societal risks that the dissemination of disinformation or other content may generate"; and that the "fundamental rights enshrined in the Charter are effectively protected and innovation is facilitated".[24]

[21] This categorisation is inspired by Filomena Chirico, *Digital Markets Act: A Regulatory Perspective*, 12 Journal of European Competition Law & Practice n.7 493, 495 (2021). However, this paper regroups them for the aim of this study.

[22] *See* European Commission, *The Digital Services Act: ensuring a safe and accountable online environment*, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-services-act-ensuring-safe-and-accountable-online-environment_en.

[23] *See* Miriam Buiten, *The Digital Services Act: From Intermediary Liability to Platform Regulation*, 12 Journal of Intellectual Property, 5 Information Technology and E-Commerce Law 631, 361 (2022).

[24] Recital 9 DSA.

In this context, the DSA contains two main types of norms: on the one hand, Chapter II lays down a system of liability exemptions, with a similar approach to the E-Commerce Directive (Directive 2000/31/EC, "ECD"),[25] but with more precise rules in terms of how to tackle the presence and removal of illegal content.[26] In a nutshell, departing from the same categories of intermediary services foreseen in the ECD, the DSA establishes the liability exemptions laid down in Table 2.[27]

| Type of Service | Example | Exemption of Liability |
|---|---|---|
| Mere conduit | WiFi | Always, *even if* notified, as long as it behaves passively in relation to the content transmitted or accessed in it. |
| Caching | CDN* | Exempted as long as it behaves passively in relation to the content transmitted by it *unless* notified. |
| Hosting | Social networks | Exempted as long as it behaves passively and *unless* notified of the illegal content. |

Figure 2: Liability Exceptions DSA

*CDN[28]

Nevertheless, the real contribution of the DSA is the introduction of the so-called due diligence obligations in Chapter III. These are independent of the system of liability exemptions, where the aim is to ensure that digital services providers are further responsible for their behaviour online.[29]

[25] *See* Martin Husovec and Irene Roche Laguna, *Digital Services Act: A Short Primer*, in Principles of the Digital Services Act 1, 3 (Martin Husovec and Irene Roche Laguna ed., 2023, forthcoming).
[26] *See* Buiten, *supra* note 23, at 363.
[27] Husovec and Roche Laguna, *supra* note 25, at 3.
[28] Content delivery network.
[29] *See* Husovec and Roche Laguna, *supra* note 25, at 4.

Against this background, the DSA lays down a series of norms in relation to the organisational model of digital businesses that materialise into a Matryoshka-looking set of cumulative and incremental due diligence obligations for platforms.[30] They range from those applicable to intermediary services (as set out above, mere conduit services, caching services and hosting services), to additional obligations for online platforms and,[31] finally, to the so-called Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs),[32] as shown by Table 3.

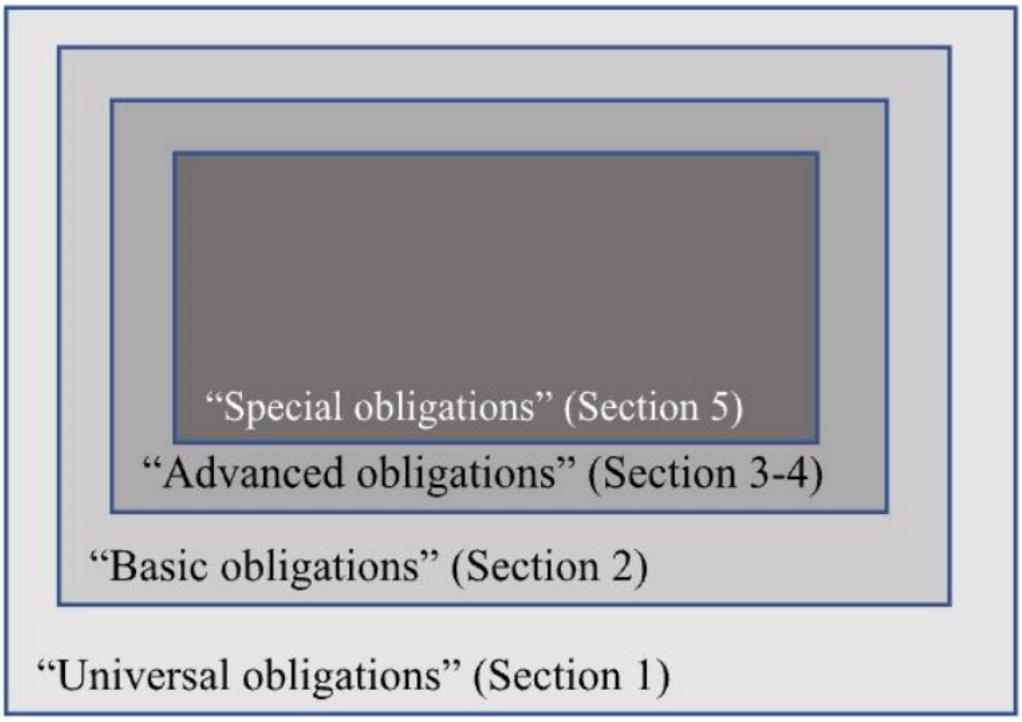


Figure 3: Due diligence obligations in terms of size

"Universal obligations" must be complied with by all firms regardless of their size. Additionally, the DSA establishes some more duties for hosting services ("basic obligations"). The third level ("advanced obligations") applies to providers of services in relation to online platforms and/or online marketplaces (Sections 3 and 4).[33] Finally, the

[30] *See* Eifert et al., *supra* note 8, at 999.
[31] "Hosting service that, at the request of a recipient of the service, stores and disseminates information to the public" (Article 3(g)(i) DSA).
[32] "Online platforms and online search engines which have a number of average monthly active recipients of the service in the Union equal to or higher than 45 million" (Article 33(1) DSA).
[33] Articles 19 to 28 and 29 to 32 respectively, notably with an internal complaint-handling mechanism and out of court disputes settlement system, as well as the creation of trusted flaggers and transparency obligations.

seed Matryoshka is formed by the "special obligations" contained in Section 5,[34] applicable to VLOPs.[35]

However, due diligence rules can also be divided *ratione materiae* into the categories shown in Table 4. They take into account not only the general objective of every specific obligation but especially its beneficiary, i.e., the person or entity to which the provision is directed in their relations with the service provider.

Yet, this division is sometimes not as straightforward since some elements undeniably have a cross-cutting nature. Moreover, as this paper will further explain, this does not mean that only the beneficiary of the obligation would always be entitled to enforce it. Still, this table will facilitate the comprehension of the analysis in the following sections of this paper.

<table>
<tr><td>Obligations vis-à-vis the regulator</td><td colspan="2">Articles 11-13 (legal representatives and points of contact), 15 (transparency reporting obligations), 22 (trusted flaggers), 24 (transparency reporting for online platforms) 34-36 (related to risk assessment and mitigation), 37 (independent audit), 40 (data access and scrutiny) and 41 (compliance function for VLOPs), 42 (transparency reporting for VLOPs), 43 (supervisory fee), and 44-47 (standards and codes of conduct).</td></tr>
<tr><td rowspan="2">Obligations vis-à-vis users</td><td>Fighting illegal content and abusive behaviour</td><td>Transparency, data, and algorithms</td></tr>
<tr><td>Articles 16, 17, 18 and 23 (notice and action system, statement of reasons, criminal offences and misuse), 20 and 21 (internal complaint and non-judicial dispute mechanism).</td><td>Articles 14 (terms and conditions), 25 (online interface design and organisation), 26 (advertising on online platforms), 27 (recommender system), 28 (minors), 30-32 (marketplaces), 38 (recommender system in VLOPs), and 39 (transparency obligations for VLOPs).</td></tr>
</table>

Figure 4: Due Diligence Obligations *Ratione Materiae*

[34] Articles 33 to 43, establishing risk management and Audit obligations, more transparency rules and data access and scrutiny.

[35] For the categorisation, see Husovec and Roche Laguna, *supra* note 25, at 4.

### 1.1.3. COMMON GROUNDS

Notwithstanding their respective objectives and obligations, the mutual conception of the DMA and the DSA gave rise to areas that are both complementary and cross-cutting,[36] to the point where some authors refer to them as "sister" regulations.[37] First, the targeted platforms, by both, are very similar in terms of a big part of their obligations, i.e., as Eifer et al. note, those that enjoy a "regulator-like position".[38] The DMA's main objective is to regulate the conduct of gatekeepers that provide *core platform services*, which include "online intermediation services, online search engines, online social networking services, video-sharing platform services, number-independent interpersonal communications services, [or] operating systems [. . .]".[39] The DSA targets *intermediary services*, consisting of mere conduit, catching, and hosting services, categories that englobe, among others, online platforms and search engines.[40] As it has been observed, all the gatekeepers designated by the Commission in 2023 are considered, for some of their core platform services, like VLOPs under the DSA (further examples include: Apple's AppStore, Meta's Facebook and Instagram, or ByteDance's TikTok, among others).

Second, as it has been argued, the setting of *ex-ante* dos and don'ts to avoid the concentration of market power by the DMA is complemented by the DSA's establishment of an *ex-post* liability regime and obligations regarding the responsibility for the behaviour of those firms.[41] In fact, the frontier between the goals pursued by both Regulations is rather blurry. Given its aim of contestability and fairness, the DMA's focus goes beyond the market power of tech giants.[42] While the DSA touches certain aspects, its very nature affects the ability of competitors to contest such market power.[43] From this perspective and, as recognised by the European Commission, both Regulations "aim to create a safer digital space where the fundamental rights of users are protected and to establish a level playing field for businesses".[44] The DMA and the DSA have in mind the protection and empowerment of individuals in the digital milieu by avoiding and regulating certain corporate behaviours.[45]

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[36] *See* Eifert et al., *supra* note 8, at 995-998.
[37] *See* Chirico, *supra* note 21, at 499.
[38] Eifert et al., *supra* note 8, at 998.
[39] Article 2(2) DMA.
[40] Article 3 DSA.
[41] *See* Buiten, *supra* note 23, at 366.
[42] *Inter alia*, Recital 31.
[43] *See* Eifert et al., *supra* note 8, at 996-997.
[44] European Commission, *The Digital Services Act package*, https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package.
[45] See, among others, Recital 7 DMA and 3 DSA.

It is based on this idea that any procedural analysis on the private enforcement of the DMA and the DSA is better tackled in conjunction. The interplay between both Regulations is crucial for the achievement of their purposes, and their complementarity is the basis of the success of such objectives. Besides, certain practices by the same firm could entail a violation of both the DSA and the DMA and negatively affect the rights of individuals who use their services. It is against this framework that this paper seeks to analyse the private procedural possibilities offered by both Regulations departing from the well-settled principles of EU law. Then, how the latter are still relevant in some of the most contemporary fields of law and contribute to the substantive aims pursued by the DMA and the DSA will further be analysed.

In order to understand the different purposes and effects of private enforcement that would justify its existence in the context of the DMA and the DSA, the following section will approach the legal and purposive reasons, as well as the necessary conditions under EU law, for the possibility of these rules to be enforceable by private means.

## 1.2. PRIVATE ENFORCEMENT UNDER EU LAW

### 1.2.1. CONDITIONS FOR PRIVATE ENFORCEMENT UNDER EU LAW

Private enforcement, as opposed to the public one, means the possibility for individuals to seek the enforceability in courts of their rights bestowed by EU law, or of certain obligations that create correlative rights from which they benefit, or redress in the case that they have been violated. However, as a rule, EU law does not provide for explicit judicial remedies and thus, based on the principle of procedural autonomy, they have to be found in the national laws of the Member States as part of the European Union's decentralisation of justice.[46]

The procedural autonomy of MS was originally recognised by the Court of Justice in *Rewe,*[47] where it established that "[. . .], in the absence of Community rules [. . .], it is for the domestic legal system of each Member State to designate the Courts having jurisdiction and to determine the procedural conditions governing actions at law intended to ensure the protection of the rights which citizens have from the direct effect of [EU] law [. . .]".

[46] *See* Takis Tridimas, *Financial regulation and private law remedies: an EU law perspective*, in Financial Regulation and Civil Liability in European Law 48, 49 (Olha O. Cherednychenko and Mads Andenas eds., 2020).

[47] Case 120/78, Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein, ECLI:EU:C:1979:42, ¶5 (Feb. 20, 1979).

Yet, this notion has to be balanced against the principle of effective judicial protection. According to the Court, the second paragraph of Article 19(1) TEU, which establishes the obligation for MS to "provide remedies sufficient to ensure effective legal protection in the fields covered by Union law", concretises the fundamental value of the Rule of Law as enshrined in Article 2 TEU.[48] Effective judicial protection has been recognised by the Court to be a general principle of EU law laid down, among others, in Article 47 of the Charter and the constitutional traditions of the MS.[49] Its respect for the purposes of EU law, through a system of judicial remedies, is an obligation arising *inter alia* from "the principle of sincere cooperation, set out in the first subparagraph of Article 4(3) TEU".[50]

Against this background, it is settled case law that, within the framework of their procedural autonomy, national remedies made available by domestic laws have to respect the so-called *Rewe* principles. These include effectiveness,[51] and equivalence,[52] which are of central importance to the complete the system of judicial remedies put in place for the enforceability of EU law. As argued by Tridimas, the Court seems to favour a "hybrid model"[53] where the principles of effectiveness and equivalence have a deep impact on the way national remedies should take place.

As pointed out before, it is mostly the case in EU law that a right (or an obligation from which a right is derived) is established with no reference to the remedies available for its redress. In this situation,[54] the remedy is not inexistent but should be implied from the obligation as a logical expression of the well-established principles of supremacy and direct effect of EU law.[55] However, not all the rights and obligations established under EU law are equally enforceable, and the fullness of their effects, especially the possibility for their private enforcement, will depend on whether certain conditions are satisfied.[56]

In this context, as noted by the Court in *Rewe*, the direct effect of the rules is paramount for the analysis of the enforceability of EU law obligations by private means before national courts. It is settled case law of the Court of Justice since *Van Gend En Loos that,*[57] for a provision of EU law to enjoy direct effect, it must be clear and sufficiently precise. In addition, for an implied right of action to be derived for the benefit of

[48] Associação Sindical dos Juízes Portugueses, *supra* note 6.
[49] *Id.* ¶35.
[50] *Id.* ¶34.
[51] The conditions for the exercise of the remedy "cannot be less favourable than those relating to similar actions of a domestic nature" (*Id.*).
[52] The exercise of the remedy cannot be "virtually impossible or excessively difficult" (Tridimas, *supra* note 46, at 49) for individuals before national courts.
[53] *Id.* at 50.
[54] *See Id.* at 51.
[55] *See* Sacha Prechal, *Community Law in National Courts: the Lessons from Van Schijndel*, 35 Common Market Law Review 3, 686 (1998).
[56] *See* Tridimas, *supra* note 46, at 51.
[57] Case 26/62, Van Gend en Loos v. Nederlandse Administratie der Belastingen, 1963 E.C.R.

individuals, the measure shall have the intention of conferring a right and protecting the legitimate interests of a category of persons in which the claimant is included.[58] Moreover, the violation must have an adverse effect for such rights and interest of the claimant.[59] For the determination of whether the last two requirements are satisfied,[60] several factors are taken into account by the Court, including a teleological interpretation of the provisions and the *effet utile* of EU law.

The legal form of the particular instrument at stake also has implications in as far as such a direct effect and subsequent private enforcement shall be recognised. As Regulations, the DSA and the DMA are, according to Art. 288 TFEU, directly applicable.[61] However, this shall not be confused with the direct effect that some of their provisions can enjoy, as such direct applicability does not represent a sufficient condition for the satisfaction of direct effect.

It should be acknowledged that some scholars consider both terms as synonyms, describing direct effect/applicability as the capacity of the provisions of EU law to bestow individuals with certain rights and obligations. Although, for such rules to be invoked before national courts, certain conditions have to be fulfilled.[62] t is beyond the scope of this paper to highlight the differences between the notions of "direct applicability" and "direct effect". However, it is relevant to clarify that, following Winter's argument, this article uses the former concept to designate "a method of incorporation of (secondary) [Union] Law into the municipal legal order", and the latter "as to when a [Union] provision is susceptible of receiving judicial enforcement".[63] Against this backdrop, the case law of the Court establishes that provided that these conditions are fulfilled, regulations should enjoy both vertical,[64] (in relations between the State and the individual) and horizontal,[65] (in conflicts between individuals) direct effects.

[58] Although it is not necessary that such a protection is the only goal of the measure.
[59] *See* Tridimas, *supra* note 46, at 61.
[60] *See id.* at 62.
[61] That, as pointed out by Tridimas (*Id.* at 61), "partially reflect the conditions discussed by the Advocate General in *Muñoz*".
[62] *See* Rostane Mehdi, *L'effet direct du droit Communautaire*, *in* Juriclasseur Europe (Rostane Mehdi ed., 2008).
[63] Jay Winter, *Direct applicability and direct effect. Two distinct and different concepts in Community law*, 9 Common Market Law Review 4, 425 (1972).
[64] *See* Case 93/71, Orsolina Leonesio v. Ministero dell'agricoltura e foreste, 1972 E.C.R. 5; Case C-237/07, Janece v. Freistaat Bayern, 2008 E.C.R.
[65] *See* Case C-253/00, Antonio Muñoz y Cia SA and Superior Fruiticola SA v. Frumar Ltd and Redbridge Produce Marketing Ltd, 2002 E.C.R. 30 and Opinion of Advocate General Geelhoed, Antonio Muñoz y Cia SA and Superior Fruiticola SA v. Frumar Ltd and Redbridge Produce Marketing Ltd 2001 E.C.R. 55.

### 1.2.2. PRIVATE ENFORCEMENT AND ITS RAISON D'ÊTRE

Private remedies in the context of EU law come to complement and not to substitute public enforcement and,[66] as established by the Court of Justice in *Skanska,*[67] they are "an integral part of the system for enforcement of those rules". In the words of Nagy, both public and private remedies form a "unitary enforcement system".[68] The existence of public enforcement mechanisms in the context of a provision of EU law does not preclude the possibility of private remedies before civil courts for violations of the rights or obligations protected by that provision.[69]

In this context, private remedies can be used for two aims: either individuals use them as a "sword" against the defendant, taking the form usually of claims for damages or injunctive reliefs, or as a "shield" when, for example in the context of competition law, they question the validity of an agreement.[70] Damage claims (and, in general, "follow-on" actions) have gathered most of the political and legislative attention, but this does not mean they are the only possibility, nor the most interesting one from the point of view of the EU system of judicial governance.[71] One of the roles of private remedies is precisely to empower individuals in the enforcement of EU law and in enabling its *effet utile.*[72] Thus, any analysis of such actions must depart from such an objective.

Nevertheless, the purpose of private remedies is not only to make individuals "integration agents",[73] but also to respect their right to an effective remedy and to a fair trial as enshrined in Article 47 of the Charter of Fundamental Rights of the European Union [hereinafter the Charter].[74] Moreover, the Preamble of the European Declaration on Digital Rights and Principles for the Digital Decade recognises that "The democratic functioning of the digital society and economy should be further strengthened, in full respect of the rule of law, effective remedies and law enforcement".[75] The legal nature of this instrument does not preclude the political importance of the inclusion of such a statement for the teleological interpretation of the pieces of legislation that relate to the

[66] *See* Csongor István Nagy, *What role for private enforcement in EU competition law? A religion in quest of founder*, *in* The Cambridge Handbook of Competition Law Sanction 218, 228 (Tihamer Tóth ed., 2022).
[67] Case C-724/17, Vantaan kaupunki v. Skanska Industrial Solutions Oy and Others, ECLI:EU:C:2019:204, ¶ 45 (Mar. 14, 2019).
[68] Nagy, *supra* note 66, at 227.
[69] *See* Muñoz, *supra* note 59.
[70] *See* Wolfgang Wurmnest & Merlin Gömann, *Comparing Private Enforcement of EU Competition and Data Protection Law*, 13 Journal of European Tort Law 154, 155 (2022).
[71] *See* Rupprecht Podszun, *Private Enforcement and Gatekeeper Regulation: Strengthening the Rights of Private Parties in the Digital Markets Act*, 13 Journal of European Competition Law & Practice 254, 254 (2022).
[72] *See* Tridimas, *supra* note 46, at 66.
[73] *Id.*
[74] *See* Nagy, *supra* note 66, at 225.
[75] European Declaration on Digital Rights and Principles for the Digital Decade 2023/C 23/01, O.J. C 23/1.

digital field. Additionally, in the specific context of administrative law, private enforcement can achieve several objectives from compensating for the absence of omnipresence and omniscience of the public administration to more procedural aspects such as the guidance of the proceedings and the assurance of compliance.[76]

From an existential point of view, the question of private remedies has turned whether they should have a deterrence or compensation purpose around (although both objectives are mutually dependent and complementary).[77] In this context, as the Court recognised in *Marshall II,*[78] such remedies "must be such as to guarantee real and effective judicial protection and have a real deterrent effect" – be it through "financial compensation [. . .] adequate [to] enable the loss and damage actually sustained",[79] or actions that help "to discourage violations which are often difficult to detect".[80] But, from the viewpoint of their legitimacy, such remedies are used by individuals to protect their own interests and rights, as opposed to public remedies, which, first and foremost, although not exclusively, seek to protect the public interest.[81] Therefore, it seems that private enforcement serves two main and complementary objectives: first, the respect of fundamental procedural rights protected by the Charter, ensuring the protection of the legitimate interests of individuals who may use them either as swords or shields; second, the effectiveness of EU rules and the empowerment of individuals in the system of EU law.

Taking this into account, the next section will respond to the question at the heart of this study, namely, whether, under which conditions and what provisions of the DMA and the DSA may give rise to private enforcement for individuals who want to access their courts for the protection of their rights. It should be reminded at this point that this article refers to individuals regardless of whether they are natural or legal persons.

[76] *See* Rupprecht Podszun, *The Commission will not be able to do this alone*, Verfassungsblog (Sept. 1, 2021) https://verfassungsblog.de/power-dsa-dma-05/.
[77] *See* Nagy, *supra* note 66, at 218-219.
[78] Case C-271/91, M. Helen Marshall v Southampton and South-West Hampshire Area Health Authority, ECLI:EU:C:1993:335, ¶24 (Aug. 2, 1993).
[79] *Id.* ¶26.
[80] Tridimas, *supra* note 46, at 64.
[81] *See* Podszun, *supra* note 71, at 260.

## 2. WHAT TO EXPECT FROM PRIVATE ENFORCEMENT IN THE DMA AND THE DSA

### 2.1. PRIVATE ENFORCEMENT OF THE DMA

It must be pointed out as a preliminary note that, notwithstanding the provisions in relation to the allowance of representative actions,[82] the DMA remains silent about specific private actions to enforce its rules. Yet, the possibility of private enforcement before national courts was already advanced by some scholars when commenting on previous versions of the DMA.[83]

This absence means that the present analysis must consider the various relevant elements that allow for the inference of certain implicit procedural rights deriving from EU law that are applicable to the DMA's obligations. This section will therefore study the content of these elements, as well as the fulfilment of the requirements established under EU law for implicit private remedies, and the different possible approaches towards private enforcement of the obligations laid down under the DMA, to finally argue on the most suitable model.

#### 2.1.1. DIRECT APPLICABILITY, DIRECT EFFECT AND PRIVATE ENFORCEMENT OF THE DMA – DIFFERENT BUT INTERRELATED

As pointed out before, the use of a regulation as a legal instrument entails that its rules are directly applicable. This solves many of the problems in terms of effectiveness that the habitual use of directives for harmonising matters in this field used to pose. Yet, as argued in the previous section, while the direct applicability that the DMA certainly enjoys as a regulation allows it to "penetrate directly in the legal order of the Member States",[84] the reading of Art. 288 TFEU should not lead to the conclusion that the provisions of these legal instruments can automatically be enforced before national courts in disputes between individuals. Nor that the obligations of the DMA shall give rise to subsequent rights that individuals can enforce through implied remedies in their domestic jurisdictions. The DMA's articles will have to meet the characteristics discussed above in order for it, first, to enjoy direct effect and, second, to allow for implied remedies under domestic laws.

[82] *See* Arts. 42 and 51 DMA.
[83] *see* Komninos, *supra note* 20, at 427.
[84] Winter, *supra* note 63, at 436.

The core of the debate regarding the private enforcement of the DMA is situated around the question of whether and which of its rules fulfil the conditions for enjoying horizontal direct effect and for their enforceability through private means.

### 2.1.2. POSSIBILITIES FOR PRIVATE ENFORCEABILITY OF (SOME OF) THE DMA PROVISIONS

Unlike its proposal, the final version of the DMA does explicitly (although briefly) mention the possibility of cooperation between the Commission and national courts for the application of its rules (Recital 92 and Article 39).[85] But, as pointed out before, mentions of individual actions are very succinct.[86] The question, therefore, is whether and for which Articles the conditions for the inference of an implicit right of action are fulfilled. In other words, this subsection will analyse which of the provisions of the DMA are *clear* and *sufficiently precise* (and thus enjoy direct effect) and have the intention of *protecting the rights of certain categories of persons* to which a potential claimant may belong; and which would be *negatively affected* by a violation of those provisions (and therefore may be enforced by private means).

Article 3 of the DMA on the "designation of gatekeepers" contains rules related to the procedure of designation and the substantive characteristics that must be fulfilled for them to be categorised as such.[87] Nevertheless, from the text of this Article, it seems clear that the Commission is the only institution called upon to appoint gatekeepers, leaving out the national authorities, including domestic courts. However, the importance of this Article is paramount, as it is the precondition for the applicability of the other provisions.[88] In other words, for the DMA to be enforceable before national courts, a firm must have been designated as a gatekeeper by the Commission via Article 3. Therefore, private enforcement cannot be used to obtain the designation of undertakings as gatekeepers.

However, as noted *inter alia* by Komninos, Articles 5, 6 and 7 of the DMA seem to fulfill the conditions for their enforceability by private means.[89] The obligations laid down in these Articles generate a correlative right for end-users, consumers, and business users (depending on the specific Article), who are the beneficiaries of these rules. And,

[85] This Article is similar to Article 15 of Regulation 1/2003, on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty.
[86] Save for the allowance of collective actions (see *supra*).
[87] *See* Komninos, *supra* note 20, at 428.
[88] *See id.* at 429.
[89] *See id*.

an eventual violation by a gatekeeper could negatively affect their individual rights and interests.

Yet, the clarity and sufficient precision deserve further analysis – given that it might not be evident for all the rules of the DMA. According to the Regulation, the obligations laid down in Article 6 are "susceptible of being further specified". Notwithstanding the reading of this title, it should not be concluded that implementation is required and therefore its direct effect and the possibility to enforce it by private means are excluded. Articles 8(2) and (3) establish the conditions for the dialogue between gatekeepers and the Commission to guarantee the effectiveness of the measures taken by the former or for the latter to specify the measures that gatekeepers shall take for the effective implementation of Articles 6 and 7. But there seems to be a general agreement that this procedure does not prejudice the fact that the obligations under Article 6 have the same nature as those contained in Article 5.[90] As pointed out by Chirico, the dialogue between the regulator and the regulated firms seeks to increase the efficiency of the rules and does not affect their specificity.[91] In other words, the process of detailing the obligations of Article 6 is only a possibility, but its rules take full effect and must be complied with in the presence or absence of such a process.

From the reading of these Articles, all the requirements for their enforceability by private means are in principle fulfilled. As pointed out before, these obligations generate a correlative right for a variety of beneficiaries (for example advertisers for Article 5(9); competitors for Article 6(2); or individual end users for Article 7(2)(a) – among others). They could access their national courts in the case of a violation that negatively affects their rights.

Although the possibility of private redress seems clear, its extent must be balanced. Therefore, the objectives and legal basis of the DMA, the rationale behind the very existence of private enforcement, and the general requirements under EU law must be taken into account.

First, it seems clear that leaving the Commission with all the work in terms of enforcement is neither desirable nor foreseeable. If one of the main purposes of the regulatory framework, introduced by the DMA, is to avoid the usual undue delays in competition procedures,[92] the overburdening of the Commission with cases would go

[90] *See* Thomas Graf et al., *Digital Markets Regulation Handbook*, Cleary Gottlieb 22 (Dec., 2022) https://www.clearygottlieb.com/-/media/files/rostrum/22092308%20digital%20markets%20regulation%20handbookr16.

[91] Chirico, *supra* note 21, at 495.

[92] *See* European Commission, Staff Working Document, Impact Assessment Accompanying the Document Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act), 15 December 2020, [119].

against the effectiveness of its rules.[93] Besides, as pointed out by Franck, in the context of the P2B Regulation (Regulation (EU) 2019/1150), users are, as a rule, better positioned to identify breaches of their obligations by online firms under EU law. And, users are also highly motivated to stop violations.[94] Additionally, if those affected by it are able to sue for damages, they may be indirectly incentivised to notify other potential enforcers, such as public authorities or business associations.[95]

Moreover, beyond the *effet utile*, there is also a democratic argument in favour of the possibility of private enforcement of the obligations in the DMA. First, Article 47 of the Charter establishes the fundamental right of individuals to an effective judicial remedy. While, Article 19(2) of the TEU mandates that MS shall ensure the effective protection of EU law. Such a remedy is, additionally, a way for them to participate and take active part in the protection of the rights that emanate from the obligations laid down in Regulation,[96] and a general democratic mandate for the Declaration on Digital Rights of the EU.

However, some scholars have also expressed concerns that play against, or at least nuance, such a possibility. The fact that the DMA is a harmonising instrument, with Article 114 TFEU as its legal basis, seems to be at odds with the risk of (re)fragmenting the interpretation and application of its provisions by its enforcement in national courts. This would cause some degree of uncertainty for gatekeepers in relation to complying with their obligations under the DMA.[97] This risk cannot be overlooked, not only from the point of view of the novelty of its rules, but also for the sake of consistency between the aims of the DMA and its legal basis.[98]

### 2.1.3. THE EXTENT OF PRIVATE ENFORCEMENT OF ARTICLES 5, 6 AND 7 OF THE DMA

Considering this, a central question gravitates around the issue of the DMA's private enforcement. While scholars generally agree that an implicit right of action may be derived from the obligations of Articles 5, 6 and 7 of the DMA, and individuals will indeed have the possibility to defend their rights in case of violation before national courts, there is no consensus on the specific extent these private claims should have.

[93] *See* Podszun, *supra* note 76.
[94] *See* Jens-Uwe Franck, *Individual Private Rights of Action under the Platform-to-Business Regulation*, SSRN 1, 23 (2022).
[95] *See id.*
[96] *See* Podszun, *supra* note 76.
[97] *See* Komninos, *supra* note 20, at 435, and Podszun, *supra* note 76.
[98] Article 114 TFEU.

Given the above-mentioned risk of fragmentation, as well as the centralised role of the European Commission, private enforcement could follow a "minimalist" approach[99] and be circumscribed to follow-on actions such as damages claims. In the past, the Court of Justice has claimed that these actions can, by themselves, be suitable for the objectives of private enforcement. For example, in *Courage,*[100] the court noted that "[. . .] actions for damages before the national courts can make a significant contribution to the maintenance of effective competition in the Community [and] [. . .] the existence of such a right strengthens the working of the Community competition rules and discourages agreements or practices [. . .]".

In this line, some authors recommend not only that public enforcement by the Commission should enjoy preferential treatment, but also that private enforcement should be restricted to claims against gatekeepers. The likes of which the Commission declares in violation of the obligations laid down in the Regulation having an *erga omnes* nature.[101] This would certainly avoid a high degree of fragmentation, which the DMA and its legal basis seek to avoid, and serve both the compensation and deterrence aims of such claims. Naturally, other private actions are foreseeable in the context of follow-on actions, such as declaratory judgments and claims for restitution or nullity – among others.[102]

Such a restriction of private enforcement could be established either by another legal instrument or through the case law of the Court itself. Recently, it ruled in *DB Station & Service,*[103] in the context of Article 102 TFEU, that national courts shall apply EU law "[. . .] in order to preserve the full effectiveness of Article 102 TFEU and, in particular, in order to guarantee applicants effective protection against the adverse consequences of an infringement of competition law [. . .] that provision in no way precludes, in view of the need for consistent management of the rail network [. . .] the retention, subject to the following considerations, of the exclusive competence of the regulatory body to hear all aspects of the disputes brought before it pursuant to Article 30(2) of Directive 2001/14".

In the context of the Directive at stake in *DB Station & Service*, the Court established the obligation for individuals to challenge alleged violations before the administrative body first before going to the national Court.[104] It also established for the

[99] *See* Rafael Amaro, *Weaving Penelope's Shroud [. . .] Some Comments on the Private Enforcement of the DMA*, 42 Competition Forum 1, 5 (2022).
[100] Case C-453/99, Courage Ltd v Bernard Crehan and Bernard Crehan v Courage Ltd and Others, ECLI:EU:C:2001:465, ¶¶26-27 (Sep. 20, 2001).
[101] *See* Komninos, *supra* note 20, at 438.
[102] *See id.*
[103] Case C-721/20, DB Station & Service AG v ODEG Ostdeutsche Eisenbahn GmbH, ECLI:EU:C:2022:832, ¶¶79-80 (Oct. 27, 2022).
[104] *Id.* ¶81.

latter to "cooperate in good faith" with the former.[105] This decision could be, however, problematic as it is a possible disproportionate circumscription of the power of individuals who are forced to make their claims first before the administration. Only after a decision would they be able to make a claim before their national Court.[106] However, based on the court's ruling in *DB Station & Services*, we can extrapolate the possibility of restricting private claims before national courts to follow-on actions for the consistency of the DMA's rules.

On the other hand, some scholars argue that private enforcement of the DMA cannot be restricted to follow-on actions and that all other private remedies should be available under the national laws in the pursuit of the effectiveness of its obligations.[107] Moreover, had the legislator wanted to preclude or restrict it in any way, this would have been included in the Regulation. From this perspective, private enforcement may also be possible in the form of stand-alone actions even before the European Commission has taken any decision. This would uphold a decentralised system of private enforcement similar to the one in competition law. and thus following a "maximalist" approach.[108] It would also allow for greater effectiveness in achieving the objectives pursued by private enforcement, as well as providing individuals with a greater number of tools to protect their rights and interests before their national courts.

Precisely in the context of competition law, this maximalist approach has been the norm for years. Podszun refers to various cases in which private enforcement of EU law in the form of injunctions before national courts has been very successful and allowed for proceedings that otherwise may have escaped the Commission's knowledge.[109] For example, in the Judgement *NetDoktor.de,*[110] where an injunction was possible on the ground of Article 101 TFEU before the German Courts,[111] the cooperation agreement between the Ministry of Health and Google was found to be anti-competitive. The latter was, thus, forced to cease giving preferential treatment to the former in search results.

However, the cost of the maximalist approach seems clear: it may lead to a fragmented interpretation of the obligations laid down in the DMA. Yet, it should not be forgotten, as noted in Art. 39(3) of the DMA, that the preliminary ruling procedure of

[105] *Id.* ¶83.
[106] *See* Daniel Madrescu, *Case C-721/20 – DB Station & Service – Can Secondary Legislation Limit the Private Enforcement of art. 102 TFEU?*, Lexxion (Nov. 15, 2022), https://www.lexxion.eu/en/coreblogpost/case-c-721-20-db-station-service-can-secondary-legislation-limit-the-private-enforcement-of-art-102-tfeu.
[107] *See* Podszun, *supra* note 71, at 255.
[108] *See id.*
[109] *Id.* at 256.
[110] Cases 37 O 15721/20 and 37 O 15720/20, *NetDoktor.de GmbH gegen die Bundesrepublik Deutschland und Google Ireland Ltd* (Feb. 10, 2021).
[111] *See* Podszun, *supra* note 71, at 256.

Article 267 TFEU aims to ensure a consistent interpretation of EU law and will be relevant to the rules of the DMA.[112]

### 2.1.4. CONCLUSION

In the final version of the DMA, the introduction of Article 39, as a copy of Article 15 of Regulation 1/2003, seems clearly to point towards a maximalist approach to private enforcement. First, because of its reading: Article 39(1) establishes the possibility for national courts to demand the transfer of information by the Commission "concerning the application of this Regulation", and (paragraph 2) the obligation for MS to send a copy of the judgment of its national courts in the application of the DMA. In order to avoid the risk of fragmentation, apart from the preliminary references to the Court of Justice (referred to in paragraph 5), Article 39(3) also foresees the possibility for the Commission to "submit written [or oral] observations to national courts". Besides, its fifth paragraph establishes the prohibition of national courts to "give a decision which runs counter to a decision adopted by the Commission under this Regulation. They shall also avoid giving decisions which would conflict with a decision contemplated by the Commission in proceedings it has initiated under this Regulation. To that effect, the national court may assess whether it is necessary to stay its proceedings". This makes the possibility for domestic courts to make decisions explicit – independently from those of the Commission.

Additionally, as pointed out before, the DMA extends the scope of the Directive on Representative Actions (Directive (EU) 2020/1828) to its rules (Article 52), allowing consumer associations to access procedural mechanisms for the protection of their interests under national courts. This also supports the conclusion that this Regulation has followed a maximalist approach towards private enforcement.

Therefore, considering the arguments outlined throughout this section and the text of Article 39 of the DMA, it seems clear that this Regulation advocates for the important role of national courts in the enforceability of its obligations. The obligations laid down in Articles 5, 6 and 7 should lead to an implied right of action before national courts allowing individuals to enforce them by private means at the MS level. This would be in accordance with their national procedural laws but with a maximalist approach, as well as in the light of the *Rewe* principles, with the risks, benefits, and safeguards that have been long debated above.

[112] *See* Amaro, *supra* note 99, at 5.

## 2.2. PRIVATE ENFORCEMENT OF THE DSA

Unlike the DMA, the DSA system envisions the establishment of Digital Services Coordinators at the national level,[113] who will oversee its enforcement and possess extensive investigative and enforcement powers, as outlined in Article 51. VLOPs, however, are still handled by the European Commission (Article 56(2)) to avoid a hitherto recurrent problem: most of the largest service providers are established in certain MS. The administration of which are sometimes unable, given the size of the countries, or unwilling, for policy reasons, to make a strong application of the rules in this field.[114]

The most relevant rules of the DSA in relation to private enforcement are the so-called due diligence obligations, which some scholars have qualified as a "procedural turn".[115] This is because instead of regulating the substantive content of freedom of speech or of illegal content, which is still a matter pertaining to national law, they lay down a series of mechanisms that platforms must establish, along with information that they shall provide. The nature of these obligations and the redress mechanisms established by the DSA will be studied in this section as a preface to the analysis of the possibilities for enforcing them by private means.

### 2.2.1. NATURE OF THE DUE DILIGENCE OBLIGATIONS

It is important to remember that these rules are intended to compensate for the liability exception regime through a certain number of obligations that aim at making online service providers responsible for their behaviour online.[116] Under the DSA, even when providers cannot be held liable under Chapter II for the information transmitted, accessed, or stored in them, they can still be responsible for violating the rules laid down in Chapter III. These rules, additionally, do not act as a condition for the exemption of liability,[117] nor do they operate alternatively to them. Under the DSA, a service provider can be held responsible under the due diligence obligations (e.g., because of a breach of their obligation where they are prohibited from targeting minors for advertisements (Art. 28)). And, then the service provider can be liable under national law ( e.g., when not acting expeditiously to remove illegal content that has been notified to them as per Art. 6(1)(b) DSA).

[113] Article 49 DSA.
[114] *See* Husovec and Roche Laguna, *supra* note 25, at 12.
[115] Pietro Ortolani, *If You Build it, They Will Come: The DSA "Procedure Before Substance" Approach*, in Putting the DSA into Practice 151, 154 (Joris van Hoboken et al. eds., 2023).
[116] *See*Husovec and Roche Laguna, *supra* note 25, at 4.
[117] *See id.*

More broadly, and in combination with the DMA's role in reducing the economic and regulatory power of online platforms, the DSA contributes to giving more control over online content to the State and, more importantly for the aim of this paper, individuals.[118] Thus, the essence of the DSA, putting "procedure before substance", calls for the empowerment of the platform's end and business users".[119] This is done by means of a series of internal and external instruments of a procedural nature that online platforms shall put in place, without prejudice to the possibility for individuals to enforce some of the obligations by private means, which will be central to the effectiveness of the DSA.[120]

### 2.2.2. REDRESS MECHANISMS IN THE DSA

The due diligence rules establish obligations for online service providers to set up and allow for certain internal and external mechanisms and to engage in various practices. In this context, the rules aimed at fighting illegal content online are a clear example of internal redress mechanisms. They establish obligatory notice-and-action and appeal mechanisms (Article 16) for the detection of this content and its elimination, with guarantees to both the informant and the addressee of the decision. The mandatory nature of this instrument prevents the service provider from taking refuge in its supposed ignorance of illegal content to avoid its liability under Chapter II of the DSA.[121] Besides, Article 17 obliges providers to furnish the affected users with a statement of reasons in the case of restrictions of content, a part or the entirety of the service, or the service's account. This instrument is crucial in the architecture of the procedural obligations of the DSA, as it allows for a transparent system and provides users with information for potential dispute mechanisms.[122] Moreover, the DSA establishes an internal complaint mechanism (Article 20) built on the experience of the P2B Regulation, which is accessible for service recipients to lodge a complaint against the provider's decisions. However, some scholars complain that they are still not obliged to provide a statement of reasons in case the content is not removed,[123] and that potential victims of it would not have a say in the internal complaint mechanism.[124]

[118] *See* Martin Husovec, *The DSA Newsletter #2*, Tech Notes (Dec. 21, 2022),https://husovec.eu/2022/12/the-dsa-newsletter-2/.
[119] Ortolani, *supra* note 115, at 155.
[120] *See* Davola, *supra* note 11, at 4.
[121] *See* Ortolani, *supra* note 115, at 156.
[122] *See id.*, at 157.
[123] *See e.g.,* Eifert et al., *supra* note 8, at 1019.
[124] *See e.g., id.*

Outside the platforms, Article 21 establishes an out-of-court dispute settlement mechanism conducted by a certified body. While the DSA proposal wanted to bind service providers by their decisions, the published version is rather watered down.[125] This is because it only forces them to provide information in relation to the appeal of this decision and the general requirement of "good faith". This goes against the mechanism's effectiveness, especially, the original aim for it to be able to "absorb escalated issues [and] resolve them in a faster and less resource intensive manner than court proceedings".[126] The result could be that national courts will be overburdened again by the appeals to these decisions. And so, users will avoid such a mechanism and directly institute claims before courts, or, worst-case scenario, users will be discouraged from enforcing their rights at all.

Ultimately, transparency rules (e.g., regarding terms and conditions), although they create procedural obligations of their own, regarding the information that service providers need to make available to users, contribute indirectly to the possibilities for seeking redress. This allows the user to use this information for her complaints.[127]

### 2.2.3. PRIVATE ENFORCEMENT

Although the possibility of seeking redress for a violation of the obligations laid down in the DSA before national courts is not directly prevented,[128] it should not be inferred from this that all due diligence obligations fulfill the necessary requirements for their enforceability by private means.

As a preliminary note, it must be pointed out that the only clear references to the DSA for private enforcement relate to compensation for damages or losses (Article 54), and the right of collective bodies to lodge representative actions for the protection of the interests of consumers (Article 90, similar to Article 52 of the DMA). Thus, to enforce the DSA's rules by private means, users must rely on their national procedural rules under the conditions established by EU law and the *Rewe* principles.

In this context, while their clarity and preciseness seem, for the DSA, undisputed, it is the beneficiary of its obligations that will be the determining factor for their enforceability by private means. For an implied remedy to be inferred from the

[125] *See* Ortolani, *supra* note 115, at 159.
[126] European Commission, Staff Working Document, Impact Assessment Accompanying the Document Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and amending Directive 2000/31/EC, 15 December 2020, [240].
[127] *See* Eifert et al., *supra* note 8, at 1019.
[128] *See* Ortolani, *supra* note 115, at 160.

rules of the DSA, such rules must intend, although not exclusively, to confer a right derived from the obligation upon an individual.

As explained before, two main categories can be identified as beneficiaries of the due diligence obligations: users and the regulator. Obligations vis-à-vis the latter clearly do not confer a correlative right to individuals. Against this background, risk assessment and mitigation rules, for example, are addressed to VLOPs in their relations with the Commission, and it would be difficult for individuals to infer an individual right from them. Only after a decision of the Commission establishing a violation of these Articles could there be a claim for damages by individuals who, in any case, have suffered a loss as a consequence of such a breach.

Deriving from the users' obligations, however, it is conceivable to find correlative rights that would make them enforceable by private means and would justify implying a remedy for redressing eventual violations. For example, when the DSA establishes in its Article 14 an obligation for intermediary service providers to give information regarding restrictions imposed by their terms and conditions in "clear, plain, intelligible, user-friendly and unambiguous language", a user could claim that such information has not been provided to them and make a claim before their national court.

However, the private enforcement of the DSA being foreseeable is not, in the abstract, the main concern. Instead, the concern is the exact extent of some of its obligations and, subsequently, of the expectations that users can derive from the behaviour of the online service providers.[129]

This issue revolves around the question of whether the due diligence obligations addressed to users are obligations of means (and therefore service providers must implement the mechanisms established under the DSA and do best efforts to achieve the desired result, but without being responsible for the attainment of the outcome), or of result (where users would be entitled to the expectation of a specific result from online service providers, e.g. that all cases regarding the taking down of illegal content should be resolved correctly through the notice-and-action mechanism). In other words, the debate is about whether the DSA establishes a series of procedural tools only, and thus platforms must comply with them but without an expectation of no-fault results. Individual mistakes could be regarded, for some obligations, as a possible margin of error in the mechanism provided for by the online service provider.

Before plunging into this discussion, it must be clarified that, naturally, an outright violation of any of the service providers' obligations (regardless of whether they

[129] *See* Husovec, Martin, *Will the DSA Work? On Money and Effort*, in Putting the DSA into Practice, 19, 31 (Joris van Hoboken et al. ed., 2023).

are of means or result) would allow an individual to enforce their rights privately before national courts. For example, a case where the service provider does not establish any notice-and-action mechanism whatsoever as mandated by Art. 16 DSA.

In addition, the DSA Impact Assessment contains a small but very important reference to this debate in the context of VLOPs. It recognises that "the additional set of enhanced obligations on very large online platforms [...] are obligations of means, without an expectation of no-fault results".[130] While, as this paper noted above, the obligations of VLOPs are more vis-à-vis the regulator than the user (see, for example, those on risk assessment and mitigation of Articles 34 and 35 DSA), this example highlights that the expectations that can be derived from the DSA obligations are variable, and may not always impose no-fault results, as in the case of VLOPs.

Turning to due diligence obligations vis-à-vis users, this debate becomes more important in that, if it is recognised that users are entitled to expect a certain outcome in all cases, this could potentially lead to flooding the courts with claims on the basis of the DSA. For example, in the digital context, decisions by online service providers on illegal content are often made en masse and on the basis of standardised criteria because of the volume of claims they have to deal with. If it is recognised that individual users have a correlative right to the obligations of service providers that legitimises them to privately enforce these rules before their national courts, this could lead to a wave of complaints that would be very difficult for both the courts and service providers themselves to cope with. Therefore, it could be that individual mistakes are not relevant in the constellation of cases, but rather an acceptable error rate as long as the procedural mechanisms established under the DSA are set and complied with. This would be the case if we were to interpret the DSA obligations as only creating an expectation that platforms have to put all means at their disposal to reach the desired outcome, recognising a certain margin of error when all procedural requirements are met, and best efforts are made.

However, if this were the case, it would be very difficult for users to ask not only for compensation but also, sometimes, to lodge an injunction. Especially as their procedural rights outside the platforms could not go beyond the legitimate expectations deriving from the DSA obligations. The Regulation and its Impact Assessment do not answer whether due diligence obligations vis-à-vis users are of means or result, so this question must be analysed in the context of the various mechanisms established by the DSA to seek redress.

In this sense, Recital 147 and Article 82(3) of the DSA highlight the role of the preliminary reference procedure in the framework of the DSA and recognise the

[130] Impact Assessment DSA, *supra* note 126, at 163.

possibility for national courts to take decisions in this area (which cannot run counter a decision of the Commission). Besides, both the internal complaint and the out-of-court mechanisms allow for individual claims, which means that even formally correct decisions generate an expectation of a certain (correct) result. Moreover, Recital 59 points out that "[t]he possibilities to contest decisions of providers of online platforms [. . .] should leave unaffected in all respects the possibility to seek judicial redress in accordance with the laws of the Member State concerned, and therefore should not affect the exercise of the right to an effective judicial remedy under Article 47 of the Charter". Additionally, Art. 17(3)(f), in the context of the content of the statement of reasons that shall be provided for by the online service provider when allegedly illegal content is taken down, establishes that users must receive "clear and user-friendly information on the possibilities for redress available to the recipient of the service in respect of the decision, in particular, where applicable through internal complaint-handling mechanisms, out-of-court dispute settlement and judicial redress". Thus, the right of individuals to seek private enforcement cannot be restricted in any way, and they must be explicitly informed of this possibility.

All these examples point out that all mechanisms (internal complaint, out-of-court settlement, and judicial redress) are complementary and seem to have the same extent. It would be paradoxical to argue that the obligations (and the correlative rights and expectations for users derived therefrom) have a different extent depending on the procedural avenue used by the claimant and that it is the judiciary that should be restrained. All in all, it could be argued that the manner the DSA is constructed, its objectives, and the rationale behind its rules, point to the direction that users are indeed entitled to expect, derived from the obligations of the DSA, not only the establishment of certain procedural mechanisms, but also the correct results in the application of those tools".

### 2.2.4. CONCLUSION

The due diligence rules of the DSA create obligations vis-à-vis both the regulator and the user. The former is not enforceable by private means, nor is the latter precluded. However, among these obligations, the extent and success of private enforcement will depend on whether they are considered obligations of means or result.

The distinction between obligations of result and of means is crucial. The breach of a due diligence obligation of the former, that confers a correlative right to end or business users, should be understood as generating an expectation of individual

compliance – not just one of systemic correctness. The latter interpretation would not be consistent with a teleological understanding of the DSA, as this Regulation aims at empowering users of online services. This gives them the tools to enforce their rights through a series of procedural mechanisms that allow them to contribute to the creation of a safer online space. Any limitation in this regard would be utterly counterproductive to this aim.

## 3. A NEW PARADIGM OF PRIVATE ENFORCEMENT

As recognised by the DMA's Impact Assessment,[131] the obligations contained in this Regulation, today, are not entirely strange to EU law. Many aspects have been contemplated before by two sorts of legal bodies: on the one hand, competition law and, particularly, Articles 101 and 102 TFEU,[132] and, on the other, instruments like the GDPR (Regulation (EU) 2016/679), EU Consumer law, and the P2B Regulation. The same applies to the DSA, which has been built on the experience of a plethora of legal instruments targeting specific issues from a sectoral perspective (e.g., content related to terrorist activities, copyright, sexual abuse of minors, etc.). But, while these pieces of legislation were suitable for their own objectives, comprehensive rules that would tackle the responsibility of platforms for all forms of services were lacking.[133]

However, establishing, article by article, which elements the DMA and the DSA are inspired by, regarding specific previous legal instruments, is far from easy. Despite the possibility of drawing parallels with other rules, the exact correspondence cannot be found due to the innovative nature of some of its provisions. And, although, they may be linked to other older instruments, many of the changes introduced by both Regulations have no precedent in EU law.

The current literature has not yet analysed whether the implications derived from the introduction of the DMA and the DSA are likely to serve the purposes mentioned before. These include building a safer and fairer, more contestable, and transparent online environment, while respecting the rights and interests of individuals in more a effective compliance with the old, procedural principles enshrined in EU law. This is precisely where the DMA and the DSA meet: the former aims at circumscribing the ever-growing power of big online platforms, gatekeepers, and so forth. And the latter

[131] Impact Assessment DMA, *supra* note 192, at 114-126.
[132] Although Article 14 DMA relates to mergers, as well.
[133] *See* Impact Assessment DSA, *supra* note 126, at 102-103.

provides the public with tools – be it the State or the individuals – to take back control of the regulation of this ecosystem.[134]

This is why, for the purpose of this paper, some examples will be used to illustrate various situations where changes in the possibilities for private enforcement can be identified, as well as some of the challenges derived from the new system created by both Regulations.

### 3.1. COMPETITION LAW AND THE DMA'S *PER SE* OBLIGATIONS

Consider the case of *Google Shopping.*[135] What was covered before by competition law, under Article 102 TFEU, can now be found among those obligations prohibiting "Anticompetitive or unfair agreements or practices". And, as stated above, their origin is sometimes also rooted in ongoing or old competition cases before the Court of Justice.[136] Article 6(5) of the DMA, for example, specifically, prohibits self-preferencing.

Article 102 TFEU gives rise to private enforcement before national courts, not only in the form of damages (today harmonised by the Damages Directive (Directive 2014/104/EU)), but also via injunctive reliefs in cases of violations or asking for nullity of anti-competitive agreements.[137] Such enforcement relies on national laws under the principles of equivalence and effectiveness mentioned above.[138] In this sense, the possibilities offered by the DMA are not specifically broader than those that existed under traditional competition rules if a maximalist interpretation is followed.

However, as explained before, the main improvement for private parties between the DMA and traditional competition law is the *ex-ante*, *per se* and *numerus clausus* nature of the regime established by the former. The prohibited practices will be identified from the beginning, with no need for an anticompetitive object or effect of the agreement in question, or for proving the firm's dominant position (and subsequently the abuse).[139] The DMA, thus, reverses the burden of proof.[140] This way, while the abandonment of a case-by-case analysis could lead to an increase in Type-I errors, and therefore certain practices or agreements that could have been a source of competition in the market will be prohibited,[141] a decrease in the length of the procedures is very likely. This was one of

[134] *See* Husovec, *supra* note 118.
[135] Case T-612/17, Google and Alphabet v Commission (Google Shopping), ECLI:EU:T:2021:763 (Nov. 10, 2021).
[136] *See* Chirico, *supra* note 21, at 495.
[137] *See* Wurmest and Gömann, *supra* note 70, at 155.
[138] *See id.* at 159.
[139] *See* Impact Assessment DMA, *supra* note 92, at 119.
[140] *See* Leistner, *supra* note 13, at 779.
[141] *See* Pinar Akman, *Regulating Competition in Digital Platform Markets: A Critical Assessment of the Framework and Approach of the EU Digital Markets Act*, 85 European Law Review 1, 17-18 (2022).

the Achilles heels of the existing regime, and some specificities of large digital gatekeepers' behaviour will be better dealt with now. In particular, the abuse by gatekeepers regarding "imbalances in bargaining power that do not affect competition",[142] generally, falls outside the scope of Article 102.

Madrescu has pointed out one problem that may arise regarding private enforcement in the context of damages. If the procedure is not brought by a private person whose rights have been negatively affected by a violation of an obligation of the DMA, but on the contrary, is driven by public enforcement, individuals who could claim damages may have some difficulties in matters of evidence.[143] If the Commission finds an abuse of a dominant platform under Art. 102 TFEU, the Damages Directive allows for follow-on damages claims. As such, the "entire complex of events that resulted in the harm for the claimants is substantiated", thus, allowing "private claimants to rely on [the Commission's] findings in their own claim".[144] These claimants would only need to show that they suffered harm and the causal link. A recent case solved by the DMA however, could mean that "eventual damages claims would have to be done on a stand-alone basis with no additional evidence to rely on" – as pointed out by Madrescu.[145] Doubts arise as to whether the DMA and traditional competition rules can mutually complement each other in terms of enforcement.

### 3.2. ILLEGAL AND NON-ILLEGAL BUT HARMFUL CONTENT UNDER THE DSA'S NEW TOOLS

Online service provider self-regulation has often been the norm for certain types of content.[146] The problem is not only that such measures enjoy a minimal scale of the issues addressed and their effectiveness, but also, that certain behaviours by providers do not necessarily entail illegal content. Instead, their impact and harm on the public online space are very high. The ECD, as discussed before, only harmonised the regime of liability exemptions but remained silent about the further responsibility of these firms for their behaviour online.

In this context, the possibilities for individuals to enforce their rights are radically different now than they used to be before the introduction of the DSA. This is

[142] Impact Assessment DMA, *supra* note 92, at 121.
[143] *See* Daniel Madrescu, *The DMA and EU competition law: complementing or cannibalizing enforcement?,* Lexxion (Mar. 8, 2022) https://www.lexxion.eu/coreblogpost/the-dma-and-eu-competition-law-complementing-or-cannibalizing-enforcement/.
[144] *Id.*
[145] *Id.*
[146] *See* Impact Assessment DSA, *supra* note 126, at 105.

the outcome of the objectives that led to the adoption of this Regulation, i.e., the responsibility of service providers for their behaviour to enhance the safety of the online space. This, then, ensures the empowerment of users to protect their rights and interests.[147]

To illustrate this idea, consider an online social media platform that qualifies as a VLOP and that would be subject to all the due diligence obligations, including the liability exemptions, contained in the DSA. In such a case, if we were in the presence of illegal content being transmitted through the platform, although the new framework of the DSA maintains the knowledge-based liability regime of the ECD (Article 6 DSA), it would be compensated by the mandatory nature of the due diligence obligations. The likes of which establish the procedural tools to act against illegal content and the safeguards for freedom of speech. As pointed out before, the notice-and-action mechanism is now obligatory for platforms. Additionally, the framework of the ECD generated several problems, as it favoured big online firms acting as regulators taking this power out of the hands of the State or the users themselves.[148]

In the scenario of non-illegal but harmful content being transmitted, the DSA introduces some very interesting novelties that are likely to contribute to improving of relations between users and the online ecosystem. For example, let us consider a scenario which has been of concern for the BEUC for a long time now.[149] Had a minor's data been used in order to profile him/her with certain types of products or ideas), the previous legal regime would have been unable to protect their rights, as it had remained silent about this question.

The system created by the DSA and the DMA changes this situation. As a first barrier, Article 5(2)(a) of the DMA prohibits processing, "for the purpose of providing online advertising services, personal data of end users using services of third parties that make use of core platform services of the gatekeeper" unless consent is given in the sense of the GDPR. Moreover, Article 28 of the DSA explicitly prohibits the targeting of minors, and therefore, although the platform would not be liable for the content, it would have breached its due diligence obligations. And, accordingly, it could not avoid its responsibility for the harm of its behaviour to the online ecosystem. If the person affected by such a violation so wishes, they could, after the entry into force of the DSA, ask for an injunction under their national procedural laws before the MS courts. This is

[147] *See id.* Figure 5 - Intervention logic.
[148] *See* Husovec, *supra* note 118.
[149] Emma Calvert, *Food Marketing to Children Needs Rules with Teeth. A snapshot report about how self-regulation fails to prevent unhealthy foods to be marketed to children*, BEUC (2021).

thanks to the obligation of Article 28 of the DSA which clearly gives a correlative right to individuals that could be enforced by private means.

### 3.3. AT THE CROSSROADS BETWEEN THE TWO REGULATIONS: THE EXAMPLE OF APPLE'S APP STORE

Finishing the analysis of this paper with the example of Apple's App Store can be very illustrative of the changes in the digital environment brought about by the DMA and DSA, as recently pointed out by Husovec The combined enforcement of both Regulations can radically change the power relations between platforms, business users, and end users. And, private enforcement has a central role in this.

In 2021, the App Store banned the app Parler – a social network created to avoid the moderation of content that some other apps imposed on their users. The turning point for this prohibition was the Capitol riots on January 6th, 2021, along with the tepid adjustments the social network proposed to Apple's core platform service. Parler was also banned later from the Google PlayStore and from Amazon Web Service, which demonstrates the massive impact of corporate on the digital ecosystem.

This situation shows two clear problems in the online space: first, the insufficient number of tools governments and individuals have for tackling hate speech and illegal and harmful content online. As well as the constant bombardment of service providers' users with this type of content, which reinforces their previous biases (the centripetal force mentioned before).[150] And second, the immense power of gatekeepers who act as regulators of this space (i.e., the centrifugal effect).[151]

The DMA and the DSA aim precisely at overcoming these problems. While the intentions of Apple could be judged as positive in this case, business users are at the mercy of large platforms, which can decide on the content they deem appropriate according to their own interests. First, with the DSA, there would be safeguards in the case of the App Store (a VLOP and a gatekeeper) wanting to suspend or restrict content or a user like Parler. Its terms and conditions will have to respect fundamental rights, especially freedom of expression (Article 14(4)). The statement of reasons shall give the procedural tools for affected parties to assert their rights. The result (banning the app) might be the same, but we must not forget that, in democratic societies, those who carry out illegal acts, online or offline, have the right to defend themselves under conditions that ensure their effective judicial protection. Moreover, under the DMA, allowing

[150] *See* De Querol, *supra* note 1, at 12.
[151] *See id.*

side-loading apps will be mandatory for gatekeepers (Article 6(4)), and thus users of Apple products would always be able to download them elsewhere.

But Parler would have to fulfil its DSA obligations according to its size. It would be the people, either in their statal form or as individuals, who would have the power, and especially the tools, to tackle and enforce these obligations in the case of a breach. Especially in terms of illegal content or certain practices that a society, through a democratic process, deems to be harmful. The DSA will allow it not only through public enforcement but also through the myriad of redress mechanisms, among which, as explained before, would be private enforcement before national courts. This case illustrates, as Husovec notes, where both Regulations meet and where the most interesting and radical changes are likely to be seen.

## CONCLUSION

The aim of this paper was to show how well-established principles of EU law are still very relevant and present in the newest pieces of legislation in the area of digital regulation. This is especially so regarding those principles relating to the fundamental procedural safeguards that individuals have in order to enjoy effective judicial protection in a legal order characterised by a complete system of judicial remedies. Against this framework, as shown in this paper, the private enforcement of the DMA and the DSA will be paramount for their effectiveness, and for users to assert their rights in the online ecosystem. Several reasons support this conclusion.

First, from the point of view of their *raison d'être*, both Regulations are built on the learnings acquired after years of vacillation and gaps in EU law. These have allowed digital undertakings to acquire a regulator-like nature and to oligopolise the market while leaving individuals with little tools for the protection of their rights. Therefore, their role in enforcing the new rules is crucial to making these firms accountable for their online behaviour and contributing to building a safer, more accountable, contestable, and fairer online space.

Second, for their *effet utile*. Public EU and national entities will need help do the job, especially on time. Time has been a significant concern in online platform cases since their birth. And, as, with the *ex-post* regulatory framework, many practices were considered illegal only after their harmful effects had adverse consequences on markets,

competitors, and consumer welfare. Individuals and national courts are critical elements of the general enforcement of EU law.

Third, in terms of *fundamental rights,* individuals must be able to access courts when the obligations they benefit from have been violated, even without explicit remedies, as is mostly the case in the DMA and the DSA. This is a democratic imperative in the digital society according to the European Declaration on Digital Rights and Principles, and it is also part of the fundamental right to judicial protection under Article 47 of the Charter. Moreover, Article 19(2) of the TEU imposes the obligation of MS to "ensure effective legal protection" of EU law as a translation of the value of the Rule of Law enshrined in Article 2 TEU.

However, not all their articles will be enforceable by private means. It will first depend on their clarity and preciseness and, second, on their objective of protecting the interests of a category of persons by conferring upon them rights correlative to the obligations incurred by digital firms. For the DMA, this can be affirmed for the norms laid down in Articles 5, 6 and 7. For the DSA, the distinction criteria are, on the one hand, considered in terms of whether due diligence obligations correlatively benefit users, or whether they are directed towards the relations between the regulated firm and the regulator. Only the former may be privately enforced. On the other hand, it will depend on whether they are obligations of result or means. Both may be subject to private enforcement, but the expectations that individual and business users may derive from their rights will differ, and therefore the specific breach could be brought before national courts too.

Moreover, private remedies should not be restricted to follow-on actions, and a maximalist approach should guide the practice of domestic courts. Within their national procedural autonomy, and taking due account of the *Rewe* principles, MS should provide for effective remedies of all kinds available under their national laws for individuals to defend their rights and interests.

However, there are some limitations to the analysis carried out by this paper. The DSA and the DMA are barely out of the oven, and only assumptions can be made based on the EU acquis. Yet, it will be the day-to-day practice, as well as the relationships between companies, regulatory agencies, and individuals, that will determine the concrete form of private enforcement. It will be interesting to see the developments in this area in the following years. Additionally, the lack of homogenisation of private remedies at the MS level could lead to different results depending on the country where individuals want to assert their rights. To avoid it, achieving some degree of harmonisation of certain private

actions among MS may be desirable, and not only relying on the indirect homogenising effect of the *Rewe* criteria.

End-users are the weakest part of the online ecosystem. While online platforms are acquiring more and more power, the EU seeks to reinforce its position and the one of its citizens vis-à-vis tech giants. The DMA and the DSA should be another piece of this empowerment strategy and not put more stones in the way of users trying to defend their rights.

VOLUME 9 ISSUE 1 ARTICLES & ESSAYS

UNIVERSITY OF BOLOGNA LAW REVIEW

https://doi.org/10.6092/issn.2531-6133/19718

Received: 01 Oct. 2023 | Accepted: 22 Jan. 2024 | Published: 05 June 2024

# Study on Space Debris Mitigation Under the National Space Laws

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ABSTRACT

The international community is beginning to focus on the issue of space debris. Space debris has increased in the low Earth orbit due to accidental collisions between various space objects such as operational satellites. In China, the destruction of the FengYun - 1C weather satellite by an anti-satellite device caused an exponential increase in space debris. During the Ukraine war in 2022, Russia destroyed a defunct satellite which created space debris. This act put astronauts on the International Space Station at risk. Collisions have also happened between American satellites that are widely used for research or to provide communication facilities.

Two unmanned European Space Agency (E.S.A.) satellites — the European Remote Sensing satellite (E.R.S.) and the Environmental Satellite (Envisat) — are currently in orbit reviving the debate over whether or not to engage in active debris removal. Despite gaining the interest of the international space community, efforts to reduce space debris have received scant legal recognition. Recent years have seen a dramatic decrease in launch costs, making space travel more affordable and feasible for the general public. As a result, smaller satellites can now be placed in low Earth orbit. Mega-constellations like SpaceX, OneWeb, Starlink, and Amazon Kuiper have also been launched or will be launched into space.

It is predicted that about five per cent of all satellites will fail to be disposed of at the end of their lives, either because of technical difficulties or a lack of proper planning for the disposal phase. As a result, there is a greater possibility of collision with other celestial bodies. The problem of orbital pollution is made much worse by the fact that each collision can produce a large number of new pieces of debris. The inoperable satellites can only be retrieved from orbit with the active participation of the international community. The space sector is in the midst of a period of profound change. As a result of recent developments in microelectronics, materials, and battery technology, multiple constellations are now able to function in low Earth orbit, at altitudes of less than 1,000 kilometres. When it comes to domestic space regulation, the International Law Association (I.L.A.) Model marked a significant shift. As a result, many nations with space programmes have adopted national space laws that include provisions for dealing with space debris. Guidelines included in soft-law instruments have provided impetus in the absence of a mandatory international regime on space debris.

KEYWORDS

*Orbital Debris; Debris Mitigation; National Space Law; Space System Technology; Sustainability*

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## INTRODUCTION

Space debris includes inoperative man-made spacecrafts in orbit, mission-related debris, abandoned launch vehicle stages, and fragmentation debris. Both artificial, man-made orbital debris and natural meteoroids encompass space debris.[1] The collapse of orbital access happens suddenly during the lack of a coordinated worldwide response to the increasing amount of space debris. Debris accumulation destabilises the low Earth orbit and has a harmful effect on the safety of space missions.[2] In addition, space debris disrupts satellite-based services available on Earth. As of the end of 2022, there were over 4,800 satellites in orbit, although it is suspected that there are more. The likelihood of a collision grows in conjunction with the density of objects in the universe, which could be understood in the purview of the Kessler Syndrome.[3]

Dr. Donald J. Kessler observed in his study that increasing orbital debris accumulation will set off a chain reaction leading to space inaccessibility in the long run.[4] Thus, international effort and collaboration must be undertaken to remove inoperative orbital debris.[5] Kessler and co-author Burton Cour-Palais indicated the Kessler Syndrome, which is referred to as "[o]rbiting fragments produced through satellite collisions, and each of the fragments would augment the probability of additional collisions, resulting in the increasing amount of debris around the Earth". Increasing orbital debris flux around the Earth could surpass the natural meteoroid flux influencing spacecraft designs in the near future.[6] Hence, voluntary obligations on mitigating space debris using current international instruments may fall short of achieving their intended purpose.[7] According to the data provided by the European Space Agency [hereinafter E.S.A.] in 2022, international action on framing the guidelines for mitigating space debris is improving. For instance, the Agency has assisted in the creation of the Zero Debris Charter in an effort to advance global efforts and inspire other space players to follow E.S.A.'s lead. All space entities can sign the worldwide

[1] *See* Mark Garcia, *Space Debris and Human Spacecraft*, NASA (July 21, 2022), https://www.nasa.gov/mission_pages/station/news/orbital_debris.html.

[2] Damian M. Bielicki, *Gruz kosmiczny - problem Polski, Europy i Świata* [*Space Debris - The Problem of Poland, Europe and the World*], *in* Wykorzystanie przestrzeni kosmicznej. Świat - Europa - Polska [The Use of Space: World - Europe - Poland] 110, 120 (Zdzisław Galicki et al. eds, 2010) (Pol.).

[3] *See* Nibedita Mohanta, *Why space debris mitigation is important for long-term sustainability,* GW Prime gw Prime, www.geospatialworld.net/prime/technology-and-innovation/why-space-debris-mitigation-is-important-for-long-term-sustainability/.

[4] Joseph S. Imburgia, *Space Debris and Its Threat to National Security: A Proposal for a Binding International Agreement to Clean Up the Junk*, 44 Vanderbilt J. Transnat'l L. 589, 589-604 (2011).

[5] Joseph N. Pelton, Space Debris and Other Threats from Outer Space (2013).

[6] *See* Mike Wall, *Kessler Syndrome and the space debris problem*, SPACE.com (July 15, 2022), https://www.space.com/kessler-syndrome-space-debris.

[7] Pelton, *supra* note 5.

effort, which was developed by more than forty participants in the space industry, to demonstrate their shared commitment to a future free of debris. However, the prime focus would need to be on space sustainability, thereby implying effective passivation, which involves burning fuel, draining batteries, and other methods to exhaust all residual energy sources after a mission.[8] Three key measures taken by E.S.A. and its partners for better space sustainability include space debris surveillance, in-orbit collision avoidance and active debris removal. Space debris surveillance networks have identified more than 30,000 space debris fragments. New and better technologies on the ground are helping us discover and study smaller fragments of "unidentified" (U.I.) space debris due to collisions or fragmentations from years ago. An illustration of an innovative approach can be observed via E.S.A.'s IZN-1 laser ranging station wherein the detection of small debris and technology is studied for laser ranging of space debris and satellites. The station analyses satellites' velocity, distance, orbit and space objects with high precision, measured in millimetres using brief laser pulses, by measuring the time taken by laser pulses to return to the observatory. This precision will be helpful to eliminate the number of false alarms and redundant collision evasion. As such, expensive spacecraft fuel and engineer time would be saved.

Avoidance is unnecessary for all collision alerts. When there is an increase in collision alerts, spacecraft operators will be unable to reply to it manually. E.S.A. and its industrial partners are incorporated in developing automated systems that use both Galileo navigational satellite signals and artificial intelligence [hereinafter A.I.] to assist spacecraft operators in preventing collisions and minimising the number of false alarms. The best strategy to limit space debris growth is to remove at least ninety per cent of newly launched objects from the orbital highways after their mission. ClearSpace-1 will be the first to remove orbital debris. The spacecraft, which was launched in 2013, aims to recover and securely retrieve 112 kilogrammes of inactive rocket parts that were released in the same year. E.S.A. is purchasing the mission from ClearSpace S.A. for the removal of active space debris establishing a sustainable space environment dedicated to eliminating high-risk fragments from restricted orbital highways.

ClearSpace received a $104 million contract from the E.S.A. to launch a 2025 debris removal mission. To prepare for a debris-removal mission, the Japan Aerospace Exploration Agency [hereinafter J.A.X.A.] has chosen Astroscale to launch a spacecraft into orbit in 2023 to inspect a spent rocket upper stage. New Zealand and Astroscale have

[8] The European Space Agency [ESA], ESA's Space Environment Report 2022 (Apr. 27, 2022), https://esoc.esa.int/content/esa-space-debris-environment-report-2022.

also agreed to collaborate on research into cutting-edge methods for clearing orbital space debris. In addition, Astroscale was awarded a contract by the United Kingdom's Space Agency to investigate the prospect of retrieving two decommissioned satellites from low Earth orbit by the year 2025.[9]

Table 1 lists the number of debris objects estimated through a statistical method in Earth's orbit, reported by E.S.A.'s space debris agency functioning at the European Space Operations Centre (E.S.O.C.) in Germany.

Table 1. Number of Debris Objects Estimated through a Statistical Method in Earth's Orbit[10]

| | |
|---|---|
| From the beginning of the space age in 1957, the number of rocket launches, excluding failures | About 6,170 |
| Number of satellites launched using these rockets that have been placed in the Earth's orbit | About 12,470 |
| Number of satellites still available in space | About 7,840 |
| Number of satellites still functioning in space | About 5,200 |
| Regular tracking and maintenance in their catalogue regarding the number of space debris objects by Space Surveillance networks | About 30,040 |
| Assessed number of explosions, break-ups, or similar events leading to fragmentation | > 630 |
| Total mass of all space debris objects available in the Earth's orbit | > 9,800 tonnes |
| Estimation of number of debris objects using statistical models in the Earth's orbit | • Objects greater than 10 cm - About 36,500<br>• Objects between 1 cm to 10 cm - About 1,000,000<br>• Objects between 1 mm to 1 cm - About 130 million |

Subsequently, the United Nations Committee on Peaceful Uses of Outer Space [hereinafter CO.PU.O.S.] described space debris as "man-made artefacts, which include elements and fragments of such, in Earth's orbit or re-entering the Earth's atmosphere, that seem to be non-functional".[11] States have struggled to mitigate space debris under national space laws due to the lack of a definition. It is evident that a global framework with enforceable debris mitigation standards, which would also include accidental or

[9] Mohanta, *supra* note 3.
[10] *Id.*
[11] U.N. Office for Outer Space Affairs, Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space (Dec. 22, 2007), https://www.unoosa.org/pdf/publications/st_space_49E.pdf [hereinafter CO.PU.O.S. Guidelines].

intentional space object destruction liability, would alleviate the crisis of space debris. At this juncture, a separate emphasis shall be made by states on the lines of international law to refurbish national space laws to reconcile the concern of space debris.

## 1. THE INTERNATIONAL REGIME ON SPACE DEBRIS

International space law does not regulate the problem of space debris. Outer space activities are governed by five treaties: (i) The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies of 27 January 1967 [hereinafter Outer Space Treaty or O.S.T.];[12] (ii) the Convention on International Liability for Damage Caused by Space Objects in 1972 [hereinafter Liability Convention];[13] (iii) the Convention on Registration of Objects Launched into Outer Space in 1975 [hereinafter Registration Convention];[14] (iv) the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space;[15] and (v) the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.[16] The first four are widely accepted treaties in the realm of international law between space-capable states, and only the first three address space debris. These Treaties have limited relevance, but commentators overstate their impact on initiatives aimed at mitigating space debris.[17]

[12] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6347, 610 U.N.T.S. 205 [hereinafter Outer Space Treaty].

[13] Convention on International Liability for Damage Caused by Space Objects, Mar. 29, 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187 [hereinafter Liability Convention].

[14] Convention on Registration of Objects Launched into Outer Space, Jan. 14, 1975, 28 U.S.T. 695, 1023 U.N.T.S. 15.

[15] Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, Apr. 22, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119.

[16] Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, Dec. 5, 1979, 1363 U.N.T.S. 21.

[17] Frans G. von der Dunk, *Asteroid Mining: International and National Legal Aspects*, 26 Mich. State Int'l L. Rev. 83, 89–90 (2017).

The most pertinent of all the international laws is the O.S.T., referred to as the "Constitution" of space law, as it involves the fundamental principles of space activities.[18] The O.S.T. explains the avoidance of unfavourable changes to space sustainability. Space activities, leading to orbital debris, often disrupt Earth's orbit. Crowded orbits hinder unlimited access to the outer space environment resulting in national appropriation in breach of Article II of the Outer Space Treaty,[19] along with Article IX, which indicates the limit on space pollution as it is detrimental to the interests of other member States.[20] In 1994, the International Law Association [hereinafter I.L.A.] — at a conference in Buenos Aires — designed an early normative international instrument for Environmental Protection against Damage by Space Debris.[21] The United Nations [hereinafter U.N.] space treaties were drafted before space debris became a major issue,[22] and so the spacefaring countries did not discuss how to deter the space debris threat.[23] The following three Articles are relevant to addressing the problems associated with space debris: (i) Article VI of the O.S.T. which indicates that every State should have global liability for national activities in the outer space environment; (ii) Article VII of the O.S.T. indicating that the State Party from whose facility or territory a space object is launched bears global responsibility for any damage brought upon another State Party to the Treaty; and (iii) According to Article IX of the Outer Space Treaty (O.S.T), if the country undertaking a space mission believes that their activities may cause 'harmful contamination' of the outer space environment, they are required to take necessary measures to prevent this".[24]

The Registration Convention implies a responsibility on states to register the launch of each space object, while the Liability Convention relates to liability standards for damage brought about to another State Party. No provisions have been enacted in the Registration Convention for the presence of space debris.[25] In mitigating space debris, these three Treaties, especially the Outer Space Treaty and the Liability Convention, are not consistent regarding ramifications and obligations. The Liability Convention aims to

[18] Rada Popova & Volker Shaus, *The Legal Framework for Space Debris Remediation as a Tool for Sustainability in Outer Space*, 5(2) Aerospace 55 (2018), at 1.

[19] Sreemena Sethu & Mandavi Singh, *Stuck in Space: The Growing Problem of Space Debris Pollution*, UK L. Student Rev. 96 (2014), 115.

[20] *Id.*, *see also* Paul B. Larsen, *Solving the Space Debris Crisis*, 83 J. Air L. & Com. 475, 484 (2018).

[21] Information on the activities of international organizations relating to space Law, UN. Comm. on the Peaceful Uses of Outer Space, on Its Fourty Session, U.N. Doc. A/AC.105/C.1/L.260 (2003), https://www.unoosa.org/pdf/limited/C2/AC105_C2_E223E.pdf.

[22] Fabio Tronchetti, Fundamentals of Space Law and Policy 19 (Springer ed. 2013).

[23] *Id.* at 20; Larsen, *supra* note 20, at 477; *see also* Edwin Kisiel, *Law as an Instrument to Solve the Orbital Debris Problem*, 51 Env't L. 223, 224 (2021).

[24] United Nations Treaties and principles of outer space, U.N. Sales No. E.02.I.20 (2002), https://www.unoosa.org/pdf/publications/STSPACE11E.pdf.

[25] U.N. Off. for Outer Space Affairs, Convention on Registration of Objects Launched into Outer Space (1974), https://www.unoosa.org/pdf/gares/ARES_29_3235E.pdf.

create an international liability framework. The parallel route deals with active debris removal.[26] Research scholars proposed solutions to circumvent the issue through treaty amendment or interpretation.[27]Articles VII and VIII of the Outer Space Treaty and Article I of the Liability Convention included that "component parts" are space objects. The component parts are to justify taking into consideration all debris, such as pieces of metal or paint to comprise space objects.[28] Hence, the state who is launching or procuring the launch is legally responsible for any smash-up caused by its orbital debris to another state. As a result, the launching state must have legal responsibility for any damages due to its aircrafts or debris present on the Earth's surface. This is because damage liability in the outer space environment is restricted to proof of "fault".[29]

The rules framed by the U.N. regarding mitigating space debris are non-obligatory.[30] Private enterprises lack the authority to initiate legal proceedings about space debris according to the U.N. Treaties, which endangers the sustainability of Earth's orbit.[31] Future efforts in space exploration depend on the viability of space access. Along with national space agencies, the Deep Space Exploration has participated in space debris avoidance.[32] Orbital debris disrupts space activities like satellite communication, military engagements, scientific research, or weather tracking.[33] As the source of space debris contamination cannot always be pinpointed, affixing liability for space debris can be a difficult task.[34]

International lawmaking has been slow due to a lack of political consensus amongst states to institutionalise enforceable rules. Private companies with business interests are also exploring space for commercializing outer space. For example as the first private corporation, SpaceX is responsible for developing and launching the first liquid-propellant rocket into orbit; recovering a spacecraft after it has reached orbit; sending a spacecraft to the International Space Station and sending passengers to the

[26] *See* Chelsea Muñoz-Patchen, *Regulating the Space Commons: Treating Space Debris as Abandoned Property in Violation of the Outer Space Treaty*, 19 Chi. J. Int'l L. 233, 241 (2018); Arpit Gupta, *Regulating Space Debris as Separate from Space Objects*, 41 Univ. Pa. J. Int'l L. 223, 225 (2019); Larsen, *supra* note 20, at 486.

[27] *See* Muñoz-Patchen, *supra* note 26, at 244-52; Joel A. Dennerley, *State Liability for Space Object Collisions: The Proper Interpretation of 'Fault' for the Purposes of International Space Law*, 29 Eur. J. Int'l L. 281 (2018); Ram S. Jakhu et al., *Regulatory Framework and Organization for Space Debris Removal and on Orbit Servicing of Satellites*, 4 J. Space Safety Eng'g 129, 129-30 (2017); Melissa K. Force, *When the Nature and Duration of Space Becomes Appropriation: "Use" as a Legal Predicate for a State's Objection to Active Debris Removal*, 56 Proceedings Int'l Inst. Space L. 405 (2013).

[28] *See* Muñoz-Patchen, *supra* note 26, at 235-38; Gupta, *supra* note 26, at 232-36; *see also* Peter Stubbe, State Accountability for Space Debris 6 (Brill Nijhoof ed., 2017).

[29] Liability Convention, *supra* note 13.

[30] *See* Sophie Kaineg, *The Growing Problem of Space Debris*, 26 UC L. Env't J. 277, 285 (2020).

[31] *See* Frans G. von der Dunk & Fabio Tronchetti, Handbook of Space Law 717 (Edward Elgar Publishing 2015).

[32] *Id.* at 723.

[33] Kaineg, *supra* note 30, at 281.

[34] *See* Von der Dunk & Tronchetti, *supra* note 31, at 735.

space station.[35] Traditional space-faring states and new space participants must establish a legislative framework which must be sustainable. Long-term harm to outer space cannot be compensated for financially; hence, prevention is the framework's main purpose.[36]

The corpus of international law is comprised of soft laws and treaties influencing the decision-making process of members.[37] U.N. General Assembly resolutions,[38] and guidelines and recommendations adopted by the Inter-Agency Space Debris Coordination Committee [hereinafter I.A.D.C.] and the CO.PU.O.S. are certain treaties pertaining to space debris.[39] The concern is that these guidelines are recommendatory in nature. CO.PU.O.S. implemented policies modelled after the I.A.D.C.'s recommendations because it is also an informal inter-governmental organisation for collaboration amongst the space agencies of space-capable states.[40]

In 1994, CO.PU.O.S. was concerned with the problem of space debris. Since then, soft-law actions have been initiated for framing the international space debris reduction framework. In 2002, the I.A.D.C. established a framework for tackling space debris.[41] Consequently, the I.A.D.C. Guidelines were amended in 2007 and 2011.[42] The I.A.D.C. standards' general policy objectives encompass restricting fragment release during space operations through appropriate spacecraft design limiting on-orbit break-ups, proper planning about orbital debris disposal, and avoidance of on-orbit collisions.[43] According to the I.A.D.C. 2021 and other research studies, unintentional collisions will increase space debris in the outer space environment. In creating the design and mission profile of an orbital stage or spacecraft, a project must evaluate and restrict the likelihood of unintentional collision with known objects during the orbital lifespan of an orbital stage

[35] Kisiel, *supra* note 23, at 228.
[36] *Id.* at 187.
[37] *See* Eyal Benvenisti, The Law of Global Governance 37-68 (2014); *see also* Steven Freeland, *The Role of "Soft Law" in Public International Law and its Relevance to the International Legal Regulation of Outer Space*, *in* Soft Law in Outer Space: The Function of Non-binding Norms in International Space Law 9, 19 (Irmgard Marboe ed. 2012).
[38] *See* Michael Wood (Special Rapporteur), Fifth Rep. on identification of customary international law, Conclusion 12, U.N. Doc. A/CN.4/717 (Mar. 14, 2018); Stephen M. Schwebel, *The Effect of Resolutions of the U.N. General Assembly on Customary International Law*, 73 Proceedings Ann. Meeting 301, 301 (Apr., 1979); Francis Lyall & Paul B. Larsen, Space Law: A Treatise 73 (2nd ed. 2018).
[39] CO.PU.O.S. Guidelines, *supra* note 11; Inter-Agency Space Debris Coordination Committee, IADC Space Debris Mitigation Guidelines, Doc. IADC-02-01, https://orbitaldebris.jsc.nasa.gov/library/iadc_mitigation_guidelines_rev_1_sep07.pdf, (Sept. 2007) [hereinafter I.A.D.C. Guidelines].
[40] Alexander W. Salter, *Space Debris: A Law and Economics Analysis of the Orbital Commons*, 19 Stan. Tech. L. Rev. 221, 224-27 (2016).
[41] I.A.D.C. Guidelines, *supra* note 39.
[42] *Id.*
[43] *See* Frans G. von der Dunk, National Space Legislation in Europe: Issues of Authorization of Private Space Activities in the Light of Developments in European Space Cooperation 70 (2011). *See* Lawrence Li, *Space Debris Mitigation as an International Law Obligation*, 17 Int'l Cmty. L. Rev. 297, 303 (2015).

or spacecraft. If conjunction evaluations and reliable orbital data are available, avoidance spacecraft manoeuvers during every operational phase and launch window coordination for orbital stages for launch vehicles should be addressed. After all operational phases of a spacecraft or orbital stage have been concluded, the risk of integrated collision during the design of the remaining orbit should decrease the possibility of tiny debris collisions that could cause a loss of control and impede post-mission disposal. Lifespan ought to be minimised in accordance with post-mission disposal strategies. Spacecraft design should also reduce the likelihood of colliding with tiny debris, which could result in a loss of control, prohibiting post-mission disposal.[44] However, the rules lack concrete strategies for controlling space debris. Thus, the goal is to minimise space debris in the near future. A timeframe of twenty-five years has been designated for the de-orbiting of short-term debris available in low Earth orbit.

The CO.PU.O.S. approved the Space Debris Mitigation [hereinafter S.D.M.] Guidelines in 2007.[45] In Resolution 67/217 of December 22, 2017, the U.N. General Assembly reaffirmed the S.D.M. Guidelines and urged Member States to adopt a national framework to manage space debris.[46] It is based on I.A.D.C.'s space debris mitigation document making it a derivative work.[47] The S.D.M. Guidelines, like its predecessor, are a voluntary agreement between major space agencies and contain a set of non-legally binding rules. It was anticipated that persistent multilateral effort would result in the voluntary adoption of space debris mitigation rules in response to an increase in orbital collisions and a growing space debris population.

In September 2017, the I.A.D.C. released a formal statement about well-known satellite constellations in low-Earth orbit.[48] In its announcement, the satellite industry was made aware of several serious problems and was given instructions on how to fix them. To minimise the risk of collision, the I.A.D.C. has prescribed, firstly, altitude separation in large satellite constellations to mitigate the risk of collision in crowded orbits. Secondly, it recommends that satellite designs ease the removal process in the event of failure or termination of the space mission. In addition, the design must facilitate manoeuvring to avoid a potential collision with other space objects.[49] There are recommendations that shall be manifested by launch vehicle and spacecraft orbital

[44] Inter-Agency Space Debris Coordination Committee, IADC Space Debris Mitigation Guidelines, IADC-02-01 Rev. 3, (June, 2021) [hereinafter I.A.D.C. Guidelines1].
[45] CO.PU.O.S. Guidelines, *supra* note 11.
[46] UN Doc. G. A. Res. 62/217, ¶ 7, point 27 (Dec. 22, 2007).
[47] I.A.D.C. Guidelines, *supra* note 39.
[48] Inter-Agency Space Debris Coordination Committee, IADC Statement on Large Constellations of Satellites in Low Earth Orbit, Doc. IADC-15-03 Rev. 1.1 (July, 2021), https://www.iadc-home.org/documents_public/file_down/id/4195 [hereinafter I.A.D.C. Guidelines2].
[49] *Id.*

stages that are followed during the mission planning, manufacturing, design, and operational phases. These guidelines are imperative in minimising space debris.

Once launch vehicle and spacecraft orbital stages have ended their operation, while passing via the geosynchronous orbital [hereinafter GE.O.] region, in-orbits should be removed to prevent their long-standing meddling in the GEO. region.[50]

The sixty-fifth session of the U.N. General Assembly Report of the CO.PU.O.S. discussed and gave important points regarding the peaceful use of outer space. Outer space, being commons, cannot be misused by nations on the pretext of exploration. This has been the U.N. agenda since 1959 which was reiterated in this session too. In the session, the fundamental significance of space science and technology and their applications for global, regional, national, and local sustainable development processes was sought to be promoted in the formulation of policies and programs of action. Their implementation, including through efforts towards achieving the objectives of those conferences and summits and in implementing the 2030 Agenda for Sustainable Development, was also emphasised. The necessity of promoting the benefits of space technology and its applications, in the major United Nations conferences and summits for economic, social, and cultural development, and related fields, was also acknowledged.

The Committee urged nations that had not yet adopted the S.D.M. Guidelines, voluntarily, to do so. It was also stated that international intergovernmental organisations' and many states' implemented, mitigating measures for space debris had been inconsistent with the S.D.M. Guidelines and the Guidelines for the Long-term Sustainability [hereinafter L.T.S.] of Outer Space Activities (A/74/20, Annex II). In addition, it was also stated that some states were implementing the S.D.M. Guidelines of the CO.PU.O.S. and/or the S.D.M. Guidelines of the I.A.D.C., the International Organisation for Standardisation (I.S.O.) standard 24113:2011 (S.D.M. requirements) and the International Telecommunication Union [hereinafter I.T.U.] Recommendation I.T.U.-R S.1003 (i.e., sustainability of the geostationary satellite orbit) as suggestions in their regulatory frameworks during national space activities. Some states co-operated under the E.U.-funded tracking support and space surveillance framework and E.S.A.'s Space Safety Programme. It is worth mentioning that L.T.S. Guidelines developed, with the ideology that the Earth's orbital space environment is a limited resource that is being used by a growing number of space players, including non-governmental organisations, lead to the extension of the notion of sustainability to space. Concerns over the O.S. safety of space operations are raised by the growth of space debris; the formation of

[50] CO.PU.O.S. Guidelines, *supra* note 11.

massive constellations; the increased risk of collisions; and interference with satellite operations.

Accordingly, 2009 saw the introduction of the subject "Long Term Sustainability of Outer Space Activities" as a CO.PU.O.S. agenda item. This ultimately resulted in the formation of a special Working Group of the Scientific and Technical Sub-Committee in 2010, which Peter Martinez of South Africa chaired. Under the Working Group, four expert groups were formed to address the subjects of space trash, space operations, and instruments to support cooperative space situational awareness. These are examples of sustainable space utilisation that supports sustainable development on Earth. Further suggestions are to have regulations governing space weather and advice for novice participants.

Many states were taking concrete measures to mitigate space debris, like improving their spacecraft and launch vehicle design, passivation, de-orbiting satellites, life extension for satellites, and establishing software and models for S.D.M. Reiterating the Committee reports in the mitigation of space debris and the sustainable use of space, the I.A.D.C. updated its S.D.M. Guidelines in 2022.

The Committee has been concerned about space debris and its effects on future space exploration. It also agreed that international intergovernmental organisations and Member States with permanent observer status should continue to provide details on research about space debris; the safety of spacecraft with nuclear power sources; and its collisions with space debris; and the implementation of S.D.M. Guidelines. The Committee also stated that the space debris should be managed in such a way that it would not harm any emerging nations' space capabilities. In addition, it also stated that future space actors should not be burdened by the history of established space actors. The Committee should prioritise addressing the issues faced by mega-constellations in low Earth orbit – notably those relating to orbit and frequency sustainability. Some delegations stressed the importance of strengthening the capacity of developing countries to implement voluntary measures like the S.D.M. Guidelines and the Guidelines for the L.T.S. of Outer Space Activities.

Major space-faring countries should shoulder the primary responsibility for addressing orbital debris and extend their help to developing and emerging space-faring nations to design spacecrafts respecting the space debris reduction criteria. To avoid miscalculations and misunderstandings, debris reduction and space traffic management should promote transparency and confidence-building.

The S.D.M. Guidelines adopted by CO.PU.O.S. and I.A.D.C. have helped reduce friction in the global community to address the hazard of space debris.[51] As a result, conditions for getting licences for space missions have been included in the mitigation rules made at national level by many state parties such as the Antrix Corporation Limited — the commercial arm of the Indian Space Research Organisation [hereinafter I.S.R.O.]. A foreign firm must enter into a contract with Antrix to receive launch services if they want to launch outside of India. Antrix contracts make up the launch agreement. Only the parties directly engaged have access to the specifics of these contracts.[52]

The Sixty-fifth session of U.N. General Assembly Report of the CO.PU.O.S. discussed and updated the L.T.S. of Outer Space Activities Guidelines in July 2022. The Working Group on the L.T.S. of Outer Space Activities aims to study and identify issues and think of probable new guidelines that are of significant interest to commercial companies and States in schemes for active space debris removal, and the establishment of programmes and plans for the Moon exploration. There is a significant distinction between dealings that limit the sudden generation of space debris and those targeted at performing the same in the long run. Hence, the S.D.M. Guidelines encompass the twin objective of reducing active space debris generated during space missions and disposal events for removing orbital fragments of launched space vehicles and decommissioned spacecraft from areas where functional space objects operate.[53]

Recommendations for the long-term sustainability of space activities were officially unveiled by the U.N. Office for Outer Space Affairs. States should adopt guidelines for mitigating space debris under national laws to incentivise operators and manufacturers to restrict debris generation through appropriate design and operation of space objects. The state should welcome new technological solutions to manage space debris and hold back space collisions.[54] Namely, Active Debris Removal [hereinafter A.D.R.] Services and Obruta. A U.S.-based startup company called Orbit Guardians offers A.D.R. services. It integrates the Internet of Things [hereinafter I.o.T.], A.I., and computer vision technologies to remove space junk at a minimal cost. It uses A.I. and I.o.T. technologies to gather debris data and remove potentially hazardous targets. Space debris of less than twenty centimetres can be cleaned up by low-cost A.D.R. making space safer, while Obruta employs techniques, such as tethered-net removal technology, for debris monitoring. Accelerated deployment masses are necessary for the net capture mechanism to force a net out of a container. The net then expands as it

[51] I.A.D.C Guidelines1, *supra* note 44, at 306.
[52] Von der Dunk & Tronchetti, *supra* note 31, at 587.
[53] I.A.D.C. Guidelines1, *supra* note 44.
[54] CO.PU.O.S. Guidelines, *supra* note 11.

approaches the intended destination. A tether line connection is made to the service spacecraft as soon as the object is caught.

In the purview of sustainability, reference is made to the I.T.U.'s Recommendation S.1003-2, titled "Environmental Protection of the GSO" (i.e., geostationary-satellite orbit [hereinafter G.S.O.]). It provides advice on environmental safeguards to protect the area below and above the geostationary satellite orbit from the fragmentation of space debris following a collision. When it comes to the placement of satellites, the I.T.U. suggests making a reasonable effort to guarantee that there is little pollution in the orbital region.[55] It is also important to reduce debris lifetime. It has been suggested to create a protected zone down below the geosynchronous orbit, which is the location where the operational satellites live and move about. It has been proposed that decommissioned spacecrafts be placed in the geostationary orbit, far from the area where active satellites orbit, to minimise their potential for collisions. Another essential step that must be taken to prevent fragmentation is the passivation of any leftover energy sources that are contained on space objects. The I.T.U. can then efficiently address space debris in the G.S.O. due to its broad mission.[56]

It is necessary for two separate national laws governing space to keep up with the worldwide regulatory standards being developed regarding space debris. The technical measures provide important new perspectives for incorporation into domestic law. The states must go beyond merely enforcing a skeleton of regulations in order to establish a comprehensive framework that can adequately address the risks posed by orbital debris. On the other hand, the subjective interpretation of soft-law instruments by individual states can dilute the application of these instruments as law. States cannot remain complacent under national space rules due to Kessler Syndrome. This may have far-reaching implications for human space travel in the future. For instance, the recent Commercial Space Act of 2023 of the United States of America, where there is an assumption that, due to the new licensing policy, national security of the country would be affected.[57] It is also questioned on the avenues of its effective dynamism, balanced approach and holistic undercurrents.

[55] *See* Environmental protection of the Geostationary-Satellite Orbit, Recommendation ITU-R S. 1003.2, 12/2010 (Jan. 16, 2023), https://www.itu.int/rec/R-REC-S.1003/en.

[56] *See* Ram S. Jakhu, *Space Debris in the Geostationary Orbit: A Matter of Concern for the ITU*, 34 Proceedings on L. Outer Space 205, 212-13 (1991).

[57] *See* John Goering, *The Commercial Space Act of 2023 is bad for National security*, Just Security (Dec. 19, 2023), https://www.justsecurity.org/90567/the-commercial-space-act-of-2023-is-bad-for-national-security/.

## 2. DEBRIS MITIGATION UNDER I.L.A. MODEL LAW

Article VI of the Outer Space Treaty stipulates that State Parties are required to assume international responsibility for any actions carried out in outer space by either public or private enterprises or government agencies. In order to regulate the activities of those operating in private remote sensing space systems, the law proposes a licensing system.[58] The United Nations General Assembly passed a resolution in 2013 recommending changes to national laws to govern "peaceful exploration and use of outer space".[59] One of the primary objectives is to reduce space debris and so protect the space environment. In order to progress toward the goal, the General Assembly strongly recommended that the appropriate national authorities establish a licensing system for activities in space. The inclusion of safety standards in the authorisation requirements was mandated in accordance with the S.D.M. Guidelines.

Domestic legislation addressing the problem of space debris is still in its early stages of development. On the other hand, a lot of progress has been made in the last decade. To mitigate the risks posed by space debris, states should work towards enacting concrete national space legislation. The nation's laws need to be clear enough so that specific guidelines can be established for all parties involved including organisations that are not affiliated with the government. I.L.A. Model Law was created at the International Law Association's seventy-fifth Annual Conference in Sofia.[60] Using the Model Law as a template, nations can create their own laws to address the growing problem of space junk. It establishes a set of policies and procedures that ought to be followed as a matter of national law.

Article VII of the Model Law imposes a broad mandate that cannot create environmental damage to outer space; nevertheless, it does not put down a precise level of compliance with this mandate. In addition, Article IV stipulates that the national space authority must comply with Article VIII when issuing authorisation for space-related endeavours. The fundamental provision to reduce space debris is included in this article. Article VIII requires that space debris be mitigated "to the maximum feasible extent".

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[58] *See* Outer Space Treaty, *supra* note 12.

[59] G.A. Res. 68/74, (Jan. 17, 2023).

[60] *See* Comm. on the Peaceful Uses of Outer Space, Legal Subcomm. on Its Fifty-Second Session, Information on the activities of international intergovernmental and non-governmental organizations relating to space law, U.N. Doc. A/AC.105/C.2/2013/CRP.6 (2013); Sofia Guidelines for a Model Law on National Space Legislation, https://ila.vettoreweb.com/Storage/Download.aspx?DbStorageId=1032&StorageFileGuid=f727cb74-4d84-4585-a29e-0d6dfb436672.

States or private companies conducting space missions would have wide latitude in determining how to interpret a "best-efforts clause".[61] Without a uniform minimum standard of compliance, it opens the door to evasion. Thus, it is necessary to harmonise state practice under national space legislation.[62] In addition, the Article specifies responsibilities for minimising in-orbit break-ups, preparing for post-mission disposal, avoiding in-orbit collisions, and limiting operational debris in accordance with "international space debris mitigation standards". According to experts,[63] there are universal norms that should be accepted by the community of space-faring states to streamline national space policies.

In order to fix Article VIII's flaws, we need to take a multifaceted strategy. A global fund for the mitigation and removal of debris might be established by the states on the basis of the principle of "common but differentiated responsibility".[64] The corpus could be used to implement a space debris accumulation-based insurance mechanism analogous to the protection against launch failures in space missions.[65] The corpus could be used to incentivise domestic private players to follow optimal practices to address the space debris situation. It could mitigate the cost rise from mitigation standards. Alternately, states may incentivise debris cleanup in outer space by taxing private space players. The proposal has the potential to generate a sustainable income stream to help clean up space debris.[66] In the United States, for instance, a trust fund has been established by taxing chemical industries to finance clean-up responses and ensure waste disposal as part of the environmental legislation framework.[67] This template is transferable to national laws on space debris mitigation and could be used as a model for similar legislation worldwide keeping sustainable development goals in the purview.

Consequently, the space debris producer — be it a government with space capabilities or a private company — would have to take the initiative to promote responsible orbital space utilisation. The I.L.A. Model Law's greatest strength is that it recognises the problem of space debris as a worldwide issue requiring systemic solutions under national space laws.

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[61] Sandeepa Bhat B. & Arthad Kurlekar, *A Discourse on the Remodeling of ILA Model Law on National Space Legislation*, 41 J. Space L. 1, 13 (2017).
[62] *See* Stephan Hobe, *The ILA Model Law for National Space Legislation*, 62 Zeitschrift für Luft-und Weltraumrecht [German J. Air & Space L.] 81, 85 (2013).
[63] *See* Bhat B. & Kurlekar, *supra* note 61, at 14.
[64] Von der Dunk & Tronchetti, *supra* note 31, at 801.
[65] *See* Pelton, *supra* note 5, at 28.
[66] *See* Joseph N. Pelton, New Solutions for the Space Debris Problem 33 (2015).
[67] *See* Kisiel, *supra* note 23, at 233.

## 3. DEVELOPMENTS IN DOMESTIC SPACE LAW

The Space Object Monitoring (S.O.M.) Guidelines are implemented under domestic law by states' political will. Nonetheless, it remains a benchmark for how other national authorities should approach enforcing similar regulatory standards.[68] Several nations have passed legislation at the domestic level to address the issue of space debris, with pioneering spacefaring nations at the forefront. Activities in outer space are often governed by a formal approval process. An array of precautionary measures has been built into the prerequisites for approval.

Since the 1997 Debris Mitigation Standard Practices of the National Aeronautics and Space Administration [hereinafter N.A.S.A.], the United States has implemented various policies on debris mitigation as a prominent spacefaring state. The Guidelines, however, were only applicable to state-run or state-produced space systems.[69] Greater private sector investment has been of primary focus. For this reason, the U.S. Commercial Space Launch Competitiveness Act of 2015 recognised the importance of maintaining a consistent regulatory framework.[70] The statute mandates that the N.A.S.A. Administrator seek advice from a "qualified independent systems engineering and technical support organisation" when conducting research into ways to reduce the effects of orbital debris. Importantly, the update to the orbital traffic management system required a review of the rules around orbital debris as part of the non-binding international arrangements.

The National and Commercial Space Programs Code mandates that the N.A.S.A. Administrator work with other federal agencies to acquire technologies that could lessen the effects of orbital debris.[71] An official space debris mitigation strategy is required as a prerequisite for authorising satellite systems under Title 47 (Telecommunications) of the U.S. Code.[72] In addition to this responsibility, it has been ordered that a space station operating in geostationary orbit must dispose of end-of-life debris.[73] In 2019, the U.S. government revised its Orbital Debris Mitigation Standard Practices in an effort to limit the spread of debris in the event of an accident. Designing spacecraft and upper stages to produce as little debris as possible is a mandatory requirement of the regulations. The

[68] *See* Tronchetti, *supra* note 22, at 21.
[69] *Id.*
[70] US Commercial Space Launch Competitiveness Act, Pub L. No. 114-90, 129 Stat. 704 (2015), https://www.congress.gov/114/plaws/publ90/PLAW-114publ90.pdf, accessed 16 Jan. 2023.
[71] National and Commercial Space Programs, 51 U.S.C. (2010), available at https://law.justia.com/codes/us/2010/title51/, accessed 16 Jan. 2023.
[72] 47 C.F.R. (2024), https://www.fcc.gov/wireless/bureau-divisions/technologies-systems-and-innovation-division/rules-regulations-title-47.
[73] *See* Von der Dunk, *supra* note 43, at 22.

operators must assess the risk of space systems becoming a source of debris owing to collisions with "man-made objects or meteoroids".[74]

It is also important for space programmes to plan for the efficient and economical disposal of space structures after their missions have ended.[75] Space debris mitigation standards are applicable to the private sector and are a condition of receiving a safety approval licence from the Federal Aviation Administration.[76] When it comes to reducing the effects of space debris, N.A.S.A. is constantly keeping an eye on emerging trends in technology and looking to implement cutting-edge programmes.[77] The private sector's space communications providers must go through a licensing process with the Federal Communications Commission [hereinafter F.C.C.] which includes the development of a strategy to deal with orbital debris.[78] An important gap in U.S. domestic legislation is the lack of financial incentives for space debris prevention and cleanup.[79]

F.C.C. updated guidelines to mitigate orbital debris in the new space age report and order, as well as the second report and order. Operators of satellites in low-Earth orbit should ensure that their spacecrafts re-enter Earth's atmosphere within twenty-five years after their mission. The Second Report and Order proposes reducing the required timeframe of a satellite's post-mission disposal to five years as part of our ongoing efforts to reduce the generation of orbital debris. The Second Report and Order would[80]

- Implement a "five-year rule", which would mandate space station operators, with plans to dispose of debris through uncontrolled re-entry into Earth's atmosphere, do so as soon as possible and no later than five years after the end of the mission;

- State explicitly that space stations completing their missions in or transiting the low-Earth-orbit region below 2,000 kilometres be subject to the new regulations;

[74] U.S. Government Orbital Debris Mitigation Standard Practices (N.A.S.A. 2019), https://orbitaldebris.jsc.nasa.gov/library/usg_orbital_debris_mitigation_standard_practices_november_2019.pdf.
[75] *Id.*
[76] Tronchetti, *supra* note 22, at 22.
[77] *See Mitigation of Orbital debris in the New Age Space*, Federal Communications Commission Order (Dec. 8, 2020), https://www.federalregister.gov/documents/2020/08/25/2020-13185/mitigation-of-orbital-debris-in-the-new-space-agehttps://www.federalregister.gov/documents/2020/08/25/2020-13185/mitigation-of-orbital-debris-in-the-new-space-age.
[78] Von der Dunk & Tronchetti, *supra* note 31, at 143.
[79] Stephen J. Garber, *Incentives for Keeping Space Clean: Orbital Debris and Mitigation Waivers*, 41 J. Space L. 179, 180 (2017).
[80] *See* Fed. Commc'ns Comm'n, IB Docket Nos. 22-271 & 18-313, Space Innovation; Mitigation of Orbital Debris in the New Space Age Second Report and Order (2022), https://docs.fcc.gov/public/attachments/DOC-387024A1.pdf.

- Mandate the above point, in accordance with Part 25 of the Commission's rules, and it applies to both U.S.-licensed satellites and systems and non-U.S.-licensed satellites and systems seeking access to the U.S. market;
- Adopt a companion requirement for organisations seeking amateur satellite deployment under Part 97 of the Commission's rules, or for organisations seeking Part 5 experimental licences for satellites;
- Reduce operator burden specifying a two-year grandfathering period for the new requirement; and,
- Discuss the possibility of exemptions for particular scientific and research expeditions.

To reduce the risk of space debris collisions, the European Union's proposed international code for space activities urges countries to adopt appropriate laws through "their own internal processes".[81] States are also cautioned against pursuing the purposeful destruction of objects in space as this would result in permanent space debris. The only circumstances in which it is permissible to justify the destruction of space objects are those in which human life or health is in danger; or in order to prevent the development of further debris in space; or to exercise one's individual or collective right to self-defence as stipulated in the U.N. Charter. States are dissuaded from contributing to space debris as they would have no legitimate security justification for doing so.[82]

The European Space Agency (E.S.A.) mentioned that preventing in-orbit explosions or collisions is the best short-term strategy to reduce space debris growth. In addition, the best long-term strategy for maintaining a safe level of space debris is ensuring widespread adherence to disposal guidelines post missions.[83]

In the United Kingdom, the Space Industry Act of 2018 mandates that the State regulator take into account "any space debris mitigation guidelines issued by an international organisation in which the Government of the United Kingdom is represented".[84] In order to maintain their space licence, space activity permittees must adhere to any space debris mitigation guidelines that are a part of their licence's terms and conditions.[85] On July 29, 2021, the Space Industry Regulations were officially

[81] *See* European Union Draft International Code of Conduct for Outer Space Activities (Mar. 31, 2014), https://www.eeas.europa.eu/sites/default/files/space_code_conduct_draft_vers_31-march-2014_en.pdf-.
[82] Von der Dunk & Tronchetti, *supra* note 31, at 380.
[83] *See* The European Space Agency [ESA], Mitigating Space Debris Generation (Jan. 18, 2023), https://www.esa.int/Space_Safety/Space_Debris/Mitigating_space_debris_generation, (last visited Jan. 18, 2023).
[84] Space Industry Act 2018, c. 5, §2 (2)(h) (U.K.).
[85] *Id.*

implemented. The rules stipulate that the operator must explain how the "design and operational procedures" limit the discharge of debris into space, and the operator must take reasonable precautions to prevent the release of debris.[86]

The standards used to evaluate licence applications are laid out in detail in the Guidance for Orbital Operator Licence Applicants and Orbital Operator Licensees. This includes international guidelines laid down for mitigating space debris described by the Inter-Agency Space Debris Coordination Committee, international standards for various international space systems defined by the International Organization for Standardization, and European standards for safety defined by the European Cooperation for Space Standardization. This Guidance requires applicants to describe any spacecraft design feature that protects against debris or micrometeoroids, but it does not require satellites to be developed with space debris shields or other impact safety protocols. The licensing process requests this information for information purposes only and not to define a special criterion for operators, which would go beyond international debris mitigation strategies.[87]

Article 5 of the French Space Operation Act establishes a system of state control over space operators through the issuance of authorisations or licences.[88] An environmental assessment, including the restriction of threats caused by space debris, could be among the prerequisites for launching objects into space. In the event that the operator attempts to avoid their responsibilities, the administrative body reserves the right to revoke or suspend the approval. That way, the operator might be obligated to take precautions to mitigate any potential fallout. In the event that a space object causes damage to Earth's ecosystem, the law mandates that responsibility for repairs be split among insurance companies.

Luxembourg space law also establishes a framework for public and private entities to get the necessary authorisations to exploit space legally. The necessary approval is contingent upon a thorough analysis of the risks involved in the space mission. It is the operator's responsibility to pay for any damages.[89] However, the law does not provide a clear mandate for the criteria of authorisation regarding the reduction of space debris.

[86] The Space Industry Regulations 2021, SI 2021/792 (U.K.).

[87] *See* Joanne Wheeler M.B.E., The Space Law Review: United Kingdom, THE LAW REVIEW (Alden Legal Limited, 2023) (U.K.).

[88] Loi 2008-518 du 3 juin 2008 relative aux opérations spatiales (telle que modifiée par la loi n°2013-431 du 28 mai 2013) [Law No. 2008-518 of June 3, 2008, regarding Space Operations (as amended by Law No. 2013-431 of May 28, 2013)] Journal Officiel de la République Française [J.O.] [Official Gazette of France], June 4, 2008 (Fr.).

[89] Loi du 15 décembre 2020 portant sur les activités spatiales [Law of December 15th 2020 on Space Activities], Journal Officiel [Official Journal] Dec. 28, 2020 (Lux.).

Russian space law also requires environmental protection in space operations. However, the law's licensing process does not address the issue of reducing space debris.[90]

The Austrian Outer Space Act, conversely, mandates that operators take measures to reduce the spread of space debris by adhering to best practices established at global level.[91] The competent state body will only provide permission for space activities to the operator if the operator has taken precautions to limit the debris release. Similar to other countries, the Netherlands requires a space debris mitigation framework as part of its licensing requirements.[92]

Article 6 of China's Interim Measures on the Administration of Permits for Civil Space Launch Projects (2002) stipulated that in order to receive state approval for a space mission, an applicant must meet technical standards for preventing pollution and space debris.[93] Safeguards outlined in the I.A.D.C. recommendations have been further replicated in the newly adopted Interim Measures on Space Debris Mitigation and Protective Management.[94] China has also embraced an "integrated system of space debris mitigation design", which lays out a methodical plan for cleaning up the debris.[95] Chinese firms are also concerned about the removal of space debris. In 2022, Origin Space, a Shenzhen space-mining start-up, launched a robot that can catch space debris with a large net. China has backed and followed guidelines from the United Nations and the Inter-Agency Space Debris Coordination Committee on space debris removal. In May 2021, the Government released new management standards for small satellites, which call for operators to submit de-orbiting plans and comprehensive safety measures in the event of malfunctions. The Space (Launches and Returns) Act 2018 in Australia requires a debris reduction strategy to be included in an application for a domestic launch licence or a grant of an international payload permit.[96] Similarly, under New Zealand's national

[90] *See e.g.,* UNOOSA, Law of the Russian Federation about Space activity, https://www.unoosa.org/oosa/en/ourwork/spacelaw/nationalspacelaw/russian_federation/decree_104_1996E.html. *Law of the Russian Federation about Space activity*, UNOOSA (Feb. 2, 1996), https://www.unoosa.org/oosa/en/ourwork/spacelaw/nationalspacelaw/russian_federation/decree_104_1996E.html.

[91] Bundesgesetz über die Genehmigung von Weltraumaktivitäten und die Einrichtung eines Weltraumregisters (Weltraumgesetz) 2011 [Austrian Federal Law on the Authorisation of Space Activities and the Establishment of a National Registry (Austrian Outer Space Act) 2011] Bundesgesetzblatt [BGBl] I No. 132/2011 as amended https://www.ris.bka.gv.at/Dokumente/Erv/ERV_2011_1_132/ERV_2011_1_132.pdf (Austria).

[92] *See*, Annette Froehlich & Vincent Seffinga, National Space Legislation: A Comparative and Evaluative Analysis 15 (2018).

[93] *Id.* at 54.

[94] *Id.*

[95] *See* UNOOSA, CASC Efforts on Dealing with Space Debris Towards Space Long Term Sustainability, available at https://www.unoosa.org/pdf/pres/stsc2013/2013lts-03E.pdf, accessed 19 Jan. 2023. U.N. Office for Outer Space Affairs, *CASC Efforts on Dealing with Space Debris Towards Space Long Term Sustainability*, https://www.unoosa.org/pdf/pres/stsc2013/2013lts-03E.pdf.

[96] *Space (Launches and Returns) Act 2018* (Cth) (AU).

space law, applicants for a launch licence or payload permission are required to submit a detailed strategy for dealing with orbital debris.[97]

According to Japan's Space Activities Act of 2016, spacecrafts must be designed in accordance with safety regulations to ensure that no harmful debris or waste enters space.[98] Detailed debris mitigation criteria could be outlined in Cabinet Office Orders.[99] The Government regulates space endeavours through a licensing mechanism that sends proposals straight to the Prime Minister for approval. Using cutting-edge technology, J.A.X.A. is cleaning up space debris.[100] For the same reason, the private sector has begun working together.[101] Japan is taking huge measures to remove space debris. The collaboration of J.A.X.A. and Tokyo-based Astroscale aims to complete the very first debris-removal mission and provide regular removal services by 2030.

In addition, Astroscale is working on technologies to refuel and repair satellites in space, which would delay their obsolescence and increase their lifespans. With these same technologies, Astroscale's missions could refuel in space, allowing them to clear out more debris continually.

Japan's Government is collaborating with Astroscale to set global benchmarks. The Government started drafting guidelines for organisations conducting space debris removal studies and missions earlier this year. Transparency and notification should be the norm to avoid suspicion and conflict between competitors – experts say.[102]

Under the space regulations of Japan, the neighbouring state of the Republic of Korea does not define any specific comprehensive regulations for the reduction of debris. The Space Development Promotion Act of 2005, however, mandates that the operator of a rocket get a general launch permit and places responsibility for mishaps caused by space objects on the operator of the rocket.[103]

The I.S.R.O. System for Safe & Sustainable Space Operations and Management (I.S.4.O.M.) for the nation is I.S.R.O.'s comprehensive approach to protecting space assets and sustaining space use for national development. It processes observations for orbit

[97] Outer Space and High-altitude Activities Act 2017 (N.Z.).
[98] Act on Launching of Spacecraft, etc. and Control of Spacecraft, Law No. 76 of 2016 (Japan).
[99] Setsuko Aoki, *Domestic Legal Conditions for Space Activities in Asia* 103 (AJIL Unbound ed., 2019).
[100] *See* Ensuring the safety of space missions now and in the future, J.A.X.A.https://www.kenkai.jaxa.jp/eng/research/debris/debris.html; *Ensuring the safety of space missions now and in the future*, J.A.X.A, https://www.kenkai.jaxa.jp/eng/research/debris/debris.html.
[101] *See* Mitsuru Obe, *Japan's Astroscale Launches Space Debris-removal Satellite*, Nikkei Asia (Mar. 22, 2021), https://asia.nikkei.com/Business/Aerospace-Defense-Industries/Japan-s-Astroscale-launches-space-debris-removal-satellite.
[102] *See* Michelle Ye Hee Lee & Lily Kuo, *For Rivals Japan and China, the New Space Race is About Removing Junk*, The Washington Post (Nov. 20, 2022), https://www.washingtonpost.com/world/2022/11/20/japan-china-space-junk-removal-compete/.
[103] Space Development Promotion Act (S. Kor.).

determination; object characterization and cataloguing; analysis of space environment evolution; risk assessment and mitigation; data exchange and collaboration; and more as a response to the increasing number of objects in space and the associated risk of collisions.[104] The Indian Government's proposed Space Activities Bill also needs approval at national level.[105] Limiting space pollution or "adverse impact or pollution to the earth's environment" is a criterion of licence and approval.[106] The draught legislation does not provide any specifics regarding the prevention of space debris. Recent announcements have been made by the I.S.R.O. on the launch of a project to investigate the detection of space debris.[107]

Major space-faring nations have attempted to include a minimum standard for debris mitigation in their own national space legislation. Many countries have made efforts to follow the guidelines laid down in Article 8 of the I.L.A. Model Law. The traditional method for reducing the effects of space debris has consisted of imposing restrictions on space operations in the form of licensing prerequisites. Because orbital access is at risk, both established space-faring states and new entrants in the field of space exploration have a responsibility to maintain a high level of vigilance to ensure that the standard of compliance is not lowered.

## CONCLUSION

The advancement of space system technology has brought about remarkable changes in human life by allowing for improved communication, navigation and remote sensing capabilities.[108] However, there is a serious danger posed by space debris to human endeavours. Lack of effective regulation under national space laws may also severely diminish the commercial utility of outer space. As a result, keeping orbital regions free of debris is crucial for their continued usage in the future.[109]

[104] *See* Nagaraja Gadekal, *ISRO Launches World's First Facility to Track Space Debris, Safeguard Assets*, The New Indian Express (July 12, 2022), https://www.newindianexpress.com/states/karnataka/2022/Jul/12/isro-launches-worlds-first-facility-to-track-space-debris-safeguard-assets-2475563.html.

[105] *See* Space Activities Bill, 2017, Bill No. 11020/2/2015, Acts of Parliament (India).

[106] *Id.*

[107] *See* D. S. Madhumathi, *ISRO Initiates 'Project NETRA' to Safeguard Indian Space Assets from Debris and Other Harm*, The Hindu (Sept. 24, 2019), https://www.thehindu.com/sci-tech/science/isro-initiates-project-netra-to-safeguard-indian-space-assets-from-debris-and-other-harm/article29497795.ece.

[108] *See* Kisiel, *supra* note 23, at 223.

[109] *See* CO.PU.O.S. Guidelines, *supra* note 11, at 5.

Some of the U.N. Guidelines' non-binding aspects have been incorporated into national space legislation to provide a domestically enforceable framework.[110] Because of this, the instruments of soft law have provided the required stimulus.[111] Sustainability in space exploration is crucial to solving the space debris problem.[112] It is imperative that states have adequate motivation to lessen the amount of space debris in order to keep space activities risk-free.[113] The CO.PU.O.S. Scientific and Technical Subcommittee has brought attention to the fact that even with the lack of enforceable international laws, individual nations are taking concerted steps to lessen the amount of debris in space. It entails working on de-orbiting, passivating, extending the life of, and decommissioning satellites, as well as improving launch vehicle and spacecraft designs and software development.[114] Efforts at state level should mirror the mitigation criteria outlined in relevant international agreements.

The alignment of interests across state space agencies and corporate parties, beyond borders, likely accounts for the overall uniformity in domestic legislation. The implementation of the I.L.A. Model brings the process of space regulation under national laws to a higher level of prominence. It establishes a precedent for the widespread acceptance of a minimal level from which no deviation is allowed to be made. To combat the threat of space debris, it is imperative that best practices around the world be incorporated under domestic law and subject to a regime of accountability. Thus, national space laws can provide fuel for the long-term utilisation of space. Improved compliance with debris reduction regulations under national space legislation is encouraging, but the issues remain severe. At first, the purpose of such legislation was limited to fulfilling the requirements of Article VI of the Outer Space Treaty, which called for the regulation of the space operations of non-Government companies.[115] After that, subsequent factors such as globalisation and the unrestricted movement of

[110] *See id.* at 21.

[111] *See generally* Łukasz Kułaga, *Kodyfikacja i postępowy rozwój międzynarodowego prawa kosmicznego przez soft law* [*Codification and Progressive Development of International Space Law Through Soft Law*], 79 Ruch Prawniczy, Ekonomiczny i Socjologiczny [J. L., Econ. & Socio.] 163 (2017) (Pol.).

[112] *See* Hakeem Ijaiya, *Space Debris: Legal and Policy Implications*, 2 Env't Pollution & Prot. 23 (2017) (China); *see also* Maria M. Kenig-Witkowska, Międzynarodowe prawo środowiska. Wybrane zagadnienia systemowe [International Environmental Law. Selected Systemic Issues] 183-86 (2011) (Pol.); *see* Maria M. Kenig-Witkowska, *Environmental Protection in Corpore Iuris Spatialis (Mapping the Issue)*, Studia Iuridica, 2016, at 141 (Pol.); *see* D. Kuzniar-kwiatek, *The United Nations and the Protection of the Environment of Space and Celestial Bodies*, in E. Cata-wacinkiewicz et al., The United Nations System From The Polish Perspective 269-80 (Warsaw: C.H. Beck, 2017) (Pol.); *see* Stubbe, *supra* note 28, at 13-59; *see* Mark Williamson, *Space Ethics and Protection of the Space Environment*, 19 Space Pol'y 47 (2003) (U.K.).

[113] *See* U.N. Office for Outer Space Affairs, Rep. of the Legal Subcommittee, on Its Fifty-fourth Session, U.N. Doc. A/AC.105/1090, pts. 166-167, at 25-26 (Apr. 24, 2015).

[114] *See generally* U.N. Office for Outer Space Affairs, Compendium of Space Debris Mitigation Standards Adopted by States and International Organizations (May 15, 2023), https://www.unoosa.org/oosa/en/ourwork/topics/space-debris/compendium.html.

[115] *See* Hobe, *supra* note 62, at 82.

transnational money contributed to an increase in the participation of the private sector in space operations. Private space operators support a concrete debris reduction standard because debris threatens capital-intensive assets.[116]

Mandatory debris reduction measures are now a part of the licensing requirements of national space laws. It is a standard part of all legal documents pertaining to legal spaceflight. Sanctions against engaging in space-related activities without proper authorisation need to be strengthened. The limitation shall not only be upon the directions so elaborated by the provisions of the Security Council and General Assembly as given in international law on issuance of sanctions, but on the misuse of space commons too. To ensure long-term space access, a mere box-ticking method is unlikely to be effective. The domino effect of space debris compels a re-examination of existing domestic legislation to make improvements, particularly, in light of the growing risk of inaccessibility.[117]

Technical due diligence procedures must be part of licensing criteria in all jurisdictions. Space collisions can be avoided if deterrent sanctions are implemented. Those who violate the rules for debris reduction should be held liable regardless of whether they are state entities or private space players. The reason for the illegality regarding the formation of debris needs to be investigated by governments. As it is often difficult to identify fault through direct causation in the case of space debris, a system of unlimited liability would be an effective deterrence. Under domestic law, the precautionary concept needs to be clearly established. Domestic space laws might involve punishments and particular remedial actions for the clean-up of orbital debris. States must define who can remove space debris,[118] and perhaps consider hiring private players.[119] In order to protect third-party states from any legal consequences related to the removal of space debris, a restricted waiver scheme could be an effective tool. Legislative changes alone are not enough to build a debris-tracking system, and so continual funding for research is required. States may begin the disposal process once they have identified probable debris clusters in orbit.

When nations pass their own space laws, it serves as a safety valve that can revitalise international cooperation to reduce the threat of space debris. The global framework lacks enforceable orbital debris rules as noted previously. At the I.L.A.'s sixty-sixth Conference in 1996, delegates voted to approve a convention to protect

[116] *See* Tronchetti, *supra* note 22, at 81; *see also* COPUOS Guidelines, *supra* note 11, at 223.
[117] *See* Kaineg, *supra* note 30, at 281.
[118] *See generally* Abbas Sheer & Shouping Li, *Space Debris Mounting Global Menace Legal Issues Pertaining to Space Debris Removal: Ought to Revamp Existing Space Law Regime*, 10 Beijing L. Rev. 423, 425 (2019) (China).
[119] *See generally* Pelton, *supra* note 66, at 44.

Earth's space against debris.[120] National rules required states to cooperate to "avoid, reduce, and control space debris".[121] Domestic regulations may not be a long-term answer if there is a weak international framework for debris mitigation. State governments use their legislative powers to advance their own interests through *ad hoc*, piecemeal interventions.[122] The debris mitigation rules under domestic law may become customary international law soon through consistent state practice and *opinio juris*.[123]According to some academics, the process is finished once a country passes legislation regulating space travel.[124]

Telecom satellites were the first space-based infrastructure to be run by a private company.[125] In the present day, private industry has been at the lead of recent space tourism activities. It is expected that orbital debris would rise with the commercial exploitation of the space. It presents an opportunity for states to pursue timely actions for debris reduction that go beyond their particular domains which is a benefit.

Active space debris reduction and removal must be envisioned as a global, formally institutionalised approach.[126] The long-term gains obtained via regulation may be sufficient to compensate for the costs incurred when establishing an international agency of such extent. It is also necessary to reach an agreement on an appropriate technology for cleaning up space in orbit. Especially since it is being developed using technologies of I.o.t. and A.I. – Spinnaker3 and Obruta being some of the examples that have been developed for proper implementation of A.D.R. services. In order to guarantee long-term access to space, it is necessary to determine whether or not the existing technical requirements and safety procedures can be improved. The CO.PU.O.S. can also be involved in the process of identifying and removing space debris by facilitating the creation of a unique treaty on the regulation of space debris.[127] The spacefaring nations that have space laws in motion and nations that aim to accentuate their being there must include the elements of sustainability and technology to modernise their space laws and establish a robust system for enforcing them.

[120] *See* Karl-Heinz Bockstiegel, *ILA Draft Convention on Space Debris*, 44 Zeitschrift für Luft-und Weltraumrecht [German J. Air & Space L.] 29, 30 (1995) (Ger.).
[121] *Id.* at 31.
[122] *See* Tronchetti, *supra* note 22, at 82; *see* Larsen, *supra* note 20, at 479.
[123] *See* CO.PU.O.S. Guidelines, *supra* note 11, at 272.
[124] *See* Von der Dunk, *supra* note 17, at 319.
[125] *See* Hobe, *supra* note 66, at 81.
[126] *See* Sethu & Singh, *supra* note 19, at 96.
[127] *See* Sheera & Li, *supra* note 122, at 433.

VOLUME 9 ISSUE 1 ARTICLES & ESSAYS

UNIVERSITY OF BOLOGNA LAW REVIEW

https://doi.org/10.6092/issn.2531-6133/18109

Received: 03 Oct. 2023 | Accepted: 22 Jan. 2024 | Published: 02 Sept. 2024

# The Role and Importance of the High Judicial Council in the Republic of Serbia: Towards Democratisation in the Field of the Judiciary

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ABSTRACT

The author deals with constitutional changes in the judiciary in the Republic of Serbia. The Constitution of the Republic of Serbia was adopted in 2006, and for years there have been attempts of change towards democratisation. A special problem is the composition, and functioning of the High Judicial Council, as a body that should have exclusive competence in the election of judges. In the first part of the paper, the author explains the 2006 constitutional solutions, while in the second, he explains the first attempts to change the constitutional provisions to form new solutions aimed at depoliticising the judiciary, which never came into force. In the third part of the paper, the author points out the most important proposed constitutional changes from 2021, which the Venice Commission criticised, but which came into force. The author also points out the views of the Venice Commission and gives his suggestions.

KEYWORDS

*Judicial independence, High Judicial Council, Constitution of Republic of Serbia, Amendments to the Constitution, Venice Commission*

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## INTRODUCTION

The Republic of Serbia adopted its Constitution in 2006.[1] The adoption of the new Constitution initiated a second stage of the democratisation process.[2] However, accession to the European Union [hereinafter E.U.] involves constitutional changes on many issues. One of the areas that must inevitably change is the part related to the organisation of the judicial system. The National Judicial Reform Strategy for the Period of 2013–2018 states that:

> [C]ertain solutions of the Strategy call for the amendment of the Constitution – we are talking about the solutions, such as the exclusion of the National Assembly from the process of election of presidents of courts, judges, public prosecutors/deputy public prosecutors as well as of members of the High Judicial Council and the State Prosecutorial Council; changes in the composition of the High Judicial Council and the State Prosecutorial Council aimed at exclusion of the representatives of the legislative and executive powers from the membership in these bodies...

One of the marked characteristics of constitution-making in the twenty-first century is the involvement of the international community.[3] The need for the amendment of the Constitution was concretised within the negotiating process in the Screening Report on Chapter 23, wherein the European Commission [hereinafter E.C.] noticed that the independence of the judiciary is, in principle, guaranteed by the Constitution. However, there are numerous issues in the constitutional solutions with regard to relevant E.U. standards related to the independence of the judiciary. Furthermore, as Adams points out, judicial independence has a strong sociological component: "[J]ustice, in the form of judicial independence, must not only be done, it must also very clearly and explicitly be *seen* to be done".[4]

Since this paper focuses on the constitutional position of judges and the High Judicial Council [hereinafter H.J.C.], it will not examine the provisions of laws that regulate the position of these entities and bodies in detail. The E.C. criticised the role of the National Assembly in the 2006 Constitution in the election and termination of the office of judges

[1] Устав Републике Србије [Constitution of the Republic of Serbia] (Serbia).
[2] *See* Violeta Beširević,*"Governing Without Judges": The Politics of the Constitutional Court in Serbia*, 12 Int'l J. Const. L. 954, 960 (2014) (U.K.).
[3] *See generally* Cheryl Saunders, *Constitution-Making in the 21st Century*, Int'l Rev. L., Apr. 2012, at 3 (2012) (Qatar).
[4] Maurice Adams, *Pride and Prejudice in the Judiciary - Judicial Independence and the Belgian High Council of Justice*, 2010 J. S. Afr. L., 236, 240 (2010) (S. Afr.).

as a significant problem that risks political influence on the judiciary. The National Assembly is also criticised for its relationship with the H.J.C., bearing in mind that the Assembly elected eight out of eleven members of the H.J.C.. The other three members, including the President of the Supreme Court of Cassation (appointed by the National Assembly), the Minister of Justice, and the Chairman of the Authorised Parliamentary Committee, were elected *ex officio*. Furthermore, the E.C. confirmed that the appointment of eight members and *ex officio* members was not in compliance with E.U. standards, stating that:

> "Serbia should ensure that when amending the Constitution...professionalism and integrity become the main drivers in the appointment process, while the nomination procedure should be transparent and merit based. Serbia should ensure that a new performance evaluation system is based on clear and transparent criteria, excludes any external and particularly political influence, is not perceived as a mechanism of subordination of lower court judges to superior court judges and is overseen by a competent body within the respective Councils".

The E.C. also contested the role of the Ministry of Justice in the judiciary in the Screening Report, stating that "the judicial reform process should lead to tasking both councils with providing leadership and managing the judicial system". [5]

The E.C. defined the Recommendations relating to the reform steps that need to be made in order to overcome the above-mentioned problems. The Recommendations call for a thorough analysis and amendment of the part of the Constitution relating to the judiciary, and particularly to the system of selection, proposal, election, transfer and termination of office of judges, presidents of courts and public prosecutors or deputy public prosecutors, which should be independent of political influence. It is requested that entry into the judicial system be based on objective evaluation criteria and equitable selection procedures, open to all candidates with relevant qualifications and transparent in the eyes of the general public. Furthermore, the H.J.C. and the State Prosecutorial Council [hereinafter S.P.C.] should be strengthened in such a way as to imply the taking over of a leading role in the management of the judiciary. Their composition should be mixed, without the participation of the National Assembly (except in an exclusively declaratory role), with a minimum of half of the members from the judiciary who represent different levels of jurisdiction. The elected members should be elected by their

[5] Ministry Eur. Integration, Screening Report Serbia: Chapter 23 - Judiciary and Fundamental Rights (May 15, 2014), https://www.mpravde.gov.rs/files/Screening-report-chapter-23- serbia%20Official%20(3)%201.pdf.

peers, and the legislative or executive power should not have the authority to control or oversee the work of the judiciary. The Recommendations also call for the re-examination of the three-year probationary period for candidates for judge and deputy prosecutor positions and for the precise stipulation of the reasons for terminating the office of judges, as well as of the rules relating to the termination of tenure of judges of the Constitutional Court. In addition, they call for the adoption and effective implementation of criteria for election to judicial positions. This would strike a balance between the H.J.C. and the S.P.C. in terms of their increasing powers and capacities, transparency and accountability which ought to be shown in their work.[6]

Since there are no E.U. directives and regulations in this area, relevant standards are based on different acts adopted by the United Nations and relevant bodies of the Council of Europe—such as the Committee of Ministers and the Consultative Council of European Judges [hereinafter C.C.J.E.]—as well as on the positions of the Venice Commission of the Council of Europe [hereinafter V.C.], which emphasises that the rule of law, democracy, separation of powers and human rights are fundamental values.[7] However, standards in the judicial field must be flexible.[8] Furthermore, in the field of constitutional law, it has been highlighted that "the Venice Commission has acquired a reputation as an authoritative consultative body for matters of constitutionalism and democracy".[9] The V.C. has played and continues to play a major role in the adoption of constitutions in Central and Eastern Europe.[10] The V.C. has issued a number of opinions regarding Serbia over the years. What is particularly important is that the constitutional provisions of the judiciary and the prosecutorial office were the focus. Even the V.C. itself has concluded that the sources of standards in this area are particularly numerous. We can see that the V.C. makes a distinction between hard and soft law when producing its opinions and studies,[11] but standards are mostly rooted in soft law.[12] Bearing this in mind, the guarantees of the V.C. should be understood as the means of establishing a

[6] *See* Ministry Eur. Integration, Screening Report Serbia: Chapter 23 - Judiciary and Fundamental Rights (May 15, 2014), https://www.mei.gov.rs/upload/documents/skrining/screening-report-23.pdf (Serb.).

[7] *See generally* Agnieszka Bień-Kacała, *Dissolution of Political Parties by the Polish Constitutional Tribunal in Light of the Venice Commission's Standards and Decisions*, 154 Studia Iuridica Auctoritate Universitatis Pécs Publicata 32 (2017) (Hung.); *see also* Paul P. Craig, *Transnational Constitution-Making: The Contribution of the Venice Commission on Law and Democracy*, UC Irvine J. Int'l Transnat'l Compar. L., Mar. 2017, at 57, 72.

[8] *See generally* Sergio Bartole, *Final Remarks: The Role of the Venice Commission*, 26 Rev. Cent. E. Eur. L. 351, 357 (2000) (Neth.).

[9] Maartje De Visser, *A Critical Assessment of the Role of the Venice Commission in Processes of Domestic Constitutional Reform*, 63 Am. J. Compar. L. 963, 968 (2015). *See, e.g.*, Gianni Buquicchio, *Venice Commission to the Council of Europe and Ukraine: The Lines of Cooperation, Law of Ukraine*, Legal Journal 316, 318 (2012).

[10] Giorgio Malinverni, *The Venice Commission of the Council of Europe*, 96 Proc. Ann. Meeting (Am. Soc'y Int'l L.) 390, 393 (2002).

[11] *See* Craig, *supra* note 6, at 77.

[12] *See* Wolfgang Hoffmann-Riem, *The Venice Commission of the Council of Europe – Standards and Impacts*, 25 Eur. J. Int'l L. 579, 582 (2014) (U.K.).

system that ensures balance is maintained among the different branches of power and which prevents misinterpretation and/or abuse of the concept of judicial independence. The provision of guarantees of judicial independence by regulations that are at the top of the hierarchy of sources of law is a standard that cannot be questioned. The rule of law cannot exist without an independent judiciary.[13]

This paper first discusses the position of the High Judicial Council in the legal order of the Republic of Serbia in the 2006 Constitution. Then, it explains the proposals of the first Amendments to the Constitution and the remarks of the Venice Commission from 2018. The third part examines the latest proposals for amendments in the field of justice from 2021, which came into force, but with which the V.C. did not (completely) agree, along with the proposals for future changes in the direction of democratisation of the Constitution.

## 1. THE HIGH JUDICIAL COUNCIL AND THE ROLE OF THE NATIONAL ASSEMBLY IN SERBIA: THE 2006 CONSTITUTION

The structure of judicial councils varies considerably from country to country. This is, of course, the situation in countries with judicial councils. Since the establishment of judicial councils or similar bodies has become commonplace, the issues of their composition and powers in relation to the selection and advancement of judges, as well as the management of the judiciary, have piqued the scientific, professional, and political public's interest. The Republic of Serbia has chosen a model with two completely different bodies: one for judges and one for prosecutors, which is one of the judicial council options available in Europe. In their attempt to create norms for the composition of judicial councils, relevant international entities appear to be cognizant of variances among national legal systems. The Committee of Ministers of the Council of Europe deems that the judicial councils should be

> [I]ndependent bodies, established by law or under the constitution, that seek to safeguard the independence of the judiciary and of individual judges and thereby to promote the efficient functioning of the judicial system.

[13] *See* Mario Reljanović & Ana Knežević Bojović, *Judicial Reform in Serbia and Negotiating Chapter 23 - A Critical Outlook*, 5 Pravni zapisi 241 (2014) (Serb.).

> ... Councils for the judiciary should demonstrate the highest degree of transparency towards judges and society by developing pre-established procedures and reasoned decisions.
>
> In exercising their functions, councils for the judiciary should not interfere with the independence of individual judges.[14]

There are European standards on the issue of the composition of a judicial council, notably Recommendation CM/Rec(2010)12, which states in Paragraph 27 that: "Not less than half the members of such councils should be judges chosen by their peers from all levels of the judiciary and with respect for pluralism inside the judiciary". No reference could be found on whether there should be an even or an odd number of members in such a council. In any case, where decisions are adopted by at least six members, whether there is an even or an odd number of members will not make a difference.

According to the V.C.,

> [T]here is no standard model that a democratic country is bound to follow in setting up its Supreme Judicial Council so long as the function of such a Council falls within the aim to ensure the proper functioning of an independent judiciary within a democratic State. Though models exist where the involvement of other branches of power (the legislative and the executive) is outwardly excluded or minimised, such involvement is in varying degrees recognised by most statutes and is justified by the social content of the functions of the Supreme Judicial Council and the need to have the administrative activities of the Judiciary monitored by the other branches of power. However, where constitutional or other legal provisions prescribe that the head of state, the government or the legislative power take decisions concerning the selection and career of judges, an independent and competent authority drawn in substantial part from the judiciary should be authorized to make recommendations or express opinions which the relevant appointing authority follows in practice.[15]

[14] Recommendation CM/Rec(2010)12, supra note 20, at §§ 26, 28 and 29.

[15] Venice Commission, International Round Table: Shaping judicial councils to meet contemporary challenges, *Extracts from the opinions and reports of the Venice Commission on the organisation and mandate of the judicial councils*, § 47 (Mar. 21-22, 2022), https://www.venice.coe.int/files/judiciary_councils_compilation.pdf.

As defined by the European Charter on the Statute for Judges: "The decisions to appoint a selected candidate as a judge, and to assign him or her to a tribunal, are taken by the independent authority...or on its proposal, or its recommendation or with its agreement or following its opinion".[16]

The H.J.C. was introduced into the legal order of the Republic of Serbia in 2001, and it was renamed by the 2006 Constitution. According to Article 153, the H.J.C. in Serbia was an independent and autonomous body which shall provide for and guarantee the independence and autonomy of courts and judges. The H.J.C. had eleven members. It was constituted by the President of the Supreme Court of Cassation, the Minister responsible for justice and the President of the Authorised Committee of the National Assembly as *ex officio* members, and the remaining eight were electoral members elected by the National Assembly. The President of the Supreme Court of Cassation was the President of the H.J.C., and according to certain positions in theory, this significantly limits the autonomy of this body because the President should be elected by a majority, by secret ballot, and not be imposed by law.[17] One solution for this situation could be the election of the President of the H.J.C. among the lay members, according to the V.C. The V.C. has stated that "the chair of the council could be elected by the council itself from among the non-judicial members of the council",[18] but this recommendation is primarily aimed at situations where judges elected by their peers have the majority in a council and is not applicable if it increases the risk of domination of the H.J.C. by the current majority in Parliament.

Opinion No. 10 of the C.C.J.E. on "the Council for the Judiciary at the service of society" stipulates that: "The Council for the Judiciary can be either composed solely of judges or have a mixed composition of judges and non-judges. In both cases, the perception of self-interest, self-protection and cronyism must be avoided." It followed by stating that:

> In the [C.C.J.E.]'s view, such a mixed composition would present the advantages both of avoiding the perception of self-interest, self-protection and cronyism and of reflecting the different viewpoints within society, thus providing the judiciary with an additional source of legitimacy. However, even when membership is mixed, the functioning of the Council for the Judiciary shall allow no

[16] Council of Europe, European Charter on the Statute for Judges, § 3.1, DAJ/DOC (98) 23 (July 8-10, 1998), https://rm.coe.int/16807473ef.

[17] *See* Vladan Petrov & Darko Simović, Ustavno pravo [Constitutional Law] (2020).

[18] Venice Commission, Judicial Appointments Report adopted by the Venice Commission at its 70th Plenary Session, § 35, CDL-AD(2007)028 (Mar. 16-17, 2007), https://www.venice.coe.int/webforms/documents/default.aspx?ref=cdl-ad(2007)028&lang=EN.

> concession at all to the interplay of parliamentary majorities and pressure from the executive, and be free from any subordination to political party consideration, so that it may safeguard the values and fundamental principles of justice.[19]

The Committee of Ministers of the Council of Europe recommends that not less than half the members of such councils should be judges chosen by their peers from all levels of the judiciary and while respecting pluralism inside the judiciary.[20] A similar recommendation is also contained in the Opinion of the V.C., which also identifies the essential element of the role of the council stating that "at least half of the members of the authority should be judges chosen by their peers".[21] However, in compliance with the formerly mentioned endeavour to establish elementary democratic principles, the Venice Commission recognises the need for other members of the council, who are not a part of the judiciary and that represent other branches of power or the academic or professional sectors. Such a composition is justified by the fact that "the control of quality and impartiality of justice is a role that reaches beyond the interests of a particular judge. Moreover, an overwhelming supremacy of the judicial component may raise concerns related to the risks of "corporatist management".[22] In a mixed composition of the Council's performance of this control, the Commission perceives the mechanism for strengthening the confidence of citizens in the judiciary.

When participation of the executive power, or its representatives (e.g., the minister of justice) is in question, the V.C., taking into consideration the practice of numerous European states, in principle, allows for the possibility that a minister is a member of the Council but proposes that he/she should not be involved in decisions concerning the transfer of judges or disciplinary measures against judges as this could lead to inappropriate interference by the Government.[23] The V.C. emphasised the need to ensure effective disciplinary procedures, including ensuring that disciplinary procedures against judges are carried out effectively and without excessive peer restraint.[24] In the opinion of the Council of Europe, the composition of judicial councils should ensure the widest possible representation. Their procedures should be transparent with reasons for decisions being made available to applicants on request.

In Serbia, electoral members included six judges holding the post of Permanent Judges, of which one was from the territory of Serbian autonomous provinces, and two

[19] Opinion No. 10 of the C.C.J.E. on "the Council for the Judiciary at the service of society".
[20] Recommendation CM/Rec(2010)12, supra note 20, at § 27
[21] Venice Commission, *supra* note 17, § 46.
[22] Venice Commission, supra note 17, § 30.
[23] *Id.* § 34.
[24] *Id.* §§ 50-51.

were respected and prominent lawyers with at least fifteen years of professional experience, of which one was a solicitor, and the other was a professor at the law faculty. Presidents of any court in Serbia could not be electoral members of the H.J.C. Tenure of office of the H.J.C's members lasted five years, except for the members appointed *ex officio*. A member of the H.J.C. enjoyed immunity as a judge.[25] In theory, the legal nature of this body was considered controversial. First, the H.J.C. was not a judicial body because it did not exercise judicial power, nor was it a body of judicial self-government because it was not composed exclusively of judges or elected. Based on that, it is considered that the H.J.C. is an autonomous state body *sui generis*.[26]

The V.C. is of the opinion that judicial councils should have a decisive influence on the appointment and advancement of judges (as well as on disciplinary accountability) while the court should be competent for the appeals against decisions of disciplinary bodies. However, as opposed to the decisions related to a judicial career, there is no need to take over the complete judicial administration which may be left to the Ministry of Justice. "An autonomous Council of Justice that guarantees the independence of the judiciary does not imply that judges may be self-governing. The management of the administrative organisation of the judiciary should not necessarily be entirely in the hands of judges".[27] "Judicial councils, where they exist, or other independent bodies in charge of the management of courts, actual courts and/or professional organisations of judges may be consulted when drafting the budget of the judiciary."[28]

The H.J.C. appointed and relieved judges, in accordance with the Constitution and the law; proposed to the National Assembly the election of judges in the first election to the post of Judge; proposed to the National Assembly the election of the President of the Supreme Court of Cassation as well as presidents of courts; participated in the proceedings of terminating the tenure of office of the President of the Supreme Court of Cassation and presidents of courts and performed other duties specified by the law.[29] An appeal could be lodged with the Constitutional Court against a decision of the H.J.C.[30]

On the proposal of the H.J.C., the National Assembly elected a judge for a trial period of three years, for the first time in his career. Tenure of office of a judge who was elected to the post of Judge lasted three years. The H.J.C. elected judges to the posts of Permanent Judges, in that or another court. In addition, this body decided on the election

[25] Устав Републике Србије [Constitution of the Republic of Serbia], art. 153 (Serb.).
[26] Petrov & Simović, *supra* note 16, at 213.
[27] Venice Commission, *supra* note 17, §§ 25-26.
[28] *Id.* § 40.
[29] Устав Републике Србије [Constitution of the Republic of Serbia], art. 154 (Serb.).
[30] *Id.* at art. 155 (Serb.).

of judges who hold the post of Permanent Judges to other or higher courts.[31] A judge's tenure of office terminated at his/her own request, upon legally prescribed conditions coming into force or upon relief of duty for reasons stipulated by the law, as well as if he/she is not elected to the position of a Permanent Judge. The H.J.C. passed a decision on the termination of a judge's tenure of office. A judge had the right to appeal to the Constitutional Court against this decision. The lodged appeal shall not include the right to lodge a constitutional appeal. The proceedings, grounds and reasons for termination of a judge's tenure of office, as well as the reasons for the relief of duty of the President of the Court, are stipulated by the special law.[32]

## 2. THE HIGH JUDICIAL COUNCIL AND THE ROLE OF THE NATIONAL ASSEMBLY IN CONSTITUTIONAL AMENDMENTS IN 2018

In the second half of 2017, intensive discussions began on amendments to the Constitution of the Republic of Serbia in the field of justice. Civil society was also involved in this process.[33] It was in accordance with the V.C.'s view that "a broad and substantive debate involving the various political forces, [N.G.O.s] and citizens associations, academia and the media is an important condition for the adoption of a sustainable text acceptable for the entire society and in accordance with democratic standards".[34] The Ministry of Justice announced a competition for the submission of proposals by all interested parties in the direction of amending constitutional solutions, to which several professional organisations have responded.[35] After receiving all the proposals for constitutional amendments, several public debates were held at round tables in Belgrade, Novi Sad, Niš and Kragujevac.[36] Without entering into the solutions that were offered, the Ministry of Justice submitted the draft Constitutional Amendments in 2018, which will be analysed briefly in the text that follows. It is especially important that during 2018, two draft Amendments to the Constitution were created, the second of which was accepted by the V.C. It was necessary to use several

[31] *Id.* at art. 147 (Serb.).
[32] *Id.* at art. 148 (Serb.).
[33] *See* Čedomir Backović, *Current State of Affairs in the Republic of Serbia in the Context of European Integration*, *in* European integration and criminal legislation 34, 35 (Stanko Bejatović ed., 2016).
[34] Mihai C. Apostolache, *The Review of Constitutional Norms Concerning Local Public Administration in the View of the European Commission for Democracy Through Law (Venice Commission)*, J. L. Admin. Sci., 2015, at 105, 108 (Rom.).
[35] It is interesting to note that some authors believe that constitutional amendments are frequently the product of abuse. *See* Wiliam Partlett, *Courts and Constitution-Making*, 50 Wake Forest L. Rev. 921, 926 (2015).
[36] *See* Čedomir Backović, *Constitution as a Guaranty of Independence of Functioning of Justice*, *in* European integration and criminal legislation (Stanko Bejatović ed., 2018).

dozens of international documents as the source of E.U. standards in the subject area. Many of which are adopted by the relevant bodies of the United Nations, the Council of Europe, and the European Commission.

The V.C. at its 116th Plenary Session, held in Venice, October 2018, adopted Opinion No. 921/2018 on the compatibility of the draft Amendments to the Constitutional Provisions on the Judiciary as submitted by the Ministry of Justice of Serbia a week prior (CDL-REF(2018)053) along with the Venice Commission's Opinion on the draft Amendments to the Constitutional Provisions on the Judiciary (CDL-AD(2018)011). Namely, following a request on 13 April 2018 by the Minister of Justice of Serbia, an Opinion (CDL-AD(2018)011) on the draft Amendments to the Constitutional Provisions on the Judiciary (CDL-REF(2018)015) was adopted by the V.C. at its 115th Plenary Session held in Venice, June 2018. There were two sets of draft Amendments prepared by the Ministry of Justice of Serbia and the first set of draft Amendments were adopted by the Government of Serbia prior to their submission to the V.C. for an Opinion (CDL-AD(2018)011). The V.C. was concerned to learn that the important process of amending the Constitution of Serbia of 2006, in its sections pertaining to the judiciary bringing it in line with European standards, began with a public consultation process which was marred by an acrimonious environment. The V.C., in its Opinion No. 921/2018, encouraged the Serbian authorities to spare no efforts in creating a constructive and positive environment around the public consultations concerning this important process of amending the Constitution. After that, a second set of draft Amendments was prepared by the Ministry of Justice of Serbia after the adoption of the Venice Commission's Opinion, and was submitted for public consultation on 18 September 2018. These draft Amendments were also sent to the Venice Commission for assessment and the Venice Commission took note that the recommendations formulated by the Venice Commission in its Opinion No. 921/2018 were followed.

As we said, the first draft Amendments were prepared by the Ministry of Justice, following the adoption of the National Action Plan for Chapter 23 of the accession negotiations by Serbia with the E.C., opened in July 2016, with the aim of depoliticising the judiciary and to strengthen its independence. The draft Amendments were adopted by the Government of Serbia prior to being submitted to the Venice Commission for the present opinion. The V.C. was informed that the formal amendment process will be initiated by the National Assembly of Serbia after the adoption of the present Opinion by the Venice Commission. This Opinion was adopted by the Venice Commission at its 115th Plenary Session (Venice, 22-23 June 2018) after having been discussed at the Sub-Commission on the Judiciary (21 June 2018).

According to the proposed solution, the H.J.C. should be an autonomous and independent state body that guarantees the independence and autonomy of the courts by deciding on issues of the position of judges, court presidents and lay judges determined by the Constitution and the law. This was a broader definition than the one in the current Constitution. Furthermore, the H.J.C. elects and dismisses the President of the Supreme Court of Serbia and presidents of other courts; elects judges and lay judges and decides on the termination of their functions; collects statistical data relevant to the work of judges; evaluates the work of judges and court presidents; decides on transfer and temporary assignment of judges; appoints and dismisses members of disciplinary bodies; determines the number of judges and lay judges; proposes to the Government funds for the work of courts in matters within its competence; and decides on other issues of the position of judges, court presidents and lay judges determined by special law. The disciplinary procedure and the procedure of dismissal of judges and presidents of courts may also be initiated by the Minister of Justice in charge.

Certain positions regarding the composition of this body were discussed earlier. However, one of the main issues were the election of non-judicial members of the H.J.C. In the first set of draft Amendments from June 2018, the Amendment dealing with the election of non-judicial members of the H.J.C. by the National Assembly provided for two rounds of elections: a first round of elections (three-fifths majority) and a second round (five-ninths majority). In the event that not all the candidates were elected, a commission comprised of the President of the National Assembly, the President of the Constitutional Court, the President of the Supreme Court of Serbia, the Supreme Public Prosecutor of Serbia, and the Ombudsman, would elect the remaining members by majority vote. However, the V.C criticised this solution. Essentially, the V.C. considers that there is a high degree of danger that the five-member body will become the rule and not the exception when selecting prominent lawyers. Accordingly, the V.C. therefore recommended that this be changed and provided for four options: (1) one would be to provide for a proportional electoral system that ensures the minority in the Assembly will also be able to elect members; (2) another option would be to give to outside bodies, not under the Government's control, such as the Bar or the law faculties the possibility to appoint members; (3) a third option would be to increase the number of judicial members to be elected by their peers, and (4) a fourth option would be to increase the majority requirement and to enable the five-member commission to choose from among the candidates who originally applied with the National Assembly for the membership in the H.J.C. The Opinion left it up to the Serbian authorities, based on the conditions in and experience of the country, to choose the most suitable option. The next, October

Amendments submitted to the Venice Commission, has followed the fourth option by increasing the majority from three-fifths to two-thirds in the first round. The second round has been taken out, but the text kept the commission as an anti-deadlock mechanism and is in line with the recommendations made by the V.C.

The second problem lied in the term *prominent lawyers*. The V.C. pointed out that this criterion raised the question as to why only those who have passed the Bar exam fall within the category of "prominent lawyers". This would exclude law professors, for instance. The third problem in this text was the condition that the prominent lawyer must have at least ten years of working experience in the field of law falling within the competence of the High Judicial Council, which was very vague and unclear as to its purpose. The October text submitted to the Venice Commission addressed this issue and no longer referred to the Bar exam and took out the vague reference to working experience in the field of law falling within the competence of the High Judicial Council and stated "...relevant working experience as defined by law...". This was in line with the V.C.'s recommendation.

The mandate for members and of the President of the H.J.C. was five years without the possibility of re-election. According to the Venice Commission, this was a relatively short mandate, although a change in the position of the President every five years is to be welcomed. The problem was raised in a situation where all the members were to change at the same time every five years, including the President. The V.C. therefore suggested that a system of gradation in the turnover of the membership of the H.J.C. be introduced, which would be welcome.

Furthermore, there were two models of election of the president of the H.J.C. According to the first proposed solution the President of the H.J.C. was to be elected among the lay members. Later, the new Amendments stipulated that the President should be elected among the judges. This was welcomed by the Forum of Judges in Serbia,[37] and the solution did not contradict the opinions of the V.C. As we stated before, the Venice Commission has stated that "the chair of the council could be elected by the Council itself from among the non-judicial members of the council".[38] However, this recommendation by the Commission is primarily aimed at situations where judges elected by their peers have the majority in a council and is not applicable if it increases the risk of domination of the H.J.C. by the current majority in Parliament.

[37] *See* F. J. Serb., Komentar Foruma sudija Srbije na radni tekst amandmana na Ustav Republike Srbije (Sept. 12, 2018), http://dopuna.ingpro.rs/Forum%20sudija%20Srbije.pdf (Serb.).
[38] *See* Venice Commission, *supra* note 17, § 35.

It was proposed that the H.J.C. makes decisions by the votes of at least six Council members or by the votes of at least five Council members, including the vote of the President of the H.J.C., at a session attended by at least seven Council members. Furthermore, it was prescribed the obligation for the H.J.C. to explain and make public its decisions, and to make decisions on the election of judges, presidents of courts, lay judges and on the termination of their functions, on the transfer and temporary assignment of judges and on the appointment and dismissal of members of disciplinary bodies, which are determined in accordance with the law and in the procedure regulated by law.

The cessation of an H.J.C. member's office term was "for reasons prescribed by the Constitution and law and in the procedure prescribed by law". This provision appeared to apply to all members of the H.J.C., but the draft Amendments, however, contained no criteria for dismissal and so appeared to leave this entirely to secondary legislation, which was a problem.

The members of the H.J.C. elected by the National Assembly could be dismissed by the Assembly by a five-ninths majority regardless of the majority with which they were elected. This solution had to be revised because the majority required for dismissal should be higher or at least equal to, the majority required for election. It was important that criteria for dismissal (and procedures) be laid down in the Constitution and not just left to legislation.

The special problem was the dissolution of the H.J.C. According to the proposed solution, if the H.J.C. does not make a decision within thirty days, the term of office of all the members of the H.J.C. shall cease. The V.C. raised the question of what is to be considered a decision? This may sound obvious, but what happens in a situation in which none of the applicants for a position as a judge is found to be qualified – does this qualify as a decision to reject all candidates, or is it a decision not made? It had to be clearer. Furthermore, in case of a tied vote, there was no decision and a very concrete danger that the term of office of all members would cease. This could lead to hastened decision making or frequent dissolutions of the H.J.C. By definition, the H.J.C. is an independent body, which also means that its individual members should be regarded as independent and should not be dismissed *en masse* on the grounds that one member has not acted responsibly in the decision-making process.

With respect to the dissolution of the H.J.C., if it does not render a decision within thirty days, the V.C. recommended that this be either deleted or at least the conditions for dissolution tightened. The threat of dissolution could lead to the hastening of the decision-making process or to frequent dissolutions of the H.J.C. Taking into account the

composition of the H.J.C. of five-five, the deadlock in the decision-making process could potentially be provoked by the members of the H.J.C. elected by the National Assembly part of the H.J.C. against the judges or vice versa. This had the potential of rendering the H.J.C. inoperative. Although not the preferred solution, the October text submitted to the V.C. was in line with the recommendation, as it listed the issues on which decisions need to be rendered and increased the period of time for the dissolution of the H.J.C. from thirty to sixty days if a decision on an issue falling into the list is not made, thereby tightening the condition.

Finally, members of the H.J.C. might not be held accountable for a given opinion and vote in decision-making in the Council unless they commit a criminal offence and they might not be deprived of their liberty in proceedings instituted for a criminal offence committed as members of the H.J.C. without the approval of the H.J.C.

However, the constitutional Amendments from 2018 did not enter into force despite receiving support from the V.C. The reason lay primarily in the strong work of various professional organisations, which fought for different interests, and primarily in the direction of strengthening the role of judges in the H.J.C. Remarks were also sent by the Bar Association of Vojvodina, who assessed that the Amendments does not meet depoliticization, that the transfer of election of judges from the National Assembly to the H.J.C. does not provide protection from political influences, that representatives of the Bar should not be left out of H.J.C., and that the election of judges to basic courts has not been resolved in a way that would protect the interests of judicial and prosecutorial assistants and that the Bar should have been designated as part of the judicial system.[39]

## 3. THE HIGH JUDICIAL COUNCIL AND THE ROLE OF THE NATIONAL ASSEMBLY IN CONSTITUTIONAL AMENDMENTS IN 2021 AND THE CURRENT SOLUTIONS

According to the Amendments from June 2021, the High Judicial Council should be an autonomous and independent body that shall provide for and guarantee the autonomy and independence of courts and judges, presidents of courts and lay judges. The H.J.C. shall elect judges and lay judges and decide on the cessation of their tenure, elect the President of the Supreme Court and presidents of other courts and decide on the

[39] *See* Slobodan Beljanski, *Patronage over Justice: In Relation to the Working Draft of the Amendment to the Constitution of the Republic of Serbia*, 90 Glasnik Advokatske komore Vojvodine [J. legal theory Prac. Bar Ass'n Vojvodina] 70, 76 (2018).

cessation of their tenure, decide on the transfer and temporary relocation of judges, determine the necessary number of judges and lay judges, decide on other issues related to the status of judges, presidents of courts and lay judges, and perform other functions provided for by the Constitution and law. This Amendment is a new attempt to separate the judiciary from the executive and the legislature according to the concept of the bipolar model – the constitution maker distinguishes between the judiciary on the one hand and the legislative and executive branches on the other, as one of the most prominent characteristics of modern constitutionalism.[40]

There were two alternative solutions regarding the composition of the H.J.C. The first proposal entails that the H.J.C. consist of eleven members: six judges elected by their peers and five "prominent lawyers elected by the National Assembly". This proposal should be welcomed. It met the parameters set out in Recommendation CM/Rec(2010)12, which states that "not less than half the members of such councils should be judges chosen by their peers from all levels of the judiciary and with the respect of pluralism inside the judiciary".[41] The second proposal, which the V.C. does not recommend, also entails an H.J.C. consisting of eleven members but with only five judges elected by their peers, the President of the Supreme Court and five prominent lawyers elected by the National Assembly. This proposal does not follow the V.C. recommendations and puts great power into the hands of the president of the Supreme Court. Furthermore, the current President has been elected by the National Assembly, which means the National Assembly would appoint six out of eleven H.J.C. members (i.e., a majority of members). The Group of States against Corruption (GR.E.CO.) goes even further in this respect; in its fourth evaluation round (corruption prevention with respect to members of parliament, judges and prosecutors) adopted on 29 October 2020, Recommendation IV calls for "(i) changing the composition of the H.J.C., in particular by excluding the National Assembly from the election of its members, providing that at least half its members are judges elected by their peers and abolishing the *ex officio* membership of representatives of the executive and legislative powers."[42]

Election of the H.J.C. members from among the judges shall be stipulated by the law. The principle of broadest representation of judges shall be considered in electing judges as H.J.C. members. The National Assembly shall elect H.J.C. members from among ten candidates (prominent lawyers with at least ten years of experience in legal practice) proposed by the competent committee of the National Assembly, after having conducted

[40] *See* Adams, *supra* note 4, at 236.

[41] Recommendation cm/rec(2010)12, supra note 20, at § 27

[42] *See* GRECO, *Fourth Evaluation Round Corruption prevention in respect of members of parliament, judges and prosecutors*, 86th Session, Doc. No. 12, § 25 (Nov. 28, 2020), https://rm.coe.int/fourth-evaluation-round-corruption-prevention-in-respect-of-members-of/1680a07e4d.

public competition, by a two-thirds majority vote of all deputies, pursuant to the law. The V.C. did not object to a two-thirds qualified majority vote, but it is aware of the factual backdrop against which these theoretical proposals will operate in practice:

> As the current National Assembly is dominated by one political party, obtaining a qualified majority vote is not a problem. To reinforce depoliticisation, while the two-thirds majority requirement should be kept, the [V.C.] recommends adding (in)eligibility requirements. These could create a certain distance between the members elected by the National Assembly (the 'prominent lawyers') and party politics, which could make the [H.J.C.] more politically neutral and avoid conflict of interest, even if it may be difficult to completely insulate these members from any political influence. The [V.C.] has shown its appreciation of such criteria in its Urgent Opinion for Montenegro on the revised draft Amendments to the Law on the State Prosecution Service.[43]

Furthermore, the provision stipulates that a candidate must be a prominent lawyer with at least ten years of experience in legal practice. These criteria are welcomed, but they are insufficient to alleviate the identified problem. Accordingly, the V.C. recommended that either the wording "other specifications shall be defined by the law" be added to the draft amendment or that several basic criteria be elaborated in the draft Amendment.[44]

If the National Assembly has not elected all five members within the deadline stipulated by the law, the remaining members shall be elected from among the candidates who meet the criteria for election by a commission comprised of the Speaker of the National Assembly, the President of the Constitutional Court, the President of the Supreme Court, the Supreme Public Prosecutor and the Ombudsman, by majority vote. Presidents of courts shall not be elected as H.J.C. members. An H.J.C. member elected by the National Assembly shall be creditable of the function and may not be a member of a political party. Other conditions for election and incompatibility with the function of the H.J.C. members elected by the National Assembly shall be defined by the law.

[43] Venice Commission, Serbia - Opinion on the draft Constitutional Amendments on the Judiciary and draft Constitutional Law for the Implementation of the Constitutional Amendments, adopted by the Venice Commission at its 128th Plenary Session, § 68, CDL-AD(2021)032 (Oct. 18, 2021), https://www.venice.coe.int/webforms/documents/?pdf=CDL-AD(2021)032-e.

[44] *See* Venice Commission, Serbia - Opinion on the draft Constitutional Amendments on the Judiciary and draft Constitutional Law for the Implementation of the Constitutional Amendments, adopted by the Venice Commission at its 128th Plenary Session, § 69, CDL-AD(2021)032 (Oct. 18, 2021), https://www.venice.coe.int/webforms/documents/?pdf=CDL-AD(2021)032-e.

The V.C. noted that where the high quorums are not reached, a five-member commission might become the rule rather than the exception. Foreseeing an anti-deadlock mechanism to avoid stalemates is a positive step. However, the danger is that in the end, it will be up to a small five-person commission to decide the composition of the H.J.C., and as a consequence, the composition of the judiciary. The V.C. believes this issue might be partially resolved by altering the commission's composition – and thereby making the pursuit of a consensus more appealing.[45]

An H.J.C. member shall be elected to a five-year term of office. The same person may not be re-elected to the H.J.C.. The H.J.C. has a president and a Vice-President. The President is elected by the H.J.C. from among the members who are judges and the Vice-President from among the non-judicial members for five years. This term is shorter than provided in the criticised Hungarian Constitution.[46] An H.J.C. member's term of office shall cease upon their personal request or conviction of a criminal offence resulting in at least six months of imprisonment. Before the expiry of the period to which he or she is elected, the term of office of a member of the H.J.C. shall cease upon personal request, or if he or she is convicted of a criminal offence to at least six months of imprisonment. The term of office of a member who is a judge shall cease in case of the termination of a judge and the term of office of a member who is not a judge shall also cease in case of permanent loss of ability to exercise the function of a member of the H.J.C. The decision on the termination of the term of office of a member of the H.J.C. shall be made by the H.J.C. An appeal against the decision shall be allowed to the Constitutional Court, which excludes the right to a constitutional appeal.

Draft Amendment XV describes the working methods and decision-making process of the H.J.C. The H.J.C. shall make decisions by the votes of at least eight members. In the Venice Commission's view, that is a rather high threshold that could easily lead to a situation where a decision is not adopted. Such a result might be welcome for decisions on a judge's dismissal but perhaps less so with decisions such as the appointment of new judges.

Furthermore, the H.J.C. shall announce the reasoning of its decisions and publish them in accordance with the law. European standards call for certain due process safeguards because the decisions of the H.J.C. impact judicial careers, but the V.C. believes this should be regulated in the law on the H.J.C. This is all the more

[45] *Id.* § 70.

[46] In Hungary, the V.C. criticised the term of office (nine years) as too long and the rule that provided for the automatic renewal of his/her appointment if there is no two-thirds majority for a new President in the Parliament. *See* Katalin Kelemen, *The New Hungarian Constitution: Legal Critiques from Europe*, 42 Rev. Cent. E. Eur. L. 1, 20 (2017) (Neth.).

recommended because the eight-vote majority could block the work of the H.J.C. and could be more easily regulated in a law where different majorities are called for different types of decisions taken by the H.J.C. Additionally, the European Charter on the Statute for Judges requires that the proceedings be adversarial and involve the full participation of the judge concerned. These draft amendments do not regulate the adversarial nature of the proceedings, the possibilities of adequate preparation by the judge or even a timeframe within which the H.J.C. needs to adopt a decision. The V.C. emphasises that the national authorities do not need to regulate these issues at the constitutional level. However, if the constitutional legislature decides to regulate a particular issue, all essential features need to be regulated in the constitutional provision – but it is not recommended. The better way is to regulate this in an ordinary law.[47]

An appeal of an H.J.C. decision may be lodged with the Constitutional Court in cases stipulated by the Constitution and the law. The lodged appeal shall exclude the right to lodge a constitutional appeal. The H.J.C. members cannot be held accountable for an opinion expressed about performing their duties and voting during decision-making within the H.J.C. The members shall not be deprived of liberty in the proceedings initiated against them for a criminal offence they have committed as members of the H.J.C. without the approval of the H.J.C. In the end, the H.J.C. will no longer be dissolved if it does not render a decision within 30 days, which is to be welcomed.

These draft Amendments bring some positive steps toward democratisation. First, and as the V.C. also states, it is a welcome change to introduce the principle of non-transferability of judges, functional immunity for judges and prosecutors, removal of the probationary period for judges and prosecutors, ending of the H.J.C.'s dissolution if it does not render a decision within thirty days and, most importantly, removal of the National Assembly's competence to elect court presidents. The relevant Amendments align with European standards and address previous recommendations, including the V.C. The V.C. made the following key recommendations:

> [T]he election by high quorums needed in the National Assembly for the election of prominent lawyers to the [H.J.C.] (five members)...may lead to deadlocks in the future. There is a danger that the anti-deadlock mechanism, which is meant to be an exception, will become the rule and allow politicised appointments. In order to encourage consensus and move away from the anti-deadlock mechanism of a five-member commission, the composition of the latter should be reconsidered;

[47] *See* Venice Commission, *supra* note 39, § 76.

> regarding the two alternative suggestions for the composition of the [H.J.C.] (both have [eleven] members, which is to be welcomed): the first alternative is clearly preferable with a majority of members being judges appointed by their peers; the second alternative would reduce the number of judges to five and include the President of the Supreme Court. This would mean that fewer than half of the members would be judges elected by their peers, which is not recommended;
>
> while the two-thirds majority requirement in the parliamentary vote is welcome and should be kept, eligibility criteria designed to reduce the risk of politicisation should be added, due in particular to the current political situation;
>
> ...
>
> consideration should be given to include the budgetary autonomy of the [H.J.C.] at the constitutional level;
>
> the working methods of both the [H.J.C.] should appear in an ordinary law and not at the constitutional level.[48]

I agree with the V.C. that the threshold of a two-thirds majority of all deputies is dangerous. In Serbia, a commission comprised of the Speaker of the National Assembly, the President of the Constitutional Court, the President of the Supreme Court, the Supreme Public Prosecutor and the Ombudsman could easily become a rule and not an exception. Second, we talk about the Judicial Council. Therefore, judges should have a majority in this Council, but I believe that the demands for democratisation are quite satisfied if there are six judges in the Council, with five prominent lawyers. Furthermore, it is important to introduce an eligibility criterion and budgetary autonomy at the constitutional level.

We can solve additional problems at the legislation level, such as judicial incompatibilities and H.J.C. working methods. The Law on High Judicial Council regulates the working methods of the H.J.C., but there is no necessary law on judicial incompatibilities. Furthermore, there are no provisions on budgetary issues, except one that provides operational funds for the H.J.C. in the budget of the Republic of Serbia.[49]

Almost immediately after the arrival of the comments of the V.C. in October 2021, the Republic of Serbia started a quick revision of the Amendments. Due to the planned referendum on constitutional issues in January 2022, the Government quickly tried to push

[48] *See* Venice Commission, *supra* note 39, §§ 110-111.

[49] *See* Zakon O Visokom Savetu Sudstva [Law on the High Council of the Judiciary] Sl. glasnik RS br. 116/2008 [Official Gazette of the Republic of Serbia No. 116/2008], art. 3 (Serb.).

through constitutional solutions that were not completely in accordance with the V.C.'s Opinion.

According to the December 2021 Amendments, the H.J.C. is no longer autonomous, and it was proposed that the H.J.C. be only an independent state body.[50] Then, in relation to the previous decision, the composition of the H.J.C. and the manner of electing prominent lawyers were partially modified: the H.J.C. consists of eleven members with six judges elected by judges, four prominent lawyers elected by the National Assembly and the President of the Supreme Court. This proposal also meets the standards set out in Recommendation CM/Rec(2010)12).

The National Assembly elects H.J.C. members from among eight candidates (prominent lawyers with at least ten years of experience in the legal profession) proposed by the competent committee of the National Assembly after a public competition, by two-thirds of all deputies, in accordance with the law. This solution meets the V.C's parameters, but the special issue is that the anti-deadlock mechanism remained the same. The authorities believe that because this anti-deadlock panel is supposed to operate as a substitute for the National Assembly's competence, it should be made up of the highest-ranking Government officials with constitutional legitimacy. The panel also includes famous lawyers and the speaker of the National Assembly, who serves as an institutional figure and represents Parliament.[51]

Because there are no prescriptive or specific criteria for the composition of such an anti-deadlock mechanism, the V.C.did not determine that the proposed mechanism does not meet international standards and must be altered.[52] The V.C. recognises the members' explicit demands for high legal competence and finds it beneficial that the H.J.C.'s "prominent lawyers" be appointed by key figures in the Serbian judiciary. It also has no objections to the participation of the Ombudsman; given that the anti-deadlock mechanism supersedes a power of the National Assembly, the participation of the Speaker of the National Assembly is similarly logical.[53] However, because four of the five members of this commission are currently elected by the National Assembly (and not all with a qualified majority), it is possible that the proposed anti-deadlock mechanism will "lead to politicised appointments" for the Commission, at least until these constitutional

[50] *See* Устав Републике Србије [Constitution of the Republic of Serbia], art. 150 (Serb.).
[51] *See* Venice Commission, Serbia - Urgent opinion on the revised draft constitutional amendments on the judiciary, issued pursuant to Article 14a of the Venice Commission's Rules of Procedure on 24 November 2021, endorsed by the Venice Commission at its 129th Plenary Session (Venice and online, 10-11 December 2021), §15, CDL-AD(2021)048-e (Dec. 13, 2021), https://www.venice.coe.int/webforms/documents/?pdf=CDL-AD(2021)048-e.
[52] *Id.* § 18.
[53] *Id.* § 16.

Amendments take effect and the composition of Parliament becomes more pluralistic.[54] Nonetheless, the V.C. encouraged the Serbian police to make the possibilities for an alternative anti-deadlock mechanism that would address the risk that it might not be politically neutral or that it might be viewed as such.[55]

The recommendation on budgetary autonomy has not been implemented. The V.C. believes that even if constitutional inclusion appears to be the preferred option for enhancing the impression of independence, a legislative regulation would also be appropriate.[56] Finally, the recommendation regarding the working methods of H.J.C. has been followed by changing the titles and content of some draft Amendments.

Even though the new solutions did not fully satisfy the Venice Commission, the Republic of Serbia entered a referendum. Through the media, the public was informed that the Venice Commission welcomes all constitutional amendments and gives its consent. In January 2022, in a referendum, the people's consent was obtained for constitutional changes even though the V.C. did not give a positive opinion on all Amendments. The key provisions on the H.J.C. are Articles 150-154 of the Constitution. In the end, the Amendments to the Constitution entered into force and the first new position of the H.J.C. was formed.

## CONCLUSION

It is not disputed that there is no perfect constitution, but one may be considered optimal if it "meets the requirements of the era, corresponds to the level of social development and the normativisation of the common values of the political community that are acceptable for all of the members in accordance with the interest and value structure of the pluralist society".[57] The constitution-maker in the Republic of Serbia must establish, at least, optimal solutions when it comes to the position of judges and the H.J.C. However, the question is when and whether this will be possible in the near future. The last ten years have clearly shown us how many conflicting opinions and interests there are in Serbia regarding these issues. In this set of conflicting interests, it is necessary to find a balance and a middle line by which we will avoid both the influence of the executive power on the selection of judges and the creation of judicial corporatism.

[54] *Id.* § 17.
[55] *Id.* §19.
[56] *Id.* § 36.
[57] Nóra Chronowski et al., *What Questions of Interpretation May Be Raised by the New Hungarian Constitution?*, 6 Vienna J. on Int'l Const. L. 41 (2012) (Austria).

Generally speaking, Serbia followed a large number of recommendations and positions from the relevant bodies. Most of the V.C.'s important recommendations from the October Opinion have been implemented, most notably regarding the composition of the H.J.C. In the first place, the Constitution was harmonised with the recommendation that the H.J.C. consist of eleven members: six judges elected by their peers and five "prominent lawyers elected by the National Assembly", and it met the parameters set out in Recommendation CM/Rec(2010)12, which states that "not less than half the members of such councils should be judges chosen by their peers from all levels of the judiciary and with the respect of pluralism within the judiciary".[58] This also builds on the C.C.J.E.'s view - such a mixed composition would present the advantages both of avoiding the perception of self-interest, self protection and cronyism and of reflecting the different viewpoints within society, thus providing the judiciary with an additional source of legitimacy. In a mixed composition of the H.J.C., the V.C. perceives the mechanism for strengthening the confidence of citizens in the judiciary.

The President of the Supreme Court of Cassation was the President of the H.J.C., and according to certain positions in theory, this significantly limits the autonomy of this body, because the President should be elected by a majority, by secret ballot, and not be imposed by law. According to the current solution, the H.J.C. has a President of the Council, who is elected by the H.J.C. for five years from among the elected members of the H.J.C. among judges. The President represents the H.J.C., convenes and presides over sessions, coordinates the work, takes care of the implementation of the Council's acts and performs other tasks in accordance with the law and acts. The H.J.C. has a Vice-President, who is elected for five years by the H.J.C. from among the elective members chosen by the National Assembly. The Vice-President performs the duties of the President in case of his absence or incapacity. In this way, all standards regarding the election of the president of the H.J.C. have been met.

When participation of the executive power, or its representatives (e.g., the Minister of Justice) is in question, the V.C., taking into consideration the practice of numerous European states, in principle allows for the possibility that a minister is a member of the Council but proposes that he/she should not be involved in decisions concerning the transfer of judges or disciplinary measures against judges, as this could lead to inappropriate interference by the Government. However, Serbia took the position that the Minister of Justice should not be a member of the H.J.C. at all.

The drafter of the Constitution followed the recommendation regarding the category of "prominent lawyers". Namely, it was a very problematic solution according

[58] Recommendation CM/Rec(2010)12, supra note 20, at § 27.

to which the category of ”prominent lawyers“ would exclude law professors, for instance. The new rule, which was confirmed in practice during the election of H.J.C. members, is much broader.

The V.C. is of the opinion that judicial councils should have decisive influence on appointment and advancement of judges (as well as on disciplinary accountability) while the Court should be competent for the appeals against decisions of disciplinary bodies. Such a solution is represented in the new Constitution, and an appeal to the Constitutional Court is allowed against the decision of the H.J.C.

However, Serbia did not follow all the recommendations. There are a number of recommendations that Serbia has not followed, so some problems appear in the sphere of the topic of this paper. In the first place, the mandate for members and of the President of the H.J.C. was of five years without the possibility for re-election. According to the V.C., this was a relatively short mandate, although a change in the position of the President every five years was to be welcomed. The problem was raised in a situation that all the members were to change at the same time every five years, including the President. The Venice Commission, therefore, suggested that a system of gradation in the turnover of the membership of the H.J.C. be introduced, which would be welcome. However, the mandate of a member of the H.J.C. lasts for five years, except for the *ex officio* member. An elective member of the H.J.C. cannot be re-elected to that position. Therefore, the same person cannot be re-elected to the H.J.C. Therefore, the entire composition of this body will be changed in this way.

A special question is whether Serbia has separated the judiciary from the executive and the legislature. The anti-deadlock procedure for the election of lay members of the H.J.C. has not been implemented. Namely, if the National Assembly has not elected all five members within the deadline stipulated by the law, the remaining members shall be elected from among the candidates who meet the criteria for election by a commission comprised of the Speaker of the National Assembly, the President of the Constitutional Court, the President of the Supreme Court, the Supreme Public Prosecutor and the Ombudsman, by majority vote. The danger is that in the end, it will be up to a small five-person commission to decide the composition of the H.J.C., and as a consequence, the composition of the judiciary. I have to repeat that I agree with the V.C. that the threshold of a two-thirds majority of all deputies is dangerous. In Serbia, a commission comprised of the Speaker of the National Assembly, the President of the Constitutional Court, the President of the Supreme Court, the Supreme Public Prosecutor and the Ombudsman could easily become a rule and not an exception. Because four of the five members of this commission are currently elected by the National Assembly

(and not all with a qualified majority), it is possible that the proposed anti-deadlock mechanism will "lead to politicised appointments" for the commission, at least until these constitutional amendments take effect and the composition of the Parliament becomes more pluralistic.[59] Despite the fact that the solutions offered in the updated draft Amendments in relation to these two proposals do not violate any international norms, the V.C. continuously emphasises the importance of reducing the risks of politicisation of the H.J.C. I am afraid that this may indeed be the case. However, in any case, I believe that the current Constitution is a step forward towards democratisation.

[59] *See also* Darko Simović, *Constitutionalization of the Judicial Council in North Macedonia and Serbia – Can we Learn from Each Other?,* 67 Strani pravni život 623, 639 (2023) (Serbia). *See also* 37 (2024). *See* also David Kosař et al., *The Case for Judicial Councils as Fourth-Branch Institutions*, 20 Eur. Const. L. Rev. 82 (2024) (Neth.).

VOLUME 9 ISSUE 1 ARTICLES & ESSAYS

UNIVERSITY OF BOLOGNA LAW REVIEW

https://doi.org/10.6092/issn.2531-6133/20469

Received: 18 Feb. 2024 | Accepted: 06 June 2024 | Published: 09 Oct. 2024

# Neuroscience and the Adjudication of Uncontrollability

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0009-0009-7977-5469

ABSTRACT

During the Italian Renaissance, Leonardo da Vinci conducted research on neuroscience, striving to explain "how the brain processes visual and other sensory input, and integrates that information via the soul". Jonathan Pevsner observes that Leonardo da Vinci took an "integrative approach to art and science". Today, research takes an integrative approach to law and science, examining how neuroscience works in the administration of justice.

Neuroscience has contributed substantially to criminal adjudication by providing criminal law with context, encouraging humane sentencing, increasing objectivity in evidence, and supporting explanations that link brain anatomy with human behaviour. In addition, neuroscience prompts a re-evaluation of the concept of free will in human behaviour and the human brain. Although free will has been viewed as an assumption underlying criminal law, neuroscience suggests that free will may be an illusion.

Neuroscience plays a crucial role in courts adjudicating crimes triggered by varying degrees of uncontrollability. Uncontrollability of actions occurs from conditions such as brain lesion, frontotemporal dementia, enlarged amygdala, and addiction to narcotics. The contributions of neuroscience to the justice system have the potential to be strengthened even further. Prospective measures for promoting individuals' future well-being, ethical frameworks for safeguarding fundamental rights, enabling the symbiotic evolution of law and neuroscience, and removing obstacles to neuroscientific research are some of the ways to create an infrastructure in which law can benefit from the flourishing of neuroscience.

KEYWORDS

*Neuroscience, Criminal Adjudication, Free Will, Technological Progress, Constitutional Rights*

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## INTRODUCTION

Leo Tolstoy, in "War and Peace", wrote that "innumerable people . . . were moved by fear or vanity, rejoiced or were indignant, . . . imagining that they knew what they were doing and did it of their own free will".[1] Tolstoy observed that: "The presence of the problem of man's free will . . . is felt at every step of history".[2]

During the Italian Renaissance, Leonardo da Vinci conducted research on neuroscience, striving to explain "how the brain processes visual and other sensory input, and integrates that information via the soul".[3] Jonathan Pevsner observes that Leonardo da Vinci took an "integrative approach to art and science", reflecting on questions about "how the brain works in health and in disease".[4] Today, research takes an integrative approach to law and science, examining how neuroscience works in administering justice.

Neuroscience is the study of the architecture and function of the brain and the nervous system associated with thought, consciousness, and personal identity.[5] Neuroscience provides insights into mental processes and human behaviour.[6] What is the impact of neuroscience on the adjudication of uncontrollability?

Neuroscience has contributed substantially to criminal adjudication by providing criminal law with context, encouraging humane sentencing, increasing objectivity in evidence, and supporting explanations that link brain anatomy with human behaviour (Section 1). In addition, neuroscience prompts a re-evaluation of the concept of free will in human behaviour and in the human brain (Section 2). Although free will has been viewed as an assumption underlying criminal law, neuroscience suggests that free will may be an illusion.

Neuroscience plays a crucial role in courts' adjudication of crimes triggered by varying degrees of uncontrollability (Section 3). Uncontrollability of actions occurs from conditions such as brain lesion, frontotemporal dementia, enlarged amygdala, and

[1] Leo Tolstoy, *War and peace*, Book Ten: 1812, Chapter I (Project Gutenberg EBook ed.) (ebook), https://www.gutenberg.org/files/2600/2600-h/2600-h.htm.
[2] *Id.* Second Epilogue, Chapter VIII.
[3] Jonathan Pevsner, *Leonardo da Vinci's contributions to neuroscience*, 25 Trends in Neurosciences 2017 (2002), https://pubmed.ncbi.nlm.nih.gov/11998691/ (Neth.).
[4] *Exploring Leonardo da Vinci's knowledge of the brain*, NEUROSCIENCE NEWS (Apr. 11, 2019), https://neurosciencenews.com/da-vinci- brain-knowledge-11070/.
[5] *See generally* Olivier Oullier et al., *Le cerveau et la loi : analyse de l'émergence du neurodroit* [The brain and the law: Analysis of the emergence of neuro-law], Centre d'analyse stratégique [Center of strategic analysis] 15 (2012), http://archives.strategie.gouv.fr/cas/system/files/cas-dqs_dt-neurodroit_11septembrereduit_0.pdf (Fr.).
[6] *See generally* Georgia Martha Gkotsi, V. Moulin & J. Gasser, *Les neurosciences au Tribunal: de la responsabilité à la dangerosité, enjeux éthiques soulevés par la nouvelle loi française* [Neuroscience in the Courtroom: From responsibility to dangerousness, ethical issues raised by the new French law], 41 *L'Encephale* 385, 387, column 1 (2015) (Fr.).

addiction to narcotics. The contributions of neuroscience to the justice system have the potential to be strengthened even further. Prospective measures for promoting individuals' future well-being, ethical frameworks for safeguarding fundamental rights, enabling the symbiotic evolution of law and neuroscience, and removing obstacles to neuroscientific research are some of the ways to create an infrastructure in which law can benefit from the flourishing of neuroscience (Section 4).

## 1. EFFECT OF NEUROSCIENCE ON CRIMINAL ADJUDICATION

Science and technology can provide insights to humans. In *Cone v. Carpenter*, a neuropsychologist invented a computer algorithm for assessing test results concerning human behaviour.[7] The neuropsychologist testified: "Usually I use it to see if there is something I didn't see".[8]

This enlightening nature of science and technology can benefit law. David M. Eagleman argues that neuroscience provides greater equity in judicial decision-making.[9] The effect of neuroscience on criminal adjudication includes bringing context to criminal law (Subsection 1), encouraging humane sentencing (Subsection 2), increasing the objectivity of evidence (Subsection 3), and linking brain anatomy with human behaviour (Subsection 4).

### 1.1. BRINGING CONTEXT TO CRIMINAL LAW

Neuroscience can provide a scientific context that sheds light on defendants' backgrounds.[10] For example, on April 14, 2021, in *Ex parte Humberto Garza*, the Court of Criminal Appeals of Texas found that evidence concerning a defendant's childhood trauma can provide "important context about Applicant's life".[11] According to the Court,

[7] *See* Cone v. Carpenter, No. 97-2312-JPM, 2016 WL 1274599, at 47, 49 (W.D. Tenn. Mar. 31, 2016).
[8] *Id.* at 50.
[9] *See* David M. Eagleman, *Pourquoi les sciences du cerveau peuvent éclairer le droit* [Why the sciences of the brain can bring clarity to the law], *in* Oullier et al., *supra* note 5, at 33(Fr.).
[10] *See generally* Sénateur M. Michel Amiel, *Neurosciences et responsabilité de l'enfant* [Neurosciences and responsibility of children], Office parlementaire d'évaluation des choix scientifiques et technologiques [Parliamentary office of evaluation of choices on science and technology], Assemblée nationale [National Assembly of France], Note n° 20, at 1 (Nov. 2019), https://www.senat.fr/fileadmin/Fichiers/Images/opecst/quatre_pages/OPECST_2019_0090_note_neurosciences.pdf (Fr.).
[11] *Ex parte* Garza, No. WR-78,113-01, 2021 WL 1397860 (Tex. Crim. App. Sep. 13, 2017).

such mitigating evidence can draw "a considerably different picture for the jury of Applicant's childhood and mental health".[12]

In this case, the defence failed to present evidence of the defendant's trauma.[13] The jury sentenced the defendant to capital punishment.[14] The defendant argued that the failure to present this evidence concerning trauma constitutes a violation of his right to effective assistance of counsel under the Sixth Amendment.[15]

The Sixth Amendment of the United States Constitution provides that the accused in criminal prosecutions shall "have the assistance of counsel for his defence".[16] In *Strickland v. Washington*, the Supreme Court held that counsel's assistance must be *reasonably* effective, and that ineffective assistance must have caused prejudice to the defence in order to be a violation of the defendant's right under the Sixth Amendment.[17]

The Court in *Ex parte Humberto Garza* found that there is a reasonable probability that the evidence on the defendant's trauma could have persuaded at least one juror to decide differently and thereby "spare Applicant's life".[18] This case presents a powerful example that neuroscience can lead to more informed decisions that save individuals' lives.

## 1.2. ENCOURAGING HUMANE SENTENCING

Neuroscience can also lead to humane decisions in sentencing. On April 9, 2021, in *United States v. Cruz*, the District Court of Connecticut reduced a sentence from life in prison to "a term of time served" with supervised release.[19] Neuroscience contributed to this decision. Expert testimony and scientific articles concerning the development of the adolescent brain persuaded the court that the defendant was less culpable.[20]

The defendant was eighteen years and twenty weeks old when he committed murder in 1994.[21] He was a member of a group.[22] The leader suspected that another member was an informant.[23]

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[12] *Id.*
[13] *See id.*
[14] *See id.*
[15] *See id.*
[16] U.S. Const. amend. VI.
[17] *See* Strickland v. Washington, 466 U.S. 668 (1984) (emphasis added).
[18] *Ex parte* Garza, No. WR-78,113-01.
[19] *See* United States v. Cruz, No. 3:94-CR-112 (JCH), 2021 WL 1326851, at 1, 5 (D. Conn. Apr. 9, 2021).
[20] *See id.* at 5-7.
[21] *See id.* at 1, 5.
[22] *See id.* at 1.
[23] *See id.*

The leader ordered the defendant to kill this member.[24] Defendant continued to insist that "[h]e did not want to kill anyone".[25] Defendant ultimately carried out the order, murdering two men.[26] He was sentenced to life imprisonment without parole.[27]

Defendant filed a motion to reduce the term of this sentence pursuant to Section 3582(c)(1)(A) of Title 18 of the United States Code.[28] The Court found that expert testimony and scientific articles demonstrate that "[eighteen]-year-olds display similar characteristics of immaturity and impulsivity as juveniles under the age of [eighteen]".[29] The Court acknowledged that "[eighteen]-year-olds are still developing in terms of maturity, impulse control, ability to resist peer pressure, and character".[30]

The Court thus noted the incongruity that the defendant, "who was less than fully blameworthy for his crimes given his age when he committed them, will end up serving significantly more time than adults who, fully blameworthy for their conduct, have committed the same crimes".[31] "This reality cannot be ignored", the Court wrote.[32]

The defendant's "extraordinary rehabilitation" also contributed to the Court's conclusion.[33] The Court remarked that the defendant "never received a disciplinary ticket" while being in custody for more than twenty-six years.[34] The Court further recognised the defendant's "extensive participation" in an "intensive cognitive-behavioral treatment program" called the "Challenge Program".[35] This program taught skills such as reducing anti-social peer associations, enhancing self-control, and improving problem-solving capabilities.[36] The Court thus found that the defendant has "transformed"[37] and "no longer poses a danger to the public".[38] This case exemplifies how neuroscience contributes to greater humanity in the criminal justice system.

[24] *See id.*
[25] *Id.*
[26] *See id.*
[27] *See id.* at 2.
[28] *See id.* at 1, 4.
[29] *Id.* at 6.
[30] *Id.* at 7.
[31] *Id.*
[32] *Id.* at 8 (citing Graham v. Florida, 560 U.S. 48, 70-71 (2010)).
[33] *See id.*
[34] *See id.*
[35] *Id.* at 13.
[36] *See id.*
[37] *Id.* at 8.
[38] *Id.* at 13.

### 1.3. INCREASING THE OBJECTIVITY OF EVIDENCE

In addition, neuroscience is expected to enhance the objectivity of evidence. Olivier Oullier et al. observe that one of the goals of "neuro-law" is to prevent future crimes by determining the dangerousness of an individual.[39] Georgia Martha Gkotsi et al. explain that public safety is a "preoccupation" in France.[40] Hence, the assessment of a defendant's dangerousness has "become paramount in the process of judicial decision" in France.[41]

Neuroscientific technology such as magnetic resonance imaging [hereinafter M.R.I.] is believed to provide "tangible" information about how dangerous a defendant is likely to be.[42] Brain imaging is expected to enhance the objectiveness of evidence for mental dysfunction.[43]

However, Gkotsi et al. caution that this expectation might lead fact-finders to place excessive importance on data obtained by neuroscientific technology.[44] For example, the psychological bias of "seeing is believing" might make brain-scanning images appear to have greater probative value.[45]

Applying generalisations to individual conduct requires caution as well. Inferences made from generalisations concerning neuroscience may lack relevance and persuasiveness. For instance, in *State v. Rogers*, expert witnesses for the defence testified that the defendant "could not appreciate the wrongfulness of his conduct and conform his behaviour to the requirements of the law" due to his bipolar disorder.[46] The Court of Appeals of Wisconsin found that two articles titled "Post-Traumatic Stress Disorder: The Role of Medical Prefrontal Cortex and Amygdala" and "Global Prefrontal and Fronto-Amygdala Disconnectivity in Bipolar I Disorder with Psychosis History" were "of marginal relevance at best".[47] The Court's opinion suggests that the Court reached this conclusion because the defendant was never personally diagnosed with post-traumatic stress disorder, and the defendant's individual brain was never actually scanned.[48]

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[39] *See* Oullier et al., *supra* note 5, at 8.
[40] *See* Gkotsi et al., *supra* note 6, at 392, column 1.
[41] *Id.* at 386, 391, column 1.
[42] *Id.* at 391, column 2; 392, column 1.
[43] *See* Florence Rosier, *Les neurosciences peuvent-elles devenir des auxiliaires de la justice?* [Can neuroscience become auxiliaries of justice?], Le Monde (Feb. 4, 2019), https://www.lemonde.fr/sciences/article/2019/02/04/les-neurosciences-peuvent-elles-devenir-des-auxiliaires-de- la-justice_5419193_1650684.html (Fr.). *See also* J. Vanmeter, *Neuroimaging: Thinking in pictures*, *in* Scientific and Philosophical Perspectives in Neuroethics 230, 241 (James J. Giordano & Bert Gordijn eds., Cambridge University Press, 2010) (U.K.).
[44] *See* Gkotsi et al., *supra* note 6, at 392, column 1.
[45] *See id.*
[46] State v. Rogers, 2015AP609–CR, 2016 WL 8605326, at 1 (Wis. Ct. App. May 4, 2016).
[47] *Id.* at 2.
[48] *See id.*

David L. Faigman et al. point out the possibility that group data might not provide precise information concerning individuals.[49] This problem is called the Group to Individual [hereinafter G2i] problem.[50] The Court's reluctance in *State v. Rogers* to accept the two scientific articles appears to reflect a recognition of this G2i problem. Inferences made from group data cannot substitute personal data obtained from individual diagnoses of the defendant.

### 1.4. LINKING BRAIN ANATOMY WITH HUMAN BEHAVIOR

Moreover, neuroscience provides information which links a defendant's anatomy to the defendant's behaviour at issue. Brain imaging shows the anatomical structure of a person's brain.[51] Brain imaging can, for example, help detect brain lesions of a defendant.[52] Such findings can contribute to explanations connecting brain lesions with the defendant's behaviour.[53] This is an important contribution of neuroscience to the law. Without neuroscience, a defendant's conduct might be assumed to be the result of the defendant's volition and personal choice.

## 2. RE-EVALUATION OF FREE WILL IN HUMAN BEHAVIOR AND IN THE HUMAN BRAIN

John Steinbeck, in "East of Eden", suggested that individuals can exercise "choice".[54] He wrote that the word "Timshel" "carried a man's greatness if he wanted to take advantage of it".[55] Can individuals be good whenever they want to be good? Can individuals control their actions freely? Do certain legal doctrines assume that persons' "free will" directs their behaviour?

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[49] *See* David L. Faigman et al., *G2i Knowledge Brief: A Knowledge Brief of the MacArthur Foundation Research Network on Law and Neuroscience* 2-3 (Columbia L. Sch. Scholarship Archive Working Paper, 2016), https://scholarship.law.columbia.edu/faculty_scholarship/2017/https://scholarship.law.columbia.edu/faculty_scholarship/2017/; David L. Faigman et al., *Group to Individual (G2i) Inference in Scientific Expert Testimony*, 81 U. Chi. L. Rev. 417, 418, 426 (2014).

[50] *See also* Zink v. State, 278 S.W.3d 170 (Feb. 24, 2009) (finding that scientific evidence presented by the defence failed to establish a link between defendant's positron emission tomography [hereinafter P.E.T.] scan and defendant's mental condition).

[51] *See*, *e.g.*, Gabriella V. Hirsch et al., *Using structural and functional brain imaging to uncover how the brain adapts to blindness*, Ann. Neurosci. Psychol. (2015), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6168211/ (U.K.).

[52] Oullier et al., *supra* note 5, at 8.

[53] *Id.*

[54] John Steinbeck, East of Eden 395 (Penguin Books ed., 1952) (ebook).

[55] *Id.* at 674.

Although the existence of free will is an assumption underlying criminal law (Subsection 1), neuroscience demonstrates that there is great variability in how each person's brain functions (Subsection 2).[56] Neuroscience suggests the possibility that, in some instances, an individual might be incapable of controlling his or her behaviour (Subsection 3).[57] Such uncontrollability has led to tragedies (Subsection 4).

## 2.1. FREE WILL AS AN UNDERLYING ASSUMPTION OF CRIMINAL LAW

Law assumes that a person has "free will".[58] In particular, an implicit assumption in criminal law is that "behaviour is a consequence of free will".[59] One of the principles of criminal law is that "only rational people can be held criminally responsible for their actions".[60] The meaning of criminal culpability includes "capacity for free will".[61] Criminal law thus assumes that "persons can be held responsible for their actions because they have freely chosen them, rather than had them determined by forces beyond their control".[62]

Neuroscience challenges these assumptions.[63] Joshua D. Greene explains that "you can have someone who is totally rational but whose strings are being pulled by something beyond his control".[64] Hence, Greene suggests that criminal law should abandon "the idea that bad people should be punished because they have freely chosen to act immorally".[65]

Dov Fox observes that criminal law punishes even mentally ill persons "so long as they exhibit minimal capacity to reason or tell right from wrong".[66] This mode of punishment

[56] Oullier et al., *supra* note 5, at 9.
[57] *See id.*
[58] Eagleman, *supra* note 9, at 39; Symposium, Taku Sasaki et al., Jiyū to jiyū ishi [Freedom and Free Will], Philosophical Association of Japan, 1, column 1, https://philosophy-japan.org/wpdata/wp-content/uploads/2019/11/ed4f45dd54a2ed6bdd0bf5b1fefc5c73.pdf (Japan).
[59] Deborah W. Denno, *Human Biology And Criminal Responsibility: Free Will Or Free Ride?*, 137 U. Pa. L. Rev. 615 (1988).
[60] Jeffrey Rosen, *The Brain on the Stand*, The New York Times Magazine, Mar. 11, 2007, https://www.nytimes.com/2007/03/11/magazine/11Neurolaw.t.html.
[61] Amy D. Gundlach-Evans, *State v. Calin: The Paradox Of The Insanity Defense And Guilty But Mentally Ill Statute, Recognizing Impairment Without Affording Treatment*, 51 S.D. L. Rev V. 122, 130-31 (2006).
[62] Michele Cotton, *A Foolish Consistency: Keeping Determinism Out Of The Criminal Law*, 15 B.U. Pub. Int. L.J. 1 (2005).
[63] *See, e.g.*, Wada Toshinori, Nō *kagaku jidai no keihō ni okeru jiyū ishi: Chūshi-han no nin'i-sei yōken wo daizai ni* [*Free will in the criminal law in the era of neuroscience: Intent requirement of defendants in attempted crimes*] 2, columns 1 & 2 (research paper, Keio University Repository of Academic Resources) (2009), https://core.ac.uk/download/pdf/145719532.pdf (Japan).
[64] Rosen, *supra* note 60.
[65] *Id.*
[66] Dov Fox, *Subversive Science*, 124 Pa. St. L. Rev. 153, 167 (2019).

appears to disregard the possibility that individuals might know right from wrong but cannot control their behaviour.

## 2.2. QUESTION ON EQUALITY IN THE CAPACITY OF SELF-CONTROL

Eagleman points out that individuals are not on an "equal footing" with respect to the freedom one has to choose and control one's behaviour.[67] Eagleman writes that, although "all citizens" are "equal before the law," every person has "different perspectives, distinct personalities, and diverse capacities in decision-making".[68]

Thus, Eagleman argues that, from a neuroscientific point of view, the notion of equality is "simply false".[69] Similarly, Oullier et al. suggest that the concept of "everyone being equal before the law" contradicts scientific findings that the neurobiology of each individual varies greatly.[70]

## 2.3. FREE WILL AS AN ILLUSION

Philosophical contemplations on neuroscience may suggest that free will is an illusion. Eagleman states that the idea that a person has "free will" is "totally false" because the brain of each individual is different.[71] According to Eagleman, every behaviour, every thought, and every decision is linked to biological phenomena taking place "beneath the surface of our consciousness".[72] Eagleman points out that individuals are not at liberty to choose all the elements that contribute to their behaviour.[73] Singer and Roth argue that the law of criminal responsibility is a "product of illusion" with no neuroscientific foundation because criminal law assumes that free will exists.[74]

These arguments challenge the idea that individuals' "free will" controls their conduct. Thus, neuroscience teaches the possibility that a defendant behaved in a way due to an anatomical factor of the brain that the defendant did not know and could not control.[75] Biological changes in the brain influence individuals' desires and even

[67] *See* Eagleman, *supra* note 9, at 37.
[68] *Id.* at 39, 49.
[69] *Id.* at 49.
[70] *See* Oullier et al., *supra* note 5, at 9.
[71] *See* Eagleman, *supra* note 9, at 38.
[72] *Id.*
[73] *See id.* at 39.
[74] Masuda Yutaka, Jiyū ishi to keiji sekinin [Free Will and Criminal Responsibility], Meiji University Academic Repository, at 204 (2007), https://m-repo.lib.meiji.ac.jp/dspace/bitstream/10291/12666/1/shakaikagakukiyo_46_1_201.pdf (Japan).
[75] *See*, *e.g.*, Gkotsi, *supra* note 6, at 387, column 2.

decisions.[76] Serge Stoléru thus poses the question: "Is society confronting perpetrators of offences and crimes? Are they instead sick people?"[77]

Even if a brain has abnormalities that can lead to aggressive behaviour, are there portions of the human consciousness that make decisions despite these abnormalities? Peggy Larrieu suggests that it is currently impossible to determine whether "free will" is spontaneous or whether it is programmed in the human brain.[78] Eagleman points out that every part of the brain is connected to some other part of the brain.[79] Thus, according to Eagleman, no part of the brain is "independent" nor "free".[80] This interconnectedness of the brain suggests that there is no single component of the brain which corresponds to "free will".[81]

Neuroscientists explain that human actions result from two networks of the brain.[82] The first is the automated network that humans themselves are unconscious of.[83] The second is the cognitive network that humans are conscious of.[84]

These neuroscientific theories pose questions concerning criminal responsibility and punishment. Should both of these networks be evaluated to decide whether a person was criminally responsible? Would it be fair to penalise a person for the consequences of the unconscious, automatic network? Does the impact of the unconscious, automated network on human behaviour reduce the person's criminal responsibility over that behaviour?

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[76] *See* Eagleman, *supra* note 9, at 35.

[77] Rosier, *supra* note 43. Meanwhile, Jean Decety maintains: "Abnormalities detected in their brain do not exonerate them. They still have free will". *See also id.*

[78] Peggy Larrieu, *Neurosciences et évaluation de la dangerosité. Entre néo-déterminisme et libre-arbitre* [Neurosciences and evaluation of dangerousness: Between neo-determinism and free will], 72 Revue interdisciplinaire d'études juridiques [Review of interdisciplinary studies in law] 22 (2014), https://www.cairn.info/revue-interdisciplinaire-d-etudes-juridiques-2014-1-page-1.htm (Belg.).

[79] *See* Eagleman, *supra* note 9, at 41.

[80] *Id.*

[81] *Id. See also* Jorge Morales, Bria Odegaard & Brian Maniscalco, *The Neural Substrates of Conscious Perception without Performance Confounds*, Neuroscience and Philosophy 296-97 (Felipe De Brigard & Walter Sinnott-Armstrong eds., 2022); N. Kohls & R. Benedikter, *The origins of the modern concept of "neuroscience": Wilhelm Wundt between empiricism, and idealism: implications for contemporary neuroethics*, *in* Scientific and Philosophical Perspectives in Neuroethics 62 (James J. Giordano & Bert Gordijn eds., 2010) (U.K.); A. Autiero & L. Galvagni, *Religious issues and the question of moral autonomy*, *in* Scientific and Philosophical Perspectives in Neuroethics 139-41, 144 (James J. Giordano & Bert Gordijn eds., 2010) (U.K.); William G. Lycan, *Philosophical Theories of Consciousness*, *in* Mind, Cognition, and Neuroscience: a Philosophical Introduction 268-69, 274-76 (Benjamin D. Young & Carolyn Dicey Jennings eds., 2022); Myrto Mylopoulos, *Neurobiological Theories of Consciousness*, *in* Mind, Cognition, and Neuroscience: a Philosophical Introduction 281, 283-90 (Benjamin D. Young & Carolyn Dicey Jennings eds., 2022); Rocco J. Gennaro, *The Unity of Consciousness*, *in* Mind, Cognition, and Neuroscience: a Philosophical Introduction 299-300, 304-5 (Benjamin D. Young & Carolyn Dicey Jennings eds., 2022); Alon Goldstein & Benjamin D. Young, *The Unconscious Mind*, *in* Mind, Cognition, and Neuroscience: a Philosophical Introduction 345, 349-50, 352, 354-56, 358 (Benjamin D. Young & Carolyn Dicey Jennings eds., 2022).

[82] *See* Rosier, *supra* note 43.

[83] *Id.*

[84] *See Id.*

## 2.4. TRAGEDY OF UNCONTROLLABILITY

In the summer of 1966, a man repeatedly fired his rifle from the top of the University of Texas Tower.[85] Innocent pedestrians lost their lives.[86] Before these killings, the perpetrator had left notes questioning his tendency to behave violently.[87] For example, the perpetrator had written, "I cannot rationally [sic] pinpoint any specific reason for doing this".[88]

According to *The Washington Post*, the perpetrator had noted that "he had been suffering from headaches and that his brain should be examined to find out why he had violent thoughts".[89]

In the brain of the perpetrator, there was a growing tumour called "glioblastoma".[90] This malignant tumour was compressing the perpetrator's amygdala.[91] Generally speaking, "[s]timulation of the amygdala causes intense emotion, such as aggression or fear".[92]

The discovery of the tumour in the perpetrator's brain stirred a debate.[93] Some argued that this "tumour could explain his actions".[94] Others maintained that "he was a calculating killer" because of "the calm way he carried out the attack".[95]

Could the perpetrator have known that his amygdala was being compressed by glioblastoma? Could the perpetrator have prevented this tumour from growing and stimulating his amygdala even further? Assuming that this pressure on the amygdala generated "intense emotion" of aggression, was the perpetrator's violent conduct a result of the perpetrator's volition? Did his aggressive behaviour occur regardless of his volition? Was it possible for the perpetrator to control his thoughts and actions? Generally speaking, how should criminal law punish a perpetrator, considering the possibility that the perpetrator's brain tumour might have stimulated his amygdala and therefore increased his aggressiveness unbeknownst to the perpetrator?

[85] *See* Michael S. Rosenwald, *The Loaded Legacy of the UT Tower Shooting*, The Wasington Post, July 31, 2016, https://www.washingtonpost.com/sf/local/2016/07/31/the-loaded-legacy-of-the-ut-tower-shooting/.
[86] *Id.*
[87] *See id.*
[88] *Id.*
[89] *Id.*
[90] Oullier et al., *supra* note 5, at 34.
[91] *See id.*
[92] Anthony Wright, *Chapter 6: Limbic System: Amygdala*, Neuroscience Online (Oct. 10, 2020), https://nba.uth.tmc.edu/neuroscience/m/s4/chapter06.html.
[93] *See* Rosenwald, *supra* note 85.
[94] *Id.*
[95] *Id.*

## 3. CRIMINAL ADJUDICATION OF UNCONTROLLABILITY

In the "Old Curiosity Shop", Charles Dickens depicted how the "disease of the brain" transformed the grandfather of the protagonist, Nell.[96] Dickens recounts the horror of Nell, as she caught a glimpse of her grandfather stealing Nell's hard-earned money.[97] He "seemed like another creature in his shape, a monstrous distortion of his image . . . so unlike him".[98] Dicken's portrayal conveys the tragic, sorrowful condition that brain disease triggers.

This Section explores how neuroscience has played a role in courts' adjudication of the uncontrollability of defendants' behaviour. Such uncontrollability includes disinhibition associated with brain lesions (Subsection 1), symptoms of frontotemporal dementia (Subsection 2), effects of a "survival mode" caused by an enlarged amygdala (Subsection 3), and loss of discernment due to narcotic addiction (Subsection 4).

### 3.1. BRAIN LESION AND DISINHIBITION

#### 3.1.1. *PEOPLE V. WEINSTEIN*

*The New York Times Magazine* suggests that *People v. Weinstein* may represent a "moment that neuroscience began to transform the American legal system".[99] In *Weinstein*, the defendant killed his wife and threw her body out of their apartment's window on the twelfth floor, presumably to create the impression that the victim committed suicide.[100]

After the defendant was indicted, his brain was scanned using P.E.T. scan. [101] A radioactive substance was injected into the defendant's body.[102] When this substance reached the brain, it was metabolised.[103] During this metabolic process in the brain, radioactivity occurred.[104] This radioactivity was captured by a device monitoring the defendant's brain.[105]

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[96] *See* Charles Dickens, The Old Curiosity Shop, Chapter 31 (Project Gutenberg EBook) (ebook), http://www.gutenberg.org/files/700/700-h/700-h.htm.
[97] *Id.*
[98] *Id.*
[99] Rosen, *supra* note 60.
[100] *See* People v. Weinstein, 591 N.Y.S.2d 715, 717 (N.Y. Sup. Ct. 1992).
[101] *Id.* at 717.
[102] *Id.*
[103] *Id.*
[104] *Id.*
[105] *Id.*

This P.E.T. scan revealed an arachnoid cyst in the defendant's brain.[106] An arachnoid cyst is described as a "congenital benign condition resulting from the splitting" of one of the layers surrounding the brain.[107] The court stated that the defendant's "brain is abnormal due to the presence of the arachnoid cyst, the attendant displacement of the left frontal lobe, and . . . metabolic imbalance".[108] The court further found that the defendant's "abnormalities are most apparent" in the frontal lobes.[109] The court notes that the frontal lobes control executive functions including the "ability to reason and to plan".[110]

Based on this evidence, the defence intended to argue that the defendant "lacked the cognitive ability to understand the nature and consequences of his conduct or that his conduct was wrong".[111] This defence raises at least two questions.

First, was the defendant rational? The defence planned to argue that the defendant could not understand that killing his wife was wrong. This argument suggests that the defendant could not distinguish right from wrong. This inference seems to contradict the notion that some individuals with brain lesions are rational and can distinguish right from wrong but cannot control their actions. Perhaps the defence in *Weinstein* planned to portray the defendant as a person who is not rational and who cannot control his behaviour.

Second, the neuroscientific evidence showed that the defendant's brain abnormality was apparent in the frontal lobes which control executive functions such as planning. Does this mean that the defendant had less cognitive capacity to plan? This inference seems to contradict the defendant's behaviour. The defendant threw the victim's body out the window to make the incident appear to be a suicide. This requires planning. This seems to mean that the defendant had the capacity to plan. How can one reconcile this contradiction between inferences made from abnormalities of frontal lobes and the cunning planning that the defendant seems to have executed during the crime?

This enigma suggests intricacy and difficulty in deciphering neuroscientific evidence in conjunction with a defendant's conduct being adjudicated. One possible explanation is that a person with abnormalities in the frontal lobes has difficulty exercising clairvoyance in making long-term plans while being capable of exercising

[106] *Id.* at 717-18.
[107] *Arachnoid Cyst*, St Vincent's Private Hospital Melbourne, St Vincent's Neuroscience https://www.stvincentsneuroscience.com.au/downloads/conditions/st-vincents-neuroscience-conditions-arachnoid-cyst.pdf (explaining the "Arachnoid Cyst") (last visited Sept. 4, 2024).
[108] *Weinstein*, 591 N.Y.S.2d at 722.
[109] *Id.*
[110] *Id.*
[111] *Id.* at 724.

dexterity in devising short-term plans.[112] For instance, in *Edwards v. Ayers*, the Court of Appeals for the Ninth Circuit found that defendant "planned, deliberated, and decided where and when he would shoot his victims".[113] The Court found that such "circumstances of the crime negate diminished capacity"[114] even though experts suggested the possibility that defendant's impulsivity is linked to dysfunction of the prefrontal lobe.[115]

### 3.1.2. BRAIN SCAN AND GENETIC TESTING LEADING TO MITIGATION IN COMO, ITALY

In Como, Italy, brain imaging and genetic testing persuaded a court to mitigate a convicted murderer's sentence.[116] Brain scans using an imaging technique called Voxel-based morphometry revealed that the gray matter volume of the anterior cingulate gyrus and insula in the defendant's brain was different from the volume of ten people in a control group.[117] Changes in the anterior cingulate gyrus and insula have been correlated with reduced inhibition.[118] Changes in the insula have been correlated with aggressive behavior.[119] In addition, a genetic test showed that defendant has abnormality in the activity of monoamine oxidase A (MA.O.A) genes which are "linked to violent behavior".[120]

Considering this neuroscientific and genetic evidence, the Italian court in Como found that the defendant has "partial mental illness".[121] The Court consequently reduced the defendant's sentence from life in prison to twenty years in prison.[122]

[112] *See* Cone v. Carpenter, No. 97-2312-JPM, 2016 WL 1274599, at *45 (W.D. Tenn. Mar. 31, 2016) (noting a neuropsychologist's testimony that "people with brain damage in the very front may lose long-term plans, but can still have very good short-term plans").
[113] *Edwards v. Ayers*, 542 F.3d 759, 775 (9th Cir. 2008).
[114] *Id. Cf.* State v. Haag, No. 51409-5-II, 2019 WL 4273918, at *3, *6 (Wash. Ct. App. Sept. 10, 2019) (taking into consideration the "nature of the crime" to determine the appropriate sentence of defendant whose "rational thinking process was based more in the primitive amygdala versus the sophisticated frontal cortex").
[115] *Edwards*, 542 F.3d at 769-70.
[116] *See* Emiliano Feresin, *Italian court reduces murder sentence based on neuroimaging data*, NATURE, (Sept. 1, 2011), http://blogs.nature.com/news/2011/09/italian_court_reduces_murder_s.html (U.K.).
[117] *Id.*
[118] *See id.*
[119] *See id.*
[120] *Id.*
[121] *Id.*
[122] *Id.*

### 3.1.3. BRAIN LESION AND UNCONTROLLABILITY LEADING TO MITIGATION IN THE NETHERLANDS

In the Netherlands, a man set fire to a painting in the National Museum in Amsterdam in 2006.[123] He was charged with arson and property damage.[124] Experts in psychiatry, psychology, and behavioural neuroscience opined that the defendant had a lesion in the frontal lobe of his brain.[125] Experts explained that, although the defendant had the cognitive capability to recognise what is unlawful, the defendant's brain lesion made him incapable of controlling his behaviour when he was acting.[126]

The court declared that the defendant was partially responsible and mitigated his sentence.[127] Defendant was sentenced to one year in prison and was ordered to be hospitalised in a psychiatric facility.[128]

### 3.1.4. DIFFERING PSYCHIATRIC OPINIONS IN LYON, FRANCE

In France, a man in Lyon hit a victim violently during an altercation in 2007.[129] The victim, trying to escape, climbed over the bannister of a staircase and fell two stories below.[130] Defendant's medical record contained a diagnosis of "frontal syndrome".[131] Defendant had this condition since age twelve when he underwent an operation to remove a brain tumour.[132]

Two neuro-psychiatrists opined that the defendant's "frontal syndrome" was the principal cause of the defendant's impulsiveness.[133] They further stated that the defendant was not responsible for his acts.[134] Another expert in psychiatry opined that the defendant's "anti-social personality" was the source of his behaviour.[135]

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[123] *See* Gkotsi et al., *supra* note 6, at 388, column 2.
[124] *See id.*
[125] *Id.*
[126] *Id.* at 389, column 1.
[127] *Id.*
[128] *See id.*
[129] *See* Benoit de La Fonchais, *Quand la neuropsychologie est convoquée au tribunal* [When neuro-psychology is called to court], Cortex Mag (Mar. 20, 2018), laboratoire d'excellence CORTEX, l'Université de Lyon, https://www.cortex-mag.net/neuropsychologie-convoquee-tribunal/https://www.cortex-mag.net/neuropsychologie-convoquee-tribunal/ (Fr).
[130] *See id.*
[131] *Id.*
[132] *See id.*
[133] *Id.*
[134] *Id.*
[135] *See* Rosier, *supra* note 43.

The court found that the causality between the defendant's aggression and the victim's death had not been proven.[136] The defendant was ultimately found guilty and was sentenced to a fine.[137]

#### 3.1.5. FRONTAL LOBE DAMAGE AND APATHY IN *CONE V. CARPENTER*

In *Cone v. Carpenter*, adjudicated by the United States District Court for the Western District of Tennessee, a neuropsychologist testified that the defendant suffered "brain damage or brain dysfunction" in the frontal lobe.[138] The expert also testified that disinhibition is one of the symptoms of frontal lobe damage.[139]

Yet the Court in this case found that there is "little evidence" to demonstrate that the defendant was unable to know right from wrong or to act lawfully.[140] The Court stated that the defendant "simply did not care to conform his conduct".[141]

At the same time, this apathy and disinterestedness in conforming one's behaviour to the law seem to be symptoms of frontal lobe damage. The observation that the defendant "simply did not care to conform his conduct" does not appear to be a sufficient reason for eliminating the possibility that frontal lobe damage affected the defendant's behaviour and cognition.

### 3.2. FRONTOTEMPORAL DEMENTIA AND THEFT

#### 3.2.1. ACQUITTAL FOR INSANITY IN OSAKA, JAPAN

In Japan, a defendant's diagnosis of frontotemporal dementia led to acquittal. On December 28, 2015, the defendant stole steak and pickles from multiple supermarkets.[142] In one supermarket, the manager was sitting right next to the shelf of pickles.[143] Yet the defendant took the package of pickles with both hands and left the supermarket.[144]

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[136] *See* De La Fonchais, *supra* note 129.
[137] *See id.*
[138] Cone v. Carpenter, No. 97-2312-JPM, 2016 WL 1274599, at *41-*42 (D.Tenn. Mar. 31, 2016).
[139] *Id.* at 46.
[140] *Id.* at 137.
[141] *Id.*
[142] Zentousokutouyou-gata ninchishō (FTD) ni rikan siteita dansei no manbiki-koui ni tsuite muzai ga iiwatasareta jirei Osaka Chisai:H29.3.22 Hanketsu [Man with frontotemporal dementia judged innocent for shop-lifting - Osaka District Court, March 22, 2017, Decision], http://kawaguchi-saiwai.com/?p=2098 (Japan).
[143] *See id.*
[144] *See id.*

Eight years earlier, in 2007, the defendant had suffered a stroke.[145] Then, in November 2015, approximately one or two months before the theft in question, the defendant was diagnosed with frontotemporal dementia.[146]

During the trial, a psychiatric evaluation concluded that (1) the defendant suffers from frontotemporal dementia and (2) the defendant tends to become incapable of controlling his behaviour when he sees something that interests him.[147]

Article 39(1) of the Penal Code of Japan provides that "[a]n act of insanity is not punishable".[148] Article 39(2) states that "[a]n act of diminished capacity shall lead to" mitigation of punishment.[149] The Supreme Court of Japan has ruled that judges have the discretion to interpret psychiatric evaluations of defendants because criminal responsibility is an issue of law.[150]

In the present case, the Osaka District Court observed that defendant did not engage in similar theft before he became affected by frontotemporal dementia[151] The Court stated that it cannot reasonably deny the possibility that defendant was in a state of insanity due to frontotemporal dementia when he committed theft.[152] Thus, the Court issued a judgment of acquittal.[153]

This case did not involve evidence from brain imaging. However, neuroscientific information concerning frontotemporal dementia and the court's observation of defendant's behavior led to the exoneration of the defendant.

According to Johns Hopkins Medicine, frontotemporal dementia occurs when "nerve cells in the frontal and temporal lobes of the brain are lost".[154] The orbitofrontal cortex, which is a part of the frontal lobe,[155] plays a role in processing emotions and

[145] *See id.*
[146] *See id.*
[147] 'Ninchi-shō de manbiki' saisin seikyū 75-sai-dansei, becken no muzai uke — Osaka Kansai ["Theft under dementia" Request for retrial filed in Osaka Summary Court, 75-year-old man, acquitted in different case], MAINICHI (Dec. 3, 2020), https://mainichi.jp/articles/20201202/k00/00m/040/388000c (Japan) (last visited May 6, 2021).
[148] Keihō [Keihō] (Pen. C.), art. 39, para. 1 *translated in* (Japanese Law Translation [JLT DS]) http://www.japaneselawtranslation.go.jp/law/detail/?id=1960 (Japan).
[149] *Id.* at article 39, para. 2.
[150] Saikō Saibansho daisan shōhōtei [Supreme Court of Japan, Third Chamber], Sept. 13, 1983, Showa 58 (a) 753, page 1, Saibansho saibanrei jōhō [Saibanshoweb], https://www.courts.go.jp/app/files/hanrei_jp/328/058328_hanrei.pdf. (Japan).
[151] [Man with frontotemporal dementia judged innocent for shop-lifting - Osaka District Court, March 22, 2017], *supra* note 142.
[152] *Id.*
[153] *Id.*
[154] *Frontotemporal Dementia*, John Hopkins Medicine, https://www.hopkinsmedicine.org/health/conditions-and-diseases/dementia/frontotemporal-dementia (last visited Sept. 4, 2024).
[155] *See* David Zald Scott Rauch, *The Orbitofrontal Cortex, Abstract*, Oxford University Press, https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780198565741.001.0001/acprof-9780198565741 (U.K.) (last visited May 6, 2021).

self-regulating behavior.[156] The ventromedial prefrontal cortex has a role in moral judgment.[157] Frontotemporal dementia is associated with dramatic behavioral changes.[158] Stealing is one of its symptoms.[159] Thus, in the Osaka District Court's decision, defendant's frontotemporal dementia was deemed sufficient to meet the criteria of the insanity defence under Article 39(1) of the Penal Code.

In contrast, the Ohio Court of Appeals in *State v. Ford* reasoned that frontotemporal dementia "could not have excused" defendant, who "did not otherwise meet the legal definition of insanity" under Ohio state law.[160] The Ohio Court of Appeals noted an expert's opinion that frontotemporal dementia might support an inference that "irresistible impulse" was what drove defendant's behavior.[161] At the same time, the Ohio Court of Appeals stated that "irresistible impulse" does not excuse the defendant's offense.[162]

### 3.2.2. DEFENDANT'S BEHAVIOR NEGATING FINDINGS OF INSANITY AND UNCONTROLLABILITY

A defendant's behavior might negate findings of insanity and uncontrollability. In a case involving theft, the High Court of Osaka, Japan, evaluated neuroscientific evidence and defendant's behavior.[163] The Court then concluded that the defendant was capable of controlling his conduct.[164]

In a store, the defendant placed a carpet into a shopping cart, put magazines, food, and other items into his bag, and tried to flee.[165] A physician diagnosed the defendant with post-traumatic stress disorder, eating disorder, alcohol addiction, and kleptomania.[166] A psychiatrist referred to images from the defendant's brain scan and pointed out that the defendant's brain function might be impaired.[167] The psychiatrist further stated that such

[156] Shazia Veqar Siddiqui et al., *Neuropsychology of Prefrontal Cortex*, 50 INDIAN J. PSYCHIATRY 202 (2008) (India).
[157] Amitai Shenhav & Joshua D. Greene, *Integrative Moral Judgment: Dissociating the Roles of the Amygdala and Ventromedial Prefrontal Cortex*, 34 J. NEUROSCIENCE 4741 (2014).
[158] Johns Hopkins Medicine, *supra* note 154.
[159] *See id.*
[160] State v. Ford, No. 102617, 2015 WL 6797320, at *1 (Ohio Ct. App. Nov. 5, 2015).
[161] State v. Ford, Nos. 88946, 88947, 2007 WL 3105267, at *2 (Ohio Ct. App. Oct. 25, 2007).
[162] *Id.* at 3.
[163] Osaka-kōtō-saibansho dai-ichi keiji-bu, Heisei 26 nen 10 gatsu 21 nichi hanketsu [Osaka High Court, First Criminal Division], Oct. 21, 2014, Case No. Heisei 26 (u) 829, pages 2-4, Saibansho saibanrei jōhō [Saibanshoweb] https://www.courts.go.jp/app/files/hanrei_jp/953/084953_hanrei.pdf (Japan).
[164] *Id.*
[165] *Id.* at 2-3.
[166] *Id.* at 1.
[167] *Id.*

impairment in brain function and environmental factors have influenced the defendant's commission of theft at issue.[168]

The Court noted that when the defendant tried to leave the store, he left the shopping cart in the mattress area, walked to the cash register to see how store employees were working, then returned to the shopping cart, went to an elevator, arrived at a roof-top parking lot, and then tried to run away.[169] A security officer, however, had followed him.[170] When the security officer said, "You haven't paid, have you?", the defendant replied, "I stole them, sorry".[171]

Based on this behavior, the Court found that the defendant sufficiently knew the unlawfulness of his conduct.[172] The Court also found that, since the defendant observed store employees and stole the commodities when the employees did not seem to be looking, defendant was controlling his behavior.[173] The Court determined that the defendant had the capacity to control himself with respect to making the final decision of whether to commit the theft.[174] Thus, the Court found that the defendant's psychiatric condition had a limited impact on impairing the defendant's control over his behavior.[175] The High Court therefore affirmed the District Court's ruling that the defendant was criminally responsible.[176]

### 3.3. ENLARGED AMYGDALA AND THE SURVIVAL MODE

In *State v. Kirkland*, the defence argued that the defendant's "survival mode" due to an enlarged amygdala constitutes a mitigating factor. An expert witness for the defence testified that "toxic stress" from child abuse enlarges a person's amygdala and weakens its connection to the prefrontal cortex.[177] The amygdala perceives threats.[178] Meanwhile, the prefrontal cortex corrects this perception so that individuals will not continue feeling intense fear when they encounter a phenomenon that is actually safe.[179]

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[168] *Id.*
[169] *Id.* at 3.
[170] *Id.*
[171] *Id.*
[172] *Id.*
[173] *Id.* at 4.
[174] *Id.*
[175] *Id.* at 6-7.
[176] *Id.* at 7.
[177] State v. Kirkland, 157 N.E.3d 716, at 748 (Ohio 2020).
[178] *Id. Cf.* Com. v. Evans, 12-P-246, 2015 WL 478698 (Mass. App. Ct. Feb. 6, 2015). In *Com. v. Evans*, defence counsel presented evidence that an underdeveloped frontal lobe of an adolescent would make the adolescent's behavior be governed by the amygdala, which leads to impulsiveness and aggression. *Id.* at *1. The Court characterised this argument as "interesting and potentially important". *Id.*
[179] *See Kirkland*, 157 N.E.3d, at 748.

In *Kirkland*, an M.R.I. scan showed that the defendant's right amygdala was abnormally enlarged.[180] Thus, the expert witness theorized that when the defendant encountered the victim, the defendant's enlarged amygdala triggered a "survival mode".[181] However, the Supreme Court of Ohio concluded that the mitigating factors are outweighed by aggravating circumstances[182]

The theory concerning "survival mode" may be applied to construct a self-defence argument at the brain level. Since the defendant's enlarged amygdala was in "survival mode", he likely perceived the victim as threatening his life. According to this argument, the defendant's aggression against the victim should be construed as self-defence because the defendant's aggression was prompted by the amygdala's perception that the defendant must act immediately to save himself.

### 3.4. VOLUNTARY ADDICTION AND THE DESTRUCTION OF LEGAL DISCERNMENT

A ruling issued on April 14, 2021, by a French court provoked a debate concerning the source of legal insanity and the degree to which it should affect a defendant's criminal responsibility. On April 4, 2017, an individual was severely beaten and killed by an acquaintance.[183] The perpetrator threw the victim out of the window.[184] On December 19, 2019, the Court of Appeal of Paris[185] declared that the perpetrator had no criminal responsibility.[186] The perpetrator had testified that he thought the victim was the devil.[187] The defence submitted testimony from witnesses who reportedly heard him cry, "I killed a devil".[188] Experts observed that the victim's religious affiliation led the perpetrator to perceive the victim as the devil.[189] Experts also stated that this perception triggered the perpetrator's violence.[190]

[180] *Id.* at 746.
[181] *Id.* at 748.
[182] *Id.* at 749-50.
[183] *See* Jean-Christophe Muller & David Sénat, *Affaire Sarah Halimi: «La loi doit clarifier la question de la responsabilité pénale en cas de consommation volontaire de toxiques»* ["Law must clarify question concerning criminal responsibility in cases of voluntary consumption of toxic substances"], Le Monde (Apr. 24, 2021), https://www.lemonde.fr/idees/article/2021/04/24/affaire-sarah-halimi-la-loi-doit-clarifier-la-question-de-la-responsabilite-penale-en-cas-de-consommation-volontaire-de-toxiques_6077896_3232.html (Fr.).
[184] *Id.*
[185] Cour d'appel [CA] [regional court of appeal] Paris, ch. inst. 6., Dec. 19, 2019, 2019/05058 (Fr.).
[186] Muller & Sénat, *supra* note 183.
[187] Cour de cassation [Cass.] [supreme court for judicial matters] crim., Apr. 14, 2021, 20-80.135, Bull. crim., No. 4, para. 23 (Fr.).
[188] *Id.* at 23.
[189] *Id.*
[190] *Id.*

The family of the victim appealed to the highest judicial court in France, called the *Cour de cassation* [Court of Cassation].[191] On April 14, 2021, the *Cour de cassation* affirmed the Court of Appeal's conclusion that the perpetrator had "no criminal responsibility due to a psychiatric or neuro- psychiatric trouble that abolished his discernment or control of his acts at the moment he committed these acts".[192] The Court determined that the perpetrator's "discernment was abolished".[193] As a result, the perpetrator will not be subject to any proceedings before the *Cour d'assises* [Court of Assizes],[194] which is a court that adjudicates crimes in France.[195]

An expert in psychiatry testified that the deterioration of the perpetrator's mental state was due to his voluntary and regular consumption of "very large quantities" of cannabis.[196] The expert then opined that the perpetrator should be held criminally responsible, noting that the severity of his mental troubles far exceeded expectations.[197] If this expert opinion was accepted, then the perpetrator would have been tried before the *Cour d'assises*.[198] The crime that the perpetrator would have been charged with normally results in life in prison.[199] The perpetrator's "modified discernment" would have resulted in a mitigated sentence of at most thirty years in prison.[200]

The second group of experts stated that the perpetrator's delirious conduct was probably due to schizophrenia.[201] They therefore suggested that the perpetrator's consumption of cannabis did not worsen his already deteriorated mental state.[202] The third group of experts opined that, when the perpetrator committed the aggression at issue, the perpetrator had no free will.[203]

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[191] Muller & Sénat, *supra* note 183; *Les missions de la Cour de cassation*, Cour de Cassation [Cass.] [supreme court for judicial matters], https://www.courdecassation.fr/la-cour/les-missions-de-la-cour-de-cassation (last visited July 1, 2024) («La Cour de cassation est la plus haute juridiction de l'ordre judiciaire français») (Fr.).

[192] Muller & Sénat, *supra* note 183; Cour de cassation [Cass.] [supreme court for judicial matters] crim., Apr. 14, 2021, 20-80.135, Bull. crim., No. 4, para. 28 (Fr.).

[193] Muller & Sénat, *supra* note 183.

[194] *See id.*

[195] *See Procès devant la cour d'assises ou la cour criminelle* [Proceeding before the *cour d'assises* or the criminal court] Ministère Chargé de la Justice, [Ministry of Justice], https://www.service-public.fr/particuliers/vosdroits/F1487 (last visited July 1, 2024) (Fr.).

[196] Muller & Sénat, *supra* note 183; Cour de cassation [Cass.] [supreme court for judicial matters] crim., Apr. 14, 2021, 20-80.135, Bull. crim., No. 4, para. 25 (Fr.).

[197] Muller & Sénat, *supra* note 183.

[198] *Id.*

[199] *Id.*

[200] *Id.*

[201] Cour de cassation [Cass.] [supreme court for judicial matters] crim., Apr. 14, 2021, 20-80.135, Bull. crim., No. 4, para. 25 (Fr.).

[202] *Id.*

[203] *Id.*

Muller et al. suggest that progress in neuroscience and psychiatry raises questions about the origin of legal insanity.[204] If the perpetrator's voluntary consumption of addictive substances was the origin of insanity, should the perpetrator be held criminally responsible, even at the level of mitigated responsibility?[205] "No" was the *Cour de cassation*'s answer on April 14, 2021.[206]

Article 122-1, Paragraph 1, of the French Penal Code provides that "[a] person is not criminally liable who, when the act was committed, was suffering from a psychological or neuropsychological disorder that destroyed his discernment or his ability to control his actions".[207] The *Cour de cassation* ruled that this statutory text does not make any distinction between the sources of mental trouble, which led to the abolition of discernment.[208] It was noted that this articulation was being made for the first time in the judicial history of France.[209]

The *Cour de cassation* observed that the record contained no information indicating that the perpetrator consumed cannabis knowing that it might lead to the conduct at issue.[210] The *Cour de cassation* explained that, when mental trouble exonerates a perpetrator, the law does not distinguish between the origins of mental trouble.[211] This means that (i) a perpetrator who is in a state of insanity under law but did not voluntarily consume any addictive toxin and (ii) a perpetrator who voluntarily consumes addictive toxin and reaches a state of insanity under law will both be exonerated.[212]

In a press release, the *Cour de cassation* explained that a division of the Court of Appeal called the *chambre de l'instruction* [chamber of instruction][213] ordered the perpetrator to be hospitalized under psychiatric care.[214] The Court of Appeal also prohibited him from contacting civil parties, and further prohibited him from appearing at the site of the crime for twenty years.[215]

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[204] *See* Muller & Sénat, *supra* note 183.
[205] *Id.*
[206] *Id.*
[207] Code pénal [C. pén.] [Penal Code] art. 122-1, para. 1 (Fr.).
[208] Cour de cassation [Cass.] [supreme court for judicial matters] crim., Apr. 14, 2021, 20-80.135, Bull. crim., No. 4, paras. 2, 29 (Fr.).
[209] Press Release, Cour de Cassation, *Trouble mental et irresponsabilité pénale* [Mental trouble and criminal responsibility] (Apr. 14, 2021) (online), https://www.courdecassation.fr/toutes-les-actualites/2021/04/14/trouble-mental-et-irresponsabilite-penale (Fr.).
[210] Cour de cassation [Cass.] [supreme court for judicial matters] crim., Apr. 14, 2021, 20-80.135, Bull. crim., No. 4, para. 26 (Fr.).
[211] Muller & Sénat, *supra* note 183.
[212] *See id.*
[213] *Quel est le rôle de la chambre de l'instruction ?* [What is the role of the *chambre de l'instruction*?], VIE PUBLIQUE, https://www.vie-publique.fr/fiches/268572-quel-est-le-role-de-la-chambre-de-linstruction (last updated Sept. 5, 2022) (Fr.).
[214] Press Release, Cour de Cassation, *supra* note 209.
[215] *Id.*

In most cases, it is difficult to ascertain whether individuals have lost control of their actions. The workings of their brains are hidden in their skulls. The law determines whether an individual's discernment was "abolished" or not. This is legal fiction because individuals deemed to have "abolished discernment" under the law might in fact be cognitively capable of controlling their actions. Such legal fiction can affect how the public acts in the future.

For example, according to the *Cour de cassation*'s decision of April 14, 2021, if individuals voluntarily consume narcotics, they might be exempt from being tried before the Court because they are deemed to have no discernment. Meanwhile, if these individuals refrain from voluntarily consuming narcotics, they might be subject to court proceedings as long as their discernment is deemed unaffected. Does this outcome encourage initiatives to stay away from addictive and toxic substances? Does this outcome promote public safety? Is it possible that some individuals will deliberately consume narcotics in order to be exonerated from the criminal justice system?

*Le Monde* reports that, after the *Cour de cassation*'s decision on April 14, 2021, President Emmanuel Macron of France asked the Minister of Justice Eric Dupond-Moretti to "change the law . . . as soon as possible."[216] According to *Le Monde*, President Macron stated that "[d]eciding to take narcotics and then going 'like insane' should not, in my view, remove one's criminal responsibility[217]

## 4. FUTURE DIRECTIONS FOR STRENGTHENING THE CONTRIBUTIONS OF NEUROSCIENCE

Neuroscience has contributed to refining judicial adjudications of uncontrollability. Neuroscience has brought insights that facilitate a greater understanding of the defendants' brain conditions and their conduct. Eagleman argues that progress in neuroscience opens up a new avenue for structuring a legal system that is more efficient,

[216] Jean-Baptiste Jacquin, *Irresponsabilité pénale : la volonté d'Emmanuel Macron de modifier la loi fait débat* [Lack of criminal responsibility : The will of Emmanuel Macron to amend the law stirs debate], Le Monde (Apr. 20, 2021), https://www.lemonde.fr/societe/article/2021/04/20/emmanuel-macron-veut-precipiter-une-reforme-sur-l-irresponsabilite-penale_6077387_3224.html (Fr.).

[217] *Id.* (« Décider de prendre des stupéfiants et devenir alors "comme fou" ne devrait pas à mes yeux supprimer votre responsabilité pénale »). *See also* Alexis Brézet, Delphine de Mallevoüe, Christophe Cornevin & Jean-Marc Leclerc, *Emmanuel Macron au Figaro : «Je me bats pour le droit à la vie paisible».* [Emmanuel Macron to Figaro : "I am fighting for the right to a peaceful life."], Le Figaro (Apr. 18, 2021), https://www.lefigaro.fr/actualite-france/emmanuel-macron-au-figaro-je-me-bats-pour-le-droit-a-la-vie-paisible-20210418 (Fr.).

effective, humane, and adaptive to each individual.[218] How can these contributions be reinforced?

Future directions for strengthening the contributions of neuroscience to the law include prospective measures enabling enhanced well-being of the parties (Subsection 1), ethical frameworks for safeguarding fundamental rights in light of the increasing application of neuroscientific technology (Subsection 2), cultivating a synergetic evolution of law and neuroscience (Subsection 3), and reducing unnecessary limitations imposed on neuroscientific research (Subsection 4).

### 4.1. FORWARD-LOOKING MEASURES FOR ENHANCED WELL-BEING

Eagleman opines that the legal concept of "culpability" should be withdrawn from the legal system.[219] This is because a person's conduct is not necessarily the person's fault.[220] A myriad of elements, including genetic factors and socio-economic conditions in a person's environment, can influence the person's conduct. [221] Eagleman thus proposes replacing the concept of "culpability" with "forward-looking measures".[222]

According to this idea, when a person commits a crime, the question is not "Was the person at fault?". Instead, the question is "What measures should be taken to rehabilitate the person in the future[223] and prevent analogous harm to society in the future?". Greene similarly argues that "the law should focus on deterring future harms".[224]

Former French Senator Michel Amiel emphasizes the importance of protecting and educating delinquent minors.[225] Neuroscience indicates that the delinquent acts of these youths are at least partially due to the underdeveloped state of their brains.[226] Their

[218] Eagleman, *supra* note 9, at 37.
[219] *Id.* at 43.
[220] *See id.*
[221] *See id.*; Gkotsi et al., *supra* note 6, at 392, column 1; Florence Rosier, *« Depuis 2011, l'usage de l'imagerie cérébrale en justice ne cesse d'augmenter en France » ["Since 2011, the use of brain imaging in law continues to increase in France"],* Le Monde *(Feb. 4, 2019), https://www.lemonde.fr/sciences/article/2019/02/04/depuis-2011-l-usage-de-l-imagerie-cerebrale-en-justice-ne-cesse-d-augmenter-en-france_5419189_1650684.html* (Fr.).
[222] Eagleman, *supra* note 9, at 43.
[223] *See* Gkotsi et al., *supra* note 6, at 391, column 1.
[224] Rosen, *supra* note 60.
[225] Sénateur M. Michel Amiel, *Neurosciences et responsabilité de l'enfant* [Neurosciences and responsibility of children], Office parlementaire d'évaluation des choix scientifiques et technologiques [Parliamentary office of evaluation of choices on science and technology], Assemblée nationale [National Assembly of France], Note n° 20, at 4, column 1 (Nov., 2019), https://www.senat.fr/fileadmin/Fichiers/Images/opecst/quatre_pages/OPECST_2019_0090_note_neurosciences.pdf (Fr.).
[226] *Id.*

personalities continue to develop with time.[227] Thus, education may help develop moral character.

In Japan, a patient suffering from dementia was arrested after stealing a boxed lunch from a store.[228] The Tokyo Summary Court found that the defendant was criminally responsible.[229] At the same time, the Court stated that "[r]ather than ordering a patient with dementia to undergo rehabilitation in prison, it is more appropriate to . . . enable patients like the defendant to live a stable life in the community while receiving social welfare, thereby aiming to prevent the recurrence of crimes in the future".[230] The Court sentenced the defendant to a monetary fine of 500,000 yen .[231] The Court's decision in this case reflects a forward-looking consideration for the defendant's future well-being.

## 4.2. ETHICAL FRAMEWORKS FOR SAFEGUARDING FUNDAMENTAL RIGHTS

Ethical frameworks should be constructed to safeguard fundamental rights in the context of the growing use of neuroscientific technology in investigation[232]. It is necessary to strike a delicate balance between maximizing the benefits of neuroscience and minimizing unintended consequences that impinge on fundamental rights.

### 4.2.1. FIRST LEGISLATION ON THE USE OF BRAIN IMAGING IN THE COURTROOM

On July 7, 2011, the French legislature enacted Law No. 2011-814 concerning bioethics.[233] According to Gkotsi et al., this is the first legislation in the world concerning the use of

[227] Betty J. Casey et al., *Making the Sentencing Case: Psychological and Neuroscientific Evidence for Expanding the Age of Youthful Offenders*, Ann. Rev. Criminology 321 (2022). *See also* Joshua May et al., *The Neuroscience of Moral Judgment: Empirical and Philosophical Developments*, *in* Neuroscience and Philosophy 17, 34 (Felipe De Brigard & Walter Sinnott-Armstrong eds., 2022).

[228] Ogata Ayumi, Ninchi-shō to keiji-sekinin-nōryoku [Dementia and Criminal Responsibility], Chukyo Lawyer, Vol. 28 (2018) at 10 (citing and describing Decision of Tokyo Summary Court of Sept. 4, 2014) (Japan).

[229] *Id.*

[230] *Id.*

[231] *Id.*

[232] *See, e.g.,* Eyal Aharoni, Sara Abdulla, Corey H. Allen & Thomas Nadelhoffer, *Ethical Implications of Neurobiologically Informed Risk Assessment for Criminal Justice Decisions: A Case for Pragmatism*, *in* Neuroscience and Philosophy 161-162, 168, 174, 179, 183-186 (Felipe De Brigard & Walter Sinnott-Armstrong eds., The MIT Press, 2022); Thilo Hinterberger, *Possibilities, Limits, and Implications of Brain-computer Interfacing Technologies*, *in* Scientific and Philosophical Perspectives in Neuroethics 271, 277-280 (James J. Giordano & Bert Gordijn eds., 2010) (U.K.).

[233] Loi 2011-814 du 7 juillet 2011 relative à la bioéthique (1) [Law 2011-814 of July 7, 2011, relating to bioethics], Titre VIII: Neurosciences et Imagerie Cérébrale [Title VIII: Neuroscience and Brain Imaging], art. 45 Journal Officiel de la République Française [J.O.] [Official Gazette of France], July 8, 2011, p. 11826 (Fr.).

brain imaging in the courtroom.[234] Jean Léonetti, Member of the French Parliament at the time of enactment, wrote that "it is necessary to set the bases for an ethical framework on the subject of neuroscience and the use of brain imaging".[235] Title VIII of this law is "Neuroscience and Brain Imaging".[236] Title VIII, Article 45, amended the French Civil Code by adding Article 16-14.[237] Article 16-14[238] provides as follows:

> Brain imaging technology can be resorted to only for medical purposes or scientific research, or within the scope of a court ordered expert examination. The express consent of the person must be obtained in writing before the examination is conducted, after the person has been duly informed of its nature and its purpose. The consent shall specify the purpose of the examination. It can be revoked without formality and at any time.[239]

This provision allows judges to appoint an expert in neuroscience in order to evaluate the risks of recidivism, the veracity of a testimony, or the degree of criminal responsibility.[240]

The role of expert testimony differs in the United States and in France. According to *Daubert v. Merrell Dow Pharmaceuticals*, judges in the United States exercise a gate-keeping role in deciding whether to admit expert scientific testimony.[241] In France, scientific experts do not participate in the adversarial process of litigation.[242] According to Article 159 of the French Code of Criminal Procedure,[243] "judges of instruction" in France appoint experts and provide them with instructions on which issues to testify.[244] "Judges of instruction" are judges who are charged with investigating serious, complex crimes and rendering judicial decisions on these cases.[245]

Oullier explains that Law No. 2011-814 "effectively bans the commercial use of neuroimaging in France".[246] One purpose of enacting this law was to protect individuals

[234] *See* Gkotsi et al., *supra* note 6, at 386-87, column 1.
[235] *Id.* at 389, column 1.
[236] Loi n° 2011-814.
[237] Gkotsi et al., *supra* note 6, at 389, column 1.
[238] Code civil [C. civ.] [Civil Code], Chapitre IV [Chapter IV], art. 16-14 (Fr.).
[239] Code civil [C. civ.] [Civil Code] as of July 1, 2013 *translated in* David W. Gruning Trans., (Sept. 2014), https://www.wipo.int/edocs/lexdocs/laws/en/fr/fr512en.pdf (Fr.).
[240] *See* Julien Larregue & William Wannyn, *Le neurodroit, oublié du débat sur la bioéthique* [The neurolaw, forgotten in the debate on bioethics], Le Monde (Feb. 11, 2018), https://www.lemonde.fr/idees/article/2018/02/11/le-neurodroit-oublie-du-debat-sur-la-bioethique_5255105_3232.html (Fr.).
[241] Daubert v. Merrell Dow Pharms., 509 U.S. 579, 592-595 (1993).
[242] Oullier et al., *supra* note 5, at 24.
[243] Code de procédure pénale (C. pr. pén.) [Criminal Procedure Code], art. 159 (Fr.).
[244] *Id.*; Oullier et al., *supra* note 5, at 24.
[245] *See À quoi sert le juge d'instruction ?* [What are the roles of the judge of instruction?], The French Republic, https://www.vie-publique.fr/fiches/268568-role-et-pouvoirs-du-juge-dinstruction (last updated Jan. 15, 2024) (Fr.).
[246]

from "potential misuses of neuroscience".[247] Lie detection and prediction of future behavior are listed as examples of misuse.[248] Overinterpretation of neuroscientific evidence is also raised as a concern.[249] In addition, there is a concern that neuroscience might be used for unintended, abusive, or discriminatory purposes.[250] The legislation aims to address these concerns.

However, despite this legislation, Gkotsi et al. note that defendants are not shielded from brain-imaging procedures that might violate their fundamental rights.[251] In particular, Gkotsi et al. express concern that neuroscientific data might be interpreted as an indication of defendants' dangerousness.[252] As a result, Gkotsi et al. explain that defendants might face longer sentences impinging upon their liberty.[253] This consequence is problematic because brain abnormality does not automatically mean that a person is ill or that the person has a propensity to act violently.[254] The legislative history of the new bioethics law in France also suggests that the legislators intended to prevent neuroscience from being used to establish the culpability of the defendants instead of mitigating their culpability.[255]

Although Law No. 2011-814 permits the use of brain imaging technology in expert examination ordered by a court, the application of this technology in the French criminal justice system has been infrequent.[256] In 2014, Gkotsi et al. stated that they were unaware of any instances in which neuroscientific technology was used in a courtroom.[257] In March 2018, Benoit de La Fonchais reported that the use of neuroscientific findings in criminal adjudication remains rare in France.[258] In February 2019, Florence Rosier reported that experts in neuroscience, law, and ethics believe that brain imaging is "not ripe enough" for evaluating criminal responsibility.[259] Alexandre Salvador states that "[t]here is no brain function that corresponds uniquely to responsibility".[260]

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Olivier Oullier, *Clear up this Fuzzy Thinking on Brain Scans*, Nature (Feb. 29, 2012), https://www.nature.com/articles/483007ahttps://www.nature.com/articles/483007aa (U.K.).

[247] Gkotsi et al., *supra* note 6, at 386.

[248] *Id.*

[249] *Id.* at page 389, column 2.

[250] *Id.*

[251] *Id.* at 386, 390, column 2.

[252] *Id.* at 386.

[253] *Id.* 386, 392, column 2.

[254] *See id.* at 392, column 2.

[255] *Id.* at 389, column 2; 390, column 2.

[256] *See* «Monsieur le juge, ce n'est pas lui, c'est son cerveau!» [*"Monsieur Judge, it was not him, it was his brain!"*], Le Progrès (June 8, 2014), https://www.leprogres.fr/rhone/2014/06/08/monsieur-le-juge-ce-n-est-pas-lui-c-est-son-cerveauhttps://www.leprogres.fr/rhone/2014/06/08/monsieur-le-juge-ce-n-est-pas-lui-c-est-son-cerveau (Fr.).

[257] Gkotsi et al., *supra* note 6, at 389, column 1.

[258] De La Fonchais, *supra* note 129.

[259] Rosier, *supra* note 43.

[260] *Id.*

### 4.2.2. CAUTION AGAINST OVERSIMPLIFICATION AND BIOLOGICAL DETERMINISM IN JAPAN

Japan's Ministry of Education, Culture, Sports, Science and Technology argues that it is simplistic for laypersons to believe that certain areas of the brain correspond to specific behavioral tendencies.[261] This belief echoes the notion of biological determinism.[262] The Ministry expresses concern that these oversimplified ideas might lead to human rights violations and discrimination against criminals and mentally ill patients.[263] The Ministry states that these outcomes are contrary to what neuroscientists aim to achieve.[264] Similarly, Peggy Larrieu argues that there is a danger in replacing legal reasoning with biological reasoning.[265]

Eagleman explains that "Is the defendants' conduct their fault or due to their biology?" is not the right question to ask.[266] This is because a person's behavior cannot be separated from the biological functions of the person's neuronal circuits.[267]

Furthermore, the brain is not the only factor that determines how a person behaves. Individuals' conduct may also be influenced by their socio-economic environment and past experience.[268] Childhood trauma, for example, affects psychological development.[269] Exposure to paint containing lead can also increase aggressiveness.[270]

### 4.2.3. NEUROSCIENTIFIC TECHNOLOGY AND CONSTITUTIONAL RIGHTS IN INDIA

In *Smt. Selvi & Ors. v. State of Karnataka*, the Supreme Court of India pointed out that the use of neuroscientific technology in legal investigation presents a tension between (i) enhancing the efficiency of investigation through the deployment of novel technology and (ii) protecting fundamental individual liberties.[271] For example, the Brain Electrical

[261] Monbu-kagaku-shō [Ministry of Education, Culture, Sports, Science and Technology of Japan], Nōkagaku kenkyū to shakai tono chōwa ni tsuite [Harmonizing neuroscience research and society], Nōkagaku no rinri-teki / hō-teki / shakai-teki kadai [Ethical, legal, and social issues involving neuroscience], https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu2/shiryo/attach/1236342.htma (Japan).
[262] *Id.*
[263] *Id.*
[264] *Id.*
[265] *See* Larrieu, *supra* note 78, at 22-23.
[266] Eagleman, *supra* note 9, at 37.
[267] *Id.* at 36-7. *See also* May et al., *supra* note 227, at 28-29.
[268] Oullier et al., *supra* note 5, at 9. *See also* Aharoni et al., *supra* note 232, at 169.
[269] Eagleman, *supra* note 9, at 38.
[270] *Id.*
[271] Smt. Selvi & Ors. v. State of Karnataka, (2010) 7 SCC 263, Supreme Court of India, at 2, 76, 86 (India).

Activation Profile [hereinafter B.E.A.P.] test was used to ascertain how well a defendant knows the details of a crime at issue.[272] This technology is a precursor to brain fingerprinting.[273]

Meanwhile, Article 20(3) of the Constitution of India provides that "[n]o person accused of any offence shall be compelled to be a witness against himself".[274] This is a right against self- incrimination.[275]

The Supreme Court of India notes the possibility that "the mere apprehension of undergoing scientific tests that supposedly reveal the truth could push them to make confessional statements".[276] The Court thus observes that the administration of these tests could prompt "individuals from weaker sections of society" to make incriminating statements because they are not fully aware of their constitutional rights.[277] The Court further found that "a forcible intrusion into a person's mental processes is also an affront to human dignity and liberty, often with grave and long-lasting consequences".[278] The Supreme Court of India therefore ruled that imposing investigative technologies such as the B.E.A.P. test on a defendant without the informed consent of the defendant constitutes a violation of the right against self-incrimination under Article 20(3) of the Indian Constitution.[279]

### 4.2.4. CONSTITUTIONAL PROTECTION OF PERSONAL DATA IN SWITZERLAND

Brain imaging yields sensitive personal data. Such data may include information about a person's "psychic health, their emotional world, their decision-making processes, and their personality profile".[280] Article 13, Paragraph 2, of the Swiss Federal Constitution provides that "[e]very person has the right to be protected against the misuse of their personal data".[281] This provision has been interpreted to mean that each person has the

[272] *Id.* at 6, 71.
[273] *Id.* at 74.
[274] India Const. art. 20(3) (India).
[275] *Smt. Selvi & Ors.*, at 3.
[276] *Id.* at 226.
[277] *Id.* at 225-26.
[278] *Id.* at 230-31.
[279] *Id.* at 246.
[280] Bärbel Hüsing et al., *Impact Assessment of Neuroimaging* 231 (2006), https://repository.publisso.de/resource/frl:3688947-1/data (Switz).
[281] Bundesverfassung [BV] [Constitution], Apr. 18, 1999, SR 101, art. 13, para. 2 (Switz.).

right to determine how one's personal data is used and disclosed.[282] Thus, the use of data obtained from brain imaging requires the informed consent of the data subject.[283]

### 4.3. EVOLUTION OF LAW AND SCIENTIFIC PROGRESS IN A MATURING SOCIETY

Former French Senator Michel Amiel writes that neuroscience does not teach lawmakers the precise age at which a person reaches maturity.[284] From what age should an individual be adjudicated as an adult? According to former Senator Amiel, setting such a specific age is within the responsibility of politicians, not scientists.[285]

When neuroscientific research is not reflected in legislation, courts' judgment and discretion enable the application of neuroscience. This crucial role of courts is exemplified in the case of *In re Monschke*. On March 11, 2021, the Supreme Court of Washington held that Section 10.95.030 of the Revised Code of Washington [hereinafter R.C.W.] violates the Constitution of the State of Washington.[286] Section 10.96.030(1) R.W.C. mandates a sentence of "life imprisonment without possibility of release or parole"[287] for all defendants above age the age of eighteen who commit aggravated first degree murder.[288] The Court noted that when the legislature enacted this statute, it "did not have the benefit of psychological and neurological studies" demonstrating that areas of the brain regulating the control of behavior "continue to develop well into a person's [twenties]".[289] The Court noted the State's argument that, since the exact age at which a person reaches maturity is uncertain, the court "may as well give up and let the legislature draw its arbitrary lines".[290]

Yet the Court refused to give up. The Court stated that "giving up would abdicate our responsibility to interpret the constitution".[291] Thus, the Court held that the

[282] Hüsing et al., *supra* note 280, at 232.
[283] *Id.* at 234.
[284] Sénateur M. Michel Amiel, *Neurosciences et responsabilité de l'enfant* [Neurosciences and responsibility of children], Office parlementaire d'évaluation des choix scientifiques et technologiques [Parliamentary office of evaluation of choices on science and technology], Assemblée nationale [National Assembly of France], Note n° 20, at 4, column 2 (Nov., 2019), https://www.senat.fr/fileadmin/Fichiers/Images/opecst/quatre_pages/OPECST_2019_0090_note_neurosciences.pdf (Fr.). *See also* Betty J. Casey et al., *Healthy Development as a Human Right: Insights from Developmental Neuroscience for Youth Justice*, Ann. Rev. L. Soc. Sci. 203, 211 (2020).
[285] Assemblée nationale [National Assembly of France], Note n° 20, at 4, column 2.
[286] *In re* Pers. Restraint of Monschke, 482 P.3d 276, at 287 (Wash. 2021).
[287] Wash. Rev. Code §10.095.030 ¶ 1 (2023), https://app.leg.wa.gov/rcw/default.aspx?cite=10.95.030.
[288] *Id.*; Restraint of Monschke, 482 P.3d, at 287.
[289] *Id.* at 285.
[290] *Id.*
[291] *Id.*

statute's "rigid cutoff at age [eighteen] combined with its mandatory language creates an unacceptable risk that youthful defendants without fully developed brains will receive a cruel [life without parole] sentence".[292]

Also remarkable was the Court's observation that "bright constitutional lines in the cruel punishment context shift over time in order to accord with the 'evolving standards of decency that mark the progress of a maturing society'".[293] What is a "maturing society"? It may mean a society that enriches its understanding of humans by absorbing what neuroscience unveils about the human brain and behavior. The "progress" of this "maturing society" includes questioning conventional notions such as responsibility, culpability, and free will.

*People v. Brewer* shows a glimpse of such progress. On February 8, 2021, the Appellate Court of Illinois ruled that "the law and the science demonstrate" that the eighty-year sentence that the defendant received for first degree murder committed when he was "barely [eighteen] years old" may violate the Eighth Amendment of the Constitution of the United States and the Proportionate Penalties Clause of the Constitution of Illinois.[294] The Court expressly acknowledged neuroscientific research, articulating that "[e]merging research indicates that the development of the young brain continues well beyond the age of [eighteen]".[295] The Court further observed that "[t]he law in Illinois has *evolved* to recognise the *reality* and *failed utility* of lengthy sentences for adolescents".[296]

*People of the State of Michigan v. Miller* also reflects the evolution of neuroscience. In this case, a jury convicted the defendant in 2003 for second-degree murder of a child.[297] The child was believed to have suffered from abusive head trauma [hereinafter A.H.T.].[298] However, in 2018, the defendant filed a motion for relief from judgment, presenting new scientific evidence that fulminant pneumonia caused the child's death, not A.H.T.[299] In response, the Court of Appeals of Michigan acknowledged that the "science underlying the [A.H.T.] diagnosis has evolved considerably since 2003". [300] The

[292] *Id.* at 286. *Cf.* People v. Osborne, No. 346867, 2021 WL 941437, at 4-5 (Mich. Ct. App. Mar. 11, 2021) (noting the prohibition of the mandatory nature of a sentencing scheme for juvenile offenders); People v. Cortez, No. 4-19-0158, 2021 WL 926289 (Ill.App.Ct. 2021) (affirming life sentence for first degree murder committed at age eighteen, citing trial court's characterization of "the nature and the circumstances of the offense" as "horrible" and "almost beyond description").
[293] Restraint of Monschke, 482 P.3d, at 282 (citing Trop v. Dulles, 356 U.S. 86, at 100-101 (1958)).
[294] People v. Brewer, No. 1-17-2314, 2021 WL 431889, at 1, 3 (Ill. App. Ct. 2021).
[295] *Id.* at 4.
[296] *Id.* at 5 (emphasis added).
[297] People v. Miller, No. 346321, 2021 WL 1326733, at 1 (Mich. Ct. App. Apr. 8, 2021).
[298] *Id.*
[299] *Id.*
[300] *Id.*

Court, therefore, ruled that "newly discovered, noncumulative scientific evidence necessitated a new trial at which a different result was probable".[301] In these ways, progress in neuroscience is having a palpable impact on adjudication.

Does the principle of *stare decisis* prevent courts from incorporating neuroscience into their analysis? In *State v. Kirkland*, the Supreme Court of Ohio cited precedent to explain that "we have seldom ascribed much weight in mitigation to a defendant's unstable or troubled childhood".[302] Thus, the Court was not persuaded by the defence's argument that the defendant experienced "childhood abuse and neglect", which led to post-traumatic stress disorder, which then resulted in the defendant's inability to "conform to the norms of the law".[303] However, to what extent should the legal system impose an obligation on courts to adhere to precedent when they evaluate neuroscientific findings? *State v. Kirkland* was decided in 2020.[304] The Court cited precedent from 1989 and 2002.[305] Could strict adherence to these precedents prevent the Court from applying neuroscientific findings, made since 2002,[306] which illuminate how childhood trauma and civilian post-traumatic stress disorder can have long-term, adverse effects on individuals' ability to control their behavior?

*United States v. Dreyer* presents an example of a departure from long-standing precedent in order to bring greater humanity to the criminal justice system.[307] In this case, the defendant was convicted of conspiring to distribute controlled substances.[308] Three reports by four medical experts indicated that the defendant suffered from "early stage frontotemporal dementia".[309] The Court of Appeals for the Ninth Circuit concluded that the defendant should have been granted a competency hearing before sentencing.[310] The dissent stated that the "majority's conclusion is a significant expansion of existing precedent, under which we have found plain error only when the quality and magnitude of mental health evidence far exceeded what has been presented in this case".[311] It seems proper and more humane to evaluate whether a defendant is competent to undergo sentencing proceedings when three medical reports have unanimously concluded that the defendant is affected by "early stage frontotemporal

[301] *Id.*
[302] State v. Kirkland, 157 N.E.3d 716, 749 (Ohio 2020).
[303] *Id.* at 749.
[304] *Id.* at 716.
[305] *Id.* at 749.
[306] *See, e.g.*, Sachiko Donley et al., *Civilian PTSD Symptoms and Risk for Involvement in the Criminal Justice System*, 40 J. Am. Acad. Psychiatry L. 522 (2012).
[307] United States v. Dreyer, 705 F.3d 951 (9th Cir. 2013).
[308] *Id.* at Synopsis, Background.
[309] *Id.* at 954.
[310] *See id.* at 953.
[311] *Id.* at 954.

dementia". This case suggests that the incremental development of case law in the United States engenders hope for bringing humanity into the justice system, despite the principle of *stare decisis*.

In Japan, the High Court of Takamatsu found in 2016 that the Trial Court's refusal to consider neuroscientific evidence was unlawful.[312] In this case, the defendant stole four items.[313] The defence counsel sought the opinion of an expert who stated that the defendant might have suffered from frontotemporal dementia at the time of the theft.[314] The defence counsel filed a request for an official psychiatric evaluation in order to ascertain the presence and degree of the defendant's criminal responsibility.[315] The Court of First Instance declined the request for psychiatric evaluation and did not seek an expert opinion on psychiatry.[316] The High Court found that this procedure was unlawful because it "clearly has influence on the final ruling".[317] Thus, the High Court vacated the ruling and remanded for further proceedings.[318] This example evokes the concept of willful blindness. Even though neuroscientific evidence was likely to be relevant, the Court declined to consider it. Although there are debates concerning the reliability of neuroscientific evidence, it has the possibility of providing considerable insight into human cognition and behavior. The High Court's ruling highlights the importance of taking advantage of this possibility and opportunity in order to determine what was transpiring in the mind and body of the defendant during the alleged crime.

[312] Ogata Ayumi, *supra* note 228, at 10 (citing and discussing Decision of High Court of Takamatsu of 2016).
[313] *Id.*
[314] *Id.*
[315] *Id.*
[316] *Id.*
[317] *Id.*
[318] *Id.*

### 4.4. HUMANE USE EXCEPTION IN PATENT LAW FOR FACILITATING NEUROSCIENTIFIC TECHNOLOGY

Case law suggests that intellectual property law might limit the application and research of neuroscientific technology. Companies claim to own intellectual property involving brain fingerprinting technology.[319] A different corporation claims that it is the true owner of intellectual property concerning brain-fingerprinting technology.[320] This corporation sought an order enjoining another company from selling and licensing this technology.[321] The definition of "brain fingerprinting technology" covered by the corporation's proposed order was ambiguous.[322] For example, it was uncertain whether the definition includes the electroencephalography system.[323]

Such disputes might impose restrictions on the research, development, and applications of neuroscientific technology. These restrictions could limit the benefits that neuroscience brings to society and to the legal system. For instance, in *Brainwave Science v. Life Science and Technology* , a forensic neuroscientist stated that adjudication concerning intellectual property agreements "would adversely affect [his] rights to use his research, pursue his profession as a forensic neuroscientist, and practice his invention".[324]

Brain fingerprinting technology helps provide the justice system with insights into human cognition. Neuroscience contributes to the administration of justice, helps prevent excessive incarceration, and can save lives from capital punishment. It can lead to informed, insightful, and humane judicial determinations. Neuroscientific technology thus has the potential to benefit society and the justice system.[325] How can intellectual property law facilitate applications and research in neuroscientific technology?

Creating a "humane use exception" in intellectual property law might alleviate unnecessary restrictions imposed by intellectual property litigation. This exception would allow researchers to use patented technology in neuroscience to develop their

[319] Neuro Science Technologies LLC v. Farwell, C20-1554 TSZ, 2020 WL 7425603, at *1 (W.D.Wash. Dec. 18, 2020); E. Hedinger AG v. Brainwave Sci., LLC, 363 F. Supp. 3d 499, 503 (D. Del. 2019) (involving a party claiming to be the "lawful owner" of brain fingerprinting technology).

[320] Brainwave Science v. Life Science and Technology LLC, 2:19-CV-00167-F, 2020 WL 572751, at *2 (D.Wyo. Jan. 9, 2020).

[321] *Id.*

[322] *Id.*

[323] *Id.*

[324] Brainwave Science Inc v. Life Science and Technology LLC, 2:19-CV-00167-F, 2019 WL 7842548, at *2 (D.Wyo. Dec. 12, 2019). *Cf.* Charleston Medical Therapeutics v. AstraZeneca Pharmaceuticals, 2:13-CV-2078, 2016 WL 7030743, at *5 (D.S.C. Feb. 19, 2016).

[325] *See*, *e.g.*, A. M. Jeannotte, K. N. Schiller, L. M. Reeves, E. G. Derenzo & D. K. McBride, *Neurotechnology as a public good: Probity, policy, and how to get there from here*, *in* Scientific and Philosophical Perspectives in Neuroethics 302-303, 315-316, 320 (James J. Giordano & Bert Gordijn eds., Cambridge University Press, 2010) (U.K.).

research. It would also permit various applications of such technology in ways that generate social benefit through humane use. The Courts should have broad discretion to apply this "humane use exception" to each particular case by evaluating the ramifications and potential social benefits of permitting such uses.

## CONCLUSION

In the Second Epilogue of "War and Peace", Tolstoy implied that how free will impacts history is just as undefinable and esoteric as how kinetic forces move planets in the universe.[326] Criminal adjudication involves the difficult task of discerning a person's mind which is intangible, invisible, and ephemeral. This determination is challenging because observing a person's conduct does not always yield the truth about the person's mental state or background. What seems to be a cold-blooded murder might be the tragic consequence of a struggle by an individual tormented by the recurrence of violent thoughts and sudden impulses to engage in aggression. What appears to be the truth might be far from the truth. Yet criminal law requires courts to make definitive findings about *mens rea*. Law requires courts to make determinations that are difficult or even impossible to determine.

Neuroscience bridges this gap.[327] Neuroscience brings insights into biological and chemical phenomena hidden behind the façade of human appearance and behavior. It provides critical information that helps understand why a person behaved in a certain way. Neuroscience teaches that individuals who appear to be acting with their "free will" might in fact lack the cognitive capacity to control their thoughts and behavior. Neuroscience thus supports the search for truth in criminal adjudication.

Discoveries, however, often generate additional questions. Insights stimulate further inquiries and even controversy. In the web of debates concerning the application of neuroscience to law, it is crucial to keep in mind what is important in law. Adjudication is not always the mechanical application of rules. The justice system should render justice. Rendering justice requires figuring out, to the greatest extent possible, what exactly occurred in a case. Neuroscience can aid in this mission. As a potential source of illumination, neuroscience merits being applied in the justice system circumspectly to augment the good in society and to render justice.

[326] Tolstoy, *supra* note 1, Second Epilogue, Chapter X.
[327] *See*, *e.g.*, May et al., *supra* note 227, at 18.


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