



# Indigenous people in international law: Developments and perspectives<sup>☆</sup>

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## Abstract

International law traditionally addresses the so-called subjects of international law, i.e. states and some other actors, but not individuals or individual population groups. International law also does not scrutinise modern state borders and their creation. As a result, the rights of indigenous groups are only weakly developed in international law. In recent decades, efforts have been made to improve the status of indigenous peoples under international law. However, these processes are complex and lengthy. It is therefore more appropriate to make indigenous interests and positions visible through ad hoc amendments to individual texts of international law. In view of the human rights challenges posed by modern neuroscience, UNESCO's current work on a 'Declaration on the Ethics of Neurotechnology' represents such a suitable opportunity. As the planned declaration is primarily intended to deal with the areas of mental integrity and human dignity, personal identity and psychological continuity, autonomy, mental privacy, access and social justice, it makes sense to incorporate specific indigenous positions in the declaration.

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## **1. History of indigenous people in international law**

The international legal status of indigenous peoples has undergone significant advancements in recent decades, particularly through the evolution of global frameworks aimed at recognising and safeguarding their rights. Indigenous peoples are distinct communities with deep historical and cultural connections to their lands, often maintaining unique social, economic, and political systems that differ from those of the dominant society. Historically marginalised and subjected to discrimination, their rights were frequently overlooked. While international law has been in existence for several centuries, it is only in recent decades that instruments specifically addressing the rights of indigenous peoples have emerged.

International law operates as a supranational legal framework, governing the relationships between states and other entities recognised as international actors. The question of whether or not indigenous peoples are those kinds of actors of international law, and if not, how they are or can be respected, remains unsettled. However, recent decades have seen progress in the recognition of indigenous peoples' rights at both the international and regional level, driven by the adoption of key legal instruments and a growing awareness of their unique challenges and contributions.

### **1.1 International recognition of indigenous rights**

The international protection of minorities historically predates the protection of human rights. It can be traced back to the 16th century, when religious minorities in particular had to be protected. Therefore, in order to prevent wars between states, international agreements, mostly bilateral, were made. After the end of the Napoleonic rule, the protection regime was further developed after the Congress of Vienna in 1815, a diplomatic conference where a new political and constitutional order for Europe was crafted with the aim of ensuring long-term peace and reshaping the political and territorial landscape of Europe.

The international protection was developed even more systematically with the establishment of the first intergovernmental system for the protection of the rights of national minorities by the League of Nations in 1920. The League of Nations was an international organisation founded as a result of the Paris Peace Conference after the First World War, aimed to promote international cooperation and achieve global peace and security. The agreement consisted of a preamble and 26 articles, designed to create a community

of shared values among nations that were peaceful and law-abiding.<sup>1</sup> After the Second World War and the creation of the UN, however, the League was dissolved in 1946, largely due to its members' frequent pursuit of own national interests, which hindered effective decision-making.<sup>2</sup> The outbreak of the Second World War was yet another reminder of the ever-present need for the protection of national minorities. By the war's end, no formal system for their protection existed. In 1948 the UN General Assembly adopted the Universal Declaration of Human Rights without any references to the rights of indigenous peoples in particular or their unique cultural, social, and economic circumstances. It was more of a general framework for human rights applicable to all individuals, regardless of their background. Over time, the protection of minority groups has been progressively absorbed into the broader normative context of human rights, such as the 1995 Framework Convention for the Protection of National Minorities.<sup>3</sup> There have been several terms used to address indigenous peoples subjects in the international legal discourse, such as Self-Determination and Human Rights. Minority rights were no longer conceived as group rights, but part of the human rights system on the basis of individual rights.

However, even with the establishment of international organisations such as the League of Nations and the UN, the rights of indigenous peoples have never been recognised as an international issue. Rather, indigenous peoples have always had to be heard by their national governments. It would be some time before international organisations addressed this issue. Instead, indigenous peoples have been left to arbitrary decisions about which country's borders divide their certain groups and how they are divided.

In 1953 the International Labour Organisation (ILO) published a key study titled "Indigenous Peoples: Living and Working Conditions of Aboriginal Populations in Independent Countries".<sup>4</sup> The ILO is a specialised agency of the United Nations focusing on promoting social justice and internationally recognised human and labour rights, to set labour standards and improve working conditions worldwide.<sup>5</sup> This report was part of the ILO's broader efforts to address the conditions of indigenous and

<sup>1</sup> <https://www.ungeneva.org/en/about/league-of-nations/overview>.

<sup>2</sup> <https://www.ilo.org/resource/c107-indigenous-and-tribal-populations-convention-1957>.

<sup>3</sup> Pustorino, P. (2023). Introduction to International Human Rights Law (Chapter 13, pp. 235–256).

<sup>4</sup> Indigenous Peoples: Living and Working Conditions of Aboriginal Populations in Independent Countries. 1953. Geneva: ILO.

<sup>5</sup> <https://www.ilo.org/about-ilo>.

tribal populations worldwide. The study focused on analyzing the social, economic, and living conditions of indigenous peoples, particularly those in independent countries, and highlighted the need for specific policies to improve their circumstances. The study laid the groundwork for the adoption of the ILO Convention No. 107 around four years later in 1957 concerning the Protection and Integration of Indigenous and Other Tribal and Semi-Tribal Populations<sup>6</sup> in Independent Countries, which was the first international treaty to address the rights and protection of indigenous and tribal populations.

Although the basic aim was a more systematic approach to recognise and protect the social, cultural and economic rights of indigenous peoples and members of tribal or semi-tribal populations, the legal framework introduced was met with criticism. One issue was that the convention presumed these populations were at a “less advanced” stage of development compared to the rest of the national community (as stated in Article 1).<sup>7</sup> The convention focused more on integrating these groups into mainstream society rather than safeguarding their distinct identities. For example, Art. 12 (1) states that indigenous populations “shall not be removed without their free consent from their habitual territories” yet allows a forced removal under certain circumstances subordinated to national interests. In addition, while the convention offered protection to indigenous individuals within their cultural communities, it failed to protect the cultures themselves and suggested that the rights of the concerned people were only valid until they achieved complete integration into colonising societies.<sup>8</sup> For nearly 30 years it remained the only binding international instrument on the rights of indigenous and tribal peoples.<sup>9</sup> However, it was eventually replaced by the ILO Convention No. 169 on June 1989.<sup>10</sup> Initially the ILO Convention No. 107 was followed by the Declaration on the

<sup>6</sup> C107 – Indigenous and Tribal Populations Convention, 1957 (No. 107), available at: [https://normlex.ilo.org/dyn/normlex/en/?p=NORMLEXPUB:12100:0::NO::P12100\\_ILO\\_CODE:C107](https://normlex.ilo.org/dyn/normlex/en/?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C107). The term “populations” has later been replaced with the term “peoples” in ILO Convention (No. 169); c.f. Barsh, R. L. (1987). Revision of ILO Convention No. 107. *The American Journal of International Law*, 81 (3), 756–762; Chen, C. W. (2017). Indigenous Rights in International Law, in *Oxford Research Encyclopedia of International Studies*, p. 4.

<sup>7</sup> As stated in Article 1 ILO Convention No. 107.

<sup>8</sup> Chen, C. W. (2017). Indigenous Rights in International Law, in *Oxford Research Encyclopedia of International Studies*, p. 7.

<sup>9</sup> Barsh, R. L. (1987). Revision of ILO Convention No. 107. *The American Journal of International Law*, 81 (3), 756–762.

<sup>10</sup> This is explained in greater detail below.

Granting of Independence to Colonial Territories and Peoples, also known as the United Nations General Assembly Resolution 1514 (XV), in 1960 with the aim to end colonialism in all its forms and manifestations<sup>11</sup> and the Convent on Economic, Social and Cultural Rights in 1966<sup>12</sup> that are still valid to this day.

Since the 1970s, and especially with the growing recognition of the United Nations, the rights of indigenous peoples finally have gained increasing prominence and inclusion in the international discourse. In 1972, indigenous rights were formally acknowledged in the first comprehensive study on the “Problem of discrimination against indigenous populations” conducted by José Martínez Cobo as part of the UN Sub-Commission on Prevention of Discrimination and Protection of Minorities.<sup>13</sup> Two years later, in 1974, leaders of tribal nations in the United States finally came together to establish the International Indian Treaty Council (IITC). Its work focuses on advocating for the sovereignty and self-determination of indigenous peoples, while also promoting the recognition and protection of their rights, treaties, traditional cultures, and sacred lands.<sup>14</sup>

In 1977, the IITC became the first Indigenous Peoples’ organisation to be recognised by the United Nations as a non-governmental Organisation (NGO) with consultative status to the United Nations Economic and Social Council (ECOSOC). In 2011, the IITC was the first Indigenous NGO to be upgraded to General Consultation Status in recognition of its active participation in various international bodies and processes aimed at ensuring that the rights of indigenous peoples are recognised, respected and upheld.<sup>15</sup> An NGO with consultative status under the ECOSOC is a civil society organisation operating independently of governments but simultaneously plays a role in advancing UN political objectives. This status is granted under Article 71 of the UN Charter.<sup>16</sup>

<sup>11</sup> <https://www.ohchr.org/en/instruments-mechanisms/instruments/declaration-granting-independence-colonial-countries-and-peoples>.

<sup>12</sup> <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights>.

<sup>13</sup> <https://digitallibrary.un.org/record/768953?v=pdf>; Chen, C. W. (2017). Indigenous Rights in International Law, in Oxford Research Encyclopedia of International Studies, p. 7.

<sup>14</sup> <https://www.iitc.org/>.

<sup>15</sup> <https://www.iitc.org/about-iitc/>.

<sup>16</sup> <https://treaties.un.org/doc/publication/ctc/uncharter.pdf>.

Around the same time as the founding of the IITC, the World Council of Indigenous People (WCIP) was established in 1974. The WCIP was the first global organisation to campaign for the rights of indigenous peoples not only in America but worldwide, with representatives from different countries and continents. Its mission was to ensure that indigenous rights were recognised and accepted globally. The WCIP also obtained observer status at the United Nations, before the organisation was eventually dissolved in 1996. Following the establishment of the WCIP, the International Covenant on Civil and Political Rights (ICCPR) was adopted by the United Nations General Assembly in 1966, entering into force on 23 March 1976.<sup>17</sup> Article 27 of the ICCPR focuses on the preservation and promotion of the cultural and collective identity of minority groups concerned as a whole. The ICCPR later became part of the International Bill of Human Rights further solidifying its role in protecting indigenous and minority rights.

Within the following years, transnational indigenous organisations have been created all around the world.<sup>18</sup> One of them was the U.N. Working Group on Indigenous Populations (WGIP) established by the United Nations in 1982. It was a key initiative formed through cooperation between indigenous organisations and U.N. member states. This marked a crucial first step toward the international recognition of indigenous rights. One of the primary goals of the WGIP was to raise international standards for the protection and promotion of indigenous rights. In 1994, the working group took a major step forward by drafting the U.N. Declaration on the Rights of Indigenous Peoples (UNDRIP), laying the foundation for a more comprehensive international framework.<sup>19</sup>

As previously mentioned, the International Labour Organisation (ILO) adopted Convention No. 169 in 1989,<sup>20</sup> a landmark agreement that replaced the earlier ILO Convention No. 107. This new convention represented a significant shift in how indigenous rights were approached at the international level. It explicitly guaranteed the protection of indigenous peoples' land rights, cultural identity, and autonomy, recognising their

<sup>17</sup> <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights>.

<sup>18</sup> For more information about the individual organisations, see [https://indigenousfoundations.arts.ubc.ca/global\\_actions/](https://indigenousfoundations.arts.ubc.ca/global_actions/) and <https://www.un.org/development/desa/indigenouspeoples/about-us.html>.

<sup>19</sup> [https://indigenousfoundations.arts.ubc.ca/global\\_actions/](https://indigenousfoundations.arts.ubc.ca/global_actions/).

<sup>20</sup> ILO Convention (No. 169) concerning indigenous and tribal people in independent countries, 27 June 1989; available at [https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_ILO\\_CODE:C169](https://normlex.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169).

right to maintain and develop their own institutions, cultures, and traditions. It also included, for example, the right of access to education (Article 26 and 27) and the right to use their own language in school (Article 28). Furthermore, it emphasised their right to participate in decision-making processes that affect their lives, particularly regarding land use, development projects, and natural resource management.

In the following years, especially during the 1990s, the international awareness of indigenous issues increased again. This period saw growing recognition of more and more organisations and countries that indigenous peoples faced unique challenges, including discrimination, marginalisation, and threats to their traditional lands and livelihoods. Many countries began to adopt more inclusive policies, incorporating indigenous perspectives into national legislation. For example, in 1992 the Council of Europe adopted the European Charter for Regional or Minority Languages (ECRML), a treaty aimed at protecting and promoting regional and minority languages in Europe. While the focus is not on the protection of Indigenous peoples per se, but on languages traditionally used by minority communities within a state.<sup>21</sup> Although it is a European instrument,<sup>22</sup> it emphasises the importance of protecting linguistic rights in order to maintain and develop distinct cultural identities globally. Together with the Framework Convention for the Protection of National Minorities (FCNM) it was a further step in the direction of recognising indigenous rights worldwide.

A major milestone in the advancement of indigenous rights was the adoption of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) on September 13, 2007.<sup>23</sup> This declaration was the result of decades of advocacy and negotiations, involving both indigenous groups and member states of the United Nations.

The UN describes the declaration as follows:

“The Declaration is the most comprehensive instrument detailing the rights of indigenous peoples in international law and policy, containing

<sup>21</sup> <https://www.coe.int/en/web/european-charter-regional-or-minority-languages/the-objectives-of-the-charter>.

<sup>22</sup> Instruments of the Council of Europe are not uniformly legally binding, but instead require ratification by the member states. Unlike EU law they have no direct effect within national legal systems unless the state incorporates them into national law.

<sup>23</sup> UN General Assembly, *United Nations Declaration on the Rights of Indigenous Peoples: resolution/adopted by the General Assembly*, A/RES/61/295, 2 October 2007, <https://www.ohchr.org/en/indigenous-peoples/un-declaration-rights-indigenous-peoples>.

minimum standards for the recognition, protection and promotion of these rights. It establishes a universal framework of minimum standards for the survival, dignity, wellbeing and rights of the world's indigenous peoples. The Declaration addresses both individual and collective rights; cultural rights and identity; rights to education, health, employment, language, and others. It outlaws discrimination against indigenous peoples and promotes their full and effective participation in all matters that concern them. It also ensures their right to remain distinct and to pursue their own priorities in economic, social and cultural development. The Declaration explicitly encourages harmonious and cooperative relations between States and indigenous peoples.”<sup>24</sup>

One of the key principles emphasised in the declaration is the concept of self-determination and autonomy, which is central to indigenous peoples' rights. It acknowledges their inherent right to decide on their economic, social, and cultural affairs, including the right to establish and control their own governance structures and maintain traditional legal and justice systems, and manage their land and resources according to their own customs and laws. Although it is not legally binding, it is intended to set a binding standard for the treatment of indigenous peoples. The UNDRIP provides a framework for member states to adopt and implement policies respecting indigenous rights. It also explicitly recognises the Free, Prior, and Informed Consent (FPIC) Principle in its articles 1, 12, 20, 27 and 30. The FPIC requires states to fully consult indigenous peoples before undertaking projects affecting their lands.<sup>25</sup>

The given timeline demonstrates that while the international recognition of indigenous rights has steadily improved since the 1980s, significant challenges remain, especially in the enforcement and practical realisation of these rights.

## 1.2 Challenges

Despite international standards guaranteeing rights of indigenous peoples such as self-determination, territories and resources, many of these principles

<sup>24</sup> <https://www.ohchr.org/en/indigenous-peoples/un-declaration-rights-indigenous-peoples>.

<sup>25</sup> <https://openknowledge.fao.org/server/api/core/bitstreams/8a4bc655-3cf6-44b5-b6bb-ad2aeede5863/content>. [https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.un.org/esa/socdev/unpfii/documents/workshop\\_FPIC\\_tamang.doc%23::~text%3DThe%2520principle%2520of%2520FPIC%2520recognizes,their%2520development%2520pat%2520\(Tebtabba\).&ved=2ahUKEwiHzdSInNGIAxVW8rsIHc2NJ9EQFnoECCAQA&usg=AOvVaw13RAjllkbgNFQ7C4x046-o](https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.un.org/esa/socdev/unpfii/documents/workshop_FPIC_tamang.doc%23::~text%3DThe%2520principle%2520of%2520FPIC%2520recognizes,their%2520development%2520pat%2520(Tebtabba).&ved=2ahUKEwiHzdSInNGIAxVW8rsIHc2NJ9EQFnoECCAQA&usg=AOvVaw13RAjllkbgNFQ7C4x046-o).



are still not being adhered to and indigenous peoples still face many adversities. Issues such as resource extraction, displacement, and systemic discrimination against indigenous communities continue to be widespread. Indigenous lands are often rich in natural resources like minerals, oil, and timber, making them a target for extractive industries. Governments and corporations frequently prioritise economic gain over indigenous land rights, leading to deforestation, mining, and other industrial projects, often without their consent or benefit, leading to various land right cases at international and national courts.<sup>26</sup> They often have limited access to political decision-making and continue to experience systemic discrimination, due to the poor implementation of international standards.

Indigenous peoples often still have no access to protection under international law through the International Court of Justice, because due to Article 34 (1) of the International Court of Justice-Statute, “Only states may be parties in cases before the Court”.<sup>27</sup> Even Article 40 of the Declaration itself speaks of the right to “[...] access to and prompt decision through just and fair procedures for the resolution of conflicts and disputes with States or other parties, [...].” However, it is not clear in which court this should take place.

Unfortunately, it is still often the case, that international instruments primarily grant rights to individuals rather than to minorities as collectives. The latter, however, is particularly worthy of protection from the indigenous peoples’ point of view, because of their tendency to claim their rights in a predominantly collective form.<sup>28</sup>

There are some particularities in the protection of indigenous peoples. Compared to minorities, indigenous protections are generally more collective and geographically specific, due to the unique historical, cultural, and territorial dimensions of the indigenous identity. In countries with significant indigenous populations, like Argentina, Bolivia, and Brazil, constitutional protections tend to be more extensive. Indigenous rights often emphasise collective ownership of land and cultural practices, reflecting their community-based traditions.<sup>29</sup> However, problems also

<sup>26</sup> Cf. Tigre MA. Indigenous Communities of the Lhaka Honhat (Our Land) Association v. Argentina. *American Journal of International Law*. 2021; 115(4):706–713.

<sup>27</sup> Statute of the international Court of Justice, Art. 34; available at <https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.icj-cij.org/statute&ved=2ahUKEwj4tz9692IAxW08LsIHTXEhcUQFnoECBQQAQ&usq=AOvVaw2bYIOwcXsC1lnbC2kdOUWu>.

<sup>28</sup> Pustorino, P. (2023). Introduction to International Human Rights Law (Chapter 13, pp. 235–256).

<sup>29</sup> Pustorino, P. (2023). Introduction to International Human Rights Law (Chapter 13, pp. 235–256).

arise from indigenous peoples' way of life, including their relationship with the criminal justice system. On the one hand, indigenous peoples are disproportionately represented in the criminal justice system, which is due to the socioeconomic disadvantages and often also the historical trauma. On the other hand indigenous peoples often hold traditional beliefs and customs that differ significantly from the Western legal frameworks, which can result in misunderstandings, which highlights the need for adjustments of the system.

Overall, the protection framework for indigenous peoples involves both universal and regional instruments and requires states to respect their unique cultural and legal needs.

Recently, there has been a shift towards applying general human rights laws to minorities, ensuring that specific rules do not conflict with fundamental human rights principles. The European Court of Human Rights (ECtHR) has addressed conflicts between minority-specific rules and general human rights, as seen in cases like *Molla Sali v. Greece*.<sup>30</sup> Practically, the enforcement of minority rights often focuses on individuals due to challenges in applying collective rights. States have positive obligations to respect and protect the identity and cultural diversity of minorities and to avoid forced assimilation. Determining additional rights for minorities, such as language use or educational rights, can depend on factors like the minority's size, historical settlement, and customs. States can treat members of certain minorities differently if justified by objective reasons related to their specific situation.<sup>31</sup>

In summary, the international legal status of indigenous peoples has improved through the years and the greater recognition of their rights. However, the practical implementation and protection of these rights remain problematic in many countries. Indigenous people are still regularly cut off from resources and traditions that are vital to their identity, well-being and survival.<sup>32</sup>

<sup>30</sup> Although this is not an indigenous case, it clearly shows the conflict between minority-specific rules and general human rights. The judgement focuses on the conflict between civil law and religious law. The main issue was whether the Greek courts should prioritise national civil law or Sharia law for a Muslim individual who had opted for civil law in his will. The case emphasised the tension between religious freedom and the application of religious laws and highlighted the importance of the European Convention of Human Rights.

<sup>31</sup> Pustorino, P. (2023). Introduction to International Human Rights Law (Chapter 13, pp. 235–256).

<sup>32</sup> Cf. <https://www.amnesty.org/en/what-we-do/indigenous-peoples/>.



## **2. Significance of neuroscientific developments**

As explained above, international law is characterised by various special features that have a direct impact on the legal status of indigenous peoples: Firstly, international law only applies directly to the so-called subjects of international law, i.e. primarily to states and – for historical reasons – to some special actors such as the International Committee of the Red Cross or the Holy See. Rights and obligations contained in international treaties therefore only apply to states, which must then adapt their national law accordingly. On the other hand, no direct claims or obligations can usually be derived for individuals. This is true not only for indigenous peoples, but for all humans. However, this circumstance has a particularly negative impact on indigenous groups who may feel that they are not or not properly represented by their state government. Secondly, the development of international law is a particularly lengthy process. While the further development of national law sometimes takes decades, things are even more complex at international level: the large number of players, the sometimes dramatic divergences between state interests, the political bloc formation that has not only been observed in the past and, above all, the particular need at international level to find compromise solutions that are acceptable to all contracting parties, make law-making at international level considerably more difficult and often result in formulations that remain all too vague.

It is therefore not surprising that international law has found it extremely difficult to expand the circle of subjects of international law and that the improvement of the legal situation of indigenous groups has dragged on for decades. Against this backdrop, it makes sense to represent and implement indigenous positions less fundamentally and more contextually, depending on the occasion. As a result, this means that when drafting specific international legal instruments, an attempt can be made to anchor the specific needs of indigenous groups and the resulting demands in the corresponding texts. Particularly with regard to neuroscientific challenges, a highly interesting opportunity is now emerging at UNESCO level. This is because UNESCO is currently attempting to address the neuroethical and neuro-legal issues that have been evident for almost 50 years in an international document.

When the physiologist Benjamin Libet was able to show in 1979 in a (rather bumpy) experimental setup that the motor centre of the brain had already started to prepare for a movement before a conscious decision was

made to carry out this movement, the question quickly arose as to whether it was still possible to speak of human free will against this background. At first glance, the assumption of neurobiological determinism leads to certain legal challenges, including for the principle of guilt, so that a broad discussion arose, particularly in criminal law, about the possible consequences of the Libet experiment. As is well known, criminal law has not been fundamentally reformed, as the view that legal categories can exist autonomously as socio-political constructs alongside scientific findings has rightly prevailed. As a result, criminal law continues to be characterised by the principle of guilt and not the principle of prevention.

However, it soon became apparent that the fields of application of modern neuroscience extend far beyond the comparatively narrow field of free will. In the context of criminal law and criminal proceedings, for example, the question arises as to whether it is possible to recognise lies by means of a 'brain scan' (such as functional magnetic resonance imaging fMRI) or other neurotechnologies. While some companies in the USA have made strenuous and largely unsuccessful efforts to have the courts use this technology, the courts in some Indian states continue to use the so-called BEOS test to determine the involvement of a person being questioned in a crime. At least in European courts, there are currently no such attempts to be registered, especially as the existing methods (still) lack the legally required significance. However, the question of which impairments of brain functions have an impact on culpability is a different matter. For example, following the (unauthorised) examination of Ulrike Meinhof's brain by a prominent psychiatrist and brain researcher, it was argued that the German terrorist of the so-called Red Army Faction (RAF) was at least less culpable due to the brain injuries suffered during an operation. And such questions do not only arise in the case of physical lesions. US neuroscientist Kent Kiehl, for example, is investigating whether a reduction in the so-called limbic system is particularly common in psychopaths – which could be a cause of the personality disorder. Whether certain brain activations are typical for certain groups of offenders has also been investigated at Europe's largest hospital, the Charité, for example, with regard to paedophilia.

While the examples mentioned promise a certain goosebump effect and have therefore also received a relatively high level of media attention, a good deal of neuroscientific research takes place under the radar of the wider public. This applies, for example, to the potential applications of deep brain stimulation (DBS), which can be used therapeutically to treat severe depression as well as Parkinson's patients. However, DBS can also be

associated with personality changes, which raises not only ethical but also legal questions. As DBS is an invasive procedure in which the patient has to be 'wired', targeted misuse for the purpose of targeted personality modification seems to be ruled out. However, the situation is different for non-invasive neuroscientific procedures that enable similar effects. In fact, technologies have already been patented in which the patent specification expressly referred to the technical possibility of achieving behaviour-controlling effects by means of fear generation in order to counteract undesirable 'antisocial behaviour'. Inventions have also been patented that promise non-invasive 'modulation' of thought content in such a way that the person concerned is unable to distinguish their own thoughts from artificially generated thoughts.

The field of Brain Computer Interfaces (BCI), which make use of the finding that the mere idea of a certain behaviour (such as a foot movement) triggers measurable changes in electrical brain activity, also enjoyed comparatively little public attention for a long time. With BCI, brain activity is recorded, analysed and converted into control signals in order to ultimately enable thought-controlled statements or actions by an assistance system. People with disabilities in particular benefit from such systems, which open up completely new communication possibilities. However, Elon Musk's activities in this area have increasingly shifted the discourse. His company Neuralink is initially focussing on medical applications. However, it is not only everyday applications that are being explicitly addressed, but above all the linking of the corresponding instruments with artificial intelligence systems. Of course, an AI-supported brain-computer interface has completely different potential uses than a purely therapeutic application.

At the same time, this also links to issues of data protection and data security. Ultimately, all neuroscientific applications require the use of health data that is particularly worthy of protection. However, the high level of protection for these so-called special categories of personal data implemented just a few years ago by the General Data Protection Regulation (GDPR) is already under pressure again. This is because the so-called European Health Data Space (EHDS) and the EHDS Regulation, which is about to be adopted, provide for a system of secondary data use that is causing massive concerns for data protection authorities: once the primary purpose – such as the treatment of a patient – has been achieved, anyone who expresses an interest in the further use of this data can ultimately gain access to the corresponding data via an official structure for the purpose of secondary use. As the EU's 'AI law', which was adopted in

June 2024, assumes that all data protection issues will ultimately be conclusively regulated by the GDPR, the significant reduction in the level of data protection associated with the EHDS approach as a result of the EHDS Regulation will also affect all AI-supported applications.

All in all, this reveals numerous areas of application of modern brain research that have long since left the realm of science fiction and, especially in the case of a link with artificial intelligence systems, give rise to human rights challenges of a completely new quality. This dimension is now also reaching the neural law discourse, which for a long time was mainly conducted in certain areas of law. However, the new UNESCO initiative is reshuffling the cards here, at least in part. The ‘Declaration on the Ethics of Neurotechnology’, which is currently being drafted, will in all likelihood be structured like a document of international law and cover numerous topics that are originally of a legal nature. In particular, the areas of mental integrity and human dignity, personal identity and psychological continuity, autonomy, mental privacy, access and social justice are considered to be ethically relevant. In particular, the scope of freedom of thought and the legal consequences of possible neurotechnological enhancement, i.e. the optimisation of people, are also discussed.

As UNESCO has established itself worldwide as the main bioethical actor in recent decades with the adoption of the ‘Universal Declaration on the Human Genome and Human Rights’ (1997), the ‘International Declaration on Human Genetic Data’ (2003) and the ‘Universal Declaration on Bioethics and Human Rights’ (2005), the corresponding work is only logical. The fact that two decades have passed since the last comparable document was adopted should emphasise the political importance that UNESCO attaches to the neurosciences. It is true that the relevant declarations are ‘only’ soft law documents. However, the past has shown that UNESCO’s initiatives in this area have a considerable impact at supranational and national legislative level.



### 3. Outlook

Against the background of general developments and the particularities of international law, it would make sense to utilise the consultation procedures currently underway in the context of the planned UNESCO Declaration on the Ethics of Neurotechnology in order to

make specific indigenous positions and demands the subject of further consultations. With a view to strengthening indigenous rights in the neurosciences, such an approach would be much more promising and target-orientated than a general improvement in the situation of indigenous groups as equal actors in international law – which of course still needs to be pursued in parallel.