



United Nations
Office on Drugs and Crime

BACKGROUND PAPER

NEUROTECHNOLOGY, LAW ENFORCEMENT, AND CRIMINAL JUSTICE: USES, RISKS, AND HUMAN RIGHTS SAFEGUARDS



OCTOBER 2025

Joint Efforts of UNODC and INTERPOL

As two leading international organizations working to strengthen law enforcement and the rule of law, UNODC and INTERPOL have partnered to explore the implications of neurotechnology for law enforcement and the criminal justice system. Through this background paper and an upcoming technology assessment, this collaboration will combine evidence-based, interdisciplinary, and human rights perspectives to assess current concerns about the use of neurotechnologies in law enforcement and the criminal justice system. It will also explore opportunities for its responsible use in law enforcement, assess the readiness of society to benefit from it, and its ability to address risks of misuse or abuse.

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I. Introduction

Encompassing a range of technological innovations and devices, neurotechnologies measure, decode, and/or alter neural data,¹ which is information obtained by measuring the activity of a person's central or peripheral nervous system. Neurotechnology tools and methods monitor, interpret, or influence brain activity, including through neuroimaging techniques, cognitive assessments, and transcranial stimulation. For example, brain–computer interfaces (BCIs), in combination with Artificial Intelligence (AI) decoding systems, are used to interpret brain signals to allow individuals with paralysis to control the movement of their limbs, advanced prosthetics, an exoskeleton, or a vehicle. They have also been used to decode human thought in the form of words into text on a screen.² Wearable technologies also constitute a growing portion of the consumer technology market, with non-invasive BCIs promising a range of benefits including improved concentration, maximized sleep, optimized sporting performance, enhanced gaming, and open-source tools for researchers, developers, and hobbyists.³ It is important to note, however, that more invasive methods are also developing at a rapid pace.

Neurotechnology holds the potential to offer innovative solutions and deliver better preventive and therapeutic treatments, benefiting humanity as a whole and providing opportunities for health improvements around the world.⁴ Indeed, studies have shown that one in three people are affected by neurological conditions, making them the leading cause of illness and disability worldwide.⁵

As these technologies advance in precision and accessibility, they are increasingly considered for use in criminal investigations⁶ for lie detection and risk assessments. The possible integration of advanced neurotechnologies into law enforcement would constitute a significant and complex development in contemporary legal practice. However, in the context of the criminal justice system, the use of brain scans is not an entirely new phenomenon and scans from the neurotechnologies found in hospitals have for some time been used in expert evidence in some jurisdictions to support claims related to legal insanity, risk, intent, culpability, and type of punishment.⁷

¹ For purposes of this joint UNODC - INTERPOL Project, and to reaffirm the need for the foundation of our work to be grounded in consensus definitions from science and medicine, our agencies will, as a start refer, to the data of concern being captured by neurotechnologies as “neural data.” This term has been defined for example in a consensus resolution adopted in June 2025 by the American Medical Association’s House of Delegates, with support of the American Academy of Neurology, as “information obtained by measuring the activity of a person’s central or peripheral nervous system through the use of neurotechnologies, but neural data does not include data inferred from nonneural information.”; See also Resolution 503, American Medical Association House of Delegates, *Safeguarding neural data collected by neurotechnologies* (11 June 2025); The term “neural data” is also employed by prestigious journals, such as the *Journal of the American Medical Association (Neurology)*. In recent final reports from the UN Human Right Council’s Advisory Committee and the United Nations special rapporteur on the right to privacy, however, the terms used there are “neurodata.” The definitions of neurodata in these other reports are analogous to “neural data,” but not the same. As such, UNODC - INTERPOL hope that respondents to this Global Call for Submissions will respond to the current definition of neural data and offer their views as to any proposed alternate formulations and the underlying rationale for such proposals.

² Robin Marks and Laura Kurtzman, *How artificial intelligence gave a paralyzed woman her voice back* (University of California at San Francisco, 23 August 2023).

³ Sean Pauzauskie, Jared Genser, and Rafael Yuste, *JAMA Neurology, Protecting neural data privacy – First, do no harm*, vol. 82, No. 3 (2024). Available at <https://doi.org/10.1001/jamaneurol.2024.4070>; See also Jared Genser, Stephen Damianos, and Rafael Yuste, *Neurorights Foundation, Safeguarding Brain Data: Assessing the Privacy Practices of Consumer Neurotechnology Companies* (New York, April 2024), p. 11. Available at <http://bit.ly/4mrihU5>.

⁴ United Nations General Assembly, *Report of the Special Rapporteur on the Right to Privacy, Ana Brian Nougères, Foundations and Principles for the Regulation of Neurotechnologies and the Processing of Neurodata from the Perspective of the Right to Privacy* (16 January 2025), [A/HRC/58/58](https://www.unhcr.org/refugees/58/58), para. 11.

⁵ World Health Organization, *Over 1 in 3 people affected by neurological conditions, the leading cause of illness and disability worldwide* (14 March 2024). Available at <https://www.who.int/news/item/14-03-2024-over-1-in-3-people-affected-by-neurological-conditions--the-leading-cause-of-illness-and-disability-worldwide>; See also Lancet Neurol, GBD 2021 Nervous System Disorders Collaborators, *Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021*, vol. 23, No. 4 (2024). Available at <https://www.thelancet.com/action/showPdf?pii=S1474-4422%2824%2900038-3>.

⁶ S.H. Geukes et al., *Journal of Neural Engineering, Neurotechnology in criminal justice: Key points for neuroscientists and engineers*, vol. 21, No. 1 (2024).

⁷ N.A. Farahany, *Journal of Law and the Biosciences, Neuroscience and behavioural genetics in US criminal law: an empirical analysis*, vol. 2, No. 3 (2015), pp. 485-509; H. de Kogel & E.J.M.C. Westgeest, *Neuroscientific and behavioral*

These potential applications raise profound questions about the future role of science and technology in legal determinations and how standards of admissible evidence may evolve. The proposed use of neurotechnology in these domains additionally raises serious ethical and legal concerns.⁸ The protection of human rights – particularly privacy, autonomy, non-discrimination, and due process – are central to this complex and emerging global debate, and are related to issues surrounding the reliability of neuroscientific methods, the risk of over-reliance on expert testimony, and the prospect of accessing or interpreting an individual’s internal thoughts in the form of words and mental states.

At the same time, there are promising potential uses of emerging neurotechnologies for the reintegration of incarcerated persons back into society. For example, EEG neurofeedback headsets have been examined for their potential to train self-regulation abilities in offenders suffering from various disorders;⁹ non-invasive brain stimulation has been examined for its potential use in improving decision-making behaviours among violent offenders,¹⁰ and transcranial magnetic stimulation has been used to assist in the treatment of depression and OCD, among other conditions.¹¹

While these devices may present treatment opportunities for those facing mental health challenges – who are overrepresented in prison settings and for whom incarceration has exacerbated mental health issues¹² – many of these studies are preliminary. Additionally, given the vulnerability of this population, the neurotechnologies used in this context must not be used to further discriminate against these individuals.

The international community has recognized the importance of leveraging technology as a global public good, while safeguarding against human rights risks.¹³ This objective on human rights-compliant neurotechnology was acknowledged by United Nations Secretary-General António Guterres in *Our Common Agenda*, where he said “consideration should, for instance, be given to updating or clarifying our application of human rights frameworks and standards to address frontier issues and prevent harms in the digital or technology spaces, including in relation to . . . neuro-technology.”¹⁴

This commitment is also evident in the first United Nations General Assembly Resolution on Artificial Intelligence (AI), which promotes the use of AI to advance the globally agreed goals of the 2030 Agenda

genetic information in criminal cases in the Netherlands, vol. 2, No. 3 (2015), pp. 580-605; M. Hafner, *Judging homicide defendants by their brains: an empirical study on the use of neuroscience in homicide trials in Slovenia*, vol. 6, No. 1 (2019), pp. 226-254; J. Chandler, *The use of neuroscientific evidence in Canadian criminal proceedings*, vol. 2, No. 3 (2015), pp. 550-579; P. Catley & L. Claydon, *The use of neuroscientific evidence in the courtroom by those accused of criminal offenses in England and Wales*, vol. 2, No. 3 (2015), pp. 510-549; See also A. Alimardani & J. Chin, *Neuroethics, Neurolaw in Australia: The Use of Neuroscience in Australian Criminal Proceedings*, vol. 12 (2019), pp. 255-270; See also McCay A., Ryan C., *International Journal of Law and Psychiatry, Issues pertaining to expert evidence and the reasoning about punishment in a neuroscience-based sentencing appeal*, vol. 65, No. 7-8 (2019), pp. 1-7.

⁸ For an overview of human rights concerns, see United Nations General Assembly, *Report of the Secretary-General on Human Rights in the Administration of Justice*, [A/79/296](#); See also Allan McKay, *Law Society of England and Wales, Neurotechnology, law, and the legal profession* (2022); See also Eric García-López, Ezequiel Mercurio, Alicia Nijdam-Jones, Luz Anyela Morales & Barry Rosenfeld, *Neurolaw in Latin America: Current Status and Challenges, International Journal of Forensic Mental Health* (2019).

⁹ Sandra Fielenbach, Franc C. L. Donkers, Marinus Spreen, Harmke A. Visser & Stefan Bogaert, *Frontiers in Psychiatry, Neurofeedback Training for Psychiatric Disorders Associated with Criminal Offending: A Review*, vol. 8 (2018). Available at <https://doi.org/10.3389/fpsy.2017.00313>; See also A. van der Schoot, J. Wilpert & J. E. van Horn, *Neurofeedback and meditation technology in outpatient offender treatment: a feasibility and usability pilot study*, vol. 15 (2024). Available at <https://doi.org/10.3389/fpsyg.2024.1354997>.

¹⁰ Leandra Kuhn, Olivia Choy, Lara Keller, Ute Habel & Lisa Wagels, *Scientific Reports, Prefrontal tDCS modulates risk-taking in male violent offenders*, vol. 14 (2024). Available at <https://doi.org/10.1038/s41598-024-60795-z>.

¹¹ Adam P. Stern, Harvard Health Publishing, *Transcranial magnetic stimulation (TMS): Hope for stubborn depression* (27 October 2020). Available at <https://www.health.harvard.edu/blog/transcranial-magnetic-stimulation-for-depression-2018022313335>; See also Mayo Clinic, *Transcranial Magnetic Stimulation* (7 April 2023). Available at <https://www.mayoclinic.org/tests-procedures/transcranial-magnetic-stimulation/about/pac-20384625>.

¹² REFORM Alliance and Perseus Strategies, *Upholding Rights and Unlocking Potential: A Global Approach to Social Reintegration* (2024), pp. 116-129. Available at https://perseus-strategies.com/wp-content/uploads/Upholding-Rights-and-Unlocking-Potential-A-Global-Approach-to-Social-Reintegration_Digital-v2_.pdf.

¹³ United Nations General Assembly, *Declaration on the Use of Scientific and Technological Progress in the Interests of Peace and for the Benefit of Mankind* (1975); See also United Nations Committee on Economic, Social and Cultural Rights, *General comment*, No. 25 (2020), [E/C.12/GC/25](#).

¹⁴ António Guterres, *Our Common Agenda – Report of the Secretary-General* (2021), p. 33.

while safeguarding against AI use cases that intrude upon human rights.¹⁵ This need for the responsible use of technology is also acknowledged in other global political commitments that pertain specifically to the criminal justice sector, as elaborated in the Kyoto Declaration¹⁶ and in successive resolutions of the UN General Assembly and Human Rights Council.¹⁷ The commitment to the responsible use of AI extends towards law enforcement as well. In 2023, INTERPOL and UNICRI jointly launched a Toolkit for Responsible AI Innovation in Law Enforcement.¹⁸

In the context of the global commitments undertaken by States, including States' obligations under international human rights law, UNODC and INTERPOL have a pivotal role to play in facilitating global dialogue, and in guiding law enforcement agencies and criminal justice institutions toward a responsible stance with respect to emerging developments in neurotechnology and AI, while promoting human-rights-based approaches.¹⁹

This background paper shares some preliminary thoughts on the field of neurotechnology and its significance for law enforcement and the criminal justice system, focusing on opportunities, risks, and human rights safeguards. The emerging use of neurotechnology in these fields highlights the importance of involving policing and justice sector professionals in the identification of regulatory gaps and emerging threats, including those that relate to the malicious and/or criminal misuse of these technologies. An important consideration is that there are currently few legal frameworks in place to criminalize the malicious or irresponsible use of neurotechnologies.

II. Uses in Law Enforcement and Criminal Justice

Neurotechnology offers a range of potential applications within law enforcement and the criminal justice system. These include supporting crime prevention, investigation, and prosecution, as well as post-release support. Potential uses include memory detection, risk assessment, the decoding of thoughts in the form of words, or neuroenhancement. Researchers are also examining the possible use of BCIs to monitor stress levels or emotional states of law enforcement personnel in the field, building on existing detection systems and potentially opening new avenues for operational support and officer well-being. It is important to note that these use cases vary significantly in their level of scientific validity and technical readiness, with many still in experimental or early deployment stages.

While the relationship between neurotechnology, law enforcement, and the justice system is complex, the growing intersection of neuroscience and policing presents significant opportunities. Realizing the potential benefits of these technologies will depend on frameworks that ensure rigorous regulation, enforceable accountability, and oversight. A demonstrable and significant benefit for law enforcement functions must also be shown, and the necessity and proportionality of their use assessed against the potential human rights impacts.

¹⁵ United Nations General Assembly, *Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development* (24 March 2024), [A/RES/78/265](#); See also [A/RES/78/311](#) and [A/RES/79/172](#).

¹⁶ *Kyoto Declaration on Advancing Crime Prevention, Criminal Justice and the Rule of Law: Towards the Achievement of the 2030 Agenda for Sustainable Development*, [A/CONF.234/16](#).

¹⁷ See [A/RES/77/219](#), [A/RES/78/213](#), [GA/RES/79/172](#) and [A/HRC/RES/32/13](#).

¹⁸ INTERPOL, *Artificial Intelligence Toolkit*. Available at <https://www.interpol.int/How-we-work/Innovation/Artificial-Intelligence-Toolkit>.

¹⁹ United Nations General Assembly, *Report on the latest developments, challenges and good practices in human rights in the administration of justice, including, inter alia, on the latest developments, risks and required safeguards regarding the potential use of neurotechnology and other emerging technologies in the administration of justice, and on the activities undertaken by the United Nations system as a whole* (2024), [A/79/296](#); See also [A/RES/79/172](#), paras. 48-50.

III. Risks for Law Enforcement and Criminal Justice

A. Application in the context of Law Enforcement

The application of neurotechnology in law enforcement presents a wide range of risks and challenges that must be carefully considered before adoption. Brain activity is among the most intimate forms of personal information, and any attempt to monitor, decode or manipulate it for identification, investigative, preventive or therapeutic purposes without genuine consent would represent a profound intrusion into human dignity, autonomy, and privacy. As noted in a report by the UN Special Rapporteur on the right to privacy, neurotechnologies present a range of risks, including those related to the improper processing of neural data in ways that are contrary to human dignity, the theft of information, and the tracking or manipulation of individuals' mental experiences.²⁰ To ensure compliance with international human rights law, law enforcement and criminal justice institutions will need to ensure individuals' rights to privacy, freedom of thought, bodily integrity, non-discrimination, and the prohibition of torture, inhuman and degrading treatment.²¹

Due process rights are also at stake, including the right to appear before a competent judicial authority, the presumption of innocence, the privilege against self-incrimination, and the right to appeal. Additionally, there is concern about the potential for neurotechnology to be used coercively, or under conditions in which individuals are "offered" the use of these technologies in ways that are coercive, or under the guise of moral-enhancement, or similar.²²

As the UN Human Rights Council Advisory Committee has highlighted, the potential for the discriminatory use of neurotechnologies – particularly in relation to groups that have been marginalized, subjected to structural discrimination, or are socioeconomically disadvantaged – is a key concern.²³ As with other technologies that have applications in these settings, including surveillance tools and artificial intelligence,²⁴ neurotechnologies could likewise exacerbate existing discrimination and facilitate further abuses in the absence of strong oversight.

Finally, practical obstacles remain. Many of the technologies under consideration have not been tested for accuracy, reliability, or safety in real-world law enforcement environments. Without assessing privacy risks and consent issues as well as other human rights challenges, there cannot be public trust in new uses. Operational experiences to date have exposed critical regulatory gaps, underlining the need for clear governance frameworks that align innovation with human rights protection as established in human rights treaties and as interpreted by treaty monitoring bodies.

B. Implications for the Criminal Justice System

The use of neurotechnologies in investigations and the reliability and admissibility of neural data in court raise important concerns, particularly in criminal cases. For example, questions remain about the

²⁰ United Nations General Assembly, *Report of the Special Rapporteur on the Right to Privacy, Ana Brian Nougrères, Foundations and Principles for the Regulation of Neurotechnologies and the Processing of Neurodata from the Perspective of the Right to Privacy* (16 January 2025), [A/HRC/58/58](#), para. 12(d).

²¹ Human Rights Council Advisory Committee, *Impact, opportunities and challenges of neurotechnology with regard to the promotion and protection of all human rights* (8 August 2024), [A/HRC/57/61](#), pp. 76-78.

²² See Australian Human Rights Commission, *Protecting Cognition: Background Paper on Human Rights and Neurotechnology* (2024), pp. 25-27.

²³ Human Rights Council Advisory Committee, *Impact, opportunities and challenges of neurotechnology with regard to the promotion and protection of all human rights* (8 August 2024), [A/HRC/57/61](#), p. 37.

²⁴ United Nations Secretary-General, *Road map for digital cooperation: implementation of the recommendations of the High-level Panel on Digital Cooperation* (29 May 2020), [A/74/821](#), pp. 49, 57.

accuracy of technologies that seek to detect memory or deception.²⁵ While there is no standardized approach to this globally, courts in some jurisdictions have assessed the admissibility of neuroimaging evidence on a case-by-case basis, determining the appropriate conditions under which it can be used. Additionally, the transnational flow of digital data raises complex cross-border challenges, as differences in national legal frameworks, enforcement capabilities, and regulatory maturity can hinder coordinated responses and accountability.²⁶ More broadly, these are global questions that require global discussions.²⁷

Emerging examples of the use of neurotechnologies in the criminal justice system present questions around the lack of regulation and oversight. Should there be laws that restrict the use of neurotechnology in criminal investigations? Can courts legally order a criminal defendant, even in narrow circumstances, to cooperate with law enforcement in the use of neurotechnologies? Should neurotechnologies be used to support the social reintegration of formerly incarcerated individuals? How should these technologies be governed to prevent misuse, abuse, or discrimination in such high-risk contexts?

C. Criminal and Malicious Misuse

Finally, the emergence of neurotechnology also brings a host of evolving threats regarding potential malicious or criminal misuse.²⁸ Unauthorized access to BCIs, manipulation of neural data, or the use of neurotechnologies for covert communication could present new and unprecedented threats to individual autonomy and societal security. Organized criminal groups could exploit these capabilities to plan and execute complex crimes faster than law enforcement can detect, disrupt, or investigate them. Preventing, countering, and effectively responding to these threats therefore necessitates the development of specialized and constant training, field response protocols, and clear procedures for maintaining the chain of custody when handling neurotechnology-related evidence. These possible criminal misuses highlight why law enforcement, and the criminal justice system must stay ahead in understanding and regulating neurotechnology carefully.²⁹

IV. Safeguards and Responsible Development

Given the risks outlined above, it is imperative that the development and application of neurotechnologies in law enforcement and criminal justice be guided by robust safeguards that place human rights at the centre. Responsible use must begin with a solid, scientific, and technical foundation. Ensuring that these technologies are lawfully deployed requires a rigorous assessment of their impact on human rights.³⁰ Technologies should therefore not be deployed until their accuracy, safety, and feasibility have been rigorously demonstrated through independent testing and peer-reviewed research. Policymakers, investigators, and courts must be equipped with clear and reliable information about what these tools can - and cannot - do, so that decisions are informed by sound evidence rather than speculation or overstatement.

²⁵ Jonathan Moens, Science, *Mind Reader?* (15 May 2025). Available at <https://www.science.org/content/article/indian-police-are-trying-read-minds-suspects-over-neuroscientists-objections>.

²⁶ Karen Herrera-Ferrá, José M. Muñoz, Humberto Nicolini, Garbiñe Saruwatari Zavala & Víctor Manuel Martínez Bullé Goyri, AJOB Neuroscience, *Contextual and Cultural Perspectives on Neurorights: Reflections Toward an International Consensus* (2022). Available at <https://doi.org/10.1080/21507740.2022.2048722>.

²⁷ Christoph Bublitz, The International Journal of Human Rights, *Neurotechnologies and human rights: Restating and reaffirming the multi-layered protection of the person*, vol. 28, No. 5 (2024), pp. 782–807. Available at <https://doi.org/10.1080/13642987.2024.2310830>.

²⁸ OECD, *Recommendation of the Council on Responsible Innovation in Neurotechnology* (2024), Principle 9.

²⁹ Jared Genser, Stephanie Herrmann, and Rafel Yuste, NeuroRights Foundation, *International Human Rights Protection Gaps in the Age of Neurotechnology* (May 2022).

³⁰ Ere Stephanie Tobi, *Neurotechnology: Redesigning the brain-computer interface technology for criminal procedure purposes* (Tilburg Law School, Tilburg University, May 2022).

It is furthermore of particular importance that there is clear communication about the implications of this evidence for settings outside the scientific and medical fields. To ensure the responsible use of neurotechnology in those cases, key precautionary measures must be implemented, including, but not limited to, establishing clear legal and ethical frameworks to protect human rights, ensuring voluntary and informed consent from individuals, implementing robust data protection and cybersecurity measures, and maintaining independent oversight to ensure accountability and address misuse.

Respect for human rights must remain paramount. Individuals must retain control over their neural data, and any interference with mental integrity or cognitive processes must be strictly limited, lawful, and subject to judicial oversight. Consent must be voluntary and informed, free of coercion or undue influence, particularly in custodial or correctional settings where power imbalances are acute. Safeguards must also ensure that neurotechnologies are not deployed in ways that reinforce existing inequalities or result in discriminatory impacts on marginalized groups.

Legal and ethical frameworks will need to evolve to provide clarity about permissible and impermissible uses of neurotechnology in both investigative and judicial contexts. This includes developing clear rules on admissibility of evidence, establishing independent mechanisms for oversight and accountability, and ensuring that any deployment is subject to transparency and democratic scrutiny. The creation of such frameworks should draw on expertise from multiple disciplines, including neuroscience, law, ethics, and human rights, to ensure that they are both scientifically robust and normatively sound.

Finally, the governance of neurotechnologies must be proactive and collaborative. Independent oversight bodies will be necessary to monitor applications and ensure compliance with human rights standards. Strong protections for data security and cybersecurity must be established to prevent unauthorized access to neural data. Because many of the challenges posed by neurotechnologies are transnational, international cooperation and harmonization of standards will be essential to addressing regulatory gaps and ensuring accountability across borders. Above all, transparency and inclusive dialogue will be necessary to build public trust, without which the use of these powerful technologies in justice and security settings would lack legitimacy.

V. Next Steps

Building on this background paper, a *Technology Assessment* will be developed to provide more comprehensive guidance on the actual or potential use, benefits, threats and risks of neurotechnologies in law enforcement and criminal justice systems. With that in mind, UNODC and INTERPOL are seeking insights from a broad range of stakeholders to inform this initiative. This public consultation aims to identify both the opportunities and risks associated with these emerging technologies, to ensure that any potential application in law enforcement and criminal justice upholds human rights, legal safeguards, and ethical principles.

A Global Call for Submissions

UNODC and INTERPOL invite submissions that address considerations relevant to the use of neurotechnology under the umbrella of the intersection of neuroscience, law enforcement, and criminal justice.

A. Suggested Areas of Focus

Submissions may address one or more of the following topics:

- i. Definitions of key terms, such as neural data and neurotechnologies
- ii. Current and potential uses of neurotechnologies in law enforcement and/or criminal justice systems
- iii. Application and implementation challenges for in law enforcement or criminal justice systems
- iv. Emerging threats posed by current or future uses of neurotechnologies in law enforcement or criminal justice systems
- v. Risks of misuse or abuse of neurotechnologies
- vi. Legal grey zones: legal, human rights, and ethical considerations
- vii. Case studies, examples, or lessons learned from the use of other technologies by law enforcement and criminal justice professionals

B. Key Questions and/or Types of Input Sought

The questions below aim to support potential contributors and are provided as a guide only. It is not necessary for submissions to address all questions.

- i. What are potential neurotechnology applications in law enforcement and criminal justice today? How are they currently impacting on law enforcement operations?
- ii. What are potential neurotechnology applications in three, five, and 10 years?
- iii. What operational and technical standards are needed for law enforcement's use of neurotechnologies?
- iv. What emerging criminal uses of neurotechnologies are law enforcement agencies encountering? What can be expected in the coming years?
- v. How can law enforcement effectively monitor, assess, and validate both scientifically and medically current and potential applications of neurotechnologies?
- vi. What practical challenges exist in applying current legal frameworks to regulate the use of neurotechnologies in law enforcement and criminal justice?
- vii. What infrastructure and training requirements need to be addressed?
- viii. How can international cooperation in this field be strengthened?
- ix. How might assistive technologies open justice pathways for individuals who would otherwise be unable to access justice, and what potential benefits could this bring?
- x. What are the legal, ethical, and due process implications of using neurotechnology to decode neural data and inform decisions in crime prevention and criminal justice, and how can these be addressed?
- xi. How might the use of neurotechnologies in the criminal justice system differentially impact specific groups, such as those with neurodevelopmental disorders, neurodiverse individuals, survivors of trauma, individuals with acquired brain injuries, migrants/refugees, and groups that have historically faced discrimination?
- xii. What are the potential labour rights implications of using neurotechnology in policing and other criminal justice functions, and how could these be mitigated?

- xiii. What is the current legal and regulatory framework governing the use of neurotechnologies in criminal justice systems, and what further guidance is needed to ensure that any use complies with international human rights law?

C. Who Should Contribute

For this consultation, experts from the following areas are welcome to contribute:

- i. Law Enforcement
- ii. Criminal Justice
- iii. Industry and Private sector
- iv. Academia and relevant applied research specialists
- v. Civil Society

Contributors are kindly invited to submit their contributions via the [Global Call for Submissions Form](#). Any queries can be directed to justice@unodc.org

D. Deadline for Submission

Submissions must be received by **10 November 2025 at 18:00 Vienna time**.

No submissions received after the deadline will be considered for this consultation.

VI. The Way Forward

The contributions will be analyzed and incorporated into a *Technology Assessment* – “UNODC and INTERPOL Technology Assessment for Law Enforcement Officials and Criminal Justice Practitioners on the Use of Neurotechnology” (tentative). The final version of the *Technology Assessment* will be presented during the Fifteenth United Nations Congress on Crime Prevention and Criminal Justice which will be held from 25 to 30 April 2026 in Abu Dhabi, United Arab Emirates, under the overall theme “Accelerating crime prevention, criminal justice and the rule of law: protecting people and planet and achieving the 2030 Agenda for Sustainable Development in the digital age”.

We appreciate your time, expertise, and perspective in helping us address one of the most cutting-edge and consequential developments in technology, justice, and global security.