

United Nations Press Release (UNPR)

Topic 2: Exploring the Strategic Implications and Ethical Challenges of Emerging Disruptive Technologies (EDTs).

President: Nusaybah Elbusaifi



President's Letter

Dear United Nations Press Release delegates,

It is my honour and pleasure to preside for one last time in UNPR. I am Nusaybah Elbusaifi, a senior at Modern Montessori School, and the Deputy Secretary General for MontessoriMUN'25.

In an era where technology dominates our daily lives, impacting our work, education, and personal interactions, it is crucial to wield this powerful tool with responsibility, justice, and fairness. Many of our voices are being silenced by governments and institutions that are meant to protect us. It is our duty to amplify these voices, helping to ensure that they resonate around the world.

MUN means something different for everybody; one might see it as an opportunity to get into a good university, another might see it as a way to make new relationships, but for me, it's an opportunity to get over my fears and become a better version of myself. MUN teaches you to speak, to empathize, and to write, all important skills that make us better people. People who not just speak, but rather take action, not only for themselves but also for others.

I write this letter to help alleviate any anxiety you may have, to guide you to becoming a better person than yesterday, and to enjoy your experience that will have a lasting impact on you.

Thank you and best of luck,

Deputy Secretary General

President of UNPR

Nusaybah Elbusaifi

Introduction to the committee

The United Nations Press Release Committee aims to discuss various topics that impact the only power we possess right now, our voices. In this committee, we debate resolutions regarding the topics of the press, journalism, and news. It addresses issues such as the lack of free speech, censorship problems in various states, and, most importantly, the protection of journalists who keep us informed during times of disaster and chaos.

Terminology

- Emerging disruptive technologies (EDTs): Technologies that are rapidly advancing and fundamentally reshape industries, economies, and societies by displacing traditional methods, systems, or services. Examples include artificial intelligence, biotechnology, quantum computing, autonomous systems, and blockchain. EDTs are disruptive because they not only offer opportunities for innovation and competitive advantage but also introduce new risks, power shifts, and governance challenges.
- Strategic implications: The long-term consequences of adopting and integrating EDTs in national, corporate, and global contexts. For example, artificial intelligence offers states enhanced defense capabilities and corporations new forms of efficiency, but it also creates strategic dependencies, economic vulnerabilities, and intensified geopolitical rivalries as nations compete for technological dominance.
- Ethical challenges: The moral dilemmas that arise from the creation and deployment of EDTs. These challenges include ensuring fairness in artificial intelligence, protecting privacy in an age of digital surveillance, addressing the environmental impact of data centers, and preventing the misuse of technologies

such as biotechnology or autonomous weapons. Ethical challenges highlight the tension between innovation and responsibility.

- Algorithm Bias: A distortion in decision-making systems built on artificial intelligence, where outcomes reflect and amplify existing social prejudices due to biased training data or flawed model design. Within EDTs, algorithmic bias raises ethical questions about fairness, justice, and accountability, particularly when AI is applied in areas like hiring, law enforcement, or healthcare.
- **Dual-Use Dilemma:** A situation where an EDT developed for beneficial civilian use can also be adapted for harmful purposes. For example, biotechnology may enable life-saving medical treatments but can also be weaponized. This dilemma highlights the ethical challenge of balancing innovation with safeguards against misuse.
- Responsible Innovation: A framework that emphasizes developing EDTs in a way that anticipates risks, aligns with societal values, and ensures inclusivity. In the context of EDTs, responsible innovation means designing artificial intelligence systems that are transparent, regulating blockchain applications to prevent exploitation, and ensuring that new technologies contribute to equitable and sustainable outcomes.

to manage the disruptive impact of EDTs. Because technologies like quantum computing or autonomous weapons transcend national borders, global governance frameworks are essential to establish norms, prevent misuse, and coordinate ethical standards. This includes efforts by the United Nations, OECD, and other bodies to shape responsible technological development.

History

Over the past century, the emergence of Emerging Disruptive Technologies (EDTs) has had a significant influence on global peace and reshaped humanity. The world mainly began facing the implications of said technologies post the advent of nuclear weapons (1945), leaving the world to suffer the outcomes of the Trinity Test on July 16, 1945, as part of The Manhattan Project, which is simply defined as a U.S. research project that successfully produced the first atomic bomb. Evidently, this deed was followed by the nuclear bombings of Hiroshima and Nagasaki (Aug 6, 1945 - Aug 9, 1945), resulting in the loss of more than 170,000 lives, demonstrating the devastating power and destructive potential of nuclear technology.

Furthermore, the International Atomic Energy Agency (IAEA) was created in 1957 to oversee the use of nuclear technology.

Unfortunately, the rise of EDTs continued to impose negative impacts on mankind during the Cold War era (1950s-1980s). The war fueled nuclear proliferation when the USA and the Soviet Union competed in producing nuclear arsenals alongside nations such as the UK, France, and China, developing vast weapons. In response, the global community decided to put an end to the spread of weapons by establishing the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1970, as well as the Strategic Arms Reduction Treaty (START) in 1991.

Years later, the world continued to progress digitally, and further disruption emerged, such as the 2007 cyber-attacks on Estonia, which revealed EDTs' ability to threaten peace; thus, NATO Cooperative Cyber Defense Centre of Excellence (CCDCOE) formed a framework called the Tallinn Manual (2013) to regulate cyberspace. Meanwhile, advances in Artificial Intelligence (AI) created the fear of Lethal Autonomous Weapons Systems (LAWS) operating without human supervision. Since then, member states debated under the Convention on Certain Conventional Weapons (CCW), with some calling for a ban. Therefore, UNESCO started the Recommendation on the Ethics of Artificial Intelligence (2021) as well as the EU's European Union's Artificial Intelligence Act (2024 to be applicable in 2026) to segregate AI systems into different risks and prohibit high-risk systems.

However, these efforts were not enough to keep the USA's Department of Defense from recently launching the "Replicator" initiative (2023) to enhance innovation and scale drones. Meanwhile, Russia and China similarly pursue ways to utilize AI for defense and surveillance.

Current situation

Rapid Technological Advancement and Adoption EDTs such as artificial intelligence, quantum computing, biotechnology, autonomous systems, and blockchain are accelerating in capability and deployment. Their adoption has expanded across sectors, including healthcare, defense, finance, and public services. There is growing convergence--technologies are being combined (e.g., AI + big data + robotics; biotech + gene editing tools), leading to more complex systems with higher potential impact.

Geopolitical & Strategic Tensions: Great power competition is increasingly focused on dominance in EDTs. Nations are investing heavily in AI, quantum, semiconductors, and critical raw materials because control over these technologies and supply chains is seen as central to national security, economic leverage, and strategic autonomy. Supply chain fragility and resource dependence are becoming more visible, particularly around critical minerals, chip manufacturing, and other foundational input technologies. This has caused concern over access, dependency, and resilience of national and regional technology infrastructures.

Ethical, Regulatory, and Governance Gaps: Although many ethical guidelines, principles, and regulatory proposals (e.g., EU AI Act, ethics guidelines) have been developed, there is uneven implementation, enforcement, and standardization globally. Some remain aspirational with weak mechanisms for accountability. The maturity of

ethical oversight often lags behind technological readiness. In many cases, technologies are deployed before their full societal, safety, or ethical consequences are understood.

Societal Impacts and Risks Raising Prominence: Concerns around privacy, data protection, surveillance, and algorithmic bias are increasingly visible. Data collection practices, capacity of AI-driven decision-making, and risk of misuse (e.g., profiling, disinformation) are topics of public debate and legal scrutiny. Dual-use risks (technologies used for both civilian and military/malicious purposes) are especially acute. Autonomous weapons, bioengineering (e.g., gene editing), and AI-enhanced surveillance are often cited as areas where the ethical stakes are very high.

Inequality of Access and Power Imbalances. There is unequal global and regional access to EDTs: both in terms of infrastructure, human capital, capital investment, and regulatory capacity. This creates risks that some countries or actors will dominate, exacerbating global inequality. Ethical and social issues are viewed differently across jurisdictions depending on legal, cultural, and socio-economic factors. This diversity complicates creating universal norms.

Growing Calls for Responsible Innovation & Multistakeholder Engagement.

Stakeholders, governments, international bodies, NGOs, academia, and civil society are increasingly pushing for frameworks that include fairness, transparency, accountability, human rights, and environmental protection in EDT design and deployment. There are

proposals for ethics readiness frameworks (linking ethical scrutiny to the maturity of technologies), regulatory "sandboxes" to experiment and test EDTs with oversight, and harmonization of standards across borders.

Tensions and Trade-offs: Strategic benefits vs ethical costs: The race for technological leadership often pushes actors to prioritize speed and advantage over deeper ethical reflection. Innovation vs regulation: Striking the right level of regulation without stifling innovation remains a difficult balance. Overregulation might slow down beneficial applications, but underregulating can lead to harm.

Parties involved

- The European Union (EU): The European Union's stance on Emerging
 Disruptive Technologies (EDTs) is focused on balancing technological innovation
 with responsible governance to secure strategic autonomy and technological
 sovereignty.
- **NATO:** The North Atlantic Treaty focuses on maintaining strategic autonomy, security impacts, and policy frameworks for EDTS and civilian sectors.
- United States: Leading across AI, biotechnology, semiconductors, and quantum technologies, the US has a decentralized innovation ecosystem fostering rapid development, and focuses heavily on governing ethical and strategic dimensions of EDTs.
- China: A strong challenger to the US, focusing on AI, biotechnology, and critical technologies with significant government backing and efforts around ethical governance and strategic autonomy

Guiding questions

- How have EDTs intervened with international peace historically?
- What are the ethical and humanitarian risks posed by EDTs?
- How can PR shed light onto the negative implications of these technologies?
- How can existing treaties or frameworks (NPT UNESCO, AI Ethics CCW) be used more effectively?
- Are there any gaps in the media coverage of the implications of EDTs?
- What long term effects can said technologies create if not addressed immediately by the international body?
- How can guidelines and ethical policies be translated into actionable policies?
- How can the UN Press Release be used to influence global norms?

Helpful resources

International documents and treaties

- Non Proliferation Treaty
- Strategic Arms Reduction Treaty (START)
- Recommendation on the Ethics of Artificial Intelligence (2021)
- Principles for the Ethical Use of Artificial Intelligence in the United Nations
 System
- Treaty on the Prohibition of Nuclear Weapons
- Tallinn Manual

News-based & UN reports

- 193 countries adopt first-ever global agreement on the Ethics of Artificial
 Intelligence
- UN Secretary-General's Statement on Nuclear Testing
- UN Security Council Debates Use of Artificial Intelligence in Conflicts
- UN General Assembly Report on Scientific and Technological Developments

 Relevant to Weapons

More sources

https://www.nato.int/cps/en/natohq/topics 184303.htm

https://technology-observatory.ch/emerging-and-disruptive-technologies-edt/

https://education.cfr.org/learn/timeline/history-nuclear-proliferation

https://www.britannica.com/event/Manhattan-Project

https://artificialintelligenceact.eu/

https://ccdcoe.org/

https://www.bbc.co.uk/bitesize/guides/z9jpn39/revision/4

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https://apnews.com/article/us-military-ai-projects-0773b4937801e7a0573f44b57a9a5942

https://ccdcoe.org/research/tallinn-manual/

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https://www.nationalgeographic.com/history/article/how-advent-nuclear-weapons-

changed-history

https://education.cfr.org/learn/timeline/history-nuclear-proliferation

https://www.bbc.co.uk/bitesize/guides/z9jpn39/revision/4

https://disarmament.unoda.org/en/our-work/conventional-arms/legal-

instruments/convention-certain-conventional-weapons

https://www.unesco.org/en/articles/recommendation-ethics-artificial-intelligence

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https://armscontrolcenter.org/strategic-arms-reduction-treaty-start-i/

https://www.wipo.int/web-publications/global-innovation-index-2025/en/gii-2025-

results.html

https://reports.weforum.org/docs/WEF_Top_10_Emerging_Technologies_of_2025.pdf