

Deepfake & Fabricated Information: New Threats to Arms Control, Non-Proliferation and Disarmament

Interview with Giacomo Persi Paoli



Giacomo Persi Paoli is Programme Lead for the Security and Technology Programme at the United Nations Institute for Disarmament Research (UNIDIR). His expertise spans the science and technology domains with emphasis on the implications of emerging technologies for security and defence, innovation, international security and disarmament. His recent work focused on arms control, technology horizon scanning, AI and cyber security. Before joining UNIDIR, Giacomo was Associate Director at RAND Europe. He holds a PhD in Economics from the University of Rome and a master's degree in Political Science from the University of Pisa, Italy.

UN Secretary-General António Guterres recently noted that the world is suffering from a “trust deficit disorder”. New technologies that are able to manipulate or fabricate information, such as deepfake, can further subvert and challenge trust, thereby endangering international security and stability. What threats do these technologies pose from an arms control, non-proliferation and disarmament standpoint?

A distinction has to be made between “threats”, or challenges, and impact. For the former, deepfakes as a technology challenge arms control, non-proliferation and disarmament in the same way that other applications of Artificial Intelligence do: it is an intangible, all-purpose technology, most of it open source and difficult to control using traditional instruments designed against physical systems. When it comes to impact however, it can only be estimated if the technology and its use are contextualized. For example, it is difficult to image a scenario in which a single deepfake can undermine relationships among states during peacetime when single accidents can be investigated and managed. However, a more complex deepfake operation that saturates the information space during an already existing political or military crisis, when decision and reaction times might be compressed, increases the risk of miscalculation and misperception leading to escalation.

What measures are governments taking and what technological countermeasures are being developed to combat the risks posed by the malicious use of deepfakes? Are these measures and countermeasures effective?

Countermeasures can be classified in two categories: those that reduce exposure to deepfakes and those aimed at countering belief in them. Technological

countermeasures are being developed to address deepfakes in three different ways: detection, authentication and provenance. However, technological countermeasures alone will not be sufficient as this is the typical cat & mouse problem: better countermeasures will lead to more sophisticated deepfakes that will in turn lead to new countermeasures and so on. As such, responses at the policy level are necessary complements to the technical ones. While only a handful of local or national governments have introduced legislative measures to limit the use of deepfakes, a key area of intervention remains increasing media literacy in the population. Engagement with social media platforms will also be important as private sector led initiatives such as standards and code of conducts could play an important role.

What specific role can the EU play, in your view, in addressing the emerging threats deriving from the use of these technologies?

The EU can play an important role in many different ways. First, fragmented and potentially incoherent national responses are not the optimal solution to the problem. The EU could continue to play its important role in harmonising policy responses to the malicious use of synthetic media, or deepfakes. Second, the EU has an important role to play as an interlocutor with social media platforms and other key stakeholders. Third, the EU should mobilise more resources towards the R&D of technological solutions, improving the resilience and longevity of countermeasures. Last but not least, the EU could provide an example, a blueprint, to other regional organisations of what a regional approach to countering deepfakes, or other malicious uses of AI, could look like.

THE EU AND ITS MOST PRESSING NUCLEAR CHALLENGES

The coming months may be crucial for the future of nuclear weapons for a number of reasons: first, Iran will have to choose between a renewal of the Joint Comprehensive Plan of Action (JCPOA), building the bomb or muddling through, which will have enormous implications for proliferation; second, the January 2022 Non-Proliferation Treaty (NPT) Review Conference – the first after the entry into force of the Treaty on the Prohibition of Nuclear Weapons (TPNW) – is likely to fail due to the miserable state of arms control, let alone disarmament; and finally, there is the first meeting of the State Parties to the TPNW in March 2022.

The EU can and should play a role in determining the outcome of each of these dimensions. The EU3 and the EU as such played a major role in negotiating the JCPOA and keeping it alive thereafter, but the fate of the agreement is now mostly in the hands of Iran.

EU member states have slightly more leverage in the NPT framework although unfortunately they tend to act separately, not collectively. NATO's Non-Nuclear Weapons States (NNWS) inside the EU have to think twice about their strategy. They have two options: falling back on their traditional role as allies of the US, the UK and France, or upgrading their role as NPT NNWS by understanding and supporting through action the grievances of NNWS outside Europe (and Ireland, Austria and Malta) with respect to article 6. The latter course of action means helping to convince nuclear weapons states – all of them – to promise far-reaching new steps (stop modernising; deep cuts; no first use; de-alerting; withdrawal of nuclear weapons to one's own territory) with concrete deadlines and a timetable for nuclear elimination. That is the only way to rescue the NPT, as Joëlle Pretorius from the University of the Western Cape, South Africa and myself explain in a recent article in *Survival* (“Ditch the NPT”).

Lastly, EU NNWS have the chance to play a constructive role in the first meeting of states parties to the TPNW by attending the conference as observers. Such action would not bind them in any way, but their presence would send a positive signal to the TPNW member states.

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CONSORTIUM NEWS

The EU Non-Proliferation and Disarmament Papers Series

As part of its mandate, defined in Council Decision (CFSP) 2018/299 of 26 February 2018, the EU Non-Proliferation Consortium is publishing a new series of Non-Proliferation and Disarmament Policy Papers. One of the latest papers is co-authored by Michal Onderco, Associate Professor of International Relations at Erasmus University Rotterdam, and Andrea Farrés Jiménez, Researcher and EU Non-Proliferation and Disarmament Consortium intern.

A comparison of national reviews of the Treaty on the Prohibition of Nuclear Weapons

Summary

This paper maps and analyses the national reviews of the 2017 Treaty on the Prohibition of Nuclear Weapons (TPNW) conducted by Germany, Ireland, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom. These reviews differ in length, depth and purpose, but present a wide range of important arguments from both legal and policy perspectives. The focus is on three main aspects: the interplay between the TPNW and existing legal instruments and international law; the verification provisions in the TPNW; and the consequences of signing the TPNW for security cooperation with the designated nuclear weapon states of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT). Through a comparative analysis of these national reviews, the paper seeks a better understanding of how the TPNW is seen and interpreted by various European states. This will help to clarify what the next steps towards a future common European position should be.

Read the full paper [here](#)

Previous papers can be found [here](#)

NETWORK NEWS

PREVENTING GREAT POWER COMPETITION FROM ESCALATING INTO OPEN MILITARY CONFLICT

The Institute for Peace Research and Security Policy at the University of Hamburg (IFSH), a member of the EU Non-Proliferation and Disarmament Network, together with the Körber Stiftung Foundation, recently concluded the Körber Strategic Stability Initiative (KSSI).

The Initiative convened a working group of European, Chinese, Russian and US experts over the course of one year. Starting from idea that the short window of opportunity created by the five-year extension of the New START Treaty must be used by political leaders to take tangible steps to enhance strategic stability, the working group developed nineteen principles and policy recommendations that can serve as a starting point to enhance international peace and security.

To present its results, the Institute for Peace Research and Security Policy at the University of Hamburg and the Körber Stiftung Foundation have launched an interactive website that presents a number of informative materials on strategic stability, including definitions of key concepts, regional perspectives, a timeline of key events and a set of ambitious goals.

More information can be found below:

[The Körber Strategic Stability Initiative \(KSSI\)](#)

[KSSI Working Group and Project Participants](#)

[The Nineteen Policy Recommendations for the Future of Strategic Stability](#)

[Towards a Common, Peaceful and Safe Future](#)

[The Institute for Peace Research and Security Policy at the University of Hamburg \(IFSH\)](#)

[The Körber Stiftung Foundation](#)

Network Calls

60TH ISODARCO COURSE ON:
["ADVANCING TECHNOLOGY,
NUCLEAR WEAPONS SECURITY
AND INTERNATIONAL STABILITY"](#)

Applications are now open for the 60th ISODARCO Course. The course will be held in Andalo (Trento), Italy, 7 - 14 January 2022

Deadline for application:

- October 11th 2021 for applicants requiring an Italian visa
- November 8th, 2021 for applicants who do not require an Italian visa

Participants wishing to submit a paper for consideration should enclose a short abstract of their proposed contribution in their application.

For further information:
Contact: Carlo Schaefer
or Visit www.isodarco.it