

EU Non-Proliferation and Disarmament Consortium

Promoting the European network of independent non-proliferation and disarmament think tanks

E-newsletter of the European Network of Independent Non-Proliferation and Disarmament Think Tanks

The 2023 Science Peace Security (SPS23) conference, an interview with Thea Riebe



Dr. Thea Riebe is a postdoctoral researcher at the Chair of Science and Technology for Peace and Security (PEASEC) in the Department of Computer Science at Technical University of Darmstadt (TU Darmstadt). She is a collaborator in the BMBF project CYWARN (2020-2023, BMBF) on the strategy and technology development for cross-platform cyber situational awareness and actor-specific cyber threat communication.

PEASEC - Science and Technology for Peace and Security - specialises in the study of advances in science and technology and their relationship with peace and security. Could you explain how you approach this relationship and what are the main technological areas of your studies?

As part of the research group PEASEC, at the Technical University of Darmstadt we study the role of technology in conflicts and security, as well as the use of technology to enhance peace and security. In my research, I use the epistemological perspectives of critical security studies, technology assessment and human-computer interaction to examine the dual-use and related risks associated with information and communication technology (ICT). My work focusses on the design and assessment of different assistant systems, including autonomous weapon systems as well as situational awareness and open-source intelligence systems, e.g., for cybersecurity. In both cases, the human-computer interaction and the overall system designs have security implications for the interaction and the division of labour between humans and technology. Furthermore, I study the innovation networks which enable the proliferation of AI algorithms in the civilian and military systems and the related risks in research and development.

Your institution co-organises the interdisciplinary conference on technical peace. What will be the main topics of the next edition of the conference in September?

The next Science Peace Security (SPS23) conference will take place in Darmstadt on the 20th, 21th and 22nd September. The conference examines the impact, control and design of technologies which influence peace and security. Existing approaches towards arms control need to adapt to the changing security landscape, while new civilian and military technologies are changing the forms of violence and warfare. Crucial areas are cyber warfare and the rapid development of unmanned weapons systems. In addition, information technology is playing a growing role in the oppression and digital surveillance of civilians during conflicts, and in policing urban space.

On the other hand, social media are also used as an infrastructure and resource for networking and to organize protests against human rights violations. Indeed, the transformative potential of ICTs in conflicts needs to be discussed. Technology is used by different actors for conflict transformation and to promote peace and may contribute to reducing (political) violence in the long term. Further information on our activities can be found under <https://sps.peasec.de>.

How do you think cooperation in scientific and technological research can help to generate confidence-building measures in cases of protracted political conflicts?

As the Pugwash Conferences have shown, scientists can contribute to the development of arms control regimes and to confidence building even in times of political conflict. Autonomous weapon systems are now under the limelight. There is an intense debate on the ethical rules that should regulate human-AI interaction, though we are far from the definition of common norms. We would also need to deepen our understanding of the impact of AI. In the case of cybersecurity, some political initiatives have been undertaken, for instance by the OSCE, that aim at promoting confidence building and an exchange of strategies and threat perceptions. However, there is a clear need to intensify the national and international dialogue and cooperation among IT security experts on how to advance risk assessment, devise an effective defense strategy against malicious cyber operations and improve infrastructure resilience. A primary objective of the SPS'23 is to support this dialogue.

The implications of AUKUS for the nuclear non-proliferation regime

The US delivery of nuclear propulsion technology to Australia foreseen by the AUKUS agreement has sparked heated controversy. At its centre is the impact of the agreement on the nuclear non-proliferation regime. While neither a nuclear weapon nor a nuclear explosive device will be transferred, the transfer of fissile material from a Nuclear Weapons State (NWS) to a Non-Nuclear Weapons State (NNWS) poses a proliferation risk.

The Comprehensive Safeguards Agreement states that if a NNWS intends to use nuclear material (in this case nuclear fuel and nuclear reactors) in a nuclear activity that does not require the application of safeguards, it is exempted from IAEA inspections and monitoring. The development and operation of a nuclear propulsion engine for a submarine fall within the framework of non-prohibited military activities and therefore should not be under safeguards. The AUKUS parties, which also includes the UK, have invoked this provision to justify the legality of AUKUS.

Yet, in order to ease tensions, the three AUKUS members have agreed that the nuclear fuel and technology provided to Australia will be placed under safeguards. However, they have argued that military secrecy requires that the IAEA's oversight activities is subjected to limitations. At the same time, Australia has undertaken not to have a training reactor on its territory, as well as not to enrich or reprocess the nuclear fuel.

While no one expects Australia to develop an atomic bomb, potential proliferators could use AUKUS to avoid IAEA safeguards, arguing that they aim to develop nuclear-powered submarines. AUKUS may thus erode the deterrent effect of the IAEA safeguards system.

There could be different ways to mitigate the impact of AUKUS on the nuclear non-proliferation regime. One would be to use low rather than high enriched uranium as fuel for these submarines. Another would be to establish clear criteria to justify when non-prohibited military activities using nuclear material are exempted from IAEA inspections and monitoring.

Latest Publications

Armed conflict and nuclear security: implications for Europe. Muhammed Ali Alkiş. EU Non-Proliferation and Disarmament Papers, no. 82, April 2023.

Nuclear Responsibilities at Sea: Bridging the Maritime-Security Nexus in the Asia-Pacific. Eva-Nour Repussard. BASIC and the Institute for Conflict, Cooperation and Security at the University of Birmingham (ICCS)

Network Calls

Internship opportunities at the Flemish Peace Institute in the position of research intern in the domains of: violence and conflict in society, arms trade and use, communication. Application deadline on July 1st

More info: [Here](#)

Internship opportunity in the space sector watch at the European Space Policy Institute. Application deadline on 23rd May at 23.59

More info: [Here](#)

Internship opportunities at Brussels School of Governance for the fields of: digitalization, democracy and innovation; environment, economy and energy; migration, diversity and justice; security, diplomacy and strategy

More info: [Here](#)

EU NEWS

CHEMICAL WEAPONS: STATEMENT BY THE EU SPOKESPERSON ON THE OUTCOME OF THE CHEMICAL WEAPONS CONVENTION REVIEW CONFERENCE

THE SPOKESPERSON STATED THAT HE REGRETTED THAT THE 5TH REVIEW CONFERENCE OF THE CHEMICAL WEAPONS CONVENTION ENDED WITHOUT A SUBSTANTIAL OUTCOME, AS CHEMICAL WEAPONS HAVE BEEN USED ON MULTIPLE OCCASIONS IN RECENT YEARS, WHICH MAKES THIS REVIEW CONFERENCE ALL THE MORE IMPORTANT.

THE SPOKESMAN STRESSED THAT THE EU AND ITS MEMBER STATES HAVE WORKED CONSTRUCTIVELY TO ACHIEVE CONSENSUS AT THE CONFERENCE. DESPITE THESE EFFORTS, IT HAD NOT BEEN POSSIBLE TO REACH AGREEMENT ON A FINAL DOCUMENT THAT WOULD STRENGTHEN THE CONVENTION.

HE REGRETTED THAT THE REVIEW CONFERENCE DID NOT CONDEMN SYRIA'S VIOLATIONS OF THE CONVENTION, AS CONFIRMED BY THE UN AND THE ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS (OPCW).

HE WENT ON TO SAY THAT IN THE CURRENT SECURITY ENVIRONMENT IT IS MORE NECESSARY THAN EVER TO UPHOLD INTERNATIONAL LAW AND THAT THE INTERNATIONAL COMMUNITY MUST CONTINUE TO STRENGTHEN GLOBAL NORMS AGAINST THE USE OF CHEMICAL WEAPONS AND UNDERLINE THE IMPORTANCE OF THE CHEMICAL WEAPONS CONVENTION AS A CRUCIAL PILLAR OF THE INTERNATIONAL DISARMAMENT AND NON-PROLIFERATION ARCHITECTURE.

HE CONCLUDED BY SAYING THAT, ALTHOUGH AGREEMENT COULD NOT BE REACHED, THE EU REMAINS ENCOURAGED BY THE FACT THAT THE VAST MAJORITY OF STATES PARTIES SHARE THE OBJECTIVES OF FULL IMPLEMENTATION OF THE CONVENTION AND OF HOLDING VIOLATORS AND PERPETRATORS OF CHEMICAL WEAPONS ATTACKS ACCOUNTABLE, AND THAT THE CHEMICAL WEAPONS CONVENTION IS A MEANS TO CONTRIBUTE TO INTERNATIONAL STABILITY, PEACE AND SECURITY.

MORE INFO: [HERE](#)

NETWORK NEWS

EU NON-PROLIFERATION AND DISARMAMENT NEXT GENERATION WORKSHOP 2023

THE ISTITUTO AFFARI INTERNAZIONALI (IAI), ON BEHALF OF THE EUNDP, WILL ORGANIZE THE ANNUAL EUNDP NEXT GENERATION WORKSHOP WHERE STUDENTS AND YOUNG PROFESSIONALS WILL HAVE THE OPPORTUNITY TO DISCUSS CHALLENGING ISSUES IN THE ARMS CONTROL, NON-PROLIFERATION AND DISARMAMENT FIELD, PRESENTING IDEAS AND HOW TO ADDRESS THEM. CANDIDACY TO PARTICIPATE MUST BE SUBMITTED BY 15 JUNE 2023

MORE INFO: [HERE](#)

G7 NON-PROLIFERATION DIRECTORS GROUP

THE G7 NON-PROLIFERATION DIRECTORS GROUP PUBLICLY ACKNOWLEDGED THE EU NON-PROLIFERATION AND DISARMAMENT CONSORTIUM FOR ITS INCLUSION AND PROMOTION OF GENDER EQUALITY AND YOUTH IN THE FIELD OF NON-PROLIFERATION, ARMS CONTROL AND DISARMAMENT, AND 'COMMEND INITIATIVES DEDICATED TO THIS SCOPE, SUCH AS THE YOUNG WOMEN NEXT GENERATION INITIATIVE

MORE INFO: [HERE](#)

EUROPEAN THINK TANK CONFERENCE 2023

THE GERMAN COUNCIL ON FOREIGN RELATIONS WILL HOST THE EUROPEAN THINK TANK CONFERENCE 2023 IN BERLIN BETWEEN THE 18TH AND 19TH OF OCTOBER 2023 TO SHARE TRENDS AND GOOD PRACTICES

MORE INFO: [HERE](#)