NON-PROLIFERATION COMMITTEE

Topic A: MANAGING EMERGING TECHNOLOGICAL THREATS IN NON-PROLIFERATION

Rapid technological advancements have created many opportunities in the development of weapons of mass destruction (WMDs) and their delivery systems, along with chemical, biological, radiological and nuclear (CBRN) weapons. NATO recognizes that these developments may pose real threats to non-proliferation efforts by the Alliance and its partners. Key examples of technological advancements gaining traction in the international security community include: 3D printing, geophysical manipulation, and artificial intelligence. These advancements are concerns for the covert development of offensive and defensive weapons and weapons systems by state and non-state actors, and for the maintenance of non-proliferation efforts for international peace and security.

3D Printing

Since its development in the 1980s, 3D printing (also known as "additive manufacturing") and its multitude of uses has significantly improved. Today, 3D printers are relatively inexpensive and can be easily purchased or created. Many industries rely on them, particularly those that need to produce large numbers of identical parts.[1] It can be used peacefully, for example, for more economically carrying out repetitive operations without skilled human input, and making detailed models for architectural or design purposes.[2] However, 3D printing can also be used in the planning and

[1] Robert Kelley, "Is Three-Dimensional (3D) printing a nuclear proliferation tool?" EU Non Proliferation Consortium, No. 54, February 2017, from: https://www.sipri.org/sites/default/files/EUNPC_no_54.pdf, p.1. [Kelley]
[2] Ibid.

manufacturing of weapons, such as plastic firearms, which are relatively undetectable in traditional airport scanners.[3]

More seriously, 3D printing has potential implications for the planning, creation and transport of WMDs and related prototypes, especially covert and defensive efforts, and raises questions about the potential effects on non-proliferation efforts by state and non-state actors. As noted by the Peace Research Institute of Frankfurt (PRIF), the growing number of defence-industrial printing fairs and rising defence spending on 3D printing, particularly by the US, indicate that countries recognize this threat.[4]

Opportunities for WMDs using 3D printing:

- WMD planning & prototype development: The use of 3D printing may revolutionize the way in which WMDs are planned and their prototypes developed. Engineers use 3D printing to produce trial parts, study dimensions, and train others.[5] For example, a US laboratory produced a complete model of a nuclear warhead in the 1990s using 3D printed parts, which was used to train workers on how to assemble and disassemble components, and could be easily transported.[6]

- Manufacturing of WMDs: While entire weapons cannot be 3D printed, there is the possibility of printing individual parts rapidly and inexpensively. For example, the castings used to hold explosive or other chemical or fissile materials used in weapons production could feasibly be 3D printed in the future, and be used as a more affordable alternative for non-state actors and developing countries.[7] Additionally, 3D printing may be used to reconstruct damaged parts. Non-state actors may exploit this ability in the future upon discovery of damaged weapons in battlefields (although there are limits to the feasibility of this depending on the type of chemicals used in the weapon).[8] Finally, the processes and plants used in weapons production, particularly for state actors with significant technological and financial resources, may be improved through 3D printing. Certain valves and fittings, and particularly highly sought-after gauges for measuring pressure in weapons production, which may be subject to export controls, could be easily created by a 3D printer.[9] This poses a challenge for tracking the development of weapons development systems and plants.

PRIF notes five ways in which 3D printing can make covert weapons manufacturing easier: (1) by increasing the home-based manufacturing capacities of countries through the bypassing of export controls and more inexpensive access to parts; (2) by

[3] Ibid.
[4] Marco Fey, "The Increasing Salience of 3D Printing for Nuclear Non-Proliferation," Peace Research Institute of Frankfurt blog, 26 June 2017, from: https://blog.prif.org/2017/06/26/the-increasing-salience-of-3d-printing-for-nuclear-non-proliferation/?lang=en. [Fey]
[5] Kelley, 3.
[6] Ibid.
[7] Ibid, 4.
[8] Ibid, 6.
[9] Ibid, 8.

minimizing the effectiveness of sanctions and export controls, which are key to non-proliferation efforts, including by NATO allies; (3) by reducing the development time of weapons; (4) by improving the transfer of knowledge through 3D training models; and (5) by reducing the "footprint" of weapons development facilities, making tracking the development of weapons more difficult.[10]

3D printing is an important area of technological innovation for NATO, particularly related to non-proliferation efforts.

Geophysical Manipulation

A long-time theme of disaster movies, geophysical manipulation efforts aim to manipulate weather and other processes occurring in nature, and are gaining traction as a potential concern for non-proliferation efforts. Interestingly, these endeavours span back to the Cold War, with the first main recognition of this threat being the signing of the UN Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (Environmental Modification Convention, or ENMOD) in 1977. ENMOD codified parties' commitment to not engage in "military of other hostile use of environmental modification techniques […against] another State Party."[11] Many NATO Member States have ratified ENMOD, including: the US, Canada, the Czech Republic, Germany, Estonia, Italy, and Slovakia. Pressure for international action on this issue followed the US's use of geophysical manipulation technology to simulate monsoon weather during the Vietnam War, under "Operation Popeye."[12]

Geophysical manipulation, or "environmental warfare," has been (often quietly) researched and evaluated by departments of defence of these Member States, and usually in the context of climate change. For example, the United States continues researching capabilities to modify weather under the High-frequency Active Aurora Research Program (HAARP) as part of their Strategic Defence Initiative.[13] The HAARP was established in 1992 and is now based in Alaska, jointly operated by the US Air Force and Navy.[14] It transmits high-frequency radio waves into the ionosphere (part of the Earth's upper atmosphere), and is capable of creating controlled local modifications to the ionosphere.[15]

China is also building its geophysical manipulation capacity. For example, China used "cloud seeding" technology to disperse clouds by inducing precipitation earlier to prevent rain during the 2008 Summer Olympic Games in Beijing.[16] While there are

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[10] Fey.
[11] United Nations, *Convention on the Prohibition of Military of Any Other Hostile Use of Environmental Modification Techniques*, RES.13/72, Geneva, 18 May 1977, Article 1.1.
[12] https://news.google.com/newspapers?nid=1873&dat=19740519&id=cpYeAAAAIBAJ&sjid=e8wEAAAAIBAJ&pg=2123,1135294&hl=en
[13] Michael Chossudovsky, "Weather Warfare: Beware the US Military's Experiments with Climatic Warfare," 7 December 2007, from: https://www.globalresearch.ca/weather-warfare-beware-the-us-military-s-experiments-with-climatic-warfare/7561. [Chossudovsky]
[14] Ibid.
[15] Ibid.
[16] Vivek Prabh, "Weaponizing Weather," NATO Association of Canada, 30 November 2013, from: http://natoassociation.ca/weaponizing-weather/

multiple variants of “seeding,” it basically entails the injection of materials into clouds to increase the concentration, or stimulate the development, of precipitation.

Critics of geophysical manipulation have noted that, in addition to being environmentally unfriendly, such efforts can be easily and covertly weaponized, with even minor modifications potentially having drastic destabilizing impacts on agriculture, ecosystems and economies – thus impacting reliance on export countries.[17] However, proponents of geophysical manipulation note the potentially positive effects on reversing climate change and minimizing climate shocks, and that technology is already affecting geophysical phenomena, such as chemtrails.

While geophysical manipulation is not yet a precise science, and while many still brush it off as “crackpot theory,” the fact that countries around the world are investing in such technologies and recognize the threat posed by them indicates it is a topic worth discussing, particularly in the context of weapons proliferation.

Artificial Intelligence

Advances in Artificial Intelligence (AI) have been great in the last decade, and strides forward are often heavily publicized, though met with scepticism. These new AI technologies have the potential to undermine non-proliferation efforts, in addition to their potential to revolutionize the ways in which weapons are developed, detected and used.

Much like geophysical manipulation, the defensive use of AI is often brushed off as “science-fiction.” However, tech leaders such as Bill Gates and Elon Musk, have recognized the threat that weaponized AI technology can pose in the hands of non-state and state actors. One highlighted threat includes the rise in use of lethal autonomous weapons systems (LAWS), also known as “killer robots.”[18] The UN Human Rights Council has called for a moratorium on the use of LAWS, and is raising concerns about the implication of LAWS for international humanitarian law. However, developments in AI technology are not confined to state actors; rather, the private sector is playing a large part in this, and is therefore more difficult to regulate at the international level.[19] However, the use of LAWS in combat may reduce risk to human soldiers and reduce defence budgets by having LAWS perform key tasks simultaneously. Therefore there is little state support for a full ban on LAWS.[20]

The potential for “dual use” AI technology being weaponized is also identified as a potential threat to non-proliferation efforts. These are AI technologies that may be used for a variety of commercial and private purposes, such as the use of quadrocopter (drone) commercial deliveries and facial recognition algorithms, but can be feasibly

[17] Chossudovsky.
[18] Anja Kaspersen, “We’re on the brink of an artificial intelligence arms race. But we can curb it,” World Economic Forum, 15 June 2016, from: https://www.weforum.org/agenda/2016/06/should-we-embrace-the-rise-of-killer-robots/.
[19] Ibid.
[20] Ibid.

weaponized for military purposes.[21] As private companies, such as Google and Tesla, usually have much larger AI budgets than state governments, cooperation between these sectors is incredibly important for states to stay up-to-date on key technological advancements. As AI technologies can and will conceivably be bought online or in stores, their potential for falling into the hands of non-state actors is high, leading to concerns about their use in organized criminal or terrorist networks.[22]

Finally, there are real concerns about the threat of an AI "arms race." Both Russia and China are leaders in AI technological development, which poses serious concerns for NATO. The US is also a leader in AI development and its potential weaponization. For example, in 2014, the former US Secretary of Defence, Chuck Hagel, described the US military's "third offset" as a period of focus on the fields of robotics and autonomous systems, among other technological developments.[23] Despite this, the US and NATO (and most of its Member States) do not have clear policies on the uses and weaponization of AI.

For NATO, the rise of AI technology poses both a threat to non-proliferation efforts and opportunities for revolutionizing war and everyday life. It is important that NATO finds a balance and works with key actors, including in the private sector and multilateral fora, to monitor key advancements in AI and regulate their use in weapons and weapons delivery systems.

Questions for Discussion:

1) Can Member States support the peaceful use of geophysical manipulation technologies, recognizing their wide-ranging effects and covertness?
2) How can NATO work with the private sector to control, monitor and prevent the weaponization of emerging technologies?
3) Does NATO support the legal regulation of AI technological development by the UN, and if so, how far-reaching should these regulations be, considering the problematic implications of limiting private research and development (R&D)? Can NATO impose regulations on the development of AI technologies, particularly those that can potentially be weaponized?
4) How can NATO leverage 3D printing for technological advancement, while monitoring and regulating its use for the development of weapons and weapons delivery systems?
5) What are the pros and cons of NATO's increased involvement in the research, development and use of 3D printing, geophysical manipulation, and AI?

[21] Ibid.
[22] Ibid.
[23] Ulson Gunnar, "The US and the Global "Artificial Intelligence" Arms Race," Centre for Research on Globalization, 3 December 2017, from: https://www.globalresearch.ca/the-us-and-the-global-artificial-intelligence-arms-race/5621424.

Further Reading:

Amy Nelson, "The truth about 3D printing and nuclear proliferation," War on the Rocks, 14 December 2015, from: https://warontherocks.com/2015/12/the-truth-about-3-d-printing-and-nuclear-proliferation/.

Anja Kaspersen, "We're on the brink of an artificial intelligence arms race. But we can curb it," World Economic Forum, 15 June 2016, from: https://www.weforum.org/agenda/2016/06/should-we-embrace-the-rise-of-killer-robots/.

John P. Caves, Jr. and W. Seth Carus, "The Future of Weapons of Mass Destruction: Their Nature and Role in 2030," Centre for the Study of Weapons of Mass Destruction, National Defence University, Occasional Paper 10, June 2014, from: http://ndupress.ndu.edu/Portals/68/Documents/occasional/cswmd/CSWMD_OccationalPaper-10.pdf.

Robert Kelley,"Is Three-Dimensional (3D) printing a nuclear proliferation tool?" EU Non Proliferation Consortium, No. 54, February 2017, from: https://www.sipri.org/sites/default/files/EUNPC_no_54.pdf.

Topic B: MULTILATERAL AND REGIONAL ENGAGEMENT ON NON-PROLIFERATION

Since the passage of the Treaty on Prohibition of Nuclear Weapons (TPNW) in June 2017 by the United Nations – a vote on which all NATO Member States abstained – NATO's engagement in multilateral and regional forums has become an issue of importance, primarily with the understanding of the importance of maintaining the unity within the Alliance and in public forums. For example, after the passage of the TPNW, NATO condemned its ignorance of the real security threats from North Korea, and ineffective as none of the Treaty's signatories actually possessed nuclear weapons. While this joint abstention by all NATO Member States signified NATO's position, it has the potential to create a rift in the international community trying to engage in non-proliferation efforts.

Multilateral Engagement

It is important for NATO Member States to present a united front in multilateral fora, such as the UN, when looking at non-proliferation efforts. Both NATO and the UN face contemporary challenges involving WMDs and CBRNs, making the UN a key forum in which to engage on non-proliferation. The UN and NATO have been cooperating on a variety of international peace and security issues, including non-proliferation, since 1999, and their cooperation has grown through the creation of liaison arrangements between the two organizations and with UN specialized agencies.[24] On non-

[24] North Atlantic Treaty Organization, "Relations with the United Nations," 21 June 2016, from: https://www.nato.int/cps/en/natohq/topics_50321.htm.

proliferation, NATO contributes to the work of the UN Security Council (UNSC) Committee for the adoption of UNSC Resolution 1540 (2004), which addresses the threat to international peace and security posed by the proliferation of WMDs, CBRNs and their delivery systems.[25]

Another key development in building the relationship between the UN and NATO is found in the UN General Assembly Resolution 66/50 (2012) on measures to prevent terrorists from acquiring WMDs. Although NATO is not explicitly mentioned, the resolution encourages cooperation between UN Member States and relevant international organizations in strengthening national capacities to prevent terrorists from proliferating weapons.[26] Since its inception, NATO has continued working with UN bodies and its partners on counter-terrorism non-proliferation efforts, including the UN Counter Terrorism Committee, the Organization for the Prohibition of Chemical Weapons (OPCW) and the UN Office for the Coordination of Humanitarian Affairs (OCHA).).[27] The UN Counter Terrorism Committee was developed after the September 11, 2001 terrorist attacks in the United States and bolsters the ability of Member States to prevent and react to terrorist acts. OPCW is the implementing body of the Chemical Weapons Convention (CWC) and is comprised of 192 Member States. OCHA coordinates the UN's humanitarian responses around the world, including disaster management, which has implications for weapons proliferation.

The use of chemical weapons in Syria, as well as nuclear and ballistic missile tests in North Korea, are both major concerns that require a multilateral response. This was recognized at the 13th Annual NATO Conference on WMD Arms Control, Disarmament and Non-Proliferation in Helsinki. One of the agenda items included cooperation with the UN, with NATO Assistant Secretary General for Emerging Security Challenges, Sorin Ducaru, noting that dialogue between NATO and international organizations, including the UN, is crucial for improving common understanding of the global security challenges linked to the use and spread of WMDs.[28] For example, OPCW is working closely with the UN to investigate Syria's sarin attack in Idlib in April 2017. There is room for NATO to collaborate in these types of investigations, and provide financial and technological support as part of a unified Alliance.

Increased cooperation between the UN and NATO could take a number of forms. In addition to participation in multilateral investigations on the use of WMDs and CBRNs and continued support of key resolutions, the organizations could facilitate more frequent high-level consultations and expert exchanges.[29] A permanent observer

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[25] Ibid.
[26] United Nations, Resolution Adopted by the General Assembly, 66/50. Measures to prevent terrorists from acquiring weapons of mass destruction, 12 January 2012, from: https://gafc-vote.un.org/UNODA/vote.nsf/d523afe92781d4d605256705006e0a5d/cdec08e6a6d4a3f88525793b006fc669/$FILE/A%20RES%2066%2050.pdf.
[27] Dalia Vitkauskaitė-Meurice, "The UN-NATO cooperation in implementing the United Nations Security Council Resolution 1540," in *Jurisprudencija* 21(2), 2012, p.348 [Vitkauskaitė-Meurice]
[28] North Atlantic Treaty Organization, "Finland hosts annual NATO conference on proliferation challenges," 30 May 2017, from: https://www.nato.int/cps/ua/natohq/news_144601.htm?selectedLocale=en.
[29] Vitkauskaitė-Meurice, 349.

position for NATO within the UN General Assembly could be established.[30] A continued look at NATO's relationship with the UNSC could be useful, particularly in relation to the UN Charter's Article 51, which protects Member States' right to individual or collective (i.e. through NATO or a similar body) defence and obligates Member States to report such action to the UNSC.

A concern with multilateral engagement is competing mandates. As the mandates of international organizations creep closer together, they may create a perceived need for competition, spurring efforts to expand mandates and thus diluting the effectiveness and focus of organizations themselves. It is therefore important for roles and responsibilities to be clarified diplomatically prior to engagement. Additionally, some NATO Member States, particularly the UK, France and the US, are recognized nuclear powers, which makes their engagement in multilateral non-proliferation efforts more complicated, and hinders the appearance of a unified NATO front on the issue.

Regional Engagement

While NATO's engagement in multilateral fora is still subject to clarification by international organizations and the Alliance itself, there is a much greater appetite for NATO engagement with regional organizations and bodies. Indeed, NATO's history is intertwined with that of the European Union (EU) and they therefore share a close relationship, including on non-proliferation issues.

In the last five years, major positive strides have been made collaboratively between the EU and NATO in non-proliferation. One key example is the implementation of the Joint Comprehensive Plan of Action between Iran (the "Iran Deal"), the EU and key countries such as Russia, China and key NATO Member States, including the US. The EU was the key negotiator in the 12-year process, and facilitated renewed US-Iran bilateral negotiations.[31] The UN Arms Trade Treaty (ATT) entered into force in 2014 and became instrumental in the EU's endeavours against the proliferation of small arms and light weapons (SALW). [32]

In the area of the EU's Common Foreign and Security Policy (CFSP) and Common Security and Defence Policy (CSDP), the European Council agreed in 2016 to deepen defence cooperation, including through the adoption of an EU-NATO Joint Declaration on cooperation on hybrid threats, operational cooperation, cybersecurity, defence capabilities, industry and research, exercises, and capacity building.[33] The June 2017 progress report on the Joint Declaration highlighted several areas of success in building the EU-NATO relationship, including: improved cooperation on hybrid threats, such as through the interaction of the EU Hybrid Fusion Cell and the NATO Hybrid Analysis Cell, and the planning of a Joint Intelligence Assessment on hybrid issues; and improved cooperation on defence capacities, particularly in ensuring coordinated

[30] Ibid.
[31] Lina Grip, "The European Union and Non-Proliferation, 2014-17," EU Non-Proliferation Consortium Final Report, August 2017, from: https://www.sipri.org/sites/default/files/2017-09/eunpc_final_report_2017_0.pdf, p.5
[32] Ibid.
[33] Ibid, 9.

outputs.[34] This stronger partnership has had positive implications for cooperation on non-proliferation efforts, particularly in relation to counter-terrorism.

Finally, information sharing is a key element of the NATO-EU relationship on non-proliferation efforts. For example, in 2009 NATO hosted a CBRN Defence demonstration in Belgium with key partners, including the EU, which enabled participants to share views and exchange best practices on CBRN defence capabilities (including warning and reporting; command, control and communications; detection, identification and monitoring; and disposal).[35] As the EU and NATO continue their talks – the last key meeting being at a NATO defence ministerial meeting, in which the EU's High Representative for Foreign Affairs and Security Policy, Federica Mogherini, participated – it will be increasingly important for non-proliferation issues to come to the forefront.

Concerns with NATO's multilateral and regional engagement

Broadly speaking, there is support for NATO's continued efforts to play a part in multilateral and regional fora on a variety of international security issues due to its wide range of expertise and capabilities. As transnational security threats continue to plague the global community, greater cooperation between alliances, organizations and bodies mandated with countering security issues becomes even more necessary to ensure the creation of targeted, coherent strategies in an efficient manner.

However, some argue that NATO, as a primarily military alliance, should be cautious against becoming a greater diplomatic or political actor in security issues, especially on non-proliferation. There is concern that NATO's credibility as a hard-power actor may be diluted with an increased diplomatic presence in multilateral and regional fora. Others argue that NATO should prevent itself from becoming implicated in the more complex diplomatic problems that arise in the UN and EU, particularly involving non-NATO Member States. Finally, some argue that NATO Member States are already key actors in the EU and UN, making their engagement through NATO overkill and unnecessary – and potentially problematic by augmenting their influence in these forums vis-à-vis non-Member States.

Questions for Discussion:

1) How should NATO continue to intervene in multilateral and regional fora, if at all, on non-proliferation issues? Should it improve its diplomatic and political capacities for this purpose?
2) What are some opportunities for NATO to contribute to multilateral and regional non-proliferation efforts, such as investigations, reporting and monitoring?
3) How can NATO step-up its efforts in implementing UNSC Resolution 1540?

[34] "Progress report on the implementation of the common set of proposals endorsed by NATO and EU Councils on 6 December 2016," 14 June 2017, from: https://eeas.europa.eu/sites/eeas/files/170614-joint-progress-report-eu-nato-en-1.pdf, p.3.
[35] North Atlantic Treaty Organization, "NATO and partners share CBRN defence know-how," 29 April 2009, from: https://www.nato.int/cps/en/SID-04A179D9-9BF89DF0/natolive/news_53368.htm?selectedLocale=en.

4) How should new geographic non-proliferation challenges, such as those posed by North Korea and Syria, affect NATO's multilateral and regional engagement efforts?

Further Reading:

Dalia Vitkauskaitė-Meurice, "The UN-NATO cooperation in implementing the United Nations Security Council Resolution 1540," in *Jurisprudencija* 21(2), 2012.

Lina Grip, "The European Union and Non-Proliferation, 2014-17," EU Non-Proliferation Consortium Final Report, August 2017, from: https://www.sipri.org/sites/default/files/2017-09/eunpc_final_report_2017_0.pdf

North Atlantic Treaty Organization, "The Non-Proliferation Treaty and the future of nuclear arms control," 26 June 2017, from: https://www.nato.int/cps/en/natohq/news_146302.htm.

North Atlantic Treaty Organization, "Weapons of mass destruction," 8 December 2017, from: https://www.nato.int/cps/en/natohq/topics_50325.htm.

Topic C: REVISITING NUCLEAR SHARING AGREEMENTS

With new threats to international security emerging from all corners of the world, particular from rogue regimes developing nuclear weapons programmes, the importance of the Non-Proliferation Treaty is as significant as ever. Perhaps even more so, is the nuclear-sharing agreements in place within NATO to ensure the collective defence of NATO member states by ensuring a united nuclear capability. While these agreements afford considerable protection to NATO allies, they may also serve to delegitimize attempts by member states seeking to curtail the proliferation of nuclear weapons. How does NATO address these concerns, or do they reinforce nuclear sharing in the face of new threats?

The NPT and NATO Nuclear Sharing

The *Treaty on the Non-Proliferation of Nuclear Weapons,* also commonly referred to as the Non-Proliferation treaty (NPT), has widely been hailed as a landmark agreement among member states as a substantial step forward to achieving the goal of nuclear disarmament. First signed in 1968, the number of signatories has risen to 190 members including a number of States recognized as 'nuclear-weapons states'. The basis for the treaty is simple: non-nuclear-weapons states will agree to never acquire nuclear weapons or the capability to produce them. However, in this simple premise lies the difficulty. The non-proliferation of nuclear weapons is based on the tacit agreement of parties to 'not acquire' these weapons. In other words, the restriction is on ownership, introducing crucial nuance which has allowed certain actors to benefit from nuclear-weapons without actually possessing them.

While all NATO Allies are parties to the NPT, and the organization has expressed a commitment to see the full-implementation of the Treaty, there has always been a subtle intent to circumvent the treaty through nuclear sharing agreements. The rationale given by the Organization is that these nuclear arrangements were already in place prior to the NPT coming into force. However, as part of the Treaty's review every five years – objections to the nuclear sharing agreements in place have not been raised.

Currently, it is believed that through these agreements, the United States has provided a large number of nuclear weapons to be hosted in continental Europe. Belgium, Germany, Italy, the Netherlands, and Turkey all play host to nuclear capabilities. Crucially important to understand, however, is that while these weapons are hosted by these States, the command and control of them remains with the owning State – in this case the United States – during times of peace. During active conflict, when the US President has authorized the option to turn to nuclear weapons, command and control of the weapons is then actively transferred to the hosting states[36].

Nuclear sharing is not a novel concept, nor is it one that has passed its time. Similar to deterrence theory, nuclear sharing expands the dangers of a 'nuclear first-strike policy', particularly providing a buffer of security in instable regions through the hosting of weapons in Turkey. In the past, Greece and Canada have both hosted nuclear weapons – however it should be noted that Canada's participation in nuclear-sharing was under NORAD rather than NATO. Today, there is also a school of thought that suggests that in order to combat the growing threat from Pyongyang, Japan should participate in a nuclear-sharing agreement.[37] Outside of NATO member states, there has been discussion in the past of a controversial arrangement between Saudi Arabia and Pakistan, a non-NPT signatory for the basis of sharing Pakistani weapons with Saudi Arabia in the event of Iran obtaining nuclear-weapons capability.

Delegates should be prepared for a unique discussion that will delve into the basic premise of the NPT. Delegates should guide their research on the basis of their country's current and historical positions on nuclear sharing but also by this central question: do nuclear-sharing agreements contravene the NPT and if they do, what role should NATO play in ensuring responsibility is taken? How can Member States enhance their individual security, and how can NATO ensure collective defence while not sharing nuclear-weapons?

[36] NATO Nuclear Sharing and the NPT - Questions to be Answered. June 1997. http://www.bits.de/public/researchnote/rn97-3.htm.
[37] "The time for 'nuclear sharing' with Japan is drawing near." The Japan Times. September 2017. https://www.japantimes.co.jp/opinion/2017/09/17/commentary/japan-commentary/time-nuclear-sharing-japan-drawing-near/#.Wjq1u1WnG70.

Questions for Discussion

1) Are NATO's nuclear sharing agreements legitimate under Article I and II of the NPT?
2) How can states rationalize being party to the NPT while actively taking steps to ensure they have access to nuclear-weapons through sharing agreements?
3) Should the organization move away from "nuclear sharing" to "conventional weapons sharing"?
4) If NATO does not take the lead in abolishing nuclear-sharing, what will prevent other states from mimicking the model? How would NATO react to a similar nuclear sharing agreement instigated by Russia or which incorporated Iran, North Korea, Pakistan and others?
5) How can NATO states host nuclear weapons while restricting the access of weapons for other states?

Further Reading

The NPT and the origins of NATO's Nuclear Sharing Arrangements (https://www.ifri.org/sites/default/files/atoms/files/alberque_npt_origins_nato_nuclear_2017.pdf)

NATO Nuclear Sharing and the NPT – Questions to be Answered (http://www.bits.de/public/researchnote/rn97-3.htm)

Nuclear Sharing: NATO and the N+1 Country (http://www.jstor.org/stable/20029495)

U.S. Nuclear Weapons in Europe: Critical for Transatlantic Security (http://www.heritage.org/defense/report/us-nuclear-weapons-europe-critical-transatlantic-security)