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General Assembly First Committee Background Guide 2019

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Dear Delegates,

Welcome to the 2019 National Model United Nations New York Conference (NMUN•NY)! We are pleased to welcome you to the General Assembly First Committee. This year's staff are: Directors Maya Kazamel (Conference B), and Assistant Directors Alexandra Bogdasarow (Conference A) and Diego Padilla Mata (Conference B). Maya has a BSc in Architectural Engineering and is currently pursuing her Masters in Real Estate and the Built Environment at Harvard University. This will be her fifth year on staff. Alexandra is studying political science and Chinese studies at the University of Trier. This will be her first year on staff. Diego is currently pursuing his undergraduate degree in biochemistry in Oakland, California. This will be his second year on staff.

The topics under discussion for the General Assembly First Committee are:

- 1. Developments in the Field of Information and Telecommunications in the Context of International Security
- 2. Nuclear Disarmament and International Security
- 3. International Cooperation in the Peaceful Uses of Outer Space

As one of the six principal organs of the United Nations (UN), the General Assembly is the main deliberative, policymaking, and representative body of the organization. The General Assembly First Committee's role within this framework is to foster high-level dialogue and negotiations on affairs of disarmament and international threats to peace. The General Assembly First Committee works within a forum for multilateral negotiations to ensure global peace and find solutions to any challenges to the international security regime. In order to accurately simulate the committee, it will be key for delegates to emulate the normative and best practice-setting approaches of the General Assembly, as opposed to operational work.

This Background Guide serves as an introduction to the topics for this committee. However, it is not intended to replace individual research. We encourage you to explore your Member State's policies in depth and use the Annotated Bibliography and Bibliography to further your knowledge on these topics. In preparation for the Conference, each delegation will submit a <u>Position Paper</u> by 11:59 p.m. (Eastern) on 1 March 2019 in accordance with the guidelines in the *NMUN Position Paper Guide*.

Two resources, available to download from the <u>NMUN website</u>, that serve as essential instruments in preparing for the Conference and as a reference during committee sessions are the:

- 1. <u>NMUN Delegate Preparation Guide</u> explains each step in the delegate process, from pre-Conference research to the committee debate and resolution drafting processes. Please take note of the information on plagiarism, and the prohibition on pre-written working papers and resolutions. Delegates should not start discussion on the topics with other members of their committee until the first committee session.
- 2. <u>NMUN Rules of Procedure</u> include the long and short form of the rules, as well as an explanatory narrative and example script of the flow of procedure.

In addition, please review the mandatory <u>NMUN Conduct Expectations</u> on the NMUN website. They include the Conference dress code and other expectations of all attendees. We want to emphasize that any instances of sexual harassment or discrimination based on race, gender, sexual orientation, national origin, religion, age, or disability will not be tolerated. If you have any questions concerning your preparation for the committee or the Conference itself, please contact the Under-Secretaries-General for the General Assembly Department, Dieyun Song (Conference A) and Maximilian Jungmann (Conference B), at <u>usg.ga@nmun.org</u>.

We wish you all the best in your preparations and look forward to seeing you at the Conference!

Conference A

Conference B

Director Alexandra Bogdasarow, Assistant Director Maya Kazamel, Director Diego Padilla Mata, Assistant Director

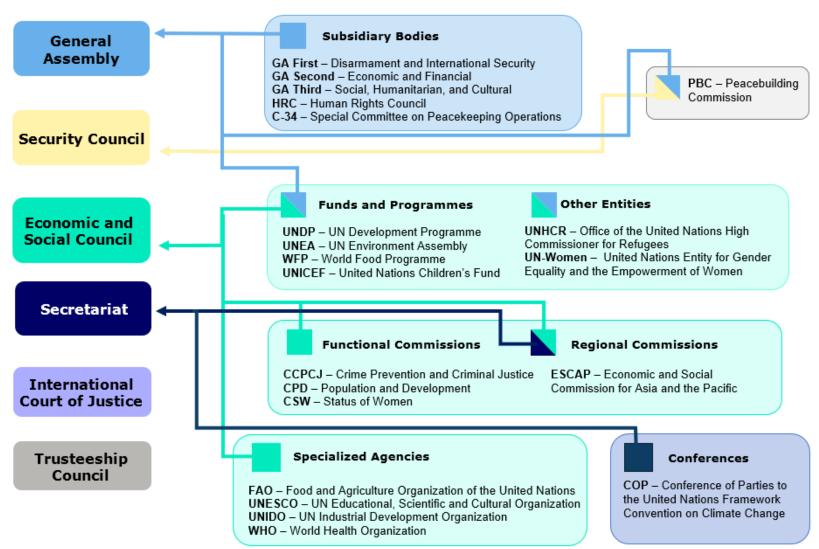
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United Nations System at NMUN•NY

This diagram illustrates the UN system simulated at NMUN•NY and demonstrates the reportage and relationships between entities. Examine the diagram alongside the Committee Overview to gain a clear picture of the committee's position, purpose, and powers within the UN system.





Committee Overview

Introduction

The United Nations (UN) General Assembly has existed since the creation of the UN and is one of the six principal organs of the UN established by the *Charter of the United Nations* (1945).¹

The First Committee considers all matters related to disarmament and international security.² General Assembly resolution 1378(XIV) of 20 November 1959 on "General and Complete Disarmament" was the first resolution co-sponsored by all Member States and considered the question of disarmament the most important question facing the world at the time.³ Consequently, the General Assembly established the United Nations Disarmament Commission (UNDC) in 1952 with a general mandate to discuss topics related to disarmament.⁴ Furthermore, in its 26th session, the General Assembly declared the 1970s as a Disarmament Decade.⁵ During this time additional institutions to support disarmament were established; in 1979 the Conference on Disarmament (CD) was created as the international community's multilateral negotiation forum on disarmament, and in 1980, the United Nations Institute for Disarmament Research (UNIDIR) was created with the purpose of undertaking independent research on questions related to disarmament.⁶ Several other disarmament-related entities and other organizations also report to the General Assembly through the First Committee, such as the regional centers on disarmament and the Comprehensive Nuclear-Test-Ban Treaty Organization.⁷

The ratification of the 1968 *Treaty on the Non-Proliferation of Nuclear Weapons* (NPT) in 1970 was a fundamental cornerstone in the field of nuclear disarmament.⁸ Efforts leading to this vital agreement started a decade earlier, and an important element in its development took place in the First Committee.⁹ In 1958, when nuclear non-proliferation was on the agenda for the first time, the First Committee recommended the creation of an ad hoc committee studying the dangers of nuclear dissemination, but this resolution failed to be adopted by the General Assembly Plenary.¹⁰ Over subsequent years, this subject was recurrent, and the First Committee adopted a series of resolutions including resolution 1576 (XV) of 1960, resolution 1665 (XVI) of 1961 and resolution 2028 (XX) of 1965, all recognizing the committee's central role in pushing negotiations on non-proliferation forward.¹¹ These negotiations continued and culminated in the adoption of resolution 2373 (XXII) in 1968, requesting Member States to sign and ratify the *Treaty on the Non-Proliferation of Nuclear Weapons*.¹²

As the only main body with universal membership, the General Assembly is a unique forum for discussion within the UN system.¹³ As such, it represents the normative center of the UN and its central role in the maintenance of international peace and security can be summarized in three principal aspects: a generator of ideas, a place of international debate, and the nucleus of new concepts and practices.¹⁴

¹ Charter of the United Nations, 1945, Art. 7.

² UN General Assembly, *Disarmament and International Security (First Committee)*.

³ UN General Assembly, General and Complete Disarmament (A/RES/1378 (XIV)), 1959.

⁴ UN General Assembly, Regulation, Limitation and Balanced Reduction of all Armed Forces and all Armaments; International Control of Atomic Energy (A/RES/502 (VI)), 1952.

⁵ UN General Assembly, *Question of General Disarmament (A/RES/2602 E)*, 1969; UN General Assembly, *Final Document of the Tenth Special Session of the General Assembly (S-10/2)*, 1978.

⁶ Ibid.

⁷ Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 63.

⁸ Sciora & Stevenson, *Planet UN*, 2009, pp. 77-78.

⁹ UN Audiovisual Library of International Law, *Treaty on the Non-Proliferation of Nuclear Weapons, 1968*, 2012, p. 1. ¹⁰ Ibid.

¹¹ Ibid., pp. 1-3.

¹² Ibid.

¹³ UN General Assembly, *Functions and Powers of the General Assembly*.

¹⁴ Thakur, *The United Nations, Peace and Security*, 2006, pp. 91, 162.



Governance, Structure, and Membership

As outlined in the Charter, the General Assembly is comprised of all 193 UN Member States. ¹⁵ However, Observer status can also be granted to intergovernmental organizations such as the African Union and states without full UN membership: currently the Holy See and the State of Palestine are the only two non-Member States with permanent Observer status. ¹⁶ In the General Assembly, each Member State has one equal vote. ¹⁷

Since its 44th session in 1989, the General Assembly is considered in session the entire year, but the most important time is the General Debate, which takes place from mid-September to the end of December and is called the "main part of the General Assembly." For the remainder of the year, called the "resumed part of the General Assembly", working group meetings take place and thematic debates are held. Decisions on important matters such as the maintenance of international peace and security, the admission, suspension, and expulsion of members, and all budgetary questions require a two-thirds majority. To rall other matters, votes in the General Assembly require a simple majority and the majority of resolutions are adopted without a vote, illustrating the consensus-based nature of the General Assembly. Elaborated by the General Assembly Fifth Committee, the budget allocated to disarmament for the biennium 2018-2019 is \$25.6 million and is mainly allocated to multilateral negotiations and deliberations on disarmament and arms limitation.

The First Committee receives substantive and organizational support from three important entities: the General Committee, the United Nations Office for Disarmament Affairs (UNODA), and the Department for General Assembly and Conference Management. 23 The General Committee is comprised of the President of the General Assembly and the 21 Vice-Presidents of the General Assembly, as well as the Chairpersons of all the six General Assembly Main Committees; all positions are elected every session on a non-renewable basis.²⁴ The General Committee's main duty, besides making recommendations on organizational issues, is to determine the agenda of the General Assembly Plenary and its six Main Committees.²⁵ After receiving a preliminary list of agenda items from the UN Secretariat, the General Committee allocates the different items to each Main Committee. ²⁶ The First Committee then votes upon its own agenda based on the allocated agenda items.²⁷ Within the UN Secretariat, UNODA provides "objective, impartial and up-to-date" information and promotes the implementation of practical measures on nuclear disarmament and non-proliferation, disarmament in the field of conventional weapons, and the general strengthening of mechanisms and frameworks bolstering disarmament.²⁸ It further encourages norm setting at the General Assembly, CD, and UNDC.²⁹ Additionally, the Department for General Assembly and Conference Management also provides valuable technical secretariat support and acts as the intersection between the General Assembly and the Economic and Social Council.³⁰

The First Committee works in close cooperation with the UNDC and the CD.³¹ The CD has a crucial role in addressing issues of disarmament and has been central to negotiations of international agreements

¹⁵ Charter of the United Nations, 1945, Art. 9.

¹⁶ UN DPI, About Permanent Observers; UN DPI, Non-member States.

¹⁷ Charter of the United Nations, 1945, Art. 18.

¹⁸ Switzerland, *The PGA Handbook: A practical guide to the United Nations General Assembly*, 2011, p. 14.

¹⁹ Ibid.

²⁰ Ibid., p. 54.

²¹ Ibid., p. 14.

²² UN General Assembly, Proposed Programme Budget for the biennium 2018-2019 (A/72/6 (Sect. 4)), 2017, p. 5.

²³ UN General Assembly, *Disarmament and International Security (First Committee)*.

²⁴ UN General Assembly, *General Committee*.

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ UNODA, About Us.

²⁹ Ibid.

³⁰ UN DGACM, Functions of the Department, 2014.

³¹ UN General Assembly, *Disarmament and International Security (First Committee)*.



such as the NPT.³² Unlike the CD, the UNDC is a subsidiary organ of the First Committee and is composed of all 193 Member States.³³ Primarily suggesting recommendations to the General Assembly, it has been important in the formulation of principles and guidelines that have subsequently been endorsed by the committee in its own reports.³⁴ Both bodies report either annually or more frequently to the First Committee.³⁵ Additionally, as a crucial partner with the UN system, civil society organizations have an important relationship with the General Assembly and are often invited to speak at the General Assembly.³⁶

Mandate, Functions, and Powers

The mandate of the General Assembly is set in Chapter IV of the *Charter of the United Nations*; Article 11 requires the General Assembly to address questions of international peace and security, particularly disarmament.³⁷ This mandate has evolved over time and the growing range of issues facing the international community ultimately gave the First Committee its focus on disarmament and international security.³⁸ The question of disarmament is organized into seven clusters: nuclear weapons, other weapons of mass destruction (WMDs), disarmament aspects in outer space, conventional weapons, regional disarmament and security, the disarmament machinery, and other disarmament measures and security.³⁹ The mandate of the General Assembly allows it to be a conduit for ideas that can become the driver of new policies and shared norms through discussion and debate.⁴⁰ This can be regarded as one of the main differences between the General Assembly and the Security Council.⁴¹ The Security Council is more concerned with concrete threats to security including ongoing conflicts, whereas the General Assembly aims to create peace by forming habits and means of cooperation.⁴² It is important to note, however, that the General Assembly considers matters of international security only when the issue is not under the consideration of the Security Council.⁴³

The General Assembly and its six Main Committees are the center of the UN System and represent its main deliberative, policymaking, and representative organs; their outcomes thus define new norms that can become treaties or conventions among UN Member States. ⁴⁴ The General Assembly is tasked with initiating studies and making recommendations to promote international cooperation in the political field; encouraging the development of international law; promoting the implementation of cultural, social, and human rights; and promoting fundamental freedoms free from discrimination. ⁴⁵ The body "receives and considers reports" issued by "the other principal organs established under the Charter as well as reports issued by its own subsidiary bodies." ⁴⁶ The General Assembly Plenary receives recommendations from the six Main Committees. ⁴⁷ Once the recommendations are sent to the Plenary Committee, the Plenary then votes on whether to adopt the resolutions as presented. ⁴⁸ Although decisions reached by the

³² UNOG, An Introduction to the Conference, 2009.

³³ UNODA, *United Nations Disarmament Commission*.

³⁴ Ibid.

³⁵ UN General Assembly, *Disarmament and International Security (First Committee)*.

³⁶ Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 31.

³⁷ Charter of the United Nations, 1945, Art. 11.

³⁸ UN General Assembly, Revitalization of the Work of the General Assembly (A/RES/47/233), 1993.

³⁹ Switzerland, *The PGA Handbook: A practical guide to the United Nations General Assembly*, 2011, p. 63.

⁴⁰ Thakur, *The United Nations, Peace and Security*, 2006, p. 10.

⁴¹ Ibid.

⁴² Ibid.

⁴³ Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 13.

⁴⁴ UN General Assembly, Functions and Powers of the General Assembly.

⁴⁵ Charter of the United Nations, 1945, Art. 12; UN General Assembly, Functions and Powers of the General Assembly; UN General Assembly, Statement made by the Chairperson of the Fourth Committee, 2013.
⁴⁶ Ibid

⁴⁷ Charter of the United Nations, 1945, Art. 4; UN General Assembly, Functions and Powers of the General Assembly; UN General Assembly, Statement by the Chairperson of the Fourth Committee, 2013; UN General Assembly, About the General Assembly; Switzerland, The PGA Handbook: A practical guide to the United Nations General Assembly, 2011, p. 20.

⁴⁸ UN General Assembly, *About the General Assembly*.



General Assembly are non-binding, they are often adopted as customary international law and serve as key international policy norms.⁴⁹ Additionally, the General Assembly can request the Secretary-General or other UN organs to issue a report to one of the Main Committees on a specified question such as the implementation of recommendations made by the General Assembly.⁵⁰

The First Committee is able to introduce resolutions that initiate new negotiations on arms control and disarmament.⁵¹ These, in turn, can lead to the creation and funding of agencies or meetings as well as ad hoc committees or working groups that consider a particular question with the purpose of reporting to the General Assembly.⁵² The General Assembly Plenary must also adopt resolutions adopted in the First Committee before they are put into effect.⁵³ Though these resolutions are non-binding, consensus reached in the First Committee often leads to more concrete initiatives at the UN.⁵⁴

Recent Sessions and Current Priorities

The strategic framework of the *Biennial Programme Plan*, adopted on 9 March 2016, covers the years 2018-2019 and consists of five subprograms: multilateral negotiations on arms limitation and disarmament, WMDs such as nuclear weapons, conventional arms, information and outreach, and regional disarmament.⁵⁵ In this regard, the main objectives of the First Committee are to: "promote and support efforts for disarmament and non-proliferation" of WMDs including nuclear weapons, and support Member States to meet existing relevant treaties, "advance greater mutual confidence and transparency among Member States in the field of conventional arms," increase understanding of Member States and the public on disarmament issues, and promote regional disarmament as a path toward global disarmament.⁵⁶ At its 71st session in 2017, the General Assembly adopted resolution 71/323, which established an ad hoc working group to revitalize the work of the General Assembly through enhancing the efficiency of the General Assembly.⁵⁷ Most of this has been achieved through procedural measures to streamline the work of the various committees of the General Assembly.⁵⁸

Prior to the start of the session, a number of reports were submitted to the First Committee, both from the Secretary-General and the CD. ⁵⁹ The majority of reports were from the Secretary-General and discussed issues such as the risk of nuclear proliferation in the Middle East and the illicit trade of small arms and light weapons (SALW). ⁶⁰ Reports from the CD covered a variety of topics such as new WMDs and the use of weapons in outer space. ⁶¹ At its 72nd session, the First Committee approved a total of 58 draft resolutions. ⁶² Although topics across all clusters were discussed, the majority of draft resolutions focused on the nuclear weapons cluster. ⁶³ Among the topics discussed were continuing activity on nuclear disarmament agreements and the establishment of a nuclear-weapon-free zone in the Middle East. ⁶⁴ One of the most contentious was resolution 72/43 (2017) on "Implementation of the Convention on the

⁴⁹ UN General Assembly, *About the General Assembly*; Switzerland, *The PGA Handbook: A practical guide to the United Nations General Assembly*, 2011, p. 13.

⁵⁰ Ibid., pp. 36, 47.

⁵¹ Weis, *The United Nations and Changing World Politics*, 2004, p. 161.

⁵² Ibid.

⁵³ UN General Assembly, *About the General Assembly*.

⁵⁴ Ibid.

⁵⁵ UN General Assembly, *Biennial programme plan and priorities for the period 2018-2019 (A/71/6/Rev.1)*, 2017, pp. 70 – 77.

⁵⁶ Ibid.

⁵⁷ UN General Assembly, Revitalization of the work of the General Assembly (A/RES/71/323), 2017.

⁵⁸ Ibid.

⁵⁹ UN General Assembly, *Documents of the First Committee (A/C.1/72/INF/1)*, 2017.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² UN DPI, Closing Session, First Committee Approves Draft on Chemical Weapons Convention, Sending Total of 58 Texts to General Assembly (GA/DIS/3594), 2017.

⁶³ UN General Assembly, Action on Draft Resolutions and Decisions Under Disarmament and International Security Agenda Items (Items 90 to 106) (A/C.1/72/CRP.3), 2017.

⁶⁴ Ibid.



Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction," which reaffirms the General Assembly's condemnation of the use of chemical weapons, referring particularly to the case of Syria. 65 Under Cluster four on Conventional Weapons, other draft resolutions address aspects such as transparency in armaments, the Arms Trade Treaty, and the illicit trade in SALW. 66 General Assembly resolution 72/76 (2017) on the "Prevention of an Arms Race in Outer Space" as well as resolution 72/27 (2017) both focus on preventing Member States from placing weapons in outer space and limiting usage of outer space to peaceful uses only. 67

In recent years, the First Committee has placed greater emphasis on information security as Member States become more and more interconnected through technology. ⁶⁸ During the 70th session, General Assembly resolutions 70/273 (2015) and 70/21 (2015) both addressed the vital role of information technology in the context of international security and disarmament. ⁶⁹ General Assembly resolution 71/28 of 9 December 2016 stressed the importance of maintaining the free flow of information while addressing the threats toward global information security. ⁷⁰ Looking forward to the 73rd session, information and telecommunication security are important items on the agenda. ⁷¹ Other topics that will be discussed include the reduction of military budgets, the role of science and technology in international security and disarmament, as well as women, disarmament, non-proliferation, and arms control. ⁷²

Conclusion

Disarmament has been an important issue for the UN and for the achievement of international peace since its founding. The last arise and complicate the question of disarmament, addressing nuclear disarmament, the use of arms in outer space, and cyber security threats have become even more important. Efforts such as those made in the field of combating the illicit trade of SALW and strengthening global counter-terrorism efforts are a testimony of the General Assembly's dedication to a safer world. As a place where new ideas are shaped, the General Assembly can introduce standards and norms to promote disarmament and take steps toward establishing sustainable peace. Although it has been argued that the First Committee has not been able to achieve its full potential in recent years, it continues to play a critical role in achieving advancements toward the pursuit of international peace and security.

Annotated Bibliography

Sciora, R. & A. Stevenson. (2009). *Planet UN: The United Nations Confronting the Challenges of the 21st Century*. Geneva: Editions du Tricorne.

⁶⁵ UN General Assembly, *Implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (A/RES/72/43)*, 2017.

⁶⁶ UN General Assembly, Action on Draft Resolutions and Decisions Under Disarmament and International Security Agenda Items (Items 90 to 106) (A/C.1/72/CRP.3), 2017.

⁶⁷ UN DPI, First Committee Submits Six Drafts to General Assembly, One Calling for Immediate Start of Negotiations on Treaty Preventing Outer Space Arms Race, 2017.

⁶⁸ UNODA, Developments in the Field of Information and Telecommunications in the Context of International Security, 2016.

⁶⁹ UN General Assembly, Developments in the Field of Information and Telecommunications in the Context of International Security (A/RES/70/237), 2015; UN General Assembly, Objective Information on Military Matters, Including Transparency of Military Expenditures (A/RES/70/21), 2015.

⁷⁰ UN General Assembly, Developments in the Field of Information and Telecommunications in the Context of International Security (A/RES/71/28), 2016.

⁷¹ UN General Assembly, Developments in the field of information and telecommunications in the Context of international security (A/C.1/72/L.44), 2017.

⁷² UN General Assembly, *Provisional agenda of the seventy-third regular session of the General Assembly* (A/73/150), 2018, pp. 12 – 16.

⁷³ Charter of the United Nations, 1945, Art. 7.

⁷⁴ UN General Assembly, *Documents of the First Committee (A/C.1/72/INF/1)*, 2017.

⁷⁵ UN General Assembly, Functions and Powers of the General Assembly.

⁷⁶ Reaching Critical Will, *UN General Assembly First Committee*, 2014.



Inspired by the documentary Planet UN, this book offers an in-depth analysis of the role of the United Nations and its challenges for the 21st century. It gives special attention to three key pillars: peace, development, and human rights. It also stresses the importance of the UN's ability to adapt itself to our changing world and to react to new threats such as terrorism or nuclear risks. An account of the genesis of the UN also allows delegates to understand how the UN was started with the intent of creating a system to maintain peace and security and to become the organization it is today. Furthermore, this book contains a series of testimonies of important personalities such as the last five Secretaries-General of the UN.

Switzerland, Permanent Mission to the United Nations. (2011). *The PGA Handbook: A practical guide to the United Nations General Assembly*. Retrieved 23 August 2018 from: http://www.unitar.org/ny/sites/unitar.org.ny/files/UN PGA Handbook.pdf

This publication produced by the Permanent Mission of Switzerland to the UN is another contribution by a Member State of introductory information about the UN system. The General Assembly is a central focus of this handbook and includes a detailed description of its organization, structure, rules, and working methods. Further providing information specific to all six Main Committees, this handbook offers a unique source of information to delegates to understand the work of the General Assembly and its place within the UN system.

Thakur, R. (2006). The United Nations, Peace and Security. Cambridge: Cambridge University Press. Ramesh Thakur, a renowned commentator on the UN, examines the UN from a contemporary perspective and looks at it from new angles such as discussing human security by examining questions on international peace and security. By doing so, he critically analyzes the use of force by the UN with the intention of making it more effective in the light of today's threats, with a particular focus on security and how it has evolved over the years and the role of the UN system, including the General Assembly. His book is a valuable guide to the UN and will be of useful reading to delegates and offers an interesting perspective on international peace.

United Nations, General Assembly, Seventy-first session. (2016). *Proposed Strategic Framework for the Period of 2018-2019, Par Two: Biennial Programme Plan, Programme 3: Disarmament (A/71/6(Prog.3))*. Retrieved 16 September 2018 from: http://www.undocs.org/A/71/6(prog.3)

The Proposed Strategic Framework is drafted biennially and outlines the priorities of each year. In the section on disarmament, there are two main segments that discuss overall orientation and legislative mandates. Under the overall orientation, five priority subprograms are listed, which include multilateral negotiations on arms limitations and disarmament, WMD, conventional arms, information and outreach, and regional disarmament. Delegates will gain more knowledge on the General Assembly's current priority for the year from this document, and have a clearer direction on moving the research forward.

United Nations, General Assembly, Seventy-second session. (2017). Documents of the First Committee (A/C.1/72/INF/1) [Note by the Secretariat]. Retrieved 9 July 2018 from: http://undocs.org/A/C.1/72/INF/1 This is an exceptionally useful source as it provides links to various UN documents utilized by the General Assembly First Committee during the 72nd session. The various documents include information pertinent to the agenda of the First Committee including nuclear disarmament, chemical weapons, cybersecurity and international security and outer space. Delegates should use this to expand their knowledge on the various priorities of the First Committee.

Bibliography

Charter of the United Nations. (1945). Retrieved 12 August 2018 from: http://www.un.org/en/documents/charter/index.shtml



Reaching Critical Will. (2014). *UN General Assembly First Committee* [Website]. Retrieved 12 August 2018 from: http://www.reachingcriticalwill.org/disarmament-fora/unga

Sciora, R. & A. Stevenson. (2009). *Planet UN: The United Nations Confronting the Challenges of the 21st Century.* Geneva: Editions du Tricorne.

Switzerland, Permanent Mission to the United Nations. (2011). *The PGA Handbook: A practical guide to the United Nations General Assembly.* Retrieved 12 August 2018 from: http://www.unitar.org/ny/sites/unitar.org.ny/files/UN PGA Handbook.pdf

Thakur, R. (2006). The United Nations, Peace and Security. Cambridge: University Press.

United Nations, Audiovisual Library of International Law. (2012). *Treaty on the Non-Proliferation of Nuclear Weapons, 1968* [Background Note]. Retrieved 12 August 2018 from: http://legal.un.org/avl/pdf/ha/tnpt/tnpt_ph_e.pdf

United Nations, Department for General Assembly and Conference Management. (2014). *Functions of the Department* [Website]. Retrieved 12 August 2018 from: http://www.un.org/Depts/DGACM/functions.shtml

United Nations, Department of Public Information. (n.d.). *About Permanent Observers* [Website]. Retrieved 12 August 2018 from: http://www.un.org/en/sections/member-states/about-permanent-observers/index.html

United Nations, Department of Public Information. (n.d.). *Non-member States* [Website]. Retrieved 12 August 2018 from: http://www.un.org/en/sections/member-states/non-member-states/index.html
United Nations, Department of Public Information. (n.d.). *Revitalization of the work of the General Assembly*. [Website]. Retrieved 9 July 2018 from: http://www.un.org/en/ga/revitalization/revital current.shtml

United Nations, Department of Public Information. (2016, October 16). Spotlighting Human Costs of Wide-spread Arms Transfers, First Committee Delegates Say States Must Bolster Global Response to Effectively Stem Illicit Flows (GA/DIS/3558) [Meetings Coverage]. Retrieved 12 August 2018 from: https://www.un.org/press/en/2016/gadis3558.doc.htm

United Nations, Department of Public Information. (2017, October 30). First Committee Submits Six Drafts to General Assembly, One Calling for Immediate Start of Negotiations on Treaty Preventing Outer Space Arms Race [Meetings Coverage]. Retrieved 12 August 2018 from: https://www.un.org/press/en/2017/gadis3591.doc.htm

United Nations, Department of Public Information. (2017, November 2). Closing Session, First Committee Approves Draft on Chemical Weapons Convention, Sending Total of 58 Texts to General Assembly (GA/DIS/3594) [Meetings Coverage]. Retrieved 9 July 2018 from: https://www.un.org/press/en/2017/gadis3594.doc.htm

United Nations, General Assembly. (n.d.). *About the General Assembly* [Website]. Retrieved 12 August 2018 from: http://www.un.org/en/ga/about/index.shtml

United Nations, General Assembly. (n.d.). *Disarmament and International Security (First Committee)*. [Website]. Retrieved 12 August 2018 from: http://www.un.org/en/ga/first/index.shtml

United Nations, General Assembly. (n.d.). *Functions and Powers of the General Assembly* [Website]. Retrieved 12 August 2018 from: http://www.un.org/en/ga/about/background.shtml

United Nations, General Assembly. (n.d.). *General Committee* [Website]. Retrieved 12 August 2018 from: http://www.un.org/en/ga/general/general.shtml



United Nations, General Assembly, Sixth session. (1952). Regulation, Limitation and Balanced Reduction of all Armed Forces and all Armaments; International Control of Atomic Energy (A/RES/502(VI)) [Resolution]. Adopted on the report of the First Committee. Retrieved 12 August 2018 from: http://undocs.org/A/RES/502(VI)

United Nations, General Assembly, Fourteenth session. (1959). *General and Complete Disarmament* (A/RES/1378(XIV)) [Resolution]. Adopted on the report of the First Committee. Retrieved 12 August 2018 from: http://undocs.org/A/RES/1378(XIV)

United Nations, General Assembly, Twenty-fourth session. (1969). *Question of General and Complete Disarmament (A/RES/2602(XXIV))* [Resolution]. Adopted on the report of the First Committee. Retrieved 12 August 2018 from: http://undocs.org/A/RES/2602(XXIV)

United Nations, General Assembly, Tenth Special Session. (1978). *Final Document of the Tenth Special Session of the General Assembly (S-10/2)* [Resolution]. Adopted on the report of the Ad Hoc Committee of the Tenth Special Session. Retrieved 12 August 2018 from: http://undocs.org/A/S-10/4

United Nations, General Assembly, Forty-seventh session. (1993). *Revitalization of the Work of the General Assembly (A/RES/47/233)* [Resolution]. Retrieved 12 August 2018 from: http://undocs.org/A/RES/47/233

United Nations, General Assembly, Sixty-eighth session. (2013). *Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security (A/68/98)* [Note by the Secretary-General]. Retrieved 12 August 2018 from: http://undocs.org/A/68/98

United Nations, General Assembly. (2013, May 7). Statement by the Chairperson of the Fourth Committee at the Ad hoc working group on the revitalization of the work of the General Assembly: Meeting on working methods. Retrieved 12 August 2018 from:

http://www.un.org/en/ga/president/67/issues/revitalization/Statement%20by%20the%20Chairperson%20of%20the%20Fourth%20Committee%20(7%20May%20-%20English)%20.pdf

United Nations, General Assembly, Seventieth session. (2015). *Developments in the Field of Information and Telecommunications in the Context of International Security (A/RES/70/237)* [Resolution]. Adopted on the report of the First Committee (A/70/455). Retrieved 12 August 2018 from: http://undocs.org/A/RES/70/237

United Nations, General Assembly, Seventieth session. (2015). *Objective Information on Military Matters, Including Transparency of Military Expenditures (A/RES/70/21)* [Resolution]. Adopted on the report of the First Committee (A/70/451). Retrieved 12 August 2018 from: http://undocs.org/A/RES/70/21

United Nations, General Assembly, Seventy-first session. (2016). *Developments in the Field of Information and Telecommunications in the Context of International Security (A/RES/71/28)* [Resolution]. Adopted on the report of the First Committee (A/71/445). Retrieved 12 August 2018 from: http://undocs.org/A/RES/71/28

United Nations, General Assembly, Seventy-first session. (2016). *The Illicit Trade in Small Arms and Light Weapons in All its Aspects (A/RES/71/48)* [Resolution]. Adopted on the report of the First Committee (A/71/450). Retrieved 12 August 2018 from: https://undocs.org/A/RES/71/48

United Nations, General Assembly, Seventy-first session. (2016). Proposed Strategic Framework for the Period of 2018-2019, Par Two: Biennial Programme Plan, Programme 3: Disarmament (A/71/6(Prog.3)). Retrieved 16 September 2017 from: http://www.undocs.org/A/71/6(prog.3)

United Nations, General Assembly, Seventy-first session. (2017). *Biennial programme plan and priorities for the period 2018-2019 (A/71/6/Rev.1)*. Retrieved 12 August 2018 from: https://undocs.org/A/71/6/Rev.1



United Nations, General Assembly, Seventy-first session. (2017). *Revitalization of the work of the General Assembly (A/RES/71/323)* [Resolution]. Retrieved 12 August 2018 from: http://undocs.org/en/A/RES/71/323

United Nations, General Assembly, Seventy-second session. (2017). *Action on Draft Resolutions and Decisions Under Disarmament and International Security Agenda Items (Items 90 to 106)* (A/C.1/72/CRP.3) [Chair's Suggested Programme]. Retrieved 9 July 2018 from: https://www.un.org/en/ga/first/72/pdf/crp3-action-on-resolutions-2017.pdf

United Nations, General Assembly, Seventy-second session. (2017). *Allocation of Agenda Items for the Seventy-second session of the General Assembly (A/72/252)* [Agenda]. Adopted by the General Assembly at its 2nd plenary meeting. Retrieved 24 September 2017 from: http://undocs.org/en/A/72/252

United Nations, General Assembly, Seventy-second session. (2017). *Developments in the field of information and telecommunications in the context of international security (A/C.1/72/L.44)* [Agenda item]. Retrieved 12 August 2018 from: https://undocs.org/A/C.1/72/L.44

United Nations, General Assembly, Seventy-second session. (2017). *Documents of the First Committee* (A/C.1/72/INF/1) [Note by the Secretariat]. Retrieved 09 July 2018 from: http://undocs.org/A/C.1/72/INF/1

United Nations, General Assembly, Seventy-second session. (2017). *Implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (A/RES/72/43)* [Resolution]. Retrieved 12 August 2018 from: http://undocs.org/A/RES/72/43

United Nations, General Assembly, Seventy-third session. (2018). *Provisional agenda of the seventy-third regular session of the General Assembly (A/73/150)*. Retrieved 15 September 2018 from: https://undocs.org/A/73/150

United Nations Office at Geneva. (2009). *An Introduction to the Conference* [Website]. Retrieved 12 August 2018 from:

http://www.unog.ch/80256EE600585943/%28httpPages%29/BF18ABFEFE5D344DC1256F3100311CE9 ?OpenDocument

United Nations Office for Disarmament Affairs. (n.d.). *About Us* [Website]. Retrieved 12 August 2018 from: http://www.un.org/disarmament/about/

United Nations Office for Disarmament Affairs. (n.d.). *United Nations Disarmament Commission* [Website]. Retrieved 12 August 2018 from: https://www.un.org/disarmament/institutions/disarmament-commission/

United Nations Office for Disarmament Affairs. (2016). *Developments in the Field of Information and Telecommunications in the Context of International Security* [Website]. Retrieved 12 August 2018 from: https://www.un.org/disarmament/topics/informationsecurity/

Weis, T. et al. (2004). The United Nations and Changing World Politics. Boulder: Westview Press.



I. Developments in the Field of Information and Telecommunications in the Context of International Security

"Few technologies have been as powerful as information and communications technologies in reshaping economies, societies and international relations. Cyberspace touches every aspect of our lives. The benefits are enormous, but these do not come without risk. Making cyberspace stable and secure can only be achieved through international cooperation, and the foundation of this cooperation must be international law and the principles of the UN Charter... Our efforts in this realm must uphold the global commitment to foster an open, safe and peaceful Internet."77

Introduction

Information and communications technology (ICTs) have profoundly impacted modern societies, from bridging the digital divide to fueling new economic opportunities in developed, developing, and least developed countries (LDCs). Represent the providing new opportunities for development, these technologies have also created new challenges for security and privacy on a global scale. Represent to technologies and technical infrastructure that enable modern communication such as devices, utilities, and software, as well as any other devices or components used to access the digital world. Due to its decentralized nature, ICTs are vulnerable to interference and tampering by state and non-state actors, making it a topic of great importance to the General Assembly First Committee.

The Committee has pursued international norms for cyberspace as the use of ICTs grows globally. ⁸² The World Economic Forum labeled cyberattacks, involving data fraud and theft, as the third-greatest global threat following extreme weather events and natural disasters. ⁸³ The topic has been of interest to the General Assembly since the 1990s, but its ever growing complexity has made it difficult to address, with several attempts being made throughout the years. ⁸⁴ Recent years have marked high-profile incidents of cyberattacks and malicious acts, and some experts have predicted that these acts will only increase in frequency. ⁸⁵ Meanwhile, the international system has not reached a consensus on what qualifies as a cyberattack and how to apply state responsibility. ⁸⁶

International and Regional Framework

Article 51 of the 1945 *Charter of the United Nations* (Charter) has not only played a key role in directing the actions of Member States in cyberspace, but it has provided a common foundation for further documents on the matter of threats to security and acts of aggression.⁸⁷ In 1998, the General Assembly First Committee adopted resolution 53/70 of 1999 on "Developments in the Field of Information and Telecommunications in the Context of International Security," identifying an emerging sphere of issues for the Committee to address.⁸⁸ The resolution recognized the benefits of ICTs for development while also

⁷⁷ UNODA, Fact Sheet: Developments in the Field of Information and Telecommunications in the Context of International Security, 2016.

⁷⁸ ITU, ICT trends in LDCs, 2018.

⁷⁹ Ibid.

⁸⁰ UN ICT Task Force, Tools for Development Using Information and Communications Technology to Achieve the Millennium Development Goals, 2003, p. 4.

⁸¹ Ibid.

⁸² ITU, ICT trends in LDCs, 2018.

⁸³ World Economic Forum, *Insight Report: The Global Risk Report 2018: 13th Edition*, 2018.

⁸⁴ UNODA, Fact Sheet: Developments in the Field of Information and Telecommunications in the Context of International Security, 2016.

⁸⁵ World Economic Forum, Insight Report: The Global Risk Report 2018: 13th Edition, 2018.

⁸⁶ Geneva Internet Platform, UN GGE, 2018; Väljataga, Back to Square One? The Fifth UN GGE Fails to Submit a Conclusive Report at the UN General Assembly, 2017.

⁸⁷ Charter of the United Nations, 1945.

⁸⁸ UN General Assembly, *Developments in the field of information and telecommunications in the context of international security (A/RES/53/70)*, 1999.



noting that malicious use could prove to be a threat to international peace and security. ⁸⁹ In 2000, the UN General Assembly adopted resolution 56/574 on "Combating the criminal misuse of information technologies." ⁹⁰ 2004 saw the creation of the Group of Governmental Experts (GGE) and reports such as the Secretary-General's 2010 note 65/201 on the "Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security." ⁹¹ In the following years, the General Assembly began to shift the conversation about ICTs and user rights, notably through its 2009 resolution 64/211 on "Creation of a global culture of cybersecurity and taking stock of national efforts to protect critical information infrastructures," which sought to identify the capacity of Member States to address cybersecurity concerns. ⁹² These resolutions and reports also demonstrated the growing need for public-private cooperation, something the International Telecommunication Union (ITU) has encouraged and assisted in. ⁹³

The *Convention on Cybercrime of the Council of Europe* (2001), better known as the Budapest Convention, comprises the only international binding legal document on cybercrime and provides a very comprehensive model for future efforts. ⁹⁴ The Budapest Convention brought together countries by circumventing the issue of definitions and focusing on ideas regarding liability and addressing problems with attributing responsibility. ⁹⁵ Many Member States that signed the Convention agreed with how the Convention addressed the problem of finding bad actors that could hide their identities and locations using proxies, as well as implementing laws that help states respond to and aid other Member States during an attack. ⁹⁶ Similarly, the African Union drafted the *African Union Convention on Cyber Security* in 2011, and after several delays, adopted it in 2014. ⁹⁷ The Convention mostly focused on issues relating to e-commerce and digital privacy, however, it did attempt to address the growing issues of cybercrime and cyber security. ⁹⁸ Only 10 countries have signed the Convention, with two having ratified it. ⁹⁹

The 2030 Agenda for Sustainable Development (2030 Agenda) of 2015 called for a substantial global expansion of vocational and technical training on ICTs in developing regions, identifying ICTs at the forefront of issues necessary for a sustainable future. ¹⁰⁰ Several Sustainable Development Goals (SDGs) relate to ICTs and their use, including SDGs 4, 8, 9, 16, and 17. ¹⁰¹ SDG 16 specifically focuses on peace, justice, and the creation of strong institutions, which directly ties to the topic of ICTs and international peace and security. ¹⁰²

Role of the International System

The international system has seen incremental progress since 1998 in the form of reports passed by the GGE, as well as work carried out by other UN bodies such as the ITU and the United Nations Institute for Disarmament Research (UNIDR), which help advise and define key terms for the committee. ¹⁰³ The ITU,

⁸⁹ Ibid.

⁹⁰ UN General Assembly, Combating the criminal misuse of information technologies (A/RES/56/121), 2002.

⁹¹ Geneva Internet Platform, UN GGE, 2018; UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/65/201), 2010, p. 8.

⁹² UN General Assembly, Creation of a global culture of cybersecurity and taking stock of national efforts to protect critical information infrastructures (A/RES/64/211), 2009, p. 8.

⁹³ Ibid., p. 4.

⁹⁴ Council of Europe, Convention on Cybercrime, 2001.

⁹⁵ Ibid., pp. 6-7.

⁹⁶ Ibid., pp. 11-13.

⁹⁷ Kenyanito, Africa moves towards a common cyber security legal framework, *Accessnow.org*, 2014.

⁹⁸ African Union, African Union Convention on Cyber Security and Personal Data Protection, 2018.

¹⁰⁰ UN General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1), 2015, pp. 14-26.

¹⁰¹ Ibid., p. 14.

¹⁰² Ibid., pp. 25-26.

¹⁰³ UNIDR, Report of the International Security Cyber Issues Workshop, 2016, pp. 57-59.



UNIDR, and the UN Group on Cybercrime and Cybersecurity assist with the creation of programs that support the development of an international framework.¹⁰⁴

The ITU has 193 members and nearly 800 private sector and academic members, and is responsible for publishing the Global Cybersecurity Index (GCI) as well as the Global Cybersecurity Agenda (GCA). 105 Since establishing the GCA in 2007, the ITU has been a key player in promoting regional and international dialogue between Member States, as well as the creation of summits where Member States can collaborate and share their cybersecurity knowledge. 106 The ITU also plays a critical role in assisting Member States that lack the capacity to create or implement adequate cybersecurity strategies through its National Computer Incident Response Teams, as well as building capacity on the national and regional levels. 107 Conducting cyber drills is also part of ITU's mission to assist the international community with cybersecurity readiness, as they are designed to "function as a platform for cooperation, information sharing, and discussions on current cybersecurity issues as well as a hands-on exercise." 108 The ITU published the GCI in 2017, which uses five pillars to gauge progress and commitment to cybersecurity for all 193 Member States. The 2017 GCI report indicates that there has been progress in all five pillars (Legal, Technical, Organizational, Capacity-Building, and Cooperation), but there remain concerns that although some countries are developing capacity and infrastructure, they lack strong cybersecurity expertise such as individuals able to carry out the implementation of cybersecurity strategies and maintain them. Regionally, ITU initiatives to counter cybercrime have been taken in concert with civil society organizations.

The UN GGE was not able to reach a consensus on its first attempt in 2004 to answer some of the more contentious questions related to the use of data, the impact of ICTs on military affairs, and technology transfer to developing countries. ¹⁰⁹ However, the 2009 iteration of the GGE succeeded in publishing a report with recommendations on the creation and sharing of information, legislation and ICTs security strategies, as well as the introduction of common terms and definitions for ICTs security. ¹¹⁰ In Secretary-General report 65/201 of 2011, the outgoing GGE called continuing study on the topic. ¹¹¹ This GGE met three times and published report A/68/98 of 2013 on the "Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security," which stated that the Charter applied to cyberspace, and that state sovereignty applied to how Member States conduct themselves in cyberspace within their ICTs infrastructure. ¹¹² The 2013 GGE report indicates that Member States should not resort to proxies to carry out unlawful tactics and must moderate the behavior of non-state actors to the best of their abilities. ¹¹³ The strong recommendations and agreements in the 2013 report were supported by the subsequent 2015 report. ¹¹⁴ The most substantive agreement in the 2015 GGE report was the application of international law and all existing international obligations of Member States to ICTs and Member State usage of ICTs. ¹¹⁵ The 2016-2017

¹⁰⁴ ITU, Global Cybersecurity Index (GCI), 2017.

¹⁰⁵ Ibid.

¹⁰⁶ ITU, Regional Cybersecurity Centres, 2018.

¹⁰⁷ ITU, National CIRT, 2018.

¹⁰⁸ ITU, ITU Cyberdrills, 2018.

¹⁰⁹ UNODA, Fact Sheet: Developments in the Field of Information and Telecommunications in the Context of International Security, 2015.

¹¹⁰ UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/65/201), 2010, p. 8.

¹¹¹ UNODA, Fact Sheet: Developments in the Field of Information and Telecommunications in the Context of International Security, 2015.

¹¹² UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International: Security Note by the Secretary-General (A/68/98), 2013, p. 8.

¹¹³ lbid., p. 8.

¹¹⁴ UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/70/174), 2015, pp. 15-17.

¹¹⁵ Ibid., p. 12.



meetings of the GGE saw increasing polarization among Member States, which ultimately prevented the group from reaching an agreement or publishing a report in 2017. The GGE did not agree on the severity of cyberattacks and Member States were averse to clauses that would possibly grant Member States the ability to respond with military force if they were victims of a cyberattack. One such disagreement was about the role that the Geneva Conventions played when addressing issues like cyberattacks, as the Geneva Conventions only specifically address conventional warfare.

The challenges ICTs present with respect to security led North Atlantic Treaty Organization (NATO) to create the Cooperative Cyber Defense Centre of Excellence (CCDCOE) which aims to "enhance the capability, cooperation and information sharing among the members of NATO and partners in cyber defense by virtue of education, research and development, lessons learned and consultation." 119 The CCDCOE has since drafted many reports that inform how NATO and NATO allies view the application of international law to ICTs and cyberspace through works such as the Tallinn Manual and Tallinn Manual 2.0.120 Where the Tallinn Manual focused on more severe instances of cyber attacks. Tallinn Manual 2.0. focuses on the more common type of cyber incidents which did not fall under the umbrella of incidents that require the use of force. 121 The difficulty of reaching a consensus for working definitions makes creating and enacting reports and legislation uniquely difficult. 122 For example, the NATO CCDCOE has compiled a list of working definitions by different countries with each varying in specificity and intent. 123 Moreover, the uneven development of cyber capabilities between Member States has made addressing all the challenges at once a difficult endeavor. 124The GGE, with the help of other UN bodies, was able to provide some direction to identify specific areas of interest. 125 Three of the most-cited issues are the increased use of proxies, the need for capacity-building, and the importance of confidence-building to ease tensions between Member States. 126

Addressing the Use of Proxies by Actors

Proxies are tools that keep users and their private information, such as location, anonymous. ¹²⁷ They act as a mediator between the user and the rest of cyberspace, allowing the user to encrypt any information before it reaches cyberspace. ¹²⁸ This allows proxies to anonymously attack critical infrastructure and interfere in Member States' internal and political affairs, making it difficult for Member States to pursue any deterrence or legal action. ¹²⁹

UNIDR published a 2017 report outlining the increasing frequency of the proxy attacks and warned that reactions of force by Member States may be counterproductive to the pursuit of peace. ¹³⁰ A growing

¹¹⁶ Korzak, UN GGE on Cybersecurity: The End of an Era?, 2017.

¹¹⁷ Väljataga, Back to Square One? The Fifth UN GGE Fails to Submit a Conclusive Report at the UN General Assembly, 2017.

¹¹⁸ Geneva Convention relative to the Protection of Civilian Persons in Time of War (2nd part), 1949.

¹¹⁹ NATO CCDCOE, About Cyber Defence Centre, 2018.

¹²⁰ NATO CCDCOE, Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations, 2018.

¹²¹ Ibid.

¹²² Korzak, UN GGE on Cybersecurity: The End of an Era?, 2017.

¹²³ NATO Cooperative Cyber Defence Centre of Excellence, Cyber Definitions, 2018.

¹²⁴ UNIDR, Report of the International Security Cyber Issues Workshop, 2016, pp. 8-9.

¹²⁵ UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/70/174), 2016

¹²⁶ UNODA, Disarmament Study Series: No. 33: Developments in the Field of Information and Telecommunications in the Context of International Security, 2011.

¹²⁷ Greenemeier, Seeking Address: Why Cyber Attacks Are So Difficult to Trace Back to Hackers, 2011.

¹²⁹ Center for Strategic and International Studies, Significant Cyber Incidents Since 2006, 2018; UNIDIR, The United Nations, Cyberspace and International Peace and Security: Responding to Complexity in the 21st Century, 2017, pp. 47-49.

UNIDIR, The United Nations, Cyberspace and International Peace and Security: Responding to Complexity in the 21st Century, 2017, p. 9.



number of Member States have expressed interest in applying Chapters VI and VII of the Charter and the *Geneva Conventions* directly to the use of ICTs, while private sector entities are calling for the creation of an entirely new convention for cyberspace following the WannaCry and NotPetya cyber campaigns. ¹³¹ WannaCry was a cyber campaign where government hackers and state-sponsored cyber tools were targeted by proxy actors. ¹³² Such cyber campaigns highlighted the consequences of government-developed cyberwarfare tools becoming publicly available. ¹³³ Additionally, it demonstrated the legal complexity of assigning liability for malicious cyber acts and reinforced reservations expressed by the private sector about creating tools that would allow individuals to gain access to devices that they do not own. ¹³⁴ In response, corporations like Microsoft have call for a "Digital Geneva Convention" that would address the risk of governments allowing cyber tools to fall into the wrong hands. ¹³⁵

Capacity Building in Developing Countries and LDCs

The 2017 GCI showed that much progress had been made globally throughout all five pillars of its commitment assessment but indicated concern for further progress in LDCs and developing countries. ¹³⁶ Current progress has come with caveats, such as the lack of well-trained cybersecurity experts, without whom it will become difficult to implement cybersecurity strategies recommended by General Assembly resolution 64/211 (2010). ¹³⁷ The first GGE report in 2010 recommended that developed countries work with LDCs and other developing countries to build capacity for responding to ICTs misuse. ¹³⁸

An example of a multilateral partnership working to solve capacity issues is the Partnership on Africa's Integration and Development Agenda 2017-2027 (PAIDA). ¹³⁹ PAIDA has set the continent's infrastructure as a high priority, with a focus on the continent's ICTs broadband and infrastructure in order to accelerate development. ¹⁴⁰ Another goal in this partnership is to create a more synchronized ICTs policy among African countries with the belief that coordinated policies will accelerate development. ¹⁴¹ Many African Member States have significantly increased connectivity through the creation and maintenance of national and regional Internet exchange points, which allows the region to better share information and cyber strategies. ¹⁴²

Confidence Building

The lack of a consensus report for the 2016/2017 UN GGE meeting represented a step backward. Analysts from the private sector and civil society attributed the lack of progress to weak relations among many Member States, particularly in light of past conflicts and political disputes. Previous GGE reports

Minárik & Van der Meij. Geneva Conventions Apply to Cyberspace: No Need for a 'Digital Geneva Convention, 2017; Geneva Convention relative to the Protection of Civilian Persons in Time of War (2nd part), 1949.

¹³² Meyer & Stauffacher, WannaCry, the Geneva Digital Convention and the urgent need for Cyber Peace: A commentary by ICT4Peace, 2017.

¹³³ Ibid.

¹³⁴ Meredith, Microsoft calls for 'new Digital Geneva Convention' after spate of high-profile cyberattacks, *CNBC*, 2018.
¹³⁵ Ihid

¹³⁶ ITU, Global Cybersecurity Index (GCI), 2017.

¹³⁷ UN General Assembly, Creation of a global culture of cybersecurity and taking stock of national efforts to protect critical information infrastructures (A/RES/64/211), 2009, p. 5.

¹³⁸ UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/65/201), 2010, pp. 4-7.

¹³⁹ UNOSAA, Framework for a Renewed UN/AU Partnership on Africa's Integration and Development Agenda 2017-2027 (PAIDA), 2015.

¹⁴⁰ Ibid., p. 26.

¹⁴¹ Ibid., p. 26.

¹⁴² Ibid., p. 14.

¹⁴³ Väljataga, Back to Square One? The Fifth UN GGE Fails to Submit a Conclusive Report at the UN General Assembly, 2017.

¹⁴⁴ Ibid.



emphasized the importance of confidence-building measures as a top recommendations for progress. 145 Two primary and recurring objections during GGE meetings have revolved around the application of Article 51 of the Charter, as well as the application of international humanitarian law to cyberspace. 146 Both of these issues were raised in previous GGE discussions due to the perception that they would instigate the concept of a militarized cyberspace. 147 At the 2016/2017 GGE meeting, the Cuban representative voiced concerns that the application of Article 51 of the Charter would "convert cyberspace into a theater of military operations" and essentially allow Member States to respond to anonymous cyber attacks with force. 148 This fear was further compounded by the overwhelming number of Member States that lack the capacity to implement any agreements or cyber strategies. 149

Conclusion

The mandate of the General Assembly First Committee focuses on international peace and security, thus the Committee is concerned with the actions of Member States in cyberspace which impact international security. ¹⁵⁰ The growth and importance of ICTs in the world only further increases the need to quickly create legislation that is fit to address the fast-moving problems that it creates. ¹⁵¹ With no clear definitions fully accepted throughout the international community, these challenges will most likely continue to grow and threaten peace and security. ¹⁵² The rights of peoples to remain anonymous in cyberspace and have access to ICTs must be balanced with the need to address the growing problem of cyberattacks and the threat of cyberterrorism. ¹⁵³ A world with no clear plan in the face of increasingly malicious ICTs use will struggle to remain peaceful and stable. ¹⁵⁴

Further Research

Delegates should consider the following questions during their research: What role can the GGE have in today's political climate? How can the international community better foster an environment that promotes cooperation when investigating cyberattacks and other malicious uses of ICTs? What role can developing countries and LDCs play in combating malicious uses of ICTs? How can the international community better assist developing countries and LDCs with capacity-building and cyber security strategies? What can the General Assembly do, within its mandate, to reconcile the diverging views on content use and state sovereignty when dealing with a borderless Internet?

¹⁴⁵ UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International: Security Note by the Secretary-General (A/68/98), 2013, pp. 4-8; UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/65/201), 2010, p. 8; UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/70/174), 2015, pp. 7-10.

¹⁴⁶ UN General Assembly, Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/70/174), 2015, pp. 1-2; Väljataga, Back to Square One? The Fifth UN GGE Fails to Submit a Conclusive Report at the UN General Assembly, 2017.

¹⁴⁷ Korzack, International Law and the UN GGE Report on Information Security, 2015; Just Security, Declaration by Miguel Rodriguez, Representative of Cuba, at the Final of Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International and Telecommunications International Security, 2017.

¹⁴⁸ Charter of the United Nations, 1945; Väljataga, Back to Square One? The Fifth UN GGE Fails to Submit a Conclusive Report at the UN General Assembly, 2017.

¹⁴⁹ UN DPI, Half of all countries aware but lacking national plan on cybersecurity, 2017; ITU, Global Cybersecurity Index, 2017.

¹⁵⁰ Charter of the United Nations, 1945, Art. 11; UNIDIR, The United Nations, Cyberspace and International Peace and Security: Responding to Complexity in the 21st Century, 2017, pp. 1-5.

¹⁵¹ UNIDIR, The United Nations, Cyberspace and International Peace and Security: Responding to Complexity in the 21st Century, 2017, pp. 1-5.

¹⁵² Ibid., pp. 47-49.

¹⁵³ Ibid., pp. 47-49.

¹⁵⁴ Center for Strategic and International Studies, Significant Cyber Incidents Since 2006, 2018.



Annotated Bibliography

Council of Europe. (2001). *Convention on Cybercrime*. Retrieved 25 July 2018 from: https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168 0081561

The Convention on Cybercrime of the Council of Europe, also known as the Budapest Convention, stands as the best example of an international binding agreement addressing certain issues such as the behavior of Member States in cyberspace, malicious use of ICTs and responses to such events. Delegates can use this document to understand what concessions were made in order to further understand how some states view ICTs issues, and their possible solutions. This is an EU agreement and so, special attention must be paid when considering the views of non-European Member States on the issues addressed by this Convention.

Geneva Internet Platform. (2018). *UN GGE* [Website]. Retrieved 25 July 2018 from: https://dig.watch/processes/ungge

This source provides a detailed history of the UN GGE. The work of the GGE is of the utmost importance and relevance, specifically for the First Committee. Previous reports published by the GGE are important milestones for advancing the cybersecurity agenda and serve as an example of consensus building. Delegates would do well to review this page thoroughly, understand what the GGE has done in the past, and where recent talks have ended in the latest gathering of the GGE.

International Telecommunication Union. (2017). *Global Cybersecurity Index (GCI)* [Report]. Retrieved 4 July 2018 from: https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-GCI.01-2017-PDF-E.pdf

The GCI is a survey used to measure how committed a Member State is to cybersecurity through a series of questions with the output being a GCI score. All 193 Member States are covered in the report, but only 134 Member States have responded to the survey. The rest of the results were compiled from open-source research. The GCI is an invaluable tool for delegates trying to understand the position of specific Member States with regards to developing a cybersecurity plan, as well as their current progress. The CGI has two iterations that produced reports in 2014 and 2017 and is currently on its 3rd iteration which has not yet issued a report.

Minárik, T. & K. Van der Meij. (2017, July 18). Geneva Conventions Apply to Cyberspace: No Need for a 'Digital Geneva Convention'. *NATO Cooperative Cyber Defense Centre of Excellence*. Retrieved 23 July 2018 from: https://ccdcoe.org/geneva-conventions-apply-cyberspace-no-need-digital-geneva-convention.html

This article published by NATO CCDCOE lends some arguments in favor of avoiding the creation and adoption of an entirely separate Geneva Convention for cyberspace. Minárik and Meij argue that the current Geneva Conventions would suffice and that any attempts to create something as complex as the Geneva Convention when Member States cannot agree on definitions is unrealistic. This short article provides delegates with a realistic description of the impact of negotiating a new Geneva Convention. Delegates are advised to consider this source as providing extensive detail on a single perspective of this complex issue.

United Nations General Assembly, Fifty-eighth session. (2003). *Developments in the field of information and telecommunications in the context of international security (A/RES/58/32)* [Resolution]. Adopted on the report of the First Committee (A/58/457). Retrieved 3 July 2018 from: http://undocs.org/A/RES/58/32)

This is the first resolution requesting the Secretary-General to conduct a study to address and review any methods or technology that could be used to strengthen global information and telecommunications systems. This document establishes one of the many iterations of the UN GGE and tasks them with creating recommendations that would address the topic of ICTs and how they relate to international peace and security. It is an indispensable source for delegates to understand the initial attempts of the international community to address cybersecurity.



United Nations Institute for Disarmament Research. (2016). *Report of the International Security Cyber Issues Workshop Series*. Retrieved 3 August 2018 from:

http://www.unidir.org/files/publications/pdfs/report-of-the-international-security-cyber-issues-workshop-series-en-656.pdf

While it is crucial that delegates review the three published GGE reports from 2010, 2013, and 2015, this material can help clarify some of the key issues that have had strong impacts on recent international ICTs discussions. Additionally, it notes which aspects of the topic are contentious among Member States. It is highly recommended that delegates familiarize themselves with this report to gain a deeper understanding of issues which still lack consensus.

United Nations Institute for Disarmament Research. (2017). *The United Nations, Cyberspace and International Peace and Security: Responding to Complexity in the 21st Century* [Report]. Retrieved 6 July 2018 from: http://www.unidir.org/files/publications/pdfs/the-united-nations-cyberspace-and-international-peace-and-security-en-691.pdf

This is a report by the United Nations Institute for Disarmament Research about ICTs and other related issues that have been on the agenda for nearly 20 years. This report contains substantive information about the use of proxies by non-state actors in order to commit malicious acts and how states might address this growing issue. Moreover, the report is relatively recent, providing much needed relevance for such a fast-moving issue. This report will provide delegates with key information to address two subtopics in their working papers, particularly the issue of proxies and confidence-building.

United Nations Office for Disarmament Affairs. (2011). *Disarmament Study Series: No. 33: Developments in the Field of Information and Telecommunications in the Context of International Security.* Retrieved 4 July 2018 from: https://unoda-web.s3-accelerate.amazonaws.com/wp-content/uploads/assets/HomePage/ODAPublications/DisarmamentStudySeries/PDF/DSS 33.pdf

This publication primarily focuses on the 2009/2010 UN GGE report on Developments in the Field of Information and Telecommunications in the Context of International Security, as well as Secretary-General reports A/66/152 and A/65/154, which focus on the perspectives of Member States on this crucial topic. This is a useful tool for delegates trying to understand various Member States' positions and their specific concerns. Delegates can focus on pages 5-8 for a brief summary of the concerns laid out by the GGE as well as some recommendations.

United Nations Office for Disarmament Affairs. (2016). Fact Sheet: Developments in the Field of Information and Telecommunications in the Context of International Security. Retrieved 20 July 2018 from: https://unoda-web.s3.amazonaws.com/wp-content/uploads/2016/01/Information-Security-Fact-Sheet-Jan2016.pdf

This is a short list of events surrounding the topic of ICTs development and international security, including the work of the GGE. This factsheet is written partially as a bullet point list for quick referencing, and thus is not meant to be all-encompassing, rather it should be a starting point for delegates to guide their research on the GGE and the topic in general. This can be a good source for delegates to quickly understand what is broadly covered in some of the GGE reports.

Väljataga, A. (2017, September 1). Back to Square One? The Fifth UN GGE Fails to Submit a Conclusive Report at the UN General Assembly. *NATO Cooperative Cyber Defense Centre of Excellence*. Retrieved 3 July 2018 from: https://ccdcoe.org/back-square-one-fifth-un-gge-fails-submit-conclusive-report-un-general-assembly.html

This source presents a review of the current state of negotiations being conducted by the GGE from the perspective of NATO. It also contains a brief history of past negotiations and links to reports written by the GGE about the topic and elaborates on the complex issues that make the topic so difficult to resolve. Delegates can use this piece to clarify the complex political polarization on the topic, and how these divergent views may be the major factor preventing further progress on this issue.



Bibliography

African Union. (2018). *African Union Convention on Cyber Security and Persona Data Protection* [Website]. Retrieved 10 October 2018 from: https://au.int/en/treaties/african-union-convention-cyber-security-and-personal-data-protection

Bowcott, O. (2017, August 23). Dispute along cold war lines led to collapse of UN cyberwarfare talks. *The Guardian*. Retrieved 20 July 2018 from: https://www.theguardian.com/world/2017/aug/23/un-cyberwarfare-negotiations-collapsed-in-june-it-emerges

Center for Strategic and International Studies. (2018). *Significant Cyber Incidents Since 2006*. Retrieved 2 August 2018 from: https://csis-prod.s3.amazonaws.com/s3fs-public/180425 Significant Cyber Events List.pdf?pqetcWcwV7mvAo33 IAZFIQVQz7.E0qh

Charter of the United Nations. (1945). Retrieved 3 July 2018 from: http://www.un.org/en/charter-united-nations/

Council of Europe. (2001). *Convention on Cybercrime*. Retrieved 25 July 2018 from: https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168 0081561

Geneva Convention relative to the Protection of Civilian Persons in Time of War (2nd part). (1949). Retrieved 2 November 2018 from:

http://www.ohchr.org/EN/ProfessionalInterest/Pages/ProtectionOfCivilianPersons.aspx Geneva Internet Platform. (2018). *UN GGE* [Website]. Retrieved 25 July 2018 from: https://dig.watch/processes/ungge

Greenemeier, L. (2011, June 11). Seeking Address: Why Cyber Attacks Are So Difficult to Trace Back to Hackers. *Scientific American*. Retrieved 3 August 2018 from: https://www.scientificamerican.com/article/tracking-cyber-hackers/

International Telecommunication Union. (2017). *Global Cybersecurity Index (GCI)* [Report]. Retrieved 4 July 2018 from: https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-GCI.01-2017-PDF-E.pdf

International Telecommunication Union. (2018). ICTs *trends in the LDCs* [Website]. Retrieved 20 July 2018 from: https://www.itu.int/en/ITU-D/LDCs/Pages/ICT-Facts-and-Figures-2017.aspx

International Telecommunication Union. (2018). *ITU Cyberdrills* [Website]. Retrieved 5 August 2018 from: https://www.itu.int/en/ITU-D/Cybersecurity/Pages/itu-cyberdrills.aspx

International Telecommunication Union. (2018). *National CIRT* [Website]. Retrieved 5 August 2018 from: https://www.itu.int/en/ITU-D/Cybersecurity/Pages/Organizational-Structures.aspx

International Telecommunication Union. (2018). *Regional Cybersecurity Centres* [Website]. Retrieved 5 August 2018 from: https://www.itu.int/en/ITU-D/Cybersecurity/Pages/Regional Cybersecurity Centre.aspx

International Telecommunication Union. (2018). *Regional Initiatives and Projects/Activities* [Website]. Retrieved 11 September 2018 from: https://www.itu.int/en/ITU-D/Regional-
Projects.aspx

Just Security. (2017). Declaration by Miguel Rodriguez, Representative of Cuba, at the Final of Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International and Telecommunications International Security. Retrieved 8 August 2018 from: https://www.justsecurity.org/wp-content/uploads/2017/06/Cuban-Expert-Declaration.pdf



Kenyanito, E. P. (2014, June 2). Africa moves towards a common cyber security legal framework. *Accessnow.org*. Retrieved 10 October 2018 from: https://www.accessnow.org/africa-moves-towards-a-common-cyber-security-legal-framework/

Khalip, A. (2018, February 19). U.N. chief urges global rules for cyber warfare. *Reuters*. Retrieved 7 July 2018 from: https://www.reuters.com/article/us-un-guterres-cyber/u-n-chief-urges-global-rules-for-cyber-warfare-idUSKCN1G31Q4

Korzak, E. (2015, December 2). International Law and the UN GGE Report on Information Security. *Just Security*. Retrieved 8 August 2018 from: https://www.justsecurity.org/28062/internationallaw-gge-report-information-security/

Korzak, E. (2017, July 31). UN GGE on Cybersecurity: The End of an Era?. *The Diplomat*. Retrieved 6 July 2018 from: https://thediplomat.com/2017/07/un-gge-on-cybersecurity-have-china-and-russia-just-made-cyberspace-less-safe/

Maurer, T. & K. Taylor. (2018, March 2). Outlook on International Cyber Norms: Three Avenues for Future Progress. *Just Security*. Retrieved 7 July 2018 from: https://www.justsecurity.org/53329/outlook-international-cyber-norms-avenues-future-progress/

Meredith, S. (2018, January 26). Microsoft calls for 'new Digital Geneva Convention' after spate of high-profile cyberattacks. *CNBC*. Retrieved 11 September 2018 from: https://www.cnbc.com/2018/01/26/microsoft-calls-for-new-digital-geneva-convention-after-spate-of-high-profile-cyberattacks.html

Meyer, P. & D. Stauffacher (2017). WannaCry, the Geneva Digital Convention and the urgent need for Cyber Peace: A commentary by ICT4Peace. ICTs *for Peace Foundation*. Retrieved 25 July 2018 from: https://ict4peace.org/wp-content/uploads/2017/06/CyberWannacry-forICT4PeaceMay222017-1-1.pdf

Minárik, T. & K. Van der Meij. (2017, July 18). Geneva Conventions Apply to Cyberspace: No Need for a 'Digital Geneva Convention'. *NATO Cooperative Cyber Defense Centre of Excellence*. Retrieved 23 July 2018 from: https://ccdcoe.org/geneva-conventions-apply-cyberspace-no-need-digital-geneva-convention.html

NATO Cooperative Cyber Defence Centre of Excellence. (2018). *About Cyber Defence Centre* [Website]. Retrieved 10 August 2018 from: https://ccdcoe.org/about-us.html

NATO Cooperative Cyber Defence Centre of Excellence. (2018). *Cyber Definitions* [Website]. Retrieved 7 October 2018 from: https://ccdcoe.org/cyber-definitions.html

NATO Cooperative Cyber Defence Centre of Excellence. (2018). *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* [Report]. Retrieved 10 August 2018 from: https://ccdcoe.org/sites/default/files/documents/CCDCOE Tallinn Manual Onepager web.pdf

Perlroth, N. (2018, March 28). Boeing Possibly Hit by 'WannaCry' Malware Attack. *The New York Times*. Retrieved 11 September 2018 from: https://www.nytimes.com/2018/03/28/technology/boeing-wannacry-malware.html

Schjølberg, S. (2017). *ITU Global Cybersecurity Agenda High-Level Experts Group: Report of the Chairman of HLEG.* Retrieved 3 August 2018 from: https://www.itu.int/en/action/cybersecurity/Documents/gca-chairman-report.pdf

Tikk-Ringas, E. (2012). Developments in the Field of Information and Telecommunication in the Context of International Security: Work of the UN First Committee 1998-2012. ICTs for Peace Foundation. Retrieved 20 July 2018 from: https://ict4peace.org/wp-content/uploads/2012/08/Eneken-GGE-2012-Brief.pdf



United Nations, Department of Public Information. (2017, July 5). *Half of all countries aware but lacking national plan on cybersecurity, UN agency reports* [News Article]. Retrieved 3 July 2018 from: https://news.un.org/en/story/2017/07/560922-half-all-countries-aware-lacking-national-plan-cybersecurity-un-agency-reports

United Nations, General Assembly, Third session. (1948). Convention on the Prevention and Punishment of the Crime of Genocide (A/RES/260 (III)). Retrieved 12 October 2018 from: http://undocs.org/A/RES/260(III)

United Nations, General Assembly, Fifty-third Session. (1999). *Developments in the field of information and telecommunications in the context of international security (A/RES/53/70)* [Resolution]. Adopted on the report of the First Committee (A/53/576). Retrieved 3 July 2018 from: https://undocs.org/A/RES/53/70

United Nations, General Assembly, Fifty-sixth Session. (2002). *Combating the criminal misuse of information technologies (A/RES/56/121)* [Resolution]. Adopted on the report of the First Committee (A/56/574). Retrieved 21 July 2018 from: http://undocs.org/A/RES/56/121

United Nations General Assembly, Fifty-eighth session. (2003). *Developments in the field of information and telecommunications in the context of international security (A/RES/58/32)* [Resolution]. Adopted on the report of the First Committee (A/58/457)]. Retrieved 3 July 2018 from: http://undocs.org/A/RES/58/32)

United Nations, General Assembly, Sixty-fourth session. (2009). *Creation of a global culture of cybersecurity and taking stock of national efforts to protect critical information infrastructures* (A/RES/64/211) [Resolution]. Adopted on the report of the Second Committee (A/64/422/Add.3). Retrieved 21 July 2018 from: https://undocs.org/A/RES/64/211

United Nations, General Assembly, Sixty-fifth session. (2010). *Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/65/201)* [Report]. Retrieved 20 July 2018 from: https://undocs.org/A/65/201

United Nations, General Assembly, Sixty-eighth session. (2013). *Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/68/98)* [Report]. Retrieved 8 July 2018 from: http://www.unidir.org/files/medias/pdfs/developments-in-the-field-of-information-and-telecommunications-in-the-context-of-international-security-2012-2013-a-68-98-eng-0-518.pdf

United Nations, General Assembly, Seventieth session. (2015). Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security: Note by the Secretary-General (A/70/174) [Report]. Retrieved 6 July 2018 from: https://undocs.org/A/70/174

United Nations, General Assembly, Seventieth session. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*. Retrieved 17 October 2018 from: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

United Nations, General Assembly, Seventy-second session. (2017). Developments in the field of information and telecommunications in the context of international security: Report of the Secretary-General (A/72/315). Retrieved 3 July 2018 from: http://undocs.org/A/72/315

United Nations ICTs Task Force. (2003). *Tools for Development Using Information and Communications Technology to Achieve the Millennium Development Goals* [Working Paper]. Retrieved 11 September 2018 from: https://www.itu.int/net/wsis/stocktaking/docs/activities/1103056110/ICTMDGFinal.pdf



United Nations Institute for Disarmament Research. (2016). *Report of the International Security Cyber Issues Workshop Series*. Retrieved 3 August 2018 from:

http://www.unidir.org/files/publications/pdfs/report-of-the-international-security-cyber-issues-workshop-series-en-656.pdf

United Nations Institute for Disarmament Research. (2017). *The United Nations, Cyberspace and International Peace and Security: Responding to Complexity in the 21st Century* [Report]. Retrieved 6 July 2018 from: http://www.unidir.org/files/publications/pdfs/the-united-nations-cyberspace-and-international-peace-and-security-en-691.pdf

United Nations Office for Disarmament Affairs. (2011). *Disarmament Study Series: No. 33: Developments in the Field of Information and Telecommunications in the Context of International Security.* Retrieved 4 July 2018 from: https://unoda-web.s3-accelerate.amazonaws.com/wp-content/uploads/assets/HomePage/ODAPublications/DisarmamentStudySeries/PDF/DSS 33.pdf

United Nations Office for Disarmament Affairs. (2015). Fact Sheet: Developments in the Field of Information and Telecommunications in the Context of International Security. Retrieved 20 July 2018 from: https://unoda-web.s3-accelerate.amazonaws.com/wp-content/uploads/2015/07/Information-Security-Fact-Sheet-July2015.pdf

United Nations Office for Disarmament Affairs. (2016). Fact Sheet: Developments in the Field of Information and Telecommunications in the Context of International Security. Retrieved 20 July 2018 from: https://unoda-web.s3.amazonaws.com/wp-content/uploads/2016/01/Information-Security-Fact-Sheet-Jan2016.pdf

United Nations Office for Disarmament Affairs. (2018). *Developments in the field of information and telecommunications in the context of international security* [Website]. Retrieved 20 July 2018 from: https://www.un.org/disarmament/topics/informationsecurity/

United Nations Office of the Special Adviser on Africa, Regional Coordination Mechanism for Africa. (2015). *Framework for a Renewed UN/AU Partnership on Africa's Integration and Development Agenda 2017-2027 (PAIDA)*. Retrieved 10 August 2018 from: http://www.un.org/en/africa/osaa/pdf/pubs/2015paidaframework.pdf

United Nations Secretary-General. (2017, September 17). Secretary-General's message to Broadband Commission for Sustainable Development. Retrieved 3 July 2018 from: https://www.un.org/sg/en/content/sg/statement/2017-09-17/secretary-generals-message-broadband-commission-sustainable

United Nations System, Chief Executives Board for Coordination. (2013). *Action on Cybersecurity/ Cybercrime* [Website]. Retrieved 20 July 2018 from: https://www.unsystem.org/content/action-cybersecuritycybercrime

Väljataga, A. (2017, September 1). Back to Square One? The Fifth UN GGE Fails to Submit a Conclusive Report at the UN General Assembly [Article]. *NATO Cooperative Cyber Defense Centre of Excellence*. Retrieved 3 July 2018 from: https://ccdcoe.org/back-square-one-fifth-un-gge-fails-submit-conclusive-report-un-general-assembly.html

World Economic Forum. (2018). *Insight Report: The Global Risks Report 2018: 13th Edition.* Retrieved 11 September 2018 from: http://www3.weforum.org/docs/WEF_GRR18 Report.pdf



II. Nuclear Disarmament and International Security

Introduction

Nuclear weapons are one of the largest threats to international peace and security. ¹⁵⁵ In response to the devastating 1945 nuclear bombings of Hiroshima and Nagasaki, the United Nations (UN) General Assembly adopted resolution 1(I) in 1946, calling for the elimination of atomic weapons. ¹⁵⁶ However, between 1945 and 1950, the amount of nuclear weapons in the world increased from 2 to 304, and throughout the Cold War, the number of nuclear weapons increased exponentially, reaching a peak of over 70,000 weapons in 1987. ¹⁵⁷ While the efforts of the international nuclear disarmament regime have decreased this figure to under 15,000 warheads in 2017, nuclear weapons continue to pose a major international security threat. ¹⁵⁸ The Bulletin of Atomic Scientists published their 2018 assessment of nuclear risk and noted that "the risk that nuclear weapons may be used – intentionally or because of miscalculation – grew last year around the globe." ¹⁵⁹ UN Secretary-General Antonio Guterres also acknowledged the growing threat posed by weapons of mass destruction, and nuclear weapons in particular. ¹⁶⁰

Currently, nine UN Member States possess nuclear weapons, with several other Member States having nuclear weapon-sharing capabilities. ¹⁶¹ According to the *Treaty on the Non-Proliferation of Nuclear Weapons* (NPT) (1968), a nuclear weapon is an explosive device that releases energy as a result of nuclear fission. ¹⁶² While nearly all UN Member States acknowledge that nuclear disarmament is fundamental for achieving international peace and security, nuclear weapon states (NWS) are reluctant to destroy their nuclear stockpiles for strategical, tactical, and security purposes. ¹⁶³ This lack of commitment and adherence to the international nuclear non-proliferation regime hampers the ability of the international community to achieve complete and total disarmament. ¹⁶⁴

The General Assembly First Committee is mandated with seeking solutions to achieve the complete and total disarmament of nuclear weapons. ¹⁶⁵ Although the First Committee has aided in making the nuclear non-proliferation regime one of the most developed aspects of international law, commitment and compliance to both legislative and regulatory frameworks is required in order to sustain the regime. ¹⁶⁶ The challenges of implementation have been demonstrated most recently with challenges in the denuclearization process of the Korean Peninsula. ¹⁶⁷ The international community has also experienced challenges in limiting the further development of nuclear weapons and pursuing good-faith measures for total disarmament, due to a lack of agreement on the way forward and the inconsistent application of existing nuclear disarmament frameworks. ¹⁶⁸ Progress in these areas will require additional frameworks and enforcement mechanisms, as well as the universal participation of all NWS. ¹⁶⁹

¹⁵⁵ UNODA, Nuclear Weapons.

¹⁵⁶ UN General Assembly, Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(I)), 1946, p.1.

¹⁵⁷ Kristensen & Norris, Status of World Nuclear Forces, 2018.

¹⁵⁸ Kristensen & Norris, Status of World Nuclear Forces, 2018; Nuclear Threat Initiative, *Nuclear Disarmament Resource Collection*, 2018.

¹⁵⁹ Bulletin of the Atomic Scientists, *It is 2 minutes to midnight: 2018 Doomsday Clock Statement*, 2018.

¹⁶⁰ UN DPI, Confidence-Building Measures Supporting Arms Control Extremely Critical, Secretary-General Tells Security Council Meeting on Non-proliferation (SG/SM/18858-SC/13167-DC/3755), 2018.

¹⁶¹ Nuclear Threat Initiative, *Nuclear Disarmament Resource Collection*, 2018.

¹⁶² UN General Assembly, *Treaty on the Non-Proliferation of Nuclear Weapons*, 1968.

¹⁶³ Nuclear Threat Initiative, *Nuclear Disarmament Resource Collection*, 2018.

¹⁶⁴ Council on Foreign Relations, *The Global Nuclear Nonproliferation Regime*, 2012.

¹⁶⁵ UN DPI, Disarmament and International Security (First Committee), 2018.

¹⁶⁶ Council on Foreign Relations, The Global Nuclear Nonproliferation Regime, 2012; IAEA, Sustaining a Nuclear Security Regime, 2018, p.1.

¹⁶⁷ IAEA, Fact Sheet on DPRK Nuclear Safeguards.

¹⁶⁸ Nuclear Threat Initiative, Nuclear Disarmament Resource Collection, 2018; Council on Foreign Relations, The Global Nuclear Nonproliferation Regime, 2012.

¹⁶⁹ UNODA, *Nuclear Weapons*.



International and Regional Framework

Since the development and first use of nuclear weapons, the international community has established many agreements and frameworks to restrict their development and use. ¹⁷⁰ The NPT was adopted in 1968 to curb the spread and development of nuclear weapons and to promote nuclear disarmament. ¹⁷¹ The NPT also includes provisions to promote the peaceful use of nuclear energy to ensure nuclear disarmament and non-proliferation measures do not infringe on states' ability to use nuclear technology for peaceful purposes. ¹⁷² According to Article VI, all parties are required to enter into negotiations on a treaty for "general and complete disarmament under strict and effective international control." ¹⁷³

In 1996, the CD adopted the *Comprehensive Nuclear-Test-Ban Treaty* (CTBT).¹⁷⁴ The Treaty has two main commitments: States parties are prohibited from carrying out a "nuclear weapon test explosion or any other nuclear explosion," and are further prohibited from urging other states to cause such explosions.¹⁷⁵ While the CTBT has wide support and has supported a norm against nuclear testing, it has not yet entered into force as eight key states have not ratified the Treaty.¹⁷⁶ In 2017, the General Assembly adopted resolution 72/70 to urge the necessary states parties to ratify the Treaty and enter it into force.¹⁷⁷

The most recent international instrument on nuclear weapons is the *Treaty on the Prohibition of Nuclear Weapons* (TPNW), adopted by the General Assembly in 2017.¹⁷⁸ The Treaty prohibits the testing, development, stockpiling, use, and threat of use of nuclear weapons.¹⁷⁹ The treaty further requires NWS to immediately decommission and destroy all of their nuclear arsenals with the cooperation and oversight of the International Atomic Energy Agency (IAEA).¹⁸⁰ While it is the first comprehensive nuclear disarmament treaty, it lacks the support of the NWS, none of which participated in the drafting or adoption of the Treaty.¹⁸¹

The General Assembly has also adopted several key resolutions on nuclear disarmament. The first resolution adopted by the UN General Assembly in 1946 was resolution 1(I) on the "establishment of a committee to deal with the problems raised by the discovery of atomic energy." ¹⁸² The resolution establishes the commission to control atomic materials, to create effective safeguards for the control and use of atomic energy, and to eliminate all atomic weapons and related WMDs. ¹⁸³ In 1959, the General Assembly adopted resolution 14/1378 that calls on all states to establish measures to achieve general and complete disarmament. ¹⁸⁴ Recently, in 2015, the General Assembly adopted resolution 70/40 on the total elimination of nuclear weapons. ¹⁸⁵ The resolution reaffirms disarmament commitments in Article VI of the NPT, and specifically calls on nuclear-armed states to completely eliminate their nuclear arsenals. ¹⁸⁶ The resolution also calls on states to enter bilateral, regional, and multilateral agreements to

¹⁷⁰ UNODA, Nuclear Weapons.

¹⁷¹ UN General Assembly, *Treaty on the Non-Proliferation of Nuclear Weapons*, 1968.

¹⁷² Ibid

¹⁷³ Ibid., Art VI

¹⁷⁴ UN General Assembly, Comprehensive Nuclear-Test-Ban Treaty (A/RES/50/245), 1996.

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

¹⁷⁷ UN General Assembly, Comprehensive Nuclear-Test-Ban Treaty (A/RES/72/70), 2017.

¹⁷⁸ UN Conference to Negotiate a Legally Binding Instrument to Prohibit Nuclear Weapons, Leading Towards Their Total Elimination, *Treaty on the Prohibition of Nuclear Weapons (A/CONF.229/2017/8)*, 2017.

¹⁷⁹ Ibid.

¹⁸⁰ Ibid.

¹⁸¹ Treaty on the prohibition of nuclear weapons – the "Ban Treaty", European Parliament Think Tank, 2018.

¹⁸² UN General Assembly, Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(I)), 1946.

¹⁸³ Ihid

¹⁸⁴ UN General Assembly, General and Complete Disarmament (A/RES/1378 (XIV)), 1959.

¹⁸⁵ UN General Assembly, *United action with renewed determination towards the total elimination of nuclear weapons* (A/RES/70/40), 2015.

¹⁸⁶ Ibid.



reduce existing stockpiles, increase transparency and confidence-building, and establish further nuclear-weapon free zones to support total nuclear disarmament. 187

Role of the International System

As the primary deliberative body responsible for international security and disarmament, the General Assembly First Committee has taken a leading role in framing and guiding progress on nuclear disarmament by providing normative frameworks on disarmament and international security matters, 188 In addition to resolution 1(1) of 1946, the General Assembly has adopted dozens of resolutions on topics of nuclear disarmament, regional nuclear-weapon free zones (NWFZs), nuclear weapons and terrorism, and other topics. 189 In 2015, the General Assembly adopted resolution 65/65, which calls for states to immediately begin negotiations on a fissile material prohibition treaty. 190 In 2017, the General Assembly adopted resolution 72/38; the document calls on nuclear-armed states to immediately halt improvement and development nuclear weapons projects and to pursue disarmament measures for total nuclear disarmament. 191 The resolution also calls for the commencement of a legally-binding nuclear disarmament agreement and for the entry into force of the CTBT. 192 Resolution 72/31, also adopted in 2017, calls upon all states to sign and ratify the Treaty on the Prohibition of Nuclear Weapons. 193 Resolution 72/31 also calls upon states to create additional measures to encourage and assist with the process of total nuclear disarmament and to involve civil society organizations in these processes. 194 Resolutions adopted by the General Assembly are not legally binding, but as the universal decisionmaking body within the UN, they provide a normative framework to guide further action on nuclear disarmament. 195

The General Assembly also held three special sessions on disarmament in 1978, 1982, and 1998. ¹⁹⁶ In all three sessions, Member States acknowledged the need to pursue total nuclear disarmament through international legal instruments and strong, internationally-based enforcement mechanisms. ¹⁹⁷ The special sessions also called on states to pursue regional measures to support disarmament and to form bilateral and multilateral cooperative arrangements to this end, inviting the participation of all Member States. ¹⁹⁸ Since the last session in 1988, several General Assembly resolutions have called for a fourth special session to be held; a working group was established to decide objectives and agenda items for the session but it has not announced the next session. ¹⁹⁹

The Committee on Disarmament, later renamed the Conference on Disarmament (CD), was created in 1979 to be the central disarmament negotiating body in the international system. ²⁰⁰ The committee was instrumental in negotiating key nuclear instruments including the CTBT, but it has remained deadlocked

¹⁸⁷ UN General Assembly, *United action with renewed determination towards the total elimination of nuclear weapons* (A/RES/70/40), 2015.

¹⁸⁸ Nuclear Threat Initiative, *United Nations General Assembly*, 2018.

¹⁸⁹ UN, Dag Hammarskjöld Library, *UN Documentation: Disarmament*, 2018.

¹⁹⁰ UN General Assembly, *Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (A/RES/65/65)*, 2011.

¹⁹¹ UN General Assembly, *Nuclear disarmament (A/RES/72/38)*, 2017.

¹⁹² Ibid.

¹⁹³ UN General Assembly, *Taking forward multilateral nuclear disarmament negotiations (A/RES/72/31)*, 2017. ¹⁹⁴ Ibid.

¹⁹⁵ Nuclear Threat Initiative, *United Nations General Assembly*, 2018.

¹⁹⁶ UN, Dag Hammarskjöld Library, *UN Documentation: Disarmament*, 2018.

¹⁹⁷ UN General Assembly, Final Document o the Tenth Special Session of the General Assembly (S-10/2), 1978; UN General Assembly, Report of the Ad Hoc Committee to the Twelfth Special Session (A/S-12-32), 1982; UN General Assembly, Report of the Committee of the Whole of the Fifteenth Special Session (A/S-15/50), 1988.

¹⁹⁸ Ibid.

¹⁹⁹ UN, Dag Hammarskjöld Library, *UN Documentation: Disarmament*, 2018.

²⁰⁰ Nuclear Threat Initiative, Conference on Disarmament (CD), 2018.



since 1996 due to an inability to reach consensus on a program of work.²⁰¹ The CD still convenes each year to discuss topics it should address, but because it has consistently failed to adopt a program of work, it is thus unable to conduct formal negotiations on any topic.²⁰² While many entities, including the General Assembly, have called on the CD to adopt a programme of work and begin negotiations on further nuclear disarmament agreements, the CD deadlock has left Member States to negotiate such agreements in other forums.²⁰³

The United Nations Office for Disarmament Affairs (UNODA) was created in 1998 to promote nuclear disarmament and non-proliferation and to support regimes in the disarmament of WMDs.²⁰⁴ UNODA supports dialogue on disarmament and confidence-building measures by providing organizational support and current information on disarmament initiatives and agreements.²⁰⁵ UNODA also has a Weapons of Mass Destruction Branch that participates in multilateral non-proliferation and disarmament efforts and cooperates with entities including the General Assembly and CD on nuclear disarmament.²⁰⁶

The IAEA, established in 1957, is another organization tasked with promoting cooperation on all areas of nuclear technology to further "peace, health, and prosperity." ²⁰⁷ IAEA supports the implementation of the NPT, particularly in administering international safeguards and promoting peaceful applications of nuclear energy. ²⁰⁸ The IAEA Department of Safeguards provides verification oversight and technical assistance to support arms control and disarmament and ensure safeguards are being implemented and enforced. ²⁰⁹ In addition, the Department of Nuclear Safety and Security develops nuclear security requirements for Member States by providing assessment and evaluation of current protocols and providing recommendations consistent with international legal obligations on nuclear materials and weapons. ²¹⁰

Regional bodies have also taken strides in addressing nuclear disarmament and international security. The North Atlantic Treaty Organization (NATO) has a stated commitment to arms control, non-proliferation, and nuclear disarmament; however, NATO is also committed to continuing to utilize nuclear weapons as a deterrent strategy for as long as nuclear weapons exist.²¹¹ The Organization for Security and Cooperation in Europe (OSCE) is also committed to the non-proliferation of nuclear weapons.²¹² To this end, OSCE assists its Member States in developing national action plans to support improved legislation, training, and awareness-raising activities to promote non-proliferation.²¹³ OSCE has also entered into partnerships with UN entities working on this topic, including UNODA, by sharing information and working with Member States to implement key provisions in the UN disarmament regime.²¹⁴

Regional entities have also been instrumental in leading disarmament efforts by establishing NWFZs.²¹⁵ NWFZs are delineated geographical areas where all the states within the region agree not to manufacture, test, acquire, or possess nuclear weapons.²¹⁶ There are currently five NWFZs; the first was the Latin American NWFZ established by the *Treaty of Tlatelolco* in 1967, followed by the South Pacific

²⁰¹ Nuclear Threat Initiative, Conference on Disarmament (CD), 2018; Reaching Critical Will, Civil Society statement on the high-level meeting on revitalizing the Conference on Disarmament and taking forward multilateral negotiations, 2010.

²⁰² International Law and Policy Institute, *Conference on Disarmament*, 2015.

²⁰³ UN General Assembly, *Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (A/RES/65/65)*, 2011; Nuclear Threat Initiative, *Conference on Disarmament (CD)*, 2018.

²⁰⁴ UNODA, *About Us*.

²⁰⁵ Ibid.

²⁰⁶ UNODA, UNODA Structure.

²⁰⁷ IAEA, Statute, 1956.

²⁰⁸ IAEA, Key Roles.

²⁰⁹ IAEA, Department of Safegaurds.

²¹⁰ IAEA, Division of Nuclear Security.

²¹¹ NATO, NATO's nuclear deterrence policy and forces, 2018.

²¹² OSCE, Non-proliferation of weapons of mass destruction.

²¹³ Ibid.

²¹⁴ OSCE, Keeping a Lid on Nuclear, Chemical, and Biological Weapons, 2016.

²¹⁵ Arms Control Association, *Nuclear-Weapon-Free Zones (NWFZ) At a Glance*, 2017.

²¹⁶ Ibid.



NWFZ through the 1985 *Treaty of Rarotonga*, the Southeast Asia NWFZ established by the 1995 *Treaty of Bangkok*, the African NWFZ through the 1996 *Treaty of Pelindaba*, and Central Asian NWFZ through the 2006 *Treaty of Semipalatinsk*.²¹⁷

Civil society organizations (CSOs) also play a key role in furthering nuclear disarmament and contributing to the development of international instruments and their enforcement. For example, Reaching Critical Will advocates for disarmament by participating in the General Assembly First Committee to monitor progress on various topics and provide input and participate in these discussions. ²¹⁸ RCW also conducts research, provides analysis and monitoring of progress and challenges, and participates in reporting advances in key disarmament forums. ²¹⁹ The International Campaign to Abolish Nuclear Weapons (ICAN) is another CSO that has worked closely with Member States and intergovernmental organizations to draft the TPNW. ²²⁰ ICAN has also hosted several summits on the humanitarian impact of nuclear weapons and coordinates the advocacy and campaign work of hundreds of affiliated disarmament groups that urge states to sign and ratify the treaty. ²²¹ ICAN was awarded the Nobel Peace Prize in 2017 in recognition of its efforts in global nuclear disarmament. ²²²

Implementing Existing Nuclear Weapons Frameworks

The international community has adopted numerous frameworks to govern various aspects of nuclear weapons and related topics, but despite this, nuclear weapons remain a critical threat to global peace and security. ²²³ Despite repeated calls for total global disarmament and several frameworks to encourage and support disarmament, tangible disarmament efforts have largely stalled in recent years. ²²⁴ Following the Cold War, there was a substantial reduction in nuclear weapons stockpiles as NWS reduced their combined weapons from over 70,000 in 1987 to approximately 14,200 in 2018. ²²⁵ While the number of weapons have decreased overall, the deployment of a single nuclear weapon in a densely populated area could kill millions of people and create a serious humanitarian catastrophe. ²²⁶

Despite reductions in the quantity of weapons, as well as international frameworks calling for good-faith efforts for disarmament, NWS continue to make significant financial and military investments in their nuclear arsenals.²²⁷ While some modernization schemes are designed solely to keep current systems up to date, many programs are designed to improve existing systems and expand delivery mechanisms, while other NWS are actively increasing their arsenals and stockpiles.²²⁸ In recent years, NWS have spent tens of billions of dollars each year modernizing their weapons systems; it is expected that the United States of America alone may spend up to a trillion dollars on nuclear weapons modernization within the next 30 years.²²⁹ Additionally, substantial investments in existing nuclear arsenals signals that NWS are continuing to reinforce nuclear weapons as cornerstones of military and defense policy.²³⁰ The UN Secretary-General Antonio Guterres has repeatedly questioned the validity of the continued investment in and reliance on nuclear weapons.²³¹ Guterres requested that states rethink costly non-

²¹⁷ Ibid

²¹⁸ Reaching Critical Will, Who we are.

²¹⁹ Ibid.

²²⁰ International Campaign to Abolish Nuclear Weapons, *Campaign overview*.

²²¹ Ibid.

²²² Ibid.

²²³ International Campaign to Abolish Nuclear Weapons, *Nuclear weapons timeline*; UNODA, *Nuclear Weapons*.

²²⁴ UNODA, Nuclear Weapons.

²²⁵ Kristensen & Norris, Status of World Nuclear Forces, 2018.

²²⁶ UNODA, *Nuclear Weapons*.

²²⁷ Archer et al., Move the Nuclear Weapons Money: A Handbook for civil society and legislators, 2016.

²²⁸ Global nuclear weapons: Modernization remains the priority, Stockholm International Peace Research Institute, 2017.

²²⁹ Archer et al., Move the Nuclear Weapons Money: A Handbook for civil society and legislators, 2016.

²³⁰ Miasnikov et al., *Modernizing nuclear arsenals: Whether and how*, 2015.

²³¹ UN Office of the Secretary-General, *Remarks on the International Day for the Total Elimination of Nuclear Weapons*, 2017.



essential modernization programs, as they run counter to states' obligation to pursue nuclear disarmament and contribute to stalled progress on this issue.²³²

The NPT is the longest-standing nuclear disarmament framework, but inconsistent application and the non-participation of key NWS is undermining the treaty's effectiveness. ²³³ At the time of its adoption in 1968, there were only five recognized NWS: the United States, the Russian Federation, the People's Republic of China, the United Kingdom, and France. ²³⁴ The treaty binds all States parties to pursue good-faith negotiations in pursuit of total disarmament and prevent non-NWS from acquiring such weapons. ²³⁵ While the five NWS party to the NPT have made significant reductions in their nuclear arsenals, they have not pursued good-faith negotiations for nuclear disarmament, as required by Article VI. ²³⁶ In addition, four NWS are not party to the treaty at all: India, Pakistan, the Democratic People's Republic of Korea (DPRK), and Israel. ²³⁷ While DPRK initially signed the NPT in 1985, it later withdrew in 2003. ²³⁸ By rejecting the NPT, these states are functionally exempt from NPT reviews and oversight processes, which are vital for the realization of Article VI on nuclear disarmament. ²³⁹ Additionally, these states are not subject to IAEA safeguards and inspections, leaving the state of their nuclear programs uncertain. ²⁴⁰

The *Treaty on the Prohibition of Nuclear Weapons* (2017) is the first comprehensive nuclear disarmament treaty, but the realization of its provisions is limited by the lack of participation of all NWS.²⁴¹ None of the nine NWS attended negotiations, nor have any signed the treaty.²⁴² In addition to the NWS themselves, many military allies of NWS have also refrained from signing the treaty; for example, not a single NATO Member State has signed the ban treaty.²⁴³ In the case of NATO, many states argue that the ban treaty is at odds with the alliance's nuclear deterrence policy.²⁴⁴ The treaty calls on \states to irreversibly eliminate their entire nuclear program, but without the participation of NWS, the treaty provisions cannot be fulfilled.²⁴⁵ Critics have also noted that the lack of verification measures to track and ensure disarmament further weaken the enforcement potential of the treaty, should NWS accede to the agreement.²⁴⁶

Negotiating a Fissile Material Cut-Off Treaty

The international community has long recognized that in order to stop the production and proliferation of nuclear weapons, the means and materials of production must be restricted.²⁴⁷ Fissile material includes plutonium and high-enriched uranium (HEU), which are required for the production of nuclear weapons.²⁴⁸ While HEU is required for nuclear weapons production, it also has other uses including fuel production, medical isotope research, and naval and space propulsion.²⁴⁹ The different level of enrichment required

²³² UN Office of the Secretary-General, Statement at High-Level Plenary Meeting of the General Assembly to Commemorate and Promote the International Day for the Total Elimination of Nuclear Weapons, 2018.

²³³ Hudson, 50 years of the NPT, Campaign for Nuclear Disarmament, 2018.

²³⁴ UNODA. Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

²³⁵ UN General Assembly, *Treaty on the Non-Proliferation of Nuclear Weapons*, 1968.

²³⁶ Hudson, 50 years of the NPT, Campaign for Nuclear Disarmament, 2018.

²³⁷ UNODA, Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

²³⁸ Nuclear Threat Initiative, North Korea, 2018.

²³⁹ Hudson, 50 years of the NPT, Campaign for Nuclear Disarmament, 2018.

²⁴⁰ Ibid.

²⁴¹ Treaty on the prohibition of nuclear weapons – the "Ban Treaty", European Parliament Think Tank, 2018.

²⁴² Ibid.

²⁴³ Ibid.

²⁴⁴ Ibid.

²⁴⁵ UN Conference to Negotiate a Legally Binding Instrument to Prohibit Nuclear Weapons, Leading Towards Their Total Elimination, *Treaty on the Prohibition of Nuclear Weapons (A/CONF.229/2017/8)*, 2017.

²⁴⁶ Onderco, Why nuclear weapon ban treaty is unlikely to fulfil its promise, 2017; Nuclear Threat Initiative, Treaty on the Prohibition of Nuclear Weapons, 2018.

²⁴⁷ UN General Assembly, General and complete disarmament (A/RES/48/75), 1994.

²⁴⁸ IAEA, Management of high enriched uranium for peaceful purposes: Status and trends, 2005, pp. 1-3.

²⁴⁹ Nuclear Threat Initiative, Civilian HEU Reduction and Elimination Resource Collection, 2017.



for nuclear weapons versus for civilian uses does allow for production to be separated and for verification measures to distinguish between enrichment levels and different applications. ²⁵⁰

While non-NWS party to the NPT are prohibited from producing fissile materials, NWS and states not party to the NPT have no such restriction. ²⁵¹ In resolution 48/75 of 1993, the General Assembly recognized that continued fissile material production could threaten nuclear disarmament efforts and called on states to negotiate a treaty to prohibit the production of fissile materials for nuclear weapons. ²⁵² Discussions around such an agreement began in the CD, but disagreements around verification measures stalled progress and other efforts to revitalize discussions have been largely unproductive. ²⁵³ Drafts of a Fissile Material Cut-off Treaty (FMCT) have been prepared, but they cannot be seriously discussed in the CD until it adopts a program of work, and no other forum has been presented to host negotiations. ²⁵⁴

Member States have disagreed about the scope and implementation of such a treaty. While some states want to limit the scope of the treaty to the production of new fissile material, other states argue this approach is insufficient and that an effective treaty must also cover existing fissile material stockpiles. As of 2017, global stockpiles of weapons-grade uranium was enough to create 76,000 nuclear weapons, and 99% of the stockpile is held by NWS. There are further disagreements on what limits might be placed on existing stockpiles. An additional challenge is that several NWS use weapons-grade fissile material to power military equipment, such as naval reactors. Negotiations on limits and uses of FMCT would need to include specific provisions to safeguard and verify these uses as well.

Verification is another point of disagreement between Member States. One treaty draft calls for the IAEA to determine and oversee any necessary verification measures, while another draft does not address verification at all. ²⁶⁰ Non-NWS party to the NPT are already prohibited from producing fissile materials, and therefore this is already included in their IAEA verification requirements. ²⁶¹ However, verification requirements could have a significant impact on NWS and states not party to the NPT. ²⁶² Because the FMCT would principally serve to restrict and monitor the activities of these nine countries, the full participation of these states is paramount to the success of the treaty. ²⁶³ There are also logistical challenges to proposed verification regimes; estimates by UNIDIR suggest that full verification of all fissile material production in NWS alone could double or triple the IAEA safeguards budget. ²⁶⁴

Finally, as presented in ongoing discussions and present treaty drafts, verification measures focused on fissile material production would be largely limited to known HEU plants. ²⁶⁵ Limiting verification to known HEU production could allow states to divert pre-enrichment uranium from other plants, allowing non-compliant states to operate clandestine uranium-enrichment plants that would be difficult to detect and therefore not subject to verification. ²⁶⁶ Requiring the verification of all parts of the nuclear fuel cycle and

²⁵⁰ Hippel, *The FMCT and Cuts in Fissile Material Stockpiles*, 1999, pp. 35-37.

²⁵¹ Arms Control Association, *Fissile Material Cut-off Treaty (FMCT) at a Glance*, 2018.

²⁵² UN General Assembly, *General and complete disarmament (A/RES/48/75)*, 1994.

²⁵³ Arms Control Association, *Fissile Material Cut-off Treaty (FMCT) at a Glance*, 2018.

²⁵⁴ Nuclear Threat Initiative, *Proposed Fissile Material (Cut-Off) Treaty (FMCT)*, 2018.

²⁵⁵ UN DPI, First Committee Debates Future of Fissile Material Cut Off Treaty, Other Instruments, as Building Blocks towards Nuclear Weapon-Free World (GA/DIS/3581), 2017.

²⁵⁶ Arms Control Association, Fissile Material Cut-off Treaty (FMCT) at a Glance, 2018; International Panel on Fissile Materials, Fissile material stocks, 2018.

²⁵⁷ Nuclear Threat Initiative, *Proposed Fissile Material (Cut-Off) Treaty (FMCT)*, 2018.

²⁵⁸ UNIDIR, A Fissile Material Cut-off Treaty: Understanding the Critical Issues, 2010, p. 35.

²⁵⁹ Ibid., p. 35

²⁶⁰ Nuclear Threat Initiative, *Proposed Fissile Material (Cut-Off) Treaty (FMCT)*, 2018.

²⁶¹ Ibid.

²⁶² Ibid.

²⁶³ Ibid.

²⁶⁴ UNIDIR, A Fissile Material Cut-off Treaty: Understanding the Critical Issues, 2010, p. 41.

²⁶⁵ Ibid., p. 43.

²⁶⁶ Ibid., pp. 42-43.



not just HEU would allow for greater detection of non-compliance, but would also significantly increase the complexity and cost of such verification measures.²⁶⁷

Denuclearizing the Korean Peninsula

The DPRK's acquisition and development of nuclear weapons has tested the limits of existing international instruments and tools to combat nuclear proliferation. ²⁶⁸ The DPRK ascended to the NPT in 1985 and initially complied with IAEA safeguards and investigations. ²⁶⁹ In 1992, an IAEA report reported inconsistencies in DPRK's declared plutonium production. ²⁷⁰ After additional IAEA investigations into DPRK's nuclear activities, DPRK withdrew from the IAEA and disallowed IAEA inspectors to continue their work under the Safeguards Agreement. ²⁷¹ Despite repeated discussions between the IAEA and DPRK, there has been no progress or agreement on a program of work and the DPRK has refused to give IAEA access to its nuclear facilities since 1992. ²⁷² Additional discussions between a variety of organizations and states yielded little progress on greater transparency or access into the DPRK nuclear program. ²⁷³ In 2003 the IAEA notified the DPRK that it was non-compliant with key safeguard measures. ²⁷⁴ In response, the DPRK announced its withdrawal from the NPT, effectively releasing the DPRK from its safeguard agreement with the IAEA. ²⁷⁵ Attempts at multilateral approaches since 2003 have proved unsuccessful. ²⁷⁶ In 2006 the Security Council imposed a sanctions regime in response to the DPRK's missile launches and nuclear testing. ²⁷⁷ The sanctions have been extended and remain in place as of 2018. ²⁷⁸

The lack of IAEA inspections leaves the size and strength of the DPRK's nuclear program uncertain, but recent estimates by RAND Corporation, a public policy research group, suggest the state could have enough fissile material for up to 100 nuclear weapons by 2020.²⁷⁹ In early 2018, Supreme Leader Kim Jong-un announced that he was "committed to denuclearization", but concrete action to that effect has not been taken.²⁸⁰ Additionally, at the 2018 UN General Assembly, just months after this declaration, the DPRK representative stated that the DPRK would not pursue nuclear disarmament without confidence-building measures and a demonstration of reciprocity from other NWS, particularly the United States of America.²⁸¹

The IAEA has expressed willingness to resume inspections in the DPRK, but this relies on the state granting transparency and open access which has been a persistent challenge for the last two decades. Furthermore, were the DPRK willing to engage in concrete disarmament, the ability of the IAEA to support this is limited. While IAEA can inspect material flows and production capacity, it does not participate in the actual dismantling of existing weapons. Other NWS are best-equipped to

²⁶⁷ Ibid., p. 44.

²⁶⁸ Nuclear Threat Initiative. *North Korea*. 2018.

²⁶⁹ IAEA, Fact Sheet on DPRK Nuclear Safeguards.

²⁷⁰ Ibid

²⁷¹ Ibid.

²⁷² Ibid.

²⁷³ Nuclear Threat Initiative, *North Korea*, 2018.

²⁷⁴ Ibid.

²⁷⁵ IAEA, Fact Sheet on DPRK Nuclear Safeguards.

²⁷⁶ Nuclear Threat Initiative, North Korea, 2018.

²⁷⁷ UN Security Council, *Non-proliferation/Democratic People's Republic of Korea (S/RES/1718 (2006))*, 2006; UN DPI, Security Council 1718 Sanctions Committee Designates Three Vessels (SC/13542), 2018.

²⁷⁸ Ibid.

²⁷⁹ RAND Corporation, A Nuclear North Korea.

²⁸⁰ Nuclear Threat Initiative, *North Korea*, 2018.

²⁸¹ North Korea will not abandon nuclear weapons if it cannot trust US – minister, The Guardian, 2018.

²⁸² North Korea presents nuclear disarmament's biggest challenge yet, The Economist, 2018.

²⁸³ Ibid.

²⁸⁴ Ibid.



decommission weapons and have taken responsibility for such tasks in the past, but political tensions between the DPRK and key NWS have severely limited their cooperation on nuclear disarmament.²⁸⁵

Conclusion

There are many challenges facing the pursuit of total nuclear disarmament.²⁸⁶ Lack of appropriate negotiating forums, continued investment in nuclear weapons production and modernization, and the lack of participation of NWS in tangible disarmament efforts pose challenges for global nuclear disarmament.²⁸⁷ Existing frameworks have created practical and normative guidance for Member States, but lack of consistent and universal enforcement limits their effectiveness in restricting actions of NWS.²⁸⁸ Building consensus among Member States to create new frameworks and mechanisms should be considered and include all NWS to ensure the universality of any action taken.²⁸⁹

Further Research

As delegates conduct more research on this topic, they should consider the following questions: How can the international community encourage all states to accede to the NPT? How can states balance modernization programs with their disarmament obligations? Can Member States revitalize negotiations for a FMCT at the CD? How can the General Assembly support disarmament negotiations in light of a deadlocked CD? What are some potential challenges in determining the scope and verification measures for a FMCT, and how can they be addressed? What diplomatic solutions can be pursued to support the denuclearization of the Korean Peninsula, and what confidence-building measures should be pursued to this end?

Annotated Bibliography

Council on Foreign Relations. (2016). *The Global Nuclear Nonproliferation Regime: Report by International Institutions and Global Governance Program*. Retrieved 9 July 2018 from: https://www.cfr.org/report/global-nuclear-nonprholiferation-regime

This comprehensive report by the Council on Foreign Relations discusses the strengths and weaknesses of the global nuclear nonproliferation regime. It provides a synopsis of the scope of the complexity of nuclear disarmament, which is beneficial for understanding nuances between key actors. Furthermore, the report analyses the key actors involved in the nonproliferation regime, and elaborates as to why particular actors impact the strengths and weaknesses as a whole from a non-partisan point-of-view. Importantly for the delegates, the report includes recommendations on how to strengthen the regime that directly align with the key challenges of a lack of commitment and adherence.

International Atomic Energy Agency. (n.d.). Fact Sheet on DPRK Nuclear Safeguards. Retrieved 28
October 2018 from: https://www.iaea.org/newscenter/focus/dprk/fact-sheet-on-dprk-nuclear-safeguards
This fact sheet from the IAEA explores the key aspects of the DPRK's nuclear program and how it has interacted with the international community since the 1980s. The fact sheet provides a detailed chronological exploration of the DPRK's nuclear program, from first developed, to IAEA safeguards and sanctions, to exploring the current context.

Delegates will find this useful in tracing the development of the DPRK's nuclear program, as well as understanding the key challenges to implementing enforcement measures and pursuing disarmament efforts on the Korean Peninsula.

²⁸⁵ Ibid.

²⁸⁶ Council on Foreign Relations. *The Global Nuclear Nonproliferation Regime*. 2012.

²⁸⁷ Nuclear Threat Initiative, *Nuclear Disarmament Resource Collection*, 2018; Council on Foreign Relations, *The Global Nuclear Nonproliferation Regime*, 2012.

²⁸⁸ Nuclear Threat Initiative, *Nuclear Disarmament Resource Collection*, 2018.

²⁸⁹ Ibid.



Miasnikov, E. et al. (2015). *Modernizing nuclear arsenals: Whether and how*. Bulletin of the Atomic Scientists. Retrieved 2 November 2018 from: https://thebulletin.org/roundtable/modernizing-nuclear-arsenals-whether-and-how/

This report series from the Bulletin of Atomic Scientists explores various aspects of nuclear weapons modernization, including the necessity of some modernization programs, the costs of modernization, and security measures. The report also has several sections dedicated to exploring the relationship between modernization and nuclear disarmament, exploring how states can pursue modernization and while honoring their commitments to total disarmament. This resource will be useful for delegates in exploring the range of modernization aims and options, and in tracing how modernization might be adapted to better support complete disarmament while maintaining the safety and security of existing weapons.

Nuclear Threat Initiative. (2018). *Nuclear Disarmament Resource Collection*. Retrieved 9 August 2018 from: https://www.nti.org/analysis/reports/nuclear-disarmament/

This resource provides a chronological assessment of the international nuclear disarmament regime. In addition to providing context on key frameworks, the report also explores bilateral and multilateral efforts pursued by individual Member States and various intergovernmental organizations and CSOs. Delegates will find this helpful in getting a full picture of the international nuclear disarmament regime and in understanding the current legal and regulatory gaps that exist in this area.

Nuclear Threat Initiative. (2018). *Proposed Fissile Material (Cut-Off) Treaty (FMCT)*. Retrieved 6 November 2018 from: https://www.nti.org/learn/treaties-and-regimes/proposed-fissile-material-cut-off-treaty/

This report by the Nuclear Threat Initiative explains the importance of negotiating a FMCT and explores the key facets of such an agreement, including contentious provisions and suggestions on scope and verification. This resource also gives a chronological background on FMCT development, exploring how discussions have evolved and developed over the last 15 years. Delegates will find this resource useful in understanding the key provisions necessary to creating an effective FMCT, as well as the key barriers that must be addressed.

Onderco, M. (2017). Why nuclear weapon ban treaty is unlikely to fulfil its promise. Global Affairs 3: 4-5. Retrieved 6 November 2018 from: https://www.tandfonline.com/doi/full/10.1080/23340460.2017.1409082
This article by Onderco discusses the recent adopted TPNW and challenges to its realization and implementation. The article takes a critical approach and explores the weaknesses of the Treaty, namely the complete lack of NWS participation, as well as the lack of verification and enforcement mechanisms. The article explores alternatives to the Treaty that might better support disarmament and provides concrete suggestions for a future framework on disarmament and advocates for urgent negotiations on disarmament.

United Nations, General Assembly, Seventeenth plenary meeting. (1946). *Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(1))* [Resolution]. Adopted on the report of the First Committee. Retrieved 3 August 2018 from: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/1(I)

This resolution, the first one adopted by the General Assembly in 1946, is the basis of the current nuclear disarmament regime. The resolution clearly calls on all states to eliminate all nuclear weapons from national military stocks and discusses the need to establish clear safeguards to assess states' adherence to its disarmament commitments. Delegates will find this useful in understanding the context for the further development of nuclear disarmament frameworks.

United Nations, General Assembly, Twenty-second session. (1968). *Treaty on the Non-Proliferation of Nuclear Weapons (A/RES/2373 (XXII))*. Retrieved 9 August 2018 from: http://www.undocs.org/A/RES/2373(XXII)



The NPT is the foremost nuclear disarmament framework; it recognizes five NWS party to the treaty and sets obligations for complete nuclear disarmament under Article VI. The Treaty also sets restrictions on the production and development of nuclear arms by other states, as well as establishing verification measure to ensure States parties remain in compliance with the NPT. Delegates will find this critical reading to understanding the key provisions and obligations for recognized NWS.

United Nations, General Assembly, Seventy-second session. (2017). *Nuclear disarmament* (*A/RES/72/38*). Adopted on the report of the First Committee (*A/72/409*). Retrieved 29 October 2018 from: https://undocs.org/A/RES/72/38

This resolution of the General Assembly sets out a number of actions for Member States to undertake in the pursuit of total nuclear disarmament. Specifically, the resolution calls for the resumption of negotiations in the CD, urges states to halt unnecessary weapons modernization programs, and calls for a high-level conference on nuclear disarmament. Delegates will find this useful in understanding the numerous components involved in pursuing nuclear disarmament, as well as understanding the normative work of the General Assembly on this topic.

United Nations Institute for Disarmament Research. (2010). *A Fissile Material Cut-off Treaty: Understanding the Critical Issues* [Report]. Retrieved 6 November 2018 from: http://unidir.org/files/publications/pdfs/a-fissile-material-cut-off-treaty-understanding-the-critical-issues-139.pdf

This report from UNIDIR explores the main facets of a proposed FMCT, and also and explains the technical aspects behind HEU and related verification measures. While the report is from 2010, due to the lack of progress on negotiating a FMCT in the past years, the challenges explored here are still relevant and central to negotiating an FMCT today. Delegates will find this resource useful in exploring key challenges in establishing an FMCT, including verification, safeguards, and pre-existing stocks, which delegates can use to propose solutions.

Bibliography

Archer, C. et al. (2016). *Move the Nuclear Weapons Money: A Handbook for civil society and legislators*. Retrieved 2 November 2018 from: http://www.nuclearweaponsmoney.org/wp-content/uploads/2018/04/Move-the-Nuclear-Weapons-Money.pdf

Arms Control Association. (2017). *Nuclear-Weapon-Free Zones (NWFZ) At a Glance*. Retrieved 2 November 2018 from: https://www.armscontrol.org/factsheets/nwfz

Arms Control Association (2018). *Fissile Material Cut-off Treaty (FMCT) at a Glance*. Retrieved 6 November 2018 from: https://www.armscontrol.org/factsheets/fmct

Bulletin of the Atomic Scientists. (2018). *It is 2 minutes to midnight: 2018 Doomsday Clock Statement*. Retrieved 28 October 2018 from:

https://thebulletin.org/sites/default/files/2018%20Doomsday%20Clock%20Statement.pdf

Council on Foreign Relations. (2016). *The Global Nuclear Nonproliferation Regime: Report by International Institutions and Global Governance Program*. Retrieved 9 July 2018 from: https://www.cfr.org/report/global-nuclear-nonproliferation-regime

Global nuclear weapons: Modernization remains the priority. (2017, July 3). Stockholm International Peace Research Institute. Retrieved 2 November 2018 from: https://www.sipri.org/media/press-release/2017/global-nuclear-weapons-modernization-remains-priority

Hippel, F. N. (1999). *The FMCT and Cuts in Fissile Material Stockpiles*. Federation of American Scientists. Retrieved 6 November 2018 from: https://fas.org/nuke/control/fmct/2e-hipp.pdf



Hudson, K. (2018, April 18). 50 years of the NPT. *Campaign for Nuclear Disarmament*. Retrieved 6 November 2018 from: https://cnduk.org/50-years-of-the-npt/

Kristensen, H.M. & R. S. Norris. (2018). *Status of World Nuclear* Forces. Federation of American Scientists. Retrieved 2 November 2018 from: https://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/

International Atomic Energy Agency. (n.d.). *Department of Safeguards* [Website]. Retrieved 2 November 2018 from: https://www.iaea.org/about/organizational-structure/department-of-safeguards

International Atomic Energy Agency. (n.d.). *Division of Nuclear Security* [Website]. Retrieved 2 November 2018 from: https://www.iaea.org/about/organizational-structure/department-of-nuclear-safety-and-security/division-of-nuclear-security

International Atomic Energy Agency. (n.d.). *Fact Sheet on DPRK Nuclear Safeguards*. Retrieved 28 October 2018 from: https://www.iaea.org/newscenter/focus/dprk/fact-sheet-on-dprk-nuclear-safeguards

International Atomic Energy Agency. (n.d.). *Key Roles* [Website]. Retrieved 2 November 2018 from: https://www.iaea.org/newscenter/focus/npt/key-roles

International Atomic Energy Agency. (1956). *Statute*. Retrieved 2 November 2018 from: https://www.iaea.org/sites/default/files/statute.pdf

International Atomic Energy Agency. (2005) *Management of high-enriched uranium for peaceful purposes: Status and trends*. Retrieved 2 November 2018 from: https://www-pub.iaea.org/MTCD/Publications/PDF/te 1452 web.pdf

International Atomic Energy Agency. (2018). *Sustaining a Nuclear Security Regime*. Retrieved 3 August 2018 from: https://www-pub.iaea.org/MTCD/Publications/PDF/P1763 web.pdf

International Campaign to Abolish Nuclear Weapons. (n.d.). *Campaign overview* [Website]. Retrieved 2 November 2018 from: http://www.icanw.org/campaign/campaign-overview/

International Campaign to Abolish Nuclear Weapons. (n.d.). *Nuclear weapons timeline* [Website]. Retrieved 2 November 2018 from: http://www.icanw.org/the-facts/the-nuclear-age/

International Law and Policy Institute. (2015). *Conference on Disarmament* [Website]. Retrieved 2 November 2018 from: http://nwp.ilpi.org/?p=1191

International Panel on Fissile Materials. (2018). *Fissile material stocks* [Website]. Retrieved 6 November 2018 from: http://fissilematerials.org/

Miasnikov, E. et al. (2015). *Modernizing nuclear arsenals: Whether and how*. Bulletin of the Atomic Scientists. Retrieved 2 November 2018 from: https://thebulletin.org/roundtable/modernizing-nuclear-arsenals-whether-and-how/

North Atlantic Treaty Organization. (2018). *NATO's nuclear deterrence policy and forces*. Retrieved 2 November 2018 from: https://www.nato.int/cps/em/natohq/topics_50068.htm *North Korea presents nuclear disarmament's biggest challenge yet*. (2018, July 5). The Economist. Retrieved 6 November 2018 from: https://www.economist.com/international/2018/07/05/north-korea-presents-nuclear-disarmaments-biggest-challenge-yet

North Korea will not abandon nuclear weapons if it cannot trust US – minister. (2018, September 29). The Guardian. Retrieved 6 November 2018 from: https://www.theguardian.com/world/2018/sep/29/north-korea-nuclear-weapons-trust-us



Nuclear Threat Initiative. (2017). *Civilian HEU Reduction and Elimination Resource Collection*. Retrieved 6 November 2018 from: https://www.nti.org/analysis/reports/civilian-heu-reduction-and-elimination/

Nuclear Threat Initiative. (2018). *Conference on Disarmament (CD)*. Retrieved 29 October 2018 from: https://www.nti.org/learn/treaties-and-regimes/conference-on-disarmament/

Nuclear Threat Initiative. (2018). *North Korea* [Website]. Retrieved 2 November 2018 from: https://www.nti.org/learn/countries/north-korea/

Nuclear Threat Initiative. (2018). *Nuclear Disarmament Resource Collection*. Retrieved 9 August 2018 from: https://www.nti.org/analysis/reports/nuclear-disarmament/

Nuclear Threat Initiative. (2018). *Proposed Fissile Material (Cut-Off) Treaty (FMCT)*. Retrieved 6 November 2018 from: https://www.nti.org/learn/treaties-and-regimes/proposed-fissile-material-cut-off-treaty/

Nuclear Threat Initiative. (2018). *Treaty on the Prohibition of Nuclear Weapons*. Retrieved 6 November 2018 from: https://www.nti.org/learn/treaties-and-regimes/treaty-on-the-prohibition-of-nuclear-weapons/

Nuclear Threat Initiative. (2018). *United Nations General Assembly*. Retrieved 2 November 2018 from: https://www.nti.org/learn/treaties-and-regimes/united-nations-general-assembly/

Onderco, M. (2017). Why nuclear weapon ban treaty is unlikely to fulfil its promise. *Global Affairs* 3: 4-5. Retrieved 6 November 2018 from: https://www.tandfonline.com/doi/full/10.1080/23340460.2017.1409082

Organization for Security and Co-operation in Europe. (n.d.). *Non-proliferation of weapons of mass destruction*. Retrieved 2 November 2018 from: https://www.osce.org/forum-for-security-cooperation/107436

Organization for Security and Co-operation in Europe. (2016). Keeping a Lid on Nuclear, Chemical, and Biological Weapons. *Security Community Issue 3/2016*. Retrieved 2 November 2018 from: https://www.osce.org/magazine/285611

RAND Corporation. (n.d.). *A Nuclear North Korea* [Website]. Retrieved 6 November 2018 from: https://www.rand.org/research/primers/nuclear-north-korea.html

Reaching Critical Will. (n.d.). *Who we are* [Website]. Retrieved 2 November 2018 from: http://www.reachingcriticalwill.org/about-us/who-we-are

Reaching Critical Will. (2010, September 24). *Civil Society statement on the high-level meeting on revitalizing the Conference on Disarmament and taking forward multilateral negotiations*. Retrieved 29 October 2018 from: https://www.wagingpeace.org/wp-content/uploads/2012/11/2010 09 24 revitalizing cd.pdf

Statistica. (2018). *Number of nuclear warheads worldwide from 1945 to 2017.* Retrieved 3 August 2018 from: https://www.statista.com/statistics/752508/number-of-nuclear-warheads-worldwide-overtime/

Treaty on the prohibition of nuclear weapons – the "Ban Treaty". (2018, January 17). European Parliament Think Tank. Retrieved 3 November 2018 from: http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2018)614664

United Nations Conference to Negotiate a Legally Binding Instrument to Prohibit Nuclear Weapons, Leading Towards Their Total Elimination. (2017). *Treaty on the Prohibition of Nuclear Weapons (A/CONF.229/2017/8)*. 28 October 2018 from: http://undocs.org/A/CONF.229/2017/8).



UN, Dag Hammarskjöld Library. (2018). *UN Documentation: Disarmament* [Website]. Retrieved 29 October 2018 from: http://research.un.org/en/docs/disarmament/ga

United Nations, Department of Public Information. (2017, October 13). First Committee Debates Future of Fissile Material Cut Off Treaty, Other Instruments, as Building Blocks towards Nuclear Weapon-Free World (GA/DIS/3581) [Meetings Coverage]. Retrieved 6 November 2018 from: https://www.un.org/press/en/2017/gadis3581.doc.htm

United Nations, Department of Public Information. (2018, January 18). *Confidence-Building Measures Supporting Arms Control Extremely Critical, Secretary-General Tells Security Council Meeting on Non-proliferation (SG/SM/18858-SC/13167-DC/3755)* [Press Release]. Retrieved 28 October 2018 from: https://www.un.org/press/en/2018/sgsm18858.doc.htm

United Nations, Department of Public Information. (2018). *Disarmament and International Security (First Committee*) [Website]. Retrieved 9 August 2018 from: http://www.un.org/en/ga/first/

United Nations, Department of Public Information. (2018, October 16). *Security Council 1718 Sanctions Committee Designates Three Vessels* (*SC/13542*) [Meetings Coverage]. Retrieved 6 November 2018 from: https://www.un.org/press/en/2018/sc13542.doc.htm

United Nations, General Assembly, Seventeenth plenary meeting. (1946). *Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(I))* [Resolution]. Adopted on the report of the First Committee. Retrieved 3 August 2018 from: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/1(I)

United Nations, General Assembly, Fourteenth session. (1959). *General and Complete Disarmament* (A/RES/1378 (XIV)) [Resolution]. Retrieved 28 October 2018 from: https://undocs.org/A/RES/1378(XIV)

United Nations, General Assembly, Twenty-second session. (1968). *Treaty on the Non-Proliferation of Nuclear Weapons (A/RES/2373 (XXII))*. Retrieved 9 August 2018 from: http://www.undocs.org/A/RES/2373(XXII)

United Nations, General Assembly, Tenth special session. (1978). *Final Document of the Tenth Special Session of the General Assembly (S-10/2)*. Retrieved 29 October 2018 from: https://undocs.org/A/RES/S-10/2

United Nations, General Assembly, Twelfth special session. (1982). Report of the Ad Hoc Committee to the Twelfth Special Session (A/S-12-32). Retrieved 29 October 2018 from: http://www.un.org/ga/search/view_doc.asp?symbol=A/S-12/32

United Nations, General Assembly, Fifteenth special session. (1988). *Report of the Committee of the Whole of the Fifteenth Special Session (A/S-15/50)*. Retrieved 29 October 2018 from: http://www.un.org/ga/search/view_doc.asp?symbol=A/S-15/50

United Nations, General Assembly, Forty-eighth session. (1994). *General and complete disarmament* (A/RES/48/75) [Resolution]. Adopted on the report of the First Committee (A/48/676). Retrieved 6 November 2018 from: https://undocs.org/A/RES/48/75

United Nations, General Assembly, Fiftieth session (1996). Comprehensive Nuclear-Test-Ban Treaty (A/RES/50/245). Without reference to a Main Committee (A/50/L.78 and Add.1). Retrieved 21 August 2016 from: http://www.undocs.org/A/RES/50/245

United Nations, General Assembly, Sixty-fifth session. (2011). *Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (A/RES/65/65)* [Resolution]. Adopted on the report of the First Committee (A/65/410). Retrieved 29 October 2018 from: https://undocs.org/A/RES/65/65



United Nations, General Assembly, Seventieth session. (2015). *United action with renewed determination towards the total elimination of nuclear weapons (A/RES/70/40)* [Resolution]. Adopted on the report of the First Committee (A/70/460). Retrieved 28 October 2018 from: https://undocs.org/A/RES/70/40

United Nations, General Assembly, Seventy-second session. (2017). *Comprehensive Nuclear-Test-Ban Treaty (A/RES/72/70)* [Resolution]. Adopted on the report of the First Committee (A/72/415). Retrieved 29 October 2018 from: https://undocs.org/A/RES/72/70

United Nations, General Assembly, Seventy-second session. (2017). *Nuclear disarmament* (A/RES/72/38). Adopted on the report of the First Committee (A/72/409). Retrieved 29 October 2018 from: https://undocs.org/A/RES/72/38

United Nations, General Assembly, Seventy-second session. (2017). *Taking forward multilateral nuclear disarmament negotiations (A/RES/72/31)* [Resolution]. Adopted on the report of the First Committee (A/72/409). Retrieved 29 October 2018 from: https://undocs.org/A/RES/72/31

United Nations Institute for Disarmament Research. (2010). *A Fissile Material Cut-off Treaty: Understanding the Critical Issues* [Report]. Retrieved 6 November 2018 from: http://unidir.org/files/publications/pdfs/a-fissile-material-cut-off-treaty-understanding-the-critical-issues-139.pdf

United Nations, Office for Disarmament Affairs. (n.d.). *About Us* [Website]. Retrieved 2 November 2018 from: https://www.un.org/disarmament/about/

United Nations, Office for Disarmament Affairs. (n.d.). *Nuclear Weapons* [Website]. Retrieved 3 August 2018 from: https://www.un.org/disarmament/wmd/nuclear/

United Nations, Office for Disarmament Affairs. (n.d.). *Treaty on the Non-Proliferation of Nuclear Weapons (NPT)* [Website]. Retrieved 6 November 2018 from: https://www.un.org/disarmament/wmd/nuclear/npt/

United Nations, Office for Disarmament Affairs. (n.d.). *UNODA Structure* [Website]. Retrieved 3 August 2018 from: https://www.un.org/disarmament/wmd/nuclear/

United Nations, Office of the Secretary-General. (2017, September 26). *Remarks on the International Day for the Total Elimination of Nuclear Weapons*. Retrieved 2 November 2018 from: https://www.un.org/sq/en/content/sq/speeches/2017-09-26/sqs-elimination-nuclear-weapons-remarks

United Nations, Office of the Secretary-General. (2018, September 26). Statement at High-Level Plenary Meeting of the General Assembly to Commemorate and Promote the International Day for the Total Elimination of Nuclear Weapons. Retrieved 2 November 2018 from:

https://www.un.org/sg/en/content/sg/speeches/2018-09-26/commemorate-and-promote-international-day-total-elimination-nuclear

United Nations, Security Council, 5551st meeting. (2006). *Non-proliferation/Democratic People's Republic of Korea (S/RES/1718 (2006))* [Resolution]. Retrieved 6 November 2018 from: https://undocs.org/S/RES/1718(2006)



III. International Cooperation in the Peaceful Uses of Outer Space

Introduction

Outer space activities have made significant contributions to advancing human and global development by providing new technologies and ideas. ²⁹⁰ International cooperation plays an important role in advancing space science and technology. ²⁹¹ The number of actors operating in outer space grows rapidly and its continued productive use requires a commitment to peaceful engagement on the part of all actors; if some of these actors see space as an potential territory for aggression, the risk of weaponization and conflict will increase. ²⁹² Months before the launch of the first artificial satellite into Earth's orbit in 1957, the United Nations (UN) began its efforts to maintain outer space for peaceful purposes. ²⁹³ Such initiatives started with proposals for prohibiting the use of space for military purposes and the placement of weapons of mass destruction (WMDs) in outer space. ²⁹⁴

The topic of an arms race in outer space is important to many Member States who are worried that rapid growth in space science and technology could lead into an arms race in outer space. ²⁹⁵ Since the early 1980s, the Conference on Disarmament (CD) has discussed further proposals regarding the prevention of an arms race in outer space. ²⁹⁶ The current international debates are divided on whether there is an arms race in outer space or not, and also whether existing frameworks are sufficient to govern and restrict such activity. ²⁹⁷ To promote the peaceful uses of outer space, it is crucial to study legal and other problems arising from the exploration. ²⁹⁸ Space science and technology benefit all humankind, and the development of an international legal regime governing space activities is an important first step to maintaining peace and security. ²⁹⁹ An arms race, environmental damage, and sustainable development are all vital issues to be considered in the discussion of international cooperation in the peaceful uses of outer space. ³⁰⁰

The General Assembly has adopted around 130 space-related resolutions since 1958.³⁰¹ The General Assembly First Committee acknowledges that cooperative security arrangements are necessary to preventing an arms race and to exchange scientific information to explore peace.³⁰² The growing number of diverse operators in outer space calls for a clear set of new norms and rules governing human activity in space.³⁰³ As outer space is becoming more and more competitive, concerns about maintaining international peace and security grows.³⁰⁴ According to the United Nations Office for Disarmament Affairs (UNODA), confidence-building measures contribute to preventing hostilities, averting escalation, reducing of military tensions, and building mutual trust between countries.³⁰⁵ 2018 marks the 50th anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space, and brings a

²⁹⁰ UNOOSA, Fifty years since the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (1968-2018): UNISPACE+50, 2018; UNOOSA, Former astronaut Scott Kelly is United Nations Champion for Space.

²⁹¹ UN General Assembly, *International cooperation in the peaceful uses of outer space (A/RES/72/77)*, 2017.

²⁹² UN DPI, UN Disarmament Commission debates ways to prevent arms race in outer space, 2018.

²⁹³ UNODA, Outer Space.

²⁹⁴ Ibid.

²⁹⁵ UNIDIR, UNIDIR Space Security Conference 2018, Space Security: The Next Chapter, Conference Report, 2018.

²⁹⁶ UNODA, Outer Space.

²⁹⁷ UNIDIR, UNIDIR Space Security Conference 2018, Space Security: The Next Chapter, Conference Report, 2018.

²⁹⁸ UN General Assembly, *International cooperation in the peaceful uses of outer space (A/RES/72/77)*, 2017.

²⁹⁹ Ibid.

³⁰⁰ Ibid.

³⁰¹ UN General Assembly, *Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(I))*, 1946; Reaching Critical Will, *UN General Assembly First Committee*.

³⁰² lbid.

³⁰³ UN General Assembly, Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(I)), 1946.

³⁰⁴ Ibid.

³⁰⁵ UNODA, Military Confidence-building.



great opportunity for the international community to enhance global space cooperation and governance in the future. 306

International and Regional Framework

The General Assembly First Committee is a consensus-building body where disarmament and international security are collectively discussed. 307 General Assembly resolution 1472 (XIV) of 1959 highlights the importance of preventing national conflicts from expanding into outer space. 308 The Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space was adopted by the General Assembly in 1963. 309 Besides highlighting the importance of international cooperation, the Declaration also holds Member States accountable to report when they believe another states' action could be harmful or threaten peace. 310 Further, the Declaration also holds Member States that launch an object into outer space responsible for its action and liable for any damage caused. 311

The *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies* (also known as the Outer Space Treaty (OST)) of 1966, building upon the Declaration of Legal Principles, includes nine principles for peaceful exploration of outer space.³¹² The principles highlight that exploration should benefit all humankind and be in the interest of all states, outer space should be free for exploration and use by all states, and the use of the moon and other celestial bodies should be peaceful.³¹³ 107 Member States are currently parties to the treaty, while 23 have signed but not ratified the treaty.³¹⁴ The *Space Liability Convention* came into force in September 1972 and elaborates on principle seven of the OST, to hold Member States accountable for all damaged caused by their space objects.³¹⁵ The *Agreement on Governing the Activities of States on the Moon and Other Celestial Bodies*, known as the Moon Agreement was adopted by the General Assembly in 1979.³¹⁶ The Agreement specifically stresses that the moon and other celestial bodies are the common heritage of humankind and as such, should be only used for peaceful purposes.³¹⁷

There are also several regional agreements pertinent to this topic. The *International Code of Conduct for Outer Space Activities* was created by the European Union (EU) in 2008 and recently updated in 2013.³¹⁸ It aims to establish a legal framework to advocate the peaceful use and accessibility of space to all states.³¹⁹ The latest update underscores the need to maintain the sustainable, safe, and secure use of outer space, as well as transparency and confidence-building measures.³²⁰ Additionally, the *Treaty of Lisbon* (2009) provides an important legal framework for European space exploration in the fields of the EU's work.³²¹ Article 182 of the treaty states that the framework shall establish scientific and technological

³⁰⁶ UNOOSA, Fifty years since the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (1968 - 2018): UNISPACE+50, 2018; UNOOSA, Former astronaut Scott Kelly is United Nations Champion for Space.

³⁰⁷ Reaching Critical Will. *UN General Assembly First Committee*.

³⁰⁸ UN General Assembly, *The Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space (A/RES/18/1962*), 1963.

³⁰⁹ Ibid.

³¹⁰ Ibid.

³¹¹ Ibid.

³¹² UNOOSA, Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies, 2018.

³¹³ Ibid.

³¹⁴ Ibid.

³¹⁵ Ibid.

³¹⁶ UN General Assembly, *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies* (A/RES/34/68), 1979, p. 78.

³¹⁷ Ibid

³¹⁸ Marchisio, *The Draft Code of Conduct for Outer Space Activities*, 2010.

³¹⁹ Ibid.

³²⁰ Ibid.

³²¹ Béclard, The Lisbon Treaty and the Evolution of European Space Governance, 2013.



objectives, indicate the broad lines of such activities, and fix the financial participation of each state. ³²² In the Americas, the Space Conference of the Americas (CEA) was first held in 1990 to strengthen regional and international cooperation in the peaceful uses of outer space and the practical use of space applications. ³²³ The *Declaration of San Francisco de Quito* (2007) is the outcome document of the fifth Space Conference of the Americas, which calls upon states to contribute to international disarmament and effectively ban of weapons of mass destruction (WMDs). ³²⁴

On a global scale, the *Sustainable Development Goals* (SDGs), adopted in September 2015 in General Assembly resolution 70/1, serve as the blueprint for international development in the decades to come. International cooperation in the peaceful uses of outer space carriers crucial importance in the achievement of the SDGs. SDG 9 on building resilient infrastructure and promoting inclusive and sustainable industrialization to foster innovation is intimately connected to the topic, because outer space technology largely relies on the promotion of scientific research, innovation, and sustainability. Turthermore, SDG 16 on peace, justice, and strong institutions also provides valuable guidance in enhancing international cooperation and reducing conflicts and insecurity in pursuing the peaceful uses of outer space. Additionally, Goal 17 on global partnerships also contributes to the topic through increasing cooperation, better access to science, technology and innovation for all states, and the promotion of knowledge sharing.

Role of the International System

In 2011, the General Assembly adopted resolution 65/68, which calls upon the Secretary-General to establish a Group of Governmental Experts (GGE). ³³⁰ This group is tasked with studying outer space transparency and confidence-building measures. ³³¹ Experts from 15 countries contributed to the final output of the group. ³³² The GGE agreed upon a set of transparency and confidence-building measures for outer space activities in its report of 2013. ³³³ In 2017, the General Assembly adopted resolution 72/56 "Transparency and confidence-building measures in outer space activities," which encourages Member States to review and implement the transparency and confidence measures contained in the report of the GGE on "Transparency and Confidence-building Measures in Outer Space Activities" of 2013. ³³⁴

In 2012, the General Assembly adopted resolution 66/71 on "International cooperation in the peaceful uses of outer space." The resolution highlights the value of regional and interregional cooperation in space activities. The resolution also calls upon Member States to assist each other in the development

³²² European Union, Consolidated Version of Treaty of the Functioning of the European Union, 2007.

³²³ UNOOSA, Space Conference of the Americas: General Information, 2010.

³²⁴ UN COUPOS, Declaration of San Francisco de Quito of the Fifth Space Conference of the Americas (A/AC.105/C.1/2007/CRP.15), 2007.

³²⁵ UN General Assembly, *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)*, 2015

³²⁶ UN DESA, Sustainable Development Knowledge Platform.

³²⁷ UN DESA, Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

³²⁸ UN DESA, Goal 16: Peace, justice and strong institutions.

³²⁹ UN DESA, Sustainable Development Knowledge Platform.

³³⁰ UN General Assembly, *Transparency and confidence-building measures in outer space activities (A/RES/65/68)*, 2011.

³³¹ UN General Assembly, *Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities: Note by the Secretary-General (A/68/189)*, 2013.

³³² Ibid.

³³³ Ibid.

³³⁴ UN General Assembly, Transparency and confidence-building measures in outer space activities (A/RES/72/65), 2017; UN General Assembly, Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities: Note by the Secretary-General (A/68/189), 2013.

³³⁵ UN General Assembly, *International cooperation in the peaceful uses of outer space (A/RES/66/71)*, 2012. ³³⁶ Ihid.



of space capabilities through expanding accessibility and sharing technical expertise and legal advice. ³³⁷ In 2017 the General Assembly adopted resolution 72/27, titled "No first placement of weapons in outer space," which calls upon Member States to start substantive work in preventing the placement of weapons in outer space and the threat or use of force against outer space object. ³³⁸ 2017 also saw the adoption resolution 72/77 on "International cooperation in the peaceful uses of outer space." ³³⁹ The resolution encourages all Member States to contribute to the prevention of an arms race in outer space by promoting international, regional, and interregional cooperation. ³⁴⁰ Further, it notes the importance of space debris mitigation measures and calls upon the Member States to implement these. ³⁴¹ Resolution 72/250 on "Further practical measures for the prevention of an arms race in outer space" was also adopted in 2017 encourages all Member States to contribute to the prevention of an arms race in outer space and the use of force against space objects by enhancing international cooperation. ³⁴² Further it calls on the Security Council to establish a new Group of Governmental Experts to make recommendations on legally-binding options for preventing an arms race. ³⁴³

A crucial UN agency that promotes scientific advancement for sustainable economic and social development is the United Nations Office for Outer Space Affairs (UNOOSA), which was established in 1958. 344 UNOOSA works closely with Member States to establish legal and regulatory frameworks like the *International Code of Conduct* for *Outer Space Activities*. 345 By governing space activities and helping strengthen the capacity of developing countries to use space science technology for development, the frameworks are contributing to international security. 346 On both regional and international levels, UNOOSA addresses emerging sustainable development challenges such as safety and security challenges in outer space. 347 To help all Member States and communities benefit equally, UNOOSA underscores the importance of space technologies and space-based data through cooperation in the implementation of confidence-building measures. 348

The United Nations Institute for Disarmament Research (UNIDIR) is an autonomous institute within the United Nations that focuses on disarmament and security. ³⁴⁹ UNIDIR holds an Annual Outer Space Security Conference. ³⁵⁰ The UNIDIR *Space Security Conference Report* of 2018 discusses the importance of national and regional approaches in space security matters as well as space economy. ³⁵¹ Key challenges in regard to the topic are new applications for space technology; limitation of space growth and space security; equal rights to develop a "full space cycle (design, launch and operation);" regulation of the space industry; and the use of space data in policy making. ³⁵²

Civil society organizations (CSOs) also make significant contributions to enhance international cooperation in the peaceful uses of outer space.³⁵³ The Coalition for Deep Space Exploration is a CSO

³³⁷ UN General Assembly, International cooperation in the peaceful uses of outer space (A/RES/66/71), 2012.

³³⁸ UN General Assembly, No first placement of weapons in outer space (A/RES/72/27), 2017.

³³⁹ UN General Assembly, *International cooperation in the peaceful uses of outer space (A/RES/72/77)*, 2017.

³⁴⁰ Ibid.

³⁴¹ Ibid.

³⁴² UN General Assembly, Further practical measures for the prevention of an arms race in outer space Statement of financial implications (A/RES/72/250), 2017.

³⁴³ Ibid.

³⁴⁴ UNOOSA, *History*; UNOOSA, *About Us.*

³⁴⁵ UNOOSA, History.

³⁴⁶ UNOOSA, About Us.

³⁴⁷ UNOOSA, Opening Keynote by the Director Simonetta Di Pippo on Space as a Driver for Socio- Economic Sustainable Development on 05 September 2016 in Vienna, 2016.

³⁴⁸ Ihid

³⁴⁹ UNIDIR, UNIDIR Space Security Conference 2018, Space Security: The Next Chapter, Conference Report, 2018.

³⁵⁰ UNIDIR, Annual Outer Space Security Conference.

³⁵¹ UNIDIR, UNIDIR Space Security Conference 2018, Space Security: The Next Chapter, Conference Report, 2018, p. 3.

³⁵² Ibid.

³⁵³ UNOOSA, Our Partners.



composed of space industry businesses and advocacy groups. ³⁵⁴ The goal of Coalition for Deep Space is to assist the United States of America's National Aeronautics and Space Administration (NASA) in extending their research and space exploration. ³⁵⁵ Together they promote the value and benefits of deep space exploration to Member States and civil society by releasing policy documents to advise governments, as well as commenting on new achievements of NASA. ³⁵⁶ Reaching Critical Will is another CSO that focuses on research, policy analysis, advocacy, monitoring, and reporting on international forums to support global disarmament. ³⁵⁷ Reaching Critical Will participates as a CSO representative at General Assembly First Committee. ³⁵⁸ It held an UNIDIR event in 2013 and presented on the *International Code of Conduct in Outer Space*, reminding Member States to take actions to protect space for future generations. ³⁵⁹ Another important document it released is *Addressing Challenges in Space through Multilateral Processes* in 2014, which talks about the challenges in outer space that the *International Code of Conduct for Outer Space Activities* should address. ³⁶⁰

Confidence Building Measures

Today more than 60 states, government entities, and other actors operate satellites and spacecraft in outer space, and the number is still growing. ³⁶¹ Outer space is becoming increasingly competitive and the concern about maintaining international peace and security grows. ³⁶² Both natural and human-made hazards are of concerns. ³⁶³ According to UNODA, confidence-building measures contribute to preventing hostilities, averting escalation, reducing military tension, and building mutual trust between countries. ³⁶⁴ More and more countries are involved in space, which makes confidence-building more complicated but also more necessary. ³⁶⁵ The increased diversity of space operators requires a clear set of new norms and rules governing human activity in space. ³⁶⁶ Other challenges are information exchange on space policies, notifications about outer space activities, and consultative mechanisms. ³⁶⁷

The Inter-Agency Meeting on Outer Space Activities (UN-Space) issued in 2015 a special report on the role of United Nations entities in supporting implementation of the GGE report 105/1116. ³⁶⁸ The report focuses on the importance of intergovernmental platforms, mechanisms and political initiatives, and capacity-building and outreach. ³⁶⁹ The open and transparent exchange of information is critical to confidence-building, but efforts to improve communication between Member States have been stalled. ³⁷⁰ Many states are reluctant to share this information due to professed national security concerns. ³⁷¹

³⁵⁴ Explore Deep Space, About the Coalition.

³⁵⁵ Explore Deep Space, About the Coalition.

³⁵⁶ Explore Deep Space, *About the Coalition*; Explore Deep Space, *A Space Exploration Roadmap for the next Administration*, 2018.

³⁵⁷ Reaching Critical Will, Who we are, 2018.

³⁵⁸ Reaching Critical Will, UN General Assembly First Committee.

³⁵⁹ Reaching Critical Will, *Presentation on the International Code of Conduct in Outer Space*, 2013.; Reaching Critical Will, *Critical Issues*, 2018.

³⁶⁰ Fihn & Irsten, Addressing Challenges in Space through New Multilateral Processes, 2014.

³⁶¹ UN General Assembly, Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities: Note by the Secretary-General (A/68/189), 2013, p. 10.

³⁶² Ibid., p.10.

³⁶³ Ibid., p. 9.

³⁶⁴ UNODA, Military Confidence-building.

³⁶⁵ Ibid.

³⁶⁶ UNODA, Outer Space.

³⁶⁷ Ibid.

³⁶⁸ UN General Assembly, Role of United Nations entities in supporting Member States in the implementation of transparency and confidence-building measures in outer space activities (A/AC.105/1116), 2016.

³⁶⁹ Ibid.

³⁷⁰ UN General Assembly, *Transparency and confidence-building measures in outer space activities (A/72/65)*, 2017. ³⁷¹ Ibid.



The EU proposed a draft international code of conduct.³⁷² The code aims to minimize harmful interference with other states in the context of peaceful exploration and use of outer space.³⁷³ To ensure this goal, the exploration of outer space should to carried out with a high standard of care and transparency between all operating entities.³⁷⁴ For instance, the Space Object Register is a mechanism that builds confidence by creating transparency, but not all Member States are registering all their space objects and the states need to have the capacity to create a national register to comply.³⁷⁵ The code also regulates cooperation mechanisms, including providing notification of activities in outer space, registering space objects, sharing information on outer space activities, and enacting consultation mechanisms.³⁷⁶

Preventing Arms Race in Outer Space

In 2017 there was a total of 90 known orbital launch attempts with nondestructive capacities from eight different countries, which marks the second most orbital launch attempts of any year in this century. 377 The placement of space-based devices with destructive capacity is illustrative of the weaponization of outer space. 378 Member States of the UN are concerned that the weaponization of space will lead to an arms race, between two or more states. 379 Numerous international frameworks prohibit an arms race in space, including the *Space Liability Convention*, but there are still concerns one may develop. 380 The *Space Liability Convention* is not yet fully ratified by all states, so there remains a lack of enforcement and verifying measures. 381 Furthermore, the lack of information on space activities, withheld by Member States, is an threat to security and stability, as well. 382

Among the challenges that the international community faces on this topic, one key issue is that there are no common guidelines which are agreeable to the vast majority of spacefaring nations.³⁸³ These guidelines could complement existing initiatives and would be most effective if Member States work together to elaborate those guidelines.³⁸⁴ These guidelines could include monitoring of placement of missile defense and also controlling space debris to prevent debris from being used as or in weapons.³⁸⁵ The UN General Assembly Special Session on Disarmament also calls for negotiations to prevent an arms race.³⁸⁶ The latest resolution adopted on this topic is resolution 72/26, adopted in 2017.³⁸⁷ This resolution calls for the establishment of a working group on the prevention of an arms race in outer space.³⁸⁸ Not only Member States should be involved, but also CSOs and other national organizations to provide states with more information on space security, arms race, and weaponization.³⁸⁹ The General Assembly First Committee will continue to work extensively on new solutions and approaches to prevent an arms race in outer space.³⁹⁰

³⁸⁶ NTI, Proposed Prevention of an Arms Race in Space (PAROS) Treaty, 2017.

389 Reaching Critical Will, Outer Space.

³⁹⁰ Ibid.

³⁸⁷ UN General Assembly, *Prevention of an arms race in outer space (A/RES/72/26*), 2017.

³⁷² Marchisio, *The Draft Code of Conduct for Outer Space Activities*, 2010. ³⁷³ Ibid., p. 3. ³⁷⁴ Ibid., p. 3. ³⁷⁵ UNOOSA, United Nations Register of Objects Launched into Outer Space. ³⁷⁶ Marchisio, Activities of States in Outer Space in Light of New Developments: Meeting International Responsibilities and Stablishing National Legal and Policy Frameworks, 2010, p. 4. ³⁷⁷ Spaceflight 101, 2017 Space Launch Statistics. ³⁷⁸ Reaching the Critical Will, *Outer Space*. ³⁷⁹ NTI, Proposed Prevention of an Arms Race in Space (PAROS) Treaty, 2017. ³⁸⁰ UN General Assembly, Convention on International Liability for Damage Caused by Space Objects (A/RES/2777(XXVI)), 1971. ³⁸¹ Ibid. ³⁸² Ibid. 383 Reaching Critical Will, Outer Space. ³⁸⁴ Ibid. ³⁸⁵ Ibid.



Conclusion

Outer space is an increasingly relevant topic to the international community because of the growing number of orbital launches and the number of actors involved, but the exploration of outer space must remain peaceful.³⁹¹ To prevent hostilities, to avert escalation, to reduce military tension, and to build mutual trust between countries, confidence-building measures are fundamental.³⁹² Some key challenges in regard to confidence-building measures are information sharing and better guidelines.³⁹³ In a similar vein, the main challenge to monitoring and preventing an arms race in outer space is the lack of information being shared openly by states.³⁹⁴ There are no common guidelines, which makes effective monitoring and accountability challenging.³⁹⁵ Efforts must be taken to improve communication and trust between Member States. With the increased number of actors, new norms and rules are crucial to address the security concerns that come with human activity in space.³⁹⁶ Building upon the past progress established under the facilitation of General Assembly First Committee, it is hopeful that an intensified effort in international dialogues and continued collaboration would accelerate the progress of sustainable and peaceful activities in outer space.³⁹⁷

Further Research

Delegates should be aware of current developments on the OST, especially in regards to new legal frameworks. As delegates delve into their research, please consider the following questions: How can the international community continue to build consensus on defining the right and sustainable behavior in outer space? How can Member States enhance cooperation with CSOs to support the peaceful use of outer space? How can information sharing be improved? What measures can be taken to build up trust between Member States? What confidence-building measures can help prevent an arms race in outer space?

Annotated Bibliography

European Organisation for the Exploitation of Meteorological Satellites. (2017). *EUMETSAT Strategy Challenge 2025 Summary*. Retrieved 18 September 2018 from:

https://www.eumetsat.int/website/home/AboutUs/Publications/Brochures/index.html

EUMETSAT is an intergovernmental organization, founded in 1986 that supplies weather and climate-related data, images, and products to the National Meteorological Services of the EU and others worldwide. International cooperation is an important aspect of EUMETSATs Policy Principles and might be a model for other Member States or state unions. The work of EUMETSAT ensures stability and security through transparency and information sharing. This brochure gives a brief overview over the work of EUMETSAT, its principles, how they use space technology, what are the security benefits of space technology, and international cooperation in the context of safe exploration of outer space.

Marchisio S. (2010). *The Draft Code of Conduct for Outer Space Activities*. Retrieved 12 August 2018 from: http://www.unoosa.org/pdf/pres/2010/SLW2010/02-10b.pdf

In this article, Professor Marchisio gives the reader a brief overview of the draft Code of Conduct for Outer Space Activities. This source is useful to understand the aims of the initiative, the legal status of the Code, and the main features of the draft Code. The aims

³⁹¹ UN General Assembly, *International cooperation in the peaceful uses of outer space (A/RES/72/77)*, 2017.

³⁹² UNODA, Military Confidence-building.

³⁹³ UN General Assembly, Role of United Nations entities in supporting Member States in the implementation of transparency and confidence-building measures in outer space activities (A/AC.105/1116), 2016; UNODA, Military Confidence-building.

³⁹⁴ UN General Assembly, Convention on International Liability for Damage Caused by Space Objects (A/RES/2777(XXVI)), 1971.

³⁹⁵ Reaching Critical Will, Outer Space.

³⁹⁶ UNODA, Outer Space.

³⁹⁷ Reaching Critical Will, Outer Space.



of the initiative include strengthening the security, safety and sustainability of activities in outer space. Marchisio describes the legal status of the draft as a document which is voluntary open to all states. The main features of the draft are general measures to ensure safe use of outer space, cooperation mechanisms and organizational aspects.

Nuclear Threat Initiative. (n.d.). *Proposed Prevention of an Arms Race in Space (PAROS) Treaty*. Retrieved 12 August 2018 from: http://www.nti.org/learn/treaties-and-regimes/proposed-prevention-arms-race-space-paros-treaty/

The Nuclear Threat Initiative (NTI) is a CSO founded in 2001 based in Washington D.C. NTI works on projects to reduce threat of mass destruction weapons and supports governments to raise awareness on disarmament. NTI's article about the proposed prevention of an arms race in space treaty (PAROS) provides the reader with an overview of the PAROS treaty beginning with background information how the treaty was negotiated. Further, the article explains the obligations and cooperation mechanisms that come with the Treaty. Especially useful for the delegates is the section explaining the developments of PAROS since PAROS is an important document in defining the prevention of an arms race in outer space. This source is useful to delegates because understanding the content of PAROS is helpful in finding solutions on how to extend international cooperation in the peaceful uses of outer space.

Reaching Critical Will. (2018). *First Committee Briefing Book*. Retrieved 18 September 2018 from: http://reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com18/briefingbook/FCBB-2018.pdf

Reaching Critical Will is a project of the Women's International League for Peace and Freedom. In the briefing book they give recommendations of the safe use of outer space. Member States should not: use space- or ground-based capabilities to destroy or damage space assets, weaponize outer space, or allow satellites that target space-based assets. The book also recommends that states express support for the negotiation of a treaty preventing an arms race in outer space and to implement legal and political or rules-based approaches to enhance the security of outer space. This source is useful in getting to know the work of a space-related CSO and to understand what concrete recommendations can be made.

United Nations, General Assembly, Twentieth session. (1966). *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (A/RES/2222(XXI))* [Resolution]. Adopted on the report of the First Committee (A/RES/2222(XXI)). Retrieved 12 August 2018 from: http://undocs.org/A/RES/2222(XXI)

The OST entered into force in 1967. The OST is important for delegates to know, since it is the basis of international space law and highly analyzed. The key points of the treaty are the legal framework, placing WMDs in outer space, and responsibility for activities in space. The Treaty states that all equipment or facilities for peaceful exploration should not be prohibited, states are responsible for all national activities, and that cooperation and mutual assistance are key principles. This Treaty has more provisions on how peaceful cooperation in outer space can be achieved and is therefore useful for delegates to read and think over further.

United Nations, General Assembly, Seventy-second session. (2017). *International cooperation in the peaceful uses of outer space (A/RES/72/77)* [Resolution]. Adopted on the report of the Fourth Committee (A/72/446). Retrieved 12 August 2018 from: https://undocs.org/A/72/446

This resolution is the most recent resolution adopted by the General Assembly discussing prevention of an arms race in outer space. The resolution mainly calls for the establishment of a legal framework to ensure peaceful exploitation, and it focuses on aspects of regional and interregional cooperation. This source is useful for delegates because it gives further information on the legal framework as well as what other measures are existing to ensure a peaceful use of outer space.



United Nations Institute for Disarmament Research. (1991). *Prevention of an Arms Race in Outer Space:* A Guide to the Discussion in the Conference on Disarmament [Report]. Retrieved 12 August 2018 from: http://www.unidir.org/files/publications/pdfs/prevention-of-an-arms-race-in-outer-space-a-guide-to-the-discussions-in-the-cd-en-451.pdf

This guide by the United Nations Institute for Disarmament Research provides the reader with information about the prevention of an arms race in outer space. The guide starts with an introduction of the work of UNIDIR. The first section shows the legal limitations of military space activities and the second section examines proposals related to existing agreement for the prevention of an arms race in outer space. The guide also discusses new proposals for agreements and confidence-building measures. This source is useful for delegates looking to learn more about existing frameworks, as well as proposals to improve them.

United Nations Institute for Disarmament Research. (2018). *UNIDIR Space Security Conference 2018*, *Space Security: The Next Chapter, Conference Report* [Report]. Retrieved 12 August 2018 from: http://www.unidir.ch/files/publications/pdfs/space-security-conference-2018-space-security-the-next-chapter-en-714.pdf

The UNIDR is an autonomous institute that generates ideas and promotes action on disarmament and security. This is a report of the UNIDR Security Conference that took place May 2018. The conference examined the existing framework for space governance to see what aspects remain relevant to the emerging order in outer space, as well as what elements might be updated. Issues include the lack of space policies that ensure the sustainable and peaceful use of outer space, and the need for further actions to strengthen international cooperation. This source is useful to analyze weaknesses in existing frameworks.

United Nations Office for Outer Space Affairs. (n.d.). *In Focus* [Website]. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/index.html

The goal of the UNOOSA is to promote international cooperation in the peaceful use and exploration of space. Also, it shows the importance of space science and technology for sustainable economic and social development. This source contains information about legal and regulatory frameworks in the context of space activities. International cooperation and information sharing are topics that fall under the mandate of UNOOSA. Delegates can use this source to get a first idea of what peaceful uses of outer space includes and also to deepen their knowledge in specific areas of outer space affairs.

United Nations Office for Outer Space Affairs. (2018, June 20). Opening Statement by the Director Simonetta Di Pippo at the UNISPACE+50 High- Level Segment on 20 June 2018, in Vienna, Austria. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/en/aboutus/director/director-statement-at-UNISPACE50-High-level-Segment.html

Simonetta Di Pippo is an Italian astrophysicist and the current Director of the UNOOSA. As this year marks the 50th anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space, Di Pippo gave an Opening Statement at the UNISPACE+50 High-Level Segment on June 2018 in Vienna. This statement gives the reader an impression of how important the work of UNOOSA is and what programs are of special important. She highlights the importance of concrete measures to assist states in using space for sustainable development, and further shows the interconnectedness of UNOOSA and the SDGs. This information is especially useful to understand UNOOSAs work and how it can impact the achievement of the SDGs.

Bibliography

Béclard, J. (2013). The Lisbon Treaty and the Evolution of European Space Governance. *Institut francais des relations internationals*. Retrieved 12 August 2018 from: https://www.ifri.org/sites/default/files/actuellesespacen12.pdf



Charter of the United Nations. (1945). Retrieved 18 September 2018 from: http://www.un.org/en/documents/charter/index.shtml

Durkin, E. (2018, August 10). Space Force: all you need to know about Trump's bold new interstellar plan. *The Guardian*. Retrieved 12 August 2018 from: https://www.theguardian.com/us-news/2018/aug/10/space-force-everything-you-need-to-know

European Organisation for the Exploitation of Meteorological Satellites. (n.d.). *International Cooperation* [Website]. Retrieved 12 August 2018 from:

https://www.eumetsat.int/website/home/AboutUs/InternationalCooperation/index.html

European Organisation for the Exploitation of Meteorological Satellites. (n.d.). *What we do* [Website]. Retrieved 12 August 2018 from: https://www.eumetsat.int/website/home/AboutUs/WhatWeDo/index.html

European Organisation for the Exploitation of Meteorological Satellites. (n.d.). *Who we are* [Website]. Retrieved 12 August 2018 from: https://www.eumetsat.int/website/home/AboutUs/WhoWeAre/index.html

European Organisation for the Exploitation of Meteorological Satellites. (2017). *EUMETSAT Strategy Challenge 2025 Summary* [Brochure]. Retrieved 18 September 2018 from: https://www.eumetsat.int/website/home/AboutUs/Publications/Brochures/index.html

European Union. (2007). Consolidated Version of Treaty of the Functioning of the European Union. Retrieved 26 October 2018 from: https://eur-lex.europa.eu/resource.html?uri=cellar:6985a220-b291-422c-8e7c-e2625a041d0d.0006.01/DOC 3&format=PDF

Explore Deep Space. (n.d.). *About the Coalition* [Website]. Retrieved 12 August 2018 from: http://exploredeepspace.com/about-us/

Explore Deep Space. (2018). *A Space Exploration Roadmap for the next Administration*. Retrieved 25 October 2018 from: http://www.exploredeepspace.com/wp-content/uploads/policies/A Space Exploration Roadmap %282016%29 FINAL LowRes.pdf

Fihn, B. & Irsten, G. (2014). *Addressing Challenges in Space through New Multilateral Processes*. Reaching Critical Will. Retrieved 29 October 2018 from: http://www.reachingcriticalwill.org/images/documents/Publications/Awaiting-launch RCW.pdf

Hatton, S. (2017, January 27). 50 years of the Outer Space Treaty. *International Institute of Space Law*. Retrieved 12 August 2018 from: https://iislweb.org/50-years-of-the-outer-space-treaty/

Marchisio S. (2010). *The Draft Code of Conduct for Outer Space Activities*. Retrieved 12 August 2018 from: http://www.unoosa.org/pdf/pres/2010/SLW2010/02-10b.pdf

Nuclear Threat Initiative. (n.d.). *Proposed Prevention of an Arms Race in Space (PAROS) Treaty* [Website]. Retrieved 12 August 2018 from: http://www.nti.org/learn/treaties-and-regimes/proposed-prevention-arms-race-space-paros-treaty/

Reaching Critical Will. (n.d.). *Outer Space* [Website]. Retrieved 12 August 2018 from: http://www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/5448-outer-space

Reaching Critical Will. (n.d.). *UN General Assembly First Committee* [Website]. Retrieved 12 August 2018 from: http://www.reachingcriticalwill.org/disarmament-fora/unga

Reaching Critical Will. (n.d.). *Who we are* [Website]. Retrieved 12 August 2018 from: http://www.reachingcriticalwill.org/about-us/who-we-are



Reaching Critical Will. (2018). *First Committee Briefing Book* [Website]. Retrieved 18 September 2018 from: http://reachingcriticalwill.org/images/documents/Disarmament-fora/1/2018/briefingbook/FCBB-2018.pdf

Spaceflight 101. (2017). 2017 Space Launch Statistics [Website]. Retrieved 29 October 2018 from: http://spaceflight101.com/2017-space-launch-statistics/

United Nations, Committee on the Peaceful Uses of Outer Space. (2007). *Declaration of San Francisco de Quito of the Fifth Space Conference of the Americas (A/AC.105/C.1/2007/CRP.15)*. Retrieved 29 October 2018 from: http://www.unoosa.org/pdf/limited/c1/AC105 C1 2007 CRP15E.pdf

United Nations, Committee on the Peaceful Uses of Outer Space. (2009). Contribution of the Committee on the Peaceful Uses of Outer Space to the work of the Commission on Sustainable Development for the thematic cluster 2010-2011 (A/AC.105/2009/CRP.7) [Report]. Retrieved 12 August 2018 from: http://www.unoosa.org/pdf/limited/l/AC105 2009 CRP07E.pdf

United Nations, Department of Public Information. (2017, October 30). First Committee Submits Six Drafts to General Assembly, One Calling for Immediate Start of Negotiations on Treaty Preventing Outer Space Arms Race (GA/DIS/3591) [Press Release]. Retrieved 12 August 2018 from: https://www.un.org/press/en/2017/gadis3591.doc.htm

United Nations, Department of Public Information. (2018, April 2). UN Disarmament Commission debates ways to prevent arms race in outer space [News Article]. Retrieved 22 October 2018 from: https://news.un.org/en/story/2018/04/1006401

United Nations, Department of Economic and Social Affairs. (n.d.). *Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation* [Website]. Retrieved 29 October 2018 from: https://sustainabledevelopment.un.org/sdg9

United Nations, Department of Economic and Social Affairs. (n.d.). *Goal 16: Peace, justice and strong institutions* [Website]. Retrieved 29 October 2018 from: https://sustainabledevelopment.un.org/sdg16

United Nations, Department of Economic and Social Affairs. (n.d.). *Goal 17: Partnership for the goals* [Website]. Retrieved 29 October 2018 from: https://sustainabledevelopment.un.org/sdg17

United Nations, Department of Economic and Social Affairs. (n.d.). Sustainable Development Knowledge Platform [Website]. Retrieved 29 October 2018 from: https://sustainabledevelopment.un.org/

United Nations, General Assembly, First session. (1946). *Establishment of a Commission to Deal with the Problems Raised by the Discovery of Atomic Energy (A/RES/1(I))* [Resolution]. Retrieved 29 October 2018 from: http://undocs.org/A/RES/1(I)

United Nations, General Assembly, Fourteenth session. (1959). *International co-operation in the peaceful uses of outer space (A/RES/1472 (XIV))* [Resolution]. Retrieved 12 August 2018 from: https://undocs.org/en/A/RES/1472(XIV)

United Nations, General Assembly, Eighteenth session. (1963). *The Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space (A/RES/18/1962)* [Resolution]. Retrieved 29 October 2018 from: https://undocs.org/A/RES/1962(XVIII)

United Nations, General Assembly, Twentieth session. (1966). Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (A/RES/2222(XXI)) [Resolution]. Adopted on the report of the First Committee (A/RES/2222(XXI)). Retrieved 12 August 2018 from: http://undocs.org/A/RES/2222(XXI)



United Nations, General Assembly, Twenty-sixth session. (1971). Convention on International Liability for Damage Caused by Space Objects (A/RES/2777(XXVI)) [Resolution]. Adopted on the reports of the first Committee. Retrieved 12 August 2018 from: https://undocs.org/en/A/RES/2777(XXVI)

United Nations, General Assembly, Thirty-forth session. (1979). *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (A/RES/34/68)* [Resolution]. Adopted on the report of the Special Political Committee (A/34/68). Retrieved 12 August 2018 from: https://undocs.org/A/RES/34/68

United Nations, General Assembly, Sixty-first session. (2006). *Transparency and confidence-building measures in outer space activities (A/RES/61/75)* [Resolution]. Adopted on the report of the First Committee (A/61/394). Retrieved 12 August 2018 from: https://undocs.org/A/RES/61/75 United Nations, General Assembly, Sixty-second session. (2007). *Transparency and confidence-building measures in outer space activities: Report of the Secretary-General*. Retrieved 12 August 2018 from: http://undocs.org/A/62/114

United Nations, General Assembly, Sixty-fifth session. (2011). *Transparency and confidence-building measures in outer space activities (A/RES/65/68)* [Resolution]. Adopted on the report of the First Committee (A/65/410). Retrieved 29 October 2018 from: http://undocs.org/A/RES/65/68

United Nations, General Assembly, Sixty-sixth session. (2012). *International cooperation in the peaceful uses of outer space (A/RES/66/71)* [Resolution]. Adopted on the report of the Fourth Committee (A/66/425). Retrieved 12 August 2018 from: https://undocs.org/A/RES/66/71

United Nations, General Assembly, Sixty- eighth session. (2013). *Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities: Note by the Secretary-General (A/68/189)* [Report]. Retrieved 29 October 2018 from: https://undocs.org/A/68/189

United Nations, General Assembly, Seventieth session. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development (A/RES/70/1)* [Resolution]. Retrieved 29 October 2018 from: http://undocs.org/A/RES/70/1

United Nations, General Assembly, Seventieth session. (2015). *Transparency and confidence-building measures in outer space activities (A/RES/70/53)* [Resolution]. Adopted on the report of the First Committee (A/70/460). Retrieved 12 August 2018 from: https://undocs.org/A/RES/70/53

United Nations, General Assembly, Fifty-ninth session. (2016). Role of United Nations entities in supporting Member States in the implementation of transparency and confidence-building measures in outer space activities (A/AC.105/1116) [Report]. Retrieved 29 October 2018 from: http://undocs.org/A/AC.105/1116

United Nations, General Assembly, Seventy-second session. (2017). Further practical measures for the prevention of an arms race in outer space Statement of financial implications (A/RES/72/250) [Resolution]. Adopted on the report of the First Committee (A/72/407). Retrieved 29 October 2018 from: http://undocs.org/A/RES/72/250

United Nations, General Assembly, Seventy-second session. (2017). *International cooperation in the peaceful uses of outer space (A/RES/72/77)* [Resolution]. Adopted on the report of the Fourth Committee (A/72/446). Retrieved 12 August 2018 from: https://undocs.org/A/72/446

United Nations, General Assembly, Seventy-second session. (2017). *No first placement of weapons in outer space (A/RES/72/27)* [Resolution]. Adopted on the report of the First Committee (A/72/407). Retrieved 29 October 2018 from: https://undocs.org/A/RES/72/27

United Nations, General Assembly, Seventy-second session. (2017). *Prevention of an arms race in outer space(A/RES/72/26)* [Resolution]. Adopted on the report of the First Committee (A/72/407). Retrieved 12 August 2018 from: https://undocs.org/A/RES/72/26



United Nations, General Assembly, Seventy-second session. (2017). *Transparency and confidence-building measures in outer space activities: Report of the Secretary-General (A/72/65)*. Retrieved 12 August 2018 from: https://undocs.org/en/A/72/65

United Nations Institute for Disarmament Research. (n.d.). *Annual Outer Space Security Conference* [Website]. Retrieved 12 August 2018 from: http://www.unidir.org/programmes/emerging-security-issues/annual-outer-space-security-conference

United Nations Institute for Disarmament Research. (1991). *Prevention of an Arms Race in Outer Space:* A Guide to the Discussion in the Conference on Disarmament [Report]. Retrieved 12 August 2018 from: http://www.unidir.org/files/publications/pdfs/prevention-of-an-arms-race-in-outer-space-a-guide-to-the-discussions-in-the-cd-en-451.pdf

United Nations Institute for Disarmament Research. (2018). *UNIDIR Space Security Conference 2018*, *Space Security: The Next Chapter, Conference Report.* UNIDIR Resources. Retrieved 12 August 2018 from: http://www.unidir.ch/files/publications/pdfs/space-security-conference-2018-space-security-the-next-chapter-en-714.pdf

United Nations Office for Disarmament Affairs. (n.d.). *Military Confidence-building* [Website]. Retrieved 12 August 2018 from: https://www.un.org/disarmament/cbms/

United Nations Office for Disarmament Affairs. (n.d.). *Outer Space* [Website]. Retrieved 29 October 2018 from: https://www.un.org/disarmament/topics/outerspace/

United Nations Office for Disarmament Affairs. (n.d.). *Practical confidence-building measures in the field of conventional arms* [Website]. Retrieved 12 August 2018 from: https://www.un.org/disarmament/cbms/

United Nations Office for Outer Space Affairs. (n.d.). *About Us* [Website]. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/en/aboutus/index.html

United Nations Office for Outer Space Affairs. (n.d.). *Documents and Resolution Database* [Website]. Retrieved 29 October 2018 from: http://www.unoosa.org/oosa/documents-and-resolutions/search.jspx?lf id

United Nations Office for Outer Space Affairs. (2018). Fifty years since the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (1968 - 2018): UNISPACE+50 [Website]. Retrieved 12 August 2018 from:

http://www.unoosa.org/oosa/en/ourwork/unispaceplus50/index.html

United Nations Office for Outer Space Affairs. (n.d.). Former astronaut Scott Kelly is United Nations Champion for Space [Website]. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/en/aboutus/champion-for-space.html

United Nations Office for Outer Space Affairs. (n.d.). *History* [Website]. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/en/aboutus/history/index.html

United Nations Office for Outer Space Affairs. (n.d.). *In Focus* [Website]. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/index.html

United Nations Office for Outer Space Affairs. (n.d.). *Our Partners* [Website]. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/en/aboutus/partners/list.html

United Nations Office for Outer Space Affairs. (n.d.). *UNISPACE Conferences* [Website]. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/en/aboutus/history/unispace.html



United Nations Office for Outer Space Affairs. (n.d.). *United Nations Register of Objects Launched into Outer Space* [Website]. Retrieved 26 October 2018 from: http://www.unoosa.org/oosa/en/spaceobjectregister/index.html

United Nations, Office for Outer Space Affairs. (2010). *Space Conference of the Americas: General Information* [Brochure]. Retrieved 29 October 2018 from: http://www.un-spider.org/sites/default/files/Brochure gen%20inf%20WORD%20ENG.pdf

United Nations Office for Outer Space Affairs. (2016, September 5). Opening Keynote by the Director Simonetta Di Pippo on Space as a Driver for Socio- Economic Sustainable Development on 05 September 2016 in Vienna. Retrieved 12 August 2018 from:

http://www.unoosa.org/pdf/SLW2016/Closing/UNOOSA_DIRECTOR_Presentation_Space_Law_Workshop_HLF_pillars_Sept_2016.pdf

United Nations Office of Outer Space Affairs. (2017). *Draft Programme for the joint panel discussion of the First and Fourth Committees on possible challenges to space security and sustainability* [Report]. Retrieved 12 August 2018 from:

https://www.un.org/en/ga/first/72/pdf/JointPanel_draft_program_rev2017.09.11.pdf

United Nations Office for Outer Space Affairs. (2018, June 20). Opening Statement by the Director Simonetta Di Pippo at the UNISPACE+50 High- Level Segment on 20 June 2018, in Vienna, Austria. Retrieved 12 August 2018 from: http://www.unoosa.org/oosa/en/aboutus/director/director-statement-at-UNISPACE50-High-level-Segment.html

United Nations Office for Outer Space Affairs. (2018). *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies* [Website]. Retrieved 29 October 2018 from:

http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html

United Nations, Spaced Based Information for Disaster management and Emergency Response. (2010). *General Information* [Brochure]. Retrieved 29 October 2018 from: http://www.unoosa.org/pdf/publications/st_space_65E.pdf