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United Nations Institute for Disarmament Research

Note by the Secretary-General

The Secretary-General hereby transmits to the General Assembly the report of the Director of the United Nations Institute for Disarmament Research (UNIDIR) on the activities of the Institute for the period from January to December 2021, the Institute's approved programme of work and financial plan for 2022 and the Institute's proposed programme of work and financial plan for 2023.

The Board of Trustees of UNIDIR reviewed the report and approved the programme of work and financial plans at the seventy-seventh session of the Advisory Board on Disarmament Matters, held in New York on 27 June 2022.

The role of UNIDIR as a provider of impartial research and a convener and enabler of discussions on delicate topics among States, and its support for transparency-building measures, is today more crucial than ever. The Board recognized the continued resilience and agility of UNIDIR in 2021 and noted that, despite the continuing challenges presented by the coronavirus disease (COVID-19) pandemic, a number of important milestones had been achieved. In 2021, the General Assembly approved the Board's long-standing recommendation to increase the regular budget subvention for UNIDIR.

* A/77/150.





Report of the Director of the United Nations Institute for Disarmament Research on the activities of the Institute for the period from January to December 2021, the approved programme of work and financial plan for 2022 and the proposed programme of work and financial plan for 2023

Summary

The present report covers the activities and financial status of the United Nations Institute for Disarmament Research (UNIDIR) for the period from January to December 2021, the Institute's approved programme of work and financial plan for 2022 and the Institute's proposed programme of work and financial plan for 2023. It was prepared in accordance with General Assembly resolution 39/148 H, in which the Assembly invited the Director of UNIDIR to report annually to it.

UNIDIR provides independent, evidence-based research and policy options to support Member States, United Nations entities, and expert, industry and civil society stakeholders in advancing practical measures that contribute to a more secure, sustainable and peaceful world. It is a key implementing partner of the initiative of the Secretary-General, Securing Our Common Future: An Agenda for Disarmament.

The Institute's current research agenda, endorsed by its Board of Trustees, is aimed at identifying pathways to reinvigorate multilateral arms control and disarmament in the face of a challenging international political and security environment. On the occasion of the Institute's fortieth anniversary, in 2020, the General Assembly recognized the importance, the timeliness and the high quality of the work of the Institute (see resolution 75/82).

In 2021, UNIDIR undertook research on a broad range of disarmament and global security issues. Its core programmes of work are focused on conventional arms and ammunition, weapons of mass destruction and other strategic weapons, space security, security and technology, and gender and disarmament, in addition to a special project on the process for a Middle East zone free of weapons of mass destruction. Focus areas studied in 2021 included outer space, nuclear risks, the risks and benefits of new technologies, emerging biothreats and the interlinkages between security, arms control, conflict prevention, development and peacebuilding. UNIDIR acts as a bridge-builder and facilitates the inclusive, transparent and collaborative dialogue among disarmament stakeholders, both State and non-State, that is essential to making progress in formal settings. The Institute builds knowledge and capacity on security and disarmament matters globally, its Cyber Policy Portal and other innovative tools enhance transparency, and its research on illicit small arms and improvised explosive devices helps to save lives. Traditionally, the Institute has also provided sustained, and often discreet, technical support to States and multilateral bodies.

This work is enabled by the voluntary support of a diverse group of donors. This support, together with continued strengthening of the Institute's funding structure and operating and financial models in recent years, allowed UNIDIR to further expand its policy-oriented research and outreach activities. These included a further increase in the amount of research outputs, publications and virtual events, despite the pandemic. In late 2021, the General Assembly increased the subvention of UNIDIR, which now covers the cost of the Director, one additional senior administrative officer, quarterly briefings to all regional groupings and three events in countries that are not members of the Organisation for Economic Co-operation and Development (OECD). All other activities implemented by UNIDIR rely on voluntary donor contributions.

Given the dependence of UNIDIR on voluntary contributions for all of its programmatic work, the pandemic's lasting economic impact and its drastic effects on the voluntary funding environment present a significant challenge to the Institute. In an era of cascading crises and uncertainty, in which disarmament matters are returning to the forefront and there are growing needs for the international community to have access to independent, in-depth and forward-looking research on disarmament and global security issues, significant steps remain to be taken to establish a more sustainable financial foundation for the Institute in order to support its mission of working towards a stable and more secure world.

I. Introduction

1. These are challenging times for humanity and the planet. The year 2021 was marked by cascading global crises and complex security dilemmas. At the start of the year, as the Russian Federation and the United States of America agreed to extend their agreement to limit their nuclear armaments, there was hope that this would spark new momentum for multilateral disarmament more widely. However, the sustained deterioration of the global security environment, with the continuous surge of tensions, polarization and mistrust over the course of the year, thwarted that prospect.

2. In September 2021, the Secretary-General warned that the world was on the edge of an abyss and moving in the wrong direction, and laid out two stark choices for humanity: breakdown or breakthrough. Disarmament, arms control and de-escalation inherently lie at the heart of any pathway towards a breakthrough. Without progress in these domains, humanity will be incapable of tackling the many urgent crises on the international security agenda. It is an inherent paradox of disarmament that it is needed the most in times when it appears least likely to be achieved. At the same time, disarmament, arms control and security arrangements have often emerged from moments of great tension, and path-breaking disarmament regimes have been achieved under conditions of strain. The need for renewed efforts to achieve multilateral disarmament, de-escalation and trust-building has never been more urgent.

3. The mission of the United Nations Institute for Disarmament Research (UNIDIR) is to work towards a stable and more secure world. It is the only United Nations think tank working on the increasingly complex spectrum of disarmament, arms control and non-proliferation issues. The Institute's independent research, evidence-based analysis and inclusive convening activities support the international community in addressing some of the world's most pressing international security challenges. Its insight-driven tools and advice generate positive, real-world change in various regions of the world. UNIDIR explores pathways to reinvigorate multilateral arms control and disarmament and acts as a bridge-builder. It also provides sustained, and often discreet, technical support to States and multilateral bodies while facilitating inclusive, transparent and collaborative dialogue among both State and non-State disarmament stakeholders. The General Assembly, in its resolution 75/82, recognized the importance, the timeliness and the high quality of the work of the Institute.

4. In 2021, UNIDIR expanded the scope, scale and impact of its research, outreach and capacity-building activities. To support the Institute's increased level of activity, the Deputy Director position at the D-1 level was re-established, and a New York Liaison Officer post was established. Following a long-standing recommendation by the Advisory Board on Disarmament Matters in its capacity as the Board of Trustees of UNIDIR, in December 2021 the General Assembly increased the Institute's subvention to support the costs of a Professional post (P-5), quarterly briefings to all regional groupings and three events in countries that are not OECD members. Notwithstanding this important boost to the Institute, the substantive activities of UNIDIR continue to be funded exclusively by voluntary contributions. This reliance on voluntary funding underlines the importance of all Member States from all regions supporting the Institute's activities, ideally with unearmarked multi-year funding. This is needed to ensure that it can continue to provide independent, evidence-based research and policy options that directly contribute to a stable and more secure world. In the three-year period from 2019 to 2021, UNIDIR operated with average annual expenditures close to \$6 million. If supported by Member States, UNIDIR can deliver even more.

II. Performance and status of implementation of activities in 2021

Research agenda and programmes

5. In 2021, UNIDIR continued the implementation of multi-year strategic research priorities endorsed by its Board (see A/76/183). During the year, UNIDIR developed a new multi-year strategic research agenda for the period 2022–2025. The new agenda builds on the Institute's research programmes and emphasizes the expansion and diversification of its expertise, educational activities, and forward-looking and long-term research on disarmament, arms control and global security matters, in line with its statutory mandate. Both strategic research agendas reflect the Secretary-General's initiative Securing Our Common Future: An Agenda for Disarmament, in which UNIDIR is a key implementing partner. The strategic research agendas of UNIDIR contribute to integrating disarmament across the 2030 Agenda for Sustainable Development (see General Assembly resolution 70/1) and ensure that knowledge, innovative ideas and dialogue on disarmament are accessible to a global audience, including young people and policymakers.

6. UNIDIR pursues five core programmes of work: (a) conventional arms and ammunition; (b) weapons of mass destruction and other strategic weapons; (c) space security; (d) security and technology; and (e) gender and disarmament. As part of a special regional project, the Institute also explores past efforts and prospects for a Middle East zone free of weapons of mass destruction. UNIDIR programmes are designed as dynamic, multi-year scalable work streams that enable the Institute to reflect the disarmament priorities of a diverse international community.

7. In 2021, UNIDIR continued to adapt and, whenever possible, enhance its service delivery, notably by shifting to online modes of working and interactive virtual formats to adjust to the impact of the coronavirus disease (COVID-19) pandemic, while continuing to scale up its research outputs and events. Quarterly risk assessments and a strong focus on staff well-being continued to guide all of the Institute's activities. Regular close contact with donors mitigated challenges in implementation. As a result, the number of publications increased from 52 in 2020 to 58 in 2021 (see annex I). New digital formats and 12 translations of its products helped UNIDIR to expand the accessibility, dissemination and impact of its research outputs: its reports were downloaded 40,000 times in 185 countries. Key research activities and policy impacts in 2021 are set out in detail below for each of the six main programmatic areas.

Conventional arms and ammunition

8. Poorly regulated conventional arms and ammunition continue to pose significant challenges to peace, security and development from global to local levels. The immediate impacts of their misuse include deaths, injuries, gender-based violence, displacement and psychological harm, facilitating violations of international law, criminality and terrorism. Their longer-term effects undermine access to health and education, humanitarian aid, the protection of civilians and the achievement of the Sustainable Development Goals. In cooperation with partners across the United Nations, Member States, regional organizations and the community of international security experts, the conventional arms and ammunition programme of UNIDIR conducts action-oriented field research and convenes multi-stakeholder dialogues to deliver advisory support and practical tools to prevent, mitigate and address the uncontrolled proliferation and misuse of conventional arms and ammunition. In 2021, the programme pursued three research priorities: (a) strengthening policy and practice on weapons and ammunition management; (b) adapting conventional arms control to the changing nature of warfare; and (c) preventing and mitigating armed violence in urban and local settings.

9. Weapons and ammunition management is essential for States to exercise governance and control over conventional arms, ammunitions and related parts and components. It is a fundamental component of conflict prevention and armed violence reduction. In 2021, UNIDIR provided practical guidance and assistance to support the conduct of national weapons and ammunition management baseline assessments, created space for dialogue to share effective practices and lessons learned to strengthen weapons and ammunition management in Africa, and shared research findings to identify diversion risks.

10. The Reference Methodology for National Weapons and Ammunition Management Baseline Assessments was published in 2021 in English, French and Spanish. It is the only publication that provides States with guidance on conducting comprehensive and systematic assessments of national institutions, policy and operational processes and capacities for weapons and ammunition management. As at 31 December 2020, 12 States had conducted a weapons and ammunition management baseline assessment using the methodology of UNIDIR, with each establishing a road map with concrete measures to enhance its weapons and ammunition management. In December 2021, Togo conducted its first baseline assessment with UNIDIR, in partnership with the Economic Community of West African States (ECOWAS). UNIDIR will continue to support ECOWAS in conducting these baseline assessments in West Africa and will cooperate with the HALO Trust to do the same in Central America. A preliminary study on weapons and ammunition management in the Sudan, conducted in 2020, informed the 2021 review by the United Nations of the situation in Darfur, in particular the benchmarks to assess the United Nations measures on Darfur (see S/2021/696).

11. In 2021, UNIDIR concluded the second part of its online regional weapons and ammunition management seminar, co-organized with the African Union in support of its Silencing the Guns initiative, to promote dialogue and share good practices on practical ways to strengthen policy and practice on weapons and ammunition management among international and regional organizations, States and non-governmental organizations (NGOs). The seminar laid the foundations for the first international symposium on weapons and ammunition management, scheduled to take place in 2022. UNIDIR will work with United Nations partners to convene this first international platform to explore options and avenues for a more coherent, strategic international approach to weapons and ammunition management.

12. The programme has a strong track record in enhancing knowledge on ways to better identify, understand and mitigate risks of diversion in international arms transfers. In 2021, in partnership with Conflict Armament Research and the Stimson Center, UNIDIR released the *Diversion Analysis Framework*, which identifies key factors that facilitate the diversion of conventional arms to better inform efforts to prevent, detect and address diversion. In 2021, UNIDIR shared its research findings on diversion and trafficking during a Security Council open debate on the impact of the diversion and trafficking of arms on peace and security, and an Arria-formula meeting on the threat to peace and security posed by trafficking and illicit trade of small arms and light weapons.

13. Action 21 of the Secretary-General's Agenda for Disarmament contains a call for the integration of conventional arms and ammunition control into the conflict prevention and management activities of the United Nations, taking the changing nature of warfare into account. UNIDIR develops practical guidance and recommendations for integrating conventional arms control into conflict prevention, management and resolution efforts, and conducts dialogues. In 2021, UNIDIR released the *Arms-Related Risk Analysis Toolkit*, offering practical guidance to mitigate arms- and ammunition-related risks in conflict-affected and fragile settings.

14. The programme also explores how conventional arms control can prevent and mitigate armed violence and civilian harm in urban and local settings. Under the programme, tools have been developed and provided to: (a) monitor the impact of explosive weapons in populated areas; and (b) conduct assessments of national capacities to counter the threat of improvised explosive devices.

15. In 2021, UNIDIR released the *Menu of Indicators to Measure the Reverberating Effects on Civilians from the Use of Explosive Weapons in Populated Areas.* This reference framework has been used by United Nations and NGO partners to document and monitor the impact of explosive weapons in populated areas on civilian deaths and injuries, civilian infrastructure, public health and education. It provides an evidence base for engaging conflict parties to mitigate civilian harm. A complementary Second Menu of Indicators, released in 2022, enables the examination of the reverberating effects from the use of these weapons in populated areas on civilian access to water, sanitation and hygiene, and the consequences for food security, environmental degradation and economic opportunity.

16. Improvised explosive devices continue to pose a global threat and cause human suffering around the world. In response to General Assembly resolution 73/67, UNIDIR released the *Counter-IED Capability Maturity Model and Self-Assessment Tool.* In 2021, UNIDIR supported six Member States in applying the tool, evaluating their national preparedness and response capabilities with a view to enhancing prevention and response strategies. The self-assessment tool has informed the whole-of-system response approach to improvised explosive devices taken by the United Nations. In 2022, UNIDIR will continue to assist interested States, United Nations partners and regional organizations in countering threats posed by improvised explosive devices.

Weapons of mass destruction

17. In 2021, the UNIDIR programme on weapons of mass destruction and other strategic weapons pursued research across four work streams: (a) identifying nuclear risk reduction measures; (b) exploring new approaches to verification in nuclear disarmament; (c) strengthening the norm against chemical and biological weapons; and (d) advancing nuclear dialogue. In a climate of continued geopolitical tension, interest in the programme's work was high throughout the year, with nearly 9,000 downloads of programme reports from more than 70 countries.

18. UNIDIR is recognized as a global thought leader on nuclear risk reduction. This topic became increasingly important during 2021, and the work of UNIDIR in the area has informed stakeholders and fed official positions and working papers for the tenth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. Research was focused on potential escalation scenarios, including from interconnected technological domains. In May, UNIDIR hosted a two-day virtual conference on the theme "Nuclear risk: across technologies and domains", featuring international experts discussing the risks posed by the technologies entangled with modern nuclear weapon programmes. The Institute also launched a new publication series on specific issues of contention among nuclear-armed and nuclear-allied States that could lead to escalation and spark conflict.

19. In 2022, the Institute will explore the relationships and dynamics between States that drive nuclear risk, with particular attention paid to building a systematic understanding of risks at the intersection of nuclear weapon systems and emerging technologies. This includes future outputs on nuclear risks linked to outer space and missile capabilities, and research on key contemporary topics such as nuclear decision-making in crisis situations. UNIDIR will also inform discussions on risk reduction at the rescheduled tenth Review Conference. This will include a policy brief

examining the prominence of risk reduction in the current review cycle, the likely outcomes of the Conference and ways forward.

20. Verifying nuclear disarmament is a key challenge for any future nuclear disarmament process. Building on its long-standing expertise, UNIDIR has shifted its conceptual focus towards new approaches to overcoming practical challenges in complex verification settings. The innovative UNIDIR concept of deferred verification has been integrated into other prominent forums in the field. In 2021, UNIDIR hosted a series of informal briefings for the Group of Governmental Experts to consider the role of verification in advancing nuclear disarmament. This was acknowledged as raising the baseline knowledge among international experts.

21. In 2021, the Institute initiated two further projects related to verification. The first explored verification in the context of the Treaty on the Prohibition of Nuclear Weapons. UNIDIR hosted a seminar to inform preparations for the First Meeting of States Parties to the Treaty, in 2022. The second project explored different options for missile verification based on insights from past arms control and disarmament efforts and new technological opportunities. UNIDIR presented its project findings at a side event of the First Committee.

22. In 2021, UNIDIR published five reports related to compliance with and enforcement of regimes related to weapons of mass destruction. The reports provided both concrete proposals to enhance regimes, such as the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, and innovative approaches to feed into a new vision for arms control and the disarmament of weapons of mass destruction. These reports were downloaded more than 2,800 times and cited in scholarly and policy literature. UNIDIR research and engagement on the Biological Weapons Convention has shaped the views of States parties in several areas, including identifying new approaches to reviewing science and technology through the development of a "UNIDIR hybrid" model. Several States parties to the Biological Weapons Convention publicly acknowledged the contribution of UNIDIR in providing information and advancing the Convention at the meetings of experts and States parties in 2021.

23. In 2022, the compliance and enforcement work stream will be refocused on strengthening the norm against chemical and biological weapons. This work stream will continue to feed policy discourse in chemical and biological weapon regimes through a series of public events and dialogue.

24. On the future of nuclear disarmament and strategic arms control, UNIDIR has initiated a dialogue on nuclear disarmament, nuclear deterrence and strategic arms control with a group of 40 senior experts from around the world. In 2021, the team published four reports and organized three events on the subject. Particularly noteworthy was a report containing concrete steps for consolidating the non-use of nuclear weapons, recrafting strategic arms control and revitalizing the pursuit of nuclear disarmament. This was presented to the First Committee and promoted through a series of op-eds.

25. In 2022, the dialogue will explore the ramifications of the war in Ukraine on arms control, disarmament and non-proliferation in order to develop policy options for revitalizing arms control and disarmament in a tense geostrategic environment.

Space security

26. As outer space is becoming ever more critical to humankind, research in this field is increasingly in demand. In 2021, UNIDIR work on space security made a

significant contribution to emergent discourse in the First Committee on ways to enhance space security. UNIDIR also initiated its first industry dialogue on space security and held the 2021 Outer Space Security Conference in an innovative hybrid format. The industry dialogue unpacked private sector perspectives related to space security and bridged the gap between States and other stakeholders. The Conference, which had a record 950 participants online and in person, enabled informal dialogue on several contemporary challenges related to space security and sustainability, advancing discussion on approaches to space security. The substantive discussion at the Conference fed into the dialogue at the First Committee and sparked considerable online interest.

27. Building on its long-standing expertise in space security, UNIDIR has designed its space security programme to facilitate the peaceful, prosperous and secure use of space through the enhancement of space security governance. In addition to the 2022 Outer Space Security Conference, the expansion of the industry dialogue and timely policy research, the space security programme will undertake multiple new tracks. These will include establishing a digital space security portal to serve as a one-stop online hub for materials on space security policies of key stakeholders; supporting the new open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours; building capacity around space security issues through regional events; and developing a space security lexicon in all United Nations languages to foster a shared understanding of contentious topics and terms.

Security and technology

28. The UNIDIR security and technology programme is designed to dynamically respond to the accelerating pace and scale of technological change, exploring its implications for international peace, security and development. In 2021, it pursued three work streams: (a) cyberstability; (b) the implications of the use of artificial intelligence and autonomy in weapon systems and other military applications; and (c) the security implications, positive and negative, of recent and over-the-horizon innovations in science and technology. It significantly contributed to supporting and advancing multilateral processes in international cybersecurity and lethal autonomous weapon systems.

29. In 2021, a concentration of high-profile cyber incidents targeted various types of infrastructure, information and communications technology businesses or services; however, there was significant progress in multilateral cyber negotiations, with the historic achievement of consensus reports by both cyber processes under the First Committee: the group of governmental experts and the open-ended working group. This context underscored the relevance and urgency of UNIDIR work on cyberstability. Recognition of the Cyber Policy Portal as a global confidence- and capacity-building tool in the consensus reports, and an invitation to present the project at the 2021 Paris Peace Forum, highlighted the importance of this work. In addition, UNIDIR conducted four multi-stakeholder dialogues and launched four reports supporting the operationalization of norms for responsible State behaviour in cyberspace. These activities tackled issues such as critical infrastructure protection, attribution, due diligence and information exchange. In 2022, UNIDIR will continue to support the operationalization of the framework for responsible State behaviour in cyberspace.

30. Another area of research is focused on the implications of artificial intelligence and autonomy in weapon systems, decision-making processes and other military applications. In 2021, UNIDIR conducted a series of five virtual regional tabletop exercises that brought together 200 experts from over 80 countries to explore human control in decisions regarding the use of force. The findings were summarized in a research report that was extensively referenced by delegations during meetings of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems. UNIDIR published two other major reports: one on data issues in autonomous systems, and a compendium mapping UNIDIR research findings on artificial intelligence and autonomous systems against open questions in the Group of Governmental Experts. In 2022, UNIDIR will explore the impact more broadly across various domains of warfare.

31. UNIDIR launched an innovative, cross-programmatic research initiative exploring the implications of emerging technologies in the conventional domain. Projects focused on the latest developments in uncrewed systems and innovative approaches to ceasefire monitoring. Activities included briefings on drone countermeasures and directed energy weapons, a paper on distributed ledger technologies for international security and arms control, and a flagship event, the Innovations Dialogue, which examined deepfake technologies and attracted over 1,000 participants from around the world.

Gender and disarmament

32. The UNIDIR gender and disarmament programme contributes to gender equality and the integration of gender perspectives into arms control and disarmament. Increasing diversity in arms control and disarmament will strengthen their effectiveness and create more employment opportunities for women. This work directly supports the implementation of the Agenda for Disarmament (actions 36 and 37), the 2030 Agenda (Sustainable Development Goals 5 and 16) and the women and peace and security agenda.

33. In 2021, the impact of the Institute's work was evident in the inclusion of gender as a formal agenda item of the Conference on Disarmament and the Meeting of Experts of the Biological Weapons Convention, the submission of working papers addressing gender-related aspects in the Biological Weapons Convention and in the Global Partnership against the Spread of Weapons and Materials of Mass Destruction, and the increased incorporation of gender perspectives in the work of the First Committee.

34. The programme included a regional workshop that brought together 52 national officials and experts from 11 countries in South and South-East Asia. It expanded its outreach by carrying out activities aimed at Arabic-speaking audiences, including two focus groups with Arab women experts in international security, a fact sheet on Arab women in international security and disarmament, and a high-level event organized in partnership with the United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women).

35. The programme covered research into gendered patterns of engagement in technical roles in the field of arms control. Findings were presented in the report *Women Managing Weapons: Perspectives for Increasing Women's Participation in Weapons and Ammunition Management*. In collaboration with Member States, the International Gender Champions Disarmament Impact Group and the International Peace Institute, UNIDIR co-hosted a discussion on the theme "Where are the women: staying curious about gender in international security" on the margins of the First Committee, attracting more than 700 live views.

36. Throughout 2021, publications under the programme examined how gender norms shape security technology and identified elements of gender-responsive approaches to cybersecurity, such as *Gender Approaches to Cybersecurity: Design, Defence and Response* and *System Update: Towards a Women, Peace and Cybersecurity Agenda.*

37. In support of the Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems, UNIDIR organized discussions on gender bias in military applications of artificial intelligence and published a report entitled *Does Military AI Have Gender? Understanding Bias and Promoting Ethical Approaches in Military Applications of AI*. The report provided an outline of avenues for countering bias and avoiding harm, including a gender-based review of military applications of artificial intelligence that would make explicit how systems represent and respond to gender, and how harmful effects related to bias have been mitigated.

38. In 2022, the best practices for gender equality in conventional arms control will be compiled and analysed under the programme. The applicability of intersectional gender analyses to nuclear research and policy will also be explored. Together with the International Gender Champions Disarmament Impact Group, the programme will build momentum for gender-responsive arms control and disarmament through briefings and resource tools that identify entry points for gender mainstreaming in multilateral processes.

A Middle East zone free of weapons of mass destruction

39. The UNIDIR project on a Middle East zone free of weapons of mass destruction is aimed at examining the historical chronology, perspectives and ideas for progress for such a zone. The three-year project, launched in October 2019 and funded by the European Union, has been building analytical capacity among stakeholders in the region. Historical divergences on the issue, and ongoing conflicts and deep mistrust among States in the region, have further complicated progress and diverted attention from cooperative initiatives to reduce regional proliferation challenges. Such initiatives are important for conflict prevention and mitigation, and to address regional instability.

40. The project pursues four overarching goals: (a) to fill an important research gap on how the issue of the Middle East zone free of weapons of mass destruction evolved, including lessons for current and future prospects; (b) to build analytical capacity to support new thinking on regional security issues and a zone free of weapons of mass destruction; (c) to collate ideas and develop new proposals on how to move forward on the issue; and (d) to foster inclusive dialogue and solicit regional perspectives, including by engaging relevant officials and experts in a series of workshops and factfinding dialogues in States in the Middle East.

41. In 2021, an interactive online timeline that maps the key historical milestones of the zone was launched. Available in Arabic, English, Hebrew and Persian, it is linked to an online document depository of over 420 key documents created in 2020. These two tools serve as a publicly accessible knowledge hub for the developments to date on the process to create a Middle East zone free of weapons of mass destruction.

42. Regional dialogue is central to this project. In 2021, the project held eight events, with over 500 participants. UNIDIR participated in and contributed to over 31 related events and regularly briefed and consulted States in the region and relevant entities within the United Nations system, including the International Atomic Energy Agency (IAEA), the Office for Disarmament Affairs and UN-Women. Under the project, interviews continued to be conducted with officials and experts from the Middle East, the three depositary States of the Non-Proliferation Treaty, the United Nations and the European Union to outline the themes, issues and debates underpinning discussions on a zone free of weapons of mass destruction in the region. During the November 2021 session of the Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction and at the Conference on Disarmament, several States commended the work of the UNIDIR project. 43. Publications in 2021 include a policy paper on nuclear verification in a zone free of weapons of mass destruction in the Middle East and an essay collection on lessons learned from the Joint Comprehensive Plan of Action for the process to create such a zone (in Arabic, English, Hebrew and Persian).

44. In 2022, under the project, essays will be published on regional perspectives, drivers and objectives for the zone, a narrative account of the zone process by the main stakeholders, and policy papers on means of delivery and chemical and biological warfare in the context of a zone free of weapons of mass destruction in the Middle East. Regional dialogues will also be held, and thematic research round tables will be organized on the topics above, as well as on cooperation on nuclear energy and on addressing regional weapons of mass destruction proliferation challenges.

Knowledge and advisory support

45. In 2021, the knowledge and advisory support of UNIDIR continued to be in high demand. UNIDIR supported the active engagement of States in various multilateral processes, including the Conference on Disarmament, the First Committee, the Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects, the Arms Trade Treaty, the Biological Weapons Convention and relevant Security Council committees. It provided technical advisory support to the Group of Governmental Experts on problems arising from the accumulation of conventional ammunition stockpiles in surplus throughout 2020–2021 and will support the 2022–2023 open-ended working group established by General Assembly resolution 76/233 to elaborate political commitments for a new global framework to address existing gaps in the "through-life" management of ammunition.

46. In 2021, UNIDIR provided technical support to the parallel processes on cybersecurity established by the General Assembly: the group of governmental experts (see resolution 73/266) and the open-ended working group (see resolution 73/27). UNIDIR, in close cooperation with the Office for Disarmament Affairs, advised the respective Chairs of both groups at their in-person meetings in February; synthesized relevant national inputs, positions and comments; and prepared draft texts for both processes. Through these advisory and support tasks, UNIDIR played a pivotal role in allowing both processes to reach a consensus, as highlighted by both Chairs. The provision of United Nations regular budget resources for consultancies for groups of governmental experts is the only source of dedicated financial support for such knowledge and advisory services.

47. The Institute provided expert briefings, technical assistance and substantive background knowledge on numerous disarmament, arms control and security issues, and substantive input to the technical guidelines to facilitate the implementation of Security Council resolution 2370 (2017) to prevent terrorists from acquiring weapons. It continued to explore collaborative initiatives with United Nations entities such as the Department of Peace Operations, the Department of Political and Peacebuilding Affairs, the Office for the Coordination of Humanitarian Affairs, the Office of the United Nations High Commissioner for Human Rights, the United Nations Development Programme, UN-Women, the Biological Weapons Convention Implementation Support Unit, the Counter-Terrorism Committee Executive Directorate, United Nations University and the United Nations Institute for Training and Research (UNITAR).

48. Each year UNIDIR holds a disarmament orientation course for newly arrived diplomats in Geneva. In 2021, the course was delivered virtually to delegates around the world. It received positive feedback from participants and permanent missions. It will be repeated annually, subject to funding.

49. UNIDIR personnel continued to give lectures at and participate in a wide range of events around the world and provided regular briefings to visiting scholars, government officials and student groups. The virtual nature of these events enhanced the global impact of UNIDIR. For example, UNIDIR personnel briefed several States and regional or like-minded groups on nuclear risk reduction and measures to reduce the diversion of small arms and light weapons, among other things; participated in the *Foreign Policy* Tech Forum; supported students in multiple Model United Nations exercises; and briefed the Security Council on the impact of arms diversion and trafficking on peace and security. Given the high demand for these educational activities, in 2022 UNIDIR will expand its educational activities in partnership with UNITAR.

Dialogue activities

50. Dialogue is at the core of the mission of UNIDIR. As an autonomous institution within the United Nations, it can exercise a critical bridge-building function in a fraught global security environment. It serves as a platform for inclusive multi-stakeholder dialogue and an interactive hub for knowledge and ideas. UNIDIR brings together State representatives, civil society, industry representatives and experts, and researchers from various disciplinary and geographical backgrounds to discuss a wide and diverse range of disarmament and global security issues.

51. In 2021, the Institute's refreshed approach to online multi-stakeholder events and its expansion of virtual interactive and practice-oriented formats allowed it to produce 63 per cent more events than in 2020. From country-specific assessments and regional workshops to First Committee side events, UNIDIR engaged participants at the national, regional and international levels on topics spanning the breadth of its research programmes. In 2022, subject to COVID-19-related travel and meeting restrictions, UNIDIR will resume its in-person activities and continue expanding its regional events and activities.

52. UNIDIR convenes annual flagship events: the Cyber Stability Conference, the Outer Space Security Conference and the Innovations Dialogue. The 2021 Cyber Stability Conference explored ways to advance the agenda for an open, secure, accessible and peaceful environment for information and communications technology. The hybrid 2021 Outer Space Security Conference provided a unique forum for 950 diverse participants to jointly consider challenges and solutions related to security in outer space. The hybrid 2021 Innovations Dialogue attracted over 1,000 participants from around the world to unpack the growing deepfake phenomenon and explore its implications for international security.

53. In 2021, UNIDIR continued the dialogue on nuclear disarmament, nuclear deterrence and strategic arms control with three interactive round tables that brought together senior experts from around the world to identify concrete options for recrafting strategic arms control and revitalizing the pursuit of nuclear disarmament.

The Institute

54. UNIDIR further improved and consolidated its funding structure and operating model, in line with the recommendations contained in the report of the Secretary-General on its thirty-fifth anniversary (A/73/284).

Staffing and operations

55. The credibility and impact of UNIDIR depend on the quality and diversity of its researchers. In 2021, UNIDIR continued to attract and retain a diverse pool of high-quality researchers. The full-time positions at UNIDIR increased by 13 per cent, from 32 in 2020 to 36 in 2021. Its current personnel hails from 24 countries from five

continents and speaks more than 17 languages, including all six United Nations official languages. In total, 38 per cent have doctoral degrees and most others have master's degrees. UNIDIR has a well-balanced gender ratio of 56:44 between female and male staff.

56. UNIDIR works with external subject matter experts on shorter contracts (2-6 months) to obtain further expertise and diversity where needed. The non-resident fellowship scheme allows UNIDIR to benefit from authoritative international voices on disarmament. The graduate professional programme facilitates the active involvement of young people. Both initiatives flourished in 2021, with 14 fellows and a total of 16 graduate professionals.

57. Successful discussions with long-standing donors to UNIDIR led to agreement in 2021 on the funding of two Junior Professional Officers, who are expected to join in September 2022 and will add capacity for coordination, resource mobilization and the planning of new initiatives.

58. The new Deputy Director (D-1) position at UNIDIR was filled in October 2021. The Deputy Director focuses on strategic research planning and implementation, resource mobilization and senior-level outreach. With the approval of an increased subvention for UNIDIR, including funds for a P-5 Executive Officer, the Institute will establish the P-5 position in 2022 to focus on management and administration.

59. In 2018, the Secretary-General recommended a staffing model in which programme leaders would be hired under temporary United Nations appointments to supervise consultant experts; this process was completed in early 2021. In 2022, their titles will be Head of Programme/Project to reflect their authority and responsibility in establishing strategic objectives, fundraising and implementing research activities.

60. In line with the recommended staffing model, UNIDIR continued to use consultancy agreements for programme expertise. This contractual modality carries fewer financial liabilities and allows for agility in responding to changes in the environment and voluntary contributions. For full-time, Geneva-based consultants, UNIDIR continued to utilize the individual contractor agreements of the United Nations Office for Project Services (UNOPS) to offer better conditions of service. For limited-duration expertise, UNIDIR offered more cost-efficient consultancies through the United Nations Office at Geneva.

61. With the shift of Head of Programme positions to United Nations contracts, the reliance on UNOPS for the administration of human resources was reduced in 2021. The total 2021 expenditure, including personnel costs, was \$1,598,552 (a decrease from \$2,198,633 in 2020), including \$1,461,946 for salaries for 20 personnel and \$136,606 in service fees. UNOPS processed 29 contracts and extensions. In comparison, the same support through the United Nations Office at Geneva would be approximately \$35,000 less, but the conditions of service that the Office offers for consultants would make it difficult for UNIDIR to attract and retain the high-quality talent it requires to carry out its work.

62. The cost of administrative and financial services of the United Nations Office at Geneva, including rent, came to a total of \$304,446 in 2021 (compared with \$295,451 in 2020).

Communications and outreach

63. UNIDIR strengthened its global outreach through innovative multimedia content, digital tools and a reinvigorated social media strategy. Website visits increased by 30 per cent in 2021, to a total of 858,000 views from people based in all Member States. With a 50 per cent increase in followers on Instagram, a 48 per cent increase on Twitter and a nearly 200 per cent increase on YouTube, UNIDIR expanded

its social media presence and engagement. Analytics from online communications provide UNIDIR with data to monitor the impact of its work. This complements the participant feedback and evaluations that it uses for events.

64. In 2021, UNIDIR attracted 9,000 participants (a 20 per cent increase) to the 78 events it hosted, continuing the rapid upward trajectory of audience growth. UNIDIR also released over 117 videos (a 56 per cent increase) covering a broad range of topics.

65. Providing access to the increasingly multilingual research outputs and expert analyses of UNIDIR remains a key priority. Twelve translations, including in Arabic, Chinese, French, Hebrew, Persian, Russian and Spanish, were issued in 2021. The Institute's 58 publications dealt with topics as varied as cyberoperations against critical infrastructure, gender and biological weapons, and a zone free of weapons of mass destruction in the Middle East (see annex I). The UNIDIR Cyber Policy Portal continued to receive accolades from Member States and the private sector. UNIDIR plans to develop additional portals in 2022, including on space security and biosecurity.

66. Acting on a recommendation from its Board to engage with young people on disarmament matters (see A/75/283), UNIDIR launched a new initiative that includes: (a) efforts to raise awareness of the importance of disarmament issues among young people; (b) building disarmament research capacity among the upcoming generation; (c) bridging generations through the organization of a Model United Nations Conference on Disarmament; and (d) education, academic outreach and collaboration.

67. In 2022, the Institute will amplify the global dissemination of its research through its website and social media platforms. UNIDIR will develop new digital tools, supplement in-depth publications with shorter, more accessible products and multimedia, and remain focused on translations. Outreach focused on the younger generations and the global public will be prioritized, and the digital presence of UNIDIR will build new audiences through partnerships with major United Nations social media accounts.

Partnerships

68. In 2021, UNIDIR continued to strengthen and expand its partnerships, including within the United Nations, with regional and national organizations and with the private sector. The new partnership between UNIDIR and UNITAR combines institutional strengths in disarmament education. It also developed a new partnership with United Nations University and partnered with the International Telecommunication Union to prepare a second edition of the *Guide to Developing a National Cybersecurity Strategy*. Throughout the year, UNIDIR worked with IAEA, the World Economic Forum and UN-Women and continued to be part of the United Nations Cyber Hub.

69. UNIDIR briefed its donors through biannual donor forums and engaged with a range of private sector and philanthropic partners through its guiding principles for engagement with non-State actors. It continued to collaborate with a wide range of research institutes and scholars worldwide and, in 2021, formalized agreements for research cooperation with Conflict Armament Research, the HALO Trust, Rutgers University, the Stimson Center and the Fondation pour la recherche stratégique. A memorandum of understanding with the Secure World Foundation formalized a long-standing partnership.

70. UNIDIR cooperation with the Office for Disarmament Affairs led to support for the open-ended working group on security of and in the use of information and communications technologies 2021–2025. UNIDIR also participated in various United Nations inter-agency processes on counter-terrorism, disarmament, demobilization and reintegration, mine action, improvised explosive devices,

biological risks and biological weapons, space security, small arms and light weapons, cyberissues, gender equality and good practices, and lessons learned from existing nuclear weapon-free zones.

71. In 2021, UNIDIR established a small liaison presence at United Nations Headquarters in New York to allow the Institute to expand and deepen its collaboration within the United Nations and with other multilateral partners. The new capacity supports Member States and other partners with knowledge and ideas and facilitates engagement with and reinforces linkages between UNIDIR-led disarmament research, events and other activities in Geneva and New York.

72. In 2022, UNIDIR intends to further deepen its collaboration within the United Nations and with other multilateral and regional partners while expanding its engagement with academic, private sector and philanthropic organizations. In part, this will be facilitated by the liaison presence in New York. Further opportunities for structured collaboration with academic institutions around the world will be explored with a view to creating a global research network that can magnify impacts at the local level and complement the skills and expertise of UNIDIR.

Resource mobilization

73. Despite the growth trajectory and increased activity of UNIDIR, it continues to face funding challenges due to a large share of contributions being earmarked. In 2021, only 13 per cent of contributions were unearmarked, leading to reduced flexibility for new institutional activities or other emerging research areas. Recognizing the almost complete reliance of UNIDIR on voluntary funds, the General Assembly, in its resolution 75/82, appealed to all Member States to continue to make financial contributions to the Institute, if possible multi-annual, and strongly encouraged them to unearmark these contributions so as to contribute to its viability, independence and impartiality and the quality of its work over the long term.

74. UNIDIR revamped its resource mobilization strategy to include United Nations trust funds and philanthropic and private sector funds, in addition to funding from government partners. To overcome the challenge of performing effective due diligence on private sector contributions, UNIDIR revived its agreement with the United Nations Office for Partnerships for receiving funds vetted by the United Nations Foundation. These institutional efforts were complemented by the further decentralization of funding activities to heads of programmes.

75. In 2021, some expected agreements did not materialize owing to restrictions on donor funding linked to development activities, as determined by OECD. The official development assistance (ODA) coefficient for donations to UNIDIR is 27 per cent. This was too low for some donors, as they were looking to fund activities with an ODA coefficient of 100 per cent.

76. Most of the first batch of multi-year agreements ended in 2021. Going forward, UNIDIR will try to ensure that the end dates of multi-year funding agreements are staggered to avoid an adverse situation for confirmed funding in any single year.

77. On 24 December 2021, the General Assembly approved the United Nations regular budget for 2022 (see resolution 76/246). This included a regular budget subvention for UNIDIR of \$683,500 for 2022, an increase of \$386,430 (after recosting). The increase is earmarked for a P-5 position to assist the Director in management and administrative functions, quarterly briefings to all regional groupings on research ideas on relevant disarmament topics, and three events in non-OECD countries to promote knowledge, ideas and dialogue on disarmament and non-proliferation among a broader and more diverse audience.

Resources and expenditures

78. With the generous support of 26 donors, a subvention from the regular budget, contributions from other United Nations entities and other income, the total revenue for 2021 amounted to \$6,516,092. The actual revenue for the first quarter of 2022 is shown in annex III, table 1. Details of voluntary contributions to UNIDIR in 2021 are in annex III, table 2. To make meaningful comparisons between income and expenditure and to better see changes in financial position from year to year, all income received from 2016 onward has been recalculated on the basis of the year for which contributions were provided, not the year in which agreements were signed. From the report of the Director, the opening and closing fund balances are included in the financial annexes showing the total funds available for the year.

79. The difference between the projected (A/76/175, annex IV) and actual voluntary contributions reflects some higher-than-expected contributions, which more than offset the expected decreases from other donors. As noted above, approximately 87 per cent of total voluntary contributions received in 2021 were earmarked for specific programmes or activities. The subvention received from the United Nations regular budget was \$280,700 and was earmarked to be used for the Director's salary. The subvention constituted 4 per cent of the Institute's total income in 2021.

80. The total expenditure of UNIDIR in 2021 was 6,892,579 (see annex III, table 1). Actual expenses for the first quarter of 2022 are also shown. Total expenditure in 2021 is close to projections of 6,819,104 (see A/76/175, annex IV). While travel and grants (for the implementation of the project on a Middle East zone free of weapons of mass destruction) were lower than projected, personnel and operating costs were higher owing to increases in publications and events. The total expenditure in 2021 was higher than the total revenues for the year, which was made possible by income carried forward from previous years, as shown in the opening balance.

81. Throughout the year, UNIDIR closely monitored its financial situation, to ensure that expenditure did not outpace revenue. Controls included a strengthened annual budgeting process, the provision of an annual cost plan to the United Nations Office at Geneva, biannual financial briefings to its Board of Trustees and donors, quarterly executive budget reviews, monthly programme budget reports to heads of programmes and more robust internal controls.

82. Reductions in the number of phone lines and New York office space and increased reliance on in-house capacity, among other cost-cutting measures, resulted in savings of over \$100,000 in 2021.

83. The closing balance at the end of 2021 is composed of funds received in 2021 or before with implementation periods into 2022 or beyond, and some funds that could not be used and for which donors granted no-cost extensions for implementation in the following year.

III. Programme of work and financial plan for 2022

84. The programme of work for 2022 was approved by the Board of Trustees at its meeting in June 2021 (see A/76/183). It reflects the updated workplans of the Institute's research programmes, guided by three cross-cutting priorities: (a) strengthening multilateral disarmament processes, including with a view to addressing the implications of new technologies; (b) continuing to implement the Secretary-General's Agenda for Disarmament, with a focus on efforts to reduce the impact of arms-related violence on civilians; and (c) expanding the Institute's engagement in different regions of the world, including through inclusive and interactive online formats. In line with its statutory mandate, UNIDIR will emphasize

long-term, forward-looking research and consider the wider linkages between disarmament, conflict prevention, development and global security. Responding to the growing demands of the international community for educational, training and capacity-building activities in disarmament and global security, UNIDIR will consolidate and seek to expand and enhance its capacity-building offerings. Following the successful development of the UNIDIR Cyber Policy Portal, the Institute plans to develop new tools to build knowledge, increase transparency and enhance confidence.

85. The strengthened Directorate and newly established New York liaison office of UNIDIR will support the Institute in meeting the international community's growing need for independent research, inclusive dialogue and advice and will facilitate the Institute's strategic planning and outreach to partners worldwide.

86. To ensure sustained high-quality research outputs and results-oriented management, UNIDIR will operate on the basis of a programme planning and review process that includes continuous programme development, proactive work planning and quarterly implementation reviews, as well as impact monitoring and reporting. New multi-year workplans were developed for each research programme in 2021, in order to collaborate with potential donors for multi-year funding that covers the 2022–2025 period.

87. The projected revenue for 2022 and 2023 is based on a conservative estimate of voluntary contributions, as most of the multi-year funding agreements established in previous years ended in 2021. Projections reflect the updated regular budget subvention and potential contributions from non-traditional donors. Expenses encompass the workplans of programmes and institutional initiatives. Implementation will be monitored and maintained within the available resources. The expenditure required to support the 2022 programme of work is projected to be \$7,843,493, as shown in annex IV.

88. The revamped resource mobilization efforts of UNIDIR and the economic implications of the global COVID-19 pandemic make it difficult to predict the revenue for 2022 and 2023. Based on ongoing discussions, UNIDIR anticipates a modest increase in voluntary contributions in 2022 and 2023, as shown in annexes IV and V. Keeping in mind the severe impact of the COVID-19 pandemic on the financial resources of Member States, the volatile global economic situation and the continued high level of earmarking, UNIDIR will aim to set aside unearmarked resources of at least 15 per cent of its annual budget for operational liquidity requirements.

IV. Conclusion

89. Over the course of 2021, tensions between States, including nuclear-armed States, and risks of escalation of conflict continued to increase to ever higher and more concerning levels. Simultaneously, the multilateral disarmament machinery remained stymied, raising urgent questions about reinforcing trust and incentivizing more effective arms control and disarmament. As core elements of the multilateral security architecture are seen to be losing operative purchase, these trends are contributing to a pervasive sense of stasis and helplessness in the multilateral system in the face of so many cascading security crises.

90. However, disarmament is more than a seemingly distant aspiration for the future: it is a recipe for strengthened bonds of trust, a continuous real-world exercise in confidence-building and de-escalation. Historically, it has helped to disrupt escalatory spirals and paved the way to more constructive dialogues. Disarmament

marks a first decisive step towards conflict prevention and onto the path towards breakthrough, rather than breakdown.

91. UNIDIR plays a unique and vital role in this multilateral disarmament environment. It develops knowledge and ideas that address the most pressing global security challenges. It provides foresight on future security trends, builds capacity and acts as a bridge-builder in a multiplex security environment fraught with tensions. The General Assembly, in its resolution 75/82, on UNIDIR considered the continuing need for the international community to have access to independent and in-depth research on security issues and prospects for disarmament and non-proliferation. In the wake of a global pandemic, a deteriorating global security environment and unprecedented existential challenges, the need for new ideas, independent research and fresh approaches has never been clearer or more urgent.

92. Against this backdrop, UNIDIR significantly scaled up its research activities, outputs and impact in 2021. It revamped resource mobilization efforts to align with its updated strategic research framework for 2022–2025. It also continued efforts to engage broader and more diverse audiences globally and further strengthened its digital communication. The higher level of activity of UNIDIR is a testament to its strength, agility and performance. However, a volatile global economy and the ongoing effects of the pandemic have drastically affected the voluntary funding on which UNIDIR depends. Significant support is needed to enable UNIDIR to sustainably meet the international community's increasing research demands and deliver its mission of working towards a stable and more secure world.

Annex I*

Publications 2021

Conventional arms and ammunition

UNIDIR publications

- Menu of Indicators to Measure the Reverberating Effects on Civilians from the Use of Explosive Weapons in Populated Areas, 23 February 2021
- Handbook to Profile Small Arms Ammunition in Armed Violence Settings (Spanish translation published in 2021), 8 June 2021
- A Reference Methodology for National Weapons and Ammunition Management Baseline Assessments (French and Spanish *translations published in 2021*), 26 July 2021
- Arms Trade Treaty Issue Brief 3: Diversion Analysis Framework, 31 August 2021
- Arms-Related Risk Analysis Toolkit: Practical Guidance for Integrating Conventional Arms-Related Risks into Conflict Analysis and Prevention, 20 December 2021

Journal and working group papers

- Bajon, Theò (2022). Book Review: Post-conflict Reconstruction and Local Government. *Peacebuilding*, vol. 10, No. 1.
- Bajon, Theò (2021). Book Review: Peace and Conflict Studies: Perspectives from South Asia. *International Affairs*, vol. 97, No. 6.
- Bajon, Theò (2021). The rebels' credibility dilemma: A new approach to the search for credibility towards the international community and the population. *Peace and Conflict Studies*, vol. 28, No. 1.
- Second version of "Proposal to Develop a Comprehensive Framework for Conventional Ammunition Management", Chair's food-for-thought non-paper for the Group of Governmental Experts on problems arising from the accumulation of conventional ammunition stockpiles in surplus.
- Implementation Mechanism for a Conventional Ammunition Framework. Internal brainstorming paper for the Chair of the Group of Governmental Experts on problems arising from the accumulation of conventional ammunition stockpiles in surplus.

Other publications

• Holtom, Paul (2021). *Taking Stock of the Arms Trade Treaty: Scope*. SIPRI, Stockholm.

Weapons of mass destruction and other strategic weapons

UNIDIR publications

• Some Thoughts on the Logic of Strategic Arms Control: Three Perspectives, 29 January 2021

^{*} Annex I is being issued without formal editing and in the language of submission only.

- Tools for Compliance and Enforcement from Beyond WMD Regimes, 5 February 2021
- Nuclear Risk Reduction: Engaging the Non-NPT Nuclear-Armed States, 9 February 2021
- Preparing for Success at the Ninth Biological and Toxin Weapons Convention Review Conference, 6 April 2021
- WMD Compliance and Enforcement in a Changing Global Context, 18 May 2021
- Revitalizing Pursuit of Nuclear Disarmament, 20 May 2021
- Exploring Science and Technology Review Mechanisms under the Biological Weapons Convention, 15 June 2021
- Nuclear Escalation Strategies and Perceptions: The United States, the Russian Federation, and China, 22 June 2021
- Identifying Collaborative Actions to Reduce Today's Nuclear Dangers (Arabic, Chinese, French, Russian and Spanish translations published in 2021), 1 September 2021
- Restoring Confidence Across Today's Nuclear Divides: Symposium Report, 14 October 2021
- Space Industry Workshop Report, 5 November 2021
- The Cyber-Nuclear Nexus: Interactions and Risks, 9 November 2021
- 2021 Outer Space Security Conference Report, 23 December 2021
- Enhancing the Management and Enforcement of Compliance in the Regime Prohibiting Chemical Weapons, 28 December 2021

Journal and working group papers

- Revill, James and Anna Roessing (2021). Biosecurity. In *The Oxford Handbook* of the International Law of Global Security, Robin Geiß, and Nils Melzer, eds. Oxford: University Press.
- Revill, James, Renata Hessmann Dalaqua and Wilfred Wan (2021). The TPNW in Practice: Elements for Effective National Implementation. *Journal for Peace and Nuclear Disarmament*, vol. 4, No. 1.
- Podvig, Pavel (2021). Practical Implementation of the Join-and-Disarm Option in the Treaty on the Prohibition of Nuclear Weapons. *Journal for Peace and Nuclear Disarmament*, vol. 4, No. 1.
- Working Group Recommendations on Education, Training and Capacity-Building, WHO Global Guidance Framework to Harness the Responsible Use of the Life Sciences.

Security and technology

UNIDIR publications

- International Cooperation to Mitigate Cyber Operations against Critical Infrastructure, 6 April 2021
- Known Unknowns: Data Issues and Military Autonomous Systems, 17 May 2021

- International Cyber Operations: National Doctrines and Capabilities Research Paper Series, 27 May 2021
- Building Cyber Operational Capabilities: Brazil's Efforts over the Past Two Decades, 10 June 2021
- Exploring Science and Technology Review Mechanisms under the Biological Weapons Convention, 15 June 2021
- UNIDIR on Lethal Autonomous Weapons; Mapping Our Research to the Discussions of the GGE on LAWS, 30 July 2021
- Table-Top Exercises on the Human Element and Autonomous Weapons System, 30 July 2021
- Exploring Distributed Ledger Technology for Arms Control and Non-proliferation: A Primer, 10 September 2021
- Applying Chapters VI and VII of the Charter of the United Nations in the Cyber Context, 22 September 2021
- ICTs, International Security, and Cybercrime, 11 October 2021
- The Projection of Cyber Power by Australia and Japan: Contrasting Their Doctrines and Capabilities for the Rule-Based International Order, 21 October 2021
- The Cyber Operations Strategies of the United States and Canadian Governments: A Comparative Analysis, 2 November 2021
- Due diligence in cyberspace: Normative expectations of reciprocal protection of international legal rights, 17 November 2021
- The 2021 Innovations Dialogue Conference Report, 22 December 2021

Gender and disarmament

UNIDIR publications

- Gender Approaches to Cybersecurity, 21 January 2021
- Gendered Impacts of Explosive Weapons in Populated Areas, 2 March 2021
- Gender & Disarmament Resource Pack (2021 edition), 8 March 2021
- Factsheet: Gender and Biological Weapons, 4 May 2021
- Connecting the Dots: Arms Control, Disarmament and the Women, Peace and Security Agenda (Arabic translation published in 2021), 7 June 2021
- Women Managing Weapons, 27 July 2021
- System Update: Towards a Women, Peace and Cybersecurity Agenda, 13 September 2021
- Factsheet: Arab Women in International Security and Disarmament, 27 October 2021
- Factsheet: Gender and Chemical Weapons (2021 edition), 16 November 2021
- Does Military AI Have Gender? Understanding Bias and Promoting Ethical Approaches in Military Applications of AI, 7 December 2021
- Gender Perspectives in Arms Control and Disarmament: Views from South and South East Asia, 10 December 2021

A Middle East zone free of weapons of mass destruction

UNIDIR publications

- Nuclear Verification in a Middle East WMD-Free Zone: Lessons from Past Verification Cases and Other Precedents, 21 January 2021
- From the Iran Nuclear Deal to a Middle East Zone? Lessons from the JCPOA for an ME WMDFZ (Arabic, Hebrew and Persian translations of introductory essay also published in 2021), 27 May 2021
- Factsheet: Arab Women in International Security and Disarmament, 27 October 2021

Journal and working group papers

• Sabet, Farzan (2021). Iran Deal Scenarios and Regional Security. *Arms Control Today* (October).

Annex II

Explanatory note to financial annexes

All figures shown in annex III, with the exception of voluntary contributions, are based on the United Nations statement of financial performance for the year 2021 for UNIDIR.

Revenue	
Voluntary contributions	Voluntary contributions, in cash and goods in kind Contributions from non-Member States
Other transfers and allocations	Allocations from other funds Subvention from the United Nations regular budget Allocations from United Nations common system entities
Investment revenue	Investment revenue Bank balance interest Realized market gain (loss) Unrealized market gain (loss)
Other/miscellaneous revenue	Foreign exchange gains Other miscellaneous income
Expenses	
Employee salaries, allowances and benefits	Staff contracts administered by the United Nations Secretariat Staff salaries and wages, allowances, including taxes and education grant, home leave, family visit, rest and recuperation and education grant travel General temporary assistance compensation and allowances
Other expert contracts and fees	Individual contractors and individual consultants administered by the United Nations Secretariat and the United Nations Office for Project Services
Grants and other transfers	Outright grants and other transfers to implementing agencies and partners and other entities
Travel	Travel of staff Travel of expert personnel Travel of representatives
Other operating expenses	Rent, utilities Contracted services

Annex III

Table 1

Actual revenue and expenses for 2021 and first quarter of 2022

(Thousands of United States dollars)

Description	2021	First quarter 2022 ^a
Opening balance	7 079	6 703
Revenue		
Voluntary contributions ^b	6 187	3 035
Other transfers and allocations	331	741
Investment revenue	(7)	-
Other revenue	5	1
Total revenue	6 516	3 777
Expenses		
Direct expenditure		
Employee salaries, allowances and benefits	2 651	380
Other expert contracts and fees	2 234	131
Grants and other transfers	640	-
Supplies and consumables	-	-
Travel	29	6
Other operating expenses	664	3
Programme support costs ^c	674	168
Total expenses	6 892	688
Surplus/(deficit) for the period	(376)	3 089
Closing balance	6 703	9 792

^{*a*} Position as at 5 April 2022; subject to changes until the close of the March 2022 accounting period.

^b Includes contributions pledged in 2019 or 2020 that were receivable for 2021 and excludes those that were pledged in 2021 for future years.

^c Programme support costs generated from the use of extrabudgetary resources were used to cover operating services provided by the United Nations Office at Geneva.

Table 2**Details of voluntary contributions for 2021**

(United States dollars)

Description	Amount
A. Voluntary contributions	
Australia	42 082
Canada	81 103
European Union ^a	374 094
Finland ^b	229 307
France	160 000
Germany ^c	1 980 985
Iraq	2 000
Ireland	243 902
Kazakhstan	10 000
Luxembourg	12 195
Mexico	10 000
Netherlands	440 000
New Zealand	54 113
Norway ^d	1 166 901
Pakistan	5 000
Philippines	7 500
Republic of Korea	185 902
Russian Federation	100 000
Spain	57 339
Sweden	273 754
Switzerland ^e	531 000
Fondation pour la recherche stratégique	24 390
Halo Trust	18 952
Microsoft Corporation	176 887
Subtotal, A	6 187 406
B. Other transfers and allocations	
Subvention from the United Nations regular budget	280 700
Office for Disarmament Affairs	50 100
Subtotal, B	330 800
Total	6 518 206

^{*a*} Part of a conditional multi-year contribution from the European Union of \$3.2 million. Revenue is recognized during the course of the project as specific goods or services are provided in accordance with the terms of the agreement.

^b Includes \$110,011 pledged by Finland in 2019 for 2021.

^c Includes \$111,483 pledged by Germany in 2019 for 2021.

^d Includes \$1,053,741 which is part of a multi-year pledge made by Norway in 2018 for 2021. Does not include a further \$113,161 pledged in 2020 for 2022.

^e Includes \$100,000 pledged by Switzerland in 2019 for 2021 and \$80,000 pledged in 2020 for 2021. Does not include a further \$165,000 pledged in 2021 for 2022.

Annex IV

Projected revenue and expenses for 2022

(Thousands of United States dollars)

Description	2022
Opening balance	6 703
Revenue	
Voluntary contributions	7 013
Other transfers and allocations	771
Investment income	20
Other revenue	5
Total revenue	7 809
Expenses	
Direct expenditure	
Employee salaries, allowances and benefits	2 336
Other expert contracts and fees	2 669
Grants and other transfers	989
Supplies and consumables	1
Travel	313
Other operating expenses	709
Programme support costs	826
Total expenses	7 843
Surplus/(deficit) for the year	(34)
Closing balance	6 668

Annex V

Projected revenue and expenses for 2023

(Thousands of United States dollars)

Description	2023
Opening balance	6 668
Revenue	
Voluntary contributions	6 733
Other transfers and allocations	787
Investment income	50
Other revenue	10
Total revenue	7 580
Expenses	
Direct expenditure	
Employee salaries, allowances and benefits	2 556
Other expert contracts and fees	2 749
Grants and other transfers	557
Supplies and consumables	1
Travel	375
Other operating expenses	740
Programme support costs	859
Total expenses	7 837
Surplus/(deficit) for the year	(257)
Closing balance	6 411