



## SECDIV-NIPS Islamabad International Conference 2022

### Promoting Strategic Trade Controls Through International Cooperation



### REPORT OF THE SECDIV-NIPS ISLAMABAD INTERNATIONAL CONFERENCE – 2022

### PROMOTING STRATEGIC TRADE CONTROLS THROUGH INTERNATIONAL COOPERATION

### STRATEGIC EXPORT CONTROL DIVISION (SECDIV) & NUST INSTITUTE OF POLICY STUDIES (NIPS) Islamabad

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### **INTRODUCTION**

Strategic Export Control Division (SECDIV) of Pakistan's Ministry of Foreign Affairs and NUST Institute of Policy Studies (NIPS) jointly organized the international conference on promoting strategic trade controls through international cooperation on September 5 and 6, 2022. Attended by more than 200 participants that included 36 foreign delegates, the SECDIV-NIPS Islamabad International Conference (IIC) – 2022 brought together domestic and foreign experts, representatives of various governments, export control regimes and international organizations, industry representatives, academic experts, think tank leaders, media professionals, members of civil society, scholars, researchers, and students.

The conference provided an open platform for greater cooperation and dialogue among the strategic trade control community for consolidating global efforts aimed at the non-proliferation of WMD and their means of delivery. The conference demonstrated Pakistan's non-proliferation credentials and commitment, its advocacy of international trade for development-based peaceful uses of technology, and its impressive convening capabilities.

The Islamabad International Conference (IIC) – 2022 focused on fostering a greater comprehension of the dynamic domain of strategic trade management (STM), strategic trade controls, and export controls. The conference comprehensively covered various aspects of the global non-proliferation regime and strategic trade control ecosystems of various states including national best practices in legislative and enforcement frameworks and the facilitation of legitimate trade. It also consisted of a detailed overview of the issues and challenges related to the contemporary strategic trade.

The conference highlighted, among other things, the need to balance nonproliferation commitments related to dual-use goods and technologies with their legitimate trade for peaceful uses for national socioeconomic development. The conference advocated that one of the best means or guarantees of the effective implementation of the United Nations Security Council Resolutions (UNSCRs) and the global realization of the UN 2030 Agenda for Sustainable Development was nondiscriminatory regulation and access to technology for peaceful uses.

The conference followed the 1+5 format consisting of one inaugural session and 5 major thematic sessions. These sessions collectively comprised 33 distinct events, namely, 2 welcome addresses, 1 keynote address, 1 inaugural address, 18

comprehensive presentations, 5 notes by session chairs, 5 detailed Q&A sessions, and 1 concluding address.

The inaugural session consisted of two welcome addresses, a keynote address and the inaugural address by the chief guest. The welcome addresses were given by senior representatives of NUST and the SECDIV. The keynote address, given by Ms Izumi Nakamitsu, Under-Secretary General and High Representative, United Nations Office for Disarmament Affairs (UNODA), underscored the centrality of inclusive approaches in addressing challenges related to proliferation without jeopardizing and circumscribing the development of commercial industry and technology interests.

The inaugural address, delivered by Ms Hina Rabbani Khar, Pakistan's Minister of State for Foreign Affairs, showcased Pakistan's legislative, regulatory and enforcement frameworks for effective controls of transfers of sensitive goods and technology to prevent their utilization in non-peaceful uses. The address underscored Pakistan's non-proliferation capabilities and the national ability to supply items listed in the control lists of the Nuclear Suppliers Group (NSG). The minister called attention to the need for objective NSG membership criteria for non-NPT states and their non-discriminatory application. She also underlined the urgency of increasing the global and national representation of women in the field of non-proliferation, arms, control, and disarmament.

Chaired by Dr. Zafar Ali, former Director General of the SECDIV, Session 1, "Promoting Effectiveness of the UN Non-Proliferation Regime," consisted of four presentations. The first presentation focused on UNSC resolution 1540 (2004) with a special emphasis on counter-proliferation financing. The speaker, one of the members of the Group of Experts assisting the 1540 Committee discussed the salient features of the resolution 1540 and important aspects of the work undertaken by 1540 Committee is assisting the implementation of the resolution. The second presentation was based on Pakistan's experience of the implementation of the resolution 1540. The speaker, a veteran of Pakistan's export controls ecosystem with many years of experience in the field, presented a detailed overview of the legislative, regulatory, institutional, and organizational aspects of Pakistan's domestic export control efforts.

The third presentation dealt in detail with Pakistan's efforts in countering proliferation financing. The speaker, Director General of Pakistan's Financial Monitoring Unit (FMU), outlined the efforts undertaken in terms of enhancing compliance and capacity building in different types of domestic financial institutions. The fourth presentation charted the evolution and key achievements of the Pakistan's domestic export control system. The speaker, Director General of the SECDIV, emphasized the leading role played by the SECDIV in comprehensive coordination and multidimensional cooperation for improved effectiveness of non-proliferation and export control measures.

Chaired by Ambassador (Retired) Tariq Osman Hyder, former Expert Member, Oversight Board for Strategic Export Controls, Session 2, "Latest Development and Progress in National Strategic Trade Management," consisted of four presentations. The first presentation focused on the Japanese best practice of intangible technology transfer (ITT) controls. The speaker, a senior functionary of Japan's Ministry of Economy, Trade, and Industry (METI) comprehensively presented different aspects, layers, modalities and articulation of ITT controls in Japan. The second presentation, delivered by a Pakistani export control professional, undertook an examination of the control lists of various export control regimes and the challenges of harmonization of national control lists with these control lists.

The third presentation focused on the importance of dedicated formal education and structured instruction for promoting export controls. The speaker, a senior researcher and consultant on disarmament and security from Belgium, gave an extensive overview of a master's course which he was tasked to prepare under the EU's multi-year Targeted Initiative (TI) on Export Controls of Dual-Use Materials and Technologies. The fourth presentation was delivered by an official of the Arms Control and Disarmament Division (ACDIS) of Pakistan's Ministry of Foreign Affairs. The speaker focused on the diverse aspects and policy implications of the emerging biotechnologies and underlined the need for greater science advice in global and national policymaking in the regulation and control of emerging technologies in general and emerging biotechnologies in particular.

Chaired by Mr. Khalid Banuri, Expert Member of the Oversight Board for Strategic Export Control, Session 3, "New Technologies: Challenges to International Export Controls," consisted of four presentations. The first presentation, given by IAEA's former Director of Nuclear Security, focused on the importance of trade controls of emerging dual-use technologies, especially nuclear technologies, for national security. The second presentation, given by a Chinese diplomat serving in the Embassy of the People's Republic of China in Pakistan, highlighted China's efforts in terms of strengthening international and regional coordination and cooperation for peaceful uses for sustainable development as against the attempts to politicize non-proliferation and export control.

The third presentation, delivered by a senior functionary of the Russian Federation's Ministry of Foreign Affairs, focused on the overview of and latest developments in the

export control system of Russia. The fourth presentation, given by the Director General of the Arms Control and Disarmament Division (ACDIS) of Pakistan's Ministry of Foreign Affairs, succinctly and masterfully emphasized the urgent need for striking a balance between export controls and legitimate trade in goods and technologies for peaceful uses, mainly for social good and socioeconomic development.

Chaired by Ambassador (Retired) Aizaz Ahmad Chaudhry, Director General Institute of Strategic Studies Islamabad (ISSI), Session 4, "Balancing Trade and Controls Through Effective Licensing and Enforcement Tools," consisted of three presentations. The first presentation, given by a Pakistani export control expert heading a noted Islamabad-based think tank, gave a clear and practicable blueprint of effective triple-helix collaboration of government, academia, and industry in the domain of strategic trade control in the context of Pakistan.

The second presentation, delivered by an Australian diplomat serving in the Australian High Commission in Pakistan, focused on the Australia Group's best practices in licensing and enforcement. The third presentation, given by a senior official of Pakistan Customs, focused on the operational and capacity-building aspects, challenges, and successes of Pakistan Customs in the enforcement of domestic strategic trade controls.

Chaired by Mr. Kamran Akhtar Malik, Director General of the Arms Control and Disarmament Division (ACDIS) of Pakistan's Ministry of Foreign Affairs, Session 5, "Latest Developments in Multilateral Export Control Regimes and Future Challenges," consisted of three presentations, two of which were given by chairs of two major multilateral export control regimes. The first presentation, delivered by the Chair of the Nuclear Suppliers Group (NSG), focused on the mandate, structure, operations, information exchange, and decision-making of NSG as well as its challenges and future role.

The second presentation, delivered by the Chair of the Missile Technology Control Regime (MTCR), focused on MTCR's mandate, structure, operations, information exchange, and decision-making together with the latest developments within the regime. The third presentation, given by a former Director General of the SECDIV, offered Pakistan's perspective on the multilateral export control regimes, identified major challenges of the regimes, and proposed the way forward.

The five thematic sessions were followed by extensive Q&A sessions, masterfully moderated by the session chairs, in which attendees asked extremely well-informed

and relevant questions or made cogent comments in an open manner. The high quality of the questions coupled with the level of detail and finesse in how the questions were addressed by the speakers indicate the deep level of engagement and the high level of interest of both the speakers and the attendees sustained throughout the conference.

The remarks or notes of the chairs of the sessions further served to enrich the discussion without allowing it to meander. The chairs performed an indispensable service in terms of enhancing the level of communication between the panelists and the audience by means of their useful points of clarification, whenever some third-party intervention was necessary for the audience to understand what the speakers were saying and vice versa.

The conference concluded with the remarks delivered by Ambassador Sohail Mahmood, the Foreign Secretary of Pakistan. The closing remarks served as the note-worthy culmination of the conference, as they focused on the successes and areas of improvement of the domestic export controls, as well as the merits and challenges of the non-proliferation regime including the multilateral export control regimes.

A few words about the method adopted for the preparation of the report are in order. The current report has been prepared from the audiovisual transcripts and Microsoft PowerPoint presentations, where the latter were supplied by the speakers. Each session was transcribed twice, revised twice, and reviewed thrice to ensure, to the extent possible, the minimization of inaccuracy and errors. Last but not the least, the information presented in the conference presentations was cross-checked as much as possible by means of the online institutional resources related to the country cases of export controls, multilateral export regimes, UN Security Council resolutions, and other organizations and initiatives mentioned in the conference proceedings.

The efforts of the following staff members of NIPS in producing the report are especially acknowledged: Mr. Adnan Ali (Research Associate), Ms. Mahnoor Abid (Research Intern), Ms. Ayesha Yusra (Research Intern), Ms. Aqsa Ajaz (Research Intern), Ms. Quratul Ain (Research Intern), Ms. Adeeba Rehman (Coordinator), Ms. Sobia Khursheed (Assistant Director, Collaboration), and Ms. Daniya Gardezi (Management Trainee Officer).



SECDIV – NIPS International Conference – 2022 Promoting Strategic Trade Controls through International Cooperation 5-6 September, 2022 Islamabad, Pakistan







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### SECDIV – NIPS International Conference – 2022 Promoting Strategic Trade Controls through International Cooperation 5-6 September, 2022 Islamabad, Pakistan







### **INAUGURAL SESSION**

### Welcome Remarks



### Haroon Rashid

**Director General** 

### Strategic Export Control Division (SECDIV)

### Ministry of Foreign Affairs (MoFA) Pakistan

On behalf of the Strategic Export Control Division (SECDIV), it is indeed an honor to welcome distinguished delegates, speakers, and guests to SECDIV-NIPS Islamabad International Conference on "Promoting Strategic Trade Controls through International Cooperation." We have an impressive gathering assembled here in Islamabad to share their experiences, ideas, and how they are implementing strategic trade controls. The participants include leading experts, senior diplomats, top academics, and seasoned practitioners, both from Pakistan and abroad. During the conference, we will discuss various aspects of trade controls, including how trade controls can be implemented effectively to maintain a balance between facilitating trade and ensuring a swift kinetic response to the threats to international security.

The conference will also focus on how we can mutually learn from the experiences of one another and how international cooperation can play a role in this regard. There is an advantage to having strong trade controls. Those countries that have successfully integrated efficient trade controls within their governance and institutional ecosystems tend to be more attractive trade destinations. We have seen such countries can swiftly move up the ladder for the most sophisticated industries and technologies.

These controls have become particularly significant in recent times to ensure that dual-use goods and technologies are not diverted from their intended use. To give domestic effect to the UN Security Council Pakistan Resolution 1540, has established a robust export control regime. In 2004, Pakistan promulgated the Act on Export Control and established an authority known as the Strategic Export Control Division or SECDIV. It is responsible to administer

and formulate a policy framework for export controls. The said policy framework includes devising rules and regulations for the export of dual-use commodities and their allied technologies.

I am pleased to share that we have chalked out a very interesting program for the conference consisting of five major sessions. Upon the conclusion of the last session on the last day of the conference, a high-level visit to the Pakistan Center of Excellence on Nuclear Security has been arranged for the delegates.

With this, I would like to thank Madam Hina Rabbani Khar, Minister of State for Foreign Affairs for her support. I would also take this opportunity to thank NUST for making available this beautiful venue and hosting this conference. I would also like to extend my gratitude to our distinguished speakers and esteemed guests, some of whom have joined us after traveling thousands of miles. I wish you a very pleasant stay here in Islamabad and two days of fruitful discussion.

### Profile

Mr. Haroon Rashid is presently serving as the Director General of Strategic Export Division, Ministry of Foreign Affairs. He holds a Master's degree in Defence and Strategic Studies from Quaid-i-Azam University, Islamabad. He has a wide experience of strategic export controls, arms control, and disarmament affairs. Mr. Rashid has also worked as the team lead for Pakistan's counter-proliferation financing measures on Pakistan's FATF Action Plan, the Asia/Pacific Group's (APG) Mutual Evaluation as well as the focal person for the on-site visit of Joint Working Group of FATF and APG on counter-proliferation efforts by Pakistan.

### Welcome Remarks



Pro-Rector – Academics National University of Sciences and Technology (NUST)

**Dr. Osman Hasan** 

I welcome all the participants, delegates, speakers, and guests to the International Conference on "Promoting Strategic Trade Controls through International Cooperation."

I am pleased to note that the Strategic Export Control Division of the Ministry of Foreign Affairs of the Government of Pakistan and the NUST Institute of Policy Studies have joined hands to organize this extremely important event that has brought together national and international experts, practitioners, and subject specialists to discuss and debate various aspects of strategic trade controls.

Much-needed international peace and stability requires a robust international regime of strategic trade controls,

based on regional and global cooperation. Effective international cooperation in this area must be based on an open, consultative process for deliberating on multiple aspects of non-proliferation among relevant international organizations, multicountry representatives, think academia, policy tanks, centers, industry, and civil society.

> "In view of Pakistan's meticulous observance of international nonproliferation guidelines, the case for the country's membership of multilateral export control regimes like Nuclear Suppliers Group, Missile Technology Control Regime, and others is indeed very strong."

One of the outcomes of such a process of knowledge sharing, among other things, is to build capacity for effective and efficient implementation of strategic trade management, while facilitating legitimate and legal trade including the transfer of dual-use technologies and goods for socioeconomic development.

In line with its commitment to nonproliferation, Pakistan has put in place a comprehensive legislative, regulatory, and implementation system based on the translation of current international obligations into robust and effective national guidelines on the transfer of sensitive goods and technologies.

The cornerstone of this national effort is the 2004 Export Control Act on Goods, Technologies, Materials and Equipment related to Nuclear and Biological Weapons and their Delivery Systems.

It is noteworthy that the associated lists of goods and technologies subject to regulatory controls in Pakistan are consistent with the ambit of export controls of major multilateral export control regimes.

In view of Pakistan's meticulous observance of international nonproliferation guidelines, the case for the country's membership of multilateral export control regimes like Nuclear Suppliers Group, Missile Technology Control Regime, and others is indeed very strong.

It is my conviction that Pakistan's inclusion in these global frameworks is imperative for regional and global stability.

all the delegates Ι thank and participants, and look forward to from benefiting the sharing of knowledge, experience, and best practices.

I especially thank Ma'am Hina Rabbani Khar for gracing the conference's inaugural session.

Dr. Osman Hasan is one of Pakistan's most distinguished academics. His impressive body of work includes 19 books, 90 journal articles, and 150 conference papers. With an *h*-index of 25 and more than 2500 citations, as per Google Scholar, Dr. Hasan's research has been published in top impactfactor journals. He is the recipient of Higher Education Commission's Best Teach Award (2010) and NUST's President's Gold Medal for the Best Teacher (2016). Prior to the assumption of the charge of Pro-Rector - Academics, Dr. Hasan was the Principal and the Dean of the NUST's School of Electrical & Computer Science (SEECS), which he led to become an internationally acclaimed hub of research excellence.

In 2021, the President of Pakistan conferred Tamgha-e-Imtiaz (Medal of Distinction) on Dr. Hasan for his meritorious service in the field of education. Dr. Osman Hasan holds a PhD from Concordia University, Montreal, Quebec, Canada.

### Profile

### **Keynote Address**



### Ms Izumi Nakamitsu

Under-Secretary-General and High Representative for Disarmament Affairs

United Nations Office for Disarmament Affairs (UNODA)

At the outset, allow me to thank the Government of Pakistan and the organizers for giving me the opportunity to address this conference.\*

Trade controls have long been regarded as an essential and legitimate tool for the purposes of disarmament, arms control, and non-proliferation. They are practical means for implementing the basic rules of multinational disarmament and non-proliferation instruments. They can also provide

tools to prevent the diversion of these items, unauthorized recipient or for unintended purposes. They can further facilitate development and trade in commercial goods by providing clarity, coordination, and predictability with respect to the handling of dual-use items. At the same time the role and effectiveness of trade controls face challenges due to change and developments international in situation. These trends can affect the efficacy of efforts to control specific technologies as well as the effectiveness of particular regimes.

> "Inclusive approaches must remain the cornerstone of our collective efforts to address proliferation challenges without hampering the development of commercial industry and technology interests."

Rapid and accelerating developments in technology can create new risks to international security and stability faster than our institutions can develop new rules. This is a key challenge we see on issues relating to attempts to control missiles, cyber capabilities, outer space autonomy, and uncrewed systems.

<sup>\*</sup> For the video of this Keynote Address, please see, <u>https://front.un-arm.org/hr-nakamitsu-video-messages/hr-nakamitsu-keynote-video-strategic-trade-controls-conf.mp4</u>.

The growing diversity of producers and users of dual-use items also poses a distinct challenge, especially as so much innovation is driven by private and commercial actors. Effectively stakeholders engaging these is increasingly important. Not only because of their domestic influence but also because of their expertise and experience. Existing export control regimes can also face particular from changes challenges in the international system. As the UN Secretary-General observed in his report, Our Common Agenda (2021), the context for collective action has evolved over the past 75 years.

When the Charter of the United Nations developed. was multinationalism meant cooperation amongst a small number of states. As proliferation-sensitive older technologies have become widely defused and newer technologies spread rapidly, international controls can only be effective if all the necessary actors, manufacturers, exporters, and importers play a constructive role in the rule-making process. Keeping ahead of these trends will require policy makers and diplomats to be similarly innovative in adopting the tools of global governance. This is an example of why the Secretary General has called for a new form of multilateralism, one that is more networked, more inclusive, and more

effective in addressing 21st-century challenges. A few argued, any effort to manage risks must navigate this complexity and seek explicitly to incorporate these new approaches where they are likely to deliver better outcomes. In this connection, I will briefly describe two areas where the United Nations has a strong role to play in fostering international cooperation on strategic trade controls. First, in the area of conventional arms, the Arms Trade Treaty (ATT) has been an important achievement, while export controls in the field of disarmament have been traditionally pursued to advance international security and stability. The ATT uses these tools to advance humanitarian and human rights principles as well as to safeguard against acts of gender-based violence. However, the ATT is still far from universal. Key arms-producing, exporting, and -importing countries remain outside the treaty.

Second, the UN has a central role to play in assisting states to prevent nonstate actors from acquiring weapons of mass destruction. The interconnected global supply chain coupled with rapid advancement of technologies has lowered the barriers for non-state actors to gain access to materials and techniques necessary to acquire weapons of mass destruction. UN Security Council Resolution 1540 of 2004 has proven to be an effective and

universally accepted framework that has enabled states to work together to accomplish their non-proliferation goals. It has greatly contributed to the strengthening of national controls and complemented has many other international arrangements. It does so while upholding the right of all states to participate in the fullest possible exchange of equipment, materials, and technological and scientific information for peaceful purposes. Our experience in supporting the resolution has demonstrated that inclusive approaches must remain the cornerstone of our collective efforts to proliferation challenges address without hampering the development of commercial industry and technology interests. Towards these ends. engagement with industry, academia, and private sector has been a critical factor. International cooperation and assistance are also key aspects in ensuring the successful application of export controls at the global level. Regional sub-regional and arms control institutions and arrangements also have an important role to play in articulating regional concerns and promoting cooperative actions and this should be recognized more broadly.

In conclusion, inclusive dialogue will be an essential requirement for ensuring our existing and developing tools for trade controls remain fit to address the 21st century. I hope this conference will promote useful exchange. I wish you success in your deliberations and I thank you very much for your attention.

### Profile

Ms. Izumi Nakamitsu assumed her position as Under-Secretary-General Representative and High for Disarmament Affairs on May 1, 2017. Prior to taking on this post, Ms. Nakamitsu served as Assistant Administrator of the Crisis Response Unit at the United Nations Development Programme (UNDP) since 2014. She has many years of experience within and outside the United Nations system, most recently as Special Adviser Ad Interim on Follow-up to the Summit on Addressing Large Movements of Refugees and Migrants between 2016 and 2017.

She was previously Director of the Asia and the Middle East Division of the United Nations Department of Peacekeeping Operations between 2012 and 2014, and Director of the Department's Division of Policy, Evaluation and Training, from 2008 to 2012. Born in 1963, Ms. Nakamitsu holds a Master of Science degree in Foreign Service from Georgetown University in Washington, D.C., and a Bachelor of Law degree from Waseda University in Tokyo. She is married and has two daughters.

### **Inaugural Address**



**Ms Hina Rabbani Khar** Minister of State for Foreign Affairs Government of Pakistan

A very good day to everyone! Promoting strategic trade controls through international cooperation has been at the heart of Pakistan's diplomacy and will continue to be so in years to come. I am pleased to inaugurate SECDIV-NIPS Islamabad International Conference – 2022, organized by the Strategic Export Control Division of the Ministry of Foreign Affairs. I want to specifically thank the National University of Sciences and Technology and the NUST Institute of Policy Studies for their cooperation in co-arranging it with us.

I welcome all the international and national experts who are participating

in this conference. I indeed look forward to valuable contributions and inputs of the conference deliberations, going forward. I hope that this occasion will give us the ability not only to hear each other but also to listen to each other.

> "Our expertise, our capabilities, and our strong credentials of cooperation can but help further global non-proliferation goals. It is our firm belief that the NSG should agree on objective criteria. These objective criteria must be universally applicable without discrimination in so far as the question of the membership of non-NPT states is concerned. Policies of exceptionalism and countryspecific approaches driven by commercial or political considerations are detrimental to the credibility of multilateral nonproliferation regimes."

Pakistan, in its capacity as a responsible member of the comity of nations, shares the global concern on the proliferation of weapons of mass destruction. Pakistan is a mature state with advanced nuclear technology and remains fully cognizant of its nonproliferation and disarmament obligations.

Pakistan stands out today as a country that has an extensive legislative, regulatory, and administrative framework for effective controls over transfers of sensitive goods and technologies to prevent the diversion to non-peaceful uses. Our export control regime is on a par with international export control standards and best practices.

As a Pakistani Parliamentarian, I am pleased to share some of the robust legislative instruments that are applicable in Pakistan. These include the Export Control Act of 2004, national control lists, comprehensive licensing, enforcement rules and guidelines, and strategic export controls.

Our national control lists and guidelines are fully harmonized with those of the multilateral export control regimes like the Nuclear Suppliers Group (NSG), the Missile Technology Control Regime (MTCR), and the Australia Group (AG).

We have declared adherence to NSG guidelines and shown keen interest in joining all the aforementioned regimes.

Established in 2007, according to the Export Control Act 2004, SECDIV is responsible for the review and implementation of the National Export Control Regime. It also acts as the licensing authority for dual-use goods and technologies and coordinates with multiple stakeholders including industry, chambers of commerce, academia, customs, and border enforcement agencies on raising and understanding awareness of strategic trade controls.

At the same time that we enforce effective controls, we do also maintain that all states have the fundamental right to access dual-use goods and technologies for legitimate socioeconomic applications.

"Reliance on clean and cost-effective civil nuclear energy is imperative for a state like Pakistan, in view of our growing economic and energy needs."

Therefore, Pakistan has time and again called for striking a balance – a very important balance indeed– between bona fide trade and security interests. The need to maintain this balance becomes all the more significant today in view of the new and emerging technologies, such as the advanced ICTs, AI, and bio and space technologies.

Given their ever-increasing applications for public health, climate change, and water, food, and energy security, the 2030 Agenda for Sustainable Development of the United Nations recognizes the key enabling role of technology for the achievement of the Sustainable Development Goals (SDGs).

> "There is an urgent need for increased representation and participation of women in arms control, disarmament, and nonproliferation forums, conferences, and related events. There have been studies indicating that their representation is currently less than 40 percent. The case for gender balance in this field is an

We remain fully committed to our obligations as a state party to various international non-proliferation and instruments safety such as the Chemical Weapons Convention (CWC), Weapons Biological Convention (BWC), Convention on the Physical Protection of Nuclear Material, Convention on Nuclear Safety, and IAEA Code of Conduct on the Safety and Security of Radioactive Sources.

Pakistan also subscribes to the IAEA's supplementary Guidance on the Import and Export of Radioactive Sources. We actively participate in the Global Initiative to Combat Nuclear Terrorism (GICNT).

We regularly share reports with the 1540 Committee, the UN Security

committee established Council pursuant to the UN Security Council Resolution 1540. In this regard, a national action plan was adopted under which two regional seminars were organized by SECDIV in 2017 and 2018. We also responded positively to country-specific requests for technical assistance made bv the 1540 Committee. In keeping with our previous record of successful knowledge exchange, this conference todav affords us an excellent opportunity to focus on the implementation of UNSC resolutions on non-proliferation and their role in promoting strategic trade controls through international cooperation.

Pakistan has a comprehensive program to harness the full potential of nuclear energy for peaceful applications. We the required expertise, have infrastructure, and human resources for this purpose. Most importantly, we have a long and illustrious tradition of international scientific collaborations. regularly participate We and contribute to the projects at the European Organization for Nuclear Research (CERN). We were the first Asian nation to become the Associate Member State of CERN in 2015. In addition, our interaction with the World Association of Nuclear Operators (WANO) and the World Nuclear Association concerns, among

other things, the enhancement of the safety of nuclear power plants.

Pakistan applied for NSG membership in 2016. Our expertise, our capabilities, and our strong credentials of cooperation can but help further nonproliferation goals. It is our firm belief that the NSG should agree on objective criteria.

These objective criteria must be universally applicable without discrimination in so far as the question of the membership of non-NPT states is concerned. Policies of exceptionalism country-specific and approaches driven by commercial or political considerations are detrimental to the of credibility multilateral nonproliferation regimes.

This particularly is worrisome, especially when we consider that there a widespread perception that is international institutions underpinning the world order seem to be suffering from a lack of credibility. Therefore, importance the of non-discrimination adherence to cannot be stressed enough. The objective should be to remain sound and technical in our approach.

Reliance on clean and cost-effective civil nuclear energy is imperative for a state like Pakistan, in view of our growing economic and energy needs. Our energy requirement is expected to grow exponentially, that is, sevenfold, over the next two decades. As it is, we are already struggling to meet the current demand for energy. So imagine this growing sevenfold in the next two decades. Therefore, our stated national goal envisages expansion in the national nuclear energy capacity to at least 50,000 megawatts by 2050.

In this situation, the perception of the people of Pakistan that their access to safe energy were being impeded by discriminatory standards motivated by political considerations could go on to reinforce the North-South divide, when thinking about how best to close that gap should be our common global goal in today's turbulent world.

We wish to explore opportunities for collaboration across the entire spectrum of international trade in dual-use goods and sensitive technologies. Adherence to global safety and security standards should further enhance international confidence and facilitate international cooperation nuclear in power generation.

with We aspire to work the international community to develop an all-encompassing and comprehensive framework of cooperation in this field, effectively addressing while the objective of non-proliferation. Such a framework should lead to economic progress and prosperity across the globe.

I hope that conferences like this one will be a recurrent feature. I further hope that this conference will deliberate on the existing and emerging challenges in strategic and trade controls such as rapid developments in science and technology, including biotechnology, artificial intelligence, cloud computing, 3D printing or manufacturing, additive and autonomous weapon systems.

This is of the essence because the world is changing at a fast pace and the rate of technological change has also accelerated remarkably. It seems that the global order that holds the world together is finding it hard to keep pace with the acceleration of change. Its failure to keep up will make it increasingly irrelevant, and the cost of its irrelevance will be unimaginably high. This is something that no one can afford.

Last but certainly not the least, there is an urgent need for increased representation and participation of women in arms control, disarmament, and non-proliferation forums, conferences, and related events. There have been studies indicating that their representation is currently less than 40 percent. The case for gender balance in this field is an important and urgent one.

Once again, I wish this endeavor success and end by saying that I hope we can listen to, instead of just hearing, each other, as we go forward.

### Profile

Ms Hina Rabbani Khar is currently serving as Minister of State for Foreign Affairs. She has served as Foreign Minister of Pakistan from 2011 to 2013, Minister of State for Finance from 2008 to 2011, and Minister of State for Economic Affairs from 2003 to 2007. Her term as Foreign Minister is memorable for the "Regional Pivot" in Pakistan's foreign policy, characterized by the focus on the enhancement of ties in Pakistan's immediate neighborhood, trade normalization with India, and the promotion of multi-partisan engagement in Afghanistan.

Ms Hina Rabbani Khar is the alumna of the prestigious Lahore University of Management Sciences (LUMS) and holds a Master's degree in Management from the University of Massachusetts at Amherst.











# **SESSION 1**

### PROMOTING EFFECTIVENESS OF THE UN NON-PROLIFERATION REGIME

### **SESSION 1**

United Nations Security Council Resolution 1540 (2004) with Focus on Counter-Proliferation Financing: An Overview



Ms Hongliu Zhang Member of the Group of Experts 1540 Committee

I am serving as a member of the group of experts supporting the work of the United Nations Security Council 1540 Committee. I thank the SECDIV for inviting the Committee to participate in this conference, which, I believe, will serve as a very important platform for participants to exchange views on practices in current the implementation of resolution 1540, particularly the export control-related provisions. This presentation will give an overview of the resolution 1540 and share some of the latest development within my mandate under the purview of the Committee. I recognize that

there are respected delegates in the meeting who are far more knowledgeable and experienced than me. Ambassador Mashkov is one of them who was the leading negotiator when the resolution was being discussed back in 2004.

> "It must be pointed out that 1540 Committee is not a sanctions committee. It does not undertake the investigation or the prosecution of alleged violations of non-proliferation obligations. It has always followed a cooperative and transparent approach to facilitate the implementation of Resolution 1540."

Resolution 1540 was unanimously adopted by the United Nations Security Council under Chapter VII of the UN Charter on April 28, 2004. The aim of this resolution is to prevent non-state actors from acquiring nuclear. chemical, and biological weapons and their means of delivery. Because this resolution is adopted by the United Nations Security Council, it is legally binding for all member states. By adopting this resolution under Chapter VII of the UN Charter means that the proliferation of nuclear, chemical, and biological weapons to non-state actors was recognized by the UN Security

Council as a threat to international peace and stability.

### Significance of Resolution 1540

The resolution is significant as it is a legally binding instrument on threats related to illicit trafficking of nuclear, chemical, and biological weapons, their of delivery, means and related materials as a new dimension of proliferation. It recognizes the nexus between non-state actors and proliferation. significance is Its reflected in the fact that it served to complement other multilateral disarmament and non-proliferation treaties such as the NPT, the BWC, and the CWC, because it had been recognized that the main priority of these multilateral treaties was state activity, not necessarily the non-state actors. In this respect, resolution 1540 filled a very important gap.

The resolution has been affirmed and reinforced by follow-up resolutions. So far, there have been seven resolutions successfully adopted, of which two were adopted in 2022. Those two were procedural resolutions which renewed the mandate of the Committee 1540.

### **Basic Obligations**

Resolution 1540 contains three primary obligations. Although the resolution has been reinforced or reaffirmed since its adoption, these three obligations have continued to be recognized as fundamental obligations.

These three primary obligations can also be understood as three operative paragraphs of the resolution which in turn contain these three obligations.

> "The overall global implementation rate for OP1 on political commitment was 72 percent in 2016 and 79 percent in 2021, with an overall increase of 7 percent. For OP2 on prohibitions, it was 66 percent in 2016 and 77 percent in 2021, with an increase of 11 percent. For OP3 (c) and (d) on border and export controls, it was 46 percent in 2016 and 51 percent in 2021, registering an increase of 5 percent globally."

### Operative Paragraph 1 (OP1)

The first obligation or OP1 stipulates that all states must refrain from providing any form of support to nonstate actors that attempt to develop, acquire, manufacture, possess, transport, transfer, or use weapons of mass destruction and their means of delivery.

OP1 can be considered a political commitment from member states. It is always reflected in the statement, the policy paper, the strategy paper, or the report of the member state(s) to the 1540 Committee.

### Operative Paragraph 2 (OP2)

The second obligation or OP2 stipulates that all states must adopt and enforce appropriate and effective laws which prohibit any non-state actor from engaging in or attempting to engage in such activities as well as participating in them as an accomplice, and assisting or financing them. OP2 is, therefore, about prohibitions.

### Operative Paragraph 3 (OP3)

The third obligation or OP<sub>3</sub> stipulates that all states must establish domestic controls, through the adoption of legislation and regulations, to prevent the proliferation of WMDs and their means of delivery, including illicit trafficking of related materials. OP3, therefore, underscores security, accountability, physical protection, border controls, law enforcement, export and transshipment control, and financial controls. More relevant to the focus of this conference are OP<sub>3</sub>(c) and OP<sub>3</sub>(d) which stipulate controls over the materials, audits controls, and export controls.

### Definitions

There are specific definitions in the resolution that are important for its implementation. The definitions are specific to the resolution and include the definition of the means of delivery, of a non-state actor, and of related materials. Those definitions solely serve the purpose of this resolution. It should be emphasized that resolution 1540 outlines the obligation on states of what they should do, but not how to do it. It means that the modalities of implementing the resolution depend on each member state. The resolution sets out what is going to be achieved and what is supposed to be achieved, but not how to achieve it. In other words, it may be interpreted that it follows an outcome-based approach.

### 1540 Committee

It is pertinent to mention the composition of the 1540 Committee and its working methodology. The Committee functions as a subsidiary body of the Security Council. It comprises 15 current members of the Security Council. It must be pointed out that 1540 Committee is not a sanctions committee. It does not undertake the investigation or the prosecution of alleged violations of non-proliferation obligations. It has always followed a cooperative and transparent approach to facilitate the implementation of Resolution 1540. A lot of its work has been done on capacity building and assistance for matchmaking activities. The working methodology of the Committee includes four key elements, namely, the annual work program, the annual review and the submission of the annual review report to the Security Council, the comprehensive review of the implementation of resolution 1540 according to Resolution 1977 (adopted in 2011), and working groups. It should be noted that the last complete comprehensive review was done in 2016. Another cycle of comprehensive review is underway, which is expected to conclude by the end of November 2022. The Committee is assisted by the Group of Experts, based in New York, consisting of nine members – of which I am one - from different backgrounds and different world regions.

"For OP2 prohibitions on financing the manufacture, acquisition, possession, development, transport, transfer, or use of nuclear. chemical, or biological weapons or their means of delivery (OP 2 -Field 11 of the 1540 Matrix), the Asia-Pacific and global implementation rates were 76 percent and 84 percent respectively in 2016, and 85 percent and 88 percent respectively in 2021. While there was a global increase of 4 percent, Asia-Pacific experienced an increase of 9 percent in the same period."

### **1540 Implementation Toolbox**

The Committee has at its disposal several tools to facilitate the implementation of the resolution. It has to be emphasized that implementation is the state's obligation and decision, but the Committee has to develop several tools to facilitate or strengthen the implementation.

### 1540 Matrix

First and foremost is the 1540 Matrix. The matrix is a table developed to organize the information, which comes originally from national reports, open public information from the state's government gazette, official communication with other international, regional and subregional organizations (IROs), or from our communications with the member states. It must be emphasized that the matrix is not intended to measure compliance of or implementation by states. It is only a reference tool for organizing the information. for facilitating technical assistance, and helping enhance dialogue and exchanges with member states.

If there is an "x" in any data field, it only means that the reporting state has asserted that it has taken relevant measures, or that the 1540 Committee has found specific reference to these legal or enforcement measures. It does not assess either the efficiency or efficacy of that measure. We do not know how effective it is. We do not have the means to verify it. The "x" also does not necessarily mean that the measure in question was implemented in full and comprehensively. It only means that we have a certain kind of evidence that there is a measure in that particular field. After the matrix is produced, the matrix is sent back to member states for consideration.

The last round of updating the matrix was initiated in late 2018 and finished by late 2020. The task of updating was painstaking and time-consuming in nature. The matrix, as mentioned earlier, was then sent back to the member states. Over 60 feedbacks were received in that round from member states on different views, varying interpretations, and different ideas regarding how the respective implementing states were the resolution. Subsequently, we revised the matrix, and with the consent of the states, it was sent to the Committee for approval, following which the matrices published were on the 1540 Committee's website with the states' consent. So if anyone is interested in it, they can find matrices of the member states, except for two, on the official website of the 1540 Committee, as well as their most current and updated legislation.

Once all the matrices are compiled and approved by the committee, then we begin a preliminary analysis. This is a very factual analysis of the national matrices. The results show that the implementation has seen steady progress in the five years (2016-2020) under review. In 2016. the implementation rate was around 50 percent, but by 2021, it was around 56 percent, which was a global increase of 6 percent.

"In 2020, the overall implementation rate for both legislation and enforcement in Asia-Pacific regarding OP3 (c) and (d) border controls to detect, deter, prevent, and combat illicit trafficking in the context of resolution 1540 was 97 percent."

The breakdown of those measures of the 1540 Matrix for the world by operative paragraph (OP) also revealed steady implementation progress. As mentioned earlier, OP1 is about political commitment, OP2 is about prohibitions, OP3 (a) and (b) are about accounting and securing of related materials, and OP3 (c) and (d) are on border and fiscal controls.

The overall global implementation rate for OP1 on political commitment was 72 percent in 2016 and 79 percent in 2021, with an overall increase of 7 percent. For OP2 on prohibitions, it was 66 percent in 2016 and 77 percent in 2021, with an increase of 11 percent. But OP3 (a) and (b) on accounting and securing of related materials, there was not much progress as it was 40 percent in both 2016 and 2021. For OP3 (c) and (d) on border and export controls, it was 46 percent in 2016 and 51 percent
in 2021, registering an increase of 5 percent globally.

If we talk of Asia-Pacific, which, according to the UN grouping of nations, consists of 55 countries including Pakistan, there has been steady progress in fields like financial controls and border controls in the context of resolution 1540. In 2020, for the Asia-Pacific, the overall implementation rate for legislation and enforcement in Asia-Pacific regarding OP<sub>2</sub> financial controls or the prohibition of financing activities in the context of resolution 1540 was 88 percent and 82 percent respectively.

Similarly, in 2020, the overall implementation rate for both legislation and enforcement in Asia-Pacific regarding OP3 (c) and (d) border controls to detect, deter, prevent, and combat illicit trafficking in the context of resolution 1540 was 97 percent. This means that each country in Asia-Pacific had its border control systems in place together with legislation and enforcement measures.

However, in the same year, there was relatively low progress on intangible technology transfer (ITT) controls as legislation and enforcement of these controls was only 23 percent and 21 percent respectively in Asia-Pacific. The same was the case with end-user controls which were 32 percent and 31 percent respectively for legislation and enforcement measures. Progress was unenviable as well for catch-all clause at 25 percent and 23 percent in 2020 for legislation and enforcement respectively.

The funding and financing requirements of resolution 1540 are covered by two clauses or two provisions that encompass financing control prohibitions. One, as already mentioned is OP2 prohibition and the other is OP<sub>3</sub> (d). The latter requires controls on funding or financing of the export or the transshipment of WMDs, their means of delivery, and related materials.

For OP2 prohibitions on financing the manufacture, acquisition, possession, development, transport, transfer, or use of nuclear, chemical, or biological weapons or their means of delivery (OP 2 – Field 11 of the 1540 Matrix), the Asia-Pacific and global implementation rates were 76 percent and 84 percent respectively in 2016, and 85 percent and 88 percent respectively in 2021.

While there was a global increase of 4 percent, Asia-Pacific experienced an increase of 9 percent in the same period. In terms of OP3 controls over financing of exports or transshipment that would contribute to proliferation (OP3 (c) and (d) – Field 15 of 1540 Matrix), the implementation rate for relevant measures was 37 percent in 2016 and 35 percent in 2021 for Asia-Pacific, and 59 percent in 2016 and 58 percent in 2021 globally. There was regional (Asia-Pacific) and global decrease in the rate of implementation in the period under study.

Our understanding of the resolution itself has been evolving, and in updating the matrices, we have undertaken discussions with member states and tried to find out the reason for these trends. Many states are adopting anti-terrorism legislation as part of prohibitions, but when it comes to controlling funds, measures taken are perhaps not sufficient. This perhaps explains the decrease in overall numbers for Field 15.

Other tools in the 1540 Toolbox include National Actions Plan (NAP), dialogue with states, and sharing of experiences.

# National Implementation Action Plans (NAPs)

The objective of an NAP is the full implementation of resolution 1540 is the UN Security Resolutions 1810 (2008) OP4, 1977 (2011) OP8, and 2325 (2016) OP5, which all are exactly identical, states are encouraged "to prepare on a voluntary basis national implementation plans, with the assistance of the 1540 Committee as appropriate, mapping out their priorities and plans for implementing the key provisions of resolution 1540 (2004), and to submit these plans to

the Committee." It must be pointed out that in so far NAP is concerned, onesize-fits-all approach is not advised. NAP of each member state should fit its national realities and priorities. For this reason, the scope, structure, content and format of each countryspecific NAP may vary.

It should be noted that the 1540 Committee does not prescribe any set format and contents for the NAP. The 1540 Committee and its Group of Experts support the drafting of NAPs. They discuss voluntary NAPs during national roundtable during visits to states to which they are invited. The Committee undertakes and encourages joint actions and events with the United Nations Office for Disarmament Affairs (UNODA) and/or other regional organizations to support the drafting of the NAPs by member states. Recently, assistance has been provided to Botswana, Colombia, Dominican Republic, Madagascar, Mongolia, and Zambia.

Last but not the least, 1540 Committee also conducts dialogue with states and encourages sharing of experiences like peer review exercises. Some past peer review exercises included these exercises in Croatia and Poland in 2013, with Belarus, Kyrgyzstan, and Tajikistan during 2014-2017, with Chile and Colombia in 2017, and with Dominican Republic, Panama. Paraguay, and Uruguay in 2019.

### Profile

Ms. Hongliu Zhang joined the Group of Experts supporting the work of the 1540 Committee in April 2018. Her main areas of expertise include nuclear disarmament, non-proliferation, strategic security, and UNSC resolution 1540 implementation. Prior to joining the 1540 Committee, she was a career diplomat, serving in the Strategic Planning Division, Arms Control and Disarmament Department, Ministry of Foreign Affairs of China from 2016 till 2018. She also served as an External Relations Officer. Legal/External Comprehensive Division, Relations Nuclear Test-Ban Treaty Organization (CTBTO) based in Vienna from 2014 to 2016. She started her career with the Ministry of Foreign Affairs of China in 2002.

### UNSCR 1540 Implementation Practices and the Experience of Pakistan



**Mr. Zawar Haider Abidi** Former Member of the Group of Experts

1540 Committee

# Introduction

Following the end of the Cold War, economic and financial globalization gathered tremendous momentum in 1990s which increased the interdependence of states. Interdependence accelerated technological development appreciably. At the same time that economic and technological interdependence of states increased during the 1990s, the threat of terrorism to international peace and security also enhanced the sensitivities of states toward the proliferation of weapons of mass destruction.

Post 9/11, the desire of the international community to maintain

peace and security across the world led to the adoption of UNSCR 1540, which obligates all states to have robust national legislation for controlling the exports of sensitive technologies. Nonetheless, such controls need to be balanced by ensuring that legitimate trade is not thereby hampered.

The non-proliferation regime is considered formally to be based on the NPT, the CWC, and the BWC. Pakistan is not a signatory to the NPT, but it has always supported and adhered to nonproliferation. This includes the commitment to the non-transfer of nuclear weapons or weapons-related materials. However, Pakistan is a signatory to both CWC and BWC as a non-possessor state.

> "During the comprehensive review in 2016 by 1540 Committee, the analysis of the country-specific 1540 matrices revealed that Pakistan's rate of implementation for measures related to OP2 and OP3 (a), (b), (c), and (d) was over 80 percent with the implementation of 268 measures out of a total of 332."

Pakistan's non-proliferation with commitment coexists its determination to safeguard its national security and foreign policy objectives. Pakistan has exhibited this commitment by fulfilling its

responsibilities and international obligations.

A robust and comprehensive legal framework and an efficient state structure provide the basis for implementation, enforcement, and attainment of national objectives concerning effective export controls. Pakistan has taken robust enforcement measures for the implementation of UNSCR 1540. It has also continued to augment its capability to meet international obligations. Pakistan's efforts in the context of UNSCR 1540 implementation can be grouped together in four different domains, namely, implementation, enforcement, UNSC resolutions, and other export control initiatives.

"Pakistan Nuclear Regulatory Authority (PNRA) has adopted a body of national regulations covering various aspects of nuclear safety and security in line with the existing IAEA standards. Pakistan Center of Excellence for Nuclear Security (PCENS), an IAEA-recognized center of excellence, provides nuclear security education, training, and technical support."

### Implementation of Export Controls

Soon after the overt nuclearization of South Asia in 1998, Pakistan began deliberations to implement а comprehensive national export control mechanism. Following its establishment in February 2000, the Strategic Plan's Division (SPD) quickly realized the importance of the formulation of such a mechanism with the involvement of all national stakeholders.

As the secretariat of the National Command Authority (NCA), all strategic organizations involved in the research and development of Pakistan's strategic capability were under SPD's operational control. In September 2000, SPD issued comprehensive export control guidelines the to all strategic organizations for compliance. In the meantime, efforts to develop the legal documentation for implementation continued in an interagency process.

The draft bill on export controls was put up before Pakistan's Cabinet for approval and placed before Parliament in mid-2004. After following the due process in September 2004, the bill was approved by both houses, and became the Export Control on Goods, Technologies, Material, and Equipment Related to Nuclear and Biological Weapons and their Delivery Systems Act, 2004.

Following the Export Control Act 2004, the national export control list was notified by the statutory regulatory order S.R.O. 1078(1)/2005 on October 19, 2005. The national Control Lists are revised periodically. These revisions took place in 2011, 2015, 2016, and 2018. The most recent revisions have been carried out in April 2022 and notified in the Gazette of Pakistan S.R.O. 551(1)/2022 dated April 12, 2022.

The Strategic Export Control Division (SECDIV) was established at the Ministry of Foreign Affairs in 2007 to further improve and strengthen the implementation and enforcement of the export control framework (S.RO. 449(1)/2009). The Oversight Board was established to monitor the implementation of the Export Control Act 2004 vide the Gazette of Pakistan S.R.O. 693(1)/2007 dated July 11, 2007.

SECDIV is headed by a Director General and is organized into three directorates to look after all matters related to the policy, licensing, regulations, and enforcement, including investigation and prosecution. It also develops the national export control policy.

# Export Control Enforcement

National laws relating to export and import are traditionally enforced by the national customs authorities the world over. Pakistan Customs is thus the primary government agency, which is entrusted with the implementation and enforcement of the export policy of the federal government, inclusive of restrictions imposed under the Arms Act 1878, the Explosives Act 1884, the Weapons Chemical Convention Implementation Ordinance 2000, the Drugs Act 1976, the Prevention of Smuggling Act 1977, and the Export Control Act 2004. The legal authority to perform this function is drawn from the relevant provisions of the Pakistan Customs Act 1969.

While Pakistan continues to revamp and improve its existing export control mechanism, it commands adequate implementation and enforcement capability to ensure that national and international obligations are satisfactorily met. Accepting the challenges of the current international environment as well as information technology requirements, Pakistan Customs has established an end-to-end solution automated for custom operations, including risk profiling of all export declarations at Pakistan Customs.

While Pakistan Customs is the primary enforcement agency, there are other agencies that support such operations along the entire length of 7822 km of Pakistan's land and sea borders. Pakistan Maritime Security Agency (PMSA) enforces the national and international laws, agreements, and conventions on and under water in the maritime zone, and cooperates with and provides assistance to Pakistan Customs. Pakistan Coast Guards (PCG) monitors and stops inbound and outbound smuggling activities throughout the sea route. In doing so, PCG complements the surveillance of the sea by the PMSA and helps Pakistan Customs in case of any unauthorized movement.

The Frontier Corps (FC) closely watches the western and northern borders along Iran and Afghanistan. Pakistan Rangers similarly covers the eastern border with India. The Airport Security Force (ASF) specializes in the security of all airports in the country. In the pursuit of this function, it complements all relevant agencies entrusted with performing export control functions.

# Adherence to UN Security Council Resolutions

Pakistan actively participated in the deliberations on the United Nations Security Council resolution 1540 and (2004)supported final its adoption. It has continued to respond to the requirements of the resolution. Pakistan submitted its first report to the 1540 committee in October 2004. It conveyed its strong commitment to the objectives of disarmament and nonproliferation along with the full support for appropriate and effective measures to prevent non-state actors from gaining access to the weapons of mass destruction and their means of delivery. The commitment and support have been reiterated publicly by the leadership and the government.

Pakistan's report to 1540 Committee highlighted the comprehensive administrative, legislative, and security undertaken bv the measures Government of Pakistan to ensure the safety and security of sensitive material, facilities, technologies, and equipment. It has also been emphasized that Pakistan remains a partner in the effort to stem the proliferation and illicit trafficking of WMD-related materials.

Pakistan further submitted the supplementary report comprising 125 pages, enlisting in detail the measures undertaken and the supporting legal framework, as required by 1540 Committee through the 1540 Matrix forwarded to the member states. Pakistan has shared six reports with the 1540 Committee, including one national submission. The latest report was shared in April 2020. This was before the latest comprehensive review by the Committee expected to be finished by the end of November 2022. supervise and То monitor the enforcement of UNSC resolutions and decisions on countering the proliferation of WMDs, Pakistan has set up Coordination, Review, and Monitoring Committee (CRMC), which representatives comprises of 21

government ministries and representatives.

Pakistan's export control and nuclear regime is one of the most rigorous in the world. During the comprehensive review in 2016 by 1540 Committee, the analysis of the country-specific 1540 matrices revealed that Pakistan's rate of implementation for measures related to OP2 and OP3 (a), (b), (c), and (d) was over 80 percent with the implementation of 268 measures out of a total of 332. The latest comprehensive review that is expected to be completed by the end of November 2022 may reveal further improvements.

Pakistan has also taken several measures to meet its non-proliferation commitments. The National Command Authority Act 2010 further strengthens the national strategic regime, providing for the legal basis of security and safety measures over all matters concerning nuclear and space technology, strategic establishments. material systems, relevant personnel, and information.

The Anti-Money Laundering Act 2010 was enacted in March 2010, and is relevant for proliferation financing, and unauthorized strategic export financing. The Chemical Weapons Convention Implementation Rules 2010 laid down detailed procedures for the production, accounting, storage, import, and export by the industry as well as for inspections by the inspectors.

The Export Control (Licensing and Enforcement) Rules 2009 were issued by SECDIV. The rules define the procedures for registering of exporters, licensing process, enforcement, and prosecution. The Licensing Review Committee was set up to streamline the licensing process. It assesses, reviews, and evaluates any license application referred to it bv SECDIV for consideration. The committee has 11 members drawn from various ministries and departments.

The International Compliance Program Guidelines. notified in October 2014, aim to develop and inculcate a self-regulating culture in entities. industries. institutions, companies, and other relevant individuals. Policy Guidelines on Strategic Export Controls, notified in Mav 2016. were formulated to strengthen the strategic export control mechanism in adherence to the commitment to the non-proliferation norms and principles.

Pakistan Nuclear Regulatory Authority (PNRA) has adopted a body of national regulations covering various aspects of nuclear safety and security in line with the existing IAEA standards. Pakistan Center of Excellence for Nuclear Security (PCENS), an IAEA-recognized center of excellence, provides nuclear security education, training, and technical support.

### **Other Export Control Initiatives**

In view of the increased volume of trade. changing international requirements of safe commerce, ensuring international peace and national commitments. security, obligations, international and safeguarding our national security and foreign policy objectives, Pakistan signed an MoU with the United States in 2006 for the implementation of the Container Security Initiative (CSI) at Port Qasim, Karachi. Port Qasim is now CSI-compliant port.

#### Challenges

The development of the national export control system has not been without challenges. Since strategic export control is a comparatively new area of national security, the need for trained and experienced human resources for implementation and enforcement has been greater than the existing training capacity. Protecting the borders against the possibility of illegal, unauthorized exports is always a dilemma for enforcement agencies, particularly when borders extend over inaccessible difficult terrain. and Another important aspect is the general awareness regarding the seriousness of the threat of proliferation.

It needs to be mentioned that various measures are being actively pursued for the effective implementation of export controls. A detailed analysis of the submission of 1540 Matrix by various countries would help identify improvement. areas of Required actions and responses could be developed by fostering public-private partnerships through integrated efforts that engage universities, think tanks, research institutes, and media. Last but not the least, there is a need on the part of leading players in the global nonproliferation regime to better appreciate the dynamics of security and development in the developing world before outlining policy preferences with regard to non-proliferation.

### Profile

Mr. Zawar Haider Abidi is a former military officer. He served in Pakistan Army for more than 26 years on various assignments. From October 2001 till November 2012, he served in Arms Control and Disarmament Affairs (ACDA), Strategic Plans Division (SPD), secretariat of the Pakistan National Command Authority from October 2001 to Nov 2012. He has been a visiting fellow at the Henry L. Stimson Center, Washington D.C, USA (2003), and a visiting fellow at the James Martin Center for

Nonproliferation Studies (CNS), Monterey, California, USA. (2010).

He has been an expert consultant supporting 1540 Committee for a period of five years from November 2012 to November 2017 to monitor the implementation of UNSC resolution 1540 by the UN Member States.

Mr. Abidi has been on the faculty of a number of military training institutions. He has served as visiting faculty at the Defence and Strategic Studies Department at Quaid-e-Azam University, Islamabad (2008). He has participated in number of international conferences, seminars and workshops on non-proliferation and strategic trade management.

At ACDA, SPD, he dealt with issues related to non-proliferation, arms control, strategic trade management, and research and outreach. He has been part of interagency groups responsible for drafting Pakistan's Export Control Act 2004, design and establishment of Strategic Export Division of Pakistan, Control compilation of Pakistan's National Control List and an interagency group developing the architecture for deployment of Radiological Portal Monitors on all land, air and sea border crossings for exercising effective border controls.

As an expert consultant supporting UNSC 1540 Committee he acquired a unique experience in the global implementation of WMD nonproliferation in general and UNSC resolution 1540 in particular. He has an understanding in-depth and knowledge of implementing laws and regulations with regard to CWC, BWC, NPT, and their means of delivery with regard to 23 UN Member States from Asia, including the SAARC Member States. He has been serving as Senior Research Fellow at the Center for International Strategic Studies (CISS) since 2019.

Promoting Effective Non-Proliferation Regime: Compliance and Capacity Building in Financial Institutions



**Ms. Lubna Farooq Malik** Director General Financial Monitoring Unit (FMU) Government of Pakistan

# **Proliferation Financing**

The reason why financial institutions are involved in the global nonproliferation regime is the possibility that proliferating financing can hit the financial system of a country. What organizations like ours are trying to do is contribute to countering to proliferation financing by making sure that whenever a financial transaction hits one of the participants of our financial system it can get recognized and promptly reported to the law enforcement agencies (LEAs).

Proliferation Financing Report 2008 of the Financial Action Task Force (FATF)

considers proliferation that is multifaceted, but "ultimately involves the transfer and export of technology, goods, software, services or expertise that could be used in nuclear, chemical or biological weapon-related programs, including delivery systems; it poses a significant threat to global security." The same report also considers that proliferation financing plays a role in of proliferation-"the movement sensitive items and as such, contributes to global instability and potential catastrophic loss of life if WMD are developed and deployed." Because of the threat that proliferation poses to global security, it is indispensable to ensure that financial systems can immediately recognize any transaction that may involve proliferation financing.

"FMU is unique in the sense that it acts as the key point of coordination between reporting entities, law enforcement agencies, regulatory bodies, internal and external databases, and other relevant authorities and entities. One of its key measures is the issuance of red flags. Red flags are essentially suggested triggers that bring suspicious transactions to the attention of the banking system."

FATF's International Standards on Combating Money Laundering and the

Terrorism Financing of and Proliferation (2012-2022) have 40 key recommendations known as the FATF Recommendations. Recommendation 7 requires countries to "implement targeted financial sanctions relating to suppression the prevention, and disruption of proliferation of weapons of mass destruction and its financing." Recommendation 2 requires countries to "have effective mechanisms in place which enable them to cooperate, and where appropriate, coordinate" to combat the financing of proliferation of weapons of mass destruction.

> "From 2019 to 2022, FMU held a total of 107 training sessions for reporting entities and trained nearly 5000 professionals. In the same period, FMU organized 17 major compliance forums with the attendance of 1046 participants."

FATF has outlined 11 key goals or immediate outcomes that effective national anti-money laundering and combating the financing of terrorism (AML/CFT) efforts should accomplish. Immediate outcome 11 and certain elements of the immediate outcome 1 relating to national cooperation and coordination aim to measure how effective countries are in implementing the FAFT Recommendations. At the Financial Monitoring Unit (FMU), we have designed our capacity-building programs for the financial institutions and law enforcement agencies around these three to four basic standards.

# Pakistan's AML/CFT Framework

Pakistan has an elaborate framework to address the risk of proliferation and comply with financing the requirements of the UNSC resolution 1540 and FATF's Recommendations and immediate outcomes. It consists of relevant legislations, regulations, and guidelines which include, but are not limited to. the: Anti-Monev Laundering Act 2010 (as amended up to September 2020); Anti-Terrorism Act 1997; United Nations (Security Council) Act 1948; State Bank of Pakistan's AML/CFT/CPF Regulations issued on September 30, 2022; Securities and Exchange Commission of Pakistan's AML/CFT Regulations; Federal Board of Revenue's AML/CFT Regulations for designated nonfinancial businesses and professions (DNFBPs) 2020; National Savings (AML and CFT) Regulations 2020; Institute of Chartered Accountants of Pakistan Anti-Money Laundering and Combating Financing of Terrorism **Regulations for Chartered Accountants** Reporting Firms (as amended up to December 2020); the AML Framework Institute of of the Cost and Management Accountants of Pakistan; and guidelines on targeted financial sanctions and UNSC resolutions by

regulatory AML/CFT bodies. Moreover, the Strategic Export Control Division of the Ministry of Foreign Affairs of Pakistan has issued Guidelines on the Implementation of the UN Security Council Resolutions Concerning Targeted Financial Sanctions on Proliferation Financing.

Pakistan's financial system is governed in the main by the State Bank of Pakistan Some (SBP). non-bank financial institutions (NBFIs) are regulated by the Securities and Exchange Commission of Pakistan (SECP). There are also other entities that are regulated by different regulators and they have input into this particular system. It is primarily because the above-mentioned transactions are more complex that it is usually the banking system that gets affected most of the time.

# Financial Monitoring Unit (FMU)

What essentially is the Financial Monitoring Unit (FMU)? It is the Financial Intelligence Unit (FIU) of Pakistan. Worldwide, every country has one FIU. Like other FIUs, FMU's key purpose is to receive information from the financial system and analyze it, utilizing FMU's own databases and when there is some comprehensive intelligence, it is relayed to the relevant law enforcement agencies.

Since we are dependent on what the financial institutions give us in terms of

information and data, we seek to build the awareness and capacity of the financial participants, that is, the banks, the exchange companies, the microfinance banks, and others. The FMU does it through various measures. One of FMU's key measures is the issuance of red flags. Red flags are essentially suggested triggers that bring suspicious transactions to the attention of the banking system.

"In so far as the capacity building of law enforcement agencies is concerned, since 2018, FMU has organized 31 in-depth training sessions in which 905 participants have taken part. These sessions were organized in coordination with different law enforcement agencies, international organizations, regulators, and other relevant stakeholders."

It is entirely possible that sometimes a completely genuine transaction may have red flags attached to it. But if multiple red flags are being tagged to any one transaction or one customer, then the bank has to exercise extra caution, and if the transaction is found to be suspicious, in that case, the bank must submit a suspicious transaction report to the FMU. We have issued several red flags on various things. For example, we have introduced red flags for terrorist financing, illegal money exchangers, and proliferation financing.

These red flags are especially intended as an aid for the reporting entities. These red flags may appear suspicious on their own. It may be considered that a single red flag would not be a clear indicator of potential financing activity. However, a combination of these red flags, in addition to the analysis of expected overall financial activity, geographical location, and business profile, may indicate toward proliferation potential financing activity.

> "The number of entities registered with FMU's goAML (Anti-Money Laundering System) has gone up from 997 in June 2021 to 2068 in August 2022.

FMU keeps communicating criteria regarding advice red flag and indicators for proliferation financing to banks and other entities that could help them identify situations, customer behavior, and transactional patterns that could potentially be red flag cases. It could be a customer that is involved in the supply, sale, delivery, or purchase of dual-use, proliferationsensitive or military goods, particularly to high-risk jurisdictions. The banks need to be very attentive in the case of such customers and need to make sure

that they understand the transaction. It could be a customer or counterparty, or its address is the same or similar to that of an individual or entity found on publicly available sanctions list. This is a quite common red flag.

It could be a situation when the customer is a research body connected with a high-risk jurisdiction of proliferation concern. It could be a situation when a customer uses complicated structures to conceal connection of goods imported and/or exported, for instance, using layered letters of credit, front companies, intermediaries, and brokers. This could be either a complicated ownership structure or transaction structure. In either case, it requires extra effort by the financial institutions since it is a major red flag.

It could be a situation when the final destination of goods to be imported and/or exported is unclear from the trade-related documents provided to the reporting entity.

For example, if you are handling export or import documents, and there are multiple shipments and multiple destinations, then it could be the indication of suspicious activity or even proliferation financing. In such a case, knowing the customer is one thing, but the actual transaction should also be carefully looked at. One needs to look more closely in who the counterparties are. There are times when goods are routed in such a manner that the two end-to-end countries are fine, but during the transfer there is a port in a high-risk country.

> "Our current technical compliance rating in terms of FATF Recommendation 7 related to targeted financial sanctions related to proliferation is largely compliant (LC)."

In terms of transactional patterns, FMU communicates its advice to financial institutions regarding transactions that could be potential red flags. It could be a transaction that involve an individual or entity in any country of proliferation concern.

It could consist of project financing and complex loans when there is a presence of other objective factors such as an unidentified end-user.

It could involve transactions related to licensed or unlicensed dual-use, proliferation-sensitive, or military goods.

It could include transactions that involve the shipment of goods inconsistent with normal geographical trade patterns, that is, where the country involved does not normally export or import or usually consume the types of goods in question.

It could also involve situations when goods destination and/or shipment country is different from the country where proceeds are sent and/or received without any plausible concern. The geographical location of the entire transaction trail is a very significant indicator and needs to be examined. Financial carefully institutions have to realize that these are indicators of potentially illegal proliferation including activities financing.

To ensure quality in the operations of entities. FMU actively reporting engages in capacity building, awareness raising, and outreach in line with the findings of the Mutual Evaluation Report of Pakistan by the Asia/Pacific Group on Monev Laundering (APG) and National Risk Assessment (NRA). To build the capacity of reporting entities, the FMU has conducted a number of AML/CFT awareness sessions and compliance forums. From 2019 to 2022, FMU held a total of 107 training sessions for reporting entities and trained nearly 5000 professionals. In the same period, FMU organized 17 major compliance forums with the attendance of 1046 participants.

The training sessions are broader in nature, while compliance forums are technical in nature and designed for compliance staff in particular. Following these sessions, a marked improvement in the quality of the examination bv banks of their transactions has been witnessed. Their monitoring of transactions has been seen to be more rigorous in the wake of FMU's capacity building sessions. Their understanding of different types of transactions and their manner of reporting seem to have become considerably better, especially in the last three years. This is significant headway.

Pakistan's inclusion in the FATF program also contributed to the energization of all the stakeholders in the national AML/CFT framework, including the FMU, the reporting entities, and the law enforcement agencies. It needs to be pointed out that FMU has conducted training sessions not just for reporting entities, but also for law enforcement agencies, as FMU acts as a conduit between the two sets of stakeholders, namely, the reporting entities and the law enforcement agencies. These trainings have been appreciated quite a bit. And there has been a significant improvement in the overall capacity of these reporting entities.

In so far as the capacity building of law enforcement agencies is concerned, since 2018, FMU has organized 31 indepth training sessions in which 905 participants have taken part. These sessions were organized in coordination with different law enforcement agencies, international organizations, regulators, and other relevant stakeholders.

The scope and operations of FMU include certain key functions, namely: receiving and analyzing Suspicious Transaction Reports (STRs)/Currency Reports Transaction (CTRs), disseminating financial intelligence to and referring LEAs, matters to regulatory or administrative bodies; conducting strategic analysis and developing typologies; maintaining database FMU's of STRs/CTRs; formulating regulations concerning STRs/CTRs; recommending AML/CFT measures to authorities; freezing any property (for 15 days); cooperating with foreign FIUs; coordinating with domestic, regional, and international stakeholders: representation at international forums; and coordinating NRA, MER; and FATF Action Plan.

There is a firm realization on the part of the stakeholders that AML/CTF/CPF is not the job of any single entity, but requires a coordinated approach involving broad linkages between a diverse set of institutions and entities complementing each other with broader access to information across various entities. FMU is unique in the sense that it acts as the key point of coordination between reporting entities, law enforcement agencies, regulatory bodies. internal and external databases, and other relevant

authorities and entities. We are now increasingly involving designated nonfinancial businesses and professions (DNFBPs) in our operations and activities.

We can confidently assert that our reach is very wide in terms of reporting entities. We have to ensure that our coordination is both intense, broad, and sustained over longer durations.

Even before FATF Action Plan, a lot of entities were doing great work, but now greater coordination and cooperation is taking place with entities like SECDIV and others. We now receive a lot more STRs. Our systems have undergone significant improvements, and the number of entities registered with FMU's goAML (Anti-Money Laundering System) has gone up from 997 in June 2021 to 2068 in August 2022. Our current technical compliance rating in terms of FATF Recommendation 7 related to targeted financial sanctions related to proliferation is largely compliant (LC).

Last but not the least, it must be pointed out that one area demanding further improvement is proliferation financing, because there is a very complex process involved in it. We are actively building capacity in this area. One positive sign of our moving in the right direction is the enhanced cooperation and coordination between various entities and growing publicprivate participation as a part of that cooperation and coordination.

# Profile

Ms. Lubna Farooq Malik is Director General, Financial Monitoring Unit (FMU), the Financial Intelligence Unit (FIU) of Pakistan, since July 2020. Prior to this assignment Ms. Lubna Farooq was the Managing Director of Deposit Protection Corporation (DPC), a subsidiary of the State Bank of Pakistan (SBP).

Ms. Malik possesses over 28 years of experience in Pakistan's financial sector, including her tenure as central banker in SBP where she headed core Departments of Banking Supervision and Policy.

Ms. Malik possesses MPA Degree from Harvard Kennedy School of the Harvard University.

As Head of FMU, Ms. Malik's responsibilities include managing and supervising the FMU. In addition, she is also the focal person from Pakistan on Pakistan's FATF Action Plan, APG Mutual Evaluation Report and all AML/CFT matters. The Foundational Role of Coordination and Cooperation for Enhanced Effectiveness of National Measures



**Mr. Haroon Rashid** Director General Strategic Export Control Division (SECDIV) Ministry of Foreign Affairs (MoFA) Pakistan

Pakistan has an elaborate national system for the implementation of the Non-Proliferation Regime. It includes the framework for coordination and cooperation at the national level. It also includes a host of national measures that are being carried out to achieve enhanced effectiveness in counterproliferation efforts. These measures include those taken bv the Coordination, Review and Monitoring Committee (CRMC) for the implementation of the UN Security Council resolutions. It needs to be mentioned at the outset that CRMC has

been constituted to sustain effectiveness of Pakistan's compliance system.

### International Counter-Proliferation Framework

The international framework for countering the proliferation of WMD consists of three central mechanisms.

"CRMC's mandate includes the implementation and enforcement of specified measures related to countering proliferating financing (CPF), issuance of guidelines in operational procedures for imposing sanctions measures, coordination and outreach to stakeholders, and performing all acts incidental and ancillary to the performance of its main functions."

First, resolution 1540 (2004) and other proliferation financing-specific resolutions of the UN Security Council play a fundamental role in counterproliferation. The former calls upon all member states to abstain from support of non-state actors seeking WMD. It also obligates all members to implement export control laws and enforce trade controls.

The resolutions 1718 and 2231 further call for actions to prevent proliferation activities by using legitimate channels of trade and commerce. Second, FATF standards emphasize the preservation of the international financial system. Recommendation FATF 7, Recommendation 2, and immediate outcome 11 together emphasize the implementation of targeted financial proliferation sanctions against financing. Third, multilateral export control regimes aim at restricting the proliferation of dual-use goods and related technologies and helping establish countermembers proliferation laws and system.

# Pakistan's Counter-Proliferation Framework

Pakistan's domestic In terms of framework, counter-proliferation Pakistan's United Nations (Security Council) Act 1948, Export Policy Order issued by the Ministry of Commerce of Pakistan every three years, Strategic Export Control Act 2004, and Customs Act 1969 form the key legislative tools for the implementation and enforcement of necessary measures for countering proliferation financing.

# Strategic Export Control Division (SECDIV)

SECDIV, established in 2007, performs six key functions. namely: administering export control; periodically updating Control Lists; coordinating for enforcement measures: formulating rules and regulations; issuing licenses; and designating agencies for enforcement. It must be emphasized that SECDIV prioritizes interagency coordination for enforcement. There is a close liaison between SECDIV and border enforcement agencies, including Customs and other law enforcement agencies like the Frontier Corps, Pakistan Rangers, and the Frontier Constabulary.

> "CRMC supervises the regulatory authorities of financial institutions, designated nonfinancial businesses and professions (DNFBPs), and other relevant stakeholders through a number of measures."

# Inspection and Enforcement Team (IET)

The Inspection and Enforcement Team (IET), established in 2016, was the first coordinated endeavor undertaken by SECDIV. IET relied on interagency cooperation to coordinate actions against sanctions violations. It comprised six official members including the Ministry of Maritime Affairs, Civil Aviation Authority (CAA), Federal Board of Revenue (FBR), Customs, intelligence agencies, and Control and Disarmament Arms Division (ACDIS) of the Ministry of Foreign Affairs (MoFA). The IET's mandate included the inspection of aircraft and vessels, cargo inspection, taking appropriate actions on alleged

violations of sanctions, recommending effective enforcement measures, and resource mobilization including resource allocation for technical assistance. However, within two years of its functioning, it was realized that the IET platform was insufficient, particularly in terms of imposing controls over trade finance against the designated entities and individuals.

The need was, therefore, felt for the creation of a more comprehensive body. This was important for more implementation effective of the financing-specific proliferation resolutions of the UN Security Council which are adopted under Chapter VII of the UN Charter. These resolutions call for sanctions measures against entities and individuals engaged in proliferation financing activities. These sanctions measures include ensuring the prevention, suppression, and disruption of proliferation financing, freezing funds or any other assets related and associated with proliferation activities. and implementing controls so that no funds or other assets can be made available to designated entities and individuals.

### Coordination, Review and Monitoring Committee (CRMC)

As authorized under Pakistan's United Nations (Security Council) Act 1948, the federal government issues Statutory Regulatory Orders or S.R.O.s to give effect to Security Council decisions.

It is by utilizing these powers that, under SRO 1067 (1)/2018,the Coordination, Review and Monitoring Committee (CRMC) was established in August 2018 as a national platform to effective interagency ensure cooperation, information promotion, and the sharing of experience sharing, optimal utilization of resources and efforts for implementing international best practices.

"Effectiveness measures undertaken by CRMC include the issuance of policy documents such as the cooperation and coordination strategy document, organization of plenary meetings, issuance issuing guidelines on CPF regime, monitoring sheets from stakeholders to overwatch compliance progress, and outreach for awareness raising to synergize CPF activities."

Compared to its predecessor, that is, IET, the mandate of CRMC is considerably broad. It includes the implementation and enforcement of specified related measures to countering proliferating financing (CPF), issuance of guidelines in operational procedures for imposing sanctions measures, coordination and outreach stakeholders. and to

performing all acts incidental and ancillary to the performance of its main functions.

CRMC comprises officio 21 ex include members, which relevant ministries, regulatory authorities, and other relevant institutions. It was decided that the Committee will conduct periodic reviews of steps taken activities performed by its and implementing members in and enforcing decisions of the federal government.

To ensure its effectiveness, the decisions made during the reviews are binding on all CRMC members.

At present, CPF supervision in Pakistan is undertaken by CRMC. It supervises the regulatory authorities of financial institutions, designated non-financial businesses and professions (DNFBPs), and other relevant stakeholders through a number of measures.

The State Bank of Pakistan, Securities and Exchange Commission of Pakistan and the Central Directorate of National Savings act as supervisors for the banking sector and National Savings, respectively.

FBR, the Ministry of Law and Justice, the Institute of Chartered Accountants of Pakistan (ICAP) and the Institute of Cost and Management Accountants of Pakistan (ICMA Pakistan) are DNBFPs supervisors for their regulated entities. Effectiveness measures undertaken by CRMC include the issuance of policy documents such as the cooperation and coordination strategy document, organization of plenary meetings, issuance issuing guidelines on CPF regime, monitoring sheets from stakeholders to overwatch compliance progress, and outreach for awareness raising to synergize CPF activities.

CRMC is used as a platform to coordinate overall strategy between all stakeholders for the implementation of CPF. First, in terms of coordination and information. CRMC serves as a platform to ensure that AML/CFT/CPF regulatory authorities can communicate with each other and respond to the request for assistance as, when, and where needed. Second, all CRMC members have designated focal persons to respond to CRMC's requests without delay and inform their respective internal processes for providing the requested feedback and views for taking necessary actions, whenever UN-designated lists are updated.

Third, for capacity building and awareness raising on obligations and risks pertaining to CPF regime, the authorities conduct outreach to the private sector to explain key elements of national CPF strategy and enhance understanding of its obligations. Fourth, dialogues for public-private collaboration are undertaken to

encourage the private sector to comply its obligations. Fifth, for with harmonization policies, the regulatory authorities harmonize the outreach and capacity-building programs of respective reporting entities. Sixth, in terms of evaluation and follow-up actions, tracking sheets are reviewed quarterly, implementation of outreach activities is monitored. and а comprehensive review has to be undertaken yearly or as and when required.

Plenary meetings are conducted every quarter to provide feedback on activities that were undertaken for initiating and strengthening CPF measures. So far, 12 plenary meetings have been conducted.

The CRMC guidelines for the domestic CPF regime are developed with the objective that relevant authorities dealing with CPF should integrate them into their internal policies. The guidelines have helped them in improving their internal regulatory and monitoring functions. As a result of the work required by the CRMC, two sets of comprehensive guidelines have been issued for effective implementation of the CPF regime. The first set of guidelines was issued in September 2020 and the second was issued in July 2021. The second set of guidelines was exclusively for the DNFBPs. In addition to these guidelines, sectoral guidelines been issued bv have also the

supervisors and regulators for regulated entities. These guidelines have also been translated into our national language, that is, Urdu, for the ease of understanding of our regulated entities.

CPF compliance is measured through the submission of monitoring sheets, tracking also sheets. called bv supervisors and regulators. Monitoring sheets were developed to monitor and track the progress and reflect the implementation of CRMC's decisions and strategic priorities. It was realized that, for the effective implementation of the CPF regime, CRMC should regularly seek input and monitor the activities carried out by its members. For that purpose, two templates of monitoring sheets were developed. The first monitoring sheet was developed in November 2020, for the regulatory authorities of the financial institutions. The second monitoring sheet was developed in July 2021 for DNFBPs' supervisors. Both tracking sheets are required to be submitted to CRMC on a quarterly basis.

CRMC also undertakes regular outreach activities for enhancing awareness and capacity building of supervisors regulators. and Its outreach is made as part of the threetiered strategy which includes outreach made from the CRMC platform, outreach made bv regulatory authorities, and internal outreach by regulated entities, that is, by financial institutions and DNFBPs themselves. In outreach activities, emphasis is placed upon raising awareness on obligations under the CPF regime. From the CRMC platform, outreach plans are made for both the public and private sectors. Moreover, there is a special focus on feedback on outreach activities made by the regulatory authorities. CRMC officials also take part in outreach activities for the private sector sponsored by the United Nations Office on Drugs and Crimes (UNODC). For Customs officials, training modules on proliferation financing-related matters are made for entry-level and mid-carrier-level officials. CRMC especially focuses on private bodies including district chambers of commerce as well as academics and research institutes.

### Profile

Mr. Haroon Rashid is currently serving as the Director General of Strategic Export Control Division (SECDIV), Ministry of Foreign Affairs, Pakistan. He holds Master's degree in Defence and Strategic Studies from Quaid-i-Azam University (QAU), Islamabad. He has wide experience of strategic export controls and arms control and disarmament affairs. Mr. Rashid has also worked as the team lead for Pakistan's counter-proliferation financing measures on Pakistan's FATF Action Plan and APG's Mutual Evaluation. He has also been the focal person for the on-site visit of Joint Working Group of FATF and APG on counter-proliferation efforts by Pakistan.











# SESSION 2

# LATEST DEVELOPMENTS AND PROGRESS IN NATIONAL STRATEGIC TRADE MANAGEMENT

# **SESSION 2**

Intangible Technology Transfer (ITT) Controls Vis-à-vis Fast-Paced Technological Developments



**Mr. Itsuki Sugihara** Trade and Economic Cooperation Bureau

Ministry of Economy, Trade, and Industry (METI), Japan

#### **ITT Controls in Japan**

There are two types of sensitive technology controlled under the national law, that is, Foreign Trade and Foreign Exchange Act (FEFTA). The first type is cross-border technology (Border Controls). The second type is technology transfers from a "resident" to a "non-resident" inside Japan (Deemed Export Controls). Both these types require license. A resident is defined as a person who has lived in Japan for more than six months continuously.



program, METI conducted 268 expert dispatches and individual consultations for 87 universities and research organizations in FY2021."

Intangible Technology Transfer (ITT) also regulated under FEFTA. is "Specific information necessary for the design, production or use of regulated products" is considered as "regulated technology". This information usually assumes the form of technical data or technical assistance. Appropriate companies, controls on ITT in universities, and research institutions are critical in terms of national security innovation. The and Advisorv Committee on export controls of Japan's Ministry of Economy, Trade, and Industry (METI) highlighted that technology transfer to a "resident" under the significant influence of a "non-resident" should be considered and controlled as "deemed export".

The scope of the ITT controls has since been expanded to include technology transfer by a resident under control by foreign governments or entities. Prior to this, Japanese national and foreigners residing in Japan for more than six months were exempted. There are three categories of a "resident" who would be treated as "non-resident". Category 1 consists of the person(s) under the control of foreign government(s) or entity by contract. Case 1 under Category 1 includes technology transfer to a professor at a Japanese university who is also hired by a foreign university. Case 2 under Category 1 includes technology transfer to a visiting professor at a Japanese university coming from a foreign university on sabbatical.

Category 2 consists of the person(s) substantially under the control of foreign government(s) by economic benefits. Case 1 under Category 2 consists of technology transfer to a student receiving a scholarship from a foreign government. Case 2 under includes technology Category 2 transfer to a researcher joining a statesponsored recruiting program and receiving a large amount of grant or expenses from living a foreign government. Category 3 consists of the person(s) in Japan acting pursuant to instructions the of foreign government(s). Case 1 under Category 3 includes technology transfer to a acting in Japan student under instructions or requests from a foreign government.

### Outreach

METI's outreach to industry, especially SMEs, consists, among other things, of information meetings on export control rules for awareness raising. The relevant organizations that take part in these meetings include commercial and industrial associations, chambers of SME business commerce. and organizations. METI arranges these meetings, sends speakers, and covers part of the costs. The meetings are open to the public.

METI dispatches advisers to SMEs to support their efforts in establishing their internal export control management systems. METI also sends advisers for consultations to SMEs which are provided by the Japan Chamber of Commerce and Industry (JCCI).

For this program, METI dispatches experts with rich experience and knowledge in export control management. Many of these experts are retired personnel from companies that have a strong self-management system of export controls. They provide consultation to universities and research institutions upon request. Online consultations are extremely connecting experts useful in to universities and research institutes that are not present in urban centers.

METI has prepared guidelines, that is, Guidance for the Control of Sensitive Technologies for Security Export for Academic and Research Institutions, especially designed for universities and research institutions engaged in cutting-edge R&D. The latest version, the fourth edition, was published in February 2022 and notified to all relevant universities. In 2021 alone, METI held five extensive online information meetings to explain the *Guidance* to relevant stakeholders.

METI has also provided detailed elearning resources on its website for the reference and consultation of academic and research institutions. The E-learning program is another part of outreach to academia. The elearning contents are provided in both Japanese and English. METI is now updating the contents to reflect recent legal arrangements in the updated version. It will include the example of unintended technology transfer, which may occur through online meetings.

METI encourages universities to implement the recommended *Guidance* for export control of sensitive technology for academia. The guidance consists of three main points.

First, it raises the example of critical research areas for export control. METI has selected and indicated 55 political research areas for export controls so that universities will be able to recognize which areas of research are likely to fall under the scope of export control. Second, there are some role-model methodologies for export control that METI recommends, for example, the interaction of the top ten systems for export control management in each organization of academia. METI also delineates the areas where professors should be responsible and where the administrative section should be responsible for clarifying areas of ambiguity.

Third, METI provides a set of sample documents that can be used when universities or research institutions introduce internal compliance. Information exchange has now become more active with online consultation than in pre-COVID times. On-site consultations are for academia which do not have or newly introduced the export control self-implementation This program encourages system. universities to have an export control mechanism in place. In this program, senior officials visit of METI universities with which METI had no connection in past.

Under its expert dispatch program, METI conducted 268 expert dispatches and individual consultations for 87 universities and research organizations in FY2021. Since FY2016, senior METI officials have visited universities for more than 200 times to brief executives of universities like presidents, boards of trustees, etc. METI promotes the establishment of regional networks of universities on export control. A total of 13 networks in 8 regions have been established so far. In this regard, the most recent meeting of regional networks was held in March 2022. Representatives from all 13 networks participated in this meeting. In 2018, a network of export control officers was also established by the National Research and Development Agency.

Center for Information on Strategic Trade Control (CISTEC), a major Japanese non-profit and nonorganization, governmental established in April 1989, for information on strategic export control is also playing a key role in Japan in encouraging security export control. In step with the overall trade control architecture of METI, CISTEC aims to enhance the cooperation between industry, government, and academia. CISTEC also conducts multipronged outreach to other countries that includes the organization of export control seminars for other Asian countries, overseas export control seminar, dispatching of export control specialists overseas, and networking with industrial associations and organizations research of other countries.

Recent years have witnessed encouraging growth in terms of the establishment of responsible divisions for security export control. In February 2020, 100 percent national universities and 61 percent other universities, and in February 2021, 100 percent national universities and 65.4 percent other universities had established security export divisions, compared to 94.2 percent national universities and 41.9 percent universities in February 2018, and 94.2 percent national universities and 45.5 percent other universities in February 2019. In so far as the establishment of Internal Compliance Programs was concerned, compared to 75.6 percent national universities and 23.7 percent universities in February 80.2 percent 2018 and national universities and 31.6 percent universities in February 2019, 100 percent national universities and 51.1 percent other universities in February 2020 and 100 percent national universities and 53.8 percent other universities in February 2021 had established ICPs.

# Profile

wide Itsuki Sugihara has Mr. experience in international cooperation. He has held different portfolios in his tenure with Japan's Ministry of Economy, Trade, and Industry (METI). Currently, he is the Deputy Director of the Trade and Economic Cooperation Bureau at METI.

### Best Practices of Control Lists Classification: Implementation Challenges



**Mr. Suleman Akbar** Former Deputy Director (Policy) Strategic Export Control Division (SECDIV)

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The UNSC Resolution (UNSCR) 1540 was passed in 2004. Article 3 of UNSCR 1540 makes it obligatory for member states to have national export control. Article 6 of UNSCR 1540 recognizes the utility of effective national control lists calls upon all member states, when necessary, to pursue at the earliest development the such lists. However, this resolution does not impose any obligation on states to follow any particular list.

The globalization of trade holds a significant challenge to export control authorities around the world, since the production and distribution of

sensitive dual-use goods and technologies is not limited to a few states, but more and more developing countries are acquiring capabilities to produce dual-use goods. This can be attributed to the acquisitions and mergers of multinational corporations (MNCs) the shifting and of technologies to developing states due to their commercial reasons. These companies have to comply with the varying export control regulations of different countries and if these control lists are not harmonized between states, then there is a chance of loopholes in the export controls.

> "The EU integrated list of dualuse goods and technologies is considered as an international best practice in control list classification. Export control experts around the world encourage states to either adopt EU dual-use list in their export control systems or use the classification system of the EU."

Similarly, transit and transshipment also pose a challenge due to the nonharmonization of export controls among countries. The EU integrated list of dual-use goods and technologies is considered to be the best practice for constituting an individual export control list. According to the European Commission Staff Working Paper of 2013, the European Union integrated list has emerged as a global standard in the harmonization of export controls, but there are some gaps in the EU integrated list vis-à-vis control list maintained by international export control regimes. These gaps could be exploited by the potential proliferators, making the EU a weak link in the international export control architecture.

Control lists are the basis of export controls. These lists identify which commodities are under export controls. Normally, control lists are divided into two parts. The first part generally deals with munitions and dual-use goods and technologies related to munitions. The second part deals with the dual-use goods and technologies related to Weapons of Mass destruction (WMDs). One of the main problems with the control lists is that they are inherently complex and difficult to understand. It is actually the responsibility of the licensing officer of the regulatory authority to interpret and decide whether or not an export license falls under the control list.

In an export control system, control lists are generally interpreted at various steps; firstly, when control lists are adopted from multilateral export control regimes into national export controls; secondly, when exporters file a license for export, an interpretation is required; thirdly, when the licensing authority judges an application whether the commodities under question are subject to controls; and lastly, the interpretation is required by the customs officials at the export stage to decide whether the commodities match the license application or not.

> "The control lists of Pakistan encompass the scope and lists of export controls maintained by NSG, MTCR, and the Australia Group."

It is very rare that the commodity under question is directly defined in the control list, for example, triple head panoramic driver displays cannot be found anywhere in the control lists. However, these are defined under the ground vehicles and components especially designed and modified for military use. There are ambiguities in the control lists that may be due to the use of different control parameters or when one commodity is defined under different categories.

The effectiveness of export controls depends upon the credibility of the control lists. The control lists should be capable of accurately defining the items that are subject to export controls. Due to rapidly expanding technological evolution and technological developments, there is a need to revise the control lists. However, the adoption of control lists and their revision is not a simple task. It is resource-intensive, and many developing countries may not have the technical resources to deal with this aspect. To be effective, the control lists should be harmonized, as far as possible, with international standards.

The EU integrated list of dual-use goods and technologies is considered as an international best practice in control list classification. Export control experts around the world encourage states to either adopt EU dual-use list in their export control systems or use the classification system of the EU.

Experts also encourage the developed states to allocate suitable resources to assist countries in developing their control lists according to the EU model. Around 20 countries outside the European Union have either adopted the EU dual-use list in their export control systems or have used the EU classification model to devise their control list. Adoption of the EU control list model makes harmonization of international export controls easier beneficial which is for better enforcement of the export controls. However, there are discrepancies and inconsistencies in the EU list vis-à-vis international export control regimes which makes the EU a weak link in the

international architecture. non-proliferation

It is important that the EU dual-use list should fully reflect the control lists of international export control regimes. Failure to reflect the international export control regimes in the EU list can have two effects. First, if the items are missing from the EU list, then there is a chance that the missing items can be exported and exploited by would-be proliferators. Second, if there are items not present in the export control regime list but added in the EU list, then the EU businesses would be at a commercial disadvantage, and countries following the EU list would also be in the same situation. There are real-life examples of both these scenarios.

The MTCR Control List is divided into two categories. Category I items are those related to missiles and other delivery systems capable of carrying a payload of around 500 kg to a range of at least 300 km, while Category II items are the goods which have the only threshold limit of the range. There are 20 items in MTCR Annex, and each item is subdivided into 5 sections.

The NSG Control List is divided into two parts. Part 1 of the NSG Guidelines contains the trigger list. It consists of goods and technologies specifically designed for nuclear application. However, the goods have been arranged in simple numerical order without any particular classification system. Part 2 of the NSG Guidelines contains dual-use goods and technologies. It has 6 categories, and each category is subdivided into 5 product groups. Since Pakistan's control lists are based on the EU classification system, it is, therefore, crucial to throw some light on it. The lists were nationally notified in 2005, and are periodically reviewed by a standing Joint Working Group which is an inter-ministerial body. The control lists of Pakistan encompass the scope and lists of export controls maintained by NSG, MTCR, and Australia Group.

These are some gaps in the EU export control lists compared to control lists of international export control regimes. The EU dual-use list does not control hybrid computers for MTCR's Category I ballistic missiles, and unmanned aerial vehicle systems and their subsystems. The EU Military list does not control hybrid computers. There around categories are 25 and subcategories in the EU list where such discrepancies could be recognized. The second gap is related to composite structures. laminates. and manufacturers. The EU dual-use list does not control composite structures, laminates. and manufacturers. Moreover, in this category of the EU list, missiles are defined as complete rocket systems and unmanned aerial

systems capable of a range exceeding 300 km, apparently by defining missiles with only 300 km threshold. The complete category of MTCR Category I missiles has been eliminated in the EU list.

Another gap is exposed when comparative analysis of the EU and NSG control lists is made. There is a difference in the control language of the EU dual-use list and the NSG trigger list. There are different exemptions given in the EU control list.

In fact, the EU dual-use list definitions are narrow, while the NSG trigger list gives broader parameters. There are some discrepancies and inconsistencies in the EU export control list vis-à-vis export control regimes' lists. These discrepancies in the EU dual-use list have negative effects on the harmonization of the export control system, as there may be scenario when countries а not following the EU dual-use list find themselves in a position where they need to incorporate commodities of the lists of international export control regimes which are missing from the EU list. At that stage, each country may assign classification numbers as per their own understanding. This may lead distortion of the to EU classification system.

Moreover, countries following the classification system of the EU may

inherit discrepancies in their national control lists. This is particularly important when states that are members of the international export control regimes follow the EU integrated lists, and when there are commodities missing in the EU list due to which they will not be able to fulfill their commitments that they have made in international export control regimes. Since most EU states are members of the international export control regimes, this may encourage these states not to follow the lists of international export control regimes because chances will be that the EU is deliberately skipping these commodities due to their commercial reasons.

The EU control list may be updated to make it consistent with international export control regimes. Gaps between the EU dual-use list and lists of international export control regimes should be identified and addressed. If the commodities could be classified by providing specific control parameters, done by the EU, then as the international export control regimes should also adopt this approach instead of giving broader parameters. Effectiveness demands simplicity and adaptability.

The EU dual-use list may be made simpler and more adaptable. The export control regimes' lists may be converted according to the EU classification system to improve the former's adaptability.

# Profile

Mr. Suleman Akbar is the former Deputy Director (Policy), Strategic Export Control Division (SECDIV), MoFA, Pakistan. He has more than 12 years of experience in export controls. He is a former visiting fellow of the Center for Non-Proliferation Studies, Monterey, California, and the Center for International Trade and Security, the University of Georgia, USA. He has participated in several international workshops and seminars on strategic export controls, and has been part of delegations official bilateral for discussions on strategic export control matters.

Reinforcing the Export Controls Through Education and Outreach



**Dr. Jean Pascal Zanders** 

Independent Researcher and Consultant on Disarmament and Security

### **Targeted Initiative (TI)**

Targeted Initiative (TI) on Export Controls of Dual-Use Materials and Technologies is the multi-year project funded by the European Union. TI has several partner countries. TI works with two science centers, namely, the International Science and Technology Centre (ISTC), based in Kazakhstan, which covers Afghanistan, Armenia, Kazakhstan, Georgia, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan, and the Science and Technology Centre in Ukraine (STCU), which covers the GUAM countries that include Georgia, Ukraine, Azerbaijan, and Moldova.

It is noteworthy that Pakistan is also among the ISTC partner countries. But so far there has been minimum interaction with Pakistan.

TI has different work packages. Each work package has its specific objective, but synergies between work packages are being pursued. Current work packages include network of scientists, academic projects including Master's and other courses, PhD grant, and industry outreach, handbooks, and Internal Compliance Program (ICP).

> "The major ambition of the course is the transfer of ownership to local stakeholders like universities, research institutes, and other relevant stakeholders."

#### **Master's Course**

My responsibility is academic projects. As part of this initiative, I developed a full-fledged Master's program for application in universities. My initial instructions were to design and implement a full Master's course of 60 credits over one or two academic years.

After initial consultations and brainstorming with potential partners in early 2018, it immediately became clear that we were going to interact with diverse stakeholders over the years, so the challenge became one of
designing the Master's course that could actually be adapted to varying educational situations and that could serve many stakeholder communities such as industry, academia or research communities.

We, therefore, developed a modular approach consisting of 9 self-contained learning units. Two of these modules are introductory, four modules are advanced, and there are three seminar modules.

Using those modules as self-contained units gave us the flexibility to actually deliver courses, short courses, and executive courses to specific target audiences. So far, the Master's course as a modular approach is being implemented in a variety of ways.

At the initial stage, the choice was one full Master's course of one academic year.

But what actually happened during the implementation was that one university from one partner country took 6 out of the 9 modules and implemented them in a two-year Master's course. So, there was an existing course and they inserted the modules as part of the two-year program.

Today, the national educational authorities of that country have officially certified that course. There is flexibility for universities as well in that they could opt to make a module, for example, an introductory module, offer it as an elective course in a different faculty, or even offer it to bachelor's students so that they already get an introduction to the course.

Executive courses are two-week intensive courses for professionals such as people from government agencies, industry, research institutes, etc.

One-week intensive courses are mostly designed for teaching experts and professors to bring them up to speed with the knowledge of the area in which they will be teaching later.

There is the option to adopt the Master's course in its entirety as a standalone course. There is the option to integrate certain elements in the existing courses.

There is also the option to spread module contents of 2 or 3 academic years.

For example, introductory modules can be offered in the final year of the Bachelor's, while advanced modules can be spread over the two years of the Master's course.

There is the possibility of selecting certain topics only to be given as elective courses for students from different disciplines. The modules can be flexibly used in a variety of educational settings.

#### **Course Outline**

The following is the outline of the modules:

#### **Introductory Modules (IMs)**

IM 1: Chemical, Biological, Radiological, Nuclear (CBRN) Basic Knowledge and Concepts

IM 1 consists of: basic concepts relating to CBRN weapons and their control; the concept of dual-use technologies and the challenges they pose from a policy perspective; and the formal, multilateral treaties and other arrangements set up to prevent their misuses.

## *IM 2: Frameworks, Instruments and Responsibilities*

IM 2 consists of: a holistic overview of frameworks and instruments relevant to CBRN export controls, their respective objectives and areas of operation; responsibilities for different categories of actors; and linkage of those responsibilities to broader societal and policy contexts.

#### Substantive Modules (SMs)

## SM 1: Threats, Risks and Their Mitigation

SM 1 consists of: in-depth analysis of the various ways in which threats and risks related to CBRN materials and technologies may present themselves; discussion of various processes of technology transfer; linkage of threats and risks with the various frameworks and instruments to counter them; and, introduction to roles played by various national implementers, and national and international actor categories.

#### SM 2: Transfer Controls (General)

SM 2 consists of: focus on the national regulatory level, but remains general; historical analysis, origins of export control regulations, and evolution of export control regulations in the context of international developments; discussion of the various instruments available to prevent and penalize proliferation activities; and, kev stakeholder communities and their contributions specific or responsibilities regarding the prevention of CBRN proliferation.

## SM 3: Transfer Controls (National Context)

SM 3 consists of: focus on the national regulatory level; types of technologies developed, produced or consumed that may be of CBRN proliferation concern, or may pose security and safety issues; study of those technologies in the context of a country's economic relations (regional and international) and specific security challenges; transposition of international obligations into national legislative and regulatory frameworks; and the possibility to study the country in which the module is being taught.

#### SM 4: Promoting Responsible Behavior

SM 4 consists of: academic, scientific, and professional legal responsibilities and obligations; academic, scientific, and professional norms and ethics; understanding of the evolution of responsibilities and obligations in view of scientific and technological advances; and how can academics, scientists, and professionals contribute to raising awareness, education, and outreach?

#### Seminar Modules (SE)

SE 1 follows SM2 and supports the two IMs. SE 2 follows SM3, SE 3 follows SM4, and both support the SMs. These involve practical and highly interactive lecture of up to 10 to 15 hours over a one-week period. It needs to be mentioned that preparatory work by students is an important part of the seminar work.

#### **Course's Core Objectives**

There are at least seven core objectives of the course. The first core objective is to promote and disseminate knowledge to partner countries about CBRN and underlying technologies. The second objective is to identify and understand threats, risks, and their evolution. The third is to understand responsibilities of different stakeholders. The fourth is to share knowledge of the relevant international frameworks. The fifth is to understand technology transfer controls. The sixth is knowing partners and target audiences. The seventh core objective is the deployment of education and outreach activities in the area.

Some of the current objectives of the course included the promotion of local ownership, sustainability, and networks. The major ambition of the course is the transfer of ownership to local stakeholders like universities, research institutes, etc.

The key problem faced by this major ambition is that local investment in such projects often tends to end when external financing stops. A possible solution to this key problem is to demonstrate the value proposition to local stakeholders showing why the issue of export controls or transfer controls is important for local stakeholders and present the strategy showing how they can address it.

The importance of this initiative is communicated by showing that even students can be a proliferation risk or threat. Another aspect is to create agency, that is, how they can address the issues and how through interaction with other stakeholders a culture of responsibility can actually be built in target countries. In other words, it is a total package. It is about motivating people, changing the behavior of communities, having risk awareness as well as having the ability to respond to perceived risks that may happen in a variety of ways.

#### Profile

Dr. Jean Pascal Zanders is a Belgian independent researcher and consultant on disarmament and security questions. He heads The Trench, a research initiative dedicated to the future of disarmament. He is also a Senior Research Associate at the Foundation of Strategic Research, Paris, and Research Associate at the Centre on Conflict, Development and Peacebuilding, Graduate Institute of International and Development Studies, Geneva.

He holds Master's degrees in Germanic **Philology-Linguistics** (1980)and Political Sciences (1992) and a PhD degree in Political Sciences (1996) from the Free University of Brussels. He was Project Leader of the Chemical and Biological Warfare Project at the Stockholm International Peace Research Institute (1996 - 2003);Director of the Geneva-based Prevention BioWeapons Project (2003-08);and Senior Research Fellow at the European Union Institute for Security Studies (2008–13).

He has participated as an expert to the Belgian and EU Delegations in the BTWC and CWC meetings since 2009. He was a member of the Advisory Board on Education and Outreach (ABEO) of the Organisation for the Prohibition of Chemical Weapons (OPCW) from January 2016 until December 2021 and served as ABEO chair from 2016 until 2019.

#### Policy Implications of Emerging Biotechnologies



Dr. Muhammad Adeel

Assistant Director Arms Control and Disarmament Division (ACDIS)

Ministry of Foreign Affairs (MoFA) Pakistan

#### **Emerging Technologies**

Emerging technologies are defined by five key attributes: radical novelty, fast growth, coherence, prominent impact, and uncertainty, ambiguity, and risk. They also have the ability to change status quo. They significantly possess technological convergence. Think of synthetic biology or nanobiotechnology, and others. These are a convergence of two different technology platforms. Thus. the question arises, how do we go forward with regulations. They also have divisive social acceptance. There is talk about what Artificial Intelligence (AI)

might entail. There is also thinking about whether these are existential threats or solutionist in nature. However, such questions still remain unanswered.

Another important aspect of these technologies is their dual-use potential such as drones, 3D printing, biotech, and AI. The kind of product landscape they are bringing forward does entail a lot of dual-use potential. Considering their prospects and challenges, it is important to understand the way countries are responding to, or making sense of, emerging technologies.

> "Emerging technologies prove to be socially disruptive with the potential to revise or upend societal norms, institutional routines, individual and group expectations, and incentives structure in the long run."

These technologies surely have a dimension of growth and development. For instance, the use of resistance crops, particularly in the aftermath of climate change, does entail improvement in livelihoods and, ultimately, socioeconomic development.

Technological development offers a competitive advantage, so global power competition increasingly involves the race for new and advanced technologies and increased competition in terms of technology interfaces.

This is more or less directly linked to the solutionist approach based on the assurance that technology can play a leading role in resolving global challenges.

#### Challenges

The other side of the debate is centered on the question of their dual-use potential such as AI in weapons systems, bioweapons, cyber warfare, misinformation campaigns, and the unintended consequences of emerging technologies and technological development. This is the aspect with which regulators are mostly concerned. For instance, questions related to the social, economic, political, and human fallout of the unintended consequences of emerging technologies, like the algorithmic bias, autonomous AI, genetic mutation, or forced changes in DNA sequence, need to be addressed to assess the likely impact of the multiple applications of emerging technologies on human lives and society.

These technologies also prove to be socially disruptive with the potential to revise or upend societal norms, institutional routines, individual and group expectations, and incentives structure in the long run. There are also associated economic challenges such as trade and patent wars or denial regimes which have the potential to impact equitable access to these technologies.

"The purpose of regulation is to define limits, that is, rights and obligations, assist policy makers, and help leverage the capabilities of academia for rendering science advice. It has to perform the crucial function of uncertainty reduction, simplification of transfers, facilitation of cooperation, and identification of the ways for the resolution of problems."

#### Safety and Security Implications of Emerging Biotechnologies

Safety and security implications of emerging technologies need to be considered as there are a lot of technology interfaces. For instance, at the level of immunology, there are products which are beneficial such as therapeutics for disease control, but there are also products that can overwhelm immune systems.

In neuroscience. emerging technologies are linked to the treatment of psychiatric disorders, but the there is risk of cognitive, psychological, behavioral or modification. Considering agriculture, there is gene editing for climate, and disease-resistance crops but there are

also gene drives which can eradicate an entire species in the case of genetically modified mosquitoes.

In so far as infectious diseases are concerned, we saw during the COVID-19 pandemic the speed with which vaccine platforms were rolled out, but viral strain modification continues to be a concern.

"The risk of institutional drift driven by technology platforms evolving faster than regulations needs to be handled. Instead of the multilateral dialogue and deliberations being at par with technology and regulations, there is in fact a lag of at least 10 years between them."

Proper regulation requires unavoidable tradeoffs. Regulatory decisions inevitably involve what is approved and what is not, what kind of controls are on dual-use research, and who under what circumstances has access to it. The tendency of technology to outpace regulation is an abiding concern. Report on Advances in Science and *Technology in the Life Sciences* (2020) by the United Nations Institute for Disarmament Research (UNIDIR) offers an excellent discussion of the implications of research and development in different areas of the life sciences and the ethical, legal, and

safety concerns raised by technological advances in these areas.

#### Objectives of International Regulations

The purpose of regulation is to define limits, that is, rights and obligations, assist policy makers, and help leverage capabilities of academia for the rendering science advice. It has to the crucial function perform of uncertainty reduction, simplification of transfers, facilitation of cooperation, and identification of the ways for the resolution of problems. Regulation also the helps answer need for harmonization.

Regarding the policy continuum for regulation regimes, across the world, member states can be sorted out into the four quadrants of promotional, permissive, precautionary, and preventive, as per Robert Paarlberg's model of policy options and regimes toward GM crops cited and discussed by Andrea Migone and Michael Howlett in their 2009 article on classifying biotechnology in Policy and Society, Volume 28, Issue 4. For instance, in the case of the approval of genetically modified (GM) crops, on one side, there is a promotional regime with neo-liberal market perception providing full patent protection.

However, on the other side, there is a very preventive approach blocking all forms of GM trade. This is the kind of broad spectrum GM technologies operate in, requiring the industry to adapt to it. This is where a level of harmonization, falling somewhere between permissive and precautionary quadrants, is needed to bridge the gap.

Another very important aspect is the battle of regulatory triggers. Export control regimes can be sorted out into process-driven versus product-driven regulatory designs. These triggers are binary. Some argue it is a false binary, but it exists.

The process prioritizes catch-all or regulation of the entire technology, but the product-based design prioritizes the end product rather than the process. This raises the question about the necessity or even utility of the regulatory binary, considering dividing lines between technologies have become fuzzy owing to technological convergence. For example, take the case of gene editing which is very different from genetic modification, because with gene editing no addition of foreign DNA is being made.

This raises the question of the appropriate regulatory paradigm, since gene editing does fall neatly in either process-driven or product-driven regulatory paradigm. These are the questions for the regulators, especially the manner in which scientific advice can best be utilized. "Technological convergence is particularly important, because it is continuously introducing new products to the market that have no regulation. For instance, how do we regulate nanobiotechnology or bioinformatics or quantum biology in the absence of international treaties in these domains? This is something that experts and practitioners need to think about."

Very importantly, setting a high bar for market entry for a firm or entrepreneur can lead to SME failure. For example, setting a high process-driven bar in crop or agro-industry can lead to the inability of smaller innovators to find a market to commercialize biotech products.

Thus, there is a need for policymakers, regulators, and scientists to identify policy sweets spots as well as plug policy loopholes.

#### International Regulation of Biotechnology

The expert opinion regarding the regulation of biotechnology is divided. Some consider it is over-regulated, while others consider it is underregulated. There are at last eight to nine different treaties at the multilateral level related to biotechnology ranging from arms control, health, and disease control to environmental protection, trade, and social impact. Interestingly, there is still not a single unified definition of biotechnology covering what it entails, how we regulate it, and what consensus areas there are.

However, there is some consensus around impact and output. There is also a tendency to compartmentalize issues in international treaties and protocols. Arms control is simply about avoiding biological weapons,

International Health Regulations (IHR) is concerned mainly with facilitating bio improvement for health applications, and the Cartagena Protocol talks about the environmental release, transboundary movement, living modified organisms, etc.

At the level of trade, there is concern mainly with sanitary and phytosanitary (SPS) measures and Trade-Related Aspects of Intellectual Property Rights (TRIPS), allowing traders to trade biotech commodities. There is some clarity about the outcome, but there is fuzziness regarding the definition of biotech such as the question of the classification of gene editing and CRISPR.

#### Policy Implications of Emerging Technologies

This calls for a connection between the scientist and the diplomat, between

science and diplomacy. First, the risk of institutional drift driven by technology platforms evolving faster than regulations needs to be handled. This drift is in a way inevitable, but efforts can and should be undertaken to manage it and minimize it.

Instead of the multilateral dialogue and deliberations being at par with technology and regulations, there is in fact a lag of at least 10 years between them. The former seems always to be breathlessly catching on. This creates problems in terms of equitable access as well as resource security.

Second, there is treaty conflict. Cartagena Protocol defines biotech in a different way from the World Trade Organization (WTO). One allows that which the other disallows and vice versa. Compliance becomes challenging in such a situation. The fact that certain states are not signatories to some of these treaties also adds another dimension of complexity.

Third, bridging gaps and defining risks in these conditions becomes challenging, especially for diplomats. Theoretically speaking, this represents the classic binary between social sciences and natural sciences.

Do you define socioeconomic dimension as a risk or not? If yes, how do you calculate socioeconomic impact precisely? How do you regulate the technologies in the absence of welldefined broadly accepted criteria? For example, in the case of the perception of GM crops or GM food in Europe, the socioeconomic dimension is considered, but there is no precise quantification of this dimension nor is it clear where the line is to be drawn in terms of benefits or utility.

> "Future-proofing is the key to countering technological drift. For future proofing, more science advice and greater synergy are needed."

The world is living in the age of infodemic, where there is a deluge of fake news with serious implications for regulations.

For instance, there is a lot of questionable material out there that construes a particular technology in a certain way which could influence consumer perceptions.

Fourth, technological convergence is particularly important, because it is continuously introducing new products to the market that have no regulation.

For instance, how do we regulate nanobiotechnology or bioinformatics or quantum biology in the absence of international treaties in these domains? This is something that experts and practitioners need to think about.

#### Implications for Biological Weapons Convention (BWC)

implications The of emerging especially technologies, biotechnologies, for the BWC must be considered deeply. First, there is the need for horizon scanning, including monitoring of technological the development. In BWC, one of the biggest limitations is the lack of a verification protocol. However, there is still a need to monitor the technology landscape. We need to ask if the member states are aware of the extent of technological development. Second, digitization of biological data and breakthroughs in sequencing technologies challenges pose to existing export control regimes. Difficult technical policy-related questions need to be decided in the face of the exponential rate of technological breakthroughs. For instance, where does Nagoya Protocol on Access and Benefit Sharing (ABS) trickle in and how can it be reconciled with respect to BWC are important questions that need technical and policy attention. Third, with regard to the question of increased assistance and cooperation in the context of technological breakthroughs, there is a need to explore avenues for benefitting from Article VII of the BWC which mentions assistance and cooperation. Fourth, there is a need to facilitate exchange of information. collaboration. and

cooperation for peaceful purposes in the context of Article X of the BWC related to peaceful uses. It needs to be asked whether or not available technology platforms are being equitably shared. Fifth, there is a need to resume negotiations on verification, as the latter adds teeth to the Convention

#### Way Forward

First, the goal should be a consistent and science-based approach for regulatory oversight. There is a need for multilateral agreement on criteria. Different technologies must be defined properly with viable distinctions made between them.

Incremental improvement in definitions and classifications with proper interventions of science advice should be sought.

Balance between safety and trade opportunity is important. As climate change is impacting Pakistan in a big way, we have a huge opportunity for deploying these technologies for climate change adaptation and mitigation.

There is also a need to consider how denial regimes and over-regulation impact us. But finding the balance is important.

Second, harmonization is essential for ensuring the safe application of these technologies.

But how do we proceed toward harmonization? One, it entails alignment information on requirements for regulations and trade. What kind of information is needed for exporting or importing? There is necessary information and good-toinformation. know In short. information requirement should not be turned into a trade barrier. Two, it entails synergy or avoiding duplication among existing regulations. There are at least 10 international regulations covering biotechnology so it is essential to avoid any duplication.

Third, future-proofing is the key to countering technological drift. For future proofing, more science advice and greater synergy are needed.

Fourth, since technology regulation requires coordination and cooperation between scientists and diplomats or experts and practitioners, so it is essential to institutionalize their engagement by means of periodic S&T reviews.

#### Profile

Dr. Muhammad Adeel is a career diplomat with the Ministry of Foreign Affairs, Pakistan, assigned to its Science Diplomacy Division. Prior to joining the Civil Services in 2015, he completed his BSc (Hons) and MPhil. in Biotechnology from Forman Christian (FC) College, Lahore, where he authored two dissertations on microbial diversity and biotechnology applications respectively. His doctoral work at the Western Australia Biotechnology Murdoch Centre. University, Perth, Australia has examined the regulatory and science perspectives diplomacy of Gene Editing.

he initiated Science In 2019, Diplomacy trainings in Australia for Early Career Researchers, which was awarded as the Best Education Initiative by the Council of Australian Postgraduate Association (CAPA), the federal peak body representing postgraduates in Australia. Prior to joining the Foreign Service of Pakistan, he was the Manager of Pakistan Biotechnology Information Centre at FC College, Lahore which was involved in science policy and communication linkages for Biotechnology applications. Apart from working on science diplomacy at the Ministry of Foreign Affairs, he also deals with matters pertaining to disarmament including the Biological Weapons Convention and Chemical Weapons Convention - whereby he has also represented Pakistan in Pakistan's Permanent Mission to the UN and other International Organizations in Geneva. He also participates in global science diplomacy dialogues including the Foreign Ministry's Science and Technology Advice Network and is currently the Associate Editor of the Ministry's periodical *Science Diplomacy Perspectives*.









# SESSION 3

## NEW TECHNOLOGIES: CHALLENGES TO INTERNATIONAL EXPORT CONTROLS

#### **SESSION 3**

#### Emerging Dual-Use Technologies and National Security



**Dr. Anita Nilsson** Former Director of Nuclear Security International Atomic Energy Agency (IAEA)

#### **Control Mechanism and Arrangements**

The prevention of the proliferation of weapons of mass destruction, that is, nuclear, chemical, and biological weapons and their means of delivery is one of the fundamental priorities for global peace and security.

This is a rather straightforward statement, but it contains a process that is a process of complexity. Let me elaborate it. The dual use of nuclear technologies was discovered early on. It was discovered that nuclear material, the key piece in a nuclear weapon or a nuclear explosive device, is also the key element in peaceful activities, namely, the nuclear reactor that produces electricity. It was as early as 1953 that President Eisenhower in an address to the UN launched the concept of "Atoms for Peace", opening the nuclear technology for use for peaceful uses, but at the same time pointed out that it came with an undertaking to abstain from using the material or technology for weapons production.

> "Pakistan has the potential to be in an advanced position in the international nuclear sector, having experience with new reactor units and also possessing an established national control system. It has a comprehensive act in place with the lists and regulations of dual-use items."

That statement was the birth, one can say, of the International Atomic Energy Agency (IAEA). It was also a triggering factor for the start of nuclear diplomacy in that the diplomats got together to come to terms with the question of proliferation and established the Non-Proliferation Treaty (NPT). It was followed by the formation of the Zangger Committee, which then led to the Nuclear Suppliers Group (NSG).

The same process has happened within the other areas of non-proliferation like the Biological Weapons Convention (BWC), the Chemical Weapons Convention (CWC), Missile Technology Control Regime (MTCR), and others.

It is not difficult to identify the fundamental components of the relevant control mechanisms and arrangements aimed at nonproliferation.

> "There is also the hope that new reactor technologies can be used for rapid development in the developing countries and fulfill the massive global demand for electricity."

First, there is the establishment of international criteria for trade and exchange of dual-use items; those criteria have been established in informal as well as formal influential groups of states.

Second, it comes together with an effort to identify the technologies and to identify and specify the materials and other items that may be used in both civil and military programs, that is, dual-use technologies, items, and materials.

Third, it cannot happen without the establishment and implementation of national legislation and regulatory requirements for export control. The responsibility for implementation always stays with the nation. Fourth, it is also the nation that has the responsibility and the leverage to establish the mechanism for enforcement, sanctions, and whatever ways in which it wants to deal with the implementation of its export laws and regulations. In other words, the mechanisms for national enforcement and the international follow-up of control systems need to be in place.

Article of the European Union's Regulation 2021/821 for the Control of Export, Brokering, Technical Assistance and Transfer of Dual-Use Items provides a comprehensive definition of dual-use:

> 'dual-use items' means items, including software and technology, which can be used for both civil and military purposes, and includes items which can be used for the design, development, production or use of nuclear, chemical or biological weapons or their means of delivery, including all items which can be used for both non-explosive uses and assisting in any way in the manufacture of nuclear weapons or other nuclear explosive devices (Article 2(1)Regulation EU 2021/821).

It can be seen that this definition offers a broad and inclusive perspective in terms of its identification of dual-use items. This is because the export controls can be comprehensive and effective.

#### International Foundations of Export Control

The international foundations of export control are provided by two fundamental components, namely the international legal basis of nonproliferation in general and the implementation arrangements in particular, the latter including both formal and informal arrangements.

The international legal basis is provided by treaties, conventions, and UNSC resolutions like the NPT, BWC, CWC, UNSC Resolution 1540, and IAEA Safeguard Agreements and Additional Protocols.

The implementation arrangements consist of instruments like national laws and regulations as well as arrangements like NSG, the Australia Group (AG), the MTCR, and the EU Strategy Against the Proliferation of Weapons of Mass Destruction (2003).

It is noteworthy that IAEA safeguard agreements and additional protocols are legally binding agreements between the IAEA and individual countries to ensure what is put in these agreements and protocols is restricted to peaceful uses.

#### New Nuclear Technologies

Some discussion about new nuclear technologies and related technologies is in order at this point. These can be put into three broad groups: new reactor technologies (Molten salt. TRISO-based fuel, Fast reactors), cyber (AI, blockchain), technology and (hypersonic technology missile vehicles that could be used for delivery, advanced drones).

The first group consists of advanced and emerging reactor technologies that can significantly improve both the safety and the security of reactors. What is new is that they will be produced both as small units or large units. The group contains a multitude of individual technologies, but I have put them in three classes.

The first one is known as molten salt reactors (MSRs), where the fuel is in liquid salt form and the reactor is intended to be refueled on load. This means that there are no predefined units. The fuel may be taken out as a liquid, and, in IAEA terminology, this may resemble a bulk handling facility rather than an itemized facility that is more of a reactor.

The second class is the TRISO fuel reactors, which is short for tristructural isotropic particle fueled reactors. They can be fabricated into pellets or pebbles, which are basically spheres that are shaped in layers containing different materials, they are small pieces, they can be larger pieces, but they are not individual pieces in the sense that you can identify them. The fuel is embedded in graphite, which is also the controlling material in this kind of reactor.

The third class is the fast reactors, which is more similar to normal light water reactors with fuel assemblies. They operate at high temperatures with other kinds of cooling materials than we are used to in light water reactors (LWRs) like gas, sodium, and even lead.

The second group is cyber technology. This represents a fantastic advanced acceleration of technology. It can be shaped in different ways. One key sector of that is AI. The other one is blockchain. Both are emerging with the possibility of influencing the core nuclear technologies, and they are important in terms of future export control regimes.

The third group is the missile technology. This includes hypersonic vehicles that are very new and can fly five times faster than the speed of sound. This new class of vehicles enables faster access to space, faster reach of targets, and also a long range. This is emerging as a very interesting new technology, and perhaps it can have relevance for delivery systems as could, perhaps, advanced drones, which also fall in the third group.

#### Relevant Issues for Export Control

There is technology being developed and tested that could be interesting also from an export control dimension. Experts are aware of the fact that there are differences between new reactors technologies and LWRs. These differences are important from the standpoint of verification and safeguards. Fortunately, a comparison can be conveniently made between the old and new technologies. According to the Partnership for Global Security (PGS), world's leading organization for nuclear and transnational security and energy policy, where assessment of advanced reactor safeguards is concerned, molten salt-fueled rectors **TRISO-fueled** and reactors may necessitate greater efforts than is the case with LWRs in terms of IAEA safeguards for item facility, source data, refueling and all verifiable nuclear material. In so far as fast reactors are concerned, greater effort may only be required for fresh fuel, LWR safeguards while may be relatively compatible for other areas of fast reactors.

A few differences, related to the fuel, that could be important from the perspective of export control, have already been mentioned above. Other elements should be considered in this context. For example, a reactor that operates at a very high temperature could have something more that could be of relevance with regard to dual-use technologies. Speaking of the fuel itself, it needs to be pointed out that molten salt with liquid fuel is not easy to verify in terms of peaceful uses, especially, if, so to speak, one opens a tap and takes away some of the fuel during loading operations.

Having said that, it is important to point out that IAEA can verify everything, that is, all nuclear material that is assigned to them in terms of peaceful uses, including anything that falls within it, but it is a matter of how much effort is required. The difference here is that an LWR reactor does not require a lot of effort. Since it is an itemized facility, fuel assemblies can be counted, they can be followed through the reactor as well as when they are shipped away. However, things are different with the liquid fuel. This may prove to be interesting for the NSG. It may also be interesting for the designers that may have to look into the way that these reactors are designed. The fuel is designed in order to alleviate any difficulties in the future. Difficulty, though relatively less than that

involved in liquid fuel verification, arises too with the TRISO fuel. Surprisingly, from the point of view of safeguards, fast reactors are easier to verify. However, the shape of the fuel presents difficulty in fast reactors, because they may operate with plutonium in the first core, because plutonium or highly enriched uranium or materials that warrant extra control fall in a certain table in the national control rules.

The question of what are the relevant issues for emerging technologies needs to be ascertained. Of course, the material is the relevant one. One needs to ascertain the category of the materials as well. Is it highly enriched uranium? Is it plutonium? Is it low enriched? Almost everything needs to be examined with the exception low enriched uranium under 20 percent, that is uranium-235. All these points discussed above are relevant for potential new discussions on export controls.

In order to ensure non-proliferation, NSG has the understanding that peaceful nuclear uses need to be evidenced or made clear. In the case of non-nuclear weapons State parties to the NPT, if there is a comprehensive safeguards agreement, the IAEA performs the inspection and makes statements based on the inspection. The same goes for Additional Protocols as they are a broader type of statements. If it is another type of safeguards agreement, they basically have the same things, but they tend to be more. Nuclear weapons states parties to the NPT normally have a socalled voluntary safeguards agreement, which applies safeguards to the nuclear material in facilities which the state has offered of its own accord. The voluntary agreement ensures that the material so offered remains under peaceful uses and is not used in any other way except as identified in the agreement, but these exist together with the military Item-specific program. safeguards agreements are with non-NPT states to ensure that items - material and facilities - included in the agreement stay for peaceful purposes.

There is a need for discussions on the new nuclear technologies to ensure peaceful uses. These discussions are important, because early on it may be possible to design the processes in such a manner that they fulfill the criteria. The point that needs to be made is that the criteria that the NSG is using should be communicated to designers so that they should understand what are the significant discussions and what are the things that need to be fulfilled for the new technologies.

There is a lot of hope concerning the new reactor technologies — both the advanced technologies and also the way that the new production is formed in small units, which can be fabricated and delivered to the site where they are used. They are referred to as small modular reactors (SMRs). There is the hope that they can significantly contribute to fossil fuel-free production of electricity. There is also the hope that they can be used for rapid development in the developing countries and fulfill the massive global demand for electricity.

At the global scale, the need for electricity is still quite significant. The technology is here. They can help the fast-track realization of SDGs with significantly increased access to electricity or energy. They can also make potentially significant contribution to climate change mitigation in the form of the reduction of CO<sub>2</sub> emissions globally. The export control system has to operate in harmony with these other key goals. The best-case scenario is based on the adherence of all countries to the of the export guidelines control regimes.

The export control system is wellknown, has commonly accepted criteria. and it has identified, understandable, and clear lists. It can benefit all. There are multiple benefits of participating in the nuclear export control arrangements. It can benefit the suppliers. It can ensure supply of material, equipment and spare parts.

It can increase predictability and it can enhance the credibility and legitimacy of those participating in the system through international cooperation.

#### Pakistan and Nuclear Export Control

Speaking of Pakistan, it should be mentioned that Pakistan is nuclear capable country.

It has the potential to be in an advanced position in the international nuclear sector, having experience with new reactor units and also possessing an established national control system. It has a comprehensive act in place with the lists and regulations of dual-use items.

It is a party to international treaties and is also interacting to some extent with export control regimes, but is not a member yet. It has a safeguards agreement with the IAEA, but not an additional protocol yet.

There is, of course, a recognition of peaceful nuclear activities, and there is a military program, but not yet a separation between the two. But all these things are part of the process today and tomorrow.

What is important is to highlight the potential, to take the process forward, to work things out, to interact, and cooperate for common goals.

#### Profile

Dr. Anita Nilsson joined the IAEA in 1996 as Senior Coordinator for International Safeguards, after having served at senior positions at Swedish nuclear regulator, the Swedish Nuclear Safety Authority. In 2003 she was appointed Director of IAEA Nuclear Security Office, a position she held until 2011. Anita Nilsson was the IAEA Gender Focal Point, 2005-2009.

Presently Dr. Nilsson is an independent consultant contributing to global nuclear security infrastructure, excellence in the safe and secure use of nuclear applications for development, the deployment of advanced reactor technology, and radiation therapy. Her expertise includes non-proliferation, nuclear security, and the establishment of international industry standards for risk-reduction.

Dr. Nilsson is Associate Fellow at Chatham House, a member of the World Federation of Scientists, Senior Associate of the Partnership for Global Security (PGS), and a member of the IAEA Director General's Advisory Committee on Nuclear Security (AdSec).

#### Strengthening International and Regional Coordination and Cooperation for Sustainable Development



### **Mr. Wang Shengjie** Director of the Political and Media Section

#### Embassy of the People's Republic of China in Pakistan

It is a great honor to attend the conference on behalf of China. First of all, I would like to take this opportunity express our appreciation to for Pakistan's long-term commitment to institutional capacity building in the field of export control and in promoting international cooperation to adjust the strategic trade controls. My thanks also go to the Strategic Export Control Division of MoFA as well as the NUST Institute of Policy Studies for organizing the event which has been a good learning experience.

The world today is experiencing a new round of scientific and technological revolution. Emerging technologies such as artificial intelligence, big data, quantum computing, and 3D printing are developing rapidly, greatly facilitating human progress.

Meanwhile, the military application of technologies has also emerging resulted in more advanced and lethal weapons, including weapons of mass destruction, and their delivery systems, which bring profound implications for peace and security. In emerging fields such as AI, lethal autonomous weapons, and ICT security, there are no legally binding international treaties, or universally agreed laws, leading to a lack of effective covenants and posing great potential security risks.

> "In 2021, the 76th session of the UN General Assembly (UNGA) adopted the resolution entitled "Promoting International Cooperation on Peaceful Uses in the Context of International Security" (UNGA Resolution A/RES/76/234) sponsored by China."

It is а common task for the international community to improve the governance of emerging technologies so as to deliver their full benefits to the world, while effectively managing and controlling the related risks, as proper control is an important means of non-proliferation. The major

multilateral export control regimes, namely the Nuclear Suppliers Group (NSG), the Wassenaar Arrangement, the Australia Group (AG), and the Missile Technology Control Regime (MTCR) have played an important role in their respective fields. The good practice and control lists have been valued and drawn upon by many countries, including China.

> "In 2015, China initiated the formulation of a code of conduct for scientists on biosecurity and has worked with Pakistan and other countries to promote multilateral discussions on this topic."

On the other hand, in recent years, some countries have, out of geopolitical purposes, sought to create divisions along ideological lines, overstretch the concept of national security, politicize and weaponize non-proliferation and export control, and even depict the tech sector as a battleground of democracy versus autocracy.

Some countries attempt to transform existing nonproliferation-related export control regimes into a new coordinating committee for multilateral export controls, the socalled CoCoM, or attempt to abandon the existing regimes and form small cliques within small cliques. Such measures not only cause tensions among countries and on the foundation of international cooperation on nonproliferation, but also deepen the scientific and technological gap between the developed and developing countries. So the international community should be highly vigilant and jointly oppose such acts.

China has always stood for the complete prohibition and thorough destruction of weapons of mass destruction. firmly opposed proliferation activities in all forms, and has actively participated in international and regional nonproliferation cooperation.

China will stay committed to promoting the sound and sustainable development of the NSG and uphold the authority of the international nuclear non-proliferation systems. China is ready to conduct dialogue and debate relations with the Wassenaar Arrangement, MTCR, and AG in the spirit of equality and mutual benefit.

In 2021, the 76th session of the UN General Assembly (UNGA) adopted the resolution entitled "Promoting International Cooperation on Peaceful Uses in the Context of International Security" (UNGA Resolution A/RES/76/234) sponsored by China.

This resolution aims to initiate and sustain an open, inclusive, and just dialogue process within the framework of the UNGA and fully assess the current state and challenges to peaceful and relevant international uses cooperation. While affirming and upholding existing international organizations, treaties, and mechanisms and fulfilling related international obligations, the resolution seeks to sort out challenges facing the international community, establish guiding principles, and take concrete measures to promote peaceful relevant international and use cooperation.

As the international community's consensus on the significance of the peaceful use increases over time, developing countries have a stronger desire for closer international cooperation and their needs become more diversified.

In the meanwhile, the input of funds and human resources from assistance providers has steadily increased, and more stakeholders participate in international cooperation. The parties concerned have carried out useful discussions and explorations on important issues, such as the scope of peaceful uses, the relationship between peaceful uses and nonproliferationrelated export control, the role of peaceful sustainable uses in development, methods and channels for carrying out international cooperation, and the challenges to peaceful uses.

Meanwhile, in the field of international cooperation peaceful in uses. integrating resources and enhancing efficiency through inter-sectoral and cross-organizational partnerships have gained more attention. For example, nuclear technology is widely used in healthcare. food and agriculture, environmental protection, and other fields, playing an important role in promoting sustainable development and well-being. The peaceful use of biotechnology is instrumental for the improvement in global public health. The Secretary-General of the United Nations has submitted his report to the UN General Assembly, compiling the views and recommendations of the UN member states on relevant issues as per the resolution.

This is the first step in implementing the resolution. China will submit an updated version of the resolution on peaceful uses to the General Assembly this year. We have updated the text on the basis of last year's resolution, making it more comprehensive and balanced in light of the presentations and views of developing countries and creating more favorable conditions for promoting dialogues under the framework of the UN General Assembly. China looks forward to the support and active participation of all parties in the follow-up progress.

The rapid development of the new technology calls for more effective

governance in the context of security. China initiated In 2015, the formulation of a code of conduct for scientists on biosecurity and has worked with Pakistan and other countries to promote multilateral discussions on this topic. In July 2021, Chinese scientists, together with their international counterparts, concluded the Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists based on the above initiative, which was formally endorsed the bv InterAcademy Partnership (IAP). Tianjin Biosecurity Guidelines advocate responsible scientific research and provide a useful reference for reducing biosecurity risks, and promote bioscience and other hightechnologies tech to benefit humankind in a safer and better way. The formulation of Tianjin Biosecurity Guidelines fully demonstrates that the international community could find solutions to the new problems through cooperation, balanced development, and security and accommodate the aspirations and interests of all parties.

In 2020, China put forward the Global Data Security Initiative (GDSI), which illustrates China's ideas and proposals on important issues such as protecting data security and promoting the securer and free flow of data across borders. We hope that initiative will provide a useful reference for countries to face the digital opportunities for cooperation and development. In recent years, the rise of the Cold War mentality, bloc confrontation, and power politics have seriously endangered world peace and security. Against this backdrop, Chinese President Xi Jinping put forward the Global Security Initiative (GSI) in April 2022, which points out the way to bridge the peace deficit and solve the global security dilemma. It is a public good of security that China provides to the world. China is ready to work with all parties to actively implement the Global Security Initiative and deepen cooperation across the board. China is also willing to conduct in-depth discussions with other parties on relevant issues during this conference, and jointly discuss ways to ensure that science and technology benefit all humankind and help achieve the SDGs for our parties.

#### Profile

Born in 1981, Mr Wang Shengjie is serving as First Secretary and Director, Political and Media Section of the Embassy of the People's Republic of China in Pakistan since December 2020. This is his second posting to Pakistan. His first posting to Islamabad was from October 2010 to October 2012. Prior to that, he was posted to the Chinese Embassy in Denmark. Export Controls in the Russian Federation: A Brief Overview and the Latest Developments



**Mr. Leonid Kozlov** Counsellor Department for Non-Proliferation and Arms Control

Ministry of Foreign Affairs of the Russian Federation

First of all, I would like to convey thanks on behalf of the Russian delegates to our Pakistani hosts for their warm welcome and for organizing this very insightful, very useful event, so that we could exchange experience and our national practices in different spheres related to export controls and non-proliferation.

Here, an outline of the export control system of the Russian Federation will be presented, and an explanation of how it works and what is the legal basis for its functioning will be provided. First, the basic aspects of the Russian export control system will be introduced.

#### Legal Basis of Export Controls in Russia

The principle law defining the main parameters of how the system works is the law on export controls (Federal Law No. 183-FZ,) which was adopted back in 1999. Export controls in Russia is a system of measures to comply with established procedures for foreign transactions related economic to goods, information, works, services, intellectual property or intellectual property rights, which may be used to develop weapons of mass destruction, their delivery means, other weapons and military equipment or to prepare and/or commit terrorist acts.

> "There is the licensing authority, FSTEC, which perhaps performs the same duties as SECDIV of Pakistan's Ministry of Foreign Affairs. FSTEC is key to the interagency licensing process. It includes other ministries and agencies."

The items subject to export controls are either listed or non-listed. If they are listed, they are included in the official control lists based on the control lists of the multilateral export control regimes. Russia is a member of the MTCR, Wassenaar Arrangement, and the NSG. There is also a catch-all clause to control unlisted items. It controls the items that can be used to develop weapons of mass destruction as well as for other military purposes, or they could be used to commit terrorist acts.

#### State Institutions and Agencies Involved in Export Controls

It should be noted that our system like that of Pakistan is twofold. So, for example, if we talk about dual-use items, the licensing authority is the Federal Service for Technical and Export Control of Russia (FSTEC) under the Russian Ministry of Defence. For exports of military goods and weapons, there is a separate agency and a separate piece of legislation. The federal law referred to above controls exports of dual-use items.

There are a number of stakeholders in the Russian export control system. For example, the top level has the President who sets the strategic goals for the system. On the government level, there a number of regulations covering different aspects of export controls, for example, how to proceed with the licensing of controlled items in the framework. There is MTCR an established interagency process, overseen by the Commission on Export Control, headed by the Deputy Prime Minister and comprised of either heads or deputy heads of agencies dealing with export control issues.



#### Federal Service for Technical and Export Control of Russia (FSTEC)

There is the licensing authority, FSTEC, which perhaps performs the same duties as SECDIV of Pakistan's Ministry of Foreign Affairs. FSTEC is key to the interagency licensing process. It includes other ministries agencies, like and the Foreign Intelligence Service, the Federal Security Service, the Ministry of Defense, but only for a limited number of cases, that is, the most sensitive ones. Agencies such as the Minister of Foreign Affairs are involved in this licensing process on a regular basis. If, for example, there was a case of exports MTCR-controlled item. of ROSCOSMOS (Russia's State Space Corporation) experts are also consulted with. The NSG-controlled items are referred to Russia's nuclear regulator, ROSATOM.

The functions of the Federal Service for Technical and Export Control of Russia (FSTEC) are manifold. It implements the national export control policy. It

drafts regulatory legislation or export control legislation. provides It expertise for the Russian delegates to the multilateral export control regimes and is active in the work of their respective technical expert groups, involved in amending their respective control lists. It also oversees the functioning of Internal Compliance Programs (ICPs) and makes regular inspections and certifications. Last but not least, FSTEC does actual licensing of exports, or in certain cases, import of controlled items.

> "FSTEC is very active and conducts outreach to academia. It produces and disseminates guidance materials, oversees, promotes, and assists the functioning of the ICPs, and conducts extensive training."

#### Commission on Export Control

The Commission on Export Control of the Russian Federation has a wide range of functions. It determines national interests in foreign trade and dual-use items. It elaborates guidelines for export control policy in Russia. It makes recommendations on future decisions related to export controls, for example, to guide the activities of FSTEC, and it also deals with interinteragency coordination on export control. For example, if several agencies differ in their approach to certain exports, this case may be referred to the Commission on Export Control and decided by this body. Technical, organizational, and IT support to the Commission on Export Control is provided by the FSTEC.

#### **Control Lists**

Russia has a number of control lists. There is not a single list as in the EU; there are six separate lists. The first two lists are related to the NSG, that is, the trigger list (nuclear materials. equipment, and technologies) adopted by Regulation No. 1285 and the duallist (dual-use use equipment, materials, and technologies used in the nuclear sphere) adopted by Regulation No. 1286. The third list (adopted by Regulation No. 1299) on the use of goods and technologies used for the development of weapons and military equipment is based on, but not identical the Wassenaar to, Arrangement's dual-use list. The fourth list (adopted by Regulation No. 1288) on the materials, equipment, and technologies used for the development of missiles is based on the MTCR's Technical Annex. The fifth list (adopted by Regulation No. 1284) consists of the chemical, equipment, and technologies used for the development of chemical weapons. The sixth list (adopted by Regulation comprises 1287) microorganisms, substances. toxic equipment, and technologies used for the development of biological and toxin weapons. These six lists collectively cover the whole range of WMD-related goods as well as dual-use items related to conventional weapons.

#### Regulation of Foreign Transfers of Control List Items

The key point in the licensing process is that in order to transfer a controlled item, government permission is required and is compulsory. In some cases, it is important that companies should receive an import license for certain important goods in Russia. There are two types of licenses or permissions issued by FSTEC. First of all, it is license in its proper sense; the license could be either individual or general. It is required when exported items are listed. The individual license is needed for exports in all cases; in certain cases, it is also needed for imports. There are also general licenses for exports of a number of certain goods.

Besides licenses, there is a permission or permit issued by the Commission on Export Control. It is used when there is a catch-all clause or temporary exports when, for example, after a certain period of time, an item should be returned to Russia. A number of government regulations have been adopted setting legal requirements for the export and import of controlled items. They regulate what should be the end-use assurances in each case. The scope of end-use assurances may vary depending on the control list or its parts as well as on the country of destination. There are two examples of how it works practically. If we talk about a dual-use list for technical data to produce items from the sensitive and very sensitive parts of this list, and if an export goes to a Wassenaar Arrangement non-participating state, the end-use assurances should be confirmed by the government of the recipient state. And the same goes for MTCR-based list, that is, if an export is intended to go to non-Partner states, end-use assurances should also be confirmed respective by the government.

#### Individual License

If we talk about individual licenses, I think it is pretty common to what the system looks like in Pakistan and in many other countries. Licenses are issued by FSTEC for a certain amount of specified items to be exported under a single contract. There are certain requirements. For example, there should be a clear definition of who is the seller, and who is the buyer, and which is the country of end-use. If there are intermediaries, they should also be clearly defined. The goods and their technical characteristics should be included in this documentation as well as a copy of the contract and end-user assurances.

#### General License

To promote the exports of less sensitive goods, there is a general license. There are certain requirements for an exporter to receive such a general license. It is issued only if a Russian company has its Internal Compliance Program (ICP), which should have been certified by FSTEC. In the case of general license, exports can only go to a limited number of states and for a limited number of control goods. There are some relevant examples. In the case of items from the dual-use list, a general license may be issued only for exports to the NSG participating states. In the case of chemicals, it could be issued only if an item is from CWC Schedule 3, or if it is an unlisted precursor, and the export is intended to CWC states parties.

It is quite a challenging task to receive a general license for a Russian company, because separate government decisions will be taken on a case-by-case basis, and also, because, prior to that, it is subject to the interagency process. However, many companies are interested in receiving such general licenses, because it considerably lessens the burden on a company in terms of licensing. There are certain benefits for the industry using general licenses. It certainly saves time and costs and makes future planning easier. It makes possible longterm and predictable relations with

foreign counterparts. As it has been mentioned above, the general license is not very easily received by an exporter. It does not mean that an exporter is not required to report its exports to the licensing body, and it is not controlled by a licensing body. It should submit quarterly reports providing information on exported items and copies of contracts. There is a legal obligation of the exporting company to include end-user assurances either in the contract or in the end-use certificate. The general license could be revoked anytime, if there are some violations on the exporter's part.

#### Catch-All Clause

As for the catch-all clause, it has been introduced in article 20 of the Federal Law on Export Control. It is used when there are reasons to believe that an item could be used to produce WMD, or their means of delivery, or intended for military or terrorist purposes. An exporter should receive permission from the Export Control Commission. Permit of the Export Control Commission is required to export goods and services not included in the national control lists in accordance with the procedure established by the Government Decree No. 517 (August 15, 2005).

#### Interagency Review

In so far as interagency review is concerned, there are several agencies involved in this endeavor. The key agency is FSTEC. Russia's Ministry of Foreign Affairs is a part of it as well as the Federal Service for Military-Technical Cooperation. It determines whether an item could be used for military purposes or not. In certain cases, other ministries also take part in this process. The review outcome could be either the issuance of license or the denial of license.

#### Non-License Export Regime

There have been а few new developments in the Russian export control regime. In 2013, non-license export of specific categories of controlled goods was introduced that were intended for a very limited number of countries of low risk. These were to be foreign states that adhere in their domestic and foreign policies to universally recognized principles and norms of international law in the area of non-proliferation of WMD and their means of delivery, comply with the requirements of multilateral export control regimes, and/or participate in regional integration association with the Russian Federation. This regime of non-license export was introduced by means of the amendment in 2013 to the Federal Law 183-FZ on Export Control. The authority to introduced such a regime lies with the President of the Russian Federation, Decree No. 810 (August 18, 2016) of the Government of the Russian Federation set the rules for

the implementation of the non-license export regime. Under non-license export regime, an exporter could export certain items without a license, but with the reporting of its activities to the licensing authority. There are some requirements an exporter should meet to be able to export without a license. This scheme of non-license exports is quite similar to the general license. It is also time-saving and makes things easy on a relative basis for an exporter. There are of course still a whole set of requirements an exporter should meet. Companies should be on a roster to export something without a license. To be included in this roster requires a thorough review. In case of violations wrongdoing, the company or is immediately removed from this roster.

#### **Intangible Transfers**

Last but not the least, a very pressing and challenging aspect of export intangible control is technology transfers (ITTS). An export is controlled irrespective of the means how it is exported. For example, if something is exported via email, it is also controlled, and its exporter should apply for an export license. We also control educational programs for foreign nationals, if they are sensitive enough. Some cases when this control can take place is if foreign nationals are educated in subjects that represent open analogues of the "closed" specialization, for example, nuclear

technology, missile production, and also takes place others. It for postgraduate studies. including doctorates, in sensitive areas where there is a risk of technology transfers, or if Russian professors go abroad to teach foreign nationals in the sensitive scientific areas. In all these cases, license is required. There are a lot of challenges in how to control these, while the because content of presentations, lectures, educational programs, etc., can be reviewed, one cannot predict what a person will actually say during a discussion, conversation, or a lecture. There are certain ways to remedy this situation. FSTEC is very active and conducts outreach to academia. It produces and disseminates guidance materials. oversees, promotes, and assists the functioning of the ICPs, and conducts extensive training. It is very active in awareness-raising so that academia is aware of the legal consequences of their actions.

#### Profile

Born in 1981 in Moscow, Mr. Leonid Kozlov is Counsellor in the Department for Non-Proliferation and Arms Control in the Ministry of Foreign Affairs of the Russian Federation. He has been previously posted to Iran and Austria. Since 2008, Mr. Kozlov has dealt with export control issues and has taken part in the work of the multilateral regimes, the Wassenaar Arrangement and the Missile Technology Control Regime (MTCR), and UNSC Committee 1540. Striking Balance Between Trade and Controls



Mr. Kamran Akhtar Malik

**Director General** 

Arms Control and Disarmament Division (ACDIS)

Ministry of Foreign Affairs (MoFA) Pakistan

I shall discuss the politics of export control, since, at the Ministry of Foreign Affairs, Pakistan, I deal with the political aspects of export controls, looking into the political dynamics of a certain export application in coordination with the Strategic Export Control Division. While export control is a technical issue, it cannot be separated from its politics. All export control-related issues are also political issues, because states mince no words about it that export controls are employed by them in furtherance of their foreign policy or security Consequently, objectives. export controls per se become issues of security and foreign policy.

The challenge for states is how to strike a balance between their economic interests and their security interests. That is why ostensibly there are technical criteria, but we see that there is a lot of politics involved as well.

> "The export control regimes are controlled by the suppliers, and the suppliers often have their own commercial and political interests in view, rather than purely technical analysis."

before Long the present-day conventions and treaties like the Chemical Weapons Convention (CWC), the Biological Weapons Convention (BWC), the Nuclear Non-Proliferation Treaty (NPT), and the related export control regimes like the Nuclear Suppliers Group (NSG), the Missile Technology Control Regime (MTCR), the Australia Group (AG), there was the mechanism called the Coordinating Committee for Multilateral Export Controls (CoCoM), and it evolved during 1945 to 1950. It preceded any of the present-day multilateral export controls.

This committee used to focus more on destination-based controls, because its objective was the prevention of technologies going to the communist countries. It did not focus primarily on prohibited end uses. The latter were defined later on by the conventions and the treaties. For instance, the CWC prohibited certain activities like the use of chemical weapons, the transfer of chemical technology, and others. In the same way, NPT prohibited certain activities and technologies related to nuclear weapons.

> "In the 21st century there is a diffusion of technologies, and the countries which are not members of multilateral export control regimes have now the capability of supplying many of the controlled items on the control lists of these regimes. If such countries are on the outside, then they will be making export control decisions in isolation."

The BWC did the same with regard to activities and technology related to biological weapons. But this committee was just looking at destination-based controls, because there was greatpower politics and contestation during the Cold War.

Destination controls presume suspicious end use rather than case-bycase technical analysis based on objective criteria. Now, once the BWC, CWC and the NPT came into existence, there was an expectation that there were very clear prohibited end uses, and that any export license will be weighed against those prohibited end uses rather than a destination-based control. There was supposed to be nondiscrimination because all the states parties to those treaties had equal obligations. So as such, they also had the right to access technologies without discrimination. That was what these treaties were supposed to do.

However, one of the shortcomings of these treaties was that while they required the states to exercise control over the transfer of dual-use technologies, they did not specify any control lists or guidelines for exercising control, except for the CWC, which had three schedules. Even after the CWC, we saw that the Australia Group continued to operate, and it was a group of select supplier states. It was not based on treaty-based negotiations within the framework of the treaty or the treaty review conferences, whereby the states would agree on a control list by consensus on the criteria for controlling technologies. So, finally, because of the lack of those lists or specified guidelines, it fell upon the supplier states to define controls to identify the items which had to be controlled.

Thus, we saw the emergence of, in a manner of speaking, groups of influential suppliers. The export control regimes are controlled by the suppliers and the suppliers often have their own commercial and political interests in view, rather than purely technical analysis. We saw that rather glaringly in 2008 when the NSG exemption was made for a country, and ironically, this very country was the reason behind the creation of the NSG, because back in the day it had diverted technology supplied to it solely for peaceful uses.

What we need to do is that we need to look at the mechanisms whereby states can have access to peaceful uses of nuclear technology, chemical technology, or biological technology.

Till the time the existing mechanisms are driven by the suppliers, there will always be problems for other countries, which are parties to the treaties and which are abiding by their obligations, but which continue to face a lot of difficulties.

So, how do we facilitate trade, while exercising strategic export controls? We understand that strategic export controls are a necessity, because if there are no controls, there will be the threat of proliferation of weapons of destruction and other mass destabilizing systems. Therefore, we have to exercise those controls, but the challenge is how to exercise them in a manner that the legitimate right of the to access technology for states socioeconomic development is not impacted.

For that to happen, we think that all the states parties to these treaties, within

the framework of these treaties and their review conferences, should examine the questions, how can the export control mechanisms be reformed, how can agreed guidelines and criteria be arrived at, and how can we come up with agreed control lists.

> "Sometimes, we are even denied the material and items for nuclear safety and security for which there is a provision in the NSG Guidelines. On the other hand, exemption is granted to a state for trade in nuclear materials without sufficient nonproliferation commitments. This kind of discrimination undermines the credibility of the regime. It undermines support for best practices which we follow domestically."

If these key questions are not addressed, then there is a chance that these export control regimes might become irrelevant, because this is not the 20th century. This is the 21st century where there is a diffusion of technologies, and many of the countries which are not members of these export control regimes have now the capability of supplying many of the controlled items on the control lists of these regimes. If such countries are on the outside, then they will be making export control decisions in isolation.
In order for the export control regimes to remain relevant and credible, they must necessarily become inclusive.

"We often face a lot of problems despite the fact that we are following best practices for enduser verifications and verification of end use."

Citing the experience of Pakistan, I shall state that it adheres to the guidelines of some of the export control regimes, but continues to face a lot of problems. For example, we are not of "no undercut" beneficiaries principles of many of the regimes. So, once we deny certain export to a country, we are not assured that no other country, which has the capability to supply items, will not supply them to the country to which we denied those Therefore, our commercial items. interest can be jeopardized, because we are not beneficiaries of the abovementioned principle.

We are also not privy to the denial notices, which are shared within the membership of the export control regimes. As a result, any export control request will be assessed by us in isolation. At times, there is a lot of pressure from various stakeholders within the system when we are being too restrictive about the exports. We are told that Pakistan might be denying this item to a certain country without being aware of the practices of the export control regimes. Thus, we may not know that there is a denial notice already, and there is a possibility that many other countries will be supplying such items. By adhering to their guidelines but remaining outside these regimes, we at times find ourselves at a commercial disadvantage.

"The question of legitimate access or lack thereof becomes all the more urgent in view of new and emerging technologies like AI, 5G, and 3D printing. These are technologies of the future. They have the potential to provide solutions to the contemporary global problems of climate change, water, energy, and food security."

One other aspect is that we often face a lot of problems despite the fact that we are following best practices for enduser verifications and verification of end use. For instance, when we send requests for end-use verification to a country with regard to one of the entities in that country which is trying to import from Pakistan and when that entity has been issued an import license by that country, we do not get those verification responses to requests. Failure in getting timely response results in the loss of business

for Pakistan. This situation, which we assure many other countries are also facing, is unsustainable for any developing country, which has an upcoming industrial sector and like us, would like its industrial sector to maximize its exports. At the same time, we want to follow the international guidelines for exports.

We have to strike a balance. We cannot put ourselves at a disadvantage, because despite adherence, we are not members of these regimes. We are worried about the latest talk about the AUKUS arrangement, as it seeks to create a new precedent of sorts. There are countries which are not getting very simple dual-use items like oCelloScopes, which are used in school laboratories, or like dosimeters, which are used in cancer radiotherapy hospitals. At times, we do not get access to radioactive shielding materials. These are the basic things which we are not getting. Sometimes, we are even denied the material and items for nuclear safety and security for which there is a provision in the NSG Guidelines.

On the other hand, exemption is granted to a state for trade in nuclear materials without sufficient nonproliferation commitments. This kind of discrimination undermines the credibility of the regime. It undermines support for best practices which we follow domestically. The industry representatives start asking us, why is Pakistan putting itself at a disadvantage when it is not being incentivized for following the guidelines of the export control regimes.

The question of legitimate access or lack thereof becomes all the more urgent in view of new and emerging technologies like AI, 5G, and 3D printing. These are technologies of the future. They have the potential to provide solutions to the contemporary global problems of climate change, water, energy, and food security. For this very reason, these are the technologies that are much needed by developing countries. The UN 2030 Agenda for Sustainable Development recognizes science and technology as the key enablers for the achievement of SDGs. Denving these technologies to other states will be unfortunate to say the least. There is talk of tech decoupling, of a CoCoM, of the denial of semiconductor chip exports to certain destinations without even knowing what will be the possible uses of those semiconductor chips. There is the alleged presumption of military application.

Ironically, in the case of lethal autonomous weapon systems, in the discussions within the UN system, when we point out the need to prohibit lethal autonomous weapon systems, which can cause humanitarian catastrophes, we are told that these technologies are required for socioeconomic development. We are told that it is their wrong use which should be prohibited, not the technologies per se, but when it comes to exercising export controls, all the supplier countries putting are restrictions on the technologies themselves without any regard to their applications for possible socioeconomic development.

It can be seen that there are a lot of contradictions. All these issues need to be resolved in order to strike a balance between trade and strategic export controls. If the suppliers think that these issues need not be resolved, then it needs to be pointed out that these technologies, unlike nuclear technology, are diffuse and pervasive. There are developing countries that have thriving sectors developing such technologies. It is just a matter of some years when these countries will become supplier countries as well. It is in the interest of the supplier states to begin interacting with these countries to have a more inclusive global export control regime. As for Pakistan, I can say personally that I am a very strong supporter of maximizing our exports. We should not be putting ourselves at a disadvantage. We should abide by international regulations which we are already doing. We should allow our industry to export and we are resolved to do it.

# Profile

Mr. Kamran Akhtar Malik is serving as the Director General of the Arms Control and Disarmament Division (ACDIS) of the Ministry of Foreign Affairs of the Government of Pakistan. Mr. Malik commands extensive experience of arms control, disarmament, and non-proliferation.









# BALANCING TRADE AND CONTROLS THROUGH EFFECTIVE LICENSING AND ENFORCEMENT TOOLS

# **SESSION 4**

# Connecting Government, Industry, and Academia for Effective National Controls



**Dr. Naeem Salik** Executive Director Strategic Vision Institute (SVI) Islamabad

Implementation of export controls requires very delicate balancing between providing fair opportunities for the flourishing of trade while exercising effective controls over the export of sensitive technologies and materials through comprehensive licensing procedures backed up by requisite enforcement tools in an institutionalized manner.

However, it must be clear that only strict enforcement of rules and procedures will not yield optimal results, unless the industry and businesses develop their own internal compliance mechanisms, develop a sense of responsibility and fully understand the benefits of compliance with the export control laws, regulations and procedures, and conversely are also conscious of the reputational and long-term financial costs of non-compliance.

> "It is important to understand that strategic export control is an interdisciplinary subject which not only requires social scientists for advocacy, analysis, and interpretation, but also natural scientists who understand and monitor the developments in various domains of technology, their sensitive nature, and the need to regulate their use and dissemination."

For this to happen, there is a need to enhance the awareness and understanding of the export control procedures in vogue. Concerned departments government and ministries can at best issue guidelines and carry out limited outreach to the industry through various chambers of commerce and industry, but neither have the capacity nor have the resources to undertake this kind of work in perpetuity. In this regard, academia can play a crucial role by disseminating knowledge and awareness on a wider scale.

think Academia and the tank community have a great potential for public outreach and education and have the capacity to develop and groom experts in this specialized field. These experts can then carry the baton forward bv educating the next generations of students on the one hand, and providing expert advice to the concerned government agencies on the other. A very important function which the academia and think tanks are well suited to perform is the analysis and critique of whatever laws, rules, and regulations government departments formulate, before and even after their promulgation.

The past experience in Pakistan suggests that, whenever such laws related to strategic export control and their associated rules and regulations are published, there is no independent analysis to point out loopholes and weak links, which may not have been noticed by the government officials, while drafting these rules and regulations.

The academia shies away from this task on the pretext that this is something which has legal connotations which should better be left for the legal fraternity, while lawyers do not want to delve into this area, looking at it as a technical and scientific subject related to security professionals and civil bureaucrats. This shortcoming can only be addressed if the academia comes forward to take the responsibility of education and awareness.

The role of academia is also significant because it creates the reservoir of educated and trained individuals who then populate the think tanks, civil services as well as industries and businesses. It is also important to understand that strategic export control is an interdisciplinary subject which not only requires social scientists for advocacy, analysis, and interpretation, but also natural scientists who understand and monitor the developments in various domains of technology, their sensitive nature, and the need to regulate their use and dissemination. This would involve physicists, chemists, biologists, experts in electronics, and many other fields. With their knowledge and insights, they can provide timely warning and advice to the government on the need to bring certain technologies, equipment and materials under regulatory controls.

Another important function which academia is best equipped to handle is the evaluation and scrutiny of any research papers, articles, reports, and studies that are offered for publication by the researchers working in sensitive areas of scientific research to ascertain that these do not contain any information that could be in contravention to the export control

laws and could be construed as intangible transfer of technology (ITT). To develop necessary capacity in the area of export controls and to be able to undertake the suggested tasks outlined earlier, the academia will need to take a number of steps.

First, courses should be developed and offered on strategic export controls as a specialized field of study in the departments of International Relations, Strategic Studies, Physics, Chemistry and Biology. It may also be possible that any of these departments could offer this course for students across the social sciences-natural sciences divide and students permitted for these opt as an extra to departmental course moving across faculties.

Second, an alternative approach could be to develop centers of excellence in this particular field offering courses to students from the relevant departments. The advantage would be that expertise in this area would develop quickly and would be concentrated in these centers, thereby making it simpler and easier for the government as well as industry to contact them for advice. Third, the academia in concert with the relevant government departments should facilitate the placement of students specializing in export controls in the appropriate industries. This will provide an added incentive to students to venture into this field knowing that they will have assured employment opportunities once they have graduated.

Fourth, the government should provide for support setting up such departments and centers by harnessing the resources that can be provided by the industry to establish and run these centers. This will naturally develop synergy and cooperation between the government, industry, and academia for everyone's benefit. Similarly, think tanks will have trained researchers in the area of export control available for hiring and tasking to carry out focused research in export controls and related subjects, including international treaties, agreements, and export control regimes. This policy, if adopted now, will start yielding results in five to ten years, and, as these institutions mature, their utility will continue to become more and more valuable.

In this context, it is noteworthy to recall some of the references made by the Japanese expert and Dr. Zanders in preceding sessions. The Japanese expert mentioned the practice of export control experts visiting the universities in Japan, as well as provision of on-site consultation for the concerned universities. This could be a helpful model, to begin with, but it will have limited reach and utility and cannot be an alternative to the integral capacity of universities in this discipline, at least in

the context of Pakistan. Dr. Zanders the development mentioned of requisite modules on export controls for the universities to run full-fledged master's courses. He also said that some universities have chosen some of these modules and integrated them into their master's programs. Given the relatively limited trade volume in Pakistan, and the reluctance on the part of the industry to employ such specialists, it would mean that there would be limited career opportunities for students with master's degrees in this discipline. So, the idea of weaving in some of the essential aspects of export controls being offered as an optional course within the existing curricula of various relevant master's courses could be more practicable in the Pakistani context. Additionally, some students could be motivated and encouraged to do their research on this subject, thereby developing greater understanding of the subject for their subsequent employment and even further education.

# Profile

Dr. Naeem Salik is currently the Executive Director at the Strategic Vision Institute (SVI), Islamabad. Previously, he was a Senior Fellow at Center for International Strategic Studies (CISS) and a Distinguished Fellow at the Institute of Strategic

Studies Islamabad (ISSI). He has taught at the Ouaid-i-Azam University (OAU), National Defence University University, (NDU), and Air Islamabad. He has been a visiting scholar at the School of Advanced International Studies (SAIS) of the Johns Hopkins University and a Guest Scholar at the Brookings Institution, Washington, D.C., besides being a Visiting Fellow at the Stanford University and Stimson Center. He has previously served as Director for Arms Control and Disarmament Affairs (ACDA), Strategic Plans Division (SPD). He holds a master's in history from Punjab University, a B.Sc. (Hons) in War Studies from Balochistan University, an M.Sc. in Strategic Studies from the University of Wales, Aberystwyth, U.K., and a PhD from the University of Western Australia (UWA). His expertise includes South Asian security with particular reference to Indian and Pakistani policies on nuclear and missile issues. nuclear nonproliferation, control arms and disarmament, nuclear and conventional confidence-building nuclear measures, and safety. security, and export controls. He has published four books, including two edited volumes and several monographs, and contributed seven book chapters. His published work also includes over 40 research articles.

# Licensing and Enforcement Best Practices in the Australia Group



Mr. Michael Kourteff

First Secretary Australian High Commission in Pakistan

Ever since its formation, the Australia Group (AG) has been permanently chaired by Australia. It plays a critical role in global counter-proliferation efforts. The Australia Group is one of the four export control regimes – the others being the MTCR, NSG, and the Wassenaar Arrangement – and it aims to prevent proliferators from obtaining materials, equipment, and technology for chemical and biological weapons programs. There are 43 members of the group, that is, 42 countries and the European Union. The most recent member to join was India in 2018.

The Australia Group is an informal arrangement. The Participants or the member governments use licensing measures to ensure the transfers of certain chemicals, pathogens, toxins, chemical and biological facilities, and equipment and the related technologies do not contribute to the proliferation of chemical and biological weapons programs. This is important as these programs are often targeted by proliferators. The expert licensing measures also help to ensure that commercial firms and research institutes do not inadvertently supply materials, equipment, and technology to those proliferators. The chemical and biological industries worldwide support these principles.

"All of the decisions within the Australia Group, for example, decisions to do with membership, are made by consensus of the members."

There are not any legally binding obligations within the Australia Group. The export control decisions are made by the individual states and they remain the exclusive sovereign right of those exporting states. Within the group, there is collaboration and shared commitment to counterproliferation goals and to strengthen respective national measures. None of the participants can veto or dictate to anybody else their export decisions, and they take into account key considerations about those national measures. These considerations are based on ensuring that there is effectiveness in impeding the production of chemical and biological weapons, ensuring that the measures are very practical and relatively easy to implement, and, very importantly, they do not impede legitimate trade of materials and equipment.

To be a participant in the Australia Group means supporting UN members to meet their obligations through the Chemical Weapons Convention (CWC), the Biological Weapons Convention (BWC), and the Security Council resolution 1540.

The origins of the Australia Group date back four decades when the UN Investigative Team discovered in 1984 that Iraq had used chemical weapons in the Iran-Iraq War in violation of the 1925 Geneva Protocol, and that some of these precursor chemicals, materials, and equipment had been sourced through legitimate trade channels. It was found that many of the countries initially involved had controls already, but there was a lack of uniformity. It was clear that attempts were being made to circumvent those rules of controls.

The first meeting of the Australia Group took place in 1985 for the 15 participant countries, and they agreed on the value of exploring how controls could be more effective in stopping diversion into chemical and biological weapon production, while at the same time upholding and supporting legitimate trade. Since then, the scope has evolved together with the expansion of technological innovation.

The evidence that Iraq was using biological weapons in the early 1990s led to the inclusion of biological weapon control lists including specific biological agents. The current control lists are available publicly on the Australia Group's website. They contain specific equipment, software, and a whole range of things that could be used to manufacture chemical and biological weapons. The licensing measures are applied to the export of five main items, namely, chemical weapon precursors, human and animal pathogens and toxins, plant pathogens, manufacturing dual-use chemical equipment and related technologies and software, and dual-use biological equipment and related technologies and software. These lists are reviewed regularly and they are informed by technical experts to minimize the risk of proliferation into chemical and biological programs.

All of the decisions within the Australia Group, for example, decisions to do with membership, are made by consensus of the members.

The members also agree on key provisions. One of them is a catch-all

provision. This is a requirement to seek authorization from the group for the transfer of non-listed items, where a country assesses that the items in question could be intended in entirety or in part for use in chemical and/or biological weapons activities. This information is shared with other members.

The group has "no undercut policy". This means the license for an export identical to one denied by another Australia Group Participant will only be granted by another participating state following consultation with that Participant. It means that the same biological agent or equipment with similar specifications will not necessarily be sold to the same consignee. Enforcement provisions are where members make every effort to implement these measures in accordance with their domestic legal frameworks and practices.

As has been mentioned above, the Australia Group aims to ensure that the controls do not hinder legitimate trade at the same time that it protects sensitive items from being diverted. The group recognizes that strong and well-implemented export controls provide the business community with confidence and certainty. In this regard, export licensing is an important means of ensuring that legitimate trade in chemical and biological agents and related equipment can proceed unfettered.

An important part of Australia Group's work is outreach to the governments as well as to the industry in the private The outreach involves sector. demonstrating the value of export regimes in countering control proliferation, and how they can contribute to international peace and security. The work of the Australia Group today is as important as it ever has been. As we have seen in recent years, the use of chemical weapons is not only abhorrent, but it violates international law. We saw that with Novichok nerve agent precursors following the poisonings in the United Kingdom in 2018. There have been additions to the Australia Group's control lists of these sorts of chemical weapons precursors. It is also in our interest that the non-proliferation objectives of the Chemical Weapons Convention and the **Biological** Weapons Convention are met and upheld as universally as possible, including through effective national implementation of export controls. It is also in our interest that we work together toward the ultimate goal of a world without weapons of mass destruction.

I would like to say a few words briefly about AUKUS and the Quad. In so far as the AUKUS is concerned, I would like to note that it is a defense and security partnership between countries that have had very close defense and security relations dating back over a century. The focus is very much on technology, that is, advanced defence, strategic military technology. The arrangement is designed to respond to the changing strategic environment in the wider region, that is the Indo-Pacific region. The core goal of AUKUS is fivefold, namely, to create, to uphold, and to support an open, stable, secure, inclusive, and prosperous Indo-Pacific. I would also like to underline that exemplary AUKUS has nonproliferation credentials. Regarding the above-mentioned five important goals, we want a region where countries and economies can make their own choices rather than their being closed and having their future decided for them.

Coming back to the Quad, it should be noted that it is a network for strategic exchange and political cooperation within the wider region, that is, the Indo-Pacific, stretching from this part of the world right through the maritime and land space to the United States, among four democratic countries, namely, the United States, Japan, India, and Australia. The focus is on sharing strategic perspectives, cooperating on the most pressing challenges facing the region, and supporting principles that. as democratic countries, we believe in.

Cooperation within the Quad has varied from climate change to critical and emerging technologies to cyber, infrastructure, outer space, maritime affairs, disinformation, and counterterrorism. It should be noted that the Quad does not have a defense pillar. It does not seek to deny any country its legitimate interests in the region, but similarly to AUKUS, the overall objective is to support an open, stable, secure, inclusive, and prosperous region.

# Profile

Mr. Michael Kourteff is currently serving as First Secretary at the Australian High Commission in Islamabad, Pakistan. He is a career diplomat who has previously served in Moscow, Cairo, Kuala Lumpur, and briefly in Colombo.

Mr. Kourteff has worked in various positions in the Department of Foreign Affairs and Trade of the Australian Government. His work has focused on key areas such as transnational crime, and geographic, multilateral, economic, and international security issues. He holds a Master's degree in International Relations from Monash University in Melbourne and an Honor's degree in Economics from the University of Adelaide. The Role of National Counter Proliferation Unit (NCPU) and National Targeting Center (NTC)



**Mr. Syed Asad Raza Rizvi** Collector (Exports-Karachi) and Project Director National Targeting Center (NTC)

# Introduction

Pakistan Customs is one of the major revenue sources of the country with 52 percent of the revenue. With border management, passenger facilitation, transit trade and the processing of exports goods, Pakistan Customs is also the most automated public sector organization and trade facilitation entity, leading and using WeBOC or Web-Based One Customs System of Goods Declaration and Clearance and Pakistan Single Window initiative. Pakistan Customs is also a member of the World Customs Organization (WCO) for international cooperation mechanisms. It is the only law enforcement agency in the country with

jurisdiction over land, sea, and air. The geographical framework with which it works consists of Pakistan-China border of 523 km. Pakistan-Afghanistan border of 2538 km, Pakistan-Iran border of 909 km, Pakistan-India border of 1600 km and the coastline of 430 nautical miles. The national entry and/or exit points manned by Pakistan Customs consist of 28 major customs stations, 14 international airports, 9 major land border crossings, 3 seaports, and 2 railway links.

> "NCPU is a product of the collaboration between Pakistan Customs and SECDIV. It began with a two-pronged strategy of setting up an operational team and a capacity-building mechanism. The key components of NCPU are the Counter Proliferation Units (CPUs) and the Counter Proliferation Teams (CPTs), which are based all across the country."

# Mandate of Pakistan Customs on Strategic Goods Controls

Pakistan Customs has an elaborate mandate on strategic goods controls. First of all, the enforcement mechanism for Pakistan Customs deals with facilitation and interdictions. This covers imports, exports, and transit and transshipments. Enforcement deals with effective border management and border controls targeting multimodal trade and travel. Key domain areas of enforcement organized consist of crimes, AML/CFT/Bulk Cash. counternarcotics, domestic and international information exchange including mutual legal assistance (MLA), human interagencv smuggling, and coordination, but again, these are the emerging domains that we have. Emerging domains consist of counterproliferation, intellectual property rights, CITES or the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and environmental crimes. Out of these, counter-proliferation is undoubtedly one of the most important areas that we have to deal with in the coming days.

The legislative framework for our work consists of Customs Act 1969 specifically Sections 16, 17, and 32 of the Customs Act 1969 - which empowers Pakistan Customs to regulate imports and exports in and out of Pakistan. It also comprises the Import and Export Control Act 1950 that enables the restrictions to be implemented under the Export Policy Order. It is composed of the Export Policy Order 2016 issued under the Import and Export Control Act 1950. As per the Export Policy Order 2016, re-export, export, transit. and

transshipment of strategic goods are subject to license from SECDIV as per Export Control (Licensing and Enforcement) Rules, 2009. Exportcum-import of goods covered under control lists are goods subject to license from SECDIV. Re-export of frustrated goods comprising items of control lists are also included therein.

"The functions of NCPU include: operational and capacity building activities to counter any movement of strategic goods in breach of regulatory control; assistance rendered to the Director General Risk Management to upgrade WeBOC risk parameters for identifying and targeting strategic goods; organization of strategic trade management (STM) training for relevant officials; and liaising with SECDIV for training and outreach activities."

Another key component is the Export Control Act 2004 that enables the government to control export, reexport, transshipment, and transit of technologies, goods. materials, equipment that may contribute to the development, design, production, stockpiling, maintenance, or use of nuclear and biological weapons and systems. their delivery Penal provisions under this act include imprisonment and monetary fine, and

upon conviction, the seizure of the offender's property and assets. It provides the right of appeal. It also establishes a link to Sections 16 and 17 of the Customs Act 1969 so that the search, seizure, and confiscation of the goods and arrests can be implemented.

# National Counter Proliferation Unit (NCPU)

NCPU began with a two-pronged strategy of setting up an operational and а capacity-building team mechanism. The initiative started in 2018 September as a Counter Proliferation Unit (CPU) in Karachi. It aimed at the establishment of a unit headed by a WCO-accredited strategic trade control enforcement (STCE) trainer and two counter-proliferation training teams at two pilot sites, one at Karachi Port, and the other at Port Qasim. One of the aims was to provide support for upgrading the WeBOC system to ensure proper risk parameters and undertaking the audit importers and/or exporters of strategic goods.

capacity-building mechanism The consisted of the Counter Proliferation Training Cell, which was established at the Directorate General of Training, now known as the Pakistan Customs Academy. Counter Proliferation Training Cell undertook robust coordination with the CPU. The training cell focused on activities

related to planning, capacity building and outreach. This initiative served as a precursor to the National Counter Proliferation Unit (NCPU).

NCPU is a product of the collaboration Pakistan Customs between and SECDIV. It is the first of its kind in the region. Aimed at providing coverage to all entry and exit points in Pakistan, it is being expanded to all entry/exit points, seaports, land ports, and border points so that our counter-proliferation teams are at all these points and connected with the NCPU. By virtue of mechanism the proactive being institutionalized under NCPU, results from this type of comprehensive coverage will naturally differ from routine enforcement. This means that at the same time that you take active trade facilitation measures, you have to check every consignment to ensure which particular consignment needs to be examined.

The two-pronged strategy consisting of operational aspects and capacity building continues to be followed with NCPU as well.

WeBOC, with regard to NCPU, has three channels, namely, green, yellow, and red. Green channel is for speedy clearance. Yellow channel is for audits, and of course, it can then lead to the red channel which is for proper examination. There are special profiling parameters in WeBOC for strategic goods, counter-profiling mechanisms, which examine all red and yellow channel declarations. It needs to be mentioned that the green channel is also properly scrutinized.

The key components of NCPU are the Counter Proliferation Units (CPUs) and the Counter Proliferation Teams (CPTs), which are based all across the country. The functions of NCPU operational and capacity include: building activities to counter any movement of strategic goods in breach control; regulatory of assistance rendered to the Director General Risk Management to upgrade WeBOC risk parameters for identifying and targeting strategic goods; organization of strategic trade management (STM) training for relevant officials; and liaising with SECDIV for training and outreach activities.

NCPU's work flow typically consists of: the circulation of the list of controlled commodities to examination officers; categorization of exports in terms of restricted. free. and banned; verification of No Objection Certificates (NOCs); technical reachback to SECDIV; Exports Intelligence; Intelligence Customs and Investigation; and post-clearance audit (PCA). It bears mentioning that the Directorate General of Customs Intelligence and Investigation is a separate organization with key inputs in the work flow.

The new setup for NCPU is proposed to be housed at South Asia Pakistan Terminals (SAPT), Karachi. It will consist of a conference room equipped for trainings and meetings, and will be supplied with a proper library stocked with relevant case studies and other materials.

"The key functions of NTC include the management of targeting criteria, provision of 24/7/365 operational support using tactical analysis and coordination, identification of new trends and emerging domains, dissemination of alerts for the relevant field formation, domestic and international information exchange, and the provision of a single platform of stakeholder cooperation and coordinated border management."

It will also comprise a state-of-the-art demo room equipped with the training simulator for the identification of dualuse items. This facility will also have the screen for practicing search using the Goods Enquiry Tool (GET) as well as equipment display, charts, and guidance materials.

It must be emphasized that searching consignment is relatively easy, but what is more important is to ensure that required examination does not hamper trade. NCPU, therefore, tries to do its work in an efficient manner while not undermining legitimate trade. Therefore, review must be carried out carefully, especially when an export consignment is involved.

One relevant case study can illustrate the elaborate measures undertaken to ensure export control. A consignment was going out of Pakistan. Once its declaration was submitted by the relevant party in the WeBOC system, the system's parameters assigned it to the yellow channel, wherefrom it went to the Counter Proliferation Unit. Examination there revealed that there were some loopholes and gaps, and shifted it to the red channel. It went to the examination area where it was found that the consignment contained set dual-use capacitors as defined in the Export Control List. Technical reach-back to SECDIV for specific information confirmed that the consignment indeed included banned items. The consignment was seized and transferred to the warehouse, while further investigation is underway at the moment.

Further developments at NCPU are aimed at introducing specialization in Pakistan Customs and strengthening the already effective reach-back mechanism. We are also working on raising public awareness and integrating the CPUs to create an effective targeting mechanism. An effective targeting mechanism will provide us with necessary information and data that in turn will facilitate trade and ensure robust enforcement activities.

# National Targeting Center (NTC)

It needs to be underscored that though data is available for targeting, yet it needs to be analyzed and assessed with certain parameters and mechanism to identify, prolife, and target a suspicious consignment or a person utilizing AI and human intelligence. A good analysis requires both types of intelligence. It is for this reason that a fusion center such as the Targeting Center for analyzing all available information is required.

The issue before us right now is that there has been a significant increase in trade and travel flows resulting in increased security and supply chain risks accompanied bv not а corresponding increase in resources at the disposal of Customs. The additional challenge confronting us is the need to simplify goods and passenger processing procedures, ensure regulatory requirements, and also reduce unnecessary delays in parallel. The solution for resolving this issue and meeting this challenge is a singlepoint intelligence pool for the fusion and management of information, managing risk through actionable

intelligence by risk analysis, disseminating information to relevant and appropriate stakeholders, and operationalization of the National Targeting Center as a single window of enforcement for law enforcement agencies.

Some international best practices of integrated targeting centers include that of Australia, Canada, New Zealand, the United Kingdom, and the United States. These were established as a result of post-9/11 developments. These best practices consist of a number of critical steps such as the combined operation of multiple law enforcement agencies. national security approach as the lead approach, risk-based selectivity criteria, targeting of multimodal transport, and the profiling of travelers.

The key functions of NTC will include the management of targeting criteria, supervision of related IT systems, provision of 24/7/365 operational support using tactical analysis and coordination, identification of new trends and emerging domains, dissemination of alerts for the relevant formation. field domestic and international information exchange using interagency agreements, MLAs, MoUs, and the provision of a single platform of stakeholder cooperation and coordinated border management.

Since targeting centers are either mostly monolithic wherein systems or modules are developed by a single source at a single platform, or integrated wherein system modules from sources and different platforms are integrated. For the National Targeting Center, we have opted for integration. We have opted for the depth-of-border approach, which is a proactive approach consisting advance information analysis combined with early warning systems giving you an adequate response time.

Different data streams for cargo, passengers, currency monitoring, immigration, monitoring mechanism, citizenship database, interdiction data, and other relevant national and international data will be integrated at a single platform. This will be used for generating alerts for the Targeting Teams and trends for the Risk Management System with a mutual feedback mechanism.

The current information systems of Pakistan Customs consist of WeBOC/Pakistan Single Window, WCO's Cargo Targeting System (CTS) for consignment profiling in and out of Pakistan, and NCPU for cargo, and Global Travel Assessment System which is the Advance (GTAS) Information Passenger (API)/Passenger Name Records (PNR) system, Currency Declaration System (CDS) at all airports and entry/exit points, and Integrated Border Management System (IBMS) for passengers. Pakistan Customs has also the WCO's National Customs Enforcement Network (nCEN).

Among the currently deployed systems that are locally developed are Customs Interdiction Module (CIM) for antismuggling seizures, IBMS, and CDS. Currently deployed systems acquired through donors are nCEN and GTAS. WCO-CTS is in the process of being deployed. The Port Control Units (PCUs), which are the outcome of the UNODC-WCO Container Control Programe (CCP), will be deployed in the coming days. CPUs will also be integrated into the system together with the integration platform. These last two are to be deployed yet.

Last but not the least, the proposed organization of the NTC will have the Director General of NTC oversee the Administration/ Risk Management System (RMS)/Vigilance Division, the Cargo Control Division, the Passenger Controls Division, Interagency Coordination/Information Exchange Division, and the Operations Management/Coordination Division.

working in different areas of Customs enforcement, trade facilitation, and policy making.

Mr. Rizvi has also served as Project Director for the Pakistan Segment of the WCO-UNODC Container Control Programme (CCP) and as UNODC Attaché to the World Customs Organization (WCO) in Brussels.

Mr. Rizvi has worked in various senior positions in Pakistan Customs as the Chief (International Customs) and Director, Customs Intelligence (Multan and Lahore Regions), and is currently working as Collector of Customs (Exports), Karachi. He has also remained a focal person for the WCO Security Programme, WCO-UNODC CCP as well as for FATF matters for the Federal Board of Revenue (FBR), Pakistan. He is the initiator of the of concept National Counter Proliferation Units and the Project **Director for National Targeting Centre** (NTC) of Pakistan Customs.

# Profile

Mr. Syed Asad Raza Rizvi is a senior officer of the Pakistan Customs Service with more than 20 years of experience













# **SESSION 5**

# LATEST DEVELOPMENTS IN MULTILATERAL EXPORT CONTROL REGIMES AND FUTURE CHALLENGES

# **SESSION 5**

#### Challenges and the Future Role of the Nuclear Suppliers Group (NSG)



#### Ambassador Gustavo Eduardo Ainchil

Permanent Representative of the Argentine Republic to the United Nations in Vienna

Chair of the Nuclear Suppliers Group (2022-2023)

The Nuclear Suppliers Group (NSG) contributes to the non-proliferation of nuclear weapons through the implementation of two sets of guidelines for nuclear exports and nuclear-related exports. It ensures that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices, and that international trade and cooperation in the nuclear field are not hindered unjustly in the process.

In addition, it permits the maximum amount of legitimate nuclear and dualuse commerce and reduces practicable licensing burdens on NSG Participating Governments (PGs) and industries.

"NSG only sets agreed international standards and does not undertake any approvals. It aims at enabling legitimate nuclear trade without attempting to deny or approve exports. Participating Governments (PGs) have the flexibility to implement NSG Guidelines and apply the Trigger and Dual-Use Lists. PGs suitably implement the Guidelines and Control Lists in their national regulations."

Moreover, it aims to harmonize nuclear cooperation between suppliers/receivers consistent with shared principles, applying a common, non-discriminatory standard for transfers.

It also encompasses the recently expanded scope aimed at incorporating several comprehensive amendments to the guidelines to prevent and counter the threat of diversion of nuclear exports to nuclear terrorism or nonstate actors.

#### **NSG Guidelines**

The NSG Guidelines are divided into two parts. Part 1 focuses on the export of Nuclear Material, Equipment, and Technology

(INFCIRC/254/Rev.10/Part 1) which

were originally published by the International Atomic Energy Agency (IAEA) in 1978. They apply to nuclear transfers to non-nuclear weapons states for peaceful purposes to ensure that these transfers are not diverted to unsafeguarded nuclear fuel cycle or nuclear explosive activities. Part 1 lists materials and technologies designed specifically for nuclear use, such as fissile material, nuclear reactors and equipment, and reprocessing and enrichment equipment.

> "In the processes aimed at enhancing nuclear security and deterring nuclear terrorism, the contribution of non-NPT countries has been considered an asset, as such countries participate fully in relevant mechanisms."

The Guidelines cover fuel cycle technologies/items only. Τt is illustrative of commodities or items especially designed or prepared (EDP) for the processing, use, or production of special fissionable material. The Guidelines give technical descriptions of the controlled items that can be sufficiently broad to cover all usable items of that type. They also aim to minimize quantities for certain materials/items and prohibit the export of commodities and related technology to any non-nuclear weapon state that does not have a legally binding commitment for full-scope safeguards with IAEA, or if the exporting country is not satisfied that the export will be used for peaceful purposes.

Part 2 of the Guidelines focuses on the transfers of Nuclear-related Dual-Use (DU) Equipment, Materials, Software, Related Technology and (INFCIRC/254/Rev.7/Part 2). originally adopted in 1992. The Guidelines are related to items that have both nuclear and non-nuclear applications that could make a significant contribution to an unsafeguarded nuclear fuel cycle or nuclear explosive activities. It deals with the categories of items on the Dual-Use (DU) list: Industrial Equipment, Materials. Uranium Isotope Separation Equipment, Heavy-Water Production Equipment, Test and Measurement Equipment for the Development of Nuclear Explosive Devices, Components for Nuclear Explosive Devices, and in addition, with items not otherwise "suitable" for placing on the Trigger List, such as lithium isotope separation facilities, tritium production facilities, gas centrifuge rotor tube assembly jigs.

These Guidelines prohibit the export of commodities controlled and technologies to anv non-nuclear weapons state for use in nuclear explosive activity, or in an nuclear fuel-cycle unsafeguarded facility, if there is an unacceptable risk of diversion, if the export would be contrary to non-proliferation objectives, or if there is a risk of diversion to terrorist acts.

The Guidelines and Control Lists are generally updated every year following the NSG Plenary Meeting. Every three consolidated the changes years, Meeting including three Plenarv decisions are forwarded to IAEA for official publication as part of the INFCIRC series (INFCIRC/254 Part 1 and Part 2). They have been updated more than 20 times so far.

#### Participation

There are currently 48 Participating Governments (PGs). There were 39 PGs in 2001 and 46 PGs in 2011. At the moment, the European Commission and the Chair of the Zangger Committee participate as observers. The NSG tries to attract countries with certain capabilities to produce an export. In so far as the rate and the direction of the evolution of the NSG is concerned, it can be said that, at least in the perception of the PGs, there are no new actors in terms of the states acquiring certain capabilities, and it goes without saving that this is subject something that is a of permanent debate in the NSG.

#### Structure

During the course of its existence, NSG developed sophisticated has а structure. Α rotating Chair is responsible for overall coordination and outreach. Currently, Argentina is the Chair. There is the NSG Troika that includes the current Chair, the previous Chair, and the future Chair. NSG Troika informal is an arrangement that focuses mainly on outreach activities. Currently, Poland,

Argentina, and Brazil are members of the Troika. There are two groups reporting to the Plenary: NSG Consultative Group (CG) and NSG Information Exchange Meeting (IEM). There are two additional groups, namely, NSG Technical Experts Group (TEG) reports to the CG, and the Licensing and Enforcement Experts Meeting (LEEM) reports to the IEM. The Permanent Japanese Mission to the International Organisations in Vienna serves as the Point of Contact, providing critical coordination support for the overall structure.

> "First, conscious efforts are required to balance trade and security interests. Second, there is also a need to constantly adapt the guidelines to technological evolution."

The Plenary is the governing and decision-making body for the NSG covering policy issues and all issues related to Part 1 and Part 2 Guidelines. The Plenary can establish technical working groups on issues including, but not limited to, the review of the NSG Guidelines. the Technical Annexes (Control Lists), procedural arrangements, information sharing, transparency and activities. The Plenary can mandate the NSG Chair to conduct outreach activities to specific countries to promote adherence to the NSG Guidelines. It is noteworthy that

all decisions in the Plenary are made by consensus.

The Consultative Group (CG) is a working-level deliberative body for issues related to Part 1 and Part 2 Guidelines. The CG meets several times a year. The CG will take up all crosscutting issues and all decisions are based on consensus.

In addition, the Technical Experts Group (TEG) is a working-level technical body for annexes of the INFCIRC/254/Parts 1 and 2. The TEG provides technical experts from all NSG PGs and also the TEG will take up technical questions related to Control Lists. It ensures NSG Control Lists are complete and up-to-date with technical advancements.

Information and Exchange Meeting the Licensing (IEM) and and Enforcement Experts Meeting (LEEM) convene once a year during the week of Plenary meeting the to share information related to identifying and discussing proliferation trends and concerns, since this exchange of crucial for these information is meetings.

# Outreach

Outreach and discussion are the responsibility of the NSG Chair. The Chair is supported by the Troika and the CG Chair.

The outreach is aimed at diverse entities such as: non-PGs, both NPT and non-NPT parties, international organizations, transit and transshipment countries, other export control regimes, multilateral and regional forums, industry, and academia.

# Major Aspects

There are a few important aspects of the work of NSG. First, NSG only sets agreed international standards and does not undertake any approvals. It aims at enabling legitimate nuclear trade without attempting to deny or approve exports. PGs have the flexibility to implement NSG Guidelines and apply the Trigger and Dual-Use Lists. PGs suitably implement the Guidelines and Control Lists in their national regulations.

The second important aspect is the "catch-all" mechanism. Adopted in May 2004, the mechanism authorizes member states to block any export suspected to be destined for a nuclear weapons program even if the export does not appear on one of the control lists.

The third aspect is "especially designed or prepared" (EDP). It refers to the Trigger List of NSG Part 1 Guidelines that covers EDP equipment, components, materials, subsystems, and facilities for processing use and production of special fissionable material. The EDP has no formal universally-accepted definition. The criterion here is that nuclear export control policy officials and technologists must make a reasoned finding on EDP. The gradations of EDP include the following:

EDP-1: Clearly unique, no other application but for nuclear processes, for example, reactor, reactor fuel rod, complete gas centrifuge;

EDP-2: Manufactured to end-use or customer-supplied specifications and intended nuclear end-use could be identified by most fabricators/suppliers for example, centrifugal compressors for pumping UF6 gas, distillation column with trays for heavy water separation; and,

EDP-3: Manufactured to customersupplied specifications and only a technology holder or well-informed supplier could identify nuclear enduse, for example, end-cap preform, gas centrifuge baffle plate, gas centrifuge housing, gaseous diffuser housing.

Some technical criteria for determining EDP include factors like physical dimensions, dimensional tolerances, material(s) of construction, performance

specifications/characteristics,

installation-specific features, manufactured to customer-supplied specifications, quantity, procurement in matched sets, end-user, and stated end-use. It is important to note that all relevant factors should be considered together in context. No single factor may be sufficiently unique for an unambiguous EDP determination.

The fourth aspect includes the criteria or the parameters for placing items on the Dual-Use List. These include the questions: Does the item play an important function in nuclear fuel cycle facility/activity or in nuclear? Is the item involved in weapon design, manufacturing, or testing? Have actually proliferators sought the item(s)? Will controlling the item(s) have an impact? Must alternative technical paths be controlled? Is it even significant or controllable? What is the extent of its non-nuclear commercial What use? its impact is on trade/economics? What is the number of suppliers? What are the supply sources outside the regime? What is its substitution cost?

The fifth aspect is Government-to-Government Assurances (GTGAs) that serve as a key part of the global nuclear non-proliferation infrastructure. GTGAs are given before sensitive exports are authorized. GTGAs include three components: principle, process, and the role of companies.

The principle of GTGAs involves notifications of sensitive exports for nuclear end-use between governments to verify legitimacy of proposed export and end-use. All items included in the NSG Trigger List are to be subject to an Assurance. The process involves the exchange of documents between governments and verification. The recipient company or entity has a role to play in the effective and prompt processing of GTGA requests. The role of companies involves understanding what information they will be asked to provide and why it is necessary. It means the exporting company has to ensure awareness on the part of their customer. The exporting company will also provide contact details of the responsible person(s) in the recipient company in the license application. The reporting company must understand that it will need to provide required information to their government.

The sixth aspect is transit and transshipment in the context of NSG. The term "transit/transshipment" in general describes a scenario where an item passes through a given country on its way from the country of consignment to the country of destination. What matters in the end is that some kind of legal instrument authorizes government authorities to deter, intervene in, and act upon illicit brokering and transit/transshipment activities, which is complementary to export controls. Examples of such legal instruments may include export control laws, customs laws, national penal security laws, laws, transportation laws, aviation/seafaring laws. laws addressed to freight forwarders/shipping companies, or other rules and regulations below the level of laws.

Some reflections on the challenges to the future role of NSG are also in order. First, conscious efforts are required to balance trade and security interests.

Second, there is also a need to constantly adapt the Guidelines to technological evolution. As technology evolves quickly, members have a hard time adapting.

Third, there is a need to promote common goals and efficiency. In this regard, different dynamics among common goals, legitimate national technological and commercial interests, and solidarity within the group has to be understood and calibrated. The importance of seeking balance between the speed of progress and the strength of the internal fabric of NSG should not be underestimated. The vital role of consensus in the functioning of NSG cannot be ignored. Being likeminded in a changing and complex international environment is critical.

Fourth, political commitment and technical standards serve as the foundations of NSG. Strong political commitment around common goals has always constituted NSG's center of gravity. This is indispensable when it is a question of managing discussions on the most complex legal tools to improve NSG's efficiency. At the same time, it has to be recognized that diversity within unity is a strength.

Fifth, understanding the evolving global security environment is important. Links between the Non-Proliferation Regime and existing initiatives to enhance nuclear security and combat nuclear terrorism are being increasingly recognized.

When NSG was created, the initial non-proliferation: problem was however, over the years, NSG has brought nuclear terrorism within its purview. In the processes aimed at enhancing nuclear security and deterring nuclear terrorism, the contribution of non-NPT countries has been considered an asset, as such countries participate fully in relevant mechanisms.

NSG is continually working to improve its effectiveness. NSG's dedication to transparency has led to the overhauling of its website as well as the creation of several reference documents on the policy of the NSG and best-practice documents for implementing the NSG Guidelines.

For the safe and secure future of humanity, a strong nuclear export control regime will continue to be important. In this regard, NSG will continue to play an important role in helping ensure that nuclear transfers are made for peaceful purposes.

# Profile

Ambassador Gustavo Eduardo Ainchil. lawyer education, ioined a by Argentina's foreign service in 1985. From 1991 to 1992, he was part of the Delegation of Argentina to the Conference on Disarmament in Geneva. Between 2007 and 2016, Mr Ainchil was Director for International Security, Nuclear and Space Affairs at Argentina's Ministry of Foreign Affairs, Member of the National Commission for Control of Sensitive Export and Military Material, Member of the National Commission for Chemical Weapons, Member of the Board of the National Commission of Space Activities, Member of the Commission of the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABAAC). Between 2016 and 2020, he was the Permanent Representative of Argentina to the International Civil Aviation Organization Council (ICAO). Since 2021, he has been Ambassador to Austria, Slovakia and Slovenia and the Permanent Representative of Argentina the International to Organizations in Vienna. He is the Chairperson of Hague Code of Conduct against Ballistic Missile Proliferation (HCOC) during 2021-2022.

Ambassador Ainchil is married with six children.

#### Missile Technology Control Regime (MTCR): Current Activities and Priorities of Russian Chairmanship



**Ambassador Grigory Mashkov** 

Ambassador at Large for the Ministry of Foreign Affairs of the Russian Federation

#### Chair of the Missile Technology Control Regime (2021-2022)

It is important to stress that all control regimes have similarities, vet they function differently. The differences are more technical, but all regimes work on the control of different items. Technology The Missile Control Regime (MTCR) functions similarly to NSG and the Australia Group (AG). MTCR and Hague Code of Conduct against Ballistic Missile Proliferation (HCoC) exclusively deal with ballistic missile proliferation. There is no other platform for this purpose which is why the regime is extremely important for global security and stability. MTCR is a technology-focused control export regime, constituted as a voluntary association of 35 countries with the aim of limiting the export of technology that can help deliver WMD.

"Countries and groups not engaging in non-proliferation talks are jeopardizing nonproliferation. One of the key challenges in the current situation is the possibility of the reduced influence of the global regimes and the increased risk of proliferation. We need to focus on the fact that in so far as nonproliferation is concerned, all of us have common goals and we should be willing to cooperate within this framework despite anything."

MTCR's *Guidelines* for Sensitive Missile-Relevant Transfers represent the agreed standards having the objective of limiting the risk of proliferation of nuclear, chemical and biological WMD bv means of controlling transfer that could contribute to delivery systems for such weapons, excluding manned aircraft. MTCR is unique because it deals with the supply side of proliferation.

The Guidelines also seek to prevent the risk of controlled items and technology becoming available to terrorist elements. It needs to be mentioned that the Guidelines are not aimed at hampering national space programs as well as international space cooperation so long as such initiatives do not help in delivery systems for WMD.

The most sensitive missile-related technology is listed in the Technical Annex of the Guidelines. This control list is divided into two parts. Category I consists of complete delivery systems capable of 500 kg payload and 300 km range as well as their production facilities. These are items of maximum sensitivity. Specific restraint has to be exercised when it is a question of Category I transfer irrespective of their purpose. The transfer of these items are subject to a robust presumption of denial. The transfer of production technology for Category I items is subject to a strict denial. In other words, the transfer of Category I item production technology is prohibited. Category II items consist of either complete systems, capable of a range of at least 300 km, not specified in Category I, or items that may be less sensitive and may have dual use. These may be subject to relatively less restriction, but still may be in need of case-by-case review with proper certification and verification. In addition, a catch-all provision is aimed at non-listed items.

MTCR has a "no-undercut" policy which means that Partners are bound to mutual consultation in the case of considering the export of an item on the list that has already been notified as denied by another Partner in the pursuance of the MTCR Guidelines.

# MTCR Structure and Working

The structure of MTCR is almost the same as other regimes, but with certain key differences. The MTCR Plenary has

three groups: Information Exchange Meeting (IEM), Technical Experts Meeting (TEM), and Licensing and Enforcement **Experts** Meeting (LEEM). IEM oversees the exchange of information on missile proliferationrelated case studies, while TEM works on the negotiations of the goods lists subject to MTCR controls. LEEM works on sharing best practices and denials related to licensing and enforcement.

# IEM's Objective and Working

IEM is a platform to exchange information on missile proliferation between MTCR Partners and raise awareness. Partners discuss regional proliferation and country issues, procurement activities. strategies, development emerging trends, technology, or national programs such as visa vetting. It is one of the most important groups within the MTCR. It bears mentioning that the content of information sharing is sensitive and classified.

The objective of the TEM is to provide technical support to the MTCR. It assesses the need to update and modify the MTCR Equipment, Software, and Technology Annex. The Annex is the Regime's list of controlled items that comprises virtually all equipment, materials, software, and technology required for missile development, production, and operation controlled Partners and adherents. bv All concerned parties submit proposals for the demanded change(s).

TEM submits changes in the Annex to MTCR Plenary for adoption. It needs to be mentioned that the MTCR Technical Annex is used by MTCR Partners, nonmembers, and other international organizations.

There are differences in the interests of the different countries, such as vving for ิล market share. and so compromises are sought to solve any issues. The control lists are far from perfect, but they are workable and an important orientation for countries, especially in terms of licensing processes.

# LEEM's Objective and Working

LEEM works as an informationsharing platform for best practices and denials. LEEM is a network of licensing and customs authorities, as well as police personnel, who exchange relevant enforcement information and experience to strike a balance between free legitimate foreign trade and the necessity to fight missile proliferation.

MTCR has no collective enforcement mechanisms and rules are implemented on a national level. There is also no standard one-size-fits-all model for export controls within the MTCR. The licensing procedures and enforcement measures are key to detecting procurement activities and preventing illegal exports.

#### Priorities of Russian Chairmanship

Organizing the Sochi Plenary of October 2021 was a huge challenge in view of the COVID-19 pandemic and the global political situation. The Plenary was considered a breakthrough, because there had been no meeting after the 2019 Auckland Plenary. The Sochi Plenary focused on the importance of in-person meetings and intersessional work.

The Partners reviewed and evaluated MTCR's activities since the Auckland Plenary and presented new initiatives to prevent the proliferation of missiles and unmanned WMD delivery systems. They highlighted the need to resume intersessional work to ensure success and coherence of the next Plenary in Montreux, Switzerland.

We tried to relaunch the activities within MTCR. It was a huge challenge but we managed to do it. We tried to ensure that during the entire year these activities had coherence. We also tried intersessional work. but to unfortunately there was no intersessional activity during the last year. During the Sochi Plenary, Partners reiterated the importance of continuing outreach activities to non-Partners. Raising awareness through dialogue with non-members such as Kazakhstan, Belarus, the United Arab Vietnam, Emirates, Mexico. and Pakistan is important. We are also realizing the importance of highlighting the risk of proliferation in academia and industry circles.

I thank Pakistan for allowing us a chance to share views in this conference. This session was pivotal and Pakistan was crucial in promoting engagement by means of this outreach activity. Perhaps, Pakistan will be our last outreach activity before the duration of our chair comes to an end in October 2022. We were able to complete at least one third of the outreach program that was agreed in Sochi Plenary.

During the past year, the MTCR Chair and his team took part in the event organized by the Center for Energy and Security Studies (CENESS), Moscow, and the International Institute for Strategic Studies (IISS), London, the 28th Asian Export Control Seminar organized by Center for Information on Security Trade Control (CISTEC), Japan, and the meeting of the UN Security Council 1540 Committee. More could have been done, but we were not invited to many events due to the prevailing international political situation. This refusal to invite is in fact damaging the cause of nonproliferation. Countries and groups not engaging in non-proliferation talks are jeopardizing non-proliferation. One of the key challenges in the current situation is the possibility of the reduced influence of the global regimes and the increased risk of proliferation.

We need to focus on the fact that in so far as non-proliferation is concerned, all of us have common goals and we should be willing to cooperate within this framework despite anything. We need to realize the crucial importance of dialogue. My personal concern is that missile challenges will grow in the future, but there is hardly any discussion about it. If this continues to be the case, then in future people will not be prepared to deal with these challenges. That is why during the Sochi Plenary, the Russian Deputy Foreign Minister Sergei Ryabkov extended an invitation to discuss the missile issue in a broader context using the UN platform, stressing that such a dialogue should be inclusive. All concerned countries should be invited participate in the proposed to discussion. It is impossible to deal with issues without the missile the participation of all concerned states.

# Profile

Ambassador Grigory Mashkov is a graduate of the prestigious Moscow Institute of International State Relations. From 1991 to 1995, he was the Second and then First Secretary and from 1999 to 2004 he was the Counselor at the Embassy of the Russian Federation in Canada. Between 2004 and 2012, he was the Deputy Director at the Department for Disarmament and Non-Proliferation. the Ambassador He served as Extraordinary and Plenipotentiary of the Russian Federation to Paraguay. Between 2018 and 2019 he was the Head of the Export Control Division of the Department for Non-Proliferation and Arms Control and the Deputy Director during 2019-2020. Since 2020, he has been the Ambassador at Large for the Ministry of Foreign Affairs of the Russian Federation.

He speaks Russian, Spanish, and English. He is married with two children.
Multilateral Export Control Regimes – Pakistan's Perspective



Dr. Zafar Ali Former Director General Strategic Export Control Division (SECDIV) Ministry of Foreign Affairs (MoFA) Pakistan

Unrestricted trade of arms and dualuse products may lead to security threats and human rights violation which is why trade controls exist. The system of export control regimes is an important instrument to prevent the proliferation of both weapons of mass destruction (WMD) and conventional weapons.

The current export architecture is based on four main multilateral export control groups, namely, the Nuclear Supplier Group (NSG), the Wassenaar Arrangement, Missile Technology Control Regime (MTCR), and the Australia Group (AG). While the regimes have similarities with regard to the membership criteria and nonproliferation objectives, they are different in commodity jurisdiction and control parameters. Nonetheless, they supplement each other.



The purposes and goals of these regimes underscores their peaceful uses. For example, NSG stresses that international trade in nuclear trade should not be hindered unjustly. The Wassenaar Arrangement emphasizes that the arrangement will not be directed at any state or group of states and will not impede bona fide civil transactions. The MTCR similarly highlights that its guidelines are not designed to impede space programs or international cooperation in such programs. The AG explains that its guidelines are not intended to impede chemical or biological trade choke or international cooperation. It needs to be mentioned that all of these commitments have fallen short of the expectations of the developing countries.

Each regime emerged as a response to some major event highlighting the vulnerability of the current system and weaknesses in the prevention of the proliferation of WMD. NSG, for instance, came up as a result of the nuclear test by India in 1974. Here, I am reminded of a saying that if you want to study the future, then study the past. It is also often overlooked that even the MTCR largely came up as a result of the launch of satellite launch vehicle (SLV-3) by India in July 1980, in addition to certain other developments in that domain.

#### Weaknesses of Multilateral Export Control Regimes

However, the system faces several structural and recent challenges. Some of these challenges were highlighted during the presentation of the NSG Chair. The drawbacks of these regimes can be identified in the existing literature.

Firstly, most countries are unwilling to give up some of their sovereignty by engaging in binding agreements on this matter. As a result, the regimes are informal and their measures are not legally binding on the states. In addition, they make decisions by consensus and this consensus-based decision process impedes bringing changes that are necessitated by rapid technological developments.

Secondly, the regimes have no official enforcement mechanisms. There are neither anv formal means of identifying violations by a member nor any institutional means of sanctions for such violations. They have hardly any power to act if countries choose to ignore the guidelines set by the regimes. One relevant example is the BrahMos missile given to India with the stated range of 290 km, but India has increased its range which is beyond the control parameters set by the MTCR.

"Efforts are now underway to create a big hole in the Nuclear Non-Proliferation Regime to make way for the membership of India to NSG. The world does not want to see the destabilizing accumulation of arms spiraling into an arms race."

Thirdly, the regimes consist of a select group of countries while excluding some dominant arms-exporting countries. On the one hand, a lower number of participating countries eases the consensus-based decisionmaking. On the other, the nonuniversal character hampers the effectiveness of the regimes because only a restrictive number of countries act by the principles established by these regimes.

Fourthly, the interpretation of the guidelines and lists by regime members varies between countries. Also, there is disagreement about what should be considered a sensitive destination. As a result, different export controls can be applied in similar situations.

Fifthly, and this is a more critical issue, new technology is rapidly changing the military field and it is difficult for the export control regimes to keep up with these developments. Also, export control regimes are under pressure because of globalization and the diffusion of technology that is leading to the easy transfer of sensitive dualuse technology.

Also since their bans are not legally binding, a number of members have taken advantage of the weakness of the NSG to pursue civil nuclear projects with non-NPT members like India. India is even propped up to be a member. The 2008 exemption and the resultant civil-nuclear of the United States and other countries was a game changer that has allowed India to enhance its nuclear weapon capabilities exponentially.

Efforts are now underway to create a big hole in the Nuclear Non-Proliferation Regime to make way for the membership of India to NSG. The world does not want to see the destabilizing accumulation of arms spiraling into an arms race.

Nobody wants sensitive equipment and technology to end up in the hands of the terrorists. Nobody wants Artificial Intelligence (AI) taking over future warfare. However, these things could happen if the international community does not engage collectively in order to address these challenges.

Various new technologies erase the need for physical trade, thereby changing the concept of trade. Software like cyber surveillance software can be transferred electronically without the need for trading partners to meet in person. Also, 3D printing can be used in the future to print components of nuclear weapons. As James N. Rosenau has said that IT revolution has enabled actors and institutions to think in terms of distant proximities, and that creates a challenge in maintaining balance.

### Way forward

What is the way forward? International export control arrangements, while preventing the proliferation of WMD, should not be allowed to hamper international cooperation in the peaceful uses of technology, including nuclear technology which is the right of every state.

Export control regimes should be more inclusive and should not create any exceptions. There is a need for transparent and non-discriminatory policies toward all states. A criteriabased non-discriminatory and nonselective approach toward civilian nuclear cooperation will be to the benefit of the global non-proliferation regime.

If multilateral export control regimes have to remain effective and credible, member states must respect and uphold their own rules. They must avoid actions that feed regional and global arms races and strengthen their guidelines to prevent sensitive technology from proliferating in the years ahead.

The nature of export control is changing. In recent years, the export control landscape has been evolving as a result of strategic competition among major powers. Export controls are becoming more country-specific due to strategic competition and geopolitical interests of the states. This is impacting the nature and the scope of controls. The proliferation concerns could best be addressed through multilaterally negotiated universal, comprehensive and non-discriminatory agreements.

Pakistan considers that peace and stability can only be ensured through a strong non-discriminatory rules-based international order. A robust nonproliferation regime is the central pillar of such rules-based order. а Technology and regulations are often posed as adversaries. Technology symbolizes markets, enterprise, and growth, whereas regulations represent government, bureaucracy, and restrictions. Regulations can retard all three stages of technological change, that is, invention, innovation, and diffusion.

Pakistan believes that international export control regimes, while preventing the proliferation of WMD, should not hamper international cooperation which is essential for the socio-economic development of developing countries. A regime that is inclusive and takes into account the legitimate technology requirements of for socioeconomic its partners development is more likely to achieve buy-in from the states and pave the way for universal adherence. It will also ensure that the export control regimes are continued to be seen as important rules-based components of the global non-proliferation architecture.

## Profile

Dr. Zafar Ali is former Director General of the Strategic Export Control Division. He has a wide experience of Export Controls, Strategic Arms Control & Disarmament Affairs. He holds PhD in Defence and Strategic Studies from Quaid-i-Azam University, Islamabad. He is a former visiting fellow of the Henry L. Stimson Center, Washington DC, the Center for Non-Proliferation Studies, James Martin Center, Monterrey, California, and the former visiting fellow of the Center for International Trade Security, Georgia, USA. He has been on the visiting faculty of various public sector universities at Islamabad, and has authored a book chapter and numerous papers and articles on national and international security issues. Dr. Ali conceptualized and operationalized the National Coordination, Review, and Monitoring Committee (CRMC) for effective implementation of UNSC resolutions. He is member of the Advisory Board of Arms Control & Disarmament Center at the Institute of Strategic Studies Islamabad (ISSI) and that of the Bahria University Journal of Social Humanities and Sciences (BUJHSS).















# Q&As

## Session 1

## **Chair's Remarks**

The chair noted that WMD proliferation by state or non-state actors poses the greatest threat to contemporary international security. The chair said that the problem of nuclear proliferation is global and any effective response must also be multilateral.

The chair stated that the international non-proliferation regime is a complex web of formal and informal well arrangements as as certain country-led like initiatives the Proliferation Security Initiative (PSI), the Container Security Initiative (CSI), and the Middle Power Initiative (MPI).

The chair pointed out that the formal side is based on the NPT, which is the bedrock of the non-proliferation regime, coupled with the UN Security council resolutions which are binding on the states. Of the latter, the chair mentioned that the one with critical significance is the resolution 1540 which was passed in April 2004. The chair added that there have been subsequent resolutions related to the resolution 1540 and other sanctions resolutions like the UN Security Council resolution 1718, which have imposed sanctions on certain countries for their proliferation activities.

On the informal side, the chair pointed out that the non-proliferation regime comprises export control regimes like the NSG, the MTCR, the Australia Group, and the Wassenaar Arrangement — all dealing with different commodities and dual-use goods and technologies.

The chair emphasized that it is very important for countries to have formal legislative, regulatory, and implementation mechanisms in place for strategic export controls to give implementation status to the UN Security Council resolutions. The chair also said that the informal regimes have also issued guidelines and control lists in order to help states in identifying dual-use items for restrictions and licensing requirements in order to ensure that trade in such items is only for peaceful purposes.

The chair was of the view that countryled initiatives have limited participation, but still serve a useful purpose in the non-proliferation regime.

The chair highlighted that Pakistan for its part has taken numerous measures for effective enforcement of UN Security Council resolutions as well as for ensuring that dual-use goods and technologies as well as goods and technologies for military applications are not transferred without regulatory mechanism and transferred only for peaceful purposes.

The chair pointed out that these enforcement practices are internationally recognized. The chair mentioned that the January 2019 report of the Belfer Center for Science and International Center of the Harvard Kennedy School noted that Pakistan has taken significant steps in four of the five critical areas of nuclear security. The chair also added that the 2020 report of the Nuclear Threat Initiative (NTI) notes that Pakistan is the most improved country with regard to nuclear security.

The chair drew attention to the fact that all enforcement practices in Pakistan combination of a effective are legislative tools and practical implementation measures based on these tools. The chair further explained mechanism enforcement that in Pakistan consists of formal and informal streams. The chair stated that the formal stream, which the primary enforcement system, is based on all the government organizations as well as the rules and regulations.

The chair said that the informal stream, which is the secondary enforcement system, consists of Internal Compliance Programs (ICP), compliance improvement, outreach, commodity identification training, capacity building and others. The chair also shared that there are excellent enforcement examples which demonstrate the effectiveness of Pakistan's enforcement system.

The chair noted that an important area of compliance is financial controls and monitoring which is relegated to secondary position in many countries, but in Pakistan countering proliferation financing is accorded importance utmost and a comprehensive, coordinated approach is followed in this regard. The chair pointed out that the Export Control Act 2004 mentions that any sort of non-financial financial or help. assistance, or abetment in facilitating the procurement, design, development, transport, and transfer of WMD is prohibited and considered a serious offence.

The chair noted that all the nonproliferation regimes, whether formal or informal, commit to peaceful uses of dual-use and other sensitive goods and technologies, but the problem occurs when the policies of member states are driven by commercial and strategic interests in international and regional security, which gives rise to the tough question, should arms management and non-proliferation policies and approaches revolve around the political alignments of states or the principles of universality and non-discrimination.

## Q&A

### The Future of 1540 Committee

In response to a question about the future of 1540 Committee, it was stated by one of the speakers that the committee's future is something that could be decided by the members of the UN Security Council. The audience were encouraged to make their own assessment of the committee's future based on the progress and developments so far. However, it was shared that the implementation of resolution 1540 was making steady progress in global terms, but the need to appreciate the fact that progress is a long-term prospect was also underscored.

#### 1540 Assistance Provision

In response to a question about the challenges faced by the 1540 Committee in resolving issues like providing assistance that are involved in dealing with developing countries like Pakistan, it was clarified by the speaker that, with specific reference to the progress made particularly by the latter on the implementation of resolution 1540, Pakistan is not a developing country. It was highlighted that it is normally the case that developed countries have a strong record in legislation and enforcement measures, while developing countries struggle with both. It was stated that this was not the case with resolution 1540.

It was highlighted that there are many developing countries that have very good legislation and enforcement measures in place. It was pointed out that the assistance mechanism of the 1540 Committee with regard to the implementation of resolution 1540 consists in bringing together interested assistance providers – which are international organizations and regional organizations from around 50 member states - and the countries making the requests for assistance. It was pointed out by the speakers that Pakistan is one of the assistance providers registered with the committee.

It was shared that the one of the main functions of the committee was matchmaking between the assistance providers and the states making the requests. It was stated that, following the formal request made for assistance by any state, the committee then circulates the request to the assistance providers, including Pakistan.

It was highlighted that different countries face a different set of challenges and issues and may need assistance with different things in terms of implementation of the resolution, which is something that the committee must and does take into consideration.

## No Enforcement in Resolution 1540

In response to a question about the lack of prescription of financing controls and the absence of control list with respect to the resolution 1540, it was shared that the consensus at the time of the resolution's adoption was that each country must decide how to implement the resolution and develop its own control list.

A seasoned foreign diplomat presented a well-reasoned clarification of the absence of prescribing financing controls from the resolution 1540 and the work of the 1540 Committee. The seasoned diplomat explained that the reason why financing controls like those of FATF are not used in the 1540 Committee is because the resolution 1540 is the resolution of cooperation, whereas FATF represents law enforcement of sorts, consisting of the evaluation of the performance of countries and their subsequent categorization and placement in blacklist, grey list and white list. It was opined that if the latter modality was adopted with regard to the 1540 Committee, it could undermine and even ruin the spirit of consensus and cooperation within the committee, as this spirit was already quite fragile then as now, especially in the midst of the current global situation. It was also underscored that the problem of finding the balance between two starkly different mechanisms, that is,

the mechanism of consensus and cooperation characterized by the 1540 Committee and the mechanism based on the power of intervention represented by FATF, was well-nigh impossible and not advised in any case. It was pointed out that this issue of the mandate was being discussed currently and that there was a high degree of cautiousness about how to proceed with the issue.

In response to a question about the linkage between the Chemical Weapons Convention (CWC) and the resolution 1540 and the former's support to the latter in the context of the fast pace of the chemical threat, it was stressed by one of the speakers, first, that the CWC is part of the international non-proliferation regime, and second, that the resolution 1540 lays down what to do, not how to do it.

As explained earlier, it was repeated that the absence of the prescriptive aspect was the basis of the consensus around the resolution. It was reiterated that the resolution does not have any control list, nor can it impinge upon the authorities of the other conventions and treaties.

It was pointed out further the resolution only mentions what is expected of the member states and leaves how they go about meeting those expectations to the states themselves, as it is a question of national sovereignty. It remarked that going into the details of the first open debate on the resolution 1540 in April 2004 would reveal that many member states were opposed the resolution's basic text, and that it was the incorporation of the cooperative aspect that led to the consensus and the subsequent adoption of the resolution.

It was highlighted by the speaker that the linkage between the CWC and the resolution 1540 needs to be understood in the context of the need to have a mechanism legally binding on everybody, since no state can be forced to sign a convention or a treaty it does not want to sign, but a UN Security Council resolution, while not enjoying the powers of enforcement, makes it obligatory on states to abide by the resolution.

It was also noted that while around 192 states are signatories to the CWC, many member states have not implementation legislation in place. It was stated that it was for this reason that Operating Paragraph (OP) 2 and Operating Paragraph (OP) 3 of the resolution 1540 are relevant for the CWC from the standpoint of the physical security, transport, and export control, since the CWC does not include the transport of chemicals, but the resolution 1540 makes it binding to have these controls, while leaving the implementation to the states.

### Session 2

## Chair's Remarks

On the challenge of how sustainable progress could be ensured in the global strategic trade management (STM), it was stated by the chair that a level playing field had to be ensured as the minimal, irreducible condition.

The chair further emphasized that it is far from what is actually happening. For instance, the attention was drawn toward the issue of updating control lists, which, for a non-NSG country, presents myriad difficulties as realtime flows and exchange of explanatory, technical and other information is missing or slow to be of use.

Another critical matter which was underscored by the chair was the apparent transition of the approach of the NSG from the one claimed to be based on the technical examination of exports within the ambit of potential controls on a case-by-case basis to one that was discriminatory and entitybased.

The chair observed that that there had been instances when non-NSG countries would request for an enduser certificate for export of certain items, but would not obtain it timely, leading the competitor to win the given opportunity. The chair stressed that adherence to strategic controls should lead to incentivization, not the obverse of it.

The chair noted that NSG guidelines permitted the exemption for non-NSG countries for safety equipment for civil nuclear power facilities including for those within the nuclear island, for critically important safety of those within the vicinity, and possibly more within the country and the region, but in actual fact such equipment is not permitted and usually denied.

The chair further noted that while adherence to control lists and guidelines is encouraged as mandatory, the 2008 exemption to India has driven a hole through these principles and processes.

It was pointed out that as regards the safeguarded nuclear materials and technology flows under the particular 2008 exemption, there was no effective check on the diversion of part of it for military purposed which is actually taking place and may well intensify.

The chair mentioned that India's unique safeguards agreement with the IAEA contains a number of provisions that give India considerable flexibility to move safeguarded materials in and out of unsafeguarded nuclear program.

The chair stressed that international export control regimes should not hamper international cooperation and peaceful uses of dual-use technologies essential for the socioeconomic development of development countries while preventing the proliferation of WMD, as developing countries cannot be expected to become hewers of wood and drawers of water.

The chair highlighted that Pakistan has a significant civil nuclear infrastructure capability for designing, making and operation small civil nuclear power plants, some of which have been requested from abroad. The chair remarked that Pakistan's capability is more than that of a number of NSG members, so bringing Pakistan within the NSG would remove a major distortion and strength the global nonproliferation regime.

## Q&A

## South-South Epidemiological Cooperation

In response to a suggestion from one of the attendees about the desirability of a South-South approach to pandemics and diseases in light of the variance by region of disease and epidemiological patterns, especially, in terms of the varying impact of pandemics and diseases in regions close to the equator as well as tropical zones, and the region-specific general lack of approaches by the United Nations or other international organizations that could take into consideration target climatic, temperature, or

epidemiological conditions, it was stated by one of the speakers that such a South-South approach or a regionspecific approach was certainly needed.

However, it was clarified parenthetically by the speaker that where disease and pandemics were concerned, the International Health Regulations (IHR) and the World Health Organization (WHO) were more relevant rather than the BWC. The speaker emphasized that, before such a response could be essayed, there was also the need to develop better cooperation patterns.

Citing the of inequitable case distribution of COVID-19 vaccines, the speaker stressed the need for resolving such disparities. It was also pointed out that developing relevant and targeted approaches required greater science advice, which of course meant greater involvement of scientists and specialists.

### Collaborative Export Control Course Development

Responding to a question about the kind of steps needed to introduce or implement the master's program in non-proliferation and export control in Pakistan, with reference to a course discussed in one of the presentations, one of the speakers pointed out that this necessitated a series of different intensive discussions and meetings with a broad range of stakeholders including the interested institutions, organizations, academia, and prospective faculty.

These events, the speaker stated, could be seminars or discussion sessions aimed in the beginning at engendering interest or assessing capacity or needs of the target audience, which could then be followed by the preparation of a more targeted package from the available range of modules. The speaker shared that it could involve training initially, but the desired endgoal should be a self-sustaining program.

### Third-Party Objections

In response to a question of an industry representative about whether country A had the right to question or object to exports of country B to country C as long as the exports stayed on the right side of the various control lists, and especially when it was private-sector firms in country B making the exports, one of the speakers remarked that strictly speaking, no country had any such right, but in practice, lump it or like it, such objections could be, and are, raised.

#### **Session 3**

#### **Chair's Remarks**

On the issue of new and emerging technologies and their impact on global and regional security and stability, the chair noted that world has always seen a balance of conflict, cooperation, and development.

The chair remarked that technological change in general and emerging technologies and their convergence in particular creates a challenging and complex situation. The chair was of the view that maintaining and enhancing security in this environment was perhaps destined to remain a process rather than a neatly isolated phenomenon.

The chair this stated that interconnectedness requires а continuous effort to anticipate and forecast change and the momentous challenges that accompany the emergence of new technologies. It was considered that this involved, among other things, availing the opportunities created by new technologies, dealing with supply vulnerabilities, and coming to grip with geopolitical challenges all at the same time.

The chair cautioned that the potential for dual-use misuse was high particularly with respect to new technologies like AI, quantum computing, big data, and others.

The chair drew attention to the fact that there seemed to be low appetite for regulating emerging technologies. It was stressed that the volatile geopolitical environment could lead to the weaponization of the regulation of emerging technologies. The chair considered that it was also important to think about how lawfare could impinge upon the question of dual use.

The chair drew attention to the fact that many emerging technologies did not presuppose a highly industrialized base for development, diffusion, and adoption.

The chair indicated that associated lawfare is tediously slow process as it involves negotiating multilateral positions and parlaying them into a common ground.

It was pointed out that technological development tended to outpace efforts at regulation, thus necessitating an innovative approach.

The chair stated that the management and the regulation of the related manpower, of those with knowledge and skills was also vital.

The chair deemed that awareness raising and capacity building in the public and private sectors were critically important areas.

The chair finally shared that sustainable development could only be realized with strong global efforts, and while regulating, the policymakers needed to consider non-discriminatory access to new technologies so that fair and legitimate access and responsible use could coexist.

## Q&A

#### The Keyword is Cooperation

A representative of the diplomatic mission in Pakistan of a global power noted that every country represented in the conference wanted to bring the world together around frameworks for responsible behavior. and that international cooperation could help preserve strategic stability, reduce proliferation risks, and prevent unintended escalations. It was stated that export controls provide the confidence that makes such cooperation possible.

The representative asserted that they strongly support broad and equitable access to goods and technologies that facilitate current and future economic development. The representative commented that UN resolutions that balance between non-proliferation and peaceful uses set up false dichotomies to fix problems that did not exist. The representative stated that they looked forward to working together on enhancing strategic trade management and export controls.

### Nuclear Separation Model

On a question about the assessment of India's separation between civil and military nuclear fuel cycles and its additional protocol and if Pakistan could follow a similar model as well as negotiate an additional protocol with the IAEA, one of the speakers refrained from commenting on the particular additional protocol that India has signed, because the speaker felt that the amount of information that the speaker had was not adequate to make an informed comment.

However, the speaker shared detailed thoughts on the general aspects of whether or not having an additional protocol was useful. It was shared by the speaker that there were countries which initially did not intend to have additional protocols did go on to have them, and that such countries included states with nuclear weapons programs, states with different agreements, and others. It was shared that the process usually entails the separation between the military program and peaceful uses.

Citing the example of the Euratom Treaty, wherein initially there were two weapons states, nuclear namely, France and the United Kingdom, the speaker pointed out that there is a regulation within the EU that requires a complete account of nuclear material in the peaceful sector combined with a clear line of demarcation that separated it from the military sector.

The speaker considered that it was the normal model and a useful one to follow, and could strengthen arguments in the context of NSG. It was the personal view of the speaker that it would be advantageous for Pakistan to do the said separation and enter into an additional protocol with the IAEA, but the speaker acknowledged that it was something that could only be decided by the policymakers of Pakistan.

## India, Quad, and South Asian Strategic Stability

On a question about the effect of India's acquisition of new technologies in the Quad on strategic stability in South Asia as well as Pakistan, the responding speaker considered that it was political in nature and that the conference was not the forum to address it comprehensively.

However, the speaker considered that providing access to technologies advanced military technologies to a state creates imbalances. It was pointed out that the purpose is not just development, and that some technologies are meant for military purposes.

The speaker thought that Pakistan has the right to be concerned. It is for this reason that there was a need for a more balanced criteria-based approach to export controls whereby no country is discriminated against.

## BrahMos Missile and MTCR Guidelines

On a question about how India's increase in the range of BrahMos missile, a joint Indo-Russian venture, beyond 290 km and likely assigning a nuclear role to the missile in the future reflects on MTCR guidelines and the catch-all clause, the responding speaker stated that Russia strictly abides by the MTCR guidelines. The speaker pointed out that there is a strong presumption of denial for exports of any Category I items, that Russia follows the principle and defends it within MTCR, and does not export any Category I items.

## Horizontal versus Vertical Proliferation

Responding to a question about little emphasis of current non-proliferation regime on the increase in the weapons programs of major nuclear states, one of the speakers considered that instruments like the BWC and the CWC are both disarmament and nonproliferation treaties, but in the nuclear domain, the speaker said, there was too little emphasis on preventing vertical proliferation compared to horizontal proliferation.

The speaker mentioned that though Article VI of the NPT calls for disarmament, there are no binding obligations as such and no corresponding mechanisms.

The speaker shared that it has been the position of many developing countries that there should be an equal emphasis on reduction in the numbers of nuclear weapons and their ultimate elimination rather than just focusing on horizontal proliferation. It was pointed out that this was one of the issues between Non-Alignment Movement (NAM) countries and countries with large stockpiles of nuclear weapons.

#### Session 4

### **Chair's Remarks**

The chair underscored that it was of the essence for Pakistan to meet its international non-proliferation commitments. It was stated that Pakistan's domestic non-proliferation framework, including export controls, was effective and comprehensive.

It was noted that the Export Control Act 2004 had already taken a lot of relevant and timely measures. The chair cited the example of SECDIV as a confirmation of the quality and rigor of this framework.

It was noted by the chair that taking care not to strangulate the industry while instituting controls was also extremely significant for the overall health of the economy. This, in the chair's estimation, required a balance between control and trade.

It was pointed out by the chair that domestic as well as global experience would show that many entities meant to facilitate trade end up becoming another cumbersome layer through which an exporter or an industry must pass. The chair urged the SECDIV to help ensure that this did not happen. The chair further urged that the SECDIV must make sure that no sensitive goods and technologies were passing through. The chair added that it was also critically important that industry and trade were thriving.

## **Q &A**

## Export Controls, Trade Facilitation, and Non-Proliferation

On a question that related to trade facilitation. the difficulty of procurement of critical items or technologies required for research and innovation for social good, and how exports controls can sometimes prove to be an impediment in this endeavor such as the delays faced by Pakistani researchers and entities in terms of obtaining materials needed for epidemiological research involved in combating COVID-19 pandemic, three speakers gave their responses.

The first responding speaker, giving the operational perspective, stated that it required a proactive and integrated profiling approach to ensure smooth of movement of goods at entry/exit points in the country and that the seamless implementation of this approach was the strategic focus of the relevant national organizations.

The second speaker, giving the policy perspective, stated that, regardless of

the trade restrictions or controls, whether or not to trade with any country, or to provide goods or technologies to any other country was the sovereign decision of every country. It was stressed that no country can be forced to trade with any other country.

The second responding speaker also noted that there had been instances where components related to safety for nuclear power plants, for strictly peaceful uses, were not given to Pakistan, despite clearance by the IAEA, by the countries from which the components were to be procured.

The third speaker stated that there was a need to balance between maximizing gains from legitimate trade and minimizing risk of diversion of dualuse items to proliferators. The speaker shared that this was something that the Australia Group as well as other export control regimes aimed for.

The speaker noted that the Australia Group had continued to agonize over this issue during the four decades since its inception at the plenaries, intelligence exchange, and technical exchange. He stressed that there have to be strong, robust reasons to put something on the control lists and to exercise denial of that transfer.

Speaking on behalf of his country, the speaker welcomed and congratulated Pakistan on its very considerable efforts over the last two decades in improving its export control standards toward international best practices. The speaker pointed out that the stronger this system is within Pakistan the more confidence the exporting countries will have in terms of the assurances being provided.

## Triple-Helix Collaboration in Pakistan's Strategic Trade Control Ecosystem

Responding to a question about the state of knowledge of academia about strategic trade controls and the contours of a practical triple-helix model of collaboration between industry, academic, and government in Pakistan in the domain of strategic trade controls, one of the speakers noted that most stakeholders refrain from grappling with this issue considering it is too intractably technical for them to comprehend.

However, the speaker noted that just as with the national experience of developing export control legislation where learning by doing took place and high standards were achieved, so triple-helix collaboration for development of research, academic, and advocacy talents in the domain of strategic trade controls is doable.

The key thing, the speaker emphasized, was the need for raising awareness that this subject was important. The speaker stated that students would be interested in this area as long as they had good career prospects, which makes the above-mentioned triangular cooperation extremely urgent.

The speaker stressed that industry should be particularly encouraged to create the absorptive capacity for employing graduates and professionals with research, academic, and professional experience in strategic export controls.

In so far as the learning contents of the domain and the level of complexity or difficulty of the contents were concerned, the speaker considered that any social science or natural science undergraduate or postgraduate student could comfortably assimilate the learning/study materials, given some degree of sustained application of hard work on the part of students was present.

Addressing a question about how industry can take the lead in assisting government in the domain of strategic trade controls for sustained growth and development, the responding speaker stated that the industry can support the process of the creation of а comprehensive strategic trade control ecosystem by providing financial resources for the establishment of centers of excellence which provide training for domain-specific skills development in this particular field, by absorbing some of the trained human resources, and by utilizing them not just for the improvement of their Internal Compliance Programs (ICPs) and better understanding of the export control regulations, but also for providing employment to the trained professionals.

Answering a question, if some sort of benchmarking of global best practices in triple-helix collaboration in the domain of strategic trade controls been carried out already at some level in the country, the responding speaker stated that it could not be said for sure if organized, systematic exercise of the kind mentioned in the question had taken place domestically, but there were plenty of international best practices of triple-helix collaboration in the domain of strategic trade controls.

The speaker pointed out that some of the best practices in the areas of intangible technology controls, course and module development in export controls, the role of science advice in non-proliferation, and the creation of hubs of knowledge of strategic trade controls had been mentioned in some presentations during Sessions 2, 3, and 4 of the conference.

The speaker considered that what was required was to adapt these practices to local needs and realities, implement them with commitment, and improve them incrementally.

### AUKUS and Non-Proliferation

Responding to а question, if cooperation under AUKUS would consider NPT and IAEA safeguards concerning the transfer of technology or fissile material, one of the speakers cooperation under assured that AUKUS would be carried out in accordance with the highest standards of non-proliferation, setting a high bar for the stakeholders and strengthening the integrity of the global nonproliferation regime. This commitment, the speaker shared. existed at the highest level of the AUKUS leadership.

The speaker further noted that the key message of the working paper, released by AUKUS partners before the NPT Review Conference 2022, regarding nuclear and naval propulsion cooperation under AUKUS is that it will be fully consistent with the respective international obligations of AUKUS partners, including their obligations under NPT and relevant safeguards agreements with the IAEA.

The speaker shared that states parties to the NPT and non-states parties like Pakistan, and the broader international community, would continue to be reassured that they can have full confidence in the commitment of the partners to the process and to an outcome which achieves these goals. The speaker said that transparency and close engagement with the IAEA are central to this approach.

## Import Intelligence and Proactive Profiling

Addressing a question about Pakistan Customs' import intelligence and the nature of mechanisms in place to ensure that a shipment entering Pakistan en route to another country remains closed once it is cleared, the responding speaker noted that import data is available, and there are opensource as well as payment options for obtaining the manifest.

The speaker explained that liaison with companies and advance access to data on shipments yet to arrive from abroad can considerably facilitate checks and the fulfilment of necessary requirements.

mentioned The speaker that an agreement with a company for the advance provision of consolidated data of all the international shipping lines for dual-track profiling, that is, via Pakistan Single Window for trade facilitation, and via the national system, that is, targeting Cargo Targeting System (CTS), for enforcement purposes.

The speaker shared that enforcement track will feed into the facilitation track so that checks and parameters will be in place with fast and precise pass-orstop decisions for consignments.

The speaker further highlighted that effective enforcement is also in place for transit trade cargo checks as well as real-time tracking against route diversion, deviation, and stoppage.

## Pakistan Single Window and Rapid Goods Clearance

Responding to a question about how to rigorous balance export control regimes and innovation especially in the context of the procedures involved in the import of 3D printers and drones, for which an NOC is required in Pakistan when these devices are being imported for recreational purposes, the one of the speakers considered that it was a policy rather an operational matter, but from the operational perspective, it was important to mention the Pakistan Single Window (PSW) which has been developed to gather all trade-related stakeholders in the country on one platform.

The speaker mentioned that routine clearance for any item demands that a required procedure, like a license or an NOC, should be completed. What has changed with PSW, the speaker shared, is that the erstwhile lengthy and diffuse procedure has been reduced and consolidated into a one-stop shop to make the clearance of goods faster and more efficient.

## Offensive Cyber and Trade Controls

Responding to a question about the impact of offensive cyber on nonproliferation and trade controls, one of the speakers remarked that cyber is a broad-spectrum threat, but with regard to strategic trade controls, the problem is that the more automation there is. the greater is the potential for disruption by different types of cyber actors. which calls threat for considerable investment in robust cybersecurity measures against these threats.

## No System is Perfect

Responding to a question about the credentials of the export control regimes in the context of the reported theft in 2021 of hundreds of kilos of uranium in a South Asian participant of Australia Group (AG) and the non-proliferation record of Australia, one of the speakers shared that Australia was aiming at the best possible non-proliferation standards.

The speaker added that technological change and advancement are constantly taking place. As a result, incomplete there is patchy and information, and proliferators. whether they are state or non-state actors, are always trying to stay ahead of the game, the speaker pointed out.

The speaker recognized that no system is going to be perfect and there will be mistakes and problems, but the objective is continuous improvement at the national level and the group level.

The speaker shared that it is part of the information exchange within the Australia Group plenaries as with the plenaries of other export control regimes, in which a lot of examples are provided together with the inside information on those examples, so that participants can learn from the experiences of others, including mistakes that might have been made.

Responding to the same question, another speaker clarified that the said the uranium theft had nothing to do with the Australia Group because the group does not deal with the nuclear matters and fissile material.

The speaker also clarified that all export control regimes were informal groups of like-minded states not bound by any treaty obligations like the NPT, and even in a case where one of the countries has violated rules of these regimes, there cannot be any legal penalty against that country, since these regimes are informal arrangements to regulate the export of certain commodities.

### AG-OPCW Overlap and AG Membership Rules

On the questions, whether Australia Group perhaps was a duplication of effort in the case of chemical trade, as Organisation for the Prohibition of Chemical Weapons (OPCW), what were the benefits for a country in becoming a participant in the Australia Group, and if the stringent rules of participation in the group needed to be relaxed somewhat, the responding speaker stated that the overlap with the role of the OPCW was one of the controversial elements of the Australia Group in implementing the CWC and the BWC.

It was mentioned that there was also controversy with some of the other export control regimes.

It was shared that there is dispersion of interests and objectives and capability in the group and also other export control regimes.

It was pointed out that the initial participants of the Australia Group were arguably leaders within the sphere with very strong commitment to stop proliferation.

The speaker stated that over time the group has expanded almost three times to its original size.

The speaker said that the group aims to set a high bar among those leading participants, and over time, others can converge toward those agreed best practices.

It was highlighted that the decisions related to membership and participation are made by consensus based indeed on very stringent benchmarks.

The speaker highlighted that even if there is even a small number of participants that are keen on a new participant joining, then the process cannot proceed at that point.

The speaker urged that, despite the controversy, it was important to look at the successes of the Australia Group and other export control regimes.

The speaker believed that was it not for regimes like the Australia Group, the world would be a more dangerous place in terms of chemical and biological weapons proliferation, just as the NSG has hoped to make the world a safer place.

## Managing Group Diversity

Answering the question, how does the Australia Group manage the complexity of dealing with all the countries with different levels of military and economic development as well as different priorities and visions, the responding speaker agreed that there is diversity within the group and it is something that the group has been very focused on for a long time.

Sharing own involvement with the group's outreach to encourage and assist the implementation of the CWC in a number of Southeast Asian countries, the speaker stated that there was a need for capacity building and

obtaining buy-in from government stakeholders and industry was challenging, but efforts were made to raise awareness and build buy-in by working closely with the lead agencies.

The speaker assured that the Australia Group was aligned as much as possible with the interest of the developing countries to ensure maximum access to technology.

#### Session 5

### Chair's Remarks

The chair stated that the MTCR and the NSG have played a crucial role in the maintenance of international peace and security.

The chair said that Pakistan shared the non-proliferation objectives of the multilateral export control regimes, as evidenced by the harmonization of national export control lists and guidelines with NSG and MTCR best practices.

The chair said that the contributions of these regimes to non-proliferation notwithstanding, they are facing challenges due to three major global trends, namely, rapid development of science and technology, exponential diffusion of technology to states not members of these regimes, and the growing expectations of the international community for regimes to be fair, non-discriminatory, and trade-friendly, and responsive to the

socioeconomic progress of the developing countries.

The chair recognized the important role played by the NSG in controlling dual-use technologies and maintaining international peace and security.

The chair highlighted that Pakistan remains fully cognizant of this role and has a long history of engagement with the NSG as a part of which the country has hosted several NSG outreach missions.

At the same time, the chair pointed out that there are challenges faced by Pakistan in terms of extensive and, occasionally, arbitrary use of the catchall provision which results in denials of some basic items which have uses in agriculture, public health, and industry.

The chair mentioned that Pakistan looks forward to discussions with the NSG on how to reach an agreement for access to these technologies.

The chair pointed out that Pakistan has also incorporated the MTCR's control list and the scope of controls in its national export controls, has continued to welcome any opportunity to engage with the MTCR, and has hosted MTCR outreach missions.

The chair highlighted that the besides the discussions on missile proliferation trends in MTCR's IEM, which are understandably technical, there is also a need for a platform – and there can be no more suitable platform than the UN – for broader discussions on arms control aspects of missile technology, because we do not have a treaty regulating this issue.

The chair pointed out that whereas MTCR deals with missile proliferation, it does not deal with restraints in terms of missile technology arms control and disarmament.

The chair stressed that there was also the need for discussions on the underlying security concerns of states which make them rely on weapons and discussions on how best to address those challenges.

The chair stressed that the international community expects the export control regimes to ensure fair access to dual-use technologies given their enabling role in addressing contemporary global challenge of public health, climate change, water, energy, and food security.

The chair considered that since the technical aspects of export control could not be divorced from political aspects, there was a need to strike a balance between the two.

## Q&A

NSG: Non-Member Adherence and Exception

The chair requested one of the speakers associated with one of the export control regimes to spell out the incentives that a non-member would have for declaring adherence to the NSG guidelines. The chair considered that it was important to know how the NSG finds space in terms of application of requirement for its its comprehensive safeguards agreement for non-par applications and for equipment related to nuclear safety.

The chair also asked the speaker to share their take on the determination by the NSG in 2012 regarding the nonpermissibility of the transfer of enrichment and reprocessing (ENR) equipment and how this determination qualifies with respect to 2008 exemption of the NSG for a non-NPT state.

Responding to the chair's request to spell out the incentives for an NSG non-member for declaring adherence to the NSG guidelines, one of the speakers stated that the NSG did not have a position on the particular issue of adherence by non-members. The speaker, therefore, chose to respond instead in their national capacity.

The speaker then mentioned that there is a possibility for deciding on the parameters to use in the future, in so far as incentives for non-members are concerned. The speaker remarked that the rules should apply to both participating governments and non-participating governments. Incentivization should bear on standards and the approach in terms of which any item(s) or part(s) of the item(s) are to be controlled.

The system, the speaker said, provides the standards and every country is expected to apply these standards in good faith. It was pointed out that it is possible sometimes to be denied items by one country and get them from another within the same group.

The speaker mentioned that Argentina had exported nuclear research reactors to Australia and Egypt, to the Netherlands and to Egypt. The speaker said that there is flexibility in this regard.

The speaker pointed out that the main thing about the "no undercut" principle is how far any participating country in the group wants to push this principle, because if the catch-all provision is pushed to the "no undercut" principle by any given member country then it becomes a political discussion within the group, in which case other members may say to that member that its decision not to export or its criteria do not apply to the rest.

Referring to the 2012 decision and 2008 decision, the speaker mentioned being a part of the 2012 negotiating team, and stated that it is extremely strict with regard to some technologies in the way it is drafted at the same time that cooperation with India is excluded, while the margins for cooperation in nuclear and enrichment technology are extremely, unless there arises a different interpretation which will be covered.

## Intricacies of NSG Membership Criteria

Addressing a question about the membership criteria of the NSG and the process of reviewing these criteria and whether it was values and objectives or simply the supplier function, especially in the context of new and emerging technologies, that was driving the criteria, the responding speaker added that the process to join the NSG remains the same for every country, that is, a country must be party to the NPT, it should have technological capabilities in nuclear field or nuclear-related areas, it should be an exporter, and should have export control system with the capacity to control its exports.

The speaker mentioned that many countries have not reached that technological level over the years, while there are countries which are part of some bigger economic union that aspire to become members of the NSG.

The speaker shared that the NSG checks at every step of the way if those countries are producers or exporters.

The speaker clarified that there was evolution in terms of the membership, but not in the criteria for membership, which remain the same for any country that wishes to join.

The speaker pointed out that though the nuclear community remains the same more or less, there has been increase in the domain of dual use.

Since the NSG also controls export of dual-use technologies, the other possibility for NSG membership is that if, in the internal discussions of the group, it is found that a certain country is developing capabilities that could be of interest, even commercial interest, to the NSG, then that country of interest may be approached by the NSG, as the group would like uniform controls for everyone.

The chair added that small modular reactors (SMRs) are considered very significant and requested the speaker to throw some light on how NSG could adapt in the future when the SMRs become more pervasive. The chair stated that there can be hope in terms of some loosening of the strict requirements for the application for the comprehensive safeguards agreements.

In so far as SMRs are concerned, the speaker said that the four SMRSs currently in construction are in Argentina, Russia, and China. The speaker recognized that SMRs are going to be a challenge, which is also related to the policy of every country.

Citing the case of Argentina, the speaker pointed out that when an export is made, technology is also transferred. The speaker admitted that it might be different from other country cases and that other countries may not have the same precision. The speaker recognized that if the technology is being transferred, then the requirements are going to be high than those transfers that are just turn-key.

Responding to a question about the possibly adverse effect of the waiver to India on the legitimacy of the NSG which could impact its outreach to nonmembers, the responding speaker pointed out the NSG works with the lowest common denominator.

The speaker stated that the decision on the special agreement with India was the result of a long internal process, during which different points of view were considered.

The speaker highlighted that in terms of the comprehensive approach to the group's criteria for the joining countries, the group was able to get an exception for one case.

The speaker remarked that if the set criteria are considered strictly, it is not a failure, because, under this agreement, any country selling anything related to nuclear field to India is supposed to report so its whole cooperation is under scrutiny, in documents that are circulated to all members, in a way that the cooperation of no other country is under scrutiny, so to say, of the rest of the membership.

The speaker concluded that the for the expansion of the NSG membership or the membership criteria, the complexity of the technical and political aspects will have to be considered, in view of which, the speaker believer that this was perhaps the best regime that could be achieved with the principle of the lowest common denominator.

## Government-to-Government Assurances

On a question about the likely negative impact on trade by private enterprises entities and of cases wherein governments have refused to give assurances or certify for a private entity, entrusted in the import and export of certain dual-use commodities for commercial use, the responding speaker addressed the question on the basis of experience gained as member of the export control committee in Argentina.

The speaker mentioned that Argentina would never transfer items unless it is certain that the country receiving the item of the Argentine company would use them in a certain way. Because Argentina does not have jurisdiction in the country of the receiving company, the speaker said that the only way to proceed in such a case is to request the government of the country where the receiving enterprise is based to take required enforcement measures.

The speaker stressed that the government of the country where the receiving company is based has to guarantee that they will control the item imported from Argentina in the same way in which it is controlled in Argentina.

The speaker cautioned that if this is not the case then what is being sold cannot be controlled.

However, the speaker admitted that there was certainly room for discretionary political discrimination in all of this.

## Challenges of Missile Technology Control

The chair requested one of the speakers associated with one of the export control regimes to consider the issue of collaboration between states on antiballistic missile (ABM) systems. The chair pointed out that though ABM systems considered defensive are systems, vet ABM collaboration between states is practically collaboration on missile technology, and it is difficult to distinguish between technology in terms of an offensive or a defensive missile.

The chair added that a defensive missile after all is capable of acting as an offensive missile, and there have been cases when states have used missile interceptors as anti-satellite weapons (ASAT) systems. Since spacerelated technology is covered by the MTCR, the chair also requested the speaker to consider the aspect of space export control and international cooperation for legitimate space applications.

The responding speaker stated that the issue was huge and any attempt to answer it in the available time could not be sufficient.

In so far as the external side of the problem was concerned, the responding speaker considered that bilateral discussions related to ABM systems are not happening at the current juncture of the international situation, owing to the huge mistrust between countries on how to deal with this issue.

In so far as the internal side of the problem was concerned, the speaker mentioned that the missile technology for civil application and missile technology for military applications are nearly identical. The speaker pointed out that the dilemma was that supplying for civil uses of missile technology is no guarantee that there will no fusion between civil and military activities.

The speaker stressed that the low level of trust makes it difficult to deal with all missile-related issues and there are no serious discussions on the issue in its entirety.

In so far as space technology is concerned, the speaker pointed out that it is not exactly identical with missile technology and does not belong exclusively to missile activity as such, but when one takes into account the fact that space technology involves, to begin with, launch of rockets and equipment into space, one perceives that one has to start with missile technology anyway.

The speaker said that there is no restriction at the global level. The speaker admitted that horizontal proliferation could be curbed through export control regimes, but there was way to deal with vertical no proliferation and any country could develop missile technology. The speaker further reminded that countering horizontal proliferation could only slow down the pace of development globally but could not stop it.

The speaker cited the case of North Korea which in spite of everything, was developing missile technologies, which according to the speaker, was for defensive purpose of protecting the country. The speaker also shared that North Korea also became part of the club of countries that are ballistic missile possessors, despite sanctions and prohibitions.

The speaker believed that there was no serious effort to talk about challenges and issues related to the uses of missile technology. The speaker thought that Hague Code of Conduct (HCOC) also suffered from lack of transparency.

The speaker considered that in order to control new technologies there was an urgent need to create greater trust, confidence, and communication between government, industry, and the private sector in order to deal with the challenges of dual use. The speaker recommended that a functional and industry-governmentdynamic research interface had to deal with multiple issues related to trade control legislation and enforcement, market competitiveness, intellectual property rights, and legitimate trade in new technologies.

The speaker regretted that currently government-business partnership is not as robust as it could be. The speaker pointed out that this interface had to be in place and in working order at the national level, before export controls could be successful at the international level in a sustainable manner.

The speaker proposed that export control regimes would also benefit by reaching out more effectively to individual countries so that there is as little differential understanding of rules of the game as possible. The speaker pointed out that there was a balance of interests as well as a compromise business between activities and non-proliferation within individual commitments countries as well as export control regimes.

The speaker said that it is not possible to anticipate all the developments, as new technologies and new possibilities associated with them are emerging at a fast pace, leading the countries to try to their predominance preserve bv keeping their new technologies to themselves, because all of it is interlinked in such way that а technological predominance contributes to military predominance, which in turn helps maintain economic predominance.

The chair added that the technical aspect of export controls cannot be separated from the political aspect and that is where the balance has to be created.














## **CLOSING REMARKS**



**Ambassador Sohail Mahmood** Foreign Secretary of Pakistan

It is a great pleasure to join you all at the closing of this important conference on "Promoting Strategic Trade Controls through International Cooperation".\* I thank the NUST Institute for Policy Studies (NIPS), for its collaboration with the Foreign Office in holding this event.

On behalf of the Ministry of Foreign Affairs, I also thank the panelists and experts for their valuable contributions to the deliberations on various aspects related to the subject matter of this conference.

The conference was organized with the aim to promote interaction of national and international policy-makers, enforcement agencies, public sector organizations, private industry, and the academia. The idea was to benefit from their perspectives on a variety of topics, including Strategic Trade Management (STM), implementation of United Nations Security Council Resolutions on WMD-proliferation and its financing; and recent developments in the multilateral export control regimes.

> "Given Pakistan's thriving S&T landscape with extensive expertise, experience, and technological capabilities in ICTs, biotechnologies, and nuclear applications, it clearly qualifies for participation in the existing multilateral export control regimes."

I am confident that the conference has met its objectives. We hope it would lead to better understanding of the challenges related to trade in dual-use technologies, and that such understanding would pave the way for the streamlining of the control regimes for sensitive technologies to ensure unhindered trade for legitimate purposes, while addressing the risk of proliferation.

Pakistan shares the global concern regarding the threat posed to international peace and security by the proliferation of Weapons of Mass Destruction (WMD). It supports a strong rule-based, equitable, and nondiscriminatory international arms

<sup>\*</sup> Transcript of the remarks is also available at, <u>https://mofa.gov.pk/conference-on-promoting-strategic-trade-controls-through-international-cooperation-islamabad-5-6-september-2022/</u>.

control, non-proliferation, and disarmament regime, premised on the principle of equal security for all states. Such a regime is imperative for the maintenance of international peace and stability.

Accordingly, we have put in place extensive legislative, regulatory, and administrative frameworks for exercising effective controls over transfers of sensitive goods and technologies to prevent their diversion to non-peaceful uses. I understand that the participants have been briefed about the extensive export control mechanisms put in place by Pakistan, consistent with the standards being followed by the multilateral export control regimes, including the NSG, MTCR and the Australia Group.

While adhering to international export control standards and best practices, Pakistan strongly maintains that efforts for regulating international trade in dual-use technologies should not hamper free and equitable access to such technologies for legitimate socioeconomic applications.

An inclusive, non-discriminatory and principle-based approach will serve the multilateral export control regimes, as platforms of greater cooperation for trade development and regional prosperity without compromising their non-proliferation objectives, with greater legitimacy, credibility, and effectiveness.

On the other hand, policies of discrimination and exceptionalism are detrimental to the non-proliferation

objectives and credibility of the export control regimes. The 2008 countryspecific exemption by the NSG for transfers of nuclear technology not only harmed the cause of nuclear nonproliferation but also undermined strategic stability in South Asia.

Multilateral export control regimes must facilitate access to modern technologies for the economic progress of the developing countries. Moreover, there is a need to make the membership of the regimes more representative.

Such a transformation is warranted by the advent of new technologies like Information and Communication Technologies (ICTs), 3D printing, A.I., biotechnologies, quantum computing, and lethal autonomous weapon systems.

These technologies are all-pervasive and no longer the preserve of a few supplier states. A truly effective regime will, therefore, necessitate the participation of all the interested stakeholders, including emerging economies which are making great strides in these new and emerging technologies. Furthermore, given the applications extensive of these technologies in mitigating the global challenges of climate change, public health, water, energy and food security, access to these technologies should not denied political be based on considerations.

The UN recognizes science and technology as one of the key enablers for the achievement of Sustainable Development Goals (SDGs). The COVID-19 pandemic reinforced the need for international scientific and technological cooperation in an increasingly interconnected global community.

Given Pakistan's thriving S&T landscape, with extensive expertise, experience, and technological capabilities in ICTs, biotechnologies, and nuclear applications, it clearly qualifies for participation in the existing multilateral export control regimes.

Pakistan's participation in these regimes will further the nonproliferation objectives of these regimes. Pakistan will welcome nondiscriminatory criteria for the membership of these control regimes, provided these criteria are applied on the basis of fairness and impartiality.

Let me conclude by expressing the hope that the interactions during this conference and the contacts that you have established amongst yourselves will provide the basis for enduring cooperation and partnership in the pursuit of our shared objectives.

We also hope that you are carrying back pleasant memories of your stay in Islamabad.

## Profile

Ambassador Sohail Mahmood has been serving as the Foreign Secretary of Pakistan since April 17, 2019. He holds a Master's degree in History from Quaid-i-Azam University, Islamabad, and a Master's degree in International Affairs from Columbia University, New York. He joined the Foreign Service of Pakistan in October 1985. He has been Pakistan's Ambassador to Thailand and Permanent Representative to the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Bangkok (2009-13),Pakistan's Ambassador to Turkey, Macedonia, and Kosovo (2015-17) and the High Commissioner of Pakistan to India (2017-19).

Ambassador Sohail Mahmood is married with three children.







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