

Chair's Synthesis Paper
Open-ended Working Group
Taking Forward Multilateral Nuclear Disarmament Negotiations

I. Introduction

1. Pursuant to United Nations General Assembly resolution 70/33, entitled "Taking forward multilateral disarmament negotiations", adopted on 7 December 2015, an Open-ended Working Group was established to substantively address concrete effective legal measures, legal provisions and norms that will need to be concluded to attain and maintain a world without nuclear weapons, as well as to substantively address recommendations on other measures that could contribute to taking forward multilateral nuclear disarmament negotiations, including but not limited to (a) transparency measures related to the risks associated with existing nuclear weapons; (b) measures to reduce and eliminate the risk of accidental, mistaken, unauthorised or intentional nuclear weapon detonations; and (c) additional measures to increase awareness and understanding of the complexity of and interrelationship between the wide range of humanitarian consequences that would result from any nuclear detonation.

2. This paper synthesizes the main issues raised and recommendations made during the first meeting of the Group held from 22 to 26 February 2016. It also draws upon working papers submitted as of 7 April 2016.

3. The work of the Group was underpinned by deep concern over the threat to humanity posed by the existence of nuclear weapons and the catastrophic humanitarian consequences of any detonation. The risk of these catastrophic humanitarian consequences will remain as long as nuclear weapons exist. The increased awareness of and well documented presentations on the humanitarian impact of nuclear weapons compel urgent and necessary action by all States leading to a world without nuclear weapons.

4. Against these considerations and the growing awareness of the humanitarian impact of nuclear weapons, it was noted with concern that progress towards nuclear disarmament has been slow. Furthermore, concern was raised regarding the serious challenges faced by the existing United Nations disarmament machinery, including the Conference on Disarmament, which has not been able to carry out negotiations pursuant to an agreed programme of work in two decades.

5. In light of the current paralysis affecting the United Nations disarmament machinery, many delegations expressed the view that there would be merit in pursuing an open and inclusive approach leading to the conclusion of concrete effective legal measures.

6. Views were expressed about the existence of a legal gap in the current international regime for the prohibition and elimination of nuclear weapons. It was recalled that Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) established an obligation on each of the States Parties to, inter alia, pursue negotiations in good faith on effective measures relating to nuclear disarmament. It was noted, however, that the NPT does not provide further guidance as to the objectives of negotiations that should be pursued in good faith on effective measures, either legal or non-legal. The view was expressed that additional and more specific legally binding provisions and other normative arrangements are required to operationalise and

complement the NPT and that such provisions and arrangements could be pursued on a multilateral, regional, plurilateral or bilateral basis.

7. On the other hand, several delegations believed that Article VI of the NPT does not contain a legal gap and that it provides an essential foundation for the pursuit of nuclear disarmament. They considered that there is no general and universally applicable authorization or prohibition in international law of the possession of nuclear weapons. They stressed that the international security environment, current geopolitical situation and role of nuclear weapons in existing security doctrines should be taken into account in the pursuit of any effective measures for nuclear disarmament. Approaches that did not take this into account would not achieve participation from nuclear-armed States and other States that rely on nuclear weapons in their security doctrines. They further considered that the best chance for reaching a world without nuclear weapons would be through the involvement of all States that possess nuclear weapons.

8. The view was expressed that divergent positions on a legal gap could be set aside in light of the complementary nature of many of the suggested approaches for achieving and maintaining a world without nuclear weapons. In fact, the different approaches may be more complementary than is often assumed with the differences focusing on the underlying motivation of different stakeholders for nuclear disarmament and which priority is therefore given to different effective legal and non-legal measures.

9. The Group also discussed the perceived effectiveness of nuclear deterrence in the current international security environment. A number of States continued to affirm their reliance on nuclear weapons in their security doctrines. Others raised questions regarding the efficacy of nuclear deterrence policies in light of the difference between the current international security environment and the context in which these policies were historically conceived.

II. Concrete effective legal measures, legal provisions and norms that will need to be concluded to attain and maintain a world without nuclear weapons

10. In addressing concrete effective legal measures, legal provisions and norms that will need to be concluded to attain and maintain a world without nuclear weapons, many possible elements were identified that could form part of a legal instrument or set of instruments. It was noted that many of these elements coincide with obligations undertaken by several States pursuant to their existing treaty-based commitments, including through the NPT and the various nuclear-weapon-free zone treaties. They are also analogous to a number of the core prohibitions contained within the Biological Weapons Convention and the Chemical Weapons Convention. The pursuit of many measures and provisions could benefit both disarmament and non-proliferation objectives, even if pursued exclusively by non-nuclear-weapon States.

11. Core prohibitions needed to achieve and maintain a world without nuclear weapons include, inter alia, measures relating to any use, acquisition, possession, stockpiling, transfer, development and production of nuclear weapons.

12. Additional core prohibitions can include measures relating to the provision of assistance to any nuclear weapon programme, including financing, accepting the deployment on one's territory of nuclear weapons possessed by a third-party, permitting visitation, transit or overflight

of nuclear weapons through one's territory and the provision of special fissionable material that is not subject to comprehensive safeguards of the International Atomic Energy Agency.

13. Victim assistance, decontamination and remediation are other dimensions yet to be fully explored as possible essential elements comprising any effective legal measures, legal provisions and norms.

14. A more detailed list of possible essential elements identified can be found in annex I.

15. Various measures were also identified under the progressive approach, which entails the parallel and simultaneous elaboration of building blocks, consisting of effective legal measures and non-legal measures.

16. These building blocks could include the pursuit of new legal instruments and related arrangements such as, inter alia, (a) negotiating a treaty to prohibit the production of fissile materials for use in nuclear weapons, as well as the declaration of all fissile material designated as no longer required for military purposes and arrangements to ensure that such material remains permanently outside military programmes, (b) the pursuit by the Russian Federation and the United States of America of a further round of bilateral strategic arms reductions, including through negotiations on a post-NEW START agreement, (c) commencement of plurilateral or multilateral negotiations on strategic arms reductions, (d) pursuit of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons, and (e) negotiation of a multilateral agreement or agreements on the prevention of an arms race in outer space.

17. Building blocks could also include the consolidation of existing legal regimes, instruments and measures, such as, inter alia, (a) achieving the early entry into force of the Comprehensive Nuclear-Test Ban Treaty, (b) achieving universal adherence to the NPT as well as to IAEA comprehensive safeguards agreements and the Additional Protocol, (c) achieving universal adherence to the International Convention for the Suppression of Acts of Nuclear Terrorism as well as the Convention on the Physical Protection of Nuclear Materials and its Amendment, (d) consolidation and strengthening of existing nuclear-weapon-free zones and the establishment of new zones, especially in the region of the Middle East, and (e) observance of the principles and norms of relevant resolutions of the General Assembly of the United Nations on nuclear disarmament and non-proliferation.

18. Regarding provisions, proposals were made to draw examples from regional nuclear-weapons-free zone treaties, especially those provisions relating to prohibitions, other provisions, definitions and organization.

19. On norms, some delegations believed that it was imperative to shift the discourse on nuclear weapons from strategic, security and military consideration to humanitarian, moral and ethical ones. They considered that building international agreement on the prohibition of nuclear weapons would contribute to efforts to achieve and maintain a world without nuclear weapons. Other delegations expressed the view that the pursuit of such a prohibition could be incompatible with the maintenance of strategic stability and reliance on policies of nuclear deterrence.

20. The Group broadly considered the main features of four distinct approaches for the pursuit of a world without nuclear weapons, including a comprehensive nuclear weapons

convention, a nuclear weapon ban treaty, a framework agreement and a progressive approach based upon building blocks. These approaches are not necessarily mutually exclusive.

21. A comprehensive nuclear weapons convention would establish all provisions for the prohibition and elimination of nuclear weapons. Many delegations consider that the process for the total elimination of nuclear weapons should take place pursuant to a phased programme with specified timelines. Such a convention would require the development of effective means for verification and inspections. To be effective, all States possessing nuclear weapons would have to participate from the outset of negotiations.

22. A nuclear weapon ban treaty would provide the basic prohibitions and obligations for all States Parties and establish political objectives for the complete elimination of nuclear weapons. It would not include provisions relating to existing nuclear arsenals and their elimination. Such a treaty also would not necessarily include any provisions for verification. Proponents of a nuclear weapon ban treaty consider that, to be effective, it would not necessarily need to be universal or include any nuclear-armed State at its inception.

23. A framework agreement would consist of a chapeau agreement that establishes key prohibitions and provides for the subsequent negotiation of protocols that elaborate measures for the elimination of nuclear weapons and related objectives. It would not necessarily include a specific timeframe for accomplishing the elimination of nuclear weapons.

24. A progressive approach would entail the parallel and simultaneous elaboration of building blocks, consisting of effective legal measures and non-legal measures. It could be accompanied by practical, effective and confidence-building measures. These measures could be multilateral, plurilateral, bilateral and unilateral. A comprehensive nuclear weapon convention would most likely be required as the final step, after reaching the "minimization point", in such an approach. Negotiations on such a convention could only commence when all States consider the goal of a world without nuclear weapons to be achievable.

25. Various possible elements and provisions could be pursued under each of the four approaches and many could be pursued across more than one. The feasibility of other elements and provisions are closely linked to only a single approach. Possible elements and provisions vary in their connection to the process of disarmament and in their potential impact on efforts to achieve and maintain a world without nuclear weapons. They also vary in their salience to nuclear-armed States, non-nuclear-armed States and other States that continue to maintain a role for nuclear weapons in their security doctrines.

26. Views were also expressed on the criteria for evaluating the feasibility and effectiveness of various approaches for nuclear disarmament. For each approach, such criteria could include its scope and content, required membership, normative value, maturity and its potential to contribute to achieving and maintaining a world without nuclear weapons.

III. Other measures that could contribute to taking forward multilateral nuclear disarmament negotiations

27. The Group also considered other measures that could contribute to taking forward multilateral disarmament negotiations. Transparency, risk reduction and awareness-raising are important to achieve verifiable and irreversible nuclear disarmament.

A. Transparency measures related to the risks associated with existing nuclear weapons

28. The principle of transparency, along with the principles of irreversibility and verifiability, was underscored and deemed indispensable in the process of nuclear disarmament. Without transparency, nuclear disarmament cannot be credibly verified, nor would States have adequate confidence that nuclear disarmament measures have been accomplished in an irreversible manner. Increased transparency also alleviates mistrust among States and builds confidence and trust at regional and international levels.

29. Calls were therefore made for States possessing nuclear weapons to engage with a view to providing standardized information at regular intervals on, *inter alia*, the following: (a) the number, type (strategic or non-strategic) and status (deployed or non-deployed, and the alert status) of nuclear warheads within their territories as well as those deployed in the territories of other countries; (b) the number and the type of delivery vehicles; (c) the measures taken to reduce the role and significance of nuclear weapons in military and security concepts, doctrines and policies; (d) the measures taken to reduce the risk of unintended, unauthorized or accidental use of nuclear weapons; (e) the measures taken to de-alert or reduce the operational readiness of nuclear weapon systems; (f) the number and type of weapons and delivery systems dismantled and reduced as part of nuclear disarmament efforts; (g) the amount of fissile material dedicated for military purposes. Baseline information on these issues would also contribute to verification and nuclear disarmament negotiations.

30. In addition to providing information, calls were also made to establish a reporting mechanism within the framework of the United Nations with a view to enhance accountability of the nuclear-weapons States and to contribute to facilitating nuclear disarmament by other States possessing nuclear weapons.

31. There was also a suggestion to further develop human and technical capacity in order to improve the capability to detect nuclear explosions.

32. A more detailed list of possible transparency measures proposed can be found in annex II.

B. Measures to reduce and eliminate the risk of accidental, mistaken, unauthorized or intentional nuclear weapon detonations

33. With respect to measures to reduce and eliminate the risk of accidental, mistaken, unauthorized or intentional nuclear weapon detonations, calls were made for States possessing nuclear weapons and other relevant States to undertake, *inter alia*, further practical measures to reduce the role of nuclear weapons in their security doctrines, to reduce the operational status of nuclear weapons systems in ways that promote international stability and security, as well as to reduce or dismantle nuclear weapons designated as surplus stockpiles, while strengthening stockpile management and enhancing nuclear security.

34. Calls were also made for all States possessing nuclear weapons to declare and/or maintain all existing moratoria on nuclear test explosions. They are also urged to undertake all efforts necessary to comprehensively address the risk of unintended nuclear detonations,

including, but not limited to, protection of command and control systems against potential cyber threats.

35. The issue of the proliferation of non-State actors and the resulting increase of risks associated with existing nuclear weapons was also discussed.

36. A more comprehensive list of possible measures proposed to reduce and eliminate risks can be found in annex III.

C. Additional measures to increase awareness and understanding of the complexity of and interrelationship between the wide range of humanitarian consequences that would result from any nuclear detonation

37. With respect to additional measures to increase awareness and understanding of the complexity of and interrelationship between the wide range of humanitarian consequences that would result from any nuclear detonation, all States were called upon to, *inter alia*, promote disarmament and non-proliferation education, including on humanitarian consequences of the use of nuclear weapons, especially in States that possess nuclear weapons.

38. Delegations also called upon Member States, the United Nations system and civil society, including non-governmental organizations, academia, parliamentarians, the mass media and individuals to enhance public awareness about the threat of nuclear weapons, its impact on health and gender, the Sustainable Development Goals (SDGs), climate change and environment, protection of cultural heritage and human rights, including through observance of 26 September as the International Day for the Total Elimination of Nuclear Weapons.

39. A more detailed list of possible additional measures proposed to increase awareness of humanitarian consequences can be found in annex IV.

D. Other measures that could contribute to taking forward multilateral nuclear disarmament negotiations

40. Other measures that could play an important role in the nuclear disarmament process were also considered, including trust and confidence-building measures to create conditions necessary to facilitate further major reductions in nuclear arsenals, as well as the consolidation and strengthening of existing nuclear-weapon-free zones and the establishment of new zones.

41. A number of delegations considered the establishment of a robust and reliable international verification regime would become necessary as the world comes closer to the complete elimination of nuclear weapons. Here, the continuation of work on developing verification capabilities, such as through the International Partnership for Nuclear Disarmament Verification, was encouraged to meet the present and future challenges of transparent, irreversible and effectively verifiable nuclear disarmament, which could possibly be accompanied by an effective international response mechanism and rigorous measures in case of violations.

42. Other proposals were also mentioned, including the call for negotiation and adoption of a universal and legally binding instrument on negative security assurances.

43. A more detailed list of other measures proposed can be found in annex V.

IV. Recommendations proposed by various delegations

44. Various recommendations were proposed to move forward multilateral nuclear disarmament negotiations.

45. Proposals were made to begin at an early date a multilateral diplomatic process for the negotiation of a legally binding instrument or set of instruments for the prohibition of nuclear weapons leading to their total elimination. The elimination of nuclear weapons should occur in a transparent, irreversible and verifiable manner, within a multilaterally agreed and clearly defined time frame.

46. More specific proposals were also made, including one to commence the negotiation process in 2016 and conclude within two years. These negotiations should be conducted in accordance with the rules of procedure of the General Assembly of the United Nations. Delegations supporting this proposal also pointed to the lack of substantial progress in disarmament efforts, a fragile international security environment and the findings uncovered by the humanitarian initiative as strong motivating factors to commence negotiations as a matter of urgency.

47. Another proposal was made for the commencement of negotiations for the early conclusion of a comprehensive convention on nuclear weapons to prohibit their possession, development, production, acquisition, testing, stockpiling, transfer, use or threat of use and to provide for their destruction. It was further proposed that such negotiations could take place within the Conference on Disarmament, including through the immediate establishment of an ad hoc committee on nuclear disarmament, with a negotiating mandate. Delegations supporting this proposal placed emphasis on the urgent necessity of negotiating and bringing to a conclusion a phased programme for the complete elimination of nuclear weapons with a specified time frame.

48. Delegations advocating the progressive approach stressed the need to take into account the prevailing international environment. They considered that progress in multilateral nuclear disarmament requires as an immediate priority the promotion of practical and effective confidence-building measures. An early contribution to the development of trust and confidence would be agreement on a broad and flexible framework, comprising legal and non-legal measures, which should drive the disarmament process. It was suggested that building a climate of trust and confidence would further ensure inclusive processes, including through demonstrated implementation of concrete disarmament measures by all States possessing nuclear weapons, as well as ongoing commitment to non-proliferation by all non-nuclear-weapon States. Here, an important landmark would be when the "minimisation" point is reached where weapon numbers are reduced to very low numbers and when an internationally reliable verification regime with effective verification techniques and methods is established. In due course, a multilateral nuclear weapons convention or a plurilateral arrangement among those with nuclear weapons could be considered as the final "building block".

Annex I: Possible essential elements identified

	Elements	Detail of Elements
	<u>Prohibitions</u>	
1	Elimination of nuclear weapons	<ul style="list-style-type: none"> - Five phases for the elimination of nuclear weapons were identified: taking nuclear weapons off alert, removing weapons from deployment, removing and disfiguring the "pits" and placing the fissile material under international control. - Obligations to eliminate nuclear arsenals within an agreed timeframe and in a specified manner could be included.
2	National implementation measures	<ul style="list-style-type: none"> - Requirement for States parties to adopt necessary legislative measures to implement their obligations under the convention, and to establish a national authority responsible for national implementation.
3	Rights and obligations of persons	<ul style="list-style-type: none"> - Application of rights and obligations to individuals and legal entities as well as States to report violations, and provide procedure for apprehension and fair trial of individuals committing crimes under the convention.
4	Agency	<ul style="list-style-type: none"> - Establishment of an agency to implement the legal instrument and be responsible for verification, ensuring compliance and decision making, as well as an executive council and a technical secretariat. - The International Atomic Energy Agency (IAEA) could have an active role in verifying nuclear disarmament and non-proliferation. - International community could support and strengthen the IAEA's safeguard system, including universal adherence to and implementation of comprehensive safeguards agreements and additional protocols.
5	Nuclear material	<ul style="list-style-type: none"> - Prohibition of the production of any fissionable or fusionable material which can be directly used to make nuclear weapons. - Dismantlement or conversion for peaceful use of facilities for the production of fissile material for use in nuclear weapons or other nuclear explosive devices. - Designation of fissile material which is no longer required for military purposes. - Development of legally binding verification arrangements, within the context of the IAEA.
6	Cooperation, compliance and dispute settlement	<ul style="list-style-type: none"> - Provisions may include consultation, cooperation and fact-finding to clarify and resolve questions of interpretation with respect to compliance and other matters. - Possibility of referring a legal dispute to the International Court of Justice (ICJ) by mutual consent of State parties. - Recommendation that the United Nations General Assembly request an advisory opinion from the ICJ on a legal dispute. - Provision of a series of graduated responses for non-compliance, and, if required, sanctions or recourse to the United Nations General Assembly and the Security Council for action.
7	Financing	<ul style="list-style-type: none"> - Obligation for States parties to cover the costs of the elimination of nuclear arsenals. - Establishment of an international fund to assist States with difficulties in meeting their obligations.

	Elements	Detail of Elements
8	Prohibition on financing, assistance, encouragement, or inducement of acts (use, development, etc.)	<ul style="list-style-type: none"> - Requirement for States parties not to assist, encourage, or induce any State, directly or indirectly, in undertaking any act prohibited under the instrument. - Prohibition of any form of financial or material support to public and private enterprises involved in nuclear weapons activities. - Prevention of public funds and foundations from supporting any entity involved in nuclear weapons activities. - Exempting the funding of activities deemed necessary to meet other obligations under the instrument, such as disarmament and securing weapons and related facilities and materials, while meeting stockpile elimination obligations.
9	Optional Protocol concerning energy assistance	<ul style="list-style-type: none"> - The use of nuclear energy for peaceful purposes would not be prohibited. An optional protocol establishing a programme of energy assistance could be included.
10	Prohibitions on acquisition of nuclear weapons or other explosive nuclear devices	<ul style="list-style-type: none"> - Prohibitions on acquisition of nuclear weapons or other explosive nuclear devices
11	Prohibition on deployment	<ul style="list-style-type: none"> - Prohibition on operational deployment by nuclear armed States parties and requirement for them to immediately take their weapons off deployment as part of their stockpile elimination plans - Prohibition from receiving, storing, installing, or accepting deployment of nuclear weapons on their territories
12	Prohibition on use and threat of use	<ul style="list-style-type: none"> - Prohibition from participating in any act related to the use of nuclear weapons.
13	Prohibition on possession	<ul style="list-style-type: none"> - Prohibition to possession of nuclear weapons
14	Prohibition on stockpiling	<ul style="list-style-type: none"> - Prohibition of stockpiling of nuclear weapons.
15	Prohibition on transfer or receive of nuclear weapons	<ul style="list-style-type: none"> - Limitations on States from receiving nuclear weapons or taking control over such weapons. - Prohibition of transit of nuclear weapons through the territory of States parties could be considered.
16	Prohibition on development and production	<ul style="list-style-type: none"> - Adoption of measures to prevent the use of new technologies for upgrading existing nuclear-weapon systems, including the prohibition of nuclear-weapon research and development. - Cessation by the nuclear-weapon States of the development and qualitative improvement of nuclear weapons and their means of delivery and related infrastructure. - Prohibition on development of nuclear weapons and delivery system could preclude research on nuclear research and testing of nuclear weapons, including subcritical and other means of testing - Prohibition from participating financially or otherwise in the production of nuclear weapons.
	<u>Obligations</u>	
17	Recognition of the rights of victim	<ul style="list-style-type: none"> - Provision of assistance to victims towards the fulfilment of their rights. - Provision of support to other States in such efforts.

	Elements	Detail of Elements.
18	Decontamination and remediation	<ul style="list-style-type: none"> - Responsibility to protect populations from any contamination through necessary measures to exclude populations from the area and, over time, through processes of decontamination and remediation.
19	Oversight, review and implementation	<ul style="list-style-type: none"> - Monitoring and verification of compliance in cooperation with other relevant agencies, such as the CTBTO, which should have a mandate to educate the global public about the role of the treaty as well as the catastrophic humanitarian consequences of the use and testing of nuclear weapons.
20	Cooperation and assistance to meet the obligations of the treaty	<ul style="list-style-type: none"> - Provision of a framework for international cooperation and technical assistance to working towards meeting obligations.
21	Military cooperation	<ul style="list-style-type: none"> - Requirement not to participate in any act prohibited, such as military alliance, and ensuring that participation is compatible with their commitments and policies under the instruments.
22	Verification	<ul style="list-style-type: none"> - Declaration and reports from States, routine inspections, challenge inspections, on-site sensors, satellite photography, radionuclide sampling and other remote sensors, information sharing with other organizations, and citizen reporting. - Establishment of an international monitoring mechanism for verifying the elimination of nuclear weapons. - Verification could be based on existing IAEA safeguards and the CTBTO in dealing with material accountancy and controls and detention of nuclear tests. - New verification measures to ensure effective maintenance of a world without nuclear weapons: verify elimination of nuclear weapons, irreversible removal of fissile material, withdrawal and dismantlement of warheads and delivery vehicles, establish a preparatory commission to resolve outstanding issues and establish implementation and verification mechanisms.

Annex II: Proposed transparency measures related to the risks associated with existing nuclear weapons

	Measures	Details of measures
1	Reporting in standardised format as agreed at the NPT Review Conference	<p>States possessing nuclear weapons to report on their nuclear arsenals, using format agreed at NPT Review Conference in 2010 and reiterated in 2015, by providing information on:</p> <ul style="list-style-type: none"> (a) the number, type (strategic or non-strategic) and status (deployed or non-deployed, and alert status) of nuclear warheads within their territories as well as those deployed in the territories of other countries; (b) the number and the type of delivery vehicles; (c) the measures taken to reduce the role and significance of nuclear weapons in military and security concepts, doctrines and policies; (d) the measures taken to reduce the risk of unintended, unauthorized or accidental use of nuclear weapons; the measures taken to de-alert or reduce the operational readiness of nuclear weapon systems; (e) the number and type of weapons and delivery systems dismantled and reduced as part of nuclear disarmament efforts; (f) the amount of fissile material for military purposes.
2	Promote public access to information disclosed	Making known to the general public of information disclosed in report by nuclear weapon States, particularly the people living in nuclear weapon States, other territories which host nuclear weapons or nuclear weapons have been in transit, and their neighbouring countries, as it is needed to mobilize popular support of the people.
3	Make more use of available information	Promotion of greater use of already available information by non-nuclear weapon States.
4	Human and technical capacity	Further develop human and technical capacity in order to improve the detection capability of nuclear explosions.
5	Establishment of and strengthening a robust and reliable international verification regime	Continue work on developing verification capabilities, such as through the International Partnership for Nuclear Disarmament Verification to meet the present and future challenges of transparent, irreversible and effectively verifiable nuclear disarmament. Such challenges will only multiply as nuclear arsenals are reduced on the way to a world without nuclear weapons, possibly to be accompanied by effective international response mechanism and rigorous measures, such as sanctions, in case of violations.

Annex III: Proposed measures to reduce and eliminate the risk of accidental, mistaken, unauthorized or intentional nuclear weapon detonations

	Measures	Details of measures
1	Practical measures to be undertaken by States possessing nuclear weapons	<p>States possessing nuclear weapons [and other relevant States] to undertake further practical measures to:</p> <ul style="list-style-type: none"> (a) reduce the role of nuclear weapons in their security doctrines, and in military training school; (b) reduce the number of deployed strategic nuclear weapons, and the operational status of nuclear weapons systems in ways that promote international stability and security; (c) reduce the number of non-strategic and non-deployed nuclear weapons, or dismantle nuclear weapons designated as surplus stockpiles; (d) strengthen the stockpile management and enhance nuclear security; (e) ensure protection of command and control systems against potential cyber threats; (f) declare and/or maintain all existing moratoria on nuclear test explosion (including computer simulated ones) as well as restraint from the use of new nuclear weapons technologies and from any action that would defeat the object and purpose of the CTBT; (g) declare and/or maintain all existing moratoria on the production of fissile material for use in nuclear weapons or other nuclear explosive devices; (h) dismantle or convert for peaceful uses facilities for the production of fissile material for use in nuclear weapons or other nuclear explosive devices; and (i) discourage improvement of nuclear weapons.
2	De-alerting	<p>States possessing nuclear weapons conclude agreements to eliminate launch-on-warning from their operational settings and carry out a phased stand down of high-alert strategic forces.</p> <p>States possessing nuclear weapons, while moving towards a world without nuclear weapons, develop and implement nuclear weapons policies that reduce and eliminate any dependence on early launch or launch on warning postures and refrain from increasing the alert levels of their nuclear forces.</p> <p>States possessing nuclear weapons begin developing a long-term formal agreement to lower the alert level of nuclear weapons, with all agreed steps to be measurable and carried out within an agreed timeframe.</p>
3	Protection of command and control systems	Protection of command and control systems against potential cyber threats.
4	Security assurances and creating conducive conditions	<p>Continued commitment by all States possessing nuclear weapons to respect fully their commitments with regard to security assurances or to extend such assurances if they have not yet done so.</p> <p>Creation of conditions that would facilitate further major reductions in nuclear arsenals, including efforts to reduce levels of hostility and tension between States – particularly between those possessing nuclear weapons.</p>

Annex IV: Additional measures proposed to increase awareness and understanding of the complexity of and interrelationship between the wide range of humanitarian consequences that would result from any nuclear detonation

	Measures	Details of measures
1	Disarmament and non-proliferation education	<ul style="list-style-type: none"> - Promotion of disarmament and non-proliferation education, including on the humanitarian consequences of the use of nuclear weapons, especially in States that possesses nuclear weapons. - Promotion of education and training on disarmament and non-proliferation in schools and universities. - Promoting information about the human costs of a nuclear explosion. - Cooperation with civil society in promoting disarmament and non-proliferation education. - Training in peace and nuclear disarmament. - Training in international law, including international humanitarian law. - Inclusion of lessons learnt from Hiroshima and Nagasaki as part of history textbooks.
2	Understanding of the humanitarian consequences of nuclear weapons	<ul style="list-style-type: none"> - Raising awareness about the reality of the use of nuclear weapons at the grassroots level across national borders and generations should be promoted. - Designating atomic bomb survivors and their relatives as special communicators for a world without nuclear weapons. - Establishing a system of youth communicators/ambassadors for a world without nuclear weapons. - Sending the aforementioned communicators to spread the awareness overseas. - Translating testimonies of the atomic bomb survivors into multiple languages and organising exhibitions on the reality of nuclear weapons overseas. - Establishing youth peace ambassadors program to share messages of peace with the United Nations, its relevant organs, the European Union, parliaments, and countries abroad.
3	Interconnected nature of the consequences of any nuclear detonation	<ul style="list-style-type: none"> - Raising awareness of the disastrous consequences that any nuclear detonation could have on a whole set of issues, including the SDGs, the environment, climate change, the protection of cultural heritage, human rights, humanitarian action, children's rights, public health and gender.
4	Integrating nuclear disarmament with policy making and elevating it to the highest levels of the global governance	<ul style="list-style-type: none"> - Nuclear disarmament needs to be integrated with policy making in all other areas which have a global impact such as sustainable development, climate change, food security, cyber terrorism, human rights or gender equality.
5	Ensuring that decision makers, academics and diplomats get more exposure to the real impact of nuclear weapons	<ul style="list-style-type: none"> - Visiting Hiroshima and Nagasaki to witness the real consequences of nuclear weapons, and talking with the survivors of atomic bombings in the areas.
6	Discussion on humanitarian impacts of nuclear weapons in existing global fora	<ul style="list-style-type: none"> - Bringing attention of nuclear weapons issues at high-level meetings such as the World Humanitarian Summit. - The continuation of holding conferences on the humanitarian impact of nuclear weapons.
7	Reach-out programmes through conventional media, social media, and commemorative events on special days	<ul style="list-style-type: none"> - Reach-out programmes through conventional media such as TV, radio and printed materials, as well as social media and commemorative events on special days in our modern history. - Using media to circulate papers from training programs in areas of peace

	Measures	Details of measures
		and nuclear disarmament so that humanitarian consequences are made known to the public.
8	Engagement with parliamentarians, youth, academia, civil society, and religious leaders	- Engagement with parliamentarians who have crucial roles in national policy making, as well as youth, academia, civil society, and religious leaders who can influence public opinion.
9	Studies on risks associated with nuclear weapons	- More research and studies about risks, especially long-term consequences, associated with nuclear weapons, should be conducted.
10	Observance of the International Day for the Total Elimination of Nuclear Weapons	- All States need to enhance public awareness about the threat of nuclear weapons, including the humanitarian consequences of nuclear weapon detonation; in particular through continued observance of 26 September as the International Day for the Total Elimination of Nuclear Weapons.

Annex V: Other measures that could contribute to taking forward multilateral nuclear disarmament negotiations -

	Measures	Details of measures
1	Nuclear-weapons States should demonstrate strong genuine political will to advance multilateral nuclear disarmament negotiations	- The international community should urge all nuclear-weapons States to demonstrate strong genuine political will to advance multilateral nuclear disarmament negotiations.
2	Cooperation between States	- Apply a cooperative security approach to promote cooperation between nations subscribing to nuclear deterrence and those nations that gave up or never subscribed to it.
3	Nuclear-weapon-free zones	- Consolidation and strengthening of existing nuclear-weapon-free zones and the establishment of new zones.
4	Establishment of a robust and reliable international verification regime	- The establishment of an international verification regime would become required as the world comes closer to the complete elimination of nuclear weapons. - Encourage the continuation of work on developing verification capabilities, such as through the International Partnership for Nuclear Disarmament Verification to meet the present and future challenges of transparent, irreversible and effectively verifiable nuclear disarmament, possibly to be accompanied by effective international response mechanism and rigorous measures in case of violation.
5	United Nations initiatives, forums, approaches and mechanisms	- Promote United Nations initiatives and forums for nuclear disarmament. - Employ United Nations approaches and mechanisms such as diplomacy, negotiation, mediation, adjudication and arbitration, and regional approaches to resolving security issues and international conflicts.
6	International Monitoring System (IMS)	- Cooperation by the international community on maintaining and enhancing the International Monitoring System (IMS) as an effective regime for nuclear test detection.
7	Convention on the Physical Protection of Nuclear Material	- Promote the entry into force of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material.
8	The Hague Code of Conduct against Ballistic Missile Proliferation (HCoC)	- Implementation of the Hague Code of Conduct (HCoC) should be promoted, contributing to its universal adoption.
9	Legally-binding negative security assurances	- Pursue negotiations on a system of unconditional legally-binding arrangements to assure non-nuclear weapon States against the use of threat of use of nuclear weapons.
10	Civil society engagement	- Develop rules to allow civil society to play a role in domestic politics, especially in nuclear-weapon States, similar to academics and parliamentarians, in order to influence nuclear disarmament policies in those States.

