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## Group of Governmental Experts to further consider nuclear disarmament verification issues

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# Nuclear disarmament verification to achieve and maintain a world free of nuclear weapons

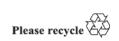
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1. The main purpose of this paper is to present "food for thought" to the Governmental Group of Experts (GGE) established by the United Nations General Assembly (UNGA) Resolution 74/50 "Nuclear Disarmament Verification." It proposes a particular way to organize its work which focus on effective and efficient progress on nuclear disarmament verification and, at the same time, could contribute to make progress on nuclear disarmament itself.

### I. The role of the GGE on NDV established by resolution 74/50

- 2. The GGE would be the second one established by a UNGA Resolution focused on Nuclear Disarmament Verification.<sup>1</sup> Its mandate is contained in operative paragraph 6 of Resolution 74/50: "6. *Requests* the Secretary-General to establish a group of governmental experts of up to 25 participants, chosen on the basis of equitable geographical representation and equitable representation of women and men, which will meet in Geneva for four sessions of one week each in 2021 and 2022, to further consider nuclear disarmament verification issues, including, inter alia, the concept of a Group of Scientific and Technical Experts, building on the report of the Group of Governmental Experts on Nuclear Disarmament Verification<sup>2</sup> and the views of Member States referred to in paragraph 2 above."
- 3. Operative paragraph 2: "*Requests* the Secretary-General to seek the substantive views of Member States on the report of the Group of Governmental Experts on Nuclear Disarmament Verification and to report back to the General Assembly at its seventy-fifth session." This report was published on 25 June 2020 in UNGA document A/75/126.
- 4. The way the information is presented in both documents, the report of the previous GGE on and the report of the UNSG on the views of Member States, reflects the status of current discussion at UNGA. Both reports present a number of aspects that are related to NDV, without a particular order or relation among themselves. All of those aspects might be relevant in the broad spectrum of NDV, but none of these documents presented the role of NDV in advancing nuclear disarmament<sup>3</sup>, nor the importance of NDV measures in achieving

<sup>&</sup>lt;sup>3</sup> Operative paragraphs 6 and 7 of UNGA Resolution 71/67 contain the mandate of the first GGE.





<sup>&</sup>lt;sup>1</sup> The first one was established by UNGA Resolution 71/67. The report of its work is contained in document A/74/90.

<sup>&</sup>lt;sup>2</sup> UNGA Document A/74/90.

and maintaining a world without nuclear weapons, which consideration was the mandate of the first GGE.

- 5. In this regard, it is understandable that the GGE established by UNGA Resolution 71/65 concluded that further work on this matter is needed. As it was the first time a GGE on NDV took place, many elements where on top of the table with not enough time to deal with all of them.
- 6. In order to avoid *ad infinitum* deliberations on NDV, which could be very interesting but not relevant to advancing nuclear disarmament, good organization of time and focus on the objective of the GGE is of the outmost importance.

#### II. Proposal for the organization of work of the GGE on NDV

- 7. While there is no multilateral agreed definition of NDV, verification could be understood as "the process of gathering and analyzing information to make a judgment about parties' compliance or non-compliance with an agreement. It aims to build confidence between parties, assuring them that their agreement is being implemented effectively and fairly. In addition to enhancing credibility of the agreement, successful verification may help increase trust between the parties more generally."
- 8. "Since the General Assembly adopted its first resolution, on 24 January 1946, the international community has recognized the need for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction and for effective safeguards by way of inspections and other means to protect complying States against the hazards of violations and evasions."
- 9. Dealing with nuclear disarmament verification in general terms could lead to many topics which might not directly contribute to the advancement of nuclear disarmament. So, focusing on the mandate of the GGE is significant to avoid distraction and the temptation of dealing with other matters related to NDV which are not directly linked to the role of NDV measures in achieving and maintaining a world without nuclear weapons.
- 10. To properly organize the work of the GGE it is imperative to consider that NDV includes both political and technical elements. Political and technical elements are related to "what is expected" of nuclear disarmament verification, while only technical ones are relate to "how to" conduct verification itself. The answer to the question "who will conduct it" is also both, political and technical. In this regard, it is relevant to recall that the international community has widely agreed to apply the principles of irreversibility, verifiability and transparency to nuclear disarmament.
- 11. While all of these elements must be explored, it is logical that the "what" guides the answers regarding "how" and "who will conduct it." Otherwise, deliberations on the "how" and "who will conduct it" could take forever and would not be successful, without actually addressing the verification needs of the nuclear disarmament and nonproliferation regime. This logic is the basis of this proposal.
- 12. It is important to highlight that, in order to achieve and maintain a world without nuclear weapons, NDV must not be limited to verification of the disarmament process until we reach the total elimination of nuclear weapons. NDV must also be in place in order to maintain that status and grant that nuclear disarmament has been accomplished in an irreversible manner. Without the latest, it would not be possible to fulfil the irreversibility principle, so verification for maintaining a world without nuclear weapons must be a part of

<sup>&</sup>lt;sup>4</sup> United Nations Institute for Disarmament Research (UNIDIR) and The Verification Research, Training and Information Centre (VERTIC), Coming to Terms with Security: A Handbook on Verification and Compliance, 2003, p.1.

Multilateral nuclear disarmament verification: applying the principles of irreversibility, verifiability and transparency", Working paper submitted by South Africa on behalf of Brazil, Egypt, Ireland, Mexico, New Zealand and Sweden as members of the New Agenda Coalition, Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, NPT/CONF.2015/PC.I/WP.30, 26 April 2012, p.3.

NDV. The elements of each of both stages must be define according to its role in the nuclear disarmament and non-proliferation regime.

- 13. In this regard, the GGE should aim at clarifying "what" needs to be verify. In the process towards achieving global zero, it should seek to identify "what" needs to be verify in order to give assurances that nuclear disarmament is taking place in an efficient, transparent and irreversible way. But it should also seek to identify what needs to be verify in order to maintain a world without nuclear weapons, at a time when their total elimination has been achieved.
- 14. In one hand, answering this question ("what") is essential for NDV efforts to be effective and efficient. In the other hand, the answer could contribute to create some agreements or basic common ground on nuclear disarmament, by agreeing on the main elements that are needed to achieve and maintain a world free of nuclear weapons.

### III. Focusing on "what"

- 15. It is well known that there is no consensus on how to make progress on nuclear disarmament. While some countries advocate for a step-by-step approach, others advocate for a comprehensive convention and another group of countries advocates for a legal framework. Discussion on approaches to nuclear disarmament had served as a distraction of the discussion of the "what is needed to achieve and maintain a nuclear weapon-free world" for the convenience of those who prefer maintaining the status quo.
- 16. Regardless of the diversity of views on the approach to be followed, which mostly defer from each other in the sequence to be follow and the type of instrument or instruments to be negotiated, looking at the big picture formed by the puzzle that represents the nuclear disarmament and nonproliferation regime, it is possible to see the pieces (elements) which could contribute or are needed to be in place in order to achieve and maintain a world without nuclear weapons. These elements would play its own role despite the nuclear disarmament approach that a particular State supports, and they could be agreed in a single or in multiple instruments; in a unilateral, in a bilateral or a multilateral way.
- 17. NDV must not be discussed in a vacuum. As NDV serves its own purpose in the regime, it must be directly linked to the elements that constitutes it. So, if we want NDV to play its role in it, there is no way to go around the questions, which elements are needed for the achievement and maintenance of a world without nuclear weapons?
- 18. In this regard, the Group could present as an outcome a proposal of the elements that NDV needs to take into account in order to fulfill its role. The list should not seek to be restrictive or exhaustive, but rather present those elements that, despite the preferred nuclear disarmament approach of each expert, are expected to be in place for the regime to fulfil its objective. Therefore, the inclusion of an element on the list should be based on its own merits, related to the role that it plays in the regime.
- 19. For the sake of making progress within the available time for the GGE, the elements to be considered should be limited to nuclear weapons itself and should not considered its delivery systems. As many of these systems are not limited to the delivery of nuclear weapons, but also of conventional weapons, while acknowledging that this topic is relevant to nuclear disarmament, it should be address separately.
- 20. In order to provide food for thought on which elements to be consider, it is convenient to consider previous deliberations on this matter. As background information, it would be useful for the GGE to take into account the elements contained in the report of the Openended Working Group (OEWG) established pursuant to General Assembly Resolution 67/56, "Proposals to take forward multilateral nuclear disarmament negotiations for the achievement and maintenance of a world without nuclear weapons."
- 21. As part of its work, the OEWG discussed in an open, constructive and transparent manner, elements to be considered in taking forward multilateral nuclear disarmament

<sup>6</sup> A/68/514

negotiations. These elements where classify in two categories, measures consisting of legally binding instruments towards achieving a world without nuclear weapons, to be implemented in an interim phase (towards the total elimination of nuclear weapons) and elements necessary for maintaining a world without nuclear weapons once that has been achieved. The elements were considered without preconditions or hierarchy.

- 22. The first category included the following list of measures:
- (a) A clear, legally binding universal and non-discriminatory multilateral commitment, on the part of all States, to the goal of nuclear disarmament, with clearly defined benchmarks and timelines.
- (b) Progressive, uninterrupted and irreversible reduction in nuclear arsenals, anywhere and of any type, with clear benchmarks and timelines accompanied by an international verification regime and the placement of all nuclear facilities under such a regime.
- (c) A multilateral, legally binding instrument dealing with all aspects of testing of nuclear weapons and the entry into force of the Comprehensive Nuclear-Test-Ban Treaty.
- (d) A multilateral, legally binding instrument dealing with fissile material that includes the following options.
  - (i) A treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.
  - (ii) A treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices and dealing with existing stocks of such material and the dismantlement or conversion, for peaceful uses, of facilities and related equipment for the production of fissile material for use in nuclear weapons or other nuclear explosive devices.
- (e) The provision of legally binding negative security assurances against the use or threat of use of nuclear weapons to non-nuclear-weapon States.
  - (f) Bilateral or plurilateral legal arrangements between nuclear-weapon States.
  - (g) A legally binding instrument on the no-first use of nuclear weapons.
- 23. As per the second category, the Working Group identified the following elements as necessary for maintaining a world without nuclear weapons once that has been achieved:
- (a) Complete elimination of nuclear weapons and nuclear weapons material and its verification.
  - (b) Prohibition of the use or threat of use of nuclear weapons.
- (c) Prohibition of the possession, stockpiling, development or transfer of nuclear weapons.
- (d) Prohibition of the production or use of already existing fissile material for nuclear weapons and placing all such fissile material under international safeguards.
- (e) Prohibition of nuclear-weapons tests in all their forms, including both supercritical and subcritical tests.
- 24. While considering the above-mentioned report, which was adopted by consensus at the OEWG, the GGE could develop its own list of measures and elements which are needed to complete the existing nuclear disarmament and nonproliferation regime. After doing so, it could seek agreement on which of those elements requires to be verified to play its role in the regime and grant that nuclear disarmament is taking place in a transparent, verifiable and irreversible manner.
- 25. Those elements will not only answer the question "what" needs to be verify. They will help to have clarity on the specific expectations and needs for nuclear disarmament verification. This is fundamental to make effective and efficient progress on NDV, as addressing these expectations and needs should constitute the main objective of it. Without

the identification of these objective NDV is useless for the purpose of advancing nuclear disarmament.

#### IV. Proposal of main elements to be considered by the GGE

26. While acknowledging that "the implementation of verification solutions depends on political decisions about arms control and disarmament commitments, which are difficult to anticipate in advance," it is possible to envisage some of the main elements that will need to be consider by the regime in order to achieve and maintain a world free of nuclear weapons and the expectations of a credible verification mechanism for each of them.

27. In this regard, also as "food for thought", the following list presents a proposal of the main elements to be considered by the GGE:

Element	NDV Expectation
Fissile material for peaceful uses	To grant no diversion to military uses.
Production of fissile material for nuclear weapons or other nuclear explosions	To grant a global moratorium on the production of fissile material for nuclear weapons and other nuclear explosive devices.
Fissile material for military uses	To be accountable and under higher safeguard standards than the existing ones for fissile material for peaceful uses.  To provide confidence that such material could not be withdrawn or diverted for nuclear weapons purpose.
Fissile material in nuclear weapons	To grant that, after its dismantlement, its fissile material will be permanently removed from nuclear weapons programs.
Facilities for the production of fissile material for nuclear weapons or other nuclear explosive devices	To grant its irreversible elimination, dismantlement or conversion.
Facilities for the integration/ensemble of nuclear weapons and other nuclear explosive devices	To grant its irreversible elimination, dismantlement or conversion.
Nuclear test facilities	To grant its irreversible elimination, dismantlement or conversion.
Nuclear reactors	To grant its use is restricted to peaceful uses.
Enrichment sites	To grant its use is restricted to peaceful uses.

28. Finally, after reaching agreement on the list of elements, another aspect that will be needed to be discussed is the development of transparency measures which will contribute to the credibility and effectiveness of the verification mechanisms, such as initial declarations,

Erästö, Tytti, Ugnė Komžaitė, and Petr Topychkanov, "Operationalizing Nuclear Disarmament Verification", SIPRI Insights on Peace and Security, No.2019/3, April 2019, p.1.

which, while achieving the total elimination of nuclear weapons, will serve as baseline and as a mean to measure progress on nuclear disarmament.

#### V. The way ahead

- 29. It is unlikely that there will be time to deal with the "how" and "who will conduct" questions during the available time for the GGE. But, if it manages to get an answer to "what" needs to be verify, that is agreeable to all the experts, without been restrictive or comprehensive, it could serve as guidance for further work on NDV and on nuclear disarmament itself.
- 30. The GGE could recommend the establishment, for example, of another GGE, a Scientific Group of Experts or an Open-ended working group on this topic to address the "how" and "by who." After answering the "what" question, it will be clearer for the experts the specific work that remains to be done and elaborate a well-informed mandate for whatever mechanism is established and the specific profile of its participants in order to move forward on NDV.
- 31. Finally, it is important to consider that there is already some political work done and technical experience available to build in it. Taking stock of such work and experience would also be useful to clarify which are the existing gaps that are needed to be filled. This will contribute avoiding duplicity and granting efficiency and effectiveness of NDV.

#### VI. References

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