

GLOBAL ENTERPRISE TO STRENGTHEN NONPROLIFERATION AND DISARMAMENT

**DISCUSSION PAPER:
STRENGTHENING THE NUCLEAR NON-PROLIFERATION TREATY:
THE ROLE OF RISK REDUCTION**

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Risk reduction has become one of the key areas of focus in the current Nuclear Non-Proliferation Treaty (NPT) review cycle. While “risk reduction” is supported by many countries, it has several different interpretations. This paper will explore the concept of risk reduction, its role in the current debate on how best to strengthen the NPT system, and the feasibility of specific risk reduction actions that can be taken both by NPT Nuclear Weapon States (NWS) and Non-Nuclear Weapon States (NNWS) as means to enhance implementation of the NPT, reduce tensions in the international sphere, and contribute to more successful efforts in the pathway to disarmament.

The concept of “comprehensive risk reduction” (as described below) can be useful for all states, as long as it is taken as a complementary step toward disarmament obligations under Article VI of the NPT and not as a substitute for disarmament. In the short term, commitments on risk reduction can encourage transparency and interaction among states which have held different positions on the NPT, paving the way for better cooperation in the pursuit of realizing common goals. Realistic measures focused on risk reduction can also help overcome dichotomies and misunderstandings on sensitive topics related to nuclear security, and could eventually contribute to progress on nuclear disarmament as the ultimate goal.

I. Nuclear Risk and the Need for Comprehensive Risk Reduction: The Current State-of-Play

If a nuclear explosion takes place (whether voluntary or accidental, by a state or non-state actor), every country will suffer from its impact. Since the threat is global, a global response is critical. Risk reduction has therefore become a key concept in order to reduce the threat of nuclear incidents that could happen under a variety of circumstances.¹ Recent attempts to identify and classify nuclear risks² have included scenarios involving accidental detonations, unauthorized explosions, and nuclear responses in the context of a conflict. Identifying the risks of these different scenarios could help point to measures that should be taken to reduce their likelihood.

¹ See Wan, W. (2019) *Nuclear Risk Reduction. The State of Ideas* (UNIDIR: Geneva), available at: <https://unidir.org/files/publications/pdfs/nuclear-risk-reduction-the-state-of-ideas-en-767.pdf>.

² Wan, W. (2019) *Nuclear Risk Reduction: A Framework for Analysis* (UNIDIR: Geneva), available at: <https://www.unidir.org/publication/nuclear-risk-reduction-framework-analysis>. Four ‘risk of use’ scenarios are described: doctrinal use (outlined in declared policies), escalatory use (linked to ongoing tensions), unauthorized use (non-sanctioned use, including by rogue States or non-state actors), and accidental use (linked to errors).

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Risk reduction has been defined as “the set of unilateral, bilateral, and multilateral measures that aim at lowering the likelihood of nuclear weapons use, be it accidental, unauthorized, or deliberate, through improved communication, predictability, and restraint”.³ This paper proposes a broader definition that embraces “comprehensive risk reduction,” which is not only limited to the use of nuclear weapons, but involves measures taken to prevent any sort of nuclear crisis situation. This broadened concept would require the inclusion of both NWS and NNWS in any dialogue and would pave the way for more comprehensive engagement on mutual security concerns between states.

It is obvious that, on the one hand, NWS (as well as the nuclear-armed States not party to the NPT – India, Pakistan, Israel, and North Korea) face the risks that arise from possession of nuclear weapons, including but not limited to, the use of nuclear weapons as a result of accidental detonations or by miscalculation or error and the possibility of a nuclear device being stolen. But at the same time all states in possession of nuclear weapons-usable materials also face risks, such as horizontal proliferation or the theft and illicit trafficking of fissile and radiological materials. Countries with nuclear facilities must therefore impose strong security measures in order to control the risks of accidents, illegal intrusion, sabotage, attack, and the illegal transfer of sensitive materials and technology to non-state actors. States engaged in peaceful nuclear activities and the transport of nuclear material also pose increased risks of procedural mistakes and accidents.

In addition, the alarming effects of many of these scenarios could have implications across the world. This is why, although states with nuclear weapons and/or material have a *particular* responsibility in mitigating the risk, since all states could be affected, there are shared interests: every state should have a responsibility within an integrated system of comprehensive risk reduction – with global implications at stake.

The importance of comprehensive risk reduction cannot be underestimated at a time in which several nuclear risks seem to be at their highest in decades. The recent tensions of the United States with Russia and China, the continuing anxieties in the relationship between India and Pakistan, the uncertainties concerning North Korea, and the threat of non-state actors interested in obtaining nuclear materials for improvised devices across the globe all demonstrate the need to endorse the concept of risk reduction in order to maintain peace and security. However, unlike other recent proposals for risk reduction,⁴ this paper proposes the idea that, because of the global nature of the risks involved, implementing the necessary measures cannot be the responsibility only of the NWS.

II. A New Framework: Common Responsibility for Comprehensive Risk Reduction

A traditional approach to the NPT —and to the discussions among its state parties— based on the three treaty pillars⁵ has proven to generate both frustration and disappointment during recent NPT Review Conferences (RevCons). A risk-focused approach to discussions among states parties would not only place the three pillars under a common framework (since all three pillars deal with risks and can benefit from a risk reduction approach), but would also engage all states, irrespective of their legal status under the NPT, in the promotion of general goals. Although simply addressing the risk

³ 2019 G7 Statement on Non-Proliferation and Disarmament, Biarritz, April 6, 2019, available at: www.elusee.fr. Gower, J. (2019) “Nuclear Risk Reduction”, Discussion Paper for the *Global Enterprise to Strengthen NonProliferation and Disarmament*, NTI, available at: https://media.nti.org/documents/Discussion_Paper-Nuclear_Risk.pdf, similarly considers that risk reduction is “any action, statement, or agreement, whether unilateral, bilateral, multilateral or omnilateral, which reduces the risk of use of a nuclear weapon”.

⁴ In a recent paper, Brustlein, C. (2021) “Strategic Risk Reduction between Nuclear-Weapons Possessors” (Paris: IFRI), available at: www.ifri.org/sites/default/files/atoms/files/brustlein_risk_reduction_nuclear_weapons_possessors_2021.pdf, has advocated for a strategic approach to nuclear risk reduction which, however, is addressed to suggest initiatives that can channel the behavior of NWS exclusively.

⁵ The NPT pillars are non-proliferation, disarmament, and the right of States Parties to pursue the peaceful uses of nuclear energy.

inherent in the three pillars does not necessarily result in progress in implementing NPT goals, a comprehensive risk-based approach provides a more substantial and inclusive basis for dealing with the international obligations of the treaty, and all states would have a role to play.

Identifying the risks and the challenges they pose should set the ground for real dialogue and help increase transparency among states. In this sense, the Nuclear Threat Initiative's (NTI's) Global Enterprise to Strengthen Non-Proliferation and Disarmament (GE), launched in 2018,⁶ has identified options for cooperative commitments in view of the next NPT RevCon. Some of the proposed Joint Voluntary Commitments (JVCs) are focused on risk reduction and deserve special attention.⁷

III. Practical Steps for the 2021 NPT Review Conference

Due to the universal nature of risk reduction, discussions among NWS and NNWS should be expanded in order to exchange best practices and build mutual confidence. Such discussions should aim to be inclusive of all states and reach broader audiences (politicians, diplomats, legal advisors, scientists, and technical experts) in order to address nuclear risks and to promote specific actions. In this sense, a change of narrative could be useful – with the traditional language of nuclear deterrence and security complemented by the reminder of the dramatic humanitarian consequences of nuclear incidents, underscoring the urgent need to address nuclear risks.⁸

Given current tensions within the NPT community, practical measures that could enjoy support at the upcoming NPT RevCon are related to voluntary commitments. While there have been many practical steps put forward in the last few years, this paper focuses on two proposals of short-term voluntary commitments which could be easily be undertaken by some states during the next RevCon:

- **Create senior and working-level meetings engaging both NWS and NNWS to discuss ways of improving communication during nuclear crisis situations.**

This interactive dialogue among experts and governmental officials would be designed to build a robust framework aimed at reducing misperceptions, animosities, and uncertainty. Meetings would convene government officials and technical experts to discuss actions designed to improve means of communication in crisis situations (for example, early warning centers, the preparation of hotlines, and international or regional networks to support operations in case of a nuclear incident). By framing the discussion around “nuclear crisis situations,” there is no need to enter the debate surrounding the categorization of nuclear risks (since the actions under examination can include the consequences of unauthorized missile launches, accidental explosions or deliberate attacks), and dialogue can involve the

⁶ For more on this NTI initiative, please visit <https://www.nti.org/about/projects/global-enterprise-strengthen-non-proliferation-and-disarmament/>.

⁷ These JVCs are options for cooperative commitments which have been identified by NTI's GE and which could be endorsed by groups of states either before or during the next NPT RevCon. The thematic focus of these JVCs was narrowed to risk reduction, transparency, and fissile material management. Concerning risk reduction, they include options on avoiding nuclear use, on reinvigorated pursuit of nuclear disarmament, on crisis avoidance and management, and on strengthening dialogue on nuclear doctrines and strategic stability. Most of these options present two variants, one for the P5 and the other one for all States (or NNWS). On the importance of these JVCs in the context of the GE proposals, see Williams, I. (2020) “The Global Enterprise: a roadmap to achieving success at the 2021 NPT Review Conference”, *European Leadership Network*, May 2020, available at: <https://www.europeanleadershipnetwork.org/commentary/the-global-enterprise-a-roadmap-to-achieving-success-at-the-2021-npt-review-conference/>.

⁸ It is true that certain incidents connected to nuclear power would be much less dramatic in terms of humanitarian consequences. However, the effects that any incident could have on local populations can never be underestimated.

reduction of the risks involved in the possession of nuclear weapons and materials and even in the effects that any nuclear incident involving this materials could produce elsewhere.

The challenge of securing participation by all States parties in the dialogue or the pending need to strengthen some pre-existing agreements (e.g. between the United States and Russia) should not undermine the proposal. A more open and inclusive dialogue could help build confidence and mutual trust among parties: in these consultations, NNWS can provide more diverse perspectives that are not necessarily dominated by unilateral interests and could pave the way for agreement on a set of risk reduction commitments. A first step for the proposal would be to attract support from a few governments in favor of a dialogue on addressing the risks of nuclear-related disasters and emergencies.⁹

- **Develop a common vocabulary between NWS and NNWS with the aim of drafting a non-binding code of nuclear responsibility.**

As a result of the dialogue concerning responses to nuclear incidents, a next step could be for governments to agree to exchange information on successful experiences or plans to deal with nuclear crisis situations. This could be a starting point for a more general discussion on shared nuclear responsibilities. Discussions could identify best practices concerning the prevention of possible harmful consequences of nuclear risks which would serve the purpose of promoting sensible behavior among states. A non-binding code would then serve as a platform for ethical responsibility regarding the management of nuclear risks.¹⁰ As mentioned when discussing the universal scope of comprehensive risk reduction efforts, it is of the utmost importance that any such effort incorporate all states in the process and therefore includes the views of NNWS on principles and responsibilities.¹¹ A more inclusive participation could help bridge the gap between NWS and NNWS and endorse the existence of common goals.

At this stage, it seems counterproductive to promote new binding instruments or endorse statements which can be interpreted as practical steps but make no real difference in current attitudes. There is always the danger of overestimating the value of rhetorical assertions that do not reflect a change of perception on the role of nuclear weapons for security or deterrence and the pursuit of disarmament.

If considered seriously and rationally, progressive steps related to a practical and inclusive risk reduction framework can support the NPT's multilateral goals and could prove useful to set the foundations and bridge gaps to make progress on disarmament efforts. Concrete and actionable commitments, as identified in this paper, could prepare the stage for more ambitious or longer-term steps that could be considered during the upcoming NPT RevCon and beyond. Since all states agree that measures should be reasonably taken to avoid nuclear crisis situations, this can set the groundwork for an open dialogue that could focus on comprehensive risk reduction as a first step to untangle many years of frustration in NPT RevCon negotiations.

⁹ The "Creating an Environment for Nuclear Disarmament" (CEND) initiative, which was launched by the United States during the 2019 NPT Preparatory Committee, included an invitation to States to address the "deteriorating security conditions" which have been impeding recent progress on disarmament. In the context of the CEND initiative, there have been interesting debates on risk reduction. Additionally, the Swedish "stepping stones" approach has identified that the first step to reduce nuclear risks would include "improving crisis communication channels and protocol" (NPT/CONF.2020/PC.III/WP.33, available at: <https://undocs.org/NPT/CONF.2020/PC.III/WP.33>).

¹⁰ See Gower, J. (2019) "Nuclear Risk Reduction", op. cit., who has given a strong support to this idea.

¹¹ Cf. Anderson, J. (2018) "Negotiating a Nuclear 'Code of Conduct'", *Next Generation Nuclear Network*, January 2018 available at: <https://nuclearnetwork.csis.org/negotiating-nuclear-code-conduct/>, who also suggested the idea of such a code but narrowed its scope only to an agreement between the P5.