Is there a need to think differently about strategic risk reduction?

Summary

Strategic risk reduction (SRR) has become one of the main topics of the nuclear debate among the nuclear-weapon states and between these and the non-nuclear-weapon states. However, the war in Ukraine since the end of February 2022 raises the question of the relevance of this field of strategic thinking. Is there a need to think differently about SRR?

This paper intends to address four topical questions posed by SRR as a method and as an objective:

- its definition;
- its relevance within the NPT framework;
- the Ukrainian precedent;
- the objective of SRR as a field of action in inter-state security.

Definition is a frequent stumbling block in the SRR debate. For some, SRR should focus on mistakes that can lead to inadvertent or accidental escalation in a regional crisis between nuclear-armed adversaries. For others, the discipline should be a lever to jump-start nuclear disarmament. Another way of defining strategic risk is to take a broader perspective, which includes the strategic environment in the risk calculation. Whatever the definition, SRR offers a wide range of modalities that serve common interests. More than a definition, it is the disposition of states to responsible behaviours that should be focused on.

Within the NPT framework, where it is natural for SRR to be debated, for proposals to be made and for initiatives to be taken, it must be recognised that the issue is a cross-cutting one and that, as such, it concerns all states parties to the Treaty. That said, it should be added that the NPT is not the only forum in which to address risk issues. These involve nuclear-armed states that are not parties to the Treaty. And it is understandable that for the sake of efficiency risk
management is done between adversaries, rather than in multilateral forums.

The war in Ukraine has highlighted a variable of strategic risk which is often overlooked: its intentionality and its use for both political and military purposes. Furthermore, the use of nuclear deterrence for coercive purposes in the conflict has called into question the value of the commitments Russia made in January 2022. It should be added that such behaviour does not imply that strategic risks have been taken out of the realm of what remains manageable in the conflict, even if it will probably break the momentum of the SRR approach. It should help to recognise that not all countries are committed to it.

The priorities set out by the French Presidency of the P5 group in 2021, as well as the fact that the current US Chair of the P5 has endorsed the idea of “setting up a dedicated work stream on strategic risk reduction in the context of the P5 dialogue” indicate that strengthening operational thinking on SRR has become a compelling necessity again.

In the contemporary strategic context, SRR probably remains valid as one of the functions of a tripod, the other two being deterrence and defence.

Introduction

In the last few years, strategic risk reduction (SRR) has become if not the main topic, at least one of the major topics of the nuclear debate among the nuclear-weapon states (NWS) and between them and the non-nuclear-weapon states (NNWS) under the NPT. The issue has fuelled academic research as well as diplomatic and political initiatives in preparation of the 10th NPT Review Conference (RevCon) and while the RevCon has been postponed. This means that the subject is ripe for discussion this summer 2022 in New York.

However, the war in Ukraine by Russia since the end of February 2022 has raised the question of the relevance of this field of strategic thinking. Should SRR be thought in new terms? Should new tools be designed that take into account the Ukrainian precedent? It is legitimate for this question to drive an analytical and political debate. It is desirable that the 10th NPT RevCon be the occasion for this. In particular, while it is understandable that there is a stake in overcoming collective embarrassment by finding a way to move forward diplomatically, it is above all a question of the very meaning of the approach. If it is true that Russia – and perhaps other countries – is deliberately choosing to increase strategic risk in its relations with competitors and adversaries, then the question of risk reduction arises as a useful lever for action.

This short paper intends to address four topical questions raised by SRR as a discipline, as a

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method and as an objective:

⇒ the recurring question of its definition;
⇒ the question of its relevance within the NPT framework;
⇒ the Ukrainian precedent;
⇒ the objective of SRR as a field of action in inter-state security.

In the very particular context of the Russian war on Ukraine, increasing the opportunities of sharing perceptions, approaches, and understanding should help to select what, in terms of SRR, can still be useful.

**Definition should not be a stumbling block in the debate on SRR**

Firstly, it should be recalled that the issue of the definition of SRR has been a problem for many years.

In a narrow sense, SRR has usually referred to measures taken to limit the risk of use of nuclear weapons between possessor states (NWS + Israel, Pakistan, India, DPRK).

In an even stricter sense, intended to have an effect on the possible conduct of a conflict between states, the focus of the discussion of SRR is on the perceptual and calculation errors that can lead to inadvertent or accidental escalation in a regional crisis between nuclear-armed adversaries. The risk of inadvertent escalation may be due to perceptual or communication errors. The risk of accidental escalation may be due to a technical failure, such as a targeting error.

In an international strategic context marked, since the beginning of the 2010 decade at least, by a slowdown in initiatives aimed at progressing towards nuclear disarmament, some NNWS consider SRR to be a useful lever for relaunching the dynamics of nuclear disarmament among NWS. In this case, it is more a question of reducing *nuclear* risks than *strategic* risks. For several years, a large part of SRR-related research has focused on this dimension, or has tried not to forget this dimension in its analyses, by apprehending this object of study in a broad way. This is the case, for example, of UNIDIR’s “Nuclear Weapon Risk Reduction” project¹.

By analogy, what happens with SRR is what arms control practitioners have long been accustomed to in terms of defining their discipline. Generically, it can indeed be argued that arms control sought to frame and stabilize nuclear deterrence in a pragmatic way. Arms control is therefore an integral part of nuclear deterrence within the frame of intergovernmental security policies. In that regard, arms control can be understood as any form of cooperation between adversaries aimed at reducing the risks of war and nuclear escalation and/or limiting competition in the field of armaments. On the contrary, if one considers arms control to gather all mechanisms, initiatives, actions, concerted or uncoordinated, unilateral, bilateral or multilateral, legally binding or non-binding, designed to limit the volume of violence in international affairs, then disarmament is obviously part of the discipline. Similarly, depending on the definition one adopts and the scope one allows, SRR can be seen as a means of endorsing the possession of nuclear weapons backed by deterrence doctrines, or as a means of getting rid of them.

Actually, it is probably more useful to collectively move beyond such a perceptual dichotomy. SRR, which can be seen as a minimal or introductory form of arms control, is not a substitute for

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¹ See [Nuclear Weapon Risk Reduction](#).
Disarmament efforts, but an accompaniment to them. If one considers that an imperative goal for everyone is the non-use of a nuclear weapon in conflict, then a very wide range of SRR modalities are potentially useful to promote and to share, as a kind of common core of collective interest.

Furthermore, another way of defining strategic risk is to take a broader perspective, which includes the strategic environment in the risk calculation. As such, SRR is not intended to focus on the risks of accidental or unintentional use of nuclear weapons, nor on the modalities of nuclear disarmament. This is probably a much more open-ended definition that does not focus on weapons, or on the evolution of the systems themselves, but is based on the behaviours associated with the possession of weapon systems whose risk of use must be prevented (doctrinal, postural, political, diplomatic and strategic).

In short, the question of how to define SRR should not be a brake on thinking in principle, nor should it prevent proposing workable solutions.

### Political and institutional initiatives

As regards the political and institutional debate, it is worth recalling the Stockholm Initiative for Nuclear Disarmament. Launched in June 2019 by Sweden, the Stockholm Initiative aims to give impetus to nuclear disarmament by focusing on measures deemed realistic, to bring nuclear-weapon states (NWS) and non-nuclear-weapon states (NNWS) closer together, and to provide operational recommendations (the “stepping stones” adopted at the Berlin meeting in February 2020), particularly with regard to nuclear risk reduction. It brings together 16 NNWS (see, for example, Emmanuelle Maitre, “L’Initiative de Stockholm: nouveau forum prééminent de réflexion en matière de désarmement”, Bulletin de l’Observatoire de la dissuasion, n° 93, FRS, December 2021; and “A Nuclear Risk Reduction Package, Working paper by the Stockholm Initiative, supported by Argentina, Belgium, Canada, Denmark, Ethiopia, Finland, Germany, Iceland, Indonesia, Japan, Jordan, Kazakhstan, Luxembourg, the Netherlands, New Zealand, Norway, South Korea, Spain, Sweden and Switzerland”, 11 May 2021).

The 2019 G7 Statement on Non-Proliferation and Disarmament (Dinard and Saint Malo, France, 6 April 2019) also stressed the importance of specific measures to reduce strategic risk: “Efforts towards strategic risk reduction constitute important contributions to regional and international security. In particular, transparency and dialogue on nuclear doctrines and postures, military-to-military dialogues, hotline agreements among nuclear weapon possessors, ‘accident measure’ agreements, transparency, and notification exercises, as well as missile launch notification and other data exchange agreements, can constitute important elements of strategic risk reduction and can help avoid misunderstanding and miscalculation. The G7 NPDG will continue to seek ways to improve and spread the understanding of strategic risk reduction measures, including in view of the 2020 NPT Review Conference.”

The work of the P5 group includes the Joint Statement of the Leaders of the Five NWS on Preventing Nuclear War and Avoiding Arms Races of 3 January 2022.

The US initiative Creating an Environment for Nuclear Disarmament is another forum in which Subgroup 3 is working to identify risk reduction measures to avoid the escalation of future crises (see: U.S. Leadership in Strategic Risk Reduction – Working paper submitted by the United States of America, NPT/CONF.2020/WP.55, 19 May 2022).
It should be noted that in all cases, the measures generally recommended to reduce strategic risks are normative in nature and result in increased transparency. The “Nuclear Risk Reduction Package” presented in 2021 by the Stockholm Initiative (and supported by 20 states) is emblematic of this approach. This implies that until now, SRR advocates have always assumed that states are willing to improve their standard of conduct as well as to increase the transparency of their defence policy, strategies, doctrines and postures. More than the definition of what strategic risk should entail in the strict sense, it is this disposition of states that should be focused on. It is a way of opening the field of reflection to what the notion of responsible behaviour implies for a state. This formulation is found today in the reflection on the framework of outer space and cyberspace. This is a field that needs to be investigated in order to distinguish what can be made operational and not confined to a kind of moral statement which, most of the time, proves inoperative or counter-productive.

The relevance of SRR within the NPT framework

SRR has been part of the NPT review process for many years under various names: «Previous NPT Review Conferences agreed by consensus on various elements relevant for nuclear risk reduction, for instance in the context of the 64-point Action Plan, including action 5i, adopted at the 2010 NPT Review Conference. The implementation of these commitments must be given greater priority, especially as risk reduction is part of nuclear disarmament and can further advance it. »2. In particular, the wording chosen in his recommendations by the Chair of the 2019 Preparatory Commission (PrepCom) to the 2020 NPT RevCon is characteristic of the synthetic approach adopted in the NPT framework: paragraph 13 of the first chapter of recommendations devoted to nuclear disarmament “call[s] for the elaboration of measures that can contribute to building confidence and reduce the risk of the use of nuclear weapons, whether intentionally, by miscalculation or by accident, in the context of achieving nuclear disarmament.”3.

Again, depending on how one defines SRR, the subject can be discussed in the context of one, two or all three pillars of the Treaty (i.e. “disarmament”, “non-proliferation”, “peaceful uses of nuclear energy”). Strictly speaking, for example, it can be considered that the military risk to electrical power generation facilities falls specifically under nuclear security, which is usually dealt with as part of the civilian uses of nuclear energy. But it also can be argued that such a risk is not really a strategic risk (in that it could lead to the use of a nuclear weapon), but a nuclear risk in the field of nuclear safety and security. Besides, to consider that strategic risk is only a matter of examining the implementation of Article 6 of the Treaty is artificial and reductive. Furthermore, the first measure to reduce strategic risks can be seen as limiting the number of nuclear actors by combating proliferation. Lastly, transparency measures and measures aimed at avoiding the dynamics of accumulation – particularly of means of delivery – are part of disarmament and non-proliferation efforts. Common sense suggests that SRR is a cross-cutting issue that deserves to be regularly considered as a fixed point during PrepComs as well as during Treaty RevCons.

Within the NPT review process, the P5 group remains the most relevant for maintaining a dialogue among NWS on this issue. It was a priority of the French presidency of the group in 2021. The fact that the United States (US) continues to prioritise it this year is a step in the right

2 “A Nuclear Risk Reduction Package, Working paper by the Stockholm Initiative, supported by Argentina, Belgium, Canada, Denmark, Ethiopia, Finland, Germany, Iceland, Indonesia, Japan, Jordan, Kazakhstan, Luxembourg, the Netherlands, New Zealand, Norway, South Korea, Spain, Sweden and Switzerland”, 11 May 2021, p. 2/5.
3 NPT/CONF.2020/PC.III/WP.49, Preparatory Committee for the 2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 10 May 2019, p. 3.
direction, as recognised in 19 May 2022 Working Paper 55: “Even in the current climate, it should be acknowledged that risk reduction remains an essential tool for conflict management and is of immediate relevance to the attainment of NPT Article VI goals.”

That said, it is worth adding that the NPT is not the only forum in which it is possible to address risk issues. These issues involve nuclear-armed states that are not parties to the Treaty, one of which claiming to have withdrawn from it (DPRK, 2003), and all of which being located in particularly fragile or even unstable regional strategic environments (the Middle East, South Asia, North-East Asia). Moreover, SRR has long been confined to the strategic bilateral relationship between the United States and the USSR. It is understandable that risk management is done between adversaries, rather than in multilateral forums, for the sake of efficiency. Therefore, while the NPT review process is essential for defining a common framework of understanding, the key to the operation of SRR is still and will continue to be the conduct of unilateral and bilateral actions. The entire history of SRR since the 1963 U.S.-Soviet Memorandum of Understanding Regarding the Establishment of a Direct Communications Link indicates that SRR accompanies the birth of strategic bilateral arms control as one of its components, designed to ensure the functionality of bilateral deterrence. It was the USSR that first proposed, in 1954, to formalise safeguards against surprise attacks, as well as the danger of accidental war. A conference of experts on surprise attacks was held in Geneva in 1958 without producing any concrete results, but it did initiate a scientific and technical thinking process, which has been the methodology for conducting strategic arms control ever since. The Indo-Pakistani case provides many other illustrations of this bilateral dimension of SRR, of course. For example, even before India and Pakistan achieved nuclear status, a series of strategic risk reduction agreements were concluded in 1991 between the two countries, including an “Agreement on the Prior Notification of Military Exercises” and another on the “Prevention of Airspace Violations”. On a bilateral level, it was already a question of avoiding miscalculations that could lead to unintended conflict.

The Ukrainian precedent

The war in Ukraine has highlighted a variable of strategic risk which is often overlooked: its intentionality and its use for both political and military purposes. Theoretically, intentional escalation is not overlooked by analysis, but it is most often a scenario studied in the singular case of the decision to use a nuclear weapon to push the adversary to de-escalation, a risk perceived in Russian strategic thinking and debated during the 2010 decade in the United States.

Furthermore, the use of nuclear deterrence for coercive purposes in the Ukraine conflict has called into question both the integrity and the value of the commitments Russia made in Paris at the end of the French P5 presidency in January 2022. The breach of this commitment unfortunately completes a long list of breaches, the first of which is the violation of the commitments made under the Memorandum on security assurances in connection with Ukraine’s accession to the Treaty on the Non-Proliferation of Nuclear Weapons (Budapest, 5 December 1994). The lack of transparency and the culture of ambiguity in Russian nuclear doctrine are also not conducive to SRR. Taken together, all these signals highlighted a long-known facet of nuclear deterrence, the

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5 Memorandum of Understanding between the United States of America and the Union of Soviet Socialist Republics Regarding the Establishment of a Direct Communications Link, Geneva, 20 June 1963.
6 See, for example, Ugne Komzaitė, Anna Peczeli (lead author), Benjamin Silverstein, Skyler Stokes, Workshop Summary – Nuclear Risk Reduction in an Era of Major Power Rivalry, Center for Global Security Research Livermore, California, 19 March 2020.
specificity of which is that it is a deviation from the deterrent exercise: in strictly military terms, Russia’s use of nuclear weapons in the course of the conflict against Ukraine is a strategic cover for conventional operations and its usefuneless can be explained in these terms. To do so would obviously be to ignore Russia’s position in the global nuclear order. Using one’s own nuclear deterrent to knowingly sanctuarise a sovereign foreign territory by turning it into a theatre of aggressive conventional operations is clearly not worthy of a responsible NWS, in accordance with the letter and spirit of the NPT. Having said this, it should also be added that such irresponsible behaviour does not imply that strategic risks have been taken out of the realm of what remains manageable in the Ukraine conflict. That is, nuclear weapon as a system should not be the target of concern so much as the management and control of its use, which falls into distinct and complementary fields: doctrinal, escalatory, unauthorised, accidental or inadvertent.\(^7\)

Russian hostilities against Ukraine since February 2022 are likely to further narrow the understanding of SRR to a field of techno-operational solutions aimed at ensuring the credibility of deterrence. For example, the often-held view that reducing the role of nuclear weapons in both interstate relations and the military doctrines of NWS is a useful risk-reduction measure should, at least in the short term, lose its salience in the debate, except among proponents of the nuclear weapons ban, whose number, it should be remembered, is increasing year by year. In any case, the need for seamless extended deterrence among allies in Europe will be the absolute prerequisite for any future SRR initiative if it is to remain relevant as a method of achieving significant political and strategic effect. However, if a narrow definition of SRR is favoured, it can be argued that the course of the war in Ukraine takes into account the major risks of escalation. Indeed, it must be noted that these risks have been more or less prevented for the time being. In this respect, the Ukrainian case seems to illustrate the validity of a very classical, if not orthodox, SRR approach, more than the need to rethink its principle. An apparent paradox of the latter is that functional deterrence is based on the threat of nuclear use, the credibility of which is inversely proportional to the nuclear risk involved.

Make no mistake, however: the current conflict may be breaking the momentum of the SRR approach that has taken shape in recent years. This break should help to recognise that not all countries are committed to SRR, especially those that refuse to refrain from threatening actual or potential adversaries on principle, or those that perceive transparency measures in unstable strategic environments as future security risks. Moreover, some strategic risks are the result of deliberate ambiguity: instability in times of crisis, for example, may be an intended objective. Finally, it should be recalled that while SRR seems to be accepted by the P3 countries and a significant part of the liberal democracies as a minimal but useful modality of arms control, the ambition to reduce the risk is not accepted in principle in Russia. In particular, there is a fear that too much transparency and predictability could divert the competitive dynamic to other areas, with the perceived danger that such a dynamic shifted to conventional strategic capabilities could upset the balance to the disadvantage of the Russian side. For several years, NATO has tried to promote an ambitious SRR agenda in the NATO-Russia Council without real success.

\(^7\) Wilfred Wan (ed.), *Nuclear Risk Reduction: Closing Pathways to Use*, United Nations Institute for Disarmament Research, 2020, p. 11.

\(^8\) See, for example, Petr Topychkanov, “Taking Forward the Dialogue on Nuclear Risk Reduction”, *Journal for peace and nuclear disarmament*, 2021, Vol. 4, n° 51, pp. 157-162.
Making an impact in the real world

The war in Ukraine does not mean that all the thinking and hopes that have been invested in SRR in recent years have been dashed.

At the institutional level for example, the initiative to create a new working group on crisis management and SRR within the P5 process, which had notably fuelled the work of the Fondation pour la recherche stratégique and the European Leadership Network in 2021, will remain valid from the launch of the next five-year review cycle of the NPT. The P5 process is one of the very few forums in which NWS can still talk to each other. In this regard, the work done by the French P5 presidency in 2021 has paved the way for further discussion of these issues in this framework. The fact that the current US Chair of the P5 has endorsed the idea of “setting up a dedicated work stream on strategic risk reduction in the context of the P5 dialogue” is also to be welcome. Such a commitment indicates that strengthening operational thinking on SRR has again become a compelling necessity in the contemporary strategic environment.

Unsurprisingly, the same commitment to SRR can be found in NATO’s new Strategic Concept, while the prospects for properly negotiated arms control agreements are fading for the moment: “We will pursue all elements of strategic risk reduction, including promoting confidence building and predictability through dialogue, increasing understanding, and establishing effective crisis management and prevention tools”. From this point of view, we agree with the synthesis of the NATO document by our IISS colleague William Alberque: “The 2022 Strategic Concept and its perspective on arms control is clearly in line with the new direction taken by NATO member countries beginning at the 2014 NATO Summit in Wales, held in the wake of the war launched by Russia against Ukraine in February of that year and its annexation of Crimea. Arms-control optimism is now gone; pessimism has set in; Russia is a threat; China is a challenge; and risk reduction and crisis prevention are the preferred tools, alongside deterrence and defence, for safeguarding the Alliance”.

Moreover, the perceived increase in strategic risks over the last few years is also due to factors that are not solely linked to the resurgence of nationalism, the aggressive re-emergence of regional powers, revisionist goals or imperialist impulses. It is also about modernisation and diversification of strategic weapons systems, development of high-precision, long-range conventional strike systems, a perceived growing confusion between conventional and non-conventional systems, information superiority and the race to modernise command and control systems, the interweaving of offensive and defensive components in the strategic debate, ballistic proliferation, or the integration of emerging technologies perceived, rightly or wrongly, as disruptive. As such, these capability factors are not decisive (and the modernisation of systems can even be a factor in reducing risks), but they multiply the risks by combining with other factors such as lack of transparency, aggressive foreign policy, etc. This means, once again, that it is the behaviour of states that SRR should primarily target, not the weapons systems that constitute their defence tool.

9 “This working paper calls for a sustained, open-ended and senior dialogue process among the P5 on strategic risk reduction in the form of a working group. The aim of this dialogue process is not only to arrive at a common P5 understanding of ‘strategic’ risks but also to adopt a programme of work to mitigate those risks through substantive measures during the eleventh NPT review cycle.” (see ELN, FRS, Working paper on strategic risk reduction, January 2022, p. 2).
10 NPT/CONF.2020/WP.55, 19 May 2022, op. cit., p. 5.
11 NATO 2022 Strategic Concept, p. 8.
In that context, although the enthusiasm created by a rich SRR debate was interrupted by the Russian war against Ukraine, leading to the question of whether the very approach to the method has been flawed in recent years\textsuperscript{13}, several SRR recommendations continue to be useful:

Firstly, the recommendation to unilaterally conduct technical actions to reduce the risks of accidents and the risks to the systems themselves is still valid despite the vicissitudes of the strategic environment: strengthening the survivability of nuclear command, control and communication (NC3), hardening detection and warning systems, preparing for false alarms of imminent attacks, or preventing maintenance failures, for example. These issues that fueled SRR during the Cold War are still useful, even if they are no longer as compelling today between NWS with proven safety and security systems.

Secondly, the transparent implementation of defence policies remains valuable for states that care about openness, the free provision of information, explanation of postures and doctrines, restraint and anticipation of misperceptions by designated or \textit{de facto} adversaries, even without reciprocity.

Thirdly, the Ukrainian crisis and the rise of strategic adversity in several regions of the world highlight the need to distinguish between chosen and suffered risks. In other words, it is up to the analysis to distinguish, without preconceived ideas and with lucidity, in each case, the risks that cannot be reduced from those for which a reduction method is potentially useful. And it is crucial not to have the wrong target: strategic risks will only decrease with states that practice transparency, behave responsibly, and do not contradict international law and the UN Charter.

Finally, formal formats for dialogue and negotiation will probably continue to decline, at least in the short to medium term. Then, informal communication channels between strategic communities will have to increase. But here too, it is a question of not getting the objective wrong: it must be borne in mind that the usual recommendation to invite the nuclear powers to strategic dialogue is not enough. It is a recommendation that has accompanied the last twenty years. However, these years were, concomitantly, those of the crumbling of a significant part of the edifice of arms control patiently built up during the Cold War. It is a reminder that the beginning of this century has shown the inadequacy of strategic dialogues as a tool for forging common or shared strategic cultures. The challenge of dialogues must henceforth be to identify precisely the gaps, differences and oppositions, without thinking that it is a question of resolving them, but rather of facing them with insight and lucidity.

To sum up, SRR remains valid in the current strategic context as one of the functions of a tripod, the other two being deterrence and defence. This means that SRR does not have to be rethought as an approach, as a method, as an objective, but probably specified and circumscribed: The debate on SRR in the NPT framework should be about the scope of the discipline. It is the improvement of the strategic context that should be the primary focus of all the NPT states parties.

\textsuperscript{13}See, for example Heather Williams, “What we got wrong about nuclear risk reduction”, \textit{The Hill}, 23 May 2022.
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