

Asia-Pacific Leadership Network–China Nuclear Fail-Safe Dialogue

**October 11–13, 2024
Beijing, China**

MEETING SYNOPSIS

Overview

- » From October 11–13 in Beijing, a delegation of former American and Asian officials and experts met with current and former Chinese officials and experts in meetings focused on nuclear fail-safe, which are safeguards that prevent the unauthorized, accidental, or mistaken use of a nuclear weapon. Grandview Institution hosted the meetings, with the support of the Asia-Pacific Leadership Network and Nuclear Threat Initiative.
- » The objective was to discuss internal unilateral nuclear fail-safe reviews and measures and the potential for nuclear fail-safe as an agenda item for bilateral and multilateral (including P5) discussion and initiatives. Participants discussed the purpose and merits of “independent” nuclear fail-safe reviews similar in concept to the U.S. review now underway; why and how such reviews could be conducted periodically by all nuclear-armed states; that such reviews required no negotiation, treaty, or verification; and that any sharing of results or actions was not required and would be entirely at the discretion of each state.
- » Participants welcomed the dialogue, explored in depth the topic of unilateral nuclear fail-safe reviews, and expressed interest in nuclear fail-safe as a potential topic for dialogue in the P5 channel that China currently chairs.

Participants agreed:

- » Nuclear fail-safe is an important concept for all nuclear-armed states. It can be a unilateral, positive sum initiative by which all countries benefit.
- » Defining the term “fail-safe” is important. In the United States, fail-safe means that if a nuclear weapon or weapon system fails, it is still safe. More broadly, in practice the term refers to safeguards that prevent the unauthorized, accidental, or mistaken use of a nuclear weapon.

- » The term “fail-safe” does not easily translate into Chinese. A concise definition that accurately conveys the intent and benefits of nuclear fail-safe is necessary to ensure the understanding and support of political and military leaders. Chinese participants keenly engaged in developing and comparing definitions of fail-safe. The Chinese definition would be more effective if it drew from national military terms, as opposed to academic language and theories. Military language tends to be more precise and concise, facilitating understanding by political as well as military leaders. Definitions discussed included:
 - 核失控安全 (“safeguarding the loss of control of nuclear weapons”)
 - 核武器事故后果管理 (“management of the consequences of nuclear weapons accidents”)
 - 预防核失控 (“preventing nuclear mismanagement or preventing the loss of control over nuclear [weapons/facilities/etc.]”)
 - 非刻意核使用安全 (“safeguarding unintentional nuclear use”)
- » Independent, internal, unilateral nuclear fail-safe reviews by all nuclear-armed states are a valuable tool for safety and risk reduction. Such reviews could use retired national nuclear scientists, military officials, and civilian defense officials with experience on these issues. Reviews would focus on assessing and recommending potential improvements to national nuclear weapons resilience and control systems, without any foreign inspections or verification. Fail-safe is not about numbers of nuclear weapons, but nuclear risk reduction.
- » Nuclear fail-safe is even more urgent now, as most nuclear-armed states are undertaking nuclear modernization programs (involving the incorporation of new technologies, early warning, command and control, and nuclear systems, some of which are entangled with conventional forces) and cyber-threats and artificial intelligence (AI) are developing. Together, these dynamics could work to even further reduce nuclear decision time for leaders. Fail-safe steps could and should increase decision time and reduce the risk of an accident, mistake, or blunder.
- » Every nuclear-armed state has a unique nuclear force, policies, and procedures; hence each nuclear fail-safe review would also have a unique scope and focus. In general, nuclear fail-safe reviews might address nuclear policy and force posture; procedures; command-and-control processes and systems; and the design of nuclear weapons and delivery systems. Specific steps discussed in Beijing included but were not limited to “no first use” policies; post-launch destruct mechanisms for ballistic missiles; personnel reliability programs; and policy and technical measures to increase decision time for leaders. They could also include cooperative measures, for example, sharing national early warning data on ballistic missile launches unilaterally, bilaterally or multilaterally to a group of participating states.
- » Nuclear fail-safe would be an important point for bilateral U.S.-China dialogue and send a positive signal to other nuclear-armed states. An improvement in overall U.S.-China bilateral relations and mutual trust could also help facilitate dialogue on nuclear fail-safe; however, differences in bilateral relations should not preclude a dialogue on nuclear fail-safe.
- » The United States could share its experience with nuclear fail-safe and the two independent reviews it has conducted: the 1990–1992 review and the review that is now nearing completion.
- » There needs to be a plan to encourage governments of all nuclear-armed states to move forward with the nuclear fail-safe initiative. Experts, officials, and leaders in each government must be made familiar with the concept and the benefits of nuclear fail-safe reviews.

Dialogue between the United States and China at the expert and official level could be expanded to include other nuclear-armed states, including those outside the Nuclear Non-Proliferation Treaty's (NPT) N5 (also referred to as the P5).

- » Nuclear fail-safe would be an appropriate topic for dialogue by the N5/P5, noting that China currently holds the rotating chair of this dialogue. The subject of fail-safe falls within the overarching P5 agreed topic of reducing strategic risk and nuclear risk reduction. An N5/P5 dialogue on fail-safe could take place at the track 1 level, supported by track 1.5 and track 2 discussions, including the P5 Expert Level Track and the Younger Generation Track. Outputs could include: a glossary of terms, principles, and best practices or a joint statement on nuclear fail-safe. This activity could be discussed with non-nuclear-weapon states and facilitate a more positive NPT Review Conference in 2026.

Bottom line

- » The dialogue was extremely productive. Bilateral conversations on nuclear fail-safe between the U.S. and China at track 1, track 1.5, and track 2 levels could be a steppingstone to progress on other issues. Fail-safe reviews alone would dramatically reduce nuclear risks, and U.S.-China dialogue on the topic demonstrates that two great countries can communicate productively and take constructive, if unilateral, steps to reduce nuclear risks and encourage other nuclear-armed states to do the same.