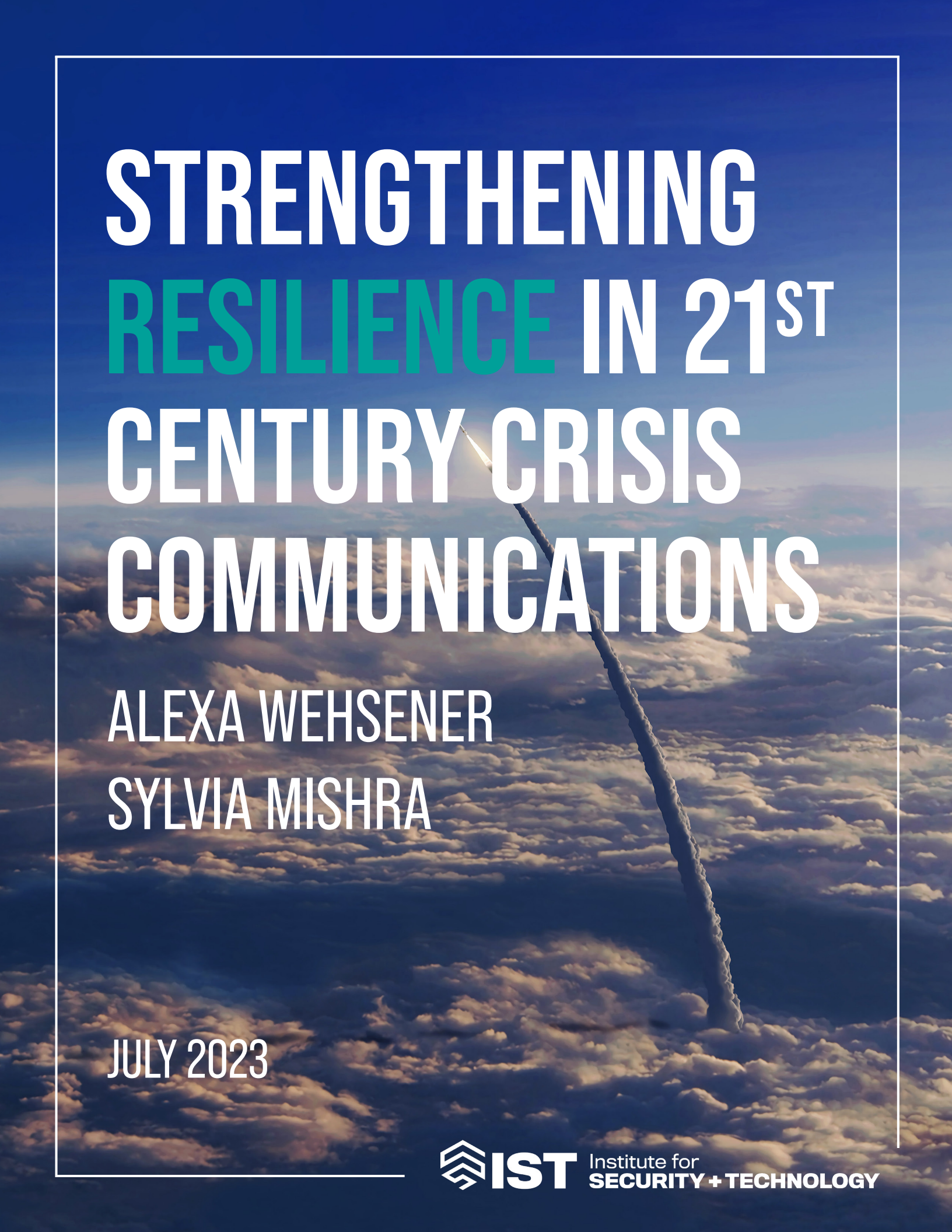


STRENGTHENING RESILIENCE IN 21ST CENTURY CRISIS COMMUNICATIONS

ALEXA WEHSENER
SYLVIA MISHRA

JULY 2023

IST Institute for SECURITY + TECHNOLOGY

Strengthening Resilience in 21st Century Crisis Communications

July 2023
Authors: Alexa Wehsener, Sylvia Mishra
Design: Sophia Mauro
Copy edits: Sophia Mauro, Lillian Ilsley-Greene

The Institute for Security and Technology and the authors of this report invite free use of the information within for educational purposes, requiring only that the reproduced material clearly cite the full source.

IST may provide information about third-party products or services, including security tools, videos, templates, guides, and other resources included in our cybersecurity toolkits (collectively, “Third-Party Content”). You are solely responsible for your use of Third-Party Content, and you must ensure that your use of Third-Party Content complies with all applicable laws, including applicable laws of your jurisdiction and applicable U.S. export compliance laws.

Copyright 2023, The Institute for Security and Technology
Printed in the United States of America

IST

About the Institute for Security and Technology

As new technologies present humanity with unprecedented capabilities, they can also pose unimagined risks to global security. The Institute for Security and Technology's (IST) mission is to bridge gaps between technology and policy leaders to help solve these emerging security problems together. Uniquely situated on the West Coast with deep ties to Washington, DC, we have the access and relationships to unite the best experts, at the right time, using the most powerful mechanisms.

Our portfolio is organized across three analytical pillars: **Innovation and Catastrophic Risk**, providing deep technical and analytical expertise on technology-derived existential threats to society; **Geopolitics of Technology**, anticipating the positive and negative security effects of emerging, disruptive technologies on the international balance of power, within states, and between governments and industries; and **Future of Digital Security**, examining the systemic security risks of societal dependence on digital technologies.

IST aims to forge crucial connections across industry, civil society, and government to solve emerging security risks before they make deleterious real-world impact. By leveraging our expertise and engaging our networks, we offer a unique problem-solving approach with a proven track record.

Acknowledgments

We would like to sincerely thank the workshop participants whose insights were paramount to advancing this study. In particular, we would like to thank Eric Grosse for his continuous contributions to the CATALINK initiative and his feedback in the review of this report. In addition, we would like to thank Sahil V. Shah and members of the ROCCS (Resilient Omni Frequency Crisis Communications System) Working Group, for their continuous support and insights.

We appreciate the continued support of the Swiss Federal Department of Foreign Affairs and the German Federal Foreign Office in championing the CATALINK initiative.

Table of Contents

Foreword ..... e

Executive Summary 1

Global State of Crisis Communications, Risk Reduction, and Arms Control 4

Key Insights from Scenario-Based Discussions 5

Conceptual Progress 8

Resilient Crisis Communication: The Way Forward 10

Foreword

July 19, 2023

On July 16th, 1945, after witnessing the first successful nuclear explosion at the Trinity test site in Los Alamos, New Mexico, J. Robert Oppenheimer, popularly known as the father of the atomic bomb, remarked that he recalled the phrase: “Now I am become Death, the destroyer of worlds.” These words, quoted from the Bhagavad Gita, invoke a sense of precariousness, and bring to our collective conscience the impending sense of doom that comes from living with arguably the deadliest weapons of mass destruction ever built.

This week marked 78 years after the first atomic device explosion. Today the global nuclear order continues to grapple with preventing the use and proliferation of these dangerous weapons. Amidst the crisis in Ukraine, recent displays of Russian nuclear brinkmanship, China’s increased nuclear arsenal build-up, fears of Iran becoming a ‘break-out state’, and the DPRK’s testing of advanced military capabilities, nuclear dangers are in sharp focus across the world.[1] As such, the strategic policy community waits with bated breath for the release of the movie *Oppenheimer*. The movie, which is based on the 2005 book *American Prometheus* by Kai Bird and Martin J. Sherwin, tracks the creation of the atomic bomb during World War II through the eyes of theoretical physicist and Manhattan Project leader J. Robert Oppenheimer.[2] Hollywood’s decision to release a movie focused on the creation of the atomic bomb is telling in and of itself: it demonstrates the continued

1 Alan Taylor, “One Year Since Russia’s Invasion of Ukraine,” *The Atlantic*, February 21, 2023, https://www.theatlantic.com/photo/2023/02/photos-one-year-russian-invasion-of-ukraine/673136/; Rose McDermott, Reid Pauly, and Paul Slovic, “Putin and the Psychology of Nuclear Brinkmanship,” *Foreign Affairs*, May 30, 2023, https://www.foreignaffairs.com/ukraine/putin-and-psychology-nuclear-brinkmanship; Tong Zhao, “What is Driving China’s Nuclear Buildup,” *Carnegie Endowment*, August 5, 2021, https://carnegieendowment.org/2021/08/05/what-s-driving-china-s-nuclear-buildup-pub-85106; Arshad Mohammed and Daphne Psaledakis, “Iran’s Nuclear ‘Breakout Time’ Could be Weeks If Not Restrained - Blinken,” *Reuters*, June 7, 2021, https://www.reuters.com/world/middle-east/iranian-breakout-time-will-fall-weeks-if-not-constrained-blinken-2021-06-07/; Choe Sang-Hun, Victoria Kim, and John Yoon, “North Korea’s Arsenal Has Grown Rapidly. Here’s What Is In It," *The New York Times*, November 18, 2022, https://www.nytimes.com/article/north-korea-arsenal-nukes.html.

2 Andy Kifer, “Behind ‘Oppenheimer’, a Prizewinning Biography 25 Years in the Making,” *The New York Times*, July 10, 2023, https://www.nytimes.com/2023/07/10/books/oppenheimer-american-prometheus-sherwin-bird.html.

relevance of the event, as well as its ongoing importance on the world stage. The timing of the movie is particularly relevant as it spotlights the threat of nuclear use and the urgent need to mitigate the risks. The threat of nuclear war and related risks are not widely discussed in the public sphere. As a result, the public often remains insulated from understanding the pressing nature of nuclear dangers. With its broad-based appeal and wide reach, pop culture plays a pivotal role in shaping public awareness. The release of *Oppenheimer* offers an unique opportunity to once again refocus on the catastrophic challenge of nuclear weapons and the urgent need for global political progress.[3]

Over the seven decades since the creation of the atomic bomb, the dangers of nuclear weapons use–intentional or accidental–have only grown in scale. Today, one of the gravest dangers emanates from the threat of intentional or accidental use of these weapons along with the opaque nature of integrating strategic weapons with evolving technologies including but not limited to artificial intelligence, cyber weapons, deep fakes, and quantum computing, amongst others.

Nuclear armed states are integrating emerging technologies into their nuclear architectures whilst expanding their nuclear arsenals and developing sophisticated delivery mechanisms. These developments are taking place at a time when arms control measures have receded to the background of national security priorities and nuclear armed states are slow to advance measures focused on nuclear risk reduction. In light of pivoting priorities, nuclear risk reduction efforts focused on crisis communication are perhaps the most tangible and easily attainable in reducing nuclear risk.

In the recent past, myriad incidents have underscored how open channels of communication are the need of the hour. During his most recent visit to Beijing, U.S. Secretary of State Anthony Blinken emphasized the “importance of diplomacy and maintaining open channels of communication across the full range of issues to reduce the risk of misperception and miscalculation.”[4] Open channels of communication can help check deteriorating trust between nations and prevent inadvertent escalation. One primary area of concern in

---

3 Sylvia Mishra, "‘Directing Doomsday’: Lessons Learned from Nuclear Weapons in Film," *Nuclear Network, Center for Strategic and International Studies*, July 8, 2020, last modified October 28, 2021, https://nuclearnetwork.csis.org/directing-doomsday-lessons-learned-from-nuclear-weapons-in-film/.

4 “Anthony Blinken in China: All Eyes on Whether US Secretary of State Will Meet Xi Jinping,” *The Guardian*, June 18, 2023, https://www.theguardian.com/us-news/2023/jun/19/antony-blinken-china-visit-meetings-talks-trip-xi-jinping-taiwan.

U.S.-China bilateral relations is China's rapid build-up of its strategic arsenals. Given concerns about Taiwan and other differences on security issues, tensions between the two countries could likely spiral out of control in the absence of military-to-military communications.

Ensuring the availability of secure, resilient crisis communications channels in the lead up to conflict, during conflict, and in worst case, post nuclear launch, is an international effort the Institute for Security and Technology (IST) continues to work with intention and steadfastness to promote. IST is at the forefront of research on the need for effective channels of crisis communication, centering recent efforts on ensuring the safety and security of global nuclear command, control, and communications (NC3) systems against the threat of emerging and disruptive technologies. Additionally, IST is working to advance the political and technical tracks of CATALINK, a novel multilateral nuclear crisis communications concept. In this report, IST's Alexa Wehsenser and Sylvia Mishra explore the importance of nuclear crisis communications.

Executive Summary

On May 3 and 4, 2023, the Institute for Security and Technology (IST) hosted a workshop in London examining vulnerabilities of existing communications channels relied on by leaders of states with nuclear weapons in times of crises. Participants included a diverse group of high-level policymakers, scholars, diplomats, and technical experts from across the world, including the United States, United Kingdom, France, Germany, Switzerland, India, Pakistan, China, and Russia as well as relevant multilateral organizations such as the North Atlantic Treaty Organization (NATO), amongst others. Sponsored by the German Federal Foreign Office and Swiss Federal Department of Foreign Affairs, IST conducted the workshop under the Chatham House Rule. As a result, this document does not identify or attribute elements of this summary to specific individuals or their institutional affiliations.

The London workshop had two goals. First, to provide a forum for open, frank discussions without judgment, creating an opportunity for participants to question standing orthodoxy and voice ground-breaking, perhaps non-traditional ideas. Second, to ideate tangible avenues of conversation that provide states with nuclear weapons creative options for advancing risk reduction. In order to achieve these goals, the workshop focused on generating a more practical understanding of existing communications approaches and failure modes, as well as political and technical risks and opportunities.

We derived 4 significant takeaways from this engagement:

1. Nuclear crisis communications are of growing importance in the 21st century. Participants agreed that existing channels for crisis communication are not sufficient for 21st century political and technical dynamics, which include increasing vulnerability to manipulation by modern technologies, such as cyber attacks, deep fakes, artificial intelligence, and quantum computing. States must understand and address the practical implications of these vulnerabilities now as a means to reduce the risk of crisis mismanagement in the future.

2. Backchannels play a significant role in diplomacy and defusing crises and sometimes rely on commonly used commercial messaging platforms like WhatsApp and Signal, amongst others.These commercial platforms are not uniformly adopted across geographies and are not necessarily sufficient for use in times of crisis, especially during escalation prior to nuclear launch in

which cyber campaigns may mitigate or eradicate the ability of cellular networks to function well. Furthermore, such services are not dedicated for true crisis moments and thus lack necessary signaling mechanisms. Especially concerning is the security of the endpoint device being used, which in most cases are personal cell phones.

3. CATALINK—an internationally-driven, secure, resilient, novel crisis communication concept being developed by IST and an array of partners—provides a basis for conversation on additive technical concepts to existing crisis communications systems.[1] Working through the technical and political challenges related to the CATALINK system encourages discussion of broader and more tangible responsible nuclear risk reduction efforts.

4. Further work is urgently required to expand the understanding of use cases for nuclear crisis communications, to best identify what technical and political requirements exist, to elucidate gaps, and to more earnestly and collaboratively update existing technical and political mechanisms to meet the challenges of 21st century multi-polar nuclear dynamics.

Participants highlighted the urgent need for a reformulation of how the nuclear community thinks about crisis communications. In order to ensure the efficacy of ongoing efforts to prevent nuclear war, some participants noted that certain state actors may hold the belief that open communication channels are not desirable. This may be because they do in fact decrease risk and these actors desire risk because they utilize the risk to gain advantage. However, participants raised that efforts to reduce nuclear risk by enabling communication between various decision-making levels remains critical to reduce uncertainty in the lead up to a crisis, prevent escalation, or provide a tool for de-escalation if a crisis has crossed into active, armed, and potentially nuclear conflict.

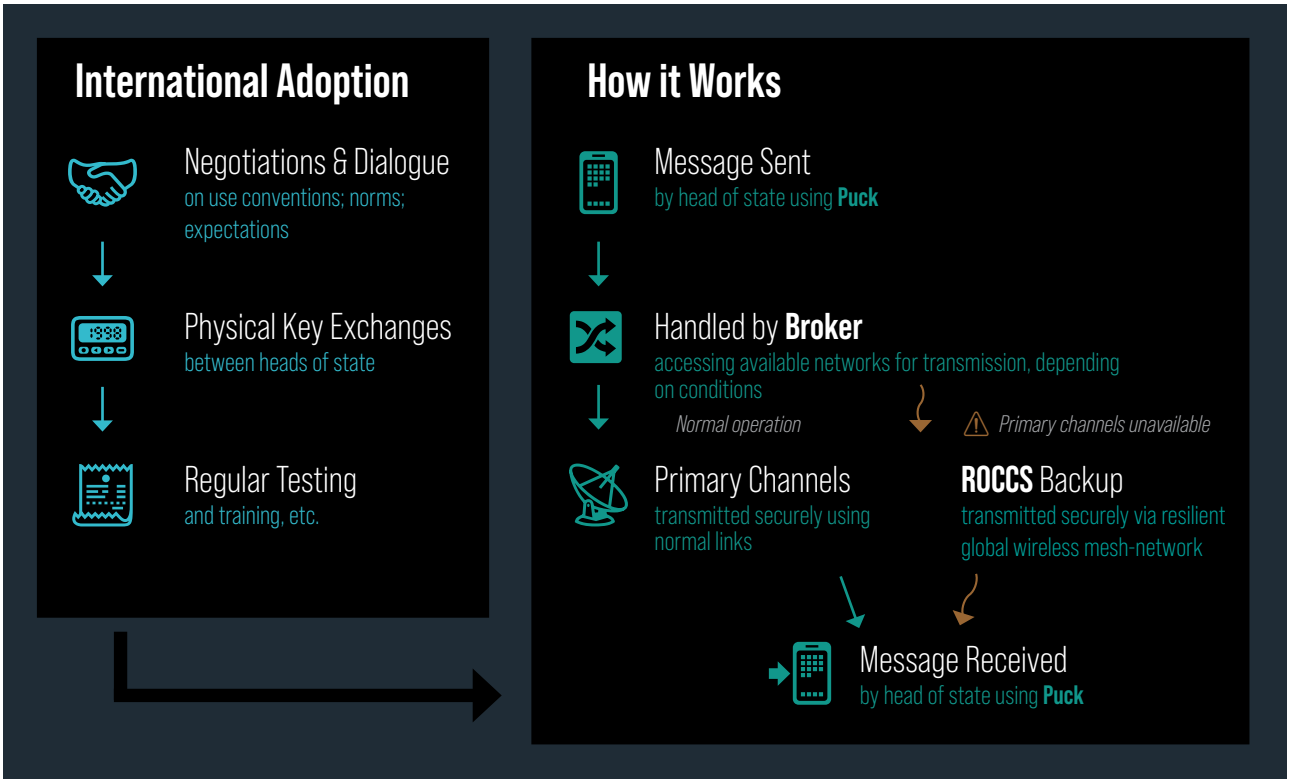
During the workshop, participants suggested that work should be done to update agreement terms and technical elements of existing hotlines, before moving to something like CATALINK, with specific reference to the Foreign Secretary hotline between India and Pakistan. In addition, participants routinely raised that a communication system like CATALINK, which is designed for use by leaders of nuclear armed states, could also perhaps be provided to non-nuclear weapons states (NNWS). This suggestion reflects the reality that a crisis or conflict is unlikely to occur directly between nuclear armed states; instead, it is more probable that a non-nuclear weapons

1 "CATALINK," Institute for Security and Technology, last modified April 25, 2023, https://securityandtechnology.org/catalink/.

state would also be involved in numerous ways. The current war of Russian aggression against Ukraine was raised as a potential use case, especially as it involves a nuclear power using nuclear coercion to advance its goals. In addition, some participants frequently raised that a CATALINK-like system could also perhaps be more useful at the lower echelons of communication, for example between commanders, in addition to its current intended use in only leader-to-leader communication. Even with public statements and communications, they noted that backchannel discussions will continue to bear weight and are likely the most critical, short of arranging for a Head of State to engage their counterpart.

ABOUT THE CATALINK INITIATIVE

An internationally-driven, secure, resilient communications solution that has the potential to avert catastrophes amidst rising tensions between adversaries.



Global State of Crisis Communications, Risk Reduction, and Arms Control

The first day of the workshop centered on three types of crisis communications mechanisms: strategic, normal, and informal. Participants agreed that having mechanisms is not enough; there must then also be political will on all sides to use these mechanisms for their intended purposes.However, some cited that tactical and operational-level mechanisms often work better than political mechanisms due to immediate life or death implications (for example, the U.S.-Russia military deconfliction lines used in context of the Syrian civil war). At the operational and tactical levels, participants emphasized states' abilities to find shared interest to increase communication despite differing objectives. Examples given included the ability of the Nuclear Risk Reduction Center (NRRC) to manage data and deconflictions over recent decades, the creation of the aforementioned U.S.-Russia military deconfliction lines,[2] and the Incidents at Sea Agreement (INCSEA). Lessons learned from these instances should be incorporated into broader conversations on risk reduction and crisis communications solutions.

In a contemporary context, participants noted that it would be difficult to successfully conduct a secret nuclear strike. This new context necessitates a different approach to effective crisis communication methods. This is exemplified by the current crisis in Ukraine; in this case, it is increasingly possible to observe a nuclear-armed state moving to potentially use nuclear weapons. This is over and above the reality that states intending to undertake nuclear use would often signal that intention in advance. Participants concluded that it is likely that the international community would see a public show of intention of nuclear escalation before a hotline was used. As one participant aptly reminded, nuclear weapons, like all other military tools, are "also political tools" used for political purposes.

2 Robert Hamilton, "The Weirdest War: Lessons from US-Russian 'Deconfliction' in Syria," *Stanley Center for Peace and Security*, April 17, 2023, https://riskreduction.stanleycenter.org/hamilton-syria-deconfliction/.

Risk reduction requires leadership and input, especially among nuclear armed states. Currently there are various Track 1 efforts focused on risk reduction, including the P5 Process, U.S. Creating an Environment for Nuclear Disarmament (CEND) Initiative, Stockholm Stepping Stones Initiative, and more.

Ultimately, participants agreed that the ongoing war of Russian aggression in Ukraine reveals the fragility of existing risk reduction frameworks, highlighting the need to collectively come to terms with the current severe constraints of existing ecosystems. The risk reduction approach must be expanded by looking beyond Cold War modalities to review what it means to operate in physical and digital proximity to nuclear states. In addition, many noted that it is increasingly important to involve non-nuclear weapons states (NNWS) that are developing capabilities which will have strategic implications in risk reduction dialogues.

Key Insights from Scenario-Based Discussions

The second day of the workshop aimed to explore practical cases of nuclear crisis communications in the present and near future. The fictional scenario exercise encouraged participants to "wear the hats" of policymakers and identify how national-level leaders might handle communication failures in the early stages of a potential modern crisis and on different rungs of the nuclear escalation ladder.[3]

Participants were divided into two groups, with each group discussing the same two scenarios. The first scenario involved a U.S.-China crisis over Taiwan and the second scenario imagined a China-India-Pakistan crisis in South Asia. Moderators led the participants through a series of discussion questions to identify the messaging goals and communications challenges in each scenario. The first scenario centered on two focal questions: What are the communications demands in the context of a multilateral nuclear crisis? How do communications needs evolve once a crisis develops into a nuclear use scenario? A single focal question guided the second scenario: How would national-level leaders handle communications failures in the early stages of a crisis?

3 The two fictional scenarios were developed by IST's CATALINK team to simulate real-world developments. If interested in discussing the scenarios developed for this workshop, please contact the CATALINK team at catalink@securityandtechnology.org.

TRACK 1.5 WORKSHOP: HYPOTHETICAL SCENARIOS

Scenario 1: U.S.-China crisis over Taiwan	**Scenario 2**: China-India-Pakistan crisis in South Asia
» What are the communications demands in the context of a multilateral nuclear crisis? » How do communications needs evolve once a crisis develops into a nuclear use scenario?	» How would national-level leaders handle communications failures in the early stages of a crisis?

Through deliberating on the ways in which a leader might handle a communications failure in the early stages of a crisis, participants discussed the political challenges of deliberate avoidance in communications and the inevitable ambiguity of actions.

Throughout the exercise, participants discussed the need to verify information and intelligence on the precise details of the crisis before sharing intelligence with strategic partners. Verification becomes particularly important, they emphasized, prior to issuance of a public statement. They also raised the difficulty of carrying out information and intelligence verification as it increasingly coincides with emerging technologies such as large language models and deep fakes. This in turn pushed participants to discuss novel pathways through which communication can be technically verified.

As they considered each hypothetical scenario, participants discussed the need for on-the-ground intelligence sharing between allies and partners. They deliberated on the proper messaging to employ during a crisis when communicating with allies and strategic partners. Participants also suggested the use of public communications: statements issued during a crisis could be one way to showcase intent of diffusing tensions and escalation. One participant referenced President Kennedy's historic public address at the height of the Cuban Missile Crisis where the President famously said "not peace at the expense of freedom, but both peace and freedom."[4] Kennedy's statement assured the world that the United States was ready to undertake steps to maintain peace and stability, while simultaneously showcasing its commitment to deterrence. Other participants debated the utility of public statements, noting that they could come with commitment costs. No matter the type of communication employed,

4 John F. Kennedy, Jr, "Address during the Cuban Missile Crisis,", October 22, 1962, John F. Kennedy Presidential Library, transcript and audio, 17:46, https://www.jfklibrary.org/learn/about-jfk/historic-speeches/address-during-the-cuban-missile-crisis.

many participants agreed that the prospect of a large-scale war is a sobering reality for national leaders; they emphasized that national security advisors should counsel restraint early in the crisis.

In both scenarios, participants were hesitant to recommend kinetic action. However, there was broad consensus on the necessity of signaling resolve, particularly through the movements of capabilities into regions to send strong deterrence signals.

Participants also discussed the effect of new technologies on nuclear deterrence, strategic stability, and novel communication channels. The scenarios led participants to again raise whether NNWS should also have access to a CATALINK-type communications solution. Due to the reality that in a multipolar world order competing and overlapping security interests exist alongside extended nuclear deterrence commitments, participants stated that averting a nuclear catastrophe through crisis communication channels is not just the responsibility of nuclear armed states, but also of non-nuclear armed states.

Participants referenced the fact that many pre-existing hotlines have specific purposes and therefore their use signals very specific political messages. Participants noted that perhaps the specificity of their use provides an opportunity for an additive solution such as CATALINK, which does not have a prescribed use case other than to be used in the lead up to, during and—in a worst case scenario—post nuclear launch.

One discussion during the scenarios focused on how states convey intention via communications. This led participants to emphasize that while CATALINK is not a panacea for effective crisis communication, it can be useful for exclusive communications between state leaders. Participants discussed the systemic incentives behind a state's choice to resort to hotlines to engage in public messaging, deter adversaries, and assure allies. Participants suggested that in the 21st century, conversations about geopolitics and nuclear crisis escalation cannot remain constrained to two parties; taking the competing interests of several states into account, there should be a trilateral or multilateral crisis communication channel. While this was discussed, it is important to note that some participants remained wary of the idea of multilateral mechanisms, as signaling could become confused and intentions blurred—potentially leading to the abuse of these communications mechanisms.

Some participants contended that the CATALINK system should only be available for use by heads of states, while others stated that it could also be useful for military-to-military leader communication channels. Several technical questions were raised

about which division or branch of national governments would utilize and manage CATALINK systems, including at what point leaders would resort to CATALINK. Participants questioned whether CATALINK should be seen as a last resort mechanism for crisis communications, or be used early in a crisis to communicate deterrence or assurance to adversaries. Despite differing opinions as to whether a messaging system like CATALINK would be more useful only at the top leadership level or at tactical or operational levels, all participants agreed that having CATALINK as an additive mechanism to existing systems could be helpful to stabilize crisis dynamics.

A persistent thread of conversation among participants was that often hotlines' are used as a last resort option before undertaking a decision in favor of kinetic actions.

A few participants underscored that hotlines work best in ambiguous and indecisive environments, especially when a state has not yet determined whether it should go to war. Several participants emphasized that hotlines lose utility when a country has already made the decision to wage war—it is highly unlikely a state will use these systems to signal their aggressive intent or betray first-mover advantages.

Throughout the discussion, participants underscored the importance of crisis communication education. Decision-makers who might not be familiar with all existing communication channels and tools available, or are not mentally prepared to address crisis situations involving nuclear weapons, need preparation and training.

Conceptual Progress

The CATALINK concept serves as both a tangible idea for a novel nuclear risk reduction measure, and a 'jumping off point' from which to discuss challenges with current crisis communication options and creative potential solutions. As countries continue attempting to advance new arms control initiatives, enhancing crisis communication could be one concrete agenda item that encourages collaboration between states. Most participants agreed that bilateral hotlines are not sufficient. Several nuclear armed states have competing geopolitical interests and within the context of a multipolar system, there is a clear necessity for multilateral nuclear hotlines. Therefore, it is necessary to think through which official and Track 1.5 settings or forums should host discussions on crisis communications. Several participants pointed out that the Coalition of the Non-Nuclear Weapons States, the UAE, Singapore, and the Philippines are actors that could play a role in facilitating and advancing conversations on crisis communication.

The scenarios exercise challenged participants to immerse themselves in potential real-world crisis situations, encouraging them to think through the gaps that need to be addressed in order to achieve enhanced crisis communications. The workshop participants encouraged the CATALINK team to build out and investigate use cases of crisis communication technologies in nuclear crisis and frame the study in a way that is easily digestible for government officials.

Participants expressed their interest in better understanding norms around nuclear hotlines and discussed what lessons could be derived from existing norms. Going forward, they suggested clarifying whether CATALINK is a technical solution or a political one. Some of the specific questions raised were:

> *Is it possible to focus on both the technical development and political progress of CATALINK without blurring the lines? Is focusing on the technical aspects of CATALINK a better way to build consensus on the political differences and stasis on crisis communications?*

They suggested that there could be benefits to delineating the two tracks and investigating how CATALINK fits into the broader nuclear risk reduction conversation.

Participants brainstormed potential ways that technical solutions can be fine-tuned and blended within existing diplomatic channels. Participants pointed out that focusing on the technical cooperation aspect of crisis communication might be a good starting point to coalesce on hotlines, while political discussions are mired in challenges.

According to several participants, it is crucial that multilateral nuclear hotlines be truly multilateral; in other words, they should not be solely led by Western powers or the P3 countries. There was unanimity regarding the need to engage other non-nuclear weapons states in this conversation to develop a better understanding of how different regions approach the issue of crisis communications. Some suggested establishing the concept of CATALINK within nuclear risk reduction centers or instituting risk reduction centers in countries where they don't exist.

Other feedback from the workshop participants focused on the technical aspects of the CATALINK initiative. Participants suggested gaming out CATALINK and doing AB testing with different feature sets, along with creating different CATALINK design prototypes. There was unanimous interest in understanding the Resilient Omni Frequency Crisis Communications System (ROCCS) and how mesh networks operate. ROCCS is the basis of the CATALINK initiative's messaging capabilities in the event that existing

networks are made unavailable–it is a working concept for a permanently active global mesh network that utilizes multiple redundant networks, channels, and wavelengths to ensure reliable relaying of messages, even in difficult threat environments.

Participants' discussions also examined CATALINK's ability to survive and operate after an EMP (electro-magnetic pulse and geo-magnetic disturbance) attack. They raised that international organizations could play a role in discussions focused on the mesh network. Mesh networks' capacities, if leveraged in other applications, could also be a solution to other problems. While focusing on the technical aspects of CATALINK, participants called for investigating how crisis communications intersects with the broader concepts of 'nuclear norms' and 'nuclear responsibilities.'

Resilient Crisis Communication: The Way Forward

Recent incidents like the China spy balloon crisis,[5] the war in Ukraine, and reports of U.S. and Russian officials using their military hotlines to avert clashes in Eastern Europe[6] showcase the importance of crisis communications with allies and adversaries alike. Secure and effective crisis communication is also a priority for the U.S. government. U.S. Secretary of State Anthony Blinken's trip to Beijing indicated the importance of crisis communication and U.S. interest in re-establishing military hotlines in order to stabilize the U.S.-China relations.[7] China's reluctance to engage the United States through open channels of communication is reflective of a broader global theme and validates the urgent need to move the needle on nuclear risk reduction efforts.

If nuclear risk reduction efforts remain hostage to political differences, the global nuclear order will continue to suffer as nuclear dangers rise at an alarming rate. To continue the momentum on fostering resilient crisis communication, it is important to nourish the technical strand of work on crisis communications. International discussion of the CATALINK concept serves as a viable example of venues through which progress can be made on this front.

5 David E. Sanger, "Balloon Incident Reveals More Than Spying as Competition With China Intensifies," *The New York Times*, February 5, 2023, https://www.nytimes.com/2023/02/05/us/politics/balloon-china-spying-united-states.html.

6 W.J. Hennigan, "U.S., Russia Open Hotline to Prevent Accidental Clash in Europe," *TIME Magazine*, March 3, 2022, https://time.com/6154459/russia-backchannel-ukraine/.

7 U.S. Department of State, "Secretary Blinken's Visit to the People's Republic of China (PRC)", June 19, 2023, https://www.state.gov/secretary-blinkens-visit-to-the-peoples-republic-of-china-prc/.

In this context, workshop participants suggested additions that could improve the overall CATALINK project and move forward nuclear risk reduction efforts writ large.

Moving Forward the CATALINK Initiative

- Participants advised that norms around existing hotlines need to be brought into sharper focus.
- There is a potential need to unpack whether CATALINK systems would be under civilian or military control.
- CATALINK is designed to be used as a fail safe option or as part of a toolkit for backchannel diplomacy. Participants highlighted using CATALINK as the last-resort/failsafe option could carry a political message. The political messaging could be both to the domestic audience (leaders of the state are utilizing all options to prevent a catastrophe) and to the global community (leaders of a state are exercising restraint or trying to prevent an escalation).
- While there was a lot of discussion on how to move forward on technical collaboration, most participants agreed that political consensus building on the idea of crisis communication is a requisite way forward. They suggested potentially setting aside the technical discussion for the interim while working through relevant use cases.

Conclusion

A unanimous takeaway from the workshop was an understanding that existing crisis communications do not meet the challenges of the 21st century geopolitical context. Amid rapidly developing emerging and disruptive technologies, the international community will need to undertake measures to insulate existing channels of communication from a variety of attacks and disruptions. Within the broader context of nuclear risk reduction, international collaboration and cooperation on crisis communications is one of the most concrete mechanisms to foster trust and partnership among nuclear-armed states. CATALINK and crisis communications can offer the much-needed direction and momentum for states to agree on that one common denominator to move discussions forward on nuclear risk reduction.

INSTITUTE FOR SECURITY AND TECHNOLOGY
www.securityandtechnology.org

info@securityandtechnology.org

Copyright 2023, The Institute for Security and Technology