History of the NNRRC

NATIONAL AND NUCLEAR RISK REDUCTION CENTER

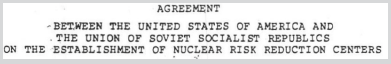
The Origins of the Nuclear Risk Reduction Center – 1980s

Senators Sam Nunn and John Warner, concerned about the rise in international tensions, nuclear armaments, and delivery systems, organized the bipartisan Congressional Working Group on Nuclear Risk Reduction. In 1982, they proposed the establishment of "crisis control centers" in Washington and Moscow to reduce the risk of a nuclear conflict. These proposed centers would exchange information on ballistic missile launches, nuclear accidents, or incidents at sea. They would provide a channel for exchanging critical information under normal circumstances and offer a reliable channel of communication in times of crisis.

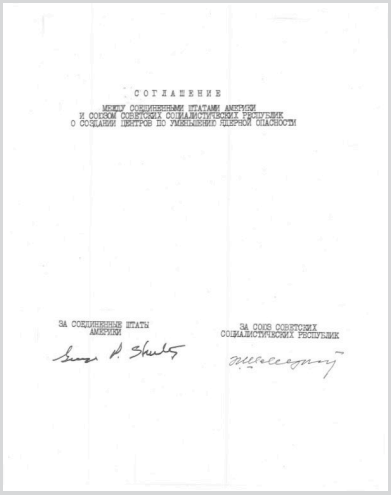
Then U.S. Secretary of State George Shultz (seated, right) and Soviet Foreign Minister Eduard Shevardnadze sign the first NRRC Agreement, September 15, 1987.

At the Geneva Summit in November 1985, Soviet President Mikhail Gorbachev and U.S. President Ronald Reagan agreed to establish a joint experts' study group to examine the feasibility of such a link. These meetings proved successful, and on September 15, 1987, after lengthy discussions,

U.S. Secretary of State George Shultz and Soviet Foreign Minister Eduard Shevardnadze signed the agreement at a White House Rose Garden ceremony, presided over by President Reagan, establishing Nuclear Risk Reduction Centers in Washington and Moscow.


AGREEMENT
BETWEEN THE UNITED STATES OF AMERICA AND
THE UNION OF SOVIET SOCIALIST REPUBLICS
ON THE ESTABLISHMENT OF NUCLEAR RISK REDUCTION CENTERS

Original Title Page, English Version, NRRC Agreement, 1987


СОГЛАШЕНИЕ
МЕЖДУ СОЕДИНЕННЫМИ ШТАТАМИ АМЕРИКИ
И СОЮЗОМ СОВЕТСКИХ СОЦИАЛИСТИЧЕСКИХ РЕСПУБЛИК
О СОЗДАНИИ ЦЕНТРОВ ПО УМЕНЬШЕНИЮ ЯДЕРНОЙ ОПАСНОСТИ
ЗА СОЕДИНЕННЫЕ ШТАТЫ АМЕРИКИ
ЗА СОЮЗ СОВЕТСКИХ СОЦИАЛИСТИЧЕСКИХ РЕСПУБЛИК

Original Title Page, Russian Version, NRRC Agreement, 1987

On February 22, 1988, National Security Decision Directive 301 (NSDD-301) officially established the U.S. NRRC within the Department of State. NSDD-301 laid the groundwork for the activities of the NRRC, including Presidential approval of future notifications regimes, the use of pre-formatted notifications and the type of communications equipment to be used. The proper location for the new NRRC was debated for months, but it was finally decided that the NRRC's role in government-to-government communication was the duty of the State Department. NSDD-301 remained the guiding document for the NRRC until January 2021 with the adoption of National Security Presidential Memorandum 34 (NSPM-34).

Secretary Shultz, Soviet Foreign Minister Shevardnadze, National Security Advisor Powell, Deputy Secretary of Defense Taft, Senator Nunn, Senator Warner, Soviet Ambassador Dobrynin, and U.S. Ambassador to the USSR Jack F. Matlock opened the U.S. NRRC on March 22, 1988 and exchanged the first message with the Soviet NRRC. The NRRC began formal operations on April 1, and the first treaty notification was transmitted to the Soviet NRRC five days later. The first notification from the Soviet Union was received on June 2, 1988.

Secretary Shultz and Soviet Foreign Minister Eduard Shevardnadze at the NRRC opening in Washington, March 22, 1988.

Staff at newly opened NRRC – April 1, 1988

Expansion of the NRRC's Role in Arms Control – 1990s and Early 2000s

Beginning in November 1991, the NRRC's role was broadened significantly. Having been created as a bilateral institution to exchange notifications on nuclear weapons with a single partner, the

Soviet Union, the NRRC became the node for the communications network of the Conference for Security and Cooperation in Europe (CSCE – changed to the OSCE in 1995). This Vienna-based multinational organization is the world's largest regional security organization.

The OSCE's comprehensive approach to security addresses a wide range of concerns including arms control, confidence- and security-building measures, human rights, counterterrorism, and economic and environmental activities. The NRRC's expertise, technical capabilities, and proven reliability in handling time-sensitive notifications for exchange of data made it an ideal partner for the newly created multilateral network of the OSCE.

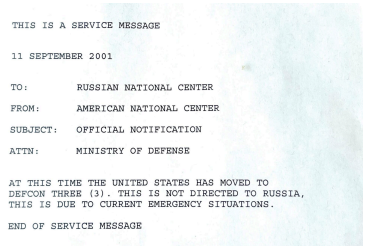
The NRRC's connection with OSCE in the realm of conventional weapons was the template for further expansion of its mandate, this time into the world of chemical weapons (CW). In 1989, the U.S. and the USSR signed the Wyoming MOU, a confidence building measure incorporating the Reagan-era maxim "Trust but verify" by combining data exchange with on-site verification across a wide variety of armaments, including CW. This paved the way to the Chemical Weapons Convention (CWC), which was signed in 1993 and entered into force in 1997.

OPCW inspection of VX nerve gas at the Newport Chemical Depot, Indiana.

The NRRC began processing CWC notifications in May 1997 and in 1998 established a connection with the CWC's implementing agency, the Organisation for the Prohibition of Chemical Weapons (OPCW).

In 1992, the United States, Russia, and 22 other countries signed on to the Treaty on Open Skies (OS), allowing unarmed aerial surveillance flights over the entire territory of its participants, in an effort to increase transparency and build trust. This was an idea originally proposed by President Eisenhower, and rejected by Soviet Premier Bulganin, in 1955. Although the Treaty did not officially enter into force until January 2002, the NRRC began processing test OS notifications in 1996. The U.S. formally withdrew from Open Skies in 2020, noting that it was not in the U.S. interest to remain in the Treaty when Russia was not upholding its commitments.

While the role of the NRRC expanded notably during the 90s and early 2000s, the direct line with the Russian NRRC remained a cornerstone of the Center's mission during this time. This was evident on September 11, 2001, when the NRRC was used to communicate to the Russian MOD that the heightened defensive posture of the U.S. military was not directed at Russia.



THIS IS A SERVICE MESSAGE

11 SEPTEMBER 2001

TO: RUSSIAN NATIONAL CENTER
FROM: AMERICAN NATIONAL CENTER
SUBJECT: OFFICIAL NOTIFICATION
ATTN: MINISTRY OF DEFENSE

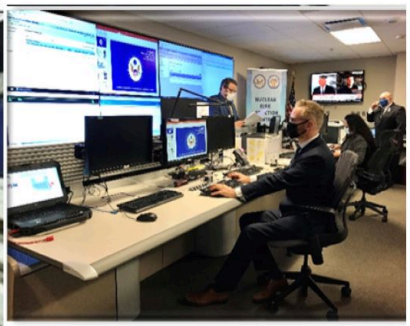
AT THIS TIME THE UNITED STATES HAS MOVED TO DEFCON THREE (3). THIS IS NOT DIRECTED TO RUSSIA, THIS IS DUE TO CURRENT EMERGENCY SITUATIONS.

END OF SERVICE MESSAGE

Further Expansion of Mandate, IT Modernization, and a New Name – 2010s and 2020s

1988

1997



2021

Over the next couple of decades, the NRRC continued to evolve both in terms of its mandate and its IT infrastructure. IT modernization became an integral and ongoing part of NRRC operations

and strategic planning in order to adapt to rapid changes to the technological landscape and evolving cybersecurity threats. This included a relocation within the State Department in 2012 and the first of an ongoing series of technological updates for NRRC operations.

In 2013, Secretary Kerry and Foreign Minister Lavrov signed an amendment to the original 1987 U.S.-USSR NRRC Agreement, committing to a full modernization of technological infrastructure for both NRRCs. With the U.S. refresh already underway, U.S. technological assistance and equipment helped Russia complete their NRRC's government-to-government communications line (GGCL) modernization by 2017.

Secretary Kerry and Russian Foreign Minister Lavrov at their Joint Nuclear Risk Reduction Centers Agreement Signing Ceremony, October 7, 2013

During this decade, the direct U.S. lines with Kazakhstan, Ukraine, and Belarus were modernized utilizing secure Virtual Private Networks (VPNs) to increase reliability and flexibility. When the United States formally withdrew from the INF Treaty on August 2, 2019, there was no longer a documented notification regime for which the direct lines would be utilized. Belarus soon afterwards decided to terminate the direct U.S.-Belarusian line. However, Kazakhstan and Ukraine agreed that the direct lines continue to hold value as a 24/7 means of communication. As such, the direct lines with Kazakhstan and Ukraine remain active.

While some notification responsibilities expired during this time, specifically INF and OS, several new responsibilities and issue sets for the Center emerged. On April 8, 2010, the U.S. and Russia signed the New Strategic Arms Reduction Treaty (New START or NST), continuing the process begun by Presidents Reagan and Bush of verifiably reducing U.S. and Russian strategic nuclear arsenals. New START replaced the 1991 START I Treaty, which expired December 2009, and terminated the 2002 Strategic Offensive Reductions Treaty (SORT) with its entry into force on February 5, 2011. In February 2021, the U.S. and Russia agreed to extend New START by 5 years, until February 5, 2026. Just as with the INF and START I, it was agreed that the U.S. and Russian NRRCs would handle all treaty-mandated notifications and communications.

U.S. President Barack Obama and Russian President Dmitry Medvedev sign the New START Treaty, April 8, 2010. (Source: obamawhitehouse.archives.gov)

Having signed the International Code of Conduct against Ballistic Missile Proliferation (later the Hague Code of Conduct, or HCoC) in 2002, the United States commenced implementation of pre-launch notifications (PLNs) for missile and space vehicle launches in May 2010, using the NRRC to transmit the notifications to the HCoC Immediate Central Contact in Vienna. Although HCoC was originally targeted at missile proliferation, notification numbers over time have shown the growth of the commercial space launch market and a possible shift in priority from conventional arms control to space situational awareness.

In 2012, the OSCE created an informal working group to develop confidence-building measures (CBMs) to reduce the risks of conflict stemming from the use of information and communication technologies (ICTs). These CBMs were officially adopted in 2016, the OSCE Cyber Communications Regime was negotiated in 2020, and the U.S. was first to use the new reporting mechanism, following the SolarWinds cyberattack in 2021. However, this multilateral cyber notification regime does not account for all cyber notifications transmitted by the Center. In 2013, the U.S. and Russia agreed to begin exchanging information via the NRRCs about cybersecurity incidents at the level of national concern, intending to build confidence and strengthen bilateral relations in cyberspace.

Due to the ongoing expansion of the Center's mandate and IT footprint, the USG decided to update the guidance for its operation. In 2021, NSPM-34 replaced NSDD-301 as the documents

governing the operations of the Center. In order to reflect the evolving scope of the Center's risk reduction mission to include nuclear arms control, conventional arms transparency, CW destruction, ballistic missile and space launch vehicle awareness, and international cyber incidents, the U.S. Nuclear Risk Reduction Center (NRRC) was renamed the U.S. National and Nuclear Risk Reduction Center (NNRRC).

NNRRC Milestones

Year	Milestone
1984	Senate Resolution 329: Establishment of a high-speed communications link between the US and the USSR in addition to the "Hotline"
1985	NSDD 186: Direct Communications Link (DCL)/"Hotline" Between Washington and Moscow Policy
1987	NRRC Agreement: Agreement Between the US and the USSR Establishing NRRCs U.S. President Ronald Reagan and Soviet General Secretary Mikhail Gorbachev sign the Intermediate-Range Nuclear Forces Treaty (INF) at a summit meeting in Washington. The Department of Defense creates the On-Site Inspection Agency (OSIA) in 1988 as a separate agency tasked with implementing the treaty.
1988	NSDD 301: Establishment and Operation of the US NRRC, located at the State Department: remit is to "transmit notifications agreed between the two Parties [U.S. and USSR], including those required under certain existing and possible future arms control and confidence-building agreements." Examples cited: Accidents Measures Agreement, Prevention of Incidents On and over the High Seas (INCSEA), INF, and unspecified "goodwill notifications." Memorandum on Ballistic Missile Launch Notifications Using the Nuclear Risk Reduction Centers (BML)
1989	Memorandum on the Use of the NRRCs for the US-Soviet Agreement on Prevention of Dangerous Military Activities (DMA) The U.S. and Soviet Union sign the Wyoming Memorandum of Understanding, a confidence building measure intended to lead to successful implementation of a chemical weapons disarmament treaty. The MOU includes two phases: first, an information exchange and second, on-site inspections.
1990	Memoranda on Arms Control Treaty Implementation: NSD-41 and NSD-44 call for on-site inspection activities to be included in all future arms control agreements. NSD-41 expands the role of OSIA from INF-related on-site inspections to include Strategic Arms Reduction Treaty (START), Conventional Forces in Europe (CFE), Chemical Weapons (CW) and Nuclear Testing Talks (NTT) verification activities. NSD-44 expands OSIA's remit to include the Threshold Test Ban Treaty (TTBT) and the Peaceful Nuclear Explosions Treaty (PNET). OSIA's expanded remit adds these treaties to NRRC's notifications list.
1992	U.S. Secretary of State James Baker and foreign ministers from 23 other countries sign the Open Skies Treaty (OS) in Helsinki, Finland. The treaty enters into force on 2 January 2002, after Russia and Belarus have completed ratification procedures. The NRRC begins processing test messages in 1996.
1994	Memorandum on the Use of NRRC for Second Phase of the Wyoming MOU: The NRRC is now responsible for notification exchanges for under the Wyoming MOU Phase II, as well as the Agreement on Reciprocal Advance Notice of Major Strategic Exercises (involving heavy bombers, agreed in Wyoming MOU Phase I).
1995	Agreement between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Belarus Concerning the Provision of Material and Services for the Establishment of a Continuous Communications Link. (This agreement is no longer in force, but the U.S. and Belarusian NRRCs continued to exchange notifications in the absence of an agreement until U.S. withdrawal from INF.)
1998	OSIA becomes part of the Defense Threat Reduction Agency
1999	PDD 70: National Implementation of the Chemical Weapons Convention (CWC) directs the NRRC to manage communications for the United States in a manner consistent with the CWC, as the end-user station of the CWC communications network established by OPCW. The U.S. Arms Control and Disarmament Agency becomes part of the Department of State.
2000	Protocol Between the United States of America and the Russian Federation Amending the Agreement Between the United States of America and the Union of Soviet Socialist Republics of September 15, 1987, on the Establishment of Nuclear Risk Reduction Centers
2001	NRRC sends goodwill message ensuring that Russia is informed of the events on September 11 as they are happening, avoiding possible misunderstanding of U.S. military action. Secure Link Agreement: Agreement Between the United States of America and Ukraine on the Establishment of a Secure Communications Link Between the Nuclear Risk Reduction Center of the United States of America and the Military Cooperation and Verification Center of the General Staff of the Armed Forces of Ukraine Secure Link Agreement: Agreement Between the Government of the United States of America and the Government of the Republic of Kazakhstan on the Establishment of a Secure Communications Link Between the Nuclear Risk Reduction Center of the United States of America and the Arms Control and Inspection Activity Support Center of the Ministry of Defense of the Republic of Kazakhstan.
2002	NSPD 13: US Policy and Organization for the Implementation of the Treaty on Open Skies (OS)
2010	Signing of the New START Treaty and provisional implementation.

Year	Milestone
	Implementation of notifications under the Hague Code of Conduct Against Ballistic Missile Proliferation (HCOC) and the Additional Protocol (AP) between the United States and the International Atomic Energy Agency (IAEA).
2012	**Nuclear Risk Reduction Center Ribbon-Cutting Ceremony celebrates the Center's relocation and continuing renovations.**
2013	**U.S.-Russia Cybersecurity Agreement: Protocol Regarding Activity Threatening Information and Communication Networks, Systems, or Infrastructure between the United States and the Russian Federation on expanding the exchange of notifications as an implementing measure under the NRRC Agreement to convey bilateral inquiries and messages regarding cybersecurity incidents. The United States first exercised this protocol in 2016.**
2019	**The United States formally withdraws from the INF treaty.**
2020	**The OSCE Cyber Notification Regime negotiated.** **The United States formally withdraws from the Treaty on Open Skies.**
2021	**NSPM-34 replaces NSDD-301 as the guiding document for the Center, officially changing the name to the National and Nuclear Risk Reduction Center (NNRRC)** **Signing of an updated Agreement on Maintaining a Secure Communications Line Between the United States and Ukraine; Ukrainian is added to list of NNRRC official languages.**