
Intermediate-Range Nuclear Forces [INF]

The Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles, commonly referred to as the INF (Intermediate-Range Nuclear Forces) Treaty, requires destruction of the Parties' ground-launched ballistic and cruise missiles with ranges of between 500 and 5,500 kilometers, their launchers and associated support structures and support equipment within three years after the Treaty enters into force.

In the mid-1970s the Soviet Union achieved rough strategic parity with the United States. Shortly thereafter, the Soviet Union began replacing older intermediate-range SS-4 and SS-5 missiles with a new intermediate-range missile, the SS-20, bringing about what was perceived as a qualitative and quantitative change in the European security situation. The SS-20 was mobile, accurate, and capable of being concealed and rapidly redeployed. It carried three independently targetable warheads, as distinguished from the single warheads carried by its predecessors. The SS-20s 5,000 kilometer range permitted it to cover targets in Western Europe, North Africa, the Middle East, and, from bases in the eastern Soviet Union, most of Asia, Southeast Asia, and Alaska.

In late 1977, NATO's Nuclear Planning Group ordered a study of the Alliance's long-term INF modernization needs, consistent with the doctrine of flexible response. In the spring of 1979, NATO established the Special Consultative Group to formulate guiding principles for future arms control efforts involving INF. That summer, NATO produced the Integrated Decision Document, which set forth the basic aims of the Alliance's INF policy. It called for complementary programs of force modernization and arms control.

On November 12, 1979, the NATO ministers unanimously adopted a "dual track" strategy to counter Soviet SS-20 deployments. One track called for arms control negotiations between the United States and the Soviet Union to reduce INF forces to the lowest possible level; the second track called for deployment in Western Europe, beginning in December 1983, of 464 single-warhead U.S. ground-launched cruise (GLCM) missiles and 108 Pershing II ballistic missiles.

Initially the Soviet Union refused to engage in preliminary talks, unless NATO revoked its deployment decision; however, by July 1980, the Soviet position changed, and preliminary discussions began in Geneva in the fall of 1980.

The U.S. approach to the negotiations, developed through extensive consultations within NATO, required that any INF agreement must: (1) provide for equality both in limits and rights between the United States and the Soviet Union; (2) be strictly bilateral and thus exclude British and French systems; (3) limit systems on a global basis; (4) not adversely affect NATO's conventional defense capability; and (5) be effectively verifiable.

Agreement to begin formal talks was reached on September 23, 1981. On November 18, President Reagan announced a negotiating proposal in which the United States would agree to eliminate its Pershing IIs and GLCMs if the Soviet Union would dismantle all of its SS-20s, SS-4s, and SS-5s. This proposal became known as the "zero-zero offer."

At the beginning of the talks, the Soviet Union opposed the deployment of any U.S. INF missiles in Europe and proposed a ceiling of 300 "medium-range" missiles and nuclear-capable aircraft for both sides, with British and French nuclear forces counting toward the ceiling for the West.

During the first two years of the talks, which ended with a Soviet walkout on November 23, 1983, the United States continued to emphasize its preference for the "zero option" even while introducing the concept of an interim agreement based on equally low numbers of INF systems.

During 1984 there were no INF negotiations. U.S. deployments were carried out as planned in the Federal Republic of Germany, Italy, and the United Kingdom, while preparations for deployment continued in Belgium.

In January 1985, Secretary of State George Shultz and Soviet Foreign Minister Andrey Gromyko agreed to separate but parallel negotiations on INF, strategic arms (START), and defense and space issues as part of a new bilateral forum called the Nuclear and Space Talks (NST). The United States and the Soviet Union agreed that all questions regarding these three areas would be considered in their interrelationship. Negotiations would be conducted by a single delegation from each side, divided into three groups -- one for defense and space, one for START, and one for INF. Formal talks resumed in March 1985 in all three areas.

In the fall of 1985, the Soviet Union hinted at the possibility of an INF agreement independent of START or defense and space issues. As U.S. GLCM deployments continued, the Soviet Union outlined an interim INF agreement that would permit some U.S. GLCMs in Europe, but which would permit SS-20 warheads equal to the sum of all warheads on U.S., British, and French systems combined. The Soviets also offered to freeze INF systems in Asia -- contingent on U.S. acceptance of their proposals and provided the Asian strategic situation did not change.

In November of 1985, President Reagan and General Secretary Gorbachev met in Geneva, where they issued a joint statement calling for an "interim accord on intermediate-range nuclear forces." At the end of 1985, the United States proposed a limit of 140 launchers in Europe for both sides and proportionate reductions in Asia while emphasizing collateral constraints on shorter-range missiles, since these systems can cover the same targets as longer-range systems.

On January 15, 1986, General Secretary Gorbachev announced a Soviet proposal for a three-stage program to ban nuclear weapons by the year 2000, which included elimination of all U.S. and Soviet INF missiles in Europe.

In late February 1986, the United States proposed a limit of 140 INF launchers in Europe and concurrent proportionate reductions in Asia. This proposal also called for both sides to reduce their INF missile launchers remaining in Europe and Asia by an additional 50 percent in 1988 and, finally, to eliminate all INF weapons by the end of 1989. There would be no constraints on British and French nuclear forces. Moreover, as of the end of 1987, shorter-range missiles would be limited equally either to current Soviet levels existing on January 1, 1982, or to a lower level. The United States also

presented an outline for comprehensive verification.

A series of high-level discussions took place in August and September 1986 followed by a meeting between President Reagan and General Secretary Gorbachev in Reykjavik, Iceland, in October 1986, where the sides agreed to equal global ceilings of systems capable of carrying 100 INF missile warheads, none of which would be deployed in Europe. The Soviet Union also proposed a freeze on shorter-range missile deployments and agreed in principle to intrusive on-site verification.

Several months later, on February 28, 1987, the Soviet Union announced that it was prepared to reach a separate INF agreement. On March 4, 1987, the United States tabled a draft INF Treaty text, which reflected the agreement reached at Reykjavik, and submitted a comprehensive verification regime. In April the Soviet Union presented its own draft Treaty, and by July, it had agreed in principle to some of the provisions in the U.S. comprehensive verification regime, including data exchange, on-site observation of elimination, and on-site inspection of INF missile inventories and facilities. In a major shift, however, the Soviet side proposed the inclusion of U.S.-owned warheads on the West German Pershing IA missile systems. The United States responded by restating that the INF negotiations were bilateral, covering only U.S. and Soviet missiles, and could not involve third-country systems or affect existing patterns of cooperation.

During April meetings with Secretary Shultz in Moscow, General Secretary Gorbachev proposed the possible elimination of U.S. and Soviet shorter-range missiles. At the June 1987 meeting of the North Atlantic Council, NATO foreign ministers announced support for the global elimination of all U.S. and Soviet intermediate-range and shorter-range missile systems. On June 15, President Reagan proposed the elimination of all U.S. and Soviet shorter-range missile systems.

On July 22, 1987, General Secretary Gorbachev agreed to a "double global zero" Treaty to eliminate intermediate-range and shorter-range missiles.

On August 26, 1987, Chancellor Kohl announced the Federal Republic of Germany would dismantle its 72 Pershing IA missiles and not replace them with more modern weapons if the United States and the Soviet Union scrapped all of their INF missiles as foreseen in the emerging Treaty. This was a unilateral declaration by the FRG and is not part of the INF Treaty, which is a bilateral U.S.-Soviet agreement.

In September, the two sides reached agreement in principle to complete the Treaty before the end of the year. On December 8, 1987, the Treaty was signed by President Reagan and General Secretary Gorbachev at a summit meeting in Washington. At the time of its signature, the Treaty's verification regime was the most detailed and stringent in the history of nuclear arms control, designed both to eliminate all declared INF systems entirely within three years of the Treaty's entry into force and to ensure compliance with the total ban on possession and use of these missiles.

The Treaty the United States and the Soviet Union signed at Washington on December 8 includes the Memorandum of Understanding (MOU) on Data,¹ the Protocol on Inspections, and the Protocol on Elimination. Because of concerns raised by the Senate during the ratification hearings, and because of issues that arose during technical consultations between the United States and the Soviet Union during the spring of 1988, this package was augmented by three exchanges of diplomatic notes (one on May 12, 1988 and two on May 21, 1988) and an agreed minute signed May 12, 1988. The Senate resolution of ratification required the President, prior to exchanging instruments of ratification, to obtain Soviet agreement that the four documents "are of the same force and effect as the provisions of the Treaty." This was done through an exchange of notes on May 28, 1988. The Treaty entered into force upon the exchange of instruments of ratification in Moscow on June 1, 1988.

Thirty days after the Treaty entered into force, the INF's precedent-setting regime of intrusive, on-site inspections began:

- **Baseline Inspections.** From July 1988 through August 1988, both signatories had the right to conduct baseline inspections at each other's facilities. Facilities were specified in the Treaty's Memorandum of Understanding, to help verify data exchanged on treaty-limited items (TLI).
- **Closeout Inspections.** Both sides had the right to conduct closeout inspections at eliminated facilities to verify that all INF-related activities had ceased. As permitted by the Treaty, some sites were eliminated prior to entry into force, and in those cases closeout inspections were combined with baseline inspections. The last closeout inspections were conducted in August 1991.
- **Elimination Inspections.** These on-site inspections were designed to confirm the destruction of missiles, launchers and associated equipment according to the stringent procedures specified in the Treaty. Eliminations were accomplished by explosive demolition, burning, crushing, cutting or static fire, and required 30 days pre-notification. Additionally, each side was permitted to eliminate up to 100 INF missiles during the first six months of the Treaty by launching the missiles to destruction. Only the Soviet Union exercised this launch-to-destroy option, eliminating 72 missiles prior to December 1, 1988. The Soviet Union had 5,349 items, including missiles, launchers, support structures and support equipment, to be destroyed during the three-year elimination period. Meanwhile, the United States had over 2,700 similar items to destroy in the same period. The last elimination inspections were conducted in May 1991.
- **"Quota" or "Short-notice" Inspections.** The Treaty provides for a series of short-notice inspections over a period of 13 years to ascertain the number or absence of TLI at a site. Twenty quota inspections per treaty year were permitted during the first three years of INF implementation. The quota inspections will continue at the rate of 15 per treaty year through May 31, 1996, and at a rate of 10 per treaty year from June 1, 1996 through May 31, 2001.
- **Continuous Portal Monitoring Inspections.** Continuous monitoring inspections are permitted at two former ballistic missile assembly plants: Votkinsk, Russia (former SS-20 final assembly facility) and Magna, Utah (former Pershing II production facility). Portal monitoring is designed to permit monitors located outside the facility to ensure that prohibited SS-20s or Pershing IIs are not being produced and shipped. The Treaty requires that each Party permit the other to begin continuous monitoring 30 days after entry into force and continue until May 31, 2001.

Article XIII established the Special Verification Commission (SVC). The SVC serves as a forum for discussing and resolving implementation and compliance issues, for considering additional procedures to improve the viability and effectiveness of the Treaty, and for determining the characteristics and methods of use of inspection equipment as anticipated by Section VI of the Protocol on Inspection. The sides resolved many of those issues during the first SVC session and agreed to utilize the agreements reached until such time as a document embodying them was signed by the two sides.

During the third session of the SVC (December 1988), the sides signed an Agreed Statement on inspection procedures at the continuous monitoring inspection site at Votkinsk and a Memorandum of Understanding on operating procedures for the SVC.

To confirm the declared inventory of INF systems throughout the three-year elimination period and for ten years thereafter, the INF Treaty established various types of on-site inspections, among these are, baseline inspections, to confirm the initial data update; closeout inspections of facilities and missile operation bases at which INF activity ceased; short-notice (quota) inspections of declared and formerly declared facilities, and elimination inspections to confirm elimination of INF systems in accordance with agreed procedures. In addition the United States also received the right to monitor, on a continuous basis for up to 13 years, the access (or portals) to any Soviet facility manufacturing a ground-launched ballistic missile (GLBM), not covered under the INF Treaty, which has a stage outwardly similar to a stage of a GLBM limited by the Treaty. The Soviets received a similar right to monitor the U.S. facility that previously produced the Pershing rocket motor.

The U.S. On-Site Inspection (OSIA) was established January 15, 1988, *inter alia*, to coordinate and implement the inspection provisions of the Treaty. Baseline inspections were conducted in 1988 by

U.S. and Soviet inspectors to verify the data provided by the United States and Soviet Union on the number and locations of their respective INF systems and facilities.

In late April and early May 1991, the United States eliminated its last ground-launched cruise missile and ground-launched ballistic missile covered under the INF Treaty. The last declared Soviet SS-20 was eliminated on May 11, 1991. A total of 2,692 missiles was eliminated after the Treaty's entry-into-force.

Following the December 25, 1991, dissolution of the Soviet Union, the United States sought to secure continuation of full implementation of the INF Treaty regime and to multilateralize the INF Treaty with twelve former Soviet republics which the United States considers INF Treaty successors.² Of the twelve successor states, six -- Belarus, Kazakstan, Russia, Turkmenistan, Ukraine, and Uzbekistan -- have inspectable INF facilities on their territory. Of these six, four -- Belarus, Kazakstan, Russia, and Ukraine -- are active participants in the process of implementing the Treaty. With the agreement of the other Parties, Turkmenistan and Uzbekistan, each with only one inspectable site on its territory, while participants, have assumed a less active role, foregoing attendance at sessions of the SVC and participation in inspections.

The multilateralizing of what was previously a bilateral U.S.-Soviet INF Treaty required establishing agreements between the United States and the governments of the relevant Soviet successor states on numerous issues. In the SVC and through diplomatic contacts with the actively participating successor states, the United States worked to secure agreements to ensure continuation of the viability of the Treaty regime and to assure the exercise by the United States of its rights under the Treaty. Among the tasks undertaken were: arrangements for the settlement of costs connected with implementation activities in the new, multilateral Treaty context; the establishment of new points of entry (POE's) in Belarus, Kazakstan, and Ukraine through which to conduct inspections of the former INF facilities in those countries; and the establishment of communications links between the United States and those countries for transmission of various Treaty-related notifications. Other issues that have been discussed in the SVC include multilateral operating procedures for the SVC's concurrent continuous monitoring under the START I and INF Treaties, and inspection procedures for new missiles exiting from the Votkinsk Machine Building Plant in Russia.

Implementation Progress

The first three years of the Treaty's implementation were marked by almost continuous elimination of missiles, launchers and related equipment. Beginning with the first Soviet SS-12 missile destruction at Saryozek in August 1988, U.S. inspectors witnessed the elimination of 1,846 intermediate-range Soviet missiles through May 12, 1991. Similarly, since the first elimination of a Pershing I-A missile at Longhorn Army Ammunition Plant near Marshall, Texas on September 8, 1988, Soviet inspectors viewed the destruction of 846 intermediate-range U.S. missiles. All declared shorter-range INF systems (those with ranges from 500 to 1,000 km) were eliminated one month ahead of the November 30, 1989 deadline. All other eliminations were completed on time by May 1991.

As a result of the breakup of the Soviet Union in December 1991, Belarus, Kazakstan, Russia and Ukraine became the implementing parties to the Treaty, responsible for conducting inspection and escort missions. Three additional points of entry for INF inspectors were also established: one in Minsk, Belarus; another in Almaty, Kazakstan; and a third in Kiev, Ukraine. Similarly, new Nuclear Risk Reduction Centers (NRRC) were created in each of the same cities. Additionally, instead of Soviet escorts, Belarussian, Kazak and Ukrainian officials now escort U.S. inspectors to former Soviet sites on their respective territory. There was no impact, however, on continuous portal monitoring.

Monitoring operations began in both countries in July 1988 and continues today. At Magna, Utah and Votkinsk, Russia, up to 30 inspectors -- from the former Soviet Union (FSU) and United States,

respectively -- remain outside the gates of former INF missile assembly plants to confirm that exiting vehicles do not contain prohibited missiles.

Quota or "short-notice" inspections of formerly declared facilities also continue. These inspections help maintain confidence that the Parties are complying with the Treaty.

INF Inspectable Sites

The Intermediate-Range Nuclear Forces (INF) Treaty required the United States and Soviet Union to conduct inspections at each other's sites during eliminations of treaty-limited items (TLI). The inspecting party was permitted a maximum of 20 inspectors to observe eliminations at each site. A 30-day notification by the eliminating party was required; and the inspecting party gave 72-hour notice before arrival of their inspectors.

U.S. systems to be eliminated under the INF Treaty were the Pershing II missile and its launcher and launch pad shelter; the Pershing IA missile and launcher; the Pershing 1B missile; and the BGM-109G ground-launched cruise missile (GLCM) and its launch canister and launcher.

Soviet systems to be eliminated were the SS-20 missile and its launch canister, launcher, missile transporter vehicle and fixed structure for the launcher; the SS-4 missile and its missile transporter vehicle, missile erector, launch stand and propellant tanks; the SS-5 missile; the SS-12 missile and its launcher and missile transporter vehicle; the SS-23 missile and its launcher and missile transporter vehicle; and the SSC-X-4 missile and its launch canister and launcher. The SSC-X-4 system, which was tested but never deployed, was eliminated within the first six months of the Treaty.

By May 1991, all intermediate-range and shorter-range missiles, launchers, related support equipment and support structures were eliminated. The methods employed included:

- Explosive demolition or burning of missiles, in or out of the canister. Nozzles, cases, and canisters were burned, crushed, flattened or destroyed by explosion (e.g., Pershing, SS-20, SS-12, SS-23).
- Missile airframe cut longitudinally, with wings and tail section severed and front section crushed or flattened (e.g., GLCM, SSC-X-4).
- Launch to destruction. Up to 100 missiles on each side were permitted to be launched to existing impact areas (e.g., Soviet SS-20s).
- Static display. Each side was permitted to eliminate up to 15 missiles, canisters and launchers by rendering them inoperative prior to placing them on display.
- Loss or accidental destruction. In the event of accidental elimination, a 48-hour notice was required, and the other side had the right to inspect the destroyed items.
- Launchers and support equipment eliminations by cutting, destroyed by explosion or removal of mechanisms as specified in Protocol.
- In situ (in place) eliminations of related support facilities, structures and shelters.

Inspectable U.S. Sites

In addition to elimination inspections, the Treaty permitted baseline, closeout, quota or "short notice" inspections, and continuous portal monitoring (CPM). The Treaty's Memorandum of Understanding identified 31 U.S. missile sites and related facilities as subject to these inspections. The identified inspection facilities are former operational and support facilities for the Pershing IA (PIA), Pershing II (PII), and BGM-109G ground-launched cruise missiles. All facilities are located in the continental United States and the five basing countries of Belgium, Italy, the Federal Republic of Germany, The Netherlands and the United Kingdom.

Specific U.S. sites include missile operating bases (MOB) --all located in Europe -- and various support establishments, including test ranges (TR), training facilities (TF), launcher and missile elimination facilities (LEF, MEF, M/LEF), missile production facilities (MPF), launcher production facilities (LPF), launcher and missile support facilities (LSF, MSF), and launcher and missile repair facilities (LRF, MRF).

Continental United States

Alliant (formerly Hercules) Plant #1, Magna, UT (CPM only)

System: PII

Sites: MPF

McDonnell-Douglas, Titusville, FL

System: GLCM

Sites: MPF

General Dynamics, Kearney Mesa, CA

System: GLCM

System: MPF

Dugway Proving Grounds, UT

System: GLCM

Sites: TR

Davis-Monthan AFB, Tucson, AZ

System: GLCM

Sites: TF, M/LEF

Ft Huachuca, AZ

System: GLCM

Sites: TF

Plant 19, San Diego, CA

System: GLCM

Sites: LPF

Martin Marietta, Middle River, MD

System: PII

Sites: LPF

Pueblo Depot Activity, Pueblo, CO

System: PIA/PII

Sites: MSF, MRF, LRF, MEF, LEF

Redstone Arsenal, Huntsville, AL

System: PII

Sites: MSF, LSF, LRF

Ft Sill, OK

System: PII

Sites: LRF, TF

Complex 16, Cape Canaveral, FL

System: PII

Sites: TR

Longhorn AAP, Karnack, TX

System: PIA/PII

Sites: MEF

U.S. Basing Countries

Weilerbach, Federal Republic of Germany

System: PII

Sites: MSF

EMC Hausen, Frankfurt, Federal Republic of Germany

System: PII
Sites: LRF, LEF
Schwaebisch-Gmuend, Federal Republic of Germany
System: PII
Sites: MOB
Neu Ulm, Federal Republic of Germany
System: PII
Sites: MOB
Waldheide-Neckarsulm, Federal Republic of Germany
System: PII
Sites: MOB
RAF Greenham Common, United Kingdom
System: GLCM
Sites: MOB
RAF Molesworth, United Kingdom
System: GLCM
Sites: MOB
Comiso, Italy
System: GLCM
Sites: MOB
Florennes, Belgium
System: GLCM
Sites: MOB
SABCA, Gosselies, Belgium
System: GLCM
Sites: MRF
Wueschheim, Federal Republic of Germany
System: GLCM
Sites: MOB
Woensdrecht, The Netherlands
System: GLCM
Sites: MOB

Continuous portal monitoring of missile assembly or production plants is permitted in the United States under two arms control agreements: the Intermediate-Range Nuclear Forces (INF) Treaty and the Strategic Arms Reduction Treaty (START), signed by the United States and the Soviet Union in December 1987 and July 1991, respectively.

The continuous portal monitoring concept originated under the INF Treaty, which established an unprecedented regime of intrusive verification measures. Under the terms of the Treaty, each treaty signatory is permitted to use up to 30 inspectors to perform around-the-clock monitoring of a former intermediate-range missile assembly or production plant on the other's territory. The U.S. site was established at Hercules Plant #1 (now called Alliant Plant #1) in Magna, Utah. The plant previously manufactured rocket motors for the Pershing II intermediate-range missile. The Votkinsk Machine Building Plant in Votkinsk, Russia, which previously assembled the SS-20 missile, was designated as the Soviet INF portal.

INF portal monitoring permits former Soviet Union (FSU) inspectors to visually observe and physically measure all vehicles exiting the Magna plant and to inspect vehicles large enough to contain a treaty-limited item. In contrast to U.S. inspectors use of a radiographic imaging system, called CargoScan, to inspect Russian SS-25 intercontinental ballistic missile (ICBM) canisters exiting the Votkinsk plant, the FSU inspectors at Magna do not use such a system.

INF continuous portal monitoring began in Magna, Utah, in July 1988, 30 days after the Treaty's entry

into force on June 1, 1988. The Treaty permits portal monitoring to continue for 13 years, until 2001.

Glossary of INF Terms

Ballistic Missile. A missile whose flight is rocket propelled and whose trajectory is primarily determined by gravitational forces after termination of powered flight.

Basing Country. A country other than the United States and former Soviet Union where treaty-limited missiles and related support equipment are located. U.S. basing countries are the United Kingdom, the Federal Republic of Germany, Italy, Belgium, and The Netherlands. Prior to the reunification of Germany and the breakup of Czechoslovakia, the German Democratic Republic (GDR) and Czechoslovakia were basing countries for the Soviet Union. The U.S. still has the treaty right to conduct inspections in the territory of the former GDR and in the independent Czech and Slovak Republics.

Cruise Missile. A missile that, like an airplane, sustains flight by aerodynamic means over most of its flight path.

Deployment Area. A geographic area in which intermediate-range missiles and their launchers, which are to be eliminated under the INF Treaty, are permitted to be operated and moved about freely without notification to the other party until they are eliminated. A deployment area contains one or more missile operating bases (MOBs).

Deployed Missile/Launcher. A missile or launcher located inside a deployment area. Deployed status in terms of the INF Treaty is dependent on the location of a missile launcher, not its operational capability.

Nondeployed Missile/Launcher. A missile or launcher not located at a deployment area or MOB, but rather at a missile support facility (MSF) or in transit.

Aggregate Number of Missiles. The total number of deployed and nondeployed intermediate-range and shorter-range missiles for each side, listed in the Treaty's Memorandum of Understanding.

Elimination Procedures. Procedures for destroying missiles, launchers, support equipment and facilities covered in the INF Treaty.

Entry into Force. A date, agreed to by both Parties to the Treaty, when the provisions of the Treaty go into effect. This date was June 1, 1988, after ratification by the governments of the United States and the Soviet Union and the exchange of instruments of ratification at the Moscow Summit.

Intermediate-Range Missile. A ground-launched cruise or ballistic missile with a range equal to or greater than 1000 km but not more than 5,500 km (roughly 300 to 3,400 miles), previously referred to as longer-range INF missiles.

Memorandum of Agreement (MOA). An implementing agreement signed on December 21, 1989, pursuant to Article XIII of the Treaty, that enhances the viability, effectiveness and implementation of the Treaty.

Memorandum of Understanding (MOU). The section of the INF Treaty which identifies by number, type, location and technical characteristics the items to be eliminated by the INF Treaty. Photographs of treaty-limited systems and site diagrams which define the boundaries of missile operating bases and missile support facilities and identify buildings used to contain treaty-limited items at these locations are attached to the MOU.