I. COMMONWEALTH OF INDEPENDENT STATES

RUSSIA

**De jure** N-weapon state. Has succeeded to USSR’s nuclear-weapon state status under Non-Proliferation Treaty (NPT).¹

- Most of all nuclear warheads in arsenal of former Soviet Union are currently based in Russian republic, including 1,067 ICBMs armed with 4,308 warheads² and more than 12,000 tactical N-weapons; all tactical weapons from Ukraine, Belarus, and Kazakhstan have been moved to Russia.³ All Soviet ballistic missile submarines are currently based in Russia.
- Has C.I.S.’s only facilities for producing weapons-grade nuclear materials (plutonium and highly-enriched uranium).
- December 21, 1991, Alma-Ata Accord, signed by leaders of 11 former Soviet republics, states that decisions on use of Commonwealth’s strategic nuclear forces will be made by Russian president *with the agreement of* leaders of Ukraine, Belarus, and Kazakhstan — and after *consultations* with other Commonwealth leaders.⁴
- On May 23, 1992, Lisbon Protocol to the START Treaty was signed by Belarus, Kazakhstan, and Ukraine with Russia and U.S. The three non-Russian republics agreed to give up strategic N-weapons on their territory by end of decade and to join NPT as non-nuclear weapon states “in the shortest time possible.” Protocol paves way for implementation of START Treaty.⁵
- On June 16, 1992, U.S. Pres. Bush and Russian Pres. Yeltsin agreed to cut their countries’ strategic arsenals to between 3,000 and 3,500 warheads each — about 50 percent below the level authorized by the START Treaty. Reductions to be completed by 2003 or sooner.⁶
UKRAINE  FORMER SOVIET REPUBLIC WITH N-WEAPONS ON TERRITORY.

- Inherited 176 Soviet ICBMs, including 46 SS-24s, armed with 460 warheads, and 130 SS-19s, armed with 780 warheads. Inherited between 2,650 and 4,200 Soviet tactical N-weapons. On May 7, 1992, Pres. Kravchuk confirmed that all tactical N-weapons had been transferred back to Russia.

- Possesses 14 Bear-H and 16 Blackjack strategic bombers, armed with 224 and 192 nuclear bombs respectively. Russia requested a number of Blackjack bombers be returned for an airshow; however, Kiev refused to let them leave Ukrainian air space.

- Has pledged that all strategic nuclear weapons will be removed or destroyed by end of 1994. Pursuant to May 23, 1992, Lisbon Protocol to the START Treaty, agreed to eliminate all strategic missile-delivery vehicles and bombers by 1999; however, is requesting financial and technical assistance to meet those goals. Pres. Kravchuk has also encountered some domestic political opposition to eliminating Ukraine's strategic N-weapons.

- Ukrainian Defense Minister Morozov has announced the establishment of a Center for the Administrative Command and Control of the Troops of the Strategic Nuclear Forces within the Defense Ministry, setting up a dual administrative structure with Russia for controlling the strategic N-forces.


BELARUS  FORMER SOVIET REPUBLIC WITH N-WEAPONS ON TERRITORY.

- Inherited 72 Soviet SS-25 missiles armed with 72 warheads.

- Inherited 725 Soviet tactical N-weapons. As of April 28, 1992, all tactical N-weapons had been transferred to Russia for subsequent destruction.

- On May 23, 1992, Belarus signed the Lisbon Protocol to the START Treaty promising to eliminate all strategic N-weapons by the end of 1999.

- Under the December 21, 1991, Alma-Ata Accord, pledged to join NPT as a non-nuclear-weapon state. The Lisbon Protocol to the START Treaty reiterated this pledge requiring that Belarus accede to the NPT "in the shortest time possible."

KAZAKHSTAN  FORMER SOVIET REPUBLIC WITH N-WEAPONS ON TERRITORY.

- Inherited 104 Soviet SS-18 missiles armed with 1,040 warheads and 40 Bear-H strategic bombers armed with 370 nuclear bombs.

- Russian Pres. Yeltsin and U.S. officials have stated that all tactical N-weapons in Kazakhstan have been withdrawn to Russia.

- On May 23, 1992, Pres. Nazarbayev signed the Lisbon Protocol to the START Treaty pledging that all strategic N-weapons will be eliminated by the end of 1999. Since then, however, political opposition to implementing the Protocol has arisen.

- Under the December 21, 1991, Alma-Ata Accord, did not pledge to join NPT as a non-nuclear-weapon state. However, the Lisbon Protocol requires that Kazakhstan accede to the NPT "in the shortest time possible."
II. EMERGING NUCLEAR-WEAPON NATIONS

ISRAEL

DE-FACTO N-WEAPON STATE.

- Probably has 75-100 undeclared N-weapons; possibly 300.\textsuperscript{19}
- Thought to have obtained first N-weapons in late 1960s.
- Beginning in 1982 apparently built "boosted" weapons that rely on H-bomb principles; may possess "neutron bombs"\textsuperscript{20} (low-blast, high radiation H-bombs).
- Thought to have deployed 400-mile-range nuclear capable Jericho missiles; testing intermediate-range missile (800 mi.? 2,000 mi.?) since 1987.
- May have conducted N-test in South Atlantic in 1979 (possibly three tests).\textsuperscript{21}
- Participating in Middle East Arms Control Talks; U.S. has proposed regional freeze on production of weapons-grade nuclear materials as part of broader arms control package.
- Has recently threatened military action to destroy Iranian nuclear facilities if Iran’s N-weapons program not halted.\textsuperscript{22}
- Not party to Nuclear Non-Proliferation Treaty (NPT).

INDIA

DE-FACTO N-WEAPON STATE.

- Probably has essentials for 75-100 A-bombs that could be deployed quickly.
- Conducted single nuclear test in 1974; no further N-tests.
- Has greatly expanded N-weapons production capability in recent years; reportedly designing H-bomb.
- Tested N-capable short-range Prithvi missile five times since 1989. Tested Agni, an intermediate-range missile (1,500 mi.), in 1989 and conducted second test on May 29, 1992; claims system is a "technology demonstrator," not intended for deployment.\textsuperscript{23}
- Has declined to participate in five-power talks proposed by Pakistan that would include U.S., Russia, and P.R.C., but has agreed to continue dialogue with U.S. on nuclear issues.\textsuperscript{24}
- Potential crisis looming over U.S.-supplied Tarapur reactors in 1993, when U.S. agreement covering reactors and French fuel-supply contract expire; India expected to claim right to suspend IAEA safeguards on reactors and plutonium-bearing spent fuel and right to extract plutonium without U.S. or French approval. U.S. (since 1980) and France (since 1991) prohibit major new N-exports to countries that operate facilities not under IAEA inspection: India has numerous uninspected facilities used to support N-weapons capability.
- Not party to NPT; unwilling to join even if Pakistan does so because of Chinese N-threat.

PAKISTAN

DE-FACTO N-WEAPON STATE.

- Probably has material, and possibly all components, for 15-20 undeclared A-bombs that could be deployed quickly.
- Apparently obtained material for first atomic weapon in 1986.
- U.S. aid and military sales terminated in 1990 when Pres. Bush declined to certify that Pakistan did "not possess a nuclear explosive device," a condition for aid to Pakistan under U.S. law since 1985.\textsuperscript{25}
On February 7, 1992, Foreign Secretary Shaharyar Khan declared that Pakistan possessed components for the core of at least one N-weapon but that Pakistan had "permanently frozen" its production of such components and of weapons-grade nuclear material. Subsequent official statements have reiterated Pakistan's traditional claim that its nuclear program is exclusively peaceful.²⁶

- No N-tests, but believed to have received N-weapon design from China.
- Attempting to develop "boosted" N-weapons.
- Tested N-capable short-range missile in 1989; sought similar "M-11" system from PRC in 1991, but no deliveries confirmed.²⁷ China has agreed to abide by export control rules of the Missile Technology Control Regime, prohibiting transfers of missiles able to carry 1,100-pound payload to a distance of 190 miles or more and has agreed that M-11 is covered by this ban.
- Not party to NPT, but has stated it is willing to join if India does.


- Assumed to have essentials for 15-25 N-weapons.
- Able to build N-weapons since 1980-81.
- May have assisted, and received data from, suspected 1979 Israeli N-test in South Atlantic.
- International Atomic Energy Agency (IAEA) conducting initial inventory pursuant to NPT in order to safeguard all existing N-materials and to ensure that none are used for weapons.
- Possibly in collaboration with Israel, developing intermediate-range (800 mi.? 2,000 mi.?) Arniston missile, suggesting some continuing interest in N-weapons.

N. KOREA PRESUMED TO BE ACTIVELY SEEKING N-WEAPONS, BUT CURRENTLY ACCEPTING NEW NON-PROLIFERATION RESTRAINTS.

- Late-1991 withdrawal of U.S. N-weapons from South Korea, long-demanded by North, paved way for December 31, 1991, agreement with South for the denuclearization of the Korean Peninsula, including bilateral inspections and mutual pledge not to build plutonium separation or uranium enrichment plants capable of producing weapons-grade nuclear materials. Mutual inspections were to have begun by mid-June 1992. The bilateral inspection talks have reached an impasse over the scope of inspections and the South's proposal for challenge inspections. They resumed June 30, 1992.²⁸
- IAEA confirmed existence of a partially completed plutonium separation (reprocessing) plant, a completed 5-megawatt (electric) reactor, and a partially completed 50-megawatt (electric) reactor at Nyongbyon and a partially completed 200-megawatt (electric) reactor at Taechon.²⁹
- North Korea claims 5-megawatt (electric) plant operated only intermittently since its completion in 1986 and produced no plutonium-bearing spent fuel; U.S. intelligence agencies believe reactor operated extensively (at unknown power level) and that North may be concealing stockpile of spent fuel.³⁰ IAEA attempting to verify plant's operating history.
North Korea plans to continue building reprocessing plant while under IAEA safeguards. South initially claimed plant to be in violation of North-South denuclearization agreement and demanded N. Korea halt construction. However, recent statements note that in its current state of construction, Seoul does not "consider the facilities to be a violation of the joint denuclearization declaration." 

U.S., South Korea, and Japan are refusing to improve relations or, in the case of Japan, provide economic assistance until the North implements bilateral nuclear inspections with the South; in early June, the European Community adopted a similar stance.

North Korea has indicated willingness to stop its reprocessing program in exchange for light-water reactor technology and fuel supply guarantees, suggesting that it does not consider such activities prohibited by the North-South denuclearization accord.

IRAQ

PARTY TO NPT; FOUND BY IAEA IN MID-1991 TO HAVE REPEATEDLY VIOLATED TREATY BY PRODUCING UNDECLARED NUCLEAR MATERIALS AT UNDECLARED FACILITIES.

N-weapons program currently being dismantled pursuant to U.N. Security Council Resolution 687.

- Earlier Iraqi N-weapons effort thwarted in 1981, when Israel destroyed Osirak reactor.
- Post-Gulf War inspections revealed previously unknown multi-track program to enrich uranium to weapons grade and develop all other components of N-weapons; most facilities/equipment destroyed during or after 1991 Gulf War.
- U.S. Director of Central Intelligence, Robert Gates, has warned that once sanctions are removed, Iraq could rebuild its N-weapons program "within a few, but not many years."
- In April 1992, N-weapons experts from four N-weapon states concluded, after examining evidence compiled by the U.N. Special Commission on Iraq, that at the time of the Gulf War, Iraq was three years or more away from producing its first atomic weapon.
- Some aspects of Iraqi enrichment effort still unclear because of Iraqi refusal to supply procurement data to the U.N.; inspectors still searching for possible uranium enrichment centrifuges and possible underground plutonium production reactor.
- June 5, 1992, Iraq submitted its "full, final and complete" report on its weapons programs in compliance with U.N. Resolution 687. On June 17, 1992, however, U.N. Special Commission on Iraq determined that Iraq was "not in compliance" with U.N. resolutions. Concurrently, the IAEA recommended a tighter embargo and additional inspections to prevent Iraq from further developing nuclear weapons.

IRAN

PARTY TO NPT, BUT PRESUMED TO BE SEEKING N-WEAPONS.

- Reactivating weapons program with some help from China and others; clandestinely seeking nuclear-weapons-relevant technology in Western Europe.
- No major N-weapon facilities apparently under construction, as yet, but related research believed to be taking place clandestinely at existing research sites.
- C.I.A. estimates of program have concluded that Iran not likely to produce N-weapons before the end of the decade.
- February 1992 special IAEA "visit" observed several locations not on list of declared nuclear sites; found no violations of NPT during visit.
**LIBYA**

PARTY TO THE NPT, BUT PRESUMED TO BE SEEKING N-WEAPONS.

- A number of years away from possibly building N-weapons indigenously.
- No major N-weapon facilities apparently under construction, as yet.
- Attempted to purchase atomic bomb in early 1970s and in 1981.
- During a visit by IAEA Director General Blix in spring 1992, Libya said it was ready to invite IAEA inspectors to any site they wished to see.⁴¹

**ALGERIA**

POSSIBLY INTERESTED IN N-WEAPONS, BUT CURRENTLY LACKS THE FACILITIES TO PRODUCE N-WEAPONS MATERIAL.

- In 1986, secretly began construction with Chinese assistance of 15 megawatt (thermal) research reactor at Ain Oussera with potential to produce N-weapons material. Agreed to place unit under IAEA safeguards as result of U.S. pressure, after reactor's discovery in early 1991.
- Army and "High State Committee" seized power in Jan. 1992 and ousted Pres. Chedli Benjedid, fearing imminent elections would bring Muslim fundamentalists to power.⁴²
- Prior to Benjedid's ouster, government indicated readiness to join NPT, but has not subsequently reiterated this position.

**SYRIA**

POSSIBLY INTERESTED IN N-WEAPONS; PARTY TO NPT SINCE 1969; SIGNED COMPREHENSIVE IAEA SAFEGUARDS AGREEMENT IN FEBRUARY 1992.⁴⁴

- Taking first steps to develop nuclear infrastructure after years of inactivity by acquiring 30-kilowatt research reactor from China (subject to IAEA inspection); reactor incapable of producing significant amounts of weapons usable plutonium.
- Despite Syrian claim that reactor intended for peaceful purposes, U.S. lists Syria among countries having "nuclear program with suspicious intentions."⁴⁵
- Has been seeking "strategic parity" with Israel through acquisition of ballistic missiles, chemical weapons, and advanced conventional armaments. Recently received Scud-C missiles from North Korea, with range of several hundred miles.⁴⁶

**BRAZIL**

Pursued N-weapon option during 1980s; accepting new non-proliferation restraints.

- Military leaders launched N-weapons program in 1979; halted by current civilian government.
- Has built facilities necessary for N-weapons capability as part of nuclear energy and research program, but has not produced N-weapons material.
- Concluded agreement with Argentina in Nov. 1990 for comprehensive bilateral inspections under IAEA auspices; established the Argentine-Brazil Accounting and Control Commission (ABACC) in July 1991 to conduct bilateral inspections; signed agreement with IAEA, Argentina, and ABACC in Dec. 1991 formalizing IAEA participation, despite objections of the Brazilian military.
• Not party to NPT (but has accepted NPT-style inspections, as noted above).
• Some work on short-range N-capable missiles; building space-launch vehicle with long-range missile potential.

ARGENTINA
PURSUED N-WEAPON OPTION DURING EARLY 1980S; ACCEPTING NEW NON-PROLIFERATION RESTRAINTS.

• Has built facilities necessary for N-weapons capability as part of nuclear energy program, but has not produced N-weapons material.
• Civilian government opposed to nuclear arming.
• Concluded agreement with Brazil in Nov. 1990 for comprehensive bilateral inspections under IAEA auspices; established the Argentine-Brazil Accounting and Control Commission (ABACC) in July 1991 to conduct bilateral inspections; signed agreement with IAEA, Brazil, and ABACC in Dec. 1991 formalizing IAEA participation.
• Not party to NPT (but has accepted NPT-style inspections, as above).
• In 1980s, cooperated with Egypt and Iraq on N-capable, short-range Condor II missile; program halted in 1991. 67

TAIWAN
PARTY TO NPT; PRESUMED TO HAVE ABANDONED INTERMITTENT N-WEAPONS EFFORT.

• Has sizeable nuclear power program, but lacks facilities to produce material for N-weapons.
• Built secret lab to extract plutonium in 1987, but dismantled unit under U.S. pressure before plutonium obtained. (Made similar attempt in mid-1970s, also thwarted by U.S..)

NOTES


6. Thomas Freidman, "Reducing the Russian Arms Threat," New York Times, June 17, 1992. It remains unclear whether this new accord will be part of the previously signed START Treaty or whether it will be considered a separate agreement. START has yet to be ratified by the U.S. Senate; however, the ratification process was begun with the testimony of Secretary of State James Baker on the treaty before the Senate Foreign Relations Committee on June 23, 1992.


9. Under the Lisbon Protocol to the START Treaty, all strategic bombers are to be destroyed or transferred back to Russia by 1999.

10. "Ukraine to Join START and NPT: All Tactical Nukes Removed," Arms Control Today, May 1992; Associated Press, June 13, 1992; "Ukraine's Kravchuk on Weapons Destruction," Interfax, June 2, 1992, translated in FBIS-SOV, June 3, 1992, pp. 2-3. Although the Lisbon Protocol allows Ukraine until 1999 to destroy its nuclear weapons, Kiev has said that it would also abide by all previous treaties and commitments made on this matter, including specifically, an independent resolution passed by the Ukrainian Parliament on October 24, 1991, committing the country to eliminate all nuclear weapons by 1994; Ukraine has stated, however, that it would require additional time to eliminate the missile delivery vehicles and strategic bombers. The Lisbon Protocol to the START Treaty stipulates that all nuclear weapons including the delivery vehicles and bombers must be eliminated by 1999. Recently, the START Treaty and the Protocol were submitted to the Ukrainian Parliament for ratification. Source: U.S. Department of State, June 26, 1992.

11. Kravchuk has been criticized by political opponents for not obtaining specific security guarantees from the U.S. before agreeing to give up Ukraine's nuclear weapons. Sec. of State Baker declared that the U.S. would assist Ukraine politically through the U.N. but not militarily, if it were threatened with nuclear attack. As a result, ratification of the Lisbon Protocol in the Ukrainian Parliament may be difficult. See Doyle McManus, "No Military Aide for Republics, U.S. Says," Los Angeles Times, April 29, 1992.


15. Oberdorfer, op. cit. Belarus' position on remaining a non-nuclear-weapon state has been consistent since the formation of the Commonwealth.


17. Political opponents of Nazarbayev have criticized him for "making a gift" of nuclear weapons to Russia. Nazarbayev has stressed that Russia and Kazakhstan are allies now and that Kazakhstan's security is assured. Nazarbayev has also hinted, however, that Kazakhstan's nuclear status after the START implementation period will depend on the security situation at that time. See "Nation May Redeploy Nuclear Arms," UPI, May 21, 1992; "Kazakh Opposition Urges Treaty Rejection," Interfax, May 25, 1992, translated in FBIS-SOV, May 27, 1992, p.2. It is not known whether the political opposition and Nazarbayev's seemingly ambiguous support will affect the
The denuclearization of Kazakhstan required by the Lisbon Protocol.


20. Ibid.

21. Ibid.


24. The U.S. is currently discussing the prospects of India negotiating a regional non-proliferation agreement with Pakistan. However, India has refused to participate in direct nuclear arms control negotiations with Pakistan and reiterated its position that it would not sign the Non-Proliferation Treaty. See "U.S. Warns India on Nuclear, Human Rights Issues," Reuter, June 17, 1992; "India-US," Associated Press, June 18, 1992; "India-U.S.," Associated Press, June 19, 1992.


29. "IAEA Director General Completes Official Visit to the Democratic People's Republic of Korea," IAEA Press Release, May 15, 1992; Ann MacLachlan "North Korea Files Initial Report With IAEA; Declares Reprocessing Facility," Nucleonics Week, May 7, 1992. Preliminary IAEA findings have concluded, however, that there is no evidence that North Korea possesses enough nuclear material for a bomb. Nevertheless, C.I.A. and Defense Department analysts contend there may be other facilities that North Korea did not list on its initial inventory, which would change this optimistic evaluation. See "Atomic Report Cast Doubt on CIA Korea Fears," Reuter, June 14, 1992.


40. "IAEA Explores Iran's Intentions, Minus Evidence Of Weapons Drive," Nucleonics Week, February 13, 1992. Israeli officials believe that the IAEA inspectors were taken to the wrong site. The Israeli government has warned that it will take military action to halt Iran from further developing nuclear weapons if political measures prove ineffective. See "Israeli Warns of Iran," Washington Post, op. cit.; "Efforts to Halt Iranian Program," Ha'aretz, op. cit.


47. Recent reports that two Condor missiles might be missing appear to be unfounded. Argentine Air Force Chief of Staff Brigadier Jose Julia has stated that the program stopped short of producing any finished missiles. See "Air Force Chief Denies Existence of Condors," Telam, June 11, 1992, translated in FBIS-LAT, June 12, 1992, p. 11.