ADDITIONAL PROTOCOL

The Additional Protocol is a legal document negotiated between the International Atomic Energy Agency (IAEA) and an individual state granting the IAEA further inspection authority to that provided in that state's Comprehensive Safeguards Agreement with the IAEA. The Additional Protocol aims to enable the IAEA inspectorate to provide assurance about both declared and possible undeclared activities and to get a more complete picture of a state's overall nuclear program. Under the Protocol, the IAEA is granted expanded rights of access to information and sites.

Nuclear Weapons States (NWS) have repeatedly called for universal adherence to the Additional Protocol and have issued working papers during the NPT review process arguing that implementation of the Additional Protocol should become a key standard by which to measure an NPT States Party's commitment to the Treaty.

Non-Nuclear Weapons States (NNWS), unlike NWS, are subject to comprehensive IAEA safeguards under Article III of the NPT. Some NNWS take the position that the comprehensive IAEA safeguards are sufficient to prevent nuclear proliferation, and that requiring the Additional Protocol as well is unnecessary and burdensome. Some countries in the Middle East, such as Egypt, have also refused to implement the Additional Protocol or undertake additional nonproliferation obligations until Israel signs on to the NPT and/or agrees to a nuclear-weapon-free zone in the region.

Background:

The international call for an Additional Protocol emerged out of the IAEA's failure to detect Iraq's efforts to develop weapons of mass destruction (WMDs) prior to the 1991 Persian Gulf War. It was discovered that Iraq had violated its NPT safeguards agreement by building nuclear facilities and failing to declare them to the IAEA. In addition, the IAEA discovered in 1992 that North Korea had diverted plutonium from its civilian program at a declared reactor but had hidden these activities when IAEA inspectors were present. The ease with which Iraq and North Korea were able to do so demonstrated the shortcomings of existing NPT safeguards, as these safeguards allow the IAEA to inspect only declared

facilities and materials and only certain areas of these facilities.

The IAEA subsequently adopted 'Program 93+2', which sought to prevent the diversion of declared materials and to detect undeclared materials. The program called for a legally binding protocol to supplement existing safeguards agreements and dramatically expand the scope of IAEA inspections. This became the Additional Protocol.

Measures under the Additional Protocol: While every Additional Protocol is negotiated between the state and the IAEA, and is individually tailored, there are several main aspects that remain constant. States that have signed Additional Protocol Agreements with the IAEA agree to provide the IAEA information about, and IAEA inspector access to, all parts of a State's nuclear fuel cycle—including uranium mines, fuel fabrication and enrichment plants, and nuclear waste sites—as well as to any other location where nuclear material is or may be present.

States also agree to provide information on, and IAEA short-notice access to, all buildings on a nuclear site. The Protocol provides for IAEA inspectors to have "complementary" access to assure the absence of undeclared nuclear material or to resolve questions or inconsistencies in the information a State has provided about its nuclear activities. Advance notice in most cases is at least 24 hours. The advance notice is shorter—at least two hours—for access to any place on a site that is sought in conjunction with design information verification or ad hoc or routine inspections at that site. The activities carried out during complementary access could include examination of records, visual observation, environmental sampling, utilization of radiation detection and measurement devices, and the application of seals and other identifying and tamperindicating devices.

States also agree to allow the IAEA to collect environmental samples at locations beyond declared locations when deemed necessary by the Agency. Wider area environmental sampling would require IAEA Board approval of such sampling and consultations with the State concerned.

Furthermore, states give the IAEA the right to make use of internationally established communications systems, including satellite systems and other forms of telecommunication.

States also agree to accept IAEA inspector designations and to issue multiple entry visas (valid for at least one year) for inspectors.

States also agree to provide the IAEA with information about, and IAEA verification mechanisms for, any research and development activities related to the nuclear fuel cycle.

Finally, States agree to provide the IAEA with information on the manufacture and export of sensitive nuclear-related technologies, and IAEA verification mechanisms for manufacturing and import locations in the State.

Model Additional Protocol issued by the IAEA

Unique Additional Protocols:

All five nuclear weapon states and India have in place Additional Protocols that vary significantly from the Model Additional Protocol issued by the IAEA.

United States: As a nuclear weapon state (NWS), the United States is not required to accept comprehensive safeguards under the NPT, nor to declare any nuclear Additional Protocol activities. The (INFCIRC/288/Add.1) expands the United States-IAEA Safeguards Agreement to include mines and other locations without nuclear materials. However, the United States' Additional Protocol is limited to civilian nuclear facilities and excludes activities with direct national security significance. In addition, the United States maintains the right to decide when/where to apply managed access procedures. Although the United States Additional Protocol is otherwise very similar to the Model Additional Protocol, its purpose is very different. Rather than enabling the IAEA to detect undisclosed nuclear activities or non-compliance with the NPT, the United States Additional Protocol serves to "assist [the IAEA] in developing more effective tools and techniques for use in complementary access in NNWS."

United Kingdom and France: The Additional Protocols for both the UK (INFCIRC/263/Add.1) and

France (INFCIRC/290/Add.1) are designed to assist the IAEA in detecting undeclared nuclear activities in NNWS. Unlike the United States, neither have a national security exemption. Both Protocols generally reflect the Model Additional Protocol, but only apply in cases where activities have links to NNWS.

Russia and China: Both countries' Additional Protocols, INFCIRC/327/Add.1 and INFCIRC/369/Add.1 respectively, do not allow IAEA inspectors physical access to any facilities. Under their respective Additional Protocols, both countries are required to provide information on nuclear imports and exports to and from NNWS, and on activities in cooperation with NNWS relating to the nuclear fuel cycle.

India: As a non-signatory to the NPT, India lacks the comprehensive safeguards that NNWS signatories to the NPT have. India's Additional Protocol stipulates that only certain facilities are placed under safeguards. The Protocol only requires India to share information relating to nuclear-related exports, while the Model Additional Protocol includes the sharing of information on nuclear fuel-cycle-related research and development, nuclear-related imports, and uranium mining. India's Additional Protocol also does not provide the IAEA with complementary access provisions, which allow the IAEA to inspect undeclared facilities. India's Additional Protocol applies many of the voluntary safeguards provisions that exist for nuclear weapon states, although India is not recognized by the IAEA as a nuclear weapon state.

STATUS OF ADDITIONAL PROTOCOLS

Number of APs in force: 134 [+ Taiwan and Greenland]

APs signed: 151

Overall total of APs: 151 + Euratom, Taiwan,

and Greenland

Of the NNWS NPT Parties with significant nuclear activities: 51 have APs in force

3 have signed

6 have not commenced negotiation of an AP.

Note: 1. "Significant nuclear activities" encompasses any amount of nuclear material in a facility or location outside facilities (LOF), or nuclear material in excess of the exemption limits in INFCIRC/153 paragraph 37.

2. States with significant nuclear activities are shown in bold.

States with Additional Protocols in Force:

Afghanistan: 19 Jul 05 Albania: 3 Nov 10 Andorra: 19 Dec 11 Angola: 28 Apr 10

Antigua and Barbuda: 15 Nov 13

Armenia: 28 Jun 04 Australia: 12 Dec 97 Austria: 30 Apr 04 Azerbaijan: 29 Nov 00 Bahrain: 20 Jul 11 Bangladesh: 30 Mar 01 Belgium: 30 Apr 04

Bosnia and Herzegovina: 3 Jul 13

Botswana: 24 Aug 06 **Bulgaria:** 01 May 09 Burkina Faso: 17 Apr 03 Burundi: 27 Sep 07 Cambodia: 24 Apr 15 Cameroon: 29 Sept 16

Canada: 8 Sep 00

Central African Rep: 7 Sep 09

Chad: 13 May 10
Chile: 3 Nov 03
China: 28 Mar 02
Colombia: 5 Mar 09
Comoros: 20 Jan 09
Congo, DR: 9 Apr 03
Congo, Rep: 28 Oct 11
Costa Rica: 17 Jun 11
Côte d Tvoire: 05 May 16

Croatia: 6 Jul 00 Cuba: 3 Jun 04 Cyprus: 1 May 08

Czech Republic: 1 Oct 09 Denmark: 30 Apr 04 Djibouti: 26 May 15

Dominican Republic: 05 May 10

Ecuador: 24 Oct 01 El Salvador: 24 May 04 Estonia: 1 Dec 05 Eswatini: 8 Sep 10 Fiji: 14 Jul 06 Finland: 30 Apr 04 France: 30 Apr 04

Gabon: 25 Mar 10 Gambia: 18 Oct 11 Georgia: 3 Jun 03 Germany: 30 Apr 04 Ghana: 11 June 04 Greece: 30 Apr 04

Guatemala: 28 May 08

Haiti: 9 Mar 06 Holy See: 24 Sep 98 Honduras: 17 Nov 17 Hungary: 1 Jul 07 Iceland: 12 Sep 03 India 25 Jul 14 Indonesia: 29 Sep 99 Iraq: 10 Oct 12 Ireland: 30 Apr 04 Italy: 30 Apr 04

Jamaica: 19 Mar 03 Japan: 16 Dec 99 Jordan: 28 Jul 98 Kazakhstan: 9 May 07 Kenya: 18 Sep 09

Korea, Republic of: 19 Feb 04

Kuwait: 2 Jun 03 Kyrgyzstan: 10 Nov 11 **Latvia:** 1 Oct 08 Lesotho: 26 Apr 10 Liberia: 10 Dec 18 **Libya:** 11 Aug 06

Liechtenstein: 25 Nov 15 Lithuania: 5 Jul 00 Luxembourg: 30 Apr 04 Madagascar: 18 Sep 03 Malawi: 26 Jul 07 Mali: 12 Sep 02

Marshall Islands: 3 May 05 Mauritania: 10 Dec 09

Malta: 1 Jul 07

Mauritius: 17 Dec 07 **Mexico:** 4 Mar 11

Moldova, Republic of: 1 Jun 12

Monaco: 30 Sep 99 Mongolia: 12 May 03 Montenegro: 4 Mar 11 **Morocco:** 21 Apr 11 Mozambique: 1 Mar 11

Namibia: 20 Feb 12 Netherlands: 30 Apr 04

New Zealand: 24 Sep 98 Nicaragua: 18 Feb 05

Niger: 2 May 07 Nigeria: 4 Apr 07

North Macedonia: 11 May 07

Norway: 16 May 00 Palau: 13 May 05 Panama: 11 Dec 01 Paraguay: 14 Sep 04 Peru: 23 Jul 01

Philippines: 26 Feb 10 Poland: 1 Mar 07 Portugal: 30 Apr 04 Romania: 1 May 10 Russia: 16 Oct 07

Russia: 16 Oct 07 Rwanda: 17 May 10 Senegal: 24 Jul 17 Serbia: 17 Sep 18 Seychelles: 13 Oct 04

Singapore: 31 Mar 08 Slovakia: 1 Dec 05 Slovenia: 1 Sep 06 South Africa: 13 Sep 02

Spain: 30 Apr 04

St. Kitts & Nevis: 19 May 14

Sweden: 30 Apr 04 Switzerland: 1 Feb 05 Tajikistan: 14 Dec 04

Tanzania, United Republic of: 7 Feb 05 **Thailand:** 17 Nov 17

Togo: 18 Jul 12 **Turkey:** 17 Jul 01 Turkmenistan: 3 Jan 06 Uganda: 14 Feb 06
Ukraine: 24 Jan 06

United Arab Emirates: 20 Dec 10
United Kingdom: 30 Apr 04
United States: 6 Jan 09
Uruguay: 30 Apr 04
Uzbekistan: 21 Dec 98
Vanuatu: 21 May 13
Vietnam: 17 Sep 12

States with Additional Protocols signed, but not

yet in force:

Algeria: 16 Feb 18

Belarus: 15 Nov 05 Benin: 7 Jun 05

Cabo Verde: 28 Jun 05 Guinea: 13 Dec 11

Guinea-Bissau: 21 June 13

Iran, Islamic Republic of: 18 Dec 03 (provisional

application as of 16 Jan 16)

Kiribati: 9 Nov 04 Lao P.D.R. 5 Nov 14 Malaysia: 22 Nov 05 Myanmar: 17 Sep 13 Timor-Leste: 6 Oct 09 Tunisia: 24 May 05 Zambia: 13 May 09

States with significant nuclear activities which have not commenced negotiation of an AP:

Argentina Brazil

Democratic People's Republic of Korea

Egypt
Israel
Pakistan
Syria
Venezuela