

## 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 tamper indicating 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 activities. The Additional Protocol ([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 *erves* 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/951/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. In the case of the United Kingdom, their Additional Protocol was updated in 2020 to include more specifications about the extent of testing and verification IAEA representatives can do. These changes gave more extensive opportunities for IAEA inspectors to use safeguards techniques and outlined more specific quantities of testable and reportable materials.

*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:** 143[+ Taiwan and Greenland]

**APs signed:** 155

**APs approved but not yet signed:** 1

**Overall total of APs:** 156 + Euratom, Taiwan, and Greenland

**Of the NNWS NPT Parties with significant nuclear activities:**

51 have APs in force

4 have signed

8 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  
 Benin: 17 Sep 19  
 Bolivia, Plurinational State of: 7 Dec 23  
 Bosnia and Herzegovina: 3 Jul 13  
 Botswana: 24 Aug 06  
**Bulgaria:** 01 May 09  
 Burkina Faso: 17 Apr 03  
 Burundi: 27 Sep 07  
 Cabo Verde: 7 Sep 22  
 Cambodia: 24 Apr 15  
 Cameroon: 29 Sep 16  
**Canada:** 8 Sep 00  
 Central African Republic: 7 Sep 09  
 Chad: 13 May 10  
**Chile:** 3 Nov 03  
**China:** 28 Mar 02  
**Colombia:** 5 Mar 09  
 Comoros: 20 Jan 09  
**Congo, Democratic Republic of:** 9 Apr 03  
 Congo, Republic of the: 28 Oct 11  
 Costa Rica: 17 Jun 11  
 Côte d'Ivoire: 5 May 16  
 Croatia: Initial Date: 6 Jul 00; Revised  
 Additional Protocol Date: 1 Apr 17  
 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  
 Eritrea: 20 Apr 21  
**Estonia:** 1 Dec 05  
 Eswatini: 9 Sep 10  
 Ethiopia: 18 Sep 19  
 Fiji: 14 Jul 06  
**Finland:** 30 Apr 04  
**France:** 30 Apr 04  
 FYROM: 11 May 07  
 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  
 Guinea-Bissau: 23 Jun 22  
 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:** Initial Date: 5 Jul 00; Revised  
 Additional Protocol Date: 1 Jan 08  
 Luxembourg: 30 Apr 04  
 Madagascar: 18 Sep 03  
 Malawi: 26 Jul 07  
 Mali: 12 Sep 02  
 Malta: 1 Jul 07  
 Marshall Islands: 3 May 05  
 Mauritania: 10 Dec 09  
 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  
 Rwanda: 17 May 10  
 Saint Kitts and Nevis: 19 May 14  
 Sao Tome and Principe: 31 Mar 23  
 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

**Sweden:** 30 Apr 04

**Switzerland:** 1 Feb 05

**Tajikistan:** 14 Dec 04

Tanzania, United Republic of: 7 Feb 05

**Thailand:** 17 Nov 17

Timor-Leste: 25 Sep 24

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:** Initial Date: 30 Apr 04;  
Revised Additional 31 Dec 2020

**United States:** 6 Jan 09

Uruguay: 30 Apr 04

**Uzbekistan:** 21 Dec 98

Vanuatu: 21 May 13

**Vietnam:** 17 Sep 12

Zimbabwe: 21 Sep 21

**Belarus:** 15 Nov 05

Guinea: 13 Dec 11

**Iran, Islamic Republic of:** 18 Dec 03

Kiribati: 9 Nov 04

Lao People's Democratic Republic: 5 Nov 14

**Malaysia:** 22 Nov 05

Myanmar: 17 Sep 13

Nauru: 22 Nov 23

Sierra Leone: 31 Oct 22

Tunisia: 24 May 05

Zambia: 13 May 09

**States with Additional Protocols approved by  
the IAEA Board, but not yet signed:**

Sri Lanka: 12 Sep 18

**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

**States with Additional Protocols signed, but  
not yet in force:**

**Algeria:** 16 Feb 18