

A. Safeguards Statement for 2021^{1, 2}

In 2021, safeguards were applied for 185 States^{3, 4} with safeguards agreements in force with the Agency. The Secretariat's findings and conclusions for 2021 are reported below with regard to each type of safeguards agreement. These findings and conclusions are based upon an evaluation of all safeguards relevant information available to the Agency in exercising its rights and fulfilling its safeguards obligations for that year.

1. One hundred and thirty-two States had both comprehensive safeguards agreements and additional protocols in force:

- (a) For 72 of these States⁴, the Secretariat found no indication of the diversion of declared nuclear material from peaceful nuclear activities and no indication of undeclared nuclear material or activities. On this basis, the Secretariat concluded that, for these States, all nuclear material remained in peaceful activities.**
- (b) For 60 of these States, the Secretariat found no indication of the diversion of declared nuclear material from peaceful nuclear activities. Evaluations regarding the absence of undeclared nuclear material and activities for each of these States remained ongoing. On this basis, the Secretariat concluded that, for these States, declared nuclear material remained in peaceful activities.**

2. Safeguards activities were implemented for 45 States with comprehensive safeguards agreements in force, but without additional protocols in force. For these States, the Secretariat found no indication of the diversion of declared nuclear material from peaceful nuclear activities. On this basis, the Secretariat concluded that, for these States, declared nuclear material remained in peaceful activities.

3. As of the end of 2021, eight States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) had yet to bring into force comprehensive safeguards agreements with the Agency as required by Article III of that Treaty. For these States Parties, the Secretariat could not draw any safeguards conclusions.

4. Three States had safeguards agreements based on INFCIRC/66/Rev.2 in force, requiring the application of safeguards to nuclear material, facilities and other items specified in the relevant safeguards agreement. One of these States, India, had an additional protocol in force. For these States, the Secretariat found no indication of the diversion of nuclear material or of the misuse of the

¹ The designations employed and the presentation of material in this report, including the numbers cited, do not imply the expression of any opinion whatsoever on the part of the Agency or its Member States concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

² The referenced number of States Parties to the NPT is based on the number of instruments of ratification, accession or succession that have been deposited.

³ These States do not include the Democratic People's Republic of Korea (DPRK), where the Agency did not implement safeguards and, therefore, could not draw any conclusion.

⁴ And Taiwan, China.

facilities or other items to which safeguards had been applied. On this basis, the Secretariat concluded that, for these States, nuclear material, facilities or other items to which safeguards had been applied remained in peaceful activities.

5. Five nuclear-weapon States had voluntary offer agreements and additional protocols in force. Safeguards were implemented with regard to declared nuclear material in selected facilities in all five States. For these States, the Secretariat found no indication of the undeclared withdrawal from safeguards of nuclear material to which safeguards had been applied. On this basis, the Secretariat concluded that, for these States, nuclear material in selected facilities to which safeguards had been applied remained in peaceful activities or had been withdrawn from safeguards as provided for in the agreements.

B. Background to the Safeguards Statement and Summary

B.1. Safeguards conclusions

1. The *Safeguards Statement* reflects the Secretariat’s findings and conclusions resulting from the Agency’s activities under the safeguards agreements in force. The Secretariat derives these conclusions on the basis of an evaluation of the results of its safeguards activities and of all other safeguards relevant information available to it. The Secretariat follows uniform internal processes and defined procedures to draw independent and objective safeguards conclusions based on its own verification activities and findings. This section provides background to the *Safeguards Statement*.



2. A summary of the status of safeguards agreements and other information presented below is given in Tables 1 to 5 in Section B.7.

B.1.1. States with comprehensive safeguards agreements in force

3. Under a comprehensive safeguards agreement (CSA), the Agency has the “right and obligation to ensure that safeguards will be applied, in accordance with the terms of the agreement, on all source or special fissionable material in all peaceful nuclear activities within the territory of the State, under its

⁵ A significant quantity is the approximate amount of nuclear material for which the possibility of manufacturing a nuclear explosive device cannot be excluded.

⁶ Material balance areas (MBAs) containing locations outside facilities where nuclear material is customarily used (LOFs).

⁷ Calendar-days in the field for verification (CDFVs) comprise calendar-days spent on performing inspections, complementary accesses, design information verifications at facilities and information verifications at LOFs and on the associated travel and rest periods.

jurisdiction or carried out under its control anywhere, for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices”.⁸

4. CSAs consist of Part I, Part II, and Definitions. Part I consists of general provisions and Part II describes the procedures for implementing those provisions. These procedures include the State’s record keeping and reporting obligations with regard to nuclear material, nuclear facilities and LOFs. They also include procedures related to Agency access to nuclear material, nuclear facilities and LOFs.

5. The procedures set out in Part II of a CSA include certain reporting requirements related to the export and import of material containing uranium or thorium which has not yet reached the stage of processing where its composition and purity make it suitable for fuel fabrication or for isotopic enrichment. Nuclear material which has reached that stage of processing, and any nuclear material produced at a later stage, is subject to all the other safeguards procedures specified in the agreement. An inventory of such nuclear material is established on the basis of an initial report by a State, which is then verified by the Agency and maintained on the basis of subsequent reports by the State and by Agency verification. The Agency performs its verification and evaluation activities in order to confirm that these declarations by the State are correct and complete — i.e. to confirm that all nuclear material in the State remains in peaceful activities.

Small quantities protocols

6. Many States with minimal or no nuclear activities have concluded a small quantities protocol (SQP) to their CSA. Under an SQP based on the original standard text⁹ submitted to the Board of Governors in 1974, the implementation of most of the safeguards procedures in Part II of a CSA are held in abeyance as long as certain criteria are met. In 2005, the Board of Governors approved the revision¹⁰ of the standard text of the SQP. This revision changed the eligibility criteria for an SQP, making it unavailable to a State with an existing or planned facility, and reduced the number of measures held in abeyance. Of particular importance is the fact that, under the revised standard text of the SQP, the requirement that the State provide the Agency with an initial inventory report and the Agency’s right to carry out ad hoc and special inspections are no longer held in abeyance.

Additional protocols

7. Although the Agency has the authority under a CSA to verify the peaceful use of all nuclear material in a State (i.e. the correctness and completeness of the State’s declarations), the tools available to the Agency under such an agreement are limited. The *Model Additional Protocol*¹¹, approved by the Board of Governors in 1997, equips the Agency with important additional tools that provide broader access to information and locations. The measures provided for under an additional protocol (AP) thus significantly increase the Agency’s ability to verify the peaceful use of all nuclear material in a State with a CSA.

⁸ Paragraph 2 of INFCIRC/153 (Corrected).

⁹ GOV/INF/276/Annex B.

¹⁰ GOV/INF/276/Mod.1 and Corr.1.

¹¹ INFCIRC/540 (Corrected), *Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards*.

B.1.1.1. States with both CSAs and APs in force

Status of implementation

8. As of 31 December 2021, 132 (131)¹² States had both CSAs and APs in force.

9. Safeguards implementation involved, as appropriate, activities carried out in the field, at regional offices and at Agency Headquarters in Vienna. The activities at Headquarters included the evaluation of States' accounting reports and other information required under CSAs and APs and the evaluation of safeguards relevant information from other sources.

Deriving conclusions

10. A safeguards conclusion that all nuclear material has remained in peaceful activities in a State is based on the Agency's finding that there are no indications of diversion of declared nuclear material from peaceful nuclear activities and no indications of undeclared nuclear material or activities in the State as a whole. The Agency draws such a conclusion only where a State has both a CSA and an AP in force and the evaluations described below have been completed.

11. To ascertain that there are no indications of diversion of declared nuclear material from peaceful nuclear activities in a State, the Agency needs to carry out a comprehensive evaluation of all safeguards relevant information available to it, which includes information provided by the State with regard to the design and operation of nuclear facilities and LOFs, the State's nuclear material accounting reports, the State's declarations submitted under the AP and the results of the Agency's in-field activities carried out to verify the State's declarations.

12. To ascertain that there are no indications of undeclared nuclear material or activities in a State as a whole, the Agency needs to carry out an evaluation of the consistency of the State's declared nuclear programme with the results of the Agency's verification activities under the relevant safeguards agreements and APs and with all other safeguards relevant information available to the Agency. In particular, the Agency needs to have:

- Conducted a comprehensive State evaluation based on all safeguards relevant information available to the Agency about the State's nuclear and nuclear-related activities (including design information on facilities and information on LOFs, declarations submitted under APs, and information collected by the Agency through its verification activities and from other sources);
- Performed complementary access, as necessary, in accordance with the State's AP;
- Addressed all anomalies, discrepancies and inconsistencies identified in the course of its evaluation and verification activities.

13. When the evaluations described in paragraphs 11 and 12 above have been completed and no indication has been found by the Agency that, in its judgement, would give rise to a safeguards concern, the Secretariat can draw the broader conclusion that all nuclear material in a State remained in peaceful activities. Subsequently, when the necessary arrangements have been completed, the Agency implements integrated safeguards — an optimized combination of safeguards measures available under CSAs and APs — for that

¹² The numbers in parentheses provide the respective data for 2020.

State. Due to increased assurance of the absence of undeclared nuclear material and activities for the State as a whole, the frequency and the intensity of verification activities at declared facilities and LOFs are optimized. Integrated safeguards were implemented for the whole of 2021 for 69 (66) States.^{4, 13}

Overall conclusions for 2021

14. On the basis of the evaluations described in paragraphs 11 and 12, the Secretariat drew the conclusions referred to in paragraph 1(a) of the *Safeguards Statement* for 72 (72) States⁴ — Albania, Andorra, Armenia, Australia, Austria, Bangladesh, Belgium, Botswana, Bulgaria, Burkina Faso, Canada, Chile, Croatia, Cuba, the Czech Republic, Denmark¹⁴, Ecuador, El Salvador, Estonia, Finland, Germany, Ghana, Greece, the Holy See, Hungary, Iceland, Indonesia, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, the Republic of Korea, Kuwait, Latvia, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Malta, Mauritius, Monaco, Montenegro, the Netherlands¹⁵, New Zealand¹⁶, Nicaragua, Nigeria, North Macedonia, Norway, Palau, Peru, the Philippines, Poland, Portugal, Romania, Seychelles, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Tajikistan, Turkey, the United Republic of Tanzania, Uruguay, Uzbekistan and Viet Nam.

15. Because the evaluation process described in paragraph 12 had not yet been completed for 60 (59) States, the conclusion drawn for these States relates only to declared nuclear material in peaceful activities. The conclusion in paragraph 1(b) of the *Safeguards Statement* was drawn for Afghanistan, Angola, Antigua and Barbuda, Azerbaijan, Bahrain, Benin, Bosnia and Herzegovina, Burundi, Cambodia, Cameroon, the Central African Republic, Chad, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Cyprus, the Democratic Republic of the Congo, Djibouti, the Dominican Republic, Eritrea, Eswatini, Ethiopia, Fiji, Gabon, The Gambia, Georgia, Guatemala, Haiti, Honduras, Iraq, Kenya, Kyrgyzstan, Lesotho, Liberia, Malawi, the Marshall Islands, Mauritania, Mexico, Mongolia, Morocco, Mozambique, Namibia, the Niger, Panama, Paraguay, the Republic of Moldova, Rwanda, Saint Kitts and Nevis, Senegal, Serbia, Thailand, Togo, Turkmenistan, Uganda, Ukraine, the United Arab Emirates, Vanuatu and Zimbabwe.

¹³ Albania, Andorra, Armenia, Australia, Austria, Bangladesh, Belgium, Botswana, Bulgaria, Burkina Faso, Canada, Chile, Croatia, Cuba, the Czech Republic, Denmark, Ecuador, Estonia, Finland, Germany, Ghana, Greece, the Holy See, Hungary, Iceland, Indonesia, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, the Republic of Korea, Kuwait, Latvia, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Malta, Mauritius, Monaco, Montenegro, the Netherlands, New Zealand, North Macedonia, Norway, Palau, Peru, the Philippines, Poland, Portugal, Romania, Seychelles, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Tajikistan, the United Republic of Tanzania, Turkey, Uruguay, Uzbekistan and Viet Nam.

¹⁴ This conclusion is drawn with regard to that part of Denmark which is covered by INFCIRC/193 and INFCIRC/193/Add.8, i.e. Denmark and the Faroe Islands, and to Greenland for which Denmark has concluded a separate CSA and an AP thereto (INFCIRC/176 and INFCIRC/176/Add.1, respectively).

¹⁵ This conclusion is drawn with regard only to that part of the Netherlands which is covered by INFCIRC/193 and INFCIRC/193/Add.8, i.e. the Netherlands in Europe, which excludes the Caribbean part of the Netherlands (the islands of Bonaire, Sint Eustatius and Saba), Aruba, Curaçao and Sint Maarten. The Netherlands has concluded a separate CSA that applies to its constituent parts mentioned above (INFCIRC/229), but has not yet concluded an AP thereto.

¹⁶ This conclusion is drawn with regard only to New Zealand which is covered by INFCIRC/185 and INFCIRC/185/Add.1; it is not drawn for the Cook Islands and Niue, which are also covered by INFCIRC/185, but not by INFCIRC/185/Add.1.

B.1.1.2. States with CSAs in force but no APs in force

Status of implementation

16. As of 31 December 2021, safeguards were implemented for 45 (44) States¹⁷ in this category. Safeguards implementation involved activities in the field and at Headquarters, including the evaluation of States' accounting reports and other information required under CSAs and the evaluation of safeguards relevant information from other sources.

Deriving conclusions

17. For a State with a CSA, the Agency's right and obligation are as described in paragraph 3 above. Although the implementation of safeguards strengthening measures¹⁸ under such an agreement have increased the Agency's ability to detect undeclared nuclear material and activities, the activities that the Agency may conduct in this regard are limited for a State without an AP. Thus, the conclusion in the *Safeguards Statement* for a State with a CSA alone relates only to the non-diversion of declared nuclear material from peaceful activities.

18. In the course of its evaluation, the Agency also seeks to determine whether there is any indication of undeclared nuclear material or activities in the State as a whole which would need to be reflected in the *Safeguards Statement*. However, without the measures provided for in the *Model Additional Protocol* being implemented, the Agency is not able to provide credible assurance of the absence of undeclared nuclear material and activities for the State as a whole.

Islamic Republic of Iran

19. During 2021, the Agency continued its efforts to engage the Islamic Republic of Iran (Iran) in order to clarify and resolve the issues related to the presence of nuclear material particles of anthropogenic origin at three undeclared locations in Iran, and the issues related to a fourth undeclared location in Iran. The lack of progress in clarifying the Agency's questions concerning the correctness and completeness of Iran's safeguards declarations seriously affected the Agency's ability to provide assurance of the exclusively peaceful nature of Iran's nuclear programme. The Director General submitted four reports to the Board of Governors entitled *NPT Safeguards Agreement with the Islamic Republic of Iran* (GOV/2021/15, GOV/2021/29, GOV/2021/42 and GOV/2021/52).

Syrian Arab Republic

20. In August 2021, the Director General submitted a report to the Board of Governors entitled *Implementation of the NPT Safeguards Agreement in the Syrian Arab Republic* (GOV/2021/41) covering relevant developments since the previous report in August 2020 (GOV/2020/43). The Director General informed the Board of Governors that no new information had come to the knowledge of the Agency that would have an impact on the Agency's assessment that it was very likely that a building destroyed at the

¹⁷ The additional protocol, which was provisionally applied by the Islamic Republic of Iran as of 16 January 2016, has not been applied since 23 February 2021.

¹⁸ Such measures include the early provision of design information, environmental sampling and the use of satellite imagery.

Dair Alzour site in 2007 was a nuclear reactor that should have been declared to the Agency by Syria.¹⁹ In 2021, the Director General continued to urge Syria to cooperate fully with the Agency in connection with all unresolved issues.

21. In 2021, inspections were carried out at the Miniature Neutron Source Reactor facility near Damascus and a LOF in Homs.

22. On the basis of the evaluation of information provided by Syria, and all other safeguards relevant information available to it, the Agency found no indication of the diversion of declared nuclear material from peaceful nuclear activities. For 2021, the Agency concluded for Syria that declared nuclear material remained in peaceful activities.

Overall conclusions for 2021

23. On the basis of the evaluation performed and as reflected in paragraph 2 of the *Safeguards Statement*, the Secretariat concluded that for the 45 (44) States²⁰, declared nuclear material remained in peaceful activities. This conclusion was drawn for Algeria, Argentina, the Bahamas, Barbados, Belarus, Belize, Bhutan, the Plurinational State of Bolivia, Brazil, Brunei Darussalam, Dominica, Egypt, Grenada, Guyana, the Islamic Republic of Iran, Kiribati, the Lao People's Democratic Republic, Lebanon, Malaysia, Maldives, the Federated States of Micronesia, Myanmar, Nauru, Nepal, Oman, Papua New Guinea, Qatar, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Saudi Arabia, Sierra Leone, Solomon Islands, Sri Lanka, the Sudan, Suriname, the Syrian Arab Republic, Tonga, Trinidad and Tobago, Tunisia, Tuvalu, the Bolivarian Republic of Venezuela, Yemen, and Zambia.

B.1.2. States Parties to the NPT without CSAs in force

24. As of 31 December 2021, eight (ten) States Parties to the NPT had yet to bring CSAs into force pursuant to Article III of the Treaty.

Overall conclusions for 2021

25. As indicated in paragraph 3 of the *Safeguards Statement*, the Secretariat could not draw any safeguards conclusions for Cabo Verde, Equatorial Guinea, Guinea, Guinea-Bissau, Sao Tome and Principe, Somalia, the State of Palestine²¹ and Timor-Leste.

¹⁹ The Board of Governors, in its resolution GOV/2011/41 of June 2011 (adopted by a vote), had, inter alia, called on Syria to urgently remedy its non-compliance with its NPT Safeguards Agreement and, in particular, to provide the Agency with updated reporting under its Safeguards Agreement and access to all information, sites, material and persons necessary for the Agency to verify such reporting and resolve all outstanding questions so that the Agency could provide the necessary assurance as to the exclusively peaceful nature of Syria's nuclear programme.

²⁰ In addition, this conclusion is drawn for those territories of the Netherlands referred to in footnote 15 for which the broader conclusion is not drawn – i.e. the Caribbean part of the Netherlands (the islands of Bonaire, Sint Eustatius and Saba), Aruba, Curaçao and Sint Maarten; and the Cook Islands and Niue, which are covered by New Zealand's CSA but not by its AP – see footnote 16. It is also drawn for France's territories covered by the safeguards agreement reproduced in INFCIRC/718 between France, EURATOM and the Agency pursuant to Additional Protocol I to the Treaty of Tlatelolco; and for the United States of America's territories covered by the safeguards agreement reproduced in INFCIRC/366 between the United States of America and the Agency pursuant to Additional Protocol I to the Treaty of Tlatelolco.

²¹ The designation employed does not imply the expression of any opinion whatsoever concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

B.1.3. States with safeguards agreements based on INFCIRC/66/Rev.2 in force

26. Under safeguards agreements based on INFCIRC/66/Rev.2, the Agency applies safeguards in order to ensure that nuclear material, facilities and other items specified under the safeguards agreement are not used for the manufacture of any nuclear weapon or to further any military purpose, and that such items are used exclusively for peaceful purposes and are not used for the manufacture of any nuclear explosive device.

Status of implementation

27. As of 31 December 2021, safeguards were implemented at facilities in India, Israel and Pakistan pursuant to safeguards agreements based on INFCIRC/66/Rev.2. India has an AP to its INFCIRC/754 safeguards agreement in force.

Deriving conclusions

28. The conclusion described in paragraph 4 of the *Safeguards Statement* is reported for these three States, and relates to the nuclear material, facilities and other items to which safeguards were applied. To draw such a conclusion in respect of these States, the Agency evaluates all safeguards relevant information available to it, including verification results and information about facility design features and operations.

Overall conclusions for 2021

29. On the basis of the results of its verification and evaluation activities, the Secretariat concluded that the nuclear material, facilities or other items to which safeguards were applied in India, Israel and Pakistan remained in peaceful activities.

B.1.4. States with both voluntary offer agreements and APs in force

30. Under a voluntary offer agreement, the Agency applies safeguards to nuclear material in those facilities that have been selected by the Agency from the State's list of eligible facilities in order to verify that the material is not withdrawn from peaceful activities except as provided for in the agreement. In selecting facilities under voluntary offer agreements for the application of safeguards, the Agency takes such factors into consideration as: (i) whether the selection of a facility would satisfy legal obligations arising from other agreements concluded by the State; (ii) whether useful experience may be gained in implementing new safeguards approaches or in using advanced equipment and technology; and (iii) whether the cost efficiency of Agency safeguards may be enhanced by applying safeguards, in the exporting State, to nuclear material being shipped to States with CSAs in force. By implementing measures under the AP in these five States with voluntary offer agreements, the Agency also seeks to obtain and verify information that could enhance the safeguards conclusions for States with CSAs in force.

Status of implementation

31. During 2021, safeguards were implemented at 11 facilities selected by the Agency in the five States with voluntary offer agreements in force: China, France, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland (United Kingdom) and the United States of America.

Deriving conclusions

32. The conclusion contained in paragraph 5 of the *Safeguards Statement* is reported for the five States with voluntary offer agreements in force in which safeguards were applied to nuclear material in selected facilities. To draw the safeguards conclusion, the Agency evaluates all safeguards relevant information available to it, including verification results and information about facility design features and operations.

Overall conclusions for 2021

33. On the basis of the results of its verification and evaluation activities, the Secretariat concluded for China, France, the Russian Federation, the United Kingdom and the United States of America that nuclear material to which safeguards had been applied in selected facilities remained in peaceful activities or had been withdrawn as provided for in the agreements. There were no such withdrawals from the selected facilities in France, the Russian Federation and the United Kingdom.

B.2. Verification and Monitoring in the Islamic Republic of Iran in light of United Nations Security Council Resolution 2231 (2015)

34. The Agency continued to verify and monitor the nuclear-related commitments of Iran under the Joint Comprehensive Plan of Action (JCPOA). From 23 February 2021 onwards, however, the Agency's verification and monitoring activities in relation to the JCPOA were seriously affected following Iran's decision to stop the implementation of those commitments, including the AP. During the year, the Director General submitted to the Board of Governors and in parallel to the United Nations Security Council four quarterly reports (GOV/2021/10 and Corr.1, GOV/2021/28 and Corr.1, GOV/2021/39, GOV/2021/51), and 30 reports providing updates on developments in between the issuance of the quarterly reports, entitled *Verification and monitoring in the Islamic Republic of Iran in light of United Nations Security Council resolution 2231 (2015)*.

B.3. Democratic People's Republic of Korea

35. In August 2021, the Director General submitted a report to the Board of Governors and General Conference entitled *Application of Safeguards in the Democratic People's Republic of Korea* (GOV/2021/40–GC(65)/22), which provided an update of developments since the Director General's report of September 2020 (GOV/2020/42–GC(64)/18).

36. Since 1994, the Agency has not been able to conduct all necessary safeguards activities provided for in the DPRK's NPT Safeguards Agreement. From the end of 2002 until July 2007, the Agency was not able — and, since April 2009, has not been able — to implement any verification measures in the DPRK, and, therefore, the Agency could not draw any safeguards conclusion regarding the DPRK.

37. In 2021, no verification activities were implemented in the field but the Agency continued to monitor developments in the DPRK's nuclear programme and to evaluate all safeguards relevant information available to it, including open source information and satellite imagery.

38. In 2021, the Secretariat continued to maintain the Agency's enhanced readiness to play its essential role in verifying the DPRK's nuclear programme. The Secretariat has further refined its collection and analysis of safeguards relevant open source information on the DPRK's nuclear programme, collected and analysed a wide range of high-resolution commercial satellite imagery, maintained necessary equipment and supplies, held training workshops to prepare Agency inspectors for verification and monitoring

activities in the DPRK, and continued to document the Agency's knowledge of the DPRK's nuclear programme. Once a political agreement has been reached among the countries concerned, the Agency is ready to return to the DPRK in a timely manner, if requested to do so by the DPRK and subject to approval by the Board of Governors.

39. In 2021, the Agency continued to monitor the Yongbyon site. Since early July 2021, there have been indications, including the discharge of cooling water, consistent with the operation of the Yongbyon Experimental Nuclear Power Plant (5MW(e)) reactor. The steam plant that serves the Radiochemical Laboratory operated for approximately five months, from mid-February 2021 until early July 2021. The duration of the operation of the steam plant is consistent with the time required to reprocess a complete core of irradiated fuel from the 5MW(e) reactor at the Radiochemical Laboratory. There were indications that the reported centrifuge enrichment facility was in operation and that internal construction work continued at the light water reactor (LWR) under construction. The Agency has not observed any indications of operation of the LWR.

40. In 2021, there were also indications of ongoing activities at the Kangson complex, in the vicinity of Pyongyang.²²

41. The Agency has not had access to the Yongbyon site or to other locations in the DPRK. Without such access, the Agency cannot confirm either the operational status or configuration/design features of the facilities or locations, or the nature and purpose of the activities conducted therein.

42. The DPRK's nuclear activities continue to be a cause for serious concern. The continuation of the DPRK's nuclear programme is a clear violation of relevant United Nations Security Council resolutions and is deeply regrettable.

B.4. Areas of difficulty in safeguards implementation

43. In 2021, the restrictions implemented worldwide to contain the COVID-19 pandemic continued to pose challenges to the Agency's implementation of safeguards, mainly impacting the Agency's ability to conduct its planned in-field verification activities. During the year, the impact of COVID-19 restrictions on the effectiveness of safeguards implementation was significantly reduced compared to 2020. However, in 2021 the COVID-19 pandemic continued to have a significant impact on the efficiency of safeguards implementation. Travel conditions and restrictions, including quarantine requirements still applied in some States, resulted in additional costs to the Agency to guarantee the conduct of safeguards activities in the field while preserving the health and safety of the staff travelling.

44. The performance and the effectiveness of State or regional authorities responsible for safeguards implementation (SRAs) and of their respective systems of accounting for and control of nuclear material (SSACs/RSACs) have a significant impact upon the effectiveness and efficiency of Agency safeguards implementation. The effectiveness of some SRAs is affected by issues identified by the Agency in one or more of the following areas: provision of safeguards information to the Agency; provision of access to the Agency to conduct in-field verification activities; technical effectiveness of SSACs; and States' cooperation and logistical support related to the Agency's verification activities in the field or at Headquarters. Addressing these issues led to additional costs, effort and resources for the Agency. During 2021, the impact of the COVID-19 pandemic on these shortcomings was less severe than in 2020.

²² GOV/2021/40-GC(65)/22, para.14.

45. In 2021, despite the above-mentioned issues, the Agency — based on the evaluation of all safeguards relevant information available to it — was able to draw the safeguards conclusions as reported in the Safeguards Statement for 2021.

46. The Agency continues to address these issues to resolve them through cooperation and engagement with the States concerned. There are different causes of these issues. Some States have still not established SSACs, which are required under CSAs. Moreover, not all SRAs have the necessary legal authority, independence from nuclear facility or LOF operators, resources or technical capabilities to implement the requirements of safeguards agreements and APs.

47. As concluded by the Board of Governors in 2005, the SQP based on the original standard text is a weakness in the Agency's safeguards system. For States with an operative SQP based on the original standard text, the Agency's authority to require the submission of an initial report on all nuclear material subject to safeguards and early design information, to determine the status of any nuclear facilities and to be able to perform verification activities in the field is held in abeyance. In accordance with the decision of the Board of Governors in September 2005, therefore, States which have not amended or rescinded their SQPs should do so as soon as possible. In 2021, the Director General sent letters reminding relevant States with an SQP based on the original standard text of his earlier calls for amendment or rescission of their SQPs. At the end of 2021, 26 (31) States²³ had operative SQPs that had yet to be amended or rescinded.

48. The Agency remains ready to provide assistance to the States concerned in amending or rescinding their SQP as well as in establishing and maintaining their SSAC as required under their safeguards agreement.

B.5. Strengthening the effectiveness and improving the efficiency of safeguards

49. The Agency has continued to improve the efficiency of safeguards implementation while maintaining or strengthening its effectiveness. This improvement has been essential since the number of safeguards agreements and APs in force, the quantities of nuclear material and other items under safeguards and the number of facilities and LOFs under safeguards have all increased over recent years. In contrast, the Agency's financial resources have not risen commensurately. While a number of facilities are being retired from service, this will not immediately reduce verification effort as safeguards continue to be applied to those facilities until their status is confirmed by the Agency as 'decommissioned for safeguards purposes'.

50. Some of the factors contributing to strengthening the effectiveness and improving the efficiency of safeguards are shown in Fact box 2. As a result of these improvements, safeguards have been implemented more effectively in the field and have been complemented by enhanced and improved activities at Headquarters.

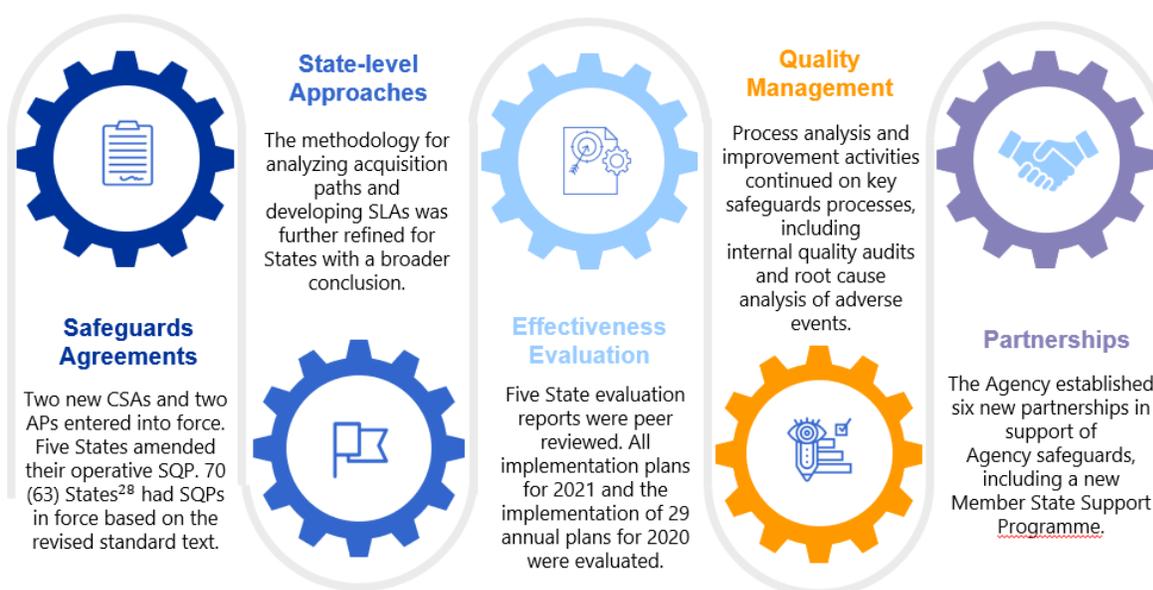
51. In 2021, the Agency began to implement the IAEA Comprehensive Capacity-Building Initiative for SSACs and SRAs (COMPASS) in the seven States that participate in its two-year pilot phase. Designed to

²³ The States with SQPs based on the original standard text are: Barbados, Bhutan, the Plurinational State of Bolivia, Dominica, Fiji, Grenada, Guyana, Kiribati, Kyrgyzstan, the Lao People's Democratic Republic, Mongolia, Myanmar, Namibia, Nauru, Nepal, Oman, Saint Vincent and the Grenadines, Samoa, Saudi Arabia, Sierra Leone, Solomon Islands, Suriname, Trinidad and Tobago, Tuvalu, Yemen and Zambia. In addition, there is an SQP based on the original standard text to the safeguards agreement reproduced in INFCIRC/229 between the Netherlands and the Agency pursuant to the NPT and Additional Protocol I to the Treaty of Tlatelolco.

further support States in building capacity towards safeguards implementation, COMPASS is structured as a collaborative endeavour aimed at strengthening the effectiveness of SSACs and enhancing the cooperation between SRAs and the Agency.

52. During 2021, the Agency continued improving the development of State-level safeguards approaches (SLAs) for States with a CSA and an AP in force. The total number of States with a CSA in force for which an SLA has been developed stands at 133. These 133 States hold 97% of all nuclear material (by significant quantity) under Agency safeguards in States with a CSA in force. These 133 States comprise 70 States²⁴ with a CSA and an AP in force for which the broader conclusion has been drawn for 2021 (of which 17 are States with an SQP); 37 States²⁵ with a CSA and an AP in force for which the broader conclusion was not drawn for 2021 (of which 26 are States with an SQP); and 26 States²⁶ with a CSA with an SQP in force but no AP in force. There are also two States²⁷ with a voluntary offer agreement and an AP in force for which an SLA has been developed.

Fact box 2. Strengthening the effectiveness and improving the efficiency of safeguards



²⁴ Albania, Andorra, Armenia, Australia, Austria, Bangladesh, Belgium, Botswana, Bulgaria, Burkina Faso, Canada, Chile, Croatia, Cuba, the Czech Republic, Denmark, Ecuador, Estonia, Finland, Germany, Ghana, Greece, the Holy See, Hungary, Iceland, Indonesia, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, the Republic of Korea, Kuwait, Latvia, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Malta, Mauritius, Monaco, Montenegro, the Netherlands, New Zealand, Nigeria, North Macedonia, Norway, Palau, Peru, the Philippines, Poland, Portugal, Romania, Seychelles, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Tajikistan, Turkey, the United Republic of Tanzania, Uruguay, Uzbekistan and Viet Nam.

²⁵ Afghanistan, Antigua and Barbuda, Azerbaijan, Bosnia and Herzegovina, Burundi, Cambodia, the Central African Republic, Chad, Congo, Côte d'Ivoire, Cyprus, the Democratic Republic of the Congo, Eswatini, Ethiopia, Fiji, Gabon, The Gambia, Georgia, Guatemala, Kyrgyzstan, Malawi, the Marshall Islands, Mongolia, Mozambique, Namibia, the Niger, the Republic of Moldova, Rwanda, Saint Kitts and Nevis, Senegal, Thailand, Togo, Turkmenistan, Uganda, Ukraine, Vanuatu and Zimbabwe.

²⁶ Barbados, Belize, Bhutan, the Plurinational State of Bolivia, Brunei Darussalam, Dominica, Grenada, Guyana, Kiribati, the Lao People's Democratic Republic, Maldives, Myanmar, Nauru, Nepal, Papua New Guinea, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Sierra Leone, Solomon Islands, Suriname, Tonga, Trinidad and Tobago, Tuvalu and Zambia.

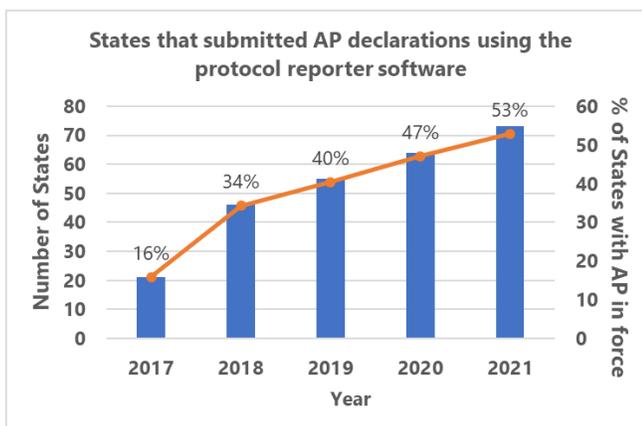
²⁷ France and the United Kingdom.

53. To ensure consistency and non-discrimination in the implementation of SLAs, in 2021 the Agency continued to improve internal work practices, taking into account experience gained and lessons learned in the development and implementation of SLAs for States under integrated safeguards. During the year, the Agency continued its project focussing on refining the internal methodology for conducting acquisition path analysis and developing SLAs. The updated process increases the consistency in the development of SLAs for States with a broader conclusion and improves both the planning and implementation of safeguards activities, as well as the State evaluation process.

54. Under the departmental quality management system (QMS), regular oversight of the key safeguards processes and their output is provided through internal quality audits, process analyses and improvement activities. These are intended to ensure impartiality, effectiveness and efficiency of safeguards implementation.

55. Internal evaluation of the effectiveness of safeguards implementation was performed through peer reviews of annual implementation plans (AIPs) and State evaluation reports. In 2021, all AIPs approved at the beginning of the year were reviewed. Moreover, the effectiveness of safeguards implementation was evaluated for 29 AIPs implemented in 2020. In addition, the State evaluation of five States was peer reviewed by ad hoc departmental teams. This additional layer of internal evaluation is expected to further strengthen the effectiveness of safeguards implementation and to increase the level of consistency and standardization across the Department.

56. The Agency continued to promote the use of the protocol reporter software supporting the preparation and submission of AP declarations. By the end of 2021, the Agency had provided an upgraded version of the software to 105 States⁴. The number of States that use the protocol reporter software to submit their AP declarations has been steadily increasing over the past years. During 2021, 73 States⁴ submitted declarations using this software, which is approximately 70% of the States that received the upgraded version of the software, and more than half of the States with an AP in force.



57. Member State Support Programmes (MSSPs) and the Standing Advisory Group on Safeguards Implementation (SAGSI) continued to make substantial contributions to Agency safeguards through the provision of assistance and advice, respectively. In 2021, Switzerland established a new MSSP, coordinated

²⁸ The States with SQPs in force based on the revised standard text are: Afghanistan, Andorra, Angola, Antigua and Barbuda, the Bahamas, Bahrain, Belize, Benin, Brunei Darussalam, Burkina Faso, Burundi, Cambodia, Cameroon, the Central African Republic, Chad, Comoros, Congo, Costa Rica, Djibouti, the Dominican Republic, Ecuador, El Salvador, Eritrea, Eswatini, Ethiopia, Gabon, The Gambia, Guatemala, Haiti, the Holy See, Honduras, Iceland, Kenya, Kuwait, Lebanon, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mauritius, the Federated States of Micronesia, Monaco, Montenegro, Mozambique, New Zealand, Nicaragua, North Macedonia, Palau, Panama, Papua New Guinea, Paraguay, Qatar, the Republic of Moldova, Rwanda, Saint Kitts and Nevis, Saint Lucia, San Marino, Senegal, Seychelles, Singapore, the Sudan, Togo, Tonga, Uganda, the United Republic of Tanzania, Vanuatu and Zimbabwe. In addition, the SQP to the safeguards agreement reproduced in INFCIRC/718 between France, EURATOM and the Agency pursuant to Additional Protocol I to the Treaty of Tlatelolco and the SQP to the safeguards agreement reproduced in INFCIRC/366 between the United States of America and the Agency pursuant to Additional Protocol I to the Treaty of Tlatelolco were amended.

through the Swiss Federal Office of Energy. MSSP activities, now in partnership with 21 States and the European Commission, focus on addressing specific development and implementation support needs for safeguards through collaboration, research and development, and the provision of equipment, materials, and access to facilities for training or equipment testing purposes.

58. In 2021, the Agency also signed practical arrangements with five non-traditional entities to further broaden the support base for Agency safeguards.

B.6. Safeguards expenditures and resources

59. During 2021, the activities of Major Programme 4 — Nuclear Verification — were funded primarily through the Regular Budget, and extrabudgetary contributions. The Regular Budget appropriation of €151.1 (€148.7) million²⁹ for 2021 was adjusted to €147.4 (€145.9) million at the United Nations operational average rate of exchange for the year. Figure 1 presents the budget growth³⁰ for the period 2017–2021 by comparing the growth of the final budget³¹ to the growth of the approved budget³².

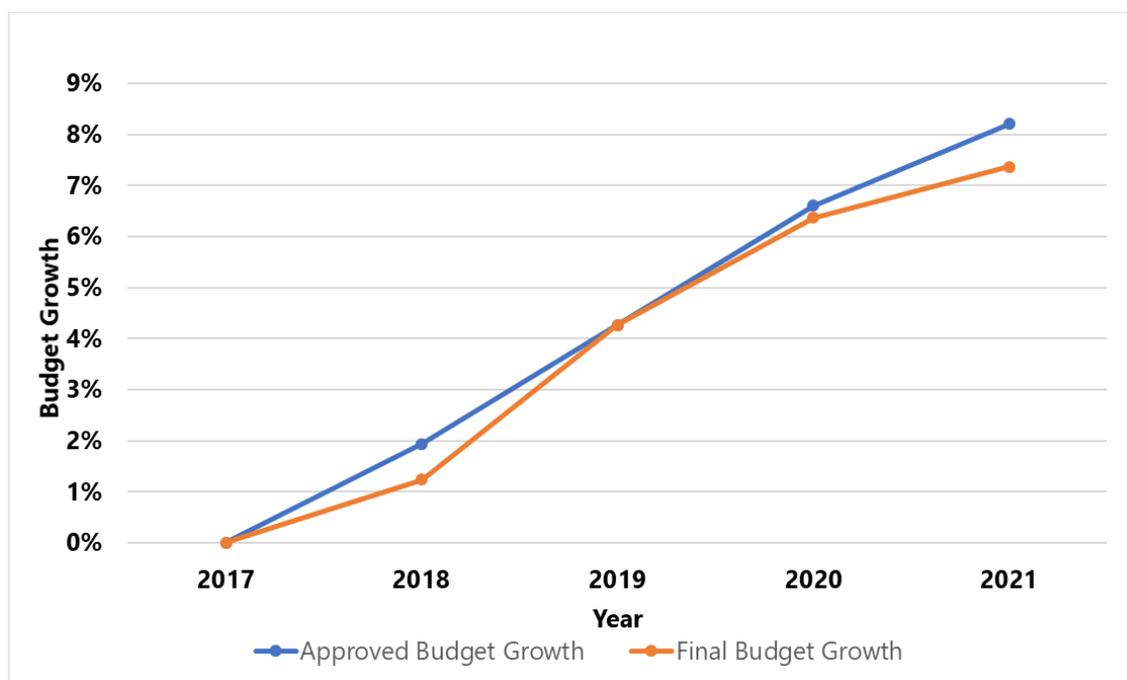


Figure 1. Budget growth of the Regular Budget, 2017–2021 (base 2017=0%)

²⁹ At an exchange rate €1=\$1, excluding Major Capital Investment Fund.

³⁰ As per GC(60)/2, it includes the gradual integration in the Regular Budget of €5.2 million allocated during the period 2017–2019 for the Agency's verification and monitoring of Iran's nuclear-related commitments under the JCPOA in light of United Nations Security Council resolution 2231 (2015).

³¹ Represents the operational portion of the Regular Budget appropriation as represented in the annual Agency's Financial Statements, including the effects of the price adjustment and the recalculation of the Regular Budget portion of US dollars at the United Nations operational average rate of exchange for the year.

³² Represents the Regular Budget approved by the Agency's policy-making organs excluding the effects of currency revaluation.

60. The expenditures³³ for Major Programme 4 were €147.3 (€145.0) million from the 2021 Regular Budget, an increase of 1.6%, compared with 2020. The Regular Budget utilization rate for 2021 was 100% (99.4%) with an unspent balance of €49 thousand at the end of the year. Figure 2 shows the utilization trend of the Regular Budget of Major Programme 4 for the period 2017–2021.

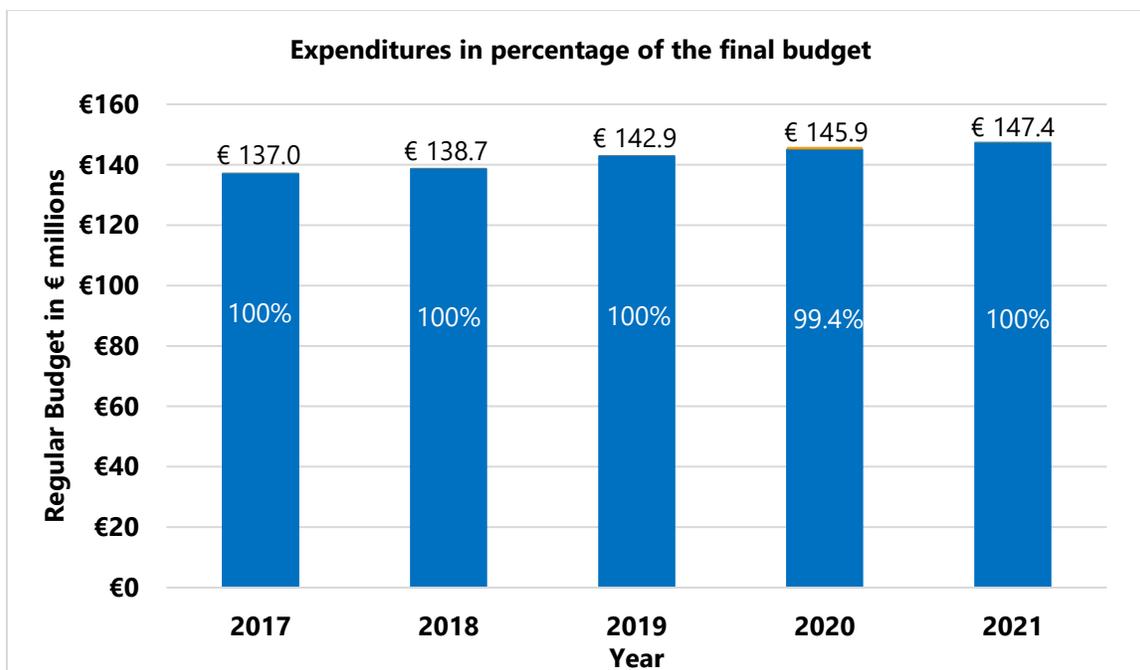


Figure 2. Major Programme 4 — Nuclear Verification — budget and expenditures, 2017–2021

61. The expenditures³⁴ from the extrabudgetary contributions were €22.8 (€26.8) million, a decrease of 15% compared with 2020. This decrease resulted mainly from a reduction in overheads related to equipment and intangibles and in travel costs associated with the gradual resumption of the use of commercial flights instead of aircraft charters.

B.7. Status of safeguards agreements (as of 31 December 2021)

62. This section contains information — presented in the five tables below — on safeguards agreements that provide the basis for the Agency’s implementation of safeguards in 2021. It does not include agreements under which the application of safeguards has been suspended in the light of implementation of safeguards pursuant to another agreement. For full details, see the Agency’s website: <https://www.iaea.org>.

³³ Excludes expenditures related to the €829 thousand carry-over balance of Regular Budget 2020 which was fully spent in 2021.

³⁴ Including Programme Support Costs.

Table 1 – States with CSAs and APs in force

State	SQP	INFCIRC	AP (date of entry into force)
Afghanistan	X(A)	257	19 July 2005
Albania		359	03 November 2010
Andorra	X(A)	808	19 December 2011
Angola	X(A)	800	28 April 2010
Antigua and Barbuda	X(A)	528	15 November 2013
Armenia		455	28 June 2004
Australia		217	12 December 1997
Austria		193	30 April 2004
Azerbaijan		580	29 November 2000
Bahrain	X(A)	767	20 July 2011
Bangladesh		301	30 March 2001
Belgium		193	30 April 2004
Benin	X(A)	930	17 September 2019
Bosnia and Herzegovina		851	03 July 2013
Botswana		694	24 August 2006
Bulgaria⁽¹⁾		193	01 May 2009
Burkina Faso	X(A)	618	17 April 2003
Burundi	X(A)	719	27 September 2007
Cambodia	X(A)	586	24 April 2015
Cameroon	X(A)	641	29 September 2016
Canada		164	08 September 2000
Central African Republic	X(A)	777	07 September 2009
Chad	X(A)	802	13 May 2010
Chile		476	03 November 2003
Colombia		306	05 March 2009
Comoros	X(A)	752	20 January 2009
Congo	X(A)	831	28 October 2011
Costa Rica	X(A)	278	17 June 2011
Côte d'Ivoire		309	05 May 2016
Croatia⁽¹⁾		193	01 April 2017
Cuba		633	03 June 2004
Cyprus⁽¹⁾		193	01 May 2008
Czech Republic⁽¹⁾		193	01 October 2009
Democratic Republic of the Congo		183	09 April 2003
Denmark⁽²⁾		193 176	30 April 2004 22 March 2013
Djibouti	X(A)	884	26 May 2015
Dominican Republic	X(A)	201	05 May 2010

State	SQP	INFCIRC	AP (date of entry into force)
Ecuador	X(A)	231	24 October 2001
El Salvador	X(A)	232	24 May 2004
Eritrea	X(A)	960	20 April 2021
Estonia⁽¹⁾		193	01 December 2005
Eswatini	X(A)	227	08 September 2010
Ethiopia	X(A)	261	18 September 2019
Fiji	X	192	14 July 2006
Finland		193	30 April 2004
Gabon	X(A)	792	25 March 2010
Gambia	X(A)	277	18 October 2011
Georgia		617	03 June 2003
Germany		193	30 April 2004
Ghana		226	11 June 2004
Greece		193	30 April 2004
Guatemala	X(A)	299	28 May 2008
Haiti	X(A)	681	09 March 2006
Holy See	X(A)	187	24 September 1998
Honduras	X(A)	235	17 November 2017
Hungary⁽¹⁾		193	01 July 2007
Iceland	X(A)	215	12 September 2003
Indonesia		283	29 September 1999
Iraq		172	10 October 2012
Ireland		193	30 April 2004
Italy		193	30 April 2004
Jamaica		265	19 March 2003
Japan		255	16 December 1999
Jordan		258	28 July 1998
Kazakhstan		504	09 May 2007
Kenya	X(A)	778	18 September 2009
Korea, Republic of		236	19 February 2004
Kuwait	X(A)	607	02 June 2003
Kyrgyzstan	X	629	10 November 2011
Latvia⁽¹⁾		193	01 October 2008
Lesotho	X(A)	199	26 April 2010
Liberia	X(A)	927	10 December 2018
Libya		282	11 August 2006
Liechtenstein		275	25 November 2015
Lithuania⁽¹⁾		193	01 January 2008
Luxembourg		193	30 April 2004

State	SQP	INFCIRC	AP (date of entry into force)
Madagascar	X(A)	200	18 September 2003
Malawi	X(A)	409	26 July 2007
Mali	X(A)	615	12 September 2002
Malta⁽¹⁾		193	01 July 2007
Marshall Islands		653	03 May 2005
Mauritania	X(A)	788	10 December 2009
Mauritius	X(A)	190	17 December 2007
Mexico		197	04 March 2011
Monaco	X(A)	524	30 September 1999
Mongolia	X	188	12 May 2003
Montenegro	X(A)	814	04 March 2011
Morocco		228	21 April 2011
Mozambique	X(A)	813	01 March 2011
Namibia	X	551	20 February 2012
Netherlands⁽³⁾		193	30 April 2004
New Zealand⁽⁴⁾	X(A)	185	24 September 1998
Nicaragua	X(A)	246	18 February 2005
Niger		664	02 May 2007
Nigeria		358	04 April 2007
North Macedonia	X(A)	610	11 May 2007
Norway		177	16 May 2000
Palau	X(A)	650	13 May 2005
Panama	X(A)	316	11 December 2001
Paraguay	X(A)	279	15 September 2004
Peru		273	23 July 2001
Philippines		216	26 February 2010
Poland⁽¹⁾		193	01 March 2007
Portugal		193	30 April 2004
Republic of Moldova	X(A)	690	01 June 2012
Romania⁽¹⁾		193	01 May 2010
Rwanda	X(A)	801	17 May 2010
Saint Kitts and Nevis	X(A)	514	19 May 2014
Senegal	X(A)	276	24 July 2017
Serbia		204	17 September 2018
Seychelles	X(A)	635	13 October 2004
Singapore	X(A)	259	31 March 2008
Slovakia⁽¹⁾		193	01 December 2005
Slovenia⁽¹⁾		193	01 September 2006
South Africa		394	13 September 2002

State	SQP	INFCIRC	AP (date of entry into force)
Spain		193	30 April 2004
Sweden		193	30 April 2004
Switzerland		264	01 February 2005
Tajikistan		639	14 December 2004
Thailand		241	17 November 2017
Togo	X(A)	840	18 July 2012
Turkey		295	17 July 2001
Turkmenistan		673	03 January 2006
Uganda	X(A)	674	14 February 2006
Ukraine		550	24 January 2006
United Arab Emirates		622	20 December 2010
United Republic of Tanzania	X(A)	643	07 February 2005
Uruguay		157	30 April 2004
Uzbekistan		508	21 December 1998
Vanuatu	X(A)	852	21 May 2013
Viet Nam		376	17 September 2012
Zimbabwe	X(A)	483	21 September 2021

General Notes:

- In addition, safeguards, including the measures of the Model Additional Protocol, were applied for Taiwan, China.
- The safeguards agreement reproduced in INFCIRC/193 is that concluded between the non-nuclear-weapon States of the European Atomic Energy Community (EURATOM), EURATOM and the Agency.
- ‘X’ in the ‘SQP’ column indicates that the State has an operative SQP. ‘X(A)’ indicates that the SQP in force is based on the revised SQP standard text (see Section B, paragraph 6).

Table Notes:

- (1) The date refers to accession to INFCIRC/193 and INFCIRC/193/Add.8.
- (2) The application of safeguards in Denmark under the bilateral NPT safeguards agreement (INFCIRC/176), in force since 1 March 1972, was suspended on 21 February 1977, on which date the safeguards agreement between the non-nuclear-weapon States of EURATOM, EURATOM and the Agency (INFCIRC/193) entered into force for Denmark. Since 21 February 1977, INFCIRC/193 also applies to the Faroe Islands. Upon Greenland’s secession from EURATOM as of 31 January 1985, the agreement between the Agency and Denmark (INFCIRC/176) re-entered into force for Greenland. The AP to this agreement entered into force on 22 March 2013 (INFCIRC/176/Add.1).
- (3) The safeguards agreement reproduced in INFCIRC/229 with regard to the Caribbean part of the Netherlands (the islands of Bonaire, Sint Eustatius, and Saba), Aruba, Curaçao and Sint Maarten is pursuant to the NPT and Additional Protocol I to the Treaty of Tlatelolco. There is an SQP to this agreement. No AP is in force for that agreement.
- (4) The safeguards agreement reproduced in INFCIRC/185 is also applicable to the Cook Islands and Niue. The amended SQP reproduced in INFCIRC/185/Mod.1 and the AP reproduced in INFCIRC/185/Add.1, however, are not applicable to the Cook Islands and Niue.

Table 2 – States with CSAs but no APs in force

State	SQP	INFCIRC	AP
Algeria		531	Signed: 16 February 2018
Argentina		435	
Bahamas	X(A)	544	
Barbados	X	527	
Belarus		495	Signed: 15 November 2005
Belize	X(A)	532	
Bhutan	X	371	
Bolivia, Plurinational State of	X	465	Signed: 18 September 2019
Brazil		435	
Brunei Darussalam	X(A)	365	
Democratic People's Republic of Korea ⁽¹⁾		403	
Dominica	X	513	
Egypt		302	
Grenada	X	525	
Guyana	X	543	
Iran, Islamic Republic of ⁽²⁾		214	Signed: 18 December 2003
Kiribati	X	390	Signed: 09 November 2004
Lao People's Democratic Republic	X	599	Signed: 05 November 2014
Lebanon	X(A)	191	
Malaysia		182	Signed: 22 November 2005
Maldives	X(A)	253	
Micronesia, Federated States of	X(A)	962	
Myanmar	X	477	Signed: 17 September 2013
Nauru	X	317	
Nepal	X	186	
Oman	X	691	
Papua New Guinea	X(A)	312	
Qatar	X(A)	747	
Saint Lucia	X(A)	379	
Saint Vincent and the Grenadines	X	400	
Samoa	X	268	
San Marino	X(A)	575	
Saudi Arabia	X	746	
Sierra Leone	X	787	Approved 09 June 2021
Solomon Islands	X	420	
Sri Lanka		320	Approved: 12 September 2018
Sudan	X(A)	245	
Suriname	X	269	
Syrian Arab Republic		407	

State	SQP	INFCIRC	AP
Tonga	X(A)	426	
Trinidad and Tobago	X	414	
Tunisia		381	Signed: 24 May 2005
Tuvalu	X	391	
Venezuela, Bolivarian Republic of		300	
Yemen	X	614	
Zambia	X	456	Signed: 13 May 2009

General Notes:

- The safeguards agreement reproduced in INFCIRC/435 is that concluded between Argentina, Brazil, the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) and the Agency.
- 'X' in the 'SQP' column indicates that the State has an operative SQP. 'X(A)' indicates that the SQP in force is based on the revised SQP standard text (see Section B, paragraph 6).

Table Notes:

- In a letter to the Director General dated 10 January 2003, the DPRK stated that the Government had "decided to lift the moratorium on the effectiveness of its withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons" and that "its decision to withdraw from the Treaty will come into effect from 11 January 2003 onwards."
- On 16 January 2016, as notified in its letter to the Director General of 7 January 2016, Iran began to provisionally apply its AP in accordance with Article 17(b) of the Additional Protocol, pending its entry into force. The AP, which was provisionally applied by Iran as of 16 January 2016, has not been applied since 23 February 2021.

Table 3 – States Parties to the NPT without CSAs in force

States Parties to the NPT	SQP	Safeguards agreement	AP
Cabo Verde	X(A)	Signed: 28 June 2005	Signed: 28 June 2005
Equatorial Guinea	X	Approved: 13 June 1986	
Guinea	X(A)	Signed: 13 December 2011	Signed: 13 December 2011
Guinea-Bissau	X(A)	Signed: 21 June 2013	Signed: 21 June 2013
Sao Tome and Principe	X(A)	Approved: 21 November 2019	Approved: 21 November 2019
Somalia			
State of Palestine⁽¹⁾	X(A)	Signed: 14 June 2019	
Timor-Leste	X(A)	Signed: 06 October 2009	Signed: 06 October 2009

General Note:

- 'X' in the 'SQP' column indicates that the State has an SQP. 'X(A)' indicates that the SQP is based on the revised SQP standard text (see Section B, paragraph 6). In both cases, the SQP will come into force at the same time as the safeguards agreement.

Table Note:

- The designation employed does not imply the expression of any opinion whatsoever concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

Table 4 – States with safeguards agreements based on INFCIRC/66/Rev.2 in force

State	INFCIRC	AP
India	754	In force: 25 July 2014
Israel	249/Add.1	
Pakistan	34	
	116	
	135	
	239	
	248	
	393	
	418	
	705	
	816	
	920	

Table 5 – States with voluntary offer agreements and APs in force

State	INFCIRC	AP
China	369	In force: 28 March 2002
France⁽¹⁾	290	In force: 30 April 2004
Russian Federation	327	In force: 16 October 2007
United Kingdom of Great Britain and Northern Ireland^{(2), (3), (4)}	951	In force: 31 December 2020
United States of America⁽⁵⁾	288	In force: 06 January 2009

Table Notes:

- (1) The safeguards agreement reproduced in INFCIRC/718 between France, EURATOM and the Agency is pursuant to Additional Protocol I to the Treaty of Tlatelolco. There is an SQP to this agreement. The SQP was amended. No AP to that agreement has been concluded.
- (2) The safeguards agreement reproduced in INFCIRC/175, which remains in force, is an INFCIRC/66/Rev.2-type safeguards agreement, concluded between the United Kingdom and the Agency.
- (3) The safeguards agreement between the United Kingdom, EURATOM and the Agency pursuant to Additional Protocol I to the Treaty of Tlatelolco was signed but has not entered into force. There is an SQP to this agreement. No AP to that agreement has been concluded.
- (4) The voluntary offer safeguards agreement between the United Kingdom and the Agency (reproduced in INFCIRC/951) and the AP thereto (reproduced in INFCIRC/951/Add.1) entered into force on 31 December 2020 at 23:00 GMT.
- (5) The safeguards agreement reproduced in INFCIRC/366 between the United States of America and the Agency is pursuant to Additional Protocol I to the Treaty of Tlatelolco. There is an SQP to this agreement. The SQP was amended. No AP to that agreement has been concluded.