

The International Atomic Energy Agency

The International Atomic Energy Agency (IAEA) serves as the world's foremost intergovernmental forum for scientific and technical cooperation in the peaceful use of nuclear energy. Established in 1957 as an autonomous international organization within the United Nations system, the IAEA carries out programmes to maximize the contribution of nuclear technology to society while verifying its peaceful use. The IAEA Secretariat has been led by Director General Yukiya Amano since December 2009.

The IAEA works with its 164 Member States and multiple partners worldwide to promote safe, secure and peaceful use of nuclear energy. Through technical cooperation programmes the IAEA assists its Member States and promotes the exchange of scientific and technical information between them. The IAEA's work also includes setting the framework for cooperative efforts to build and strengthen an international nuclear safety and security regime and verifying States' fulfilment of their non-proliferation undertakings under the NPT.

The IAEA headquarters is at the Vienna International Centre in Vienna, Austria. Operational liaison and regional offices are located in Geneva, Switzerland; New York, USA; Toronto, Canada; and Tokyo, Japan. The IAEA runs scientific laboratories in Vienna and Seibersdorf, Austria and in Monaco. It also supports research centres, such as the one in Trieste, Italy.

The IAEA Secretariat is a team of some 2500 multi-disciplinary professional and support staff from more than 100 countries.

The IAEA and the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

The IAEA is not a party to the NPT but is entrusted with a key verification role under it. Under the NPT, the IAEA has a specific role as the international safeguards inspectorate. The IAEA serves also as a multilateral channel for transferring peaceful applications of nuclear technology:

NPT Article III: The IAEA administers international safeguards to verify that non-nuclear weapon States party to the NPT fulfil the non-proliferation commitment they have made, "with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapon or other nuclear explosive devices."

NPT Article IV: The IAEA facilitates and provides a channel for endeavours aimed at "the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world."

IAEA Safeguards

Under Article III of the NPT, each non-nuclear-weapon State party undertakes the obligation to conclude a comprehensive safeguards agreement with the IAEA. Under such agreement, the IAEA has the right and obligation to ensure that safeguards are applied on all nuclear material in all peaceful nuclear activities within the territory of the State, under its 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.

As of the end of 2014, safeguards were applied for 180 States^{1,2} with safeguards agreements in force with the IAEA. These States³ include the five nuclear-weapon-States party to the NPT with voluntary offer agreements in force for which safeguards are applied to declared nuclear material in selected facilities or parts thereof. Twelve non-nuclear-weapon States party to the NPT had not yet brought comprehensive safeguards agreements into force as required by Article III of the NPT.⁴

Although the IAEA has the authority under a comprehensive safeguards agreement 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 IAEA under such an agreement are limited. Indeed, one of the greatest challenges for the IAEA is to detect *undeclared* nuclear material and activities. Additional protocols concluded based on the 1997 Model Additional Protocol equip the IAEA with important supplementary tools which provide the IAEA with broader access to information and locations. The measures provided for under an additional protocol thus significantly increase the IAEA's ability to verify the peaceful use of *all* nuclear material in a State with a comprehensive safeguards agreement. By the end of 2014, 124 States had brought additional protocols into force.

At the end of 2014, the IAEA was implementing safeguards in some 1300 facilities and safeguarding nuclear material equivalent to some 190 000 significant quantities⁵. The implementation of safeguards involves activities carried out both in the field and at the IAEA's headquarters in Vienna. The latter activities include the evaluation of States' nuclear material accounting reports and other information required under comprehensive safeguards agreements and additional protocols and the evaluation of other safeguards

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

2 And Taiwan, China.

3 These States also include those States that are not party to the NPT for which the IAEA applies safeguards pursuant to item-specific safeguards agreements to nuclear material, nonnuclear material, facilities and other items subject to such safeguards agreements.

4 A summary of the status of States' safeguards agreements is available at: https://www.iaea.org/safeguards/documents/sir_table.pdf.

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



2015

REVIEW CONFERENCE OF THE PARTIES TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS

relevant information. In implementing in-field activities, the Secretariat annually carries out approximately 2000 inspections and spends some 12 000 calendar-days in the field for verification.

Since the 2010 Review Conference, the IAEA has continued its effort to resolve outstanding safeguards implementation issues in three States.⁶

Peaceful Applications of Nuclear Technology

Consistent with its statutory mandate “to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world”, the IAEA’s activities include: developing and transferring nuclear technologies for peaceful purposes to its Member States; contributing to the strengthening of the global nuclear safety framework and strengthening the security of nuclear material and facilities.

The IAEA, through its technical cooperation (TC) programme, aims to support tangible socio-economic development by promoting the use of appropriate nuclear science and technology in addressing major sustainable development priorities of Member States at the national, regional and interregional levels. The programme concentrates on six thematic areas — human health, agricultural productivity and food security, water resources management, environmental protection, physical and chemical applications, and sustainable energy development, together with a cross cutting thematic area — safety and security — and supports the achievement of the Millennium Development Goals. The IAEA’s TC programme is unique in the UN system, in that it combines significant technical and developmental competencies. It seeks to forge human and institutional capacities in Member States, so that they can safely and securely maximize the utilization of nuclear technologies to address challenges to sustainable socioeconomic development.⁷

Ensuring safety and security is primarily the responsibility of each State. However, the recognition of far reaching and transboundary consequences of any severe nuclear or radiological emergency has led to the recognition of the central role of the IAEA in promoting international cooperation and in coordinating international efforts to strengthen global nuclear safety, in providing expertise and advice in this field and in promoting nuclear safety culture worldwide. The IAEA continues to help develop and strengthen the global nuclear safety and security framework based on strong national infrastructures, international instruments, safety standards and security guidelines. The IAEA

⁶ For further details on the safeguards implementation issues see Section 3 of the background document to the 2015 NPT Review Conference prepared by the IAEA Secretariat on Activities of the International Atomic Energy Agency relevant to article III of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT/CONF.2015/13).

⁷ For further details on the IAEA TC programme, promotion of peaceful nuclear cooperation and the IAEA Peaceful Uses Initiative see, inter alia, Sections 3, 4 and 5 of the background paper to the 2015 NPT Review Conference prepared by the IAEA Secretariat on *Activities of the International Atomic Energy Agency relevant to article IV of the Treaty on the Non-Proliferation of Nuclear Weapons* (NPT/CONF.2015/14).



2015

REVIEW CONFERENCE OF THE PARTIES TO THE TREATY ON THE **NON-PROLIFERATION OF NUCLEAR WEAPONS**

assists Member States in these areas, upon their request, through peer reviews, advisory services, knowledge networks and capacity building activities.⁸

⁸ For further details on nuclear safety and nuclear security see Sections 4.3 and 4.4 of the background paper to the 2015 NPT Review Conference prepared by the IAEA Secretariat on Activities of the International Atomic Energy Agency relevant to article IV of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT/CONF.2015/14).