

International Atomic Energy Agency

[UPSC Notes]

What is International Atomic Energy Agency (IAEA)?

International Atomic Energy Agency (IAEA) is a UN agency that works with member countries and partners to promote the safe, secure, and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.

- International Atomic Energy Agency (IAEA) reports to both the United Nations General Assembly and Security Council.
- The headquarters of the IAEA is in Vienna, Austria.
- The IAEA is entrusted with the task of upholding the principles of the Nuclear Non-Proliferation Treaty of 1970.

International Atomic Energy Agency	Highlights
IAEA Full Form	International Atomic Energy Agency
IAEA Full Form in Hindi	अंतरराष्ट्रीय परमाणु ऊर्जा अभिकरण (आईएईए)
IAEA Headquarters	Vienna, Austria
IAEA President	Rafael Mariano Grossi

IAEA Full-Form

IAEA's full form is International Atomic Energy Agency. It serves as the world's foremost intergovernmental forum for scientific and technical cooperation in the peaceful use of nuclear energy and carries out programs to maximize the contribution of nuclear technology to society while verifying its peaceful use.

International Atomic Energy Agency: History

The origin of the International Atomic Energy Agency can be traced back to the General Assembly of the United Nations in 1953. There the former US President Dwight Eisenhower addressed 'Atoms for Peace, which was also the former name of the institution. It was formally established in 1957.

- The mandate of the IAEA is to promote safe, secure, and peaceful nuclear technologies. Currently, it has 175 members.
- The latest members are Saint Kitts and Nevis; and Tonga, which joined the IAEA in 2022.
- India became a member in 1957.

The IAEA, and its former Director-General Mohamed El Baradei, were awarded the Nobel Peace Prize in 2005. The IAEA is an independent international organization, but it reports annually to the UNGA. Its regional offices are in Geneva, New York, Toronto, and Tokyo.

IAEA Membership

Presently, the total membership is 175. In the list below, some of the latest joined members are given, the year denotes the year of membership.

- Eswatini; San Marino(2013)
- Bahamas; Brunei Darussalam(2014)
- Antigua and Barbuda; Barbados; Djibouti; Guyana; Vanuatu(2015)
- Turkmenistan(2016)
- Saint Vincent and the Grenadines(2017)
- Grenada(2018)
- Saint Lucia(2019)
- Comoros(2020)
- Samoa(2021)
- Saint Kitts and Nevis; Tonga(2022)

IAEA: India's Membership

Since 1957, India has been a founding member of the IAEA. In January 2020, India joined the IAEA Response and Assistance Network (RANET). Response and Assistance Network (RANET) is a group of countries that provide assistance in reducing the consequences of nuclear or radiological emergencies.

IAEA Secretariat

The IAEA Secretariat is headquartered at the Vienna International Centre in Vienna, Austria. The Agency is led by the Director-General and six Deputy Director Generals who head the major departments. Its Secretariat comprises the IAEA's professional and general staff.

Present IAEA Director General is Rafael Mariano Grossi.

IAEA Functions

The IAEA's prime functions include:

- To promote and assist the research, development, and practical applications of peaceful uses of nuclear technologies.
- To establish and administer safety guards to ensure that such research/development, etc., by the IAEA is not used for military purposes.
- The countries, under the Nuclear Non-Proliferation Treaty (NPT) and other international treaties, should fulfill the non-proliferation commitment they have made, "with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices."
- The IAEA's three important areas of work are:
 1. Safety and security
 2. Science and technology
 3. Safeguards and verification

IAEA Governance Model

The IAEA has two policymaking bodies. They are

General Conference

It consists of the IAEA member countries and meets in an annual session. The annual general conference generally takes place in September. The 66th General Conference of IAEA will be held in Vienna from September 26th to 30th 2022.

Board of Governors

There are 35 board members. The 35 Board Members for 2021-2022 are

1. Argentina
2. Australia
3. Austria
4. Brazil
5. Burundi
6. Canada
7. China
8. Colombia
9. the Czech Republic
10. Egypt
11. Finland
12. France
13. Germany
14. Guatemala
15. India

16. Ireland
17. Japan
18. the Republic of Korea
19. Libya
20. Malaysia
21. Mexico
22. New Zealand
23. Pakistan
24. Peru
25. Poland
26. the Russian Federation
27. Senegal
28. Slovenia
29. South Africa
30. Spain
31. Switzerland
32. the United Arab Emirates
33. the United Kingdom
34. the United States of America, and
35. Viet Nam

The Board Members meet five times a year. The board examines and makes recommendations to the IAEA's General Conference on the organization's program, financial statements, and budget. It also considers membership applications, approves safeguards agreements, and the publication of the safety standards of the IAEA.

The Board appoints the Director-General of the IAEA, with the approval of the General Conference.

IAEA Safeguards

They are a set of technical measures that allow the IAEA to independently verify a State's legal commitment, not to divert nuclear material from peaceful nuclear activities to nuclear weapons or other nuclear explosive devices.

IAEA Statute authorizes it to establish and administer safeguards, States accept the application of such measures through the conclusion of safeguards agreements with the IAEA.

These safeguards are based on assessments of the correctness and completeness of a country's declared nuclear material and nuclear-related activities. The verification measures include visits and ongoing monitoring, on-site inspections, and evaluation. Basically, the two types of measures are carried out as per safeguards agreements in force with a State.

1. The first relates to verifying State reports of declared nuclear material and activities.
2. The second set enables the IAEA not only to verify the non-diversion of declared nuclear material but also to provide assurances as to the absence of undeclared nuclear material and activities in a State.

Issues of International Atomic Energy Agency

International Atomic Energy Agency does not have any power to override the sovereignty of any member nation of the UN. The IAEA never challenges the five permanent members of the UNSC on their nuclear dominance, who themselves hold some of the biggest nuclear arsenals in the world.

IAEA has also proved to be ineffective to prevent power politics from influencing nuclear negotiations.

IAEA Iran Challenge

Under the Joint Comprehensive Plan of Action (JCPOA) signed between Iran and other major powers of the world including the United States, Iran agreed to obey the regulations pertaining to nuclear facilities and welcomed international inspections by the International Atomic Energy Agency (IAEA).

The JCPOA was the result of negotiations between 2013 and 2015 between Iran and China, France, Russia, the United Kingdom, the United States, and Germany (known as P5+1). Iran agreed to significantly cut its stores of centrifuges, enriched uranium, and heavy water, all key components for nuclear weapons. Under JCPOA, Iran also agreed to implement a protocol that would allow inspectors from the International Atomic Energy Agency (IAEA) to access its nuclear sites to ensure Iran would not be able to develop nuclear weapons in secret.

Iran was under the control and monitoring of the IAEA till 2020. After that, it was affected due to a stalemate in the indirect talks between the U.S. and Iran.

Recently, the IAEA Board of Governors has passed a resolution calling on Iran to fully cooperate with the investigation by the Agency.