Science & Technology

Nuclear Diplomacy

IAEA, Additional Protocol, NSG, NPT, MTCR, Wassenaar Arrangement, Australia Group, CTBT etc.

Ву

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Nuclear bomb drop in Hiroshima and Nagasaki (1945)



IAEA was established as an autonomous organisation on 29 July 1957



NPT, opened for signature in 1968 but entered into force in 1970.

[Nuclear weapon states are those that have tested nuclear explosive device before 1 January 1967, these nations are United States, Russia, UK, France and China]



Pokhran test in India (18 May 1974) [Operation 'Smiling Buddha' without NPT signing India earned nuclear development technology]



NSG founded in 1975 with seven Countries (Canada, France, Japan West Germany, Soviet Union, USA and UK) and treaty signed to prevent nuclear proliferation.

NSG has 48 participating governments.



Australia Group, established in 1985 as a multilateral export control regime. It is an informal forum of countries which control export of chemical and biological weapons.



MTCR, established in April 1987 by G-7 Countries (Canada, France, Germany, Italy, Japan, UK and USA) as an informal and voluntary partnership among 35 countries to prevent proliferation of missiles and UAV (Unmanned Aerial Vechical) technology capable of carrying above 500kg payload for more than 300 km.



Wassenaar Arrangment, established on 12 July 1996 to control in transfer of conventional arms and dual-use good and technologies misuse for military purposes.



CTBT, was adopted by UN General Assembly on 10 September 1996 but not enter into force because eight specific states did not did ratify it (These are China, Egypt, Iran, India, Israel, North Korea, US and Pakistan)

The International Atomic Energy Agency (IAEA)

It was set up as the world's "Atoms for Peace" organisation in 1957 within the United Nations family.

IAEA reports to both the United Nations General Assembly and Security Council.

It was an unanimous resolution of the United Nations for helping nations to develop nuclear energy for peaceful purposes

• The IAEA has its headquarters in Vienna, Austria.

ADDITIONAL PROTOCOL

The Additional Protocol is a safeguard agreement that serves as the legal document of IAEA safeguards agreement (as a tools for verification).

The Comprehensive Safeguards Agreements (CSAs) is involved in deciding to settle as well as take action of the additional protocols.

Status of the Additional Protocol

As of March 2019, Additional Protocols are in force with 134 States and Euratom (European Atomic Energy Community) and another 14 States are yet to bring it into force.

Goal of Additional Protocol:

The IAEA is granted the extended rights to access information and sites through additional protocol

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Periodical Order under Nuclear diplomacy

NSG – Importance in Indian Context

- Access to nuclear material easily like Uranium, thorium, plutonium etc.
- Access to international arena of nuclear commerce
- International market for export and import.
- Foreign nuclear energy in investment.
- Sophisticated foreign technologies.
- Greater say the powers in management of the nuclear commerce and NSG.

India try for NSG membership

- India is trying from 1990s
- CTBT (All places no nuclear test) Land, underground, water
- India's regional security will compromise so India not sign on NPT and CTBT.
- unanimous agreement of all members (Every country should agree)
- 2008, the NSG exempted India (Indo-US Nuclear deal) here India got some independence to do export and import of nuclear material. This agreement applicable in 2015. India is doing trade with some limitation.
- Allowed nuclear trade with NSG countries, like USA

Opposition to India's membership

- Opposed by China, New zealand, South Affrica, Ireleand, Turkey and Austria.
- Non-signatory of NPT, CTBT etc. should not be given a NSG membership.
- Chinese argument: India only limited in South Asia not at world level but our all records are excellent. NFT (No first use)
- Pakistani concerns
- Does not want India to possess high end technologies.

India willingness to join NSG

India's track record

Excellent Non-proliferation record Nuclear safeguard of IAEA

Voluntary undertaking

Prohibition of underground testing NFU (No first use of Nukes)

Confidence Building measures

Recently signed MTCR, Wassenaar Arrangment, Australia Group Fissile Material cutoff Treaty

NPT (Nuclear non-proliferation treaty)

- International treaty to prevent the spread of nuclear weapons and weapons technology.
- To promote cooperation in peaceful uses of nuclear energy.
- Achieving nuclear disarmament is the main goal.

- Effective from 5th March 1970
- Treaty recognises five states as nuclear weapon states. UK, US, France, China and Russia. Rest all are non nuclear weapon states.
- India, Pakistan, Israel Posses nuclear weapons but not joined
 NPT
- North Korea accepted NPT (1985) but withdrawn in 2003.
- The world's latest country South Sudan (2011) never joined NPT.
- As of 191 UN countries, adhered to NPT.

Why India not signed NPT

NPT is discriminating --- NPT recognises only those countries as possessing nuclear weapons who has tested nuclear device before 1970.

Presence of China, Pakistan makes it mandatory for India to keep a minimum nuclear deterrent.

India's nuclear policy is no first use and it has showed to the world that it will use nuclear power only for peaceful purposes but NPT will not allow India to posses weapons.

Missile Technology Control Regime (MTCR)

It was established in 1987 by G7 countries (Japan, Canada, France, US, UK, Italy, Germany)

It is an informal and voluntary group of 35 countries.

Prevent the proliferation of missile and unmanned aerial vehicle technology.

Capable of carrying 500 kg payload & minimum of 300 kms

India Joined MTCR (27 June 2016)

India will able to access high end technology.

MTCR maintains a common list of items for export policy, once India also puts in place such a export policy, insecurity regarding proliferation from India will be eliminated.

India can sell Brahmos type of missile to countries like Vietnam etc.

ISRO can develop cryogenic engine.

India can source surveillance drone from USA.

Wassenaar Arrangement

- Established in 1996, Hague in the Netherlands.
- Now India is member (7 Dec 2017)
- Multilateral export control regime
- Members ensures that transfer of items does not contribute to enhancement of military capabilities.
- Total 42 members.
- The agreement is based on Export Controls for Conventional
- Arms and Dual-Use Goods and Technologies

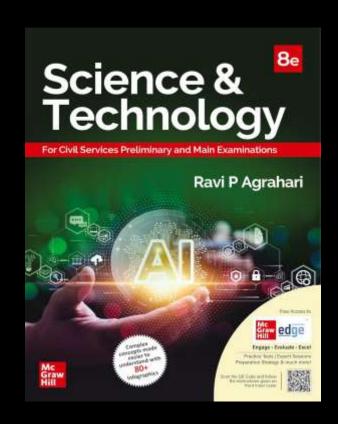
As per the existing procedure, every six months member countries exchange information on conventional arms deliveries to non-Wassenaar members, thereby falling under eight categories such as:

battle tanks, armoured fighting vehicles (AFVs), largecaliber artillery, military aircraft, military helicopters, warships, missiles or missile systems, and small arms and light weapons. Due to WA membership, India will be able to get easier access of dual use technologies and military equipments and its licensing which are basically banned for non-participating member.

The country will also be able to sell its nuclear reactors and other equipment and materials without attracting any adverse reaction and will be in a better position to collaborate with other countries in the development of such capabilities.

Australia Group

- It is a multilateral export control regime and an informal countries group, set up in 1985.
- These group seeks to ensure that exports do not contribute to development of **chemical or biological weapons**.
- Total 43 members (India Joined 19 Jan 2018).





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