



KAMARAJ IAS ACADEMY
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Artemis Accord

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Why is in news? Will signing Artemis Accords benefit India?

On June 21, India became the **27th signatory to the Artemis Accords**, a **set of non-binding guidelines** that underpin the Artemis programme, a U.S.-led project to return humans to the moon permanently.

The Artemis programme includes **plans for a base on the lunar surface, multiple spacecraft to ferry humans and cargo, an orbiting space station, and a constellation of satellites to help with navigation and communication.**

The **first Artemis crewed mission** to the moon's surface is **likely in 2026.**

The programme **resembles a Chinese-Russian plan** for an '**International Lunar Research Station**'.

With Russia reeling under sanctions, China has taken the lead on the project, outlining similar plans for a permanent base and a lunar satellite constellation.

Signing the Artemis Accords alone has no financial implications for India but if the country wants to be a major player in the Artemis programme, **ISRO will need a significant hike in its annual budget**, which stands at about ₹12,500 crore this year.

India must **overcome domestic resistance to collaboration with other space agencies**, enable its private sector to work with other Artemis members, and develop legislation that encourages space activities.

Artemis Accord:

The Artemis Accords was signed on **October 13, 2020** by eight founder nations - Australia, Canada, Italy, Japan, Luxembourg, UAE, UK and the United States.

The Artemis Accord is a **non-binding agreement with no financial commitments.**

It aims at enhancing the governance of the civil exploration and use of outer space with intension of advancing the Artemis program.

This principle will help to **ensure the maintenance of a safe and predictable outer space environment.**

NASA, in coordination with the U.S. Department of State, established the Artemis Accords in 2020, together with seven other founding member nations.

Artemis Accords signatories as of May 30, 2023: Australia, Bahrain, Brazil, Canada, Colombia, Czech Republic, France, Israel, Italy, Japan, Luxembourg, Mexico, New Zealand, Nigeria, Poland, the Republic of Korea, Romania, Rwanda, Saudi Arabia, Singapore, Spain, Ukraine, the United Arab Emirates, the United Kingdom, and the United States.

Principles:

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Peaceful Purposes: Consistent with the Outer Space Treaty, the Artemis Accords affirm that cooperative activities should be exclusively for peaceful purposes and in accordance with international law.

Transparency: Artemis Accords signatories are committed to the broad dissemination of information regarding their respective national space policies and space exploration plans in accordance with their national rules and regulations.

Interoperability: Interoperability enhances the potential for space exploration that is safe and robust among cooperating nations.

Emergency Assistance: Accords signatories commit to taking all reasonable efforts to render necessary assistance to personnel in outer space who are in distress and acknowledge their obligations under the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space.

Registration of Space Objects: Appropriate registration of space objects can help to mitigate the risk of harmful interference. The Artemis Accords reinforce the importance of meeting the obligations under the Registration Convention.

Release of Scientific Data: Sharing scientific data with the global community in a timely and transparent manner.

Protecting Heritage: Accord's signatories intend to preserve historically significant human or robotics landing sites, artifacts, spacecraft, etc.

Space Resources: The utilization of space resources should be done in a manner that complies with the Outer Space Treaty, can benefit humankind and is critical to sustainable operations.

Deconfliction of Activities: Artemis Accords signatories need to provide notification of their activities, including regarding the location and general nature of their operations, and coordinating with any relevant actor to avoid harmful interference. The area covered by the notification and coordination is referred to as a "safety zone."

Orbital Debris and Spacecraft Disposal: Planning to mitigate for orbital debris, as well as disposing safely of spacecrafts, is critical to maintaining a safe environment in space and operating in space sustainably.

Where do the Accords fit in space law?

Modern space law is erected on four international agreements that cover issues like the **peaceful use of space, registration, and liability**. They were struck **between 1967 and 1976**, at the time of the first Space Race and Cold War detente.

The Accords' principles are consonant with these agreements.

A fifth treaty, the **Moon Agreement**, was introduced in **1979** but **neither the U.S. nor the Soviet Union signed it. India signed it but didn't ratify it.**

One provision in the Artemis Accords **allows actors to extract and utilise space resources.**

This could be at odds with the Moon Agreement, which asks for gains from commercial exploitation of lunar resources to be distributed.

This **has not stopped countries** like Australia and France which **previously signed the Moon Agreement, from becoming Artemis signatories.**

Also, even if the Artemis programme succeeds and private enterprises set up settlements on the Moon, resource extraction will likely be restricted to using the lunar soil to build habitats and lunar ice for sustaining life.

Why didn't India sign the Accords earlier?

The Artemis Accords were drafted in 2020, just as India was **opening up its own space sector to private players**.

While being a **signatory to the Moon Agreement may have initially given India pause**, the cases of Australia and France are reassuring.

India's own attitude has also evolved, with its new space policy allowing private players to mine any "space resource".

There is also a **noticeable shift in India's diplomatic practice**. Previously, diplomats in Delhi were likely concerned that the Accords are an informal set of norms rather than a legally-binding instrument. India has historically preferred the latter because it believes laws foster better compliance.

That India has now accepted a **set of U.S.-led norms** suggests a change in thinking.

Furthermore, the dramatic developments of the last three years have made it clear **that divisions between the U.S. and China are too deep for them** to agree on a complex new international law on the Moon until their ties improve.

Finally, **ties between India and the U.S. have been on an upswing**, and there is less hesitation in Delhi about joining an America-inspired international effort.

NASA's Artemis Program:

With the Artemis programme, NASA aims to **land humans on the moon by 2024**, and it also plans to land the first woman and first person of colour on the moon.

With this mission, NASA aims to contribute to scientific discovery and economic benefits and inspire a new generation of explorers.

Outer Space Treaty:

The 1967 Outer Space Treaty **bans the stationing of weapons of mass destruction (WMD) in outer space**, prohibits military activities on celestial bodies, and details legally binding rules governing the peaceful exploration and use of space.

The treaty entered into force Oct. 10, 1967, and has 110 states-parties, with another 89 countries that have signed it but have not yet completed ratification.

India is also a party to this treaty.

Significance of the Accords for India:

NASA and ISRO have **agreed to launch a joint mission** to the International Space Station (ISS) in 2024.

India's choice to sign the Artemis Accords shows **how committed it is to international space cooperation** and how eager it is to take part in lunar exploration missions.

By signing the agreement, India can **work with other countries**, notably the United States, on upcoming Moon missions.

This partnership makes it **possible to share information and skills**, advancing scientific inquiry, technological innovation, and the expansion of humanity's presence in space.

Many of the space activities India intends to carry out, including manned flights, moon landings, planetary exploration, and the construction of a space station, have previously been accomplished by nations like the US, Russia, or China.

The advantage of doing it alone is that it adds knowledge and assurance. But attempting to recreate the wheel has its drawbacks as well.

The possibility of getting left behind exists. India has the resources and experience necessary to send manned space missions, and it has already successfully landed a satellite on the moon. It's heavily influenced by the early regime of technological denial.

Way forward:

However, historically speaking, **Russia has been India's most dependable partner** in the space industry, just as it has been in the defence industry.

Russian facilities were reportedly offered to train Indian astronauts for the Gaganyaan mission.

Russia is unlikely to see joining an alliance that is perceived as serving to further US space objectives favourably.