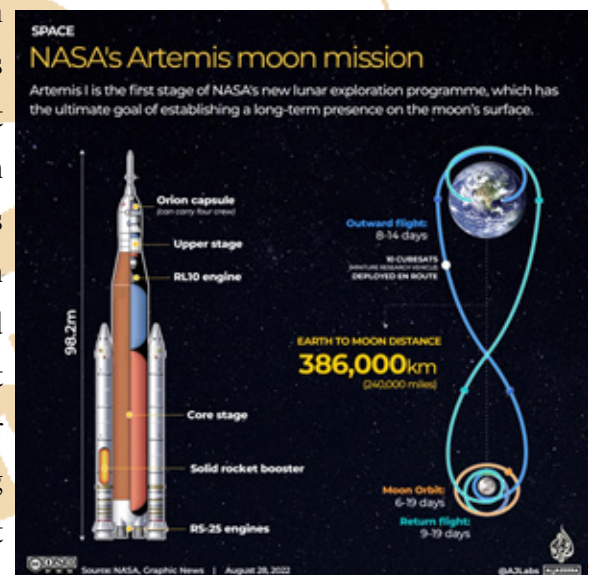


## JOINING THE HUNT : INDIA AND THE ARTEMIS ACCORDS

The Hindu

Paper - III (Science and Technology)

News of India's accession to the Artemis Accords has been met with great interest within the space community. India has great aspirations in outer space and by joining the Accords it has signalled an interest in building a greater relationship with NASA and its partners. This is of note, considering ISRO's close ties to Roscosmos. It could signal a shifting away from Russia, following the invasion of Ukraine and the reduced scope of Russian activities in space after the fall of the Soviet Union. Named after the Greek Goddess of the Moon and sister to Apollo, the Artemis Accords themselves are a non-binding multilateral agreement, intending to provide its parties with a set of commitments and standards when making use of resources in outer space. Parties to the Accords gain greatly from the exchange of information and gain access to NASA's Artemis programme – bringing humans back onto the lunar surface for the first time following the Apollo missions – which would greatly help India's own Gaganyaan mission. Its purpose is rooted deeply within the principle of sharing of scientific findings and knowledge enshrined in Article XI of the Outer Space Treaty (1967). This Treaty acts as the foundation for space law today, with India being one of its 113 parties, along with all other major players in the space sector.



Yet, what is it that India seeks to gain out of Artemis? To answer this question, we must investigate the history of resource exploitation in outer space and the legal texts that guide it. There are 5 treaties that govern activities in outer space, including the aforementioned Outer Space Treaty. Three of the remaining treaties deal with the rescue of astronauts, the registration of space objects and liability for damages caused by a space operation. This leaves us with the final treaty, the Moon Agreement of 1979. The Moon Agreement is

directed towards the use of the Moon and other celestial bodies. It declares that these regions of space must only be for peaceful purposes, with no state allowed to establish military bases or place weapons on celestial bodies. This is an extension of the concept of outer space being reserved for peaceful purposes, which was noted in the Outer Space Treaty. As these treaties were all drafted during the Cold War and the Space Race, there was a real danger of nuclear conflict occurring in Earth orbit, leading to the U.S. and USSR attempting to limit the scope of such a future conflict through treaty law. The Moon Agreement also speaks to how resources may be exploited from these celestial bodies. First, it establishes that the moon and other celestial bodies are 'the province of all mankind'. This makes these areas a 'global commons', a legal term used to describe international waters, being areas meant for the greater good of humankind, rather than merely for state appropriation. This is extended to the natural resources of the moon, which are meant to be extracted with the guidance on an international regime that would have the power to ration these resources to the states on the Earth. The Moon Agreement further requires state parties to act on celestial bodies keeping in mind the protection of their environment.

Despite being instrumental in the drafting of the Moon Agreement, the United States refused to ratify it. Several nations followed suit, which has led to this being the least internationally accepted of the space treaties. In 2020, the Trump administration released an executive order pointing out that the U.S. was not a party to the Moon Agreement and did not view outer space as a global commons. This order invited other states to utilise opportunities to make use of resources from outer space. This led to the creation of the Artemis Accords later that year, which intend to act as a soft-law alternative to the Moon Agreement. India may be a signatory to the Moon Agreement, yet it has not ratified it. With the war in Ukraine making Russia's space activities more isolated than before, India may be signalling an important shift in its overall space policy by casting its lot with the Americans. The years to come will show the value of this action, with missions already being planned between ISRO and NASA, which may soon see the first Indian aboard the ISS and the first Indian astronaut since Rakesh Sharma, all those decades ago.

## Artemis Accord

### What is Artemis Accord?

- ❖ The Artemis Accords is a set of principles and guidelines for international cooperation in space exploration, led by NASA (National Aeronautics and Space Administration) of the United States.
- ❖ The Accords were introduced in 2020 as part of NASA's Artemis program, which aims to return humans to the Moon and establish a sustainable lunar presence.
- ❖ The Accords establish a set of principles that signatory countries agree to adhere to when participating in space missions and activities.

### **What are the implications of the Accord?**

- ❖ By signing the accord, India has aligned itself with the US-led space exploration program, which currently excludes two major space explorers – Russia and China.
- ❖ Further, the agreement is important considering the US-India relationship in the 1980s and 1990s, when the US hindered India's access to crucial space technology.
- ❖ It also pressured Russia to retract its commitment to supply cryogenic technology, setting back India's space program for nearly three decades.
- ❖ Now, in the joint statements, the US has promised to address export controls and facilitate technology transfer. This indicates a shift in the US stance towards India and a willingness to collaborate on space technology.

### **What is the significance of the Accord for India?**

- ❖ India's space plans like human missions, moon landings, planetary explorations, setting up a space station, has already been done by countries like the US, Russia or China.
- ❖ While achieving these missions independently provide expertise, there are also concerns of staying behind the other countries in such missions.
- ❖ Moreover, India's delay in sending manned missions or landing a satellite on the moon is not due to a lack of capacity or expertise but rather the technology denial regime of earlier years.
- ❖ Therefore, joining the US-led alliance is an attempt by India to collaborate on the next generation of space technologies while simultaneously pursuing its own space plans.

### **What are the challenges with India signing the Artemis Accord?**

- ❖ Russia has been India's most trusted partner both in the space and defence sectors. Recently, Russia also offered its facilities to train Indian astronauts for the Gaganyaan mission.
- ❖ Therefore, India joining a US-led alliance that promotes the interest of the US is not likely to be seen very favourably by Russia.
- ❖ Hence, India will have to strike a careful and delicate balance that it has been doing in the energy sector ever since the war in Ukraine.

### Expected Question

**Que. With reference to the Artemis Accord, consider the following statements:**

1. It is a bilateral agreement between the US and India.
2. This agreement is related to the exploration of outer space.

How many of the above statements are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer : b**

### Mains Expected Question & Format

**Que.: 'The Artemis Accord is not only associated with technological changes for India but also with diplomatic changes.' Do you agree with the statement? Discuss. (250 words)**

**Answer Format :**

- ❖ Briefly discuss the Artemis Accord at the beginning of the answer.
- ❖ In the next part of the answer, discuss the technical importance of this agreement in the context of India and also discuss the diplomatic challenges that may arise regarding Russia and America before India.
- ❖ Finally, give a brief conclusion showing the way forward.

**Note:** - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC mains examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.