Artemis Accord

January 13, 2021 In News

- NASA's Artemis programme aims to return humans to the Moon by 2024.
- NASA Announces Eight-Nation Space Coalition Under Artemis Accords.

About Artemis Accord

- The Artemis Accords are an international agreement between governments of participating nations in the Artemis program on the principles for cooperation in the civil exploration and use of the Moon, Mars, comets, and asteroids for peaceful purposes, and is grounded in the Outer Space Treaty of 1967.
- The Accords were signed on October 13, 2020 by the directors of eight national space agencies: United States, Australia, Canada, Japan, Luxembourg, Italy, the United Kingdom, and the United Arab Emirates. Ukraine and Brazil signed it later in 2020.
- Artemis Accords is intended to support a safe, prosperous, and peaceful future in space.
- The signatories commit to adhere to peaceful exploration transparently.
- The Artemis Accords exclude China, a rising space rival to the US.

Accords

 The stated purpose of the Artemis Accords is to "provide for operational implementation of important obligations contained in the Outer Space Treaty and other instruments."

 It is put into effect by a series of bilateral agreements between the signatory parties.

Accords The provisions:

- Affirm that cooperative activities under these Accords should be exclusively for peaceful purposes and in accordance with relevant international law.
- Confirm a commitment to transparency and to share scientific information, consistent with Article XI of the Outer Space Treaty.
- Call for a commitment to use reasonable efforts to utilize current interoperability standards for spacebased infrastructure, and to establish standards when they do not exist or are inadequate.
- Specify responsibility for the registration of objects in space, as required by the Registration Convention
- Call for a commitment to publicly share information on their activities and to the open sharing of scientific data. While doing so, signatories agree to coordinate with each other to provide appropriate protection for any proprietary and/or export-controlled information, and this provision does not extend to private sector operations unless conducted on behalf of a signatory.
- Include an agreement to preserve outer space heritage, which they consider to comprise historically significant human or robotic landing sites, artifacts, spacecraft, and other evidence of activity, and to contribute to multinational efforts to develop practices and rules to do so.
- Include an agreement that extraction and utilization of space resources should be conducted in a manner that complies with the Outer Space Treaty and in support of safe and sustainable activities. The signatories affirm that this does not inherently constitute national appropriation, which is prohibited by the Outer Space

Treaty. They also express an intent to contribute to multilateral efforts to further develop international practices and rules on this subject.

 Include a commitment to mitigate space debris and to limit the generation of new, harmful space debris in the normal operations, break-up in operational or postmission phases, and accidents.

The Artemis program

- Is an upcoming crewed mission to the moon.
- It is a collaborative project of NASA, European Space Agency (ESA), Japanese Aerospace Exploration Agency (JAXA) and the Canadian Space Agency (CSA).
- The preparations for the mission started in 2017 and is expected to be launched in 2024.

Artemis program Concept

- With the Artemis program, NASA wishes to demonstrate new technologies, capabilities and business approaches that will ultimately be needed for the future exploration of Mars.
- The program is divided into three parts,
 - Artemis I is most likely to be launched next year and involves an uncrewed flight to test the SLS and Orion spacecraft.
 - Artemis II will be the first crewed flight test and is targeted for 2023.
 - Artemis III will land astronauts on the Moon's South Pole in 2024.
- For NASA, going to the moon involves various elements such as the exploration ground systems (the structures on the ground that are required to support the launch), the Space Launch System (SLS), Orion (the spacecraft for lunar missions), Gateway (the lunar outpost around the Moon), lunar landers (modern human landing systems) and the Artemis generation spacesuits.

- NASA's new rocket called SLS will send astronauts aboard the Orion spacecraft a quarter of a million miles away from Earth to lunar orbit.
- Once the astronauts dock Orion at the Gateway which is a small spaceship in orbit around the moon they will be able to live and work around the Moon, and from the spaceship, will take expeditions to the surface of the Moon