



ISRO's POEM-4 Mission

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Context:

The **Indian National Space Promotion and Authorization Centre (IN-SPACe)** recently announced the **successful deployment of 10 hosted payloads by Non-Governmental Entities (NGEs)** on the **POEM-4 module** of ISRO's **PSLV-C60/SpaDeX mission**. This marks a significant advancement in involving private sector players in India's space exploration efforts.

What is POEM-4?

- **POEM-4** (PSLV Orbital Experimental Module) is a pioneering initiative that utilizes the **spent PS4 stage** of the **PSLV rocket**, repurposing it to host various **scientific and technological experiments** in space.
- The module was part of the **PSLV-C60 rocket** mission, which carried the POEM-4 into orbit, where it performed **in-orbit scientific experiments** at an altitude of **350 km** with a **55-degree inclination**.

Role of IN-SPACe:

The **Indian National Space Promotion and Authorization Centre (IN-SPACe)** plays a central role in this mission and other private sector collaborations in the space sector. IN-SPACe was established to promote and facilitate the participation of **NGEs** in India's space activities.

1. Organizational Structure:

- IN-SPACe is led by a **chairman** and includes **technical experts, safety experts, legal and strategic advisors**, and members from **academia, industry**, and key government offices such as the **Prime Minister's Office (PMO)** and **Ministry of External Affairs (MEA)**.
- The agency is headquartered in **Bopal, Ahmedabad**.

1. Objectives and Functions:

- IN-SPACe's primary goal is to enable and supervise the participation of **NGEs** in space activities. It works as an intermediary between the **Department of Space (DoS)/ ISRO** and private players, ensuring **collaboration and infrastructure sharing**.
- By reducing **entry barriers**, IN-SPACe helps **NGEs** develop **launch vehicles, satellites**, and provide **space-based services**.
- The agency is also responsible for assessing **feasibility** and ensuring **safety compliance** for any space-related activities or new infrastructure developed by private entities.

Significance of POEM-4 and IN-SPACe's Role:

- The **POEM-4 mission** underscores India's growing capability in space technology and the increasing role of the private sector. By hosting payloads from **non-government entities**, it opens the door for further innovation and **commercial opportunities** in the space domain.
- **IN-SPACe** plays a crucial role in fostering these developments, ensuring that India's **space economy** continues to grow, positioning the country as a significant player in **global space technology**.