How Two Latin American Institutions Came Together to Start the First Regional Program for Lunar Exploration – Study Case of Colombia and Ecuador

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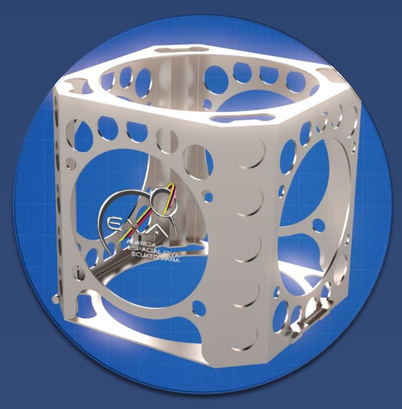
THE GLOBAL GOALS
For Sustainable Development

Background – The Way Towards an International Lunar Mission

- Decree 2442, 18.07.2006 – Stablishment of the **Colombian Space Comission**.
- The **Ecuadorian Civilian Space Program** for the next 10 years is published and the creation of the Ecuadorian Civilian Space Agency is announced – 29.08.2007
- **Libertad I** – 2007, Launch of the 1st Colombian Satellite (1U Cubesat), Sergio Arboleda University
- On 01.11.2007, the **Ecuadorian Civilian Space Agency, EXA** is created.
- **NEE-01 PEGASO** – 2013, Launch of the 1st Ecuadorian Satellite (1U Cubesat), EXA
- **Colombian Space Agency** as Private Initiative – Launched on 04.10.2017
- **Payload Partnership to the Moon Agreement** between EXA, AEC and Astrobotics – 04.10.2018



Phase I
Lunar Deployer

Starting with Peregrine's first upcoming mission to the Moon, EXA and AEC will jointly develop a small satellite technology demonstration payload for deployment in lunar orbit.

Phase II
Lunar Landing

EXA and AEC will follow up their first lunar satellite with future lunar surface exploration payloads on subsequent Peregrine missions.

Phase III
Regional Development

This campaign will result in the first payloads from South America to reach the Moon, and mark the beginning of a new era in space exploration on the continent.

Ecuadorian-Colombian Payload Partnership to the Moon

Intergovernmental/Interinstitutional Cooperation (SDG #17)

- **Colombia, France –** Memorandum of Understanding on Space Cooperation between private entities: Airbus, Eutelsat and AEC (Colombian Space Agency).
- **Colombia, Ecuador, USA** - Agreement with Astrobotic to begin a lunar exploration campaign across multiple Peregrine lunar lander missions

Cross-Sector Collaboration Between Space and Technology Governmental/Industry Experts	Collaboration & Capacity Building	Alignment with the United Nations Sustainable Development Goals

• Create working groups across both nations within non-space forums, to study the implementation of space technologies to assure the long-term sustainability of the Ecuadorian-Colombian Payload Partnership to the Moon. Some example of these are:
  ○ The Meeting of Ministers and High Authorities on Science and Technology of the Summit of the Americas.
  ○ Industry meetings with the government in order to enhance PPP to enhance Space Applications for industrial development
• These working groups would have a direct link to policy makers and thus a framework for implementation could have a clear path to realization.
	• Build more industry/governmental/academia relationships that allow for capacity building and sharing of data
	• Continue to utilize organizations such as CEOS and GEO for support on capacity building and collaboration
		• In general all the SDGs apply to the current status of the Ecuadorian-Colombian Payload Partnership to the Moon, these SDGs help to create manageable objectives, especially when thinking on policies and cooperation relating to further applications:
		9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
		17 PARTNERSHIPS FOR THE GOALS
		SUSTAINABLE DEVELOPMENT GOALS

References

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