

Promoting Space Sustainability

Implementation of the Guidelines for the Long-term Sustainability (LTS) of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space

Operational Case Studies

I. Short description of the outer space activity [1000-word max.]

The Philippine Space Agency (PhilSA) was established through the passage of the Philippine Republic Act No. 11363, also known as the “Philippine Space Act”, signed by President Rodrigo Duterte in August 2019. Through this law, PhilSA serves as the central government agency in the Philippines addressing all national issues and activities relating to space science and technology applications. The Agency is also referred to as the primary, policy, planning, coordinating, implementing, and administrative entity of the Executive Branch of the government that will plan, develop, promote the national space program in line with the Philippine Space Policy.

Furthermore, PhilSA is mandated to work on the six (6) key development areas:

1. National Security & Development
2. Space Research & Development
3. Hazard Management & Climate Studies
4. Space Education & Awareness
5. Space Industry Capacity Building, and lastly,
6. International Cooperation

All of these areas are strategically directed to spur scientific growth and to promote improved access and resource-sharing of spaceborne data, services and facilities.

Likewise, these areas will accelerate the transfer and diffusion of space technologies and knowhow in the Philippine society that will develop a robust local space industry and economy.

Several space science and technology applications activities have been pursued through Philippines' Department of Science and Technology (DOST) since 2010 as project-based initiatives leading up to the establishment of the PhilSA and contributing significant milestones in space for the country

These prior initiatives have produced emergent technological capabilities, infrastructure and skilled personnel in space science and technology applications or SSTA, all of which provide a springboard for the PhilSA to build on.

Currently, the Philippines has 4 satellites: Diwata-1 (operated in 2016 and was decommissioned in 2019), Maya-1 (2018), Diwata- 2 (2018), and Maya-2(2021). Furthermore, as we also aim to access satellite data for the country. The Department of Science and Technology first built the PEDRO Center, which is the ground receiving station located in Metro Manila. Another station was also built in Davao and in Iloilo. These GRS receive satellite data from our local satellites and from our international image provider partners.

II. Connection with the LTS Guidelines [500-word max.]

Many provisions in the LTS guidelines showcase the importance of international cooperation. In this regard, PhilSA is currently enhancing its official representation and contribution in the international space community through the establishment of international cooperation with other countries. PhilSA is currently and continuously engaging with various local and international organizations to seek possible areas of collaboration for space cooperation (*Guideline C.1-4*). In addition, the Philippine Space Act mandates PhilSA to:

- a) Cooperate with space-related agencies of other countries in the peaceful use and development of space (*Guideline C.1-4*);
- b) Maintain a national registry of space objects in accordance with the United Nations Convention on Registration of Objects Launched into Outer Space and other international guidelines (*Guideline A.5, C.4*);
- c) Enter into contracts, memoranda of understanding/ agreement or other arrangements in behalf of the State, in consultation with the Department of Foreign Affairs and/or other concerned agencies (*Guideline A.3, C.3, C.4*);
- d) Establish and maintain linkages with other national space agencies and organizations (*Guideline C.1 – 4*); and
- e) Represent the Philippines in the United Nations Committee on the Peaceful Use of Outer Space and other similar space-related forums, assemblies and organizations (*Guideline A.1, C.2, C.4*).

Moreover, the Philippine Space Act contains the following provisions in accordance with the Registration and Liability Conventions (*Guideline A.5, C.1, C.4*):

- a) PhilSA shall maintain a National Registry of Space Objects which lists all space objects launched under the responsibility of the Philippines as the Launching State. PhilSA shall furnish the United Nation Office for Outer Space Affairs with information contained in the National Registry of Space Objects as required under the Registration Convention.
- b) The Philippine Government shall take responsibility for damages caused by space objects registered in the Philippines' National Registry-of Space Objects. This shall take into effect upon ratification of the Liability Convention and Registration Convention by the Philippine Government.

III. Lessons learned [500-word max.]

PhilSA recognizes the importance of international cooperation to fulfill its mandate and its shared responsibility in ensuring the sustainability of space activities. Hence, PhilSA is in the process of coordinating and requesting for advisory input with relevant government agencies and stakeholders towards the ratification of the outer space treaties where Philippines has not yet acceded to. At this time, PhilSA is specifically working towards the ratification by the Philippines of the Liability and Registration Conventions. This is in consonance with the LTS Guidelines with respect to enhancing the practice of registering space objects. PhilSA's efforts in this regard recognize that the implementation of effective and comprehensive registration practices of space objects is a key factor to maintain the safety and the LTS of space activities.