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Author: Dr. Julie Ann Banatao
 Philippine Space Agency, The Philippines, julie.banatao@philsa.gov.ph

Mr. Floyd Ferrant Fortes
 Philippine Space Agency, The Philippines, floyd.fortes@philsa.gov.ph

Ms. Elaiza Pontrias
 Philippine Space Agency, The Philippines, elaiza.pontrias@philsa.gov.ph

Mr. Kenneth John Ibarra
 Philippine Space Agency, The Philippines, kenneth.ibarra@philsa.gov.ph

Mr. Victor Joseph Ochave
 Philippine Space Agency, The Philippines, victor.ochave@philsa.gov.ph

Ms. Gracielle Capardo
 Philippine Space Agency, The Philippines, gracielle.capardo@philsa.gov.ph

Ms. Micherene Clauzette Lofamia
 Philippine Space Agency, The Philippines, micherene.lofamia@philsa.gov.ph

Mr. Ralph Aaron Aguinaldo
 Philippine Space Agency, The Philippines, ralph.aguinaldo@philsa.gov.ph

Mr. Noniel Paul Novabos
 Philippine Space Agency, The Philippines, noniel.novabos@philsa.gov.ph

Ms. Daryll Jessica Occena
 Philippine Space Agency, The Philippines, daryll.occena@philsa.gov.ph

Mr. Jholeh Charls Madalipay
 Philippine Space Agency, The Philippines, jholeh.madalipay@philsa.gov.ph

Dr. Marc Caesar Talampas
 Philippine Space Agency, The Philippines, marc.talampas@philsa.gov.ph

INSTITUTIONALIZING UPSTREAM SPACE TECHNOLOGY DEVELOPMENT FROM THE
 UNIVERSITY TO THE PHILIPPINE SPACE AGENCY

Abstract

This paper aims to discuss the efforts of the Philippine Space Agency (PhilSA) to institutionalize the development of small satellites in the Philippines, thus creating a more robust local space ecosystem in the country. The PhilSA was established in 2019 and now serves as the primary policy, planning, coordinating, implementing, and administrative entity of the Philippine government that will plan, develop, and promote the national space program in line with the Philippine Space Policy. Towards this end, the gains from earlier space programs implemented by other institutions are being transitioned to be eventually under the management of PhilSA. Thus, the ADOPT Project was put into fruition.

The ADOPT Project aims to increase PhilSA's capabilities by adopting and transitioning the microsatellite development know-how and technologies developed in the country, most of which were done in the university setting. These transition activities builds upon the past and current gains in space Research and Development investments in the Philippines, specifically the know-how in building satellite payload and bus components acquired by the academe, in particular the University of the Philippines -

Diliman (UPD), through the National Institute of Physics (UPD-NIP), and the Electrical and Electronics Engineering Institute (UPD-EEEI).

Transitioning the technologies, as well as the capabilities in hardware and software development, and testing into PhilSA largely improves PhilSA's capabilities in terms of satellite development. PhilSA then leverages these capabilities to institutionalize the satellite development process and feed to the creation of standards for satellite development.

ADOPT has also become a seed project that spurs further collaborations between the government, through PhilSA, and the academe, represented by UPD-EEEI and UPD-NIP by establishing facilities co-managed by PhilSA and the university. These facilities allows PhilSA personnel free access to the university laboratories, while working on space technologies development, receive training from the university, as well as take advantage of the expertise developed in the university. At the same time, the universities actively participates in development activities of PhilSA, providing more value to knowledge developed in the universities.