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## HD-COM- HAZARD AND DISASTER COMMUNICATIONS SYSTEM IN THE PHILIPPINES

### Abstract

The geography, meteorology and economic status of the Philippines has made it difficult and prohibitively expensive to establish a reliable communications system and many of the communities on the 2000+ inhabited islands currently remain isolated and disconnected. Reliance on a ground-based communication infrastructure also poses great risk during natural disasters where existing networks are disrupted, as many areas are unable to receive appropriate aid.

Following extensive research and road-mapping activities, the Philippines' Department of Science and Technology (DOST) and National Space Development Programme (NSDP) have cited the establishment of a robust communications system as the nation's most urgent priority.

A partnership of organisations including the UK Space Agency, Clyde Space, and the Department of Science and Technology within the Philippines is working to define an emergency nanosatellite-based communications system which will enable voice communication, connecting key locations within the Philippines to emergency response teams in the event of natural disasters.

As part of our partnership programme, Clyde Space and the University of Strathclyde in the UK shall also work to ensure that the Advanced Space Concepts Laboratory in Glasgow houses a world leading MSc. Course, and PhD Opportunities in Nanosatellite Applications Development.

As well as providing this vital life-line communications service, Clyde Space and the University of Strathclyde shall work on a technology transfer programme with several academic institutes in the Philippines to ensure that a level of satellite production capability exists in country to ensure that the Hazard and Disaster Communications System (HD-COM) can be maintained effectively.

The UK Space Agency, through the International Partnership Programme, will ensure that the first beneficiaries of this programme are students from the Philippines.