GOVERNMENT OF DUBAI

MOHAMMED BIN RASHID SPACE CENTRE

Payload Hosting Initiative

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Payload Hosting Initiative

Vision:

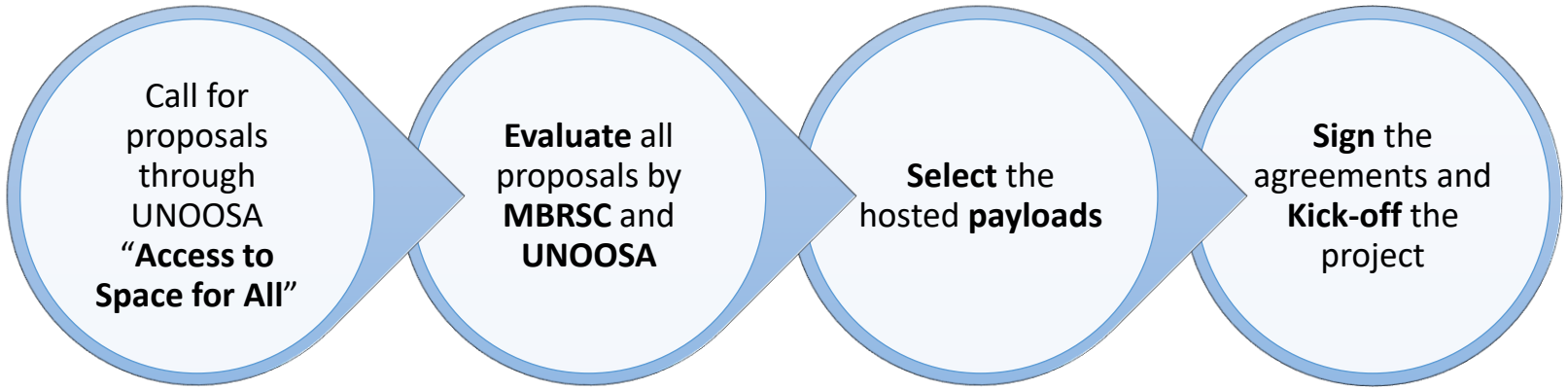
Provide a modular satellite platform that foster innovation in space technologies sector and ensure the experience exchange between governmental entities, universities and start up companies. It will consist of a **yearly launch of 1 to 2 satellite missions** in which MBRSC will call for these entities to load their innovative payloads and launch them on these satellites.

Objectives:

- To test innovative technologies to keep pace with development in space field.
- To share knowledge in the field of satellite industry through all stages of design, testing and launch.
- To provide opportunities for entities in any country to present and test their new payload technologies in space.

PHI Process

- MBRSC signed a memorandum of understanding with UNOOSA in IAC2021
- The opportunity can be given to any entity that has a well developed and tested payload classified as Technology Readiness Level 6 (**TRL 6**) and above.



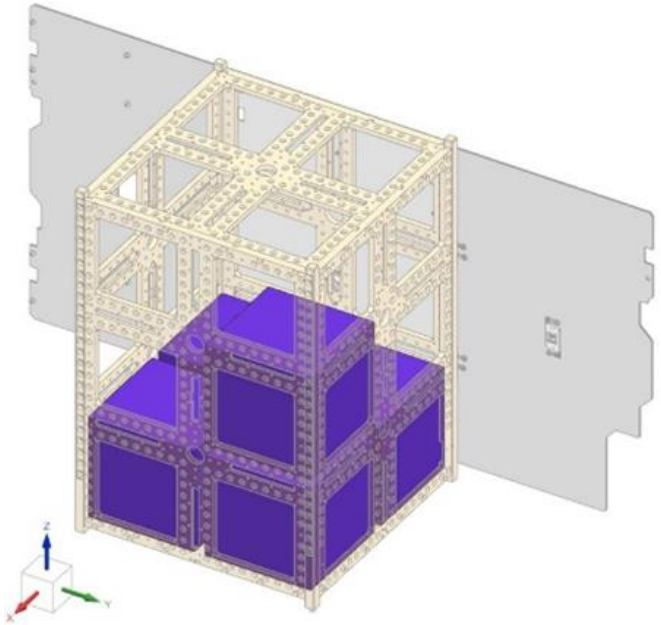
Timeline

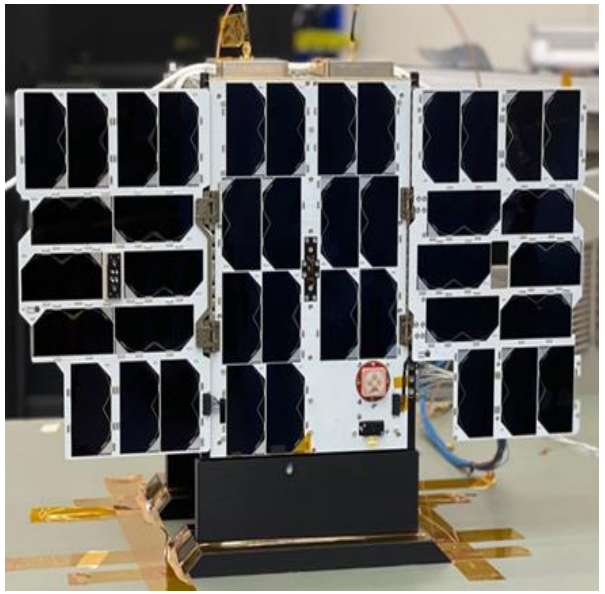
Milestone/Activities	Duration
Kick-off (MCR)	T0
PDR	T0 + 3 months
CDR	T0 + 8 months
FRR	T0 + 12 months
Launch	T0 + 14 months
Early Operation	2 weeks (to be agreed on)

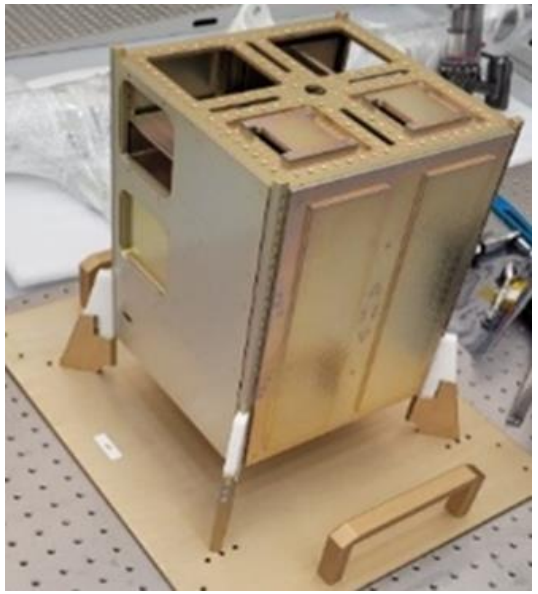
PHI Platform

PHI platform provides **modular** interfaces and wide range of specifications to **host** multi-use innovative technologies.

Specifications	Value
Lifetime	1 ~ 2 years
Orbit Type	Sun Synchronous Orbit
Orbit Altitude	500 Km - 600 Km
Satellite Mass	18Kg
Power Generation	38W
Bus Voltage	14.8V
Communication Bands	UHF, VHF, S-band
Downlink Data Rate	9.6kbps to 10Mbps
Control Accuracy	5 deg
Data Interface	I2C, CAN, UART, SPI, RS422
Memory Storage	30 GB storage





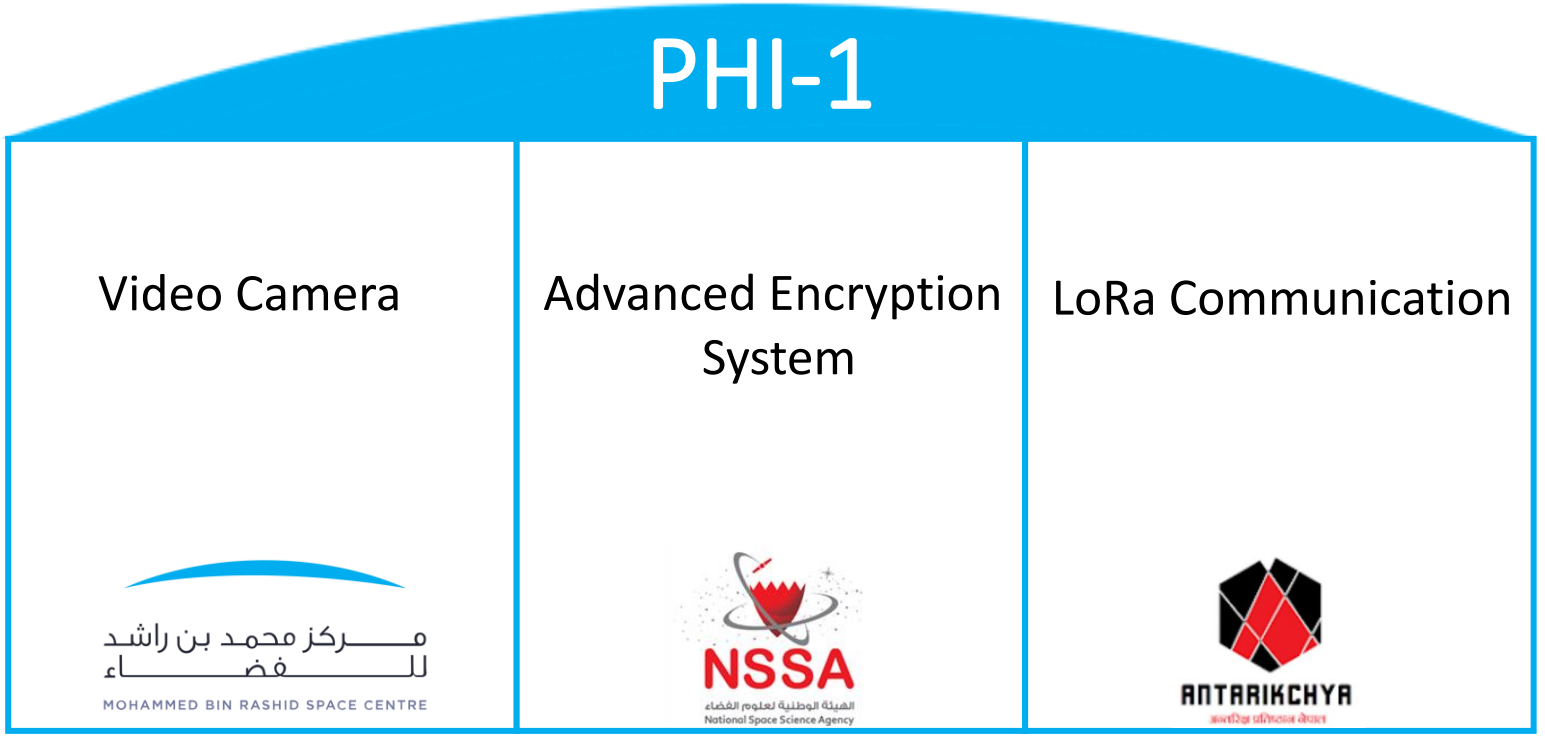


حكومة دبي
GOVERNMENT OF DUBAI

مركز محمد بن راشد للفضاء
MOHAMMED BIN RASHID SPACE CENTRE

Mission Overview

PHI-1 is a **12U** CubeSat developed by Mohammed Bin Rashid Space Centre (MBRSC) for innovative technology demonstration.



Thank You