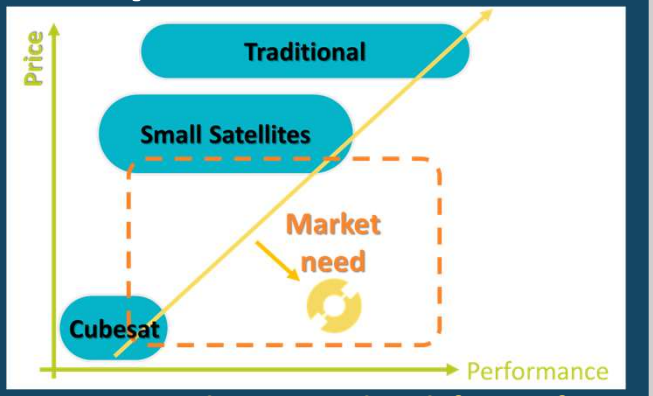
SSC20-P1-01

Disrupting the Space Industry with Open Source

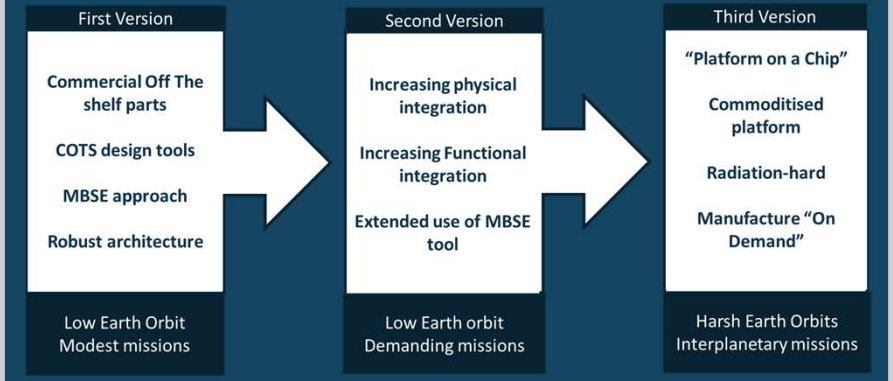
KISPE's goal is to build a community of open-source contributors, collaborators and beneficiaries, including those from CubeSat and SmallSat teams who are at the forefront of collaborating, adopting and championing non-traditional approaches to delivering space missions, to develop a design that is freely available for all to use

Disrupt Price:Performance



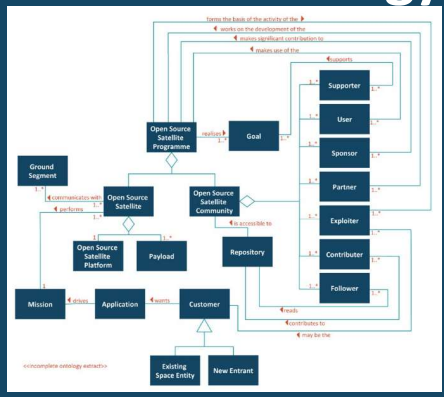
A new approach is required to shift away from current price:performance line

Capability Roadmap



Increasing functional and system integration with each subsequent version of the design

Platform Ontology



A common language for communicating, sharing and exploring system relationships

First Version

25kg-250kg Spacecraft mass

70% Payload mass fraction

Flexible payload accommodation

10W-1kW Payload power, scalable to suit mission power needs

Ability to be 3-Axis stabilised - for communications and sensor payloads

400km to 850km altitude

<14 month recurrent delivery schedule

5 to 7-year lifetime

Recurrent price of $1m for 50kg, £1m for 100kg

A cost-effective modular, scalable, flexible, robust, reliable microsatellite platform for LEO missions

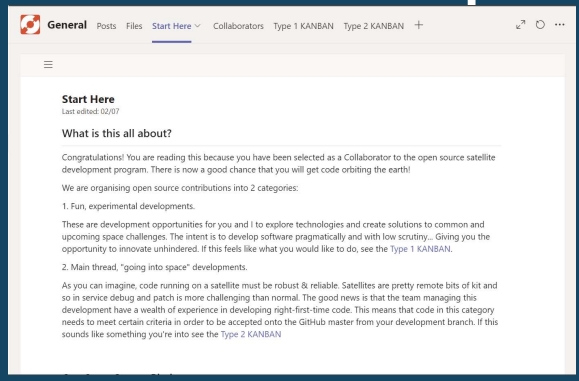
A cost-effective modular, scalable, flexible, robust, reliable platform for LEO missions

Active Satellite Organisations

Organisation	Logo	Website	Primary Activities
AALTO Satellites		https://www.aalto.fi/en/spacecraft	Cubesat Subsystems, Missions, Ground segment designs and tools
Aristotle Space and Aeronautics Team		https://asat.gr/	Cubesat Subsystems, Missions, Science Payloads
Fossasystems	FOSSA	http://fossa.systems/	Cubesat Subsystems, Missions, Ground receivers
LibreSpace		www.libre.space	Cubesat Subsystems, Spacecraft, Missions
LibreCube	LIBRECUBE	https://librecube.org/	Open Source Earth and Space Exploration
Open Source Satellite Programme	OPEN SOURCE SATELLITE	www.opensourcesatellite.org	Microsatellite components, subsystems, Platforms and Missions

There are only a few companies in the world developing open source spacecraft

Collaborator Workspace



Accepted collaborators have access to view and contribute to planned activities

linkedin.com/company/open-source-satellite
twitter.com/satelliteopen

Register to participate:
opensourcesatellite.org/register

Anita Bernie: abernie@kispe.co.uk
John Paffett: jpaffett@kispe.co.uk
www.opensourcesatellite.org