

<Constellation Mission>

Limit 5 pages, single spaced, 11 pt font, in English. A4 or Letter paper with 2cm margins on all sides. Number all pages.

Title:

Primary Point of Contact (POC) :

Email:

Co-authors:

Organization:

Need

In 2-3 sentences describe the fundamental need (humanitarian, business, scientific, etc.) your mission idea addresses. For example "Equatorial countries need timely tsunami warnings," and why this need is not being fully addressed by current or conventional large space systems.

Mission Objectives

List and describe no more than 5 mission objectives and prioritize them. These should be quantitative in nature and serve as overall measures of effectiveness for the mission.

Concept of Operations

List and describe key mission elements (ground segments, space segments, launch, etc.) and describe their primary interfaces. Use diagrams and tables as appropriate.

Key Performance Parameters

List and explain the technical rationale for 3-5 key performance parameters that enable the successful conduct of your mission idea. For example, tsunami detection may depend on better than 20 m spatial resolution in the visible spectrum.

Space Segment Description

Describe the conceptual design for your satellite system or systems. List key specifications (e.g. mass, volume, peak and average power, link budget, delta-V, etc.). Diagrams or simple CAD drawings are encouraged.

Orbit/Constellation/Description

Describe the orbital elements for the desired mission constellation/formation and explain the technical rationale for its selection. Presentation of analytical results ground coverage or user access computations or simulations is encouraged.

Implementation Plan

Describe how your organization, or your organization working with others, could implement your idea.

Provide a reasonable estimate of total life cycle cost to include design, development, assembly, integration, testing, launch, operations and disposal. Provide considerations about project sustainability where applicable (e.g. "the next round constellations"). List any facilities or other infrastructure to be used or needed. Describe the project organization. Present a top-level project schedule starting from authority to proceed. List and describe the top 5 project risks (technical or programmatic).

References

List any technical references for your idea.