

# Exploration & SPACE Communications

A Technical Overview of the Mission Onboarding Process Managed by the Mission Engagement Working Group (MEWG)

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More than you ever imagined...



## Commercialization Innovation Synergies (CIS)



#### MISSION ENGAGEMENT

Who: Mission Teams

How: Promoting NSN Services and Capabilities

Result: Onboarding Missions





## Our Network: The Near Space Network





# Network Regimes



Regime

**NEAR SPACE** 

DEEP SPACE



Range from Earth

Earth Proximity Below 36,000 km Lunar Proximity 70,000 km from center of Moon Earth-Moon L1/L2 61,000 km from center of Moon Cislunar 455,000 km Sun-Earth L1/L2 1.5M km

Deep Space > 2M km

Notation

Near Space is considered from 80 km to 2 million km from the Earth

> 2M km from Earth is considered Deep Space

# MISSION ENGAGEMENT



Onboard new missions for the Near Space Network



Coordinates collection of mission technical requirements





Defines inter-and intra-ESC organizational interactions and roles centered on providing mission solutions



Facilitates mission onboarding processes to secure NSN services



Supports missions in early phases to ensure "right sized" solutions are provided

## Mission Engagement Working Group 1/2



#### 1. Central Interface:

- a. The MEWG acts as the primary entry point for missions to request communication and navigation services from the Space Communications and Network (SCaN).
- b. It serves as the initial contact for these missions (referred to as "customers") to engage with the Near Space Network (NSN).

## 2. Screening and Evaluation:

- a. Reviews and assesses service requests for NSN support.
- b. Ensures that each request includes all necessary information for accurate evaluation.

## 3. Request Management:

- a. Records all incoming requests for traceability.
- b. Categorizes requests to streamline the assessment process.
- c. Coordinates the internal workflow to address the requests effectively.
- d. Assigns tasks for further action to the appropriate NSN teams.

## Mission Engagement Working Group 2/2



### 4. Customer Support and Feedback:

- a. Provides comprehensive support for missions located within two million kilometers of Earth.
- b. In the event of a request denial:
  - i. Diagnoses the reasons for rejection.
  - ii. Suggests possible solutions for the customer to address the issues.
- c. Delivers focused, clear, and actionable feedback to the customer in a timely manner.

### 5. Process Simplification:

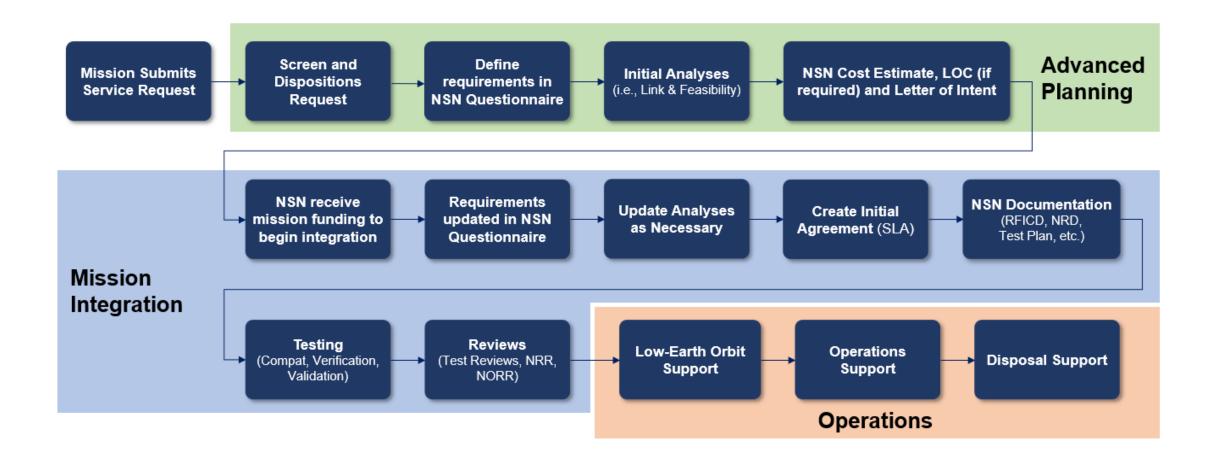
- a. Aims to simplify the customer's interaction with the NSN.
- b. Reduces the complexity of communication by minimizing the points of contact.

### 6. Post-Screening Procedure:

- a. Once a request clears the screening phase:
  - i. The MEWG transitions the responsibility to the NSN Project team.
  - ii. The NSN Project team manages all subsequent customer communications.
  - iii. Continues to update and inform the customer as the NSN processes their request.

## **MEWG Process**

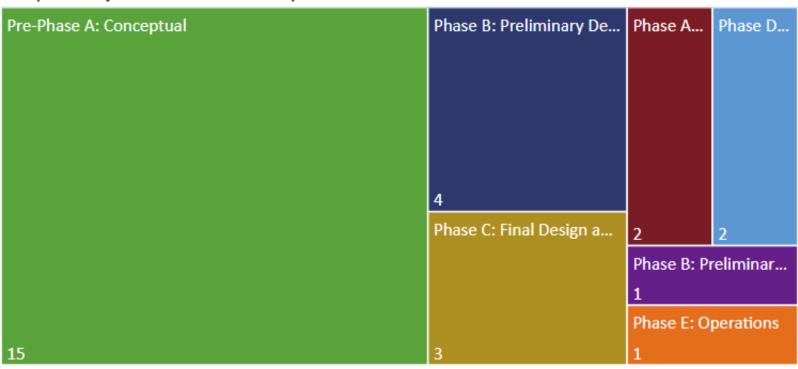




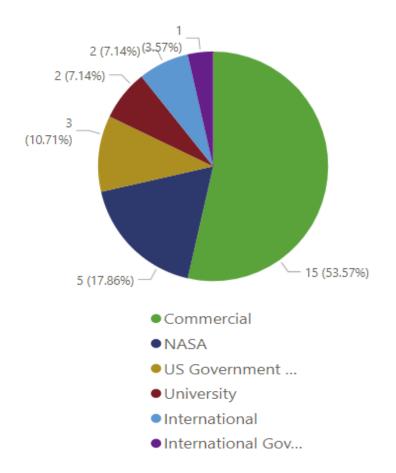
## MEWG Service Inquiry Request Dashboard



#### Request by current mission phase



#### Request by sponsor organization type



## Engage with Us



- Inquire about services through our "Service Inquiry Form"
- <a href="https://go.nasa.gov/NSNServiceInquiry">https://go.nasa.gov/NSNServiceInquiry</a>