



SPACE COMMUNICATIONS AND NAVIGATION

Leveraging SCan Services

Near Earth Network

- The Near Earth Network (NEN) is a network of ground stations located at sites around the world that provide space communications and tracking services to missions operating in the near earth region.



- The NEN supports multiple robotic and launch vehicle missions through the use of NASA-owned stations and through cooperative agreements with interagency, international, and commercial service providers.

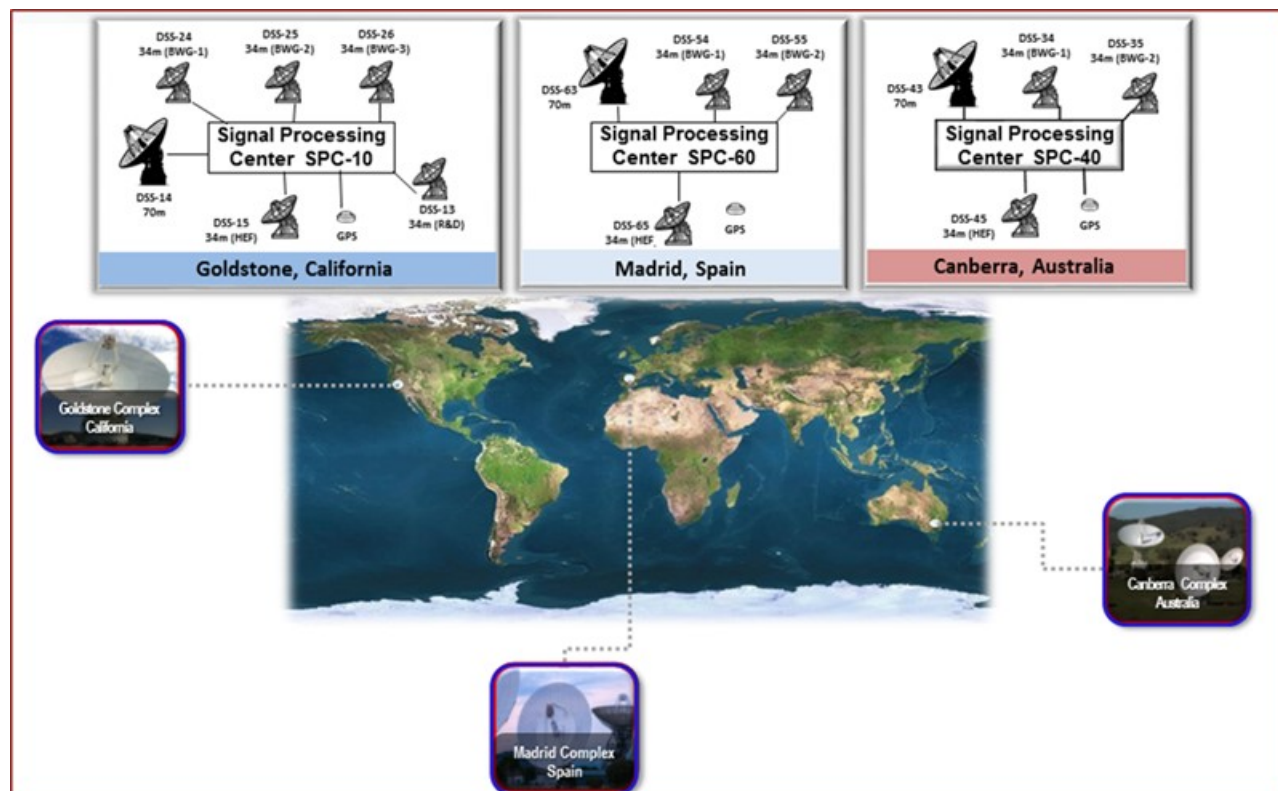
Space Network



- The Space Network (SN) provides space communications services through the management of the Tracking and Data Relay Satellite System (TDRSS).
- The SN is a constellation of geosynchronous satellites called Tracking and Data Relay Satellite (TDRS) and associated ground systems that operate as a bent pipe relay system between the customer platform and customer ground facilities.

Deep Space Network

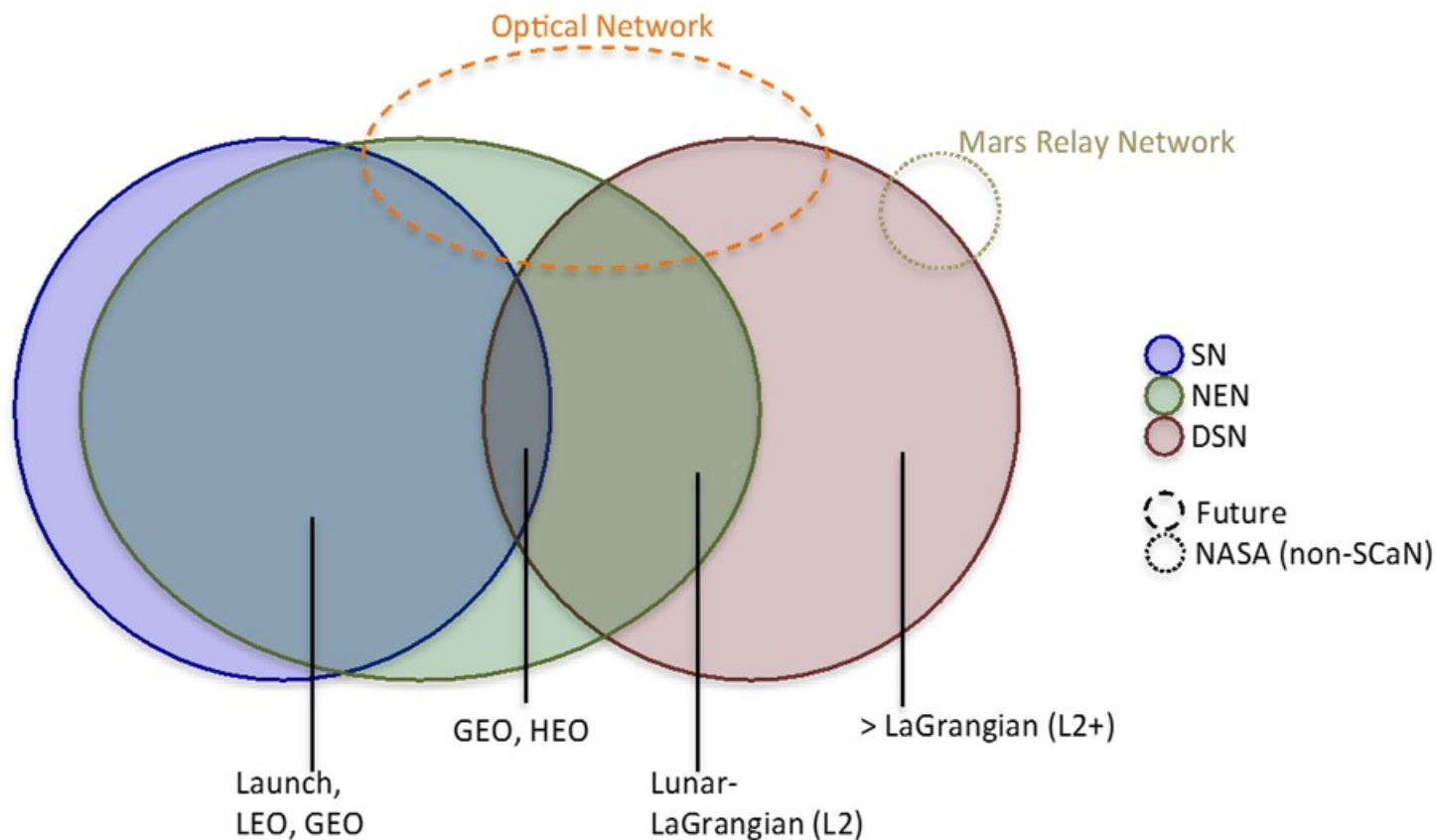
- The Deep Space Network (DSN) is comprised of three major tracking sites around the globe that can provide continuous communication and navigation support for the world's deep space missions.



- The three sites, Goldstone (USA), Madrid (Spain), and Canberra (Australia) are spaced approximately 120 degrees apart in longitude to provide nearly continuous tracking coverage for missions above the Geosynchronous Earth orbit of 35,786 km (22,236 mi).

SCaN Networks Coverage Regions

- SCaN's Networks provide coverage from launch through interplanetary exploration/science



- Optical comm is being integrated into the SCaN Network family.



SCaN's Mission Commitment Offices



- SCaN utilizes a well-established process to capture and assess user requirements in order to determine how to best support those requirements.
 - The process is collaborative and relies on communication and exchange of information between the customer and SCaN throughout all phases of mission development.
- It is the responsibility of SCaN's Mission Commitment Office (MCO), along with the Networks Integration and Management Office (NIMO) and the Customer Interface Management Office (CIMO) to facilitate this process on behalf of the SCaN Networks.



SCaN Customer Commitment Offices and Websites



- GSFC/Network Integration Management Office (NIMO)
 - Space Network and Near Earth Network mission design, proposal support, service agreements and compatibility testing
 - <https://nimo.gsfc.nasa.gov/nimo>
- JPL/DSN Commitments Future Planning Office
 - Deep Space Network mission design, proposal support, service agreements and compatibility testing
 - <http://deepspace.jpl.nasa.gov/advmiss>
- SCaN Customer Service Portal
 - SCaN service overview, mission commitment process, spectrum information, points of contact
 - <https://www.nasa.gov/directorates/heo/scan/csp>



SCaN Points of Contact



- SCaN Program Office/NASA HQ
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- GSFC/Network Integration Management Office (NIMO)
 - Cathy Barclay/Acting Chief, NIMO
 - Scott.A.Greatorex@nasa.gov
 - (301) 286-8626
- JPL/ Mission Support Definitions and Commitments Office
 - Glen Elliott
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A large radio telescope dish is the central focus, set against a dramatic sky at sunset or sunrise. The sun is low on the horizon, creating a bright glow and casting long shadows. The sky is filled with clouds, some of which are illuminated by the low sun. In the background, there are some industrial structures and a fence.

NASA

www.nasa.gov

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