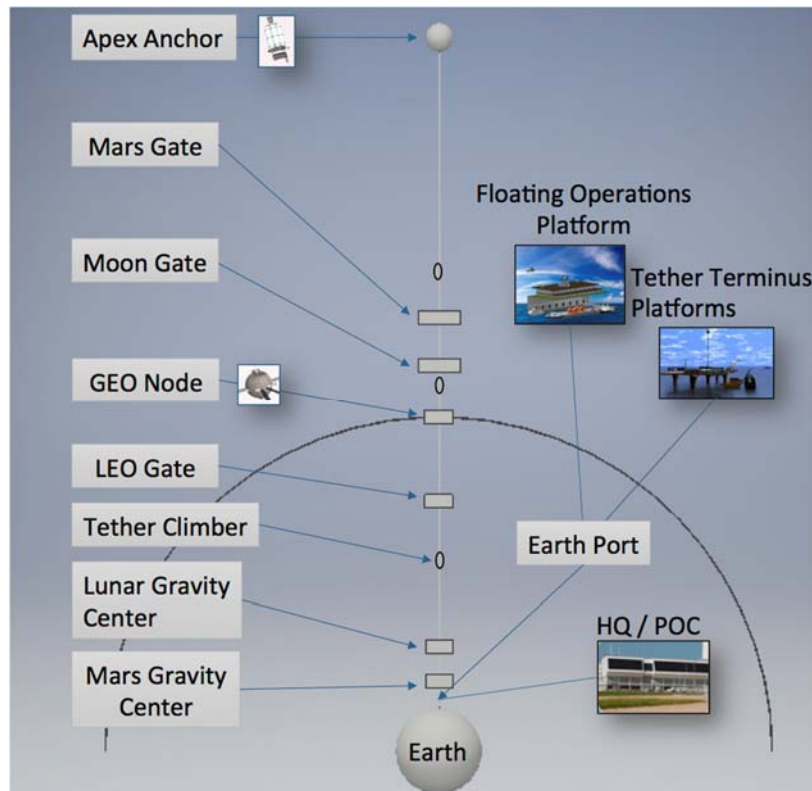


Space Elevator Lexicon

Terminology is an important area that should be focused upon. The following summary of a lexicon of space elevator terms should help all of us communicate via common usage. Recently, the International Academy of Astronautics (IAA) and the ISEC have agreed to develop a common lexicon. This ISEC presentation has three components to its proposed Lexicon. The first is an image of a space elevator as seen in both the ISEC and the current IAA study. The second is a table of those major terms. The third is a preliminary list of additional terms that should be considered as part of the overall Space Elevator Lexicon. Please provide your feedback with new terms or enhancements describing the space elevator infrastructure to info@isec.org.

Apex Anchor Node 96,000 to 100,000 kms
Mars Gate – release at 57,000 kms
Moon Gate [lunar] – release at 47,000 kms
GEO Node [36,000 kms]
LEO Gate release at 24,000 kms into ellipse
Lunar Gravity Center – at 8,900 kms
Mars Gravity Center – at 3,900 kms
Tether Climbers
Earth Port – complex along the equator
- Earth Terminus – anchor for tether
- Floating Operations Platform
Headquarters and Primary Operations Center



Space Elevator Lexicon

Suggested Space Elevator Terms – a continuous project for ISEC

<i>Terminology</i>	<i>Explanation</i>
Apex Anchor	The upper end at roughly 100,000 kms altitude
Carbon Nano Tube (CNT)	High Tensile Strength material under development
Climbers [Tether Climbers]	Vehicle able to climb or lower itself on the tether
Deployment	Releasing the tether from the GEO construction up and or down during the initial phase of construction
Earth Anchor	Earth Terminus for space elevator
Earth Port	Consists of Earth Anchor [terminus] and Floating Operations Platform
Earth Terminus	Lower attachment for the space elevator tether.
Final Operational Capability	Design for full capability of the space elevator
Floating Operations Platform	The Op's Center for the activities at the Marine Node or Earth Terminus [Earth Port]
GEO Node	Operational location at the Geosynchronous Earth Orbit (GEO) Release Point – roughly 36,000 kms altitude
Headquarters and Primary Operations Center [HQ/POC]	Location for the Operations and Business Centers – probably other than at the Earth Port (Marine Node)
Initial Operational Capability	A term to describe the time when the space elevator is prepared to operate for commercial profit - robotically
International Academy of Astronautics (IAA)	Professional association with approximately 1,000 elected members from the space arena – studies space elevators
International Space Elevator Consortium (ISEC)	Association whose vision is to: A world with inexpensive, safe, routine, and efficient access to space for the benefit of all mankind.
Japanese Space Elevator Association (JSEA)	JSEA handles all the space elevator activities for universities and STEM activities. Also handles the global aspects of space elevators.
Length Overall	Full length of the space elevator, est. from 96,000 to 100,000 km
LEO Gate	Elliptical release point for LEO – roughly 24,000 kms
Lunar Gravity Center	Point on Tether with Lunar gravity similarity – 8,900 kms
Marine Node	Earth Terminus for space elevator
Mars Gate	Release Point to Mars – roughly 57,000 kms
Mars Gravity Center	Point on Tether with Mars gravity similarity – 3,900 kms
Moon Gate	Release Point towards Moon – roughly 47,000 kms
National Aeronautics and Space Administrations (NASA)	United States organization responsible for space exploration and civil space
Ocean Going Vehicle (OGV)	Vehicle able to travel over the open ocean
Primary Operations Center	Center of all activities for the space elevator. Could be distributed or centralized.
Primary Floating Operations Platform (FOP)	Operations center at the Earth Port
Seed Ribbon	The initial tether lowered from GEO altitude which would then be built up to become the space elevator tether
Tether	100,000 km long woven ribbon of space elevator
Tether Climbers	Vehicle able to climb or lower itself on the tether