
The Global Exploration Roadmap

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Structure of GER3



- ◆ **Common vision for space exploration**
- ◆ **Why We Explore: Benefits of Space Exploration**
- ◆ **Goals and Objectives**
- ◆ **The Roadmap**
- ◆ **Highlights of Preparatory Activities**
 - Robotic missions
 - In-situ resource utilization
 - Technology gaps
 - Human health and performance research
 - Analog activities

Why we explore: Benefits Stemming from Space Exploration



◆ Innovation and Economic Growth

- Advances in Science & Technology
- Global Technical Workforce Development
- Enlarged Economic Sphere

◆ Knowledge Gain

- New knowledge
- Evidence of past or present life in the solar system would affect humanity's appreciation of life's uniqueness on Earth

◆ Culture and Inspiration

- Exploration fulfills human curiosity and inspires wonder
- Exploration missions expand our views about the limits of human travel and the possibilities for humanity

◆ Global Partnerships

- International partnerships able to address 21st century problems

◆ Importance of LEO

- The ISS
- Chinese Space Station
- Future platforms in LEO

◆ The Moon

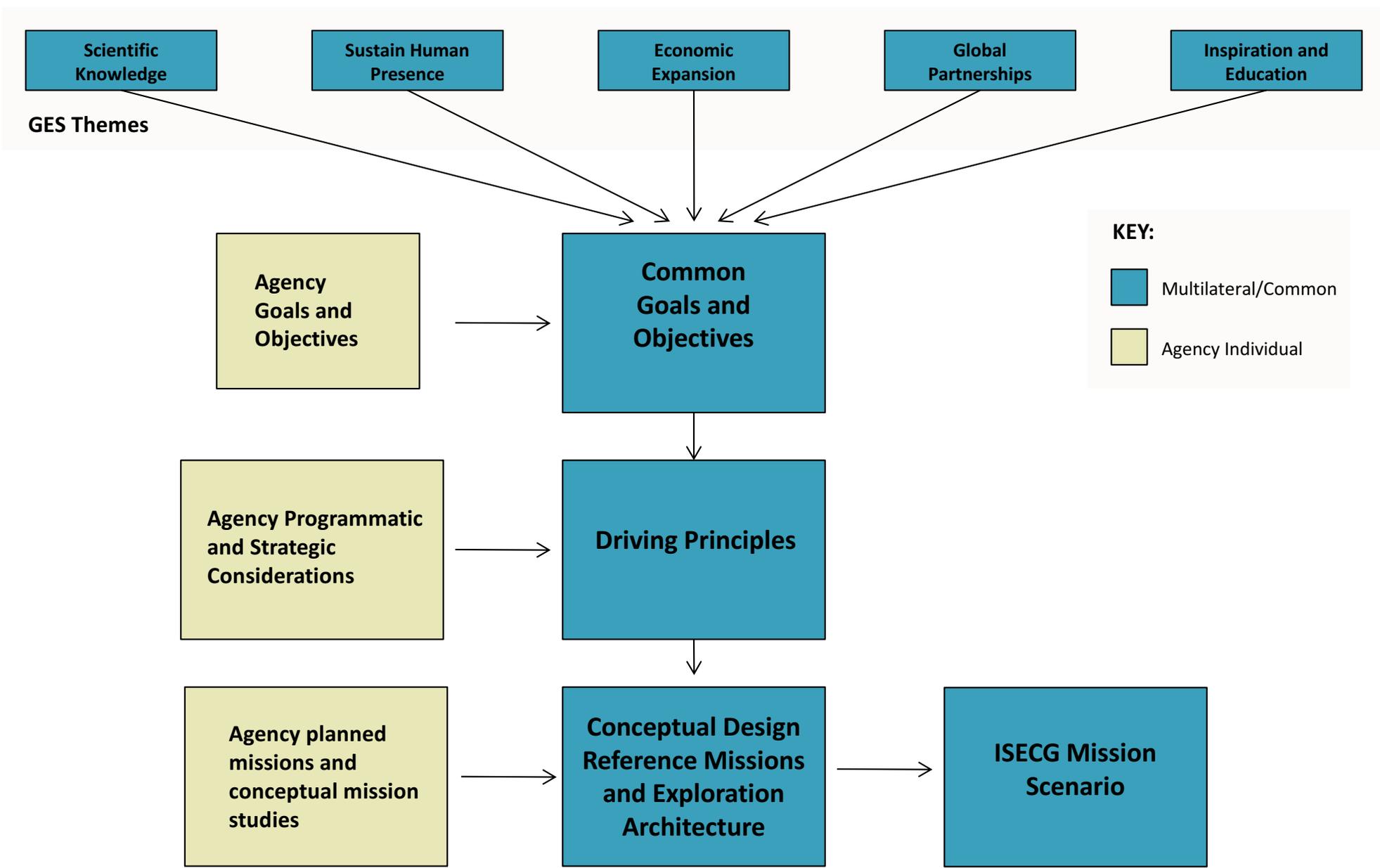
- Cislunar Space: The next step
- Deep space Gateway
- Lunar surface

◆ Mars

- Mars orbit mission in 2034, per NASA planning
- Mars surface

◆ Asteroids in their native orbits

Developing the ISECG Mission Scenario



◆ **Robotic Missions**

- Updated plans of all agencies
- Robotic precursor to human lunar lander

◆ **In-situ Resource utilization**

- Focus on lunar volatile mission coordination

◆ **Technology gaps**

- Closing gaps enables and enhances human space exploration

◆ **Human health and performance research**

- On ground, in LEO, at the deep space Gateway

◆ **Analog activities**

Innovative Uses of the Gateway

