



# Programme and Development of the “Belt and Road” Space Information Corridor

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**Development and Achievement**

**Win-Win Cooperation**





# Introduction

# Belt and Road Initiative

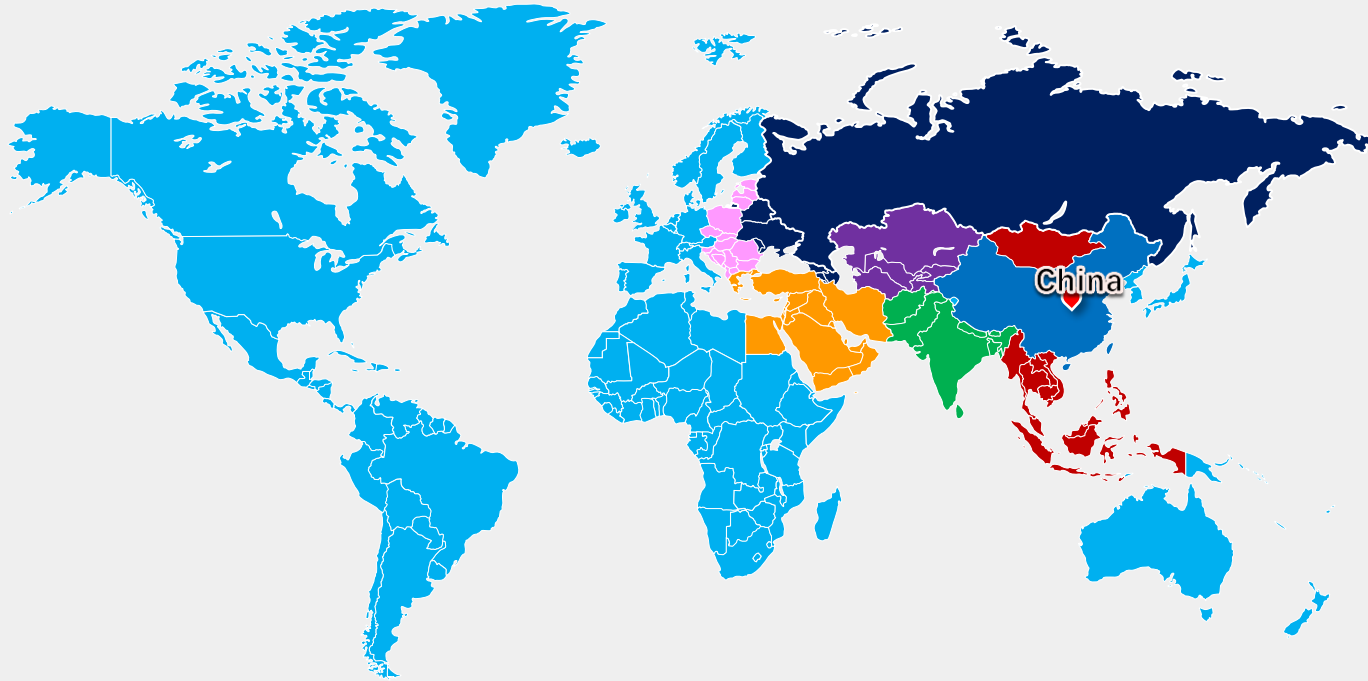
In 2013, Chinese President Xi Jinping suggested the “Belt & Road” Initiative

- strengthen international cooperation
- synergize development strategies of various countries
- achieve complementary advantages
- promote common development





# Belt and Road Initiative



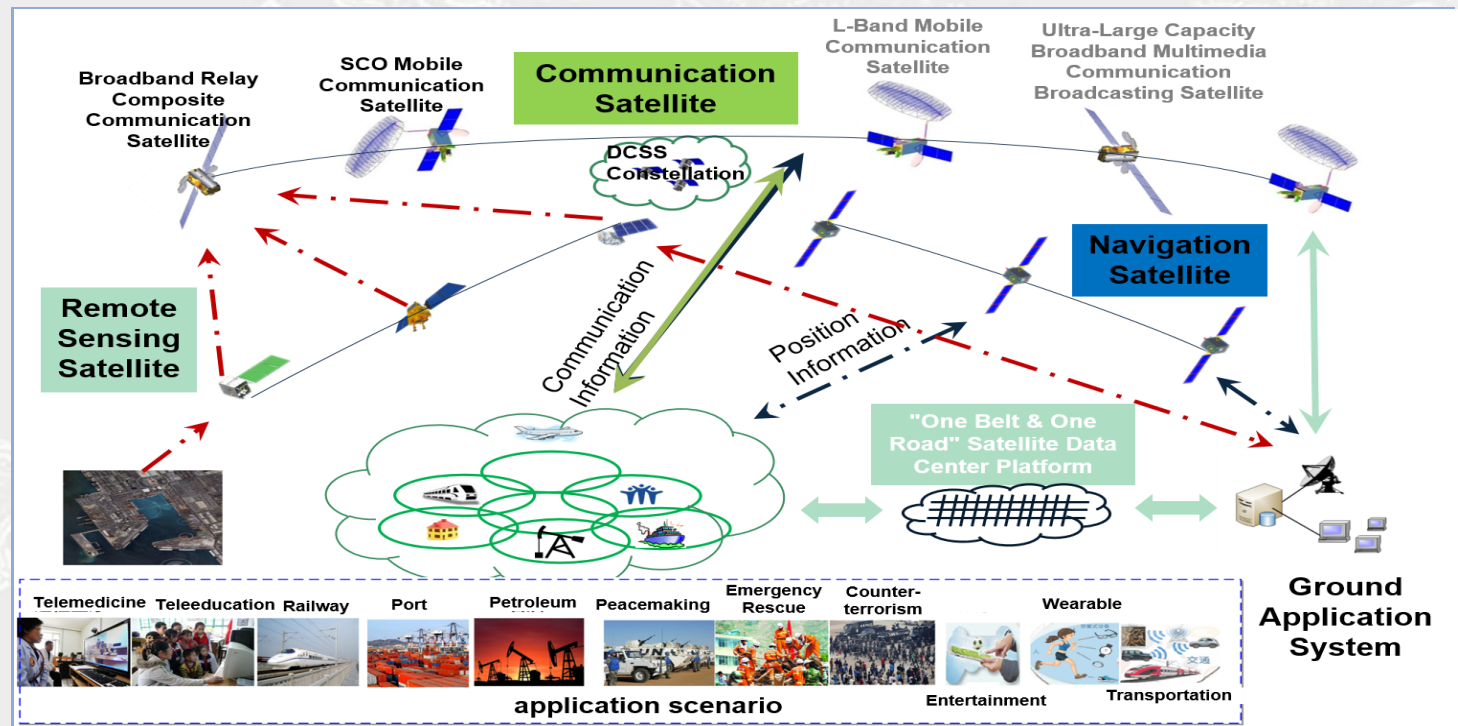
- |                                       |  |
|---------------------------------------|--|
| ● 10 countries in East Asia and ASEAN | ● 5 countries in Central Asian                 |
| ● 18 countries in Western Asia        | ● 7 CIS countries                              |
| ● 8 countries in South Asia           | ● 16 countries in Central and Eastern European |

- Focus on Asia, Europe and Africa, but is open to all partners”
- Uphold the principles of extensive consultation, joint contribution, and shared benefits
- AIIB and the Silk Road Fund gives a steady support to the “Belt & Road”

Initiative

# “Belt & Road” Space Information Corridor

It is a comprehensive project of providing information services along Belt & Road, which **takes communication, remote sensing, navigation satellites** as the main body, with space-based information resources and ground information sharing network, and aims at realizing co-construction and sharing of space information in the Region.



# Four- in - one

Space Information Corridor can provide “four-in-one” space information service for countries along the Belt and Road, which integrates sense, transmission, knowledge and use, to realize interconnection and the intercommunication of the information.





# Cooperation

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**Policy coordination :** space capacity supporting and policy guarantee

**Construction cooperation:** construction and running of Space segment and ground segment

**Co-operation:** application technology and service platform

**Service cooperation:** integration of information and add-valued service



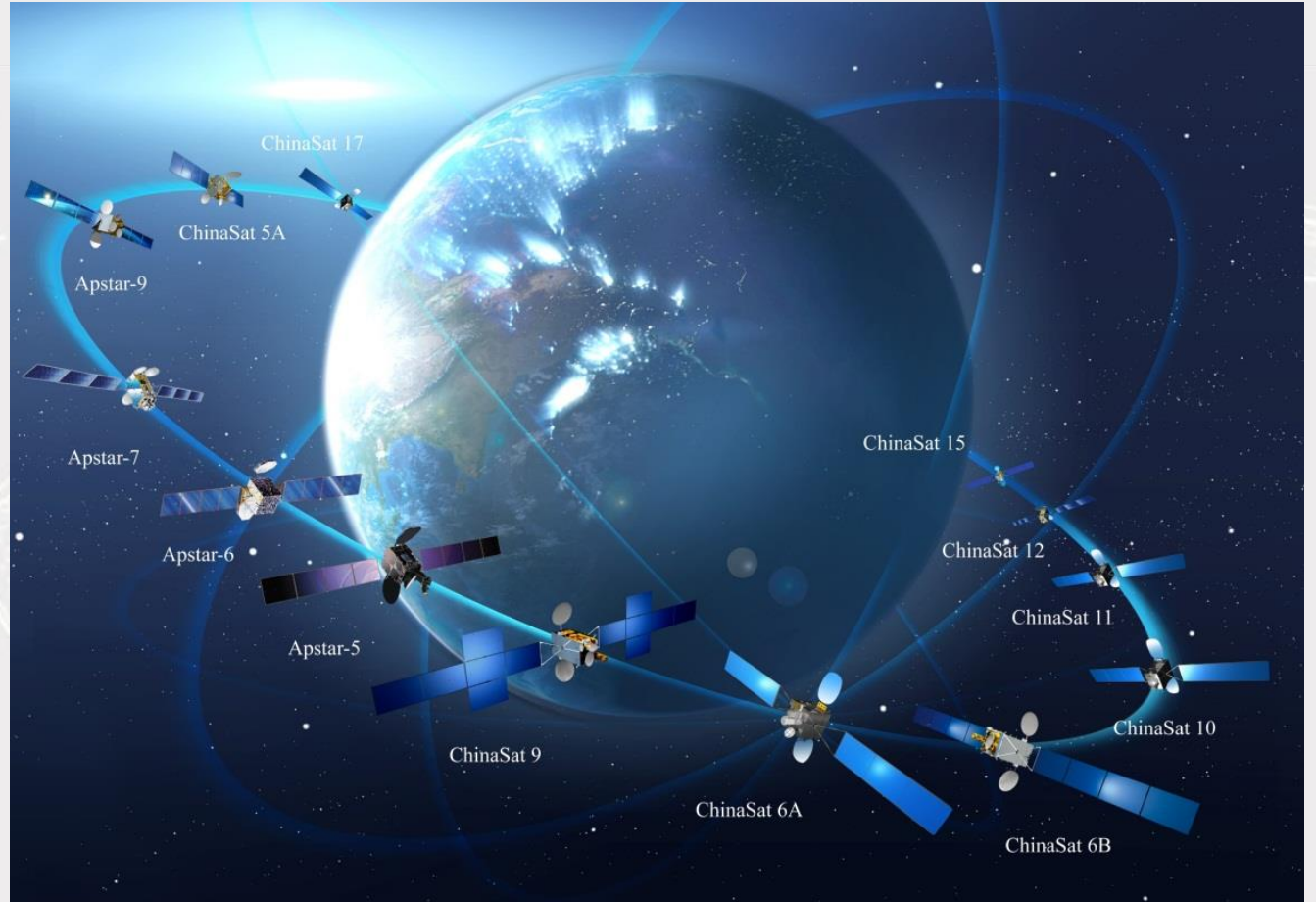


# Development and Achievement

# Telecom Satellites



China boasts sufficient satellite transponder resource which covers the entire territory of China, Asia-Pacific region, Middle East, Australia, Europe and Africa.

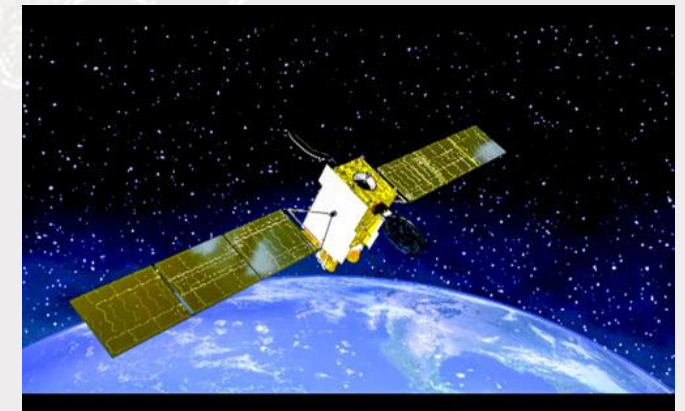
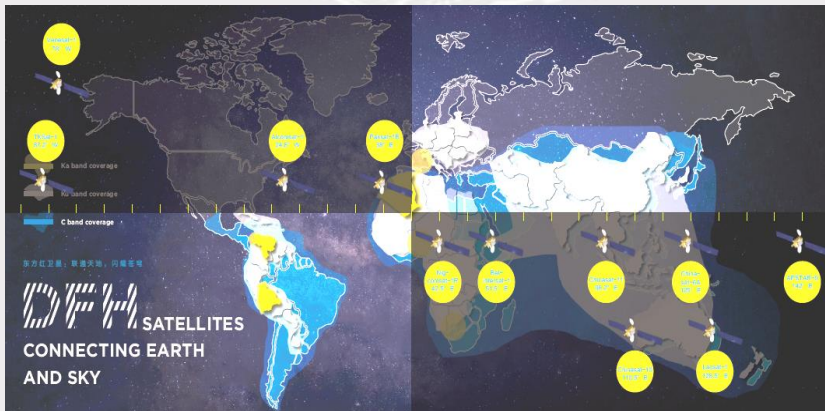




# Telecom Satellites

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A broadband communication satellite network with “one belt and one road” can be set up to jointly develop mobile, broadband and multifunctional composite communication satellites. Telecom satellites export are promoted, to support connectivity of countries along the Belt and Road.



# Beidou Navigation



On December 27, 2018, Beidou System expanded its service scope from regional to global, and formally entered the global era. The development of Beidou satellite navigation system is multi-system compatibility and interoperability, to improve service experience of users through ICG.





# Beidou Navigation

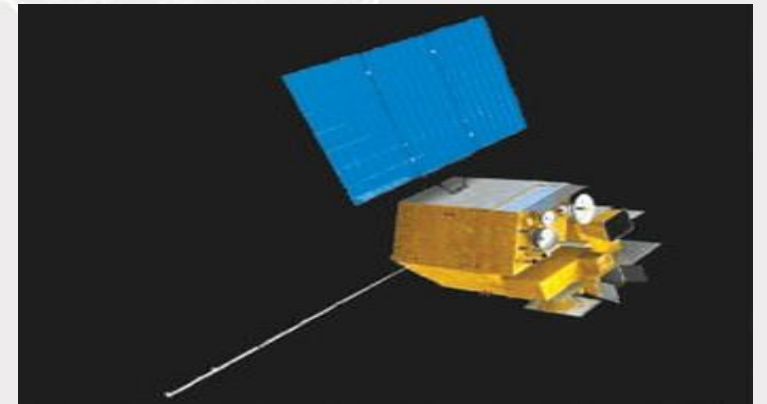
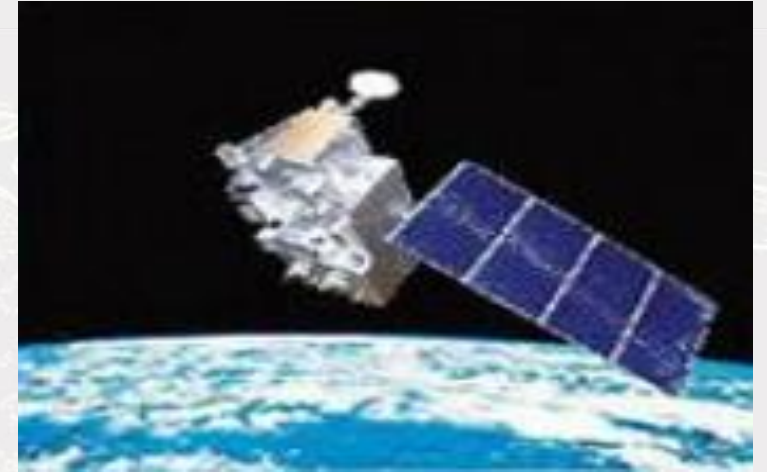


China and Arab countries cooperate in the construction and application of space infrastructure, jointly build a space-ground integrated space information corridor covering Arab countries, and share the experience and achievements of Beidou application to serve for local economic and social development.

# Remote Sensing Satellites

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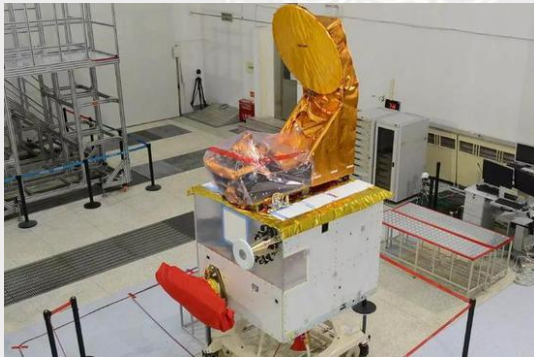
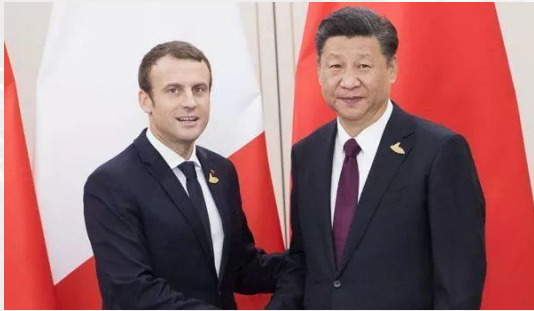
- Action Plan on Meteorological Satellite Fengyun for Belt and Road issued to play fully the benefits of satellite comprehensive application, and better serve countries along Belt and Road.
- FY-2H adjust the orbit position 79° E to provide better meteorological monitoring services for Belt and Road and ensure the integrity of global meteorological data acquisition.





# Remote Sensing Satellites

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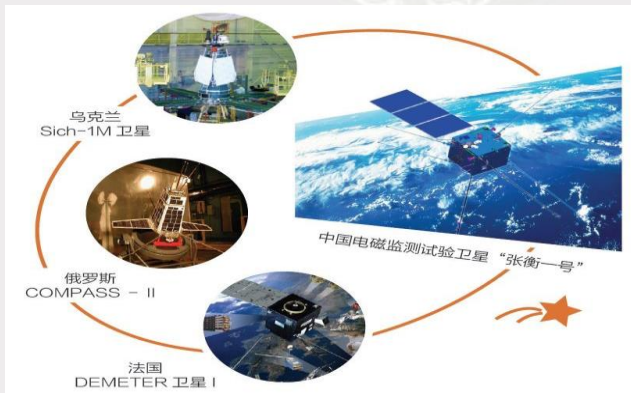


- China and France issued Joint Declaration in 2018 reaffirm their commitment to deepen and broaden their cooperation on environmental protection and climate change.
- China and France have expanded their cooperation in space technology, marine scientific research and global climate change through China-France satellite. At the same time, the satellite data can also be used by scientists and forecasters from all over the world.

# Remote Sensing Satellites



- China and Italy released Memorandum of Understanding on construction of Belt and Road, to enhanced cooperation on Electromagnetic Monitoring, Space Science, Deep Space Exploration and Manned Space.
- Zhangheng-1 satellite carries a high-energy particle detector developed under the Italian "Matteo Ricci" project. The satellite can improve the research and understanding of the law of earthquake pregnancies on a larger scale and make up for the shortcomings of earthquake observation and measurement.





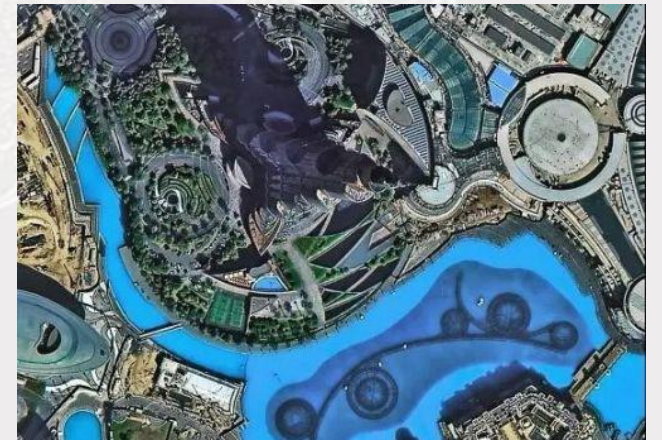
# Remote Sensing Satellites

- GF satellite data have been broadly used by 16 government departments in over 20 industries including agriculture, land and resource, water resources, environmental protection, marine, and so on.
- The data have also been used for the “Belt and Road” country and International Cooperation.



# Remote Sensing Satellites

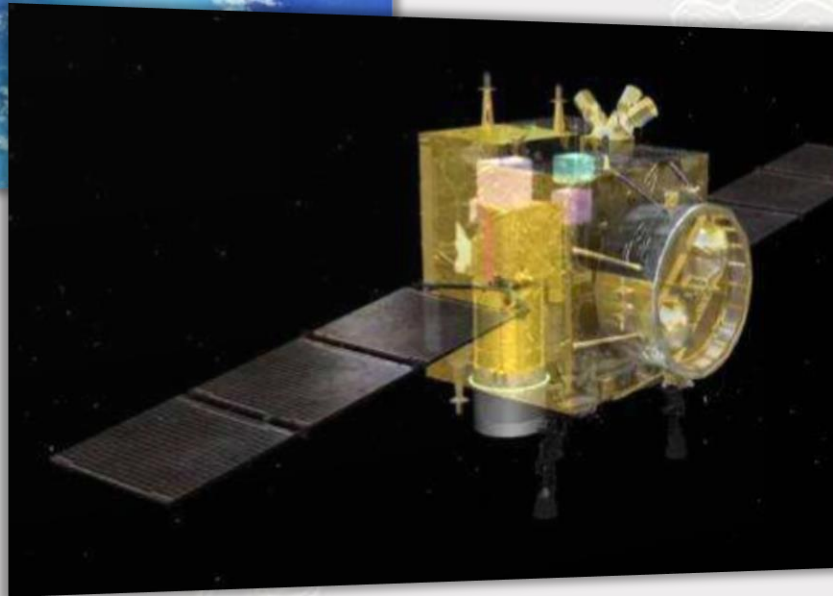
Superview series of satellites, Triplesat and Changguang-1 provide commercial data service for countries along Belt and Road, to support data application evaluation based on national characteristics.





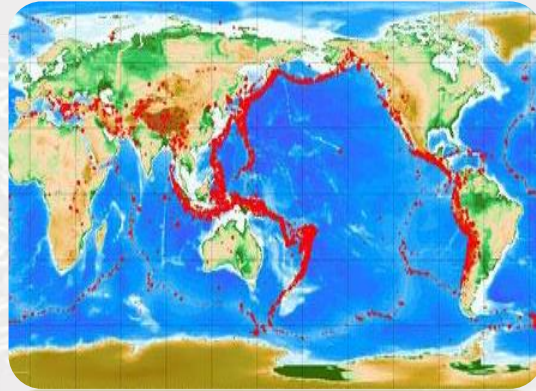
# Remote Sensing Satellites

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PRSS-1 and VRSS-2 were delivered, to contribute to the enhancement of data observation capacity and provide data services for regional and global sustainable development of the two countries.

# Support infrastructure construction

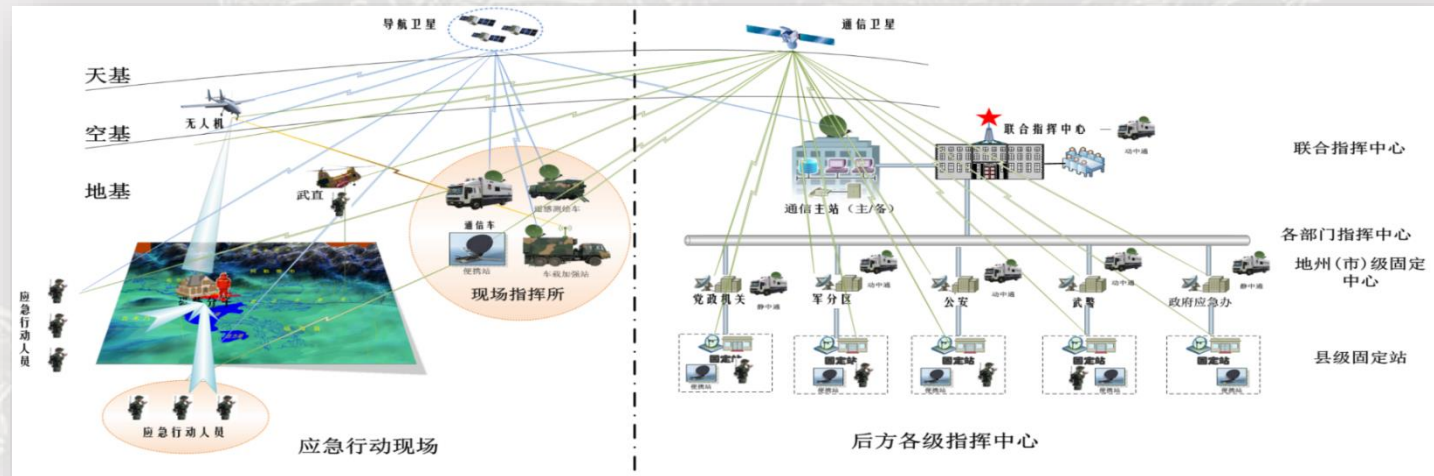


The corridor provides remote sensing monitoring, navigation and positioning, communication services for infrastructure construction such as railways, ports and energy development along the “ Belt And Road”.



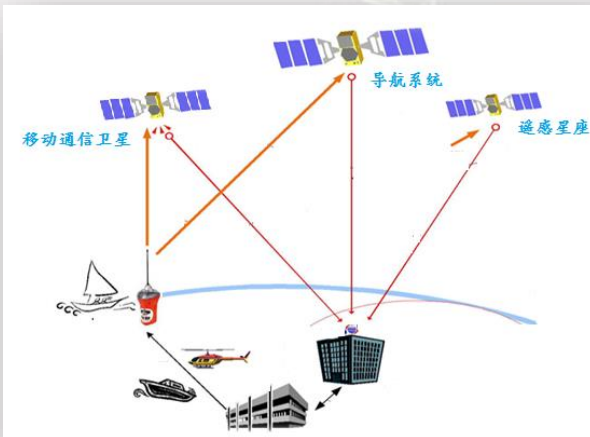
# Establish emergency service platform

There are several Chinese satellites joined CHARTER mechanism and played an important role in dealing with major international disasters to provide remote sensing image, emergency communication, navigation and positioning for early warning of natural disasters, international humanitarian public affairs. China firmly relief and other support UNSPIDER projects.



# Improve maritime space information security

Depending on the environmental monitoring satellites, Communication satellites and Beidou navigation satellites, a three-dimensional maritime search and rescue system will be established. China will become the country with the largest number of remote sensing satellites, and is willing to provide marine information services to all the countries along the route.



- Maritime rights enforcement
- Safety of sea lanes
- Maritime search and rescue
- Offshore resource development
- Marine disaster prevention and mitigation
- Coastal zone environmental monitoring

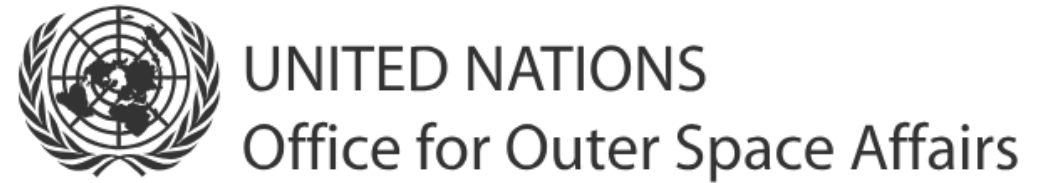




# Win-Win Cooperation

# Promote Cooperation with International Space Organizations

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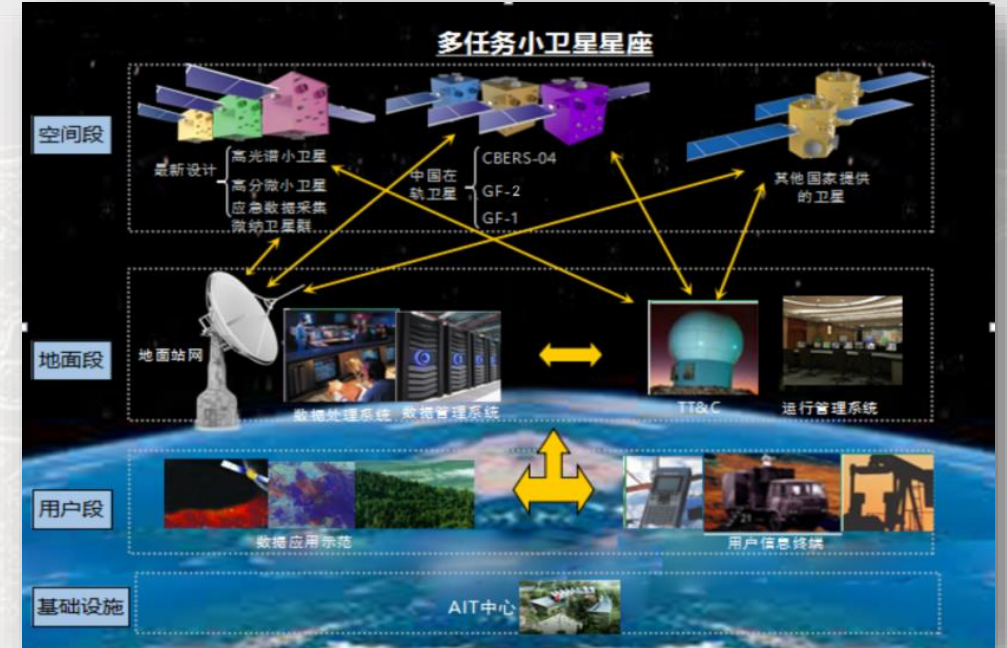


Enhance cooperation with multilateral platform, including UNOOSA, ESCAP, APSCO, to promote construction of Belt and Road and public service.



# International cooperative satellite constellation

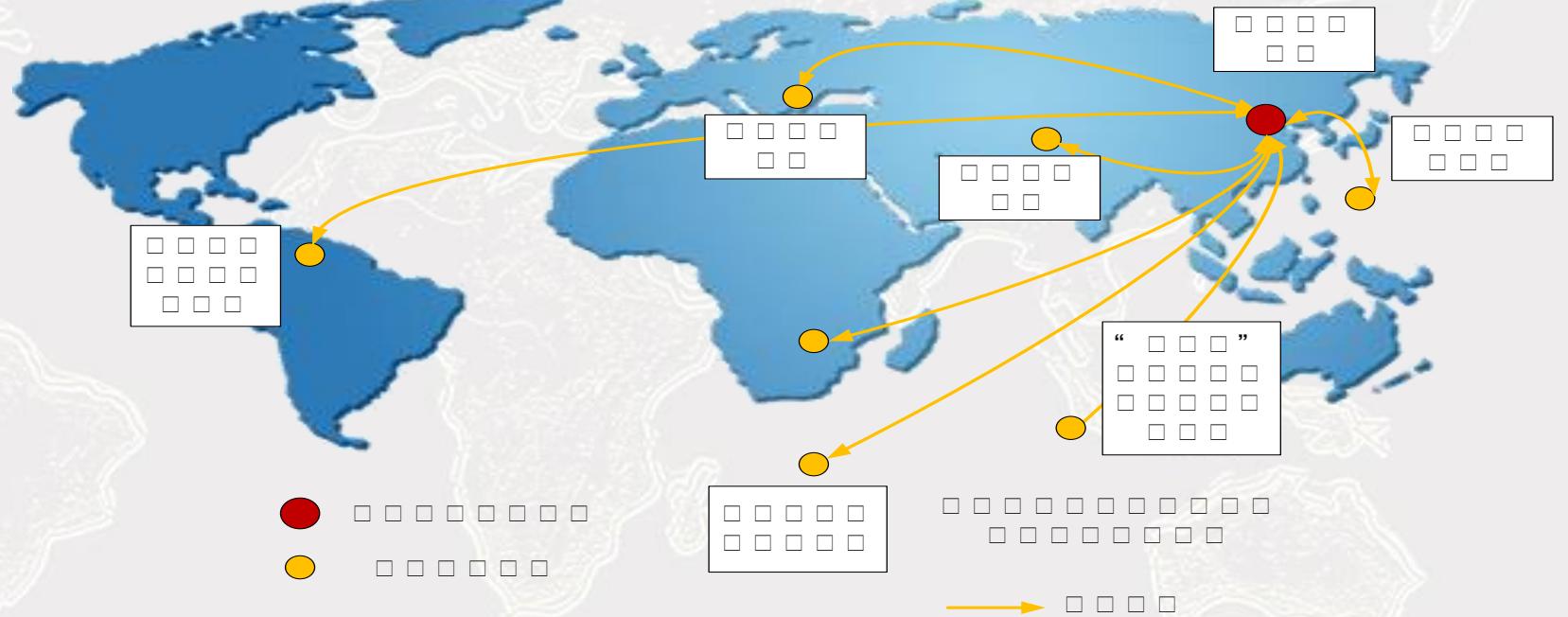
Through cooperation in space resources, joint observation and data exchange, a new type of international satellite service system with consistent objectives and unified standards will be formed, such as APSCO Joint Small Multi-mission Satellite Constellation.



APSCO Joint Small Multi-mission Satellite Constellation

# Space information sharing network

Along the “ Belt And Road”, China will jointly build remote sensing data and application centers, communication satellite information ports and beidou navigation ground enhancement systems, build several distributed satellite application and service platforms, and form a comprehensive service network .







# **Promote cooperation in the space information industry along the 21st century maritime silk road**

Promote the construction of "china-malaysia" satellite application industrial park, Pakistan telecom port and china-asean information port.

Promote the development of maritime satellite applications in fujian and expand the market for space information services in asean and south Asian coastal countries.

Promote the construction of beidou foundation strengthening systems in Thailand, Laos, Indonesia, Cambodia and other asean countries.

# Talent Exchange and Cooperation

NPU initiated the Belt and Road Aerospace Innovation Alliance, by uniting 51 members (universities, research institutes and enterprises) from 14 countries and building platforms and mechanisms for all in and beyond the Alliance. Students

from all members are the people who are benefited most by attending the activities organized by the Alliance.







**Thanks for your attention !**