United Nations/Austria

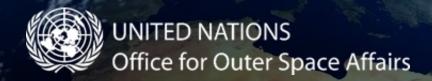
World Space Forum

13 - 15 December 2022



ORGANIZED JOINTLY BY:

Federal Ministry
Republic of Austria
Climate Action, Environment,
Energy, Mobility,
Innovation and Technology



Federal Ministry Republic of Austria European and International Affairs

Strengthen International Cooperation to Ensure the Long-term Sustainability of Outer Space Activities

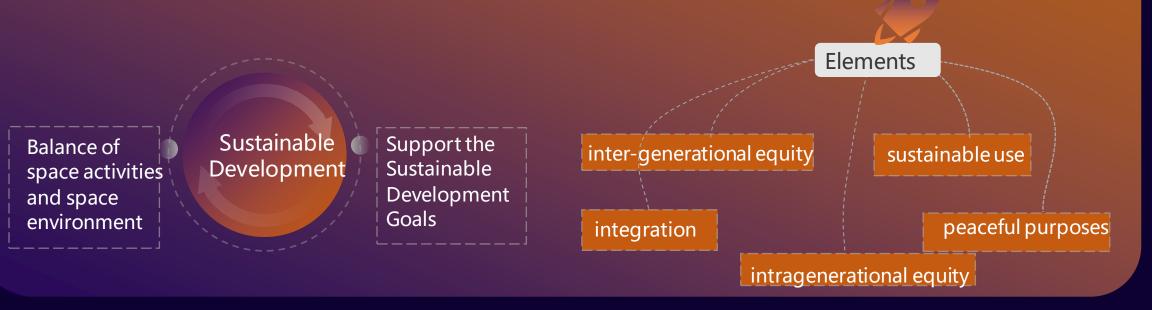
SUSTAINABLE DEVELOPMENT

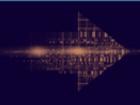
Research and Promotion Center for International Cooperation,
China National Space Administration(CNSA)



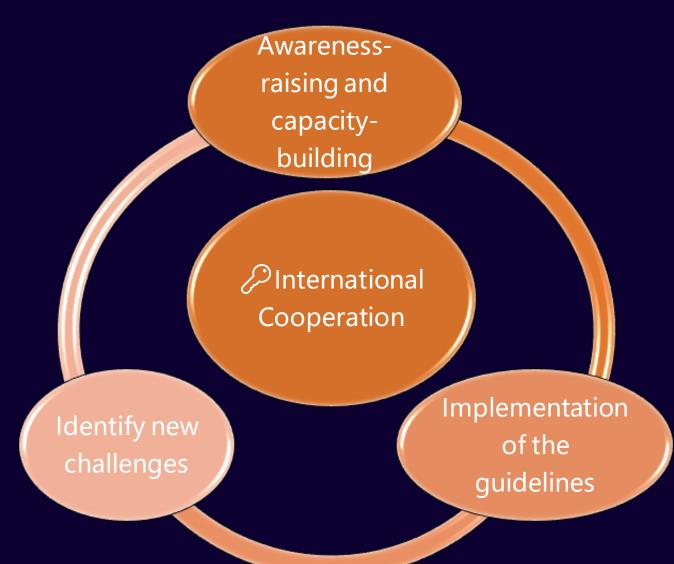
Essence of long-term sustainable outer space activities

The 21 Long-term Sustainability (LTS) voluntary guidelines, agreed by UN COPUOS members, is a positive step to a global common understanding on good orbital behavior.





Basic path to ensure the long-term sustainability of space activities



- It's important to strengthen international cooperation through COPUOS;
- Promote identifying new challenges, sharing experience of implementation, as well as awareness-raising and capacity-building in a balanced manner.



Identify and analyze new challenges properly and develop new guidelines as necessary

- The private sector has become important players in space activities.
- Mega constellations are developing rapidly, and the number of satellites in orbit is increased significantly.







Challenges brought by low-orbit mega satellite constellations



- the surge of close encounter events
- Increased risk of collision
- orbits blockade



- Large occupancy of frequency and orbital resources
- The Injustice of First Come, First Served in NGSO



 the impacts on astronomical observations



Exchange experiences and best practice from implementation of the LTS Guidelines

China is willing to share with the Working Group our experiences and lessons learned

a. Legal and policy framework and national regulation

A draft Regulation on Satellite Frequency and Orbital Resources Management. Interim Measures on the Administration of Licenses for Civil Space Launch Projects

Measures for the Registration of Space Objects

Measures on the Management of Space Debris Mitigation and Protection

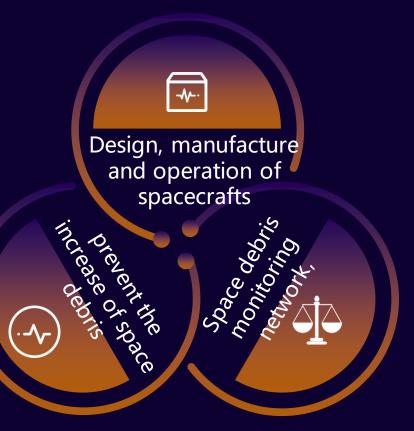
Regulation on the
Promotion of Orderly
Development and
Safety Management of
Micro-satellites

White papers on China's Space Program and China's BeiDou Navigation Satellite System



Exchange experiences and best practice from implementation of the LTS Guidelines

- b. Technical protocols for space activities
- Improving the design, manufacture and operation of spacecrafts, ,strengthens requirement on space debris mitigation, and enhances the post-mission disposal and de-orbiting measures for carrier rockets and orbital satellite.
- The whole series of Chinese Long-March rockets are passivated after launching, and the FengYun, ZhongXing, BeiDou satellites are capable of conducting de-orbiting operations to effectively prevent the increase of space debris.
- A space debris monitoring network was established, and the capacities on collision warning and space events awareness was raised.





Exchange experiences and best practice from implementation of the LTS Guidelines

c. Information sharing on space activities



Share the TLE orbital element of China Space Station via the official website of en.cmse.gov.cn.



Since the launching of Long-March 5B in October 2022, China Manned Space Engineering Office has been closely monitoring the orbit information of the rocket debris, and timely releasing it to the international community in an open and transparent manner.



Promoting international cooperation and capacity-building of developing countries and emerging space nations





13 CLIMATE ACTION

Support the UNSPIDER project

Regional Centre for Space Science and Technology Education in Asia and the Pacific





China believes international cooperation is the basic path to ensure the long-term sustainability of outer space, and contribute to a shared vision for the future in the exploration and use of outer space for peaceful purposes and for the benefit and interest of humankind.

谢谢 THANK YOU