Introduction to the International Space Science and Scientific Payload Competition (ISSSP2026)

Background

Exploring the universe is a shared dream of all humanity. In recent years, China has designated space science and deep-space exploration as priority areas in its national science and technology innovation strategy. Policies such as the National Medium and Long-Term Plan for Space Science (2024-2050) and the Outline for Building a Space Power have continuously driven basic research in space science and breakthroughs in key technologies. With the China space station fully completed and in stable operation by 2022, multidisciplinary, systematic, long-term space science research has entered an important stage of development, providing a practical platform for young researchers to participate in real space missions.

Against this backdrop, under the guidance of the China Manned Space, the Beijing Institute of Technology and the Chinese Society of Astronautics, together with other organizations, jointly launched the inaugural International Space Science and Scientific Payload Competition (ISSSP). The competition is dedicated to creating a forward-looking platform for innovation in space science and for the cultivation of young

research talent. To date, it has been held successfully three times, attracting over 300 teams from more than 80 universities across over 30 countries and regions, with total participation exceeding 3,000 people, thereby generating a positive impact both domestically and internationally. After several iterations, the competition has established a relatively mature contest framework and evaluation mechanism, and has gradually generated project development pathways oriented around genuine research needs and cross-regional collaboration networks, continuously aggregating innovative achievements in space science and payload technology.

Vision

- **Leverage Unique Space Resources** to conduct frontier research aboard the China Space Station.
- **Catalyze Breakthroughs** in both fundamental science and next-generation payload technologies.
- **Accelerate Civilian Applications** by transitioning aerospace innovations into industrial and societal use.
- **Foster Global Collaboration** through a culture of co-creation, shared results, and joint stewardship across borders.

Mission

- **Unite Global Talent** by attracting and mentoring outstanding students and projects in space science and payload engineering.
- **Ignite Innovation** via competitive challenges that inspire novel scientific ideas and advanced instrument designs.
- **Expand Public Outreach** with expert lectures, popular science programs, and media engagement to elevate aerospace literacy.
- **Bridge Academia, Industry & Capital** by creating channels for research institutions, enterprises, and investors to collaborate and commercialize breakthroughs.

Highlights

- **Innovative Format & End-to-End Support**

Cross-disciplinary teams progress through a fully managed process—topic guidance, expert webinars, Q&A sessions, and online community forums—culminating in high-stakes finals.

- **STEAM-Driven Talent Cultivation**

Integrates Science, Technology, Engineering, Arts, and Mathematics via interdisciplinary workshops and technical tutorials.

- **Belt & Road-Centered Brand**

Partners with universities along the Belt & Road and leading global

aerospace institutions to foster inclusive, mutually beneficial exchange.

- **Post-Competition Empowerment**

Expert juries—including CNSA specialists and IAA academicians—select winning projects for targeted incubation, funding introductions, and potential flight tests.

ISSSP Organization Committee

Guidance unit

Chinese National Space Administration(CNSA)

Co-Hosts

Beijing Institute of Technology

Chinese Society of Astronautics

Asia-Pacific Space Cooperation Organization

International Academy of Astronautics

International Aerospace Science and Technology Innovation Organization

Supporter

China Space Foundation

Organizers

Beijing Ligong Genshu Technology Co.,Ltd

To ensure the professionalism and cutting-edge nature of the competition, the list of the organizing committee will be supplemented

with experts, leaders, and partners from government, universities, research institutes, and businesses during the preparation process of the event.

The organizing committee for the competition, known as the "International Space Science and Payload Competition Organizing Committee" ("Organizing Committee"), is jointly formed by the sponsors, guiding units and organizers,and co-organizers. The Organizing Committee is led by the Executive Committee and is responsible for the overall organization of the competition. The Expert Advisory Team, consisting of experts in the field of aerospace, provides comprehensive technical support and guidance.

Under the Executive Committee, there are subcommittees, including the Competition Review Committee, Competition Operations Committee, and the Competition Secretariat, responsible for the evaluation, operations, and communication and coordination of the competition, respectively.

Before the competition, the Executive Committee, Operations Committee, and Review Committee work together to determine the competition process, plans, and detailed rules. During the competition, they oversee the overall competition, participate in the preliminary and final evaluations, and manage ongoing operations. After the competition, the Review Committee, Executive Committee, and Operations

Committee are responsible for reviewing awards, presenting awards, and summarizing the competition activities.

If participating teams have objections to the evaluation results, they can submit a written inquiry application to the Organizing Committee Secretariat (secretary@isssp.org.cn) on behalf of their respective institutions and teams, authorized by the relevant student administrative department of their institution. The application should outline the appeal issues, reasons, and provide necessary supporting materials. The Review Committee will conduct a reevaluation, and the Executive Committee will make the final decision. In case of a tie in the final scores of participating projects that affects the determination of the number of projects advancing to the next round, the Review Committee will conduct a vote until a final result is reached. In the event of unforeseen circumstances requiring adjustments to the competition format, the Executive Committee will make the final decision, and the Operations Committee will notify all participating teams.

Key Information

- Slogan

A Shared Space for a Better Future

- Format

Online Global Preliminary + Onsite Final (TBD)

- Schedule

Events	Date
Register Openning	24 Apr, 2026
Deadline for Register	31 May, 2026
Preliminary Submission Deadline	30 Jun, 2026
Qualify for the Final	31 Jul, 2026
Community Building	Aug-Oct, 2026
Shortlisted Team Training	
Deadline for Submission of Final Work	31 Oct, 2026
Final Contest (TBD)	Nov, 2026

- Participants

Middle School Students Group(Invitation), University Students Group

Middle School Students Group: Mainland China Observation Team (Invitation) and Hong Kong/Macao middle School Students Team up to Participate, The Middle School Students Group will participate in Track 1, Creative Design of Space Experiments.

University Student Group: Open to global university students, including undergraduate, graduate, and doctoral students. University student teams may select one of the following three tracks:

Track 1: Creative Design of Space Experiments

Track 2: Innovative Design of Low Earth Orbit Space Science Payloads

Track 3: Innovative Design of Lunar Payloads

- Tracks

Track 1: Creative Design of Space Science Experiments

According to the environmental needs of the Space Station, The participating teams establish the objectives without referring to Technical Requirements illustrated in Appendix 5, then identify the corresponding scientific experiment requirements and formulate the design plan based on the environmental status of the space station.

Track 2: Innovative Design of Low Earth Orbit Space Science Payloads

According to the environmental needs of the Space Station and the technical requirements, the teams shall propose an innovative space payload design and build the principle prototype of the payload instrument or conduct simulation of the equipment. The Technical Requirements should be taken as the reference.

Track 3: Innovative Design of Lunar Payloads

Participating teams should develop innovative lunar payload designs based on their defined scientific research objectives, with encouragement to incorporate AI and other advanced technologies. Teams are expected to either build a functional prototype of the payload instrument or conduct equipment simulations.

- Awards & Supports

The number of awards for this competition is not fixed. In the finals, teams will be awarded based on their total scores as follows:

🏆 **Gold Award (≥90 points): CNY 50,000**

🏆 **Silver Award (80-89 points): CNY 10,000**

🏆 **Bronze Award (＜80 points): CNY 5,000**

Special Awards: Best Community, Poster, Hardware/Simulation, Presentation & Instructor

Further Support: Flight-test candidacy on CSS, ISS, lunar bases, and deep-space missions; priority in talent programs; introductions to investors; and access to academic resources.

Contact

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