



SECURE WORLD FOUNDATION

SWF is a private, endowed operating foundation dedicated to the secure and sustainable use of space for the benefit of Earth and all its peoples. SWF works with governments, industry, international organizations, and civil society to develop and promote ideas and actions for international collaboration that achieve the secure, sustainable, and peaceful uses of outer space.

OUR FOCUS

SPACE SUSTAINABILITY

Ensuring that all of humanity can continue to use outer space for peaceful purposes and socio-economic benefit over the long term.

SPACE POLICY AND SPACE LAW DEVELOPMENT

Promoting and assisting in the development of international and national norms, laws, and policies to foster responsible behavior by States and private sector actors.

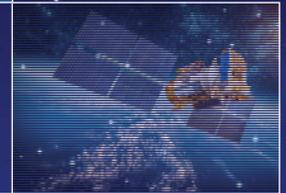
HUMAN AND ENVIRONMENTAL SECURITY

Promoting improved governance and international cooperation in the delivery of information derived from space systems, and promoting cooperative efforts for the protection of our planet from the threat of near-Earth objects (NEOs).



To learn more about the Secure World Foundation please visit www.swfound.org

SPACE COMMERCE AND SUSTAINABILITY



**PROMOTING COOPERATIVE SOLUTIONS FOR
SPACE SUSTAINABILITY**



EXPANSION AND INVESTMENT

The commercial space sector is in the midst of a worldwide expansion of actors, application areas, and business models. Over the last decade, private sector activities in space have grown considerably beyond the traditional markets of government service and satellite communications. The rapid commoditization of the underlying technology, easier access to capital, and the spread of a disruptive innovation ethos have combined to create a burgeoning commercial space industry.

GROWING APPLICATIONS AND SERVICES

- Earth observation constellations and analytics
- In-space manufacturing
- On-orbit servicing
- Partially reusable launch vehicle development
- Small satellite-based low Earth orbit communications constellations
- Space stations and space transportation
- Space mineral resources utilization
- Suborbital tourism

This growing level of activity offers the potential to expand global society's access to space technology, applications, and services, as well as the societal and economic benefits derived from that access.

CHALLENGES AND BUSINESS RISKS

The development of the nascent commercial space sector introduces important changes and challenges. Emerging business plans must take into account the policy and regulatory context in which they operate. Governments and multilateral bodies must recognize that new services and applications may outpace or challenge traditional and established legal, regulatory, and policy mechanisms for providing oversight of private sector activities.

POLICY ISSUES IN COMMERCIAL SPACE DEVELOPMENT

- Balance between the societal benefits of dual-use technology and the security risks
- Boundaries between commercial services and government functions
- Legal and regulatory context for new applications
- Regulatory efficacy, efficiency, and scale
- Space debris mitigation
- Space situational awareness
- Space traffic management
- Spaceflight safety

Addressing these and other challenges requires a cooperative decision-making environment. SWF facilitates discussion linking commercial perspectives and the international political system.

COOPERATIVE SOLUTIONS

As the commercial space industry brings ever more innovative business plans to life, SWF is working to foster a cooperative political environment where those plans can thrive, contribute to addressing humanity's grand challenges, and inspire following generations.

INTEGRATING COMMERCIAL PERSPECTIVES AND POLICY

New actors may benefit from lessons learned in order to most effectively operate in the regulatory regime. States may not fully recognize the impact of new services and applications being implemented by commercial space actors. Through research, workshops, panels, and other means SWF brings together disparate communities—technical, commercial, legal, policy—and works to improve links between the commercial space community and the means and fora by which international legal and policy regimes are updated or created.

SWF RESOURCES

For more information about our efforts and for additional resources related to SWF-supported events and workshops, please visit our website at www.swfound.org.



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