



Promoting Cooperative Solutions for Space Sustainability

SWF Handbook for New Actors in Space:

A Shared Resource for the Long-Term Sustainable Use of Space

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Secure World Foundation

- Secure World Foundation *is a private operating foundation* that promotes cooperative solutions for space sustainability
- **Our vision:** the secure, sustainable and peaceful use of outer space that contributes to global stability on Earth
- **Our mission:** 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 for the socioeconomic and environmental benefits to Earth

Countries Operating In Space

States Operating Satellites as of January 2015



- More than 70 nations, companies, or other organizations currently operate satellites

Source: UCS Satellite Database

- Will all these new actors experience the same “learning curve” as the legacy actors?
 - What lessons learned and best practices can be adopted?
- What sort of national policies and regulations should new spacefaring countries be adopting?
- How do we help maximize the benefits from new actors entering the space domain while minimizing potential sustainability challenges?

SWF Handbook for New Actors in Space

- **Proposal:** Create a publication that provides an overview fundamental principles, laws, norms, and best practices for safe, predictable, and responsible activities in space
 - Integrate legal, policy, and technical issues and perspectives
 - Provide concrete examples, but not attempting to be exhaustive
- **Two specific audiences:**
 - Countries developing space programs and/or having to oversee and regulate their first satellites
 - Universities and start-up companies that are developing/operating satellites

- Chapter 1: International framework for space activities
 - Freedom of access, exploration, and use
 - State responsibility and liability
 - International cooperation
 - Remote sensing and radio broadcasting
 - Frequency coordination
 - International export control
 - International standards
 - Space debris mitigation and space traffic management

- Chapter 2: National policy, administrative, and regulatory frameworks
 - Space policy
 - Rationales
 - Objectives
 - Interagency coordination
 - Oversight and control of private sector activities
 - Licensing
 - Regulation
 - Export controls and technology transfer
 - Spaceports

- Chapter 3: Best Practices for Sustainable Space Operations
 - Pre-launch
 - Payload opportunities and launch aggregators
 - Launch Services Agreements
 - Frequency allocation and coordination
 - Launch
 - Range safety
 - Deployment
 - On-orbit
 - Sources of space situational awareness data
 - Conjunction assessment and collision avoidance
 - Radiofrequency interference mitigation
 - End-of-life
 - Post-mission disposal

- Working with the space community to develop the content for the Handbook
 - Input on topics to include, particularly best practices
 - Feedback welcome: <http://swfound.org/handbook>
- Plan to publish first printed edition of the Handbook in 2016
- Phase 2 will be developing an electronic complement to the printed version
 - More details and examples of the topics and issues in the Handbook



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Thank You

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