

CELESTIAL NAVIGATION: SPACE ESSENTIALS FOR NEW ACTORS

SWF'S HANDBOOK FOR NEW ACTORS IN SPACE

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Meridian Center



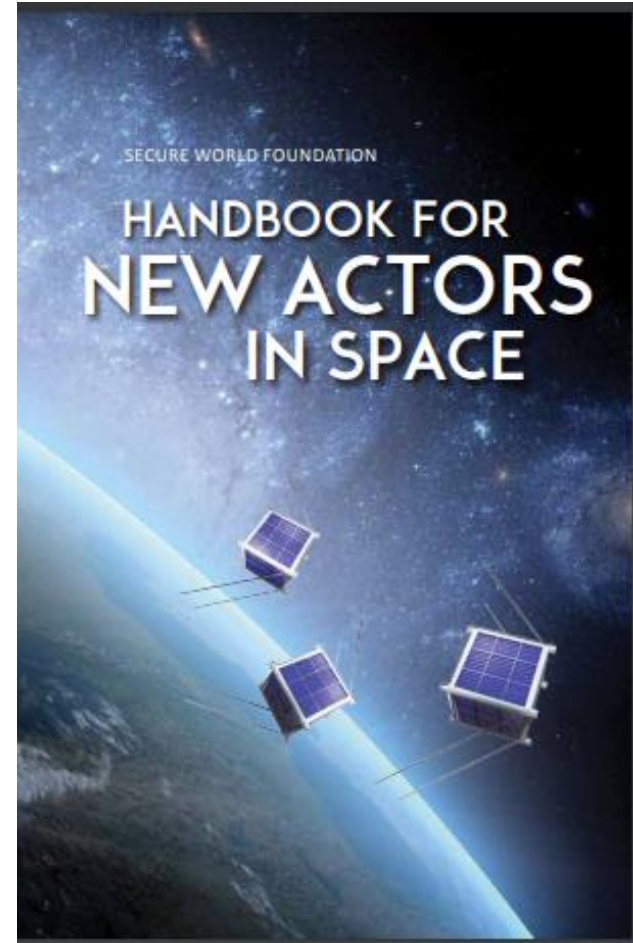
About Secure World Foundation

- **Secure World Foundation (SWF)** is a *private operating foundation* that promotes cooperative solutions for space sustainability
- **Our vision:** The secure, sustainable, and peaceful uses of outer space that contribute to global stability on Earth
- **Our mission:** Secure World Foundation works with governments, industry, international organizations, and civil society to develop and promote ideas and actions to achieve the secure, sustainable, and peaceful uses of outer space benefiting Earth and all its peoples



History of the Handbook for New Space Actors

- Published in February 2017
- Intended Audience: Governments, regulators, established satellite operators, start-up companies, universities, and other space actors
- Goal: Provide a broad overview of the fundamental principles, laws, norms, and best practices for peaceful, safe, and responsible activities in space
- Free copies available online and numerous options for hard copies



Translations

Three languages are available for the first edition:

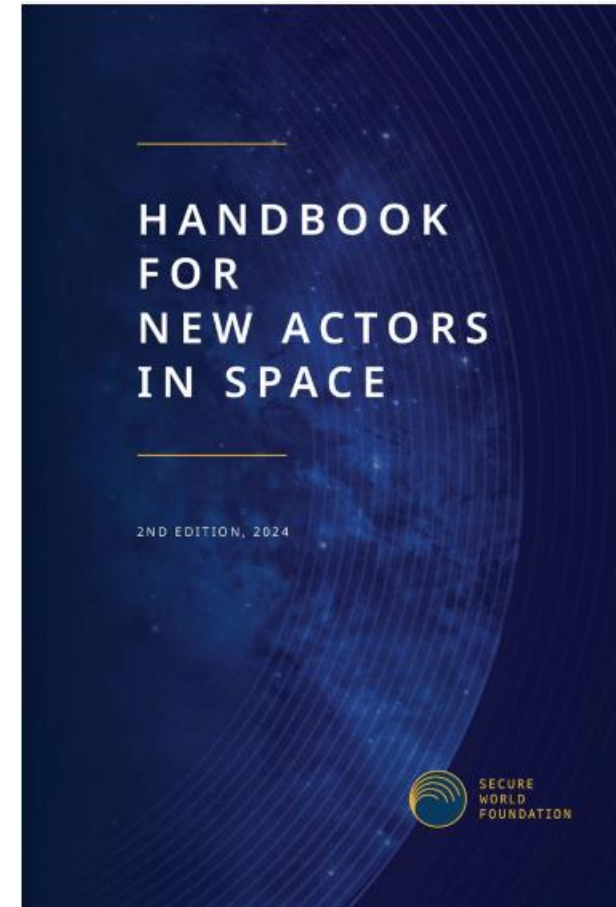
- Spanish (2020)
- French (2021)
- Chinese (2021)



We will be working with partners to translate this new edition as well. Please contact us if interested!

Introducing the 2nd Edition of the Handbook for New Actors in Space

- **Continued growth in space sector**
 - More actors, more investment, more satellites, more activities
- **Same goal as previous edition, but updated to account for new activities, trends, and data**
- **More online-friendly format**



Handbook Structure & Contents

- **Three Chapters:**

- The International Framework for Space Activities
- National Space Policy and Administration
- Responsible Operations in Space

- **Extensively revised content and new sections added**

- **Links to additional resources**

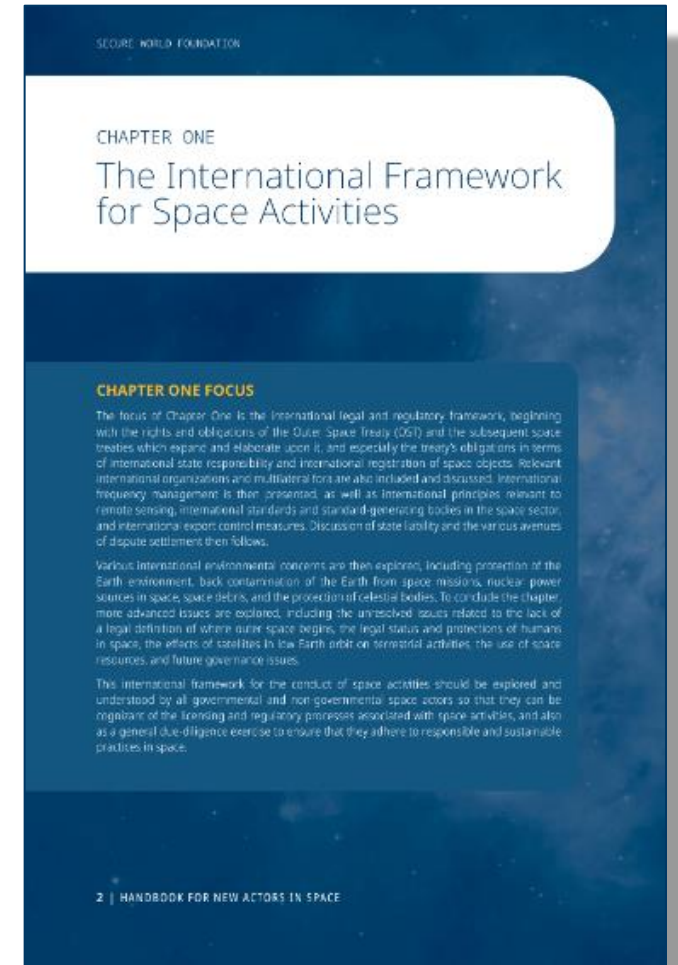
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Chapter One Updates

• New Sections:

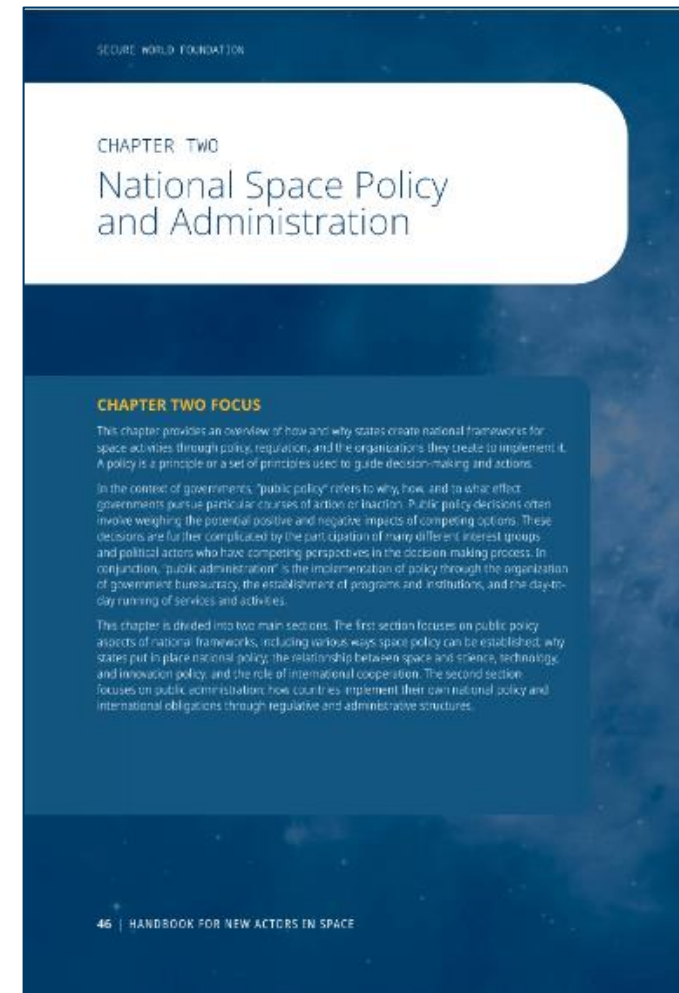
- UN COPUOS Guidelines for the Long-Term Sustainability of Outer Space Activities (LTS Guidelines)
- UN Online Index of Objects Launched Into Outer Space
- Wassenaar Arrangement
- Missile Technology Control Regime
- Hague Code of Conduct
- Dark and Quiet Skies
- Future of International Space Governance



Chapter Two Updates

- **New Case Studies:**

- Lunar Governance Initiatives
- Collaboration between Governments and Industry
- New Zealand's Space Regulatory and Sustainability Platform



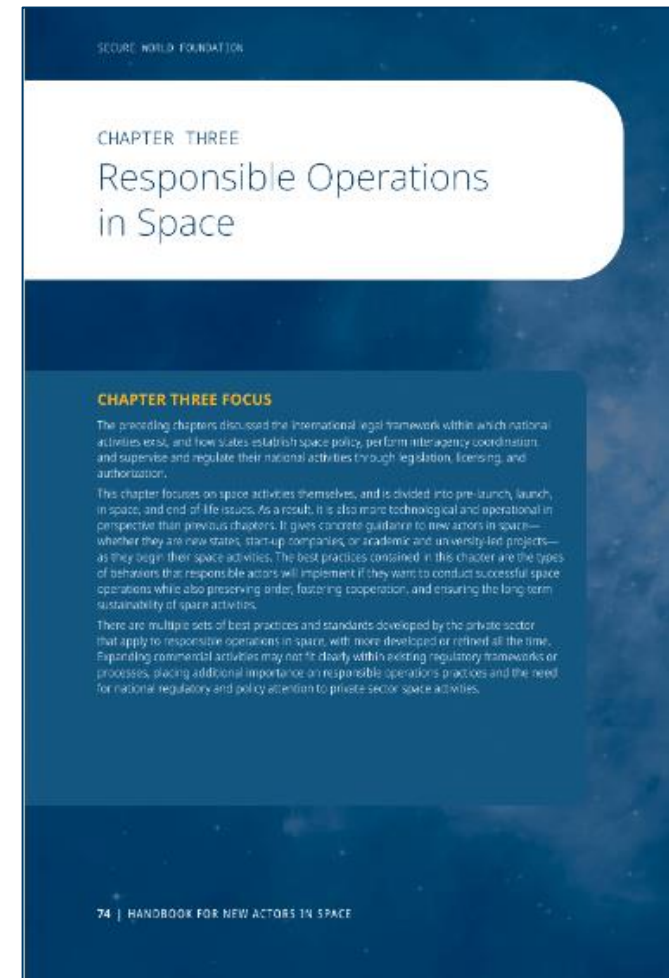
Chapter Three Updates

• New Sections:

- Orbital Carrying Capacity
- Potential Atmospheric Effects from Launches and Re-entries
- Sustainable Practices for Cislunar Space and Lunar Surface Operations
- In-Space Servicing, Assembly, and Manufacturing
- Commercial Human Spaceflight Safety

• New Case Studies:

- SpaceX Starbase 95
- Voluntary Best Practices for Space Safety and Sustainability
- Starlink Satellite Loss Due to Space Weather



Availability

- Download for free from the SWF website right now
- A limited number of printed copies is available here today
- Bulk orders can be made at [Amazon.com](https://www.amazon.com)
- Feedback is always welcome!



Acknowledgements

Thank you to the following!

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Thank You

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