Space Security Index 2017

Trust, Transparency, Accountability

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A shared understanding of space security

Secure and sustainable access to and use of space, and freedom from space-based threats

Fact-based research to promote ***transparency and confidence*** in space activities

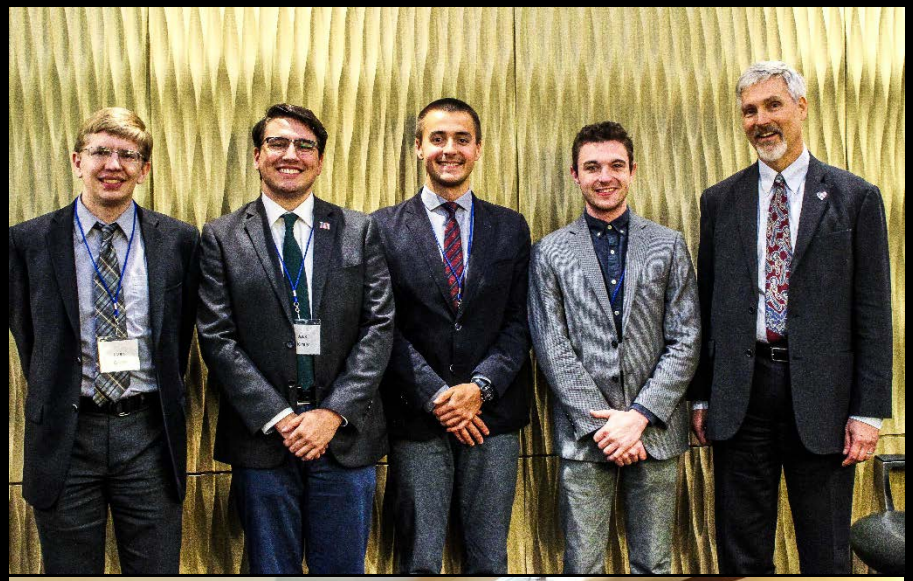
Theme 1: Condition of the space environment

Theme 2: Access to and use of space

Theme 3: Security of space systems

Theme 4: Outer space policies and governance

Research teams 2017

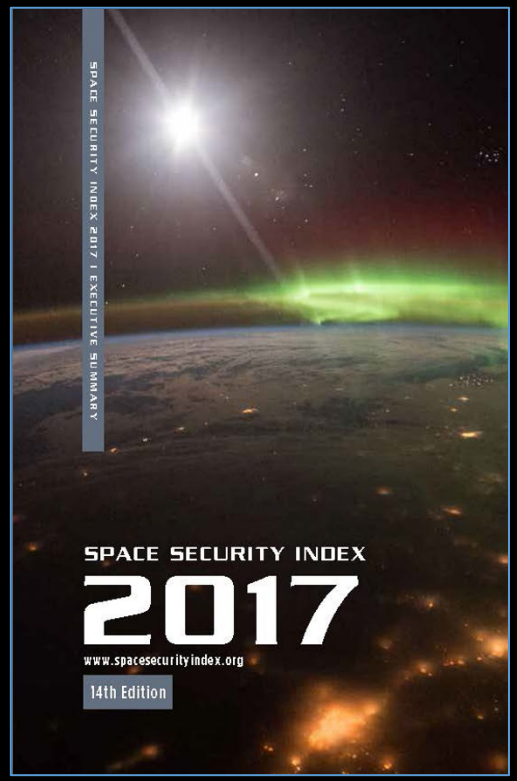


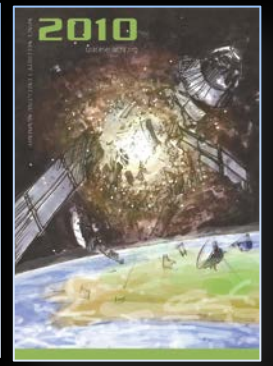
Space Security Working Group Meeting

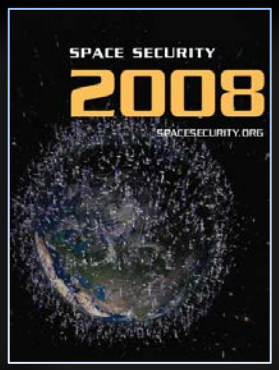
McGill University, Montreal, Canada

2-3 May, 2017

Space Security Index 2017: 14th Edition



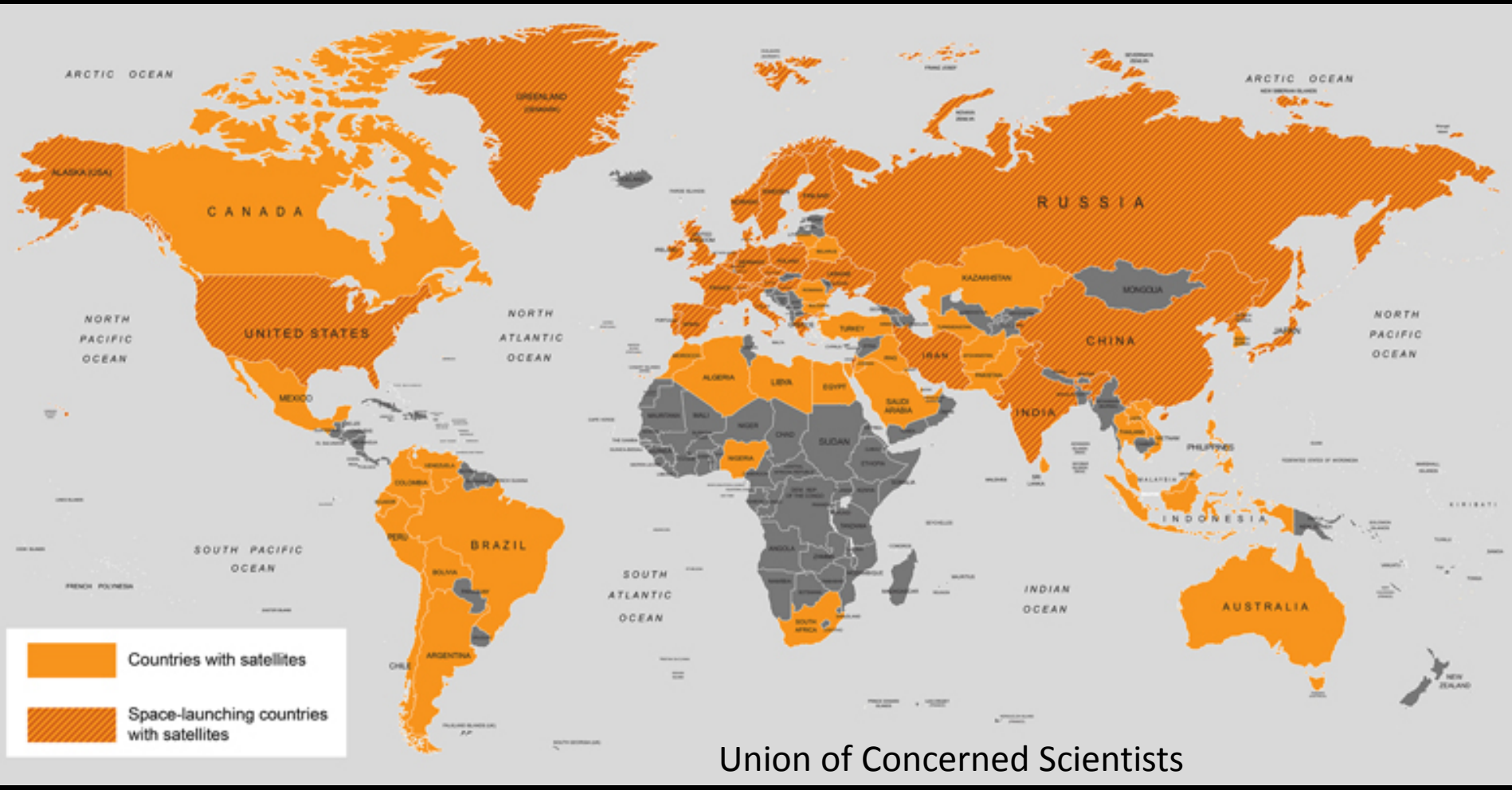




Space Security Index 2017: The case for comprehensive security

- Global participation in outer space
- Space as a driver of socio-economic development
- Growing link between human activities and the space environment
- Growing importance of space for national security purposes

Global participation in outer space

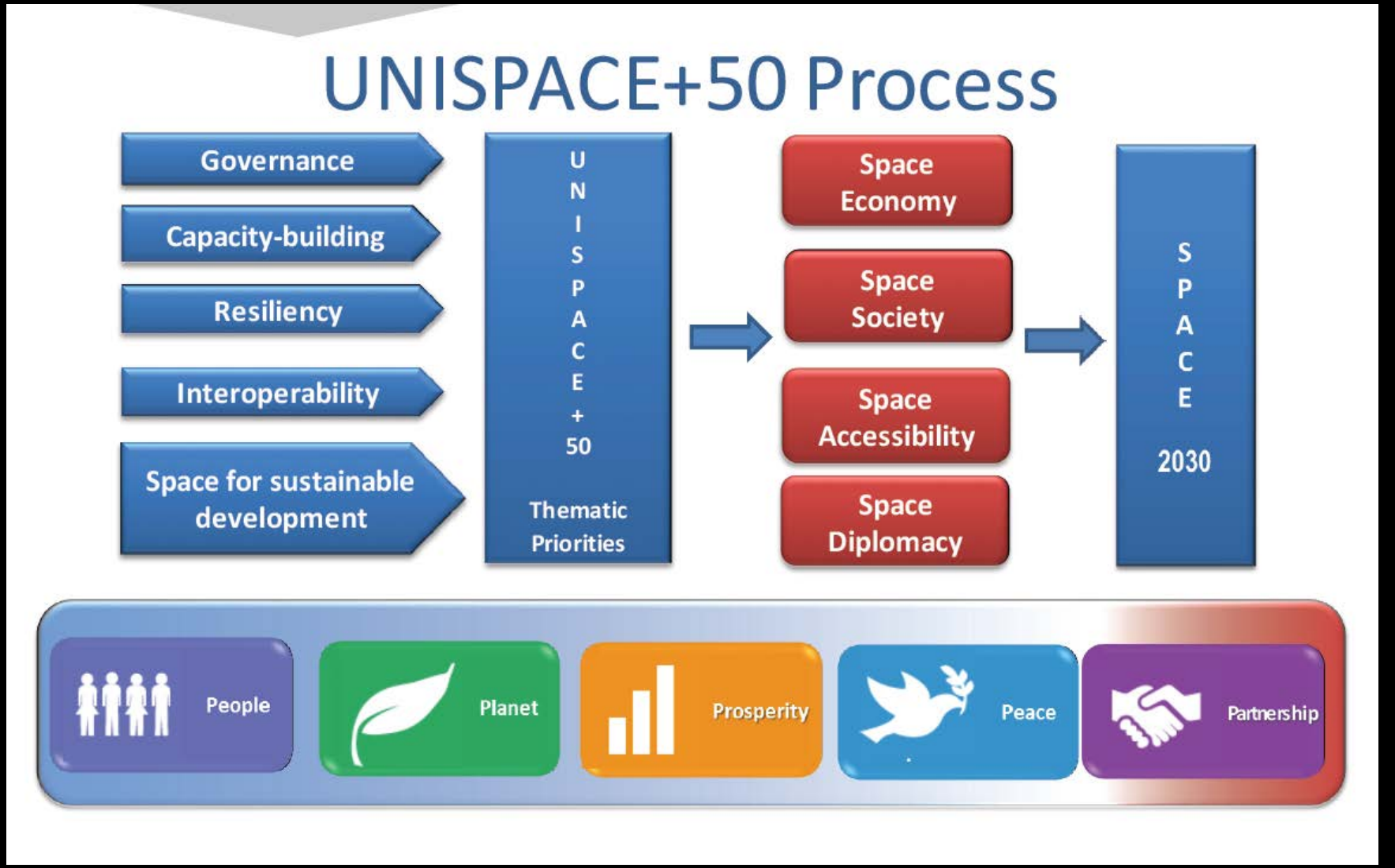


Union of Concerned Scientists

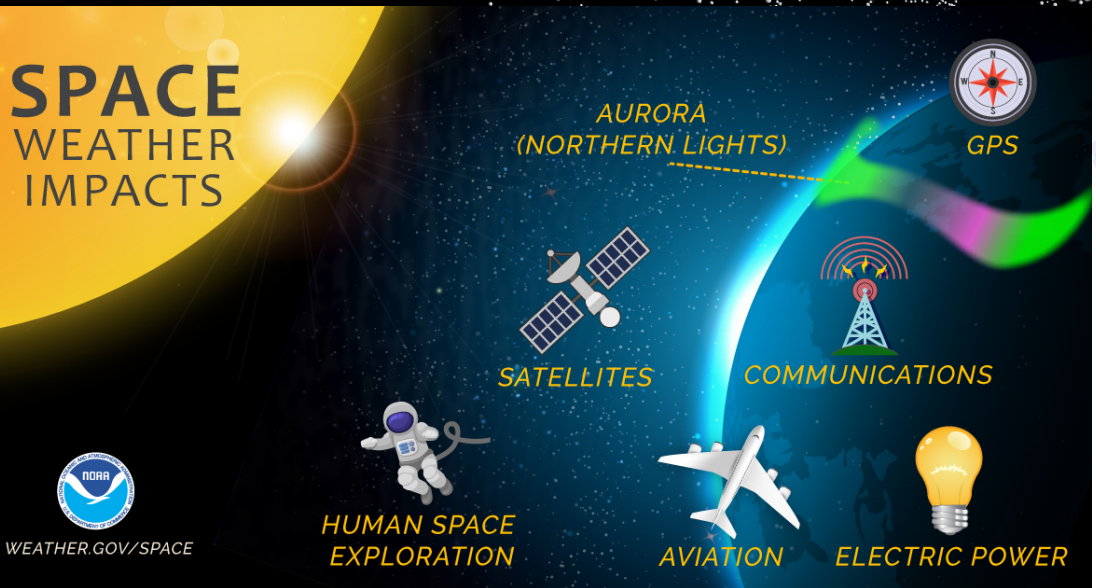
Number of Satellites 2017:

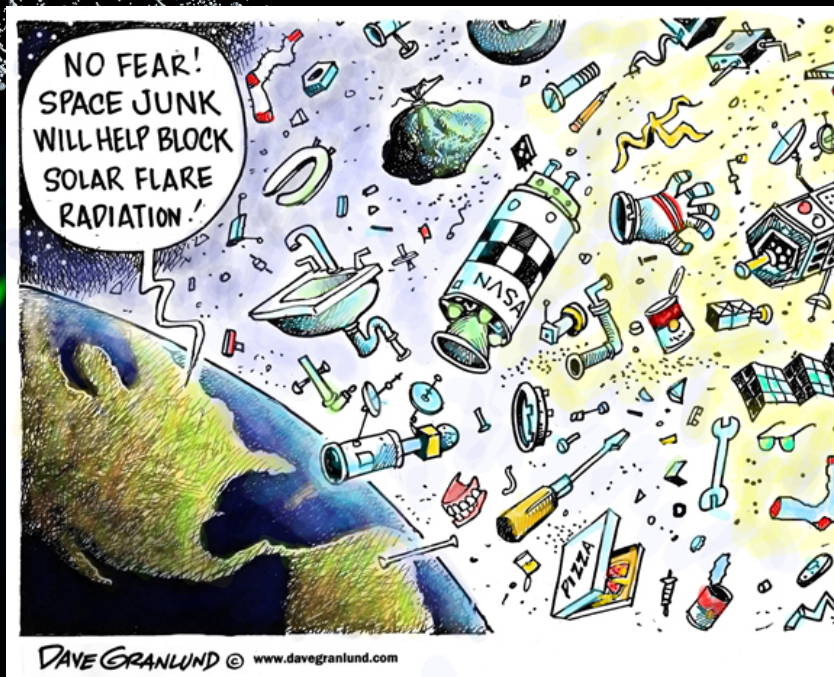
United States: 593 Russia: 135 China: 192 **Other: 539**

Space and socio-economic development

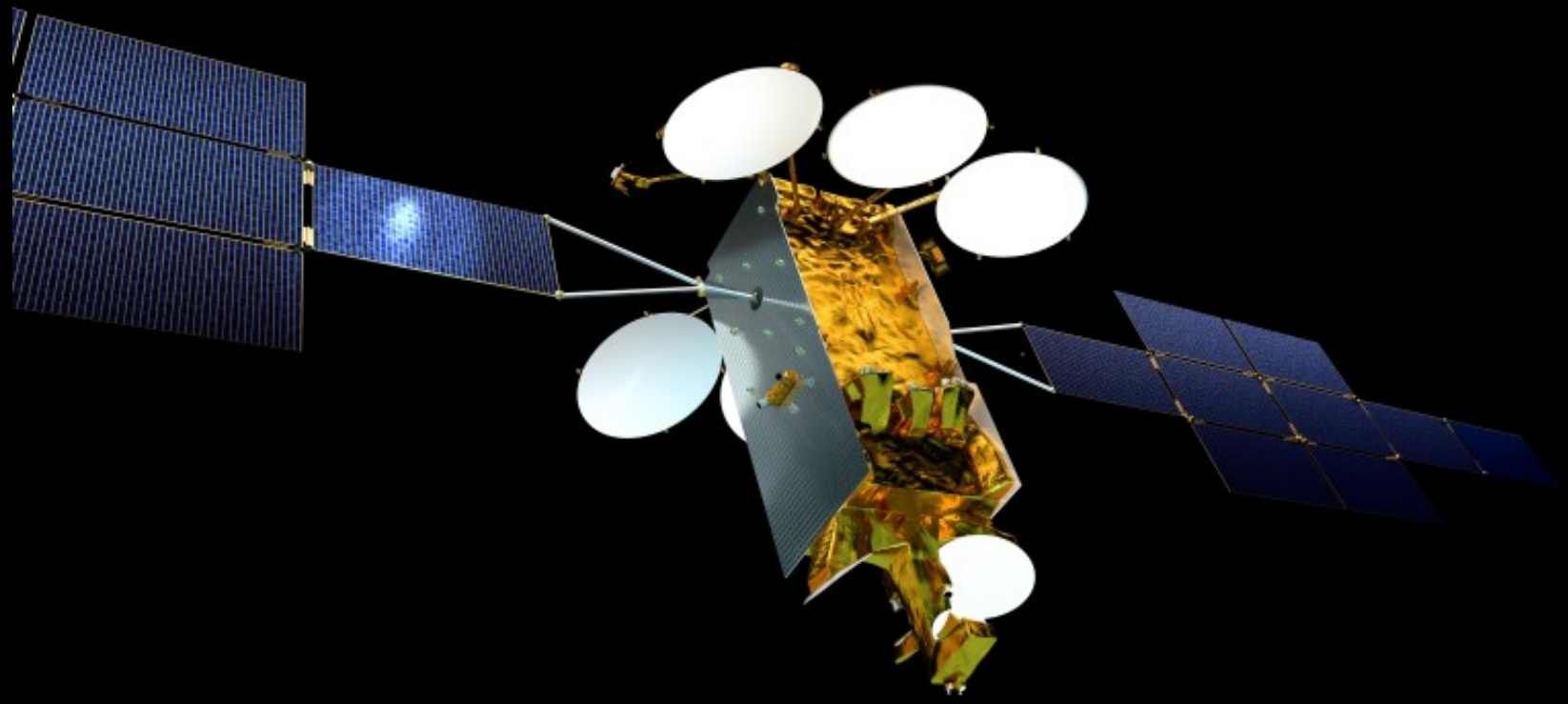


Human interaction with the space environment





Space and national security



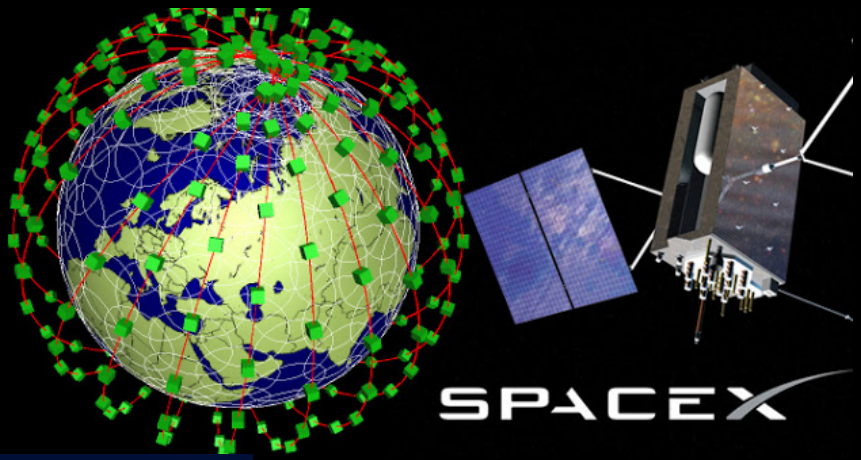
Approx. 358 dedicated military satellites 2016

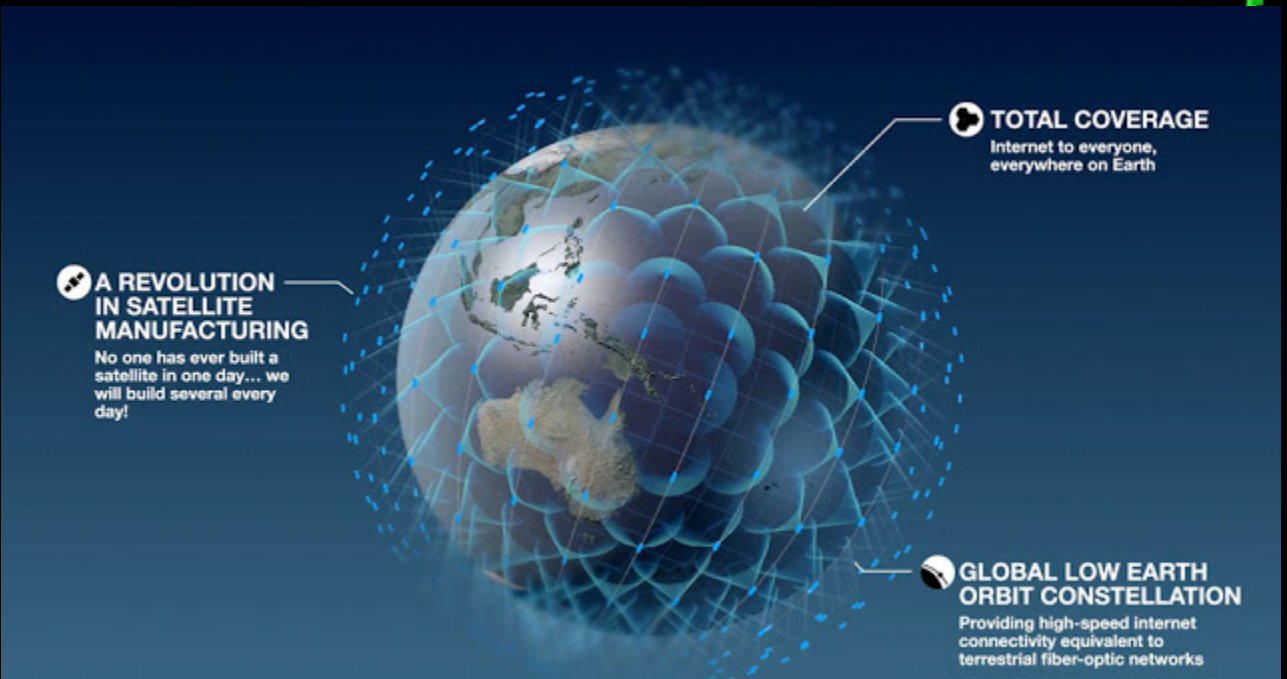
Space Security Index 2017:

Key Challenges

- Sustainability challenges: large satellite constellations
- New actors and uses: growth of private industry
- Strategic concerns: space as a warfighting domain
- International governance lags

Large constellations of satellites





Sustainability challenges

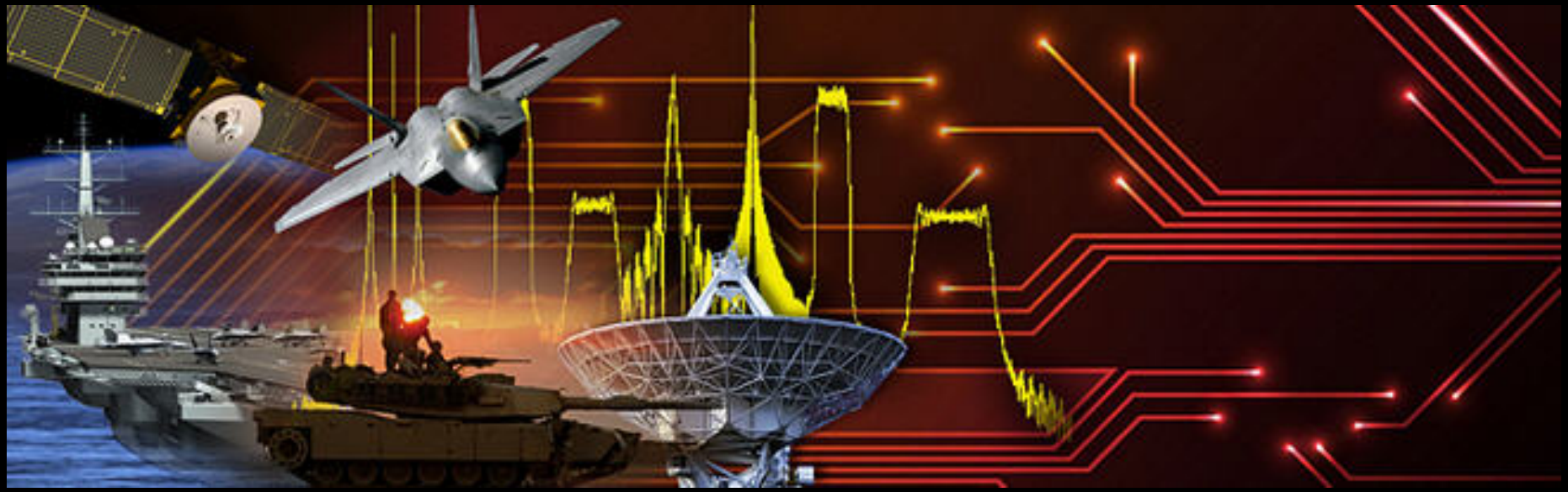
- Magnitudinal increase of *active* satellites in orbit
- Challenges governing equitable use of resources
- Insufficient compliance with debris mitigation
- Inadequate space traffic management

Private actors in space

Governing new actors/activities

- Large Internet companies shift gaze to space
- Private actors in space:
  - Human space flight
  - Resource extraction
- New questions about space principles, laws, regulations, responsibilities

Space as a warfighting domain

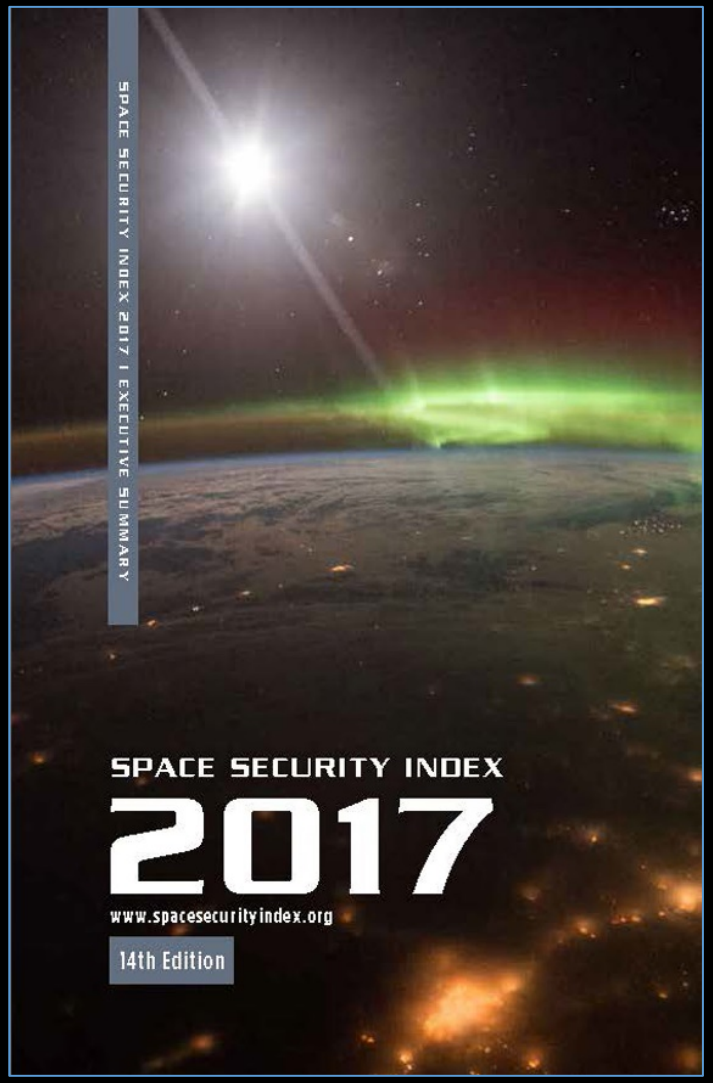


Strategic challenges

- Advancing technologies for the use of force in space
- Shift in military space strategies and priorities
- Failure to consider limits on the use of force

Governance: a fragmenting regime

Thank-you



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