Space Innovation and Its Governance From the Science, Technology & Innovation Policy Perspective

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Changing nature of STI

- Shifting
  - Discipline-based S&T ➡ Multi-, Inter-, Trans-disciplinary
  - Division of labour (scientist, engineer, entrepreneur, producer, consumer, citizen) ➡ Interactive, cooperative
  - Individual entrepreneurial action ➡ More concerted, collective, combinatory, networked action
  - Economic impact ➡ Social impact
- This, in a ever changing economic framework
  - Data-driven economy, Internet economy, on-demand economy, shared economy, platform economy
- And at the nexus of Science, Technology and innovation
  - Space economy, Bioeconomy, Ocean economy

Rationale for government involvement

- Exploration of the space
- Scientific endeavor
- Space-based services
  - Communication, remote sensing, earth observation services, navigation and location-based services, …
- As a mean to address global challenges
- Military application
- And encouraging business development

Policy challenges

- From The Space Economy at a Glance 2014 (OECD)
  - Globalisation of the space sector
  - Democratisation of space
  - Increased socio-economic impacts from space investments

- From the 5th Science and Technology Basic Plan
  - Positioning
    - Potential to expand the frontiers of human activities
    - Importance of space for security and civilian applications
  - Technology efforts in
    - Satellite positioning, satellite remote sensing, satellite communications and transmission, space transport systems, space science and exploration, manned space activities, and assessing space conditions
- Challenges
  - Space for new actors?
  - International collaboration in an ever-changing geopolitical environment?