



SPACE ECONOMY

Advancing Sustainable Economic Growth through Space

Prof. Heidi Kuusniemi, Tampere University and National Land Survey/Finnish Geospatial Research Institute



University of Vaasa
VAASAN YLIOPISTO



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FINNISH METEOROLOGICAL INSTITUTE

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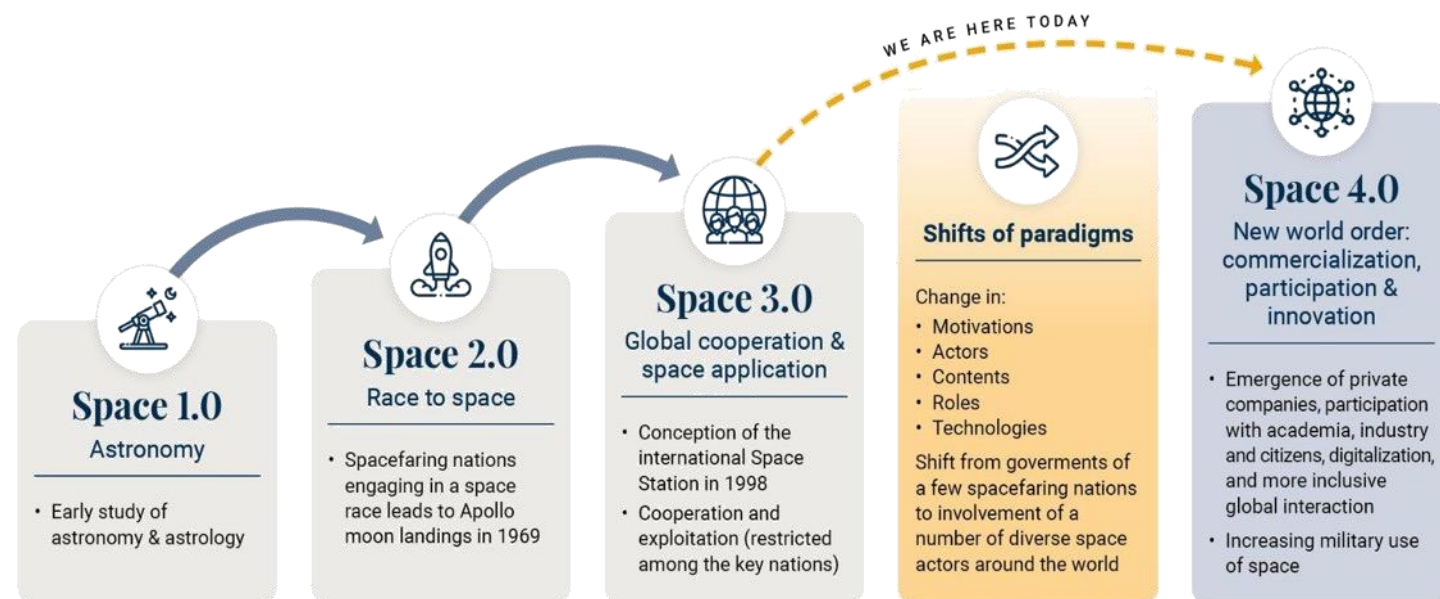
What is SpacEconomy? (1)

The academic world laid the foundation for Finland's space activities, including the first satellites and the spin-off companies that emerged from them.

Companies have received significant venture capital funding, but the amount of academic space research has declined – coinciding with the dawn of a new era in space utilisation.

The SpacEconomy project is creating a foundation for a new "new space" by bringing together science, industry, and the public sector to boost the space economy.

- AI-driven EO and GNSS solutions to support decision-making
- Sustainable business and governance models / how do we create value?
- International partnerships and competitiveness
- Ethical and responsible regulation and resilience
- Support for expertise, space awareness, and citizen participation



We aim to address the challenges

- Fragmented field and lack of cohesion among actors
- Shortage of experts
- Limited integration of societal and regional perspectives

What is SpacEconomy? (2)

The project combines **technology and space science, business studies, administration, social sciences, and communication.**

The SpacEconomy consortium includes:

- Tampere University (coordinator, Heidi Kuusniemi et al)
- University of Vaasa (Helka Kalliomaäki et al)
- Finnish Meteorological Institute (Jouni Pulliainen et al)
- University of Helsinki (Minna Palmroth et al)
- Aalto University (Jaan Praks et al)
- University of Turku (Marikka Heikkilä et al)
- National Land Survey of Finland (Hannu Koivula et al)
- Kupla Productions Oy (Jari Mäkinen)

The first funding period is from October 2025 to September 2028 (3 million euros) with an option for a second period from October 2028 to September 2031 (3 million euros). The funding is provided by the Strategic Research Council of Finland.

It is one of ten projects under the SKILLS and WELEC programs (total funding 29 million euros).



SpacEconomy project work packages 1-3

- WP1 builds the **space data ecosystem** by integrating open Earth observation and satellite positioning data into AI- and machine-learning-driven pipelines for advanced visualization and analysis. Led by Professor Johanna Tamminen, Finnish Meteorological Institute.
- WP2 develops **science-based education to** address the growing skills gap, fostering collaboration and synergies among educational institutions. Led by Professor Emilia Kilpua, University of Helsinki.
- WP3 promotes **productivity growth and the development of business models and innovations** in Finland, with international networks such as Winter Satellite Workshop, ESA BIC, and ESA Phi-lab. Led by Professor Jaan Praks, Aalto University.

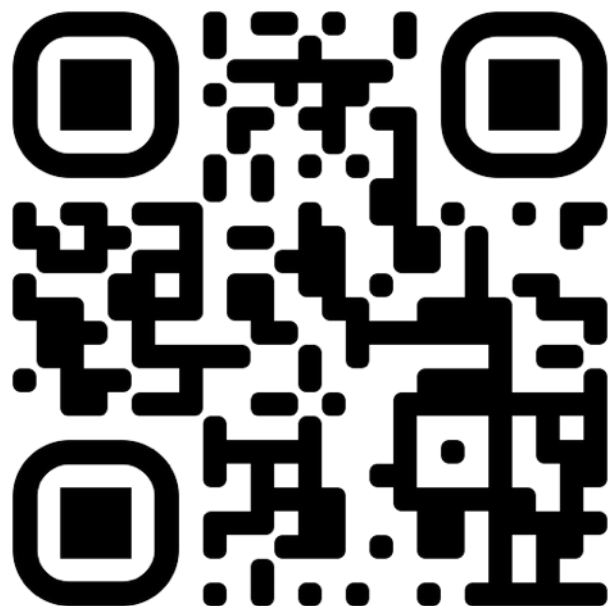
SpacEconomy project work packages 4-6

- WP4 focuses on **sustainable space economy governance**, integrating results from other WPs into a national roadmap through co-creation with stakeholders from government, industry, academia, and citizens. Led by Professor Arto Ojala, University of Vaasa.
 - Currently ongoing: Benchmarking space ecosystems in Japan & Indonesia. An edited **book, "Space Business – The Ecosystem" will be published in the end of 2026**. The book includes **practical insights** on space business.
- WP5 **strengthens national resilience and preparedness** by safeguarding critical space-based services, particularly Positioning, Navigation and Timing (PNT) and Earth Observation (EO), against natural, technological, and intentional disruptions. Policy recommendations will address space resilience and space debris monitoring and management. Led by professor Hannu Koivula, National Land Survey of Finland.
- WP6 uses **futures research and citizen engagement** to assess long-term impacts of space economy development on societal well-being and public services, with case studies on regional growth, environmental resilience, and infrastructure security. Led by Research Director Marikka Heikkilä, University of Turku.

SpacEconomy project work packages 7-8

- WP7 manages **project interaction and dissemination** through workshops and events. Communication and engagement led by SpacEconomy projects interaction coordinator Jari Mäkinen, Kupla Productions Oy.
- WP8 supports all WPs through **project administration and coordination**, steering group work, reporting, open science practices, and risk management. Led by Principal Investigator of SpacEconomy project, professor Heidi Kuusniemi, Tampere University.

For more information



www.spaceeconomy.fi

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