



## SIRIUS SPACE TALKS'25 12<sup>th</sup> SPACE BUSINESS CONFERENCE

# Dilemmas in the Space Ecosystem: Threats and Opportunities

Toulouse, Friday 5 December 2025











# **Objectives**

Organized by the *SIRIUS Chair*, the conference aims at discussing recent, original and unpublished contributions to the understanding of current space business issues and their consequences for modern economies and societies.

This year's theme is **Dilemmas in the space ecosystem: threats and opportunities**.

## Context

In the mid-2000s, the space ecosystem entered a new era characterized by the acceleration of outer space commercialization. Several socio-technical disruptions emerged, among which new technologies, new policies, and new markets represent the most influential drivers (including satellite miniaturization, Internet access from space, fixed-cost contracts, and public-private partnerships). Reinforcing each other, these multiple disruptions triggered a powerful mechanism of creative destruction that no one can ignore today in the ecosystem.

Disruptions in the space ecosystem established an uncertain context marked by numerous dilemmas for all space organizations, including incumbents and new entrants. Adaptation strategies for incumbent organizations now face many uncertainties. Moreover, strategic foresight and scenario planning have become more challenging as technical and commercial knowledge becomes obsolete more quickly (e.g., sales forecasts).

The long tradition of the space industry being shaped by large organizations, such as space agencies, has also been disrupted by the acceleration of outer space commercialization, leading to unusual business cycles. New actors, driven more by economic performance, can now shape trajectories in the space ecosystem, though prestige and defense remain key objectives for all. Moreover, the space ecosystem is now also impacted by sustainability issues (including space debris and taxonomy), which increase the cost of space technologies and might ultimately hinder access to space, as illustrated by the Kessler syndrome.

The mechanism of creative destruction induced by disruptions also brings opportunities for both incumbents and new entrants. Space organizations are developing more vertically integrated value chains with high potential for performance improvement (e.g., launcher manufacturing). Space technologies also increasingly exploit the advantages of electronic component miniaturization. These developments drive cost reduction and are supported by the progressive relaxation of institutional constraints, including NASA's COTS program and ESA's geographical return rule.

The space ecosystem is also witnessing the emergence of new markets and the entry of new customers, driven by the growth of private investment and institutional budgets. Manufacturers engaging in servitization can expand their activities toward new customers in both developed and developing countries (e.g., EUSPA and other new space agencies). New









business trajectories are further supported by green space innovations and socioenvironmental criteria in public tenders, contributing to sustainability efforts on Earth and in space (e.g., climate change monitoring, space debris tracking).

The opportunities and threats shaping the current space ecosystem manifest at the macro level but also at the meso and micro levels, where national and regional ecosystems vary in terms of innovation and performance. More recently, the need to develop technological sovereignty has rapidly emerged as a powerful driver in the space ecosystem.

The conference aims to explore the dilemmas in the space ecosystem by examining both the threats and opportunities arising from creative destruction.

## **Key Themes**

We encourage researchers to submit papers on the following themes but also welcome proposals on other related topics relevant to the conference.

#### 1. Disruptions and Adaptations in the Space Ecosystem

Examining how traditional and emerging stakeholders adapt to disruptions, including consolidation trends, technological changes, and the intellectual property rights.

#### 2. Future Trajectories and Scenario Planning for Space

Analyzing risks, opportunities, and prospective developments shaping the global space ecosystem, with a focus on foresight and strategic planning for the next decades.

#### 3. The Evolving Role of Civil Agencies and Defense Priorities

Exploring the evolving role of civil agencies and defense bodies in shaping the space ecosystem, including enhanced support for SMEs, the expansion of public-private partnerships, international cooperation, and the pursuit of sovereignty in defense and security.

#### 4. Innovation Ecosystems and Geographic Hubs

Exploring the spatial and institutional dimensions of space innovation, highlighting the role of regional and national ecosystems, startup clusters, and innovation hubs in driving advancements in the industry.

#### 5. Sustainable Space

Addressing the managerial, economic, political, and legal challenges of ensuring long-term sustainability in space activities.









# **Participants**

The conference will feature academic contributions.

We especially encourage the submission of state-of-the-art research papers and papers from scholars and PhD students in business, management, economics, political science and law.

## **Practical information**

The conference will be held in Toulouse on Friday 5 December 2025.

Papers should be received by **30 June 2025** (extended abstracts will be considered, but full papers are more likely to be accepted).

A notification of acceptance will be given on **25 August 2025**.

Participants are invited to submit papers by e-mail to <a href="mailto:spacetalks31@gmail.com">spacetalks31@gmail.com</a>

Attendees only are invited to pre-register by e-mail to <u>spacetalks31@gmail.com</u> before **5 November 2025**.

## **Registration fees**

Registration fees waived for speakers, special rates for certain other attendees.

## **Organizing and scientific committee**

Victor Dos Santos Paulino (TBS Education, SIRIUS Chair), Lucien Rapp (University Toulouse-Capitole, SIRIUS Chair), Alexandre Garus (Thales Alenia Space), Laurent Deroin (CNES), Gilbert Griseri (Airbus Defence and Space), Marie-Clotilde Runavot (University Toulouse-Capitole, SIRIUS Chair), Aveline Cloitre (TBS Education, SIRIUS Chair), Zouheir EL KAWAS (TBS Education, SIRIUS Chair), and Research Network on Innovation (RNI).

The conference is organized by the SIRIUS Chair, which has been conducting research in business and law applied to the space sector since 2013. For more information visit our website: <u>https://chaire-sirius.space/en/</u>

This conference is also supported by the Research Network on Innovation, founded in 2006, which aims to develop a better understanding of innovation phenomena. For more information visit <u>https://rri.univ-littoral.fr/en/home/</u>









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