



The 16th ESPI Autumn Conference

After two years of online and hybrid conferences, the **16th ESPI Autumn Conference** was held in person at the Urania Observatory in Vienna, Austria on the 11th and 12th of October 2022.

During the two days, **more than 120 participants from 25 countries** interacted through panel discussions, and dedicated networking events. Amongst the participants, **45% were representatives of private entities** (industry, investors, entrepreneurs), highlighting the increased importance and interest of private actors, **30% represented public institutions** (space agencies, innovation agencies, ministries), and **20% represented academia** (including the next generation).

The selected theme of "**Space Economy and Commerce: The way ahead for Europe**" was addressed through three panels and several keynote addresses. The conference discussed ways **public policy frameworks and ambitions** can best leverage and build upon the momentum commercial solutions are providing to European space activities and further supporting European leadership on global markets.

The ESPI team has identified a number of **key messages** presented below.

European ambition and objectives

- Europe does not have the capital market pool and public spending levels needed to reproduce the US environment, and should hence not try to replicate other systems, but rather **tailor its own**, with seed elements discussed in ESPI's Report [Evolution of the Role of Space Agencies](#),
- Public policies and programmes targeting commercialisation need to consider the **full life cycle of commercial ecosystems** – from initial grants and prizes, through baseline demand generation and contractual commitments, to self-sustaining markets.
- **Autonomy and resilience** can be at risk without a substantial increase in budgetary allocations and without an integrated vision on wider public policy objectives (e.g. climate and security), both highlighted in ESPI Reports [Space in Support of Security Missions](#) & [Green applications of space-borne sensing on the rise](#).
- To develop vibrant innovation ecosystems the level of private investment that can make a difference should be **reflected in billions, not millions**.
- The level of public and private investment in Space and deep tech should reflect time scales beyond the current macro-economic environment and consider a **7-10 year outlook**.
- Given its heritage and proven commercial success, Europe needs to **seize the opportunity** as emerging space markets are expected to grow further.
- There is a need to better gauge consistent and thorough statistics and analysis on the **size and impact of the space economy** at European, but also national levels.

Building on heritage, leveraging change

- Europe has a heritage of commercial success on global markets, yet both public and private actors alike need to **adapt to unfolding transformations**. To ensure European prosperity within an increasingly commercial & competitive environment Europe should define ambitions in view of global developments as highlighted in ESPI's Report [European Space Strategy in a Global Context](#).
- An environment where commercial solutions are increasingly available allows public actors to adapt their roles, enabling them to become **less risk-averse and increasingly fast-paced**.
- Europe needs to consider the whole industrial spectrum, **from early-stage start-ups through midcaps to primes**, with public actors tasked to leverage industrial assets.
- Procurement schemes (e.g. anchor tenancy, launching customer) and business models cannot always be mirrored across different markets and organisations as they are **dependent on market & technology maturity and industrial policy objectives**.

- Given its heritage, Europe needs to **seize the opportunity** as space is increasingly becoming a key enabler of digitalised environments that integrates space at the core of our societies across different industry verticals (automotive, logistics, energy, healthcare, finance).

Space - a key enabler of growth across different industry verticals

- We can anticipate increased uptake and blending of space-based services at the **heart of our digital infrastructure**, with space solutions integrated into all aspects of society and the economy.
- Space solutions are poised to become a key asset for the future of non-space industries with (e.g.) **non-terrestrial connectivity** playing a crucial role in user-driven applications (e.g. autonomous mobility).
- The space-enabled connectivity market is expected to reach **\$16 billion in 2030** (without including downstream markets), with LEO taking around 50% of that market and projected to grow 2.5 times faster than the overall market.
- Non-space industries are increasingly able to **integrate space into their products and solutions** due to decreased costs as well as the emergence of new business models.

Mobilising forces within a multi-stakeholder environment

- Private investment is increasingly supporting innovation dynamics, allowing industrial actors to develop and implement their own vision, and in turn, **disrupting traditional public-private relations**.
- Over the past six years, there has been a consistent acceleration in the level of private investment with a **55% CAGR between 2014-2021**, as reflected in ESPI's Report [Space Venture Europe 2021](#). The importance of private capital is progressively embraced by public actors, while private actors are simultaneously leveraging public schemes to mould their investment strategies.
- We need to consider the crucial role the **next generation** is poised to play in future commercial space ecosystems – with industry, in particular legacy actors, already exposed to a talent shortage.

Key Challenges



Building on this year's success and given ESPI's 20-year anniversary – we look forward to welcoming an inspiring and informed space policy community at the 17th Autumn Conference - addressing "Space governance: public and private objectives in a multi-stakeholder environment".