



Where is the space industry heading?

HIGH ECONOMIC GROWTH

Space industry expanding +7% per year over the last 13 years

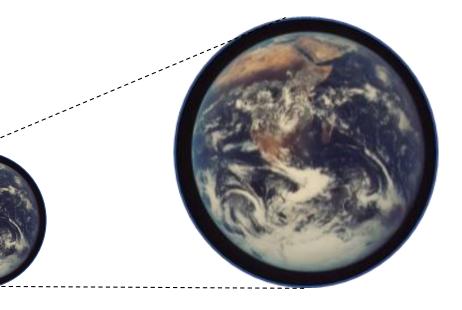
NEW SPACE TREND

Markets with **PAYING CUSTOMERS** & companies using **PRIVATE INVESTORS** to fund expansion plans.

CHALLENGES FOR EU SPACE INDUSTRY

- +Europe has top-notch space R&D and skills
- Lags behind in building **VIABLE BUSINESSES**
- EU space companies rely on procurement and grants
- Low VC investment levels, hard for SMEs to access growth finance

GLOBAL MARKET VALUE



€350bn today

→ €1000bn in 2040

Morgan Stanley: "Space: Investing in the Final Frontier" (2017, 2019)



Why support space entrepreneurship?

New products and services:

• Digital services based on space data, information and services

New business models:

Commercialisation of space

New financing schemes:

Increasing role of venture capital funds



Space entrepreneurship actions 2016-2020

Hackathons - competitions to develop new ideas for applications

- Galileo Applications using positioning services
- Copernicus Earth observation applications

Prize competitions

- Copernicus Prizes, Galileo Prizes
- My Galileo App, Farming by Satellite Competition, etc
- EIC Prize on a Low-cost Space Launch (published in 2018, to be awarded in 2021)



Accelerators and Incubators

 Business advisory and mentoring for entrepreneurs: Copernicus and Galileo separately

Seed and growth funding

 InnovFin Space Equity Pilot – a dedicated space fund implemented by EIF and private venture capital funds (2020)



Rationale for CASSINI

New markets

Improving business skills

Investment readiness

Capital markets

Value creation by startups and SMEs with a faster road to market

Business acceleration with a focus on sales and revenue growth

Prepare startups to raise VC funding, learn pitching and VC negotiations

Increase number of VC funds with focus on space

Creating new market segments for commercialization of space data

Collaborating with Business Accelerators in digital services, cloud and SaaS

Matchmaking with VC investors and large industrial companies

Make European space SMEs an attractive and profitable segment



CASSINI 2021-2027-OVERVIEW

THE ROAD TO NEW SPACE

- Clear vision for European space businesses and markets
- New industry setup
- New entrants
- New private investment
- New markets
- New solutions

PROMOTION

CASSINI Hackathons & Mentoring INNOVATION
COMPETITIONS
CASSINI Prizes

INVESTMENT

CASSINI Seed and Growth Funding Facility (InvestEU)

MATCHMAKING

CASSINI Matchmaking with Investors
CASSINI Industrial Partnering

BUSINESS GROWTH

CASSINI Business Accelerator

IOD/IOV

CASSINI In-Orbit Demonstration and Validation

EU SPACE CASSINI Hackathons & Mentoring

Hackathons and Mentoring 2016-2020

- Reached a large audience in total
- Many participants developed their prototype ideas further

CASSINI Hackathons and Mentoring 2021-2027

- + Large European events in 10 locations simultaneously
- + Teams building prototypes on data from Copernicus, Galileo & other sources
- + Online pitching & award ceremony
- + Considerable communication efforts





CASSINI Prizes

INNOVATION COMPETITIONS

Current Prizes and Innovation Competitions

- The first EIC Prize on Low-cost Space Launch to be awarded 2021
- Recognition prizes: MyGalileo App, Joint Copernicus & Galileo Prizes

CASSINI Prizes 2021-2027

- + Challenges both for space technology ("upstream") and for digital applications based on space data ("downstream")
- + Prizes will spur new innovation through well-defined challenges
- + Prize reward will help winning companies to raise further investment



EU SPΛCE CASSINI Business Accelerator

Business Growth activities 2016-2020

- Galileo Accelerator, Copernicus Incubation, Copernicus Accelerator
- Many participants made market development progress

CASSINI Business Accelerator 2021-2027

- + Commercialisation of digital services on space data
- + Connect to a variety of markets --> revenue growth
- +Implemented with Europe's sharpest business accelerators





CASSINI Seed and Growth Funding Facility

Current SEED FUNDING support

- No targeted seed investment support for space companies
- Space startups have difficulties reaching "Series A" venture capital round
- Too few private investors in space segment; not yet profitable & recognized

Current GROWTH FUNDING support

- Commission's InnovFin Space Equity Pilot boosts 4 European VC funds via EIF in 2019-2020
- Good start, but all money will be spent in 2020
- Need for a 10-year perspective on Europe's aims



CASSINI Seed and Growth Funding Facility

- + Target: €1 billion **EU Space Investment Fund** dedicated to early- and growth-stage companies
- + Implementation: InvestEU and EIF
- + Objectives: Attract more VC funds & space companies to raise VC financing
- + Requirement: Space Programme provides a budget contribution ("blending") to InvestEU
- + Leverage: EIF adds capital + private funds

CASSINI Matchmaking

Current matchmaking activities

• Matchmaking events 2018-2020, e.g. EU Space Week, MyGalileoApp and Copernicus Accelerator

CASSINI Matchmaking with Investors 2021-2027

- + Make companies investment-ready
- + Broaden companies' networks and provide leads to investors

CASSINI Matchmaking with trough Industrial Partnering 2021-2027

- + Large companies can provide product testbeds, potential customers, distribution channels and industrial partnerships
- + Matchmaking is an open door to new markets



CASSINI In-Orbit Demonstration & Validation



OBJECTIVE: Enable space tech SMEs to test their products in micro-gravity **ACTIVITIES:**

- Selection of IOD/IOV experiments
- Procurement of carriers and associated integration tasks, in order to aggregate the experiments ready to launch
- Procurement of launch services by EU-manufactured launchers