NEREUS General Assembly 14 May 2019

A European

"New Space" Approach



SPACE STRATEGY FOR EUROPE 26 October 2016

Designed to deliver on <u>4 strategic priorities</u>:

- 1. Maximise the **benefits of space for society** and the **EU economy**
- 2. Foster a **globally competitive** and **innovative** European space sector
- 3. Reinforce Europe's **autonomy in accessing and using space** in a **secure** and **safe** environment
- 4. Strengthen Europe's role as a global actor and promote international cooperation



SPACE STRATEGY FOR EUROPE (2)

Main actions in support of new space economy:

- Encouraging the uptake of space services and data
- Advancing the EU space programmes and meeting new user needs
- Stimulating the development of space applications with a greater involvement of new actors from different domains
- Fostering entrepreneurship and new business
 opportunities
- Explore alternative business models (public-public, publicprivate partnerships or buying services)
- Promote access to finance for space
- Support space start-ups and facilitate the emergence of space hubs and clusters across Europe
- Promoting interfaces with non-space data and services and open up space to non-space entrants and non-space industries

Study on Access to Finance Conditions for European Space Industries (EIB Advisory Hub)

- EU Space sector has historically widely relied on procurement and grant schemes
- Growing interest from the European VC community to invest in space with the emergence of first space tech focused funds

Access to finance opportunities in Europe are not many and not very developed



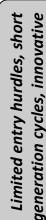
This poses some **challenges** given the **New Space trends**:

- Increased competition
- Reduced cost of accessing and using space
- Commercialisation of space activities
- New entrants and new ambitions in space
- Greater private sector involvement
- Major technological shifts
- New business models

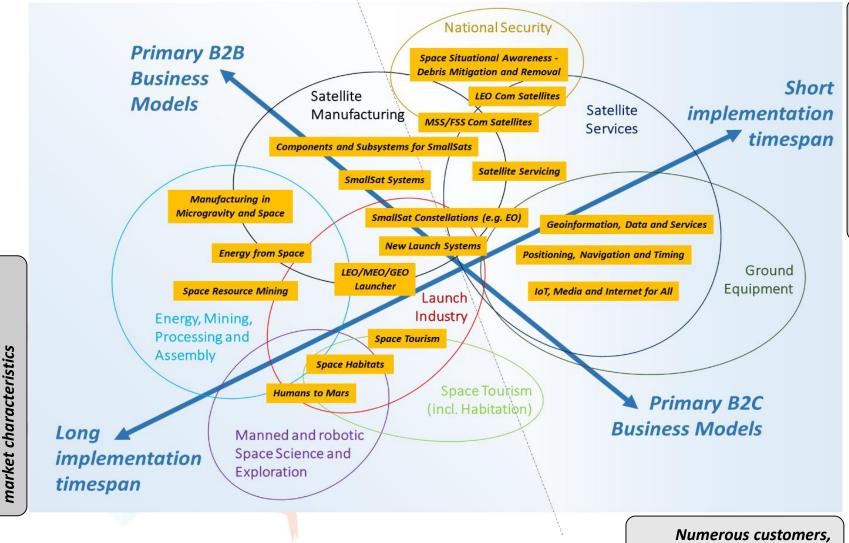


Limited, institutional market

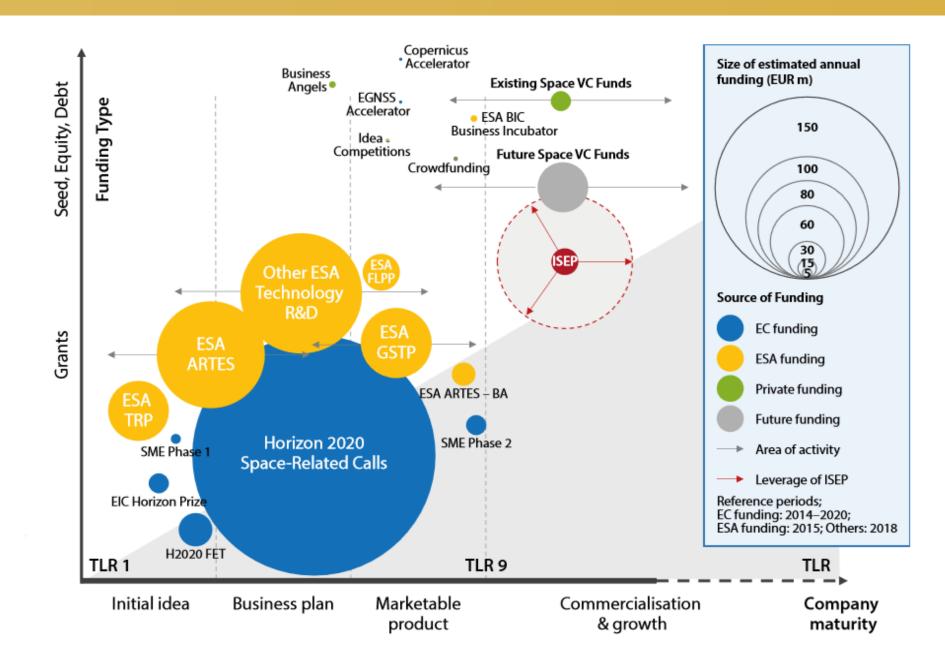
High entry hurdles, conservative



open, commercial market



EUROPEAN FUNDING LANDSCAPE



HORIZON 2020 SPACE 2018-2020

Maximising benefits of space for society and EU economy

SPACE-EO

EO market uptake

 Copernicus mission and services evolution

SPACE-EGNSS

- EGNSS market uptake
- EGNSS infrastructure, mission and services evolution

SPACE-BIZ

- Support to space hubs
- Space outreach and education
- EIC Horizon Prize on "Low cost Space Launch"
- InnovFin Space Equity Pilot (ISEP)
- SME-instrument
- FTI Fast Track to Innovation

Globally competitive and innovative space sector

SPACE-TEC

SPACE-SCI

- Technologies for European non-depend. and competitiveness
- Strategic research clusters
- Generic space technologies
- EO and SatCom technologies
- In-orbit validation/demonstration
- Scientific instrumentation and technologies for exploration
- Scientific data exploitation

Access to space & Secure and safe space environment

SPACE-TEC

Access to space

SPACE-SEC

- Space weather
- Exploring concepts for space traffic management
- Space Surveillance and Tracking (SST)
- Near Earth Objects (NEOs)

*H2020 Space*Work Programme 2018-2020
budget: ~ €709 M







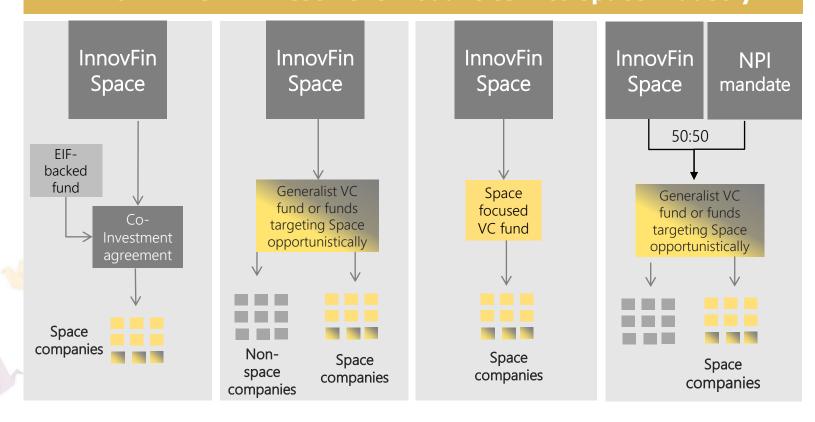
SPACE EQUITY FUND – MAIN FEATURES

- Approach: Invest in VC funds focused on innovative SMEs/small midcaps aiming to commercialise new products/ services linked to space data/ spacetech
- **EC's budget**: EUR 50m to be committed between 2018 2020 and allocated on a deal by deal basis to qualifying investments, based on magnitude of Space tech focus.
- Overall size: c. EUR 111m (EFSI+EC+EIF) enabling a portfolio of 4 to 6 fund investments and co-investments in Space related technologies.
- **Tools**: direct fund investments, co-investments alongside existing EIF fund managers and business angels.
- **Fund strategies**: space technologies focused funds or generalist funds with ex-ante Space technologies allocation.
- Target final beneficiaries: SMEs, projects that are developing or operating in the field of Upstream or Downstream Space technologies.
- Stage focus: early stage, expansion and growth stage. Demand-driven.
- Geography: fund managers and companies to be established or operating in the EU or Horizon 2020 Associated Countries. Demand-driven.

European Commission

INNOVFIN SPACE - INVESTMENT MODALITIES

European Investment FundInnovFin ISEP investment modalities into space industry

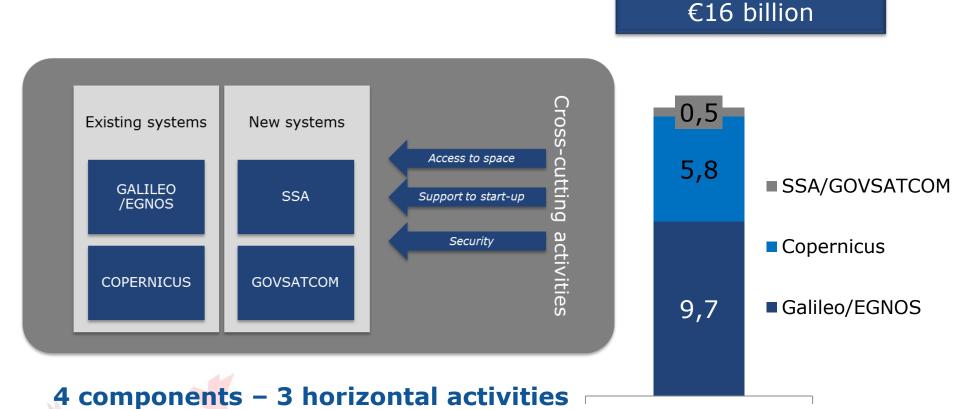








SPACE IN THE NEXT MFF: SPACE PROGRAMME





MFF 21-27

Allocation of the

SPACE IN THE NEXT MFF: HORIZON EUROPE

Specific objectives of the Programme

Support the creation and diffusion of high-quality knowledge and skills

Strengthen the impact of R&I in supporting Union policies

Foster innovation and strengthen deployment and exploitation of innovative solutions

Optimise the Programme's delivery for impact in a strengthened ERA



Pillar 1
Excellent Science

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



Pillar 2

Global Challenges and Industrial Competitiveness

- Health
- Culture, creativity and inclusive society
- · Civil security for society
- Digital, Industry and Space
- · Climate, Energy and Mobility
- · Food and natural resources

Joint Research Centre



Pillar 3
Open Innovation

European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area

Widening Participation & Spreading Excellence

Reforming and Enhancing the European R&I system



SPACE IN THE NEXT MFF: InvestEU

| Window | Budgetary guarantee | Mobilised investment (estimate) |
|--|------------------------|---------------------------------|
| Sustainable infrastructure | 11 500 | 185 000 |
| Research, Innovation and Digitisation | 11 250 | 200 000 |
| SMEs | 12 500 | 255 000 |
| Social investment and skills | 5 567 | 60 000 |
| TOTAL (EUR Million, in current prices) | 40 817 | 700 000 |

- The size of the EU guarantee proposed is EUR 40,82 billion
- InvestEU is expected to mobilise more than EUR 700 billion of additional investment across Europe
- Budget for InvestEU Advisory Hub, InvestEU Portal and accompanying measures is proposed to be EUR 525m.





Commission