The ESA Perspective to New Space and entrepreneurship

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Dr. Gianluigi BALDESI
Commercialisation Department
NEW SPACE AGE, NEW SPACE APPROACH

COMMERCIALISATION.ESA.INT
**THE NEW SPACE ECONOMY**

### OPPORTUNITIES
- **Launch Price** To be divided by 3 in next 10y
- **Higher Payload Capacity and Launch Rate**
- **Deorbiting Regulations**
- **Space-as-a-Service**
- **Edge-Computing/AI for Ground Segments and Space Data**
- **Green/Electric Propulsion**
- **In Orbit Servicing, Manufacturing, Assembly**

### CHALLENGES
- Reaching out to potential investors
- Associated burdens and delays
- Lack of knowledge of available options
- Agreeing on terms and conditions
- Lack of business expertise
- Difficulties to comply with requirements

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**Avg. Satellites launched/year**

**2021–2031**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
<th>Increase</th>
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<tbody>
<tr>
<td>2021</td>
<td>382</td>
<td></td>
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<tr>
<td>2031</td>
<td>1,704</td>
<td>x4.5</td>
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- **Demand increase**
- **80%** to come from constellations
- **75%** revenues to come from govt.

**Global Private Space Investment**

- **13 B€** in 2021
- **+95%** since 2020

**Global Public Space Investment**

- **93 B€**
- **→ 113 B€**
ONE ROCKET LAUNCH ALMOST EVERY TWO DAYS
THE NEW EUROPEAN SPACE AGE

14 B€ (+3%) of European INSTITUTIONAL space investment in 2021
14% of the Global

1 B€ (+66%) Private investment in European space start-ups to grow in 2022-ups

80 B€ of European downstream revenues in 2022
24% of the Global
COMMERCIALISATION IN AGENDA 2025 AND THE 3 DRIVERS
ESA AMBITION ON COMMERCIALISATION

TO MAKE EUROPE A SPACE COMMERCIALISATION HUB TO LAUNCH AND GROW GLOBAL SPACE COMPANIES THAT MAKE SENSE FOR OUR FUTURE

SPEED

TALENT

CAPITAL
For ESA, there are no “New Space companies”, but a New Space approach which can be observed from large well-established companies to small newcomer entities. This approach implies a business mindset based on private investments leveraging on speed, customer focus and new risk acceptance culture.

**SPEED UP TIME TO MARKET**

**CUSTOMER-ORIENTED:**
Good enough vs Best in class

**NEW APPROACH TO PROJECT MANAGEMENT AND RISK ACCEPTANCE**
BEFORE LAUNCHING ROCKETS WE LAUNCH IDEAS
THE ARENAS WE WILL PLAY IN

NON SPACE COMPANIES

INVESTORS

STARTUPS

ACADEMIA

INSTITUTIONS

SPACE COMPANIES
COMMERCIALISATION@ESA
D/CIP
COMMERCIALISATION AND COMPETITIVENESS SUPPORT SERVICES AT ESA
SCALEUP

EARTH OBSERVATION
- Incubed 2
- Φ-Sat

OPERATIONS
- S2P
  (COSMIC – Competitiveness)

TELECOMS
- Space for 5G
- Space Systems for Safety and Security (4S)
- Optical Communication
- Future Preparation
- Partnership Projects
- Business Applications
  Space Solutions

EXPLORATION
- E3P Period 3
  (BSGN and commercial mission support services)

TECHNOLOGY
- GSTP
  (Develop, Make, Fly)

NAVIGATION
- Navisp
  (Element 2) Third Phase
- FutureNAV

SPACE TRANSPORT
- Boost! 2.0
  (Commercial Services; Support to MS; Service Procurement)
THE ENTRY POINT TO ALL ESA COMMERCIALISATION SERVICES

MARKET INTELLIGENCE FOR ESA PROGRAMMES, INVESTORS AND ESA COMMERCIALISATION NETWORK

A ‘ONE-STOP SHOP’ SERVICE FOR ALL COMMERCIAL OPPORTUNITIES

A WEBSITE, SOCIAL MEDIA CHANNELS AND NEWSLETTERS TO GIVE VISIBILITY TO ESA’S COMMERCIAL INITIATIVES

AN EASY ACCESS TO ESA COMMERCIALISATION SERVICES AND NETWORKS OF RESOURCES

AWARENESS AND SUPPORT FOR THE USE OF SPACE INFRASTRUCTURE AND DATA FOR APPLICATIONS AND SERVICES
3000+ SMEs REGISTERED WITH ESA

1380 SMEs CONTRACTED*

*JUNE 2022

9.6% COMMITMENTS TO SMEs*

*PERIOD 2017–2021

THE ACTIVITIES OF THE SME OFFICE ADDRESS THE FOUR MAIN AREAS OF THE SME POLICY:

GENERAL SUPPORT MEASURES
Point of contact SME, Training Courses, Networking & Visibility (esa-match, ISD), Supporting Awareness of ESA Business Opportunities, Analyses and surveys

PROCUREMENT MEASURES
Reserved Share for SMEs in the Frame of Large Procurements, Model-subcontracts, COVID-19 measures, ...

INDUSTRIAL POLICY MEASURES
SME specific procurement clauses, Advance Payments, ...

FINANCIAL MEASURES
Financial viability of SME, Neutral Cash flow, Access to Finance
INVESTOR Partnerships

30 MEMBERS OF THE ESA INVESTOR NETWORK

250+ LARGE INVESTMENT COMMUNITY

EUROPEAN COMMISSION & EUSPA & EIC

ACCELERATORS
Space founders, Seraphim, Starburst, TakeOff!, CDL Space

EUROPEAN INVESTMENT FUND & EUROPEAN INVESTMENT BANK

INVESTORS
Venture Capital, Private Equity, Institutional investors, …
INVEST

BUSINESS SUPPORT

Pool of various services to best answer individual acceleration needs
For companies with high business potential with mature technology

ESA MARKETPLACE

Development of industrial players on new upstream & downstream markets aggregating service requests and offers from and for industry

INNOVATE

Disruptive research innovation projects

Φ-LABNET

Start-up creation & incubation services for entrepreneurs

ESA BICs NETWORK

Commercial innovation projects integrating space technologies

ESA BROKERS NETWORK

BOOSTING INNOVATION AND COMMERCIALISATION

INVESTMENT COMMUNITY, SUPPORT TO SME, COMMERCIALISATION GATEWAY, INDUSTRY ALLIANCE, TECHNICAL SUPPORT, ETC...

SUPPORTING THE SCALEUP OF VENTURES
SCALEUP RESULTS AT CM22
FUNDING OF THE PROGRAMME

121 M€
TOTAL SUBSCRIPTIONS

OVERSUBSCRIPTION OF
+20%

INNOVATE ELEMENT
FUNDED WITH
100 M€

INVEST ELEMENT
FUNDED WITH
21 M€
CONTRIBUTIONS IN THE COMPANY’S LIFE-CYCLE

SCALEUP COMPLEMENTS EXISTING PROGRAMMES

- ESA Business Incubation Centres
- Prepare for Space
- Φ-Lab Network
- Technology Transfer
- Intellectual Property

CASH FLOW

ESAre R&D Programmes

ScaleUp INNOVATE
Boosting innovation and commercialization in the European space sector

- 10 k€ – 1 M€
- BUSINESS ANGEL
- Technology Readiness Level (TRL) 1

ScaleUp INVEST
Supporting the development of ScaleUp ventures in new space markets ESA Marketplace

- > 10 M€
- PRIVATE EQUITY/LEVERAGED BUYOUT

TURN AROUNDS
- > 10 M€
- INSTITUTIONAL INVESTORS

GROWTH CAPITAL
- > 10 M€

SCALEUP
- BUSINESS ANGEL
- TRL 7
- INCUBATOR
- Technology Readiness Level (TRL) 1

INNOVATE
- Technology Transfer
- Intellectual Property

ESA R&D Programmes
- Φ-Lab Network
- Prepare for Space
TOGETHER WE INVEST AND INNOVATE

YOU SCALE UP!

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