

Overview of the ESA commercialisation opportunities

e-shape solutions: Earth Observation for biodiversity and water management

ESA COMMERCIALISATION GATEWAY

SPACE FOR BUSINESS BUSINESS FOR SPACE

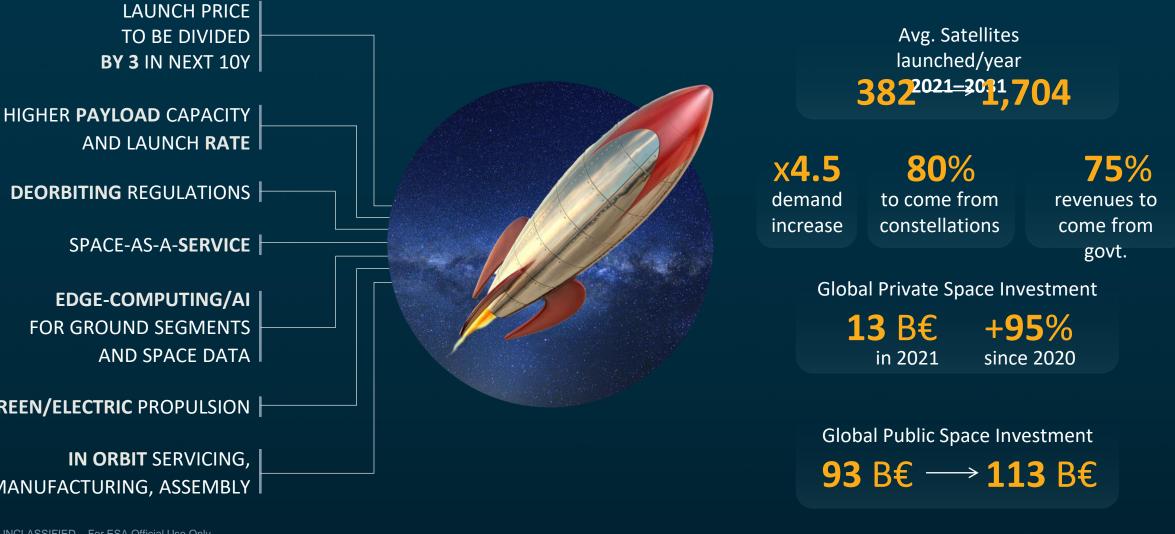
> Dr. Gianluigi Baldesi Gianluigi.Baldesi@esa.int 14/02/2023

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THE NEW SPACE ECONOMY



DEORBITING REGULATIONS

SPACE-AS-A-SERVICE

EDGE-COMPUTING/AI FOR GROUND SEGMENTS AND SPACE DATA

GREEN/ELECTRIC PROPULSION

IN ORBIT SERVICING, MANUFACTURING, ASSEMBLY



ONE ROCKET LAUNCH ALMOST EVERY **TWO DAYS**



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BUT THIS ISN'T ONLY HAPPENING **ACROSS THE** OCEAN





THE NEW EUROPEAN SPACE AGE

11.9 B€

(+7%) of European institutional space investment in 2021

+14%

Private investment in European space start-ups to grow in 2021-ups

7.5 B€

of European upstream revenues in 2021



TODAY WE START BUILDING THE FOUNDATIONS OF THE EUROPEAN **BUSINESS JOURNEY**



COMMERCIALISATION IN AGENDA 2025 AND THE 3 DRIVERS





TALENT

ESA AMBITION ON COMMERCIALISATION

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

CAPITAL

SPEED

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ESA AND NEW SPACE



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.

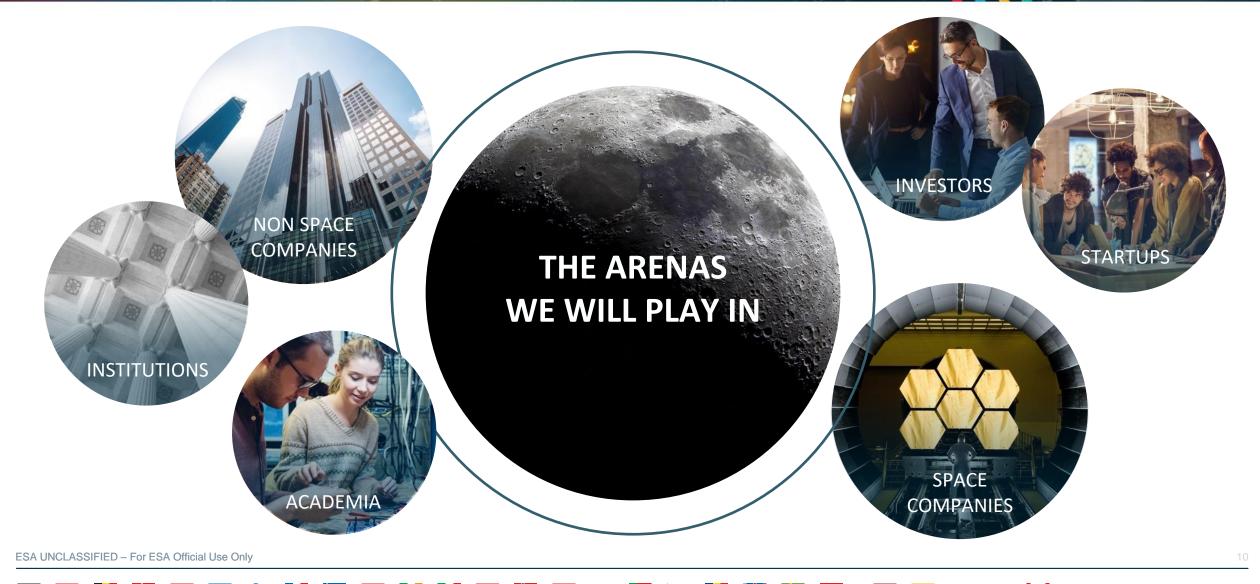
> SPEED UP TIME TO MARKET

CUSTOMER-ORIENTED: GOOD ENOUGH VS BEST IN CLASS NEW APPROACH TO PROJECT MANAGEMENT AND RISK ACCEPTANCE

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COMMERCIALISATION@ESA





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

D/CIP

COMMERCIALISATION AND COMPETITIVENESS SUPPORT SERVICES AT ESA

SCALEUP

EXPLORATION

E3P Period 3

 (BSGN and commercial mission support services)

TECHNOLOGY

GSTP (Develop, Make, Fly)

NAVIGATION

- Navisp (Element 2) Third Phase
- FutureNAV

SPACE TRANSPORT

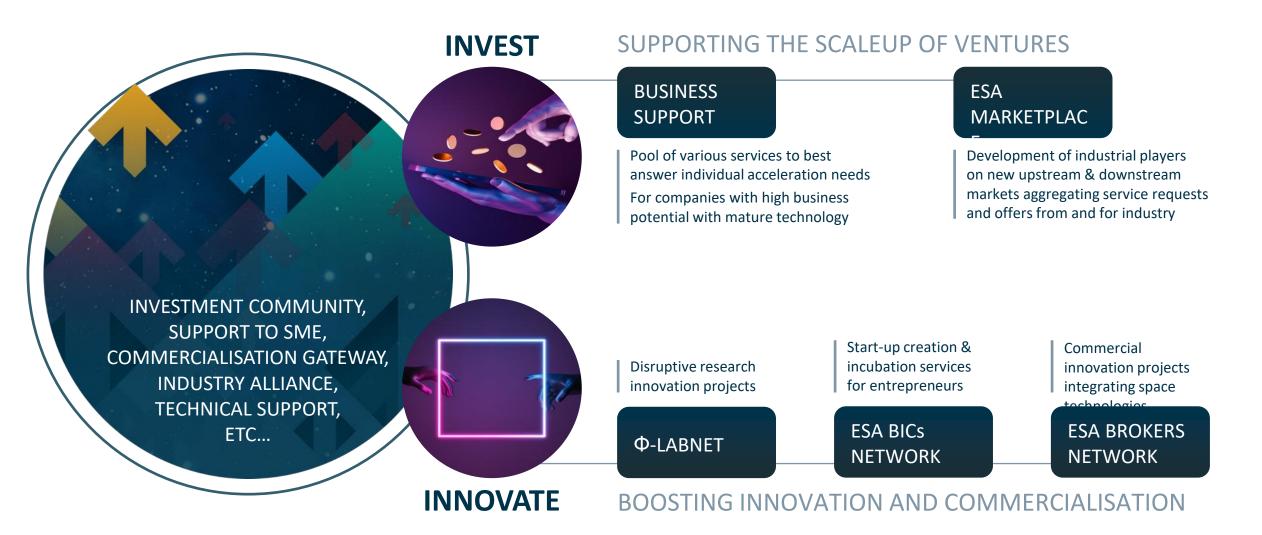
• Boost! 2.0

(Commercial Services; Support to MS; Service Procurement)

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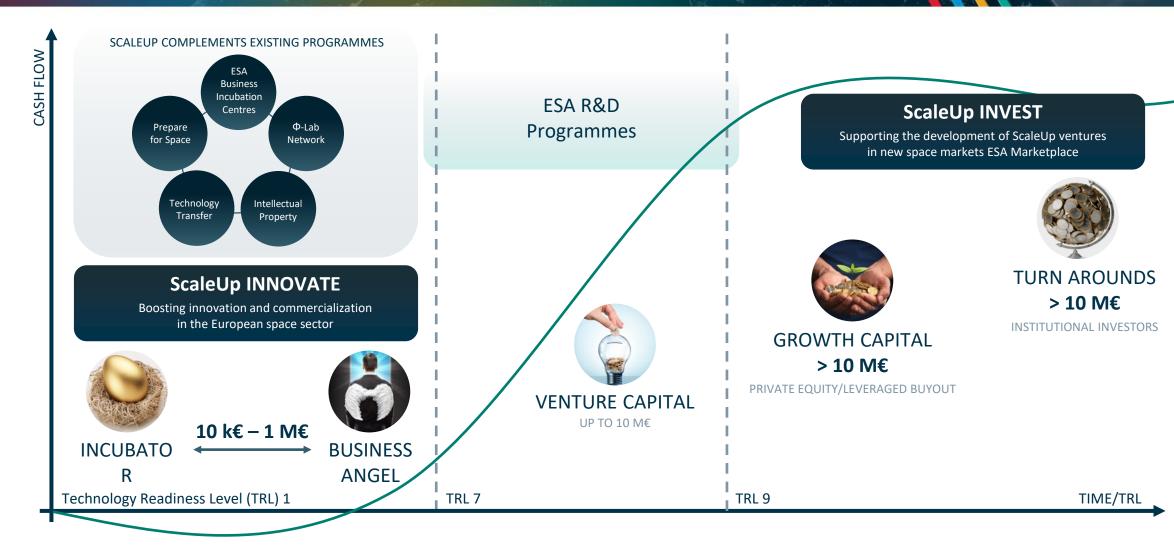




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CONTRIBUTIONS IN THE COMPANY'S LIFE-CYCLE







CM 22 OUTCOME FOCUS SCALEUP



SCALEUP RESULTS AT CM22 FUNDING OF THE PROGRAMME



117.6 M€ TOTAL SUBSCRIPTIONS

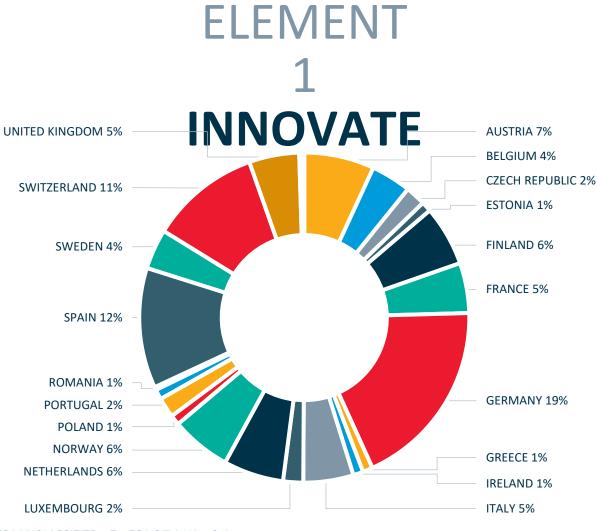
OVERSUBSCRIPTION OF +17.6%

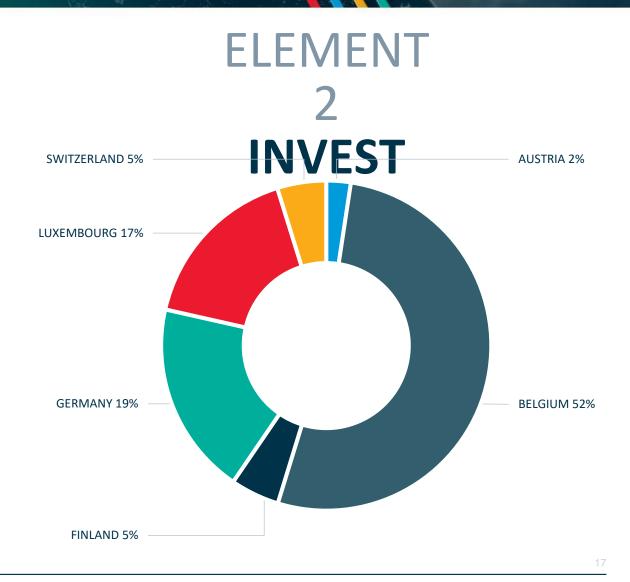
INNOVATE ELEMENT FUNDED WITH 96.6 M€

INVEST ELEMENT FUNDED WITH 21 M€

SCALEUP RESULTS AT CM22 FUNDING BY MEMBER, ASSOCIATE AND COOPERATING STATES









SERVICES DELIVERED **BY THF** COMMERCIALISATION DEPARTMENT

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ESA COMMERCIALISATION GATEWAY



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



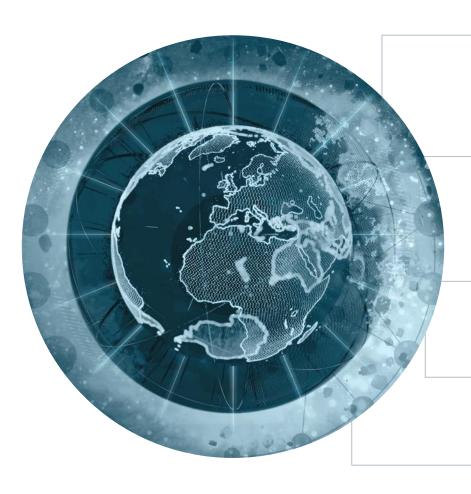
SME OFFICE



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

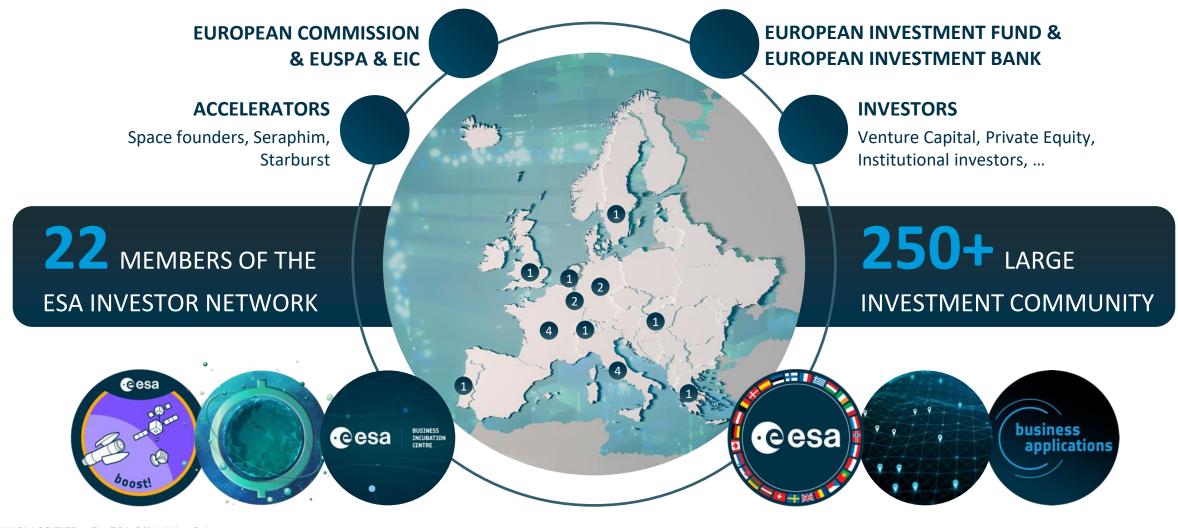
SME specific procurement clauses, Advance Payments, ...

FINANCIAL MEASURES

Financial viability of SME, Neutral Cash flow, Access to Finance

ESA INVESTOR COMMUNITY





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ScaleUp INNOVATE Element



ESA BICs

Foster start-up firms that set-up a new and innovative business using space-oriented technology, or data derived from space assets, for products and services in both space and terrestrial markets

ESA TECHNOLOGY TRANSFER

Support technology transfer and appliances between established industry from the space and non-space sector, and within the space sector

ESA Φ-LAB NETWORK

Facilitates research teams to engage in groundbreaking science and technology development that have a potential in high-yield commercialisation

BUSINESS eesa INCUBATION Φ-LAB **TECHNOLOGY BUSINESS PARTNERSHIPS NETWORK INCUBATION** TRANSFER **ESA-WIDE COVERAGE** FOR ENTREPRENEURS, 29 CENTRES IN MULTIPLE CORPORATES, INSTITUTES, AND BUSINESS SCHOOLS MEMBER STATES **TECHNOLOGY** >90 LOCATIONS BROKERS **GROUND-BREAKING** SUPPORTS START-UPS, **RESEARCH, DIVIDING** 200 NFW **ALUMNI AND** 404 COMMERCIAL **NEWCOMERS STARTUPS P/Y TECHNOLOGIES TECHNOLOGY CONNECTING TO** TRANSFERS 1450 FOR PhDs **CURRENT & FUTURE** AND RESEARCHERS STARTUPS SELECTED DECISIONMAKERS



ScaleUp INVEST : ESA Marketplace



Foster the development of industrial players

on new and emerging upstream and downstream markets



ASSESS THE MOST CREDIBLE OPTION FOR SCALING UP SUPPORTED BY **INVESTORS**

AGGREGATE THE **DEMAND** OF THE SERVICE

AGGREGATE THE SERVICE PROVIDERS ON THE SUPPLY SIDE ("THE **OFFER**")

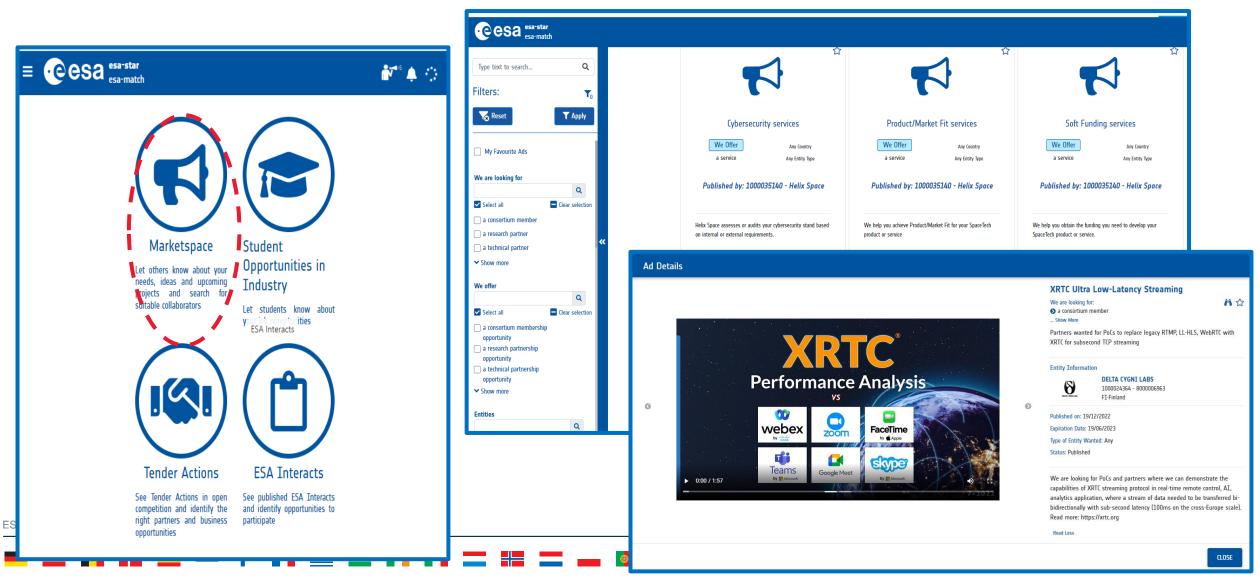
CREATE AND MAINTAIN ESA MARKETPLACE



ESA Marketplace: A digital platform tool



1st version already available within ESA-Match



ESA Marketplace: A digital platform tool



Today the **Marketspace** allows <u>all Legal Entities</u> from ESA MS, Associate States, and Cooperating States to publish their ads

We offer	
Select all	
 a consortium membership opportunity 	
a research partnership	
opportunity	
 a technical partnership opportunity 	
a service	
🗌 a product	
🗌 a technology	
🗌 a challenge	
🗌 a spin-in opportunity	
a technology transfer opportunity	

Economic Operators supported by INVEST – identified by "*supported* by ScaleUp" label – will be clearly highlighted in the **Marketspace** digital tool

Application Programming Interface (API) for connecting with other existing platforms will be available in June 2023



RID

→ THE EUROPEAN SPACE AGENCY

Show less



TOGETHER WE INVEST AND INNOVATE YOU SCALE UP!



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Lilium



12 INVESTORS

826.4 M\$ TOTAL FUNDING RAISED

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Isar Aerospace



13 INVESTORS

182.6 M\$ TOTAL FUNDING RAISED



ME Vitae



6 INVESTORS

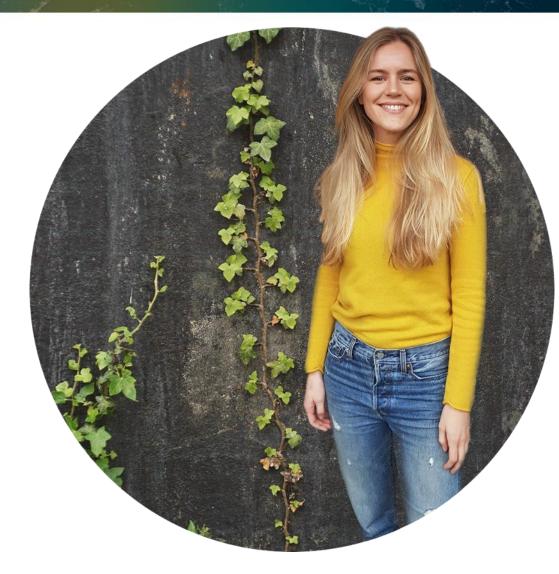
1.7 M\$ TOTAL FUNDING RAISED

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ArchAl



DR IRIS KRAMER EARLY CAREER ARCHAEOLOGIST

2021 HIGHLY COMMENDED BY COUNCIL FOR BRITISH ARCHAEOLOGY

INNOVATE UK YOUNG INNOVATORS AWARD 2022-23



clearspace today



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Tim Maclay





Carlos Carlos

FOUNDED 2018 **800+ YEARS COMBINED SPACE EXPERIENCE**

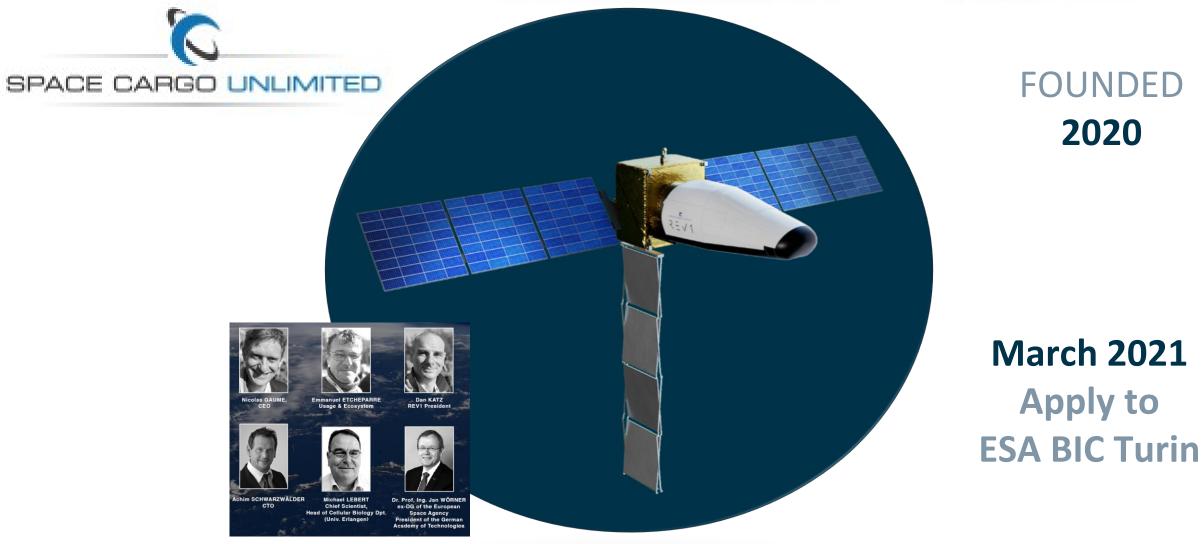
~**€80** M **CONTRACT** by **ESA to remove** debris from Orbit



FOUNDED

2020

Apply to





THANK YOU FOR YOUR ATTENTION

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