

INTRODUCTION TO WHAT IS THE CHANGE IN COMMERCIALISATION APPROACH



Agata Jozwicka-Perlant

Space Transportation beyond LEO Manager
European Space Agency (ESA)

initiated by



organised by



Agenda:



How to enable such Space Transportation ecosystem?

Stakeholders mapping and action targets

Member States

Private Investors / VCs

Clear way-forward and status for Member-States

FLPP: flagship demos enabling space transportation ecosystem

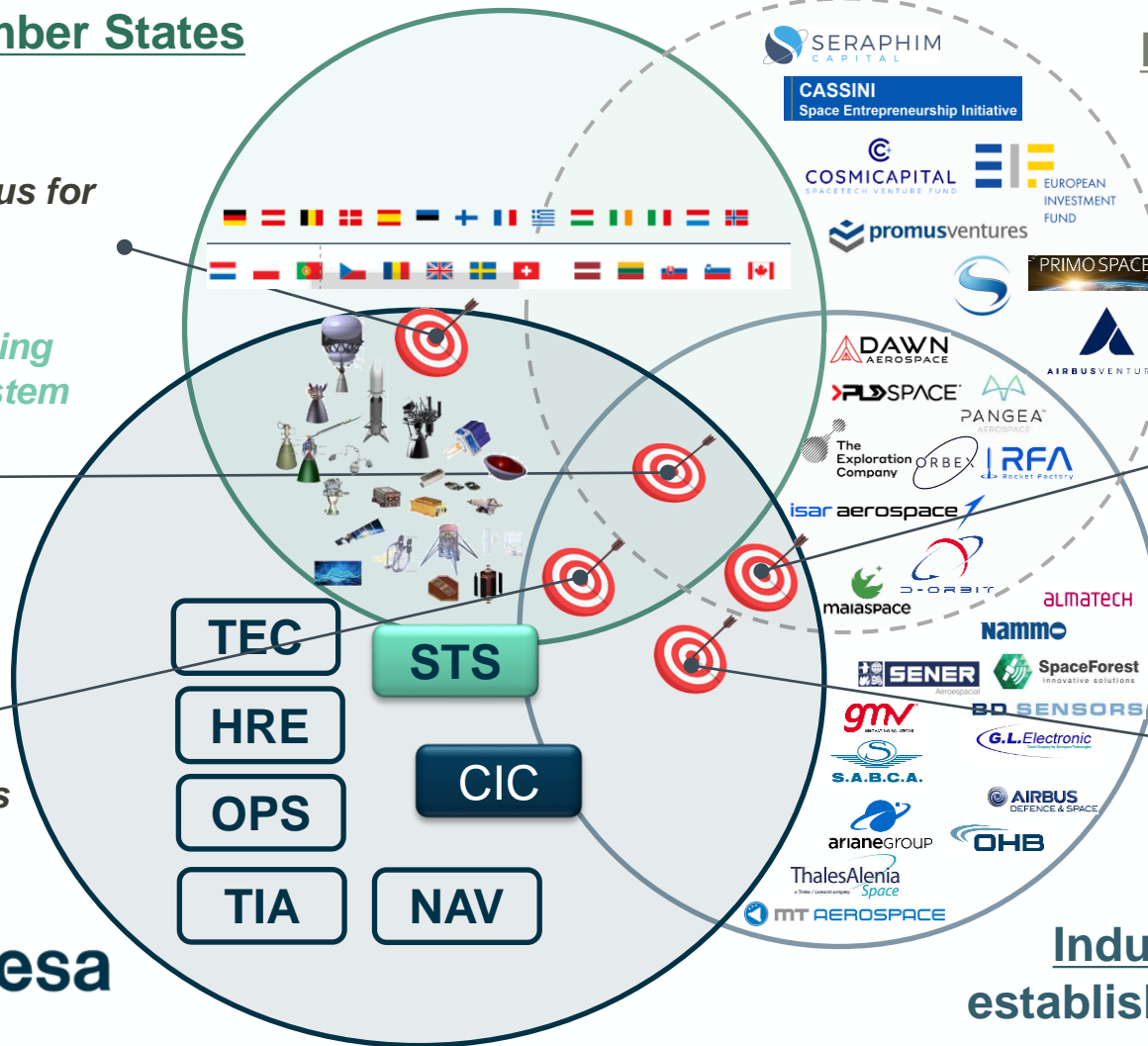
Boost!: financial support enabling private investment

Hyguane: business and techno enabler at CSG

Deliver added-value technologies and demos

Enable private investment in Space

Catalyse the industrial ecosystem Reach and breed next champions



Industrial ecosystem established and new players



NEXT STAGE TO SPACE

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in partnership with



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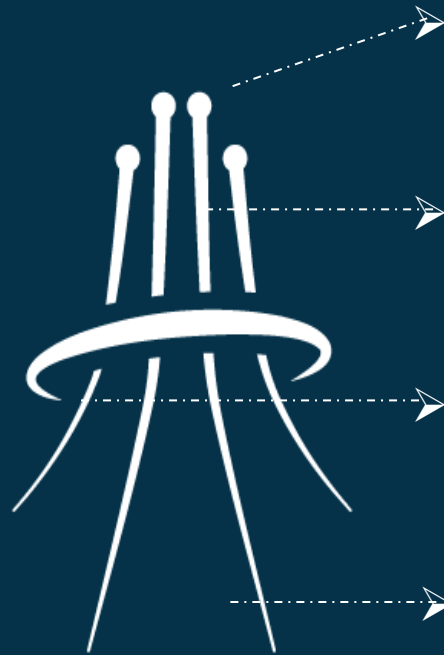
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Join industrial forces to unfold this vision

Combine the strengths of **established** large-space integrators and innovative **new actors**

NEXT STAGE TO SPACE



→ Foster a competitive SpaceTech ecosystem for space transportation

→ Mature and integrate technology disruptors into real space transportation applications

→ Match-make needs from Large Space Integrators and solutions from technology providers

→ Extend outreach across the SpaceTech sector

The overarching objective of the “Next Stage to Space” initiative is to facilitate the SpaceTech ecosystem in Europe by providing a platform where future space transportation needs meet promising innovative solutions.

Next Stage to Space overview



About Topics Partners Events Apply



<https://nextstage.space>



**NEXT STAGE
TO SPACE**



**Embarking together towards
future space transportation**

The European Space sector is transforming quickly to allow a more and more competitive access to Earth orbits and beyond, serving advanced science, exploration and commercial applications to bring the benefits of Space to our society.

To further increase the return of investment in Space, the European Space Agency, together with its Member States, supports entrepreneurs with the ambition to exploit space technology or utilise space systems in non-space markets (spin-off), or become suppliers to the space sector, e.g. by exploiting non-space technology in the space market (spin-in).



[More About](#)

FROM REALITY BACK TO VISION.

To support ArianeGroup and MTA with innovative cases, six pilot technologies have been identified. Are you ready for the challenge? Have a look: on each of them there is a world to be discovered!



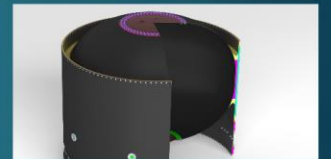
High efficiency batteries for space applications

[Click here](#)



Intelligent visual detection methods for enhanced quality

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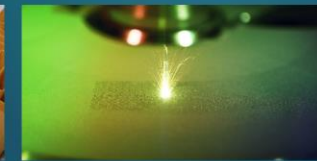
Sealing/coatings for cryogenic CFRP surfaces

[Click here](#)



Folded Core materials for cryogenic CFRP tank insulation

[Click here](#)



Optimized production in additive manufacturing (DED process)

[Click here](#)



Augmented Reality based process visualization, manufacturing and training

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→ THE EUROPEAN SPACE AGENCY

Next Stage to Space

Pilot implementation in Bavaria

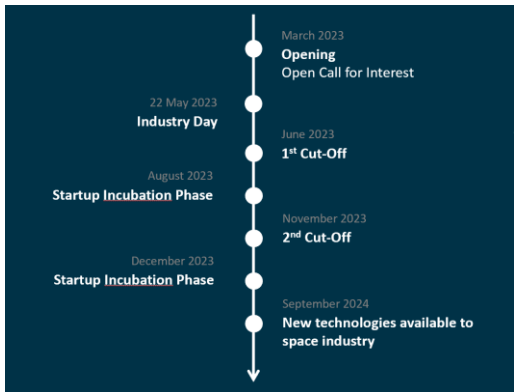


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AZO
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Next Stage to Space Industry Day (22 May 2023)

- Welcome (ESA/AGG/MTA/AZO)
- Introduction to Next Stage to Space
- Sessions for six pilot cases: Primes / SME-startups-lab
- Networking meetings

nebumind, SPACE STRUCTURES, Institut für Werkstoff-Forschung (DLR), GOODLY innovations, BMW, SkillCamp VR, NAVVIS, 3DTRUST BASSETTI GROUP, Scientific Prototypes | R&D Lab, GESTALT ROBOTICS, PULSARCONSULTING, UNTERNEHMER TUM, Fraunhofer IST, HALERIUM, vypno designing data, BIGAWE, UNIVERSITÄT BAYREUTH, HOFMANN, OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG

<https://nextstage.space/>



Next Stage to Space

Pilot implementation in Bavaria



NEXT STAGE TO SPACE

- Foster a **competitive SpaceTech ecosystem** for space transportation
- Mature and integrate **technology disruptors** into real **space transportation applications**
- **Match-make** needs from Large Space Integrators and solutions from technology providers
- **Extend outreach** across the SpaceTech sector

- ✓ Industry Day 22/05
- ✓ Call for proposals - up to 27/08
- ✓ Assessment with Primes - 18/09
- ✓ Signature and Kick-off of all contracts - 16/10

initiated by **esa** in partnership with **arianeGROUP** **MT AEROSPACE** (An OHB Company) organised by **AZO** (Space of Innovation)

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| <p>High efficiency batteries for space applications</p> <p>arianeGROUP</p> <p>EXCELLION</p> | <p>Intelligent visual detection methods for enhanced quality</p> <p>arianeGROUP</p> <p>GESTALT ROBOTICS</p> | <p>Sealing/coatings for cryogenic CFRP surfaces</p> <p>MT AEROSPACE</p> <p>Fraunhofer IST</p> | <p>Folded Core materials for cryogenic CFRP tank insulation</p> <p>MT AEROSPACE</p> <p>SPACE STRUCTURES</p> | <p>Optimized production in additive manufacturing (DED process)</p> <p>MT AEROSPACE</p> <p>nebumind</p> <p>Laser power: 954 W Temperature: 600 °C Position: 43 63 75</p> | <p>Augmented Reality based process visualization, manufacturing & training</p> <p>MT AEROSPACE</p> <p>nebumind</p> <p>Smart Factory Full automation & self-regulation</p> |
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