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Technology R&D implementing CM25

Discovery, Preparation, TDE & GSTP
Industry Space Days 2026

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EUROPEAN SPACE AGENCY

Major Industry Feedback Collected since ISD24

Improve Speed & Time to contract	Supporting a dynamic Industry
Reduce number of requirements	According to Mission & R&D needs
Provide visibility to Calls for tenders	Allowing Industry to Plan
Simplify ESA R&D programmes	Easy to understand & work with ESA

GSTP

MS supported already 240 M€ activities

2x faster implementation: 220 M€+ comitments in 2026 vs 110 M€ in 2023 (post CM22)

You ask for ...

Use
mission classification
for R&D

Decrease
Time to Contract

Simplify
R&D Programmes

Simplicity

Increase
Transparency

Increase
R&D Budget

Clarify the
Rationales

Strengthen
early mission phases

Increase
Predictability

Simplify
Contracts

We delivered ...

Simplicity

Use
mission classification
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Decrease
Time to Contract

Simplify
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activities.esa.int

Increase
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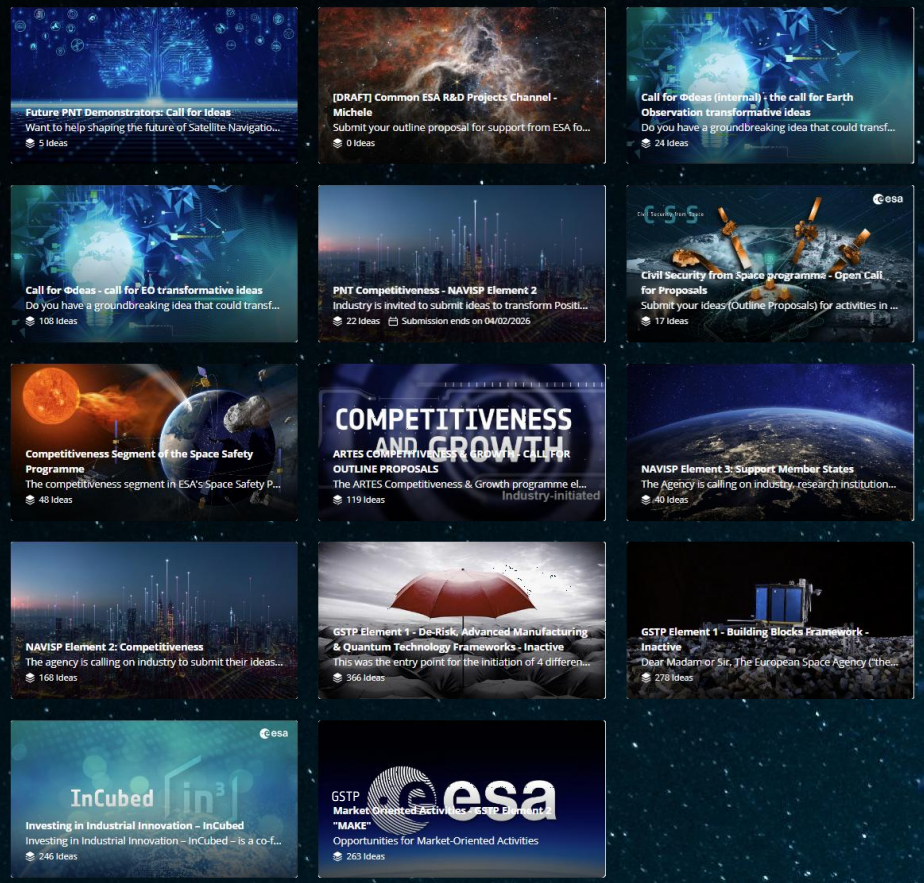
ORBIT PORTAL – Your Single-Entry Point for Industry Driven R&D

Previously: Many channels



Now: One unified entry on OSIP

ESA Technology Programmes – GSTP @CM25

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Discovery — *Game changing* — 155M

Preparation — *Future missions*

TDE — *Enabling techn.* — 290M

GSTP — 886M

Element 1 Develop — 405M (276+129)
Techn. for missions

Element 2 Make — 193M
Techn. for competitiveness

Element 3 Fly — 90M
In orbit demonstrations

EEE — 67M

Resilience & Security — 130M

Techn. for resilience and European non-dependence

+ Cluster option

Focus Areas

AI

Quantum

Sustainability

Propulsion

Specific

CyberSecurity

VLEO

Serialisation

Discovery, Preparation, TDE, GSTP

Disruptive Ideas

- Taking risks
- Low budget
- Fast and Open
- Research, studies and tech.dev.

- Novelty driven
- Open Competition

Discovery

Future Missions

- Solid baselines
- (Pre-)Phase A
- For all domains
- Commercialisation

- ESA driven
- Open competition

Preparation

Technology Raising

- Enabling missions
- Low TRL
- work plans

- ESA driven
- Open competition

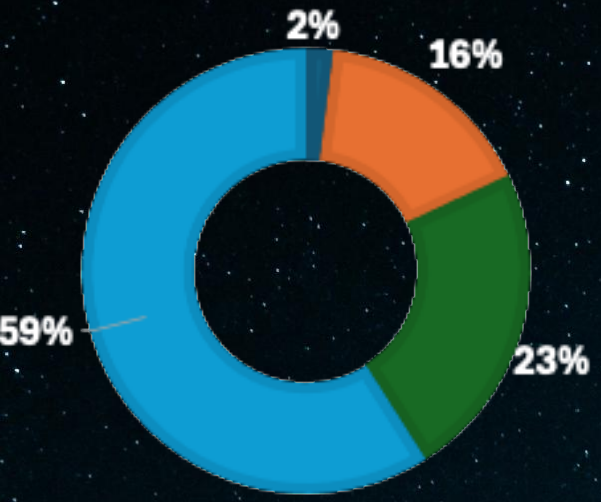
TDE

- Enabling missions
- Supporting Competitiveness
- Higher TRL
- Work plans and industry-driven
- SME focus
- Delegation support
- 3 Elements
- 2 Components

GSTP

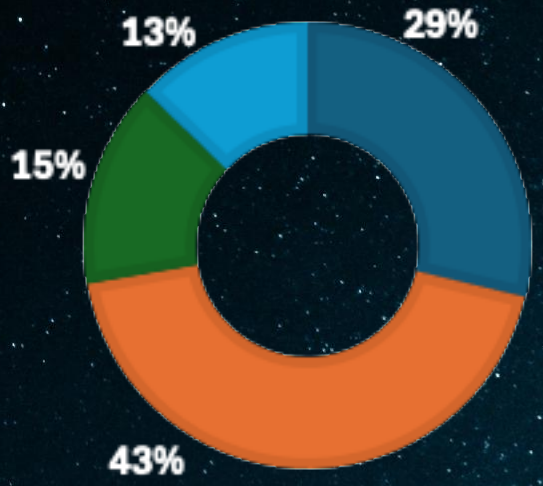
2025 Discovery, Preparation, Technology Development & GSTP

Discovery



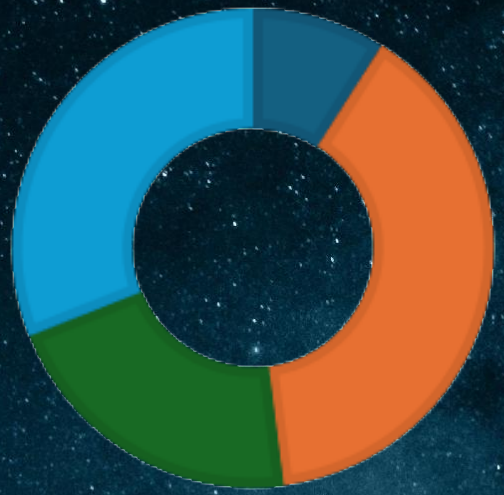
12.9 M€ Commitments
125 Activities

Preparation



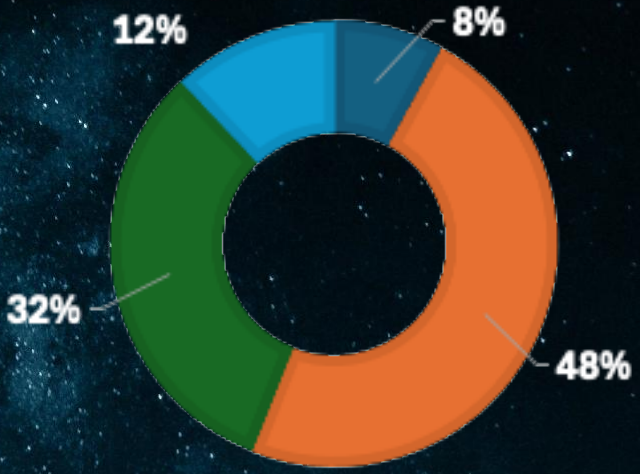
16.4 M€ Commitments
51 Activities

Technology Development



56 M€ Commitments
165 Activities

GSTP



200 M€ Commitments
175 Activities

SME | Acad./Res.Centr. | LSI | Others/midcaps

ESA Technology Focus

Artificial Intelligence

AI for mission design
AI for mission operations
AI for operational efficiency
AI for autonomous systems

Quantum Technologies

Quantum Sensors
Quantum Communication
Quantum positioning, navigation and timing
Quantum Computing

Sustainable Space

Eco-Design
Zero Debris
Circular Economy in Space

Innovative Propulsion

Higher-performance technologies
Greener and lower-cost technologies
Technologies expanding space logistics capabilities

ESA Specific Areas

Cybersecurity

Advancing space system capabilities.
On-board security protection
RF and optical link protection
Quantum-resistant crypto units

Serialisation

Promote interoperable equipment
Federate industry efforts
Support industrialisation developments
Strengthen competitiveness

Very Low Earth Orbit (VLEO)

increased resolution and/or reduced aperture size
improved link budgets and reduced latency
easier end of life compliance with new space debris regulations and ESA's Zero Debris Charter.

Simplifying ESA R&D

Anticipating future needs

Answering to identified needs

Bottom-up & Technology Push R&D

Main Drivers: Readiness, Innovation, risk/gain

R&D for ESA Missions

Main Drivers: Project metrics of Time, Cost and Performance

R&D for MS, ESA and EU Capability Building & Policy Needs

Main Drivers: Policies, National-focus, Confidentiality, external KPIs

Industry and market-driven R&D

Main Drivers: Speed, Cost Effectiveness, scaling up

Process Initiatives

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Accelerate Initiative

Technical Authority

Centers of Competence

Speed, Focus, Efficiency

2022 > 2025 -50%

Time to Contract

One ESA Technology Governance

Requirements & Project Tailoring

esa mission classification

Modernise Standards

ECSS

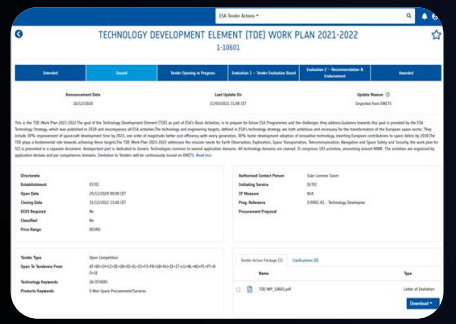
NextGen

Industrialisation Branch

Useful links

esa-star Publication

- Registration of companies
- Invitations to tenders
- News/Procurement related announcements



OSIP – Open Space Innovation Platform

- Channel & Campaigns
- Entry to Discovery
- Submission of pre-proposals / outlines

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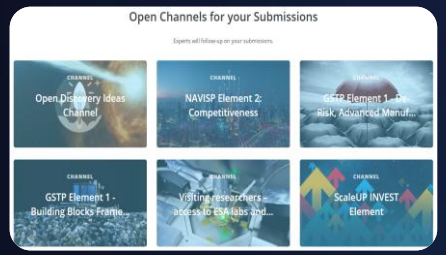

Activities Portal

- Running activities
- Visibility on progress
- Final Reports and exec Summaries

activities.esa.int

General Public

- R&D Highlights, stories

Technology

- Business to business page for technology R&D
- New: GSTP R&S information

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Thank you !
Pass by the Technology Tent !

EUROPEAN SPACE AGENCY

BACKUP SLIDES

R&D Simplification – Single Portal

ideas.esa.int

ideas/outlines

activities.esa.int

running activities

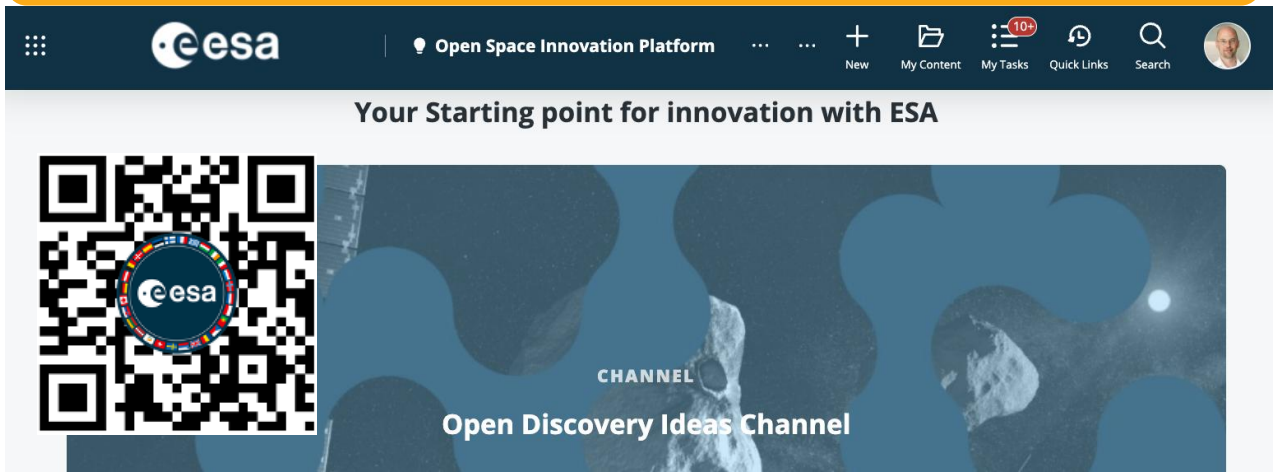
nebula.esa.int

deliverables

operational

One portal from idea submission, running activities and final deliverables

Common Integrated Portal



Technology Programmes Implementation

GSTP Ramp-up following CM25

- 240M€ authorisations of funding for R&D activities so far
- Covering all technology areas (Quantum, Propulsion, AI, Sust Space, VLEO, Cyber, Serialisation)
- Not all MS at same decision status with respect to supporting activities
- Dedicated calls in DE, NO, UK, ES, DK, CA …

Predictability

- Publication of intended ITT dates

Simplification

- Single entry point for industry-driven R&D activities

R&D Simplification – Single Entry Point

- De-Risk
- Incubed

operational

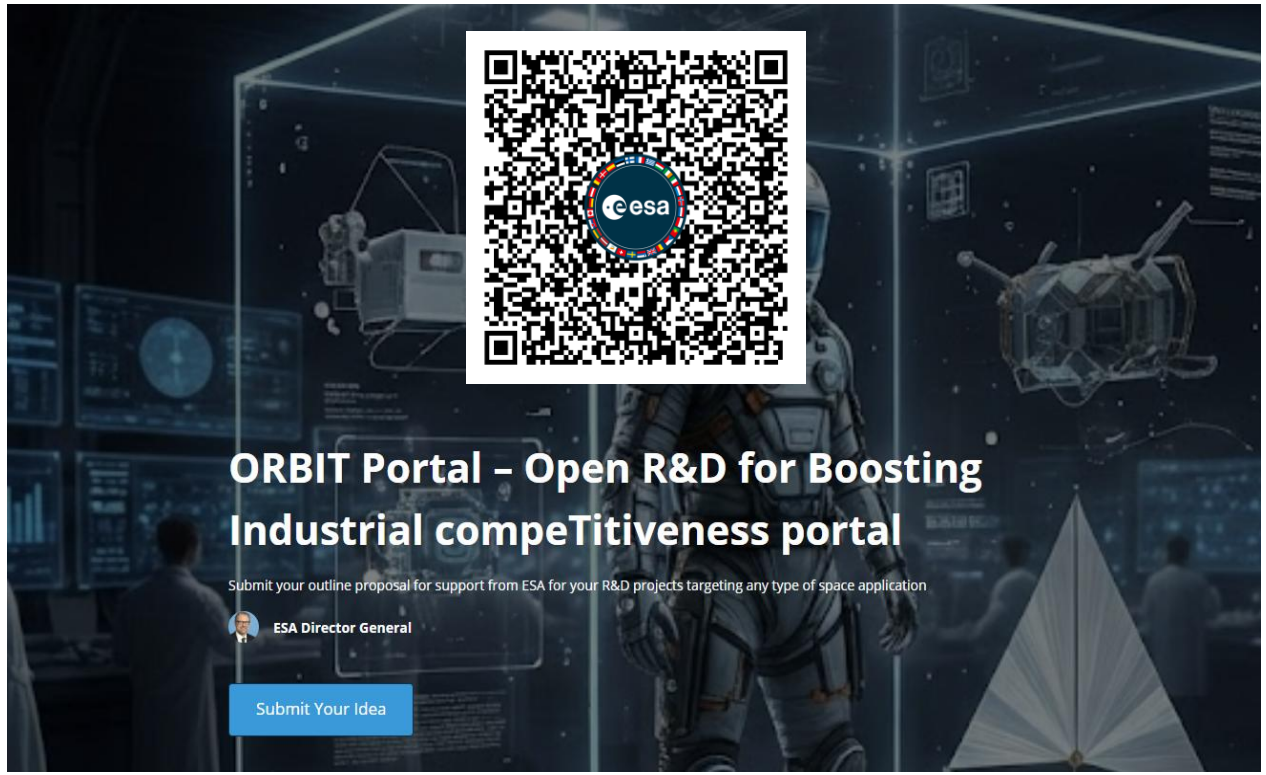
- Building Blocks

1 Sept. 26

- GSTP EI2

transition until Aug./Sept. 26

- Navisp E2
- Artes
- …

transition until Sep/Oct.26

Common Portal (+template)