FiERCE
MAKING SPACE FOR GREEN SOLUTIONS

D1.3 Blueprint of the FIERCE support for SMEs and innovation ecosystems

DREVEN

29/08/2025

Funded by the European Union

Document Information

Issued by:	DREVEN
Issue date:	29/08/2025
Due date:	31/08/2025
Work package leader:	NOVASPACE
Dissemination level:	Public

Document History

Version	Date	Modifications
0.1	21/07/2025	First version issued by DREVEN and shared for quality review with partners
0.2	24/07/2025	Quality review by EMNP
0.3	27/07/2025	Quality review by NOVASPACE
0.4	04/08/2025	Quality review by Q-PLAN INTERNATIONAL
1.0	29/08/2025	Final submission-ready version

Authors

First Name	Last Name	Beneficiary
Sofia	Magopoulou	DREVEN
Despoina	Romniopoulou	DREVEN
Svetlin	Dimitriev	NOVASPACE
Thomas	Wilczek	FBA
Dalma	Jázmin Versitz	EMNP

In case you want any additional information, or you want to consult with the authors of this document, please send your inquiries to: Despoina Romniopoulou (dromniopoulou@dreven.gr)

Quality Reviewers

First Name	Last Name	Beneficiary
Krisztina	Toth	EMNP
Annabel	Egert	NOVASPACE
Christina	Balla	Q-PLAN INTERNATIONAL

Disclaimer

Funded by the European Union under GA no. 101177496. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or HaDEA. Neither the European Union nor the granting authority can be held responsible for them.

Executive Summary

Deliverable 1.3 presents the consolidated blueprint of the FIERCE project's support mechanisms for SMEs and innovation ecosystems, as developed under Task 1.3 of Work Package 1. Building upon the analytical foundation established in Task 1.1 and Task 1.2, this deliverable translates strategic objectives and stakeholder insights into four co-designed, implementation-ready support models: (i) Advisory Services, (ii) Financial Support for Transformation Projects, (iii) Local Entrepreneurship Initiatives (LEIs), and (iv) the Monitoring and Evaluation (M&E) Framework.

The development of these blueprints followed a participatory methodology, centred on design thinking and co-creation principles. Through a high-intensity Design Sprint and a series of intra-consortium focus groups, the consortium engaged SMEs, innovation intermediaries, the Advisory Board and relevant initiatives in shaping support structures that are modular, inclusive, and regionally adaptable.

The Advisory Services blueprint defines a tailored, 50-hour support programme for SMEs seeking to leverage downstream space technologies in sustainability-driven innovation. Delivered through a hybrid model of mentoring, masterclasses, and one-to-one sessions, this mechanism is reinforced by a digital infrastructure and quality assurance framework. The FSTP blueprint outlines the open call process for funding 70 SME-led innovation projects, with clear application flows, eligibility criteria, and support tools to enhance accessibility and strategic alignment. The LEIs blueprint operationalises a decentralised approach to ecosystem activation, embedding FIERCE methodologies in local contexts through regional partnerships, capacity-building activities, and replication pilots. Finally, the M&E framework ensures the integration of robust, cross-cutting evaluation mechanisms from the outset, enabling evidence-based learning and continuous improvement.

As a foundational deliverable, D1.3 serves as the strategic and operational reference for upcoming activities under WP2, WP3, and WP4. It ensures that FIERCE's SME support model is grounded in stakeholder needs and implementation feasibility, positioning the project to deliver meaningful impact across European innovation ecosystems.

Table of Contents

List of Tables

List of Terms and Definitions

Table 1. Terms and Definitions

Term	Definition
EO (Earth Observation)	The collection of data about the Earth's physical, chemical, and biological systems via satellite or airborne sensors, used for environmental monitoring, agriculture, urban planning, and more.
GNSS (Global Navigation Satellite System)	A satellite system that provides geolocation and time information to a GNSS receiver anywhere on Earth, including systems like Galileo (EU.
EGNOS (European Geostationary Navigation Overlay Service)	A regional satellite-based augmentation system (SBAS) that improves the accuracy and reliability of GNSS signals over Europe.
SME (Small and Medium-sized Enterprise)	Businesses with fewer than 250 employees and an annual turnover not exceeding €50 million, often targeted for innovation and sustainability support within EU programs.
CSRD (Corporate Sustainability Reporting Directive)	An EU regulation requiring large companies and listed SMEs to disclose environmental, social, and governance (ESG) impacts in their annual reporting.
InSAR (Interferometric Synthetic Aperture Radar)	A radar technique using satellite data to detect ground deformation, widely used in mining, infrastructure monitoring, and natural hazard assessment.

Circular Economy (CE)	An economic system aimed at eliminating waste and the continual use of resources through reuse, repair, recycling, and sustainable design.
Copernicus	The EU's Earth Observation programme, providing open access to satellite data through its Sentinel missions, supporting applications in climate, environment, agriculture, and disaster response.
Downstream Space Data	Space-derived data and services applied on Earth for practical purposes, including EO imagery, GNSS positioning, and satellite communications.
ESA (European Space Agency)	An intergovernmental organization coordinating space activities in Europe, including EO missions and downstream data innovation.
CASSINI	An EU initiative providing support (e.g. hackathons, accelerators, funding) to startups and SMEs in the space sector to promote innovation and green transformation.

1. Introduction

1.1 Background of the FIERCE Project

The FIERCE project ("Financing and Innovation Ecosystems for SMEs to innovate for Raw materials and Circular Economy solutions using downstream space technologies") was launched under the Horizon Europe programme (Call HORIZON-CL4-2024-RESILIENCE-01) as a Coordination and Support Action (CSA). The project is motivated by a clear gap in the current European innovation landscape: while the European Space Programme offers powerful tools to advance the EU's green and digital priorities, SMEs often lack the technical capacity, business support, and contextual knowledge needed to leverage space-based data and services for transformation. FIERCE responds to this challenge by offering a structured and targeted approach to enabling SME innovation at the intersection of space technology and sustainability.

Running from **November 2024 to October 2027**, FIERCE brings together a diverse consortium of seven beneficiaries and affiliated entities from across Europe, coordinated by Q-PLAN. The project's total grant value is €4,999,329 and is provided in the form of a lump sum action grant by the European Health and Digital Executive Agency (HaDEA). With a mission to accelerate Europe's green and digital transition, FIERCE will mobilize 2.5 million EUR in financial support for 70 SMEs, start-ups and scale-ups to fuel the development, demonstration and commercialization of green space-enabled solutions. On top of that, FIERCE will support 140 SMEs with specialised technical and business advisory to design business solutions and engage in process innovation using downstream space data in areas such as circularity, raw materials, environmental monitoring and corporate sustainability. In parallel, FIERCE will enable a series of local entrepreneurship initiatives driven by innovation intermediaries and business support networks aimed at creating even more opportunities for space-enabled green innovation through synergies with regional industrial, research and market actors.

FIERCE's methodology is centred on a **three-tiered support system**, specifically designed and co-developed under **Objective 2 (O2)**'s ambition to elevate both individual SME innovation potential and the capacity of regional ecosystems to deliver sustained, high-quality support for space-enabled green transformation:

1. **Advisory Services:**

   FIERCE provides tailored technical and business advisory services, allowing SMEs to access expertise in areas such as satellite data integration, business modelling for space-enabled products, regulatory compliance, and access to finance.

2. **Transformation Projects:**

   Through open calls, the project will distribute **€2.5 million** in financial support to **70 SMEs**. These **Transformation Projects** aim to accelerate the development and commercialisation of innovative space-enabled solutions across strategic sustainability sectors.

3. **Local Entrepreneurship Initiatives:**

   Over **15 LEIs** will be launched in collaboration with **innovation intermediaries** such as **Digital Innovation Hubs (DIHs)**, clusters, and incubators. These LEIs will act as regional engines for

SME engagement, creating localised pathways for innovation and ensuring alignment with regional smart specialisation strategies.

The project aligns strongly with several key EU policy frameworks, including the **European Green Deal**, the **Critical Raw Materials Act**, and the **Circular Economy Action Plan**, and contributes to achieving the **Sustainable Development Goals (SDGs)** by supporting SME-led innovation for resilience, sustainability, and competitiveness. FIERCE also leverages synergies with EU-wide networks such as the Europe Business Network, and the European Association of Remote Sensing Companies and aims to stimulate longer-term policy and investment frameworks through replication handbooks and targeted recommendations.

1.2 Objectives of Task 1.3

“Co-design of blueprints for the FIERCE support to SMEs and innovation ecosystems” (Task 1.3) plays a pivotal role in the project, serving as the linchpin between the analytical groundwork established in WP1 and the implementation-focused activities to be carried out in WP2, WP3, and WP4. The task’s core objective is to define and document a consolidated blueprint for the FIERCE support architecture, ensuring that it is both responsive to the needs of SMEs and aligned with EU strategic priorities.

Task 1.3 specifically focused on the co-design of four key support mechanisms: (i) the FIERCE SME Advisory Services; (ii) the Transformation Projects, delivered through open calls; (iii) the Local Entrepreneurship Initiatives architecture; (iv) the FIERCE Monitoring Framework.

Recognising the diversity of SME profiles, regional contexts, and ecosystem maturity levels across Europe, the task was guided by the principle of operational feasibility and adaptability. The goal was not only to design effective mechanisms but to ensure they could be meaningfully deployed across sectors and geographies.

To achieve this, Task 1.3 adopted a participatory methodology, grounded in stakeholder co-creation. It involved a high-intensity Design Sprint and a series of co-creation focus groups, bringing together SMEs, project partners, innovation intermediaries, and other support actors. These sessions were used to validate initial assumptions from WP1, identify priority service areas, and co-develop the structure and delivery model for each support mechanism.

Deliverable D1.3 constitutes the main output of Task 1.3. It formally documents the blueprints for the SME support mechanisms under FIERCE, detailing their objectives, structure, delivery pathways, partner responsibilities, enabling tools, and performance indicators.

2. Methodology

2.1 Conceptual basis for co-design and participatory innovation

The FIERCE blueprint was developed through a co-design process rooted in participatory innovation methodologies (Sanders & Stappers, 2008[1]). These approaches fundamentally reconceptualise the role of end users, positioning them not as passive recipients of predetermined solutions but as active co-creators and knowledge contributors in shaping interventions that directly affect their operational contexts. This shift from a traditional "design for" to **a "design with" paradigm** reflects what Buur and Matthews (2008[2]) term "participatory innovation," where diverse stakeholders collaborate throughout the innovation process to ensure solutions are contextually embedded and practically viable.

In the context of FIERCE, where the ultimate aim is to empower SMEs to integrate space-enabled solutions into their business flows, the design of support mechanisms for SMEs cannot be viewed in isolation, but with them as co-designers. This approach draws upon the theoretical foundations of user-centred design (Norman, 2013[3]), which emphasize that those who will ultimately use a system or service possess critical insights that can only be accessed through active participation in the design process.

The adoption of co-design methodologies aligns with broader paradigmatic shifts in EU research and innovation policy that emphasise user-centricity, societal responsiveness, and innovation ecosystem alignment.

This participatory stance represents a direct methodological response to the empirical findings of D1.1, which revealed significant **heterogeneity in SME technological readiness levels**, **substantial variations in awareness and understanding of space-enabled tools**, and **differences in innovation ecosystem maturity across European regions**. These findings align with contemporary research[4] demonstrating that SMEs exhibit significant heterogeneity in their digital transformation processes and capabilities, with technological, organisational, and environmental factors creating complex, context-dependent adoption barriers. Recent studies emphasise that SMEs must consider their baseline digital maturity, readiness to adopt new technology, and dynamic

[1] Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. Co-Design, 4(1), 5–18. Retrieved from https://www.tandfonline.com/doi/full/10.1080/15710880701875068

[2] Buur, J., & Matthews, B. (2008). Participatory innovation. International Journal of Innovation Management, 12(3), 255–273. Retrieved from https://www.worldscientific.com/doi/10.1142/S1363919608001996

[3] Norman, D. (2013). The design of everyday things: Revised and expanded edition. Basic Books. Retrieved from https://dl.icdst.org/pdfs/files4/4bb8d08a9b309df7d86e62ec4056ceef.pdf

[4] Kahveci, E. (2025). Digital transformation in SMEs: enablers, interconnections, and a framework for sustainable competitive advantage. Administrative Sciences, 15(3), 107. https://www.mdpi.com/2076-3387/15/3/107

capabilities when developing transformation strategies (Sagala & Őri, 2024[5]), while the misalignment of digital capabilities and tools with broader transformation visions can impede the realisation of technology potential.

The theoretical framework guiding our approach integrates insights from several complementary domains: (1) **innovation intermediation theory** (Howells, 2006[6]), which emphasises the critical role of boundary organisations in facilitating knowledge transfer between different domains; (2) regional innovation systems literature (Cooke, 2001[7]), which highlights how local institutional contexts shape innovation capacity and pathways; and (3) organisational learning theory (Argyris, 1996[8]), which is foundational for the importance of adaptive, experience-based learning processes in capability development.

Consequently, rather than pursuing a uniform support mechanism, the FIERCE project adopted a modular and adaptive co-design approach that can accommodate diverse regional contexts, varying organisational capabilities, and different stages of space-technology awareness.

2.2 Stakeholder engagement architecture: a multi-level and action-oriented process

A central pillar of FIERCE's methodology is its layered stakeholder engagement architecture, designed to generate contextualised input. Rather than relying on a single engagement channel, the project intentionally sequenced four distinct stages of interaction, each targeting a different type of knowledge and stakeholder contribution, grasping the opportunity to also expand its network and connect with project "allies" from an early stage onwards.

The process started with the definition of the "**boundary object**", a shared evidence base that can be interpreted and utilised by diverse stakeholder groups in subsequent stages. In the FIERCE case, this included the flow of the results from D1.1, ensuring the empirical understanding of needs, gaps, and innovation patterns across Europe. The combination of extensive survey data with purposive sampling of high-performing SMEs and systematic literature review enabled the identification of both common patterns and exceptional practices.

Next, in Task 1.3, the project convened co-design methodologies with direct participation from SMEs, innovation intermediaries and the FIERCE Advisory Board. Crucially, the Sprint was not conceived

[5] Sagala, G. H., & Őri, D. (2024). Toward SMEs digital transformation success: a systematic literature review. Information Systems and e-Business Management, 22(4), 667-719. https://ideas.repec.org/a/spr/infsem/v22y2024i4d10.1007_s10257-024-00682-2.html

[6] Howells, J. (2006). Intermediation and the role of intermediaries in innovation. Research Policy, 35(5), 715–728. Retrieved from https://www.sciencedirect.com/science/article/pii/S0048733306000497

[7] Cooke, P. (2001). Regional innovation systems, clusters, and the knowledge economy. Industrial and Corporate Change, 10(4), 945–974. Retrieved from https://academic.oup.com/icc/article-abstract/10/4/945/706922?redirectedFrom=fulltext

[8] Argyris, C. (1996). Organizational learning II: Theory, method, and practice. Retrieved from https://cir.nii.ac.jp/crid/1572824500144147968

as a standalone consultation event but aimed to act as a "community of practice" formation activity — a bridge into deeper collaborative relationships and shared understanding that would inform subsequent co-creation processes. This approach aligns with recent research on innovation intermediation (Hafeez & Shahzad, 2025[9]) that emphasises the importance of sustained engagement rather than episodic consultation.

The insights from these engagements fed directly into a series of intra-consortium co-creation focus groups, where partners collaboratively translated stakeholder inputs into design elements. This internal stage enabled alignment on feasibility, delivery roles, and resource allocation.

Finally, lead partners for each support mechanism blueprint (e.g. DREVEN for Advisory Services, FBA for Transformation Projects and NOVASPACE for LEIs) were responsible for shaping the final outputs, ensuring integration with implementation planning in WP2, WP3, and WP4.

This staged architecture*, from understanding, to engagement, to co-creation, to drafting*, ensured that the resulting blueprints are empirically grounded, stakeholder-validated, and ready for real-world deployment. The methodology represents what Bergvall-Kåreborn et al. (2014[10]) describe as "user-driven innovation," where end-user insights are systematically integrated throughout the design process rather than treated as external validation checkpoints.

[9] Shahzad, K., & Hafeez, S. (2025). The role of ecosystem collaborations in the internationalization of SMEs: Empirical evidence from Finland. International Journal of Entrepreneurship and Small Business. Retrieved from https://www.researchgate.net/publication/387607366_The_role_of_ecosystem_collaborations_in_the_internationalisation_of_SMEs_empirical_evidence_from_Finland

[10] Bergvall-Kåreborn, B., Howcroft, D., Ståhlbröst, A., & Wikman, A. M. (2010, March). Participation in living lab: Designing systems with users. In IFIP working conference on human benefit through the diffusion of information systems design science research (pp. 317–326). Springer Berlin Heidelberg. Retrieved from https://inria.hal.science/hal-01060408/document

3. Design Sprint

3.1 Organisation of the Design Sprint

While the traditional Design Sprint methodology developed by Google Ventures spans five intensive days of structured activities (Knapp et al., 2016[11]), the FIERCE project implemented a condensed, one-day version, carefully tailored to the project's time constraints, multi-stakeholder needs, and focus on system-level innovation. The Sprint took place on April 9th, 2025, in Warsaw, Poland, hosted with the local support of FBA in the context of the 2nd Project Meeting.

The Sprint was organised around four key thematic pillars:

- **FIERCE SME Advisory Services (led by DREVEN)**
- **Open Calls and Financial Support for Transformation Projects (led by FBA)**
- **Local Entrepreneurship Initiatives (led by NOVASPACE)**
- **Monitoring and Evaluation Framework (led by EMNP)**

Each thematic strand was explored in parallel design sessions, combining both on-site and online/hybrid formats to maximise inclusivity and expert input. A total of 28 external stakeholders were engaged, including SMEs, innovation intermediaries, representatives from sister projects, and members of the FIERCE Advisory Board.

As overall performance tracking and outcome measurement are embedded from the outset in each of the support pillars of FIERCE, the Consortium decided that the monitoring framework was not to be treated as a standalone topic, but discussed and incorporated transversally across all thematic groups, with initial indicators proposed in direct connection to each blueprint component.

3.1.1 Preparation Phase

A significant effort went into **preparing the Sprint environment**, both in terms of content and facilitation. The team developed:

- slide decks presenting each support mechanism, including objectives, structure, and discussion prompts
- tailored questions to guide co-creation and feedback
- breakout session formats and facilitation guides

[11] Knapp, J., Zeratsky, J., & Kowitz, B. (2016). Sprint: How to solve big problems and test new ideas in just five days. Simon & Schuster. https://books.google.gr/books?hl=en&lr=&id=rV0JCgAAQBAJ&oi=fnd&pg=PA1&dq=Knapp,+J.,+Zeratsky,+J.,+%26+Kowitz,+B.+(2016).+Sprint:+How+to+solve+big+problems+and+test+new+ideas+in+just+five+days.+Simon+%26+Schuster.&ots=kGvhndoVdN&sig=BDuMHJgo5TP_Y9Q_jD-Q1dQC8TE&redir_esc=y#v=onepage&q&f=false

- pre-defined note-taking responsibilities to ensure documentation of all insights
- needed materials for on the ground implementation.

In the lead-up to the event, DREVEN coordinated a preparatory session for all facilitators and participants from the Consortium members, designed to align facilitation strategies and ensure methodological consistency across strands, while also preparing all members of the team for their supportive roles and organizational aspects. This was complemented by a series of one-to-one meetings between DREVEN and FBA, NOVASPACE, EMNP, and Q-PLAN focused on discussing the flows, clarifying objectives, and tailoring templates to the thematic needs of each blueprint area.

Each Sprint session was also matched with a clear moderation plan (including support from the rest of the partners), pre-assigned leads, and a participatory structure. Pre-sprint preparation included the distribution of key findings from Deliverable D1.1, ensuring all participants shared a foundational understanding of SME barriers, needs, and space-data awareness.

3.1.2 Execution Phase

The Design Sprint opened with a joint plenary session, where Q-PLAN and DREVEN introduced the FIERCE project's logic and the methodology for the day. Following this introduction, participants were divided into thematic groups, each focusing on a core component of the FIERCE support architecture.

To ensure both broad reach and deep local engagement, the Sprint was delivered in a dual-format model, combining on-site sessions in Warsaw with online discussions. This structure enabled the project to engage both local ecosystem actors and strategic external stakeholders.

- The physical sessions capitalised on FBA's extensive regional network, bringing together SMEs, start-ups and innovation intermediaries from across Poland. These participants contributed grounded insights and operational perspectives essential for context-sensitive design.
- The online sessions allowed for the inclusion of the European Commission's Project Officer, members of the "Innovate to Transform" sister projects (SURE5.0, GreenSME, MANTRA, STAGE, Up2Circ, InTransit and PhotonQBoost) and the FIERCE Advisory Board.

Each design strand was assigned a dedicated moderator and note-taker, with sessions following structured agendas developed during the preparation phase.

Design Sprint I – Local Entrepreneurship Initiatives

- Moderated by NOVASPACE with support from EMNP
- Physical session with local ecosystem actors and SMEs
- EMNP introduced monitoring considerations linked to LEIs

Design Sprint II – Open Calls & Transformation Projects (Online)

- Moderated by Q-PLAN and FBA, joined by the Project Officer and relevant "Innovate to Transform" projects
- Focused on budget models, application logic, and target group segmentation
- EMNP contributed monitoring perspectives for integration

Design Sprint III – FIERCE Advisory Services (Hybrid)

- **Strand I (on-site)**: Moderated by DREVEN with introduction on monitoring aspects from EMNP, engaging innovation intermediaries and SMEs
- **Strand II (online)**: Moderated by Q-PLAN and DREVEN with Advisory Board members and expert guests, while including also the monitoring framework component by EMNP
- Key focus areas included service scope, delivery models, SME readiness, and implementation constraints

All three strands followed a common structure: presentation of preliminary concepts, co-creation of mechanisms through interactive tools and templates, and final roundtable-style synthesis of actionable recommendations. Notes from each session were consolidated by DREVEN, QPL, NOVASPACE and EMNP for blueprint development.

3.1.3 Post-Sprint reflection and debriefing

Following the Design Sprint, a structured internal debriefing session was facilitated by DREVEN, with active participation from all project partners. The goal was twofold: to reflect on the Sprint's organisational experience, and to capture strategic insights for translating co-creation inputs into actionable blueprints. The debrief session built on partners' observations, session notes, and moderator reflections across the three design strands.

The debriefing session commenced with a structured reflection exercise, during which partners were invited to assess Sprint's overall performance, including organisational aspects, facilitation effectiveness, and content outcomes. Discussions focused on identifying key strengths, potential areas for improvement, and any elements that challenged initial assumptions. The consortium confirmed the added value of combining in-person sessions, which enabled rich, context-specific dialogue with local stakeholders, with online and hybrid components, which allowed engagement with EU-level actors and external experts. This dual-format approach was recognised as an effective strategy for ensuring both ecosystem relevance and policy alignment.

3.2 Key lessons learned

To consolidate insights from the Design Sprint and guide the blueprint drafting process, the consortium conducted a structured internal debrief, facilitated by DREVEN with active contributions from all partners. This reflective session aimed to assess both the operational aspects and the substantive outcomes of the Sprint, ensuring alignment across design strands and translating collective input into actionable design parameters.

The debriefing highlighted several strategic and operational priorities:

- The **importance of clear, jargon-free communication**, particularly in explaining space-enabled advisory services to non-technical SME audiences.
- A **shared need to streamline onboarding processes**, including intuitive application logic, eligibility guidance, and simple entry points for new SMEs.
- Strong stakeholder interest in **peer-learning formats**, **SME showcases**, and **mentoring pathways** tailored to the needs of resource-constrained and early-stage firms.

- The **potential of cross-sector engagement strategies**, such as participation in startup expos or sustainability forums, to position FIERCE beyond space-sector silos.
- Recommendations to embed **community-building features**, including storytelling, Slack/Discord channels, and co-branded visibility opportunities, as a way to enhance engagement and extend the project's reach.

Critically, the debrief confirmed the necessity of tailoring advisory services by theme and sector, with several examples emerging from the sessions (e.g., “thermal imagery for agriculture”, “hyperspectral analytics for circularity monitoring”). This segmentation is expected to improve both relevance and uptake.

The consortium also validated the approach of integrating the monitoring framework as a transversal design layer, rather than a standalone module. Partners agreed that performance indicators should be embedded in each blueprint component from the outset. Mechanisms such as mid-term check-ins, and self-assessment tools were proposed as suitable tools for tracking progress without overburdening SMEs.

This debriefing process played a critical role in ensuring that the Design Sprint results were not only captured but also immediately operationalised, with clear blueprint drafting responsibilities distributed among partners.

3.2.1 Session-Level Insights

The table below presents a synthesis of the most relevant takeaways from each Sprint session, based on structured notekeeping templates and moderator reflections.

Table 2: Key takeaways per Design Sprint Session

Design Sprint Session	Key Takeaways
FIERCE Advisory Services	Need for jargon-free communication; promote “imagination triggers”; blend of technical and business support; use of peer learning and video-based formats; interest in Slack/Discord; simplified application logic.
Advisory Board Consultation	Startups need visible links to capital, clients, and revenue; avoid overloading with services; leverage EIT/KIC networks; support short applications and cross-sector outreach, connect Advisory Services Program with FSTP
FSTP and Monitoring Framework	Lessons from past FSTP: streamline application process; define sustainability KPIs at entry; use local scouting and EEN for outreach.
Local Entrepreneurship Initiatives (LEIs)	Barriers include regulation and customer awareness; need for public stakeholder matchmaking; promote learning hubs and regulatory sandboxes; fill early-stage funding gaps; shift from tech- to client-focus.

4. The Focus Groups

As a key component of Task 1.3, DREVEN organised a series of intra-consortium **co-creation focus groups** to refine and validate the design of its SME support architecture with the support of the Blueprint Leads (NOVASPACE, EMNP, FBA). Methodologically, focus groups represent a well-established participatory design tool, enabling interactive dialogue between project involved teams

and stakeholders. In innovation ecosystems, they are particularly effective in fostering shared understanding, surfacing tacit knowledge, and enhancing the practical feasibility and legitimacy of policy and programme blueprints[12]. For FIERCE, the focus groups provided an essential complement to the broader Design Sprint exercise, offering a setting for more in-depth co-development of technical, procedural, and governance-related components of the support mechanisms.

Four thematic focus groups were conducted between June and July 2025, each addressing a core pillar of the FIERCE support model:

- Advisory Services & Monitoring Framework
- Monitoring & Evaluation Framework
- Transformation Projects (FSTP)
- Local Entrepreneurship Initiatives (LEIs)

Each session followed a semi-structured format, combining presentations of initial proposals with open discussion, guided questioning, and collaborative editing of design elements. The format allowed the FIERCE partners to gather the insights of the Design Sprint and feed it in the design of the project elements, challenging assumptions, adapting models to operational realities, and co-defining key components of the blueprints.

The inputs gathered during the four thematic focus groups provided the final layer of refinement for each core pillar of the FIERCE support architecture. These sessions enabled targeted validation of delivery logic, procedural flow, and stakeholder alignment. Below are presented the key results.

Table 3: Advisory Services Focus Group

Advisory Services Focus Group (DREVEN)	
Format: online	Date: 05/06/2025

[12] Granstrand, O., & Holgersson, M. (2020). Innovation ecosystems: A conceptual review and a new definition. Technovation, 90, 102098. Retrieved from https://www.sciencedirect.com/science/article/pii/S0166497218303870#:~:text=An%20innovation%20ecosystem%20is%20the%20evolving%20set,an%20actor%20or%20a%20population%20of%20actors.

This session focused on refining the structure, delivery logic, and evaluation framework for the FIERCE Advisory Services. Building on Sprint outcomes, participants confirmed a phased SME journey model:
Preparation → Application → Mentoring → Advisory Services → Evaluation.

Consensus emerged around providing up to 50 hours of customised support per SME, delivered through a combination of one-on-one expert sessions and thematic group-based masterclasses. Participants endorsed the inclusion of:

A short, user-friendly application form
Simplified scoring criteria
Language- and topic-matching for mentor assignments
A Helpdesk function and a dedicated LinkedIn group to enhance onboarding and visibility

Table 4: Monitoring and evaluation framework

Monitoring and evaluation framework (EMNP)	
Format: online	Date: 05/06/2025

EMNP presented the initial design of the Monitoring and Evaluation (M&E) framework, which includes both output (e.g. number of SMEs supported, services delivered) and impact indicators (e.g. skills development, commercialisation success, market integration). The group stressed the importance of strict timeline coordination, aligned with the Month 19 review milestone, and called for easy-to-use reporting mechanisms.

Table 5: Local Entrepreneurship Initiatives Focus Group

Local Entrepreneurship Initiatives Focus Group (NOVASPACE)	
Format: online	Date: 25/06/2025

This session addressed the structure and operational logic of the Local Entrepreneurship Initiatives (LEIs), intended to mobilise regional innovation ecosystems around green, space-enabled technologies. Discussions explored:

- alignment of LEIs with Smart Specialisation Strategies (S3)
- formats for activation events (e.g., hackathons, thematic workshops)
- the role of Digital Innovation Hubs (DIHs), incubators, and clusters
- local outreach and SME recruitment strategies

Participants highlighted the need for flexibility and contextual tailoring to regional conditions, stressing the value of leveraging existing networks to increase engagement and legitimacy. The importance of avoiding “one-size-fits-all” formats and enabling co-branding with regional actors was also emphasised.

Table 6: Transformation Projects (FSTP) Focus Group

Transformation Projects (FSTP) Focus Group (FBA)

Format: online Date: 10/07/2025

The third focus group focused on designing the open call mechanism for SME-led Transformation Projects. The discussion examined:

- eligibility criteria, thematic priorities, and funding conditions
- transparent and accessible evaluation procedures
- complementarity with Advisory Services and LEIs
  support measures to help SMEs apply (e.g. matchmaking, FAQs, preparatory sessions)

There was a strong consensus on ensuring that the FSTP design promotes transparency, accessibility, and strategic alignment, with special emphasis on reaching SMEs active in circular economy, raw materials, and environmental monitoring. Participants proposed several operational improvements, including an integrated call calendar, continuity between funding and advisory tracks, and feedback loops for unsuccessful applicants to re-engage with the ecosystem.

The consolidated outcomes of the focus groups were directly incorporated into the final blueprint structures, informing key design elements such as eligibility criteria, delivery formats, monitoring metrics, and stakeholder engagement strategies. These contributions significantly reinforce the usability, adaptability, and strategic coherence of the FIERCE support mechanisms across diverse regional and sectoral contexts, while ensures that outputs from WP1 feed meaningfully into the overall design of the workflow and delivery structures.

5. Blueprints

The blueprints developed under Task 1.3 serve as the foundational design documents for the operationalisation of the FIERCE support mechanisms. Each blueprint translates stakeholder input, consortium expertise, and strategic priorities into a structured implementation model, detailing objectives, workflows, partner roles, and monitoring provisions. Together, they provide a coherent and adaptable framework for delivering targeted support to SMEs across Europe through FIERCE.

In the context of FIERCE, a **blueprint** is a structured design specification that outlines **the logic, components, delivery model**, and **operational requirements** of each SME support mechanism. The FIERCE Blueprints aim to act as both a strategic guide and a practical reference, ensuring that implementation is consistent, scalable, and linked to the stakeholder needs.

5.1 Blueprint on the Advisory Services

The Advisory Services form the foundational layer of support that the FIERCE project will offer to SMEs working at the intersection of downstream space data and sustainability-driven innovation. Developed through co-design methodologies and extensive ecosystem consultation, this blueprint outlines a modular, inclusive, and impact-driven support framework that enables SMEs to advance in their green and digital transitions.

The blueprint introduces a structured service model that is responsive to SME needs, adaptable across geographies, and aligned with key EU policy priorities, including the European Green Deal, the Circular Economy Action Plan, and the Critical Raw Materials Act. The design ensures high-quality, scalable delivery across all project regions.

Table 7: Advisory Services at a glance

Advisory Services | At a glance	
Objective	Provide tailored support for SMEs to integrate space-derived data into green and digital innovation strategies.
Target Audience	SMEs across EU and HE Associated Countries
Key Components	• Technical Coaching • Business Advisory • Thematic Masterclasses • Personalised Mentoring • Toolkits & Templates
Delivery Format & Duration	Online; 3 months per SME; up to 50 hours support (38h advisory + 12h mentoring)
Entry Criteria	EU/HE-eligible SMEs with basic digital readiness and sustainability commitment. No prior space-data expertise required.

Expected Outcomes	Improved SME capacity for space-data use, new product/service development, enhanced sustainability reporting.
Partners Involved	DREVEN, EMNP, QPLAN, NOVASPACE, TTG, EIT RAW MATERIALS
Monitoring & Evaluation	Self-assessments, KPIs, transformation roadmaps, final mentor reports, feedback forms.

5.1.1 Core components

The programme is structured around six thematic areas of support, further identified during co-creation and validated through focus groups and design sprints:

Table 8: Advisory Services Core Components

Component	Objective	Delivery Mode
Technical Space Data & Applications	Introduce SMEs to EO data access and integration in products/services	Masterclasses + 1:1 technical support
Circular Value Chains & Product Redesign	Support sustainable redesign of business models and products	Masterclasses + 1:1 technical support
Environmental Monitoring & CSRD Compliance	Assist SMEs in ESG metrics, emissions tracking, and CSRD alignment	Masterclasses + 1:1 technical support
Business Strategy, Marketing & Fundraising	Provide guidance on market readiness, access to finance, and business planning	Masterclasses + 1:1 technical support
Raw Materials	Support in efficient management of primary, secondary and critical raw materials	Masterclasses + 1:1 technical support
Intellectual Property & EU Support Resources	Educate on IPR management and EU-level training	Masterclasses + 1:1 technical support

The support model ensures that each SME receives a tailored mix of support across these areas, with up to 50 hours (including up to 38 hours expert advisory and up to 12 hours mentoring). The services will include masterclasses, coaching sessions, roadmaps, and collaborative tools. The selection of service mix will be co-created with each SME based on a Transformation Roadmap co-designed with the Lead Mentor.

5.1.2 Target beneficiaries

Eligible participants include SMEs legally established in EU Member States or Horizon Europe associated countries. The programme targets start-ups, scale-ups, and established SMEs across

sectors such as agriculture, energy, construction, transport, digital, culture and creativity, proximity services, and critical raw materials.

The programme is designed to support SMEs at varying levels of maturity and digital readiness. No prior experience with space data is required. However, applicants should demonstrate a commitment to sustainability and a willingness to engage with advisory services.

5.1.3 Open Calls and Applications

The application process is hosted on the OnePass platform with the support of FBA and is designed to be intuitive and user friendly. Applicants are required to submit a complete application form with the relevant declarations.

Applicants will be supported through webinars, a helpdesk, FAQs, and informative materials. Selection will be carried out through 2 open calls (with two cut-off rounds each) using standardised criteria focused on relevance, transformation potential, and replication within the European context.

5.1.4 Outreach Campaign

To ensure wide visibility and attract a diverse pool of applicants, a comprehensive outreach campaign will be carried out. Activities will include an Info Session as well as a “How to Apply” webinar to provide interested SMEs with an overview of the programme. Additionally, each consortium partner will actively promote the Open Calls through their own networks, leveraging their connections with relevant stakeholders, SMEs, clusters, and associations. Innovation intermediaries and the Strategic Partners Network will also contribute to the promotion, ensuring targeted dissemination within their respective ecosystems. Moreover, partners will organise and/or participate in online events, conferences, and networking sessions to present the Open Calls and engage directly with potential applicants. Further outreach actions will include 3 roadshows, dedicated social media promotion, newsletters, and tailored communication activities to raise awareness and maximise the reach of the campaign.

5.1.5 Advisory Journey and Services Delivery Model

The SME support journey is structured in four stages:

- **Onboarding**: After successful selection, SMEs are onboarded by Lead Mentors and complete a self-assessment form.
- **Mentoring**: Lead Mentors facilitate the mentoring process, working closely with SMEs to assess their needs and co-design a tailored Transformation Roadmap.
- **Advisory Services Delivery**: SMEs receive masterclasses and individualised sessions based on the Transformation roadmap.
- **Exit and Reporting:** Lead Mentors complete a final mentoring session, gather feedback, and submit reports.

Support is also delivered through a peer LinkedIn group for community building.

5.1.6 Process flow and timeline

To ensure the consistent and high-quality delivery of the FIERCE Advisory Services, the project has adopted a four-phase implementation model. This structure provides clarity on how SMEs are

selected, onboarded, supported, and evaluated throughout their engagement with the programme. Each phase is designed to streamline delivery, foster personalisation, and ensure measurable outcomes aligned with the overall objectives of the FIERCE project. Key milestones, actors, and timelines are summarised below.

Table 9: Phase 0 - Preparation

PHASE 0: PREPARATION

• **Objectives**: Set up governance, documentation and delivery tools prior to Open Call launch.
• **Key Actions**:
  ○ Formation of Selection Committee (DREVEN)
  ○ Appointment and training of evaluators (by each partner, coordinated by DREVEN)
  ○ Preparation of Open Call documentation (DREVEN)
  ○ Activation of OnePass platform (FBA)
  ○ Communication strategy and outreach plan (Q-PLAN)
• **Timeline**:
  ○ Evaluator & Selection Committee Guidelines: July 2025
  ○ Training Sessions: September - October 2025

Table 10: Phase 1 - Application

PHASE 1: APPLICATION

• **Objectives**: Streamlined application, eligibility verification, and selection.
• **Key Actions**:
  ○ Application through OnePass with support tools (FAQs, webinars, helpdesk)
  ○ Evaluation by assigned evaluators using simplified criteria
  ○ Selection Committee validation and notifications
• **Deadlines**:
  ○ 1st Open Call: September – November 2025 (including cut-offs)
  ○ 2nd Open Call: January – March 2026 (including cut-offs)

Table 11: Phase 2 - Mentoring

PHASE 2: MENTORING

• **Objectives**: Define SME needs, prepare for tailored advisory, monitor and support along the way
• **Key Actions**:
  ○ Assignment of Lead Mentors
  ○ First mentoring session: Self-assessment review, define advisory needs and co-design roadmap
  ○ Service allocation according to SME profile and thematic focus

- Exit interview to collect feedback
- Submission of final reports

Table 12: Phase 3 – Advisory Services

PHASE 3: ADVISORY SERVICES

- **Objectives**: Deliver high-quality, tailored support to SMEs.
- **Key Actions**:
  - Technical and business advisory delivery by DREVEN and thematic partners
  - Delivery of masterclasses
- **Deadlines**:
  - The Service delivery should be completed within 3 months from onboarding

5.1.7 Descriptions of the Advisory Services

This section provides an overview of the Advisory Services available to SMEs, encompassing both thematic masterclasses and 1:1 advisory sessions, amounting to a total of 31 services. The thematic area ***"Space Data and Applications"*** comprising four masterclasses, is recommended as a foundational starting point, offering essential conceptual and practical grounding. Building on this foundation, SMEs are encouraged to select additional services aligned with their specific interests or operational priorities. Furthermore, adopting a cohesive approach by combining masterclasses with corresponding 1:1 advisory support allows participants to cultivate a thorough understanding of the subject matter and to translate acquired knowledge effectively into strategic and operational practice.

Technical Space Data & Applications

Space data and applications (4 Masterclasses)

All applicants will begin with four introductory Masterclasses designed to build a foundation in space data and its applications. These will cover the basics of Earth Observation (Masterclass 1), how satellite data and sensors generate insights (Masterclass 2), the value of geolocation and GNSS (Masterclass 3), and the main platforms and services for EO data (Masterclass 4). Participants will be introduced to sources such as Copernicus and Galileo, common data formats, and practical use cases.

The programme is particularly valuable for SMEs with little prior experience, helping them navigate data platforms and understand how space-based insights can support their business goals. The objective is to give SMEs a clear foundation in space data concepts and applications, enabling them to explore the potential of space technologies with confidence.

Specialized Space data (Masterclass)

This advanced Masterclass focuses on cutting-edge developments in Earth Observation (EO), with a strong emphasis on Artificial Intelligence (AI), Machine Learning (ML), and future space data trends. Participants will learn how AI/ML is enhancing EO data analysis and driving decision-making in areas such as agriculture, urban management, maritime surveillance, and disaster preparedness, while also

gaining insights into emerging developments like commercial satellite constellations, New Space technologies, and near real-time analytics.

The objective is to equip SMEs with advanced data analysis techniques and a clear understanding of upcoming EO trends, enabling them to strengthen their technical capabilities, stay competitive, and future-proof their strategies. This Masterclass is particularly relevant for SMEs that already have a basic grounding in space data and are ready to deepen their expertise through advanced tools and applications.

Specialized Space data (1-1 Advisory)

This one-on-one advisory service provides tailored support to help SMEs apply space data within their specific innovation context. Building on the advanced Masterclass, participants will work with a mentor to explore practical steps for integrating satellite data into their products or services. The sessions are fully personalized, guiding SMEs in identifying the most relevant datasets, tools, and platforms, defining application scenarios, and addressing implementation or feasibility questions.

The objective is to offer dedicated, in-depth technical support with clear next steps and resources, making it especially valuable for SMEs that already have a concrete idea or early-stage prototype and need expert guidance to integrate space data effectively.

Circular Value Chains & Product Redesign

Circular Economy (Masterclass)

This Masterclass introduces SMEs to the core principles and practices of Circular Economy, with a focus on analysing value chains and designing circular business interventions. Participants will learn how to map their value chains, identify gaps in sustainability and circularity, and explore strategies to reduce waste, extend product lifecycles, and improve resource efficiency. The session emphasizes practical tools and frameworks aligned with EU sustainability policies and market opportunities, preparing SMEs to embed circular thinking into their innovation processes and business models.

The objective is to strengthen SMEs' understanding of circular strategies and support them in enhancing the sustainability, resilience, and competitiveness of their innovations. This Masterclass is designed for SMEs across all sectors that are developing new products, services, or business models and want to leverage circularity for greater impact.

Circular Economy (1-1 Advisory)

This one-on-one advisory session supports SMEs in applying circular economy principles directly to their product, service, or business model. Building on the "Circular Economy" Masterclass, it provides a personalized opportunity to assess current value propositions, identify waste or inefficiencies, and co-design practical pathways toward circularity. Mentors offer actionable insights and tools to help SMEs integrate strategies such as extending product life, designing for reuse, adopting regenerative practices, or rethinking resource inputs, while also exploring how space data can support circular approaches.

The objective is to deliver tailored guidance that enables SMEs to embed circular strategies aligned with their innovation goals and sector, making it especially relevant for those aiming to strengthen the sustainability of their innovations through circular thinking.

Environmental Monitoring & CSRD Compliance

Environmental Monitoring (Masterclass)

This Masterclass introduces SMEs to the use of space data for environmental monitoring, demonstrating how satellite information can help assess, track, and communicate environmental performance. Participants will explore key indicators such as land use change, water quality, and emissions, as well as the tools and platforms commonly used for environmental analysis. With a strong focus on practical applications across sectors including agriculture, infrastructure, logistics, and resource management, the session also highlights how monitoring practices align with EU sustainability frameworks such as the Corporate Sustainability Reporting Directive (CSRD).

The objective is to provide SMEs with the knowledge and tools to understand and monitor their environmental impact through space data, supporting informed decision-making and compliance with sustainability standards. This Masterclass is particularly relevant for SMEs that want to measure their environmental footprint or strengthen the sustainability of their operations, products, or services.

Environmental Monitoring (1-1 Advisory)

This one-on-one advisory service helps SMEs integrate space-based environmental monitoring into their product, process, or service. Building on the “Environmental Monitoring” Masterclass, it focuses on practical application by identifying relevant indicators, selecting suitable datasets, and designing a monitoring strategy aligned with the SME’s innovation and impact goals. The session provides both technical and strategic guidance on using Earth Observation (EO) data to track parameters such as land cover change, pollution, or vegetation health, while also supporting SMEs in preparing for reporting obligations, green funding opportunities, or alignment with policy frameworks like the EU Green Deal and CSRD.

The objective is to help SMEs define and implement a tailored environmental monitoring approach that strengthens their environmental intelligence and impact alignment. This service is particularly suited for SMEs that want to measure or demonstrate their environmental performance through EO data, whether for internal tracking, external communication, or compliance with sustainability requirements.

Raw Materials

Environmental risk and monitoring for raw materials (Masterclass)

This Masterclass explores how satellite technologies can support the management and monitoring of mining activities and their environmental impacts. Participants will learn how Earth Observation (EO) data can detect and track phenomena such as acid mine drainage, rooftop mining, and vegetation loss, using techniques like multi-spectral imaging, time-series analysis, and change detection. Real-world use cases will illustrate how these technologies help assess and mitigate environmental impacts in mining operations, supporting regulatory compliance, transparency, and sustainable resource management.

The objective is to provide SMEs with insights on leveraging EO data for monitoring the environmental effects of mining, particularly for those with existing space data expertise who wish to expand their portfolio to include mining impact applications.

Environmental risk and monitoring for raw materials (1-1 Advisory)

This one-on-one advisory service builds on the “Environmental risk and monitoring for raw materials” Masterclass and offers tailored support for SMEs seeking to expand their expertise in this topic. The service begins with an assessment of the SME’s structure and solution portfolio, followed by personalized sessions addressing specific questions and challenges related to the Masterclass content. Participants will explore processing techniques for monitoring stockpile volume and stability over time, while receiving guidance on identifying and selecting the most suitable datasets for their specific application use case.

This advisory is particularly designed for SMEs with existing experience in space data who wish to broaden their portfolio to include applications such as disposal monitoring and the use of satellite data for managing secondary raw materials.

Earth Observation for Mineral Exploration (Masterclass)

This Masterclass offers an in-depth exploration of mineral mapping using Earth Observation (EO) technologies. Participants will learn the fundamentals of optical EO data, and the processing techniques needed to extract valuable information for mineral identification and mapping. The session covers diagnostic spectral features for key mineral groups (iron, clays, carbonates, silicates), spectral analysis methods such as band ratios and spectral angle mapping, supervised and unsupervised classification algorithms, abundance mapping including spectral unmixing, and the valorisation of secondary raw materials. Each topic is illustrated with real-world case studies.

The objective is to enable SMEs to understand how EO data can support mineral exploration and the valorisation of secondary raw materials. This Masterclass is particularly suited for SMEs with existing EO expertise seeking to expand their portfolio using multispectral data for mineral exploration applications.

Earth Observation for Mineral Exploration (1-1 Advisory)

This one-on-one advisory service builds on the Earth Observation for Mineral Exploration Masterclass and provides tailored support for SMEs aiming to expand their expertise in this domain. The service begins with an assessment of the SME’s structure and solution portfolio, followed by personalized sessions addressing specific questions and challenges from the Masterclass content. Mentors guide participants through advanced exercises using open-source software such as SNAP, enabling hands-on processing of optical EO data for mineral mapping. Additional consultancy supports SMEs in selecting the most suitable processing approaches and datasets for their specific needs.

The objectives are to equip SMEs with practical skills for processing optical data, knowledge of available datasets and best practices for integration, and the ability to leverage Copernicus data and open tools. This advisory is particularly relevant for SMEs with existing EO expertise looking to incorporate multispectral data into mineral exploration applications.

The role of space data in the mining lifecycle: focus on safety applications (Masterclass)

This Masterclass provides a comprehensive overview of how space data can support every stage of the mining lifecycle, from exploration to closure, with an introduction to Earth Observation (EO) and GNSS technologies. A particular emphasis is placed on safety applications: GNSS can monitor the displacement of critical infrastructure and slopes in static mode, and track mining vehicles in real time

in kinematic mode, optimizing routes and reducing accident risks. EO data, especially through InSAR (Interferometric Synthetic Aperture Radar), allows precise measurement of ground displacement at local and regional scales with millimetric accuracy. Participants will also learn about key EO data providers.

The objective is to raise SMEs' awareness of the role of space data in the mining lifecycle and demonstrate how it can enhance safety in mining operations. This Masterclass is designed for SMEs already serving the mining sector or those with space technology expertise looking to enter or expand within the industry.

The role of space data in the mining lifecycle: focus on safety applications (1-1 Advisory)

This one-on-one advisory service builds on the "The role of space data in the mining lifecycle: focus on safety applications" Masterclass and provides tailored support for SMEs seeking to integrate space data into the mining lifecycle with a focus on safety applications. The service begins with an assessment of the SME's structure and solution portfolio, followed by personalized sessions addressing specific questions and challenges from the Masterclass content. Mentorship helps SMEs identify how their products and services can be positioned within the mining value chain, while targeted networking and matchmaking activities connect them with suitable solution providers based on their specific needs.

The objectives are to guide SMEs in positioning their space-based solutions within the mining sector and to facilitate strategic partnerships. This advisory is particularly relevant for SMEs already serving the mining industry or those with space technology expertise aiming to enter or expand within the sector.

Business Strategy, Marketing & Fundraising

Find and use EU funding (Masterclass)

This Masterclass provides SMEs with a step-by-step introduction to the EU funding landscape. Specific funding opportunities for technology development, research collaboration, capacity building, and network expansion, will be presented, with a focus on space-enabled green solutions.

The objective is to give SMEs a comprehensive overview of EU funding options and highlight opportunities relevant to downstream space data applications, including circularity, raw materials, environmental monitoring, and corporate sustainability. This Masterclass is aimed at SMEs across all sectors with limited experience or a basic understanding of identifying and applying for EU funding.

Find and use EU funding (1-1 Advisory)

This one-on-one advisory service provides SMEs with tailored support to navigate EU funding opportunities. It begins with an assessment of the SME's research excellence and technology portfolio to identify relevant funding needs, followed by mentoring sessions focused on selecting suitable EU funding programs and understanding their specific requirements. One session is dedicated to a chosen funding opportunity, where the SME and mentor review the call in detail, evaluate potential involvement, assess eligibility criteria, and outline key steps for proposal preparation.

The objectives are to give SMEs a clear overview of funding opportunities relevant to their business and to provide personalized guidance for successful applications. This service is aimed at SMEs with

a basic understanding of EU funding who wish to refine their knowledge or prepare for upcoming calls.

Marketing, Partnerships and Communication Strategies (Masterclass)

This Masterclass offers SMEs a step-by-step guide to building a strong communication strategy, covering branding, establishing an online presence, drafting a communication plan, and implementing effective marketing actions.

The objective is to provide SMEs with an overview of the key components and initial steps needed to develop an effective communication strategy. It is designed for SMEs across all sectors with limited experience or a basic understanding of communication strategy design and execution.

Marketing, Partnerships and Communication Strategies (1-1 Advisory)

This advisory service begins with an assessment of the mentees' needs and an audit of their current communication and marketing activities. It is followed by tailored training addressing the identified pain points and concludes with a final review meeting to evaluate progress.

The objectives are to provide mentees with an external perspective on their current status, offer personalized guidance on communication-related areas, and support skill development. This service is designed for SMEs with some experience or understanding of communication and marketing who wish to refine or enhance their knowledge and capabilities.

Compliance & regulatory drivers for the uptake of space data in Europe (1-1 Advisory)

This one-on-one advisory service helps SMEs understand the regulatory and compliance challenges they face and how space data can support solutions. The service aims to identify key compliance issues, demonstrate real-world cases where space data has successfully supported regulatory requirements (e.g., environmental monitoring), and provide guidance on applying space data to the SME's specific challenges.

It is designed for SMEs encountering compliance or regulatory hurdles that could be addressed with space data, as well as for space sector SMEs seeking support in business coaching, funding, or service development.

Navigating through space incubation and acceleration programmes (1-1 Advisory)

This one-on-one advisory service provides SMEs with tailored guidance to identify and apply to incubation and acceleration programs that foster innovation and growth through space data and related technologies.

The objective is to help SMEs find programs aligned with their business goals and support them throughout the application process. It is aimed at SMEs seeking to scale their business using downstream space technologies, as well as space sector SMEs looking to develop or improve their services with business coaching and funding support.

Landscape of space data companies and their value-added services (1-1 Advisory)

This one-on-one advisory service helps SMEs assess their projects and identify suitable external service providers from the FIERCE pool of experts. The objectives are to clarify project needs,

demonstrate how space data can be integrated, explain the roles of different players in the space data ecosystem, and support SMEs in finding the right partner for their funded transformation project.

It is aimed at SMEs seeking to apply downstream space technologies to enhance operations and achieve sustainability goals, as well as space sector SMEs looking to develop or improve their services with business coaching and funding support.

Space Economy (Masterclass)

This Masterclass offers a comprehensive introduction to the current and emerging trends shaping the space industry, highlighting technological advancements, evolving market demands, and promising growth opportunities. Designed to equip businesses with a solid understanding of the space market, the course helps participants identify potential opportunities and adopt best practices in leveraging space data.

It is particularly tailored for companies with limited experience in the space sector, as well as organizations that utilize space data but seek deeper insights into the space economy and its practical applications across areas such as sustainability, agriculture, raw materials, and mining.

Space Economy (1-1 Advisory)

This one-on-one advisory service provides SMEs with tailored insights into the space industry, covering technological trends, market demands, and growth opportunities. Objectives include helping businesses understand the space market and identify opportunities and best practices for using space data.

It targets companies with limited experience in the space sector or those using space data without deep knowledge of the space economy and its applications in areas such as sustainability, agriculture, raw materials, and mining.

Business Model definition/ transformation (1-1 Advisory)

This service supports SMEs in designing or transforming the key building blocks of their operational framework, such as cost structures, revenue streams, and eco-social benefits, using the Sustainable Business Model Canvas (SBMC) by Strategyzer. The SBMC offers a holistic approach that considers not only economic factors but also the ecological and social impacts of business activities, helping companies understand the broader relationships within and beyond their operations.

The service aims to provide actionable insights that enable SMEs to build resilience through more sustainable business models. It is particularly suited for early-stage companies developing space-enabled products who wish to assess the viability and sustainability of their operations, as well as for non-space companies exploring how integrating satellite data into their products or processes can transform their business models.

Business Plan Improvement (1-1 Advisory)

This 1-1 Advisory service is designed to help SMEs enhance their existing Business Plans by reviewing the foundational roadmap that guides strategic implementation and ensures alignment with their Business Model, while providing tailored recommendations for improvement. Aimed at strengthening the strategic and operational capacity of SMEs, the service focuses on improving the

quality, coherence, and effectiveness of Business Plans to boost readiness for growth, investment, and long-term competitiveness.

It is particularly suited for middle-stage companies developing space-enabled products who wish to assess the viability and sustainability of their strategic execution, as well as for non-space companies interested in understanding how integrating satellite data into their products or processes can transform their Business Plan.

Value proposition definition/ transformation (1-1 Advisory)

This service helps SMEs define or refine their value propositions using the Value Proposition Canvas (Strategyzer) or the Sustainable Value Proposition Canvas (Explorer Lab), ensuring alignment with customers' values, needs, pain points, and desired gains.

The service aims to support SMEs in creating new offerings or transforming existing ones through the use of space data, positioning their value propositions around what matters most to their key customers. It is particularly suited for non-space SMEs seeking to understand how space data can reshape their value propositions and business models, as well as for early-stage space SMEs aiming to align their products more closely with the needs of prospective customers.

Getting Investment Ready: challenges & solutions (Masterclass)

The Masterclass is designed to equip SMEs with the essential knowledge and practical tools needed to attract investors, secure funding, and scale their operations. Through tailored guidance and expert insights, participants will learn how to prepare compelling investor pitches, strengthen financial management practices, and explore suitable funding opportunities.

The overall objective is to increase SMEs' capacity to access and leverage investment for growth, innovation, and market expansion, while supporting SMEs, start-ups, and scale-ups in enhancing their investment readiness. By bridging knowledge gaps and providing actionable strategies, the Masterclass empowers businesses across multiple sectors to confidently pursue funding and accelerate their innovations.

Getting Investment Ready: challenges & solutions (1-1 Advisory)

The 1:1 Advisory service builds on the "Getting Investment Ready: challenges & solutions" Masterclass and offers SMEs tailored, hands-on guidance designed to refine business models, strengthen financial strategies, and enhance investor outreach. By providing personalised support aligned with each business's funding goals, investment stage, and sector needs, this service ensures that SMEs receive the customised expertise required to successfully navigate the investment landscape.

The objective is to increase SMEs' capacity to access and leverage investment for growth, innovation, and market expansion, while supporting SMEs, start-ups, and scale-ups in boosting their investment readiness. With a focus on practical, tailored solutions, the 1:1 Advisory service empowers businesses across multiple sectors to position themselves for funding success and long-term growth.

Private Financing (Masterclass)

The "Private Financing" Masterclass is designed to familiarise SMEs, start-ups, and scale-ups with the private investment landscape, equipping them with the knowledge and tools to secure funding.

Through theory, case studies, and expert input, participants explore the different types of investors, financing strategies, and the key elements of successful funding proposals. The session is structured to provide tailored guidance that helps businesses effectively navigate the financing journey, from early discussions with investors to final agreements, while strengthening their ability to meet investor expectations. It is particularly relevant for SMEs across multiple sectors that are seeking to raise funding for their innovations and enhance their investment readiness.

Private Financing (1-1 Advisory)

The 1:1 Advisory service builds on the “Private Financing” Masterclass and provides tailored support for SMEs to navigate the complexities of this topic. Each business receives personalised guidance in investor targeting, pitch and proposal refinement, and negotiation strategies. This hands-on approach ensures alignment between the SME’s funding needs and investor expectations, while providing step-by-step support through due diligence and closing agreements. It is designed to provide tailored guidance and expertise to help SMEs, start-ups, and scale-ups effectively navigate the private financing landscape, from initial discussions to final agreements. The service is aimed at SMEs from multiple sectors focusing on raising funding for their innovations.

Intellectual Property & EU Support Resources

Introduction to IP protection measures (1-1 Advisory and/ or Masterclass)

The Introduction to IP Protection Measures service is designed to familiarize SMEs with appropriate intellectual property (IP) protection strategies tailored to the specific products or services they are developing. Delivered through one-on-one advisory sessions or group masterclasses, the service introduces SMEs to relevant IP options, emphasizing the assessment of their suitability in line with the company’s strategic objectives and long-term goals.

Its primary aim is to empower SMEs to make informed decisions about IP protection, aligning effective IP strategies with innovation goals to safeguard competitive advantage and enhance the commercial viability of space-enabled solutions. The service is especially valuable for innovative SMEs developing new space-enabled products, services, or technologies in the early to mid stages of commercialization, as well as for non-space SMEs seeking to create custom space-enabled solutions, helping them understand IP ownership, allocation, and protection between themselves and technology providers.

Utilisation of EU support and trainings (1-1 Advisory)

This 1-1 Advisory assists SMEs in navigating the range of materials and training programs offered by EU institutions, such as EUIPO, and other relevant sources related to intellectual property (IP). Following a needs assessment, the service delivers a tailored selection of recommended trainings and downloadable tools that best match the SME’s requirements.

Its objective is to enhance the IP capacity of SMEs by providing customized guidance and facilitating access to EU-provided resources, thereby strengthening their ability to protect, manage, and capitalize on their IP assets. This service is particularly suited for innovative SMEs developing new space-enabled products, services, or technologies in the early to mid stages of commercialization, who require support in identifying, assessing, and implementing effective IP protection strategies.

5.1.8 Quality assurance and tools

The quality and consistency of the FIERCE Advisory Services are underpinned by the framework of tools, protocols, and digital infrastructure designed to support delivery partners and SMEs throughout the advisory journey.

A core suite of standardised tools has been developed to ensure alignment across delivery teams. These include the FIERCE Self-Assessment Form (linked to T2.1), used to assess baseline SME capabilities and needs; the Transformation Roadmap Template, which structures each SME's pathway through the programme; and a set of structured feedback and reporting templates to facilitate systematic monitoring and evaluation. These templates aim to serve as reference points for mentors, advisors, and SMEs.

Digital infrastructure plays a central role in ensuring smooth implementation and coordination. The OnePass platform serves as the backbone of the application, selection, and monitoring process, offering a user-friendly interface for SMEs and delivery partners alike. In parallel, a shared cloud-based system (Google Drive) will be used to store session materials, track progress, and maintain version control. Online conferencing platforms such as Zoom and Microsoft Teams will host masterclasses, mentoring sessions, and internal meetings.

In support of peer learning and community engagement, a dedicated LinkedIn group (linked to Dissemination and Communication of the project) will be established to facilitate informal exchanges, share curated insights, and highlight milestones and outcomes. This channel will also provide a space for SMEs to connect with mentors and with each other during and after their participation.

Oversight of quality assurance is a shared responsibility. DREVEN, as the coordinator of the Advisory Services, ensures service cohesion and timely delivery, while EMNP is tasked with tracking key performance indicators and leading internal quality reviews. Regular coordination meetings, partner check-ins, and a mid-term evaluation of the Open Call cohort will inform iterative improvements to the service model and its supporting ecosystem.

5.1.9 Roles and responsibilities of partners

The implementation of the FIERCE Advisory Services relies on a coordinated, multi-actor model that leverages the diverse expertise of consortium partners. The design, deployment, and evaluation of the advisory mechanisms are collectively governed through clearly defined roles and responsibilities among Consortium Partners.

DREVEN serves as the lead coordinator for the Advisory Services. Its responsibilities include overseeing the operationalisation of the blueprint, preparing core templates and guidelines (e.g. self-assessment form, mentor handbook, roadmap structure), leading the training of mentors, and ensuring quality assurance across the support journey. DREVEN also delivers key technical advisory content, particularly in the areas of space-data applications, environmental monitoring and circular product design.

FBA is responsible for managing the OnePass platform, which serves as the main interface for application submission, evaluation workflows, and progress monitoring. FBA also leads the Open Call coordination, including eligibility checks, evaluator assignment, and communication with applicants.

QPLAN leads the communication and outreach strategy for the Open Calls, ensuring targeted dissemination to relevant SME communities and intermediary networks. In addition, Q-PLAN provides expertise on business strategy and IP essentials.

EMNP oversees the development and implementation of the Monitoring and Evaluation framework. This includes the definition of KPIs, aggregation of advisory outcomes, and contribution to internal learning loops. EMNP also supports the delivery of advisory content on Business Strategy and EU funds.

TTG, EIT-RM and **NOVASPACE** are involved in the provision of thematic expertise, especially in areas such as innovation acceleration, space-based entrepreneurship, raw materials. They also contribute to peer-learning components and support the development of innovation support templates and tools.

DREVEN, QPLAN, EMNP, NOVASPACE, TTG and EIT-RM will also serve as Lead Mentors, evaluators and selection committee members sharing the responsibility equally.

Finally, the Advisory Board and external innovation intermediaries identified during Task 1.3 serve as co-design contributors and potential service multipliers. Their involvement ensures that the FIERCE Advisory Services remain aligned with broader ecosystems' needs.

5.1.10 Milestones and risk mitigation

To ensure smooth implementation, a series of preventive and corrective measures have been established to mitigate potential risks. To mitigate limited applicant turnout, a robust outreach strategy has been developed, including proactive dissemination via project partners, innovation intermediaries, and sectoral networks. In addition, three roadshows will be conducted along our open calls to further foster participation. Outreach efforts are also strengthened by mobilizing the Strategic Partners Network to create synergies and extend reach through key partners such as EBN, EIT DIGITAL, and EARSC. These efforts are complemented by the provision of user support tools, such as a dedicated helpdesk, detailed FAQs, and informative webinars aimed at lowering entry barriers.

The risk of SME dropout during the advisory process is addressed through a reallocation mechanism that redistributes unclaimed mentoring and advisory hours to other participating SMEs. In parallel, a reserve pool of qualified SMEs may be maintained to enable flexible substitution in case of attrition.

Quality assurance is safeguarded through a combination of advanced training for mentors, common delivery standards, and the use of standardised templates for transformation roadmaps, session reporting, and performance tracking. These tools enable consistent service delivery across geographies and topics while ensuring adaptability to specific SME contexts.

Through these mitigation strategies, the FIERCE Advisory Services ensure a resilient and high-quality delivery framework capable of scaling across multiple regions and industrial ecosystems.

5.2 Blueprint on Financial Support for Transformation Projects: Open call and implementation

5.2.1 Purpose and Strategic Role

The Transformation Projects (FSTP) mechanism is a core pillar of the FIERCE support architecture, designed to unlock €2.5 million in third-party funding for SMEs developing space-enabled green solutions. Beyond mere equity-free financial support, the scheme acts as a strategic accelerator of SME-led innovation by combining funding, expert mentoring, and access to technical infrastructure. It aims at helping SMEs move from ideation to market deployment of space-enabled solutions, supporting green transformation mainly across three priority areas: improved circularity, safe and efficient management of raw materials, and enhanced environmental monitoring.

5.2.2 Funding Instruments and Innovation Pathways

Each selected SME may receive up to €50,000 in the form of lump sum vouchers. The support is categorised into three transformation pathways:

- **Ideation Vouchers** (up to €25,000): For early-stage concept development.
- **Scale-up Vouchers** (up to €50,000): For access to infrastructure and validation.
- **Commercialisation Vouchers** (up to €25,000): For market launch preparation.

An SME may receive up to €50,000 in total and combine more than 1 vouchers within this limit, with the latter available after successful completion of the former. Vouchers must be used to contract vetted External Service Providers (ESPs) aligned with the SME's Transformation Plan.

5.2.3 Eligibility and Target Beneficiaries

Eligible applicants include SMEs, start-ups, and scale-ups based in EU Member States (and Overseas Countries and Territories) or Horizon Europe Associated Countries. Both space-tech and non-space SMEs are eligible, provided their projects integrate downstream space technologies (e.g., Copernicus, Galileo, EGNOS) for measurable sustainability outcomes. Applicants must demonstrate technical and financial feasibility and provide a clear implementation plan.

5.2.4 Open Call Process and Foreseen Timeline

FSTP will be delivered through two rounds of Open Calls, using a structured and transparent selection process:

- **Preparation (M11-14 & M17-19)**: Includes the preparation of Open Call documents, evaluator recruitment, and Open Call platform setup, including a helpdesk.
- **Launch & Dissemination (M15-17 & M20-24)**: Two calls, the first open for 3 months and the second for 5), with each call having multiple cut-off dates. Dissemination via InfoDays, application webinars, and strategic partner networks.
- **Evaluation and Selection (M17-18 & M22-25)**: After each cut-off date, every proposal's eligibility is checked by FBA and then assessed by two external evaluators and one consortium

expert. The resulting ranking is reviewed by the Selection Committee, which decides on and validates the Provisional List of winners and a Reserve List during a consensus meeting.

- **Formal Check & Onboarding (M18-19 & M25-26)**: Includes formal legal check of winners by FBA, winners' ethics self-assessment and proposal review by ethics evaluators. Each SME is then matched with a Lead Mentor who supports the ESP matchmaking process and Transformation Plan writing (including key objectives, deliverables, KPIs, milestone definition, payment schedule and ESP offer integration), which is then validated by the Selection Committee and annexed to the Sub-Grant Agreement. To conclude the onboarding process, the Sub-Grant Agreement is signed by the SME and FBA (on behalf of the FIERCE consortium).
- **Implementation & Monitoring**: Begins immediately upon contract signature and can last up to 6 months.

5.2.5 Delivery and Support Mechanism

The Lead Mentor provides three mentoring sessions, monitoring the SMEs' execution outlined in its Transformation Plan and reporting back to the Selection Committee. FSTP implementation spans up to 6 months and culminates in a 2nd Milestone Review. Successful completion unlocks the final FSTP payment to SMEs, who then pay the ESPs.

5.2.6 Roles and Responsibilities

- **FBA**: Leads overall FSTP coordination, Open Call platform management, evaluator contracting and onboarding, Subgrant Agreement and FSTP payment processing.
- **All Partners**: Help disseminate the open calls to their ecosystems, participate in the Selection Committee, act as mentors and internal expert evaluators, and support external evaluator recruitment.
- **Lead Mentors**: Guide SMEs through Transformation Plan development including ESP matchmaking and closely monitor execution leading mentoring/milestone review sessions, ensuring alignment with project goals.
- **Selection Committee**: Final validation of proposed winner selection, mentor assignment, transformation plan and milestone achievement validation, as well as payment authorisation.
- **External Evaluators**: Provide independent, expert assessments on technical and business feasibility.

5.2.7 Quality Assurance and Risk Mitigation

The Open Call process follows strict EC guidelines on transparency, eligibility, and conflict of interest. Ethics self-assessments are reviewed by independent experts. The consortium maintains a reserve list to mitigate dropouts. Continuous monitoring ensures alignment with performance KPIs. All selected projects must align with FIERCE Impact KPIs (e.g., business model innovation, sustainability metrics). A dynamic ESP matchmaking process ensures service quality and alignment with SME goals.

5.2.8 Resources and Tools

Templates to be used throughout the FSTP process:

- Guide for Applicants
- Frequently Asked Questions
- Subgrant Agreement
- Weekly Open Call Application Report
- Ethics Self-Assessment Form
- Ethics Evaluator Report
- Formal Check Form
- OnePass Application Form
- OnePass Evaluation Form
- Consensus Meeting Minutes/Report
- External Service Provider Registration Form
- Transformation Plan
- Mentoring Session Minutes/Report
- Final Milestone Report

5.3 Blueprint on the Local Entrepreneurship Initiatives

5.3.1 Purpose and Strategic Role

The Local Entrepreneurship Initiatives (LEIs) are a key pillar of the FIERCE project's territorial activation strategy. Conceived as decentralised implementation hubs, LEIs serve to localise and scale the project's support offer by embedding FIERCE tools, methodologies, and advisory services within real-life entrepreneurial ecosystems. By connecting SMEs, local authorities, innovation intermediaries, and community actors, the LEIs create vibrant micro-environments for experimentation, peer learning, and cross-sectoral collaboration.

Anchored in place-based innovation principles and aligned with the objectives of the European Green Deal and the New European Innovation Agenda, the LEIs function as multi-stakeholder ecosystems that accelerate the uptake of space-based data for sustainability transitions in diverse territorial contexts.

5.3.2 Objectives and Added Value

The LEIs will be implemented as part of the Ecosystem Building Programme by innovation intermediaries. The objectives of this programme are as follows:

- Research and industrial partnerships to improve SME access to infrastructure and equipment (experimentation, testing, piloting and demos)
- Leverage local & wider business communities to enhance B2B matchmaking for SMEs with local service & technology providers, advisors, suppliers, legal experts
- Community Building and Events to create connections and networking opportunities for SMEs
- Support SMEs' talent recruitment through the development of skills building programmes, from universities to internships

- Expansion of incubation, acceleration and business support services related to downstream space technology adoption
- Facilitate cross-value chain and inter-regional collaboration and knowledge exchange with other intermediaries, expert and companies

Each LEI will be designed to:

- **Foster demand-driven entrepreneurship** by engaging local SMEs, startups, and scale-ups with context-specific innovation challenges.
- **Promote adoption of FIERCE tools and services**, including the Advisory Services, Learning Hub, Replication Toolkit, etc.
- **Bridge European policy ambitions with local action**, tailoring support to regional ecosystems and sectors (e.g. agri-food, construction, raw materials, circular economy).
- **Enable experimentation and replication**, serving as scalable testbeds for tools, support mechanisms, and multi-stakeholder approaches.

The LEIs aim to demonstrate how innovation support can be translated from centralised EU policy frameworks to ground-level transformation led by local actors.

5.3.3 Identification of Suitable Local Entrepreneurship Initiatives (LEIs)

The process of identifying suitable LEIs followed a comprehensive, multi-stage methodology designed to tailor initiatives to the specific needs of diverse local ecosystems. It began with an ecosystem analysis and qualitative interviews with organisations embedded in ecosystems at varying stages of maturity. These discussions provided critical insights into local innovation dynamics and helped uncover the underlying reasons why certain ecosystems had not yet fully thrived.

Based on this, the team analysed structural and operational challenges and explored how LEIs could effectively address these gaps. Preliminary LEI concepts were derived from the interviews and carried forward into a collaborative design sprint. During this sprint, the proposals were examined in more detail to assess implementation feasibility, resource and knowledge requirements, and potential obstacles. The challenges identified were presented again, and an on-site brainstorming session further enriched the process, giving rise to new LEI ideas.

Following this, a long list of potential LEIs was developed, incorporating inputs from the ecosystem research, interviews, design sprint, and brainstorming activities. From this long list, a curated short list was created, prioritising initiatives based on their likelihood of successful implementation. These short-listed initiatives will now form the core of the FIERCE Ecosystem Building Programme. However, the remaining long-list concepts will be retained and considered in case the innovation intermediary's priorities or local conditions evolve.

5.3.4 Shortlist of LEIs

The Local Entrepreneurship Initiatives (LEIs) are defined as an innovation scheme designed to be carried out by local stakeholders ("innovation intermediaries"), used as a tool to animate the local ecosystem and build up its capacity for space-enabled green entrepreneurship. The implementation of the LEIs will be conducted under the Ecosystem Building Programme.

The following LEIs were identified for implementation:

1. **Space Talks** - A space talk is an event where a group of space enthusiasts meet and discuss space-related topics, with an emphasis on new space, trends, and the latest market news considering its potential for start-ups. It is a relaxed, informal, affordable and straightforward event with a strong focus on community building and networking. The key is the cooperation between the different stakeholders, as the outcome is collaborative. This means that the organisation is made up of a group of space stakeholders who try to leverage their network to get speakers of interest.
2. **Space Hackathons and Challenges** - A space hackathon is a race that seeks to solve a challenge with a specific theme that is relevant to space, the economy and society. The hackathon format involves several participants meeting at a specific location for a certain period of time. Hackathons are short-format, cross-disciplinary sprints focused on developing practical solutions that combine space tech with sustainability challenges. They are a breeding ground for founder teams and are usually framed as a pitching competition in front of a panel of judges, sometimes with a prize or other benefits. In some cases, corporates from both space and green sectors pose real-world challenges, with winners gaining pilots, funding, or procurement opportunities.
3. **Space Sprints, Incubators, and Accelerators** - Space sprints, incubators and accelerators are forms of innovation support that invest time, mentoring and funds in a start-up to try to help it move through its stages more quickly. Sprints are short mentoring events that aim to seed or improve early-stage start-ups. A sprint occurs in short cycles of one month, in which a cohort will work on finding solutions to a challenge while testing their ideas for validation. Incubators work with start-ups with ideas already generated but in early stages prior to raising funds. Often, they are given a certain amount of training/mentoring where they are guided through their gaps, usually associated with the business side. Accelerators include a lot of mentoring and usually funding, but sometimes they may not provide capital and be only a mentoring programme. Accelerators are long-term programmes, lasting at least half a year due to the development of new services, products or market validations.
4. **Space Training for SMEs** - The space training for SMEs is the core initiative to support intermediaries in building technical knowledge on space topics, markets, trends, and the European programmes like Galileo, EGNOS, Copernicus, SSA and SATCOM. This initiative builds on the missing technical knowledge and space gap for SMEs. Besides the technical information on the space market and programmes, an additional introduction to the space support ecosystem will be offered to help understand the situation from a top-down perspective.
5. **Bootcamps and Space Education** - Engaging talent through bootcamps that offer a tailored curriculum and hands-on activities. These programs can serve as entry-level points to introduce students, graduates, researchers, and early founders to the space startup landscape and commercialisation basics. They also provide an introduction to the key concepts and opportunities within the space sector.
6. **Space Investment Tracks** - A good adaptation would include Space Startup Demo days coupling deep-tech and sustainability-tech VCs simultaneously.

7. **Ecosystem Showcases** - An ecosystem showcase aims to build the perception of a city/ region/ country as a unified ecosystem. The main goal is to give founders a clearer picture of opportunities across the ecosystem and provide knowledge of the playfield. It can include creating a support forum to disseminate support opportunities to startups, or public dashboards that showcase key players and mapping of structures, success stories and funding opportunities. For ecosystems where the home market is the main focus, best practices have shown success in so-called "extraversion missions.
8. **Events and Matchmaking** - Facilitating matchmaking events with higher ministerial leadership, startup high support, and promotion of success stories, enabling discussions and follow-up. It can be expanded with a structured matchmaking tool to link startup capabilities with corporate needs, with searchable use cases and active brokering.

5.3.5 Structure and Implementation Logic

Through targeted initiatives, an innovation intermediary can slowly build up capacity and become a fully-fledged ecosystem animator for space-enabled green entrepreneurship, by choosing the right initiative and allocating the correct resources. The collaboration with the intermediary follows a flexible, iterative approach, using a tested framework that can be key in improving an intermediary's support ecosystem. The approach is focused on mobilizing existing resources, creating 'network effects' (linkages with actors) and building a community around space.

Each LEI is a novel, place-based initiative, such as a space café, hackathon, or other entrepreneurship-boosting format, co-developed with a selected innovation intermediary to catalyse space-enabled green entrepreneurship. The LEI operates through a structured support pathway offered under the FIERCE Ecosystem Building Programme:

- **Engagement & Mapping:** Intermediaries participate in a kick-off session with FIERCE to assess local ecosystem needs, interests, and capacities. This includes stakeholder mapping and gap analysis to identify opportunities for piloting a space-focused initiative.
- **Initiative Selection & Planning:** Based on the analysis, FIERCE and the intermediary co-select the most fitting local entrepreneurship initiative. A deployment plan is developed jointly, outlining concrete milestones and timeline. This forms the basis for a series of three check-in calls between FIERCE and the intermediary.
- **Capacity Building & Pilot Support:** Intermediaries receive on-demand support, via workshops, expert input, and strategic guidance, to plan and deliver a pilot of the selected initiative. This may include topics such as business support services, circularity, and use of space data.
- **Deployment & Replication:** After the pilot, the intermediary will officially launch and promote the initiative locally. Lessons learned will be captured, and the resulting deployment plans will feed into the FIERCE Replication Guide to inspire similar efforts across other regions.

Intermediaries commit to driving the LEI implementation and cover associated costs. In return, they gain tailored support, visibility, and synergies with FIERCE Open Calls and Advisory Services to amplify local ecosystem development.

5.4 Blueprint on the Monitoring and Evaluation Framework

The FIERCE Monitoring and Evaluation system is a foundational mechanism to ensure the coherence, quality, and effectiveness of all project activities, with a particular focus on the delivery and impact of the Advisory Services. Designed to be both formative and summative, the M&E system captures performance across WPs, supports evidence-based decision-making, and promotes learning and adaptation throughout the project lifecycle.

This blueprint outlines the strategy, tools, roles, and operational mechanisms underpinning FIERCE's M&E approach. It is intended to support the consortium in assessing progress, identifying areas for course correction, and ultimately enhancing the project's capacity to deliver value to SMEs, stakeholders, and the wider innovation ecosystem.

5.4.1 Key objectives of the Monitoring and Evaluation Framework

The overarching objectives of the M&E system are:

- To ensure accountability by tracking progress against planned activities and outcomes.
- To generate insights that inform project learning and refinement.
- To support quality assurance by providing structured and transparent feedback loops.
- To assess impact through robust indicators that measure behavioural, operational, and system-level changes.

The system is developed to reflect the nature of the FIERCE intervention logic: from inputs and activities to outputs, outcomes, and long-term impact.

5.4.2 Tools and Quality Assurance Mechanisms

The central element of the M&E Framework is the **Monitoring and Evaluation Excel file**, located in the project's Google Drive folder. This file includes all essential details about the project's Key Performance Indicators (KPIs) as well as guidelines for measuring them throughout the project implementation.

The M&E file serves a **two-way communication function**:

1. It provides relevant partners with clear instructions on the data they need to collect (what, when, and how).
2. It tracks progress and changes in KPIs based on input from the partners.

The file is structured to allow each KPI to be managed individually. Ownership and responsibility for each KPI were assigned at the beginning of the project to ensure smooth and effective data collection.

Data Management and Coordination

All relevant data and evidence collected by the responsible partners will be processed and incorporated into the M&E file by **EMNP**. EMNP is also responsible for facilitating efficient bilateral information flow with each project partner, ensuring timely updates on KPI statuses and maintaining the quality of input data.

Structure of the M&E File

The M&E file is organized into several tabs, each corresponding to a specific group of KPIs:

- **Introduction Tab:** Provides introductory and general information about the objective and impact KPIs.
- **Objective KPIs Tab:** Lists the measurable outputs and KPIs aligned with the project's objectives. Each KPI entry includes: Targets, Indicators, Methods of measurement and verification, Related tasks and deliverables, Task leaders and relevant partners, Time dimensions (task duration, check-in dates, frequency), Status updates
- **Impact KPIs Tab:** Focuses on impact-related KPIs, especially those linked to multiple tasks across different work packages. To ensure accurate tracking, KPIs are broken down into elements with associated details: Baselines and methods of measurement, Related tasks and deliverables, Responsible task leaders and partners, Timeframes and status
- **C&D KPIs Tab:** Dedicated to KPIs related to Communication and Dissemination (C&D) activities. Q-PLAN, the lead partner for C&D, is responsible for monitoring these KPIs. This tab integrates communication-related indicators into the overall M&E framework.
- **Gantt Chart Tab:** A visual representation of the project timeline and task dependencies.

Additional Tools and Templates

Given the complexity of several project tasks, additional tools and templates will be used to support data collection, monitor progress, and gather feedback from participating SMEs, startups, and innovation intermediaries. These include:

- **Self-Assessment Tool:** A publicly available tool for startups and SMEs to assess their sustainability, technical, and business maturity. It also supports Lead Mentors in evaluating selected companies and identifying the most appropriate FIERCE services.
- **Progress Tracking Templates:** Standardized reporting formats designed to monitor milestones and track progress (e.g. Activity Cards for LEIs).
- **Transformation Roadmaps:** Custom plans developed by Lead Mentors with each SME to define advisory priorities, expected outcomes, and success indicators.
- **Feedback Forms:** Distributed following key milestones (e.g., masterclasses, mentoring, advisory sessions, learning materials) to evaluate satisfaction and perceived value.
- **Final Reporting Templates / Exit Interview Template:** Structured formats for mentors to document outcomes, lessons learned, and SME development at the end of support.
- **OnePass Platform:** A digital system for collecting and managing applicant data throughout the various phases of the FIERCE open calls. Monitoring and feedback mechanisms embedded in OnePass will enable the improvement of the overall application process both for the Advisory Serves and the Transformation Projects open calls.

The M&E system is **iterative**, allowing for ongoing refinement and adjustments as the project evolves.

Regarding the FIERCE digital toolkit, the Learning Hub will be monitored through Google Analytics, in terms of user engagement as well as through the net promoter score methodology (coupled with a user survey) to capture user satisfaction. The Replication toolkit will be monitored through Google Analytics, while the Network and Community functionality through LinkedIn Insights. The Self-Assessment tool will be improved based on the feedback collected from the SMEs of the Advisory Services Support Program via the exit interviews.

5.4.3 Roles and responsibilities of partners

The M&E system is a **shared responsibility** across the consortium, with clearly defined roles to ensure effective implementation and data quality. All relevant data and evidence collected and stored by the responsible partners (as defined in the monitoring file, KPI owner) will be processed and incorporated into the M&E file by **EMNP**, which also facilitates efficient bilateral information flow with project partners. This ensures timely updates to KPI statuses and maintains the quality and consistency of input data.

Roles and Responsibilities:

- **EMNP**: Designs the M&E framework, leads data collection and analysis, coordinates reporting activities, and ensures alignment across all work packages.
- **DREVEN**: Provides performance data related to advisory services, ensures compliance with relevant KPIs, and integrates monitoring insights into service delivery.
- **FBA**: Supports the integration of M&E principles into the OnePass platform and ensures seamless access to applicant data for monitoring purposes.
- **Q-PLAN**: Leads monitoring of communication and outreach efforts, as well as the monitoring and improvement of the Replication Toolkit and the Network and Community Functionality.
- **Lead Mentors**: Act as frontline observers of SME development journeys, providing both qualitative and quantitative data through standardized templates.
- **All Partners**: Participate in reflection sessions, co-design updates to M&E tools, and ensure data integrity within their respective areas of responsibility.

These roles are supported by operational guidelines and are aligned with the WP8 coordination and management framework.

5.4.4 Milestones and evaluation timeline

The **"general monitoring window"** for each KPI is defined in the Monitoring and Evaluation Excel file under the **Start of Task** and **End of Task** columns (e.g., M1 to M6). This timeframe currently serves as indicative guidance for the expected monitoring period. However, the actual data collection may begin before or extend beyond the official task duration, depending on the specific requirements of each KPI or indicator.

The **task leader** responsible for a given KPI determines the actual monitoring and data collection dates during the task implementation period, in consultation with **EMNP** and other relevant partners. The **frequency** of data collection is influenced by the task's length, complexity, and the task leader's preference.

In addition to the individual monitoring data capturing timelines set by each partner, **EMNP** will organize **bi-monthly meetings** with each partner to ensure that all necessary data is collected and supporting documentation is properly stored.

A key milestone in evaluating project performance will be the **Performance Review Workshops** scheduled for **M19** and **M27**. During these workshops, EMNP will facilitate targeted review meetings aimed at:

1. Updating the framework's performance KPIs, and
2. Identifying areas for improvement of the **FIERCE services and tools** in the second term, based on feedback from partners, SMEs, and intermediaries.

5.4.5 Integration with FIERCE architecture

The Monitoring and Evaluation Framework is fully embedded in the overarching architecture of FIERCE, functioning as a transversal framework that connects and supports the project's three main pillars: **Advisory Services**, **Transformation Projects**, and **Local Entrepreneurship Initiatives**. The M&E system is a shared governance mechanism across WPs, enabling continuous tracking, reflection, and performance improvement.

- **For Advisory Services**, the M&E system provides a structured approach to track SME progress across the four delivery phases (Preparation, Application, Mentoring, and Advisory). Tools such as transformation roadmaps, lead mentor reports, and SME self-assessments directly feed into the evaluation cycle, enabling both formative adjustments and summative assessments of impact.
- **For Transformation Projects**, the M&E framework integrates specific output and outcome indicators, such as innovation maturity, uptake of space-enabled solutions, and market readiness levels. Progress will be tracked using periodic reporting, milestone reviews, and tailored key performance indicators (KPIs) defined in the Transformation Roadmaps. EMNP and FBA will work closely to harmonise evaluation criteria between the Advisory and Transformation pathways.
- **For LEIs**, the M&E system includes metrics to evaluate ecosystem mobilisation, stakeholder participation, regional activation outcomes, and alignment with Smart Specialisation Strategies (S3). Data collection will rely on local event reporting templates, qualitative partner reflections, and community engagement indicators.

Cross-cutting components such as the OnePass platform and the internal Google Drive structure will be used for integrated documentation, feedback collection, and dashboard updates. The consortium will hold regular internal check-ins to synthesise results from all three pillars and translate findings into strategic recommendations and communication materials (WP6, WP7).

By design, the FIERCE M&E system does not only measure what is achieved, it also informs how implementation evolves, ensuring the project remains agile, demand-driven, and accountable to both SME beneficiaries and public stakeholders. This integrative approach will enable the replication and upscaling of the FIERCE model across European innovation ecosystems.

6. External Service Providers

The FIERCE project leverages the expertise of external service providers to deliver high-impact support to SMEs. As part of the Open Call for Transformation projects, selected SMEs will have the opportunity to access funding and engage with a curated pool of external service providers, to fuel the development, demonstration, and commercialisation of their green, space-enabled solutions. This approach is a strategic advantage, ensuring that participating SMEs benefit from cutting-edge services and expertise, while enabling the consortium to remain agile and respond swiftly to dynamic project needs.

FIERCE follows the Horizon Europe provisions regarding the financial support to third parties, as outlined in Article 9 of the Grant Agreement.

Under WP1, a preliminary suggested list of 84 external service providers has been compiled to support SME engagement activities in WP3 and WP4. These providers have been grouped into six specialised categories to reflect the broad range of expertise required for supporting space-enabled green innovation:

I. Earth Observation (EO) & Remote Sensing
II. GNSS & Geospatial Positioning
III. Smart Agriculture, Climate & Sustainability
IV. Artificial Intelligence (AI), Analytics & Platforms
V. Software & Systems Development (Web, Cloud, Mobile)
VI. Startups, Innovation, Policy & Ecosystem Support

This categorisation facilitates targeted matchmaking between SMEs and service providers based on specific innovation needs anticipated in the upcoming work packages.

The next steps involve initiating contact with the suggested companies to explore collaboration pathways. These potential stakeholders will be approached well in advance of the FSTP Open Call to invite them onboard as External Service Providers (ESPs). Through these interactions, the consortium will have the opportunity to present the project and the FSTP scheme, assess their suitability and interest, confirm their willingness to participate, and ensure there are no conflicts of interest.

Table 13: External Service Providers

Name	Location	Expertise
Cloudferro	Poland, Warsaw	Access to EO data connected with cloud infrastructure for data processing
Spectator	Poland, Cracow	Live Satellite Monitoring and Centralized Data Access
Orbify	Poland, Cracow	Satellite Data for Energy and Environmental Intelligence
VITO Remote Sensing	Mol, Belgium	Optical Remote Sensing for agriculture projects

TRE Altamira	Milan, Italy	Displacement monitoring through InSAR technology applied to mining
VIRIDIEN	Crawley, UK / Toulouse, France	Optical and SAR satellite image processing applied to mining exploration
STONEX	Milan, Italy	Expert in GNSS solutions development
SYNTONY GNSS	Toulouse, France	Expert in GNSS solutions development
SEPTENTRIO	Leuven, Belgium	Expert in GNSS solutions development
E-Geos	Rome, Italy	SAR data processing, analysis and reporting services
Aresys	Milan, Italy	SAR Data processing and developing customized SAR-based solutions
Space4Good	Den Haag, The Netherlands	Turning space data into useful insights for end-users
Plantek Italia	Bari, Italy	Usage of SAR and Optical data to develop solutions for sustainability
GReD	Como, Italy	GNSS for displacement monitoring
Geoapp	Florence, Italy	Consultancy on displacement data for mining
Terrabotics	London, UK	Specializing in space-based and aerial topographic 3D measurement, mapping, and monitoring to deliver remote, precision terrain insights for natural resource management and beyond.
FlyPix.AI	Darmstadt, Germany	AI applied to EO for Target/object detection
Origosat	Alba, Italy	GNSS for tracking purposes
UP42	Berlin, Germany	Access to data
CDXi	Thessaloniki, Greece	Specializing in Quality Assurance using Space (EO) and non-Space data: data-driven, and explainable AI solutions for the digital and green transition.

Geosystems Hellas	Athens, Greece	Advanced geospatial software specializing in EO, GIS, remote sensing, and data management, delivering tailored platforms for Smart Cities, IoT, and environmental and urban solutions.
Neuralio	Thessaloniki, Greece	Advanced AI solutions using Earth Observation data for sustainable land use, climate forecasting, environmental monitoring, and simulations
Neuropublic	Piraeus, Greece	Web and cloud-based systems with Greece's first large-scale IoT in agriculture. Uses EO data, AI, IoT, and a Code Generator to enable smart farming, civil protection, and environmental monitoring.
TERRA SPATIUM	Athens, Greece	Geospatial solutions and remote sensing, offering advanced systems for mapping, environment, agriculture, defense, and supporting Greece's HELIOS-II satellite ground segment.
Caius	Ioannina/Athens, Greece	Satellite and geomorphological data to map forests, protect ecosystems, and support sustainability and rural development.
Planetek Hellas	Athens, Greece	Upstream and downstream sectors, designing and commercializing onboard software for satellite EO data compression and control.
AGENSO	Athens, Greece	Precision Agriculture and IoT, they use satellite data to optimize sustainable farming and resource management.
Geomatics	Athens, Greece	Expertise in geoinformatics, mapping, cadastral tech, aerial photography, and photogrammetry
Ideas Forward P.C.	Thessaloniki, Greece	New technologies and business models to solve meaningful problems, leveraging expertise in engineering, IoT, cloud, and blockchain discovery/validation for new products and early-stage startups
EIT Digital	European coverage	Invest in deep tech to scale research-based digital solutions in key areas: Tech, Cities, Industry, Wellbeing, and Finance

Venture Garden	Athens/Heraklion /Thessaloniki, Greece	Inclusive, accessible entrepreneurship education for early-stage founders expand opportunities for aspiring entrepreneurs. Offered free of charge, the program empowers early-stage founders to turn ideas into action.
Elevate Greece	Athens, Greece	Elevate Greece is a state initiative supporting startups via a national registry and upcoming programs.
Orbify	Krakow, Poland	AI Analytics, Climate & Biodiversity Monitoring
Kanop	Paris, France	Environmental Monitoring
EarthPulse	Barcelona, Spain	Real-time Asset Monitoring
OroraTech	Munich, Germany	Disaster Management
Verhaert	Antwerp, Belgium	Consulting & Services
Space4Good	The Hague, Netherlands	AI Analytics, Agriculture & Forestry, Environmental Monitoring, General EO Services
NextCoder	Berlin, Germany	AI Analytics, EO Platforms & Tools
Marble Imaging	Bremen, Germany	AI Analytics, Climate & Biodiversity Monitoring, Agriculture & Forestry
Airmo	Munich, Germany	GHG Monitoring
GEOFEM	Nicosia, Cyprus	Infrastructure Monitoring
TerraEye	Wroclaw, Poland	Mining & Georesources
Sylva	Munich, Germany	Agriculture & Forestry
Glint.Solar	Oslo, Norway	Infrastructure Monitoring
Geosense	Lemelerveld, Netherlands	Agriculture & Forestry
LiveEO	Berlin, Germany	Climate & Biodiversity Monitoring
Constellr	Munich, Germany	General EO Services

Everimpact	Paris, France	Environmental Monitoring
Rovjok	Helsinki, Finland	Consulting & Services
Terrasigna	Bucharest, Romania	AI Analytics, Agriculture & Forestry
i-SEA	Bordeaux, France	AI Analytics, Environmental Monitoring
GISAT	Prague, Czechia	AI Analytics, EO Platforms & Tools, Consulting & Services, General EO Services
Nhazca	Rome, Italy	Infrastructure Monitoring, Environmental Monitoring, Mining & Georesources
GMATICS	Rome, Italy	AI Analytics, Infrastructure Monitoring, Climate & Biodiversity Monitoring, Agriculture & Forestry, Environmental Monitoring, EO Platforms & Tools, Consulting & Services, General EO Services
SpottIt	Didcot, UK	AI Analytics, Infrastructure Monitoring, Disaster Management, Consulting & Services, General EO Services
Orbital Eye	Delft, the Netherlands	AI Analytics, Infrastructure Monitoring, Disaster Management
AEROSPACE VALLEY	Toulouse, France	Space, HR Tech, Food
CBO Consulting	Brussels, Belgium	Innovation and strategy; funding (EU grants, equity, debt); execution and investment pitching
Kongsberg Satellite Services (KSAT)	Tromsø, Norway	EO data provider, PPP
Friedrich-Alexander-Universität, Institute of Particle Technology (LFG)	Erlagen, Germany	Agri-food, agri-tech, environmental monitoring/climate, manufacturing

Fromscratch	Thessaloniki, Greece	UX/UI design, product strategy, and end-to-end development of web and mobile applications.
arx.net	Thessaloniki, Greece	Mobile content development, CMS and delivery platforms, frontend/UI/UX design, mobile/web app development, cloud solutions, security/encryption, big data analytics, AR/VR, IoT, R&D in EU innovation projects.
AgroApps	Thessaloniki, Greece	Remote sensing, weather and crop modeling, AI/ML, IoT for precision ag, cloud platforms, and agri-risk solutions.
bSpoke Solutions	Thessaloniki, Greece	Delivering custom digital transformation solutions for businesses, including web/mobile software, tech consulting, and AI-powered systems.
Agrisat	Albacete, Spain	Smart agriculture technology; remote sensing and webGIS-based crop and farm advisory services.
GILab.rs	Belgrade, Serbia	Advanced geoinformatics solutions—2D/3D spatio-temporal data processing, remote sensing, spatial data science, web and mobile GIS application development, and geovisualization tools
iLink	Athens, Greece	Enterprise software development, IoT, logistics and telematics solutions
Ubitech	Athens, Greece	Cloud computing, cybersecurity, big data analytics, IoT and digital transformation consulting.
TotalView	Athens, Greece	Satellite image processing, photogrammetry, remote sensing services
EOfarm	Preveza, Greece	Earth Observation analytics for precision agriculture.
Cloud Signals	Athens, Greece	Satcom and space-technology solutions focusing on Network-as-a-Service, security/cloud layers, and transport connectivity services.
NOVARGI	Vitoria, Spain	Gas pollution management, process equipment, energy systems and environmental technologies.
Geospatial Ventures Ltd	London, UK	EO-specialist software development

Solenix AG	Aarau, Switzerland / Darmstadt, Germany / Frascati, Italy	EO software systems and operations support. Specialized in the implementation of distributed system and client applications, applying modern technologies.
Sparkgeo	Prince George, Canada and the UK	EO, remote sensing, cloud apps, AI/ML, and data pipelines. R&D via prescient.earth
Terrawatch Space	Berlin, Germany	Strategic consulting, public thought leadership, and communication services to make satellite data accessible and actinable
Paulinyi & Partners	Budapest, Hungary	EO-informed urban planning & smart city solutions
Optimaze	Budapest, Hungary	Custom AI development and data solutions
Composite Zrt.	Budapest, Hungary	AI in engineering, data analysis & simulation
Data Science Europe	Vienna, Austria	Data science, machine learning, artificial intelligence
Wozify Engineering Group	Budapest, Hungary	Interdisciplinary engineering, UX/UI and systems engineering for space applications, rapid prototyping, and product innovation

7. Innovation Intermediaries

In the context of the Ecosystem Building Programme, innovation intermediaries, including clusters, digital innovation hubs, business associations, incubators, and accelerators, play a central role as both facilitators of local transformation and capacity builders for space-enabled green entrepreneurship. These actors are not only instrumental in mobilising and engaging SMEs but also act as strategic partners in the co-design and delivery of the project's support mechanisms.

To fully harness their potential, we complement our targeted support for SMEs with a dedicated Ecosystem Building Programme aimed at members of established innovation networks such as ECCP, DIHs, Enterprise Europe Network (EEN), specialised business networks, open innovation test beds, research centres, and industry associations. Through this programme, we provide hands-on coaching, strategic guidance, and networking opportunities to empower these intermediaries to better understand their local innovation ecosystems, identify key actors, and design tailored intervention strategies.

These efforts culminate in the development of Local Entrepreneurship Initiatives, which foster partnerships with regional structures, promote community-building, and generate new, locally adapted business support schemes. At the same time, we connect innovation intermediaries with EU-wide networks, leveraging initiatives like ClusterXChange, to facilitate cross-industry and inter-regional synergies, enable knowledge exchange, and scale the impact of local initiatives. Innovation intermediaries also contribute directly to our SME support programme as multipliers, engaging local entrepreneurs and registering as external service providers to ensure continuity, localisation, and outreach.

A preliminary list of suggested innovation intermediaries has been compiled, serving as a foundational element for upcoming activities in WP3 and WP5, particularly:

Table 14: Innovation Intermediaries

Innovation Intermediary Name	Country
Algebra	Croatia
1010 Cosmos	Cyprus
Cyprus Space Exploration Organization (CSEO)	Cyprus
Czech Invest	Czechia
Aalto University / ESA BIC FI	Finland
ESA BIC Finland	Finland
Final Frontier VC	Finland
Sustainable Space Economy	Finland
Tribe Tampere Ry	Finland
CNES Pleiades Apps Campus Airbus	France

Bavairia	Germany
Munich Innovation Ecosystem	Germany
AIZ Incubator	Greece
BIZRUPT	Greece
Corallia/ si-Cluster / ESA BIC Greece	Greece
HASI	Greece
HEBAN	Greece
Ideas Forward	Greece
Ok!Thess	Greece
Walk Accelerator AuTH	Greece
Hungarian Space Cluster	Hungary
Wozify	Hungary
EIT-RM RIH Piedmont Italy	Italy
ESA BIC/ Politecnico di Torino I3P incubator	Italy
H-FARM	Italy
Lazio Innova	Italy
dotSpace	Netherlands
Blue Dot Solutions	Poland
EIT-RM RIH Krakow Poland	Poland
ESA BIC Poland	Poland
Starr Stalowa Wola	Poland
UNIMOS	Poland
SARIO/Slovak Space Office	Slovakia
Venture Factory / Startup Slovenia	Slovenia
Western Balkans Start-up Alliance	Albania

ENSPACE	Austria
Wexelerate	Austria
BeCentral	Belgium
Citizens In Power	Cyprus
Eratosthenes Center of Excellence	Cyprus
Accelerace	Estonia
ESA BIC EE / Tartu Science Park	Estonia
Aalto Startup Center	Finland
BusinessFinland	Finland
Invest In Toulouse	France
SpaceFounders	France
Munich Aerospace	Germany
Loggerhead ventures VC	Greece
MANT	Hungary
Ministry of Economy Latvia/ Industry Association	Latvia
Center of Space Technology at AGH University	Poland
Krakow Technology Park	Poland
IPN	Portugal
Cluj IT	Romania
Initium Space Consulting	Romania
ROMSPACE	Romania
ROSPIN	Romania
Transilvanian IT Cluster	Romania
ESA BIC Austria/ Science Park Incubator	Austria
Imec iStart	Belgium

Vanguard Initiative	Belgium
BESCO	Bulgaria
Bulgarian Academy of Science - Centre for National Security and Defence Research	Bulgaria
Bulgarian Chamber of Commerce and Industry	Bulgaria
Bulgarian Innovation Agency/ Invest Bulgaria	Bulgaria
Bulgarian Space Industry association	Bulgaria
CASTRA	Bulgaria
Dronamics	Bulgaria
Endurosat	Bulgaria
Go-Up Incubator	Bulgaria
Life Sciences Cluster	Bulgaria
Sofia Investment Agency	Bulgaria
Technical University of Sofia	Bulgaria
HAMAG-BICRO	Croatia
Institut Ruđer Bošković	Croatia
StepRi	Croatia
Technology Park Split	Croatia
ZICER	Croatia
Cyprus Research and Innovation Center	Cyprus
Cyprus Research and Innovation Foundation	Cyprus
DiGiNN	Cyprus
ESA BIC CZ Brno / JIC	Czechia
Accelerace	Denmark
ESA BIC Denmark	Denmark
ESA BIC DK / Aalborg University	Denmark

ESA BIC DK / Technical University of Denmark (DTU)	Denmark
Naturvidenskabernes Hus	Denmark
Tartu Centre for Creative Industries	Estonia
RiseEurope	Europe
BusinessHelsinki Accelerator	Finland
EIT-RM INNOVATION HUB BALTIC SEA ESPOO	Finland
Finnish Remote Sensing Club	Finland
ForumVirum	Finland
GTK - Finish Geological Survey	Finland
University of Helsinki/ Helsinki Innovation Services Ltd	Finland
Aerospace Valley	France
B612	France
BGE Occitanie	France
ESA BIC FR Nord / Ouest BIC Technopoles	France
HelloTomorrow	France
IGNFab	France
ISAE Suapero	France
SAFE Cluster	France
CESAH	Germany
ESA BIC Bavaria / Anwendungszentrum GmbH Oberpfaffenhofen	Germany
ESA BIC Hessen & Baden-Württemberg & ESA Broker DE / Centrum für Satellitennavigation Hessen	Germany
ESA BIC Northern Germany / Aviaspace Bremen	Germany
ATHENA	Greece
Elevate Greece	Greece
found.ation	Greece

Incubation4Growth	Greece
Innovathens	Greece
Innovation Greece	Greece
JNP Strategy and Consulting	Greece
Technopolis Incubator	Greece
Design Terminal	Hungary
Innoskart Digital Cluster	Hungary
Orion Űrnemzedék Fund	Hungary
Startup Iceland	Iceland
ESA BIC IE / Maynooth Incubation	Ireland
ESA BIC Ireland / Tyndall	Ireland
National Space Center	Ireland
Ramon foundation	Israel
EDIH DAMAS	Italy
EIT-RM INNOVATION HUB SOUTH ROME, Italy	Italy
Plug and Play Turin	Italy
Innovation Centre Kosovo	Kosovo
Green Tech Cluster Latvia	Latvia
ESA BIC/ European Space Resources Innovation Centre	Luxembourg
HouseofStartups Luxembourg	Luxembourg
LuxInnovation	Luxembourg
ESA BIC Noordwijk/ SBIC	Netherlands
ESA BIC Poland/ Industrial Development Agency JSC	Poland
Foundation for Technology and Entrepreneurship	Poland
National Centre for Research and Development	Poland

Polish Agency for Enterprise Development	Poland
Rzeszow Regional Development Agency	Poland
Startup Poland	Poland
Wolves Summit	Poland
GreeneDIH	Romania
Magurele Science Park	Romania
ROTSA	Romania
The Recursive	Romania
Timis Chamber of Commerce, Industry and Agriculture	Romania
Catalonia	Spain
ESA BIC Madrid / Madri+d Knowledge Foundation	Spain
MobileWorldCapital	Spain
ESA BIC SE / Arctic Business Incubator	Sweden
ESA BIC SE / Ideon	Sweden
ESA BIC SE / Innovatum	Sweden
ESA BIC CH / ETH Zurich	Switzerland
Space4Impact	Switzerland
Polissia Digital Innovation Hub	Ukraine

Ultimately, innovation intermediaries are not just beneficiaries of the FIERCE ecosystem-building approach. They are co-creators, multipliers, and long-term anchors of sustainable, space-enabled innovation across Europe, playing a strategic role in shaping resilient and inclusive regional innovation ecosystems.

8. Conclusions

Deliverable D1.3 marks a critical milestone in the FIERCE project, translating analytical insights and stakeholder input into a comprehensive support architecture tailored to SMEs working at the intersection of space technologies and sustainability. The co-design of the four core mechanisms, the Advisory Services, Transformation Projects, Local Entrepreneurship Initiatives, and Monitoring and Evaluation Framework, reflects FIERCE's commitment to contextual relevance, operational adaptability, and policy alignment.

The participatory process underpinning this blueprint, spanning a structured Design Sprint, thematic Focus Groups, and internal validation, has ensured that each mechanism is not only theoretically sound but also practically implementable across diverse regions and sectors. Importantly, the integration of external service providers and innovation intermediaries into the ecosystem amplifies the project's reach and sustainability.

The blueprints provides a clear roadmap for WP2, WP3, and WP4 activities, anchoring future implementation in shared design logic, common quality standards, and an iterative monitoring framework.

In sum, D1.3 offers a robust, flexible, and future-proof foundation for achieving FIERCE's core mission: empowering SMEs to harness space-enabled innovation for a greener, more resilient Europe.

9. References

Argyris, C. (1996). *Organizational learning II. Theory, method, and practice*. https://cir.nii.ac.jp/crid/1572824500144147968

Bergvall-Kåreborn, B., Howcroft, D., Ståhlbröst, A., & Wikman, A. M. (2010, March). Participation in living lab: Designing systems with users. In *IFIP working conference on human benefit through the diffusion of information systems design science research* (pp. 317–326). Springer Berlin Heidelberg. https://inria.hal.science/hal-01060408/document

Buur, J., & Matthews, B. (2008). Participatory innovation. *International Journal of Innovation Management, 12*(03), 255–273. https://www.worldscientific.com/doi/10.1142/S1363919608001996?srsltid=AfmBOopYRc2JqJwFKrmbWjC0AnswAgO91Qvkb4ghPEuvTA_m7EPJ7ZN9

Cooke, P. (2001). Regional innovation systems, clusters, and the knowledge economy. *Industrial and Corporate Change, 10*(4), 945–974. https://academic.oup.com/icc/article-abstract/10/4/945/706922?redirectedFrom=fulltext

European Commission – Environment. (n.d.). Circular economy action plan. Retrieved July 21, 2025, from https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en

European Commission – Internal Market, Industry, Entrepreneurship and SMEs. (n.d.). Install the Commission website. Retrieved July 21, 2025, from https://commission.europa.eu/core/install.php

Granstrand, O., & Holgersson, M. (2020). Innovation ecosystems: A conceptual review and a new definition. *Technovation, 90*, 102098. https://www.sciencedirect.com/science/article/pii/S0166497218303870#:~:text=An%20innovation%20ecosystem%20is%20the%20evolving%20set,an%20actor%20or%20a%20population%20of%20actors.

Howells, J. (2006). Intermediation and the role of intermediaries in innovation. *Research Policy, 35*(5), 715–728. https://www.sciencedirect.com/science/article/pii/S0048733306000497

Kahveci, E. (2025). Digital transformation in SMEs: Enablers, interconnections, and a framework for sustainable competitive advantage. *Administrative Sciences, 15*(3), 107. https://www.mdpi.com/2076-3387/15/3/107

Knapp, J., Zeratsky, J., & Kowitz, B. (2016). *Sprint: How to solve big problems and test new ideas in just five days*. Simon & Schuster. https://books.google.gr/books?hl=en&lr=&id=rV0JCgAAQBAJ&oi=fnd&pg=PA1&dq=Knapp,+J.,+Zeratsky,+J.,+%26+Kowitz,+B.+(2016).+Sprint:+How+to+solve+big+problems+and+test+new+ideas+in+just+five+days.+Simon+%26+Schuster.&ots=kGvhndoVdN&sig=BDuMHJgo5TP_Y9Q_jD-Q1dQC8TE&redir_esc=y#v=onepage&q&f=false

Norman, D. (2013). *The design of everyday things: Revised and expanded edition*. Basic Books. https://dl.icdst.org/pdfs/files4/4bb8d08a9b309df7d86e62ec4056ceef.pdf

Parasuraman, A. (2000). Technology Readiness Index (TRI): A multiple-item scale to measure readiness to embrace new technologies. *Journal of Service Research, 2*(4), 307–320. https://journals.sagepub.com/doi/abs/10.1177/109467050024001

Sagala, G. H., & Őri, D. (2024). Toward SMEs digital transformation success: A systematic literature review. *Information Systems and e-Business Management, 22*(4), 667–719. https://ideas.repec.org/a/spr/infsem/v22y2024i4d10.1007_s10257-024-00682-2.html

Sanders, E. B. N., & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *Co-design, 4*(1), 5–18. https://www.tandfonline.com/doi/full/10.1080/15710880701875068

Shahzad, K., & Hafeez, S. (2025). The role of ecosystem collaborations in the internationalization of SMEs: Empirical evidence from Finland. *International Journal of Entrepreneurship and Small Business*. https://www.researchgate.net/publication/387607366_The_role_of_ecosystem_collaborations_in_the_internationalisation_of_SMEs_empirical_evidence_from_Finland

Suchek, N., & Franco, M. (2023). Inter-organisational cooperation oriented towards sustainability involving SMEs: A systematic literature review. *Journal of the Knowledge Economy*, 2023, 1–21. https://doi.org/10.1007/s13132-023-01196-x

The Sprint Book. (2025). *The Design Sprint*. Retrieved July 21, 2025, from https://www.thesprintbook.com/the-design-sprint

Voorberg, W. H., Bekkers, V. J., & Tummers, L. G. (2014). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review, 17*(9), 1333–1357. https://doi.org/10.1080/14719037.2014.930505

FiERCE

MAKING SPACE FOR GREEN SOLUTIONS

GA 101177496

Partners

Q-PLAN INTERNATIONAL

NOVASPACE

FundingBox

europa media

TechTour

eit RawMaterials Connecting matters

DREVEN

@fierce-project

Funded by the European Union under GA no. 101177496. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or HaDEA. Neither the European Union nor the granting authority can be held responsible for them.

Funded by the European Union