

Empowering
innovation intermediaries
to generate sustainable
initiatives to incentivise
and accelerate
the commercialisation
of space innovation

D4.9: InnORBIT Business Support Programme - Final version





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Empowering innovation intermediaries to generate sustainable initiatives to incentivise and accelerate the commercialisation of space innovation

#### **COORDINATION AND SUPPORT ACTION**

# **D4.9: InnORBIT Business Support Programme - Final version**

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## **Executive summary**

The Business Support Programme (BSP) is InnORBIT's programme comprising the delivery of innovation space initiatives by local innovation intermediaries to their entrepreneurs, start-ups, scale-ups and SMEs. It offers a set of predefined initiatives and a tailoring service, out of these, the Toolbox is directly served by InnORBIT through digital means. The intermediaries were previously instructed on the execution and implementation initiatives to be deployed, including the process of guiding the selection of the most appropriate and interesting ones. Also, the customisation and tailoring process of the discussed initiatives is done right before the kick-off of the BSP. As a result of the process, the intermediary gets enabled to execute sustainable initiatives on its own, stemming towards the space segment with the support of InnORBIT.

In summary, the Business Support Programme is the actual deployment of initiatives from the Central and Eastern European innovation intermediary on its ecosystem, with support and monitoring of InnORBIT. The BSP has a supporting document that outlines in more detail the activities to be carried out, the Initiative Deployment Plan (IDP). For external intermediaries, activity or tracking cards are preferred instead. These were previously developed with the guidance and support of InnORBIT during the capacitation stage. The document serves as a log document and guidebook during the deployment or BSP stage. The IDPs are highly detailed during the first pilot and not so much during the second -activity card-, due to the allocated resources in each stage.

The deployment of InnORBIT to the intermediaries has been tested in two stages, first within the consortium intermediaries, -during the 1<sup>st</sup> pilot round- and later to external innovation intermediaries across Central and Eastern Europe -during the 2<sup>nd</sup> pilot round-. This document details the actions that define the Business Support Programme methodology, designed by InnORBIT and implemented by the intermediary in its ecosystem. The methodology is justified by the previous work during tasks 1.1, 1.2, 1.3 and 3.1, as well as the objectives for this project.

This document is the final version of the Business Support Programme, the third issue, after the successful implementation of the 1<sup>st</sup> and 2<sup>nd</sup> pilot rounds. Results and achievements of each pilot could be found in, correspondingly, D3.6, D3.8 Achievements of InnORBIT's support initiatives - 1<sup>st</sup> & 2<sup>nd</sup> rounds and D3.7 Enhancing the capacity of innovation intermediaries to better support space innovation.





#### 1 Introduction

The Business Support Programme (BSP) is InnORBIT's set of initiatives that strive to directly help innovators, entrepreneurs, start-ups, grow-ups and SMEs in Central and Eastern Europe to develop business and growth opportunities in the space sector. The BSP is deployed by local innovation intermediaries with the support and assistance of InnORBIT. Previously to the BSP, innovation intermediaries were trained and guided by InnORBIT to plan their space initiatives for their local ecosystems. This happened under the frame of the Capacity Building Programme (CBP). The training during the CBP ensures that innovation intermediaries have the capacity and knowledge to successfully deliver the BSP to their innovators.

The BSP is therefore the logical continuation of the efforts made during the previous CBP, presented in detail under D4.8<sup>1</sup>, and fundamentally represents monitoring, tracking and on-demand support activities. Moreover, InnORBIT is giving direct support to local innovators by enabling access to its Toolbox, which comprises audio-visual material and training elements for the development of the entrepreneur. This direct provision aims to make the use of the contents and materials easier and more attractive for the end-user, without the intermediary having to make any effort or allocate resources to these training sessions.

The Business Support Programme (CBP) is the deployment of pre-planned initiatives by trained innovation intermediaries in their local ecosystems, together with InnORBIT's guidance and support

To increase the penetration of Central and Eastern European start-ups, scale-ups and SMEs in the space market, InnORBIT makes a particular effort to get innovation intermediaries to open stems into the space sector, thus encouraging them to explore and open their ecosystems to new opportunities in a region traditionally distant from the space innovation. InnORBIT initiatives are designed in this deliverable together with D4.8 - Capacity Building Programme (CBP), final version.

This deliverable, D4.9 InnORBIT Business Support Programme - Final version, is the third and definitive refinement of the BSP (previously D1.5 and D4.4), having received feedback and fine-tuning from the experience in deploying two pilot rounds in Central and Eastern Europe. Although the CBP (D4.8) and BSP (D4.9) are separated in formal documents, a large improvement after deployment was the understanding of the continuity between them, reaching the point in which one without the other cannot be. Hence, there is a continuum between the CBP and BSP programmes, having overlapping boundaries since one is the next stage of the other. While under the CBP initiatives are planned and the intermediaries get tailored support in developing their ambitions, under Business Support Programme (BSP) services are delivered through the initiatives implemented by the intermediaries, and assisted by the InnORBIT consortium. There are singular cases in which, InnORBIT will deliver material directly to start-ups like through the Toolbox. However, it is always channelled through local intermediaries so as not to detract from their role and not to place InnORBIT as a competitor of the intermediaries by entering into their business of coaching start-ups.

The nomenclature used in this document includes:

 Programmes are a set of initiatives aimed at innovation intermediaries or start-ups, scale-ups and entrepreneurs. InnORBIT programmes are the Capacity Building Programme (CBP) and the Business Support Programme (BSP)

<sup>&</sup>lt;sup>1</sup> D4.8: InnORBIT Capacity Building Programme - Final version





- Initiatives are an individual set of services, events, modules, support and guidance to be offered to
  intermediaries encouraging them to assimilate and deploy within their network. They are described in
  the Initiative Deployment Plan (IDP), when elaborated.
- Services, the elements composing the local space initiatives, are to be provided by the intermediaries which may include a number of the initiatives through the BSP. The services were first defined during the co-creation workshop as required characteristics or items to be deployed to innovators.
- Tools, the components of InnORBIT's digital toolbox (i.e. platforms, methods, programs) aiming to facilitate the delivery or to deploy the BSP and CBP to end-users
- Modules or courses, a set of lectures, for the core training and mentoring services
- Lectures, meaning individual units of training about 20 to 60 minutes. They may include guides, books, further readings, and other training or educational material

Graphically this is summarised as follows:

Figure 1: Rationale of InnORBIT programmes



#### The BSP and CBP programmes share rationale, continuity and steps that are to conceive separately.

Thus, some parts may be redundant with D4.8 for allowing a full understanding of the context. Both programmes, BSP and CBP, come from previous study and research phases condensed in:

- The European space support landscape: Insights from Central Eastern and South-eastern Europe<sup>1</sup>
- Needs and challenges of innovation ecosystems and intermediaries for taking up activity in the EU space sector<sup>2</sup>
- Co-design of capacity building and business support programmes<sup>3</sup>

This final version of the BSP is built on the experience accumulated of discussing with more than 50 intermediaries, training more than 20 and having discussed more than 60 potential initiatives in the space sector.

D4.9: InnORBIT Business Support Programme - Final version, 27/06/2023

<sup>&</sup>lt;sup>1</sup> D1.1 The European space support landscape: Insights from Central Eastern and South Central and Eastern Europe

<sup>&</sup>lt;sup>2</sup> D1.2: Needs and challenges of innovation ecosystems and intermediaries for taking up activity in the EU space sector

<sup>&</sup>lt;sup>3</sup> D1.3: Co-design of capacity building and business support programmes





## 2 The rationale of the InnORBIT Business Support Programme

#### 2.1 The landscape of the Central and Eastern European innovation support mechanisms

The InnORBIT Business Support Programme targets the need for creating sustainable initiatives in Central and Eastern Europe which ultimately support start-ups, scale-ups, and entrepreneurs in the space industry. Despite the preliminary study stage helping to identify the needs of Central and Eastern European innovation ecosystems, is the potential missed opportunities the driving vector. The lack of space-related networks penalises start-ups that could flourish in Central and Eastern Europe. The sector is inherently international, and countries suffer from the small size of their nascent space ecosystem, which prevents the virtuous circle of the "network effect" from occurring. Following these lines, some initiatives have been designed specifically to address the creation of space networks among the network of intermediaries. E.g., more than 10 space unicorns have sprung out with a combined value of €30 billion with only €0.7 billion invested in EE start-ups in 2018. Central and Eastern Europe enjoys a highly skilled and educated technological workforce, able to unlock the great potential for space innovation.

The space sector is divided into two segments according to their different applications: upstream and downstream. It is usual to find a midstream category for the operators that are involved in upstream and downstream. The upstream segment includes all businesses dealing with spacecraft manufacturing and launchers, while the second segment comprises applications that work with the data or signals obtained by the upstream segment and apply to services & products of everyday life. Logically, there is a strong barrier to entry in terms of knowledge, cost, and experience to perform tasks in the upstream segment. In contrast, downstream applications have a low barrier to entry, with the doors open to new competitors and ideas. Recent years have seen a growth of companies in what is known as New Space, or the community of relatively new space companies working independently of governments and their major customers, providing cheaper and faster solutions that enable easier access to space, in all segments. This new landscape of opportunities, together with the long trail of the European Union's space components: Galileo, Copernicus and the upcoming SSA and STM, open up possibilities to leverage Central and Eastern Europe as a niche for space entrepreneurship.

The lack of space innovation initiatives and space expertise in Central and Eastern Europe creates a need for supporting programmes in this field. Targeting new entrepreneurs or start-ups from both space and non-space sectors, in the domains such as transport, logistics, agriculture or energy, healthcare, maritime, environment, etc. More specifically, InnORBIT CBP and BSP seek to build bridges towards applications, reducing the distance between the upstream needs and downstream services. Likewise the Copernicus Academy and its downstream applications network, through specific training, including access to data and Copernicus DIAS, enabling the development of entrepreneurs at a seed stage idea. Correspondingly, InnORBIT's programmes strive to meet the identified training needs, but instead of creating content from scratch, it leverages the training content previously created by Space Hubs' programmes. In other words, bridges shall be built between InnORBIT and other EU initiatives for the synergistic exploitation of the entrepreneurial innovation ecosystem. In addition, another critical aspect is the immaturity of space innovation support networks in Central and Eastern Europe. Although there are established innovation networks, when it comes to space they do not have experience enough to foster the space niche -with a few exceptions. Supporting Central and Eastern European space entrepreneurs is therefore achieved by capacitating the intermediary to develop its space-oriented innovation services, delivered to their local ecosystems through the Business Support Programme.





#### 2.2 Earliest steps towards the definition of the programmes

InnORBIT endeavours to empower innovation intermediaries in the space sector to foster the Central and Eastern European space innovation ecosystem. The programmes were born from the needs identified during the preliminary study phases of InnORBIT, both the status of the support mechanisms and the needs and challenges of the intermediaries. Later, a co-design exercise was included, built also on the information obtained during the co-creation activities, where regional entities and innovation intermediaries pointed out the most critical aspects and needs of their innovation ecosystems. The 3-stage design process helped to conclude the design of the programmes:

Figure 2: InnORBIT stages for the design of the CBP and BSP programmes



First, the analysis and study stage<sup>1</sup> is based on desk research, expert interviews and validation of the results by local intermediaries. The aim was to map the innovation ecosystem of 4 representative countries of Central and Eastern Europe: Croatia, Greece, Romania, and Slovenia, thus getting a general reading of what is happening with space innovation in the region. Deep dives were obtained as results of the research, per country and other variables, as well as macroeconomic pictures. The findings revealed that there is a lack of space-related networks. This is particularly sensitive in the space sector, where funding linked to this activity requires a large amount of capital and frequently, consortia building. International cooperation and developed networks help to remove part of the uncertainty associated with long-term payback periods, underlining the need for innovation networks. This is aggravated by limited research and development spending in Central and Eastern Europe (EE), which is significantly below the EU27 average. The upstream space segment is, therefore, weaker as it is sustained by public funding, due to the higher time-to-maturity products which characterise this industry. Sadly, the lack of links with public funding weakens the space industry, which is not very well understood in Central and Eastern Europe. Therefore, their outside positioning is pushing them away from the New Space rush market, meaning by New Space to the commercialisation and the new opportunities arising from leveraging the space industry into commercial or private companies. Business downstream models are sometimes not different from IT companies, potentially reducing the gap for new entrants. It is a golden opportunity to catch up fast, but training is needed.

On the other hand, the inexistence of related industries established in Central and Eastern Europe impedes the possibility of *lateral growth* in the sector. These companies, although not entirely dedicated to the sector, due to their proximity, are complementary or auxiliary industries and therefore may encourage innovation, if space opportunities are understood. This includes any product suitable for the space industry with little modifications. The negative funding landscape is reinforced by the lack of early-stage funding from banks and the private sector, which is often attempted to be alleviated by institutional funding, such as ESA and Horizon 2020 grants, or EU cohesion funds.

Secondly, the consultation campaign<sup>2</sup> was executed using a survey, providing more granular information on the missing skills of the innovation intermediaries. These actions sought to detect mismatches by comparing the self-perceived skills of the intermediaries against the skills perceived by their local innovators. The survey also dug into the unserved needs of the innovators, covering available skills, missing skills and innovator needs. As for highlights of Central and Eastern Europe's innovation intermediaries, it was found that they are strong in training, mentoring and coaching, as well as in supporting the improvement of pitching and communication

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<sup>&</sup>lt;sup>1</sup> D1.1 The European space support landscape: Insights from Central Eastern and South Central and Eastern Europe

<sup>&</sup>lt;sup>2</sup> D1.2: Needs and challenges of innovation ecosystems and intermediaries for taking up activity in the EU space sector





skills. They are used to deliver training and enhance soft skills in their support networks. However, some aspects are missing largely related to the knowledge of the space industry. For example in regulation, market, business, and practices in the space industry. Funding schemes and opportunities, together with intellectual protection are commonly flagged as an improvement points. This aligns with the innovators' needs, where there is a demand to get to know the technologies and applications currently trending in the space industry. It can be asserted that there is a general lack of knowledge of the space sector.

Third, the co-creation activities¹ were a collaborative effort between experts in business, investment and space markets from all across Europe. A significant presence of innovation intermediaries also attended, to reveal the master lines that the CBP and the BSP should follow. The activities included a dynamic format to encourage brainstorming and funnelling of ideas, collectively helping to identify missing resources, networks, knowledge and skills, from the innovators' intermediary perspective. The process includes a 4-stage approach consisting of:

- Acknowledging the major needs of entrepreneurs and the most adequate services in covering those needs
- Brainstorming services and funnelling the most important
- Identifying the missing resources, networks, knowledge, and skills associated with those services
- Determination of the target audience, desired results, specific tools needed and regional customisations for each local ecosystem

From the co-design of the programmes, it has been determined that there is a **strong need for training on the space market**, its programmes, applications, market, and success stories to guide both intermediaries and innovators. The intermediaries that will be implementing the BSP need to master their expertise in the space sector. General support in **access to funding** and investment readiness, which is a cross-cutting issue for any start-up or entrepreneurial adventure, **cannot be forgotten**. This should be covered with training on the opportunities that exist as well as regular updates with calls and announcements that may occur during the deployment of the pilots. The large amount of on-demand training already created by years of Space Hubs and related initiatives was grasped for InnORBIT, recycling training as much as possible for both CBP and BSP programmes. By researching, contacting and partnering through our network and the databases on CORDIS, ESA and EUSPA, the CBP and BSP have included training from several Europan initiatives thus reducing the amount of ad hoc training to be developed in-house. This resource investigation has narrowed the curriculum and training topics and condensed them into the main modules or courses in the syllabus of Figure 12.

Is also important to realise that InnORBIT is not an entity with evaluation authority, nor does it make a monetary offer to intermediaries, so the support and content to be delivered must be sufficiently attractive and effective for intermediaries to implement them pro bono. This is a severe conditioning criterion that changes the programme deployment. During InnORBIT's deployment, the first pilot funded intermediaries while the second pilot round did not. The main difference found was the interest, meaning that non-funded intermediaries will only be interested in developing initiatives that are aligned with their ambitions. The training will be limited towards these initiatives and understanding the space sector opportunities, at maximum.

<sup>&</sup>lt;sup>1</sup> D1.3: Co-design of capacity building and business support programmes





## 3 Fine-tuning of the programme – from the initial to the interim version

## 3.1 Findings during the deployment of the CBP and BSP

During the deployment phases of both Capacity Building and Business Support programmes, notable points have been observed that have led to changes in the programme's practice. Perhaps the most relevant are:

- Both Capacity Building and Business Support programmes cannot be mentioned to external intermediaries. It is a continuous flow and intermediaries do not understand the difference, as they receive support from InnORBIT to develop their initiatives and implicitly their skills and capabilities. Hiding the internal terminology should be the normal procedure, easing the understanding and the services offered.
- Linked to the previous, intermediaries do not need or want a fixed set of initiatives; they need fully tailored solutions. They tend to know about all the initiatives to some degree since they are professionals in innovation. Despite being useful to mention a broad variety of initiatives, to illustrate what can be achieved by implementing them, it has been found useful to show specific deployment of local examples because it helps to locate strengths and weaknesses quickly, by comparison.
- Again, linked, the full tailoring of the initiative is achieved by setting an initial dialogue between InnORBIT trainers and the local intermediary, where ambitions are presented and then InnORBIT quickly assesses and selects the best option for the intermediary. The training is therefore directly aimed to understand space opportunities and towards the actual deployment of the selected initiatives.

The service offering is quickly understood with the outline presented during the InfoDays, as InnORBIT transforms business services into initiatives useful for the local intermediary, training it in the process and later on supporting them during the deployment.

Pre-defined initiatives Business training & mentoring Coffee Innovators' MOOC Sprints, incubators & Intermediaries training Knowledge hub Hackathons Tailored initiatives Hands-on support on access to financing and funding Customised initiatives designed to meet specific expectations of your ecosystem Some examples: Vocational training, adapting the contents of the MOOC · Info sessions · Investors events Maker labs · "Ecosystem audits"

Figure 3: InnORBIT mapping of actions as shown during the InfoDay





• The process of the CBP and BSP has not changed; it remains the same but has been highly streamlined, based on the deployment experience. Since there are no strict formalities, InnORBIT shall jump quickly to the desired phase, as illustrated in the general outline Figure 6. This is one of the major learnings, as maximising the flexibility of the programmes, a key aspect of the custom tailoring for each intermediary. This increases the attractiveness of the programme, as it gives room for the development of each intermediary's ideas and ambitions.

#### 3.2 Specific adjustments from the initial version of the programmes

- Intermediaries particularly those who do not have large resources, are reluctant to take fixed training
  and are not keen on receiving help that is not related to their line of work and expansion interests.
   While this was anticipated, in practice it has been accentuated to the extent that an intermediary can
  drop off from the programme if it is talked about training for too long during a session, or about anything
  that does not move swiftly to their interests.
- The training shall be very direct towards what the innovation intermediaries want to achieve. In this way, they participate and get actively involved in the programme. If this is not achieved, there is a danger of dropping out. In relation to the BSP, the CBP training has to move in the same direction as the initiatives they would like to launch later on.
- The most efficient way to deliver this training is throughout the check-in meetings, by continuously assessing each small step that is necessary to develop the initiative. For example, in a call discussing the organisation of a CASSINI Hackathon, a detailed plan of the different milestones is made. It is during this plan that the degree of space awareness of the intermediary is evaluated, and when a flaw is detected, some time is spent talking about each specific element. The same goes for every small detail related to the initiative. It is the result of applying flexibility and adaptation to the needs of each intermediary, which are vastly different in the end. At the end of the programme, the innovation intermediary is comfortable and enabled to deploy the initiative thanks to the previous CBP which supported only where he wanted and needed.
- This custom tailoring does not eliminate the entire fixed design part (D1.4 InnORBIT Capacity Building Programme, initial version). The programme shall be simply agile in selecting the content needed at each stage. One example is that, when intermediaries are interested in taking lessons on their own, there is recorded and on-demand material accessible through the Toolbox. Although not usually in demand, several intermediaries have requested, explored and taken lessons through InnORBIT's elearning platform. Different options and solutions are ready when the intermediary requires so.
- The most effective way to keep track of the training is maintaining a periodic pace, thus avoiding stress and also setting lengthy periods. Since it is almost impossible to think that a homework schedule of activities can be set up, it is important to maintain attention by doing bilateral cooperation. The involvement of the intermediaries enriches their skillset passively. This is a result of the evolution of the original programme; particularly in streamlining the lines connecting the milestones.

InnORBIT's role is defined as an advisor helping to understand, develop skills, and support the implementation of sustainable innovation initiatives in the space sector





## 4 The Business Support Programme (BSP)

## 4.1 Business Support Programme layout

#### 4.1.1 Overview of the BSP

The BSP is a programme composed of deploying initiatives by intermediaries over their ecosystem, thus benefitting local start-ups, scale-ups, and SMEs. The granular details of each initiative are described under the Initiative Deployment Plan (IDP), a document to be created during the CBP period in which InnORBIT provides the necessary support in building their IDPs. IDPs are avoided when working with non-funded intermediaries due to the scarce resources. Therefore, activity or tracking cards are preferred as intermediaries do not need to write down a detailed plan for the deployment of an initiative. Prior to this implementation, the intermediaries were trained in the mechanics of selected initiatives during the CBP, as well as in the dynamics of the space sector.

# The BSP mission is to support the intermediary to support their start-ups, monitor and make the Toolbox available to the users. In

Figure 4, the flow of actions according to the initiatives is depicted. The upper group -space entrepreneur's instruction and Knowledge Hub- of initiatives are delivered directly by InnORBIT to the start-ups, with tailoring according to the intermediary desires. On the other hand, sprints, incubators, accelerators, hackathons, coffees<sup>1</sup>, and any tailored initiative are directly deployed by the intermediary, while InnORBIT provides support and monitors the successful implementation of the initiatives.

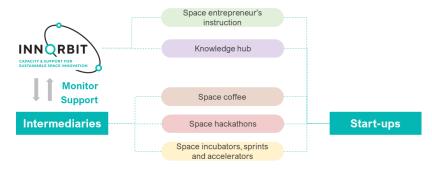


Figure 4: BSP initiatives and agents

The objective and scope of the BSP for the Central and Eastern European ecosystem are to open up to the possibilities of the space sector, expanding their funding possibilities, market and range of products and services offered by start-ups, scale-ups and SMEs. These new possibilities are born in the initiatives deployed by the intermediaries, which try to open up a space theme in the demanded services and identified needs in their ecosystems.

In the overall plan, the BSP is the last of the stages. Here, InnORBIT activities do not have the same intensity demand when compared to the CBP period. It is noteworthy that while the InnORBIT consortium deploys the CBP to the intermediaries, the intermediaries are deploying the BSP to the start-ups. As soon as the Initiative Deployment Plan is elaborated -or a simplified plan-, the BSP deployment kicks off when the initiative

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<sup>&</sup>lt;sup>1</sup> The consortium became aware close to the end of the project that the term "Space Café" is a registered trademark in the EU [link] . As such, the term has been updated to "Space Coffee" on new public project documentation and will be followed in any future activities by the consortium.





gets launched. During this stage, InnORBIT monitors and acts as a support entity for the intermediary. Given that the BSP is deployed by the intermediary, it is necessary to build a memorandum of understanding before each intermediary launches its intended initiative, so as to get some commitment to track and monitor their start-ups. This will improve the delivery of InnORBIT services, by enabling tracking and gathering feedback. Continuous monitoring is one of the key factors to being able to take mitigation actions if the project deployment is not as successful as desired.

A last objective is InnORBIT's strive to help start-ups to become aware of funding possibilities, supporting their networks, and connections. This is crucial to achieving greater capitalisation, an objective that groups several of the KPIs of the project. It is also very important to get them to penetrate the space market so that they can sell products and services and open new sales lines. This is pursued with a proactive introduction to the space funding networks, for example, with InnORBIT in-house initiatives such as InnORBIT Space Track.

#### 4.1.2 The BSP's relation to the service and initiatives

InnORBIT's BSP is delivered in the form of initiatives, transforming missing skills and needed services into tangible initiatives for the innovators of each ecosystem. The relation between the desired services and the set of initiatives could be found in Figure 5, where fixed initiatives depict which services they include during the training and deployment. Tailoring complements the services, reinforcing the particularities and demands of each intermediary. The services, as per D1.3, were grouped into Business training & mentoring, Technical training & mentoring, Investment readiness, Networking & matchmaking, Hands-on support on access to financing and funding, and Awareness raising.



Figure 5: InnORBIT services matching the initiatives





- Training & mentoring services refers to the instruction provided by InnORBIT to cover the areas of applied knowledge, both technical and business. This service is covered through modules that InnORBIT provides directly through its Toolbox. In the form of lectures and recordings, all the topics that a start-up might need in business are covered. Training courses re-use material from previous EU projects and initiatives to avoid duplication of efforts, as requested in the scope of this project. Essential parts of the training that are not covered by existing materials have been crafted ad hoc by InnORBIT consortium partners, thus ensuring the completeness of the service.
  - The training is split between business, technical and innovation. Technical training is essentially space technology, with space market economics, an understanding of space technologies and programmes, and examples of successful start-ups in the sector. The innovation training aims to cover the basics of the fixed initiatives offered in the catalogue. Lastly, business training cover business planning, business models, value propositions, IP and innovations, and negotiation skills for start-ups among several others. The technical modules cover.
- Similarly, investment readiness support and hands-on support on access to financing and funding are
  largely satisfied by the training and mentoring modules together with the Space Tracks activities, where
  investors are put in touch with Central and Eastern Europe innovators stemming from local intermediaries.
  In addition, funding opportunities are available on the website or toolbox, with communications and updates
  to innovators and intermediaries to stimulate their ecosystems.
- Other initiatives that unlock networking and matchmaking are the space coffees and incubators and accelerators. Distinguished by the stage at which they intervene in a start-up, incubators and accelerators help innovators to start entrepreneurial activity, raise their business into commercial or scale up into revenues. Coffees are excellent initiatives to build up an ecosystem of interested parties in developing the same sector, by attracting relevant figures and spreading the knowledge. Therefore, these initiatives also facilitate the required service of networking and matchmaking. This is not limited to these initiatives since any initiative that brings together people foster networking and matchmaking by mixing entrepreneurs, stakeholders and investors in local ecosystems. Innovators might have access to new networks and knowledge from other parties through the experience that comes from being involved in a competition like the one mentioned above. Also, by engaging in an ecosystem exclusively dedicated to the space sector.
- The awareness raising on space initiatives emerges with the services provided by practically all of the
  initiatives, as they all aim to attract start-ups, scale-ups and SMEs from Central and Eastern Europe to step
  into the space sector, as the main objective of InnORBIT. To a greater extent, the Knowledge Hub and
  dissemination activities will maintain a stream of information on current space activities for the support of
  the ecosystems of the innovation intermediaries.





#### 4.2 BSP deployment

#### 4.2.1 Delivery method

InnORBIT's BSP activities are delivered with a linear flow, first from InnORBIT to the intermediary as CBP and then from the intermediary to the innovator as pure BSP. The BSP is offered to local start-ups as part of the intermediary's ecosystem, in the form of initiatives, chosen and tailored to perfectly align with their aspirations and needs. This means, initiatives are deployed to a group of innovators stemming from the local ecosystem. Among the initiatives, the training and hub do not require the intermediary's proactive participation, but the other group of initiatives will entail intermediaries to dedicate monetary and personnel resources.

Specific details on the delivery are logged in the Initaiteive Deployment Plan -when resources are available to do so- or as activity tracking cards, a synthesised version used during the 2<sup>nd</sup> pilot. The overall flow can be found in Figure 6.

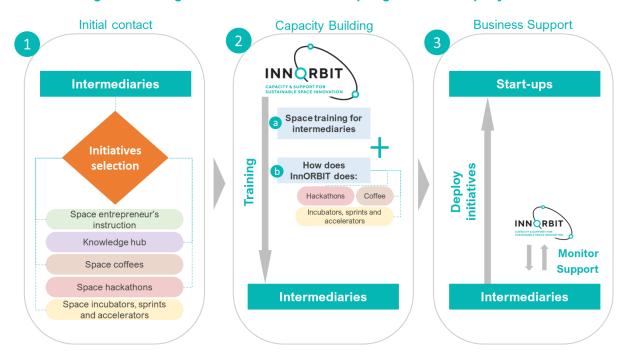


Figure 6: stages of the CBP and BSP programmes deployment

#### 4.2.2 Deployment stages

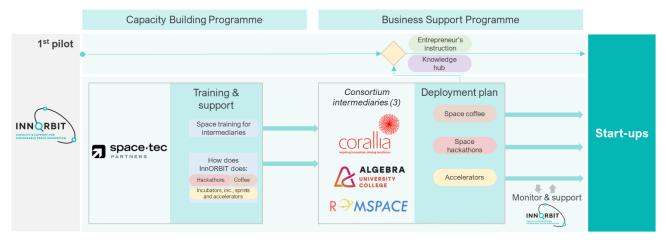
The InnORBIT programmes spread the efforts in a couple of deployment stages. The first pilot round attains 3 intermediaries part of the consortium, aiding to gather internal feedback for programme improvement, while during the second pilot round at least 17 intermediaries are reached, to establish local sustainable initiatives.

1st pilot. At this stage, InnORBIT starts the delivery of the programmes on Corallia, Algebra and ROMSPACE, InnORBIT's internal intermediaries. The details of the contact protocol are further explained in chapter 0. As they are project partners, the preliminary contact, programme explanations and screening stages were unnecessary. The programmes started with the first workshop where the programme was clarified. Afterwards, internal intermediaries expressed their interest in some fields of improvement. With the support of InnORBIT during the check-in calls, the training focused on the needs assessed and discussed. The activities carried out during the first pilot could be found in D3.6 Achievements of InnORBIT's support initiatives, 1st round.



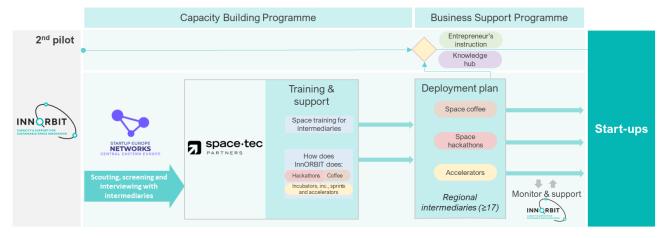


Figure 7: 1st pilot deployment scheme



2<sup>nd</sup> pilot. The process of this second pilot round is virtually the same as the first, except for the scouting stage for intermediaries and the open call for applications. Once these are received, contact calls are made in order to advise, assess, and funnel the interest of the intermediary into InnORBIT programmes. The target of the 2<sup>nd</sup> pilot round is to include at least 17 participating intermediaries. Similarly, the process is more detailed in chapter 0. Results could be found in D3.8 Achievements of InnORBIT's support initiatives, 2<sup>nd</sup> round.

Figure 8: 2<sup>nd</sup> pilot deployment scheme







#### 4.2.3 BSP waypoints

#### Step 8: Initiative pre-launch by the intermediary

- Final check of the intermediary's plan (during CBP)
- Announcement of the initiative: awareness and communication.
   InnORBIT to support dissemination. Toolbox to host a dedicated page with dates and relevant information such as how to participate (innovator shall be routed to the closest local intermediary)
- Webinar of the launched initiative for innovators. Access to materials
- Initial picture of the variables to measure before the BSP starts
- Intermediaries' detailed deployment plan for each initiative evolved from the draft CBP early plan
- Scouting and screening of innovators. InnORBIT potential support to increase the reach

#### Step 9: Launch of the initiatives

- Plan execution. Milestones and management
- On-demand support from InnORBIT in the implementation (limited)
- Space entrepreneurs' training kick-off in the Toolbox (Moodle)
- Monitoring framework execution

#### Step 10: Feedback BSP

- Quality and content assessment of the innovators
- Closing feedback session & reporting between innovatorintermediary and intermediary-InnORBIT with a semi-structured call



The BSP starts with step 8<sup>th</sup>, coming from the CBP ending stage 7<sup>th</sup> as previously described in D4.8 InnORBIT Capacity Building Programme, final version

#### 4.2.4 Innovator's journey

Is the perceived path by an innovator when enrolling in some initiative deployed by a local intermediary. It is highly sensitive to the procedure of the intermediary deploying the initiative.

#### Expression of interest in an initiative

- Innovators may proceed from intermediaries scouting, inviting, or from InnORBIT networks.
- Declarations of interest arriving at InnORBIT's channels shall be redirected to local intermediaries

#### Register to the initiative

- Basic information for sign up
- Their local intermediaries may request more information for planning purposes

#### Receive a confirmation with more details about the initiative

- The innovator should receive a confirmation that they have registered and that they will be informed about their participation
- Activities, milestones, and requirements of participation shall be detailed at this step

#### Initiative participation

- Access to the Toolbox (registration by the intermediary, InnORBIT or by the innovator itself)
- Provide feedback on the required items in the Toolbox or when asked by its intermediary. Completion and attendance
- Further feedback, weeks after the initiative is done, maybe collected to be able to assess the success
  of the program and towards calculating the KPIs we need more information.





#### 5 Initiatives under the BSP

#### 5.1 On-demand training for innovators

The contents of the BSP are aiming to support intermediaries' ecosystem. This initiative is served by InnORBIT directly to the start-ups, under the supervision of the intermediary as instructors, if desired. This is done via the Toolbox (Thinkific) and the repository of files, documents and links. The training involve a large amount of lectures to cover all possible potential topics, but summarised and simplified so it easy to navigate. In order to build it, InnORBIT has prepared ad hoc training and filled the gaps partnering with some European initiatives. The curriculum of the courses for innovators are composed of a couple of modules:

- The Space Technical Training as a core element and enabler for non-space enthusiast but with a
  potential space idea. It has all the essential material to catapult a start-up into the space sector, with
  in-depth knowledge from years of experience that can act as an eye-opener unlocking new possibilities
  and ideas
- The Space Business Training provides training in the always weak business dimension when dealing with tech innovators. This covers pitching, fundraising, markets or investors' points of view. The business training is a series of materials gathered from different previous EU initiatives together with some materials created ad hoc for this project. The added value of the business training lies in the source of the space-flavoured contributing programmes such as the Copernicus Accelerator, Galactica, EBAN, Copernicus MOOC or Point.IoT among others.

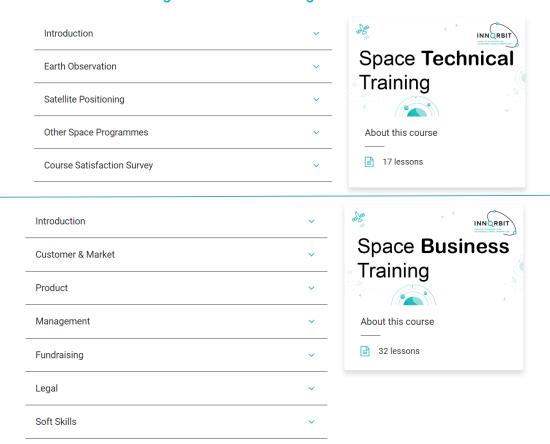


Figure 9: BSP training curriculum

Course Satisfacion Survey





#### 5.2 Tracking and monitoring of the deployment

#### 5.2.1 Initiative Deployment Plan

The Initiative Deployment Plan (IDP) is the work plan and finely detailed execution programmes of the initiatives to be deployed by each innovation intermediary. During the Capacity Building stage, the IDPs are crafted by the intermediaries as a detailed plan. Also, for the first pilot round IDPs were formal deliverables. They indicatively included:

- Introduction to the initiative's concept
- A detailed description of the initiative in different work packages
  - Promotion
  - Application process and selection criteria
  - Execution of events
- Management of each initiative
  - Team and allocations
  - Capital, material and tools
  - Timeline and milestones
- Monitoring & tracking
  - Performance, success and quality indicators and assessment criteria
  - Procedures, and templates to monitor and collect feedback from participants

IDPs will be prepared are excellent exercises to foresee implementation stages, reaching higher granularity on the plans thus identifying milestones for adequate management. The IDPs¹ developed during the first pilot round are good examples to illustrate and further guide other intermediaries in IDP elaboration. Despite they are tools to support the planning stage, they are not mandatory and even more, the resources consumed in its elaboration lead to be avoided when dealing with external or pro bono intermediaries. Instead and during the second pilot, a simplified version of the IDP is used, the tracking or activity card.

#### 5.2.2 Activity cards

The activity cards are the documents which comprise the description of the intermediary and its ecosystem, the check-in capacitating meetings and the log of the ambitions and planning of the initiatives discussed. Also, it shall track associated KPIs of the initiative or InnORBIT. The tracking cards were designed to ease the capacitation of pro bono intermediaries where there are few resources to employ. The tracking cards are built collaboratively during the check-in meetings as continuous minutes of meetings. Both InnORBIT and the intermediary can recall previous actions logged in.

**Each intermediary has an individual tracking or activity document.** Each tracking **document is composed of several cards, one per initiative**. Also, at the beginning of the document, there is a brief ecosystem and ambitions depiction, together with the major lines of the strategy pursued.

An example of a tracking card is presented on the next page. Results of the activities are illustrated in D3.6 and D3.8 Achievements of InnORBIT support initiatives – 1<sup>st</sup> and 2<sup>nd</sup> rounds.

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<sup>&</sup>lt;sup>1</sup> D3.2, D3.3 and D3.4 Support Initiative Deployment Plan for Greece, Croatia and Romania (expected on M12).





Figure 10: ROSPIN initiative tracking card, part A (captured in January 2023). Confidential information blurred

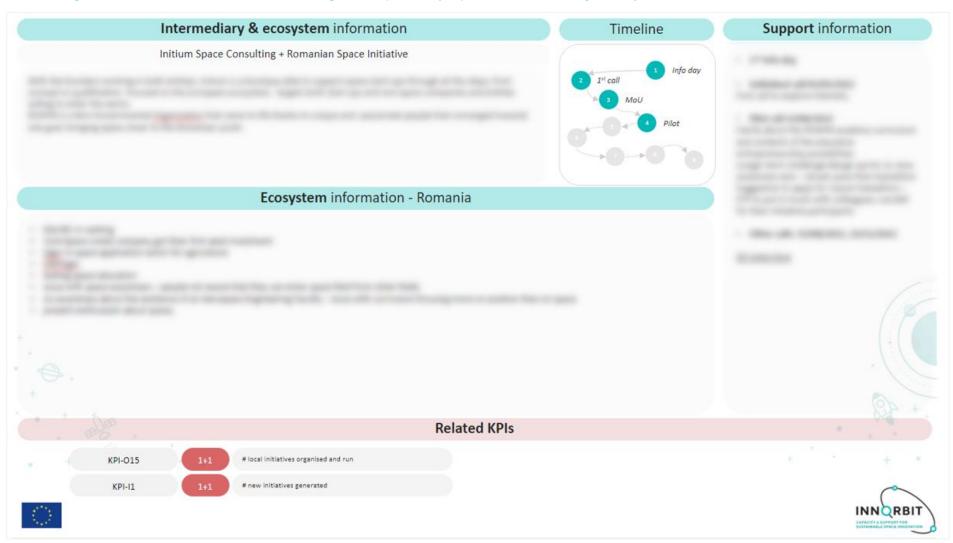






Figure 11: ROSPIN initiative tracking card, part B (captured in January 2023). Confidential information blurred







## 6 Conclusions and next steps

The present document describes the design memory and methodology of the Business Support Programme in its third and final version. Many of the conclusions are similar to the D4.8 CBP deliverable, as both share continuity.

The BSP is the central stage of the InnORBIT process, where the efforts of the consortium are transferred to the innovators. Some of the activities come directly from InnORBIT, others come from the previously trained intermediaries, capacitated and guided in their previously planned initiatives. major changes happened in terms of flexibility between different points of the original schedule and the methodology of deployment. This is due mostly to the scarcity of resources of external intermediaries, obligating InnORBIT's actions to be extremely time efficient and adaptable to each intermediary. The inclusion of new initiatives and massive tailoring during the 2<sup>nd</sup> pilot round is a critical modification from the previous versions of this plan.

During the 1<sup>st</sup> pilot round much of the weight of the actions came from fixed training with pre-defined initiatives. While this worked well with the intermediaries in this round, it was because they were funded and received a significant motivational boost. The first approach with internal intermediaries proved to be a poor way to proceed with externals, so naturally, the method was modified to make the process less bureaucratic, less rigid, and more adapted to the needs of the local intermediary. The aim was to make InnORBIT fit in with its resource allocation and strategic growth projections. Also, to tailor the initiatives that they could be trained in, always clearly outlining the results they could obtain with local analogues.

The online platform will be hosted by InnORBIT for a few months after the project ends. Long-term viability is lying in the interest of the intermediaries to keep it. Despite this, InnORBIT is collecting hosting-free URLs and links to the material that might endure over time.

Despite intermediaries share common issues, related to the immaturity of the space innovation ecosystem of Central and Eastern Europe, each innovation intermediary has quite different ambitions and plans. Therefore, a variety of initiatives are been deployed across Central and Eastern Europe. The results are reflected in D3.6, D3.8 Achievements of InnORBIT's support initiatives - 1<sup>st</sup> & 2<sup>nd</sup> rounds and D3.7 Enhancing the capacity of innovation intermediaries to better support space innovation. No further actions are foreseen. However, D4.5 Replication Guide and similarly D4.6 Policy Recommendations will complement this final design.





#### **Annexes**

#### Annex I – Initiatives factsheets

Table 1: Space training for intermediaries' fact sheet

#### **Initiative summary**

Instruction material for the training of intermediaries in the space sector. The modules have a planned structure to catapult an outsider in the space sector. It will help to master the space basic knowledge and be able to recognise business opportunities while being familiar with the general topics of the space sector.

The second set of lectures aims to give a consolidated and recorded version, for on-demand re-use, of how InnORBIT partners execute these initiatives.

#### Features and functions

- Space technology training material
- Recording and tracking of the completion of each participant in each intermediary
- Fixed syllabus, with some detachable units based on their interest to develop during the BSP
- Essential knowledge to be able to help their innovation ecosystems
- Disposition of InnORBIT to the intermediary. This initiative is not passed on to the entrepreneurs, it
  is part of the CBP only
- Planned to be implemented by the intermediary at its own pace
- Commitment to finish written down in the MoU

#### Resources required

- Capital: N/A
- Person-days: technically less than 1 full day. Further doubts and clarifications may extend the
  dedication depending on the level of knowledge and the agreement achieved in the MoU
- Knowledge: Not required

#### Minimum eligibility requirements

There is no eligibility requirement to deploy this initiative. However, to maximise the impact of InnORBIT, it would be interesting for each intermediary to choose initiatives that it has never done before.

#### Service process & request steps

The process is automated and preconfigured. The only requirement is to accomplish the space 101 training and selected running initiatives

- 1. Commitment to accomplish. Tracking and monitoring
- 2. Selection of the initiatives to further develop, and receive the recorded training
- 3. Granting access and management of the platform

#### **Relevant KPIs and metrics**

Content quality, usefulness, attendance & completion

#### Materials required for the delivery

Computer and registry. Database of people attending per innovation intermediary. Feedback forms and monitoring tools under the framework.





#### Table 2: Space coffee fact sheet

#### **Initiative summary**

The space coffee is a simple and inexpensive networking and community building event that seeks to build on the shared interest of multiple sectors to launch a series of (10 for example) informal events where a keynote speech is followed by Q&A and networking in a friendly eatery-like environment.

Purely online version is possible but the eating or drinking activities is reduced to a small group of people that are sharing a common place. This is, the audience is not attending physically, but the anchor and the lecturers are in the same venue. The format remains the same, being a live transmission of a reduced coffee.

#### **Features and functions**

- Economic. Based on the interest of multiple parties
- Informal setting
- Pro bono speakers; promotion of them an invitation to a drink
- Fake or hidden agenda, repeating the process of keynote-Q&A-networking
- Take advantage of a coffee, university or eatery type venue where expensive facilities are not mandatory
- Critical aspect: finding the right speakers
- Promotion and awareness are needed to ensure participation during the networking breaks

#### Resources required

- Capital: limited to the venue and the speakers; eating costs of the speakers. A fully online version
  can simplify the venue if only the speakers and the anchor are present
- Person-days: 1 or 2 person-day work for each space coffee, excluding the event itself (1 to 4 hours)
- Knowledge: event management and space community will be relevant

#### Minimum eligibility requirements

There is no eligibility requirement to deploy this initiative other than carefully planning the speakers. It would be interesting for each intermediary to choose initiatives that it has never done before.

#### Service process & request steps

The detailed process is to be defined during the intermediary's initiative deployment plan. The request is on-demand

#### **Relevant KPIs and metrics**

Number of attendees, audience. Number of events, speakers, and depth of the discussed topics

#### Materials required for the delivery

Specific materials to be defined during the IDP





#### Table 3: Space hackathons fact sheet

#### **Initiative summary**

A prize competition or race which requires accommodation for a number of days, guaranteed supplies, technical means and manpower. Hackathons are moderately expensive and time-consuming to run properly. They are an excellent tool to stimulate the student community to get involved in a certain topic such as space, attracting talent and fresh ideas into an ecosystem.

#### Features and functions

- Prize competition for a short period of time
- Venue and manpower could trigger costs
- Sponsorship is recommended
- Challenge design, jury and tutors for the teams, require in-situ experts

#### Resources required

- Capital: average depends heavily on personnel, gross range in Western Europe ca. 10 and 20k.
   Cost reducing with sponsors providing food and the venue
- Person-days: simple hackathons can take around 20 working days per person day. Additionally 1 expert, mentor or facilitator per team of hackers. Jury and in-site moderator
- Knowledge: event management. Space thematic, ideally complemented with a good understanding
  of the innovation process

#### Minimum eligibility requirements

There is no eligibility requirement to deploy this initiative other than securing the funds and ensuring participation. It would be interesting for each intermediary to choose initiatives that it has never done before. Organisers should guarantee that skills are correctly spread among the teams.

#### Service process & request steps

The detailed process is to be defined during the intermediary's initiative deployment plan. The request is on-demand

#### Relevant KPIs and metrics

Number of teams, size of the event. Number of applications, prize and quality of the solutions.

#### Materials required for the delivery

Specific materials to be defined during the IDP





#### Table 4: Space sprints, incubators, and accelerators fact sheet

#### **Initiative summary**

Sprints, incubators, and accelerators are innovation initiatives that last long term, starting in a month up to years. They require a large number of resources, and the innovation intermediary shall plan this accordingly procuring public funds to support its ecosystem. They are excellent tools to boost ideas into start-ups and scale-ups by providing direct training, mentoring and funds to their ecosystem.

#### Features and functions

- Sprints: up to 1 month. Seed stage
- Incubators: 6 months programme. Early-stage, common space to work. Training and non-thematic mentoring. Start-ups apply to the programme which consists of several cut-off dates
- Accelerators: >6 months programme. Defined start-ups with the potential to go into the market.
   Hard thematic training and funds granting.
- Incubators and accelerators require long-term planned resource allocation
- Critical aspects: finding the right mentors and securing funds for the deployment and the funding of the innovators
- Promotion and awareness are needed to ensure participation during the networking breaks

#### Resources required

- Capital: difficult to assess as it strongly depends on the wages
- Person-days:
  - Sprint: 1 full time equivalent to run the show plus mentors on-demand. They can be found pro bono for the period. Normally 3 months in total.
  - Incubation: venue, maintenance of the venue and 2-5 staff, yearly planned.
  - Accelerator: 2-5 people for the whole year for only 6 months of an accelerator programme. The venue, maintenance and grants for the start-ups shall be considered as well.
- Knowledge: event management and space community will be relevant. Fundraising and mentoring network on technical and business-related content

#### Minimum eligibility requirements

There is no eligibility requirement to deploy this initiative other than finding the mentors, securing the funds and resource allocation. Particularly interesting for intermediaries with a venue that may cut this fixed cost.

#### Service process & request steps

The detailed process is to be defined during the intermediary's initiative deployment plan. The request is on-demand

#### **Relevant KPIs and metrics**

Number of start-ups supported, mentors, applications, audience, size of the grant. Number of sprints.

#### Materials required for the delivery

Materials to be defined during the IDP





#### Table 5: Space entrepreneur's instruction fact sheet

#### **Initiative summary**

Instruction material for the training of intermediaries in the space sector. The modules have a planned structure to catapult an outsider in the space sector. It will help to master the space basic knowledge and be able to recognise business opportunities, while being familiar with the general topics of the space sector.

A second set of lectures aims to give a consolidated and recorded version, for on-demand re-use, of how InnORBIT partners execute these initiatives.

#### **Features and functions**

- Space technology training material
- Recording and tracking of the completion of each participant in each intermediary
- Fixed syllabus, with some detachable units based on their interest to develop during the BSP
- Essential knowledge to be able to help their innovation ecosystems
- Disposition of InnORBIT to the intermediary. This initiative is not passed on to the entrepreneurs, it is part of the CBP only
- Planned to be implemented by the intermediary at its own pace
- Commitment to finish written down in the MoU

#### Resources required

- Capital: N/A
- Person-days: technically less than 1 full day, without considering the creation of the initiative development plan. Further doubts and clarifications may extend the dedication depending on the level of knowledge and the agreement achieved in the MoU
- Knowledge: Not required

#### Minimum eligibility requirements

There is no eligibility requirement to deploy this initiative. However, to maximise the impact of InnORBIT, it would be interesting for each intermediary to choose initiatives that it has never done before.

### Service process & request steps

The process is automated and preconfigured. The only requirement is to accomplish the space 101 training and selected running initiatives

- 4. Commitment to accomplish. Tracking and monitoring
- 5. Selection of the initiatives to further develop, and receive the recorded training
- 6. Granting access and management of the platform

#### Relevant KPIs and metrics

Content quality, usefulness, attendance & completion

#### Materials required for the delivery

Computer and registry. Database of people attending per innovation intermediary. Feedback forms and monitoring tools under the framework.





## Annex II - InnORBIT's training syllabus

Figure 12: InnORBIT's training syllabus for the BSP

