



ESA BIC Switzerland Frequently Asked Questions

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From:

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To:

Interested Parties ESA BIC Switzerland

Copy to:

This “FAQ” is complementary to the Memo titled “ESA BIC Switzerland: Key Elements”, dated 8 April 2015, and to the information presented to participants of the information event on ESA BIC¹ Switzerland on July 7, 2015. Revision 2 has been updated to reflect discussions and additional information on funding and work to be carried out (IAP Ambassador, Preparatory/“Acceleration” type of coaching & preparation). Revision 3 includes further information on the bidding timeline and some precisions on certain aspects.

The questions and answers presented reflect the status of various discussions with stakeholders and interested parties. They inform the reader about specific aspects of the general concept of ESA BIC Switzerland. The information contained herein is for information purposes only and *is not part* of the official and binding tender package to be issued by ESA.

Topics, Types of incubatees and selection process

Question: Would it not make sense to not only have bottom-up support to companies, but also top-down defined topics (e.g. “Mega Constellations”)?

Answer: While this certainly sounds like an interesting idea, it would in our view further limit the “gravity” potential of the BIC. It must also be considered that not only spin-in/spin-along, but also spin-out and applications/services will be supported. Based on early discussion, we believe though that topics or clusters might emerge naturally, especially in cases where smaller consortia might team up, each bringing its specific strengths to the discussion table.

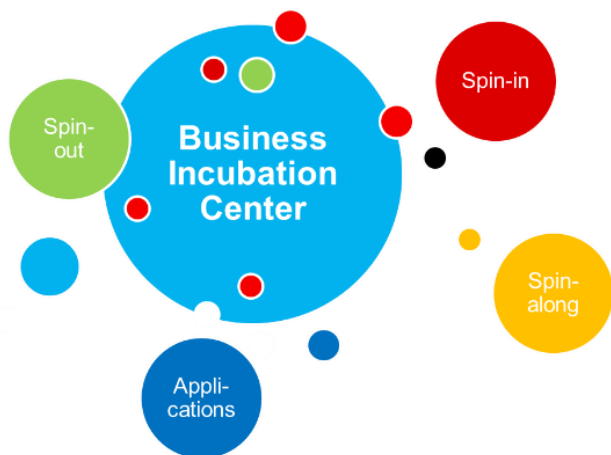


Illustration 1: Types of incubation

¹ BIC: Business Incubation Centre

Q: It was mentioned that the tender and selection process (including registration) of start-up companies is a standard ESA process. Those processes are generally seen as rather slow and complicated. Is that not in contradiction to the methods/mentality of start-ups presented during the Event on July 7th: fast, risk-taking, out-of-the box thinking, fearless and “little respect”?

A: No. The ESA selection process for incubatees is time-proven. As mentioned during the presentation, time-to-contract after selection is usually a maximum of six weeks. The selection process itself is via an open call with three selection campaigns per year². This largely matches or outpaces similar selection processes like venture competitions and contests, or seed funding rounds.

Nature of the BIC, Critical Mass and Success Criteria

Q: Cantons might demand the physical presence of the companies in their area before their investments into the BIC is granted (Economic development agencies). This might be stimulating, if the companies are already registered in the respective Cantons. However, Start-ups in the domain of Space technologies, unlike e.g. Medtech or Nano technologies, will probably not be so frequent, which makes it unlikely to have a concentration in any given spot. Furthermore, Switzerland has a very well-established infrastructure with short distances that enables good exchange throughout the country. Therefore, wouldn't it be more promising to have a decentralized BIC?

A: In a nutshell, ESA is open to consider proposals with a perspective to expand from a centralized BIC towards a more decentralized (or networked) and/or virtual model, with a preference for the former.³ A few thoughts on this aspect can be found below.

On a very fundamental level, we see three main ways of a setup for ESA BIC Switzerland: A **centralized**, “one node” BIC, a **decentralized** model with interdependent locations or nodes (i.e. networked but still with physical locations), and a **purely virtual** BIC where no structure for locations of the incubatees is enforced (see illustration below).

We are convinced that one of the fundamental success factors is a good and strong partnership with the cantonal and regional authorities involved, as well as the creation of a critical mass that allows the incubated businesses to thrive. With that in mind, we started with one central instance as the baseline for ESA BIC Switzerland. This would make discussion with potential funding cantons easier, as well as create, to a certain extent, the gravity needed to succeed. Yet, we are aware of the limitations and potential challenges in attracting enough companies in a centralized model. We are thus open to a different/incremental approach (see illustration below), especially also considering the initial feedback that cantons might indeed be open to fund a less centralized (and thus less “cantonal”) setup.

In a bottom-up logic, potential bidders are open to seek complementary partners to set-up such a model pre-bid, whereas, based on the outcome of the tendering process, ESA might also suggest

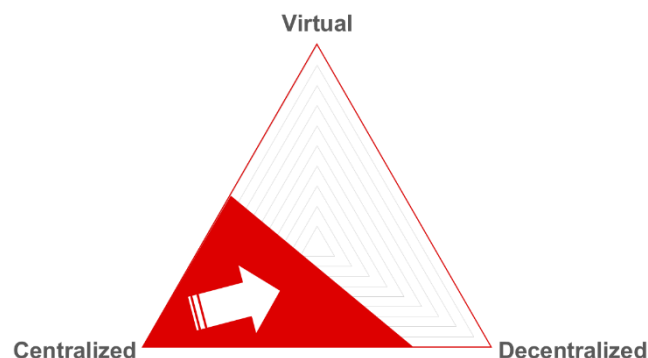


Illustration 2: Nature of the BIC

² See the [ESA Website for Details](#)

³ Depending on the specific case, incubatees already having a physical location in the vicinity of a BIC location might be accepted nevertheless. The exact details are again something that will be defined post-bid.

“top-down” that certain individual partners build a consortium post-bid, to maximize the impact.⁴

Notwithstanding the above, ESA will place one contract in Switzerland, with one main partner who will be tasked to manage the overall initiative.

Q: How will the success of the BIC be measured?

A: On one hand, there is a standard set of KPI's in ESA's BIC model that will be tailored to ESA BIC Switzerland. These are centered around the success of the incubatees, and the overall performance of the BIC operations w.r.t. to the tasks entrusted (networking, events, marketing related activities). On the other hand, the funding model (see "Private investments into the BIC Model" below) as well as the additional elements like the "preparators"/"acceleration" type of activities (see "Early / Raw Diamond Detection, Innovation Funnel, Deal Sourcing" below) require a set of new KPI's that take this into account. These KPI reflect the responsibilities assumed by the entity operating the BIC.⁵

Private investments into the BIC Model

Q: Can you summarize the funding model of ESA BIC Switzerland?

A: We believe that a public-private partnership increases the value for the public and the private partner while the risk per party is significantly reduced. Private investments therefore form an integral part of the ESA BIC Switzerland Model.

The funding model can be summarised as **500/10/2**, which breaks down to the following:

- **500 kEUR** funding per incubatee⁶
- Up to **10 new incubatees** per year⁷
- Incubation period of **2 years**

ESA and the Swiss Confederation *commit up-front* 2 MEUR per year for seed funding of start-up businesses in Switzerland. This represents 40% of the funding for the ESA BIC, which amounts to a maximum of 5 MEUR per year (10 new incubatees per year).

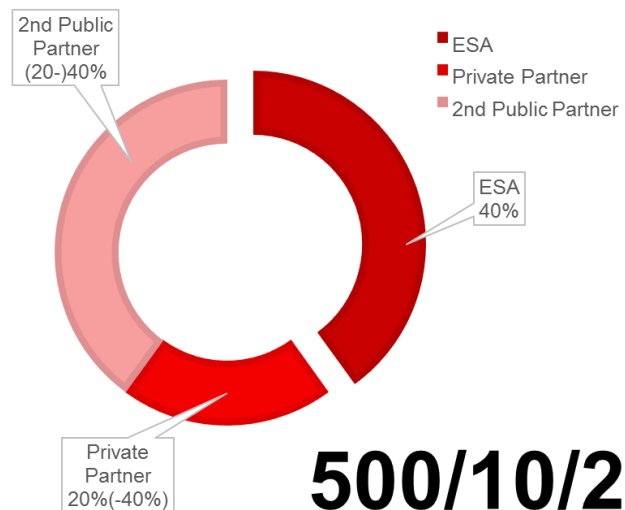


Illustration 3: The funding model

It is expected that a private partner covers at least 20% of the remaining funding, and that a 2nd public partner matches this with the remaining percentage. However, should a private partner be willing to commit to more, then this can certainly be accommodated for Private funding will be mandatory, while a second public source is optional.

⁴ For example smaller bidders covering complementary regions and/or topics. Given the size of the initiative, and ESA's experience, a practical limit for the number of nodes is 3 to 5 maximum, including "virtual" nodes.

⁵ One has also to keep in mind that the model should and will be set-up such that accountability is built-in as much as possible.

⁶ **Incubatee**: = a natural or legal entity running (or making preparations for starting up) a business who/which:

1. for own account and risk sells and supplies products, processes or services –not being advice– which are based on a new technological invention or a new application of existing technology with a relation to space and space assets.
2. has been registered in a Chamber of Commerce at most five years ago;
3. satisfies the definition of medium-sized, small and micro businesses

⁷ **"Up to"** is meant literally: ESA BIC Switzerland shall focus on businesses with high growth potential, both in terms of market size and global reach beyond Switzerland. It's not our goal to fill the slots as quickly as possible, but to find and actively manage businesses that have this potential. Space has no borders and attracting this kind of business is instrumental for the success of the initiative.

Q: We understood that private investors would not support specific companies, but support the BIC as such through a kind of fund.

A: ESA is flexible in accommodating different potential setups and the details of how the funding is made available. This can range from one Evergreen fund raising all capital, to models where the 2nd public partner and / or the private partner commit to financing their share according to a specified plan, based on milestones⁸.

Q: We further understood, that the IPR remain fully with the Start-up. Normally, a private investor needs to get favourable interest rates as a return or a product or IPR of the company. What is concretely the return on investment for the private partners and the public partners in the BIC Model?

A: As outlined above, ESA BIC Switzerland will be implemented in a public-private partnership with risk and profit sharing. To this extent, it is expected that the seed funding is granted with **a mix of instruments**, including **grants, loans, convertible loans, and equity**. The part funded by the ESA will be split 50%/50% into a grant and a convertible loan. Potential bidders will be invited to propose a suitable model for the remaining funding, taking into account the specific needs or requirements of the investors (both public and private).⁹

Early / Raw Diamond Detection, Innovation Funnel, Deal Sourcing

Q: The selection of companies will be based on ESA calls. How will the BIC make sure that promising Start-ups, which are not familiar with ESA, will respond? Is there pro-active search of such promising Start-ups foreseen?

A: Yes. Part of the work to be covered by the winning bidder is pro-active search of promising businesses, through dedicated initiatives or by partnering with existing initiatives (e.g. competitions, contests organised by national, European or global actors). It is also envisaged that the Ambassador Platform for Integrated Applications might at some point be included into the BIC operations.

The following illustration recalls where the Business Incubation initiative and its seed funding have to be located in the context of the (Space) innovation funnel and existing instruments.¹⁰

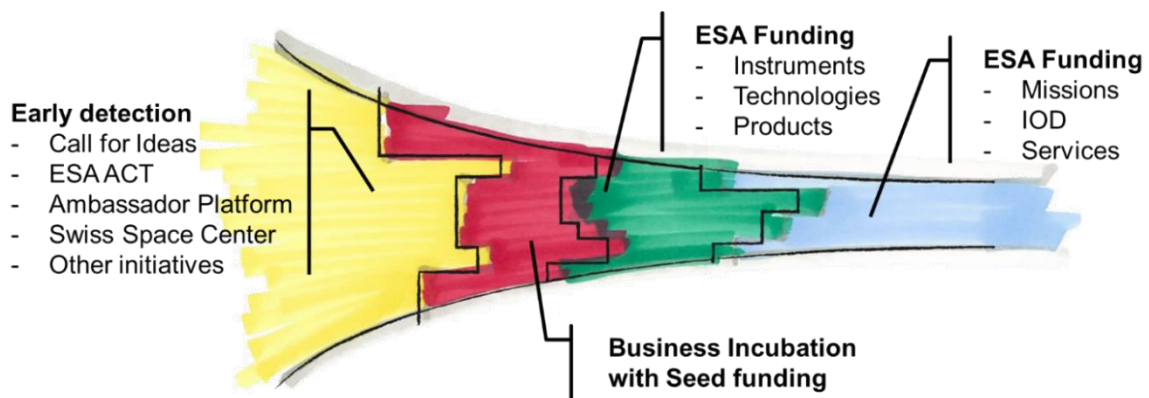


Illustration 4: The overall context and innovation funnel (Space view)

⁸ While ESA expects a pre-commitment from all partners for the funding (i.e. a “reservation of funds” or capability of funding), the effective commitment of the funds will be more incremental, spread over time and connected to specific milestones of the incubatee’s progress. Notwithstanding this, the partners are expected to reach a basic decision together on funding the incubatee when the company is selected (See the question on selection process).

⁹ The final, overall requirements for the funding scheme will be part of the tender package to be issued by ESA. The final decision and scheme, however, will be part of the contractual negotiations after a successful bid.

¹⁰ By analogy, this applies to Non-space Industries, spin-out, spin-along, and applications as well.

Looking at the interest demonstrated by the private partners, a solid and actively managed deal sourcing will be a very important success factor. Demonstrating the ability to master this, including potential future evolutions of this ability, will most likely be asked of the participants in the bid.

Q: Will there be funding available for BIC operations?

A: In essence: No. One of the characteristics of all ESA BIC is that they are not completely new buildings and operations, but are instead building on existing and proven structures in the respective hosting country/area, supported by existing agreements with local and regional governments. Furthermore, most regions and countries have existing support mechanisms in place to support start-ups with coaching, networking, marketing and other elements. In fact, on a national level, this role is assumed to a large extent by the CTI. Not only through its numerous offerings for start-ups but also offerings and support for accelerators or Business Incubation Centres.

There will be some general funding made available in the order of 40-50 kEUR for covering operational cost. In addition the Ambassador Platform (AP-Swiss) will be integrated into ESA BIC Switzerland, and be covered accordingly. Details on the scope will be given in the Statement of Work. Last but not least, one objective is of course to have as many successful incubatees as possible. After several discussions with interested parties, we decided that some additional funding will be made available to cover what could best be summarised as "acceleration" or "preparatory" activities of companies. As there are different models envisageable for this type of support/preparation, there will be some flexibility as to where this funding can be used in the lifetime of the startup process. It will however be centered around the selection campaign of the incubated companies (See Illustration 5) and will be only awarded on a per-activity/company basis (i.e. no lump sum).

The modalities for this funding will be detailed in the Statement of Work and look similar to the following:

- Up to [20] kEUR per "accelerated" company from ESA
- Funding to be matched with at least another [40] kEUR through partnerships (i.e. 1/3 vs 2/3)
- Maximum amount of [200] kEUR available per year for this work

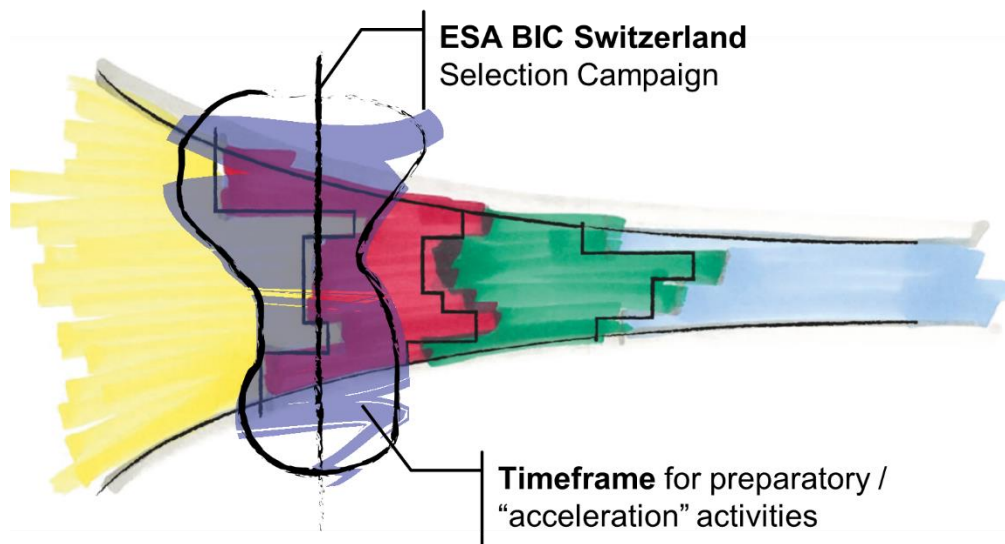


Illustration 5: Timeframe for preparatory / "acceleration" activities

The Statement of Work will invite the bidders to outline their specific view of how this funding shall be integrated in their overall vision for ESA BIC Switzerland.

Q: What could be the role and possible benefit of industry associations and existing space industry?

A: Space being a niche Industry in Switzerland, we see a role for existing space industry and industry associations in two domains:

- Supporting a strong space sector by working together with ESA BIC Switzerland on tailored initiatives like, for example, related to supply chains in the space market (or beyond), by providing opportunities to network with established actors and similar initiatives
- Participate actively in a consortium by (a group of) private investors, on the one hand by funding a part of the private share, and on the other hand having direct and unfettered access to new, interesting and fast growing businesses

Timing and Planning

Q: Being ready for a bid in September / October is very challenging, especially when looking at the time needed to secure funding with potential investors and/or cantonal government. What does the planning look like and how will you accommodate for these constraints?

A: It is the expectation of ESA and the Swiss Confederation that ESA BIC Switzerland opens its doors in summer 2016. A first round of companies shall be selected by that time for incubation. This means that the selection process must be concluded by the end of 2015/early 2016 (i.e. the selection of a winning consortium for managing the BIC based on the ESA tendering) to ensure timely opening.

Based on early discussions with a number of interested parties, this planning seems challenging but nevertheless feasible, both for private and public partners. It is noteworthy to say that not all agreements with investors or other partners will need to be finalized and signed to be able to bid. However, the tender requires bidders to demonstrate that such agreements are at a level which will allow for conclusion in due time to start operations of the ESA BIC.

Q: During the event, you mentioned “registration as an economic entity”. What does this mean for a potential bidder?

A: Only registered entities can apply to ESA bids. For that purpose, ESA has set-up an electronic system called “EMITS”¹¹. You find detailed information about the registration process and the requirements [on the ESA Website](#). Since this process can take some time, we advise you to register as soon as possible if you are interested in bidding.

Q: Is there help available for potential bidders with respect to the bidding process, administrative requirements and other paperwork-related elements?

A: Yes. The [Swiss Space Center](#), the national entity tasked with supporting the Swiss Space Office in space matters, is available to help with these aspects. You can contact the director, Dr. Volker Gass, via the following e-mail address: volker.gass@epfl.ch.

Bidding Phase

As of November 27th, 2015, the planned timing for the bidding phase by ESA is as follows:

- **Mid-December (14.12.2015):** ITT finalized, approved and published on EMITS
- **January 13, 2016:** Bidders/Investors Conference in Bern¹²
- **Beginning of February (8.2.2016):** Preliminary closing date of the bid
- **February-March:** Tender evaluation, decision and contract negotiations
- **Beginning of April 2016:** Contract finalized and signed

¹¹ EMITS: [Electronic Mail Invitation to Tender System](#)

¹² Intended to clarify the ITT, and questions associated with it