

EU4Digital: supporting digital economy and society in the Eastern Partnership

Mapping and Diagnosis of the Start-up Ecosystem in the Eastern Partner Countries:

The Concept of High-performing Incubation
Analysis of the Ecosystem Maturity
Recommendations



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Glossary

CEE	Central and Eastern European countries
DG NEAR	Directorate-General for European Neighbourhood Policy and Enlargement Negotiations
EaP	Eastern Partnership: European Union, its Member States, and Armenia, Azerbaijan, Belarus ¹ , Georgia, the Republic of Moldova and Ukraine.
Early adopter	An entity that adopts or starts using a new product, technology, or idea before most of the population.
Eastern partner countries	The Eastern European countries of the Eastern Partnership: Armenia, Azerbaijan, Belarus ¹ , Georgia, the Republic of Moldova and Ukraine.
EC	European Commission
Ecosystem builder (EB)	Organisation that fosters entrepreneurial activities by collaborating with the private sector, regulators, and other stakeholders. It focuses on strategic decision-making, financial sustainability, actions implementation, support to regulators, and support to wealth enablers to enhance entrepreneurial ecosystems. Its efforts include facilitating collaboration, providing industry expertise, securing funding, supporting policy development, and promoting entrepreneurship and economic growth.
EU	European Union
EU4Digital	EU4Digital Facility is an EU-funded programme that aims to harmonise digital markets of EU and Eastern partner countries. The programme is in its second phase (2022-2025).
High-performance incubator	An advanced type of incubator that provides start-ups with a wide range of operational resources, mainly capital, business knowledge, human resources and access to markets.
ICT	Information and Communications Technologies
Incubator	An organisation that has the goal to create high-growth-capacity start-ups by facilitating entrepreneurs' access to business knowledge, capital, market, human and operational resources.
IP	Intellectual property
KPI	Key performance indicator
MVP	Minimum viable product
SMEs	Small and medium-sized enterprises
ToT	Training of Trainers
Wealth enabler	Organisation that actively supports start-up growth by providing essential resources, such as business knowledge, funding, access to human and technical resources, and assistance in finding co-founders and employees. It helps entrepreneurs generate revenue from their products or services. Examples of such organisations are

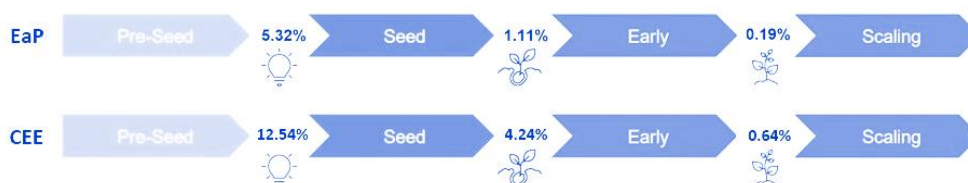
¹ As a result of the Russian military aggression against Ukraine and the involvement of Belarus as recognised in the European Council Conclusions of February 2022, the EU is further suspending planned and ongoing programmes and activities with the participation of Belarusian public authorities and state-owned enterprises. The EU will continue to step up its support to Belarusian civil society.

	universities, incubators, mentorship organisations, education courses providers, grant providers, etc.
Wealth generator	Wealth generators are start-ups that have a significant socioeconomic impact on the national economy. They progress from initial idea or seed stages to high valuation scale-ups. These companies rely on strong support from the entrepreneurial ecosystem, especially during their early phases, where incubators play a crucial role.

Executive summary

The region's main challenge: The Eastern partner countries start-up ecosystem is still in its early stages of development and faces significant challenges in catching up with more mature ecosystems. Start-ups' conversion rates in the Eastern partner countries are **more than 70% lower** than in Central and Eastern Europe as per Figure 1, below.

Figure 1. Start-up conversion rate between growth stages



The region's potential: The Eastern Partnership (EaP) region has a lot of potential for development. Even though it is not as developed as the EU, it has a fast-growing ICT sector with many new start-up companies emerging in recent years. The region also has a skilled workforce, especially in the ICT field, and its education is improving. Another advantage of the EaP countries is their location between the EU and Asia, which makes them attractive for businesses looking to expand into these markets. Moreover, the governments in these countries are supporting growth by offering tax incentives and creating innovation centres, leading to noticeable progress recently.

Basis for the study: Phase I of the EU4Digital Facility identified deficiencies in the start-up ecosystem, including a scarcity of ecosystem builders (organisations that foster entrepreneurial activities by collaborating with the private sector, regulators, and other stakeholders), a lack of ecosystem-building activities, and a need to improve the effectiveness and efficiency of the incubation process. The resulting report² emphasises the importance of addressing these deficiencies to ensure the success of the start-up community.

The study aims and outputs: The Phase II EU4Digital research, described in this report, examines the challenges faced by ecosystem builders and incubators in the Eastern partner countries. Its main goal is to improve the growth of start-ups during their early stages. The report offers a detailed diagnosis of the incubation status in these countries, including information about existing ecosystem builders and incubators. Additionally, it provides guidance to donors and regulators on how to create effective incubation programmes, with the aim of increasing start-up conversion rates. This involves empowering ecosystem builders and incubators through expertise and funding, while also encouraging collaboration among other actors in the ecosystem.

To promote a thriving start-up ecosystem and boost start-up conversion rates, policymakers might want to implement the recommended actions. To maximise the impact of these suggestions, it is advisable to consolidate them into a comprehensive regional programme with a focus on enhancing incubation efforts. The Eastern partner countries share similar gaps and action requirements, so a coordinated effort would ensure a more efficient distribution of resources and facilitate the exchange of best practices. This regional programme can be supported by both public and private sector stakeholders, working together to create a vibrant start-up ecosystem throughout the region.

Methodology of the study: The study has started with the development of frameworks and their visual representations, incorporating expert judgement and best practices from successful ecosystems, to create a clear and structured evaluation process for measurement of the performance of ecosystem builders and incubators.

Next, the study identifies and engages with various ecosystem stakeholders through national consultations. This step aims to create a comprehensive list of relevant ecosystem actors, with a focus on **28** ecosystem builders and **79** incubators identified in the region. The process of stakeholder mapping ensures a targeted and detailed analysis of these key actors. The mappings are attached in Appendixes 1 and 2 of this report.

² The report 'Design of the ICT Entrepreneurial Ecosystem Builder(s)' was published in April 2022: <https://eufordigital.eu/wp-content/uploads/2022/04/EU4Digital-ICT-Ecosystem-BUILDER.pdf>

To gather pertinent information, the study ran two surveys:

- For ecosystem builders – exploring their relationships with donors and regulators to assess their financial sustainability and engagement in action plan development, and assessing the level of support provided to the wealth enablers (incubators) and wealth generators (start-ups).
- For incubators – focusing on their financial sustainability, their capacity to provide crucial resources to start-ups, and the success rate of incubated start-ups.

Collected data undergoes evaluation and analysis, combined with expert judgement, to gain insights into the effectiveness of ecosystem builders and incubators. This step enables an understanding of their performance and impact on the entrepreneurial ecosystem.

Based on the analysis and expert assessments, the study draws conclusions. Each conclusion has an ID and is accompanied by a recommendation. The recommendations are provided to improve incubation performance. The recommendations are not a ready-made action plan for a specific incubator or an ecosystem builder, but rather serve as a guide for future development.

As a last step, the study actively seeks national feedback through consultations to validate its conclusions and recommendations. This process ensures that the suggestions align with the actual needs and realities of the region, making them practical and relevant for implementation. The collected feedback is compiled into a specialised document for internal use by the European Commission.

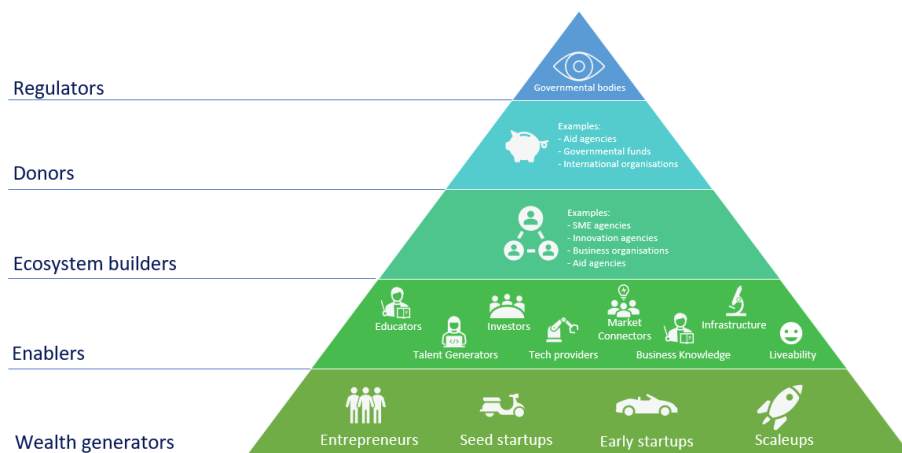
The report consists of three main parts: (1) definition of high-performing incubation; (2) analysis of the existing ecosystem actors; (3) recommendations and action steps.

1. **The chapter on the incubation concept** aims to give understanding of a start-up lifecycle and start-up ecosystem actors, and to introduce the performance framework.

The start-up early-lifecycle journey comprises three stages: (a) **talent stage**—where promising individuals with needed skills are identified and trained; (b) **idea stage**—where teams are formed and ideas are advanced; (c) **pre-seed stage**—where entrepreneurs validate their ideas and develop a minimum viable product (MVP).

The success of an entrepreneurial ecosystem relies on the active involvement of various stakeholders, each playing a distinct role: (a) **wealth generators** are entrepreneurs and start-ups, requiring support from ecosystem actors, particularly incubators, in the early stages; (b) **wealth enablers** provide resources to start-ups, including business knowledge, capital, market access, and technical resources; (c) **ecosystem builders** act as intermediaries (bridging) between donors, regulators, wealth enablers and wealth generators, playing a vital role in assuring the continuous collaboration of the ecosystem actors; (d) **donors** contribute funds for ecosystem development; (e) **regulators** create policies and regulations and facilities that promote and streamline start-up growth. Figure 2, below, presents a structural overview of the entrepreneurial ecosystem actors.

Figure 2. Structure of an entrepreneurial ecosystem



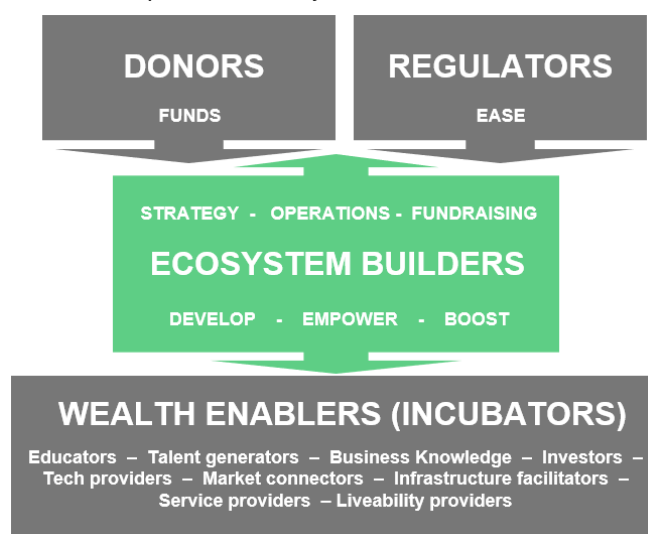
Moreover, two performance frameworks were developed to act as guidelines for measuring performance in an entrepreneurial ecosystem:

- **Ecosystem builder's performance framework** focuses on:
 - **Capacity design**
 - (a) Whether ecosystem builders provide strategic support to regulators and donors;
 - (b) whether ecosystem builders manage to attract stakeholders to fund their own operational sustainability;
 - (c) whether ecosystem builders manage to attract stakeholders to fund the projects aimed at ecosystem development;
 - **Capacity implementation**
 - Whether ecosystem builders provide expertise, operational resources and funding to wealth enablers.
- **Incubator's performance framework** highlights key activities related to providing resources (capacity) to entrepreneurs and start-ups, such as business knowledge, market access, capital, and operational resources.

2. **The chapter on analysis of the existing ecosystem actors** focuses on analysis of the existing ecosystem builders in the Eastern partner countries and a comprehensive diagnosis of the wealth enablers (incubators) in the Eastern partner countries.

Ecosystem builders are crucial in nurturing and fostering conditions for entrepreneurial activities to succeed. The report examined organisations that responded to the survey from the Eastern partner countries: **24** of these were identified as meeting the ecosystem builder definition (private foundations, aid agencies, national agencies, etc.). Figure 3, below, presents an overview of the ecosystem builders' role in the start-up ecosystem.

Figure 3. Ecosystem builders' role in the entrepreneurial ecosystem



The ecosystem builders' performance was analysed against the following components:

- **Strategic support to regulators and donors:**
 - **Low donor participation**
 - 21%** of ecosystem builders engage with private sector donors in the decision-making. **29%** engage with public sector donors³ in the decision-making. Donor organisations are interested in the entrepreneurial ecosystem's growth, but ecosystem builders are not providing them with expertise.

³ Only international public sector donors are considered in the context of the Eastern partner countries, as no national public sector donors (except for government) were identified to fund the development of the ICT private sector.

- **Low expertise in developing capacity-building action plans**
Ecosystem builders are dynamic organisations, with **75%** of them contributing actively to government policy development and **25%** providing the government with action recommendations for ecosystem development. However, the action recommendations are more concerned with ecosystem builders' own sustainability. Consequently, foreign organisations have taken control of ecosystem-building activities, leaving governments to independently undertake capacity development efforts. In doing so, governments find themselves in competition with both ecosystem builders and wealth enablers.
- **Funding for ecosystem builders' operational sustainability –**
 - **Low private sector donors' participation**
29% of ecosystem builders receive direct funding from private sector donors. In most of these cases, ecosystem builders receive the funding either directly, for example by receiving monthly or annual fees, or indirectly, by offering operational resources such as a working space or supplies.
- **Funding for entrepreneurial ecosystem development –**
 - **High participation of public sector donors⁴**
71% of ecosystem builders receive funding from public sector donors. However, in many cases, the funds are not obtained directly from donors, but instead they flow through intermediary agencies, such as international organisations' programmes that are funded by the donors. These intermediary agencies then distribute the funds to the incubators that have applied to participate in the programme. This implies a lack of confidence in public sector donors to provide significant funds to ecosystem builders. Several ecosystem builders use funds from public sector donors to implement direct activities with entrepreneurs and start-ups, competing with wealth enablers.
 - **Low participation of the regulators**
29% of ecosystem builders receive funding from regulators. This demonstrates a lack of confidence on the part of government entities in the ecosystem builders; the governments implement their strategies directly with ecosystem builders in a very limited number of instances.
- **Ecosystem builders' support to wealth enablers –**
 - **Low ecosystem builder participation in supporting entrepreneurial ecosystem wealth enablers**
29% of ecosystem builders receive funding from regulators. This demonstrates a lack of confidence on the part of government entities in the ecosystem builders; the governments implement their strategies directly with ecosystem builders in a very limited number of instances.

Overall, the ecosystem builders lack expertise in the development of action plans to be shared with the regulators and donors, i.e. they do not communicate to the donors and regulators the action steps to be taken, and they compete with wealth enablers in many activities performed.

Incubators play a vital role in facilitating resources that foster success for entrepreneurs and start-ups. The findings are based on thorough diagnostics of the performance levels respondent organisations — **36** of which qualified as incubators — aiming to understand their current and potential role in promoting innovation and entrepreneurship in the region.

The incubators' performance was diagnosed against the following:

- **Provision of essential resources to entrepreneurs and start-ups.** On the regional level the incubation organisations are:
 - **Strong** in providing access to (1) knowledge – education on the development and validation of hypotheses about customers, products, markets; (2) market – access to investors, business angel networks and seed funds;
 - **Weak** in providing access to (1) knowledge – courses on entrepreneurial skills and team building; development of MVP, key performance indicators (KPIs) and milestones; (2) market

⁴ Only international public sector donors are considered in the context of the Eastern partner countries, as no national public sector donors (except for government) were identified to fund the development of the ICT private sector.

– connection of entrepreneurs with businesses for idea discovery, successful entrepreneurs for strategic mentorships, and companies that would allow proof of concept to be arranged; (3) capital – provision of the starting financial resources, grants; (4) operational resources – scientific laboratories, interns, technical industry-specific education and professional mentorship.

- **Impact on start-ups' development.** In 2023, there has been a significant increase in the number of new start-up companies thriving within the incubators of the Eastern partner countries, compared with the figures observed in 2021. The growth rate has increased from **5.6%** (in 2021) to **8.6%** (in 2023), which is a significant jump of about **54%**. However, despite this growth, only **8.6%** of incubated start-ups have reached the seed stage and generated sustainable revenue. In comparison, selected Central and Eastern European countries have a higher success rate of **12.5%**. The lower success rate in the Eastern partner countries can be attributed to limited incubator capacity in providing entrepreneurs with knowledge, capital, and market access. To improve success rates and bridge the gap, enhanced support for incubators is necessary.

Conclusion, the wealth enablers lack provision of a significant share of essential resources. One of the reasons for this is a lack of support, mainly lack of funding and lack of expertise provided, from the ecosystem builders. The role of the ecosystem builders is to give capacity to the wealth enablers by offering expertise, operational resources, and funding. The other reason is lack of expertise in incubation in the region overall and, as follows, lack of capacity to provide resources to start-ups.

3. **Chapter 3 is dedicated to recommendations** to enhance the effectiveness of ecosystem builders and incubators in promoting entrepreneurship and fostering the growth of start-ups. These recommendations are guidance for donors regarding what support and resources to provide the ecosystem builders with; and for ecosystem builders about which resources to provide to incubators. The recommendations are not a detailed action plan. Specific action plans shall be developed in accordance with available resources and aligned with governmental strategy. Action plans based on the recommendations can be developed at any scale: for the entire region, country, or at the level of one organisation.

- **Recommendation 1: Engage regulators and donors in ecosystem strategy development.**

Provide to the managers and key representatives of ecosystem builders specialised expertise on strategy development, networking with regulators, private sector, and public sector donors for collaborative planning and goal setting.

- **Recommendation 2: Support the operational sustainability of ecosystem builders.**

Provide to the managers and key representatives of ecosystem builders specialised expertise on finance and proposal development, networking with donors, investment funds, etc. Finally, provide ecosystem builders with direct funding for operational expenses.

- **Recommendation 3: Fund the ecosystem builders.**

Provide to ecosystem builders direct funding for project implementation.

- **Recommendation 4: Support ecosystem builders' overall capacity building.**

Provide to the managers and key representatives of ecosystem builders specialised expertise on capacity building (effective provision of resources to wealth enablers). Also, offer to ecosystem builders opportunities for networking with international ecosystem builders for collaboration and sharing knowledge and best practices.

- **Recommendation 5: Support incubators' capacity to provide access to knowledge.**

Provide to the managers and executives of incubators specialised expertise on 'incubation management', 'high-performance incubation', 'entrepreneurial talent development' and 'business design'. Provide incubators access to networking with educational institutions for educational development.

- **Recommendation 6: Support incubators' capacity to provide access to market.**

Provide to incubators' coaches and instructors specialised expertise on 'business idea discovery'. Along with that, provide incubators access to networking with the national private sector and with international accelerators. Also, provide incubators with funding for 'entrepreneurial talent attraction events' and for establishing sectoral-driven incubation programmes and 'soft-landing' programmes. Finally, provide incubators with certified private sector mentors.

- **Recommendation 7: Support incubators' capacity to provide access to capital.**
Provide to the managers and executives of incubators specialised expertise on 'business analysis and grant programme management' and 'investors relationship'. Also, connect incubators with national and global seed investors, and with the national banking sector. Finally, provide incubators with funding, to be granted to entrepreneurs to develop their start-ups in the initial idea and pre-seed stages.
- **Recommendation 8: Support incubators' capacity to provide access to operational resources.**
Provide to incubators funding for the establishment of internship programmes, the funding of professional services (e.g., legal advice, accounting, etc.), and for funding advanced technical and business education that will help the entrepreneurs develop technical expertise.

The recommendations aim to strengthen incubation in the Eastern partner countries through four main areas: ensuring financial backing for incubators, equipping entrepreneurs with business development knowledge, facilitating start-ups' access to early-stage capital, and providing entrepreneurs with vital operational resources and market access. The proposed actions include tailored educational programmes, networking events, collaborations and financial support, all geared towards helping start-ups to grow.

Chapter 1. Background

Challenges and potential for growth in the EaP ICT entrepreneurial ecosystem

The current state of the ICT entrepreneurial ecosystems in the Eastern partner countries indicates that start-ups in this region face significant challenges in terms of their growth potential, particularly when compared to selected EU countries in Central and Eastern Europe (see Table 1). Notably, there is a clear imbalance in the conversion ratio of start-ups at the seed stage compared with those at the early stage. This highlights a deficiency in the number of start-ups able to achieve economic sustainability, i.e., only 1.1% of start-ups manage to achieve the early stage and become fully financially sustainable.

Moreover, the prior analysis from Phase I highlights a lack of adequate support structures, including incubators, accelerators and co-working spaces, which play a crucial role in fostering the growth and development of start-ups.

At the same time, it is worth noting that the region does possess many strengths. For instance, there is a substantial pool of talented and skilled ICT professionals available, creating a favourable foundation for innovation. Additionally, there is a growing demand for digital products and services in the region, indicating potential market opportunities. Furthermore, the presence of a supportive policy environment demonstrates a commitment to nurturing entrepreneurship.

In summary, while the market analysis identifies challenges faced by ICT start-ups in the Eastern partner countries, it also highlights the EaP region's potential for growth. By leveraging its talented professionals, capitalising on the increasing demand for digital solutions, and further enhancing its support infrastructure, the region can create a more vibrant and prosperous entrepreneurial ecosystem.

EU4Digital assessment findings: maturity and performance of EaP start-up ecosystems

During the years 2020 and 2021, under the EU-funded programme 'EU4Digital: supporting digital economy and society in the Eastern Partnership'⁵, the maturity of entrepreneurial ICT ecosystems in the EaP countries was assessed⁶.

EU4Digital examined the ICT entrepreneurial ecosystem's status, strengths and weaknesses, and identified gaps and challenges for its growth. It also explored the roles of ecosystem builders, policymakers, and stakeholders in developing effective strategies. To conduct the analysis, a sample of approximately 28,000 start-ups from the EaP countries in their different growth stages – spanning the period from 2010 to 2020 – was used. The analysis primarily focused on three key aspects: (1) the number of start-ups incubated, (2) the duration for which incubators were operational, and (3) the quantity of incubated start-ups that secured funding.

The methodology and findings of the analysis can be summarised in the following gaps:

⁵ <https://eufordigital.eu/>

⁶ The report 'Design of the ICT Entrepreneurial Ecosystem Builder(s)' was published in April 2022: <https://eufordigital.eu/wp-content/uploads/2022/04/EU4Digital-ICT-Ecosystem-BUILDER.pdf>

- **Lack of ecosystem builders**

The maturity of the ecosystem can be broken down into four key aspects: capacity to scale up and to generate talent; the quantity and quality of companies; and the balance of ecosystem enablers. To understand the maturity of the ecosystem, a comprehensive evaluation was conducted, encompassing various stakeholders such as entrepreneurs, start-ups, enablers, capacity builders, donors, and regulators. The assessment aimed to determine the number of active and engaged participants who are collectively working towards the common goal of establishing and expanding innovative companies.

The identified gap in the EaP region is the lack of ecosystem builders such as national aid agencies, business associations, private foundations, innovation agencies, etc. These organisations are responsible for creating and empowering other organisations that directly support start-ups throughout their lifecycle. Ecosystem builders should assure the achievement of a balance (see explanation below⁷) among different types of enablers within the ecosystem (investors, educators, mentors, and service providers).

Due to the observed lack of coordination in the EaP region, the gap showed the underperformance of ecosystem wealth enablers (incubators, investors, educators) and, consequently, wealth generators (entrepreneurs, start-ups, scale-ups). All because the entrepreneurial ecosystem is underprovided with expertise, funds, and operational resources necessary for the proper incubation of start-ups.

Although the role of an ecosystem builder is done for non-profit, being an ecosystem builder can provide the organisations with certain benefits, including but not limited to networking opportunities, a strong reputation in the market, a greater influence in shaping industry standards, and the ability to pool resources for joint ventures. By addressing social or environmental challenges, ecosystem builders can align their businesses with sustainable development goals and contribute to positive change.

To better understand ecosystem builders' mission, vision, and responsibilities, EU4Digital Facility experts composed the document 'Design of the ICT Entrepreneurial Ecosystem Builder(s): Guide for boosting the ICT entrepreneurial ecosystems in the Eastern Partnership'⁸.

- **Low incubator performance**

Incubators' performance is assessed based on the health and wealth of the incubated start-ups. To assess the health of start-ups, their lifecycle was analysed. Namely, conversion rates from one stage of a start-up lifecycle to another. Some other factors were taken into consideration as well, for example, the number of incubated start-ups. However, the number of incubated start-ups in the ecosystem becomes barely relevant if incubated start-ups do not convert to the stage of sales and profit generation. Therefore, the conversion rates were the key indicators to base the judgements upon.

The study revealed that **conversion rates in the Eastern partner countries were more than 70% lower** than in Central and Eastern Europe (Bulgaria, Estonia, Lithuania, Poland, and Romania), (see Table 1).

Table 1. Comparison of the start-up growth conversion rates in the Eastern partner and Central and Eastern Europe countries for the period 2010-2020⁶

Country	Countries' population	Ratio talent to idea stage	Ratio idea to seed stage	Ratio seed to early stage	Ratio early to scale-up	Ratio of exits
East-Central Europe Average	79,80 mln	0,06%	12,54%	4,24%	0,64%	0,19%
Eastern partner countries	71,67 mln	0,04%	5,32%	1,11%	0,19%	0,04%
Percentage Difference	-	-32,74%	-57,59%	-73,88%	-70,57%	-77,94%

⁷ **NOTE:** The report emphasises that the absence of any of these enablers can create a critical gap in the chain, leading to stagnation in start-up growth due to insufficient financing or expertise. For instance, if the ecosystem primarily consists of strong incubators but lacks business angel networks, start-ups may face challenges in securing early-stage financing. Similarly, although financing institutions like venture capital funds can contribute to increased investment, the growth of their portfolio start-ups may be hindered by a lack of relevant expertise stemming from an insufficient presence of educators in the ecosystem. Therefore, even with multiple ecosystem builders involved, collaboration is essential to ensure a well-balanced ecosystem.

⁸ The report 'Design of the ICT Entrepreneurial Ecosystem Builder(s)' was published in April 2022: <https://eufordigital.eu/wp-content/uploads/2022/04/EU4Digital-ICT-Ecosystem-Builder.pdf>.

This substantial percentage difference indicates a significant contrast between the two regions in the success of start-ups.

Consequently, the identified gap of the EaP region was low incubator performance⁹. It has been observed that the lower conversion rates can primarily be attributed to the limited capacity of the incubators in supporting start-ups through the crucial pre-seed (developed product) and seed (sales and sustainability) stages in the following areas:

- Low number of incubators in the EaP countries;
 - Lack of educational programmes, which would equip entrepreneurial talent with the necessary skills in generating customer traction and validating business models;
 - Limited engagement with the private sector, which hinders access to mentors, prototyping opportunities, and other resources;
 - Insufficient provision of early-stage grants for validating business models and accessing international markets.
- **EaP start-ups have difficulties in growing internationally**
The presence of international ‘wealth enablers’ in the ICT entrepreneurial ecosystems of the Eastern partner countries is relatively low. Currently, their involvement is primarily limited to organising specific events to discover promising start-ups or establishing a few education programmes funded by the public sector. However, what the region needs is closer collaboration between local incubators and international accelerators that can guide start-ups towards sustainable growth and economic success. Entrepreneurs in the region require assistance in accessing support for internationalising their start-ups, as this would enable them to tap into their growth potential beyond local markets.

Deriving from the identified gaps, the following set of the recommendations were developed:

- **Recommendations for policy makers**

The report¹⁰ suggested that policy makers create an action plan to empower ICT entrepreneurial ecosystems. This can be done by establishing and supporting ecosystem builder organisations. The implementation framework involves selecting a national coordinating organisation, preparing a national action plan, and involving all ecosystem builders in creating, empowering, and boosting ecosystem enablers. The report also recommended adding national KPIs to align with government strategy and other programmes.

- **Recommendations for other stakeholders**

The report¹¹ provided:

- Empowering recommendations that focus on supporting stakeholders who are already established and performing at optimal or excellent levels (educators, investors, connectors, or facilitators): the goal of these recommendations is to optimise the stakeholders’ activities and responsibilities as well as to scale their operations by applying the best international practices;
- Boosting recommendations that, on the other hand, suggest providing funding to stakeholders to generate a larger capacity to support entrepreneurs and start-ups.

Both categories of recommendations impact different types of stakeholders, such as educators or investors. Additionally, the report suggested:

- Creating entrepreneurial programmes in universities to empower them as capacity builders.

As a result of the findings and raised awareness, all the EaP governments have expressed interest in receiving technical assistance or development of an action plan. This report builds on the previous results and is supposed to guide during the preparation of an action plan. As a first step towards the change, the governments have assigned the coordinating organisations. The role of the coordinating organisations is to provide a big picture view and coordination over ecosystem development, ensure that the ecosystem builder organisations are

⁹ For detailed information on high-performing incubators, please refer to Chapter 2 of the report.

¹⁰ The report ‘Design of the ICT Entrepreneurial Ecosystem Builder(s)’ was published in April 2022: <https://eufordigital.eu/wp-content/uploads/2022/04/EU4Digital-ICT-Ecosystem-BUILDER.pdf>.

¹¹ The report ‘Guide for Building the ICT Entrepreneurial Ecosystems in the Eastern Partner Countries: Maturity Analysis and Recommendations’ was published in March 2021: <https://eufordigital.eu/wp-content/uploads/2021/04/Guide-for-building-the-ICT-entrepreneurial-ecosystems-in-the-Eastern-partner-countries-maturity-analysis-and-recommendations.pdf>.

established and supported in a way that achieves the overarching goals of the ecosystem, and lead the preparation of the action plans for each government.

Chapter 2. Understanding the state of incubation

This chapter discusses the early stages of a start-up's lifecycle and the role of incubators in supporting start-ups. It explains how incubators attract talent, help validate ideas, design business models, and provide resources (see 2.1).

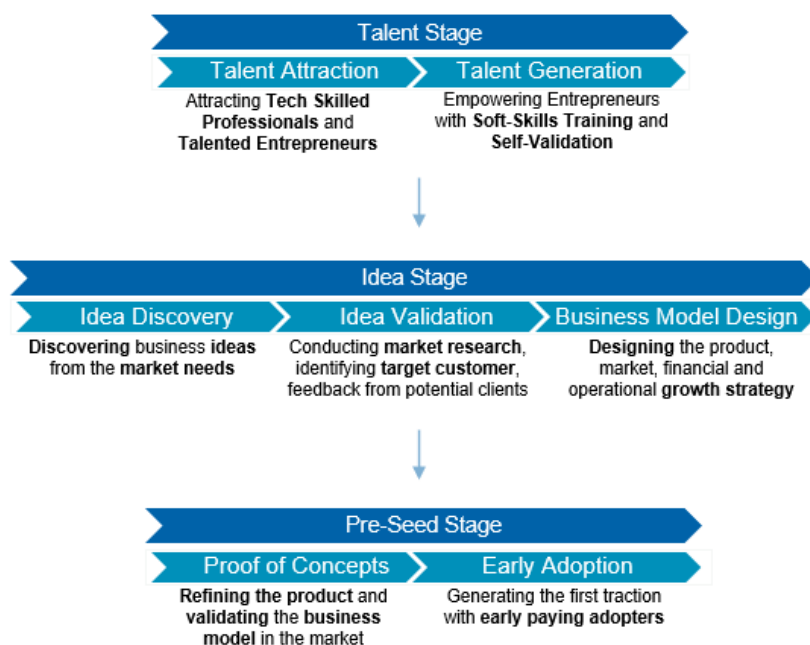
It also explains the roles of different stakeholders in the entrepreneurial ecosystem, including wealth generators, wealth enablers, ecosystem builders, donors, and regulators (see 2.2).

In addition, the chapter introduces performance frameworks for ecosystem builders and incubators, outlining their key activities: "components" and "items" (see 2.3 and 2.4).

2.1 Start-up lifecycle's early stages

To understand the incubation process, one must first comprehend the initial stages in a start-up's lifecycle:

Figure 4. Understanding the start-up lifecycle's early stages



1. Talent stage

At this phase, individuals with strong business or technical skills and promising ideas are being identified as 'talent' and attracted to the incubation programme. The talents are becoming educated and trained with necessary business and teamwork skills.

2. Idea stage

At this stage, teams of co-founders or non-shareholder employees are being formed. The teams must be balanced with a customer-oriented and product-oriented mindset. Together, the teams advance their ideas to the next stage.

3. Pre-seed stage

At this phase, entrepreneurs must validate their ideas, develop their MVP and strive to secure initial sales. This stage marks a progression towards establishing the business and advancing to acceleration programmes.

To get to know the role of an incubator during the stages, please see 2.4, 'Definition of 'Incubator's performance framework'.

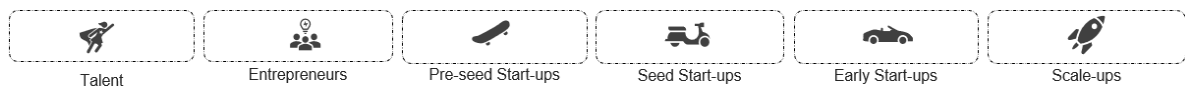
2.2 Entrepreneurial ecosystem stakeholders and their roles

The start-up ecosystem comprises five levels: wealth generators, wealth enablers, ecosystem builders, donors, and regulators. The ecosystem's success is contingent upon the collaboration of all participants involved:

- **Wealth generators**

Wealth generators are the most important pillar of the entrepreneurial ecosystem. By wealth generators, we mean emerging companies (start-ups) whose rapid growth has a significant socioeconomic impact on the national economy. These start-ups are categorised based on their growth stage, from the initial idea or seed phases to the final phases of scale-up, in which the companies have a high valuation and generate taxes and jobs. Wealth generators require strong support from entrepreneurial ecosystem actors for their growth, particularly in their early stages, where incubators, to which this report specifically refers, play a crucial part.

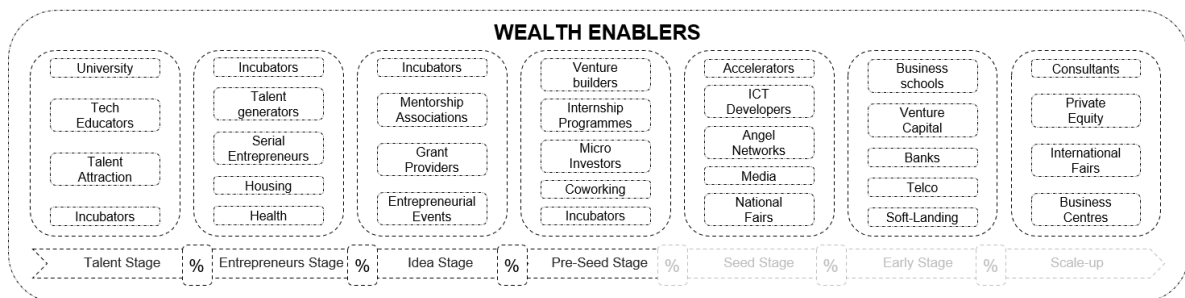
Figure 5. Type of wealth generators



- **Wealth enablers**

Wealth enablers are individuals or organisations whose common objective is to support the development of start-ups, by providing start-ups and entrepreneurs with multiple resources necessary for their growth. In the specific case of the incubators, their primary function is to provide business knowledge to talented entrepreneurs, as it constitutes a critical resource at the early stages. Business knowledge is necessary to cultivate the attracted talents into becoming entrepreneurs and help them identify and validate business ideas. Wealth enablers, specifically incubators, also provide the start-up's first capital for prototyping, product development, research and development. In addition, incubators help start-ups to access human resources, to locate co-founders and prospective employees. Furthermore, they help start-ups to afford access to markets and technical resources, enabling entrepreneurs to monetise their products or services.

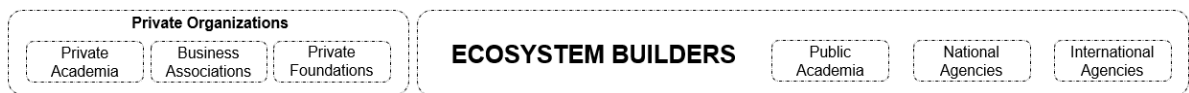
Figure 6. Examples of organisations that may perform the role of a wealth enabler



- **Ecosystem builders**

Ecosystem builders function as pivotal entities that bridge the gap between donors and regulators, on the one hand, and wealth enablers and wealth generators, on the other. Ecosystem builders' primary obligation is to generate enough wealth enablers, as well as later to empower and bolster them. Once doing that, ecosystem builders procure valuable knowledge - knowledge integral to comprehending the dynamics of the ecosystem, helping them to identify the actions necessary to be undertaken for ecosystem growth and development. This deep understanding of the ecosystem allows them to develop sophisticated capacity-building strategies for donors and regulators, thereby nurturing and reinforcing the ecosystem's vitality and productivity, as well as helping to implement the strategies. Also, fundamentally, ecosystem builders are typically the recipients of funds from these donors and regulators, with the aim to correctly distribute the funds to wealth enablers, further solidifying their central role within the ecosystem.

Figure 7. Examples of organisations that may perform the role of an ecosystem builder



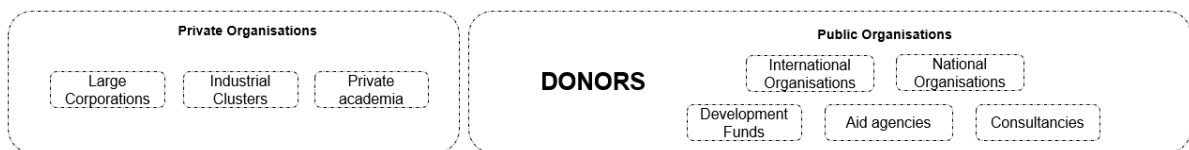
• **Donors**

Donors are organisations developing in the public and private sectors with the ability to contribute funds towards the development of the ecosystem, i.e., not solely providing funds for start-ups but for the entire ecosystem. Donors primarily support the sustainability of ecosystem builders, who, in their turn, support wealth enablers, and the following expansion of start-ups and entrepreneurs.

Donors can be:

- **Private** – In mature ecosystems, capital primarily originates from the national and international private sector.
- **Public** – In non-mature ecosystems, funding is mainly provided by national and international public organisations. Public organisations examples are the European Commission, development banks (e.g., EBRD, World Bank, etc.), public innovation agencies (e.g., ADA, SIDA, etc.), etc.
- **National** – Funding can come from national public sector organisations or government agencies within a specific country.
- **International** – If there are no national public organisations apart from the government to perform the role of public sector donor, the function relies on international organisations (e.g., European Commission, USAID, UNDP, GIZ, World Bank, EBRD, etc.). Unfortunately, international public sector donors do not generate continuity, given that their activities in the region are generally limited in time.

Figure 8. Examples of organisations that may perform the role of a donor



• **Regulators**

Regulators are accountable for easing the growth process of start-ups, which falls under the government's purview. Governments with the support of the policy-making agencies shall establish policies to ease the development of start-ups, such as tax incentives, streamlined business registration and licensing processes, IP protection, investment regulations, low-interest loans, and other regulatory frameworks. Governments should enact laws and regulations that promote entrepreneurship and support start-ups. They should also invest in and provide access to resources that make their start-up ecosystems attractive, such as high-speed internet, municipal infrastructure and effective communication with investors. Regulators play a vital role in fostering an environment conducive to the growth and development of start-ups. They are responsible for formulating policies that facilitate start-up growth and grant access to the resources necessary for their success.

Figure 9. Examples of organisations which may perform the role of a regulator



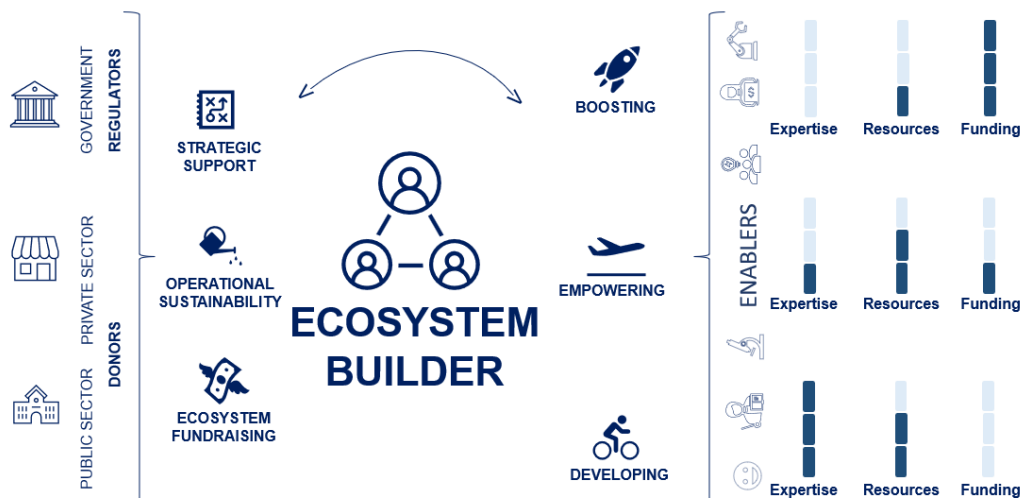
2.3 Definition of ‘Ecosystem builder performance framework’

Entrepreneurial ecosystems thrive largely due to the efforts of ecosystem-builder organisations. These organisations act as intermediaries, nurturing and fostering conditions for entrepreneurial activities to succeed.

In this chapter, we examine the identified ecosystem-builder organisations in the Eastern partner countries (see Appendix 1), and their role in developing entrepreneurial ecosystems. Through this analysis, we aim to gain valuable insights and conclusions, ultimately providing recommendations to enhance the growth and effectiveness of these organisations.

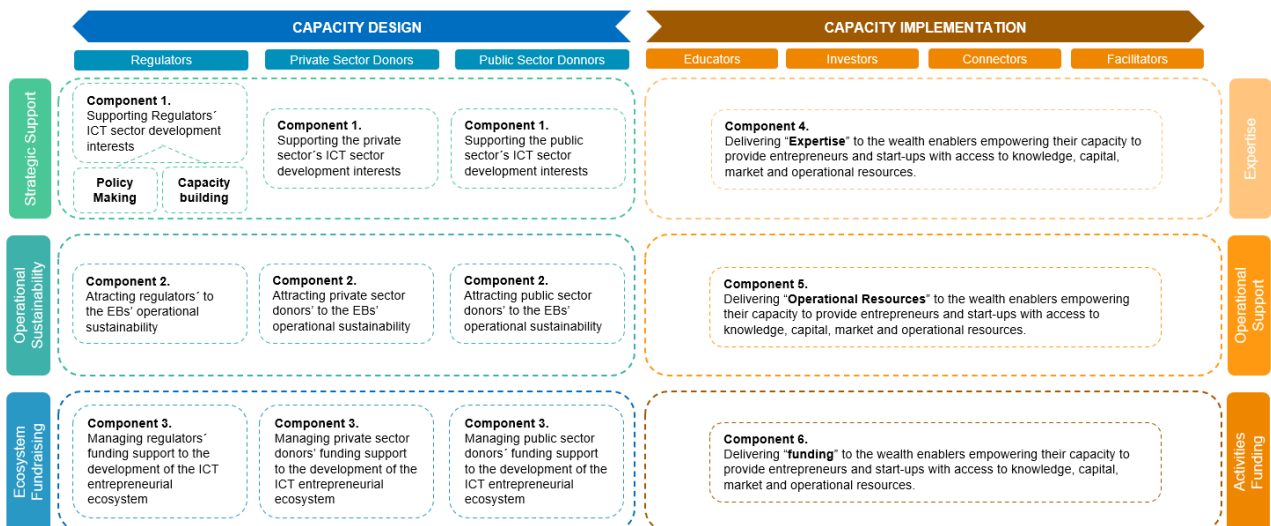
An ecosystem builder can be understood as an organisation, such as a business association, private foundation, or innovation agency, that works to improve the maturity of the entrepreneurial ecosystem. It does this by creating, empowering, and supporting wealth enablers through the provision of expertise, resources, and funds. To possess the capacity to support the wealth enablers, ecosystem builders strongly support the regulators and private and public donor organisations in developing capacity-building actions, and get funds to implement the actions with the common objective of enhancing the growth of entrepreneurial ecosystems.

Figure 10. Ecosystem building operations: bridging donors and regulators with wealth enablers (incubators)



Note: To understand ecosystem builders in depth, please see the report 'Design of the ICT Entrepreneurial Ecosystem Builder(s)'¹².

Figure 11. Performance framework of an ecosystem building organisation



¹² See the report here: <https://eufordigital.eu/wp-content/uploads/2022/04/EU4Digital-ICT-Ecosystem-Builder.pdf>, "Design of the ICT Entrepreneurial Ecosystem Builder(s)", published in April 2022.

To understand how an ecosystem builder is performing in its role of developing the entrepreneurial ecosystem, it is necessary to define its key activities. The key activities of an ecosystem builder are separated in two groups: *capacity design* and *capacity implementation*.

1. Capacity design

This refers to activities for the design of capacity-building actions for the development of the ICT entrepreneurial ecosystem, in collaboration with the regulators, the donor organisations and corporates interested in the development of the ICT Sector. We can group the activities into three key components:

- **Component 1 – Strategic support to regulators and donor organisations**

An essential role of an ecosystem builder is to assist regulators and representatives from the public and private sectors who are interested in the growth of entrepreneurial ecosystems. They collaborate to refine their strategies and goals.

- *Regulators* – these are national public sector donors; their interest includes enhancing economic growth (job creation and taxes generation), fostering competitiveness and promoting global cooperation and partnerships.
 - Capacity building: ecosystem builders add great expertise at the level of developing and implementing ecosystem strategies and action plans.
 - Policy making: ecosystem builders add great support in the development of streamlined policies that facilitate the growth of the private sector.

A lack of national ecosystem builders hampers the implementation of policies and strategies.

- *Private sector donors* – these donors' interest is the provision of support to start-ups with high growth potential that can bring a future value back to these private sector organisations – such as financial return, innovations and technologies, strategic partnerships, talent acquisition, brand reputation, and the meeting of corporate social responsibility targets. To achieve these goals, donors should collaborate with ecosystem builders for effective strategies.
- *International public sector donors* – these donors are international public organisations and their interest in the development of the start-up ecosystem is to achieve economic and social impact.

- **Component 2 – Ecosystem builders' operational sustainability**

Ecosystem builders usually are non-profit organisations; to sustain their operation's financial sustainability (expenses for rent, equipment, marketing, payroll, insurance, and funds allocated for research and development), these organisations maintain strong relationships with the private and public sector, donor organisations, and regulators. By securing financial backing, ecosystem builders can ensure the continuous progress of their activities.

- **Component 3 – Funding the entrepreneurial ecosystem's development**

The mission of the ecosystem builders is to receive and direct funding from donor organisations into boosting the wealth enablers in the form of grants and projects aimed at the creation of strong institutional structures, implementation of capacity-building programmes, and development of necessary infrastructure.

2. Capacity implementation

This refers to activities regarding the implementation of capacity-building actions for the development of the ICT entrepreneurial ecosystem. Namely, ecosystem builders must equip wealth enablers with necessary resources. Wealth enablers in their turn will empower entrepreneurs and start-ups with access to knowledge, capital, market, and resources.

We can group implementation activities into three key components according to the delivered type of resource:

- **Component 4 – Expertise**

Wealth enablers supporting start-up development must possess extensive expertise in the delivery of resources to entrepreneurs. The ecosystem builders aim to offer expertise to wealth enablers in various ways, such as courses, workshops and training to facilitate access to experts and attract new professionals.

- **Component 5 – Operational support**

Wealth enablers must provide technical, human, and financial resources to support start-up growth. Ecosystem builders aim to offer technical, human, and financial resources to the wealth enablers in various ways, such as covering human resources and networking costs.

- **Component 6 – Activity funding**

Wealth enablers must have funding capacity in order to support start-up growth. Ecosystem builders provide funding through grants, loans, and direct funds for operational expenses.

The report diagnosed the support provided to the following groups of wealth enablers (incubators):

- Educators – organisations that offer access to knowledge to entrepreneurs and start-ups;
- Investors – organisations that offer access to capital to entrepreneurs and start-ups;
- Connectors – organisations that offer access to the market to entrepreneurs and start-ups;
- Facilitators – organisations that offer access to operational resources to entrepreneurs and start-ups.

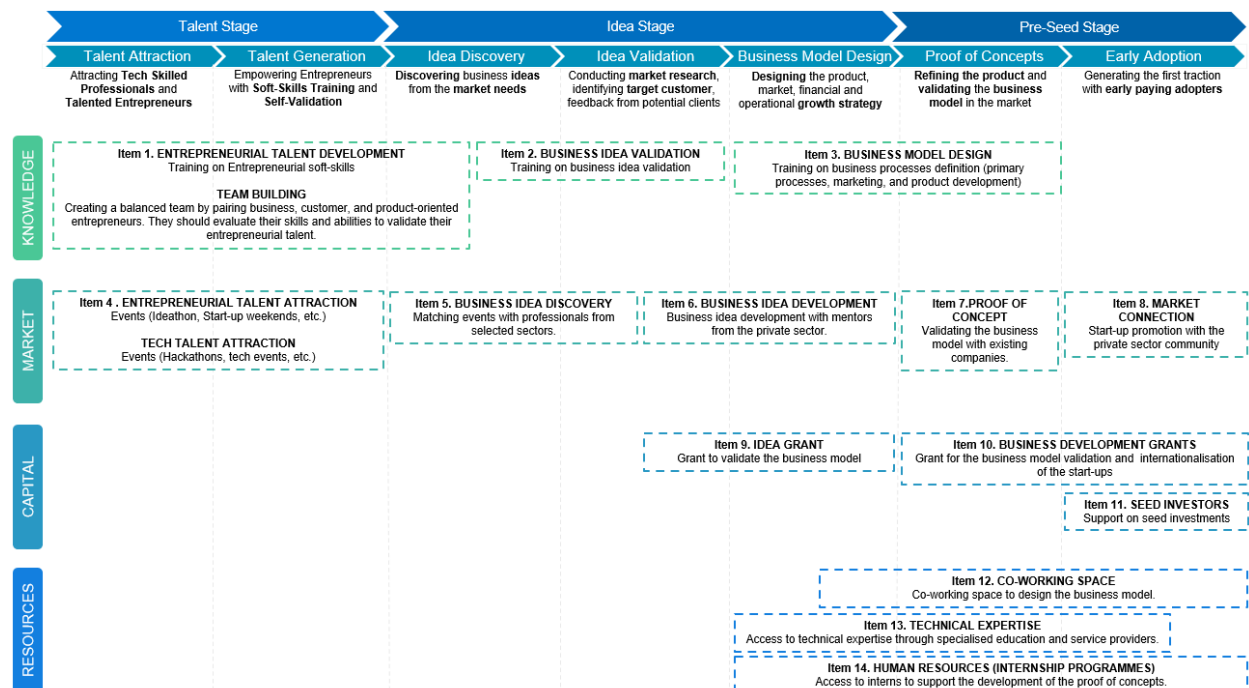
2.4 Definition of ‘Incubator performance framework’

Start-up incubation is a process that involves nurturing and supporting the growth of new businesses. This process entails providing entrepreneurs with capacity at each stage of a start-up’s lifecycle, namely, facilitating access to knowledge, market, capital, and operational resource. Any organisation that provides entrepreneurs with either with the full capacity, or just some of those resources is considered an incubator.

The report focuses on conducting a comprehensive diagnosis of the identified business incubators in the Eastern partner countries (see Appendix 2). The main goal was to conduct a thorough diagnosis of the performance levels of these organisations, which was of great importance in understanding their current and potential role in promoting innovation and entrepreneurship in the region and developing the empowerment recommendations.

Incubators are considered as organisations dedicated to promoting and nurturing start-ups with high growth potential. Their main aim is to provide support to entrepreneurs during the initial and crucial stages of establishing a start-up, which often involves navigating through uncertainty and substantial challenges.

Figure 12. Performance framework of a business incubator



To fulfil their role of incubating high-growth-capacity start-ups, incubators need the capacity to deliver key resources (business knowledge, early capital, market access and resources) to entrepreneurs during the early stages of their business ideas and start-ups. To understand how an incubator is performing in this role, it is necessary to define its activities, which we group into the following 'items' according to the delivered resource:

- **Business knowledge:**

- **Item 1 – 'Entrepreneurial talent development' education**

This pertains to the knowledge that entrepreneurs need during the 'talent generation' phase. At this juncture, entrepreneurs must learn to **validate their soft skills, capabilities, and personal resources** to successfully foster their future start-up. Furthermore, they need to learn how to amalgamate these skills and resources with other entrepreneurs to **assemble co-founder teams**.

- **Item 2 – 'Business idea validation' education**

This refers to the business development knowledge that entrepreneurs must acquire to **identify business opportunities** congruent with their skills, knowledge, and resources, thereby ensuring they possess all necessary elements to implement the discerned business idea. Upon identifying the opportunity, a process of business idea validation is initiated, which involves **developing and validating hypotheses about customers, products, markets**, and the other various key elements of the business.

- **Item 3 – 'Business model design' education**

This education category involves business development knowledge that entrepreneurs need to design critical activities in developing **a product, operations, finance, marketing, and sales strategies**. These activities must be developed in the initial months of the start-up's inception, encompassing **principal milestones and the KPIs** necessary to assess the start-up's performance.

- **Market:**

- **Item 4 – Entrepreneurial talent attraction**

This refers to the networking activities that incubators carry out to attract individuals with entrepreneurial skills. These individuals are generally attracted to entrepreneurial and start-up events such as 'start-up weekends', 'ideathons' and 'hackathons', where attendees carry out a series of entrepreneurship activities such as validating an idea or developing a code, which incubators use to analyse soft and hard skills and detect potential entrepreneurs.

- **Item 5 – Business idea discovery**

This refers to matching activities, where incubators promote meetings between entrepreneurs and executives or employees of the private sector. Through these encounters, entrepreneurs gain the ability to discover potential business ideas.

- **Item 6 – Business idea development**

Since businesspeople and employees possess a profound understanding of the problem and need, they can assist entrepreneurs in proposing value propositions and designing technological solutions. Incubators are responsible for offering entrepreneurs access to businesspeople and professionals through mentorship sessions.

- **Item 7 – Proof of concept**

National private companies represent the optimal starting points for the start-up to develop its innovation and business in a genuine business environment, thereby assisting in value proposition validation and pivoting during product development. Sectoral-driven incubators facilitate entrepreneurs to start validating their products and implementing partnerships with corporates.

- **Item 8 – Market connection**

This refers to activities that incubators develop to support start-ups in their access to the domestic market by connecting with early adopters or internationally by linking with foreign companies and accelerators.

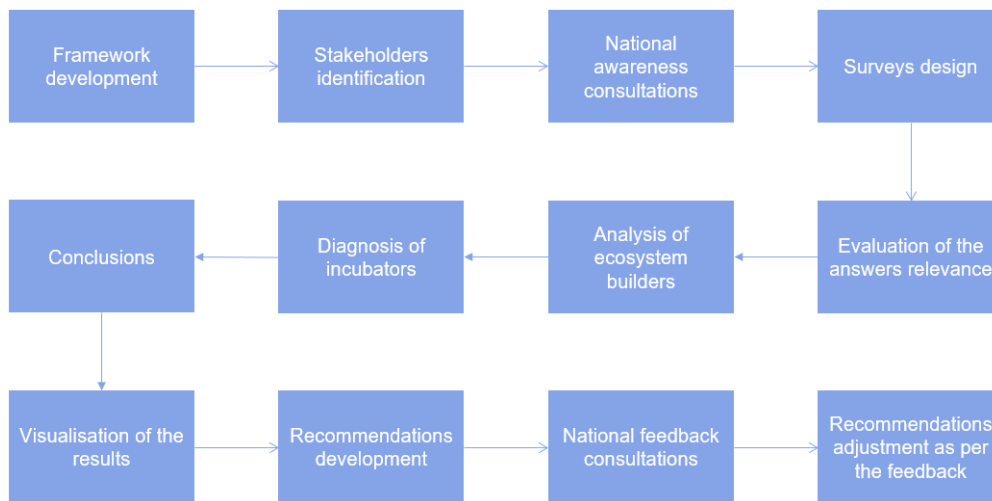
- **Capital:**
 - **Item 9 – Business validation grant**
This refers to activities that the incubator develops by implementing subsidy programmes to support the validation of business ideas and business models. With a modest grant, entrepreneurs have the ability to carry out activities such as small developments, marketing campaigns and hiring, which allow them to validate product and market hypotheses within their stage of validation of the business idea.
 - **Item 10 – Business development grant**
This refers to activities the incubator develops by implementing subsidy programmes to support start-up development. A broader grant allows entrepreneurs to develop their start-ups in key factors such as the development of prototypes or MVPs, access to early adopters, or establishing in new markets (soft landing grants).
 - **Item 11 – Seed investors**
This refers to activities that incubators carry out to connect their start-ups with seed investors. These seed investors can be business angels, seed funds or even companies. A seed investment allows the start-up to develop its activities in product, marketing and sales and operations to sustainability (breakeven point).

- **Resources:**
 - **Item 12 – Co-working space and scientific laboratories**
Incubators often provide start-ups with dedicated co-working spaces. They are equipped with advanced technological infrastructure, including high-speed internet, meeting rooms, and workstations. Start-ups can benefit from working with like-minded individuals in a dynamic and supportive environment. Generally, incubators give start-ups access to these spaces to develop their prototypes and MVPs, generating their first sales (seed stage), so the duration of use of these facilities can vary depending on the type of innovation and business models.
 - **Item 13 – Technical expertise**
This refers to activities that the incubator performs to give entrepreneurs and start-ups specialised education. This is usually done through training and mentorship programmes where incubators deliver specialised technology and business knowledge, bolstering entrepreneurs' technical and business acumen. Incubators can provide professional services in legal advice, accounting, marketing, and branding support, enabling entrepreneurs to concentrate on developing their start-ups.
 - **Item 14 – Human resources**
This refers to the incubator's ability to offer start-ups free or partially subsidised workforce through internship programmes, where start-ups can incorporate interns or junior employees with certain skills mainly in technological development or marketing.

Chapter 3. Methodology

After conducting a comprehensive evaluation of the incubators' performance and analysing the capacity builders currently operating in the Eastern partner countries, this report provides a set of recommendations to key stakeholders in entrepreneurial ecosystems. Specifically, these recommendations are targeted at donors and regulators. The main objective is to improve incubation practices in the entrepreneurial ecosystems of the Eastern partner countries and maximise the impact on start-up growth, particularly in the early stages. In contrast to Phase I, which primarily focused on quantifying the number of start-ups that were incubated, the duration of incubator operations and the funding received by incubated start-ups, Phase II has a narrower and deeper focus.

Figure 13. Methodology of the ecosystem boosting recommendations' development



The methodology employed for this study utilised a survey as the primary method for data collection. To identify the participants for the survey, a systematic approach was followed that involved engaging with ecosystem builders and utilising expert knowledge. The following steps were taken to ensure a comprehensive selection process:

1. Framework design

Identification of activities and responsibilities of ecosystem builders and high-performing incubators in the development of the mature entrepreneurial ecosystems, and creation of a visual representation that outlines the key 'components' and 'items' used as a benchmark to measure the performance of the actors in the ecosystem enhancement.

2. Stakeholder identification

Connections were established with various ecosystem stakeholders, and discussions were held to create a comprehensive list of potential participants.

3. National awareness consultations

National consultations were conducted to further refine the list of ecosystem builders and incubators. Through this process, the list of organisations involved in ecosystem building or incubation activities was refined, ensuring a more focused mapping.

4. Surveys design

Two separate surveys were developed—one for ecosystem builders and another for incubators¹³. The key questions addressed in these surveys were as follows:

○ **Ecosystem builders' survey**

The survey aimed to explore the relationship of ecosystem builders with private sector donors, public sector donors, wealth-enablers, and regulators. The survey was designed to capture essential information regarding the level of support available to SMEs and the innovation sector, as well as to assess the long-term sustainability of ecosystem building organisations. The survey methodology aimed to gather comprehensive and diverse perspectives from ecosystem builders to enhance our understanding of support systems and financial sustainability within the targeted sectors.

○ **Incubators' survey**

The survey aimed to comprehensively understand the incubators' financial sustainability in the long term. It also assessed the success rates of incubated start-ups in terms of progression, funding attraction, and related factors. Furthermore, the survey evaluated the

¹³ **Please note** that the research aimed at understanding the maturity of surveyed organisations as an ecosystem builders or incubators. It should be considered that many of these organisations only aspire to attain a) the status of a national ecosystem builders in order to solicit donor funding and potentially engage in the ecosystem builders' initiatives in the future, or b) the status of incubator while some of them are currently in the early stages of developing incubation programmes/activities for prospective implementation in the future.

incubator's capacity to provide crucial resources such as knowledge, capital, market opportunities, and other operational resources to the start-ups. The survey methodology aimed to gather comprehensive and valuable insights to inform our understanding of the incubator's performance and capacity in supporting start-ups.

5. Evaluation of the answers' relevance

The study progressed with an evaluation phase. The collected data was thoroughly assessed for its relevance to our research objectives.

o Ecosystem builders

Appendix 1 of this report contains the list of organisations, meeting the qualifications as ecosystem builders, totalling **28**. The responses were received from **35** organisations. Among the respondents, **24** organisations provided complete answers, meeting the qualifications as ecosystem builders, and enabling a comprehensive analysis to be conducted.

o Incubators

Appendix 2 of this report contains the list of organisations, meeting the qualifications as incubators, totalling **79**. Of the respondent organisations, which totalled **47**, the following organisations were not selected for the diagnosis: (1) organisations not engaged in creating new start-ups; (2) international organisations rather than national incubators; (3) the same incubation organisations acting in more than one of the Eastern partner countries; and (4) organisations that did not provide sufficient information. The diagnosis of incubators is based on the specific organisations whose answers were comprehensive enough to qualify for the diagnosis, totalling **36**.

6. Analysis of ecosystem builders

An in-depth analysis of the roles and activities of national capacity-building organisations was conducted, examining their function as of the ecosystem builders. The performance framework of an ecosystem-building organisation (see Figure 11) is explained and depicted in Chapter 2, 'Understanding the state of incubation'. This study encompassed an investigation into their effectiveness in devising action plans for regulators, donors and financial contributors, and their support provided to entities responsible for nurturing high-capacity start-ups.

7. Diagnosis of the incubators

A comprehensive diagnosis was undertaken to assess the capability of incubators in delivering highly specialised business development education, providing early access to capital, facilitating connections with the private sector, and offering access to operational and human resources. The performance framework of an incubation organisation (see Figure 12) is explained and depicted in Chapter 2, 'Understanding the state of incubation'.

8. Conclusions

Following the analysis and diagnosis performed, conclusions were drawn pertaining to the impact of both ecosystem builders and incubators on the growth and development of the entrepreneurial ecosystem.

9. Performance summary visualisation

Surveyed data was transformed into visual representations of the findings aligned with the developed performance frameworks, presented as percentages of organisations meeting the criteria.

The findings' summary visualisations for ecosystem builders and incubators will be gauged by the indicators of performance level as depicted in Figure 14.

Figure 14. Indicators of performance level used in the findings' summary visualisations



Note: The indicators depict levels 'Low', 'Medium', 'High' based on how many organisations in % provide certain types of support as per frameworks.

10. Recommendations

The goal of this report is to provide recommendations to improve the performance of the incubation in the Eastern partner countries. The recommendations are not a ready action plan, but a guide to which areas should receive special attention in the future development of an action plan.

11. National feedback consultations

The consultations aimed to review and validate the recommendations suggested in the report with ecosystem builders and incubators. The feedback received is valuable in refining the recommendations to better suit the actual needs of the region.

12. Feedback evaluation and adjustment of the redocumentations

Feedback will be collected, evaluated and outlined in a specialised document intended for internal use by the European Commission.

Chapter 4. Status of the incubation in the Eastern partner countries

The data collected from the different organisations surveyed have been carefully reviewed. The organisations have been identified as the target of the analysis if they met the criteria of an incubator (or an organisation performing incubation activities, but not qualifying as a full-capacity incubator), or an ecosystem builder (or an organisation performing ecosystem-building activities, but not qualifying as a full-capacity ecosystem builder). **The mapping of the organisations can be found in Appendices 1 and 2 of this report.**

Please note that the **research aimed at understanding the maturity of surveyed organisations as an ecosystem builders or incubators. It should be considered that many of these organisations only aspire to attain a) the status of a national ecosystem builders in order to solicit donor funding and potentially engage in the ecosystem builders' initiatives in the future, or b) the status of incubator while some of them are currently in the early stages of developing incubation programmes/activities for prospective implementation in the future.**

4.1 Analysis of the existing national ecosystem builders in the Eastern partner countries

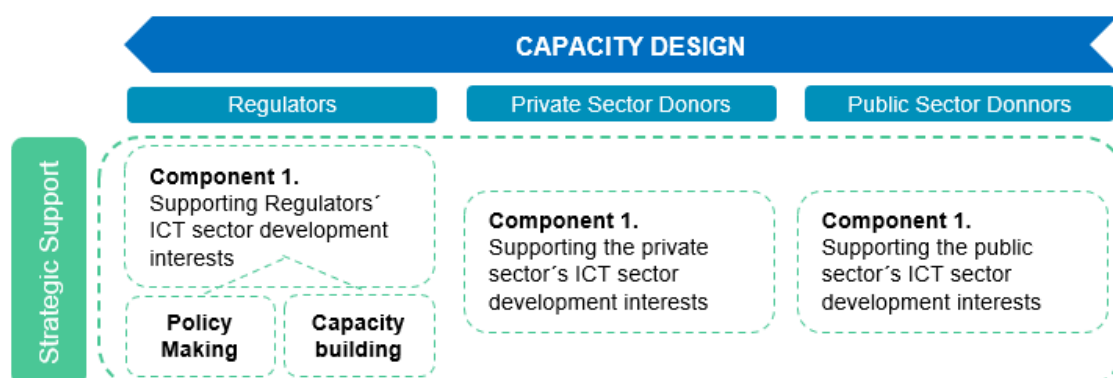
These subchapters analyse the following components presented in subchapter 2.3, 'Definition of ecosystem builders' performance framework':

- Capacity design (Component 1): Strategic support to regulators and donor organisations (see 4.1.1);
- Capacity design (Component 2): Ecosystem builders' operational sustainability (see 4.1.2);
- Capacity design (Component 3): Funding entrepreneurial ecosystem development (see 4.1.3);
- Capacity implementation (Components 4, 5, 6): ecosystem builders' support to wealth enablers (see 4.1.3).

4.1.1 Capacity design analysis: strategic support to regulators and donor organisations (Component 1)

Figure 15 depicts the part of the ecosystem builders' performance framework that highlights the responsibility of an ecosystem builder to assist regulators, private and public donors in the creation of strategic plans to achieve their goals, as outlined in Chapter 2.3, 'Definition of Ecosystem builders' performance framework'.

Figure 15. Performance framework of an ecosystem-building organisation: capacity design – strategic support



In strategic support, the relationships of ecosystem builders with donors and regulators are based on the mutual exchange of expertise as depicted in Figure 16.

Figure 16. Reciprocity of the specific strategic support provision between ecosystem builders, donors and regulators, (%)

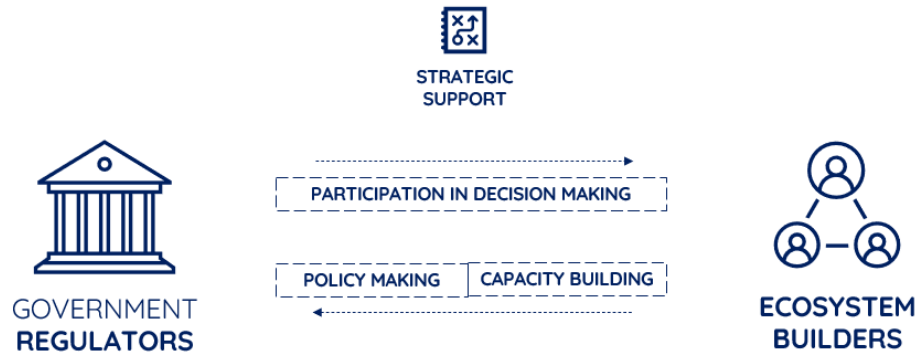
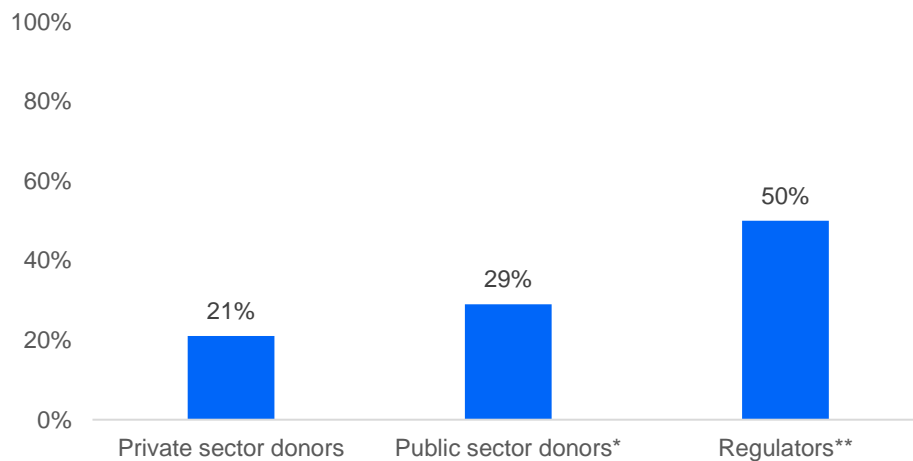


Figure 17 shows the percentage of ecosystem builders that engage regulators and donor organisations in capacity-building design for the development of the entrepreneurial ecosystem:

Figure 17. Ecosystem builders engaging donors and regulators in decision-making, (%)

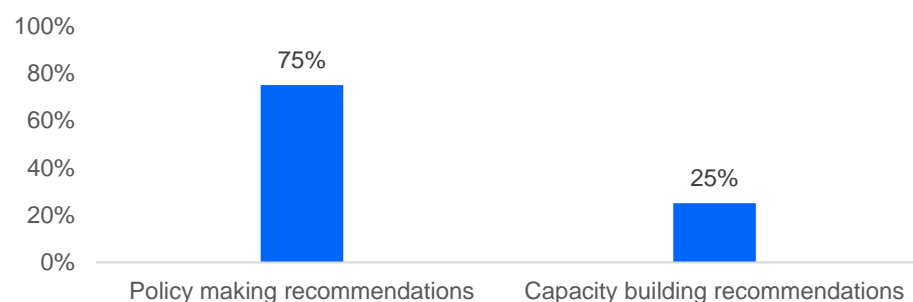


*Note: *Public sector donors in the context of the Eastern partner countries are international organisations, as no national public sector donors apart from government were identified.*

***Regulators are national public sector donors.*

Figure 18 depicts the percentage of ecosystem builders supporting regulators with recommendations on capacity-building actions for the development of the entrepreneurial ecosystem:

Figure 18. Ecosystem builders providing specific strategic support to regulators, (%)



Conclusions:

EB1 – Low donor participation in the ecosystem builders' strategic decision-making process

- **Private sector donors**

In this analysis, we measured the interaction by asking the surveyed organisations about their direct relationships with private sector donors (predominantly mentioned were large corporations and academic institutions) in strategy decision-making. Out of the 24 organisations interviewed, only five (21%) reported that private sector donors had direct access to the organisation through board membership or ownership. As mentioned in Chapter 2, 'Understanding the state of incubation', an ecosystem builder's responsibility is to generate development actions within the entrepreneurial ecosystem for the benefit of private sector donors. Ecosystem builders are often affiliated with universities and primarily provide expertise to support knowledge development for entrepreneurs through education and incubation. The relatively low percentage suggests that while private sector donors show interest in contributing to the ecosystem's growth, the surveyed organisations may not be effectively proposing engaging action plans or not effectively approaching donors.

- **Public sector donors¹⁴**

In contrast, seven out of 24 (29%) of the interviewed organisations indicated relationships with international public sector donor organisations. In contrast to private sector donors, public sector organisations lack the ability to engage in the board or ownership of ecosystem builders. Their main focus lies in promoting private sector development through the activities of ecosystem builders, with the ultimate aim of achieving both economic and social impact. In this case, the role of the ecosystem builder is to present capacity-building actions that the public sector can finance. The interviews revealed that none of the organisations developed and presented action plans to public sector donors. Instead, the relationship seems to be inverse, with international organisations requesting specific expertise from ecosystem builders to develop individual initiatives. Similar to the previous paragraph, we can conclude that public donor organisations are interested in the entrepreneurial ecosystem's growth, but the surveyed organisations may not be effectively proposing engaging action plans or not effectively approaching donors.

EB2 – Medium regulators' participation in the ecosystem builders' strategic decision-making process

To analyse this component, ecosystem builders were questioned regarding the direct participation of government bodies in the organisation's governance, either as board members or as owners. The governments' participation in shaping the direction of these organisations demonstrates their dedication to fostering the expansion of the business sector. Given the vital role played by the interviewed organisations in driving economic development, a greater governmental presence in their decision-making processes has the potential to significantly amplify their influence on the advancement of the business sector.

In 50% of the 24 organisations surveyed, the government is actively involved in the decision-making processes of ecosystem builders. This indicates that governments in the Eastern partner countries are very interested in fostering business ecosystems.

EB3 – Low ecosystem builder expertise in developing capacity-building action plans

75% of the interviewed organisations indicated that they contribute actively to the government's policy development; and 25% of the ecosystem builders provide the government with recommendations for entrepreneurial ecosystem development actions.

Considering the results of the analysis of strategic support to regulators and donor organisations and the two previous conclusions, it can be concluded that ecosystem builders lack the necessary expertise to develop action plans for capacity building, jeopardising their collaboration. It is true that six of the 24 (25%) organisations surveyed indicated that they design actions to develop the entrepreneurial ecosystem, but it was observed that these actions are quite specific and more concerned with their own sustainability, such as soliciting donations or consulting work.

¹⁴ Only international public sector donors are considered in the context of the Eastern partner countries, as no national public sector donors (except for government) were identified to fund the development of the ICT private sector.

On the one hand, the private sector is not directly involved in the entrepreneurial ecosystem. On the other hand, public sector donors entrust their financing for the development of the private sector to foreign organisations, such as aid agencies or development banks, which provide certain value to the development of entrepreneurial ecosystems, but do not foster continuity in the work of ecosystem construction. As a result, governments have to engage in capacity development activities themselves and by doing that compete with ecosystem builders and wealth enablers.

4.1.2 Capacity design analysis: ecosystem builders' operational sustainability (Component 2)

Figure 19 depicts the part of the ecosystem builders' performance framework highlighting the responsibility of an ecosystem builder to attract financing from regulators (national public sector donors), international public sector donors, and private sector donors for its operational sustainability.

Figure 19. Performance framework of an ecosystem building organisation: capacity design – operational sustainability

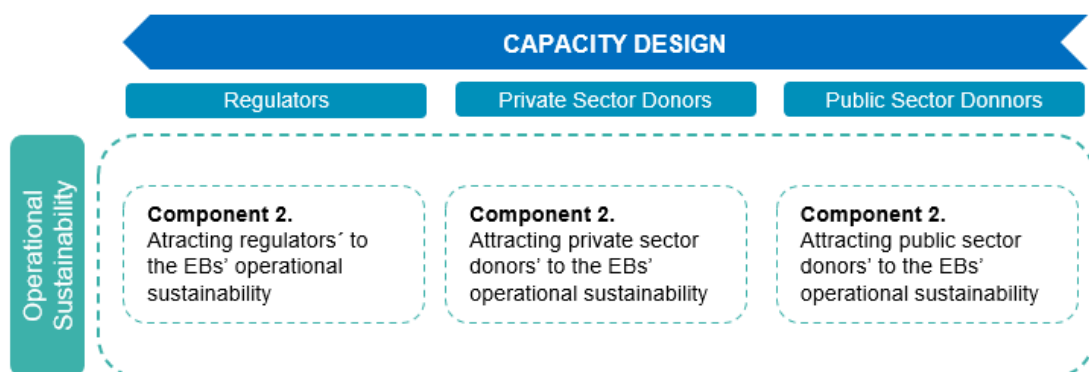
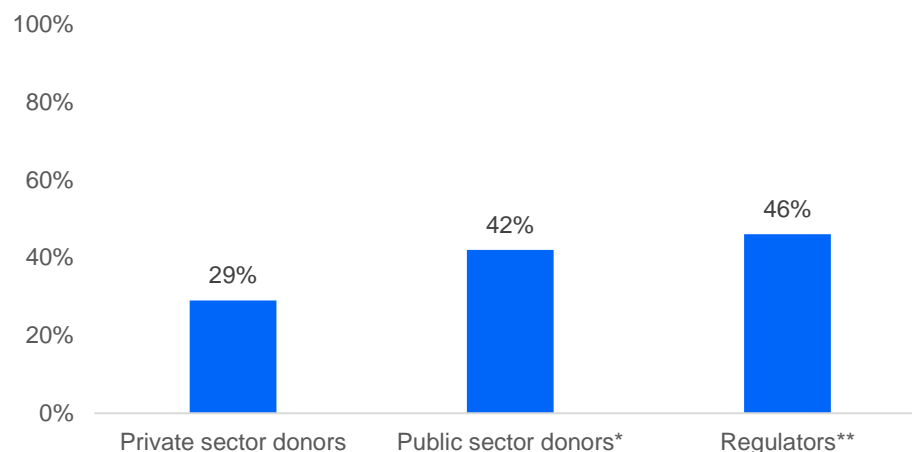


Figure 20 shows the percentage of regulators (national public sector donors), international public sector donors, and private sector donors that support the operational sustainability of the ecosystem builders:

Figure 20. External participants contribution to the financial sustainability of the ecosystem builders, (%)



Note: *Public sector donors in the context of the Eastern partner countries are international organisations as no national public sector donors apart from government were identified.

**Regulators are national public sector donors.

Conclusions:

EB4 – Low private sector donor participation in the ecosystem builders' sustainability

As it was explained in previous sections, there is a benefit for private sector donors in having a mature entrepreneurial ecosystem; and it is crucial to directly support the sustainability of ecosystem builders to realise this benefit. Only seven out of the 24 (29%) organisations receive direct funding from the

private sector donors. This ratio highlights, once again, the limited engagement of the private sector in fostering the development of a resilient ecosystem capable of nurturing high-growth potential start-ups. In most of these cases, private sector organisations provide funding to ecosystem builders either directly, for example by paying monthly or annual fees, or indirectly by offering operational resources such as working space or supplies.

EB5 – Medium public sector donors¹⁵ participation in ecosystem builders’ sustainability

Ecosystem builders are crucial to fulfilling the private sector development plans of public sector donors. It was observed that 10 out of the 24 (42%) interviewed organisations receive funds provided by public sector donors. These funds are primarily received as fees for executing entrepreneurial ecosystem development activities in the form of services requested from these organisations. Such services include organising networking events and overseeing direct subsidies to entrepreneurs and start-ups. Considering the lack of capacity to provide expertise in the development of action plans, which we mentioned in the EB3 conclusion, the ratio of 42% of ecosystem builders supported by public sector donors is quite satisfactory. It demonstrates the strong interest of these international organisations in the development of the entrepreneurial ecosystem.

EB6 – Medium governmental participation in ecosystem builders’ sustainability

The Eastern partner governments provide funding to 11 out of the 24 (46%) surveyed organisations to ensure their financial sustainability. The 46% ratio is highly satisfactory. Greater expertise in the development of entrepreneurial ecosystems and the capacity to develop action plans and policies that allow entrepreneurial ecosystems to mature would result in increased government confidence and interest in ensuring the sustainability of the ecosystem builders.

4.1.3 Capacity design analysis: funding the entrepreneurial ecosystem development (Component 3)

Figure 21 depicts the part of the ecosystem builders’ performance framework that highlights the responsibility of an ecosystem builder to attract financing from regulators (national public sector donors), international public sector donors, and private sector donors for projects aimed at the development of the start-up ecosystem.

Figure 21. Performance framework of an ecosystem-building organisation: capacity design – funding

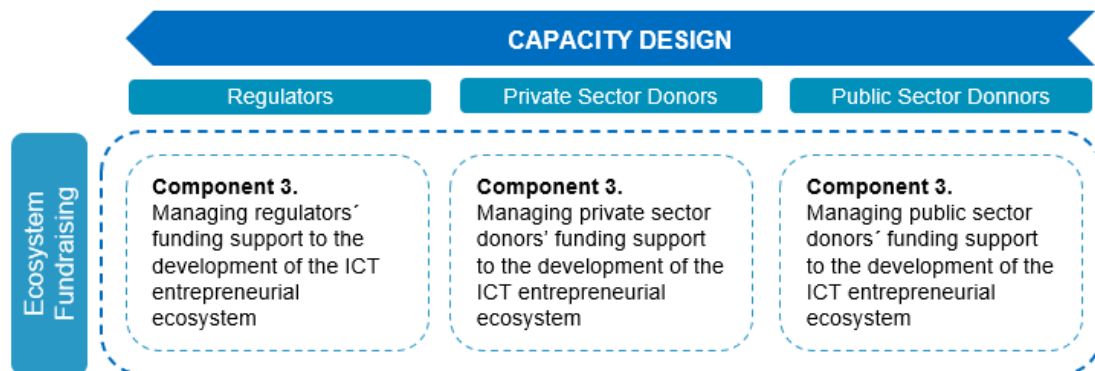
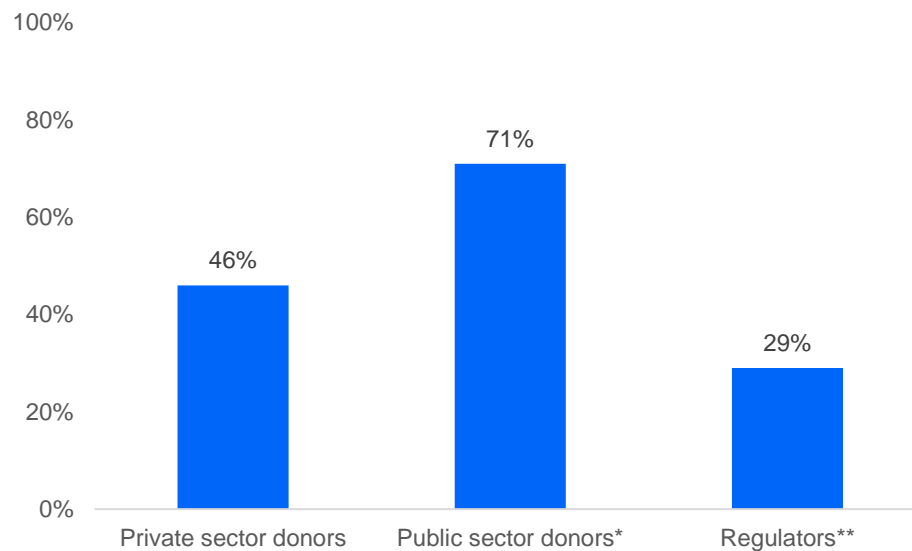


Figure 22 shows the percentage of regulators (national public sector donors), international public sector donors, and private sector donors that offer funding for the implementation of actions for the development of the entrepreneurial ecosystem:

¹⁵ Only international public sector donors are considered in the context of the Eastern partner countries, as no national public sector donors (except for government) were identified to fund the development of the ICT private sector.

Figure 22. External participants' contribution to the actions' implementation by ecosystem builders, (%)



*Note: *Public sector donors in the context of the Eastern partner countries are international organisations as no national public sector donors apart from government were identified.*

***Regulators are national public sector donors.*

Conclusions:

EB7 – Medium participation of the private sector donors in financing the development of the entrepreneurial ecosystem

Even though 11 out of the 24 (46%) organisations surveyed receive funding from the private sector for the implementation of activities in the development of the entrepreneurial ecosystem, the questionnaires indicate that the level of funding is limited in scale and therefore does not have significant impact on the growth of the entrepreneurial ecosystem.

Private sector participation is primarily limited to small, specific actions, such as sponsoring events that ecosystem builders organise to facilitate networking between wealth enablers. Another example is providing grants to start-ups and entrepreneurs that, in all cases, are implemented by the ecosystem builders, in contrast to entrusting these activities to wealth enablers such as incubators or investors. Large corporations do not provide financing for strategic plans for the growth of the entrepreneurial ecosystem because, as stated previously, they do not have access to critical actions to empower ecosystems, which would give an effect (e.g., it was evident that the banking system is not informed by the ecosystem builder about the actual steps the banks must take to support the ecosystem).

EB8 – High participation of the donor organisations in financing the development of the entrepreneurial ecosystem

Donors from the public sector are the most active financiers of ecosystem builders. 71% of the interviewed organisations have access to these types of funds to finance their wealth enabler-supporting activities.

Even though this ratio appears to be quite favourable, we must keep in mind that many of the ecosystem builders interviewed have limited access to public funds and obtain them through intermediary agencies, such as international aid agencies' programmes that are funded by the donors. These intermediary agencies later distribute the funds to the incubators that have applied to participate in the programme, however, they usually do not generate local expertise and its continuation. Having intermediaries in the funding process indicates that there is a lack of confidence on the part of public sector donors to provide significant funds directly to ecosystem builders for the implementation of actions that have a measurable and sustainable effect on the maturity of entrepreneurial ecosystems.

It should be noted that in several instances, the surveyed organisations access funds from public sector donors to implement direct activities with entrepreneurs and start-ups, competing directly with wealth enablers.

EB9 – Low participation of governmental bodies in financing the development of the entrepreneurial ecosystem

Only seven of the 24 ecosystem builders (29%) received funding from their respective national governments for the implementation of actions for the development of entrepreneurial ecosystems. This is not due to a lack of capacity on the part of governments to finance strategies for the development of the private sector; rather, as mentioned previously, this ratio of 29% demonstrates a lack of confidence on the part of government entities in the ecosystem builders. Moreover, similar to the previous conclusion EB7 finding, the majority of ecosystem builders have limited access to national funds, and the governments implement their strategies directly with ecosystem builders in a very limited number of instances.

4.1.4 Capacity implementation analysis: ecosystem builders’ support to wealth enablers

Given the limited answers received from the interviewed organisations within the section on capacity implementation analysis, the components expertise, operational support, and activities funding presented in Figure 23 below, were analysed collaboratively:

Figure 23. Ecosystem builder capacity implementation components

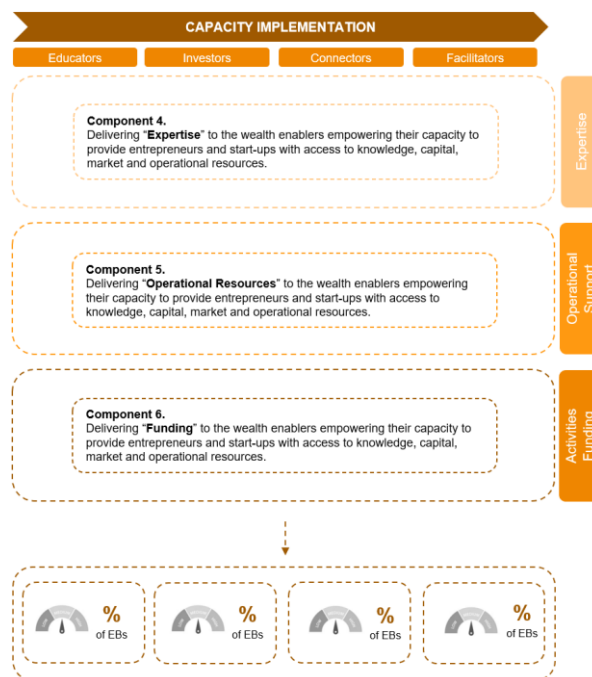
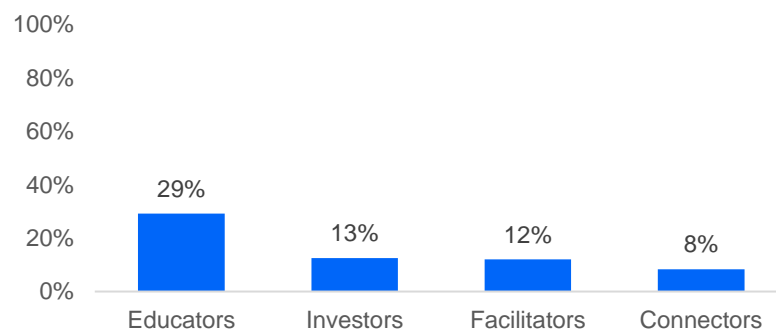


Figure 24 depicts the percentage of ecosystem builders who empower the wealth enablers by delivering expertise, operational support, and funding:

Figure 24. Ecosystem builder participation in supporting the wealth enablers, (%)



Conclusion:

EB10 – Low ecosystem builder participation in supporting entrepreneurial ecosystem wealth enablers

Figure 24 illustrates the scale of support provided by ecosystem builders to the wealth enablers:

- **Support to educators**

It is evident that seven out of 24 (29%) of the interviewed organisations implement activities to support wealth enablers of the educator type. According to the information gathered, this support consists primarily of collaboration with universities to implement education programmes and entrepreneurial events. There is an evident lack of support for incubators and accelerators in the entrepreneurial ecosystem, which are essential for providing entrepreneurial talent with access to the private sector.

It is indicated that some of the interviewed organisations perform incubation directly with the entrepreneurs by implementing their own incubation programmes. These organisations also compete with the other incubators, which is an indication of a lack of expertise in entrepreneurial ecosystem development.

- **Support to investors**

Three out of 24 (13%) of the interviewed organisations support wealth enablers of the investment type. However, this assistance is very limited because it does not involve the delivery of additional capital to investors. The activities are limited to producing investment events in collaboration with national investors or connecting start-ups with investors, which is more characteristic of an incubator or an accelerator. In some instances, ecosystem builders provide entrepreneurs and start-ups with direct access to capital through grant programmes funded by donors and regulators. Again, we observe the emergence of direct competition with wealth enablers.

- **Support to connectors**

Two out of 24 (8%) of ecosystem builders aid wealth enablers of the connector type. This extremely low ratio is primarily attributable to the fact that the ecosystem builders are essentially direct competitors of the connectors, since rather than assisting the connectors with the execution of entrepreneurial events or trade fairs, the same organisations execute these types of events. This 8% is restricted to cooperations in which ecosystem builders participate as small sponsors, co-organisers, or speakers at connector events.

- **Support to facilitators**

Three of the 24 (12%) interviewed ecosystem builders support wealth enablers of the facilitator type. This type of wealth enabler is responsible for providing start-ups with technical, human, and operational resources for growth, and they require substantial financial support from ecosystem builders. Instead, their contribution was limited to offering physical spaces for wealth enablers to assist start-ups, while this approach competes with the enablers of this type.

In the four cases examined, the organisations evaluated did not provide significant operational or financial support to wealth enablers. Furthermore, these organisations exclusively supported wealth-generating organisations who were directly affiliated with the ecosystem builders.

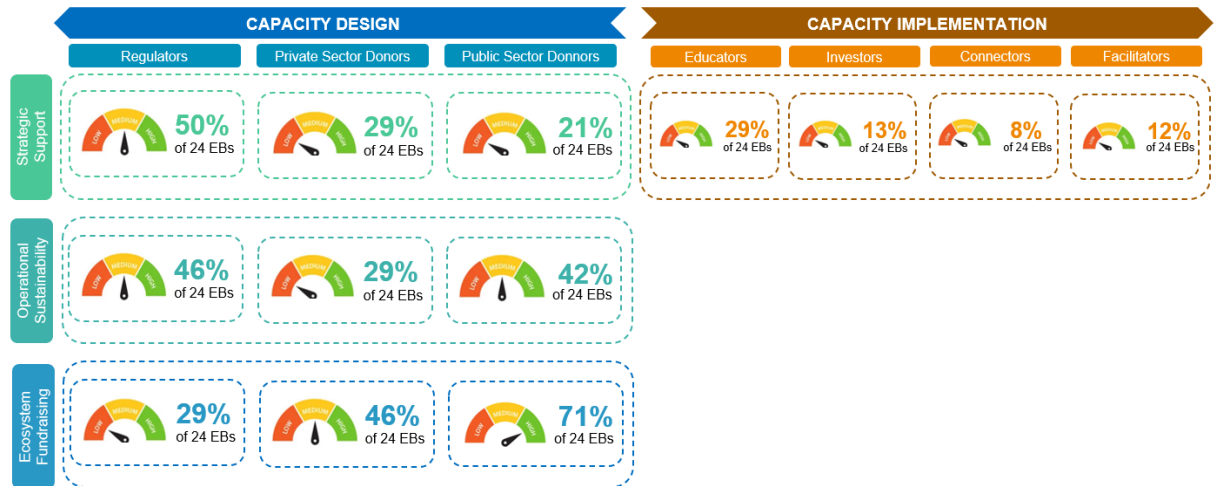
In addition to the above-mentioned conclusions, two more observations need to be emphasised:

- The percentages presented do not accurately reflect the situation, as the interviews revealed that the activities carried out by ecosystem builders to support wealth enablers are extremely limited. These activities do not align with a strategy for developing the entrepreneurial ecosystem, such as implementing 'high-performance incubation'.
- It is evident that the interviewed organisations, within their restricted activities in entrepreneurial ecosystems, focus on assuming the role of wealth enablers and directly supporting start-ups and entrepreneurs. This approach competes with the existing wealth enablers within the ecosystem.

4.1.5 Ecosystem builders' performance: summary of the findings from the analysis

The performance of the ecosystem builders is summarised in Figure 25, following the performance framework explained in Chapter 2 of the report.

Figure 25. Ecosystem builders: visualisation of the findings from the analysis



4.2 Analysis of the existing incubators in the Eastern partner countries

This subsection is separated into two blocks:

1. A diagnosis of the incubators' capacity to provide access to knowledge, capital, market, and resources, and evaluation of the level of performance as per the 'items' described in Chapter 2 of this report (see 4.2.1). Visualisation of the incubators' performance framework (see 4.2.2).
2. An analysis of the growth of the start-ups in the entrepreneurial ecosystems of the Eastern partner countries to understand how the current incubators' capacities are impacting the wealth generators (entrepreneurs and start-ups), (see 4.2.3).

4.2.1 Diagnosis of the incubators' capacity to provide access to essential resources

Essential resources are:

- Business development knowledge
- National market
- Early capital
- Operational resources

4.2.1.1 Diagnosis of the incubators' capacity to provide access to business development knowledge

Figure 26 depicts the part of the incubators' performance framework that highlights the responsibility of an incubator to provide entrepreneurs and start-ups with access to knowledge during the three early stages of development.

Figure 26. High-performance incubation framework: access to business development knowledge

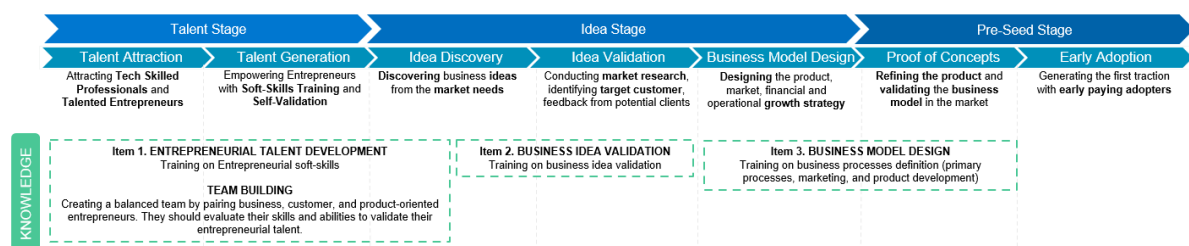
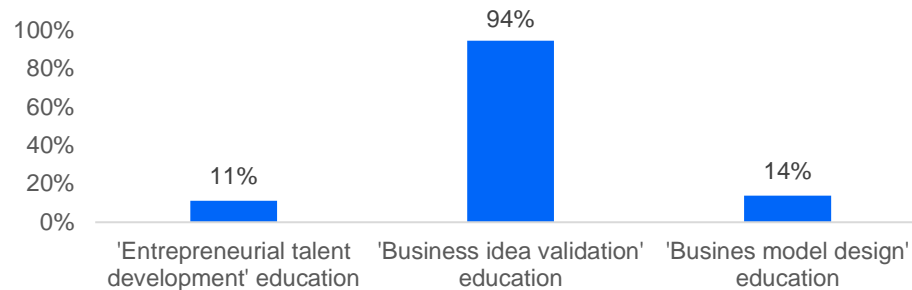


Figure 27 provides an overview of the incubators equipping entrepreneurs and start-ups with the knowledge necessary to be able to diversify their technical product-oriented expertise with business knowledge, and, as a result, successfully develop a business plan.

Figure 27. Business development education offered by incubators, (%)



Conclusions:

IC1 – Low capacity for provision of 'Entrepreneurial talent development' education

Although all responded affirmatively, a deeper examination of the interview results revealed a lack of understanding associated with the implementation of educational programmes to develop entrepreneurial talent. Only a few of the surveyed incubators (11%) are providing this type of education, facilitating the creation of entrepreneurial teams with core balanced competencies. Entrepreneurs must be able to self-evaluate their entrepreneurial soft-skills and hard-skills to comprehend their orientation as entrepreneurs towards the product, business, or customers. Through training, incubators can assist entrepreneurs in assembling co-founding teams whose members combine their knowledge and soft skills for the optimal development of a business. If this is not the case, start-ups encounter many issues with their founding teams when they realise that some members do not contribute to the growth of the start-up.

IC2 – High capacity for provision of 'Business idea validation' education

Thirty-four out of 36 (94%) of the surveyed incubators provide entrepreneurs with 'business idea validation' education. This education aids entrepreneurs in understanding the viability of their business concept by allowing them to formulate hypotheses about key factors such as their target market, product development, marketing strategy, market access, and key resources, among others. After developing hypotheses, entrepreneurs validate these hypotheses through interviews with market professionals, experts, and future clients, as well as analysis of public information such as competitors' pricing and pricing structures, etc. This is without a doubt the most important education that entrepreneurs should have access to prior to launching their start-ups, as a lack of validation can lead them to create companies that do not add value to the customer or the market.

IC3 – Low capacity for provision of 'Business model design' education

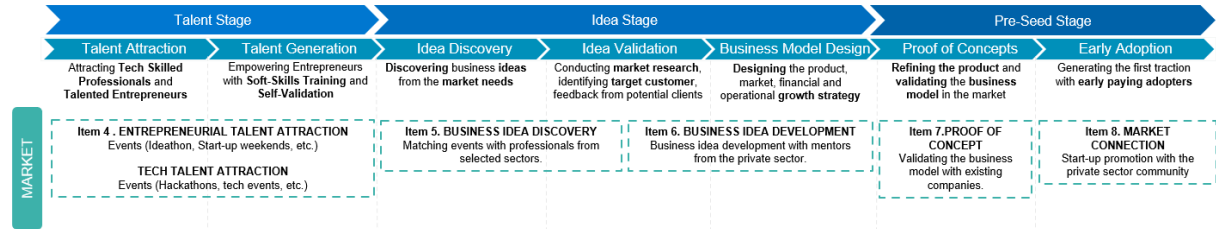
All incubators professed to offer this education, but subsequent analysis of their claims uncovered an evident shortfall in knowledge concerning the design of business models totalling only 14% of the organisations providing such a training. Incubators fell short in aiding their incubated start-ups to delineate action plans that incorporated activities, milestones, and KPIs for the initial months of operation.

Once the entrepreneurs have validated their business idea, with promising results, where future clients show an interest in accessing the future product or service, these entrepreneurs, before starting their start-up development activities, must carefully design and plan their main activities, milestones and KPIs, to be developed during the first stages of the start-up. Incubators play a key role in supporting business design through product development, marketing, operations, and start-up budgeting training, where entrepreneurs are taught to develop roadmaps with clear activities and milestones. The lack of this type of education means that, in many cases, entrepreneurs make critical mistakes when launching their start-ups, such as spending years developing a product, or not generating community and leads, such that the prepared product takes a long time to enter the market.

4.2.1.2 Diagnosis of incubators' capacity to provide access to national markets

Figure 28 depicts the part of the incubators' performance framework that highlights the responsibility of incubators to provide entrepreneurs and start-ups with access to market during the three early stages of development.

Figure 28. High-performance incubation framework: access to market



Figures 29 and 30 provide an overview of the incubators in equipping start-ups with the necessary connections to enter and compete in the business landscape.

Figure 29. Access to market capacities (Items 4 to 7) offered by incubators, (%)

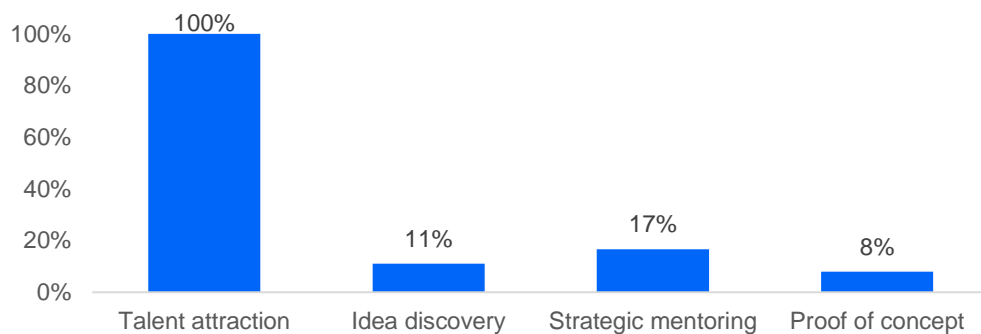
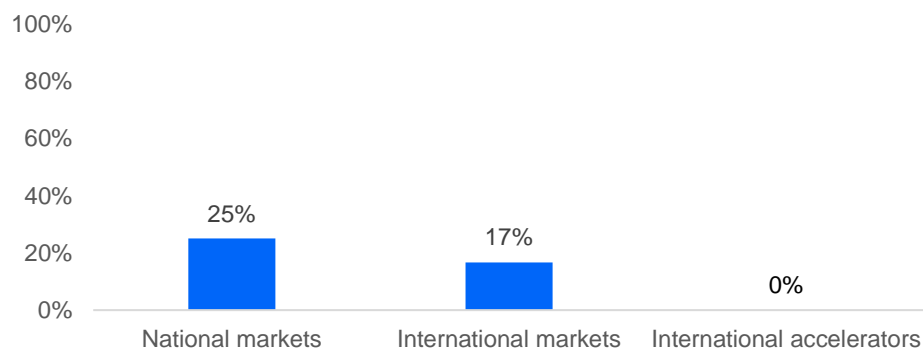


Figure 30. Access to market connection capacities (Item 8) offered by incubators, (%)



Conclusions:

IC4 – High capacity for provision of 'Entrepreneurial talent attraction'

All (100%) of the interviewed incubators stated that they implement entrepreneurial events such as start-up weekends and hackathons to attract entrepreneurial talent. However, only two of the incubators described scouting activities during these events, which is the primary purpose of these events: to identify individuals with entrepreneurial soft skills. Consideration must be given to the significance of identifying individuals with entrepreneurial talent to compose co-founder teams able to execute the development of a start-up. For this reason, it is essential that incubators engage in internal scouting and evaluation of event participants throughout events, as opposed to using this type of event solely to promote the incubator.

IC5 – Low capacity for provision of 'Business idea discovery'

Based on the collected data, it is evident that most incubators begin their incubation programmes with pre-formed teams with existing business concepts and, in some cases, even with established start-ups. This finding supports the previous conclusion (IC1) that highlights the lack of focus on training entrepreneurial talent within incubators. It is noteworthy that only four out of 36 (11%) of the incubators provide entrepreneurs with access to private sector professionals for business idea development.

An enhanced business idea discovery process is particularly crucial for incubators operating in the Eastern partner countries, as it encourages the entrepreneurs to avoid business ideas that are non-problem-solving or non-niche, thereby minimising the risk of failure. It is crucial to assist entrepreneurs with limited resources and experience in the private sector, as they tend to look for business ideas in their own daily routines rather than by identifying market opportunities. The approach is deemed inefficient due to its tendency to result in entrepreneurs developing products with no real market demand or lacking the necessary resources to successfully launch them. For example, this can be observed when entrepreneurs focus on developing Deep Tech innovations that necessitate substantial investments in research and development (R&D), or when they pursue Direct2Customer products that require significant marketing expertise and budgetary allocations.

IC6 – Low capacity for provision of 'Business idea development'

Entrepreneurs must validate many hypotheses on the product, market, marketing, values, etc. during the process of validation of the business idea. In many of these instances, when entrepreneurs lack experience in the industry for which they are developing a product, they tend to make mistakes once their start-ups are established, which inevitably leads to the creation of a product that does not address the market needs and lacks market appeal.

To prevent mistakes, incubators assist entrepreneurs in comprehending their market by providing them with access to professional mentors from specific industries. These mentors assist entrepreneurs not only in formulating hypotheses but also in designing the business model for their future start-up.

Despite many incubators claiming to provide strategic sectoral mentorship, data analysis suggested that most of them failed to supply mentors of tangible value to the start-ups. Often, these mentors were either academics devoid of field experience, or technical mentors that are proficient in validating key aspects such as technology or finances, but deficient in business model experience. While most incubators asserted that they offered occasional access to mentors, such as inviting professionals for general talks, sustained access was scarce. Only six out of 36 (17%) incubators met this criterion, granting entrepreneurs continued access to strategic mentors from the private sector.

IC7 – Low capacity for provision of 'Proof of concept'

To thrive, start-ups need to refine their products within authentic environments and engage with real customers. Thus, one of the primary responsibilities of incubators is to facilitate start-ups' access to national corporations. The findings showed that only 17% of the incubators ran sectoral incubation programmes, with agriculture and finance being the most dominant sectors. However, only three (8%) of these incubators facilitated access to businesses where start-ups could develop proofs of concept and validate their products. The development of proofs of concept in real environments is crucial to the success of a start-up, as the companies, customers, and users who support these proofs of concept assist start-ups in the creation of a product that will provide real value to future customers. When this is not the case, entrepreneurs develop products based on their own understanding, which, in the case of entrepreneurs with no market experience, results in the development of worthless products that do not attract a significant number of customers.

IC8 – Low capacity for provision of 'Market connection'

- **National markets**

Nine of the 36 (25%) incubators interviewed carry out activities to connect incubated start-ups with early adopters in the national market. However, only two of these nine incubators connect start-ups with a diverse range of clients. The remaining incubators primarily establish collaboration agreements with specific companies that are directly affiliated with them, predominantly large IT companies. Therefore, it would not be appropriate to determine an incubator's capability to link its start-ups to the national market solely based on its ability to connect its start-ups with a single company.

To maximise the long-term sustainability of a start-up and validate its business model before expanding, it is crucial for entrepreneurs to quickly establish connections with local customers (early adopters), allowing them to minimise the time, resource and financial investments

required. However, if these entrepreneurs face challenges in accessing the national private sector for networking purposes, it significantly compromises their long-term viability.

- **International markets**

Six (17%) of the interviewed incubators reported that they facilitate connections between their start-ups and international businesses. In most instances, these incubators explained that they make these connections through diaspora-based businesspeople and small investors. Indeed, this is a great way for emerging countries to promote their ecosystem, by amplifying diaspora connections. Ideally, more incubators should resort to this approach.

- **Global accelerators**

Also, it should be noted that none (0%) of the interviewed incubators established relationships with global accelerators. To facilitate the internationalisation of incubated start-ups, high-performing incubators in countries with small markets should form partnerships with accelerators in larger markets. These international accelerators can connect start-ups with customers and investors in countries with robust markets. Numerous high-performance international accelerators are sector-focused and have extensive connections with companies and investors in specific industries. These connections also strengthen the local business ecosystem by facilitating the transfer of knowledge and technology and attracting foreign investment.

4.2.1.3 Diagnosis of the incubators' capacity to provide access to early capital

Figure 31 depicts the part of the incubators' performance framework that highlights the responsibility of incubators to provide entrepreneurs and start-ups with access to early capital during the three early stages of the development.

Figure 31. High-performance incubation framework: access to early capital

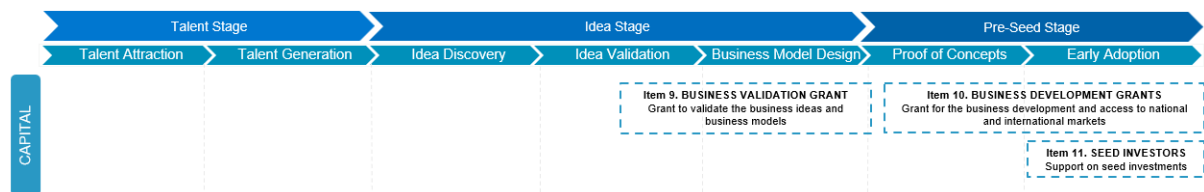
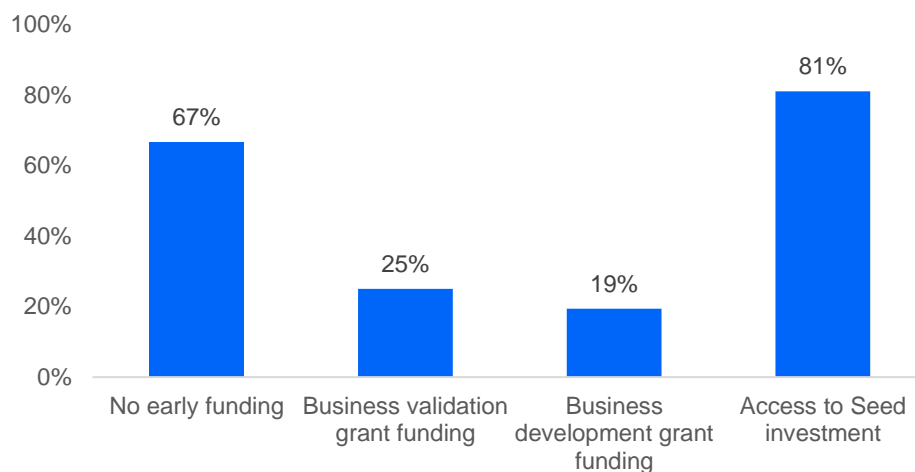


Figure 32 provides an overview of the business incubators in equipping start-ups with the necessary early capital to be able to establish the business framework.

Figure 32. Access to early capital offered by incubators, (%)



Conclusions:

IC9 – Low capacity for provision of 'Business validation grant funding'

Insufficient initial funding often forces entrepreneurs to allocate insufficient time towards validating their ideas and business models and, in some cases, even abandon their projects altogether. Consequently, this delays the creation of the start-up or sets it up for potential failure. Therefore, establishing improved access to early capital is imperative to mitigate these challenges and foster the success of start-ups.

Nine of the 36 (25%) interviewed incubators indicated that they could provide entrepreneurs in the idea stage with access to financial instruments. The average amount is EUR 3,000, which may not be sufficient depending on the nature of the innovation to be created. Interestingly, most incubators indicated that they receive funding from public sector donors rather than private sector donors. There is a need for incubators to have a greater capacity for financing start-ups in the idea stage described. The capacity requirements are described in Chapter 2 of this report (Item 9, and Item 10) and in 'Recommendation 7: Supporting incubators' capacity in access to Capital' of this report.

IC10 – Low capacity for provision of 'Business development grant funding'

Seven of the 36 (19%) incubators surveyed reported that they can provide their incubated start-ups with access to funds for the development of their activities during the pre-seed stage. Most of them provide these funds as grants with an average size of EUR 20,000. While this funding amount may be considered sufficient for the development of most MVPs, it might fall short when it comes to high engineering costs. Unfortunately, this limited funding is not enough for start-ups to finance both the creation of their MVPs and to gain access to the market. As a result, their customer reach remains constrained, hindering their ability to generate sales and ultimately stunting their growth. Overall, when start-ups are unable to secure early investment, particularly for MVP development, they face significant delays in their progress, posing a serious threat to their long-term viability.

IC11 – High capacity for provision of 'Access to seed investors'

The study revealed that 29 of the 36 incubators (81%) successfully facilitated their start-ups' access to investors, primarily business angel networks and seed funds.

This is accomplished by organising 'demo day' events where the incubated start-ups are presented to primarily national investors. In most cases, incubators assist start-ups in preparing their communication with investors through creating a 'pitch deck'; however, some incubators also assist with creating business plans and investment proposals.

Three of the 36 (8%) incubators are directly affiliated with business angel networks, allowing their incubated start-ups greater success in securing seed funding.

In contrast, three incubators (8%) are directly associated with large corporations, primarily large IT companies, and offer incubated start-ups access to seed investment, primarily in exchange for equity (Development4equity).

4.2.1.4 Access to operational resources

Figure 33 depicts the part of the incubators' performance framework that highlights the responsibility of incubators to provide entrepreneurs and start-ups with access to operational resources such as co-working space, technical expertise, and human resources during the three early stages of development.

Figure 33. High-performance incubation framework: access to operational resources

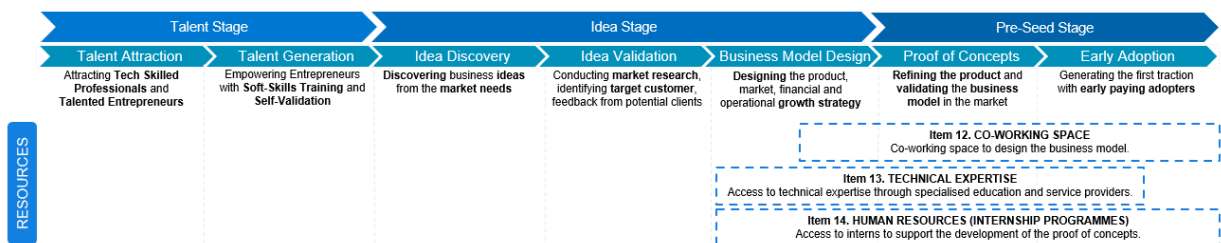
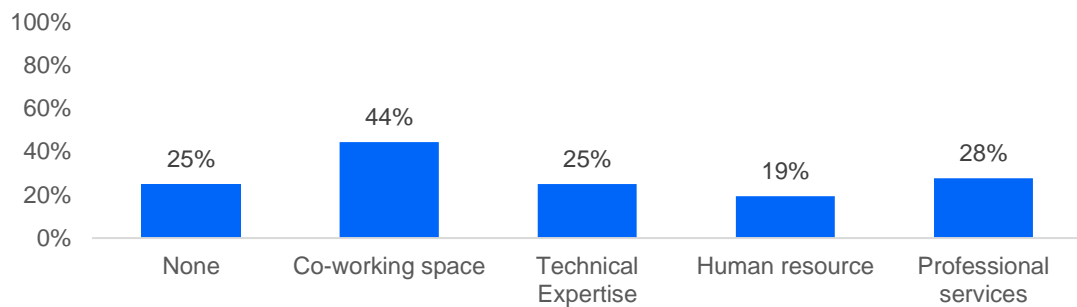


Figure 34 provides an overview of the business incubators in equipping start-ups with the necessary resources and facilities to be able to establish their business operations.

Figure 34. Access to operational resources provided by the incubators, (%)



Conclusions:

IC12 – Medium capacity for provision of 'Co-working space'

In the pre-seed stage, the duration of which varies greatly based on the type of innovation and business model, start-ups must have access to operational resources, primarily workspaces, technical equipment and supplies, so that entrepreneurs have a place to meet and work together. Once start-ups have validated their business ideas and designed their company's development processes, they should initiate development of their activities (developing a product, operations, finance, marketing and sales strategies, milestones and KPIs). If entrepreneurs lack access to the operational resources, they often lose focus, delaying the development of their start-ups, or abandon their projects altogether.

All incubators interviewed responded affirmatively when asked if they provide co-working space and operational resources for start-ups in their programmes. However, while examining the collected data, it became evident that co-working space is underprovided in the majority of cases. For instance, while all incubators claimed to provide access to workspace, only 16 of 36 (44%) incubators responded that they provide workspace and resources during the pre-seed stage for a duration averaging 5 months. The remaining incubators only provide workspace during the period of entrepreneurial education and during business idea validation.

IC13 – Low capacity for provision of 'Technical expertise'

Although we can define an entrepreneur as someone who possesses a variety of soft skills (such as decision making, problem solving, creativity and leadership), co-founder teams must also possess the technical knowledge or hard skills required for the development of an innovative product, business and financial management, and sales marketing. In many instances observed, entrepreneurial teams lack technical expertise. Only 25% of the interviewed incubators stated that they provide entrepreneurs with access to specialised education in technical fields, with offered education primarily in business administration and finance. Given the constant growth of the innovation sector, this ratio must be much higher. Education in marketing and sales is also crucial, as many entrepreneurial teams with highly technical profiles lack commercial skills and are unable to attract customers once they have an MVP. It is imperative that incubators have access to specialised education, and that education must remain constant through the entire cycle of the start-up.

IC14 – Low capacity for provision of 'Human resources'

The greatest asset to a company's success throughout its existence is its workforce: internal and external (independent professionals). In the case of start-ups, i.e., innovative business models that are developed in environments with great uncertainty, insufficient personnel or personnel lacking skills often leads to failure.

- **Internal workforce**

In the case of the internal workforce, given the low or non-existent budgets of start-ups, incubators must assist their incubated start-ups in gaining access to workforce. Typically, the workforce consists of interns who, despite their lack of work experience, provide value through their technical expertise as programmers, marketing enthusiasts, or accountants.

Seven of the 36 incubators (19%) provide access to human resources (workforce) for start-ups through internship programmes. However, only one incubator out of seven provides access to human resources and actively promotes internship programmes. Other than that, the

incubators do not provide any real support. Instead, most incubators referred solely to the fact that entrepreneurs have access to university environments where they can persuade students to collaborate in launching a start-up.

- **External workforce**

28% of incubators indicated that they connect start-ups with freelancers (in most cases, technology experts who provide entrepreneurs with technology mentoring). There is an evident lack of acknowledgement among the incubators of the significance of connecting their start-ups with specialists – such as experts in marketing, finance, management, or law, etc. – providing free guidance to entrepreneurs in many instances.

4.2.2 Incubators' performance: summary of findings from the analysis

The performance of the incubators is summarised in Figures 35 to 40, following the **performance framework elements which are defined and explained in Chapter 2** of this report.

It is imperative to **note that if any component within the incubator performance framework receives a score of zero, this should be attributed to the absence of valid supplementary comments or explanations offered by the interviewees.**

Figure 35. Incubators' performance framework: visualisation of the analysis findings in the Eastern partner countries

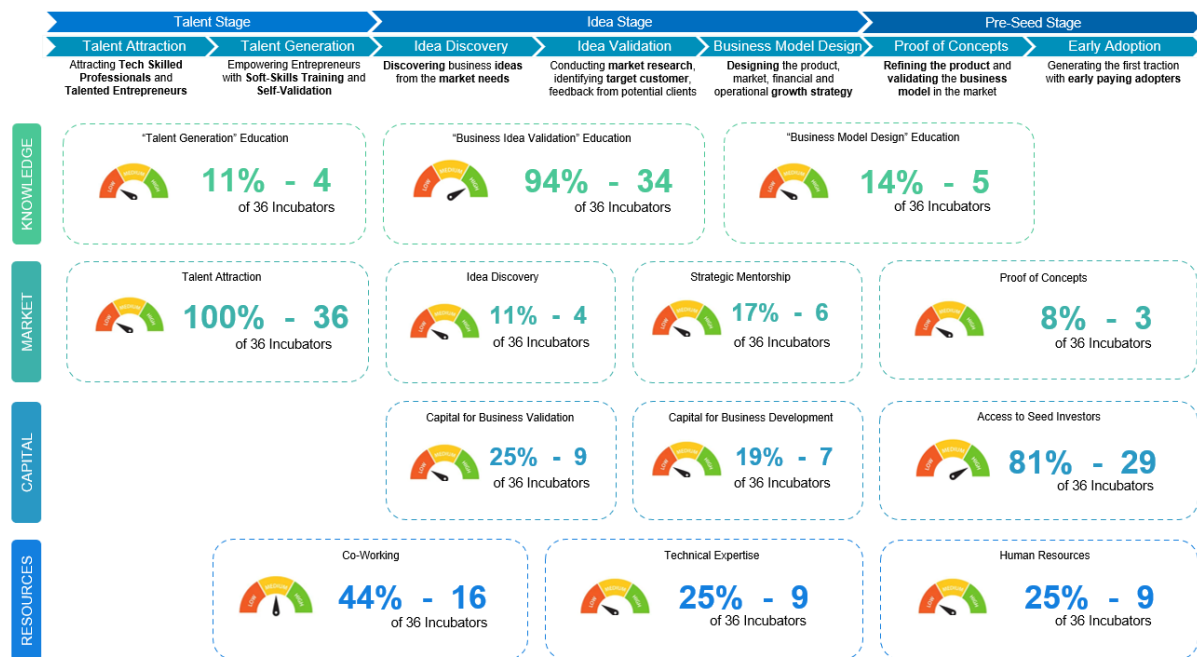


Figure 36. Incubators' performance framework: summary of the analysis findings in Armenia

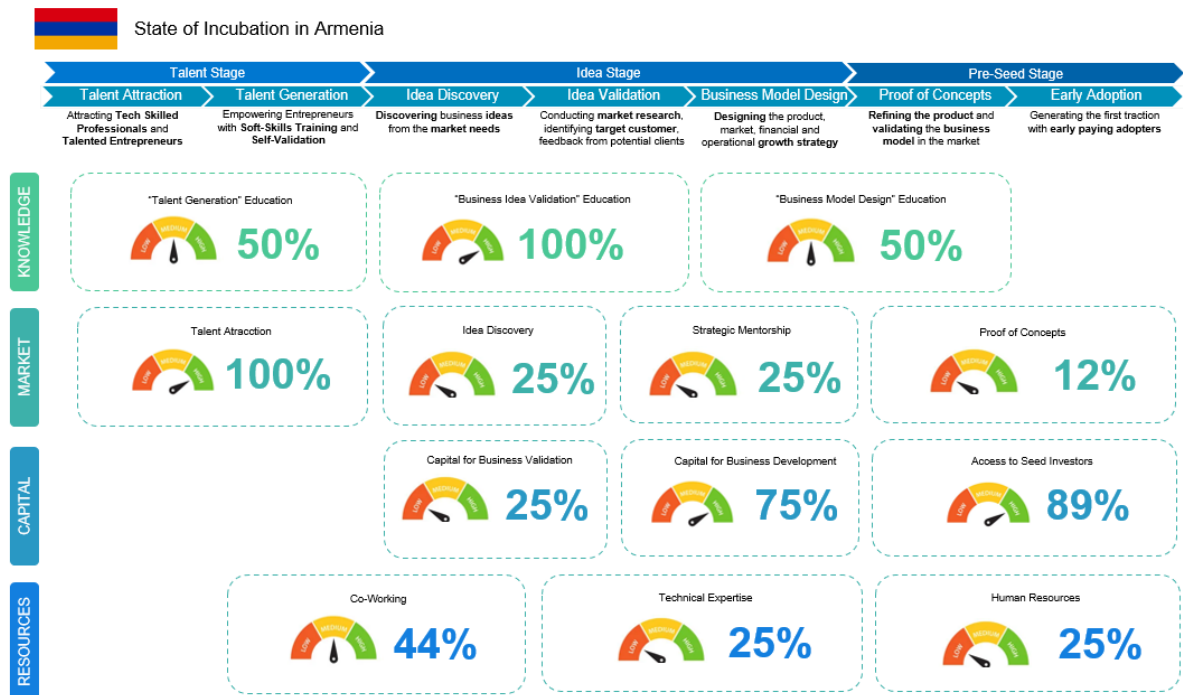


Figure 37. Incubators' performance framework: summary of the analysis findings in Azerbaijan

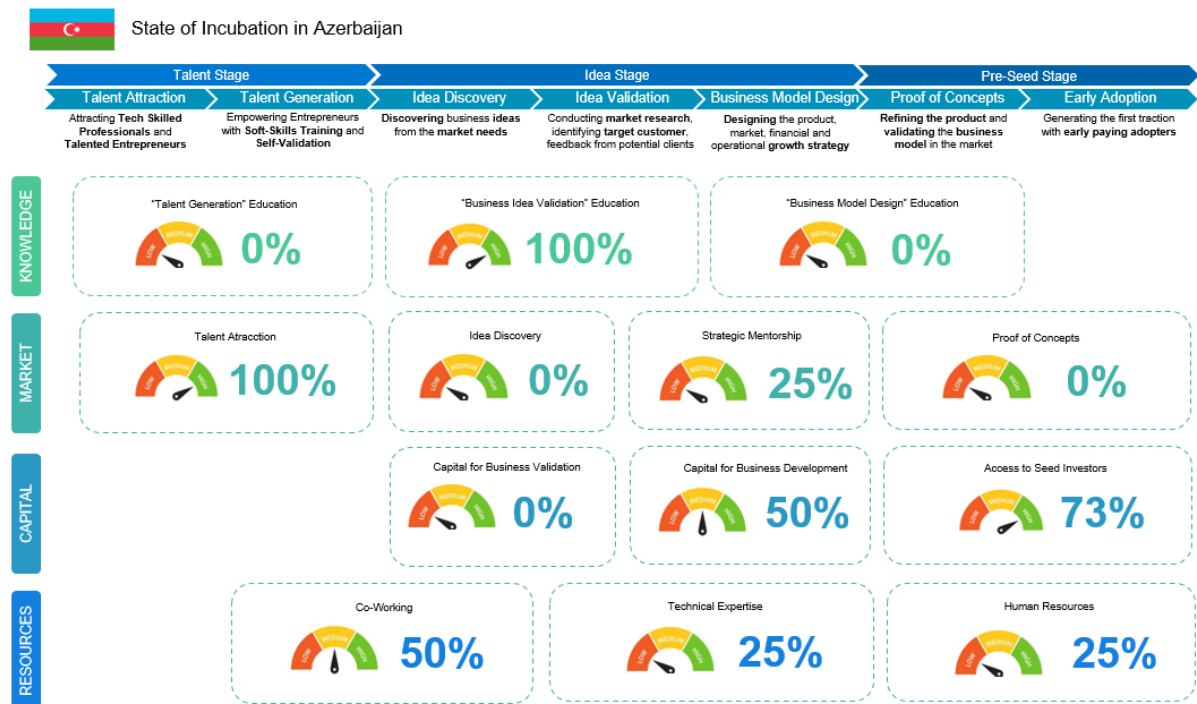


Figure 38. Incubators' performance framework: summary of the analysis findings in Georgia

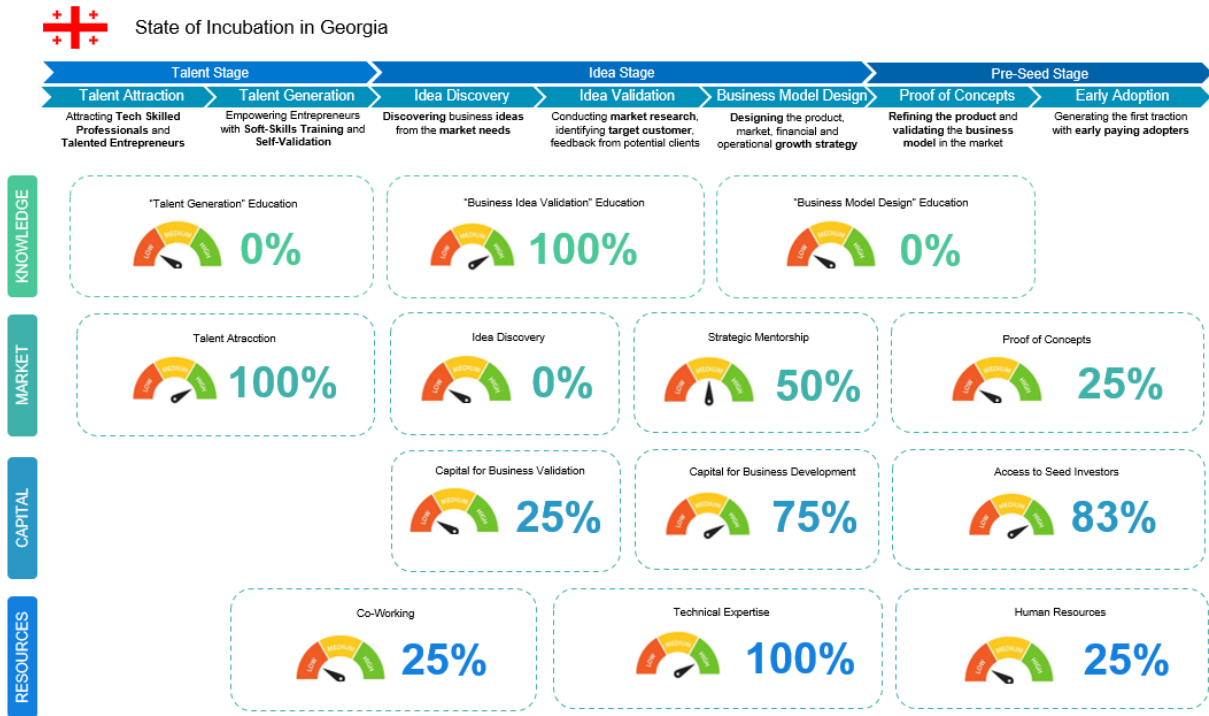


Figure 39. Incubators' performance framework: summary of the analysis findings in Moldova

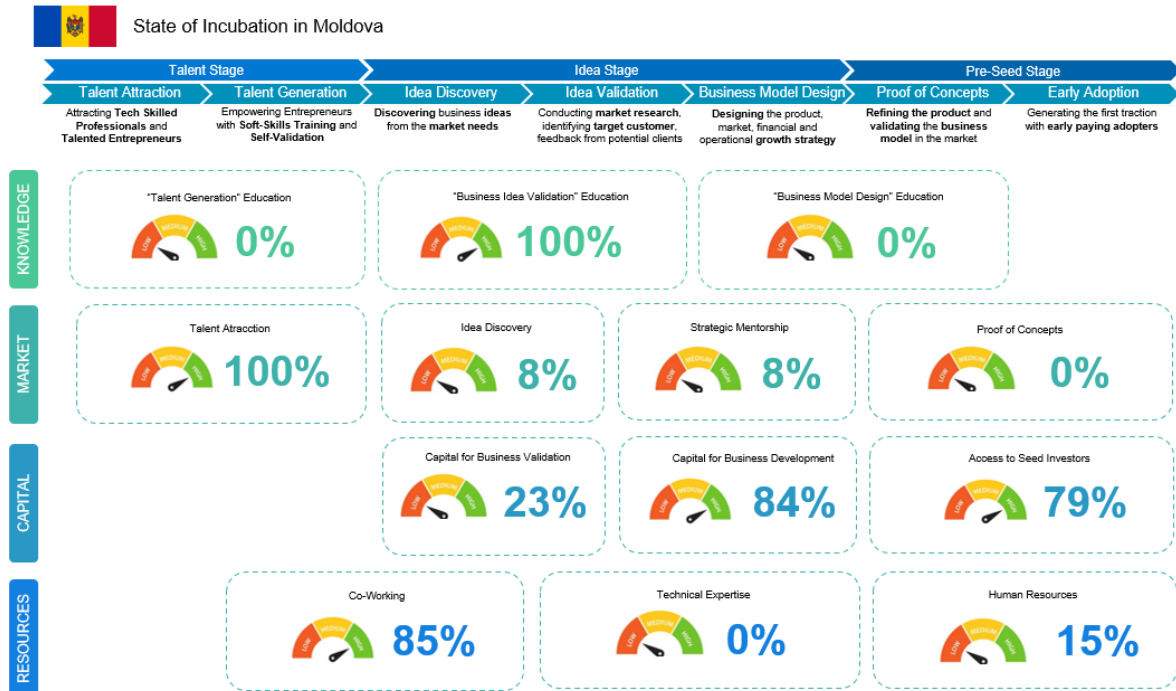
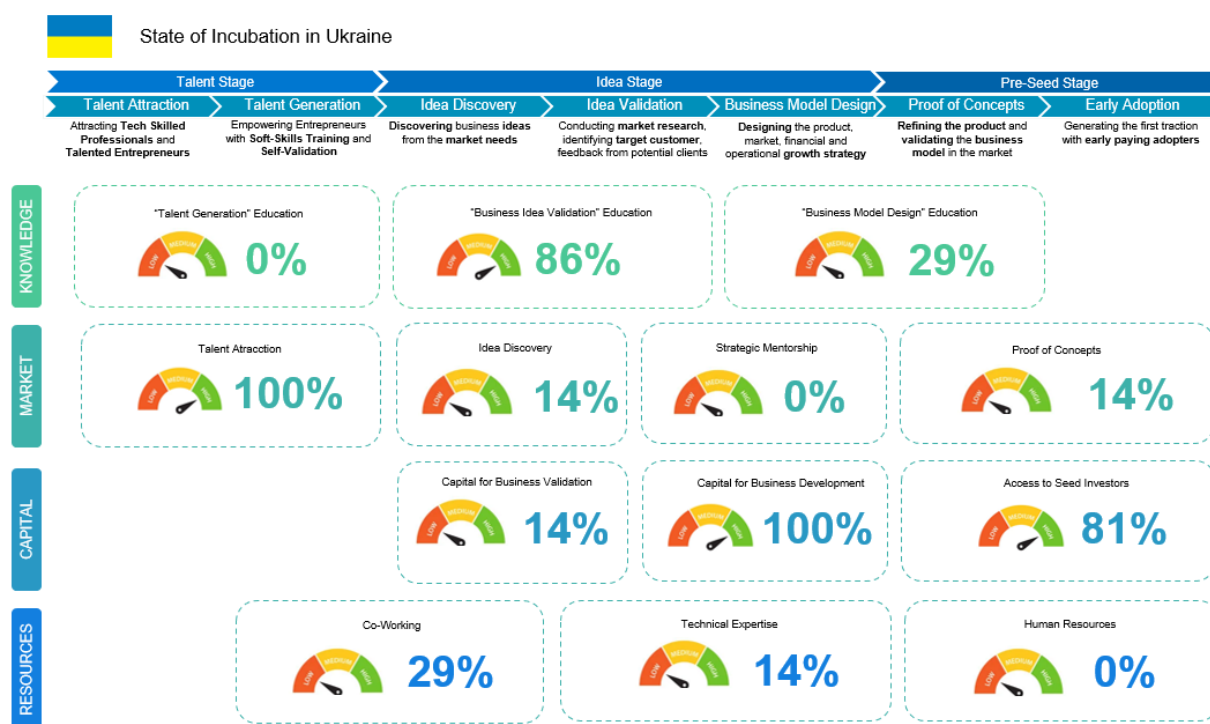


Figure 40. Incubators' performance framework: summary of the analysis findings in Ukraine



4.2.3 Actual incubators' capacity impact on start-ups' growth

Incubated start-ups' success rate

The primary responsibility of incubators is to perform successful incubation programmes. In this report, we explore three KPIs used to measure the success of incubators relative to incubated start-ups.

- The percentage of entrepreneurs establishing their start-ups after incubation**
 This indicator reflects the incubator's ability to motivate and guide entrepreneurs in turning their ideas into real businesses. A high proportion (>70%) of entrepreneurs participating in the incubation programme and subsequently launching their own start-ups means that the incubator has provided sufficient support to stimulate entrepreneurship and facilitate business creation.
- The percentage of incubated start-ups achieving financial sustainability**
 This indicates that the company may be generating sufficient revenue to cover its operating costs and sustain autonomous growth. A successful incubator must demonstrate a high percentage (>70%) of incubated start-ups that achieve this level of sustainability, demonstrating the incubator's effectiveness in supporting entrepreneurs to open viable business proposals.
- The percentage of incubated start-ups attracting external investment**
 Attracted investors can be angel investors, venture capital firms or mutual funds. A high percentage (>70%) of incubated start-ups managing to attract investment indicates investor confidence in the quality and potential of the companies approved by the incubator. The incubator's ability to build connections between start-ups and investors is also integral to its overall success.

A detailed assessment of the start-up ecosystem's vitality could not be conducted due to the limited availability of success rate data provided by the interviewed incubators.

To assess the success of start-up incubators, data from the Phase I study¹⁶ was analysed (Table 2). This data allowed a comparison of the ratio of incubated and non-incubated start-ups in the ecosystems of the Eastern partner countries, as well as start-ups from countries of Central and Eastern Europe, such as Bulgaria, Estonia, Lithuania, Poland and Romania.

Table 2. Comparison of start-up growth conversion rates in Eastern partner countries and Central Eastern EU countries

	From Idea to Pre-Seed	From Pre-Seed to Seed	From Seed to Early
Eastern partner countries start-ups in 2021	-	5,61%	1,20%
Eastern partner countries start-ups in 2023	23,51%	8,62%	2,67%
Central Eastern EU start-ups in 2021	46,2%	12,54%	4,24%

Note: Regarding 'Eastern partner countries start-ups in 2021,' it remains unclear whether all the start-ups were not incubated, but the result implies that most of them did not emerge from incubators.

The survey's results allowed an assessment to be conducted, based on the following number of start-ups (Table 3):

Table 3. Number of start-ups disclosed by incubators

Armenia	Azerbaijan	Georgia	Moldova	Ukraine
515 start-ups	127 start-ups	269 start-ups	855 start-ups	1120 start-ups

Resource: Evaluated data received through the survey of incubators. The number of start-ups is cumulative from the commencement date of each surveyed incubator's operations¹⁷.

It is evident that the growth rate of start-ups established within the incubators of the Eastern partner countries in 2023 surpasses the growth rates observed within the Eastern partner countries' ecosystems in 2021. This demonstrates the significant influence of incubators on the growth of start-ups. As of 2023, 8,62% of start-ups incubated in the Eastern partner countries have reached the seed stage, thereby generating sufficient revenue to ensure their sustainability. However, this figure remains noticeably lower than the 12,54% of start-ups from selected Central and Eastern European countries. This discrepancy is due to the lack of capacity of many incubators to provide entrepreneurs with access to knowledge, capital and the market.

¹⁶ The report 'Guide for Building the ICT Entrepreneurial Ecosystems in the Eastern Partner Countries: Maturity Analysis and Recommendations' was published in March 2021: <https://eufordigital.eu/library/design-of-the-ict-entrepreneurial-ecosystem-builders-guide-for-boosting-the-ict-entrepreneurial-ecosystems-in-the-eastern-partnership/>.

¹⁷ It should be noted that the numbers of start-ups in the countries are coming from the surveys conducted. For example, the number of Moldavian start-ups is very high, especially compared with Ukraine. For example, one of the reasons might be that all the start-up ideas, pitched by founders/teams, which attended any of the events or programmes run by the interviewed organisations, are counted. Also, it is important to understand that the estimated survival rate of start-up in the first 6 months is 5%-10%.

Chapter 5. Recommendations for the development of high-performance incubation

Previous sections of this report analysed ecosystem-building organisations and business incubators in the Eastern partner countries. We examined their activities and key capabilities for fostering the development of start-ups within the ecosystem. Considering the conclusions drawn from the preceding chapters, this section presents a set of recommendations designed to empower ecosystem builders and enhance incubators' ability to develop high-growth-capacity start-ups.

Each recommendation contains the subsequent components:

- Title of the recommendation that emphasises the impact areas;
- References to chapters and conclusions for comprehension of the recommendation;
- 'Component' or 'Item' affected by the recommendation;
- Principal actions for the recommendation's implementation.

It is important to note that actions for the implementation of the recommendations mentioned in this chapter have not been detailed, as this report does not present an action plan. Instead, it identifies the actions that would impact the conclusions reached in this report.

It is recommended that any organisation interested in implementing the proposed actions should:

- develop the action's objectives and outcomes;
- develop a description of the action;
- develop a map of action implementers and objective targets;
- develop the action's specific activities;
- determine the operational, technical, and human resource requirements for each action;
- develop each action's budget;
- establish interim benchmarks for the implementation of each action;
- develop KPIs for each action's performance evaluation;
- visualise the development timeline for each action.

5.1 Recommendations for regulators and donors: empowerment of ecosystem builders

The first set of recommendations emphasises actions to improve the effectiveness of ecosystem builders: capacity building, collaboration with donor organisations and government bodies, and support for wealth enablers. These recommendations are intended for government agencies responsible for innovation sector development and for donor organisations with a vested interest in promoting the growth and sustainability of the private innovation sector. It is essential that stakeholders evaluate and align these recommendations with their respective regional, national or organisational priorities and resources.

Recommendation 1: Engaging regulators and donors in the ecosystem builders' ecosystem strategic design

References:

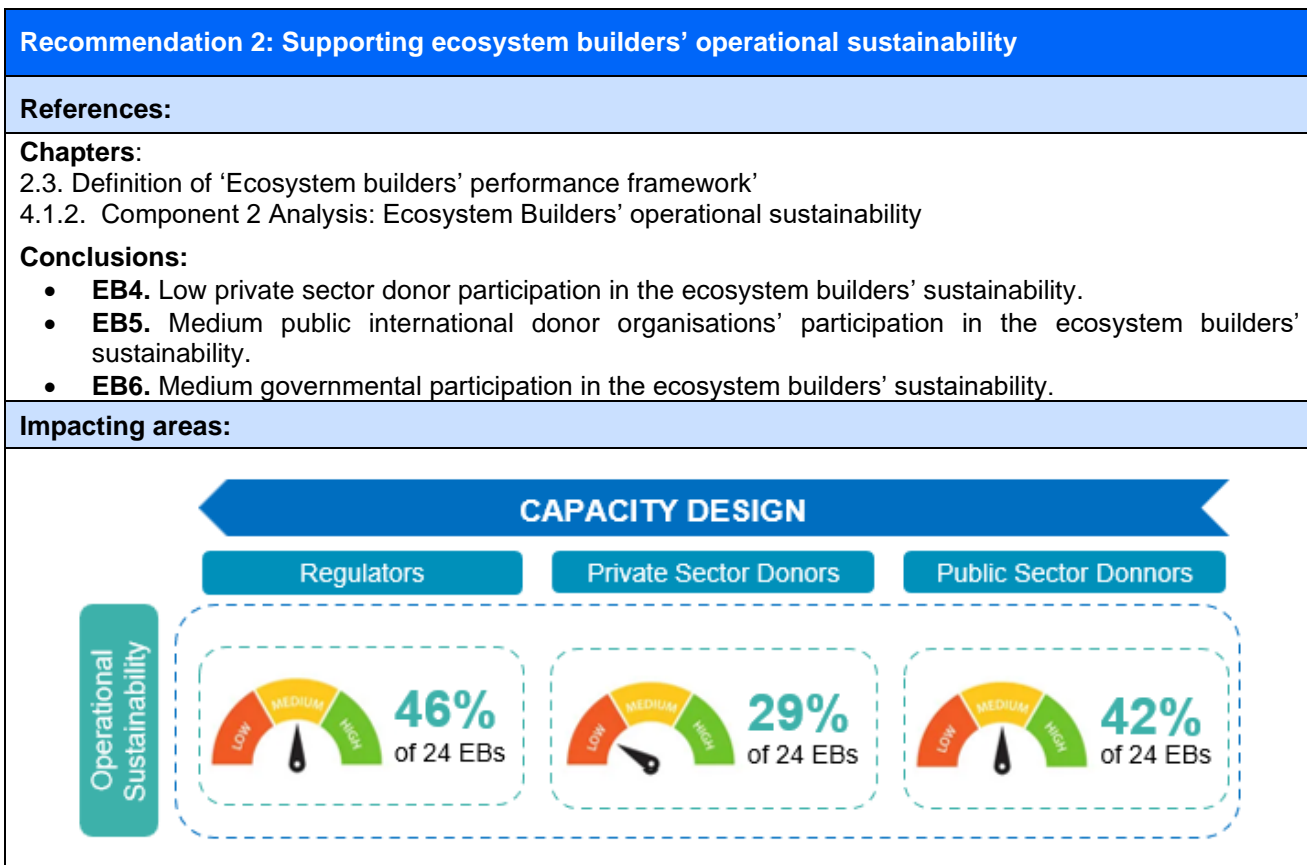
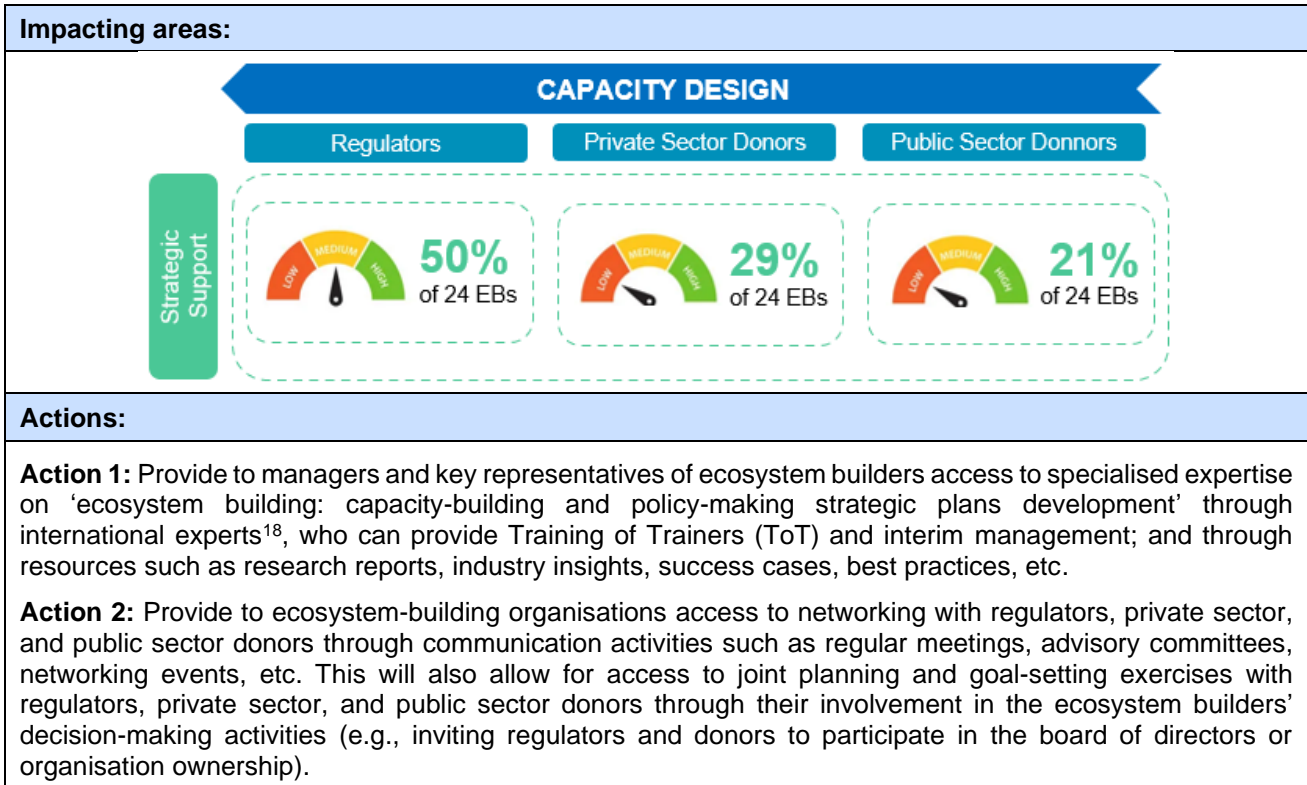
Chapters:

2.3. Definition of 'Ecosystem builders' performance framework'

4.1.1. Component 1 Analysis: Strategic support to regulators and donor organisations

Conclusions:

- **EB1.** Low donor participation in the ecosystem builders' strategic decision-making process.
- **EB2.** Medium governmental participation in the ecosystem builders' strategic decision-making process.
- **EB3.** Low ecosystem builder expertise in developing capacity-building action plans.



¹⁸ The support of ‘experts’ implies educational training followed by interim management (regular consulting on the setup of the organisation’s activities).

Actions:

Action 3: Provide to managers and key representatives of ecosystem builders’ access to specialised expertise on ‘financial sustainability planning’ through international experts, who can provide ToT and interim management.

Action 4: Provide to managers and key representatives of ecosystem builders access to specialised expertise on ‘donor funding proposals and management’ through international experts, who can provide ToT and interim management.

Action 5: Provide to ecosystem building organisations access to private sector and public sector donor funding through networking activities (e.g., donor events, participation in investment forums and start-up fairs, etc).

Action 6: Provide to ecosystem building organisations access to networking with key partnerships (other ecosystem builders, national agencies, business associations, service providers, etc.) through communication activities such as regular meetings, advisory committees, networking events, etc.

Action 7: Provide to ecosystem building organisations direct funding to sustain the ecosystem builders’ operations; and funding for the design of policy-making and capacity-building strategies for the development of the entrepreneurial ecosystems.

Recommendation 3: Funding the ecosystem builders’ entrepreneurial ecosystem development

References:

Chapters:

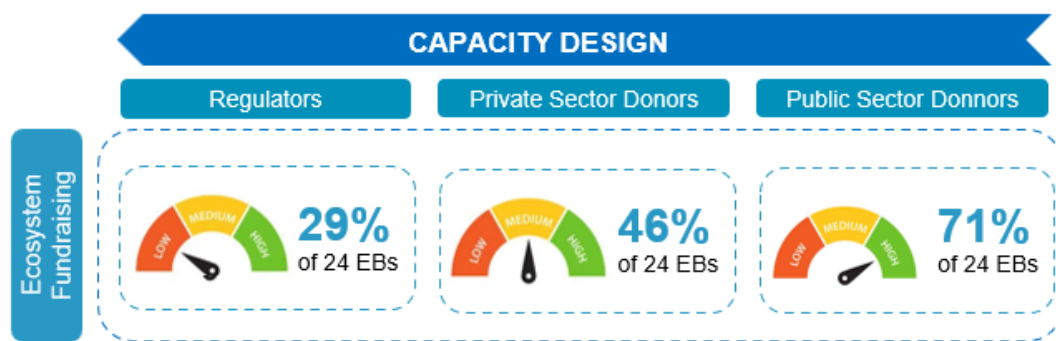
2.3. Definition of ‘Ecosystem builders’ performance framework’

4.1.3. Component 3 Analysis: Funding the entrepreneurial ecosystem development.

Conclusions:

- **EB7.** Medium participation of private sector donors in financing the development of the entrepreneurial ecosystem.
- **EB8.** High participation of donor organisations in financing the development of the entrepreneurial ecosystem.
- **EB9.** Low participation of governmental bodies in financing the development of the entrepreneurial ecosystem.

Impacting areas:



Actions:

Action 8: Provide to ecosystem-building organisations with direct funding for the development of dedicated ecosystem-building departments to give capacity for designing and implement activities necessary to promote the growth of the ecosystem.

Action 9: Provide to ecosystem-building organisations direct funding to give ecosystem builders the capacity to provide financial support to wealth enablers, ensuring impact of those in the development of high-growth-capacity start-ups.

Recommendation 4: Supporting ecosystem builders' capacity-building implementation

References:

Chapters:

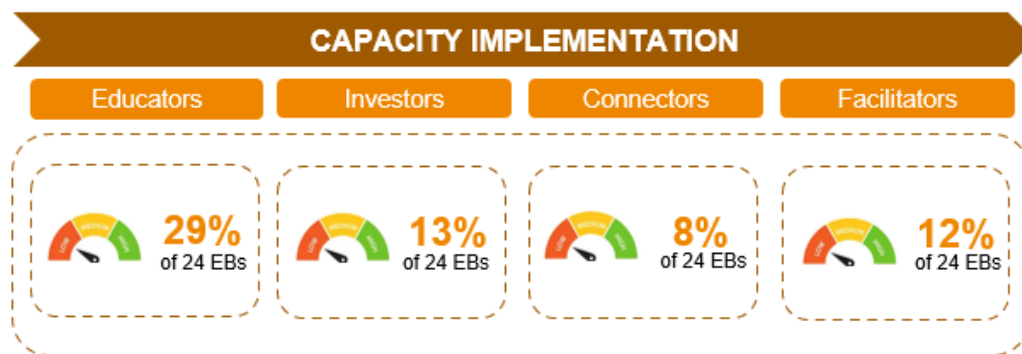
2.3. Definition of 'Ecosystem builders' performance framework'

4.1.4. Component 3 Analysis: Funding the entrepreneurial ecosystem development.

Conclusions:

- **EB10.** Low ecosystem builder participation in supporting entrepreneurial ecosystem wealth enablers.

Impacting areas:



Actions:

Action 10: Provide to managers and key representatives of ecosystem builders access to specialised expertise on 'ecosystem building: ecosystem wealth enablers' roles and performance' through international experts, who can provide ToT and interim management.

Action 11: Provide to managers and key representatives of ecosystem builders access to specialised expertise on 'ecosystem building: access to entrepreneurial education' through international experts, who can provide ToT and interim management.

Action 12: Provide to managers and key representatives of ecosystem builders access to specialised expertise on 'ecosystem building: access to business development knowledge' through international experts, who can provide ToT and interim management.

Action 13: Provide to managers and key representatives of ecosystem builders access to specialised expertise on 'ecosystem building: access to capital' through international experts, who can provide ToT and interim management.

Action 14: Provide to managers and key representatives of ecosystem builders access to specialised expertise on 'ecosystem building: access to market' through international experts, who can provide ToT and interim management.

Action 15: Provide to ecosystem-building organisations access to networking with international ecosystem builders through activities such as networking events, trade missions, exchange programmes, etc., to exchange experiences, knowledge and best practices in the construction and development of entrepreneurial ecosystems.

5.2 Recommendations for ecosystem builders: empowerment of incubators

The second set of recommendations emphasises actions to improve the impact of the incubators on the creation of high-growth-capacity start-ups in the Eastern partner countries' entrepreneurial ecosystems. These recommendations are intended for ecosystem builders to empower the incubators in their responsibilities to deliver knowledge, capital, market and resource to their entrepreneurs, to create high-growth-capacity start-ups. It is essential that stakeholders evaluate and align these recommendations with their respective regional, national or organisational priorities and resources.

Recommendation 5: Supporting incubators' capacity in access to knowledge	
References:	
<p>Chapters: 2.3. Definition of 'Incubators' performance framework' 4.2.1. Diagnosis of the incubators' capacity to provide access to essential resources: Business development knowledge.</p> <p>Conclusions:</p> <ul style="list-style-type: none"> • IC1. Low capacity for provision of Item 1: 'Entrepreneurial talent development' education. • IC2. High capacity for provision of Item 2: 'Business idea validation' education. • IC3. Low capacity for provision of Item 3: 'Business model design' education. 	
Impacting areas:	
<p>The diagram illustrates the incubation process flow and associated knowledge gaps. The process is divided into three main stages: Talent Stage, Idea Stage, and Pre-Seed Stage. Each stage has specific activities: Talent Attraction (Attracting Tech Skilled Professionals and Talented Entrepreneurs), Talent Generation (Empowering Entrepreneurs with Soft-Skills Training and Self-Validation), Idea Discovery (Discovering business ideas from the market needs), Idea Validation (Conducting market research, identifying target customer, feedback from potential clients), Business Model Design (Designing the product, market, financial and operational growth strategy), Proof of Concepts (Refining the product and validating the business model in the market), and Early Adoption (Generating the first traction with early paying adopters). Below the flow, three knowledge gaps are highlighted with gauges: 'Talent Generation' Education (11% - 4 of 36 Incubators), 'Business Idea Validation' Education (94% - 34 of 36 Incubators), and 'Business Model Design' Education (14% - 5 of 36 Incubators).</p>	
Actions:	
<p>Action 16: Provide to incubators' managers and executives access to specialised expertise on 'incubation management' through international experts¹⁹, who can provide ToT and interim management, including the key topics of incubation management, incubator models and strategies, operations, and administration, as well as funding and sustainability.</p> <p>Action 17: Provide to incubators' managers and executives access to specialised expertise on 'high-performance incubation' through 'lessons learned', i.e., study visits to international high-performance incubators to get on-site best practices and lessons.</p> <p>Action 18: Provide to incubators' coaches and instructors access to specialised expertise on 'entrepreneurial talent development' through educators²⁰, who can provide ToT and share their content, tools, etc.</p> <p>Action 19: Provide to incubators' coaches and instructors access to specialised expertise on 'business design' through educators, who can provide ToT and share their content, tools, etc.</p> <p>Action 20: Provide to incubators access to networking with educational institutions through activities such as events, joint entrepreneurial programmes, incubation co-ownership, digital tools, etc., to develop together entrepreneurial education and start-up incubation.</p>	

¹⁹ The support of "Experts" implies educational training followed by interim management (regular consulting on the setup of the organisation's activities).

²⁰ The support of "Educators" implies educational training.

Recommendation 6: Supporting incubators' capacity in access to market

References:

Chapters:

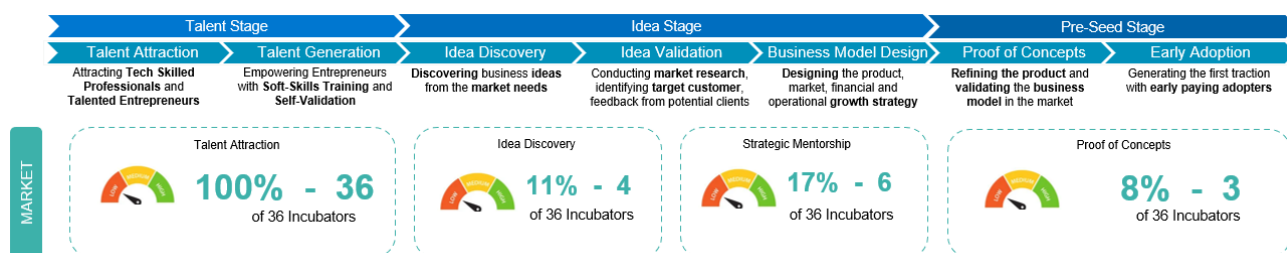
2.3. Definition of 'Incubators' performance framework'

4.2.1. Diagnosis of the incubators' capacity to provide access to essential resources: national market.

Conclusions:

- **IC4.** High capacity for provision of Item 4: Entrepreneurial talent attraction.
- **IC5.** Low capacity for provision of Item 5: Business idea discovery.
- **IC6.** Low capacity for provision of item 6: Business idea development.
- **IC7.** Low capacity for provision of Item 7: Proof of concept.
- **IC8.** Low capacity for provision of item 8: Market connection.

Impacting areas:



Actions:

Action 21: Provide to incubators' coaches and instructors access to specialised expertise on 'business idea discovery' through educators, who can provide sectorial-driven ToT and share their content, tools, etc.

Action 22: Provide to incubators access to funding for the implementation of 'entrepreneurial talent attraction events' (e.g., start-up weekends, business ideathons, hackathons, etc.) to identify and contact entrepreneurial talent.

Action 23: Provide to incubators access to networking with the national private sector through activities such as networking events, joint entrepreneurial programmes, incubation co-ownership, etc., to incubate together high-growth-capacity investable start-ups.

Action 24: Provide to incubators access to private sector mentors through the implementation of a 'mentors certification programme'²¹ that will connect entrepreneurs with certified mentors from the private sector.

Action 25: Provide to incubators access to funding for the establishment of sectoral-driven incubation programmes (e.g., agro-sector, health-sector, etc.) that will help entrepreneurs with private sector collaboration, mentoring, industry expertise, proof of concepts and first customers by giving the incubators the financial capacity to cover their operational, technical, and human resource expenses.

Action 26: Provide to incubators access to networking with international accelerators through activities such as networking events, joint incubation programmes, demo days etc., to connect entrepreneurs with representatives from global accelerators with the capacity to support start-ups in accessing global markets.

Action 27: Provide to incubators access to funding for the establishment of 'soft-landing' programmes that will help entrepreneurs, who have validated their business model nationally and are ready to expand internationally, to enter international high-performance acceleration programmes by utilising the funds received (e.g., accommodation expenses, transportation expenses, etc.).

²¹ 'Mentors certification programme' is a structured club or programme that aims to validate mentors and provide them with certification. It involves a team of experts who assess and evaluate the skills, knowledge, and experience of individuals aspiring to become mentors in a specific field or area of expertise. The purpose of this programme is to ensure that mentors meet certain standards and possess the necessary qualifications to guide and support others effectively.

Recommendation 7: Supporting incubators' capacity in access to capital

References:

Chapters:

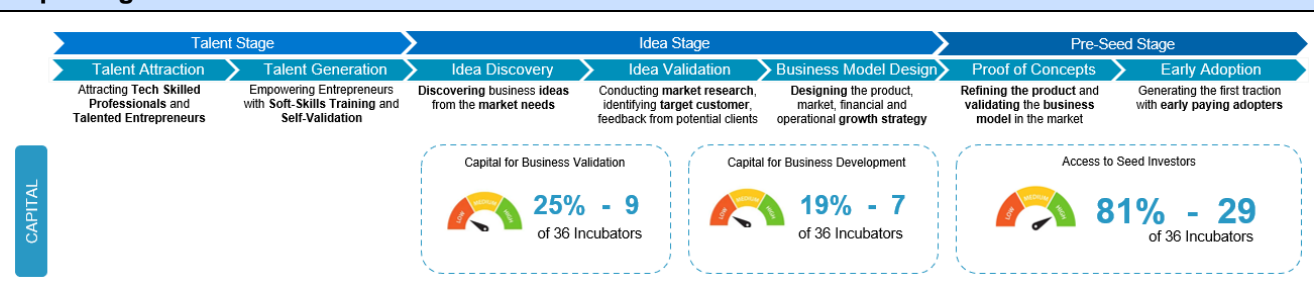
2.3. Definition of 'Incubators' performance framework'

4.2.1. Diagnosis of the incubators' capacity to provide access to essential resources: Early Capital.

Conclusions:

- **IC9.** Low capacity for provision of item 9: Business validation grant funding.
- **IC10.** Low capacity for provision of item 10: Business development grant funding.
- **IC11.** High capacity for provision of item 11: Access to seed investors.

Impacting areas:



Actions:

Action 28: Provide to incubators' managers and executives access to specialised expertise on 'business analysis and grant programme management' through international experts, who can provide ToT and consultancy, including business feasibility analysis, business risk analysis and grant processes.

Action 29: Provide to incubators' managers and executives access to specialised expertise on 'investors relationship' through international experts, who can provide ToT and interim management including aspects of investor relationships, investment expectations, due diligence processes, and investment deal structuring.

Action 30: Provide to incubators access to networking with national and global seed investors such as business angel networks and venture capital firms through activities such as national or international entrepreneurial events, pitch competitions, demo days, matchmaking sessions etc.

Action 31: Provide to incubators access to networking with the national banking sector through activities such as regular meetings, demo days, networking events, etc., to promote the start-ups' access to traditional financing (e.g., soft loans, lines of credit, etc.).

Action 32: Provide to incubators access to funding that will be granted to entrepreneurs to validate their business ideas and develop their start-ups in the initial idea and pre-seed stages.

Recommendation 8: Supporting incubators' capacity in access to operational resources

References:

Chapters:

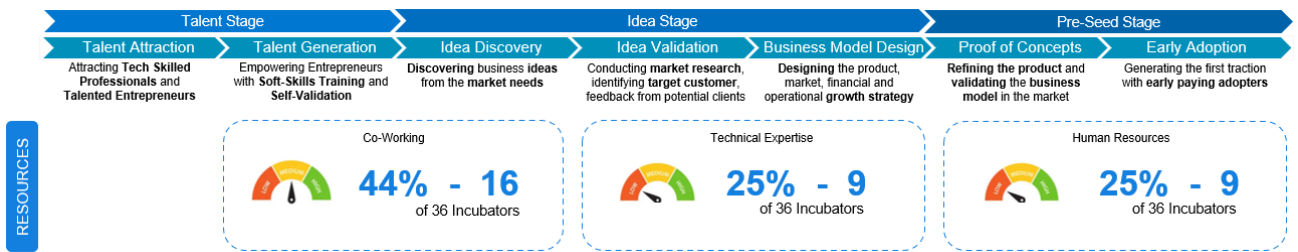
2.3. Definition of 'Incubators' performance framework'

4.2.1. Diagnosis of the incubators' capacity to provide access to essential resources: operational resources.

Conclusions:

- **IC12.** Medium capacity for provision of item 12: Co-working space.
- **IC13.** Low capacity for provision of item 13: Technical expertise.
- **IC14.** Low capacity for provision of item 14: Human resources.

Impacting areas:



Actions:

Action 33: Provide to incubators access to funding for the establishment of internship programmes that will help entrepreneurs to hire interns and collaborators with hard skills in product development, sales and marketing, business operations and finance.

Action 34: Provide to incubators access to funding for professional services that will help entrepreneurs to get professional services (e.g. legal advice, accounting, marketing, etc.).

Action 35: Provide to incubators access to funding for technical expertise that will help entrepreneurs to get advanced technical and business education (e.g., through courses and workshops in topics on emerging technologies and business management and development).

References

[Design of the ICT Entrepreneurial Ecosystem Builder\(s\)](#). (2022, April). [EU4Digital](#).

[Guide for building the ICT entrepreneurial ecosystems in the Eastern partner countries: Maturity analysis and recommendations](#). (2021, March). [EU4Digital](#).

Appendix 1. Ecosystem builders mapping

Below presented all the Eastern partner countries' organisations invited to participate in the survey for ecosystem builders. The collected answers were evaluated for relevance, more about the selection criteria you can read in **Chapter 3. Methodology**.

Please note that the research aimed at understanding the maturity of surveyed organisations as ecosystem builders. As the recommendations of this report show, the organisations are in a low maturity. Nevertheless, it could be considered that these organisations aspire to attain the status of a national ecosystem builders in order to solicit donor funding and potentially engage in the ecosystem builders' initiatives in the future.

Armenia		
1	Enterprise Armenia	Responded
2	National Center for Innovation and Entrepreneurship (NCIE)	Responded
3	SME Cooperation Association	Responded
4	Startup Armenia Scientific Educational Foundation	Responded
5	Union of Advanced Technology Enterprises (UATE)	Responded
Azerbaijan		
1	Innovation and Digital Development Agency	Responded
2	Small and Medium Business Development Agency (SMBDA)	Responded
Georgia		
1	Enterprise Georgia	Responded
2	Georgia's Innovation and Technology Agency (GITA)	Responded
Moldova		
1	Green City Lab Moldova	Responded
2	Moldova IT Park	Responded
3	Moldovan Association of ICT Companies (ATIC)	Responded
4	Organisation for Entrepreneurship Development (IP ODA)	Responded
5	Startup Moldova	Responded
6	Tekwill	Responded
Ukraine		
1	Agency of European Innovations (AEI)	Responded
2	Association of Information Technology Enterprises of Ukraine (APITU / AITEU)	Not responded
3	Digital Ukraine Association	Not responded
4	IT Ukraine Association	Not responded
5	Kyiv Academic University	Responded
6	Radar Tech	Responded
7	Scientific Park of Lviv Polytechnic National University	Responded
8	SME Development Office (SMEDO)	Not responded
9	State Institution Entrepreneurship and Export Promotion Office (EPO)	Responded
10	Techosystem	Responded

11	Ukrainian Cluster Alliance (UCA)	Responded
12	Ukrainian Startup Fund (USF)	Responded
13	Virtual Center for Digital Innovation NOSC-UA DIH (Kyiv Academic University)	Responded

Appendix 2. Incubators mapping

Below presented all the Eastern partner countries' organisations invited to participate in the survey for incubators. The collected answers were evaluated for relevance, more about the selection criteria you can read in **Chapter 3. Methodology**.

Please be advised that a portion of these organisations aspire to attain the status of incubator while some of them are currently dedicated to incubating non-technology SMEs rather than start-ups or are in the early stages of developing incubation programmes/activities for prospective implementation in the future.

Armenia		
1	ANAU Agritech Incubator - Agro University	Not responded
2	ARDY Incubator	Responded
3	Berkeley SkyDeck - Armenia	Responded
4	Business Angel Network of Armenia (BANA)	Responded
5	Enterprise Incubator Foundation (EIF)	Responded
6	Entrepreneurship and Product Innovation Center (EPIC)	Responded
7	Foundation for Armenian Science and Technology (FAST)	Responded
8	Hero House / Smart Gate	Not responded
9	IRIS Business Incubator	Responded
10	Startup Armenia Foundation	Responded
11	"Techonomy" incubator of Armenian State University of Economics Incubator	Responded
12	TUMO Labs	Responded
Azerbaijan		
1	ABB Innovation Center	Not responded
2	ADA University: Idea Incubation Program	Responded
3	A-hub	Not responded
4	ANAS Business Incubation Centre and High Technologies Park	Responded
5	Azerbaijan Young Entrepreneurs Network	Responded
6	Azerbaijan Robotics Engineering Academy	Responded
7	Azerbaijan State Agrarian University (ASAU)	Not responded
8	Azerbaijan Technical University (AzTU): 'HUB 1887: Innovation and Acceleration Center'	Not responded
9	French-Azerbaijani University (UFAZ)	Not responded
10	ICT Applying and Training Center by Ministry of Digital Development and Transport	Not responded
11	INNOLAND Incubation & Acceleration Center	Not responded
12	Youth Inc. Entrepreneurship Program Mentornity	Not responded
13	LTC (Lotfi Zadeh Technology Center)	Not responded
14	New Idea Startup Competition	Responded

15	NewSpace	Not responded
16	Next Step Innovation Center	Not responded
17	RİİB (I2B): Idea-to- Business by Ministry of Regional Development	Not responded
18	SABAH.lab Acceleration and Incubation Center	Not responded
19	SUP.vc Startup Accelerator	Not responded
20	Technopark of Baku Engineering University (BEU)	Not responded
21	The High-Technology part Incubation Technology transfer center	Not responded
22	UNEC: 'Innovative Business-Incubator'	Responded
Georgia		
1	500 Georgia	Not responded
2	BTU's Center for Entrepreneurship	Responded
3	Founders Institute (Silicon Valey Franchise)	Not responded
4	Georgian Business Development Center	Responded
5	Georgian ICT Cluster	Not responded
6	Georgian Research and Educational Networking Association	Not responded
7	IdeaDrom Program by MediaLab	Responded
8	Ilia State University	Not responded
9	IMPACT HUB	Responded
10	Innovation and Development foundation (IDF)	Not responded
11	JA Georgia (skills)	Not responded
12	JSC MFO CRYSTAL / Crystal Crowd	Not responded
13	NNLE Skills Agency	Not responded
Moldova		
1	ArtCor	Responded
2	Association for the Development of Electronic Communications and Innovative Technologies (ACETI)	Responded
3	Association of Women Entrepreneurs from Moldova - GLIA Impact HUB (AFAM& ASEM)	Responded
4	XY Accelerator	Responded
5	Ceadir-Lunga Business incubator (IACL)	Responded
6	DreamUps	Responded
7	Fintech Moldova Hub	Responded
8	Yep! Moldova	Responded
9	Information Technologies for Business Applications (IT4BA) incubator	Responded
10	Leova Business Incubator (RIAM)	Responded
11	Mozaic Business Angels Community	Responded
12	National Agency for Research and Development	Responded
13	Nisporeni Business Incubator (RIAM)	Responded
14	Sîngerei Business Incubator (RIAM)	Responded
15	Soroca Gunnar Due Gundersen Business Incubator (RIAM)	Responded
16	Startup City Cahul	Not responded

17	Technovator	Responded
Ukraine		
1	1991 Accelerator	Responded
2	eō Business Incubators	Responded
3	Yep Incubator	Responded
4	iHUB	Responded
5	Innovation Center KAU	Responded
6	ISE Corporate Accelerator	Responded
7	Lviv IT cluster	Not responded
8	Lviv Startup Depot	Responded
9	RadarTech	Responded
10	Tech Start UP School	Responded
11	TechUkraine Platform	Responded
12	The Centre for Entrepreneurship of the Ukrainian Catholic University	Not responded
13	Ukrainian Future Business Incubator	Not responded
14	UNIT.City (Incubation program NEST)	Not responded
15	Vacuum deep tech	Not responded