SEEDplus

Strengthening European
Entrepreneurial Development

Funded by the European Union

Deliverable D.5.2
University Seed Fund Feasibility Studies

Deliverable contains:

- *Study 1. Kyiv Academic University*
- *Study 2. UiT The Arctic University of Norway*
- *Study 3. Technical University of Varna*

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Executive Summary

This exclusive summary presents the findings of three feasibility studies developed under the SEEDplus project, which aims to establish a sustainable seed funding mechanism to strengthen university-based innovation in Europe. The studies target three countries—Norway, Bulgaria, and Ukraine—each representing distinct innovation environments, yet collectively facing the common challenge of insufficient early-stage capital for entrepreneurship linked to higher education institutions (HEIs).

The primary goal of the studies is to address the persistent gap between academic knowledge generation and its transformation into real-world innovation. In emerging and moderate innovation regions, HEIs frequently lack access to tailored financial instruments, experienced venture support, and mechanisms for fostering entrepreneurial mindsets. The study seeks to design a replicable and context-sensitive model for seed funding that can help empower university ecosystems and catalyze innovation aligned with the EU's sustainability and digitalization agendas.

To achieve this, the studies employed a mixed-methods approach, combining stakeholder interviews, institutional readiness assessments, desk research, and SWOT analyses. Three universities in Norway, Bulgaria, and Ukraine were selected as case studies to ensure diverse and representative perspectives. While deeply rooted in local realities, the findings of the studies are applicable and scalable to other European HEIs and regions facing similar constraints.

In Norway, the study reveals a highly structured innovation system with significant public support. However, it highlights the absence of dedicated seed-stage financing at the university level. Universities have shown readiness to explore micro-funding schemes, yet collaborations with private investors remain limited. The recommendation focuses on building pre-seed funding tools within university frameworks and enhancing public-private cooperation.

In Bulgaria, innovation resources are available but scattered. There is minimal experience among HEIs in fund design or management, and entrepreneurship is only beginning to emerge as a student priority. Still, the momentum exists. The study proposes the establishment of hybrid financial instruments that combine EU funds, philanthropic contributions, and local stakeholder support.

Ukraine presents a complex but promising landscape. Despite political and economic instability, the entrepreneurial ecosystem is dynamic. The study identifies a lack of regulatory frameworks and institutional investment culture within HEIs. Nonetheless, there is strong community engagement and openness to international collaboration. Recommendations include capacity-building partnerships and alignment with development agencies to enable donor-backed seed investments.

From these localized studies, a unified model is proposed: a blended funding approach that integrates university budgets, EU structural funds, philanthropic contributions, and private investment. The model emphasizes flexibility, risk-sharing, and mission-driven governance structures. Implementation begins with pilot initiatives embedded within university innovation offices and gradually scales toward formalized cross-border funding frameworks.

This study and the SEEDplus project are part of CloudEARTHi initiative (a pan-European initiative that aims to strengthen the European innovation ecosystem with a focus on Deep Tech and circular solutions). A core outcome of this study is the proposal to establish the CloudEARTHi Seed Fund—a strategic financial instrument designed to support startups and spin-offs across the CloudEARTHi

network. While grounded in the findings from three countries, the Fund will be implemented at the broader European level, leveraging the reach of CloudEARTHi's 31 partners across 17 countries. This fund will directly support deep tech and circular innovation initiatives, acting as a bridge between research and entrepreneurship.

Ultimately, this study is not a static blueprint but a strategic roadmap that CloudEARTHi is committed to implementing. By engaging investors, stakeholders, and policymakers, CloudEARTHi will lead the next steps in translating the feasibility study into institutional practice and funding reality. The goal is not only to foster innovation at the partner universities but to reshape Europe's regional innovation landscape, making it more inclusive, resilient, and globally competitive.

Contents

Introduction

This document presents **Deliverable D.5.2** of the *SEEDplus* project (Grant Agreement No. 101100494), titled **"University Seed Fund Feasibility Studies."** The deliverable has been produced under **Work Package 5 (WP5): Strengthening the Roles of Universities in Their Innovation Ecosystems**, and forms a key contribution to the project's objective of enhancing entrepreneurial capacity within European higher education institutions.

The deliverable comprises three individual feasibility studies, each conducted by a project partner university to assess the strategic outlook for their institutions, considering the legal, technical, and economic feasibility of establishing a university-affiliated seed fund or similar venture support mechanism. These studies provide tailored roadmaps for fostering early-stage innovation and supporting the commercialization of research, while accounting for each institution's unique national context, regulatory environment, and entrepreneurial ecosystem.

The studies include:

- **Study 1: Kyiv Academic University (Ukraine)** – exploring pathways to seed-stage funding within a developing innovation ecosystem.
- **Study 2: UiT The Arctic University of Norway** – examining mechanisms to accelerate student-led innovation and regional impact in Northern Norway.
- **Study 3: Technical University of Varna (Bulgaria)** – proposing a phased accelerator and seed fund model within the constraints of national public funding regulations.

Together, these studies serve as both practical implementation blueprints and knowledge-sharing tools to inspire similar efforts across Europe. They highlight the diverse conditions under which university-affiliated venture initiatives may emerge and offer adaptable models that can inform regional and institutional innovation strategies beyond the SEEDplus consortium.

This deliverable is submitted as part of the 27-month SEEDplus project, co-funded by the European Union under the Horizon Europe programme, and reflects the collaborative efforts of universities committed to transforming academic research into entrepreneurial value.

Study 1. Kyiv Academic University

This feasibility study explores the establishment of a university-anchored venture capital fund as part of the innovation ecosystem of one of the SEEDplus partners - Kyiv Academic University and aligning with the project's mission to strengthen European entrepreneurial development. It focuses on Kyiv Academic University (KAU) and its signature initiative - the project of the Academ.City science park, examining the viability of launching a dedicated instrument to support the commercialization of academic research and deep-tech innovation in Ukraine.

The study responds to a well-documented gap between existing public research funding and the availability of venture capital to support academic spin-offs and early-stage science-based ventures. While Ukraine demonstrates growing investor interest - especially in sectors like DefenseTech, AI, and AgriTech - structural challenges persist, including regulatory fragmentation, limited tax incentives, and a lack of institutional venture models tailored to deep-tech commercialization.

The analysis combines legal, economic, and technical feasibility assessments. It identifies current limitations in Ukraine's investment infrastructure and legal environment, particularly in aligning with EU norms. A comparative analysis of European models (e.g., France, Germany, Estonia) further highlights best practices and possible pathways for Ukrainian adoption.

Key recommendations include:

- Establishing a **Corporate Investment Fund (CIF)** aligned with EU venture standards, targeting pre-seed and seed stage startups.
- Pursuing **blended finance models** combining public, private, and international capital through tailored partnerships
- Utilise existing **institutional capacity -** current pre-incubation and acceleration programs, IP transfer policies.
- Advocating the introduction of the **tax incentives** for private investors in R&D ventures. and developing a **regulatory sandbox** for academic venture funding.

The proposed fund structure favors a para-academic model, ideally evergreen, with mixed capital sources and a focus on deep-tech startups. The VC fund is suggested to be established as a legal entity, co-owned by the to-be established Science Park Academ.City. A detailed roadmap outlines the preparatory, implementation, and monitoring phases, along with checkpoints related to legal setup, capital commitments, and early-stage portfolio performance.

1. Legal Feasibility

1.1. Regulatory frameworks for VC in Ukraine

Legal feasibility is defined based on the:

- legal analysis of Ukrainian regulations (laws, bylaws, regulations of the NSSMC);

- analysis of EU directives, including Regulation (EU) No 345/2013 of 17 April 2013 on European venture capital funds;

As of April 2025, venture capital activity in Ukraine is regulated by a number of laws and regulations that form a multi-level system of legal support for investment and innovation activity. The main ones are as follows:

- The Law of Ukraine 'On Joint Investment Institutions' No. 5080-VI is a fundamental document that defines the legal status of joint investment institutions (JII), mechanisms of their establishment, operation, functioning and termination. The law provides for the division of funds into public and private, open and closed-end, as well as venture funds with a specific investment strategy.

- The Law of Ukraine 'On Licensing of Types of Economic Activity' No. 222-VIII defines the general procedure for licensing economic activity, including professional activity in the securities market, which includes the activities of asset management companies (AMCs).

- The Law of Ukraine 'On Innovative Activities' No. 40-IV establishes the legal, economic and organisational framework for the functioning of the innovation environment. It explicitly provides for the right of scientific institutions to establish business entities to commercialise R&D results.

- The Law of Ukraine 'On Scientific and Scientific-Technical Activities' No. 848-VIII establishes the legal status of scientific institutions, their rights and obligations, inc

- The Civil Code of Ukraine (Articles 86-98, 167-169) and the Commercial Code of Ukraine (Articles 113-117, 390-391) - provide definitions of business entities, the possibility of participation of state and municipal institutions in business entities, as well as the specifics of contractual relations in the field of investment.

- Regulatory acts of the National Securities and Stock Market Commission, in particular, the Regulation on the Functioning of AMC (Decision No. 706 of 12.07.2016) and the Licensing Conditions for Activities in the Securities Market (Decision No. 60 of 14.01.2014), which detail the operational activities of professional market participants.

According to Art. 2 of Law No. 5080-VI, a venture fund is a special type of closed-end collective investment institution that invests in high-risk innovative projects. This is in line with the idea of the Academ.City project, which is focused on the commercialisation of scientific developments.

In Ukraine, venture capital funds can operate in two main legal forms: a unit investment fund (UIF) and a corporate investment fund (CIF). Each of these forms has its own peculiarities in terms of management, legal status and financial capabilities.

Unit investment fund (UIF)

Legal form: Unit investment fund (or mutual fund) is not a legal entity. It is a collective investment entity consisting of participants who invest in a common fund. It is a mechanism for collective investment through share certificates, which are not legal entities.

Asset management: The assets of Unit investment fund (mutual fund) are managed by an asset management company (AMC), which conducts investment transactions in accordance with the fund's strategy. AMC is a key element of the management structure of a mutual fund.

Autonomy: A Unit investment fund has limited autonomy compared to a CIF. All decisions on investments and strategic directions are made through the AMC, and the fund itself does not have a separate governing body.

Features of Unit Investment Fund (UIF) (mutual fund):

- This type of fund is often used for smaller investment projects, where participation in the fund implies minimal organisational costs and simpler management mechanisms.
- A mutual fund is less flexible in management and limits the opportunities for participation in more complex and long-term investment projects.

Corporate investment fund (CIF)

Legal form: A CIF is a legal entity, usually organised as a joint-stock company or a limited liability company (LLC). The fund may be established as a separate enterprise that is a participant in other enterprises and conducts investment activities.

Asset management: A CIF has its own management bodies, including the management board, supervisory board and other corporate bodies. This allows for strategic management and important investment decisions to be made at the fund level.

Investment activity: A CIF may carry out investment activities independently, without intermediary of other management structures. In addition, CIF has the right to join other enterprises, to purchase and sell assets, as well as to attract additional capital from partners or investors.

Features of CIF:

- This is the most flexible and autonomous form of venture capital investment, which allows attracting international partners and institutional investors.
- A CIF is able to effectively enter into partnerships with the private sector and government agencies, making it ideal for large and complex investment projects such as Academ.City.

Venture Fund Licensing and Supervision

Establishment of a venture fund in the form of a CIF requires compliance with a number of regulatory requirements set out in Ukrainian legislation. In particular, to ensure transparency, legality and efficiency of the venture fund's activities, the following procedures must be followed:

1. Licensing of an asset management company (AMC)

According to Ukrainian legislation, in order to manage a venture fund in the form of a CIF, it is necessary for an asset management company to obtain a license based on Article 24 of the Law No. 5080-VI 'On Collective Investment Institutions'. Licensing of AMC includes:

- Verification of financial stability and qualification of management companies.
- Assessment of the AMC's ability to effectively manage the fund's assets, which is a key aspect to ensure risk minimisation.

2. Registration of the fund with the NSSMC

The CIF must be registered with the National Securities and Stock Market Commission (NSSMC) with the submission of the prospectus. This process includes:

- Registration of the fund's charter and approval of the terms of issue of securities (units).
- Submission of financial statements and documents confirming compliance with the requirements of the NSSMC regarding asset management and investment.

3. Compliance and internal control requirements

A CIF, like other financial institutions, must comply with the requirements for internal control, compliance and audit. This includes:

- Implementation of an internal control system to prevent financial fraud and ensure compliance with legal requirements.
- Having an independent audit to verify financial statements and the accuracy of asset accounting.
- Compliance with anti-money laundering (AML) and counter-terrorist financing (CFT) requirements, which is critical to ensuring investor confidence.

According to Ukrainian law, investment funds, including venture capital funds, are permitted to engage solely in activities related to collective investment. This means that a venture fund may be established solely for the purpose of reinvesting profits (i.e., acquiring assets) or for distributing dividends to the fund's participants. When establishing a fund, a decision may be made exclusively in favor of profit reinvestment. This matter will be determined during negotiations with the fund's founders.

A corporate fund cannot be established by legal entities that have more than 25 percent of state or municipal ownership in their authorised capital.

The state or a territorial community, as well as legal entities with a share of state or municipal ownership exceeding 25 percent, may not act as founders/participants of a venture fund.

Since the KAU is a state-owned legal entity, it cannot directly act as a founder of the fund, but it may participate in a science park or establish another legal entity under private law that can become a founder of the fund.

The minimum authorized capital of a corporate venture capital fund is 1250 minimum monthly wages. The founders shall pay for the shares of the corporate fund exclusively in cash. Prior to the state registration of the corporate fund and its charter with the state registration authorities, the founders of the corporate fund must pay 100 percent of the initial authorized capital. Under Ukrainian law, there is only a requirement for a minimum ticket limit for an individual, but no

restrictions on the maximum contribution. The minimum ticket for an individual is 1500 minimum monthly wages.

Since the founders cannot be public legal entities, the fund cannot be capitalized through public funding. Under Ukrainian legislation, there are no restrictions on grant funding. The possibility of international grant funding requires further study.

Additional legal requirements

In addition to the special regulations governing the activities of venture capital funds, general laws and regulations governing the financial market of Ukraine apply:

1. The Law of Ukraine 'On Financial Services' No. 2664-III: This law regulates the provision of financial services in Ukraine, including the provision of asset and investment management services. The Law establishes legal rules to ensure transparency and accountability of financial institutions.

2. Law on Capital Markets No. 738-IX: Regulates activities in the stock markets, defining requirements for publicity, transparency and information disclosure of funds, including venture capital funds. The requirements of this law are necessary to ensure the transparency of financial transactions and protect the interests of investors.

1.2. International experience and norms of venture investments

1.2.1. Common European rules governing venture capital investment

One of the key legislative initiatives of the European Union in the field of venture capital investment is Regulation (EU) No. 345/2013 of the European Parliament and of the Council of April 17, 2013 on European Venture Capital Funds (EuVECA). This regulatory act creates a single regulatory framework for alternative investment funds investing in small and medium-sized enterprises (SMEs) with high growth potential.

Key elements of Regulation (EU) No. 345/2013 (as amended by Regulation (EU) 2017/1991):

1. Purpose of the Regulation is to ensure a favorable regulatory environment for venture capital financing by:

- creating a single "passport" mechanism for fund managers in the EU,
- reducing the regulatory burden on small AIFs (alternative investment funds),
- stimulating cross-border investment in startups and innovative SMEs.

2. EuVECA status: according to Article 3, the EuVECA status can be obtained by funds that:

- are alternative investment funds (AIFs) registered in an EU Member State;
- are managed by entities whose total assets do not exceed the threshold of EUR 500 million (i.e., not subject to the full regulatory regime under Directive 2011/61/EU - AIFMD);
- make at least 70% of their investments in unlisted SMEs that:

- are not listed on regulated markets,
- meet the criteria of innovation or high growth.

3. Regulatory simplification:

- Registration of the fund is carried out through the competent national authority of the Member State;
- After registration, it is entered into the public register of the European Securities and Markets Authority (ESMA);
- EuVECA funds are exempted from certain AIFMD requirements, such as capital, reporting, depositories, etc., but must comply with certain transparency standards for investors.

4. Investor protection: EuVECA funds may only offer their services to professional investors or individuals who:

- make an investment of at least EUR 100,000,
- provide written confirmation of awareness of the risks of venture capital investment.

Legal prerequisites for the implementation of the EuVECA approach in Ukraine

Ukraine is currently not a member of the EU, but its obligations under the Association Agreement provide for the harmonization of financial legislation with the acquis communautaire, in particular:

1. Harmonization with Directive 2011/61/EU (AIFMD):

- AIFMD is the basic document for regulating alternative funds in the EU.
- Ukraine should adapt its legislation to the requirements of the AIFMD, especially with regard to licensing, risk management, reporting, use of depositories, and management of conflicts of interest.

2. Create a national infrastructure for venture capital investment:

- Legislative regulation of the status of alternative investment funds;
- Introduction of a simplified registration regime for venture capital funds investing in innovative SMEs (similar to EuVECA);
- Formation of a professional market of AIF managers and collective investment institutions.

3. Agreement on mutual recognition of licenses/passports (passporting regime):

- For Ukrainian funds to function fully in the EU market, a bilateral agreement with the EU on mutual recognition of regulatory standards, including the passporting regime, is necessary;
- Such an agreement is possible as part of Ukraine's further financial integration with the EU, and is part of deepening cooperation in the capital markets.

1.2.2. Practice of individual EU countries

France: Fonds Commun de Placement à Risque (FCPR) mechanism

The French venture capital investment model is based on Law No. 2019-486 of May 22, 2019 (the "Loi Pacte"), which modernized the financial sector and, in particular, facilitated investment in innovative companies through:

- reform of entrepreneurial activity;
- liberalization of access to venture capital;
- stimulating the innovation economy.

Key instruments include:

FCPR (Fonds Commun de Placement à Risque) - joint venture capital funds regulated by the Code monétaire et financier and subject to supervision by the Autorité des Marchés Financiers (AMF).

- They have no legal personality and are managed by a management company licensed under the AIFMD.
- They must invest at least 50% of their assets in unlisted companies.

Fiscal incentives:

- Pursuant to Article 150-0 B of the French Tax Code, exemption from capital gains tax is possible if the investor holds the investment for more than five years.
- Additional tax benefits are provided for individuals who invest in FCPR through the IR-PME program (réduction d'impôt sur le revenu pour souscription au capital de PME).

Institutional support:

- Bpifrance is a public investment company that implements a co-investment strategy with private funds.
- Bpifrance's participation ensures investor confidence, reduces risks and stimulates private capital in the innovation sector.

Germany: Venture capital financing under the Kapitalanlagegesetzbuch (KAGB)

Regulatory framework is defined by two acts:

- The Kapitalanlagegesetzbuch (KAGB) is the Investment Funds Act, effective since July 22, 2013, with numerous amendments until 2025.
- It is a full implementation of Directive 2011/61/EU (AIFMD).

Venture capital funds are established in the form of closed-end investment companies (Closed-end AIFs), which are not subject to redemption of shares until the end of the fund's life. Management is carried out by Kapitalverwaltungsgesellschaften (KVG) - companies that have received permission from BaFin (Federal Financial Supervisory Authority).

Fiscal instruments:

- The INVEST Zuschuss für Wagniskapital Programme is a state subsidy for individuals investing in startups.
- As of 2025, INVEST will compensate up to 25% of the investment, as well as 50% of the capital gains tax on exit from the investment.
- Additional benefits for companies certified as innovative start-ups.

Regulations are characterised by the high level of predictability, including legal clarity and transparency, standardized reporting, compliance and internal control requirements.

Estonia: Flexibility, digitalization and openness to innovation

Regulatory framework is defined by the following acts:

- The Investment Funds Act (as amended in 2023);
- The e-Residency Act;
- A number of bylaws from the Estonian Financial Supervision and Resolution Authority (EFSA).

Key features of venture capital investment include:

Fast registration:

- Possibility to create an investment fund within 5-10 business days.
- Use of electronic signature and online registry (Business Register Portal).
- Funds can be managed remotely from anywhere in the world through electronic residency.

Tax environment:

- 0% tax on undistributed profits (undistributed profits are not taxed until dividend payments).
- No capital gains tax in case of reinvestment.

Passporting:

- The passporting regime allows a fund registered in Estonia to provide services throughout the EU without the need to re-license in each country.

The comparative analysis of France, Germany, and Estonia shows three strategic models of venture capital investment support (see Table 1). The French model is based on government co-financing and tax incentives for long-term investments. The German model implies strict regulation with benefits through state subsidies. The Estonian model provides maximum digitalization, flexibility and international openness.

Table 1. Comparative table of venture capital investment models in France, Germany and Estonia (as of April 2025)

Country	Legal framework	Type of venture capital structures	Tax incentives	Government support features	Digital tools/access speed
France	Loi Pacte (Law № 2019-486)	FCPR (funds without legal entity status)	Capital gains tax exemption for >5 years of holding	State co-investment through Bpifrance	Limited digitalization, mostly offline
Germany	KAGB (Kapitalanlagegesetzbuch)	Closed-end AIFs (closed companies)	INVEST Zuschuss: up to 25% subsidy + 50% tax rebate	Subsidies to individual investors; state certification of startups	Medium level of digitalization
Estonia	Investment Funds Act (ed. 2023)	AIFs, registered in 1-2 weeks	0% tax on retained earnings, reinvestment tax benefits	No direct subsidy, but complete digital infrastructure	High: e-Residency, online registration

1.3. Tax regulations for VC in Ukraine

In Ukraine, the tax regulation of venture capital funds is determined by several main provisions of the Tax Code of Ukraine (TCU), which establish the specifics of taxation of funds and their participants.

Tax benefits for collective investment institutions (CII)

According to para. 141.6 of the Tax Code of Ukraine:

- Collective investment institutions (CII), which include venture capital funds, are exempt from paying income tax on their investment activities, provided that they comply with the requirements of the legislation on accounting and reporting.

- This income tax exemption applies to income derived from investment activities, i.e., transactions on purchase and sale of assets carried out within the framework of the fund's investment strategy.

Implications for a venture capital fund:

- This tax exemption allows venture capital funds to retain a larger portion of their profits for further investment, which increases the efficiency of the fund.

- However, in order to retain this exemption, the fund must ensure proper accounting, in accordance with the legal requirements for reporting and internal control.

Taxation of investors

Investors who receive income from transactions with funds are taxed in accordance with subpara. 170.2 of the Tax Code of Ukraine, in particular:

For individuals:

- Personal income tax (PIT): the rate is 18%.
- Military duty: additionally levied at the rate of 5% of the amount of income.

For legal entities:

- Corporate income tax: levied at a general rate of 18%, according to the corporate taxation regulations.

Specifics for investors:

- Individuals receiving income from investments in venture capital funds are subject to standard personal income tax and military duty rates, which are mandatory.
- Legal entities are taxed at the regular corporate income tax rate, but are subject to compliance with all necessary regulatory requirements.

Thus, the tax field is neutral for the fund itself, as it is exempt from paying income tax on investment activities. At the same time, the taxation of investors' income is clearly defined and depends on their legal form, which allows us to predict the tax burden on fund participants.

1.4. Venture capital as a funding mechanism for science-based innovations: current state and perspectives

In the field of academic technologies, the main problem with commercialisation in pre-seed and seed stages is the lack of specialized venture capital funds capable of adapting their model to scientific commercialization cycles, including the length of time to market and high initial risks. Academic institutions may initiate the creation of venture capital structures with the participation of professional market participants (e.g. AMCs). Ukrainian legislation provides the following formats for creating a venture capital legal entity:

- Corporate Venture Capital Funds (CVFs): These are investment structures that can be created with the participation of scientific institutions. These funds can be invested in start-ups that develop new technologies or innovative products.

- SPVs (Specialised project companies): These are separate legal entities that can be set up for specific projects in the field of innovation or research.

The right to create such an entity is regulated by Article 10 of the Law of Ukraine 'On Innovative Activities' that defines the right of scientific institutions to be founders of legal entities for the implementation of intellectual property results. This allows scientific organisations to participate in the creation of new business structures, such as corporate venture capital funds (CVFs) or special project companies (SPCs).

Such a right provides an opportunity for scientific institutions not only to commercialise their intellectual results, but also to actively attract investments to develop innovations, create new products or technologies. This can be achieved through investment structures that allow private capital to be involved in the development of innovations, together with the public sector.

Restrictions for public institutions

Restrictions on profitable activities: according to clause 141.4.1 of the Tax Code of Ukraine (TCU), state-funded research institutions cannot carry out profitable activities as their main activity. This means that their main goal remains to perform research and development work, not commercial activities.

However, scientific institutions have the right to be participants in business entities if such participation is not the main one and is of an auxiliary nature. This participation must be aimed at achieving the statutory goal of the institution, i.e., the development of scientific research and the implementation of its results in the real sector of the economy.

Investment of public funds: according to the Resolution of the Cabinet of Ministers of Ukraine No. 163 dated 15.02.2006, investment of public funds in risky projects, including venture capital funds, is allowed only if the effectiveness of such investment is assessed. This ensures minimisation of risks for the state budget and guarantees achievement of targeted results.

Intellectual property restrictions: according to Articles 31 and 33 of the Law No. 848-VIII 'On Protection of Intellectual Property Rights', the results of research and development financed by public funds belong to the state or scientific institutions, unless otherwise provided by the contract. They are subject to protection and can be transferred to management (to governance) through licensing or other legal mechanisms.

Several steps are required to transfer intellectual property rights to a venture capital fund:

1. Valuation of the rights: For the correct allocation of assets to be transferred to the fund, the value of intellectual property is assessed.
2. Legal agreements: Appropriate agreements on the transfer of intellectual property rights between the research institutions and the foundations should be concluded. This may be a licence or other legal arrangement.

3. Approval by the competent authorities: In the case of public institutions, any transfer of rights should be approved by the relevant authorities, e.g. the Ministry of Education and Science or other competent state authorities.

In conclusion, academic institutions have the opportunity to initiate or participate in venture capital funds, subject to certain restrictions:

- Protection of the state share: Proper control over state assets should be ensured to avoid their illegal privatisation or misuse.
- Compliance with tax requirements: Participation of scientific institutions in venture capital funds should not violate tax regulations and principles of state economic policy.
- Protection of intellectual property: Intellectual property rights should be clearly defined and properly formalised through legal mechanisms for transfer to the funds.
- State asset management procedures: All actions related to the investment of public funds or assets in venture capital projects should be subject to procedures that guarantee efficiency and transparency.

In general, scientific institutions can participate in venture capital investment, but this requires compliance with legal requirements, transparency of processes and proper protection of intellectual property rights, including:

- protection of the state share;
- compliance with tax requirements;
- protection of intellectual property;
- procedures for managing state assets.

In order to harmonize the legal environment of Ukraine with the practices of the European Union and increase investment attractiveness for venture capital, it is proposed to introduce a number of amendments to Ukrainian legislation. They are based on the rules and regulatory approaches provided for in Regulation (EU) No. 345/2013 on European Venture Capital Funds (EuVECA), Directive 2011/61/EU on the management of alternative investment funds (AIFMD), as well as on the national experience of EU member states. The key directions of change are presented in Table 2 below. Kyiv Academic University, as an active player in the innovation ecosystem and as an experimental project of the National Academy of Sciences of Ukraine, has monitoring and advocating changes in legislation as one of its priority tasks.. The Open Innovation Ecosystems Lab is KAU's Think Tank that takes part in the legislations analyses and public discussions, suggesting necessary changes.

Table 2. Changes required to harmonize the legal environment of Ukraine with EU practice

Introduction of tax incentives for investors in venture capital funds	
Current problem	Ukrainian legislation currently lacks a systematic approach to stimulating investment in startups through tax incentives for individuals and legal entities investing in high-risk projects through venture capital funds. This reduces the attractiveness of the market for private investors.
European experience	Many EU countries have effective tax regimes, for example: - Enterprise Investment Scheme (EIS) in the UK - tax deduction of up to 30% of the investment amount; - Investitionsabzugsbetrag in Germany - the possibility of advance write-off of investments in small businesses; - Madelin Law in France - tax reduction of up to 18% for individual investors.
Recommendations for Ukraine	To amend the Tax Code of Ukraine, in particular: - Supplement Section IV with a new Article 166-9, which provides for a tax rebate for individuals in the amount of up to 30% of investments in registered venture capital funds. - In Section III, provide for a reduction in the income tax rate for legal entities investing in projects that meet the criteria for innovative development set out in the Law of Ukraine "On Scientific and Scientific-Technical Activities." - In Section XVIII, add the concept of "investment startup" with certain criteria (company age up to 5 years, innovative activity, turnover up to a certain limit, no distribution of dividends).
Expected effect	- Increase in the number of private investors; - Revitalization of investment activity in the field of R&D; - Emergence of a mechanism for internal redistribution of capital to the innovation sector.
Regulation of venture capital funds through a licensing mechanism (similar to AIFMD)	
Current problem	Ukrainian legislation does not provide for a separate, transparent and specialized licensing or registration regime for venture capital funds and companies managing such funds. The existing provisions are scattered among general regulations on investment activities, financial institutions and collective

	investment, which complicates the process of launching a fund and reduces investor confidence.
European experience	Directive 2011/61/EU (AIFMD) stipulates that alternative investment fund managers must obtain a license from the relevant national financial supervisory authority. In addition, requirements are set for: - minimum capital - management competence; - risk management and compliance systems; - periodic reporting; - protection of investors' rights.
Recommendations for Ukraine	- Develop and adopt a separate law of Ukraine "On Management of Alternative Investment Funds", similar to the AIFMD, or amend the Law of Ukraine "On Collective Investment Institutions" (2001, No. 2299-III) to include a section on venture capital funds. - Provide for mandatory registration of management companies with the National Securities and Stock Market Commission (NSSMC) with minimum requirements for capitalization, internal policies, risk management, and corporate governance. - Establish a special reporting regime for venture capital funds, including public reports on asset structure, risks, and profitability (quarterly).
Expected impact	- Increased confidence in Ukrainian venture capital funds among international investors; - Transparency and predictability of the venture capital sector; - Reduced reputational and financial risks.

Other necessary steps include:

(a) Define the status of a venture capitalist in the legislation

Introduce an official definition of the status of a "venture capitalist" (similar to a qualified investor under MiFID II Directive 2014/65/EU).

(b) Launching a regulatory sandbox

On the basis of the NSSMC or the Ministry of Economy, create a mechanism for testing the implementation of venture models - an "innovative regulatory hub", as implemented in Estonia, Lithuania and Denmark.

(c) Ensure institutional support

Establish a program at the level of the Cabinet of Ministers and the Ministry of Education and Science to support venture capital funds focused on financing R&D projects and startups that cooperate with science parks.

Implementation of the proposed changes will create a clear, stable and transparent legal environment for the development of venture capital investment in Ukraine. They will help integrate the Ukrainian capital market into the European economic and legal space, reduce risks for investors, and create an effective mechanism for attracting funding for innovative projects.

1.5. Conclusion on legal feasibility

For Academ.City, the creation of a venture fund in the form of a corporate investment fund (CIF) is the most optimal option. This model allows to:

- Attract international partners and institutional investors.
- Have greater autonomy in making strategic decisions.
- Enter into partnerships with the private sector and public institutions to implement complex innovative projects.

In order to ensure the effective operation of CIFs in Ukraine, it is necessary to comply with the requirements of the legislation, in particular, with regard to licensing of AMCs, registration of the fund with the NSSMC, as well as compliance, audit and investor protection requirements. These steps will help to ensure transparency and stability of investment processes and create favourable conditions for attracting investments in long-term innovative projects.

The tax regulation of venture capital funds in Ukraine is favorable for the development of investment activities. The exemption of funds from paying income tax creates additional opportunities for investment development, while transparent and clear taxation for investors ensures the predictability and stability of investment activities within such funds.

Regulation (EU) No. 345/2013 on EuVECA is a strategic instrument of the European Union to stimulate innovative business through venture capital financing. Its provisions create a balance between investor protection and facilitating access to capital for SMEs. For Ukraine, the adaptation of this approach is possible only if:

- a full implementation package in accordance with the AIFMD;
- creation of an appropriate regulatory framework and financial infrastructure;
- achievement of agreed mechanisms for mutual recognition of regulatory norms with the EU.

EU countries experience provides some grounds to be considered by KAU and the Academ.City when establishing a VC fund and advocating regulatory changes:

- Possibility of implementing public-private partnerships in the form of a quasi-public venture capital fund;

- Formation of a legislative framework for FCPR analogues - without the formation of a legal entity, but with clear regulatory requirements;
- Establishing tax incentives for long-term venture capital investment;
- Possibility of creating a national analogue of KAGB, with a distinction between public and private funds;
- Introduction of co-financing mechanisms (investor + state) through subsidies or tax compensation;
- Ensuring a full regulatory cycle through a single financial supervisory authority;
- Possibility of developing an electronic system for registration of investment structures based on Diia or another unified state digital portal;
- Tax incentives for reinvestment of profits as a key element of venture capital policy;
- International integration through the mechanism of "virtual passporting", after the conclusion of relevant agreements with the EU.

Ukraine, in the context of future financial integration with the EU, can use a hybrid model that combines:

- French experience of public-private partnership (Bpifrance);
- German institutional approach to legal predictability and tax subsidies;
- Estonian electronic ecosystem for registration and management of venture capital funds.

2. Economic feasibility

2.1. Venture capital market in Ukraine: overview

2.1.1. General VC market dynamics

The Ukrainian venture capital market has undergone significant changes over the past few years, driven by a number of challenges:

- Economic instability: The war and its aftermath continue to create uncertainty for investors.
- Legal restrictions: A lack of transparency in the legal system and high levels of corruption remain serious barriers to capital raising.
- Human resource outflow: Many qualified professionals leave the country, which negatively affects startups and their ability to grow.

Despite these challenges, Ukrainian startups continue to attract funding, and the ecosystem is gradually adapting to the new realities. The volume of investments[1]:

[1] https://ain.ua/2024/09/28/vid-startap-bumu-do-viklikiv-viini-iak-zminilisia-vencurni-investiciyi-v-ukrayini-za-10-rokiv-doslidzennia/

- **2021** saw a record amount of venture capital investment: **$832 million**, 312 deals.
- **2022** - a sharp drop: **$215 million**, 184 deals (down 74%).
- **2023** - stabilization: **$209 million**, 82 deals.
- **The first half of 2024** amounted **to $283 million**, which is 4.1 times more than in the same period of 2023.

The main factors behind the decline in 2022-2023 were:

- Military risks that reduced investor confidence.
- Outflow of venture capital due to the overall decline in the global technology investment market.
- Migration of startups abroad, which made it difficult to assess investments in Ukrainian companies.

However, the first half of 2024 shows a positive trend: investors are once again interested in Ukraine, which indicates renewed confidence in the tech sector.

2.1.2. Key venture capitalists and deals

Despite the crisis, some funds and investors continue to support Ukrainian startups. The most active players include:

- **AVentures Capital** is one of the largest venture capital funds in Ukraine.
- **SMRK VC Fund** - invests in IT startups.
- **Horizon Capital** - attracts significant foreign investment.
- **TA Ventures** - specializes in startups in mobile technology, logistics, and deep-tech.
- **Presto Ventures, Flyer One Ventures, and SID Venture Partners** are new funds that have stepped up their activities.
- **Ukrainian diaspora funds and foreign VCs** (Speedinvest, Owl Ventures, G Squared) also support Ukrainian startups.
- **SEEDS of BRAVERY -** a mechanism of the European Innovation Council (EIC)for supporting Ukrainian startups.

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https://en.ain.ua/2023/05/25/venture-investments-in-ukraine-fell-by-74-during-2022-dealbook-report/?utm_source=chatgpt.com

AVentures Dealbook of Ukraine: https://www.slideshare.net/slideshow/dealbook-of-ukraine-2025-edition-aventures-capital-9d27/278843661?utm_source=chatgpt.com

Forbes (2024): https://forbes.ua/innovations/polovina-vsikh-defense-investitsiy-v-ukrainski-startapi-nepublichni-shcho-vidbuvaetsya-v-ukrainskomu-venchuri-rezultati-chetvertogo-kvartalu-y-usogo-2024-go-doslidzhennya-forbes-ukraine-29122024-25916

The largest venture capital deals in recent years[2]

2022–2023 years

- **AirSlate** - $51.5 million from G Squared and UiPath Ventures, which increased the company's valuation to $1.25 billion.
- **Preply** raised $50 million in a Series C round led by Owl Ventures.
- **Fintech Farm** - $22 million from Nordstar, Chrome Capital, and others.
- **Spin.ai** - $16 million from Blueprint Equity, Blu Ventures, and Santa Barbara Venture Partners
- **Hily, Iternal, VanOnGo, GoTo-U** have received significant investments.

2024 (first half of the year)[3]

- **Mate Academy** - $4 million.
- **ComeBack Mobility** - $1 million.
- **Zeely** - $1 million.

The number of early-stage deals has increased significantly, indicating a gradual return of venture capitalist confidence.

2.1.3. Sectoral distribution of venture capital investments

The most investment-attractive sectors in Ukraine:

Sector	Description.
IT and SaaS	A key industry for venture capital investments. Ukrainian IT startups have gained international recognition, especially in software development, artificial intelligence, blockchain technologies, and business process automation services (AirSlate, Grammarly).
EdTech	Online education continues to grow (Preply, Mate Academy).
Fintech	Payment systems and banking technologies (Fintech Farm, monobank).

[2]https://ain.ua/2024/09/28/vid-startap-bumu-do-viklikiv-viini-iak-zminilisia-vencurni-investiciyi-v-ukrayini-za-10-rokiv-doslidzennia/

[3] TechCrunch: https://techcrunch.com/2023/04/12/ukrainian-startup-zeely-raises-1m-for-smb-growth-app-aimed-at-us-uk-brazil-mexico/

AgriTech	The introduction of the latest technologies in agriculture increases efficiency and productivity - smart farming, automation (EOS Data Analytics).
HealthTech & MedTech	Development of telemedicine, medical applications and biotechnology (ComeBack Mobility).
Security & DefenseTech	Cybersecurity, military technologies (Ajax Systems, Unmanned Technologies).
AI & ML	Developments in artificial intelligence and machine learning (Neurons Lab, Respeecher).

Today, Ukrainian and foreign investors are increasingly interested in the Ukrainian DefenseTech industry. This is due both to the fact that Ukrainian developments have proven their effectiveness directly on the battlefield and to the fact that they are cheaper than European or American ones.

In the first half of 2024, more than $12 million was invested in the Ukrainian DefenseTech industry[4].

The state-owned Brave1 cluster for the development of the Defense Tech market in Ukraine was launched in July 2023. Since then, the cluster has issued 263 grants for $4.96 million and 46 grants for UAH 67 million under the grant program.

More than 2,600 developments from more than 1,200 Ukrainian manufacturers are registered on the Brave1 platform. There are also established markets in such areas as UAVs (over 500 companies), ground robotic systems (over 160 manufacturers), and electronic warfare (110 manufacturers).

2.1.4. Challenges and opportunities for the Ukrainian venture capital market

Challenges

1. High military risks - some investors are postponing financing until the situation stabilizes.
2. Limited access to international funds - many funds cannot invest directly due to sanctions and regulatory restrictions.
3. Risks of startup relocation - some teams move abroad, which complicates venture capital financing for Ukrainian companies.
4. Decreased activity of corporate investors - large international companies reduced their investments in the Ukrainian market.

Features.

[4]https://ain.ua/2024/09/28/vid-startap-bumu-do-viklikiv-viini-iak-zminilisia-vencurni-investiciyi-v-ukrayini-za-10-rokiv-doslidzennia/

1. Growing interest in DeepTech and defense technologies - Ukraine is becoming one of the centers of military innovation.
2. Adapting startups to war conditions - companies focus on business sustainability and scaling to global markets.
3. Government support - the government is launching funding programs for startups and technology companies.
4. Ukraine Recovery Fund - international organizations are ready to invest in projects that will help rebuild the country.

2.1.5. Forecast for 2025 - 2026

- Increased investment in the technology sector.
- Activation of funds from the EU and the US - reducing global risks will help to return investments.
- Increase support for early-stage startups.
- Strengthening cooperation with defense companies.
- Development of local venture capital funds to support national entrepreneurship.

Overall, Ukraine's venture capital market is resilient and, despite the challenges, promising for investment. The dynamics of 2024 indicate a gradual recovery in activity, and key sectors (AI, DefenseTech, Fintech, AgriTech) remain attractive to investors.

According to experts, the implementation of the Ukraine Investment Framework could attract up to EUR 40 billion in public and private investment[5]. After the end of hostilities, critical infrastructure is expected to be significantly restored, which will increase demand for construction materials and create new opportunities for investors.

In addition, important factors for improving the investment climate are:

- Reforming the judiciary and fighting corruption.
- Simplification of administrative procedures and deregulation.
- Supporting innovations and developing public-private partnerships.

Thus, while the venture capital market in Ukraine faces serious challenges, there are also significant opportunities for growth and development.

[5] Ukrainian Investment Framework https://enlargement.ec.europa.eu/european-neighbourhood-policy/countries-region/ukraine/ukraine-investment-framework_en?utm_source=chatgpt.com

2.2. SWOT-analysis for KAU and Academ.City VC

Strengths

1. **Robust Scientific and Research Infrastructure**

- Kyiv Academic University (KAU), Academ.City, and over 12 institutes of the National Academy of Sciences of Ukraine form a strong research base with direct access to frontier science in physics, biotechnology, materials science, quantum technologies, and AI.
- A large pool of potentially viable spin-off companies exists, derived from patents, scientific breakthroughs, and applied research outputs.

2. **Institutional Support and Strategic Partnerships**

- Ongoing collaborations with academic institutions, government bodies, international donors (e.g., EIC, Horizon Europe, Brave1), and private VCs (e.g., TA Ventures, Horizon Capital).
- Integration into startup support infrastructure including accelerators (ISE, USF, G-Force) and the innovation hub Academ.City.

3. **Rising Demand for Deep Tech in Ukraine**

- Sectors such as DefenseTech, AI, Fintech, and AgriTech are gaining investor interest — venture activity in H1 2024 increased 4.1x compared to 2023.
- Programs like Brave1 and emerging academic startups are building a unique interface between fundamental science and applied markets.

4. **Potential for an Evergreen VC Model**

- Given the long R&D cycles of deep tech ventures, an evergreen venture capital model (without a fixed exit horizon), as used by Breakthrough Energy Ventures, is particularly well suited.

Weaknesses

1. **Underdeveloped Investment Infrastructure**

- Ukraine's VC market is still immature: few funds focus on deep tech, and successful commercialization of academic IP (intellectual property) remains rare.
- Grant-based funding dominates, making transitions to equity financing mechanisms more complex.

2. **Lack of Trust Between Scientists and Venture Capital**

- 81% of deep tech founders believe investors lack the scientific or engineering literacy required to properly evaluate deep tech ventures.
- Academic entrepreneurs often fear losing control over IP and governance when accepting private investment.

3. **Limited Domestic Resources**

- Ongoing emigration of scientific talent and restricted public R&D funding weaken the local innovation workforce.
- Limited experience in incubating and accelerating deep tech ventures from lab to market.

4. **Shortage of Specialized Deep Tech Accelerators & Venture Studios**

- Standardized startup support models (e.g., SaaS accelerators) are ill-equipped to handle science-heavy ventures with long development timelines.

5. **Lack of a Sustainable Profitability Model**

- Deep tech startups typically require long investment horizons (10+ years), which misaligns with conventional VC fund cycles (8–10 years) unless adapted.

6. **Legal and Geopolitical Uncertainty**

- Weak rule of law, corruption risks, and war-related uncertainty dissuade many foreign LPs and institutional investors from committing capital.

Opportunities

1. **First-Mover Advantage in the CEE Region**

- The KAU academic ecosystem can become a flagship hub for deep tech VC in Central and Eastern Europe (CEE), inspired by cases like BioNTech (Mainz) or UiPath (Romania).

2. **Global Shift Toward Long-Term Deep Tech Investing**

- There is over $1.9 trillion in available VC/PE dry powder globally[6]. Deep tech is projected to attract over $200 billion annually by 2030[7].

3. **Ukraine's Reconstruction as a Catalyst for Deep Tech Demand**

- With up to €40 billion expected in post-war recovery investment[8], Ukraine will require deep tech solutions in advanced materials, energy systems, and defense.

4. **Synergy with Public Co-Investment Mechanisms**

- Programs such as Brave1 and government agencies (e.g., Ministry of Digital Transformation, Ministry of Defense) create ideal conditions for blended finance models combining public grants and private equity.

5. **Platformization of the Fund: Venture Builder Potential**

- A venture builder or deep tech studio approach could reduce startup formation barriers, help commercialize university IP, and de-risk early-stage investment.

[6] McKinsey Global Private Markets Report 2025: https://www.mckinsey.com.br/industries/private-capital/our-insights/global-private-markets-report?utm_source=chatgpt.com
[7] StartUS Insights https://www.startus-insights.com/innovators-guide/deep-tech-trends/
[8] European Comission 2025 https://ec.europa.eu/commission/presscorner/detail/en/mex_25_728

6. **Integration into European Innovation Clusters**

- Close collaboration with EIC, EIF, and Horizon Europe enables cross-border scale-up pathways and access to blended finance mechanisms.

Threats

1. **War-Related Instability and Investor Reluctance**

- The ongoing war poses existential threats to company scaling, continuity of R&D teams, and the inflow of capital from Western funds.
- Brain drain among tech and academic talent continues to undermine team stability and institutional knowledge.

2. **Incomplete Legal Frameworks for IP and Venture Investment**

- Ukraine lacks standardized and transparent IP transfer mechanisms (as seen in the US or Germany), complicating spin-off formation and raising transaction costs.
- Lack of clear regulation of academic-type venture capital funds - currently, the legislation (in particular, the Law of Ukraine "On Joint Investment Institutions" No. 5080-VI of 05.07.2012) does not provide for the specifics of creating specialized venture capital funds at science parks.
- Restrictions on sources of funding for state institutions - according to the Budget Code of Ukraine (Articles 13, 23), budgetary institutions have restrictions on direct investments in high-risk assets.
- Lack of preferential tax treatment for R&D investments, which reduces the motivation of private investors.

3. **Absence of Mission-Driven Government Policy**

- Ukraine lacks a DARPA-like institution or long-term strategic instruments to fund critical future technologies (e.g., quantum, synthetic biology, autonomy) beyond 2035.

4. **Constrained Domestic Market**

- Low purchasing power and a weak industrial base limit domestic commercialization and product validation for deep tech solutions.

5. **Global Competition for Deep Tech Talent and Capital**

- Countries like the US, China, Israel, and Germany already offer mature ecosystems with tight academic–corporate–VC integration, risking early-stage talent loss from Ukraine.

Despite significant internal weaknesses and external threats, this SWOT analysis reveals a unique window of opportunity to build a **mission-driven, science-first venture fund** for deep tech in

Ukraine. Taking into account the internal and external factors, the proposed model is a university or para-academic venture fund with mixed funding (public/private/international).

Given the above, the key factors of economic feasibility are:

1. Sources of funding:

- state targeted programs (e.g., the Innovative Development Program, provided for in Article 23^1 of the Budget Code of Ukraine No. 2542-III of 21.06.2001);
- international technical assistance (e.g., Horizon Europe, LIFE, Digital Europe programs);
- private investors looking for R&D platforms with high expertise.

2. Risk and profitability:

- high risk is compensated by the innovative potential of developments;
- long-term profitability of a venture fund in the knowledge-intensive segment - from 15% per annum in the scale-up phase (according to the models used by the European Investment Fund - EIF).

3. Institutional advantage:

- Science Park Academ.City has a functional structure for technology transfer (in accordance with Art. 49 of the Law of Ukraine "On Scientific and Scientific-Technical Activities" No. 848-VIII of 26.11.2015);
- active participation in international programs, which allows to integrate the financial model with European mechanisms.

2.3. Conclusion on economic feasibility

In terms of economic feasibility, the external economic environment being not very favourable at the same time creates a potential opportunity for an academia-specific VC Fund. Key limitations include:

- Lack of clear regulation of academic-type venture capital funds - currently, the legislation (in particular, the Law of Ukraine "On Joint Investment Institutions" No. 5080-VI of 05.07.2012) does not provide for the specifics of creating specialized venture capital funds at science parks.
- Restrictions on sources of funding for state institutions - according to the Budget Code of Ukraine (Articles 13, 23), budgetary institutions have restrictions on direct investments in high-risk assets.
- Lack of preferential tax treatment for R&D investments, which reduces the motivation of private investors.

On the other hand, the economic feasibility of creating a venture capital fund at the Science Park Academ.City is confirmed by a number of criteria:

- availability of a high-tech R&D base;
- demand for innovations from international investors;
- the state's readiness to support science in the format of public-private partnership.

The envisioned fund should:

- Focus strategically on **deep tech spin-offs from Ukrainian academic institutions**
- Utilize **alternative capital structures** (e.g., evergreen models, blended finance)
- Serve as a **trusted institutional interface** for mobilizing funding from government, the EU, and private LPs

However, it is necessary to adapt the legislation to European practices and introduce a special regulatory approach to such funds.

3. Technical Feasibility and roadmap

3.1. Stakeholder analysis and potential partners

The key stakeholder groups of the Venture Fund, operating within the deep tech innovation ecosystem of the Kyiv Academic University and Academ.City projects are presented in Table 3.

Table 3. Academ.City VC Fund Stakeholders

Stakeholder Group	**Examples**	**Role in the Ecosystem**
Government & Regulatory Bodies	Ministry of Education, Ministry of Digital Transformation, Ukrainian Startup Fund, National Academy of Sciences, IP Office	Policy-making, funding support, legal & tax regulations
Universities & Research Institutions	Kyiv-Academic University, Kyiv-Mohyla Academy, KNEU, 12 research institutes of the NAS of Ukraine,Taras Shevchenko National University, Kyiv Aviation Institute, Kyiv Medical University	Source of startups, IP & technology transfer
Academic Startups & Spin-offs	Digital, biotech, materials science startups	Target investment recipients
Existing Venture Capital & Angel Investors	G-Force, TA Ventures, Horizon Capital, SMRK, U.Ventures	Potential co-investors, funding partners

Accelerators & Incubators	KAU Center for Innovation, G-Force, SEEDplus International Entreprise Hub, Ukrainian Startup Fund, ISE Accelerator, TechUkraine, Radar Tech,	Prepares startups for investment, refer promising startups
Corporate Partners & Industry Players	APPAU, Ukrainian Cluster Alliance, Project Office Academ.City, Yuria-Farm, Plazma Tech	Potential corporate investors, market access, pilot testing
International Investment & Development Organizations	EBRD, IFC, USAID, Horizon Europe, EIF, EIT	Additional funding sources, policy recommendations
Legal & Financial Experts	Law firms, tax advisors, financial analysts	Help with fund structuring, compliance, and tax incentives

Stakeholder Influence-Interest Matrix (Figure 1) depicts the groups of stakeholders depending on their interest in the VC Fund activities and the ability to influence/support its success.

Depending on their attitude and influence, Academ.City VC should take specific actions in regard to stakeholders' groups:

Key Players - engage actively, including into the strategy co-creation process

- Hold regular meetings to keep them informed and involved
- Offer joint decision-making opportunities (e.g., advisory board)
- Provide customised incentives (e.g., co-investment structures, regulatory input)
- Ensure constant feedback loops to refine the fund's strategy

Potential Gamechangers - create interest and ensure strategic informing

- Organise policy briefings to showcase the economic impact of deep tech investments
- Offer customised engagement opportunities (e.g., partnerships in adjacent sectors)
- Highlight international success stories to make the case for involvement
- Keep them in the loop with periodic updates and strategic reports

Supporters and Advocates - benefit from their support

- Conduct focus groups & interviews to assess their needs
- Provide educational resources on VC funding and commercialisation

- Offer mentorship & capacity-building programs
- Encourage them to publicly support the initiative (e.g., success stories, testimonials)

Passive observers - keep informed

- Include them in press releases and newsletters
- Organise awareness events (e.g., innovation expos)
- Ensure transparent communication to avoid misinformation
- Provide on-demand engagement if they show interest later

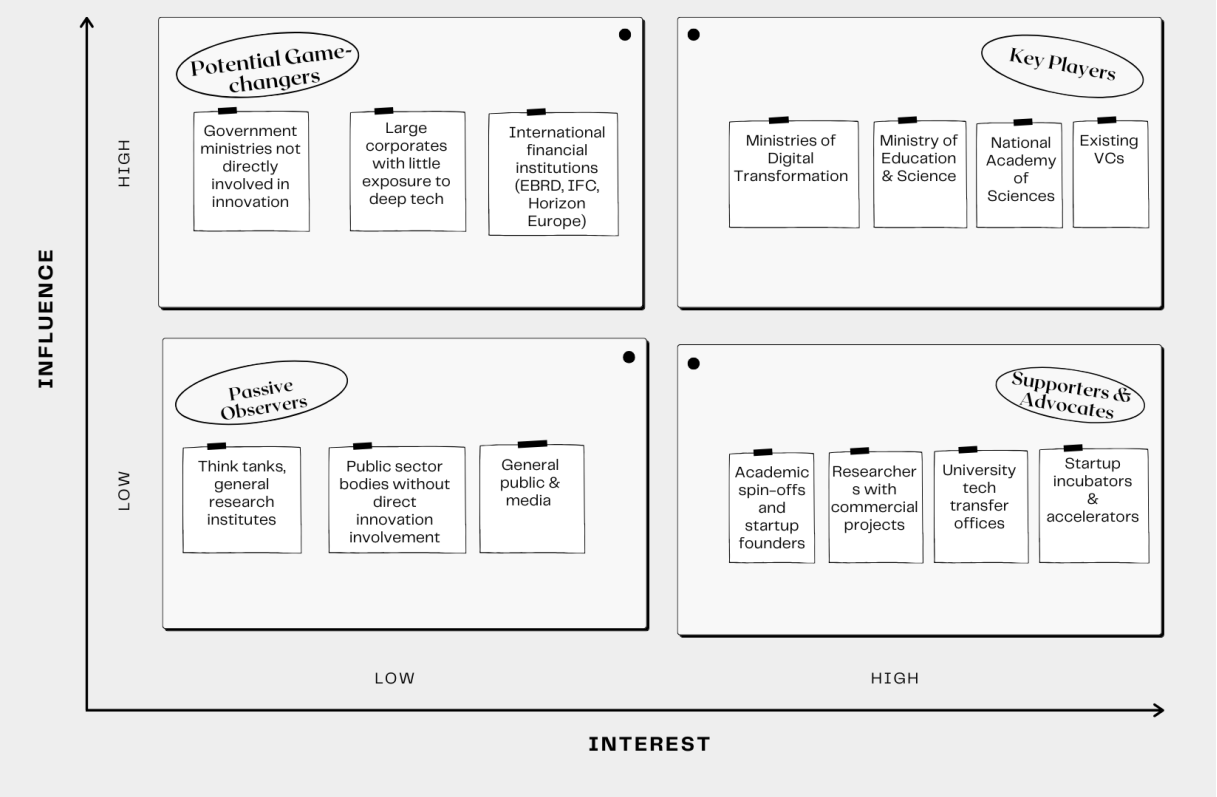

Figure 1. Stakeholder Influence-Interest Matrix

Some stakeholder groups, especially those with high influence, may demonstrate resistance to VC Fund activities and therefore such risks should be identified and mitigated. **Academic founders** might demonstrate fear of losing their IP and shares in the founded startups and therefore not eager to attract venture capital. VC, in turn, should offer clear IP arrangements and structured funding. **Private VC investors** may be uncertain about the ROI of the deep tech startups and not willing to invest in the VC. Academ.City VC might use de-risking strategies (e.g., grants) to mitigate this risk. To ensure relevant **government agencies** support the operations of the VC fund, it is essential that it demonstrates success stories and provides successful benchmarks abroad.

3.2. Alternative venture fund business models

Table 4. contains the description of the existing VC Fund models which proved efficient in the university-based innovation ecosystems globally.

Table 4. Alternative VC Fund Models

Model Overview	Successful Examples	Why Does It Works for Deep Tech?
Evergreen Venture Capital Fund		
Evergreen funds continuously reinvest returns rather than liquidating after a fixed investment cycle (e.g., 10 years). This long-term model suits deep tech startups, which often require extended R&D and commercialization timelines. The fund doesn't need to raise new capital frequently—it grows using reinvested exits.	**Khosla Ventures (USA)** – Focuses on high-risk, long-term innovations, particularly deep tech and AI. **Breakthrough Energy Ventures (USA, Bill Gates-led)** – An evergreen fund investing in climate tech and energy innovation, crucial for deep tech applications.	Eliminates short-term return pressure, allowing patient capital for complex R&D-driven startups. Reduces risk by ensuring continuous reinvestment and long-term support.
Corporate Venture Capital (CVC) Fund		
Funded by large corporations rather than traditional investors. Aims to secure strategic partnerships, not just financial returns. Corporates may provide R&D resources, market access, and pilot testing for startups.	**Intel Capital (USA)** – Invests in AI, semiconductors, and deep tech, aligning with Intel's core business. **Siemens Venture Capital (Germany)** – Focuses on industrial automation, healthcare, and deep tech. **BASF Venture Capital (Germany)** – Invests in biotech, materials science, and cleantech startups, leveraging its global network.	Corporate investors understand the technology and market potential better than traditional VCs. Provides deep tech startups with critical infrastructure and commercialization support.

University-Backed Venture Fund		
Created by universities & research institutions to commercialize scientific discoveries. Can be fully university-funded or structured as a public-private partnership. Often works alongside technology transfer offices (TTOs) to invest in spin-offs.	**Oxford Science Enterprises (UK) –** Backed by the University of Oxford, investing in biotech and AI. **Stanford-StartX Fund (USA) –** Supports Stanford spin-offs in AI, biotech, and cleantech. **UVC Partners (Germany) –** Affiliated with TU Munich, investing in deep tech and industrial startups.	Provides early-stage funding for high-potential university research. Ensures direct access to top scientific talent and emerging innovations. Universities retain equity, fueling further R&D.
Hybrid Public-Private Venture Fund		
Mixes government, private VC, and corporate investments to de-risk early-stage deep tech ventures. The government often takes first-loss positions, making investments less risky for private VCs. Aims to catalyze private investment in high-risk deep tech areas.	**European Innovation Council (EIC) Fund (EU) –** Provides blended financing (equity + grants) for deep tech startups across Europe. **Israel Innovation Authority (Israel) –** Public-private model co-investing in deep tech startups, leading to Israel's reputation as the "Startup Nation." **Bpifrance (France) –** The French government-backed VC supports biotech, AI, and industrial innovation through co-investments.	Reduces risk by sharing investment burden between government and private investors. Encourages private sector participation in high-risk, high-reward R&D. Provides long-term stability and financing options for capital-intensive projects.
Revenue-Based Financing (RBF) Fund		
Instead of traditional equity stakes, startups pay back investors as a percentage of their revenue over time. Works well for deep tech startups that expect long-term revenue growth but	**Indie.vc (USA)** – Pioneered the RBF model for startups wanting capital without losing equity. **Lighter Capital (USA)** – Offers revenue-based investments to tech startups.	Ideal for startups with a strong IP foundation but long commercialization cycles. Provides funding without forcing premature exits or dilution.

want to avoid equity dilution.		
Fund-of-Funds (FoF) Model		
Rather than investing directly in startups, the fund invests in other VC funds specializing in deep tech. Helps spread risk and allows investors to back a diverse portfolio of deep tech companies.	**European Investment Fund (EIF, EU) –** Invests in VC firms across Europe to strengthen deep tech financing. **British Business Bank (UK) –** Invests in venture firms that fund high-tech startups.	Allows risk diversification across multiple deep-tech investment funds. Provides liquidity to specialized VCs, encouraging more investment in deep tech.
Government-Led Venture Builder Model		
Instead of just providing capital, the fund actively creates and incubates startups based on national R&D priorities. Supports scientists and engineers in forming startups without prior business experience.	**Helmholtz Enterprise (Germany) –** Germany's largest research organization incubates deep tech startups from its research labs. **Fraunhofer Venture (Germany) –** Helps researchers spin out commercial deep tech startups. **DARPA & In-Q-Tel (USA) –** U.S. government-backed funds creating startups in defense and cybersecurity.	Directly transforms research into commercial ventures. Government-backed, reducing risk for follow-on investors.

3.3. Legal entity, fundraising and management structures

Table 5 below describes the suggested legal entity structure of the Acaem.City VC Fund as well as the key principles to follow for raising funding.

Table 5. Legal entity, fundraising and management structures

Legal form	The proposed model is a university or para-academic venture fund with mixed funding (public/private/international). The fund is created in the form of a closed-end collective investment institution (CII), according to the Law of Ukraine "On

	Collective Investment Institutions" No. 5080-VI. It is possible to establish in the form of a Corporate (joint-stock company) or a Unit fund.
Structure of the venture fund	The structure of the fund should be flexible in order to manage investments efficiently. The following model is recommended: 1. Investment committee: Consists of representatives of Academia City, experts in the field of venture capital and external consultants. 2. Administrative body: Responsible for the day-to-day management of the fund, decision-making and project monitoring. 3. Financial and Legal Department: Prepares and oversees the financial and legal aspects of investments.
Management	The fund is managed by a licensed asset management company (AMC), which is licensed by the NSSMC in accordance with the License Terms (Resolution No. 60 of 14.01.2014).
Reporting	It is proposed to create a reporting system to ensure transparency. This could include quarterly reports to investors, analytical reviews of project performance, and the ability of supervisory authorities to inspect the fund's activities. The suggested list of the reporting activities includes: - Audit of the fund annually; - Submission of reports to the NSSMC in accordance with Article 65 of the Law on CII; - Disclosure of information to investors in accordance with the requirements of the Law of Ukraine "On Securities and Stock Market".
Sources of financing of the fund	- Private investors (individuals and legal entities); - Strategic corporate partners; - International donors and technical assistance programs (Horizon Europe, EIC Fund, EIF, etc.); - University or government grants (no restrictions under the UA legislation, needs to be investigated for EU restrictions); - Institutional investors. - Legal regulations for ticket size: only for individuals: is the equivalent of 1500 minimum monthly wages - Minimal size of capital is the equivalent of 1250 minimum monthly wages.

	- Re-investing profits is one of the exclusive activities of collective investment under Ukrainian law; another possible option is the distribution of dividends, but both options should be discussed with the fund's founders.
Objects of investment	- Startups that have emerged on the basis of Academ.City and the Kyiv Academic University; - Innovative scientific developments that have undergone an initial assessment of commercial viability, protected IP, developed a minimum viable product (MVP), and demonstrated a clear market opportunity; - Pre-seed and seed stage startups and spin-off companies of research institutions; - In line with the ERC approach, the fund places no restrictions on startups after graduation and does not require them to remain within research institutions. This flexibility is intended to strengthen the broader innovation ecosystem by allowing founders to reintegrate with new experience and networks. - project portfolios, formed by e.g., Academ.City Project office and balanced in terms of time to market and risk/return ratio
Investment mechanisms	- Direct investment in corporate rights; - Loans with an option to convert to equity; - Co-financing with other funds; - Investments through acceleration programs; - Conditional investments (revenue-based financing).
Financial instruments and infrastructure	- Attraction through the issue of shares or investment certificates; - Registration and accounting of rights through depository institutions; - Use of open data platforms and blockchain registries for transparency of investment decisions.
Risk management	- Portfolio diversification strategy; - Establishment of an investment committee with representatives of science, business and law; - Ensuring investor rights in accordance with AIFMD requirements (similar control model).
Exit from the investment	- Sale of a share to a strategic investor; - Initial public offering (IPO);

	- Merger with other companies; - Buy-back by a startup.

3.4. Financial model and performance KPIs

Establishing a venture capital fund has significant economic potential, and to justify its economic feasibility, it is necessary to prepare forecasts of financial flows. It is recommended that a financial model be prepared that includes:

- Expected investments: Analysis of the number of potential investors, the amount of investment amounts, the investment period, and the possible level of return.
- Projected expenses: Costs of launching the fund, administrative costs of management, operating costs.
- Risk assessment: Analysis of the main risks associated with high-risk investments, as well as methods of minimizing them.

It is planned to attract at least 5-10 large investors (including international ones), which will allow the fund to gain a critical mass of capital to provide financing for research and innovation projects worth at least UAH 50-100 million in the first year.

Several key indicators can be used to assess the effectiveness of a fund, including:

- Number of successful startups that received funding.
- The level of return for investors: With the right strategy and management, the fund is expected to achieve a return of up to 15% per annum.
- Impact on the economy: The fund is expected to create new jobs and innovative technologies, which will have a positive impact on the development of Ukraine's technology industries.

An analysis of the experience of other countries in creating venture capital funds for science and technology startups shows that there are certain models that can be adapted to Ukrainian realities.

The UK has the British Business Bank, which supports small and medium-sized businesses through venture capital funds. The UK legislation allows investing in startups through the Enterprise Investment Scheme (EIS) and Seed Enterprise Investment Scheme (SEIS), which provides tax benefits to investors.

To adapt such models to Ukraine, it is necessary to:

- Develop a mechanism for providing tax incentives for investors investing in science park-based startups.
- Introduce national programs similar to those in the UK to support small and medium-sized businesses.

Germany has several funds that finance innovative startups. The main instruments are the KfW Bank and the state program High-Tech Gründerfonds (HTGF), which finance innovative projects at the early stages of development. These programs also support the creation of venture capital funds through tax incentives and government guarantees.

It is recommended to introduce a model where the fund can receive government guarantees or partial government subsidies to cover risks in the early stages of startup development.

3.5. Roadmap

The VC Fund establishment includes three steps (see Figure 2):

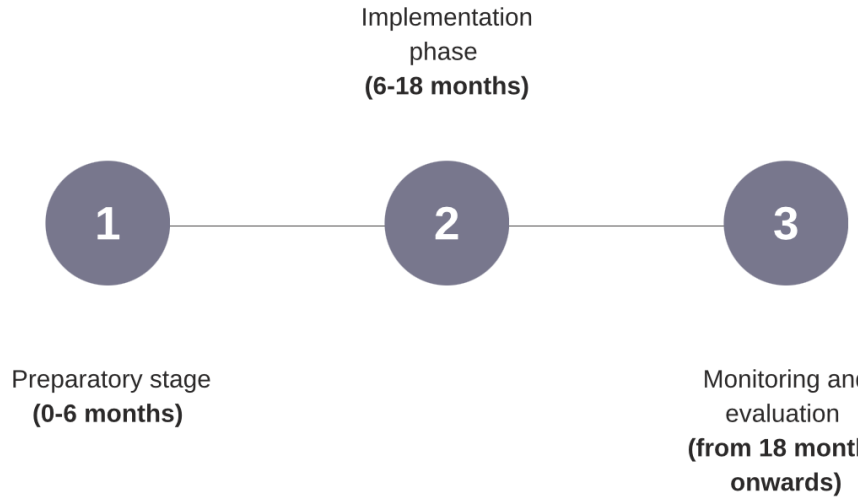

Figure 2. VC Fund Roadmap

1. Preparatory stage (0-6 months)

- Legal framework analysis and final definition of the legal model of VC
- Build trust with academic community: Develop transparent IP agreements, educational programs, and founder-friendly spin-out frameworks, engage stakeholders
- Raising funds: initial capital form private investors
- Creating the organizational structure of the fund: Determining the governing bodies and procedures for managing the fund.

2. Implementation phase (6-18 months)

- Launch of the venture fund: Establishment of the fund's legal entity, registration with the state authorities.

- Investing in startups: Searching for and evaluating startups for financing, signing agreements with the first set of invested projects. The exact size of funding and the amount of investment per startup will depend on the level of capitalisation of the startup and the targeted level of fund portfolio diversification set at fund launch.
- Raising funds: Search for combined models for state and international funding and creating partnerships.

3. Monitoring and evaluation (from 18 months onwards)

- Performance evaluation: Regular evaluation of the fund's performance, analysis of results and adjustment of the investment strategy.
- Develop a customized deep tech due diligence methodology: Standard VC tools are insufficient - scientific validation, IP defensibility, and time-to-market metrics must be adapted.

In addition to steps, directly related with the VC legal entity establishment, it is necessary to address the following aspects of the external environment improvement and ecosystem building:

1. Develop a specialized regulatory model for science park venture capital funds: For a venture fund to be successful, it is important to develop a new model of venture capital investment within academic institutions that takes into account the specifics of scientific startups, the length of time it takes to bring innovations to market, and the high level of risk.

2. Involvement of state and international partners: To ensure the success of the fund, it is recommended to actively engage government grants, international funding programs such as Horizon Europe, and form partnerships with international venture capital funds.

3. Use of tax incentives for investors: In order to attract private capital and stimulate investment in high-risk science and technology projects, it is necessary to consider the possibility of introducing tax incentives for investors investing in innovations in Ukraine.

4. Create training programs and accelerators for innovation: In addition to the fund itself, it is recommended to create accelerators, business incubators and educational programs for the development of startups that can be financed by the fund, thus ensuring a full cycle of commercialization of scientific developments.

3.6. Technical Feasibility and Roadmap Conclusions

The technical feasibility of establishing a venture capital fund anchored at Kyiv Academic University and Academ.City is supported by a comprehensive analysis of stakeholder alignment, viable business models, legal structures, and fund management frameworks. The study identifies a clear opportunity

to develop a fund tailored to the needs of deep-tech and academic spin-offs, leveraging Ukraine's scientific strengths and emerging investment interest in high-impact sectors.

Multiple international models—ranging from evergreen funds to hybrid public-private structures—offer adaptable blueprints for implementation. Among these, a university-anchored venture fund with mixed capital (public/private/international) stands out as the most strategic and context-appropriate solution.

The roadmap proposes a phased approach:

- A **preparatory phase** focused on legal setup, stakeholder engagement, and initial fundraising.
- An **implementation phase** marked by the launch of the fund, early-stage investments, and the formation of operational partnerships.
- A **monitoring and evaluation phase** designed to refine strategy, measure impact, and secure long-term sustainability.

Key enabling factors include transparent IP and governance frameworks, founder-focused policies, and the active involvement of local and international partners. Additionally, external measures such as the creation of a supportive legal and regulatory environment—including tax incentives and a regulatory sandbox—will be critical for success.

Taken together, the findings confirm that the proposed venture fund is both technically viable and strategically aligned with Ukraine's innovation priorities. It offers a compelling mechanism to bridge the gap between research and market, and to activate the country's academic potential in service of long-term economic resilience.

4. Appendices

4.1. Reference list

1. The Tax Code of Ukraine dated 02.12.2010 No. 2755-VI (as amended as of April 2025), in particular Section IV, Article 166.
2. Civil Code of Ukraine No. 435-IV of January 16, 2003.
3. Commercial Code of Ukraine of January 16, 2003, No. 436-IV.
4. The Law of Ukraine "On Joint Investment Institutions" of 05.07.2012 No. 5080-VI.
5. The Law of Ukraine "On Securities and Stock Market" of 23.02.2006 No. 3480-IV.
6. The Law of Ukraine "On State Regulation of the Securities Market in Ukraine" of 30.10.1996 No. 448/96-BP.
7. The Law of Ukraine "On Scientific and Scientific-Technical Activities" of 26.11.2015 No. 848-VIII.
8. Resolution of the National Securities and Stock Market Commission No. 60 of January 14, 2014 "On Approval of the License Terms for Professional Activity in the Securities Market".
9. EU Directive 2011/61/EU (AIFMD - Alternative Investment Fund Managers Directive).
10. Regulation (EU) No. 345/2013 of the European Parliament and of the Council of April 17, 2013 on European venture capital funds (EuVECA).
11. Regulation (EU) No 346/2013 on European social investment funds.
12. OECD Policy Framework for Investment (2021).
13. European Charter for Small Enterprises, Brussels, 2000.
14. The Deep Tech Investment Paradox: a call to redesign the investor model
15. 2021: the year of Deep Tech.
16. NV Business (2023) Venture investments in 2022: what the war in Ukraine changed. https://biz.nv.ua/ukr/tech/venchurni-investiciji-u-2022-to-zminila-viyna-v-ukrajini-novini-ukrajini-50327524.html
17. Forbes Ukraine (2024) The decline in investment in Ukrainian startups has slowed: signs of recovery appear. https://forbes.ua/news/padinnya-investitsiy-v-ukrainski-startapi-spovilnilosya-zyavilisya-oznaki-vidnovlennya-doslidzhennya-aventures-capital-04072024-22207
18. Dnipro Regional Development Agency (2024) Analysis of the development of Ukraine's technology sector 2024. https://dia.dp.gov.ua/analiz-rozvitku-texnologichnogo-sektoru-ukra%D1%97ni-2024
19. Dnipro Regional Development Agency (2023) Venture investments in Ukraine fell by 74% in 2022. https://dia.dp.gov.ua/venchurni-investici%D1%97-v-ukra%D1%97ni-znizilisya-na-74-u-2022-roci
20. Assets (2024) Venture capital in Ukraine: which sectors have the greatest potential. https://www.assets.com.ua/posts-afg/venchurniy-kapital-v-ukrayini-yaki-sektori-mayut-naybilshiy-potencial
21. InVenture (2024) Analysis of the development of Ukraine's technology sector 2024. https://inventure.com.ua/uk/analytics/investments/analiz-rozvitku-tehnologichnogo-sektoru-ukrayini-2024

22. AIN.UA (2024) From startup boom to wartime challenges: how venture investments in Ukraine changed over 10 years. https://ain.ua/2024/09/28/vid-startap-bumu-do-viklikiv-viini-iak-zminilisia-vencurni-investiciyi-v-ukrayini-za-10-rokiv-doslidzennia
23. PSM7 (2023) How the war affected Ukraine's investment ecosystem: top 13 venture funds. https://psm7.com/uk/analytics/kak-vojna-povliyala-na-investicionnuyu-ekosistemu-ukrainy-top-13-venchurnyx-fondov.html
24. Mind.ua (2024) Surviving despite the war: how the startup ecosystem is building resilience. https://mind.ua/openmind/20245943-vizhiti-popri-vijnu-yak-ekosistema-startapiv-naroshchue-rezilentnist
25. Journal "Entrepreneurship and Trade" (2023) Article on the development of venture investing in Ukraine. https://journals-lute.lviv.ua/index.php/pidpr-torgi/article/view/1483
26. Assets (2024) Prospects for the development of venture investment in Ukraine: opportunities and challenges. https://www.assets.com.ua/posts-afg/perspektivi-rozvitku-venchurnogo-investuvannya-v-ukrayini-shansi-ta-vikliki
27. AVentures Dealbook of Ukraine: https://www.slideshare.net/slideshow/dealbook-of-ukraine-2025-edition-aventures-capital-9d27/278843661?utm_source=chatgpt.com
28. "Half of all defense investments in Ukrainian startups are undisclosed: what is happening in Ukrainian venture – results of the fourth quarter and the whole of 2024": https://forbes.ua/innovations/polovina-vsikh-defense-investitsiy-v-ukrainski-startapi-nepublichni-shcho-vidbuvaetsya-v-ukrainskomu-venchuri-rezultati-chetvertogo-kvartalu-y-usogo-2024-go-doslidzhennya-forbes-ukraine-29122024-25916
29. TechCrunch: https://techcrunch.com/2023/04/12/ukrainian-startup-zeely-raises-1m-for-smb-growth-app-aimed-at-us-uk-brazil-mexico/
30. Ukrainian Investment Framework https://enlargement.ec.europa.eu/european-neighbourhood-policy/countries-region/ukraine/ukraine-investment-framework_en?utm_source=chatgpt.com
31. McKinsey Global Private Markets Report 2025: https://www.mckinsey.com.br/industries/private-capital/our-insights/global-private-markets-report?utm_source=chatgpt.com
32. StartUS Insights https://www.startus-insights.com/innovators-guide/deep-tech-trends/
33. European Comission 2025 https://ec.europa.eu/commission/presscorner/detail/en/mex_25_728

4.2. VC Taxation

For taxation issues, it is necessary to consider separately a venture fund as a collective investment institution (CII) and its participants (investors).

1. Venture funds

A corporate venture fund is an independent legal entity that belongs to the category of collective investment institutions.

The details of the corporate income tax for collective investment institutions are determined in Article 141.6 of the Tax Code of Ukraine (TCU).

In accordance with Article 141.6.1, the following joint investment funds are exempt from corporate income tax:

- funds contributed by the founders of the corporate fund,
- funds and other assets raised from participants of the collective investment institution,
- income received from transactions with the assets of the collective investment institution,
- income accrued on the assets of the collective investment institution,
- other income received from the activities of the collective investment institution (interest on loans, rent (lease) payments, royalties, etc.)

Assets of a collective investment institution are defined by the TCU as follows:

> a set of property, corporate rights, real estate (including an indivisible object of unfinished construction/future real estate and/or a divisible object of unfinished construction), property rights, claims and other assets formed (paid for) at the expense of joint investment funds, as provided for by the laws and regulations of the National Securities and Stock Market Commission.

2. CII participants

Income of CII investors (participants and founders) can be:

- investment profit of a CII participant (income of an investor of a collective investment institution, received from alienation of CII securities, and represented by the positive difference between the sale price of the securities portfolio and the documented costs of its acquisition);
- dividends of a CII (payments paid on securities of collective investment institutions via distribution of investment fund's profit).

In accordance with the current legislation, dividends may be paid by closed-end CII only, and when it is provided for by the CII regulation.

Income of CII participants belongs to the category of passive income. According to Article 14.1.268 of the TCU, passive income includes, in particular:

- income paid by the company that manages the assets of the collective investment institution on the placed assets in accordance with the law, including income paid (accrued) by the issuer upon redemption (repayment) of securities of the collective investment institution, which is defined as the difference between the proceeds received from the redemption and the value of the funds or property paid by the taxpayer to the seller (including the issuer) due to the acquisition of such securities as compensation for their value;
- investment income, including income from transactions with government securities and debt liabilities of the National Bank of Ukraine, including exchange rate differences;
- dividends.

Taxes for CII investors depend on their legal status:

(A) Residents

1. For an individual investor - a resident:

- investment profit from transactions with securities is subject to 18% personal income tax (Article 167.5.1 of the TCU) and 5% military duty.
- Article 170.2.2 of the TCU regarding PIT: Investment profit is calculated as the positive difference between the income received by the taxpayer from the sale of a separate investment asset, including exchange rate differences (if any), and its value, determined as the value of the documented expenses for the acquisition of such asset or the value of the investment asset declared by the person as an object of declaration under the one-time (special) voluntary declaration procedure in accordance with subsection 9-4 of section XX of this Code, taking into account the requirements of subparagraphs 170.2.4-170.2.6 of this paragraph (except for transactions with derivatives);
- dividends paid by a collective investment institution (Article 167.5.4 of the TCU) are subject to 9% personal income tax and 5% military.

2. For an investor - a resident legal entity:

- profit from securities transactions is included in the corporate income tax base and taxed at 18%;
- dividends paid by a collective investment institution are included in the corporate income tax base and taxed at 18%

(B) Non-residents

3. For an individual investor - a non-resident:

- investment profit from transactions with securities is subject to personal income tax at 18% (unless otherwise provided by an international agreement) and 5% military duty;
- dividends paid by a collective investment institution are subject to 9% personal income tax (unless otherwise provided by an international agreement) and 5% military duty.

4. For an investor - a non-resident legal entity:

- profit from securities transactions performed by the taxpayer is taxed at the rate of 15% (unless otherwise provided by an international agreement);
- dividends are taxed at the rate of 15% (unless otherwise provided by an international agreement).

When paying dividends to individual investors, as well as income to non-residents, a corporate investment fund or an asset management company of a mutual investment fund acts as a tax agent - calculates and pays the relevant amounts of taxes and fees to the budget, and submits reports to the government authorities.

Study 2. UiT The Arctic University of Norway

1. Objective

The objective of the feasibility study for establishing a SEED Fund at the University of Tromsø (UiT) is to evaluate the institutional, legal, financial, and strategic conditions necessary to develop a robust and sustainable funding mechanism that supports student entrepreneurship and innovation. The study seeks to determine whether a SEED Fund can effectively accelerate the commercialization of student-driven research and business ideas, enhance interdisciplinary collaboration, and cultivate a thriving entrepreneurial ecosystem aligned with UiT's innovation strategy. It aims to identify the optimal governance model, assess legal and regulatory compliance under Norwegian and EU frameworks, and explore existing and potential funding streams including public grants, private investments, and university-backed initiatives. Furthermore, it analyzes the institutional capacity to support early-stage start-ups through mentoring, infrastructure, and administrative coordination—particularly through synergies with Norinnova and the Innovation HUB at UiT. By integrating stakeholder feedback, assessing market gaps, and piloting targeted initiatives, the study ultimately intends to provide a strategic roadmap for establishing a SEED Fund that fosters student engagement, drives regional economic development, and strengthens UiT's role as a catalyst for innovation in Northern Norway.

2. Legal considerations

2.1. Ownership of inventions

Under Norwegian law, students own their inventions unless otherwise agreed. This allows them to commercialize their intellectual property through start-ups. Students can commercialize their inventions through start-ups while receiving support from UiT, provided that state aid regulations are followed. UiT's policies must align with the General Data Protection Regulation (GDPR) when handling student projects and research data.

2.2. State Aid Regulations

Any financial support from UiT must comply with EU and Norwegian state aid regulations, ensuring fair competition. Key provisions include:

1. De Minimis Aid: A single company can receive a maximum of €200,000 in state aid over a three-year period.
2. General Block Exemption Regulation (GBER): Start-ups receiving support must comply with Article 22 of Commission Regulation (EU) No 651/2014.
3. Public Procurement & Competition Laws: Any contractual agreements related to SEED Fund must align with Norwegian public procurement regulations and competition laws. Compliance with the Norwegian Competition Act (Konkurranseloven) ensures that support does not create unfair advantages for UiT-affiliated start-ups.

4. Student start-ups must register with Brønnøysund Register Centre and adhere to Norwegian tax regulations.
5. Non-financial support: Access to free or discounted offices, lab spaces as well as mentoring and training programmes, is permitted under Article 22 of the General Block Exemption Regulation (Commission Regulation (EU) No 651/2014).

2.3. Relevant Norwegian Laws & Regulations

1. The Patent Act (Patents Act, LOV-1967-12-15-9)

This law regulates the rights related to patents in Norway, including the protection of inventions, the application process, and the rights of inventors. For students who create inventions or start businesses, the law primarily addresses ownership, employer rights, and the process of obtaining a patent.

In general, the inventor owns the rights to their invention unless an agreement states otherwise. This means that students who develop an invention independently, without any formal employer or university involvement, usually retain full ownership. However, if a student is working on a project as part of an employment contract, such as an internship or a university research project funded by an external company, the employer may have rights to the invention under Section 39 of the act. Universities may also have policies that grant them ownership of inventions developed using their resources or as part of research programs, though this depends on internal agreements and Norway's Act on Employee Inventions.

If a student starts a business based on an invention, it is essential to ensure clear patent ownership before seeking investment or commercialization. When multiple parties contribute to the invention, such as co-founders, universities, or funding organizations, patent rights should be formally agreed upon in advance to prevent future disputes.

To obtain a patent, students must apply to the Norwegian Industrial Property Office (Patentstyret) and ensure that their invention meets the requirements of novelty, inventive step, and industrial applicability. Several innovation programs in Norway, such as Innovation Norway and the Research Council of Norway, offer funding and support to help students protect and commercialize their inventions.

2. The Employee Invention Act (LOV-2003-04-04-21)

This law regulates the rights to inventions made by employees (including PhD's) while working for a company or institution. It primarily applies to employees in both the private and public sectors, including universities and research institutions. The law ensures that when an employee creates an invention as part of their job, the employer may have certain rights to it, depending on how closely the invention is related to the employee's work tasks.

For students, the law is relevant when they are working on research projects or employed by a university or company. If a student creates an invention while working under an employment

contract, the employer may have the right to claim ownership of it, especially if the invention is a direct result of their assigned work. However, if a student develops an invention independently, without direct influence from their job or university employment, they typically retain full ownership.

The law also includes provisions for compensation, meaning that if an employer takes over an employee's invention, the employee may be entitled to financial compensation. This applies if the invention holds significant value. In academic settings, the law can affect university researchers, including PhD students, depending on whether their work is considered employment based.

For students launching startups, the main factor is whether their inventions were created within the scope of their employment or university research. If they were developed entirely on their own, outside of any employment relationship, students usually keep full rights to their ideas.

3. Norwegian Competition Act (Konkurranseloven) (LOV-2004-03-05-12)

This law is designed to promote fair competition in Norway and prevent anti-competitive practices. For students working on inventions and startups, the law is particularly relevant in areas such as market dominance, agreements between businesses, and mergers that could limit competition.

If a student develops an invention or starts a business, they must ensure that their activities comply with competition regulations. This means they cannot enter into agreements with other businesses that would unfairly restrict competition, such as price-fixing, market-sharing, or limiting production in a way that harms consumers. The law also prevents businesses from abusing a dominant market position, for example, by setting unfair prices or preventing new competitors from entering the market.

For startups, this law ensures they have a fair chance to compete against established businesses. If a large company tries to push a student-led startup out of the market through unfair practices, the Norwegian Competition Authority (Konkurransetilsynet) can step in to investigate and take action. The law also applies to mergers and acquisitions, meaning that if a startup grows and is acquired by a larger company, the authorities may review the transaction to ensure it does not harm competition.

4. The Public Procurement Act (LOV-2016-06-17-73)

This law regulates how public entities, such as universities and research institutions, purchase goods and services. When it comes to students' inventions and startups, this law can affect how these institutions engage with and support student-led innovations. If a university wants to buy or invest in a product or service developed by students, it must follow fair and transparent competition rules. This means that the university cannot simply favor its own students' startups without offering the opportunity to others in the market.

For students who create inventions or start businesses, this law can be both a challenge and an opportunity. On one hand, it ensures that public institutions do not unfairly prioritize certain companies, even if they were founded by students. On the other hand, it means that student startups

have a chance to compete on equal terms with more established businesses when bidding for contracts. In practice, universities and research institutions must handle student innovations carefully, ensuring that any financial support, contracts, or purchases comply with procurement regulations.

5. The Universities and University Colleges Act (LOV-2005-04-01-15)

This law includes provisions that impact students' inventions and startups. Generally, students in Norway own the rights to their own inventions, unlike university employees who may have to transfer intellectual property rights to the institution. This means that if a student develops an idea, creates an invention, or starts a business while studying, they typically retain full ownership and control over it.

However, there are some exceptions. If a student participates in a research project that is funded by the university or external partners, there may be agreements in place that affect ownership. In such cases, the university or the funding organization might have a claim to intellectual property rights, depending on the terms of the funding agreement.

Additionally, if a student collaborates closely with university staff or uses significant university resources—such as specialized equipment, research labs, or funding—ownership rights could be subject to negotiation. Some universities have innovation support programs that offer guidance and resources, but these may come with conditions regarding intellectual property.

In general, Norwegian law supports student entrepreneurship and innovation by ensuring that, in most cases, students are free to develop and commercialize their ideas without automatic claims from their institutions.

3. Objectives of the SEED Fund

The SEED Fund at UiT would serve as a financial accelerator for student entrepreneurship. Key objectives include:

1. Providing access to funding and investment opportunities for student-founded start-ups.
2. Facilitating mentorship programs, networking events, and business development training.
3. Offering co-working spaces, research labs, and technology support.
4. Ensuring alignment with regional and national innovation strategies, such as Norway's Research and Innovation Strategy for Smart Specialisation.
5. Encouraging interdisciplinary collaboration across faculties.
6. Promoting entrepreneurship and innovation across UiT.
7. Giving the possibilities for students to improve their practical personal skills.

3.1. Metrics for Success

Success metrics for the SEED Fund depend on its structure and objectives. Key indicators include:

1. Financial Metrics: Return on investment (ROI) for private investors, total funds disbursed, and follow-up funding secured by start-ups.
2. Operational Metrics: Number of start-ups funded, number of applications, success rate of businesses launched, number of students engaged in SEED Fund activities.
3. Impact Metrics: Job creation, societal impact (including contribution to sustainability goals), and commercialization of research-based innovations.

3.2. Organizational Structure, Ownership & Governance

1. Governance of the SEED Fund depends on its funding model:
   - 1.1. University-Financed Model: UiT directly finances the SEED fund, prioritizing social impact and long-term innovation - a board including university representatives, industry experts, and student entrepreneurs will oversee operations.
   - 1.2. Private Investment Model: Private investors fund the HUB, focusing on financial returns and high-growth potential businesses.
   - 1.3. Hybrid Model: A mix of public and private financing, balancing impact-driven and profit-oriented goals.
2. Governance responsibilities include:
   - 2.1. An advisory board consisting of UiT representatives, industry experts, and investors.
   - 2.2. A management team overseeing daily operations, fundraising, and mentorship programs.
   - 2.3. A compliance team ensuring adherence to Norwegian and EU regulations.
   - 2.4. Communication and marketing team making sure that the information about the SEED fund reaches as many students as possible.

3.3. Fund Size and Financial Structure

The fund size will depend on available capital and target objectives. The main challenge regarding funding is that there are very few sources that would support the early-stage investments of student's startups. Key considerations include initial funding sources:

1. UiT - UiT Talent Startup Grants - Provides early-phase funding of up to NOK 30,000 per project
2. Innovation Norway - (STUD-ENT Grant) Offers up to 1 M NOK per project/startup. Since it's a grant, Innovation Norway does not have any shares in the startup.

3. Grants - Research Council of Norway: Grants for innovation-driven research projects; EIC Accelerator (Horizon Europe): EU funding for high-potential start-ups;
4. Private Investors - Corporate Sponsorships: Companies investing in UiT's entrepreneurial ecosystem; Venture Capital Funds: Investors seeking scalable start-ups; Hybrid Model: UiT-managed fund with external co-investors.
5. Annual Budget Allocation: Estimating costs for infrastructure, personnel, and student support.
6. Revenue Streams: Government grants, equity investments, membership fees, and industry partnerships.

3.4. Stakeholders

Key stakeholders in establishing the SEED Fund include:

1. UiT Leadership & Administration: Policy formulation and institutional support. Innovation HUB – newly established HUB at UiT and CloudEARTHi initiative.
2. Norrinova – with already existing students incubator, business accelerator, mentoring programs, partnerships and funding support. 30% of Norrinova's shares are owned by the UiT.
3. Norwegian Government & Innovation Norway: Early-stage funding and regulatory compliance.
4. Private Investors & Venture Capitalists: Financial support and mentorship. Norrinova already collaborate with the number of local companies that also provide different mentors to guide students at UiT.
5. Industry Partners & Research Institutions: Collaboration and knowledge sharing.
6. Student Entrepreneurs & Alumni Networks: Primary beneficiaries and peer mentors.

3.5. Current Funding Sources and Fundraising Opportunities

1. Existing Student-Focused Funding Programs:

1.1. Arctic Ignite by Norinnova: Norinnova has developed a regional program to support young entrepreneurs in Northern Norway. Over six months, participants engage in both in-person and online sessions, gaining foundational knowledge on starting and growing a business. The program also provides access to expert panels, offering mentorship and networking opportunities. It culminates in Ignite Day, a pitching event where startups present their ideas to a jury and audience for a chance to receive funding from Norinnova. The program primarily targets young entrepreneurs, including UiT student entrepreneurs.

1.2. STUD-ENT by Innovation Norway: Innovation Norway administers an annual national grant designed to support entrepreneurial students in transforming their ideas into viable businesses. Each project can receive up to 1 million NOK in funding.

To qualify, the lead student must be in the final year of their master's program or within a year after graduation.

1.3. UiT Start-Up Grant (UiT Talent): The UiT Talent-funded startup grant is designed to support students in the initial stages of developing their business concepts. Its primary aim is to foster innovation by providing financial assistance for specific activities and initiatives outlined by applicants. These typically include idea development, prototyping, research, and market validation. The funding cannot be used for salaries and offers up to 30,000 NOK per project. Here are the specific guidelines.

The overarching objective is to ensure that publicly funded research benefits society by facilitating knowledge dissemination and practical implementation. As part of UiT Talent Innovation, this initiative aligns with the university's action plan for innovation and entrepreneurship. Since 2023, it has also included innovation grants for master's and PhD students.

UiT has long prioritized financial support and mentorship for entrepreneurial students. One example is Entreprenørskapsfondet ved UiT, a small-scale funding initiative similar to UiT Talent, which has played a key role in fostering student entrepreneurship.

1.4. Student-IX by Norinnova: Student IX is a free incubator program available to students across Northern Norway who are looking to start their own business or grow an existing one. Provided by Norinnova, it serves as a hub where young entrepreneurs from any university or college in the region can collaborate and build connections. The program offers a range of resources, including idea evaluation and consulting, workshops and events, office space, networking opportunities, and access to funding.

2. Potential New Funding Sources

2.1. EU Horizon Europe Grants: Funding for research-driven innovations.
2.2. Norwegian Research Council Grants: Support for technology transfer and commercialization.
2.3. Corporate Sponsorships: Partnership with industries aligned with UiT's innovation goals.
2.4. Crowdfunding & Alumni Networks: Engaging former UiT students as investors and mentors.

4. Next Steps

1. Stakeholder Engagement

Engaging key stakeholders is critical to the success of the funding mechanism at UiT. By involving leadership, students, and industry partners, we can ensure a well-rounded and effective initiative that aligns with institutional priorities and market needs.

4.1.1. Consultation with UiT leadership:

4.1.1.1. Establish a working group with representatives from the university administration, faculty members, research units and representatives from the private sector such as Norrinova. This needs to be specified, which faculties and research units should be represented that are the most suitable in regard to the innovation. This could be done by the interviews with the representatives of Innovation HUB at UiT.

4.1.1.2. Conduct meetings with UiT leadership (chancellor, dean, person in charge of innovation and entrepreneurship topics at UiT etc) to align the funding mechanism with UiT's strategic goals for innovation and entrepreneurship.

4.1.1.3. Secure institutional buy-in by demonstrating the benefits of a SEED Fund, including increased student engagement, commercialization of research, and economic impact.

4.1.1.4. Explore potential university co-funding opportunities and administrative support structures, together with support from Norrinova.

4.1.2. Students: Interviews and needs assessment

4.1.2.1. Organize focus groups and one-on-one interviews with students to understand their needs, challenges, and expectations regarding startup funding and improving their practical personal skills.

4.1.2.2. Assess gaps in existing resources such as mentorship, networking opportunities, and early-stage funding.

4.1.2.3. Develop a feedback loop to continuously refine the funding mechanism based on student input.

4.1.2.4. Promote awareness of the fund through workshops, hackathons, and campus-wide entrepreneurship events.

4.1.3. Industry partners and investors

4.1.3.1. Engage local and national businesses, venture capital firms, and angel investors to explore co-funding and sponsorship opportunities – this will require reaching out to various companies. This process can be supported by Norrinova which has established a wide network with local companies.

4.1.3.2. Develop partnerships with industry leaders who can provide mentorship, internships, and potential investment in student-led startups.

4.1.3.3. Establish an advisory board comprising industry professionals and investors to provide strategic guidance and oversight.

4.1.3.4. Organize networking events that connect students with potential investors and corporate partners.

2. Regulatory Review

Ensuring compliance with Norwegian and EU regulations is essential for the legitimacy and sustainability of the SEED Fund.

4.2.1. Conduct a legal review in collaboration with UiT's legal department to ensure adherence to Norwegian financial regulations and university policies.

4.2.2. Ensure compliance with EU funding and state aid regulations, particularly concerning grants and equity-based investments.

4.2.3. Establish transparent governance and financial reporting mechanisms to maintain accountability and regulatory compliance.

4.2.4. Develop risk mitigation strategies to address potential legal and financial challenges.

3. Pilot Phase

A small-scale pilot program will allow for testing the effectiveness of the SEED Fund before full-scale implementation. This is already happening to a certain extent with the Innovation HUB that is being developed at UiT. Coordination of activities between the Innovation HUB, SEED Fund and Norrinova, will be crucial in the pilot phase to get the best outcome without overlapping activities, instead combining the inputs from collective work.

4.3.1. Create a communication and marketing strategy which will allow to reach more students across different departments.

4.3.2. Launch an initial funding round with a limited number of student-led projects to assess demand and operational feasibility.

4.3.3. Provide structured support, including mentorship, workshops, and networking opportunities, to pilot participants - mostly Norrinova is going to oversee that.

4.3.4. Implement a rigorous evaluation framework to measure success, including key performance indicators (KPIs) such as the number of students that applied, the number of startups being funded, startup survival rates, funding leverage, and student satisfaction.

4.3.5. Use insights from the pilot phase to refine the funding structure, selection criteria, and support services.

4.3.6. Develop a roadmap for scaling the initiative based on pilot performance and stakeholder feedback.

4. Long-term Strategy

Sustainability and scalability are critical to the long-term success of the SEED Fund.

4.4.1. Diversify funding sources by securing contributions from the university, government grants and industry partnerships (private companies).

4.4.2. Explore the possibility of establishing an endowment fund to provide continuous support for student entrepreneurship.

4.4.3. Strengthen connections with venture capital firms and innovation hubs to create a seamless pathway for startups to access further funding beyond the SEED Fund.

4.4.4. Foster a culture of entrepreneurship by integrating innovation-focused programs into UiT's academic curriculum.

4.4.5. Continuously assess and adapt the funding model to align with evolving industry trends and student needs.

4.4.6. Creation of a comprehensive and effective marketing strategy to reach and attract a higher number of students.

5. Key Recommendations

To effectively launch and sustain a SEED Fund that supports student entrepreneurship and innovation at UiT, the following actions are recommended:

1. Define a Clear Governance Structure

5.1.1. Establish a hybrid governance model combining university, industry, and investor representatives to ensure balanced oversight.

5.1.2. Form an advisory board including UiT leadership, UiT's Innovation HUB representatives, Norinnova representatives, CloudEARTHi representative, private investors, and student entrepreneurs to provide strategic direction and mentorship oversight.

5.1.3. Create a dedicated management and compliance team to oversee fund administration, regulatory adherence, and reporting.

2. Align Legal Frameworks and Internal Policies

5.2.1. Ensure full legal compliance with Norwegian and EU regulations, including state aid rules, GDPR, and procurement laws.

5.2.2. Clearly define IP ownership rules for students using UiT's resources, aligning with the Norwegian Patent and Employee Invention Acts.

5.2.3. Collaborate with UiT's legal department to establish standardized agreements and risk mitigation protocols for supported startups.

3. Coordinate with Existing Innovation Infrastructure

5.3.1. Integrate the SEED Fund's operations with the Innovation HUB and Norinnova to avoid duplication and promote synergy.

5.3.2. Utilize Norinnova's mentoring network, accelerator programs, and existing student incubator (Student-IX) to support funded projects.

5.3.3. Involve faculty and departments with strong innovation potential to provide academic backing and domain-specific guidance.

4. Strengthen Stakeholder Engagement

5.4.1. Conduct structured interviews with students, faculty, and external stakeholders to align the SEED Fund with actual needs and expectations.

5.4.2. Engage UiT leadership through workshops and planning sessions to ensure top-down support and potential co-funding.

5.4.3. Establish formal partnerships with industry players and investors to secure mentorship, sponsorship, and follow-on funding opportunities.

5. Pilot a Small-Scale Initiative

5.5.1. Launch a limited pilot program within the Innovation HUB framework and CloudEARTHi Initiative, selecting a small cohort of student-led startups for initial funding and mentorship.

5.5.2. Use this pilot to test application processes, support structures, and impact metrics.

5.5.3. Evaluate pilot results to iteratively refine the fund's structure, support offerings, and outreach strategy.

6. Develop a Comprehensive Marketing and Outreach Strategy

5.6.1. Implement a communication strategy tailored to reach students across all faculties, using both digital platforms and in-person events (e.g., hackathons, idea competitions). Build upon what Norrinova has already done.

5.6.2. Highlight success stories and role models to inspire participation and build a community around innovation.

5.6.3. Collaborate with student organizations and UiT's communication department to amplify visibility.

7. Secure and Diversify Funding Streams

5.7.1. Consolidate initial capital from UiT Talent Startup Grants, Innovation Norway (STUD-ENT), and Norinnova's Arctic Ignite.

5.7.2. Explore partnerships with EU Horizon Europe, Research Council of Norway, and corporate sponsors aligned with UiT's innovation priorities.

5.7.3. Consider establishing a long-term endowment or revolving fund to ensure financial sustainability beyond grant cycles.

8. Measure Impact and Foster Continuous Improvement

5.8.1. Define and track KPIs such as the number of applications, startups launched, survival rate, follow-on funding, and student satisfaction.

5.8.2. Create a transparent feedback loop to continuously improve fund operations based on student and stakeholder insights.

5.8.3. Regularly publish impact reports to maintain accountability and attract future investors and partners.

6. Conclusion

Establishing a SEED Fund at UiT presents a significant opportunity to foster student entrepreneurship and innovation. By leveraging existing funding mechanisms, aligning with national regulations, and engaging key stakeholders, UiT can create a sustainable and impactful innovation ecosystem. Establishing SEED Fund will require a very tight collaboration with Norrinova and the newly established Innovation HUB at UiT, in order to improve and expand their already ongoing activities. Since they have already built a solid foundation for promoting, funding, teaching and inspiring innovation at UiT, SEED Fund would be a great addition and booster to all of their activities. Another priority in terms of increased performance of the SEED fund is improving existing marketing strategy in order to reach a higher number of students. Finally, SEED Fund can serve as a vital bridge between academia and industry, driving regional economic growth and technological advancements around Northern Norway.

7. References

1. Norwegian Patent Act (LOV-1967-12-15-9): https://lovdata.no/dokument/NL/lov/1967-12-15-9
2. Norwegian Employee Invention Act (LOV-2003-04-04-21): https://lovdata.no/dokument/NL/lov/1970-04-17-21
3. General Block Exemption Regulation (Commission Regulation (EU) No 651/2014): https://eur-lex.europa.eu/eli/reg/2014/651/oj/eng

4. Norwegian Competition Act (LOV-2004-03-05-12): https://lovdata.no/dokument/NL/lov/2004-03-05-12
5. Public Procurement Act (LOV-2016-06-17-73): https://lovdata.no/dokument/NL/lov/2016-06-17-73
6. Universities and University Colleges Act (LOV-2005-04-01-15): https://lovdata.no/dokument/NLEO/lov/2005-04-01-15
7. Innovation Norway – startup activities: https://en.innovasjonnorge.no/article/startups
8. Norrinova innovation activities: https://norinnova.no/en/program/
9. UiT Talent Program & Innovation Grants Overview - https://en.uit.no/talent
10. Opprettelse av Entreprenørskapsfondet ved UIT - https://munin.uit.no/bitstream/handle/10037/27050/article.pdf?sequence=2
11. The future of European competitiveness – report https://commission.europa.eu/document/download/97e481fd-2dc3-412d-be4c-f152a8232961_en?filename=The%20future%20of%20European%20competitiveness%20_%20A%20competitiveness%20strategy%20for%20Europe.pdf
12. Interviews with representatives from Norrinova.

Study 3. Technical University of Varna

1. Executive Summary

This Feasibility Study, developed under the SEEDplus project and CloudEARTHi initiative and supported by the European Union, provides a comprehensive analysis and strategic proposal for the creation of a university-affiliated venture fund and accelerator program at the Technical University of Varna (TU-Varna). Its core objective is to establish a sustainable, legally compliant, and contextually adapted mechanism to nurture entrepreneurial talent, facilitate research commercialization, and position TU-Varna as a regional hub of innovation and startup development.

The study builds on a robust environmental analysis, benchmarking best practices from Bulgaria and internationally. While no Bulgarian university currently manages its own venture fund, emerging models—such as partnerships with private investors, accelerators, and external funds—demonstrate an increasing institutional appetite for entrepreneurship support. Global examples from MIT, Stanford, Oxford, and ETH Zürich offer mature models that integrate legal autonomy with strong academic and infrastructural support.

To ensure the relevance and practicality of the initiative, a survey was conducted among TU-Varna's students and faculty. Results revealed high demand for mentorship, hands-on training, infrastructure access, funding support, and investor engagement. The feedback confirms a strong entrepreneurial culture on campus and validates a phased approach: starting with a university-backed accelerator and progressing to seed-stage investment.

Legally, the study identifies viable pathways for TU-Varna to engage in startup funding while adhering to public finance constraints. Recommended structures include foundations, special purpose vehicles, and public-private partnerships—each offering varying degrees of operational flexibility and financial autonomy. In parallel, multiple funding strategies are explored, including cascade funding from the Fund of Funds, partnerships with EIF-backed intermediaries, private donor engagement, and the use of university-generated revenues from ancillary economic activities.

The operational model proposed includes a dedicated management team, expert mentors, a dual-fund architecture (Acceleration and Seed Fund), and an advisory board to ensure governance, industry alignment, and visibility. A detailed roadmap outlines a three-year implementation timeline with progressive scaling, infrastructure development, and institutional embedding of the program.

This study concludes with a set of concrete recommendations for TU-Varna's leadership, including governance setup, legal structuring, partnership building, and phased program deployment. The long-term vision is clear: to integrate entrepreneurship into the university's academic and innovation agenda, extend its impact across the region, and build a model that can inspire replication across Bulgaria's higher education sector.

2. Introduction and Objectives of the Study

2.1. Objective of the Study and Expected Outcome for TU-Varna

The primary objective of this Feasibility Study is to evaluate the potential for establishing a university-affiliated venture fund at the Technical University of Varna (TU-Varna) that can serve as a catalyst for innovation, entrepreneurship, and economic impact within the university and the broader regional ecosystem. The study seeks to determine whether such a fund can be a viable and sustainable instrument to support the commercialization of research, the development of student- and faculty-led startups, and the overall strengthening of TU-Varna's role as an innovation hub.

More specifically, the study aims to:

- **Assess the feasibility** of launching a university venture fund affiliated with TU-Varna, focused on supporting innovative ideas, entrepreneurial teams, and spin-offs emerging from its academic and research environment.
- **Develop a phased implementation model** for a university accelerator program and associated financing mechanism that reflects the university's strategic vision, complies with national legal and regulatory frameworks, and responds to the specific characteristics and needs of the local entrepreneurial landscape.
- **Provide concrete, actionable recommendations** to the leadership of TU-Varna regarding the necessary legal structures, internal governance, stakeholder partnerships, and institutional commitments required to move from concept to implementation.

By pursuing these objectives, the study will not only assess technical and financial viability but also address institutional readiness, strategic alignment, and potential for long-term impact.

2.2. Expected outcome

The expected outcome of this study is to deliver a comprehensive, evidence-based foundation for informed decision-making by TU-Varna's academic leadership and relevant stakeholders. It is intended to guide the university in taking the next steps toward establishing a sustainable and strategically aligned venture support mechanism.

This mechanism would be designed to identify, develop, and finance high-potential startup teams emerging from TU-Varna's student body, research staff, and alumni network. Furthermore, the study will provide a roadmap for building the necessary ecosystem components—including internal capacity, external partnerships, legal frameworks, and operational models—that are essential for long-term success.

Ultimately, the study aspires to position TU-Varna as a proactive institution in Bulgaria's innovation landscape—one that not only produces knowledge but also actively drives its transformation into entrepreneurial value.

3. Environmental Analysis and Best Practices

3.1. Review of University Venture Funds in Bulgaria

There are no structured university-managed venture capital funds in Bulgaria, directly operated by higher education institutions. However, some universities have taken steps to promote entrepreneurship and support startups through partnerships with external funds and the creation of accelerator programs.

American University in Bulgaria (AUBG):

Elevate Accelerator Program: Launched in 2019, this program was created in partnership with Eleven Ventures and aims to support students and recent graduates in starting their own businesses. The program offers $2,000 in investment to cover costs related to validation and prototype development, along with access to a mentor network and training.

Sofia University "St. Kliment Ohridski":

National Competition "Best Youth Startup in Bulgaria": A national competition organized by Sofia University in collaboration with the Fund of Funds. Its goal is to inspire and support young entrepreneurs in Bulgaria by providing a platform to realize their innovative ideas. Participants receive practical training, mentorship, and access to capital investment.

University of Economics – Varna (UE–Varna):

UEVA (University of Economics Varna Accelerator): Launched in 2021, UEVA is a business accelerator designed to promote entrepreneurship among students and support the development of their business ideas. The program offers individualized mentorship, consultations, and access to business experts. Trainings are organized on topics such as team building, prototyping, business modeling, and market strategies.

Varna Free University "Chernorizets Hrabar":

Start2UP Business Incubator and Accelerator: In collaboration with the Regional Agency for Entrepreneurship and Innovation – Varna (RAPIV), the university offers support for startups through a business incubator and accelerator program.

Veliko Tarnovo University "St. Cyril and St. Methodius":

Youth Talent Incubator: An initiative aimed at encouraging young innovators and entrepreneurs in the region.

Private Venture Funds with an Educational Focus:

- **Eleven Ventures:** A Sofia-based fund investing in tech companies in Southeast Europe. In the education sector, Eleven Ventures has made four investments.
- **LAUNCHub Ventures:** Focused on tech companies in Central and Eastern Europe, with two investments in educational startups in Bulgaria.

Although there are no structured university venture funds in Bulgaria, these examples show growing academic interest in supporting entrepreneurship through various forms of partnerships and programs.

3.2. Comparative Analysis with International University Funds

International practices show well-established models of university venture funds, offering valuable guidance when considering the creation of a similar structure in Bulgaria. The best examples include:

MIT – The Engine:

The Engine is an innovation fund founded by the Massachusetts Institute of Technology (MIT) in 2016. It focuses on deep tech ventures that require long R&D cycles, significant capital expenditures, and access to specialized infrastructure. In addition to equity funding, The Engine offers startups access to labs, prototyping equipment, engineering support, and a network of mentors and industry partners. The organization operates as an independent entity but maintains strong ties with MIT.

Stanford – StartX and StartX Fund:

StartX is an incubator created by Stanford alumni, supported by Stanford University and Stanford Health Care. The accelerator program itself does not take equity—it provides free support in the form of training, mentorship, and access to the community.
In parallel, the StartX Fund offers equity financing to selected startups that have already secured outside investment. The fund mirrors the terms of the external deal without renegotiation, ensuring transparency and founder-friendly conditions.

Oxford – Oxford Sciences Innovation (OSI):

Oxford Sciences Innovation (OSI) is a venture fund established in partnership with the University of Oxford and private sector investors. Founded in 2015, it manages over £600 million in assets. OSI invests in spin-out companies originating from the university's research activities. It works closely with Oxford University Innovation (OUI)—the body responsible for IP management and technology

transfer. OSI provides early-stage funding, mentorship, and business development support (especially in deep tech and biotech).

ETH Zürich – ETH Zürich Foundation Venture Fund:

ETH Zürich maintains several structures to support entrepreneurship, including the ETH Zürich Foundation Venture Fund, which invests in university-derived startups. It is part of a broader ecosystem including ETH ieLab (Innovation and Entrepreneurship Lab)—an accelerator offering mentorship, coaching, seed funding, and connections to industrial partners. Funding can take the form of equity, grants, or hybrid models aimed at accelerating the transition from lab to market.

3.3. General Observations

The analysis of both Bulgarian and international cases reveals several recurring themes and structural principles that are critical for the successful implementation of university-affiliated venture funds and accelerator programs. While Bulgarian universities have yet to establish dedicated, university-managed venture capital funds, the variety of partnership-based initiatives indicates a growing institutional commitment to fostering innovation and entrepreneurship. In contrast, leading international models demonstrate mature ecosystems, often involving substantial financial resources, specialized infrastructure, and independent fund governance. Drawing from these insights, several general observations can be made to inform the design and implementation of a similar initiative at TU-Varna:

- All models are built on close collaboration between the university and the investment structure—the funds work with faculty, students, and researchers, leveraging university labs and accelerator programs.
- In most cases, the funds are legally separate from the university—established as independent entities (foundations, companies, or partnerships), which provides greater operational and financial flexibility.
- Funding is focused on early-stage ventures (pre-seed / seed / early stage).
- A combination of resources is offered—capital, expertise, mentors, access to R&D infrastructure.
- Universities typically participate via technology transfer offices or by supporting the spin-off process, without directly managing the fund.

4. Interest and Potential

To ensure that the design of the proposed university-affiliated accelerator and venture support model reflects the real needs and interests of its primary users, this study included a dedicated needs assessment survey. The goal was to capture the perspectives of students, researchers, and academic

staff at TU-Varna regarding entrepreneurship support, capacity development, and the perceived obstacles and opportunities related to launching ventures from within the university.

A total of 63 individuals participated in the survey, and the responses provided valuable input for shaping the structure, priorities, and functional components of the proposed initiative.

4.1. Demographic Profile and Inclusivity

The survey sample showed a balanced gender distribution, with 54% identifying as male and 46% as female (Figure 1). This near-parity indicates that entrepreneurial interest is not confined to any one demographic group at TU-Varna and reinforces the importance of creating inclusive support mechanisms that appeal broadly across the student and faculty population.

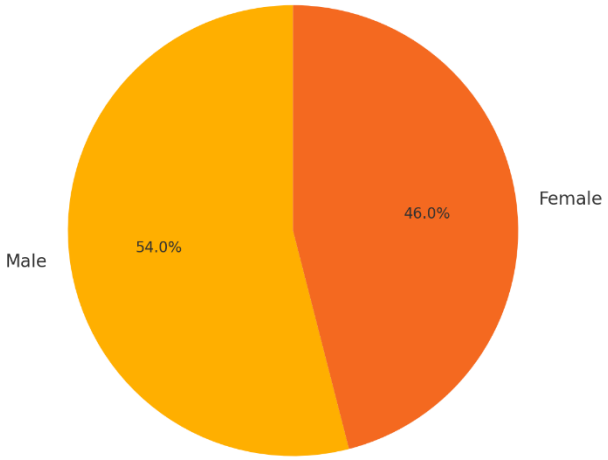

Figure 3. Gender dimension of the responders

4.2. Preferred Types of Entrepreneurship Support

When asked what types of support they would like to see available at the university, respondents emphasized the need for practical, experience-based resources. The most frequently selected forms of support included mentoring and coaching, workshops, access to workspaces or labs, and networking events (Figure 2).

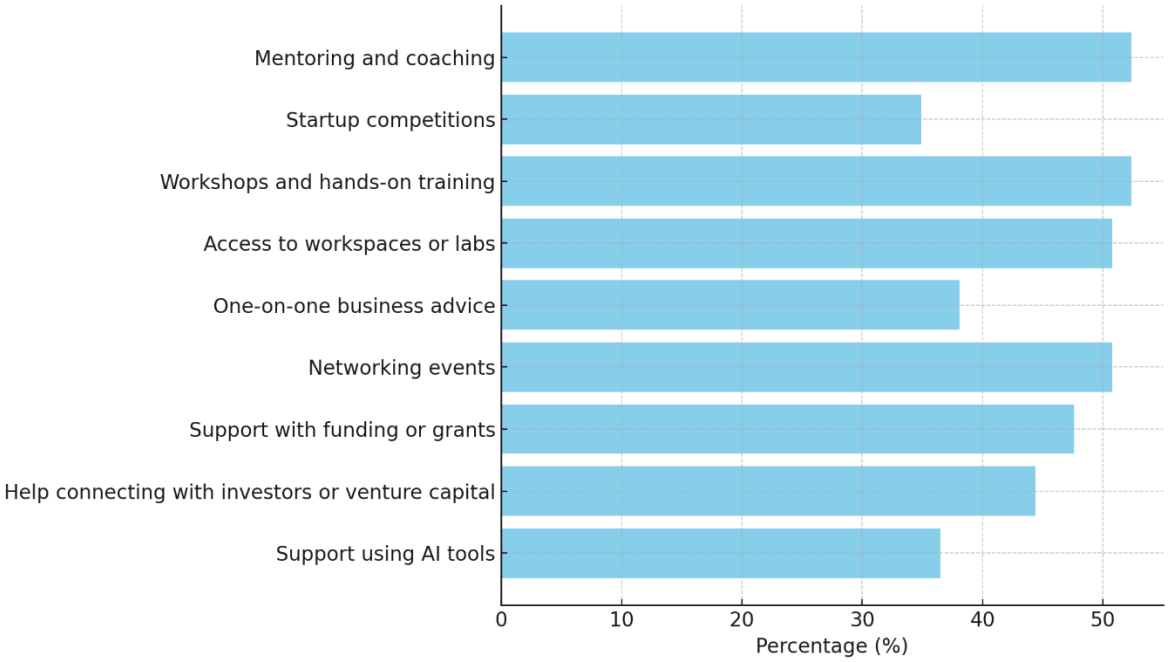

Figure 4. *Preferred types of entrepreneurship support*

These preferences suggest that participants value a support ecosystem that goes beyond theory—one that offers direct interaction with experts, physical space to develop projects, and structured peer engagement opportunities. Furthermore, nearly half of respondents indicated a desire for help accessing funding or grants, and over 44% were interested in connections to investors or venture capital, reflecting an early awareness of the financial dimensions of entrepreneurship.

The survey also revealed interest in modern technologies, with over a third of respondents highlighting a desire for support in using AI tools. This finding suggests the opportunity to embed emerging tech themes—such as artificial intelligence—into entrepreneurship education and early-stage venture development.

4.3. Most Useful Support for Entrepreneurial Development

Respondents were then asked to prioritize the top three types of support that would most effectively help them explore or grow an entrepreneurial idea. As shown in Figure 3, the leading responses focused on business planning support, investor connections, seed funding, and practical workshops.

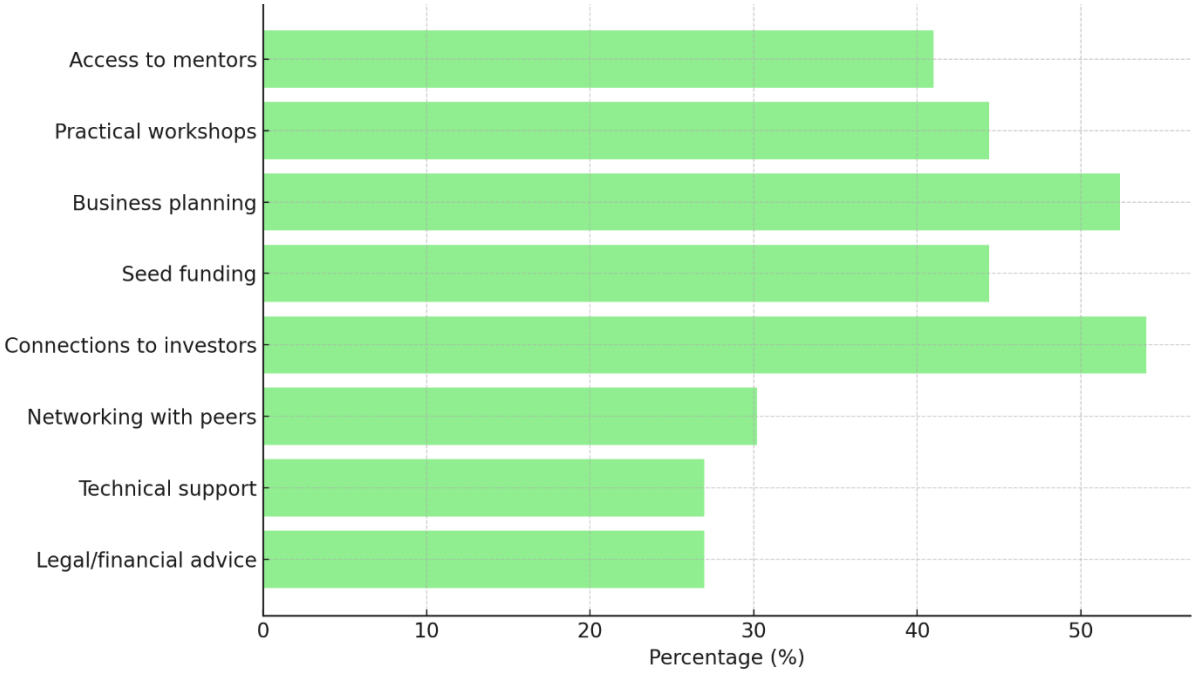

Figure 5. Most useful support for developing entrepreneurial ideas

The consistency of these priorities demonstrates a clear demand for applied learning and financial enablement. While mentorship and networking are seen as valuable, students and early entrepreneurs at TU-Varna appear to be especially focused on resources that directly affect startup feasibility and market readiness—such as guidance on strategy and planning, and access to funding or capital networks.

These findings further support the phased model proposed in this study, where participants begin with structured validation activities and, if successful, progress toward more resource-intensive support such as pre-seed investment or seed fund opportunities.

4.4. Priority Training Topics and Capacity Gaps

Finally, respondents were asked to indicate which topics they would be most interested in exploring through workshops or training (Figure 4). The top selections included idea generation and validation, building a startup team, business models and revenue streams, and finding or approaching investors.

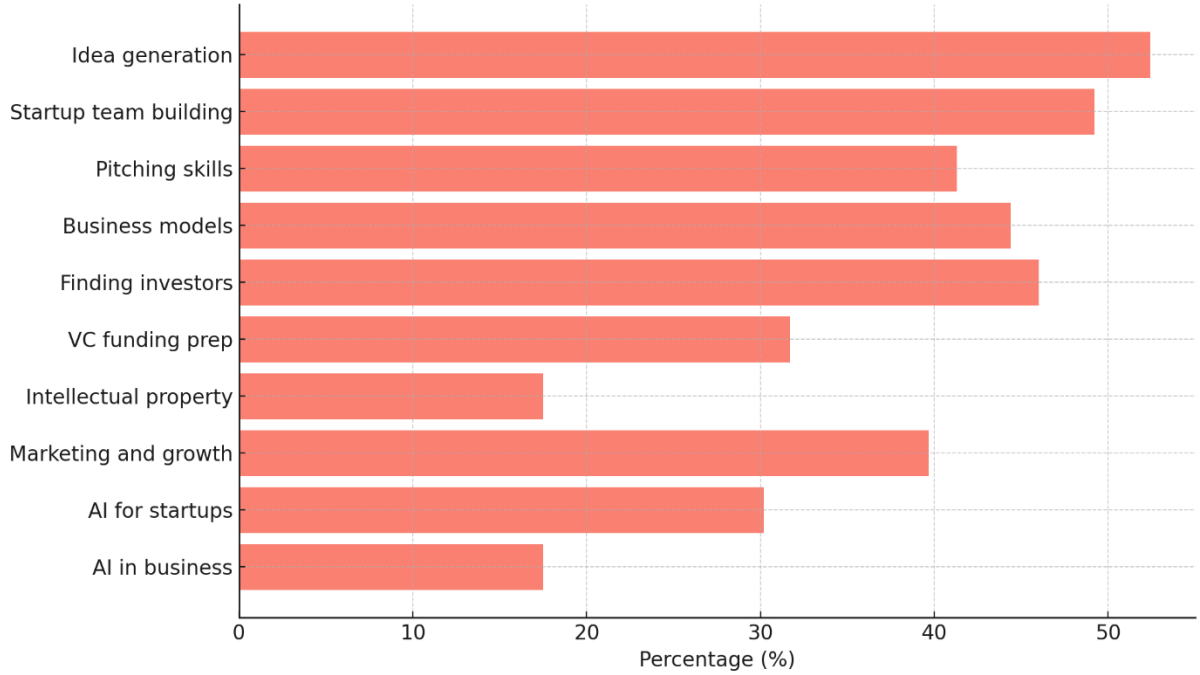

Figure 6. Preferred tools for future workshops or training

This cluster of topics reflects a strong focus on the foundational stages of venture creation—from ideation through early-stage team formation and financial planning. Respondents also showed meaningful interest in pitching and presentation skills, which are critical for securing investment, entering competitions, and engaging partners.

Notably, several respondents expressed interest in the use of AI in business and startups. Although these topics were less dominant, they suggest a growing awareness of digital and data-driven business models, offering a pathway for integrating innovation-oriented themes into future accelerator curricula.

4.5. Summary and Implications for Program Design

Overall, the survey findings confirm that TU-Varna has an active, engaged, and diverse community interested in entrepreneurship. There is strong demand for structured, hands-on support that combines expert mentoring, access to infrastructure, targeted education, and viable funding pathways.

The insights also validate key elements of the proposed operational model—particularly the emphasis on an accelerator program as a foundational step, followed by the deployment of tailored financial instruments such as an Acceleration Fund and Seed Fund. The data suggest that this phased approach is aligned with both the current readiness and future aspirations of TU-Varna's stakeholders.

By grounding this feasibility study in the voices of its community, TU-Varna positions itself to build a responsive, inclusive, and high-impact innovation ecosystem—one that equips students and researchers not only with ideas, but with the tools, networks, and capital to transform them into ventures.

5. Legal Framework and Legal Possibilities in Bulgaria

5.1. Legal overview

The Technical University of Varna is a state budget-funded organization governed by the Higher Education Act and the Public Finance Act.

Budget organizations are not allowed to engage in direct risk investments (e.g., acquiring equity in private companies), as this is considered high-risk and incompatible with the purpose of spending public funds.

A venture fund managed entirely by TU-Varna would conflict with legal restrictions related to:

- the use of state budget funds for risk financing;
- the ownership and management of commercial entities by state institutions.

TU-Varna cannot directly establish and manage a venture fund using budget funds without first creating a separate legal entity with its own budget and status.

However, Bulgarian legislation allows for two exceptions under which direct participation might be possible:

- The university has a special status and receives additional approval from the Ministry of Education and Science (MES) or the Ministry of Finance (MF) to invest public funds in venture capital (i.e., in commercial companies);
- The university uses its own funds derived from ancillary economic activities or externally funded projects.

5.2. Possible Legal Structures Through Which TU-Varna Can Initiate or Participate in a Venture Fund and Steps Toward Legal Establishment

Although direct risk investment by TU-Varna is legally restricted, several alternative legal and organizational structures exist that could facilitate its involvement in supporting startups and spin-offs. These models provide varying degrees of control, flexibility, and legal separation from the university, allowing TU-Varna to choose the most appropriate pathway based on its strategic objectives and resources. The subsections below present and evaluate each option in detail.

5.2.1. Foundation with University Participation

One common and legally viable approach is the establishment of an independent foundation with TU-Varna as a founding member. This model provides flexibility in funding sources and operational governance while maintaining a formal link to the university. Where it can be highlighted:

- An independent public-benefit foundation is established with TU-Varna as a founding member.
- It is managed by a board of trustees, which may include representatives from TU-Varna, industry, and other partners.
- It can raise funding from both private and public sources and participate in financing innovative projects through grants, loans, or equity instruments.

5.2.2. Establishment of a Special Purpose Vehicle (SPV)

Another option is to set up a Special Purpose Vehicle (SPV) — a legally independent commercial entity with a specific mission such as technology transfer or startup investment. This allows for more dynamic operations and potential co-investment opportunities with external stakeholders. Below are the typical features and functions of such a structure.

- A commercial company (e.g., LLC or JSC) is created with clearly defined objectives:
  - commercialization of research results,
  - intellectual property management,
  - support for student startup teams,
  - investment in innovative projects and spin-off companies.
- The university may participate indirectly via existing legal entities (e.g., commercialization companies, if any).
- The fund is managed by a separate executive team and may involve external investors.

5.2.3. Public-Private Partnership (PPP)

A Public-Private Partnership (PPP) structure allows TU-Varna to collaborate with a private sector partner, combining university resources with external capital and expertise. This model reduces financial risk for the university while expanding the reach and sustainability of the initiative. The key elements of this model are outlined below.

- A joint structure is formed between the university and a private investor (e.g., bank, VC fund, corporation).
- The university contributes resources (infrastructure, R&D, mentorship), while financing is provided by the private partner.

- Management is delegated to an external team.

5.2.4. Association / Consortium (e.g., with Other Universities)

Forming a joint investment vehicle through a consortium of universities or research institutions can pool resources and enhance impact. This approach is especially relevant in cases where individual institutions face resource constraints. The following points explain how such collaborations can be structured.

- The university joins a consortium with other institutions to create a joint investment vehicle.
- This can be effective when local resources are limited and there's a need for broader impact and scale.

5.3. Alternative Options

In addition to formal legal structures, TU-Varna may explore phased or indirect approaches to supporting innovation and entrepreneurship. These alternatives offer flexibility and lower legal complexity, enabling the university to take incremental steps or act as a partner without direct investment responsibility. The subsections below present a variety of such options.

5.3.1. Step-by-Step Development: Accelerator → Fund

A phased approach allows the university to build entrepreneurial capacity gradually by starting with an accelerator program. This model provides support services without requiring financial instruments initially, while laying the groundwork for future investment opportunities. Key components of this approach are outlined below.

- The university launches a pre-accelerator or accelerator program that does not require equity or financial instruments but provides:
  - mentorship,
  - training,
  - access to R&D infrastructure,
  - business validation.
- Funding of startups occurs after the accelerator through an external partner-fund or a separate structure created by the university.

5.3.2. Creation of an Investment Structure Independent of the University but in Partnership with It

This model involves establishing a legally independent entity—such as a foundation or company—that maintains a strategic partnership with TU-Varna. It allows the university to contribute non-financial support while avoiding the legal risks associated with direct fund management. The following points detail how such a partnership might function.

- The university acts as a consultant or strategic partner, while the fund is managed by an external organization (e.g., a foundation or company formed by alumni, angel investors, former faculty, etc.).
- TU-Varna can provide in-kind support (infrastructure, access to students and research) without bearing direct legal or financial responsibility.

5.3.3. Participation in an Existing External Fund or Cascade Funding Platform

Instead of creating a new structure, TU-Varna can collaborate with existing national or European funding platforms that allocate resources to university-linked startups. This low-risk model offers access to capital without requiring the university to take on fund management responsibilities. Below are the core advantages of this approach.

- TU-Varna can partner with cascade funding platforms or work with national or European programs that allocate funding to university-affiliated startup teams.
- This avoids the need for the university to create and manage its own fund.

5.3.4. Creation of a Spin-Off Organization (Commercial Entity) Affiliated with the University

If TU-Varna has an applied research or technology transfer entity, it can be used to establish a commercially oriented spin-off that manages startup investments. This model allows greater autonomy and agility while preserving a link to the university.

5.4.5. Agreement with a Bank or Fund for a Credit Line Guaranteed by the University

This model involves financing innovation projects through a credit facility backed by the university, rather than direct equity investment. While it provides a pathway to capital, it also involves reputational and legal risk, and should be pursued with strong safeguards. The following points outline how such arrangements could be structured.

- Projects are financed through a partner bank, with the university guaranteeing the credit via services or future outputs (e.g., patent income).
- Suitable when direct investment is not possible, but it carries high reputational risk and requires strong legal preparedness.

6. Funding Models and Partnerships

6.1. Detailed Examination of Opportunities

6.1.1. Fund of Funds (FoF)

The Fund of Funds (FoF) is a national investment instrument financed by European structural funds. It allocates resources through licensed fund managers (e.g., Vitosha Venture Partners, Innovation Capital, NV3), who invest in early-stage innovative companies.

How it can apply to TU-Varna:
TU-Varna can build partnerships with FoF fund managers by:

- Providing access to startup teams, innovative ideas, and infrastructure;
- Participating in joint accelerator formats or pre-selection processes;
- Offering mentorship, academic expertise, and support for business validation.

Potential opportunity:
Participation in a project scheme via cascade funding, where TU-Varna acts as a partner, and financing for startup teams is provided through an external fund managed by an FoF-related structure.

Advantages:

- No direct financial risk for the university;
- Access to already structured financial instruments;
- Easy integration with existing accelerator formats.

Limitations:

- The university cannot be a direct recipient of investment funds;
- Requires negotiation with an external manager and adequate legal and administrative capacity.

6.1.2. European Investment Fund (EIF)

EIF is part of the European Investment Bank (EIB) Group and plays a key role in supporting micro, small, and medium-sized enterprises (SMEs) in Europe through guarantees, venture capital, and financing via intermediaries (funds and banks). EIF does not invest directly in universities but operates through approved fund managers or financial institutions.

How it can apply to TU-Varna:

- TU-Varna can partner with a fund or bank financed by EIF to direct academic entrepreneurs or spin-off companies toward funding.

- The university may apply to EIF co-financed programs via joint projects or cascade funding mechanisms.
- A separate legal structure (foundation or company) created for funding startup teams could act as an intermediary or associated partner in the EIF network.

Potential opportunity:

Inclusion in a partnership scheme for funding spin-off projects within the academic entrepreneurship ecosystem, with access to EIF instruments via approved funds in Bulgaria or the EU.

Advantages:

- Access to favorable European capital;
- Opportunities for joint projects with international partners;
- Support for technology transfer structures and academic startups.

Limitations:

- No direct funding to universities;
- Requires an accredited intermediary (fund, bank);
- Procedures are complex and demand strong capacity and partnership networks.

6.1.3. Partnership with a Banking Institution (Loan Guarantees from TU-Varna)

A model where a bank provides financing (usually loans or credit lines) for innovative projects related to the university ecosystem. TU-Varna does not directly fund but acts as a guarantor or provides in-kind guarantees—mentorship, resources, access to labs and expertise.

How it can apply to TU-Varna:

- The university establishes an agreement with a bank to finance student, faculty, or spin-off projects.
- Credit guarantees can be backed by:
  - Future income from patents;
  - Commitment to co-develop the product;
  - Real infrastructure and expertise provided by TU-Varna.

Potential opportunity:
Use a hybrid model combining grants, loans, and equity instruments with strategic support from the university.

Advantages:

- No need for the university's own capital;

- Fast access to real financing;
- Flexibility in selecting and supporting projects aligned with academic priorities.

Limitations:

- High reputational risk if projects fail;
- Banks may require strong guarantees or financial securities;
- Contracts must be well-structured with clear responsibilities.

6.1.4. Attracting Private Investors and Donors (Alumni, Business Partners)

A sustainable funding model involving private donors, alumni, corporate partners, angel investors, and foundations interested in supporting academic entrepreneurship and innovation. Funding may be in the form of donations, sponsorships, equity investments, or co-funding of specific programs (e.g., pre-accelerator, incubator, fund).

How it can apply to TU-Varna:

- Identify active alumni and industrial partners as strategic donors or mentors.
- Create a fund to support startup teams, sourced from the private sector, with the university contributing networks, mentorship, and resources.
- Structure a campaign to attract private investment (e.g., "Academic Entrepreneurship Fund at TU-Varna").

Potential opportunity:
Establish a fund or foundation involving alumni, supported by a donation campaign and accompanied by an accelerator program organized by the university.

Advantages:

- Flexible financing—free from public funding constraints;
- Potential to build a long-term community around the university (alumni network);
- Strong public image and impact.

Limitations:

- Requires resources to attract and manage investor relations;
- Funding is not guaranteed and depends on campaigns or individual commitment;
- Requires a legal entity (foundation or company) to manage funds.

6.1.5. Participation in National and European Programs

Funding through programs such as Horizon Europe, EIT HEI Initiative, Erasmus+, Digital Europe, Eurostars, OPHRD, Research Fund, etc., aimed at building innovation capacity, technology transfer, and supporting entrepreneurship.

How it can apply to TU-Varna:

- The university participates as a beneficiary or partner in a project that includes elements of acceleration, support for startup teams, or even cascade funding.
- Funds may be allocated for:
    - Service vouchers for startups;
    - Mentorship programs;
    - Access to incubation and R&D;
    - Support for spin-off processes.

Potential opportunity:
Participation in projects funded by EIT, the EC, or national agencies that allow redistribution of funds to third parties based on predefined criteria.

Advantages:

- No need for own funds;
- Involvement in prestigious international networks and initiatives;
- Enhancement of the innovation ecosystem through structural support.

Limitations:

- High competition and extensive project preparation;
- Funding tied to reporting and administrative regulations;
- Often time-limited (typically 2–4 years).

6.1.6. Use of Own Funds from Ancillary Economic Activities or Projects

Bulgarian universities are allowed to carry out additional economic activities related to their core mission (Art. 6, para. 2 of the Higher Education Act), and the income from such activities can be used to self-fund initiatives, including innovation programs, accelerators, or seed funds.

How it can apply to TU-Varna:

- Use revenue from courses, licenses, consulting, industrial contracts, and other paid services.
- Reallocate part of project income, where allowed, to support startup teams (e.g., via service vouchers, scholarships, mentorship, or preparatory programs).

Potential opportunity:

Create an internal "micro-fund" for validating student and faculty projects, financed through university or university-owned entity/center funds.

Advantages:

- Full autonomy in fund management;
- Independence from external programs and approvals;
- Ability to focus on academic priorities.

Limitations:

- Usually limited in volume;
- Requires internal procedures and legal compliance with budget rules;
- Does not allow for risk investments without a separate structure.

6.2. SWOT Analysis of funding models and partnerships

Table 6. *SWOT Analysis of funding models and partnerships*

Model	Strengths	Weaknesses	Opportunities	Threats
Fund of Funds (FoF)	- Nationally recognized mechanism with established partners - Provides access to significant financial resources via fund managers - The university can participate in project selection and development	- No direct access—requires a licensed FoF partner - Administrative and legal complexity in negotiation and implementation - The university cannot independently manage the funds	- Joint accelerator program with a fund manager - Positioning the university as a source of high-quality projects - Use of cascade funding within a project framework	- Overdependence on external fund managers - Potential misalignment of their goals with the academic mission - Delays or changes in FoF regulation
European Investment Fund (EIF)	- Backed by the European Investment Bank (EIB) - Access to venture capital and guarantees via fund managers - Suitable for academic spin-offs with innovative potential	- EIF does not fund universities directly - Requires intermediaries (licensed funds or banks) - Long and complex partnership and approval process	- Co-financed projects (e.g., EIC/EIF combinations) - Inclusion in existing mechanisms via cascade funding - Access to European networks and institutional investors	- Strategic changes at EIF may exclude academic projects - Lack of suitable local fund managers - EIF conditions may conflict with Bulgarian law
Partnership with a Bank	- Provides real funding via an established institution - The university can participate indirectly	- Banks may require collateral or guarantees, even indirect - Reputational risk for the university if projects fail	- Framework agreement to finance academic projects - Combine with accelerator/incubator for validation before lending	- Bank products may not suit early-stage teams - High risk during economic instability or unforeseen failures - Teams may lack readiness for bank approval

Model	Strengths	Weaknesses	Opportunities	Threats
	without capital risk - Possibility to create tools focused on R&D and innovation	- Difficulty negotiating terms suited for an academic environment	- Build a sustainable model to support entrepreneurial initiatives	
Private Investors and Donors	- Flexible funding model based on university-specific needs - Enables building a support community—alumni, industry, donors - Potential for long-term sustainable partnerships	- Funding stability and predictability are lacking - Depends on external actors' activity - Requires communications and fundraising capacity	- Create a fund or foundation led by alumni or industry leaders - Long-term donations and CSR program support - Potential to involve former professors and investors	- Economic changes or donor motivation shifts - Competition with other organizations for alumni and industry attention - Risk of inconsistent or short-term funding
TU-Varna's Own Resources	- Full control over funds and allocation - No need for external approvals or competition - Easy integration with current academic activities and priorities	- Limited and unstable resources over time - Cannot be used for direct equity investment without a separate structure - Potential internal administrative conflicts over priorities	- Create an internal micro-fund to validate ideas - Combine with external financing for greater impact - Use funds as co-financing for projects	- Resource depletion without returns - Conflict between academic and financial goals - Limited impact without complementary funding
National and European Programs	- No need for own capital; funding comes from international programs - Participation in prestigious networks and innovation	- Strong competition for grants - High administrative burden - Time- and volume-limited funding	- Fund accelerator, spin-off, and tech transfer activities - Create cascade funding structures - Build reputation and positioning in EU networks	- Funding is project-based and time-limited - Difficulty ensuring sustainability post-project - Potential administrative overload

Model	Strengths	Weaknesses	Opportunities	Threats
	initiatives - Opportunity to upgrade innovation infrastructure			

7. Proposed Operational Model and Roadmap

To translate legal possibilities into a functioning and sustainable initiative, TU-Varna will need to implement a clear operational model that aligns strategic intent with day-to-day execution. This section outlines a proposed roadmap and organizational structure for the venture initiative, detailing the roles, teams, and resources required to manage the accelerator program, funding activities, infrastructure, and governance. The goal is to ensure coherence between the university's innovation vision and the mechanisms used to deliver measurable outcomes.

Operational Structure (Team, Expertise, Infrastructure)

A multi-component structure is proposed for effective implementation, combining administrative leadership, expert support, financial/legal frameworks, and an independent advisory body.

7.1. Central Management Team (Core Unit)

At the heart of the initiative will be a central management team responsible for strategic leadership, program execution, and coordination across all components of the venture support ecosystem. This team will serve as the operational backbone, overseeing planning, partnerships, compliance, and communications. The following roles are proposed to ensure all critical dimensions of the program are covered effectively.

Roles: Strategic planning, coordination, fund management, and partnerships

- **Program Director:** Leads strategy, liaises with university leadership, external representation
- **Accelerator Manager:** Oversees cohort cycle—selection, logistics, mentorship, training
- **Financial Expert:** Prepares budgets, monitors investments and financial flows, supports participants
- **Legal Expert:** Ensures compliance, prepares contracts, offers legal/regulatory guidance
- **Operations Coordinator:** Daily liaison with teams, mentors, event logistics, admin tasks
- **Marketing & Communications:** Runs campaigns, manages website/social media, media relations

7.2. Accelerator Program Team

The accelerator program will be a core mechanism for nurturing early-stage entrepreneurial teams emerging from TU-Varna. To deliver a high-impact program, a dedicated team comprising both internal university actors and external experts will be required. This group will be responsible for project selection, capacity building, mentorship, and final evaluation of participants. The structure ensures strong academic grounding, combined with market-oriented support.

Roles: Train, mentor, and validate early-stage projects linked to TU-Varna

- **Internal mentors and lecturers:** Faculty/researchers providing subject-matter support
- **External mentors and experts:** Entrepreneurs and industry professionals guiding market fit
- **Trainers and facilitators:** Deliver practical workshops on business modeling, pitch, IP, marketing
- **Selection Committee:** Screens applicants based on innovation, team capacity, viability
- **Demo Day Jury:** Evaluates final pitches (includes fund reps, industry, university)

7.3. Funding Units and Fund Structures

To effectively support startup teams at different stages of development, a two-tiered funding structure is proposed: an Acceleration Fund for early validation and a Seed Fund for growth-stage investment. Each fund will have specialized teams for scouting, evaluation, and financial management, ensuring that capital is allocated responsibly and transparently. This dual structure will allow TU-Varna to support a wide spectrum of innovation projects—from ideas to scalable ventures.

Acceleration Fund (up to €50,000)

- Supports graduates of the accelerator with grants or equity
- **Scouts & Advisors:** Initial screening, team validation, application support
- **Fund Managers:** Conduct due diligence, define funding terms, monitor progress

Seed Fund (€50,000–€200,000)

- Invests in mature spin-offs with scalable potential
- **Expert Panel:** Evaluates tech, business, academic merit
- **Partner Bank:** Provides loans, conducts credit analysis, co-financing
- **Fund Managers:** Handle investment deals, negotiate, monitor performance

7.4. Infrastructure

Robust physical and digital infrastructure is essential for the successful implementation of the accelerator and funding programs. This includes not only the physical spaces needed for collaboration and prototyping but also digital tools for program management and performance tracking. The infrastructure component ensures that teams have continuous access to the facilities, platforms, and networks required to scale their ventures.

Purpose: Provides all material and digital conditions for accelerator and fund operations

- **Physical:** Rooms, labs, prototyping centers, coworking spaces, campus offices

- **Digital:** Online learning platform, progress tracking database, team profiles
- **Connected:** Access to R&D networks, partner hubs, cascade funding platforms, external networks

7.5. Innovation & Entrepreneurship Advisory Board

To provide strategic oversight and ensure alignment with broader institutional and economic goals, the establishment of an Innovation & Entrepreneurship Advisory Board is recommended. This board will include representatives from TU-Varna's leadership, the investment community, industry partners, and public institutions. Its role will be to guide program evolution, validate major decisions, and foster external engagement to elevate the initiative's profile and impact.

Roles: Strategic oversight, guidance, and external engagement
Recommended composition:

- TU-Varna senior leadership representative
- Industrial partner / business cluster rep
- Investment ecosystem member (fund, accelerator, bank)
- TU-Varna alumni entrepreneur or spin-off founder
- Public sector representative (e.g., Varna Municipality, Ministry of Education)
- Initiative coordinator (observer)

Main functions:

- Set strategic direction
- Advise on partnerships and investment decisions
- Review and validate program progress
- Support international visibility and network expansion

Meeting frequency:

5 times per year or as needed for strategic review

7.6. Indicative Roadmap

The proposed indicative plan is designed to ensure structured development and minimize the risks associated with introducing a new institutional and investment framework connected to the Technical University of Varna. It is presented in table 6.1

The phased implementation enables piloting of individual components—starting with services and mentorship, followed by limited funding, and eventually leading to sustainable funding mechanisms.

The flexibility of the approach allows adaptation to external support, regulatory requirements, and interest from the academic and entrepreneurial communities.

Table 7. *Indicative Roadmap*

Phase	Period	Key Activities
I. Preparation and Structuring	Month 1–6	- Establishment of central management team- Formation of the Advisory Board- Development of a detailed accelerator program and investment tools- Launch of digital platform and setup of physical infrastructure- Communication campaign and candidate recruitment- Team selection
II. Launch of Accelerator Program (Cohort 1)	Month 7–9	- Implementation of the first accelerator program (8–12 weeks)- Support through training, mentorship, and infrastructure- Organization of Demo Day
III. Funding of First Teams	Month 10–12	- Evaluation of top-performing teams- Funding decisions by the Acceleration Fund- Contract signing and project initiation
IV. Second Cycle and Scaling (Cohort 2 + Seed Fund)	Year 2	- Launch of the second accelerator cohort- Expansion of partnership network- Activation of Seed Fund and creation of investment framework- Funding of mature spin-off projects- Organization of a new Demo Day with international visibility
V. Sustainability and Institutionalization	Year 3 and beyond	- Expansion to 2–3 cohorts per year- Sustainable funding through external partners and cascade funding- Integration of the accelerator as a permanent TU-Varna structure- Development of joint funds with other universities or business organizations

8. Conclusions and Recommendations

This final section synthesizes the findings of the feasibility study and outlines specific recommendations for TU-Varna's leadership and stakeholders. It draws upon the legal, institutional, and operational analyses presented in earlier sections and proposes a roadmap for implementation that is both realistic and aligned with the university's capacity and strategic goals. The aim is to provide a practical foundation for decision-making and a structured path forward to establish a venture support ecosystem at TU-Varna.

8.1. Summary of Key Findings

The feasibility study confirms that, while university-managed venture funds are not yet present in Bulgaria, there is strong precedent for similar models abroad and growing local momentum around innovation support. The analysis identified several viable legal and operational pathways for TU-

Varna to pursue this initiative, supported by its existing strengths and regional position. The following bullet points summarize the most critical insights derived from the environmental scan, legal framework, and proposed operational model.

- There are no university-managed venture capital funds currently operating in Bulgaria; however, interest in accelerator programs and partnerships with external funds is steadily growing.
- International practices demonstrate that university funds are sustainable and effective when they are legally structured as separate entities, while remaining deeply integrated with the academic, research, and entrepreneurial environments.
- Bulgarian legislation allows universities to participate indirectly in fund structures through the establishment or partnership with foundations, companies, or consortia.
- The Acceleration Fund and Seed Fund can be implemented by combining grant, bank, and equity financing—without requiring an initial contribution from the participants. The mixed funding model (grants, equity, bank instruments) is realistic, provided the capital is sourced from external channels such as private investors, banks, or European programs.
- TU-Varna possesses the necessary capacity (R&D, faculty, students) and a suitable regional context (Varna, Innovation Hub) to successfully launch such an initiative.
- The proposed operational structure allows for clear responsibility allocation, independent oversight, sustainable management, and growth potential.
- The indicative plan outlines a 36-month development path—from preparation and initial accelerator cohorts to fund establishment, scaling, and institutionalization.
- A phased approach—starting with the accelerator program, followed by fund creation and institutionalization—is appropriate for minimizing risk and gradually building capacity.

8.2. Specific Recommendations to TU-Varna Leadership: Next Steps and Clear Priorities

Building on the study's findings, this section provides a detailed action plan for TU-Varna to move from analysis to implementation. The recommendations are structured around three core dimensions—strategic management, programmatic development, and financing and partnerships. These steps are designed to ensure institutional readiness, legal compliance, operational effectiveness, and long-term sustainability of the initiative.

8.2.1. Strategic and Management Actions

Establishing a solid governance foundation is the first step toward ensuring the initiative's credibility, coherence, and sustainability. The university must empower a dedicated coordination group, create an independent legal vehicle, and establish an advisory body with diverse stakeholders to guide the process. These early strategic actions will anchor the initiative and set the stage for programmatic and financial development.

- Establish an internal coordination group with a clear mandate from TU-Varna leadership to oversee the development of the university accelerator and related funds.
- Set up an independent legal entity (foundation or SPV) with TU-Varna's participation to manage the financial instruments in full compliance with legal requirements.
- Activate an Innovation and Entrepreneurship Advisory Board, including university leadership, industry representatives, public sector figures, and alumni—to provide strategic guidance and external oversight.

8.3. Programmatic and Operational Development

Operational readiness will be achieved through the phased rollout of the accelerator program and supporting infrastructure. Starting with a pilot cohort, TU-Varna can begin to build internal capabilities, refine programmatic processes, and engage key academic and external stakeholders. The following recommendations outline the necessary first steps to translate the concept into functioning activities.

- Launch the first accelerator program in the upcoming academic year, with a minimum of 10 teams, focused on basic validation support (training, mentorship, infrastructure).
- Develop internal regulations and procedures for the selection, implementation, and monitoring of accelerator cohorts.
- Begin the development of digital and physical infrastructure—coworking areas, an online training platform, and administrative support.

8.4. Financing and Partnerships

No venture initiative can succeed without sustainable funding and strong partnerships. TU-Varna must proactively pursue financing from public and private sources while forming alliances with organizations that can contribute capital, expertise, and networks. This subsection outlines the strategic financial planning and partner engagement required to launch and sustain the Acceleration and Seed Funds.

- Identify external funding sources—cascade funding tools, Fund of Funds, European Investment Fund, private investors, and banks.
- Prepare an investment strategy and capital-raising plan for the Acceleration and Seed Funds—in close collaboration with financial and legal partners.
- Establish strategic partnerships with local and international organizations that can contribute financing, mentorship, or market access.

8.5. Long-Term Vision

Beyond the initial implementation, the long-term success of this initiative will depend on its integration into TU-Varna's institutional strategies and its ability to evolve into a recognized, enduring feature of the university's innovation ecosystem. This final subsection provides a vision for sustainability, growth, and broader impact—emphasizing the role of the initiative in reinforcing TU-Varna's position as a regional leader in entrepreneurship and applied research.

- Integrate the initiative into TU-Varna's research, transfer, and educational strategies—linking it to research projects, technology transfer, and academic programs, while involving faculty, PhD students, and undergraduates.
- Develop a sustainability plan beyond the first three years—aimed at institutionalizing the model, scaling it to other universities, and enhancing TU-Varna's regional and international visibility as an entrepreneurial university.

A comprehensive analysis: Strengthening Seed Venture Funding in Europe´s Moderate and Emerging Innovation Regions

1. Background Context

Early-stage innovation funding is a critical enabler for translating research into commercial innovation, yet its availability in Europe is highly uneven. The European Innovation Scoreboard classifies a majority of EU member states – 16 out of 27 – as *"emerging or moderate innovators,"* primarily in Eastern and Southern Europe[9]. These regions typically invest a lower share of GDP in R&D and have less mature venture capital ecosystems compared to innovation leaders[9]. This "innovation cohesion" gap means start-ups in moderate/emerging regions often struggle to access seed and pre-seed capital, making it harder to launch and scale new ventures. The EU has acknowledged this imbalance: high-level initiatives (e.g. the *New European Innovation Agenda*) call for strengthening innovation capacity across all regions, not just the usual tech hubs[10]. Cohesion policy and Horizon Europe's "Widening Participation" measures now channel billions of euros to boost research *and* innovation in less-developed ecosystems.

Existing Early-Stage Funding Mechanisms: Europe's landscape of early-stage funding is a mix of EU-level programs and national/regional instruments. On the EU side, the European Innovation Council (EIC) and Horizon Europe grants provide substantial funding to innovative SMEs and start-ups, but these are highly competitive and often dominated by firms from strong innovator countries. The European Institute of Innovation and Technology (EIT), through its KICs, operates accelerator programs and a Regional Innovation Scheme to involve modest innovator regions. Meanwhile, the European Investment Fund (EIF) plays a pivotal role in nurturing venture capital in cohesion regions by anchoring local funds. For instance, EIF-backed initiatives in Central and Eastern Europe have seeded new VC funds and angel networks, helping mitigate early-stage funding gaps[11]. At the national level, moderate innovator countries increasingly employ *public-private* schemes: co-investment funds, government-backed VCs, and incubator/accelerator grants are common policy tools. Many such programs leverage European Structural and Investment Funds (ESIF), reflecting EU encouragement to use revolving financial instruments for SME innovation[12]. Notably, in the 2014–2020 period, countries like Hungary, Poland, Slovenia, Greece, Bulgaria devoted a significant share of their EU funds to equity financing for R&D-intensive SMEs[12]. These investments helped kick-start local start-up scenes by providing seed capital and support services.

[9] https://sciencebusiness.net/viewpoint/start-ups/viewpoint-we-must-foster-innovation-cohesion-across-europe#:~:text=the%20north,as%20emerging%20or%20moderate%20innovators
[10] https://research-and-innovation.ec.europa.eu/strategy/support-policy-making/shaping-eu-research-and-innovation-policy/new-european-innovation-agenda_en
[11] https://therecursive.com/inside-eif-s-new-e162m-boost-for-bulgarian-innovation-growth-and-green-infrastructure-development/#:~:text=First%20time%20teams%20are%20always,cosystems%20would%20not%20have%20happened
[12] https://www.fi-compass.eu/sites/default/files/publications/The%20use%20of%20financial%20instruments%20in%20the%20%E2%80%98Research%2C%20Development%20and%20Innovation%20in%20Small%20and%20Medium-sized%20Enterprises%E2%80%99%20sector.pdf#:~:text=The%20main%20form%20of%20finance,2%C2%A0million%20for

2. CloudEARTHi and SEEDplus

Within this policy context, the CloudEARTHi initiative (a consortium of 31 partners across 17 countries) is focused on boosting innovation capacity – especially leveraging *Deep Tech, AI & big data* for sustainability and circular economy solutions[13]. SEEDplus is one of CloudEARTHi's projects, targeting the entrepreneurial gap at technical universities in regions with *moderate or emerging innovation ecosystems*. The current analysis by SEEDplus represents distinct innovation environments – from a well-funded Nordic ecosystem to an EU cohesion country and a transitioning Eastern European nation – yet all face the common challenge of *insufficient early-stage capital* for university-born innovations. The following sections analyse the study's findings and compare them with broader EU27 trends, with a focus on moderate/emerging innovation regions.

3. Comparative Findings: SEEDplus Study vs. Broader EU Landscape

Norway (High Support, Missing University Seed Capital): The SEEDplus study finds Norway's innovation system to be *highly structured and amply supported by public programs*, consistent with its status as a strong innovator. Generous government schemes (e.g. Innovation Norway grants, national seed funds) and university tech-transfer offices form a solid foundation. However, even in this advanced ecosystem, dedicated seed-stage financing at the university level is absent. This mirrors a broader observation: in Europe's innovation leaders (and associated countries like Norway), universities excel at research but often lack their own venture funds. Instead, promising spin-offs rely on external angel investors, national seed funds or EU grants. The study notes Norwegian universities are interested in *micro-funding schemes* (small pre-seed grants or proof-of-concept funds), but they have *limited collaboration with private investors* so far. This suggests a *structural gap*: while Norway's public innovation spending is high, its universities could better bridge research to market by hosting seed funds or co-investing with industry. In the broader EU context, other strong innovator regions have addressed this gap through university-affiliated funds (for example, some Western European universities partner with alumni or industry to create seed funds), but such models are not yet widespread in moderate regions. The recommendation from SEEDplus – build pre-seed funding tools within university frameworks and improve public-private co-investment – is in line with best practices in leading ecosystems and could be adapted across Europe. Many EU countries are indeed moving in this direction; for instance, *Poland* established multiple university-linked incubator funds under its BRIdge programs, and *Estonia*'s SmartCap fund launched a specialized *University Startup Fund* in collaboration with technical universities (aligning with Norway's identified need). The key is combining public support with venture expertise, so that *academic innovations can mature to investable stage*.

Bulgaria (Scattered Resources, Nascent Entrepreneurship): As an EU *"emerging innovator,"* Bulgaria exemplifies the challenges of moderate innovation regions. The SEEDplus study confirms that innovation resources in Bulgaria exist but are fragmented, and higher education institutions have minimal experience in designing or running venture funds. Entrepreneurship culture among students is only beginning to take root – a scenario common in Southeast Europe a decade ago, though

[13] https://cloudearthi.com/

momentum is growing. This finding resonates with Bulgaria's recent history: its startup ecosystem was effectively jump-started in 2012–2015 by the EU-backed JEREMIE seed fund initiative. Under JEREMIE, EIF selected two funds (*LAUNCHub* and *Eleven*) to run an accelerator + seed program with €21 million from structural funds[14]. The impact was significant – over 180 startups were supported with funding and mentorship (up to €200k each), leading to 600+ new jobs and €20 million in follow-on private investment. Sofia's start-up scene flourished; by 2015 *Forbes* ranked Sofia among the top 10 cities globally to launch a startup[14]. This success validates SEEDplus's observation that *"the momentum exists"* in Bulgaria – when catalytic funding is provided, entrepreneurial activity surges. However, after the initial JEREMIE funds were fully invested, Bulgarian universities themselves did not retain in-house seed funds, and reliance on EU instruments continued. The SEEDplus study's recommendation for Bulgaria is to establish hybrid financial instruments that pool multiple sources: EU funds, philanthropic contributions, and local stakeholder support. Such blended models are indeed emerging. In 2023, Bulgaria launched a new Recovery and Resilience Fund-of-Funds with EIF, using EU recovery funds to invest in local VC funds targeting innovation, growth, and green infrastructure[15]. This fund-of-funds explicitly recognizes how far the ecosystem has come since JEREMIE, noting that *"the market is much more educated; success stories have trained founders and investors"*. In other words, Bulgaria's broader trajectory – from almost no VC activity, to EU-seeded accelerators, to today's more mature environment – exemplifies the path many moderate innovators are on. The SEEDplus study findings align with this trajectory: initial public-backed seed funding is crucial, and over time it should evolve into mixed funding with private and community involvement. Other moderate innovator countries mirror this pattern: Romania and Croatia, for example, also saw their first VC funds arise via public initiatives and now are witnessing growing angel and diaspora investor engagement. The broader EU data show steady improvement: venture investments in Central and Eastern Europe hit record highs in recent years (over €800 million in 2022) as local ecosystems matured, though they still lag Western Europe[16]. In summary, Bulgaria's case underlines that *patient public capital* combined with capacity-building yields results – a lesson broadly applicable to moderate innovation regions.

Ukraine (Challenging Context, Entrepreneurial Resilience): Ukraine, though not an EU member, represents an *"emerging innovation"* environment facing extraordinary challenges. Despite political instability and war, Ukraine's tech community has demonstrated remarkable resilience and dynamism. The SEEDplus study identifies that Ukrainian universities lack supportive regulatory frameworks and investment culture for venture activities. Historically, there were few if any university venture funds or formal seed programs within HEIs. However, the study also notes strong grassroots engagement and openness to international collaboration – a vital strength in Ukraine's innovation ecosystem. Indeed, Ukraine's start-up scene has been fueled by a vibrant IT sector and diaspora support, even as domestic funding mechanisms were weak. Recognizing the gap in seed-stage support, the Ukrainian government (with donor help) established the Ukrainian Startup Fund

[14] https://www.fi-compass.eu/sites/default/files/publications/case-study_esif03d-bulgaria.pdf#:~:text=develop%20entrepreneurship%20during%20the%20financial,combination%20of%20accelerator%20and%20seed

[15] https://therecursive.com/inside-eif-s-new-e162m-boost-for-bulgarian-innovation-growth-and-green-infrastructure-development/#:~:text=The%20fund%20aims%20to%20facilitate,equity%20investments%20across%20three%20categories

[16] https://www.investeurope.eu/news/newsroom/cee-venture-capital-investment-achieves-new-record-in-2022-other-statistics-point-to-region-s-resilience/#:~:text=2022%20CEE%20PE%20Statistics%20Report,with%20451%20companies%20receiving

(USF) in 2019 as a state-owned seed fund. Uniquely, USF was set up with *independent governance*: a Supervisory Board of veteran investors and a transparent, competitive selection process[17]. It provides grants ($25k for pre-seed, $50k for seed) to tech start-ups nationwide. By late 2021 – just before the full-scale invasion – USF had funded over 250 start-ups with ~$6.4 million, becoming *"the largest angel investor in Ukraine and Eastern Europe"* in terms of number of deals[17]. This real-world program echoes SEEDplus's recommendations: the study suggests Ukraine pursue capacity-building partnerships and align with development agencies for donor-backed seed investments. In fact, USF itself was bolstered by donors like the Western NIS Enterprise Fund, which co-launched grant programs[18]. The importance of international support cannot be overstated – even now, amid conflict, Ukraine's innovators are tapping into EU instruments (Horizon Europe associated projects, EIT initiatives) and global tech philanthropy. Comparatively, other emerging innovator regions (e.g. Western Balkan countries) also rely on donor-backed funds and development bank initiatives to jumpstart venture financing. The common theme is that in environments where private capital is scarce or risk-averse, public and philanthropic funding fills the void, at least until stability and investor confidence improve. Ukraine's experience highlights an additional factor: regulatory reform is needed to enable venture investment (e.g. allowing universities to take equity stakes, creating legal structures for funds). Many EU widening countries have been updating such frameworks – for example, *Slovakia and Lithuania* recently adjusted regulations to encourage venture funds. The SEEDplus findings underscore that Ukraine's universities should be integrated into these efforts, leveraging global partnerships to create seed funds even in a turbulent context. In broader EU terms, Ukraine's case reinforces the idea that *innovation knows no borders*: talent exists everywhere, so mechanisms to support early-stage innovation in crisis or periphery regions are strategically important (not just for those countries, but for Europe's collective resilience and post-crisis recovery).

Cross-Cutting Diagnosis: The feasibility study's three cases, when viewed together, point to a unified challenge: how to empower universities in moderate/emerging regions with effective early-stage funding. Across Norway, Bulgaria, and Ukraine, the *common gap* is the lack of structured seed capital within or closely tied to universities. This gap persists despite very different contexts – from Norway's wealth to Ukraine's instability – suggesting it is systemic in nature. Typically, universities in these regions do produce innovative research and ambitious students, but they face: (a) scarce tailored financial instruments (small funds or grants for prototyping, proof of concept, etc.), (b) weak links to experienced venture support (mentors, investors), and (c) only nascent entrepreneurial mindsets among faculty and students. These findings align with broader studies on Europe's innovation divide. For instance, an EIF analysis noted that *"the majority of Member States are moderate innovators,"* with many innovative SMEs relying on public support due to underdeveloped private VC markets[19]. Moreover, a *Science|Business* viewpoint by the EU Innovation Commissioner stressed the need to *"tap*

[17] https://techukraine.org/2022/12/16/driver-of-innovation-how-the-ukrainian-startup-fund-is-building-an-innovative-ukraine/#:~:text=At%20the%20initial%20stage%20of,that%20have%20shown%20their%20inefficiency
[18] https://en.ain.ua/2024/02/26/ukrainian-startup-fund-2-5m-grant-program/#:~:text=Ukrainian%20Startup%20Fund%20and%20WNISEF,projects%20at%20the%20seed%20stage
[19] https://www.fi-compass.eu/sites/default/files/publications/The%20use%20of%20financial%20instruments%20in%20the%20%E2%80%98Research%2C%20Development%20and%20Innovation%20in%20Small%20and%20Medium-sized%20Enterprises%E2%80%99%20sector.pdf#:~:text=exists1,of%20GDP%2C%202015%20and%202017

the huge innovation potential in newer member states" by providing better connections and funding across regions[20]. She highlighted that 16 EU countries fall into the emerging/moderate category and emphasized new measures (e.g. *Regional Innovation Valleys*) to direct at least €10 billion into inter-regional innovation projects[20]. In short, both the SEEDplus micro-level findings and the macro-level EU data concur: early-stage innovation funding in moderate/emerging regions is *fragmented and insufficient*, but targeted interventions and cross-region collaboration can unlock latent potential.

4. From diagnosing problems to solutions

Importantly, the SEEDplus feasibility study doesn't stop at diagnosing problems – it moves toward solutions by proposing a replicable funding model. It advocates a *blended seed funding approach* that integrates multiple capital sources and features risk-sharing and mission-driven governance. This approach and related best practices are discussed next, in the context of broader European experiences.

5. Recommended Models for Replication in Moderate/Emerging Regions

Drawing on the study's conclusions and comparable success stories across Europe, several concrete policy instruments, support programs, and governance models emerge as candidates for replication. These represent *proven strategies* for boosting early-stage innovation in moderate and emerging regions:

- **Blended Public-Private Seed Funds:** One of the strongest recommendations is to adopt blended funding instruments – seed funds that combine public money (EU structural funds, national innovation budgets) with private capital and philanthropic contributions. Blended funds spread risk and align incentives: public funding ensures patience and policy alignment (e.g. focusing on green or digital innovation), while private investors bring market discipline and expertise. An example is the JEREMIE Accelerator/Seed Fund in Bulgaria, which was capitalized by ERDF funds but managed by private fund managers (selected by EIF). This public-private fund not only invested in 180+ start-ups but also *"triggered a further €20 million in third-party follow-on investment,"* demonstrating the multiplier effect of mixed financing[19]. Similarly, Poland's BRIdge Alfa program created dozens of small seed funds by matching national R&D grants with venture investors. By 2019, the Polish National R&D Center had co-financed 179 seed investments with private VC firms, injecting ~€67 million into start-ups and capping government co-investment per project at €200k[21]. This model – essentially a *public-private partnership (PPP) for venture capital* – is highly replicable. It succeeds by *outsourcing fund management to professional investors* (improving quality of selection), while public entities act as cornerstone investors or guarantors. For moderate innovators lacking a VC tradition, PPP seed funds build the ecosystem from scratch. Many have followed this path: Hungary's Hiventures is a state-owned VC firm that invests from

[20] https://sciencebusiness.net/viewpoint/start-ups/viewpoint-we-must-foster-innovation-cohesion-across-europe#:~:text=We%20must%20tap%20the%20huge,as%20emerging%20or%20moderate%20innovators
[21] https://startupjedi.vc/content/start-poland-fastest-growing-east-european-vc-market-part-2-ventures-grants-and-national#:~:text=This%20investment%20vehicle%20has%20helped,stage%20deals

pre-seed upwards, but operates with a mandate to crowd-in private co-investors[22]; Estonia's SmartCap (part of a public fund KredEx) launched venture funds focusing on deep-tech and even a university spinoff fund; Lithuania and Slovakia have set up similar fund-of-fund structures in recent years with EIF support. The key governance takeaway is to ensure *mission-driven but independent management*: e.g. Ukraine's Startup Fund introduced an independent Supervisory Board to avoid political influence, a governance best practice acknowledged in its success[23].

- **University-Linked Seed Programs (Micro-grants and Incubation Funds):** To specifically empower universities in innovation, one model is the creation of university seed funds or micro-grant programs within HEIs. The SEEDplus study recommends piloting pre-seed funding *"embedded within university innovation offices"*. This can take the form of competitive proof-of-concept grants, student startup grants, or an actual investment fund run by the university (often in partnership with external investors). In the UK and some EU countries, a few leading universities have their own venture funds or invest through *"accelerator funds"* – for instance, the University of Oxford's $600m venture fund (mostly private endowed) or KU Leuven's Gemma Frisius fund (a partnership with banks). Moderate regions can adopt scaled-down versions. Importantly, even micro-scale funding (e.g. €5k–€25k grants) can make a difference at the concept stage. Portugal's "Startup Voucher" program and Spain's NEOTEC grants are examples of small grants for young innovators that have been successful in Southern Europe's moderate innovator context. These programs act as *idea-to-prototype bridges*, often hosted or promoted by universities and incubators. A governance model here is to involve university entrepreneurship centers in scouting and mentoring, while funding comes from public innovation agencies. The University of Warsaw's incubator fund (supported by Poland's *Ideathon* grants) or Slovenia's university-business accelerator co-funded by its Slovene Enterprise Fund illustrate how national agencies can channel funds directly to campus-level entrepreneurship. Such initiatives build an entrepreneurial *pipeline*, ensuring that the best ideas from classrooms and labs don't die due to €10k or €50k being unavailable.
- **Fund-of-Funds and Regional Co-Investment Platforms:** For scaling beyond individual universities or cities, regional fund-of-funds have proven effective. A fund-of-funds aggregates public resources to invest in multiple venture funds that target a region or theme. The new Bulgarian RRF Equity Fund-of-Funds is a case in point: financed by EU Recovery funds and managed by EIF in cooperation with the national Ministry, it dedicates €162 million across three "windows" (innovation, growth, and green infrastructure)[24]. This structure allows specialization (seed vs later-stage) and ensures capital is deployed by qualified private fund managers under EIF oversight. Other regions have done similarly: the Baltic Innovation Fund (BIF) pooled money from Estonia, Latvia, Lithuania and EIF to capitalize local VC funds, which subsequently invested in hundreds of Baltic start-ups through multiple fund generations. In Western Balkans, an EU-backed platform (WB EDIF) created several funds targeting early-stage SMEs. These fund-of-

[22] https://www.mfb.hu/en/mfb-group/hiventures-venture-capital-fund-management-cls-s1821#:~:text=As%20a%20state,incubation%2C%20seed%20and%20growth
[23] https://techukraine.org/2022/12/16/driver-of-innovation-how-the-ukrainian-startup-fund-is-building-an-innovative-ukraine/#:~:text=of%20this%20format%2C%20which%20replaced,that%20have%20shown%20their%20inefficiency
[24] https://therecursive.com/inside-eif-s-new-e162m-boost-for-bulgarian-innovation-growth-and-green-infrastructure-development/#:~:text=The%20fund%20aims%20to%20facilitate,equity%20investments%20across%20three%20categories

funds models are highly relevant to moderate/emerging regions because they *centralize know-how and attract international investors*. A national or multi-country fund-of-funds sends a strong signal that there is public commitment to the start-up ecosystem, thus encouraging foreign venture firms and diaspora investors to participate. Importantly, governance of such funds is typically entrusted to professional bodies (e.g., EIF or a national financial intermediary) that run open calls for fund managers – this competitive selection was crucial in Bulgaria's JEREMIE and in Poland's PFR Ventures programs. For replication, the presence of EIF (or other experienced institutions) can reduce execution risk. Countries like Croatia, Czechia, and Romania have all launched fund-of-funds in recent years, co-financed by EU structural funds and managed with EIF expertise (Croatia's was ~€40M, Romania's *InnovFin* fund-of-funds ~€100M) – these are already bearing fruit in new VC fund creation. We recommend moderate innovators without local VC industry to consider a joint regional fund-of-funds if scale is an issue; for example, a "Balkan Seed Fund" combining resources from several small countries could achieve critical mass and share risk.

- **Accelerators and Mentoring Networks with Funding Ties:** Funding alone doesn't guarantee success; support programs and networks are complementary instruments. Many moderate regions have successfully implemented accelerator programs or innovation hubs that provide mentorship, training, and links to investors. The SEEDplus project itself established venture creation courses and startup competitions to build entrepreneurial capacity[25]. A best practice is to pair such programs with a financing mechanism – e.g., winners of a startup competition receive seed funding, or an accelerator comes with an investment fund attached. In Eastern Europe, a notable example was *Eleven Accelerator* in Sofia: it ran a 3-month accelerator program for cohorts of start-ups and gave each a €25k–50k investment, enabled by the JEREMIE fund. This combination of mentorship + capital helped inexperienced founders navigate early pitfalls and become investment-ready. Similarly, EIT's Jumpstarter program in RIS countries provides training to research teams and awards seed grants at the end. For replication, universities and regional agencies should institutionalize such hybrid programs. They can leverage EU funding (like Erasmus+ for entrepreneurship or Horizon Europe ecosystem calls) to finance the "soft" support and earmark some funds for grants or equity. *Governance model:* involves broad partnerships – e.g., a local innovation agency, the university, private sponsors, and possibly an NGO or donor (especially in places like Ukraine) – to run the accelerator. This spreads ownership and ensures the program meets local needs while connecting to global networks. An interesting governance innovation is the "Startup Council" model: for instance, Latvia's government formed a council of private investors and public officials to jointly decide on accelerator grant awards, blending public accountability with private sector insight. Such multi-stakeholder governance could be adopted by CloudEARTHi partners when rolling out funding competitions.
- **Angel Co-Investment Schemes and Tax Incentives:** To stimulate private investment in early-stage ventures, many moderate innovator countries have introduced angel co-investment schemes or tax incentives for seed investment. For example, Ireland and Portugal (once moderate innovators, now improving) give income tax relief to individuals investing in start-ups. Estonia and Finland have co-investment facilities where a public fund matches funds invested by

[25] seedplus.cloudearthi.com

accredited angel investors, thereby de-risking the deal for the angels. The UK's Seed Enterprise Investment Scheme (SEIS), while outside EU now, is often cited in EU policy circles as a model to emulate because it unlocked a wave of angel capital through tax breaks. Moderate innovators could replicate these policies to grow their local investor base. A relevant support program in this vein is InnovFin Business Angels, piloted by EIF in some countries, which provided EU loan guarantees for angel funds – essentially encouraging more angel consortiums to form. The SEEDplus study's emphasis on *"enhancing public-private cooperation"* in Norway and *"local stakeholder support"* in Bulgaria can partly be achieved by such incentives that mobilize domestic capital. While tax policy is national, knowledge sharing across the EU (via OECD or EC workshops) has led to many countries adopting or improving these instruments. The strategic replication here is to tailor the incentive to the country's context (e.g., a modest tax credit may suffice where some wealth exists, whereas direct co-investment by government might be needed where investor culture is very nascent).

- **Mission-Driven and Blended Governance:** Lastly, an overarching model recommended is to ensure mission-driven governance of seed funding initiatives. This means aligning fund objectives with societal missions (e.g., climate innovation, digital transition) and involving stakeholders beyond just financiers – such as universities, government, industry, and community representatives – in oversight roles. The SEEDplus unified model calls for *"mission-driven governance structures"* with flexibility and risk-sharing. One concrete example is the CloudEARTHi Seed Fund proposal itself, which would be governed by the CloudEARTHi consortium (spanning academia and industry partners) to focus on deep-tech and circular economy start-ups. Such a multi-partner governance ensures the fund stays true to its innovation mission rather than purely profit. Another example is Ukrainian Startup Fund's Supervisory Board composed of top VC and tech leaders alongside a government observer[26] – this model kept the fund's strategy market-relevant and merit-based, even though it was state-funded. A recommended practice for replication is to incorporate an independent advisory board for any new university seed fund or public VC program, including successful entrepreneurs, venture investors, and university tech transfer officers. This not only builds trust (transparency to avoid politicization) but also helps build bridges between the start-up and investor communities. In sum, the governance innovations – PPP structures, independent boards, multi-source capital pooling – are as important as the capital itself in ensuring these programs succeed and endure.

Each of the above models has a track record in Europe's moderate/emerging innovation regions. Adapting them is less about reinventing the wheel and more about *scaling proven wheels across new roads*. In the next section, we discuss how the **CloudEARTHi initiative** can act on the SEEDplus study by leveraging these best practices across its extensive consortium.

[26] https://techukraine.org/2022/12/16/driver-of-innovation-how-the-ukrainian-startup-fund-is-building-an-innovative-ukraine/#:~:text=an%20impeccable%20business%20reputation%2C%20known,investment%20and%20innovative%20business%20circles

6. Role of CloudEARTHi in Implementation

Leveraging a Pan-European Consortium: CloudEARTHi, with partners in 17 countries, is uniquely positioned to translate the SEEDplus feasibility study into action. The study explicitly proposes establishing a "CloudEARTHi Seed Fund" as a direct outcome. This would be a strategic seed fund operating at a European level, but grounded in the lessons from Norway, Bulgaria, and Ukraine. CloudEARTHi's role would be to catalyze and coordinate this fund across its network. In practical terms, CloudEARTHi can serve as the convenor of stakeholders – bringing together its member universities, industry partners, and external investors (e.g. EIF, national agencies, even corporate VC arms interested in sustainability tech) to design the fund's structure. The consortium's broad geographic spread is an asset: it covers multiple widening countries (such as Bulgaria, Spain, Lithuania, Slovakia), some strong innovators (like Norway, Austria, Turkey and UK), and everything in between. This diversity means CloudEARTHi can implement pilot seed funding in different contexts and share learnings in real time. For example, a *pilot micro-fund* could be launched at UiT Norway to test the university-driven model (with more public-private co-financing), while another pilot runs at Kyiv Academic University (with donor-backed capital and international mentor oversight). CloudEARTHi can facilitate cross-pollination between these pilots, ensuring that a *replicable template* emerges for university seed funds under varying conditions.

Scaling Best Practices: Acting on the study means scaling up best practices identified. CloudEARTHi can create a platform for scaling in a few ways:

- **Knowledge Hub and Training:** First, CloudEARTHi could establish a *knowledge hub* or community of practice around seed fund management for universities. This might involve workshops and toolkits on topics like legal setup of a university fund, IP policies for spin-offs, engaging angel investors, etc. Given CloudEARTHi's projects already include education components (e.g. MOOCs, venture creation courses), extending this into a training program for innovation managers and future fund managers would be natural. By training people across its 31 partners, CloudEARTHi ensures capacity to run seed funds or accelerators is disseminated widely – addressing the "experience gap" noted in places like Bulgaria.
- **Pooling Resources and Co-Funding:** CloudEARTHi can act as an aggregator of resources. Each of the 31 partners could commit a modest amount (from their own budgets or regional development funds) into a collective seed fund pot. For instance, if each partner university or region allocates €50k, the consortium would pool €1.5 million – enough to start funding a portfolio of, say, 30 student/startup projects Europe-wide. Furthermore, CloudEARTHi can engage with EU-level funding programs. As a Horizon Europe initiative itself (European Innovation Ecosystems work programme), CloudEARTHi can align with instruments like InvestEU or upcoming Innovation Agenda calls that might support innovation-financing initiatives. A concrete step could be applying for an *InvestEU* guarantee or funding via the *European Innovation Council Ecosystem* calls, explicitly to capitalize the CloudEARTHi Seed Fund. The consortium could also approach EIF to explore a partnership – for instance, EIF could manage or advise the fund, lending credibility and connecting it to other funds, much like EIF's role in national fund-of-funds. In essence, CloudEARTHi can multiply its impact by *combining many small streams of funding into a significant river*.

- **Piloting Cross-Border Funding Frameworks:** Implementing a seed fund that spans 17 countries will likely face regulatory and operational hurdles (different national laws on public funding, university endowments, etc.). CloudEARTHi's role is to navigate and pilot a cross-border framework. This could mean setting up a central legal entity (perhaps in an EU country with flexible fund laws, like Luxembourg or the Netherlands) through which all partners participate. CloudEARTHi can leverage its academic network to negotiate any needed policy accommodations – for example, convincing education ministries to let universities take equity stakes in start-ups (where currently restricted) as part of the project. The study envisions gradually scaling from local pilots to a formal cross-border fund. CloudEARTHi can coordinate this phased implementation: start with a "virtual fund" model (each partner supports local start-ups with local funds but under a common branding and criteria), then evolve into an integrated fund once proof of concept is established. The consortium structure itself provides a governance umbrella for this: a fund steering committee with representatives from key regions can be constituted under CloudEARTHi to oversee selection and monitoring of investments across the network. This federated approach mitigates risk and allows customization – e.g., Ukrainian projects might initially receive grant-equity hybrid support due to higher risk, while Norwegian projects might get co-investment from local VCs with CloudEARTHi topping up. CloudEARTHi's coordination ensures these disparate efforts still follow a unified strategy (targeting deep-tech, climate, circular economy solutions, as per the mission).
- **Engaging Investors and Philanthropists:** The study highlights involving philanthropic contributions and development agencies. CloudEARTHi can actively reach out to such sources. Many successful tech entrepreneurs and corporations in Europe are launching philanthropic initiatives for sustainability and innovation. The consortium can pitch the CloudEARTHi Seed Fund as an attractive impact investment vehicle – one that leverages an existing pan-European infrastructure (31 partners) to scout and support solutions for climate and circular economy. By engaging with high-net-worth donors, corporate CSR funds, or foundations (e.g., those focused on education or climate innovation), CloudEARTHi can secure additional patient capital. Likewise, international development agencies (e.g. World Bank, EBRD, USAID) have programs for supporting innovation in Eastern Europe – CloudEARTHi could propose partnerships where these agencies provide grant funding or first-loss capital for ventures in regions like Ukraine or the Balkans, under the consortium's umbrella. Essentially, CloudEARTHi can act as a bridge between such funding sources and the local innovation ecosystems that need them, offering scale and professional management to ensure funds are well-used.
- **Showcasing and Networking:** Finally, CloudEARTHi's role includes being a *visible champion* for the cause of innovation cohesion. Through its conferences, publications, and outreach (which are already part of its activities), CloudEARTHi can share success stories from the seed fund pilots and promote the model to a wider audience. By documenting the outcomes (new startups created, follow-on investments, societal impacts), the consortium can influence stakeholders and policymakers (as noted below). CloudEARTHi can also connect its start-ups to broader markets – e.g., organizing investor demo days across countries, linking start-ups with EIT KICs or EIC Accelerator opportunities for next-stage funding. Acting as a network orchestrator, CloudEARTHi ensures that a start-up nurtured in one moderate region can find partners or investors from another, truly building a pan-European innovation ecosystem.

In summary, CloudEARTHi can take the feasibility study from paper to practice by coordinating resources, standardizing best practices, and fostering collaboration across its consortium. This multi-country approach directly addresses the fragmentation issue: instead of isolated efforts, CloudEARTHi's 17-country fund would demonstrate unity and shared purpose in European innovation. It effectively operationalizes the study's "replicable and context-sensitive model" on a large scale.

7. Policy and Strategic Implications

Implementing the SEEDplus study's vision through CloudEARTHi carries important implications for policy at institutional, national, and EU levels. These implications point to the **strategic shifts** needed to sustain and amplify early-stage innovation funding in moderate and emerging regions:

a. Integrating University Seed Funds into Innovation Policy: One clear implication is that universities – especially in widening countries – should be given a more prominent role in innovation policy. Policymakers may need to update frameworks to allow universities to hold equity in start-ups or create endowment-like funds. Some countries still restrict public universities from investing or retaining returns from spin-offs, which can hinder the establishment of university venture funds. The success of a CloudEARTHi Seed Fund would press for reforms: e.g., modernized higher education laws to encourage commercialization and venture activity on campus. National innovation strategies might explicitly include support for university seed funds as a tool to retain talent and intellectual property locally. Strategically, this helps curb "brain drain" from peripheral regions – if students and researchers know they can get funding to start companies at their home university, they are less likely to migrate purely for entrepreneurial opportunities.

b. Aligning with EU's New Innovation Agenda (Cohesion & Missions): At the EU level, a CloudEARTHi-driven seed fund aligns tightly with the New European Innovation Agenda's focus on *"innovation cohesion"* and missions like the green and digital transitions. The proposed fund is mission-oriented (supporting deep-tech and circular economy innovations), which dovetails with EU priorities (European Green Deal, Digital Decade goals). If successful, this model could feed into the "Regional Innovation Valleys" initiative – where the EU encourages at least €10 billion in inter-regional innovation investment. Policymakers might see CloudEARTHi's approach as a blueprint for *future European Innovation Ecosystems actions*: for example, the Commission could launch a dedicated program to co-fund Consortium Seed Funds among groups of universities in moderate/emerging regions. It also supports the idea of linking innovation leaders with laggards: CloudEARTHi inherently does this by involving top universities (e.g., Edinburgh or Alicante as per CloudEARTHi partners) alongside less advanced ones (Varna, KAU). Strategically, spreading such consortia could reduce the East-West innovation gap over time, by *institutionalizing collaboration* rather than one-off projects.

c. Financing Sustainability and Deep-Tech at Early Stages: A policy implication of focusing on deep-tech and circular start-ups (CloudEARTHi's theme) is the recognition that these areas often need longer-term, patient capital starting at seed stage. Climate tech or advanced materials startups, for instance, may not attract quick private investment due to longer R&D cycles. A

public-private seed fund targeting these missions fills a critical gap. The EU and national governments will need to consider expanding financial instruments for high-risk, high-impact innovation – essentially scaling the approach of the EIC (which provides up to €2.5M grants and equity for deep-tech) down to the university seed level. One strategic implication is the potential to use *NextGenerationEU* or *Structural Funds* in the 2021–2027 period to capitalize such mission-driven seed funds. If CloudEARTHi's fund demonstrates success, regions could justify allocating part of their *European Regional Development Fund (ERDF)* budgets to similar seed funds that target Smart Specialisation priority areas (many of which are sustainability-oriented). This would embed the practice into mainstream cohesion policy, making it not just a pilot but a norm.

d. Need for Cross-Border Investment Vehicles: The initiative also raises a broader policy question: how to ease cross-border investment in European start-ups. A fund operating across 17 countries will likely encounter *legal and tax complexities* moving money and returns across borders. Policymakers might use this case to streamline regulations – for example, standardizing rules for cross-border venture funds or providing EU-level "passporting" for seed funds similar to UCITS in the mutual fund world. There could be discussions on creating a Pan-European Seed Fund framework, perhaps under the InvestEU umbrella, that consortiums like CloudEARTHi can readily plug into. Strategically, simplifying cross-border funding would help mobilize Europe's large pools of capital (often concentrated in innovation-leading countries) to invest in start-ups in moderate/emerging regions. It addresses the current mismatch where, say, a pension fund in France finds it difficult to invest in a Bulgarian or Latvian seed fund. By lowering these barriers, policy can unlock more financing for the places that need it, as exemplified by the *CloudEARTHi network bridging Western and Eastern Europe*.

e. Engaging Development and Cohesion Instruments for Innovation: For countries like Ukraine (and similarly situated neighbors), the project underscores how development aid and cohesion funds can be leveraged for innovation, not just infrastructure. Policymakers in the EU's external action and neighbourhood policy can take note that supporting entrepreneurship (through grants, equity, technical assistance) is a form of resilience-building. The implication is that future assistance packages (for Ukraine's reconstruction, for Western Balkans accession preparation, etc.) should include dedicated envelopes for *innovation and start-up funding*. CloudEARTHi's approach – aligning with development agencies for donor-backed seed investments – could become a model under the EU's External Investment Plan or the EBRD's small business initiatives. Strategically, this broadens the concept of economic development to explicitly incorporate start-up ecosystem development as a pillar, even in crisis or transition countries. It is a forward-looking move: helping war-torn or lagging economies not just rebuild the old, but leapfrog into new innovative sectors.

f. Long-Term Sustainability and Exit Strategy: A final implication relates to the sustainability of such seed funding efforts. Publicly-backed seed funds eventually need to show they can attract private capital and recycle returns into new investments (creating a *self-sustaining evergreen fund* ideally). CloudEARTHi and policymakers must plan for an *exit strategy*: for example, after an initial funding period, could the CloudEARTHi Seed Fund spin off into an independent entity funded by returns and new private LPs? Policy could facilitate this by allowing profits from investments to be retained and reused by universities or consortia (rather than returned to state coffers, as sometimes required). It also implies measuring success not just in immediate outputs

(start-ups funded) but in longer-term outcomes: follow-on funding raised by those start-ups, commercial successes, and perhaps even regional economic impact (jobs, value created in moderate regions). If these outcomes are positive, it provides evidence for policymakers to institutionalize seed venture funding programs. We've already seen precedents: Bulgaria increased the capital of its national Fund of Funds in 2022 to broaden its venture programs[27], and Poland's PFR Ventures has become a permanent fixture in its innovation landscape after proving effective[28]. Strategically, Europe might witness a shift where *every moderate innovator country has a stable, hybrid seed fund or fund-of-funds mechanism by default* – much like how every country has a national research council. CloudEARTHi's pan-European fund could serve as the catalyst and template for that vision.

In conclusion, the SEEDplus feasibility study and the broader analysis here illustrate both the *need and the opportunity* for strengthening early-stage innovation funding across Europe's less-advantaged innovation regions. The policy implication is clear: Europe's innovative future relies on empowering *all its regions* to participate in the knowledge economy. By replicating successful instruments and scaling them via initiatives like CloudEARTHi, the EU can make tangible progress toward a truly interconnected pan-European innovation ecosystem. The CloudEARTHi consortium's commitment to implement this *"strategic roadmap"* by engaging investors, stakeholders, and policymakers is a timely opportunity. It aligns with Europe's goals of cohesion, sustainability, and global competitiveness, turning what was a feasibility study into a real-world model for inclusive innovation-driven growth.

References:

- Mariya Gabriel (EU Commissioner), *Viewpoint: Innovation Cohesion across Europe*, Science|Business, Sep 2022 sciencebusiness.net.
- fi-compass (EU/EIB), *Case Study: JEREMIE Acceleration and Seed Instrument in Bulgaria*, 2016 – outcomes of EU-backed seed fund (180+ start-ups financed, €20M follow-on) fi-compass.eu.
- Irina Obushtarova, *Inside EIF's New €162M Boost for Bulgarian Innovation…*, The Recursive, Oct 2023 – on Bulgaria's RRF Fund-of-Funds launch and ecosystem maturation therecursive.com.
- Startup Jedi (V. Tsvirko), *Poland: Fastest-Growing CEE VC Market (Part 2)*, Aug 2021 – role of public programs (81% of VC rounds with government funding, Bridge Alfa, PFR) startupjedi.vc.
- TechUkraine, *How the Ukrainian Startup Fund is Building an Innovative Ukraine*, Dec 2022 – USF model (state fund with independent governance, 250 startups funded) techukraine.org.
- European Investment Bank, *fi-compass Stocktaking – RDI Financial Instruments in SMEs*, 2018 – use of structural funds for equity in innovation (share by country) fi-compass.eu.
- SEEDplus Deliverable D6.1, *Project Communication & Exploitation Plan*, 2023 – SEEDplus focus on emerging/moderate ecosystems and CloudEARTHi context seedplus.cloudearthi.com.

[27] https://www.novinite.com/articles/204872/Bulgarian+Government+Increases+the+Capital+of+the+Fund+of+Funds#:~:text=Bulgarian%20Government%20Increases%20the%20Capital,The%20funds

[28] https://startupjedi.vc/content/start-poland-fastest-growing-east-european-vc-market-part-2-ventures-grants-and-national#:~:text=August%202%2C%202019%2C%20the%20maximum,capital%20rounds%20had%20government%20capital