Proposal for a financial instrument for innovation dedicated to SMEs: INOV-IMM

Federation for Innovation and Sustainable Competitiveness in SMEs (FICSIMM)

Contents

0. The need for a financial instrument for innovation in SMEs 5

1. Key principles of the instrument 6

1.1. Accessibility 6

1.2. Stimulating innovation 6

1.3. Complementarity 7

1.4. Risk sharing 7

1.5. Increasing the competitiveness of SMEs 7

2. Structure of the financial instrument 8

2.1. Revolving fund 8

2.2. Financing mechanisms 8

2.3. Partners and implementation 9

3. Eligibility criteria 9

3.1. Type of eligible SMEs 9

3.2. Eligible activities 9

3.3. Financial conditions 12

4. Advantages for SMEs 13

4.1. Rapid access to financing 13

4.2. Support for the development of new technologies 13

Ana-Maria Icatoiu

Digitally signed by Ana-Maria Icatoiu
Date: 2026.11.10 21:15:45 +02'00'

4.3. Increasing competitiveness on the global market 13

4.4. Reducing financial risks 13

5. Implementation and monitoring 14

5.1. Implementation 14

5.2. Monitoring mechanisms 14

5.3. Reporting and adjustment 14

6. Phasing of the instrument's implementation 15

6.1. Preparation phase 15

6.2. Pilot phase 16

6.3. Expansion phase 16

6.4. Consolidation and development phase 16

7. Application, evaluation and monitoring flow of a project 17

7.1. Information and preliminary assessment 17

7.2. Preparation of the innovation plan 17

7.3. Submission of the application and eligibility check 18

7.4. Evaluation and financing decision 18

7.5. Contracting and implementation 18

7.6. Reporting, monitoring and closure 19

8. Governance of the instrument and the role of partners 19

8.1. Investment and Development Bank (BID) 19

8.2. Partner commercial banks 20

8.3. Ministry ..... (MFin / MEDAT?) 20

8.4. Advisory board 20

8.5. Universities, research institutes and ecosystem partners 21

9. Risks and mitigation measures 21

9.1. Insufficient demand or insufficiently prepared projects 21

9.2. Reluctance of banks to finance innovation projects 22

9.3. Technical or commercial failure of the innovation 22

9.4. Insufficient protection of intellectual property 22

9.5. Default rate above expectations 22

9.6. Growing administrative complexity 23

10. Illustrative examples of fundable projects 23

10.1. Manufacturing firm developing a new product 23

10.2. Agri-food firm with process innovation 24

10.3. IT services firm developing an artificial intelligence-based solution 24

10.4. Firm in the renewable energy and energy efficiency field 25

10.5. Start-up with scalability potential 25

11. Expected impact and indicator system 26

11.1. Output indicators 26

11.2. Result indicators 26

11.3. Impact indicators 27

11.4. Use of the indicators 27

12. Questions regarding the instrument 28

12.1. Why an instrument based on loans and guarantees, rather than grants? 28

12.2. How does INOV-IMM differ from the European programmes dedicated to innovation? 28

12.3. What happens if the innovation fails? 28

12.4. Is the instrument accessible to firms in traditional sectors? 29

12.5. How is information about the projects submitted protected? 29

12.6. What is the role of employers' organisations? 29

Conclusions 30

International good practices 32

1. Integrating a support mechanism for scaling up innovations 32

2. Creating a technical assistance and mentoring mechanism for SMEs 34

3. Creating a system of incentives for SMEs that collaborate with universities and research institutes 36

4. Integrating a system of performance indicators for beneficiary SMEs 38

5. Creating a component for cooperation with private investors and venture capital funds 40

0. The need for a financial instrument for innovation in SMEs

In an increasingly competitive global economic context**, innovation is an essential factor for the growth and sustainability of Romanian SMEs**. Nevertheless, **limited access to financing** remains one of the greatest barriers to the development of new technologies, products and innovative services. SMEs frequently face **difficulties in obtaining the capital needed for research, development and the implementation of technological solutions**, particularly in the early stages of innovation, when risks are high and financial resources are insufficient. Commercial banks are reluctant in assessing innovation projects, since these **lack conventional collateral** and their outcomes are, by their very nature, uncertain. Without adequate support, many of these firms fail to realise their innovation potential, remaining dependent on outdated technologies and losing growth opportunities on international markets, while **valuable ideas remain unexploited or are taken up by competitors from other countries**. These barriers manifest themselves with varying intensity depending on the size of the firm, the sector of activity and the region, **with micro-enterprises and firms located outside the major university centres being the most affected**.

At present, most of the financing programmes available to SMEs focus on conventional investments in infrastructure and equipment, without specifically covering the costs associated with the innovation process, such as **applied research, prototyping, market testing or the protection of intellectual property**. Although there are European initiatives dedicated to innovation, such as Horizon Europe or the EIC Accelerator, access to these funds is difficult for Romanian SMEs, owing to strict criteria, complex bureaucracy and intense competition at European level, in which firms from countries with mature innovation ecosystems enjoy **a considerable structural advantage**. At national level, there is a lack of intermediate instruments to prepare firms for the European competitions and to finance medium-sized innovation projects.

In the absence of a flexible national financial instrument that responds to the specific needs of innovative firms, Romania risks losing ground to more advanced economies, where support for innovation is regarded as a strategic priority.

The INOV-IMM financial instrument comes as a solution tailored to Romanian SMEs, offering accessible, rapid and sustainable financing for the development and commercialisation of innovations. Through a **mechanism based on preferential-rate loans, technology leasing and state guarantees**, SMEs will be able to access the resources needed to develop new technologies, products and business models. Unlike grant schemes, which depend on one-off calls and limited budgets, the instrument is designed to be **continuously available** and to **“recycle” resources** as the financing

is repaid. This instrument will contribute directly to increasing the competitiveness of the Romanian economy, stimulating applied research, digitalisation and the transition towards high value-added industries, and will **strengthen the link between SMEs, the financial system and the research community**. The instrument thus responds to a need consistently signalled by SMEs: **the existence of a predictable source of financing, dedicated to innovation, which does not depend on the calendar of calls for projects under one European-funded programme or another**.

1. Key principles of the instrument

This financial instrument is intended for SMEs wishing to invest in **the development of new products, services or technologies**, providing financial support through a **mechanism without non-repayable grants**, but with **flexible financing and incentives for innovation**.

The principles below describe the operating logic of the instrument and represent **the commitments that FICSIMM proposes to its institutional and financial partners**, starting from the premise that **an economically viable innovation can sustain its own financing** when the lending conditions are adapted to its development cycle.

1.1. Accessibility

- **A rapid and digitalised** application process (max. 30 days), with **simplified documentation** and predictable response times.
- **Flexible eligibility criteria**, favouring innovative SMEs, including start-ups, **regardless of the sector of activity or the region in which they operate**.
- **Support for obtaining patents, developing prototypes and market testing**, stages which are rarely covered by the existing financing instruments.

1.2. Stimulating innovation

- Financing dedicated to **the development of new technologies**, digitalisation and patenting, with an emphasis on projects that have **clear commercialisation potential**.
- Focus on **sustainable technologies, "net zero" technologies, automation, digitalisation, AI, IoT** etc., without excluding process or business-model innovations in traditional sectors.

- SMEs will have the opportunity to **collaborate with universities and research centres**, benefiting from **their expertise and infrastructure**.

1.3. Complementarity

- It is aligned with the **EU objectives on innovation and competitiveness** and can prepare SMEs for **subsequently accessing European programmes (both those financed directly by the European Commission and those under the Multiannual Financial Framework 2028 - 2034)**.
- It complements the existing European initiatives, but removes the limitations imposed by European-funded programmes, in particular **the rigid calendar of calls and the procedural complexity**.
- It is based on **public-private financing**, involving the **Investment and Development Bank (BID)** and **commercial banks**, which ensures **the mobilisation of private capital** alongside public resources.

1.4. Risk sharing

- BID will guarantee up to **80% of the loan value**, **compensating for the lack of conventional collateral** that is specific to innovation projects.
- Creation of a **guarantee fund** to support investments in innovation, reducing the risks for banks and **encouraging them to finance projects they would otherwise reject**.
- **SMEs will be able to reinvest the savings obtained through the instrument in their further development**, thereby consolidating the long-term effect of the initial investment.

1.5. Increasing the competitiveness of SMEs

- Supporting innovation will enable SMEs to **launch new products and/or services**, increase their productivity and expand into new markets, including through **integration into international value chains**.
- The instrument aims at **narrowing the innovation gap between Romania and other EU Member States**, contributing to **real economic convergence**.
- Beneficiary firms will increase their **capacity to subsequently attract private financing**, on the basis of the results achieved.

2. Structure of the financial instrument

The instrument will be structured in the form of an **Innovation Financing Fund (FFI)**, **managed by BID and operated in partnership with financial institutions and investment funds**. This architecture allows **a clear separation of roles** between the entity that administers the resources and guarantees and, respectively, the entities that actually grant the financing, while also ensuring **transparency in the use of funds** and **a uniform evaluation of innovation projects**. The proposed structure can be put into practice **on the basis of the existing institutional framework**, without the need to create new entities, which reduces the time and costs of operationalisation.

2.1. Revolving fund

- Fed from:
  - **BID and commercial banks** - initial capital.
  - **European funds dedicated to innovation** (Horizon Europe, EIC Accelerator), insofar as the programme rules allow their use through financial instruments.
  - **Partnerships with private investors** and venture capital funds interested in SMEs with growth potential.
- The revolving model allows **continuous refinancing**, ensuring **financial sustainability**: **the amounts repaid by beneficiaries are reinvested in new innovation projects**, so that the fund maintains its capacity to intervene without repeated budgetary allocations.

2.2. Financing mechanisms

- **Preferential-rate loans** (max. 2.5%), intended for research, development and commercialisation activities.
- **Leasing for innovative equipment and technologies**, adapted to laboratory, pilot-production and testing equipment.
- **Grace period:** 1-2 years, depending on the duration of the innovation's development, so that repayment begins **after the new product or service generates revenue**.
- **Loan term:** 5-10 years, depending on the type of investment and on **the life cycle of the technology financed**.
- **Partial interest subsidy for the first 2-3 years**, reducing the pressure on SMEs in the highest-risk stage.

2.3. Partners and implementation

- **BID** will administer the fund and the guarantees, ensuring **the overall coordination of the instrument**.
- **Commercial banks** will provide the financing to SMEs, using their **existing territorial network** and direct relationship with clients.
- A **single financing platform** will be developed, where SMEs can apply and follow the process, from the submission of the application through to **the reporting of project results**.
- **Universities and research institutes** may be involved as technical partners of the beneficiary SMEs, while **employers' organisations** as well as other associative structures of the private sector can contribute to informing and preparing firms to access the instrument.

3. Eligibility criteria

The eligibility criteria are designed so as **to open the instrument to the largest possible number of innovative SMEs**, while maintaining **the prudential standards required** by a mechanism based on loans and guarantees. The emphasis is placed on **the quality and viability of the innovation project**, not on restrictive formal criteria.

3.1. Type of eligible SMEs

- Innovative SMEs in **the technology, manufacturing, automotive, renewable energy, health and IT sectors**, etc., **regardless of size or age**.
- SMEs developing **patentable products, AI, IoT and automation solutions** or other technologies with **commercialisation potential**.
- Start-ups with **scalability potential**, assessed on the basis of **the quality of the team and of the business plan**, not only of their financial track record.

3.2. Eligible activities

The INOV-IMM instrument finances **the entire pathway of an innovation project, from idea validation and applied research, through prototyping, testing, protection of intellectual property and preparation of production, to market launch**. This approach starts from the observation that **many**

innovations fail not in the development phase, but in the intermediate stages, which are insufficiently covered by existing instruments, such as market testing, certification or industrialisation.

The categories of eligible activities proposed by FICSIMM are presented below; the list is indicative and will be detailed in the procedural framework of the instrument, with **periodic updating** in line with technological developments and the needs signalled by SMEs.

a) Applied research and experimental development:

- **Applied research activities** carried out by the SME, including the costs of research and development staff assigned to the project, for its duration.
- **Research contracts and development services** concluded with universities, research institutes or other specialised entities, for concept validation, technical feasibility studies and the development of the solution.
- **Materials, components and consumables** required for experimental development activities.
- **Access to the research infrastructure** (laboratories, testing equipment, computing infrastructure) of universities, institutes or innovation centres, on a contractual basis.

b) Prototyping, testing and validation:

- **Development of prototypes** (functional, demonstration or pre-series), including design, materials, manufacture and successive iterations.
- **Technical testing and validation** of the prototype in the laboratory and under real conditions of use, including with pilot customers.
- **Certification, type approval and compliance with the applicable standards**, including the tests required by sectoral regulations (for example in the fields of health, energy, construction or food).
- **Market testing** of the new product or service, including market studies and commercial validation activities with the first users.

c) Protection of intellectual property:

- **Patenting expenses** (prior-art searches, drafting, filing, fees) at national, European and international level.
- **Registration of trade marks, designs and industrial models** associated with the innovation.

- **Specialised consultancy** in intellectual property, including protection strategy, freedom-to-operate analysis and licensing management.
- **Acquisition or licensing of intellectual property rights** required for the development or commercialisation of the innovation.

d) Equipment and technologies for innovation:

- **Laboratory, testing and prototyping equipment**, purchased or leased, required for development activities.
- **Pilot-production or series-production equipment** required for the industrialisation of the innovation, including the adaptation of existing production lines.
- **Advanced technologies** (artificial intelligence, robotics, automation, blockchain, IoT, additive manufacturing) integrated into the new product, service or process.
- **Software, licences and cloud services** used in development, testing and launch activities, for the duration of the project.

e) Development of digital products and services:

- **Development of software, platforms and applications** which constitute the innovation or an essential part of it, including external development services.
- **Development of solutions based on artificial intelligence and data analytics**, including the acquisition or compilation of the necessary data sets.
- **Security and compliance** of the digital products developed, including security testing and compliance with the legal requirements on data protection.

f) Consultancy, mentoring and innovation management services:

- **Technical and innovation management consultancy**, including the drafting of the innovation plan, the product strategy and the commercialisation plan.
- **Industrial design and user experience services** for the new products and services.
- **Project management** for complex projects with several partners or several stages.
- **Participation in mentoring programmes, accelerators and innovation networks**, insofar as they are linked to the objectives of the project.

g) Preparation for commercialisation and internationalisation:

- **Drafting of the launch strategy and presentation materials** for the new product or service.
- **Participation in trade fairs, exhibitions and economic missions** relevant to the launch of the innovation, including on foreign markets.
- **Adaptation of the product to the requirements of foreign markets** (translations, additional certifications, technical adaptations).
- **Preparation of the dossier for attracting investors**, including the valuation of the company and the related consultancy, with a view to accessing the co-investment component.

h) Staff training and skills development:

- **Training of employees** in the new technologies and processes introduced through the project.
- **Recruitment or secondment of researchers and specialists** for the duration of the project, including within collaborations with universities.
- **Development of innovation management skills** at the level of the firm's management.

i) Expenditure proposed as ineligible:

- **Fundamental research with no prospect of economic application** within the project horizon.
- **Acquisition of equipment unrelated to the innovation project** (conventional production equipment for existing products, vehicles, furniture).
- **Current operating costs** (rent, utilities, salaries of staff not involved in the project), with the exception of those directly linked to the project, within the limits set by the procedural framework.
- **Refinancing of investments already made** or of existing debts.
- **Expenditure on recoverable taxes**, under the applicable tax legislation.

3.3. Financial conditions

- SMEs must be **free of major tax arrears** and must demonstrate **the capacity to repay the financing** on the basis of realistic assumptions.
- They must submit **a detailed innovation plan** demonstrating the economic impact, with **objectives, milestones, budgets and expected results** that are clearly defined.

4. Advantages for SMEs

Compared with the sources of financing currently available, INOV-IMM offers SMEs **a combination of speed, low cost and flexibility**, adapted to the specific nature of innovation projects. The main advantages are summarised below.

4.1. Rapid access to financing

A simplified and **digitalised** process, with **clear response deadlines** and documentation kept to the strictly necessary.

Extended grace period to allow the innovation to be developed **before repayment begins**.

4.2. Support for the development of new technologies

Financing dedicated to **research and innovation**, including for the intermediate stages, which are insufficiently covered by other instruments.

The possibility of **collaboration with research centres**, for the **technical and scientific validation** of the solutions developed.

Access to venture capital, private equity and business angel funds, facilitated by the validation that financing through the instrument provides.

4.3. Increasing competitiveness on the global market

SMEs can **launch new products** and **enter international markets**, diversifying their sources of revenue.

Improved **international visibility** through strategic collaborations and participation in **European innovation networks**.

An increase in **company value** through innovation and development, including through the **intellectual property assets** created.

4.4. Reducing financial risks

Guarantees of up to 80% of the financing value, which **compensate for the lack of own collateral**.

Preferential and subsidised interest rate for the first years, which **reduces the total cost of financing**.

Flexibility in repayment, adapted to the development cycle of the innovation and to the **firm's cash flows**.

5. Implementation and monitoring

The success of the instrument depends on **coordinated implementation** between the public institutions and the financial partners, as well as on **a monitoring system that allows rapid corrections** when results do not meet expectations. The proposed stages and mechanisms are presented below.

5.1. Implementation

- **BID and the commercial banks** will manage the funds and guarantees on the basis of a **common procedural framework** ensuring equal treatment for all SMEs.
- A **digital platform** will be developed for SMEs, which will reduce **the administrative time and costs** of applying and reporting.
- There will be **an advisory board** made up of **specialists in innovation, finance and industry**, for the validation of innovative projects and for **formulating recommendations on adjusting the instrument**.

5.2. Monitoring mechanisms

A **half-yearly** evaluation of the impact of the innovation on the market, based on the data reported by beneficiaries.

Independent audit of the proper use of funds and **verification of compliance with the eligibility criteria**.

Performance KPIs (number of patents, launch of new products, impact on revenue), established **from the very launch of the instrument**.

5.3. Reporting and adjustment

An **annual** report to the Ministry of ..... and the partners involved, covering **the results achieved and the difficulties encountered**.

Periodic adjustments to the financing conditions, in line with the progress of the financed projects and the **feedback received from beneficiaries and banks**.

Periodic consultation of the employers' organisations relevant to SMEs, with a view to the early identification of access difficulties and of the emerging needs of innovative firms.

6. Phasing of the instrument's implementation

In order to ensure a controlled launch and adjustment based on actual results, FICSIMM proposes that the INOV-IMM instrument be implemented **in four successive phases**, each with clearly defined objectives, deliverables and criteria for moving on to the next phase. This approach allows **the procedures to be tested on a small scale before national roll-out**, limits operational risks and gives the financial partners time to adapt their own evaluation methodologies to the specific nature of innovation projects, which differ substantially from conventional investments.

6.1. Preparation phase

- **Defining the legal and institutional framework** of the instrument, including the agreement between BID and the participating commercial banks, the rules of the guarantee fund and the standard financing conditions.
- **Consulting employers' organisations, banks, universities and research institutes** on the financing conditions, the eligibility criteria and the method of evaluating innovation projects.
- **Developing the single financing platform** and testing it together with a group of innovative SMEs and banks before the public launch.
- **Establishing the performance indicators and the reporting system**, so that data are collected uniformly from the very first project financed.
- **Drawing up the methodology for evaluating innovation projects**, which **combines conventional financial analysis with an assessment of the technological and commercial potential of the innovation**.

6.2. Pilot phase

- **Launching the instrument in a limited number of partner banks and in a limited number of sectors or regions**, in order to verify the functioning of the procedures under real conditions.
- **Close monitoring of processing times**, the application approval rate and the difficulties encountered by SMEs in preparing their innovation plans.
- **Interim evaluation of the pilot phase**, with the involvement of the advisory board and employers' organisations, and **adjustment of the conditions** before national roll-out.
- **Communicating the results of the pilot phase** to the business community and the research community, in order to build trust and prepare demand for the next phase.

6.3. Expansion phase

- **Opening the instrument to all interested commercial banks** that meet the participation conditions, and to innovative SMEs in all sectors and regions of the country.
- **National information campaign**, run in partnership with employers' organisations, universities, research institutes and business accelerators, with an emphasis on **regions with low innovation activity**.
- **Activating the complementary components: the mentoring and technical assistance programme, the incentives for collaboration with academia and the periodic consultation of beneficiaries**.
- **Increasing the capitalisation of the fund**, as demand confirms the initial sizing, including by attracting private investors and venture capital funds.

6.4. Consolidation and development stage

- **Introducing the second phase of the instrument**, dedicated to the scaling and commercialisation of successfully developed innovations, following the model of the international good practices presented in this document.
- **Developing the public-private co-investment component**, through which SMEs with high growth potential can attract private capital on preferential terms.
- **Impact evaluation of the instrument**, carried out by an independent evaluator, to underpin decisions on its continuation, extension or reconfiguration.

- **Integrating the instrument into the broader framework of national research, innovation and SME support policies**, including alignment with the European programmes dedicated to innovation.

7. Application, evaluation and monitoring flow of a project

An essential advantage of the INOV-IMM instrument is **the simplicity and predictability of the path an SME follows**, from the moment it decides to invest in an innovation project until its completion.

The flow proposed below is designed so that **each stage has a clear owner and an indicative deadline**, and the SME can track the status of its application at any time through the single financing platform:

7.1. Information and preliminary assessment

- The SME accesses the instrument's platform, where it finds **the financing conditions, the eligibility criteria, the list of required documents and examples of innovation projects**.
- A **preliminary assessment tool for the innovation project**, available on the platform, helps the firm clarify **the maturity stage of the idea** (concept, prototype, validated product) and the appropriate type of financing.
- At this stage, the SME may request **an initial advisory session** through the mentoring programme, in order to clarify its technology, intellectual property and market needs.

7.2. Preparation of the innovation plan

- The SME draws up **the innovation plan**, which describes **the problem or opportunity addressed, the proposed solution, the current stage of development, the next steps, the budget, the partners (including universities or research centres, where applicable) and the expected results, expressed through measurable indicators**.
- The plan includes **a section on the target market and the commercialisation strategy**, since **the instrument finances innovations with potential for economic exploitation**, not research without a commercial purpose.
- The platform provides **a standardised plan template**, which reduces the preparation effort and facilitates the comparable evaluation of projects.

7.3. Submission of the application and eligibility check

- The financing application, together with the innovation plan and the financial documents, is submitted **exclusively online**, through the instrument's platform.
- The partner bank selected by the SME verifies **compliance with the eligibility criteria** and **repayment capacity**, in accordance with its own procedures and the common framework established with BID.
- Any clarifications are requested **only once**, within a set deadline, in order to avoid unjustified prolongation of the process.

7.4. Evaluation and financing decision

- The project evaluation looks at **the degree of novelty of the innovation, technical feasibility, commercial potential, the quality of the team and the realism of the plan**, in addition to the conventional financial analysis.
- For projects with a high degree of technological novelty, the bank requests **the opinion of the advisory board**, which verifies the technical feasibility and relevance of the innovation, thereby protecting both the SME and the bank from insufficiently understood risks.
- The financing decision, including **the specific conditions (amount, interest rate, grace period, term)**, is communicated to the SME within the target deadline of no more than 30 days from the submission of the complete application.

7.5. Contracting and implementation

- After the financing contract is signed, BID issues **the related guarantee**, and the bank makes the funds available, **in tranches aligned with the stages of the innovation project** (for example: development, prototyping, testing, launch).
- The SME implements the project, benefiting, if it has opted for this, from **the support of the designated mentor** and from **advice on intellectual property protection** throughout the duration of the project.
- Given **the inherently uncertain nature of innovation projects**, justified changes to the initial plan may be approved **through a simplified procedure**, without repeating the entire evaluation process.

7.6. Reporting, monitoring and closure

- The SME reports **every six months**, through the platform, on the status of the project and the values of the established indicators, using a simple form which **requires no additional documentation** beyond the firm's existing records.
- On completion of the project, the SME submits **the final report**, which documents the results achieved (prototype, patent, product launched, revenue generated), and the bank and BID validate the closure of the investment stage.
- SMEs that demonstrate **results exceeding the objectives undertaken** may access, on a priority basis, **the second phase of the instrument**, dedicated to scaling and commercialisation, without repeating the evaluation process in full.

8. Governance of the instrument and the role of the partners

The sound functioning of the INOV-IMM instrument depends on **a clear distribution of responsibilities** among public institutions, financial partners, the research community and business representatives. FICSIMM proposes a governance model that is **simple, transparent and results-oriented**, in which each partner contributes its specific expertise and strategic decisions are taken on the basis of the data collected through the monitoring system.

8.1. Investment and Development Bank (BID)

- **Administers the Innovation Financing Fund** and the guarantee fund, including the management of capital, repayments and the reinvestment of resources on a revolving basis.
- **Establishes, together with the partners, the common procedural framework**: the standard financing conditions, the eligibility criteria, the methodology for evaluating innovation projects and the performance indicators.
- **Selects and accredits the partner commercial banks**, on the basis of transparent criteria, and monitors their compliance with the conditions of the instrument.
- **Draws up the annual report** of the instrument and proposes the necessary adjustments, on the basis of monitoring data and consultations with the partners.

8.2. Partner commercial banks

- **Grant the financing** to SMEs, under the conditions of the instrument, using their territorial network, staff and direct relationship with clients.
- **Assess the repayment capacity** and credit risk of each project, in accordance with their own rules, within the framework agreed with BID, and request the opinion of the advisory board on technical aspects.
- **Collect and transmit monitoring data** through the single platform, thereby ensuring the comparability of information across the entire instrument.
- **Develop their internal capabilities for evaluating innovation projects**, including through training programmes organised within the instrument.

8.3. Ministry ..... (MFin / MEDAT?)

- **Ensures the alignment of the instrument with national policies** for SMEs, research and innovation and with EU-funded programmes, avoiding overlaps and making use of complementarities.
- **Receives the annual report** and, together with the partners, **decides on the strategic adjustments** to the instrument.
- **Supports the promotion of the instrument** among SMEs and facilitates dialogue with the institutions responsible for research policy and with the authorities in the field of intellectual property.

8.4. Advisory board

- It is composed of **specialists in innovation, finance and industry**, designated by the partners of the instrument, including **representatives of employers' organisations, of universities and research institutes, and of investors**.
- **Validates, at the request of the banks, the technical feasibility and relevance of projects with a high degree of novelty** and provides guidance on the technological fields that should be encouraged through the instrument.
- **Analyses the monitoring data every six months** and formulates recommendations on adjusting the financing conditions, the eligibility criteria and the complementary components.

- Operates on the basis of **transparent rules of procedure**, with clear rules on **conflicts of interest and the confidentiality** of information about the projects evaluated, an essential aspect for protecting SMEs' innovations.

8.5. Universities, research institutes and ecosystem partners

- **Universities and research institutes** may act as technical partners of beneficiary SMEs, providing research and testing services, access to infrastructure and specialised staff, within the collaboration incentives proposed in this document.
- **Accelerators, innovation hubs and employers' organisations**, including FICSIMM, contribute to **informing and preparing firms** to access the instrument, to the periodic consultation of beneficiaries and to the early identification of access difficulties.
- **Private investors and venture capital funds** take part in the co-investment component and can offer beneficiary SMEs access to business development expertise and to foreign markets.

9. Risks and mitigation measures

Like any new financial instrument, INOV-IMM entails a number of risks, which can be **anticipated and managed through careful design** and continuous monitoring. Innovation projects carry, by their very nature, **a higher degree of uncertainty** than conventional investments, and the instrument must recognise this reality without abandoning financial discipline. FICSIMM considers that the open identification of these risks, from the proposal stage onwards, is **a condition of the instrument's credibility** in the eyes of financial partners and SMEs.

9.1. Insufficient demand or insufficiently prepared projects

- **The risk:** innovative SMEs are unaware of the instrument, lack confidence that they can access the financing, or submit insufficiently mature projects with unclear commercialisation plans.
- **Measures:** an information campaign run through employers' organisations, universities and accelerators; **the preliminary assessment tool** and **the initial advisory session**, which help firms mature their projects before submission; **transparent communication of the first results**.

9.2. Reluctance of banks to finance innovation projects

- **The risk:** banks treat innovation projects as very high-risk investments, owing to the lack of tangible collateral and the difficulty of evaluating new technologies, and apply more restrictive criteria than those of the instrument.
- **Measures: the guarantee of up to 80%** provided by BID; **the technical opinion of the advisory board**, which reduces uncertainty for the bank; **the common procedural framework** and **training of bank staff** on the specific features of innovation projects; monitoring of the approval rate for each partner bank.

9.3. Technical or commercial failure of the innovation

- **The risk:** some projects do not reach the intended technical result, or the product developed does not find a market, which affects the SME's repayment capacity.
- **Measures: financing in tranches aligned with the stages of the project**, which limits exposure in the event of early failure; **the grace period** and **the possibility of rescheduling**; **commercial mentoring**, which increases the chances of exploitation; explicit acceptance of a **normal failure rate** in the sizing of the guarantee fund.

9.4. Insufficient protection of intellectual property

- **The risk:** SMEs do not adequately protect their innovations, losing their competitive advantage to larger competitors, or disclose sensitive information during the evaluation process.
- **Measures: eligibility of patenting and intellectual property protection costs**; **specialised advice** within the mentoring programme; **strict confidentiality rules** for evaluators and members of the advisory board.

9.5. Default rate above expectations

- **The risk:** the proportion of failed projects exceeds estimates, affecting the sustainability of the revolving fund and the banks' appetite for the instrument.
- **Measures: prudent sizing of the guarantee fund**, based on the experience of similar instruments in other countries; **diversification of the portfolio** across sectors and project types; six-monthly monitoring, which allows **early intervention**; periodic adjustment of the conditions on the basis of actual data.

9.6. Growing administrative complexity

- **The risk:** over time, procedures become more complicated through the addition of further requirements, and the instrument loses the advantage of simplicity that distinguishes it from existing programmes.
- **Measures: the "once-only" principle** for the documents requested; periodic review of procedures with the explicit objective of simplification; **consultation of beneficiaries** on the administrative burden; reporting based on the firm's existing records.

10. Illustrative examples of fundable projects

To make the logic of the instrument more concrete, we present below **a few illustrative examples** of innovation projects that could be financed through INOV-IMM. The examples are **hypothetical and serve a purely indicative purpose**; they do not refer to real firms and do not indicate specific amounts or conditions, which will be established within the procedural framework of the instrument. Their aim is to show **the diversity of situations** in which the instrument can intervene and the way in which its components (financing, guarantee, mentoring, collaboration with research, monitoring) complement one another.

10.1. Manufacturing firm developing a new product

- **Starting situation:** a medium-sized firm in the manufacturing industry has identified an opportunity to develop **a product with performance superior to those existing on the market**, but does not have the resources needed for prototyping, testing and certification.
- **The project: development of the prototype in collaboration with a research institute, testing and certification of the product, protection of the technical solution through a patent and preparation of series production.**
- **The role of the instrument: financing through a preferential-rate loan for development activities and leasing for testing equipment, a grace period aligned with the duration of development, preferential conditions for collaboration with the research institute, advice on patenting.**

- **Targeted results:** launch of the product on the market, **growth in turnover and margin**, obtaining the patent, access to clients abroad.

10.2. Agri-food firm with process innovation

- **Starting situation:** a small agri-food processing firm wishes to introduce **a new processing technology**, which reduces losses and extends the shelf life of products, but the technology has not yet been adapted to the specific characteristics of local raw materials.
- **The project: adaptation and testing of the technology in collaboration with a specialised university, acquisition of pilot equipment, validation of the resulting products and development of a new product line.**
- **The role of the instrument: financing for equipment and testing activities, technical and commercial mentoring, support for subsequently accessing European programmes for capacity expansion.**
- **Targeted results:** reduction of production losses, launch of a product line with higher added value, **access to retail chains and to export**.

10.3. IT services firm developing an artificial intelligence-based solution

- **Starting situation:** an IT services firm, with experience in client projects, wishes to develop **its own artificial intelligence-based product** for a specific sector, moving from services to product, but cannot finance the development from its current activity.
- **The project: development of the product, testing with pilot clients, protection of intellectual property and preparation of the commercial launch.**
- **The role of the instrument: financing for development and testing, a grace period until the commercial launch, mentoring on product and market strategy, access to the co-investment component for the scaling stage.**
- **Targeted results:** launch of the product, **diversification of revenue**, growth in company value, attraction of private investors for expansion.

10.4. Firm in the field of renewable energy and energy efficiency

- **Starting situation:** a firm that installs renewable energy systems has developed **a concept for an integrated energy management solution** for its clients, but needs resources to turn it into a validated and certified product.
- **The project: development and testing of the solution in real conditions, certification in accordance with the applicable standards, staff training and preparation for commercialisation.**
- **The role of the instrument: financing for development, testing and certification, leasing for testing equipment, advice on intellectual property and standards, mentoring for internationalisation.**
- **Targeted results:** launch of the solution on the market, **growth in revenue and in the number of clients**, contribution to energy transition objectives, export potential.

10.5. Start-up with scalability potential

- **Starting situation:** a young firm, founded by a team with technical skills, has developed **a prototype validated by its first users**, but does not have the financial track record needed to access conventional credit and has not yet attracted investors.
- **The project: completion of the product, obtaining intellectual property protection, commercial launch and expansion of the team, followed by preparation for attracting private capital.**
- **The role of the instrument: financing granted on the basis of an assessment of growth potential, team quality and the business plan, mentoring in the field of investment, access to the co-investment mechanism in the scaling phase.**
- **Targeted results:** growth in revenue and in the number of clients, attraction of private capital, **creation of highly skilled jobs**, consolidation of the firm as a player in the Romanian innovation ecosystem.

11. Expected impact and the system of indicators

In order to assess the effectiveness of the instrument objectively and to underpin adjustment decisions, FICSIMM proposes a **system of indicators structured on three levels**: output indicators (what the instrument produces), result indicators (what changes at the level of beneficiary SMEs) and impact indicators (what changes at the level of the economy). The target values of these indicators will be set **during the preparation stage**, on the basis of the sizing of the fund and the available data on innovation in Romanian SMEs, and will be **reviewed annually**.

11.1. Output indicators

- **Number of SMEs financed**, broken down by firm size, sector of activity, region and maturity stage of the project (concept, prototype, validated product).
- **Total value of financing granted and guarantees issued**, relative to the capitalisation of the fund, in order to track the degree of utilisation of resources.
- **Average processing time of applications**, from the submission of the complete application to the financing decision, compared with the 30-day target.
- **Number of projects carried out in collaboration with universities or research institutes**, as a measure of the effect of the collaboration incentives.
- **Number of SMEs that have benefited from mentoring, technical assistance or advice on intellectual property**.

11.2. Result indicators

- **Number of new products, services or technologies launched on the market** by beneficiary SMEs, as a direct result of the projects financed.
- **Number of patent applications filed and patents granted**, at national, European and international level.
- **Growth in turnover generated by new products and services**, according to the beneficiaries' reports.
- **Growth in exports** of beneficiary SMEs, as a measure of the international competitiveness of the innovations.
- **Number of jobs created**, with emphasis on highly skilled positions in research, development and innovation activities.

- **Private capital subsequently attracted** by beneficiary SMEs (investors, venture capital funds), as an indicator of the market validation of the projects.
- **Repayment rate of the financing**, as an indicator of the quality of the projects selected and of the sustainability of the fund.

11.3. Impact indicators

- **Reduction of the innovation gap** between Romania and the European average, tracked through the statistical indicators used at European level to assess innovation performance.
- **Increase in the share of innovative SMEs** in the total number of SMEs, particularly in high value-added sectors.
- **Contribution of beneficiary SMEs to the state budget**, through growth in revenue, profits and the number of jobs.
- **Intensification of collaboration between the business and academic communities**, measured by the number and value of research contracts concluded by SMEs with universities and institutes.
- **Development of the venture capital market** in Romania, through the volume of private co-investment mobilised and the number of SMEs that have attracted investors after financing through the instrument.

11.4. Use of the indicators

- Output indicators are tracked **continuously**, through the single platform, and analysed every six months by the advisory board.
- Result indicators are collected **every six months** from beneficiaries, through simple forms, and summarised in the instrument's annual report.
- Impact indicators are assessed **periodically**, through independent evaluations, which compare the development of beneficiary SMEs with that of similar firms which have not accessed the instrument.
- Aggregate results are **published**, with due regard for the confidentiality of individual projects, in order to ensure the transparency of the instrument and to inform future public policy decisions.

12. Questions about the instrument

To facilitate understanding of the proposal by all partners, we present below the answers to **the most frequently asked questions** raised in preliminary discussions with FICSIMM members, with representatives of the banking system, of academia and of other business organisations.

12.1. Why an instrument based on loans and guarantees, rather than on grants?

- Grants depend on **limited budgets and one-off calls**, generate competition and heavy bureaucracy, and the resources are consumed only once. An instrument based on **guaranteed loans and a revolving fund** is continuously available, mobilises private capital and **regenerates its resources** through repayments.
- At the same time, the lending logic **makes beneficiaries accountable**, directing financing towards innovations with real commercial potential, which can sustain their repayment from the revenue generated; grants remain complementary, for very high-risk research stages.

12.2. How does INOV-IMM differ from the European programmes dedicated to innovation?

- Through **continuous availability**, **simplified procedures**, **a decision deadline of no more than 30 days**, **less competition** and conditions adapted to Romanian SMEs, including those without experience in European projects.
- INOV-IMM **does not replace** the European programmes but complements them, being able to finance medium-sized projects, intermediate stages or firms preparing to access the European instruments at a later stage.

12.3. What happens if the innovation fails?

- The financing is a loan, so that **the repayment obligation remains**; however, the instrument provides for **financing in tranches, a grace period, a repayment schedule aligned with the stages of the project and the possibility of rescheduling** in justified situations.
- **Six-monthly monitoring and mentoring** allow the early identification of technical or commercial difficulties and the reorientation of the project, before they affect repayment capacity.

12.4. Is the instrument accessible to firms in traditional sectors?

- Yes. Innovation is not limited to high-technology sectors; **product, process or business model innovations** in traditional sectors (manufacturing, agri-food, construction, services) are eligible, provided they have **a character of novelty and potential for economic exploitation**.
- **The initial advisory session and mentoring** are designed precisely to help firms without experience in innovation to structure their projects.

12.5. How is information about the projects submitted protected?

- All those involved in the evaluation (banks, BID, members of the advisory board) are subject to **strict confidentiality obligations**, and access to project documents is limited to the persons directly involved.
- SMEs are encouraged and supported to **protect their intellectual property before disclosing technical details**, and the related costs are eligible for financing.

12.6. What is the role of employers' organisations?

- Employers' organisations, including FICSIMM, contribute to **informing and preparing SMEs**, to **the periodic consultation of beneficiaries**, to the identification of access difficulties and to **formulating adjustment proposals**, within the advisory board.
- They can also facilitate **partnerships between SMEs, universities, research institutes, accelerators and investors**, which are needed for the complementary components of the instrument.

Conclusions

The implementation of the **INOV-IMM** financial instrument represents a **strategic and sustainable solution for accelerating innovation in Romania's SME sector**. In a global economic environment marked by rapid change and ever fiercer competition, SMEs need **access to flexible financing in order to develop and implement innovative solutions**, while **the existing instruments**, geared mainly towards conventional investments, **do not sufficiently meet this need**. Through this instrument, an **effective alternative to non-repayable grants** is provided, making available **financial mechanisms adapted to the needs of innovative firms**, such as preferential-rate loans, technology leasing and state guarantees. These measures will not only support SMEs in the innovation process, but will also contribute to **the creation of an economic ecosystem based on advanced technologies and digitalisation**, in which **financing, research and entrepreneurship work together**. The effects of such an ecosystem will be felt progressively, as **the first financed projects reach the market** and demonstrate that innovation can be financed sustainably in Romania too.

One of the most important benefits of **INOV-IMM** is that it **will stimulate the competitiveness of SMEs on the European and international markets**. Financing the development of new products and technologies will enable Romanian firms to diversify their portfolios, expand their presence on foreign markets and increase their added value, **reducing dependence on low-margin activities**. At the same time, this instrument will narrow the gap between Romania and the developed economies in terms of the degree of innovation, giving local firms the chance to compete successfully in a globalised economic environment. Moreover, through collaboration with research centres and universities, SMEs will gain access to state-of-the-art know-how and technological resources, thereby strengthening the link between academia and the business community and **making better use of the results of public research**, which at present rarely reach the market.

In the long term, **INOV-IMM** will contribute to **the structural transformation of the Romanian economy, encouraging the transition towards industries based on knowledge, technology and sustainability**. At a time when the European Union is placing ever greater emphasis on **innovation, digitalisation and climate neutrality**, Romania must adopt economic policies that support SMEs in becoming active players in this transformation, rather than merely passive beneficiaries of technologies developed in other countries. This instrument will have a **significant impact** not only on the beneficiary firms, but also **on the economy as a whole, by stimulating investment in research and development, creating jobs in cutting-edge sectors and attracting foreign capital interested in the Romanian**

innovation ecosystem. The **revolving** nature of the fund ensures that **the public resources mobilised initially continue to produce effects**, financing new generations of projects as the first loans are repaid.

Therefore, **INOV-IMM** is not merely a one-off solution for financing innovation, but a **strategic mechanism for economic growth and the modernisation of SMEs**. The adoption and implementation of this instrument will ensure **an environment conducive to the development of new ideas, transforming Romania into a regional innovation hub**. For this objective to be achieved, **collaboration between the public sector, financial institutions and the business community** is essential, so that financing is directed efficiently towards projects with a real impact on the economy and society. The phasing proposed in this document, the simplified application flow, the governance model based on clear roles and the three-level system of indicators are designed so that the instrument **can be launched quickly, tested on a small scale and developed progressively**, as the results confirm the initial sizing and conditions. The risks identified are manageable through the measures proposed, and the illustrative examples show that the instrument can meet very different needs, from manufacturing firms in traditional sectors to technology start-ups. FICSIMM expresses its readiness to contribute to **the detailed design and operationalisation of the instrument**, alongside the responsible institutions and partners in the financial system, as well as to **facilitate dialogue with the innovative SMEs** it represents.

In addition, **INOV-IMM** will have a **direct positive impact on public finances, by increasing the net contributions of SMEs to the state budget**. By supporting innovation and digitalisation, **SMEs will increase their productivity, generate higher revenues and create new jobs, which will lead to higher collection of taxes and duties**. At the same time, through **its structure based on guarantees and loans**, the instrument has a **low net budgetary cost** compared with grant schemes, since public resources are committed only to the extent that risks materialise. Furthermore, **the modernisation and diversification of SMEs' activities will attract additional investment and stimulate long-term economic growth, thus ensuring a constant flow of financial resources to the national budget, without the need for non-repayable subsidies from the state**.

International good practices

The experience of other countries shows that **innovation financing is truly effective when it is accompanied by complementary mechanisms**: support for scaling up, mentoring and technical assistance, incentives for collaboration with academia, performance indicators and private co-investment. The examples presented below were selected for **their direct relevance to the Romanian context** and can underpin **a phased development of the INOV-IMM instrument**. For each line of action, examples from several countries are presented, followed by **concrete proposals for adaptation to the realities of the Romanian economy** and to the existing institutional framework.

1. Integrating a support mechanism for scaling up innovations

- In some countries, innovative SMEs benefit not only from support for developing a prototype, but also from dedicated financing for **scaling it up** to mass production or expansion into new markets, based on the finding that **many innovations fail not in the development phase, but in the commercialisation phase**.
- One example is the EU's **EIC Accelerator** programme, which offers blended financing (grant + equity) to firms that already have a working prototype and want to launch it on a large scale.
- A **second phase of the INOV-IMM instrument** could be introduced to support SMEs in implementing and expanding their innovations, **thereby rewarding the results achieved in the first phase**. This phased approach also allows **better risk management**, since additional financing is granted only to projects that have proven their viability.

1.a. European Union - "EIC Accelerator":

Link: EIC Accelerator: https://eic.ec.europa.eu/eic-funding-opportunities/eic-accelerator_en

- **EIC Accelerator** (part of the **European Innovation Council**) is one of the most effective support programmes for innovative SMEs that have moved beyond the prototype phase and wish to scale up their products at European and global level.
- The programme offers **blended financing**:
  - **Grants of up to EUR 2.5 million** for development and market validation.
  - **Equity investments of up to EUR 15 million** for scaling up and commercial expansion.

- SMEs with a working prototype can receive additional financing for **industrialisation, internationalisation and attracting private investors**, while **the rigorous selection** of the programme acts as a quality signal for investors.

1.b. United States - "Small Business Innovation Research (SBIR)" and "Small Business Technology Transfer (STTR)":

Link: SBIR / STTR: https://www.sbir.gov/

- **SBIR and STTR** are government programmes that support innovative SMEs in two phases, **linking public support to the needs of federal agencies**:
  - **Phase 1:** Financing for **concept development and prototype construction**.
  - **Phase 2:** Financing for **scaling up and commercialisation**, with additional support for securing **government contracts or private investment**.
- The programme offers **interest-free loans and co-investments from venture capital funds** to SMEs that have successfully completed the first stage of innovation, **with the state acting as first customer** for the technologies developed.

1.c. Israel - The scale-up programme of the Innovation Authority:

Link: Israel Innovation Authority: https://innovationisrael.org.il/en/

- **The Israel Innovation Authority** gives SMEs that have developed a validated technology access to financing for **scaling up production and internationalising the business**, as part of a coherent policy of support for the entire innovation cycle.
- The programme includes:
  - **Subsidies for the transition from prototype to industrial production**.
  - **Partnerships with private investors and venture capital funds** to accelerate growth.
  - **Support for expansion into international markets**, including assistance in setting up subsidiaries abroad.
- This approach has contributed to **keeping in Israel the production and development activities** of firms that would otherwise have relocated after the prototype phase.

How can these models be adapted for Romania?

- A **second phase of INOV-IMM** could be introduced, similar to the **EIC Accelerator**, to support SMEs in industrialisation and commercial expansion, **with preferential conditions for firms that have duly repaid their first financing**.
- A **co-investment mechanism** could be created, following the **SBIR** model, whereby the state provides support for scaling up together with private investors, including through **the use of public procurement for innovation** as a tool for validating new technologies.
- An **internationalisation programme** inspired by **Israel** could be implemented to support innovative SMEs in accessing foreign markets, **in collaboration with Romania's network of economic representation offices**.

2. Creating a technical assistance and mentoring mechanism for SMEs

- Innovative SMEs face not only a lack of financing, but also **difficulties in managing the innovation, commercialisation and scaling-up process**, which requires skills different from those involved in the firm's day-to-day activity.
- In some countries, such instruments include **mentoring and technical assistance** through innovation centres and business accelerators, so that **financing is accompanied by the skills needed to use it effectively**.
- A **mentoring programme** could be introduced for SMEs accessing INOV-IMM, giving them access to experts in technology, marketing and investment **throughout the duration of the financed project**. Such support could be provided in partnership with the **accelerators, innovation hubs and employers' organisations** already active in Romania.

2.a. France - “Bpifrance Le Hub” and “French Tech Tremplin”:

Link: Bpifrance Le Hub: https://lehub.bpifrance.fr/ |
French Tech Tremplin: https://lafrenchtech.gouv.fr/en/programme/french-tech-tremplin/

- **Bpifrance Le Hub** is a programme created by **France's Public Investment Bank (Bpifrance)**, which offers **technical assistance and personalised mentoring** to innovative SMEs, complementing the bank's financial instruments.
- SMEs accepted into the programme benefit from:
    - **Mentoring from experts in technology, finance and marketing**.

- **Access to investors and venture capital funds** for scaling up.
- **Partnerships with large companies and research institutions**.

- **French Tech Tremplin** is a complementary programme that helps technology SMEs access mentoring and acceleration networks, with a focus on **entrepreneurs from under-represented backgrounds**, including from less developed regions.

2.b. Germany - "EXIST Business Start-up Grant" and "Mittelstand 4.0":

Link: EXIST Start-up Grant: https://exist.de/en/programm/gruendungsstipendium/ | Mittelstand-Digital (formerly Mittelstand 4.0): https://www.bundeswirtschaftsministerium.de/Redaktion/EN/Dossier/Digitalisierung-neu/mittelstanddigitalisieren.html

- **EXIST Business Start-up Grant** is a government programme that offers **technical assistance and strategic advice** to innovative SMEs, with a focus on **firms originating from the university and research environment**.
- SMEs benefit from:
  - **Support for developing a sound business plan**.
  - **Mentoring from universities and innovation hubs**.
  - **Access to scaling-up and internationalisation programmes**.
- **Mittelstand 4.0** is a programme dedicated to the digitalisation of SMEs, which offers **free technical assistance for the adoption of new technologies** and automation, through **regional competence centres** accessible to firms in all parts of the country.

2.c. Sweden - Vinnova's mentoring programme:

Link: Vinnova – support for SMEs: https://www.vinnova.se/en/m/small-and-medium-sized-corporations/

- **Vinnova**, Sweden's government agency for innovation, offers innovative SMEs **structured mentoring and technological support**, integrated into its financing programmes.
- SMEs benefit from:
  - **Access to industry experts, investors and innovation specialists**.
  - **Advice on patenting, commercialisation and strategic partnerships**.
  - **Support for internationalisation and connection to global markets**.
- The Swedish model stands out for the **continuity of support**, with firms accompanied from the validation of the idea through to entry into foreign markets.

How can these models be adapted for Romania?

- Creating an **INOV-IMM mentoring programme**, inspired by **Bpifrance Le Hub**, giving SMEs access to **experts in technology, finance and international markets**, **before and during the implementation of the financed project**.
- Integrating a **free technical assistance mechanism**, similar to **Mittelstand 4.0**, to support SMEs in adopting digital technologies, **in partnership with the existing employers' organisations and innovation hubs**.
- Developing a **partnership programme between SMEs and universities**, following the **EXIST** model, to provide support in research and development and to **encourage the creation of innovative firms from academia**.

3. Creating a system of incentives for SMEs that collaborate with universities and research institutes

- In some countries, SMEs that develop **innovation projects in partnership with universities** benefit from **more advantageous financial conditions**, including lower interest rates or extended grace periods.
- In others, SMEs that collaborate with research centres to develop new technologies receive **priority financing through government programmes**, on the premise that **scientific validation reduces the project's risk**.
- A **bonus for SMEs that implement projects together with research institutes or universities** could be introduced, thereby stimulating collaboration between academia and the private sector, which is **insufficiently developed in Romania**.

3.a. Finland - Business Finland:

Link: Business Finland - financing for research and development: https://www.businessfinland.fi/en/services/funding/funding-services/research-and-development-funding/research-and-development-funding/

- **Business Finland**, the government agency for innovation, supports SMEs that develop **partnerships with universities and research institutes**, regarding these collaborations as **a quality criterion** for projects.
- SMEs that collaborate with **research and development centres** receive **priority financing**, which gives them:
    - **Access to grants and reduced-rate loans**.
    - **Grace periods of up to 3 years** for investments in new technologies.
    - **Support for patenting and intellectual property protection**.
- Projects involving **several SMEs and a university** receive **a financing bonus**, covering up to **50% of research costs**, which encourages **the formation of consortia** around common themes.

3.b. Germany - "ZIM - Zentrales Innovationsprogramm Mittelstand":

Link: ZIM: https://www.zim.de/ZIM/Navigation/DE/Meta/Englisch/englisch.html

- **ZIM (Central Innovation Programme for SMEs)** offers **non-repayable financing and reduced-rate loans** to SMEs that collaborate with research institutes, and is **open to all sectors and technologies**.
- SMEs benefit from:
    - **Grants of up to 55% of project costs** if they work together with universities.
    - **Tax reductions for research and development expenditure**.
    - **Access to technology transfer networks**, facilitating collaboration between SMEs and academia.
- Under this programme, SMEs are encouraged to form **consortia with universities and research centres**, thereby obtaining additional support, and **the application procedure is continuous**, with no deadline-based calls.

3.c. Netherlands - "MIT – Mkb-Innovatiestimulering Regio en Topsectoren":

Link: MIT (RVO): https://www.rvo.nl/subsidies-financiering/mit

- This programme offers **financial incentives to SMEs that develop innovation projects in partnership with universities and research centres**, closely linked to **the priority sectors of the Dutch economy**.
- SMEs receive:
    - **Grants for applied research**, covering up to **45% of project costs**.

- **Access to testing and prototyping infrastructure** in universities.
- **Subsidies for hiring researchers** in SMEs.

- The Netherlands encourages SMEs to work **in innovation consortia**, thereby obtaining extended financing and **access to research results that they could not obtain individually**.

How can these models be adapted for Romania?

- Creating a **preferential financing mechanism** for SMEs that collaborate with universities, inspired by **Business Finland**, for example through **an additional reduction in the interest rate or an extension of the grace period** under INOV-IMM.
- Implementing a **system of grants for innovation in partnership with research centres**, similar to **Germany's ZIM**, **complementary to the lending component** of the instrument.
- Developing a **support programme for SMEs that hire researchers**, following the **Dutch MIT** model, which would also contribute to **making use of the human resources trained in the public research system**.

4. Integrating a system of performance indicators for beneficiary SMEs

- To ensure a real impact, in many countries SMEs that access such financing must **report their results periodically** with regard to:
  - The number of **patented products / technologies**;
  - Growth in **turnover generated by innovations**;
  - The number of **new jobs created**;
  - Growth in **exports** attributable to innovative products.
- Through such a mechanism, SMEs that demonstrate high performance can access **additional rounds of financing**, while **the data collected allow an objective evaluation of the instrument**.
- An **annual performance reporting system** could be introduced, giving SMEs access to additional financing depending on results, **with a limited number of indicators, so as not to place an administrative burden on small firms**.

4.a. UK - "Innovate UK Smart Grants":

Link: Innovate UK Smart Grants: https://ukri.org/councils/innovate-uk/guidance-for-applicants/guidance-for-specific-funds/smart-innovation-funding-guidance

- The **Innovate UK Smart Grants** programme finances innovative SMEs, but also includes a rigorous system of **performance monitoring**, integrated into the disbursement procedure.
- SMEs accessing the funds must report annually:
  - **The number of products / services / technologies developed and patented**.
  - **The impact of the innovation on the firm's revenues**.
  - **Job creation in technology sectors**.
- SMEs that demonstrate sustained growth can access **a second round of financing** without going through a new application process, which **reduces administrative costs for both parties**.

4.b. Sweden - Vinnova:

Link: Vinnova – support for SMEs: https://www.vinnova.se/en/m/small-and-medium-sized-corporations/

- **Vinnova**, the Swedish government agency for innovation, operates a system of **performance-based financing**, under which beneficiary SMEs must meet success indicators in order to receive additional financing.
- The indicators measured include:
  - **Growth in exports attributable to innovative products**.
  - **Growth in private investment attracted**.
  - **Technological impact on industry**.
- SMEs that exceed the objectives initially set can obtain **financial bonuses or preferential access to new funds**, and **the aggregated results are published**, contributing to the transparency of the programme.

4.c. Canada - "Industrial Research Assistance Program (IRAP)":

Link: NRC IRAP: https://nrc.canada.ca/en/support-technology-innovation/about-nrc-industrial-research-assistance-program

- The **IRAP** programme, managed by the **National Research Council Canada**, offers SMEs financial and technical support, but imposes a strict system of **performance reporting**, through **dedicated technology advisers** assigned to each firm.
- SMEs must monitor and report:

- **The number of jobs created through innovation**.
- **The evolution of sales generated by the new technologies**.
- **The level of collaboration with universities and research institutes**.

- SMEs with good results receive **direct access to new sources of financing**, without a new competitive process, on the basis of **the long-term relationship** built with the programme adviser.

How can these models be adapted for Romania?

- Creating an **annual performance reporting system**, inspired by **Innovate UK**, to measure the impact of innovation on turnover and exports and to **underpin the instrument's annual report**.
- Implementing a **system of financial bonuses** for SMEs that exceed the objectives set, similar to the **Vinnova model in Sweden**, for example through **a reduction in the interest rate or priority access to the second phase of the instrument**.
- Introducing a **staged financing scheme**, under which SMEs with proven results can receive **additional rounds of support without excessive bureaucracy**, inspired by **Canada's IRAP**.

5. Creating a component for cooperation with private investors and venture capital funds

- In some countries, innovation financing is complemented by partnerships with **private investment funds**, which can bring in additional capital and facilitate the scaling up of projects, while also contributing **business development expertise**.
- A **co-investment mechanism** could be introduced, whereby SMEs that demonstrate high growth potential can attract private capital on preferential terms, **reducing the pressure on public funds** and preparing firms for the next stages of development.

5.a. United States - “Small Business Innovation Research (SBIR) & Small Business Technology Transfer (STTR)”:

Link: SBIR / STTR: https://www.sbir.gov/

- **SBIR & STTR** are government programmes that offer **public financing combined with access to private investors**, and are among the longest-standing instruments of this kind.

- SMEs receive **public funds for technology development**, but are also connected with **venture capital** funds and private companies interested in emerging technologies.
- SMEs that successfully complete **the research and prototype phase** can attract private capital on advantageous terms, thanks to the assurance provided by the initial public financing, which **validates the quality of the technology** in the eyes of investors.

5.b. Israel - "Yozma" (venture capital):

Link: Yozma: https://yozma.com

- The **Yozma** programme, launched by the Israeli government, combines **public financing and private capital** to support innovative SMEs, and is regarded as **one of the most successful examples of public intervention in the venture capital market**.
- SMEs with **high growth potential** receive initial support from the state, but are also connected with **private investment funds**, which co-finance 50%-70% of the projects.
- The programme has contributed to the development of the Israeli tech sector, transforming Israel into a **global hub for start-ups and innovation**, and **the gradual withdrawal of the state** once the private market had consolidated is an important lesson on the temporary role of public intervention.

5.c. Germany - "High-Tech Gründerfonds (HTGF)":

Link: High-Tech Gründerfonds: https://www.htgf.de/en/

- **HTGF** is a public-private venture capital fund for innovative SMEs in Germany, **one of the most active early-stage investors in Europe**.
- The German state, together with **private investors and large companies**, contributes to the fund to support **start-ups and SMEs in the scaling-up phase**, and **the involvement of large companies** facilitates the financed firms' access to customers and industrial partners.
- SMEs benefit from **equity investments**, and those that demonstrate their viability can access **additional rounds of private investment**.

How can these models be adapted for Romania?

- Creating a **public-private co-investment mechanism**, inspired by **SBIR (USA)**, whereby the state finances initial development and private investors support scaling up, which would **complement the lending component of INOV-IMM with an equity component**.

- Implementing a **hybrid venture capital programme**, similar to **Yozma (Israel)**, through which innovative SMEs receive **public funds only if they also attract private capital**.
- Launching a **public-private investment fund for innovative SMEs**, following the **HTGF (Germany)** model, to attract private investors into Romanian technology projects, **drawing on the experience of BID and of the investment funds already active in Romania**.

Conclusion on good practices:

- The models analysed converge on **a few common principles**: financing is **phased and conditional on results**, it is **accompanied by non-financial support** (mentoring, technical assistance, access to research) and it **mobilises private capital** alongside public resources.
- For Romania, **INOV-IMM can integrate these elements gradually**: **the guaranteed lending component** in a first stage, followed by **the scaling-up, co-investment and academic-collaboration incentive mechanisms**, as the instrument proves its effectiveness and administrative capacity is consolidated.