

Synergy of projects in H2020 and OPEIC

How to be successful in the EU Space?

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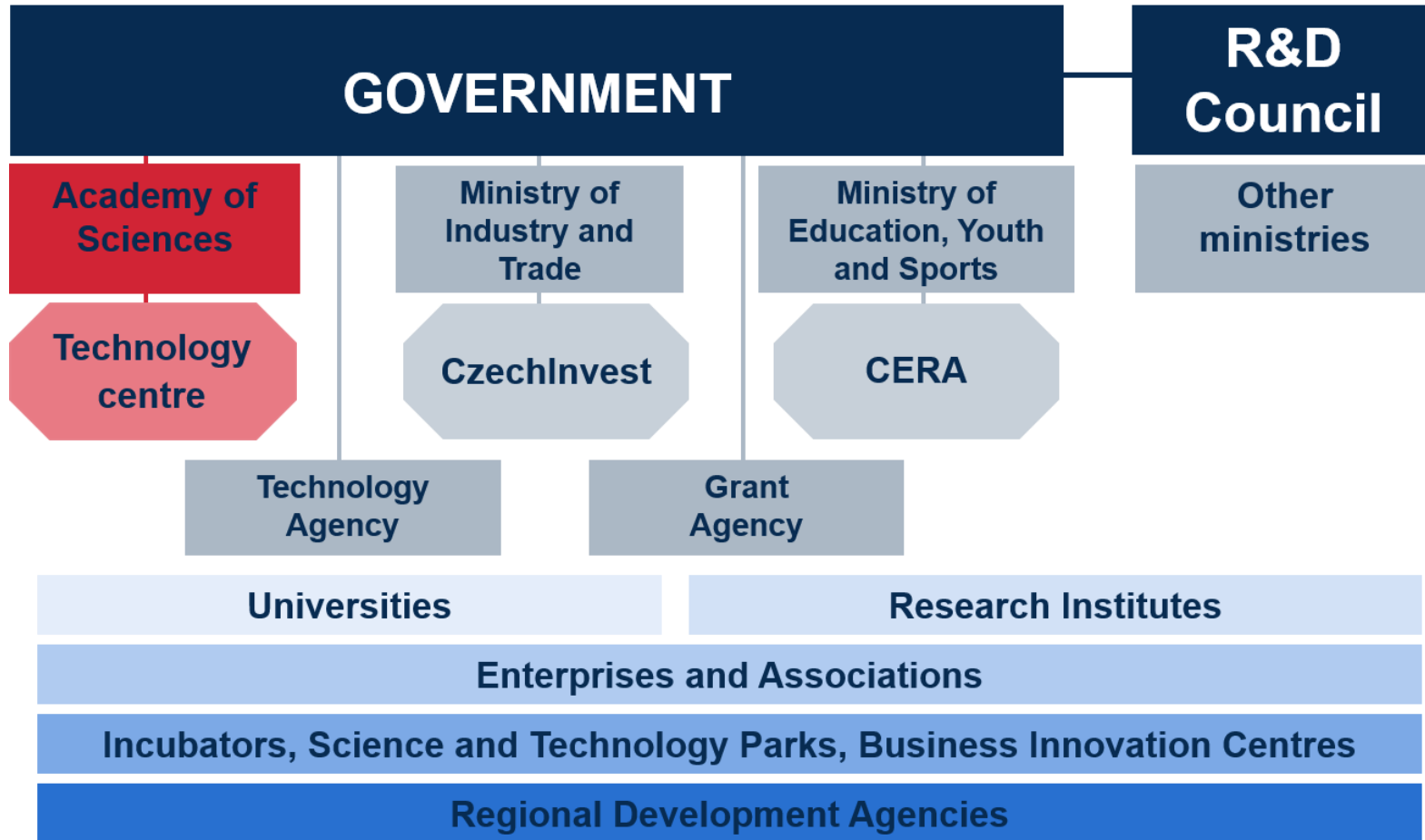


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R&D Support in the Czech Republic



Synergy and challenge to the ESIF

Understand specific objectives & features

EU R&D Policy – Horizon 2020	EU Cohesion Policy
Differences	
<p>> Excellence based / Non-territorial approach</p>	<p>> Socio economic development/ Place-based approach</p>
<p>> Direct management - mostly awarded directly to final beneficiaries</p>	<p>> Awarded through shared management to national and regional public intermediaries</p>
<p>> Mostly competitive calls addressed mainly to international groupings through peer-review based on excellence criteria</p>	<p>> Mostly non-competitive attribution addressed to regional players (single beneficiaries) based on strategic planning negotiation</p>
<p>> Bi-annual work programmes</p>	<p>> 7-years OPs</p>
Complementarities	
<p>> Horizon 2020 focuses on tackling major societal challenges, maximising the competitiveness impact of research and innovation and raising and spreading levels of excellence in the research base (widening) + single beneficiary (SME) + simplification</p>	<p>> Cohesion policy will maximise the competitiveness impact of research and innovation acting as a capacity building instrument via smart specialisation, based on learning mechanisms and critical skills in regions and Member States + interregional possibilities.</p>



Business

manufacturing and services, primary sectors, financial sector, creative industries, social sector, large firms, SMEs, young entrepreneurs, students with business ideas, cluster and business organisations, etc.

Research

public and private research bodies, universities, science and technology parks, NCPs, Technology transfer offices, Horizon2020 committee members, regional ESFRI roadmaps etc.

Synergies with Horizon2020 inbuilt in RIS³ via the Entrepreneurial Discovery Process:

Authorities directly concerned by Horizon 2020 shall be closely associated with EDP.

RIS³s shall include:

(a) **"Up-stream actions"** to prepare regional R&I players to participate in Horizon 2020

(b) **"Down-stream actions"** to provide the means to exploit and diffuse R&I results, stemming from Horizon 2020"

See [Common Provisions Regulation for ESI funds No 1303/13](#) annex 1, point 4.3.2.

See also annex III of RIS3 Guide: <http://s3platform.jrc.ec.europa.eu/s3pguide>

Entrepreneurial in **composition** and **spirit**: (risk-taking, broader view beyond boundaries ...)

Different departments, if relevant at different government levels, agencies e.g. for regional development, business advice, public procurement offices, incubators, etc.

Public administration

NGOs and citizens' initiatives related to societal challenges for which innovative solutions would be helpful, consumers associations, Talents! etc.

Civil society / Users



Priority axis of OPEIC

The OP contains **four factually-oriented priorities and one priority axis for technical assistance**

PA 1 R&D for innovation growth

- 1.35 bil. €
- 31 % of allocation

PA 2 Development of enterprise and competitiveness in small and medium-sized enterprises

- 0.89 bil. €
- 21 % of allocation

PA 3 Efficient energy management, development of energy infrastructure and renewable energy sources, support for the introduction of new technologies in the management of energy and secondary raw materials

- 1.22 bil. €
- 28 % of allocation

PA 4 Development of high-speed internet access networks and information and communications technology

- 0.74 bil. €
- 17 % of allocation



New Approach and Synergy OPEIC/SME In

→ New head of unit – H2020 support of projects close to OPEIC

→ Launch strategy – SME Instrument/Seal of Excellence:

1 stage SMEI – feasibility study in Proof of Concept prg. – grant/ex post consideration about special call (under DG Regio discussion)

2 stage SMEI– many activities (bonification in different OPEIC prg or special call or PoC)

3 stage SMEI- investment pool – NIF (PoC) or EU investment of risk capital fund

Further focusing in H2020 -

Clean Sky2 – a potential complementary call

Fast Track to Innovation

LIFE



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EU Grant of
€ 50,000
(lump sum)

EU Grant of
€ 500,000 to 2.5
million (indicative
amount)

01

Technical and market feasibility

assessment of technical feasibility and market potential of new ideas



02

Demonstration activities

developing, testing, prototyping, piloting innovative processes, products and services



03

Commercialisation

support measures toward commercialising SMEs' innovative products



Elaborated Business Plan



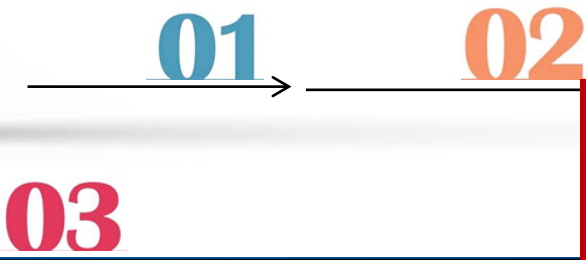
Commercialisable Output



Market Success



DEMO (TRL 5)
Idea > Business Plan



- **No grant**, but...
- Coaching support
- Market and Investment Readiness support
- Promotion / networking with financiers & clients
- ... and more indirect support!



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SMEi themes

SMEInst-01 Open Disruptive Innovation Scheme

SMEInst-02 Accelerating the uptake of nanotechnologies advanced materials or advanced manufacturing and processing technologies by SMEs

SMEInst-03 Dedicated support to biotechnology SMEs closing the gap from lab to market

SMEInst-04 Engaging SMEs in space research and development

SMEInst-05 Supporting innovative SMEs in the healthcare biotechnology sector

SMEInst-06 Accelerating market introduction of ICT solutions for Health, Well-Being and Ageing Well

SME Inst-07 Stimulating the innovation potential of SMEs for sustainable and competitive agriculture, forestry, agri-food and bio-based sectors

SME Inst-08 Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth

SME Inst-09 Stimulating the innovation potential of SMEs for a low carbon and efficient energy system

SME Inst-10 Small business innovation research for Transport and Smart Cities Mobility

SME Inst-11 Boosting the potential of small businesses in the areas of climate action, environment, resource efficiency and raw materials

SME Inst-12 New business models for inclusive, innovative and reflective societies

SME Inst-13 Engaging SMEs in security research and development



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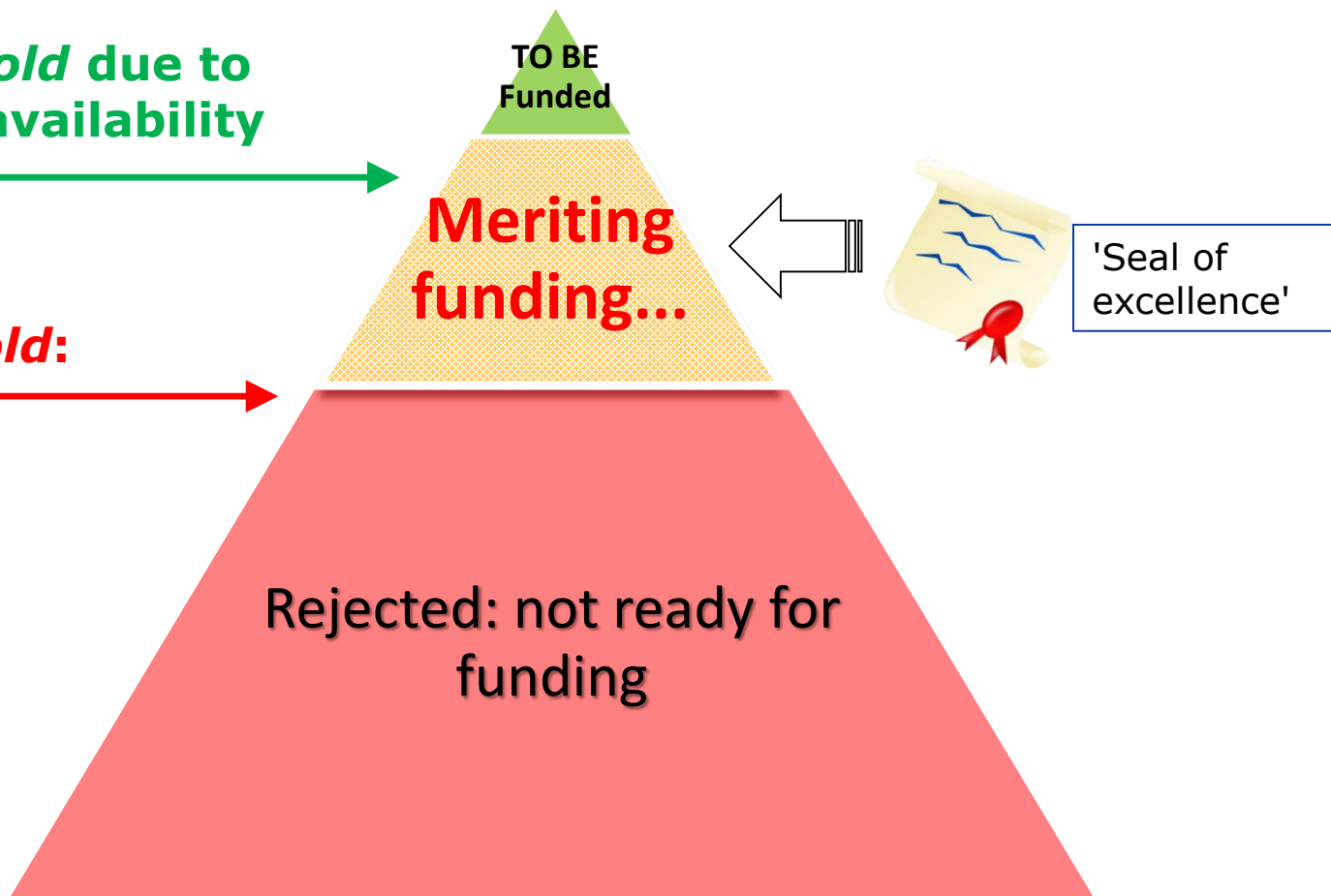


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SME Instrument STEP 1 - IDENTIFY THE PROJECTS ABOVE THRESHOLD BUT NOT FUNDED WHICH ARE CONSIDERED SUITABLE FOR A SEAL OF EXCELLENCE (SoE)

Funding threshold due to H2020 budget availability

Quality threshold:



SME Instrument STEP 2.

**PROVIDE THE APPLICANTS ABOVE THRESHOLD WITH
A SEAL OF EXCELLENCE CERTIFICATE ANNEXED TO THE REJECTION LETTER**

It contains:

- a standard text explaining that the proposal was subject to strict peer review and positively assessed
- the necessary data for identifying the proposal and the applicant (proposal number, acronym, title, applicant PIC, legal name, legal address)
- document validity to be checked through Commission services/agency



The accompanying letter will indicate that:

- the certificate can be used to get in contact with other funding bodies to explore other funding possibilities, as for instance from national/regional Managing Authorities of the Structural Funds



MIT activities regarding SMEi

MIT organizes seminars together with The Technology Centre of the CAS for potential SMEi applicants in order to increase the success rate of Czech companies. These seminars include the possibility to consult project proposals with foreign SMEi evaluators.



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OPEIC – Priority Axes 3

The Operational Programme Enterprise and Innovation for Competitiveness offers the following programmes under the PA 3:

- Renewable Sources of Energy – OPENED CALL
- Energy Savings – OPENED CALL
- Smart Grids I – OPENED CALL
- Low-Carbon Technologies – OPENED CALL
- Energy Savings in Heat Supply System – OPENED CALL
- Smart Grids II – OPENED CALL



Navržené finanční nástroje na základě závěrů předběžného posouzení

Specifický cíl/PO	Program podpory	FN 1. generace	FN 2. generace	Navrhované rozpětí alokace FN (mil. EUR)	Alokace ŘO pro pilotní implementaci FN (mil. EUR)	Alokace specifického cíle v OP PIK (mil. EUR)
1.2 - Zvýšit intenzitu a účinnost spolupráce ve výzkumu, vývoji a inovacích	Proof of Concept		Kapitálové vstupy	21-42	12	377,7
2.1 - Zvýšit konkurenceschopnost začínajících a rozvojových MSP	Expanze	Zvýhodněné úvěry a záruky		322-436	327	609,4
	Rizikový kapitál		Kapitálové vstupy	30-60	53	
3.2 - Zvýšit energetickou účinnost podnikatelského sektoru	Úspory energie	Zvýhodněné úvěry		20-75	20	746,2
3.5 - Zvýšit účinnost soustav zásobování teplem	Úspory energie v SZT	Zvýhodněné úvěry		11-25	11	142,9

Proposed financial instruments based on ex ante assessment conclusions

Specific objective/PA	Support programme	FI 1st generation	FI 2nd generation	Proposed margin of FI allocation (millions of EUR)	MA's allocation for pilot FIs implementation (EUR mil.)	Allocation for OP EIC specific target (EUR mil.)
1.2 – Improving the intensity and efficiency of cooperation in research, development and innovation	Proof of Concept		Equity investment	21-42	12	377,7
2.1 – Enhancing competitiveness of start-ups and developing SMEs	Expansion	Soft loans and guarantees		322-436	327	609,4
	Venture capital		Equity investment	30-60	53	
3.2 – Improving the energy efficiency of the business sector	Energy savings	Soft loans		20-75	20	746,2
3.5 – Improving the efficiency of the systems for heat supply	Energy savings in SHS	Soft loans		11-25	11	142,9



Example of a specific project - OPEI

Velobel, s.r.o.

The company focuses on production of components, complements and accessories for bicycles manufacturing. Other activities of the company lay in custom mechanical engineering for furniture and construction industry as well as galvanic plating.

The portfolio of the costumers consists of many domestic and foreign producers of bicycles. Its main costumer is the worldwide know company SHIMANO which focuses on manufacturing of high-tech bicycle components. More than 50 % of the overall production is exported to more than 15 foreign countries from Europe, South America and Africa



Example of a specific project - OPEI

Velobel, s.r.o.

The company needs technological heat for its activities and the main objective of the project was to replace obsolete low efficiency boiler with a modern technology powered by biomass.

The old boilers were powered by coal and gas and its combined efficiency has led to an estimated 20 % of energy losses. The installation of new technology reduced the energy losses to 8 % maximum, led to a cost savings not only due to higher efficiency but also its self-service and last but not least had a positive effect on the environment. Proposed energy savings yearly reached 1092 GJ which decreased the yearly spending by more than 490 000 CZK.

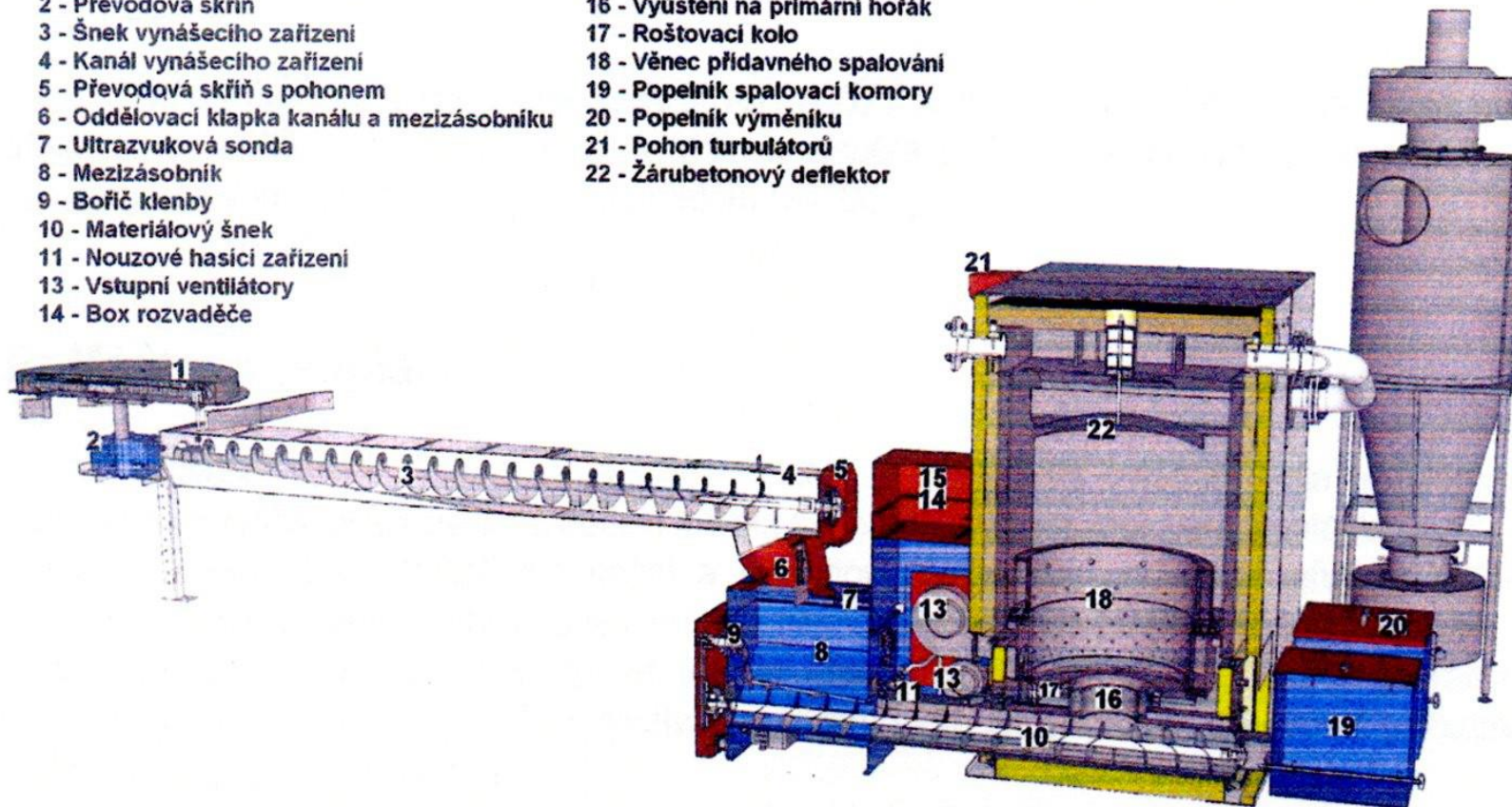
The project was implemented in line with the objectives of the OPEI ECO-ENERGY programme as it stimulates companies in reducing energy intensity and consumption of primary energetic resources.



Example of a specific project - OPEI

SMART 300-500kW - čelní řez kotlem

- | | |
|--|---------------------------------|
| 1 - Michadlo prostorového vynášení | 15 - Víko rozvaděče |
| 2 - Převodová skříň | 16 - Vyústění na primární hořák |
| 3 - Šnek vynášecího zařízení | 17 - Roštovací kolo |
| 4 - Kanál vynášecího zařízení | 18 - Věnc přídavného spalování |
| 5 - Převodová skříň s pohonem | 19 - Popelník spalovací komory |
| 6 - Oddělovací klapka kanálu a mezizásobníku | 20 - Popelník výměníku |
| 7 - Ultrazvuková sonda | 21 - Pohon turbulátorů |
| 8 - Mezizásobník | 22 - Žárubetonový deflektor |
| 9 - Bojič klenby | |
| 10 - Materiálový šnek | |
| 11 - Nouzové hasící zařízení | |
| 13 - Vstupní ventilátory | |
| 14 - Box rozvaděče | |



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The National Innovation Fund - NIF

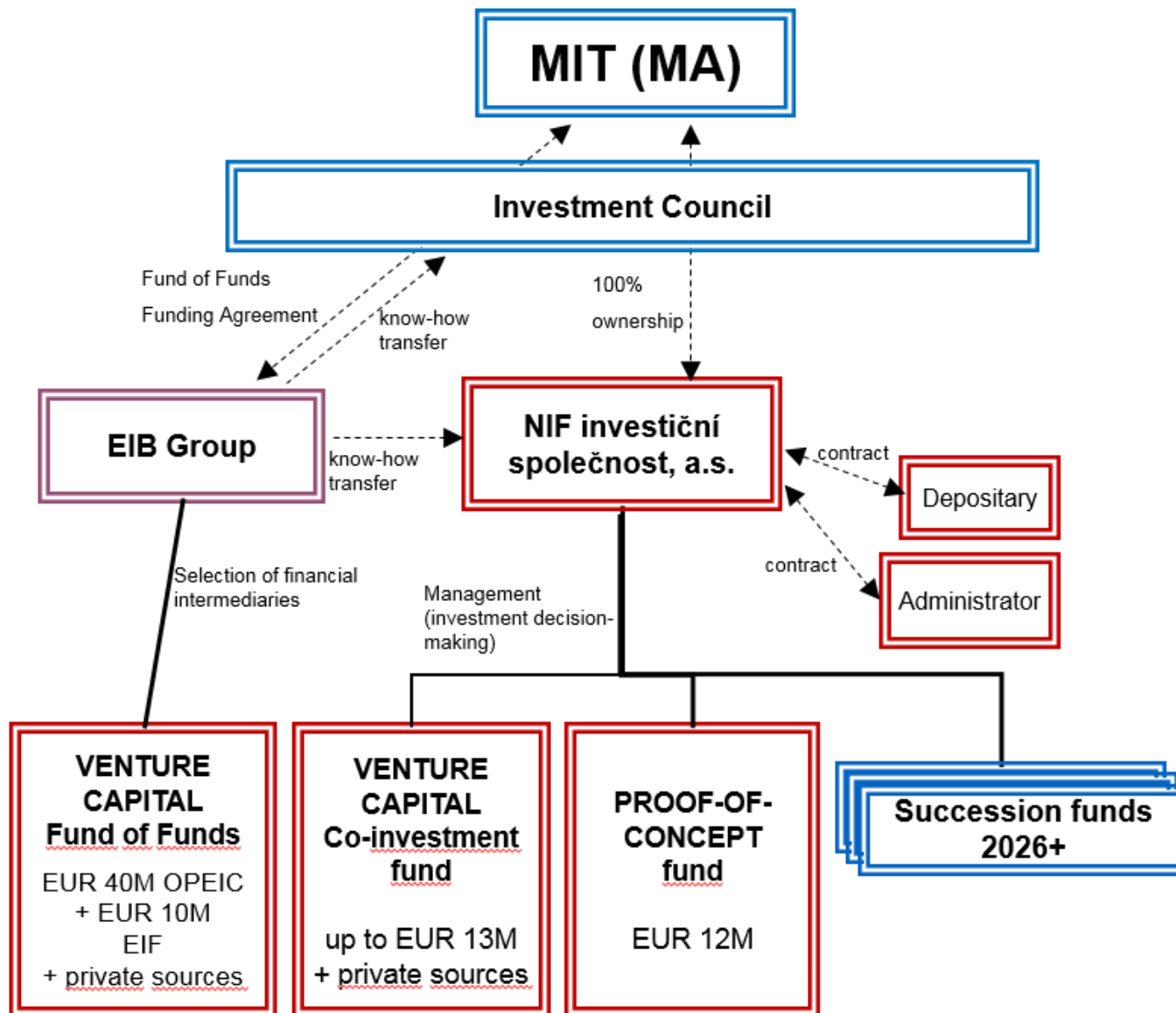
- ➔ **Inspired by Israeli Yozma programme and German HTGFs**
- ➔ Mobilization of domestic **venture capital** market, particularly in the **seed and start-up stage**.
- ➔ Ensuring know-how and strengthen public awareness of this method of financing.
- ➔ The aim is also **to increase the attractiveness of the Czech Republic for foreign venture capital funds** which may bring in the Czech startup environment not only capital, but also the necessary global contacts.
- ➔ The investment strategy of the fund will be directed at the areas insufficiently saturated by the private sector – seed (prototype) stage and high-tech industries outside of ICT with a longer payback period.
- ➔ The feasibility study of the project was approved by the Czech government. Founding of the state investment company is in process.

Present state of NIF implementation

- ➔ NIF launch is expected in 2017
- ➔ MIT cooperates with a licensed specialist adviser for the purpose of founding the investment company NIF IS and obtaining the license from the regulator
- ➔ MIT needs to select qualified specialists for NIF IS and the Investment board (supervisory body)
- ➔ In the first phase, NIF shall have available funding of 13 mil. EUR. These should go directly into innovative start-ups, in cooperation with private investors.
- ➔ Later a support for a Proof-of-Concept scheme is expected

EIF administered fund of funds

- ➔ Funding agreement for the fund of funds (FoF) was signed on 24. 1. 2017. A call for expression of interest to financial intermediaries was published on 9. 3. 2017.
- ➔ Total allocation to the fund of funds from EIF is 10 mil. EUR and from the Czech Republic is 40 mil. EUR.
- ➔ Investments into the start-ups should start at the beginning of 2018.
- ➔ A minimum for the FoF is 35 successfully supported projects.
- ➔ The result should be to strengthen the offer of venture capital for emerging Czech start-ups development of the venture capital market in the Czech Republic and the increase in domestic know-how in the field of investments.
- ➔ There will be 3 – 5 VC funds selected as financial intermediaries Support for accelerator and incubator is also included.
- ➔ EIF as a manager of the FoF brings several important benefits:
 - ▶ EIF successfully implemented similar schemes in other states of the EU.
 - ▶ Reputation of EIF offers a guarantee to managers and investors who might be otherwise reluctant to manage funds and co-invest into them in the Czech Republic
 - ▶ EIF co-investment to the FoF from EFSI, which can cover Prague region



Results of Horizon 2020 Stakeholder Consultation

Interim Evaluation
of Horizon 2020



EU added value

H2020 related survey amongst stakeholders

- For 63% of the respondents the added value of Horizon 2020 is higher than that of national and/or regional programmes for research and innovation
- Research organizations and business respondents had the highest rate of agreement (66% and 65% respectively), while the agreement rate was lowest for public authorities (56%)
- In terms of effectiveness, respondents strongly agreed with statements suggesting that Horizon 2020 strengthened the quality and visibility of research in the EU
- For respondents, the main added value of participating in Horizon 2020 compared to national and/or regional research and innovation programmes is cooperation with partners from other countries
- They also mostly agree that the additionality of the programme is strong and feel that a possible discontinuation of the programme would have strong negative impacts, which would extend far beyond a simple reduction of research and innovation funding for their organizations.



Key issues in Future FP

- ➔ Collaborative cross-sectorial, interdisciplinary and international projects and associated networking effects
- ➔ Faster and large scale implementation which is not possible on national or bilateral level
- ➔ Scientific excellence
- ➔ Opportunity to leverage financial investment
- ➔ Opportunities for SMEs to globalize through their cooperation with large companies
- ➔ Access to international/ European supply chain.



Thank you for your attention!



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