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# EUROPEAN INTEREST GROUP SURVEY

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D.3.1.1



16. AUGUST 2017  
FH JOANNEUM GMBH

# TABLE OF CONTENTS

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1	Project Summary .....	3
1.1	Project Identification .....	3
1.1.1	Main Data .....	3
1.1.2	Project Summary .....	3
1.1.3	Changes compared to the Expression of Interest (Eoi) .....	4
1.1.4	Project Budget Summary .....	4
2	Project Partner .....	4
2.1	List of Project Partners .....	4
3	Summary Description and Objective of the Work Package .....	5
4	Cooperation of intermediaries with research centres .....	6
4.1	General .....	6
4.1.1	General description of the intermediaries .....	6
4.1.2	Membership network .....	14
4.2	Description of the collaboration of intermediaries with research centres .....	19
4.2.1	Cooperations of intermediaries with research centres .....	19
4.2.2	Kind of intermediaries having cooperations with researcher centres .....	24
4.2.3	Quantity of the cooperation of intermediaries with research centres .....	30
4.2.4	Kind of collaboration of intermediaries with research centres .....	35
4.2.5	Kind of common activities of intermediaries with the research centres .....	40
4.2.6	Satisfaction of the collaboration of the intermediaries with the research centres .....	46
4.2.7	Important points of a collaboration of intermediaries with a research centres .....	51
4.2.8	Obstacles of intermediaries in working together with research centres .....	66
4.2.9	Kind of services which a research centre should offer .....	69
5	Cooperation of NGO's with research centres .....	76
5.1	General .....	76
5.1.1	General description of the NGO's .....	76
5.1.2	Membership network .....	83
5.2	Description of the collaboration of NGO's with research centres .....	88
5.2.1	Cooperations of NGO's with research centres .....	88
5.2.2	Kind of NGO's having cooperations with researcher centres .....	94
5.2.3	Quantity of the cooperation of NGO's with research centres .....	99
5.2.4	Kind of collaboration of NGO's with research centres .....	104
5.2.5	Kind of common activities of NGO's with the research centres .....	109
5.2.6	Satisfaction of the collaboration of the NGO's with the research centres .....	114

5.2.7	Important points of a collaboration of NGO's with a research centres.....	120
5.2.8	Obstacles of NGO's in working together with research centres.....	135
5.2.9	Kind of services which a research centre should offer.....	137
6	Research centres .....	144
6.1	General .....	144
6.1.1	General description of the Research Centres .....	144
6.1.2	Membership network.....	152
6.2	Question to collaboration .....	158
6.2.1	Cooperations of research centres .....	158
6.2.2	Description of the organizations which collaborates with RI's.....	163
6.2.3	Description about the kind of collaborations of RI's.....	171
6.2.4	Financing of the projects.....	178
6.2.5	Kind of financing the projects.....	183
6.2.6	Important points of a collaboration with a research centres .....	189
6.2.7	Obstacles in working together with research centres .....	204
7	Cooperation of SME's with research centres.....	208
7.1	General .....	208
7.1.1	General description of the SME's.....	208
7.1.2	Membership network.....	214
7.1.3	Size of the SME's .....	220
7.2	Description of the collaboration of SME's with research centres.....	226
7.2.1	Cooperations of SME's with research centres .....	226
7.2.2	Kind of SME's having cooperations with researcher centres.....	231
7.2.3	Quantity of the cooperation of SME's with research centres.....	236
7.2.4	Kind of collaboration of SME's with research centres .....	241
7.2.5	Kind of common activities of SME's with the research centres.....	246
7.2.6	Satisfaction of the collaboration of the SME's with the research centres.....	251
7.2.7	Important points of a collaboration of SME'S with a research centres .....	256
7.2.8	Obstacles of SME's in working together with research centres.....	271
7.2.9	Kind of services which a research centre should offer.....	273

# 1 PROJECT SUMMARY

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## 1.1 PROJECT IDENTIFICATION

### 1.1.1 Main Data

**Reference No.** **Project Acronym**

DTP1-1-184-1.1

RI2integrate

**Project Title**

Embeddedness of high quality research infrastructures in the Danube Region

**Name of the Lead Partner Organisation in English**

ELI-HU Nonprofit Ltd.

**Project Duration**

*Start Month*

*End Month*

*Number of Months*

01/2017

to

06/2019

30 Month(s)

**Project Priority**

PA1. Innovative and socially responsible Danube region

**Programme Specific Objective**

SO1.1 Improve framework conditions for innovation

### 1.1.2 Project Summary

The main objective of RI2integrate project is to exploit the economic development potential and to better the integration of the operation of the EU's excellent R&D Infrastructure (RI) investment projects through devising and implementing innovative tools for policy learning on macro-regional embeddedness in the Danube Region.

The main result is the improved transfer of scientific results into the economy in the Danube Region, in line with the different needs of the participating countries by the improvement of cross-linkages among the R&D, SMEs, community and government. As the main outputs, 3 tools will be developed and tested for boosting macro-regional embeddedness of RIs (1 public procurement on innovation utilization guide; 1 guideline for aiding the RI related business ecosystem ; 1 roadmap for community dissemination). To ensure policy durability, 7 National and 1 Joint Action Plans will be developed and a transnational RI2integrate Committee will be funded covering all Danube countries.

The main novelty of RI2integrate is two-fold. It's methodology foresees the combination of the Smart Specialization approach (from the expert side) and the Quadruple Helix model (from the stakeholder perspective). Additionally, as a policy driven novelty, the project creates synergies between different EU and territorial funding instruments.

### 1.1.3 Changes compared to the Expression of Interest (Eoi)

During the preparation phase, 4 new ASP partners have been involved to increase the efficiency of answering the territorial challenges. Additionally, IPA PP1 (National Agency for Regional Development) merged with FDI promotion agency SIEPA. The new agency is Serbian Development Agency that take part in the project with the similar roles. The situation is consulted with the JS as well as National Contact Point and requested no further clarification.

### 1.1.4 Project Budget Summary

#### Project Budget

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1,899,430.00 €

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## 2 PROJECT PARTNER

### 2.1 LIST OF PROJECT PARTNERS

ROLE	OFFICIAL NAME IN ENGLISH	ACRONYM	COUNTRY
LP	ELI-HU Nonprofit Ltd.	ELI-ALPS	HUNGARY
ERDF PP1	Central Transdanubian Regional Innovation Agency Nonprofit Ltd.	CTRIA	HUNGARY
ERDF PP2	Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering	IFIN-HH	ROMANIA
ERDF PP3	Institute of Physics, Academy of Sciences of the Czech Republic	IOP	CZECH REPUBLIC
ERDF PP4	FH JOANNEUM GESELLSCHAFT M.B.H.	FHJ	AUSTRIA
ERDF PP5	Institution for development of competence, innovation and specialization of Zadar County	INOVAcija	CROATIA
ERDF PP6	University of Maribor	UM	SLOVENIA
ERDF PP7	Magurele High Tech Cluster	MHTC	ROMANIA
ERDF PP8	Central Bohemia Innovation Centre	SIC	CZECH REPUBLIC
IPA PP1	Development Agency of Serbia	DAS	SERBIA
ASP1	Ministry for National Economy	MNE	HUNGARY
ASP2	Ilfov County Council	ICC	ROMANIA
ASP3	Central Bohemia Region	CBR	CZECH REPUBLIC
ASP4	Steirische Wirtschaftsförderungsgesellschaft mbH	SFG	AUSTRIA
ASP5	Zadar County	Zadar County	CROATIA
ASP6	Technical University of Kosice	TUKE	SLOVAKIA
ASP7	Municipality of Ruse	OR	SLOVENIA

### **3 SUMMARY DESCRIPTION AND OBJECTIVE OF THE WORK PACKAGE**

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The overall objective of WP3 is to develop a framework for RI embeddedness tool development from a content related and an organizational perspectives. The objective will be reached through 3 sub-objectives as:

- By the analysis in the preparation phase, systematization of the RI infrastructure's embeddedness in each country will be done. It will include in-depth evaluation by agreed methodology through 4 interest group surveys per region (at least 40 responses per region) plus 1 stakeholder consultation per region (15 each)
- Establishment of National Expert Groups - NEG (1 per involved country) plus 3 Embeddedness Groups - EG (with the coordination of 1 ELI each related to the 3 main pillars of the project) with the involvement of all partners. Each NEG will be structured on a geographical basis and will have members from R&D, NGO, government and industries as a consultation body of all national activities. Each project partner will have one representative in each EG for monitoring the professional implementation.
- Using the results of the systematization and the knowledge of NEG and EGs, the partnership can define specific focus (on the 3 main pillars of RI embeddedness improvement) for all involved countries. Additionally, a macro regional approach will be defined.

Throughout their results transnationally applicable supporting tools will be ready to develop and test.

The activities will be made through transnational work with the participation of all partners that allow a coherent theoretic background and comparable results for the whole project area.

## 4 COOPERATION OF INTERMEDIARES WITH RESEARCH CENTRES

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### 4.1 GENERAL

#### 4.1.1 General description of the intermediaries

##### ***ELI-HU Nonprofit Ltd.***

1. ArchEnerg Cluster
2. Hungarian Chamber of Agriculture, Directorate of Bács-Kiskun county
3. Chamber of Commerce and Industry, Bács-Kiskun county
4. Hungarian Chamber of Agriculture, Directorate of Békés county
5. Chamber of Commerce and Industry, Békés county
6. Hungarian Chamber of Agriculture, Directorate of Csongrád county
7. Chamber of Commerce and Industry, Csongrád county
8. DARINNO – regional innovation agency
9. First Carpathian Basin Development and Knowledge Cluster
10. Software Industry Innovation Pole Cluster

The economic structure in Southern Great Plain is really diverse. In Szeged which is the biggest city in the region there is one of the largest university with significant R&D&I capacities and several faculties. This envisages that the economic structure of the city is mostly based on the SMEs which operate in mostly in the tertiary sector (e.g. the software industry is really strong in the city). The northern part of the region - Kecskemét and its area - is strongly defined by the Mercedes factory and its supplier network in the automotive industry. Traditionally the agricultural activities have been defining the region and they are still significant in the whole region's economy. The main centre of the agricultural researches is Szeged and Hódmezővásárhely.

Regarding the colourful economic activities the intermediary bodies have different role in each part of the region. In Southern Great Plain – such as in the whole country – the most important intermediary bodies are the chambers of commerce and industry. There are chambers in every county and they are part of a national level network. The main goals of these institutions are to facilitate the economic development, provide general advocacy based on sectoral approach. More practical task is the service providing for the economic actors which mostly means counselling and facilitating co-operations among the different players in the economy. But as we can see the task of these bodies are more general than specified for the local or regional needs. In agriculture the county level organizations of the National Chamber of Agriculture have similar tasks than the chambers of commerce and industry.

More effective institutions on the field are the clusters which operates in a proper way. In the previous decade establishment of clusters were supported in Hungary, however many of these clusters were not a strong initiatives and have not been working in a proper way, many of them sopped working. But clusters due to their structure, flexibility and common interest could be really effective in the terms of co-operation between different actors in an economic sector. In the Southern Great Plain there are four accredited innovation clusters: three of them in Szeged and one of them in Kecskemét.

## **Development Agency of Serbia**

1. **Business incubator Kruševac Ltd.** was the first "greenfield" investment of this kind in Serbia and it is the driver of local and regional economic development. The main purpose is implementation of a comprehensive business support programme for SMEs (<http://www.bickrusevac.co.rs/>)
2. **The Centre for the Development of the Jablanica and Pcinja Districts- Leskovac** is limited liability company, established with the aim of supporting the long-term social and economic development of the region. The Founders of the Centre were all the municipalities from both districts, NGOs and business associations (<http://www.centarzarazvoj.org/index.php>)
3. **RARIS– Regional Development Agency Eastern Serbia** is a bottom-up initiative by the Eastern Serbia stakeholders, established to support development initiatives based on institutional networking and partnerships aiming at sustainable development of Eastern Serbia (<http://www.raris.org>)
4. **Regional Agency for Spatial and Economic Development of the Raška and Moravica Distrikt-** founded with the aim of integrating the needs of the Raška and Moravica districts in the process of planning and implementation of development activities, supported by the UNDP PRO and funded by the European Union and the Swiss Government (<http://www.kv-rda.org>)
5. **Sim cert Ltd.** is consulting company that deals with management, organizational changes, implementation of management standards, products harmonization with directives of the RS and EU, as well as with making of innovative and development projects according to customer requirements ([www.simcert.co.rs](http://www.simcert.co.rs))
6. **West metal group Ltd** is one of the best known clusters in Serbia in the metal industry (<http://www.klasterwestmetalgrou.rs/>)
7. **Mobes group Ltd.-** company focused on provision of consulting services in the field of ISO standards and management techniques for business improvement (<http://www.mobes.rs/>)
8. **Inovative cluster "Panonian bee"** is a business support institution and first cluster in Serbia that gathers beekeepers and science. It operates regionally (<http://www.klasterpanonskapcela.com/>)
9. **The Regional Economic Development Agency for Šumadija and Pomoravlje Ltd.** represents a partnership of private, public and NGO sectors from the area of two districts: the district of Šumadija and the district of Pomoravlje. The primary objective of the Regional Agency is to create conditions and stimulate economic and social development of the Šumadija and Pomoravlje region ([http://www.redasp.rs/index\\_en.html](http://www.redasp.rs/index_en.html))
10. **The Regional Development Agency "Braničevo-Podunavlje"** is established as a non-profit limited liability company. Represents a central place for the promotion of sustainable and balanced socio-economic development of urban and rural areas (<http://www.rra-bp.rs/>)
11. **Accredited Regional Development Agency Sandžak "SEDA" - Novi Pazar** is founded with the key aim to support the economic development of the Sandžak region through developing local capacity, regional strategic planning and project development (<http://seda.org.rs/>)
12. **Vladimir Pandurov–** founder of EUprojekti, highly experienced EU IPA programming manager (<http://eu-projekti.rs/>)



### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

Economic character of Central Transdanubia Region is heterogeneous, with several decisive sectors giving its economic activity. This diversity has impact for every area in the region.

Intermediaries are very important actors of innovation system. They can make contact among private sector, entrepreneurs and institutions of R&D. And they can give innovation support for every actors. In Hungary (an in Transdanubia region) can find two main organization which can fill this role. First are chambers and second are clusters.

Every county has Chamber of Commerce and Industry. They organized and records every entrepreneurship. They have wide range services include construction of innovation networks and development of innovations opportunities. (Plan of projects, Survey of innovation actors etc.) The main problem with this organization is they don't pay enough attention innovation support.

There are several cluster types in the region, the most important of which are ICT, automotive and renewable energy organizations. These clusters also have accreditation and they are able to fulfil the representations of their members. The main problem is that we still can't talk about a sufficient amount and good quality of cluster in the Central Transdanubia region.

We asked another actors too, like association of young entrepreneurs, and like innovation centre. That's why we chose them, because they are focusing on a special area, and they are important intermediaries too.

Surveyed organizations:

- EMTEK cluster
- FIVOSZ - Young Entrepreneurs Association Hungary
- Chamber of Commerce and Industry of Fejér County
- Innoskart ICT Cluster
- Hungarian Logistic Association
- ECOPolis Cluster
- Pannon Student School Association
- Veszprém Territorial Commission
- Chambers of Commerce and Industry Veszprém
- Regional Innovation Centre of Veszprém

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering CCIA Dolj**, Chamber of Commerce and Industry of Dolj County, is a business intermediary dealing with services

1. **CNIPMMR**, National Council of SMEs of Romania, is an employers' confederation belonging to social partners dealing with SMEs issues;
2. **ADR SM**, Regional Development Agency South Muntenia, is an intermediate body for Regional Operational Programme;
3. **UEFISCDI**, Executive Agency for Higher Education, Research, Development and Innovation Funding, is a competition based public funding agency in the public system in Romania
4. **Incubator INSB**, is a technology transfer infrastructure belonging to National Institute for Biological Sciences;
5. **ULC Craiova**, Urban Logistic Cluster Craiova, is a cluster dedicated to urban logistics ;
6. **AOSR**, Academy of Romanian Scientists, is an intermediary between scientific institutions focused on different aspects of their specific issues;
7. **RA Physics Section** is an intermediary in physics research inside the Romanian Academy;
8. **ICC**, Ilfov County Council, is a local administration body for Ilfov County.

### ***Institute of Physics, Academy of Sciences of the Czech Republic***

We were asking three major groups of intermediaries: cluster organization (business sector), regional innovation centres (R&D sector, cooperation between stakeholders) and local action groups (NGO, local stakeholders cooperation). TAČR was the only one intermediary from state administration which is founded by public law. TAČR does not have any "members", is state funding agency for applied research, so its role is little bit different from other intermediaries in survey.

Cluster organisations represent the association of enterprises of similar scope or branches, for example nanotechnology. Clusters help their member to find R&D cooperation partners, negotiate with state administration. Clusters exist from many of branches in the Czech Republic. We spoke to the automotive, engineering, nanotechnology and automotive cluster.

Regional innovation centres was founded in the Czech Republic in relation to implementing RIS3 regional strategy and enhancing the cooperation of regional stakeholders in R&D from public and private sector. Because of their fundament, they are basically focused on R&D, innovation and cooperation. There exists differences between the ranges of activity maintenance by regional innovation centres but mainly they provide some funds for starting cooperation between private sector and public research organizations. Innovation centres were often founded in neighbourhood of research centres, infrastructures or university campus.

Local action groups provide the regional development and they also redistribute EU and national funds to local stakeholders (municipalities, NGO, etc.). They will be particularly focused on tourism, cultural heritage or regional development project in general. R&D project are not generally their main scope but these R&D activities could be encapsulated for example in some exhibition or educational trail projects.

**FH JOANNEUM GESELLSCHAFT M.B.H.**

**Area m styria GmbH is part of business service sector. This company is an agency for regional economic development. Homepage: [www.areamstyria.at](http://www.areamstyria.at)**

1. Energy Agency Upper Styria belongs to information, consultancy an engineer consultant industry. Energy Agency Upper Styria is an intermediary which deals with regional energy agency at NUTS 3-level. This means assisting regional governments, enterprises, SME's, organisations and individuals in energy and renewable energy and regional energy planning Homepage: [www.eao.st](http://www.eao.st)
2. Erz und Eisen Regionalentwicklungs GmbH belongs to consultancy industry. This company is an intermediary for regional development agency. Homepage: [www.steirisches-eisenstrasse.at](http://www.steirisches-eisenstrasse.at)
3. Holzcluster Steiermark GmbH is part of the forest based industry and is a cluster organization. Homepage: [www.holzcluster-steiermark.at](http://www.holzcluster-steiermark.at)
4. Impulszentrum Auersbach GmbH belongs to food line of business. This company is an intermediary for incubators. Homepage: [www.sfg.at/cms/821/Auersbach](http://www.sfg.at/cms/821/Auersbach)
5. Stadtgemeinde Leoben belongs to the municipality line of business. Stadtgemeinde Leoben is an intermediary which deals with public administration. Homepage: [www.leoben.at](http://www.leoben.at)
6. Styrian development agency – impulse center is part of government sector. This company is an intermediaries organization which is responsible for the styrian impulse center.
7. Styrian business promotion agency (SFG) is completely owned by the province of Styrian in Austria. SFG is a service provider, which aims to contribute to the consolidation and growth of the Styrian economy. They offer companies a broad range of services free of charge such as general information, advice on grants and financing and location consultancy or location analysis. Homepage: [www.sfg.at](http://www.sfg.at)
8. WGM – Wirtschaftspark und Gründerzentrum Mürzzuschlag belongs to the properties sector. WGM is an intermediary which deals with property rental.
9. WIL – Wirtschaftsinitiativen Leoben GmbH is part of consulting sector. WIL deals with business agency and development. Homepage: [www.wil.at](http://www.wil.at)

Materials Cluster Styria GmbH is part of the materials sector. Their kind of intermediaries is a cluster. Homepage: [www.materialscluster.at](http://www.materialscluster.at)

**Institution for development of competence, innovation and specialization of Zadar County**

1. **Innovative Zadar Ltd** is a business incubator that supports entrepreneurs in sectors: ICT, creative industry, business and professional services, development of products and services based on knowledge, innovations and new technologies ([www.inzad.hr](http://www.inzad.hr))
2. **Zadar County** is regional self-government in charge for general public administrative activities ([www.zadarska-zupanija.hr](http://www.zadarska-zupanija.hr))
3. **Natura-Jadera** is a public institution for management of protected areas in Zadar County (<http://natura-jadera.com/>)
4. **Ministry of Economy, Entrepreneurship and Crafts** is a public body that supports national business sector ([www.mingo.hr](http://www.mingo.hr))
5. **City of Zadar** is a local self-government unit ([www.zastovolimzadar.hr](http://www.zastovolimzadar.hr))
6. **BICRO BIOCentre Ltd** is incubation centre for biosciences technology commercialization ([www.biocentre.hr](http://www.biocentre.hr))

7. **Agency for investments and competitiveness** is a public body which gives administrative and technical supports to clusters ([www.aik-invest.hr](http://www.aik-invest.hr))
8. **Technology Park Varaždin Ltd** is a business support institution ([www.tp.vz.hr](http://www.tp.vz.hr))
9. **Hamag-Bicro** is Croatian Agency for small Business, Innovation and Investment with the aim of supporting the development of small and medium-sized enterprises, improving the innovation process and encouraging investments ([www.hamagbicro.hr](http://www.hamagbicro.hr))
10. **ZADRA nova** is a Zadar County development agency is a non-profit public institution for supporting private and public sector ([www.zadra.hr](http://www.zadra.hr))
11. **Development agency Zagreb – Technology Park Zagreb Ltd.** is a public body for business support. TPZ offers to its users workplace, technical support, business consulting, Business education, Internationalization and a Start-up accelerator is under preparation ([www.raza.hr](http://www.raza.hr))
12. **AGRRA** – Zadar county Rural Development Agency is a public non-profit regional agency for supporting private and public sector in rural development issues (<http://www.agrra.hr/hr>)

**Ministry of science and education** – policy level body on government level for science and education system in Croatia ([www.mzo.hr](http://www.mzo.hr))

### **UNIVERSITY OF MARIBOR**

Intermediaries that participated in our survey are listed in table below:

No.	Name of the company	Branche
1.	Chamber of Commerce and Industry of Štajerska	Business and entrepreneurship
2.	Regional Development Agency Bistra Ptuj	Business and regional development
3.	Association of Employers of Slovenia	Business and entrepreneurship
4.	Prizma	Regional employment fund
5.	Municipality of Maribor	Regional development
6.	Municipality Ruše	Regional development
7.	Business incubator Venture factory	Business and entrepreneurship

### **Magurele High Tech Cluster**

1. Agentia pentru Dezvoltare Regionala Centru, intermediate Body for PA1 of the Regional Operational Programme, coordinator entity for the Regional Consortium for Innovation
2. Bilateral Chamber of Industry and Commerce Ro - Kaz, economy
3. Centrul de Transfer Tehnologic si Marketing IFIN HH, technological transfer
4. Ministry of Research and Innovation, scientific research and innovation
5. Ministry of Economy, cross sectoral
6. Romanian Cluster Association - CLUSTERO, cross sectoral
7. South East Regional Development Agency (SE RDA), Regional Development
8. Prahova Chamber of Commerce and Industry, representation, support and specific activities to the chambers of commerce and industry
9. Ministry of Foreign Affairs, diplomacy, national coordination in the field of the EUSDR project development and implementation
10. Giurgiu Municipality, European Programs – European Funded Projects

## **Central Bohemia Innovation Centre**

1. The largest Czech railway **České dráhy**, a.s. carrier with a tradition spanning more than 175 years. ČD provides comprehensive services in railway transport and related services. Kind of intermediaries: operator. Branch: Railway transport. Homepage: [www.ceskedrahy.cz](http://www.ceskedrahy.cz)
2. The **LINET** spol. s r.o. is a major European manufacturer of hospital and nursing beds. The company's portfolio includes solutions designed for intensive care, products for regular in-bed treatment and also special beds for old people's homes and long-term care facilities. The LINET range also includes a wide range of accessories such as anti-pressure ulcer mattresses, mobile equipment, healthcare furniture, etc. Kind of intermediaries: Industrial Company, including all necessary areas like marketing, sales, production, RnD, services etc. Branch: Medical device producer (mainly hospital beds). Homepage: [www.linet.com](http://www.linet.com)
3. The **JIC** was created on the foundations of Regional Innovation Strategy of the South Moravian Region in 2003. It is responsible for its coordination and providing support to (not only) entrepreneurs in the South Moravia region. Today, the JIC, which follows a European format, has 3 buildings, 2 subsidiary companies and almost 50 employees. The Competence centre in Kuřim serves engineering companies, researchers and students, which are developing new technologies connected with machine tools. The JIC VENTURES help promising companies grow faster by investing in them in exchange for a stake in the company. In 2011, the JIC was awarded the 3<sup>rd</sup> best connected incubator internationally. Kind of intermediaries: The JIC is an Association of Legal Entities. Branch: Among our alumni and current clients, knowledge intensive companies from the IT sector prevail. Nonetheless, the JIC services remain open to entrepreneurs regardless their principal industry (in exception of specific cases, e.g. Starcube accelerator). Homepage: [www.jic.cz/en](http://www.jic.cz/en)
4. The **Engineering Science and Technology Park** is a modern Czech centre supporting the entrepreneurial environment in the region and focussing on industrial research, technological development and innovation. Kind of intermediaries: Scientific and technical park. Branch: Engineering, research and development. Homepage: [www.svtpark.cz](http://www.svtpark.cz)
5. The **ICUK** was established in 2015 by the local Government, University and the Chamber of commerce. Kind of intermediaries: ICUK is a networking institution, facilitator, promoter, inspiratory. Branch: The area of innovations, ICUK supports the rise of new business and start-ups in the region, helps to develop existing companies, ICUK connects R&D institutions and companies (the main focus is on the applied science and the collaboration of both sides). Homepage: [www.icuk.cz](http://www.icuk.cz)
6. The **National Training Fund (NTF)** is a nonprofit organization operating since 1994. Its aim is to promote the development and restructuring of human resources in accordance with the requirements of economic and social reforms in the Czech Republic. Kind of intermediaries: provides services and conduct research in the field of labour market and education. Homepage: [www.nvf.cz](http://www.nvf.cz)
7. The **SusChem** belongs to the chemical industry. Kind of intermediaries: non-profit organisation. Branch: chemistry. Homepage: [www.suschem.cz](http://www.suschem.cz)
8. The **Technology Centre of the CAS** supports the participation of the Czech Republic in the European Research Area, prepares analytical and conceptual studies for research and development, performs international technology transfers and supports the creation and development of innovation businesses. The Technology Centre of the Czech Academy of Sciences (TC) was established in 1994 as a non-profit special-interest association of legal entities.

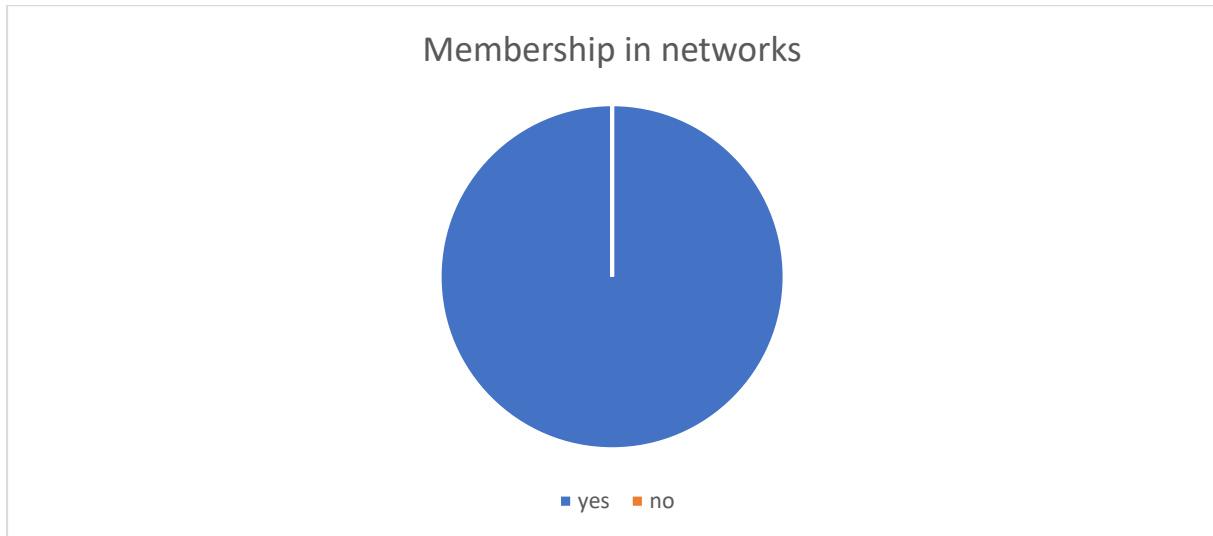
Its members are institutes of the Czech Academy of Sciences. Kind of intermediaries: H2020 NCP, EEN. Branch: all areas of RDI Homepage: [www.tc.cz](http://www.tc.cz)

9. Established on 5th of May 1990, the **Confederation of Industry of the Czech Republic** carries on the tradition and activities of the former Central Union of Czechoslovak Industrialists that existed in the years 1918 – 1938, 1945 – 1950 and 1968 – 69. Kind of intermediaries: Confederation of associations, companies, research organisations Branch: industry. Homepage: [www.spcr.cz/en](http://www.spcr.cz/en)
10. The network of the Czech **Chamber of Commerce** is composed of 14 regional chambers of commerce. Through its network the Czech Chamber of Commerce provides support to businesses in all regions of the Czech Republic. This mainly concerns consulting services and assistance in matters related to business activities, issue of verified printouts from selected registers of the public administration, activities aiming at education and development of human resources, support in accessing foreign markets, etc. Kind of intermediaries: chamber of commerce Branch: chamber of commerce Homepage: [www.khkstrednicechy.cz](http://www.khkstrednicechy.cz)
11. Science and Technology Park is focused on supporting of business projects based on the application of the latest scientific knowledge and technologies and have a chance to succeed on the domestic and global market. **CAVD** s.r.o. is a private company, working closely with leading university, research and development centres. However, the CAVD is not a scientific research organisation. It doesn't do research but helps to apply the results of research and development into practice. Kind of intermediaries: science and technologic park Homepage: [www.cavd.cz](http://www.cavd.cz)
12. **GroeBUSINESS** belongs to the consultancy industry. Kind of intermediaries: Startup investment, consultancy, incubator – management programs. Homepage: [www.gow2business.com](http://www.gow2business.com)

**AVO** is the only organization in the Czech Republic representing applied research. Founded in 1993 AVO has more than 80 members with more than 8000 researchers. AVO key role is to promote the Czech applied research, development and innovations on both national and international level and help to bring the R&D results into the business. Kind of intermediaries: Branch: podpora výzkumu a vývoje Homepage: [www.avo.cz](http://www.avo.cz)

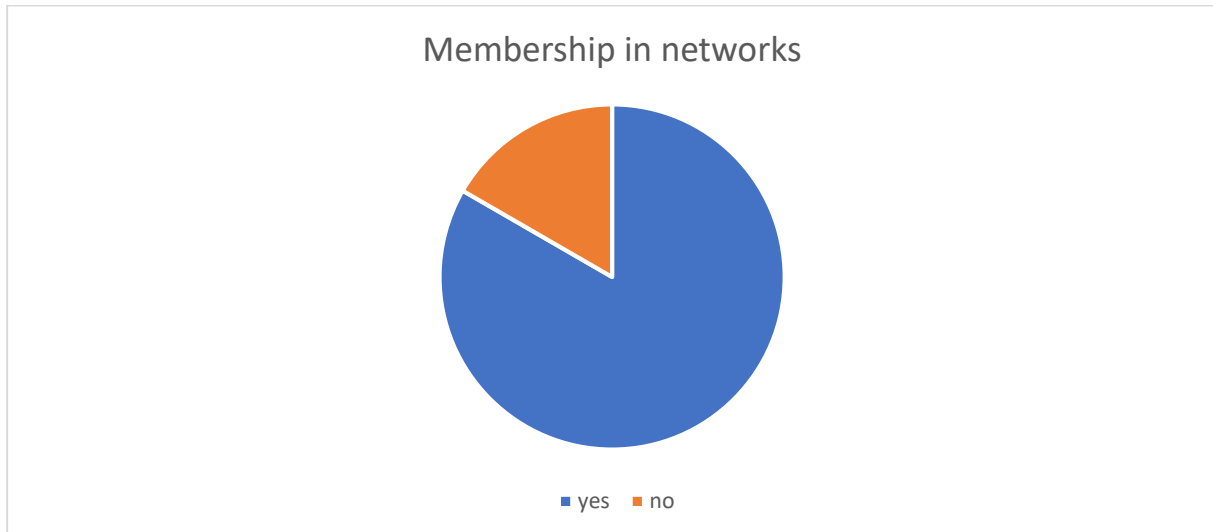
#### 4.1.2 Membership network

##### *ELI-HU Nonprofit Ltd.*



All surveyed institutions are member of some kind of network, but there is no information about the type of these network. They can be networks with strongly related members and with strong professional work or - and unfortunately this is common in Hungary – just de jure networks exist only in paper.

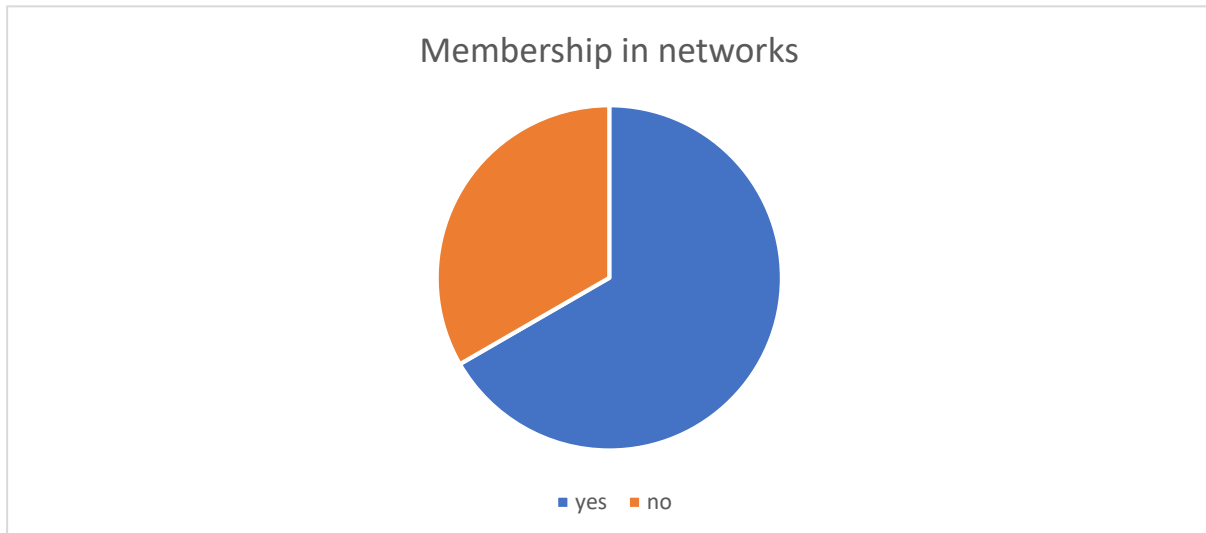
##### *Development Agency of Serbia*



More than 80% of surveyed intermediaries have membership in various networks. Among the most important ones we can find:

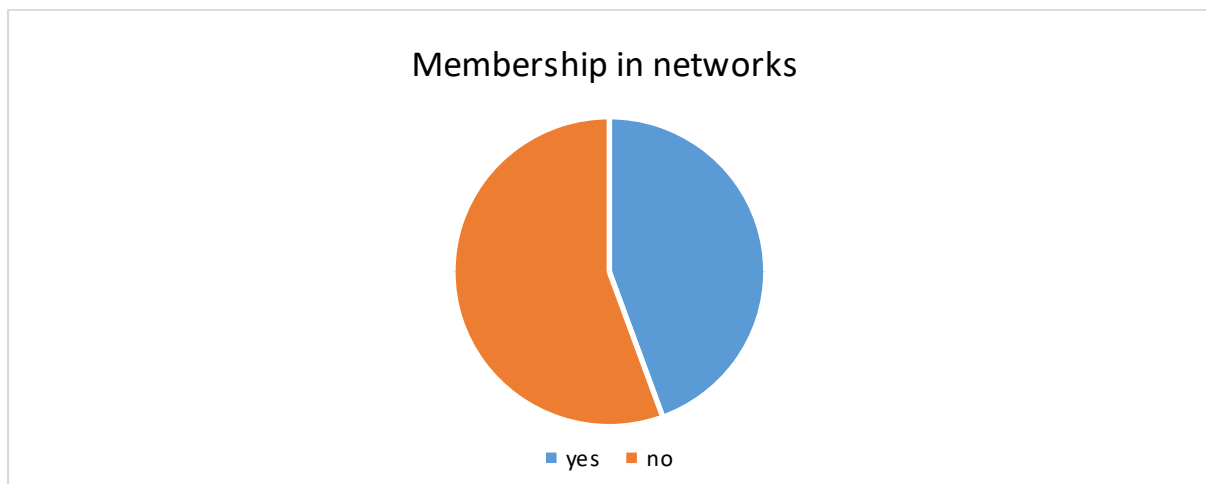
- **Enterprise Europe Network EEN**
- **Network of accredited regional development agencies SARRA**
- **Association Tempus- Center for strengthening development capacities**
- **Serbian Chamber of commerce**
- **European Association of Regional Development Agencies EURAD**
- **Clusters from various sectors**
- **Association of business consultants in Serbia**

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



60% of the surveyed institutions are a member of any kind of a company network. Only 20% are no members of any kind of network. 20% of the fillers did not answer the question. The Chamber of Commerce and Industry Veszprém was established on 28th of October 1994. The organization works for the interests of micro, small and medium enterprises, companies and all economic actors in Veszprém County in order to enhance economic development, innovation capacity and vocational education system of the region. The Chamber of Commerce and Industry of Fejér County, as a service providing and entrepreneur-centred chamber, shall provide a stable background for its activity, and propagate as a value the idea of the decently thinking and operating enterprise.

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



Membership in networks could be an indicator of potential collaboration opportunities. 5 respondents out of 9 indicate that they are not members of any network. If we look this figure closer we can see that 3 of the 5 respondents are centres within a larger entity they belong to. A development agency choose not to answer.

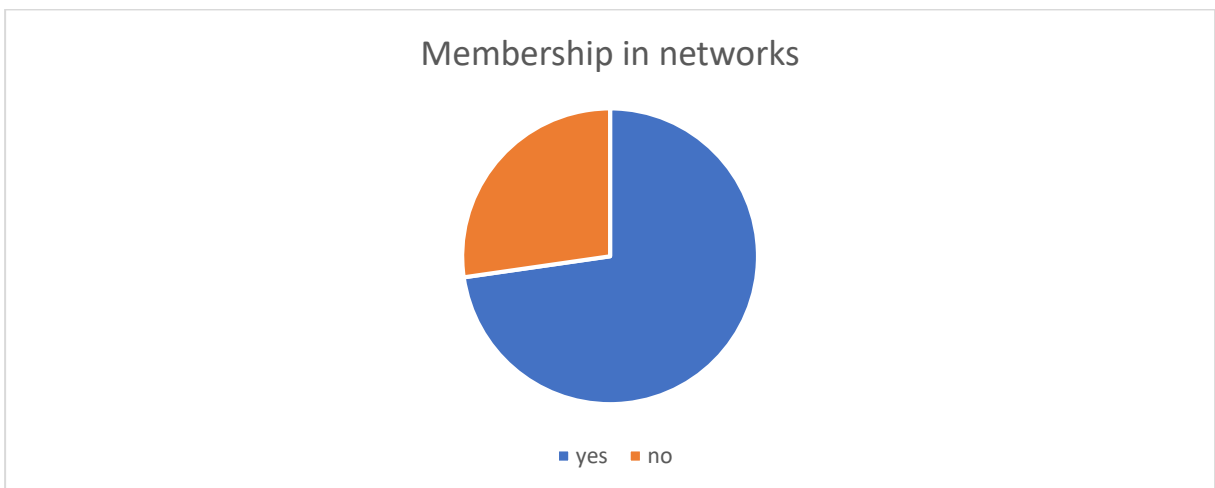




Most of the intermediaries are connected in some network organisation. It is probably related to their mission, because they are supposed to enhance inter-sectoral cooperation and networking. These are some of network organisations, where our intermediaries are connected:

Enterprise European Network, European Business and Development Centre Network, National cluster organisation, Association of automotive, Transfera.cz, CEBIO, Society of Science-Technology parks in Czech Rep., National network of local action group, Association of SMEs, European Cluster Collaboration Platform, TAFTIE

**FH JOANNEUM GESELLSCHAFT M.B.H**



73% of the surveyed companies are a member of any kind of a company network. Only 27% are no members of any kind of network.

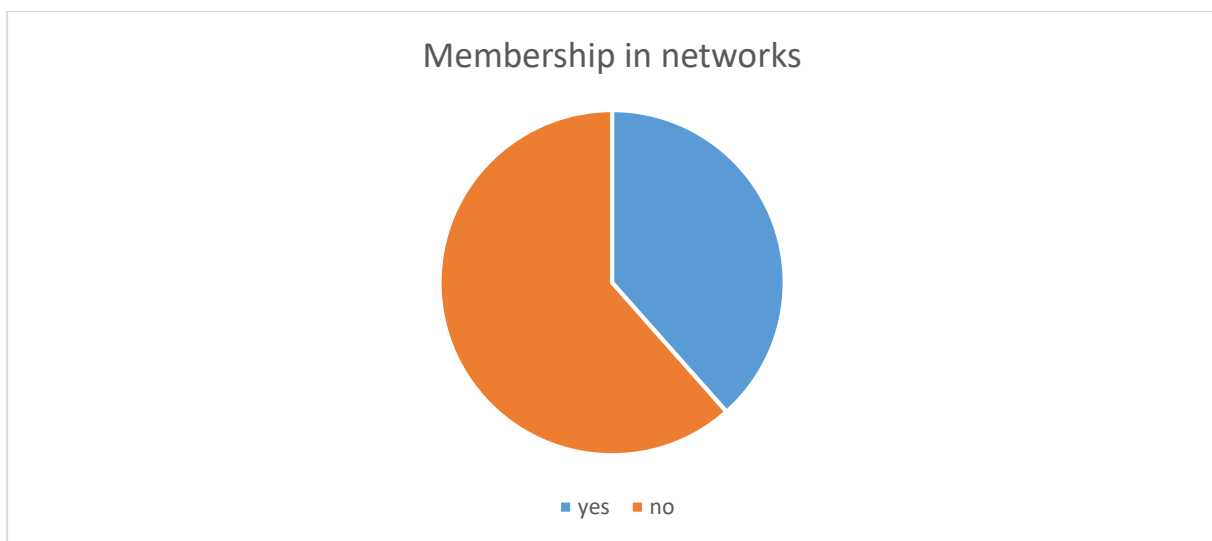
These networks are KMU Energy consultant, National Cluster Platform of the Republic of Austria or Austrian Association of Cities and Towns.

The KMU energy consultant is a certified Styrian company offering comprehensive, professional advice on the subject of energy and energy saving. From construction technology to heat generation, we support you with up-to-date knowledge in the implementation of your renovation project and explain all possibilities for funding.

The National Cluster Platform initiates the discussion of topics of common concern within working groups. It actively contributes to further developments of the Austrian RDTI policy and the link-up to cluster activities at European level and facilitates a considerable rise in the implementation of innovative measures in Austria.

The Austrian Association of Cities and Towns represents the common interests of 245 cities and major municipalities. Membership at the Austrian Association of Cities and Towns is voluntary. Besides the Austrian Association of Municipalities, that represents smaller municipalities, the Austrian Association of Cities and Towns is a dialog partner for the government on the federal and on the state level.

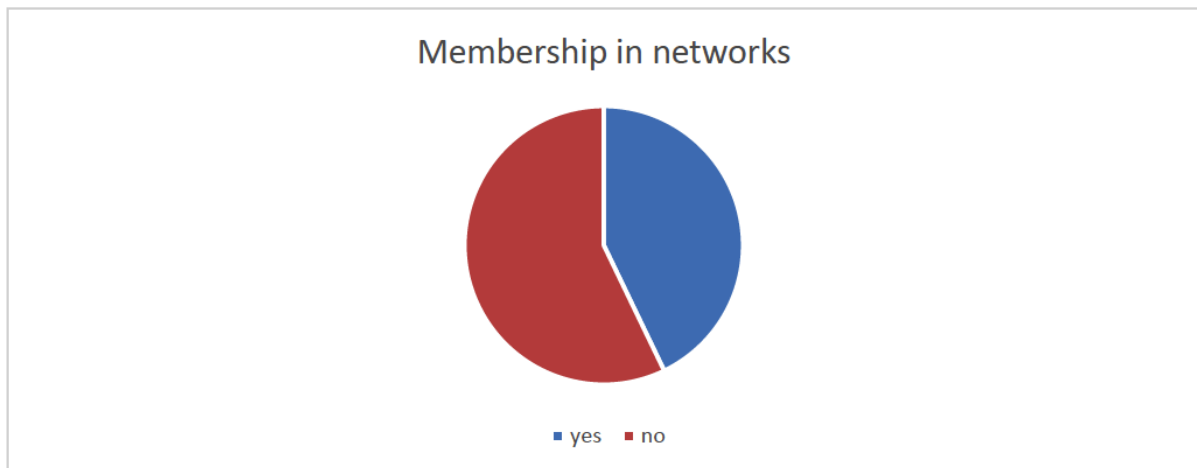
### ***Institution for development of competence, innovation and specialization of Zadar County***



This pie chart shows that 62% of the 13 surveyed intermediaries are not a member of any network. 38% of them are members of some kind of network. These networks are:

- **EEN** – European Enterprise Network
- **TAFTIE** – European Network of Innovation Agencies
- **Croatian competitive cluster of creative and cultural industries**
- **Chamber of commerce**
- **Competitiveness cluster – medical industry**
- **Personalized medical cluster**
- **Energy cities** - European Association of local authorities in energy transition

**ACR+** - an international network of cities and regions sharing the aim of promoting a sustainable resource management and accelerating the transition towards a circular economy on their territories and beyond.



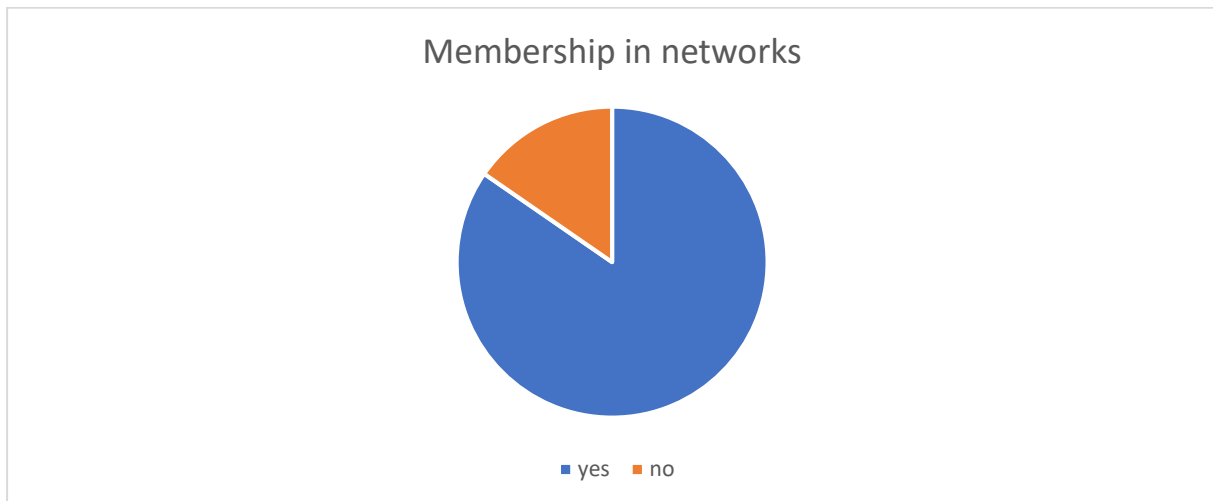
This pie chart shows that 57% of the surveyed intermediaries are not a member of any network. 43% of them are members of some kind of network. These networks are: Association of business incubators and technology parks of Slovenia, Chamber of Commerce and Industry of Štajerska, Regional development agency, Chamber of Craft and Small Businesses of Slovenia.

***Magurele High Tech Cluster***



The intermediaries are less connected with other entities / networks than other target groups of this survey. Probably this is the result of the fact that some of the respondents are representing national governmental entities.

## Central Bohemia Innovation Centre



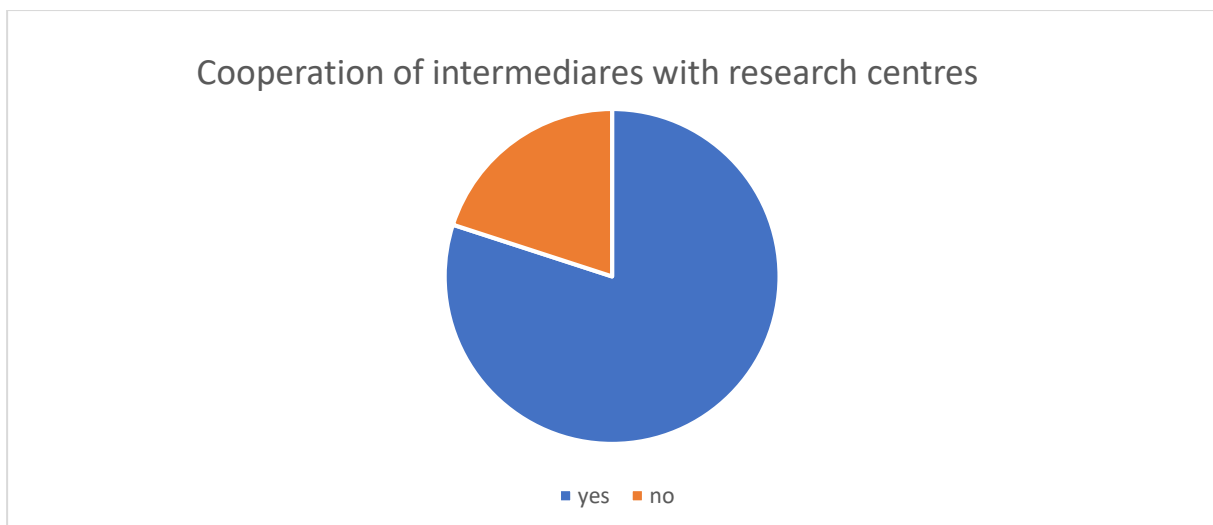
85% of the surveyed companies are a member of any kind of a company network on national or international level. Only 15% are no members of any kind of network.

To name a few, companies actively participate in the Enterprise Europe Network, in the European Business & Innovation Centre Network (EBN), International Railway Research Board (IRRB), International Union of Railways (UIC), Community of European Railways (CER), EPUAP European Pressure Ulcer Advisory Board, BUSINESSEUROPE, Confederation of Industry, SPOLEČNOST VĚDECKOTECHNICKÝCH PARKŮ ČR, z.s.; Klastř MECHATRONIKA, z.s., Asociace poskytovatelů sociálních služeb České republiky; CzechMed Česká asociace dodavatelů zdravotnické techniky; Asociace výrobců a dodavatelů zdravotnických prostředků, Společnost vědeckotechnologických parků, AIP, AVO.

## 4.2 DESCRIPTION OF THE COLLABORATION OF INTERMEDIARIES WITH RESEARCH CENTRES

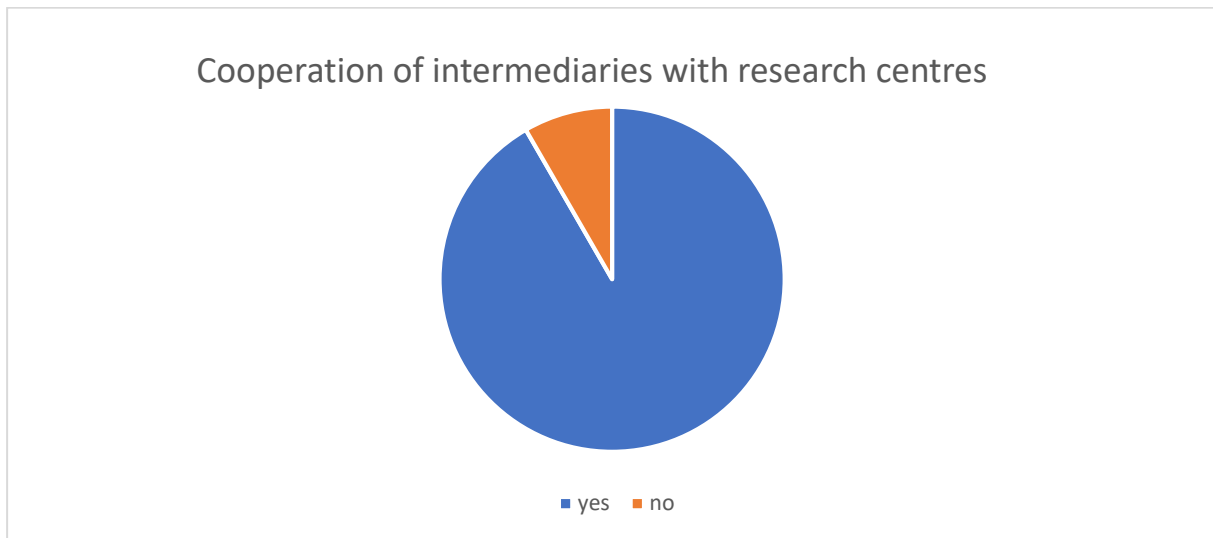
### 4.2.1 Cooperations of intermediaries with research centres

#### ELI-HU Nonprofit Ltd.



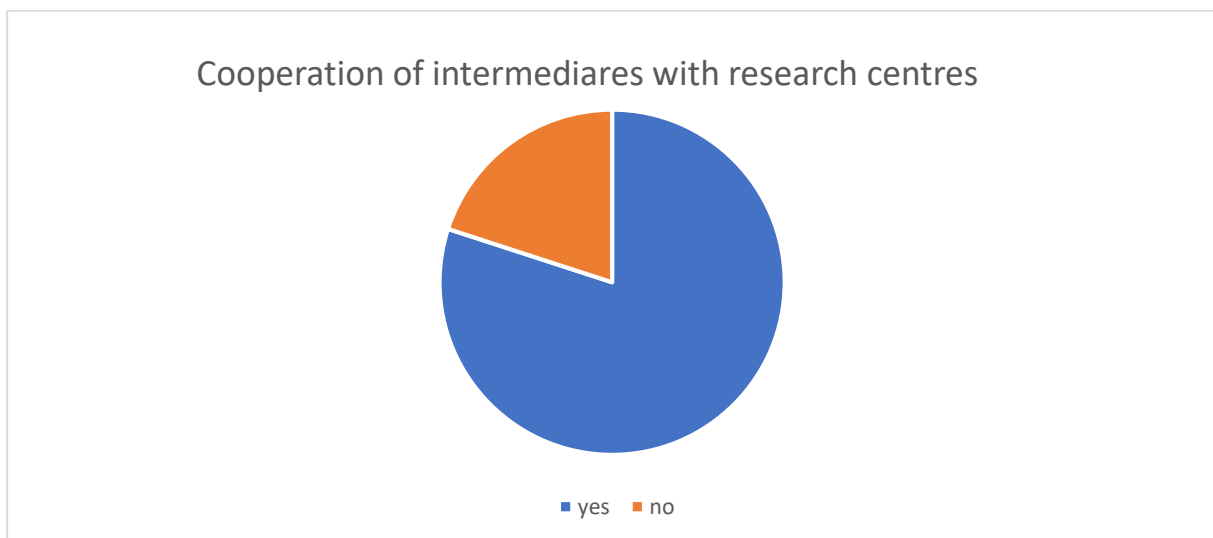
From the asked 10 organizations 8 said that they have some kind of cooperation with research centres.

**Development Agency of Serbia**



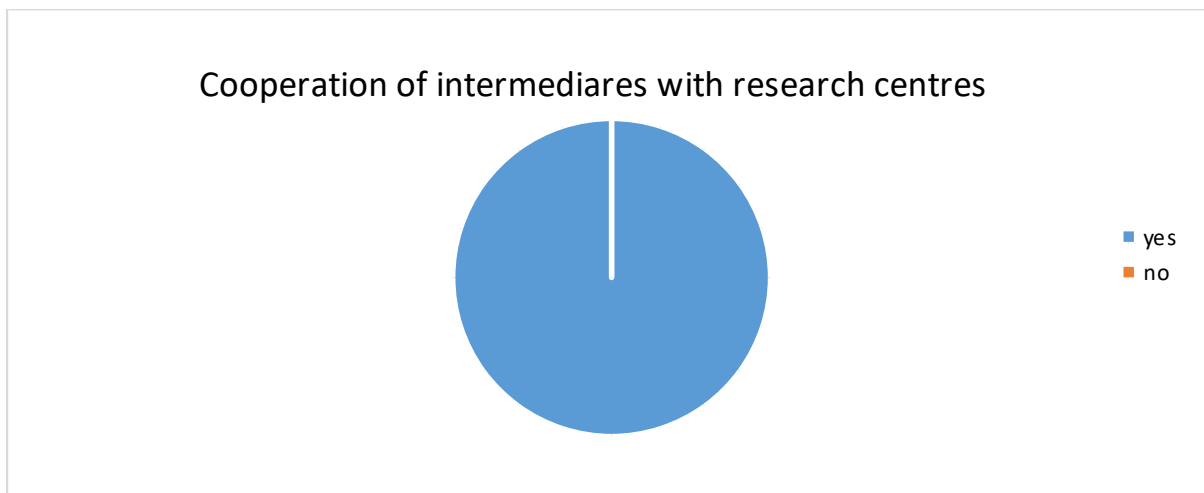
Only one interviewed organization stated that currently doesn't have any kind of cooperation with research centres.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



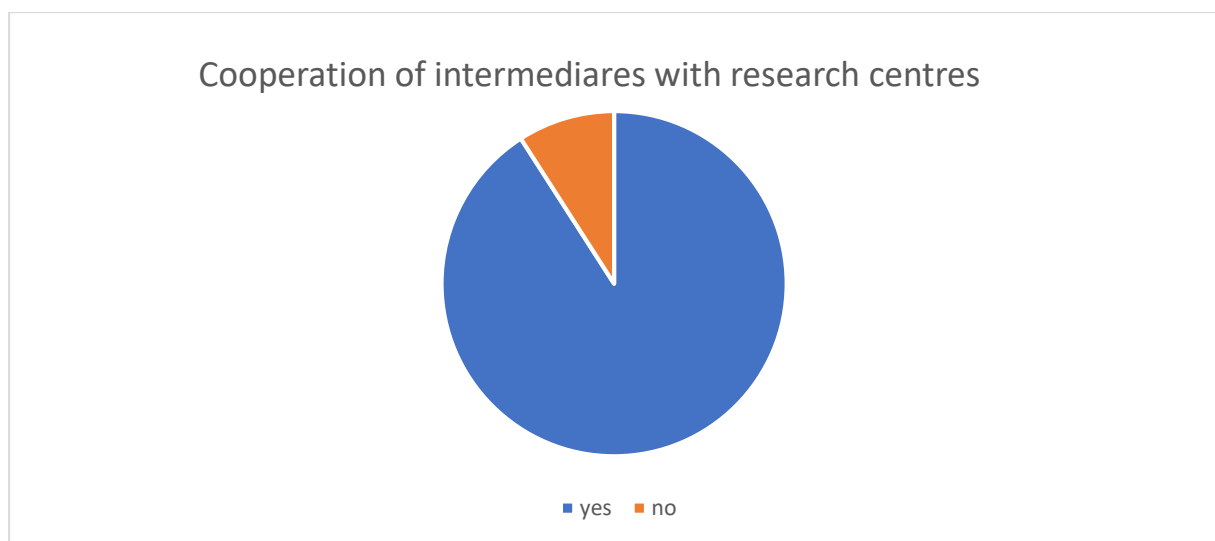
These parts of the pie chart show the cooperation's of intermediaries with research centres. It shows that more than half of the sample intermediaries (80% actually) are working with research centres. Only 20% do not have a cooperation with research centres.

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**

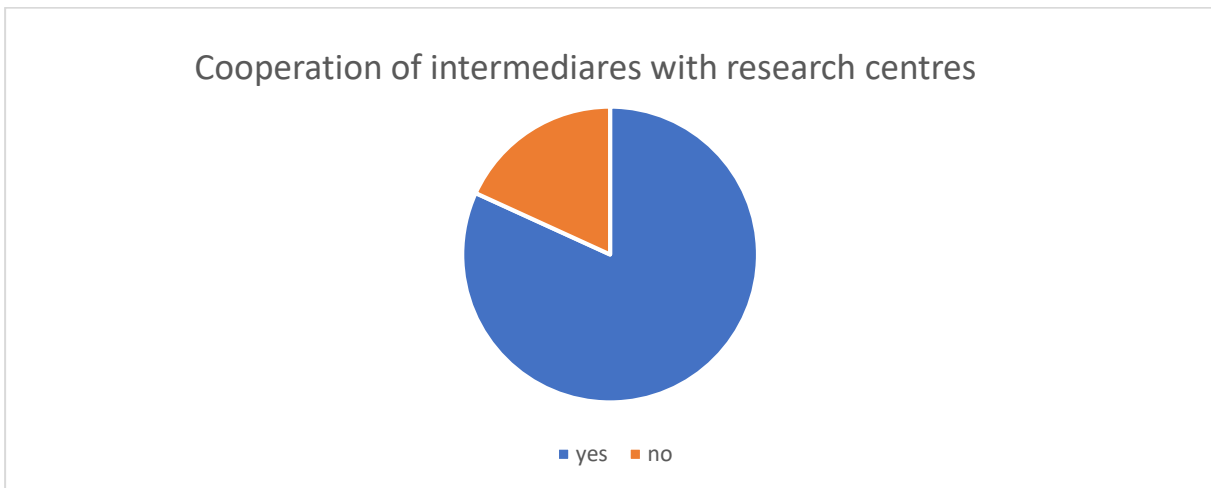


All 10 intermediaries have cooperation with research centres.

**Institute of Physics, Academy of Sciences of the Czech Republic**

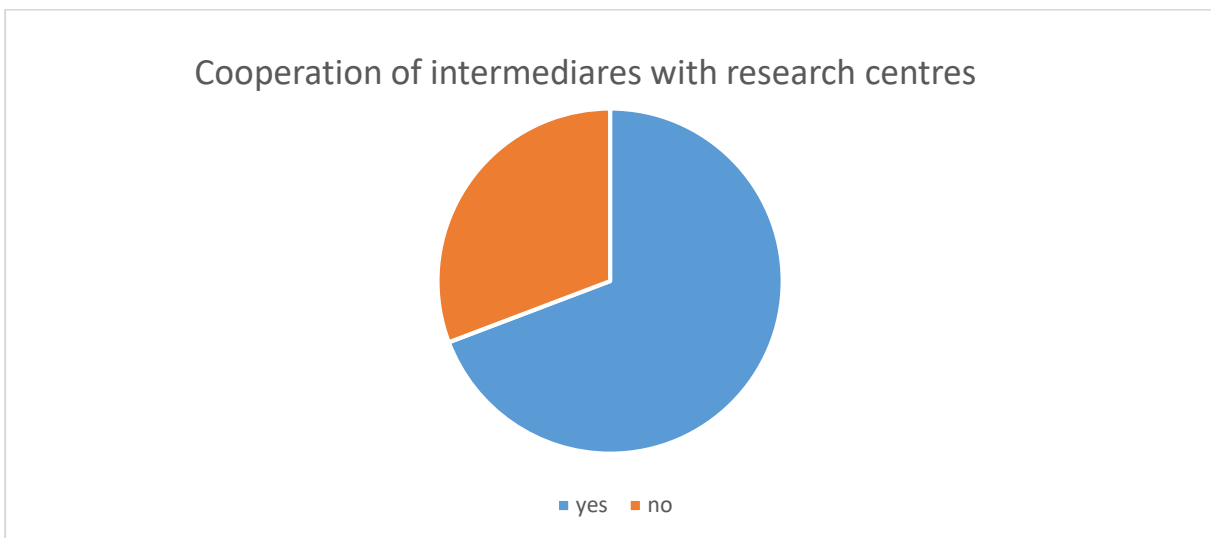


The intermediaries have their main scope to provide better condition for intra-sectoral cooperation. They itself are because very active in networking projects and cooperation. Almost all intermediaries have because some cooperation with research centres.



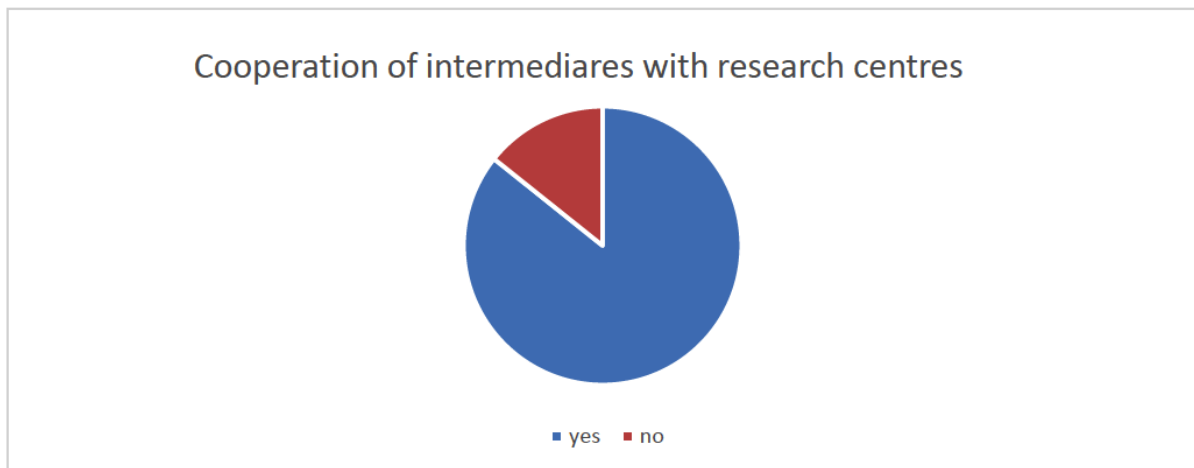
These parts of the pie chart show the cooperation's of intermediaries with research centres. It shows that more than half of the sample companies are working with research centres. Only 18% do not have a cooperation with research centres.

***Institution for development of competence, innovation and specialization of Zadar County***



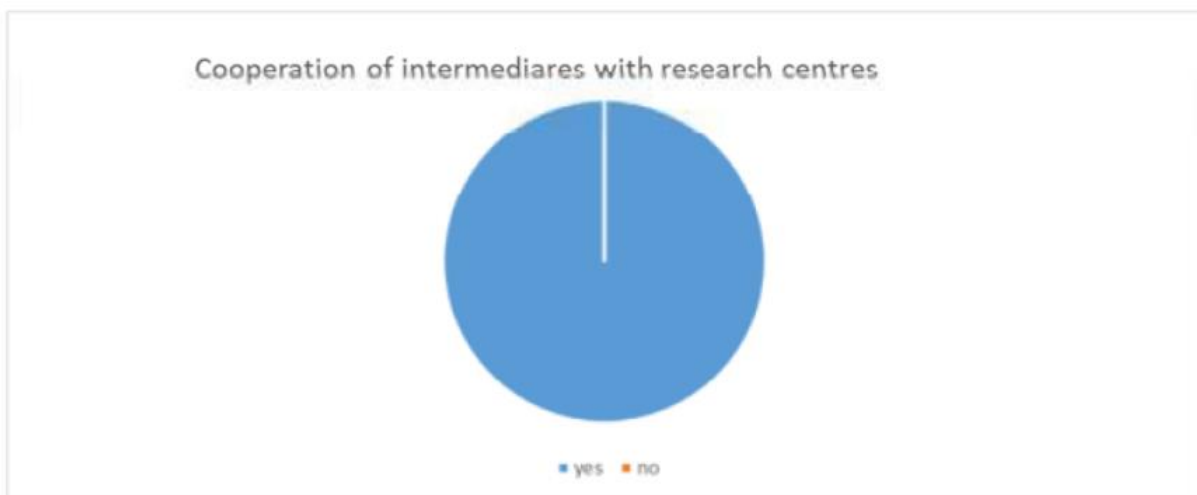
These parts of the pie chart show that 69% of surveyed intermediaries cooperate with some kind of research centre.

**UNIVERSITY OF MARIBOR**



These pie chart shows that 86% of surveyed intermediaries cooperate with some kind of research centre.

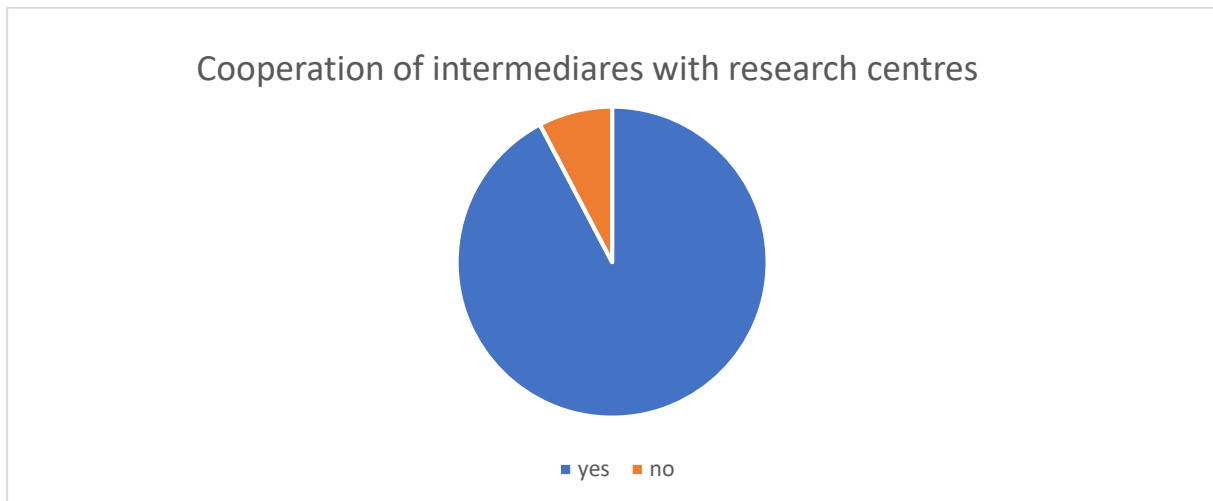
**Magurele High Tech Cluster**



All intermediaries have a strong cooperation with the research entities. This is the result of the active life of the research entities in connection with the intermediaries. The research centres are very pushy because of their need for financial resources.



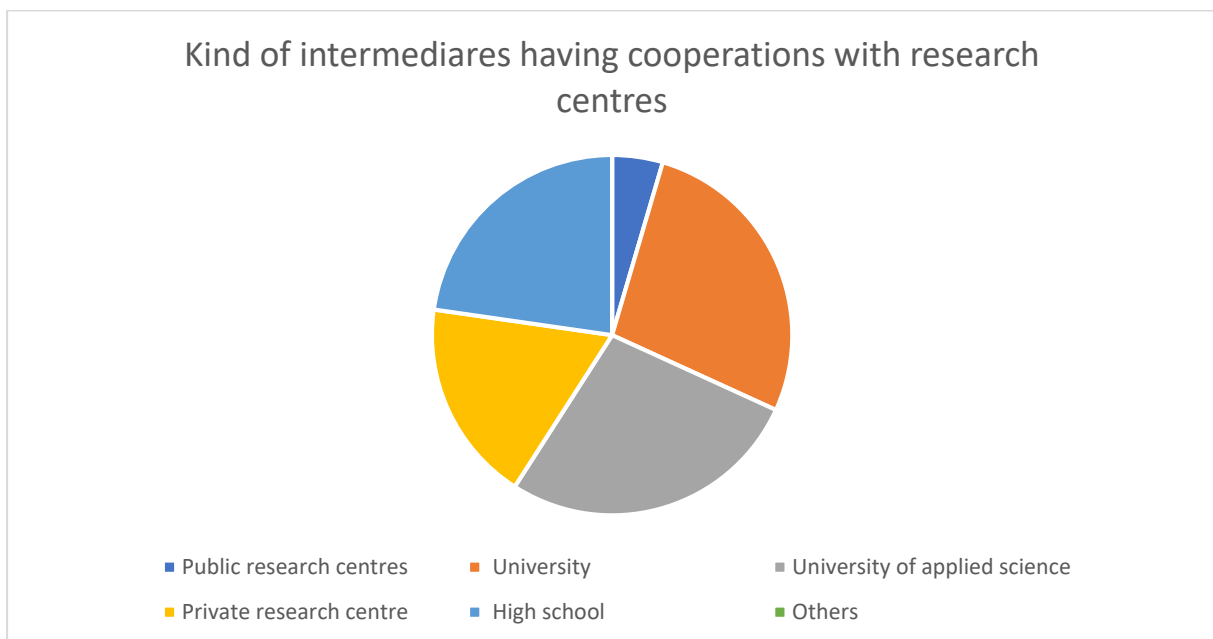
### Central Bohemia Innovation Centre



These parts of the pie chart show the cooperation's of intermediaries with research centres. It shows that more than three quarters of the sample companies are working with research centres. Only 8% do not have a cooperation with research centres.

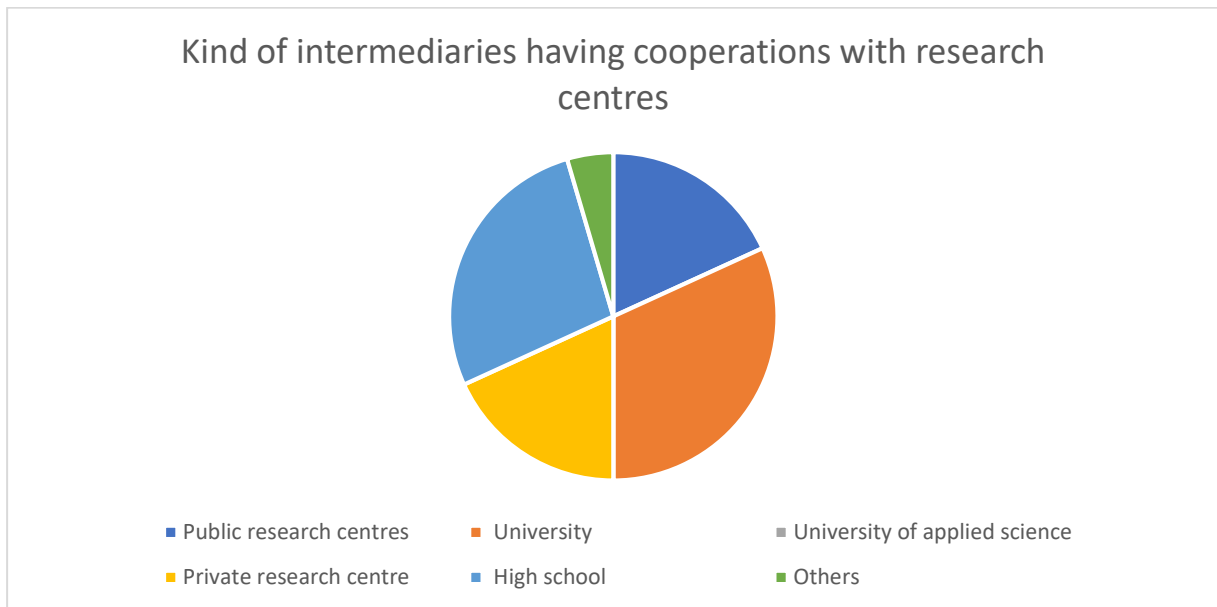
#### 4.2.2 Kind of intermediaries having cooperations with researcher centres

##### ELI-HU Nonprofit Ltd.



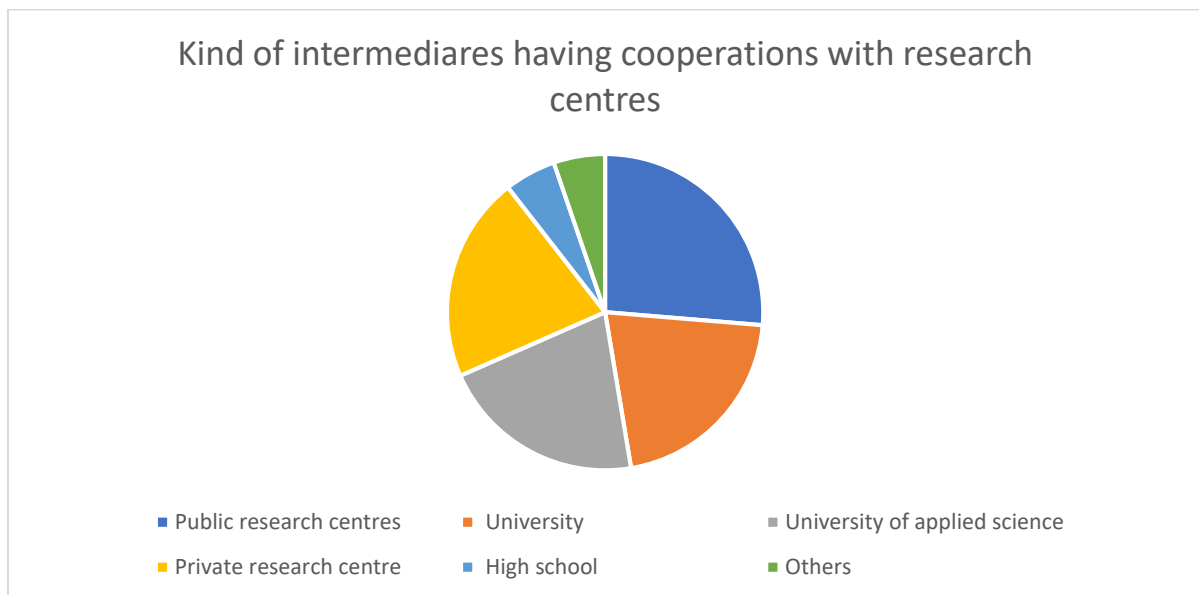
These cooperations are really colourful, every kind of research centres are represented in the sample. Educational institutions such as universities, universities of applied science share around ¼ of the total answers, from the research centres private centres are represented significantly.

**Development Agency of Serbia**



Previous pie chart shows types of research centres that intermediaries have cooperation with and they usually work with more than just one type of centre. The majority cooperates with Universities (31.8%) and High schools- 27.27%. Other research centres are more or less equally present and none of respondents mentioned cooperation with University of applied science.

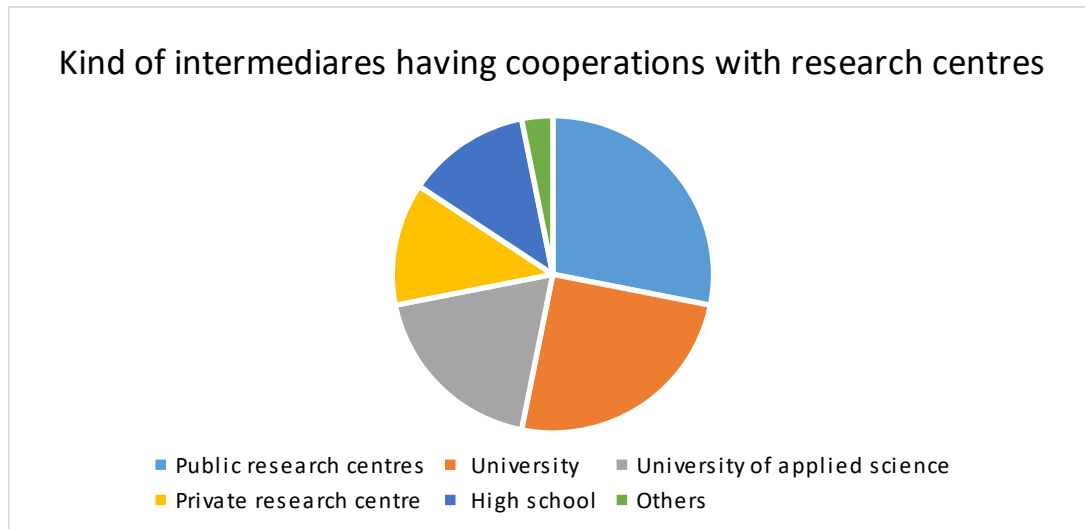
**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The pie chart shows the kind of intermediaries having cooperation with research centres. 26% regularly cooperates with Public research centres. 21-21-21% cooperates with universities, private research centres and universities of applied sciences. 5,5-5,5% usually cooperates with high schools and others.

*Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering*

From all intermediaries 5 are coming from research (UEFISCDI, INSB incubator, ULC Craiova, AOSR,



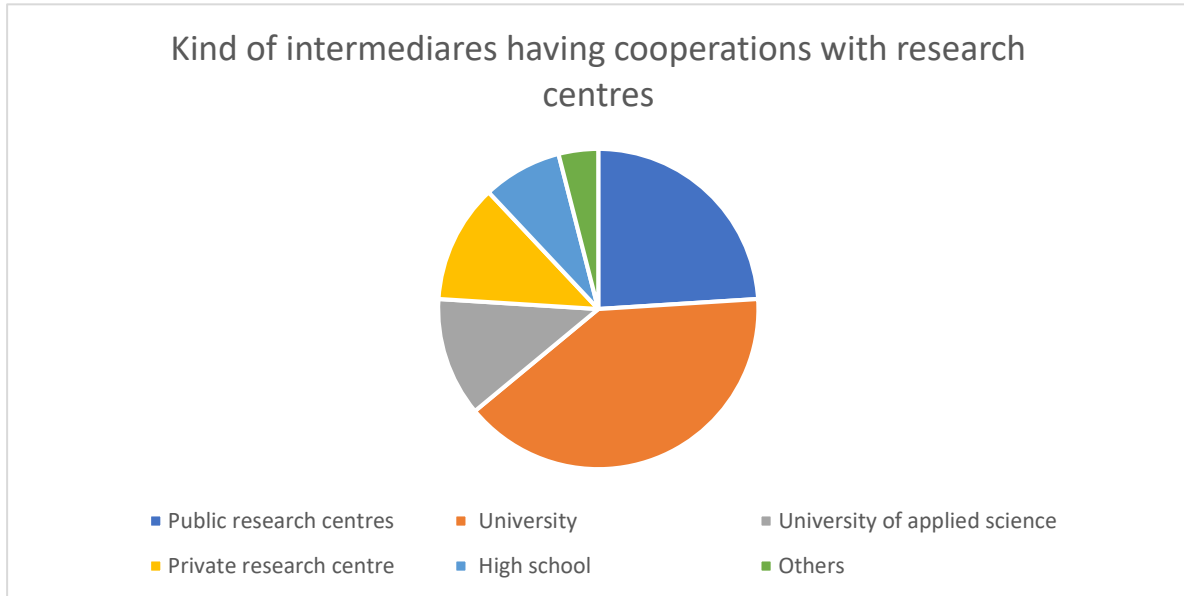
and Romanian Academy – Physics Section), 2 are representing development agencies (NERDA and SMRDA), one is a local administration body (ICC), one is coming from the business sector and one is the Federation of SMEs in Romania.

Their cooperation with research centres is centred on public centres (9), universities (8), applied universities (6) but also with private research centres and high schools. RA Physics Section is also cooperating with their colleagues from Science Academies.

It is interesting to observe that Federation of SMEs cooperate only with universities and not with applied universities or private research centres. We could also mention that 4 out of 5 respondents from research field cooperate with private research centres and 3 with high schools.

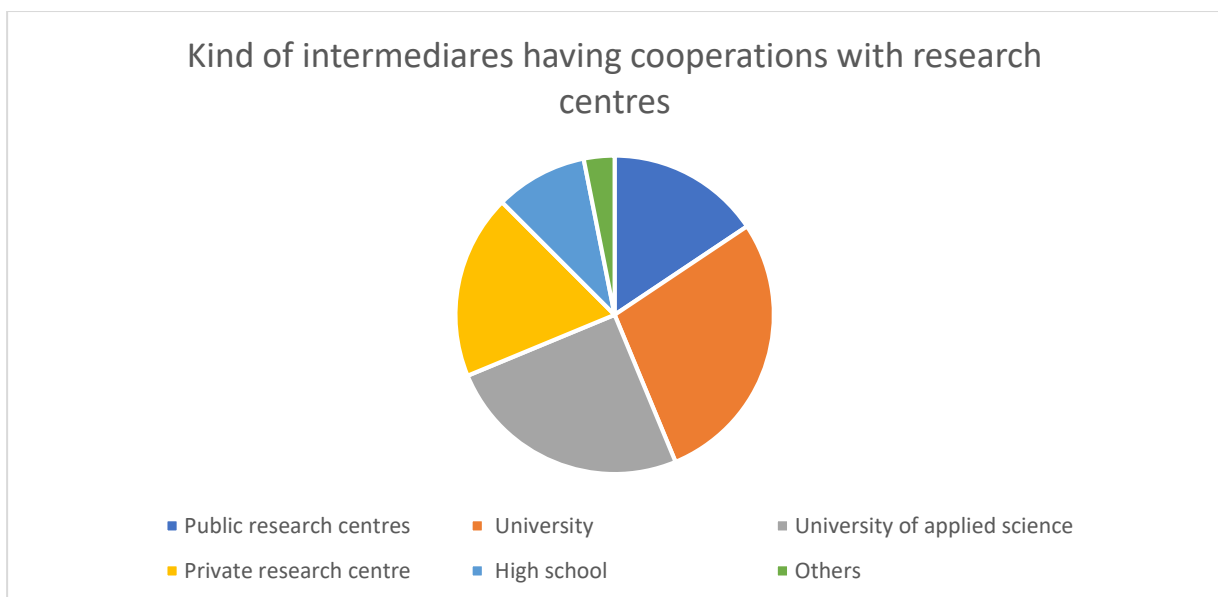
It seems that research respondents are more open to cooperation with private research centres and schools than Federation of SMEs.

**Institute of Physics, Academy of Sciences of the Czech Republic**



The intermediaries should provide the cooperation tools between the private sector and research centres so they should be closely related to research organisations. The most of them have some cooperation with universities. This could be because the universities are often connected in R&D pipeline, there is very difficult to distinguish universities and universities with applied science. It is common to have both categories, basic and applied research together in the Czech universities. Public research institutes are on second place after universities. These institutes include many disciplines and mostly are aggregated under Czech Academy of Sciences.

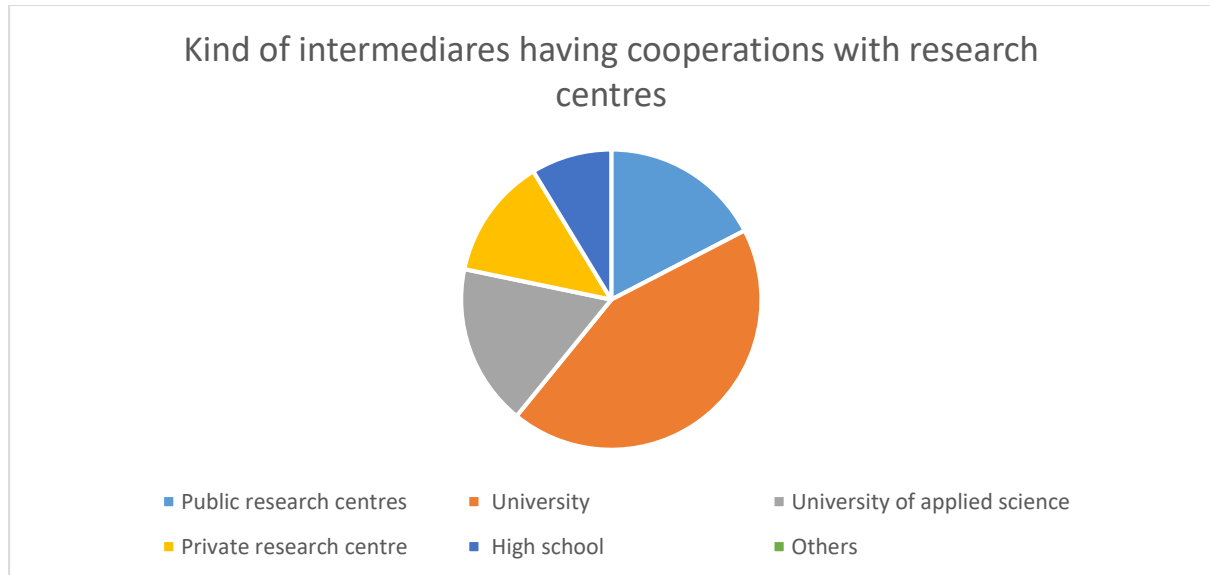
**FH JOANNEUM GESELLSCHAFT M.B.H**



The chart deals with the kind of intermediaries having cooperation's with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities closely followed by universities of applied science and private research centres. Five of eleven

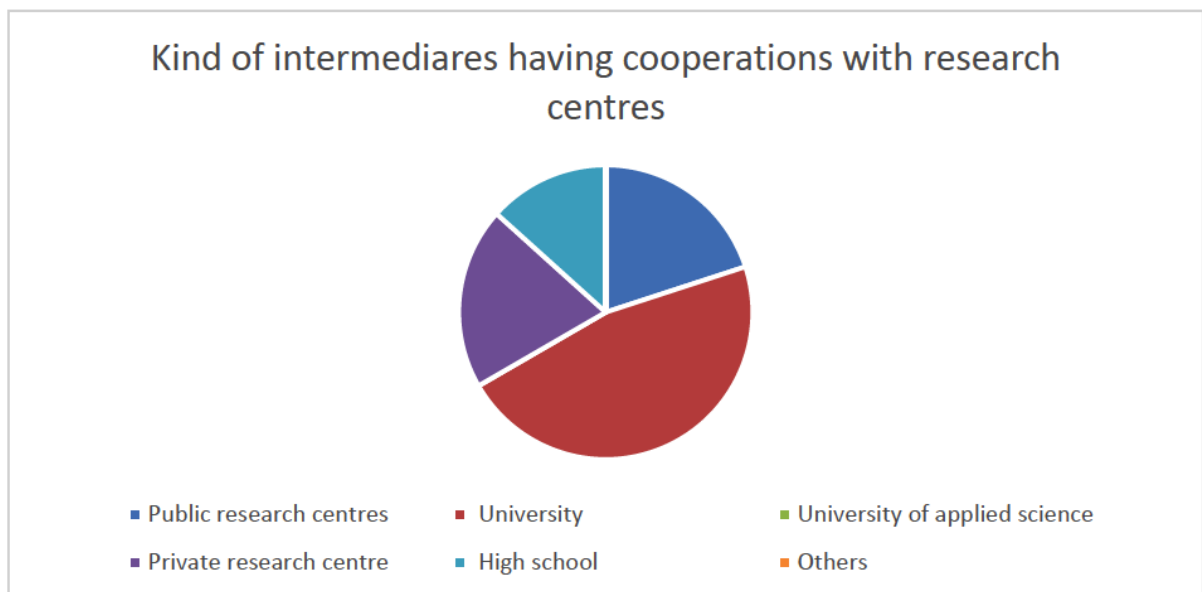
companies cooperate with public research centres and three of eleven with high schools. Only one company cooperates with another research centres as mentioned in the survey.

***Institution for development of competence, innovation and specialization of Zadar County***



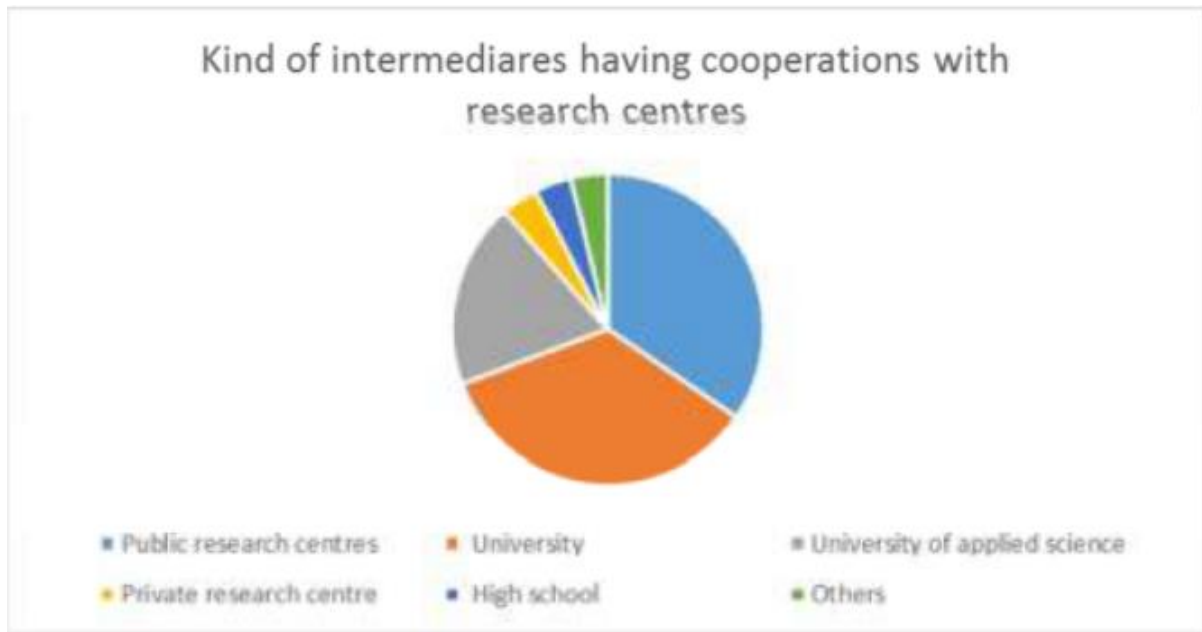
This pie chart is showing the kind of research centres that intermediaries have cooperation with. Most of them cooperate with University (43%). 17% of intermediaries has cooperation with Public research centre and University of applied science. 13% of them cooperate with Private research centre, and 9% has mentioned High school as a research centre that they have cooperation with.

***UNIVERSITY OF MARIBOR***



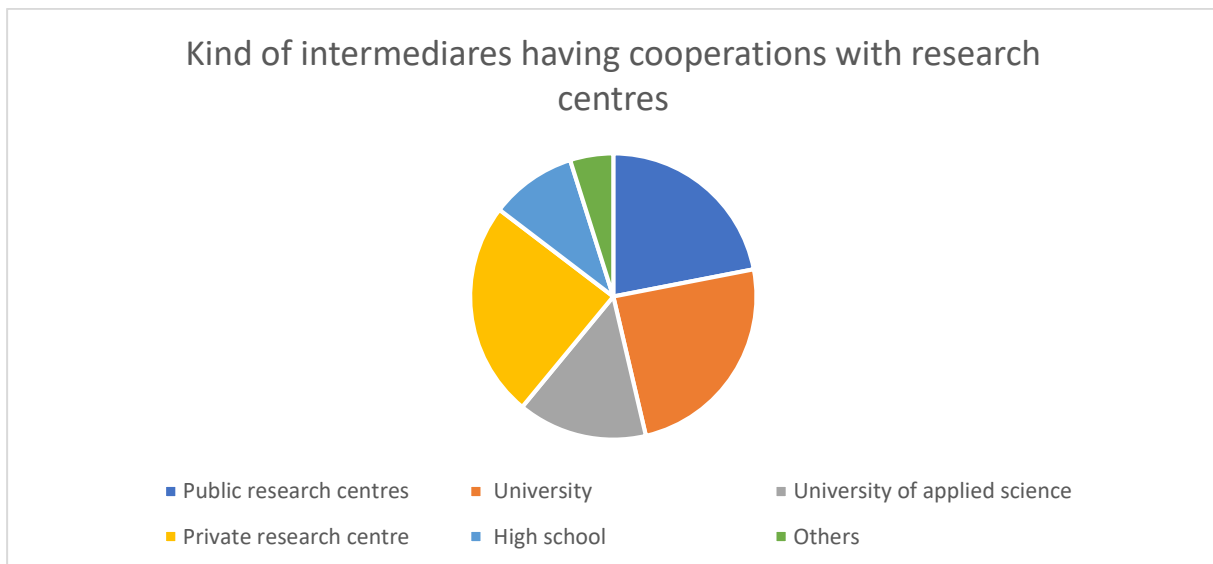
This pie chart is showing the kind of research centres that intermediaries have cooperation with. Most of them cooperate with University (47%). 20% of isntermediaries has cooperation with Public research centres and Private research centres, followed by High school with 13%.

### Magurele High Tech Cluster



The public sector attracted the majority of the attention from the intermediaries. The entities from the public sector have a larger experience in working with intermediaries. It is necessary to stimulate the private research centres to become partners for the intermediaries and to work with the public sector for generating new scientific approaches and new technologies.

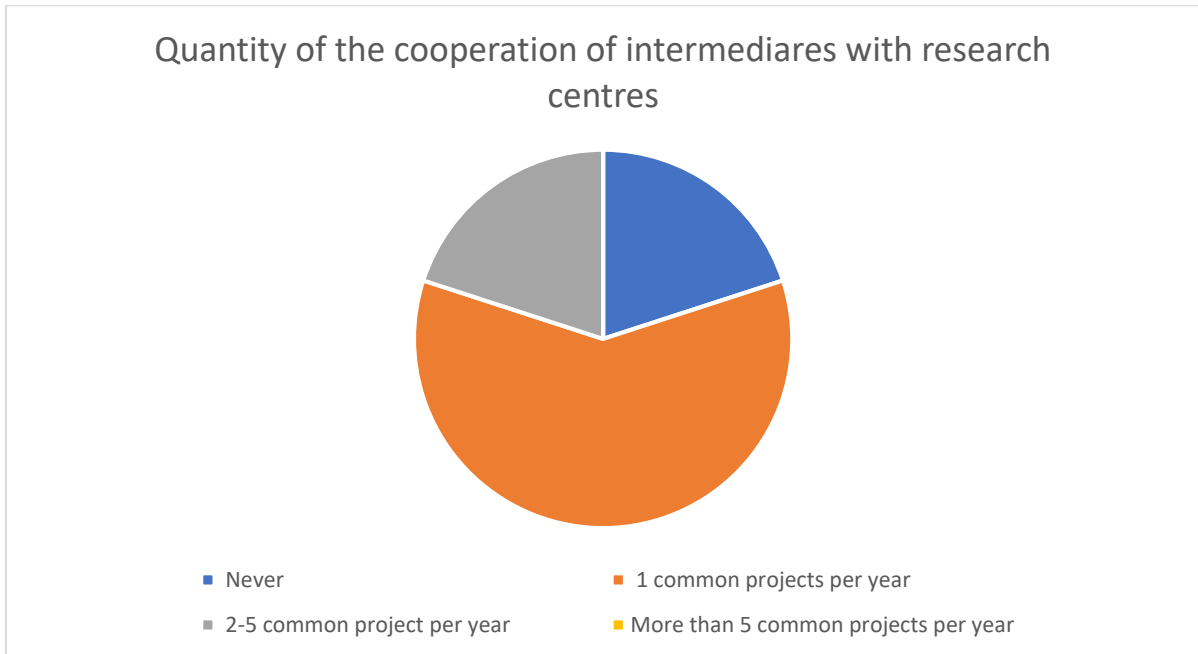
### Central Bohemia Innovation Centre



The chart deals with the kind of intermediaries having cooperation's with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities and Private research centres closely followed by public research centres. Six of thirteen companies cooperate with university of applied science and four of thirteen with high schools. Only two companies cooperate with another research centres as mentioned in the survey.

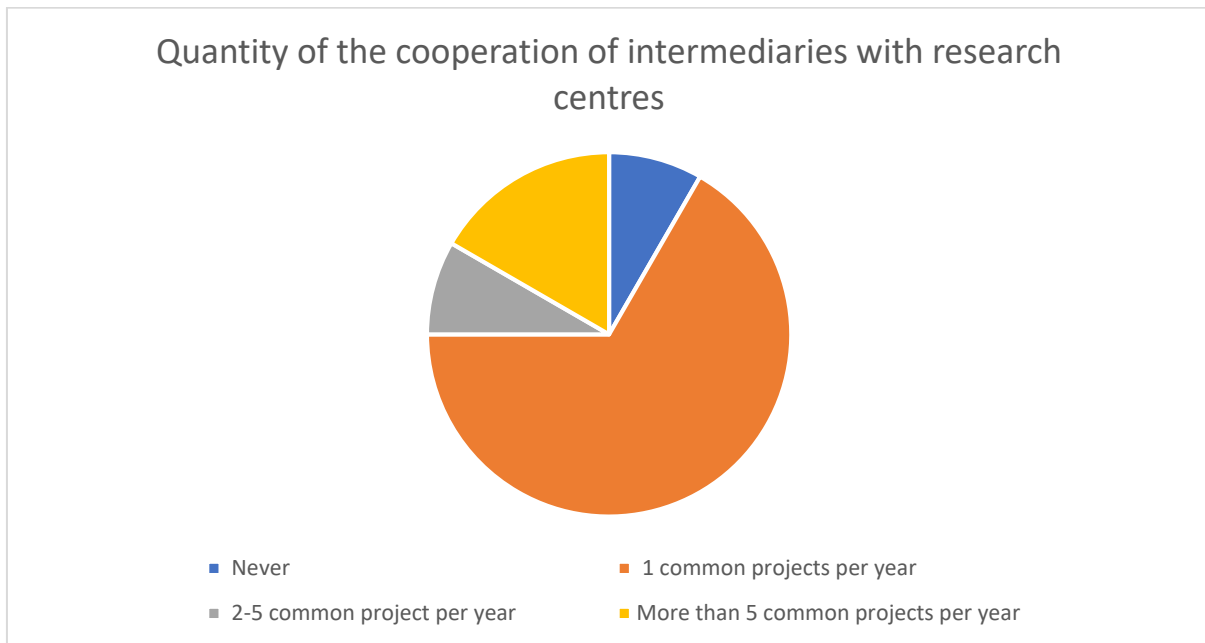
#### 4.2.3 Quantity of the cooperation of intermediaries with research centres

**ELI-HU Nonprofit Ltd.**



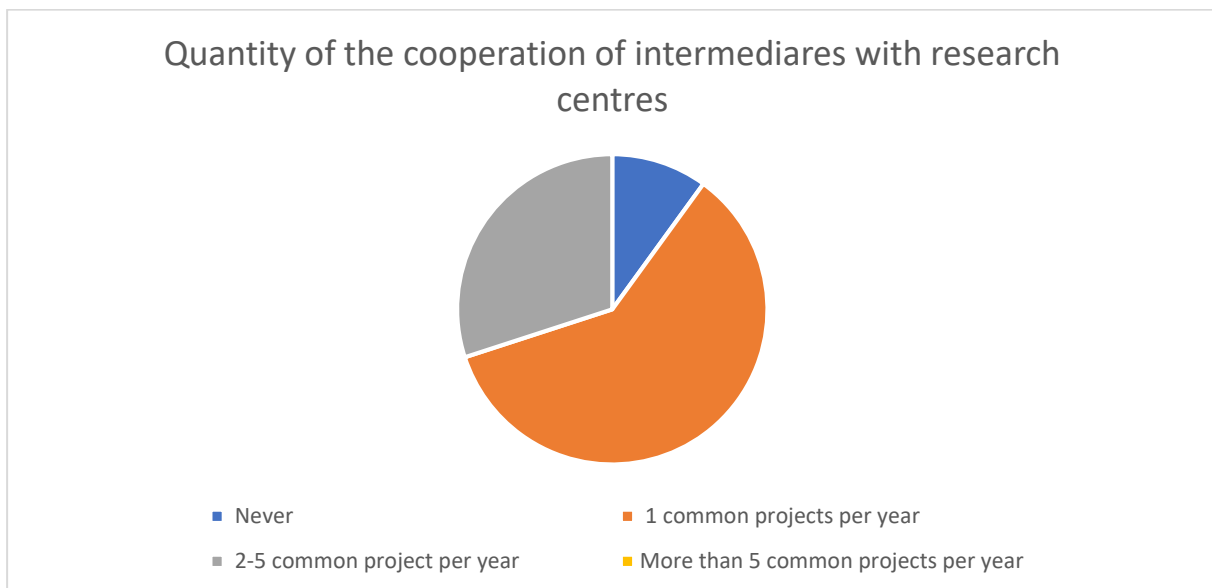
However many intermediaries have some kind of cooperations with research centres these relations are not really strong. More than half of the cooperations are limited to one common project per a year and just in a few cooperations have the partners between two and five common projects per a year. Not even in one relationship have the partners five or more common projects per a year. This means that the cooperations rather ad hoc than continuous activities. This is a problem because in this way the effective exploitation of the results, the follow-up activities is not ensured enough.

**Development Agency of Serbia**



More than 65% of intermediaries cooperate with research centres 1 time per year. Only one intermediary stated that cooperates with them 2 -5 times per year and around 16% of intermediaries collaborates more frequently.

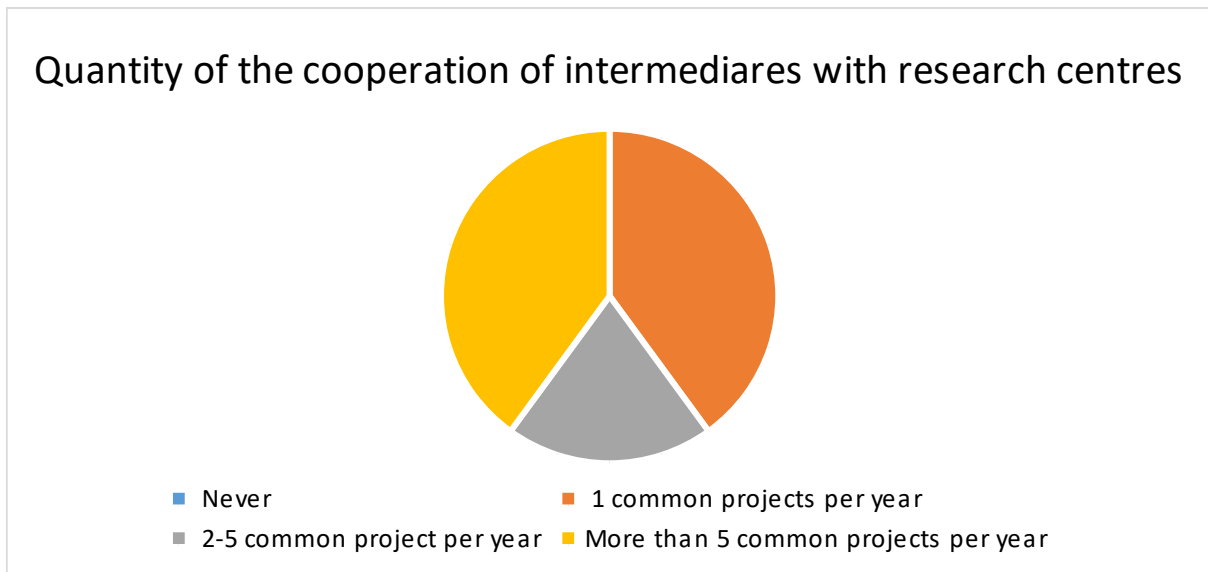
**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



In this pie chart, we can see that 60% of institutions are having one common projects per year. 30% of the survey fillers cooperate with research centres two to five times a year or once a year. About 10% never cooperate with a research centres.

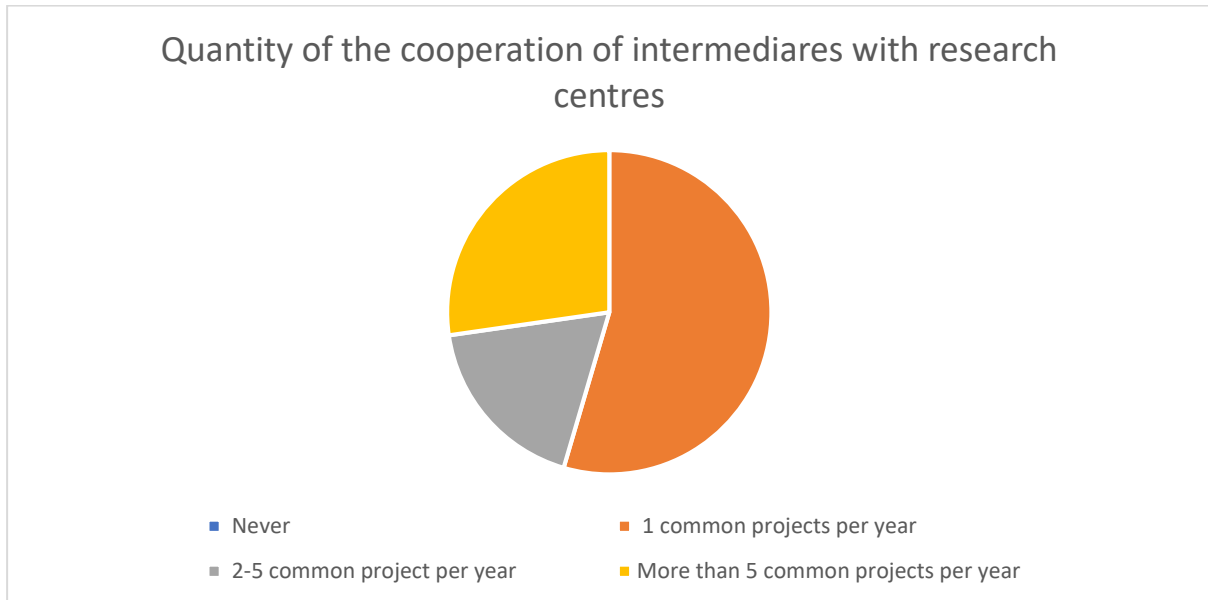


### Quantity of the cooperation of intermediaries with research centres

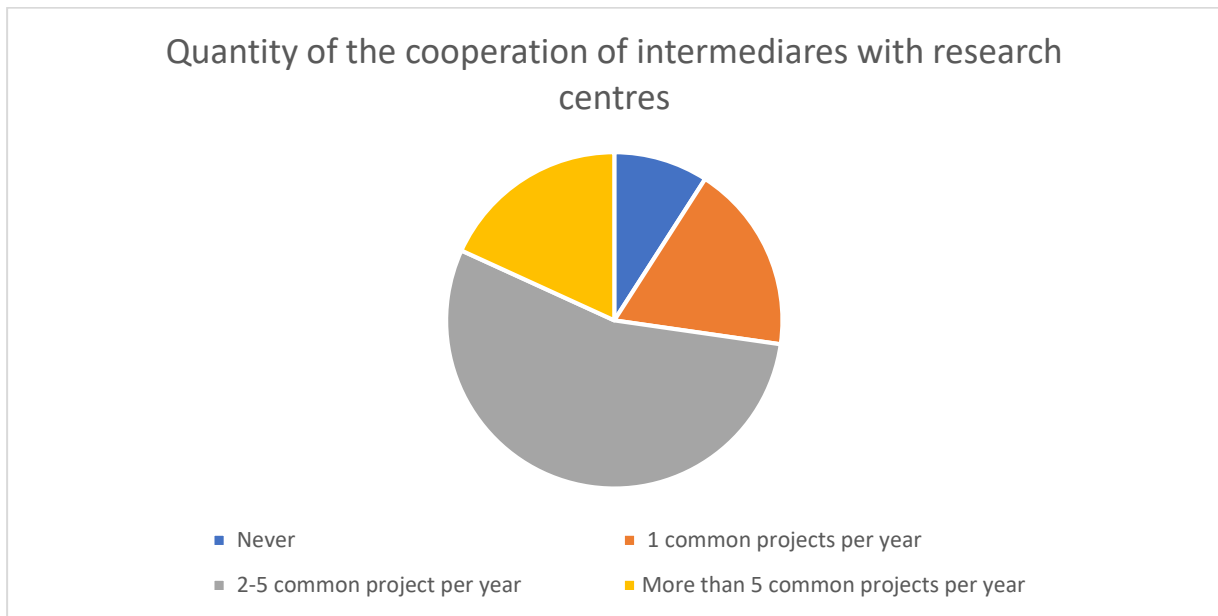


Quantity of collaboration is balanced between intermediaries with more than 5 projects per year and those with one common projects per year: each case involved 4 intermediaries. ICC and AOSR have each 2 – 5 projects per year. There is not respondents without projects.

### ***Institute of Physics, Academy of Sciences of the Czech Republic***

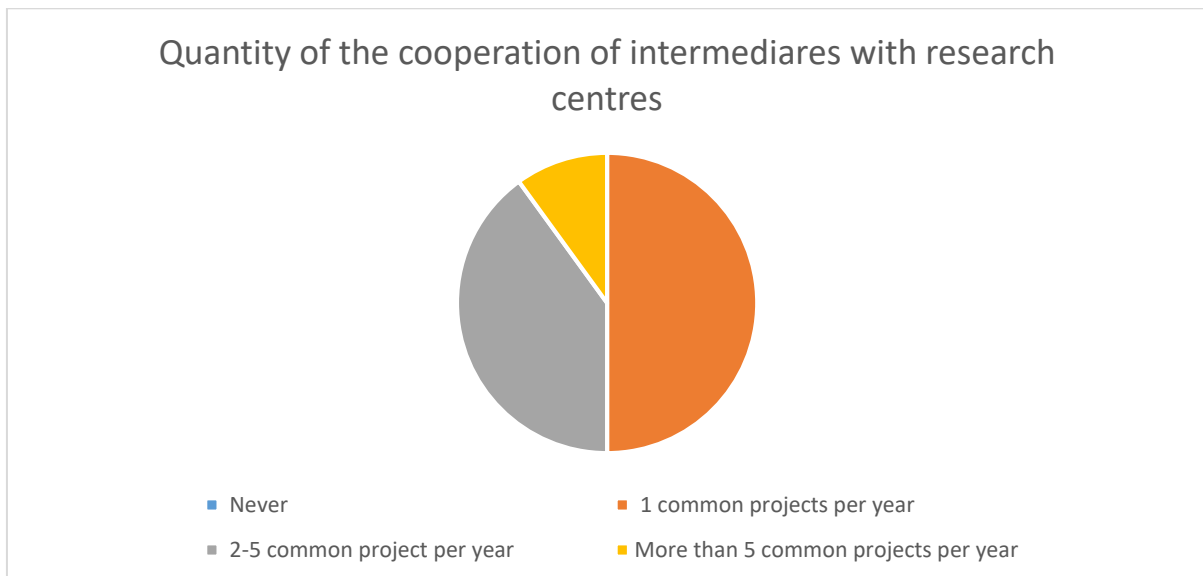


As was mentioned in previous statement, the intermediaries are supposed to have joint project also with research centres. Otherwise there are several obstacles of this cooperation (finance, common goals see 2.8 for more details). Generally intermediaries do not have enough capacity (financial, project team) for so many common projects with research centres. They are some exceptions, for example JIC centre.

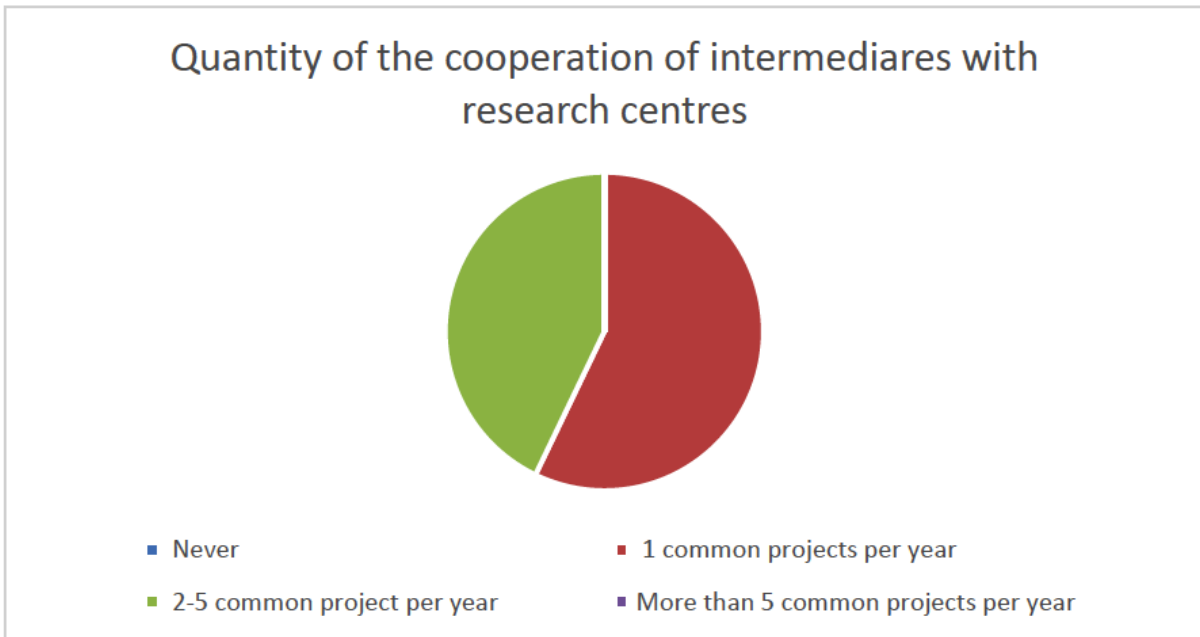


In this pie chart, you can see that 55% of companies cooperate two to five times a year with research centres. 18% of the surveyed companies cooperate with research more than five times a year or once a year. About 9% never cooperate with a research centres.

***Institution for development of competence, innovation and specialization of Zadar County***

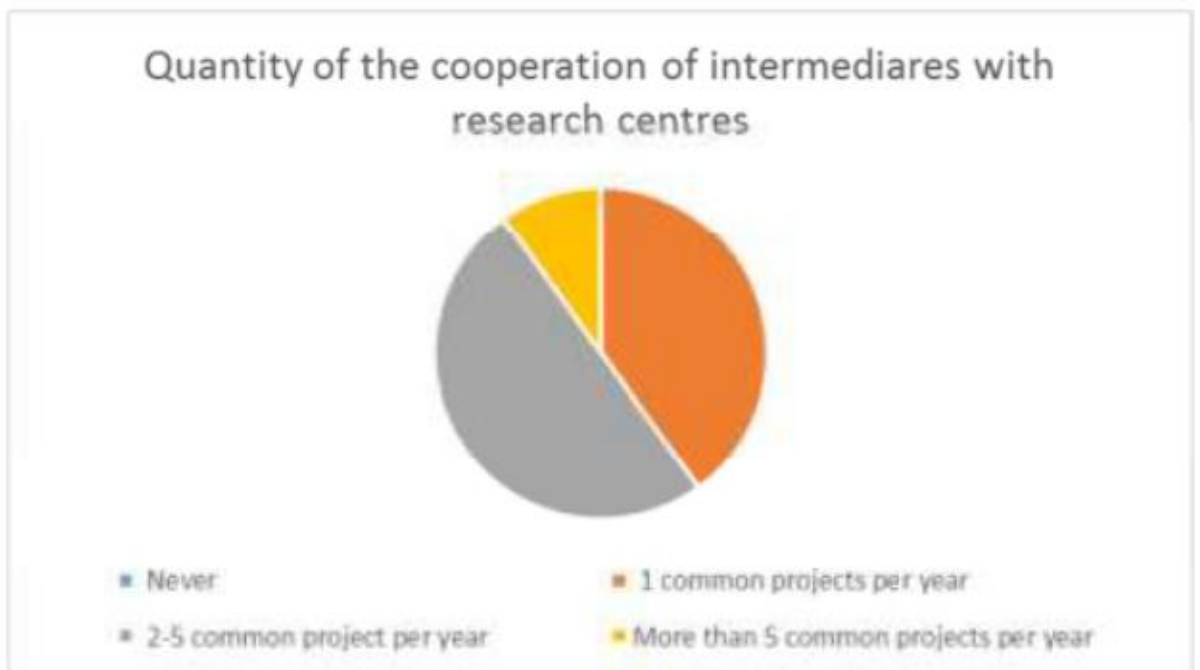


Most of intermediaries cooperate with research centres 1 time per year (50%). 2 -5 times pre year cooperate 40% of intermediaries while only 10% cooperate even frequently.



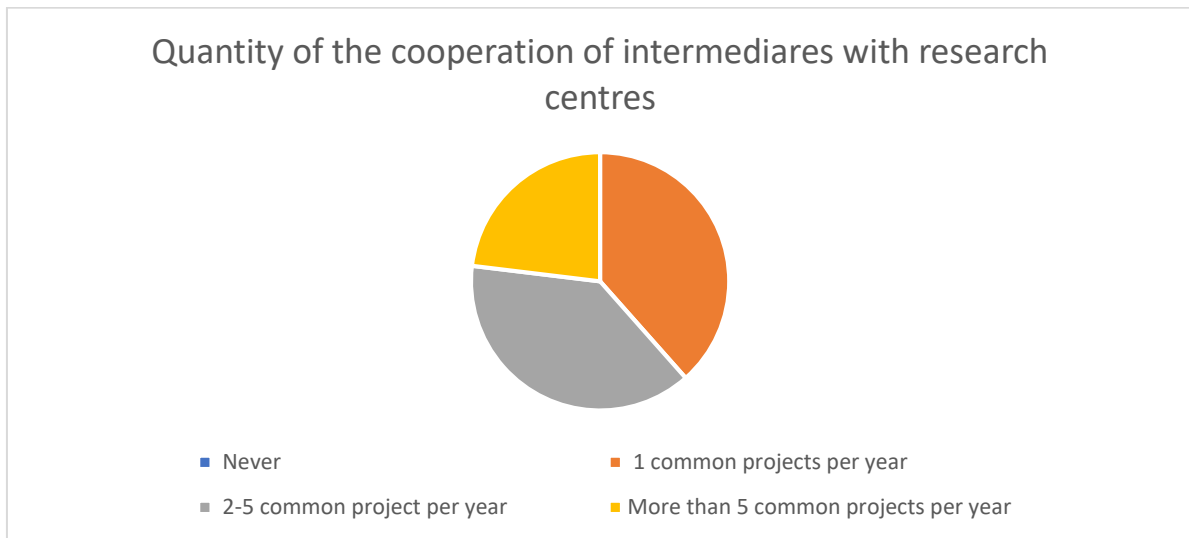
Most of intermediaries cooperate with research centres 1 time per year (57%). 2 -5 times per year cooperate 43% of intermediaries.

**Magurele High Tech Cluster**



The intermediaries are less active in the cooperation with the research centres than are the research centres with the companies, for example. This is not a good sign for the role of the state entities involve in technology transfer, or knowledge transfer. The communication between intermediaries and the research centres have to be developed in the next period of time.

### Central Bohemia Innovation Centre

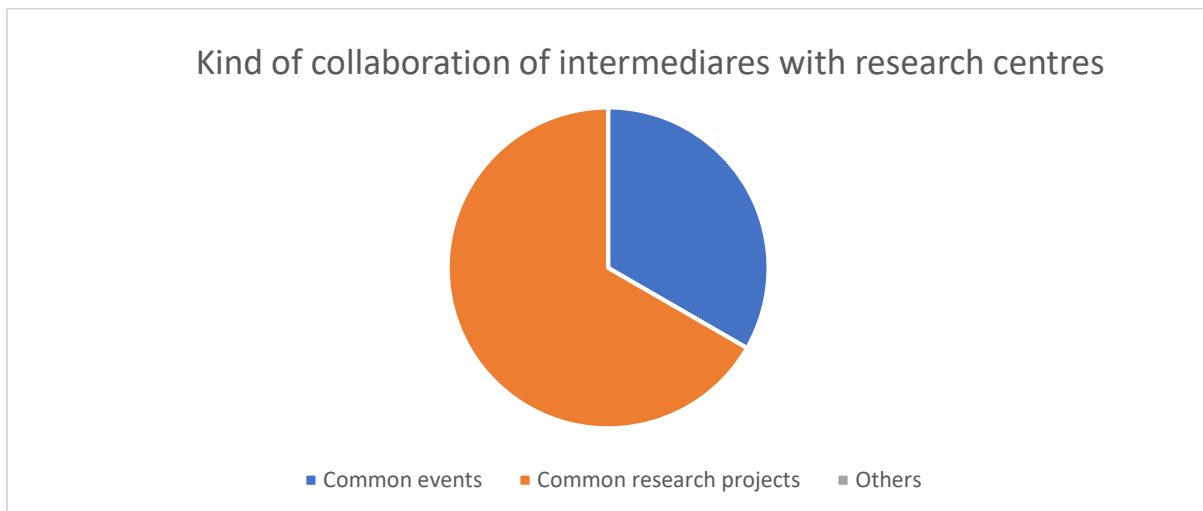


In this pie chart, you can see that 38% of companies cooperate two to five times a year with research centres. 23% of the surveyed companies cooperate with research more than five times a year or once a year and 39% of companies cooperate ones a year with research centres. There are no companies that never cooperate with a research centres.

For example, ICUK network partners to meet in the research projects, 1-3 per year, in future more.

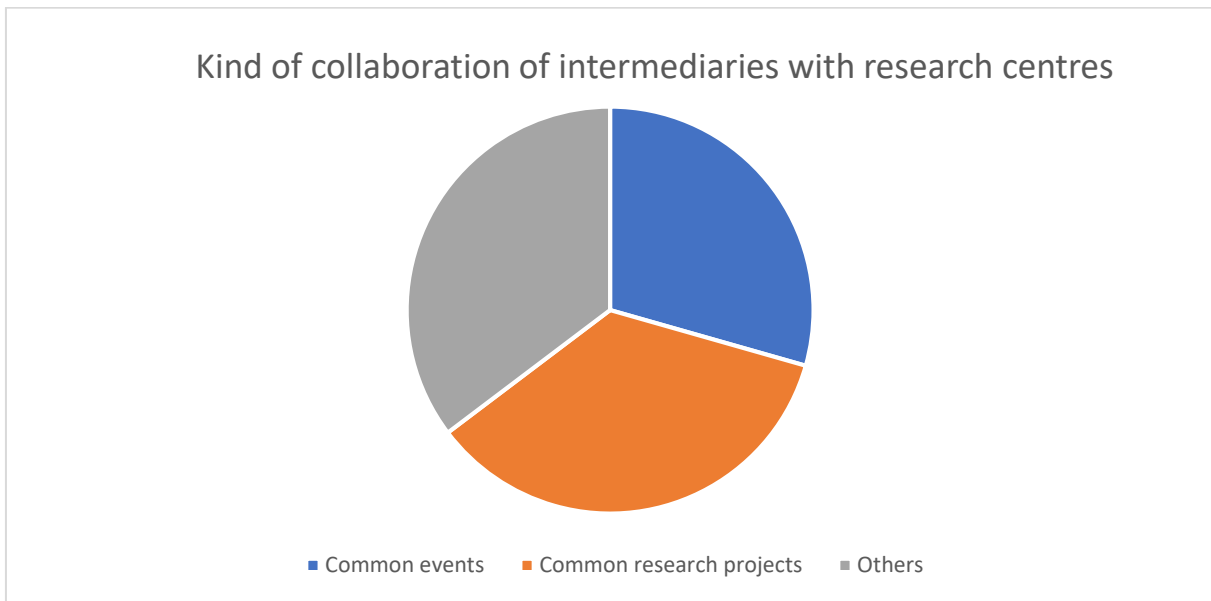
#### 4.2.4 Kind of collaboration of intermediaries with research centres

##### ELI-HU Nonprofit Ltd.



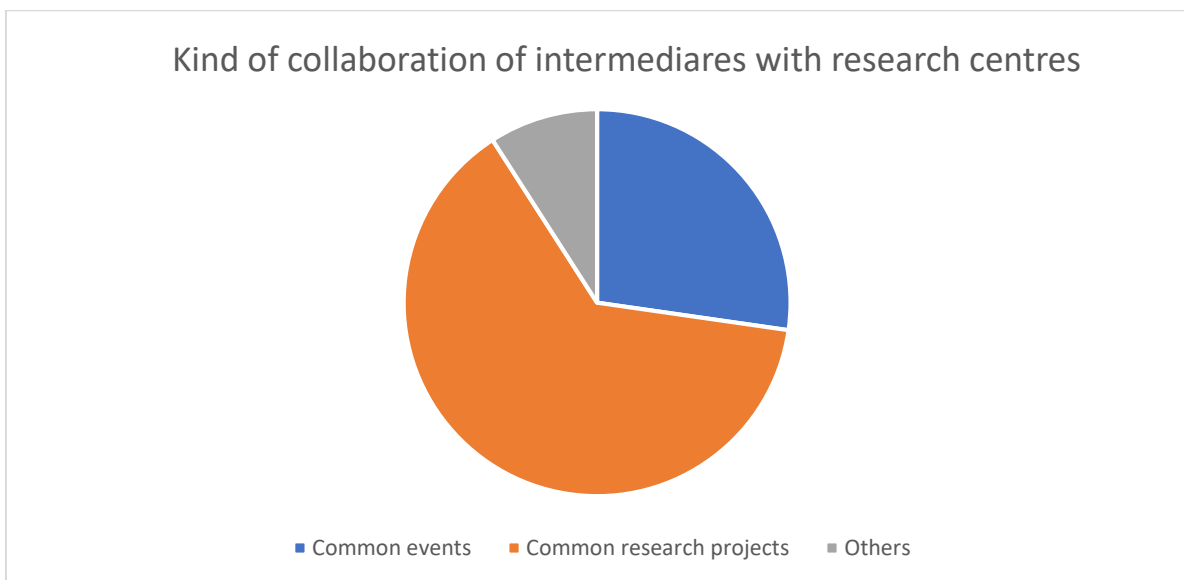
From the collaborations 2/3 are common research projects and 1/3 are common events. This proportion is favourable because research projects have far more added avlue than events.

**Development Agency of Serbia**



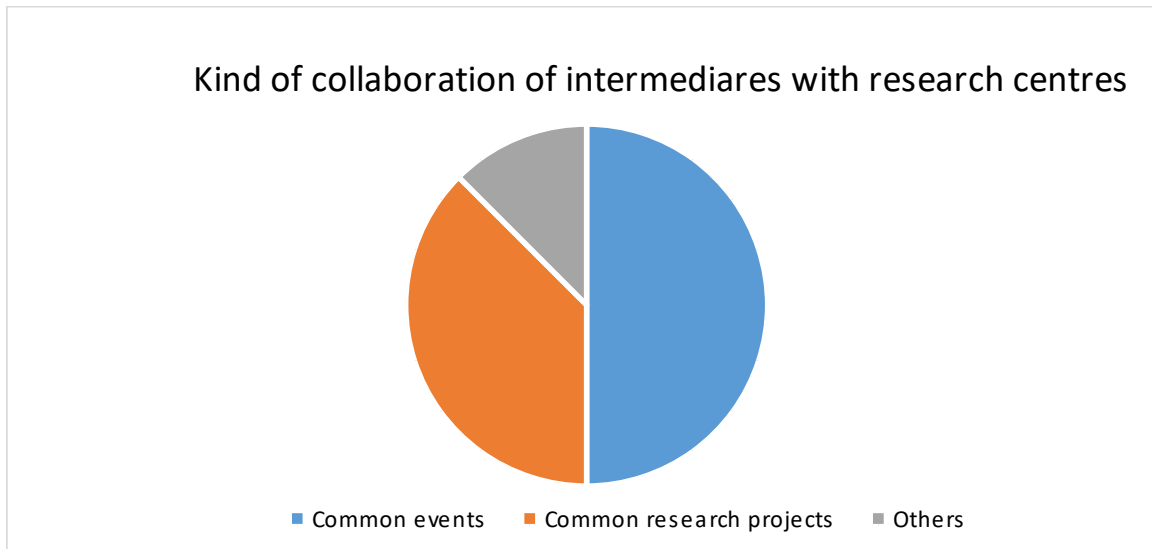
All kinds of collaboration of intermediaries with research centres are equally represented. Among the other types of cooperation intermediaries mentioned: development of educational programmes, preparation of joint projects, organization of trainings and info days etc.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



This pie chart deals with the kind of collaboration of intermediaries with research centres. Common research projects held a share of 63% closely followed by common events with an amount of 27%. 10% deal with other collaboration as mentioned.

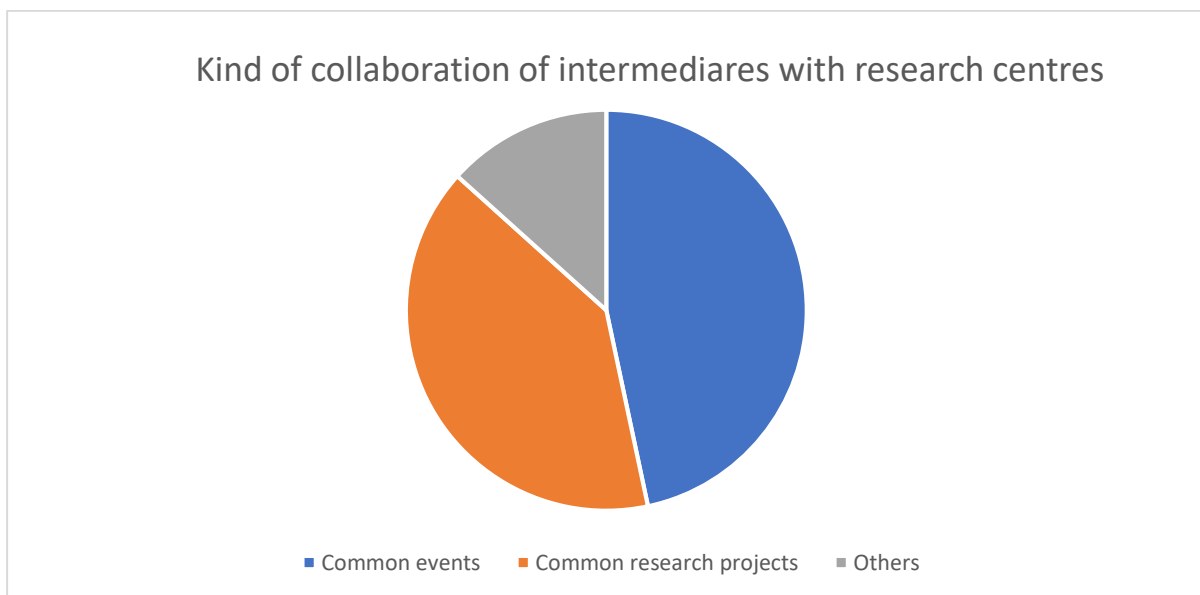
**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



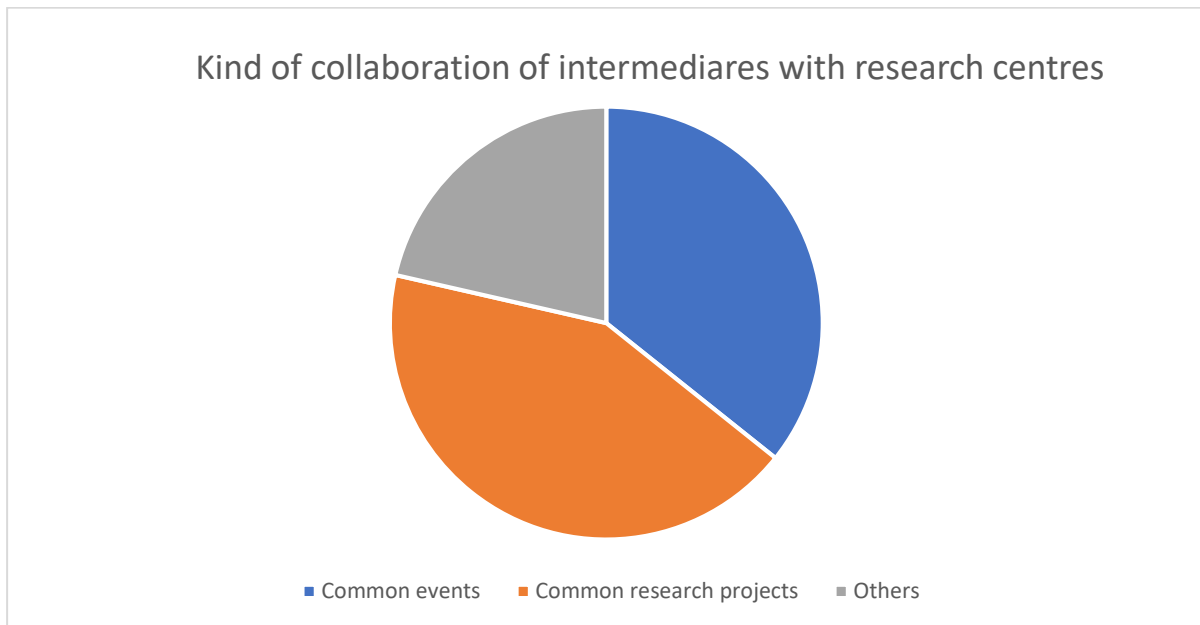
Participation in common events is strong with 8 respondents indicating this kind of relation while 6 are focused on common research projects.

CCIA Dolj choose not to answer on kind of collaboration.

**Institute of Physics, Academy of Sciences of the Czech Republic**

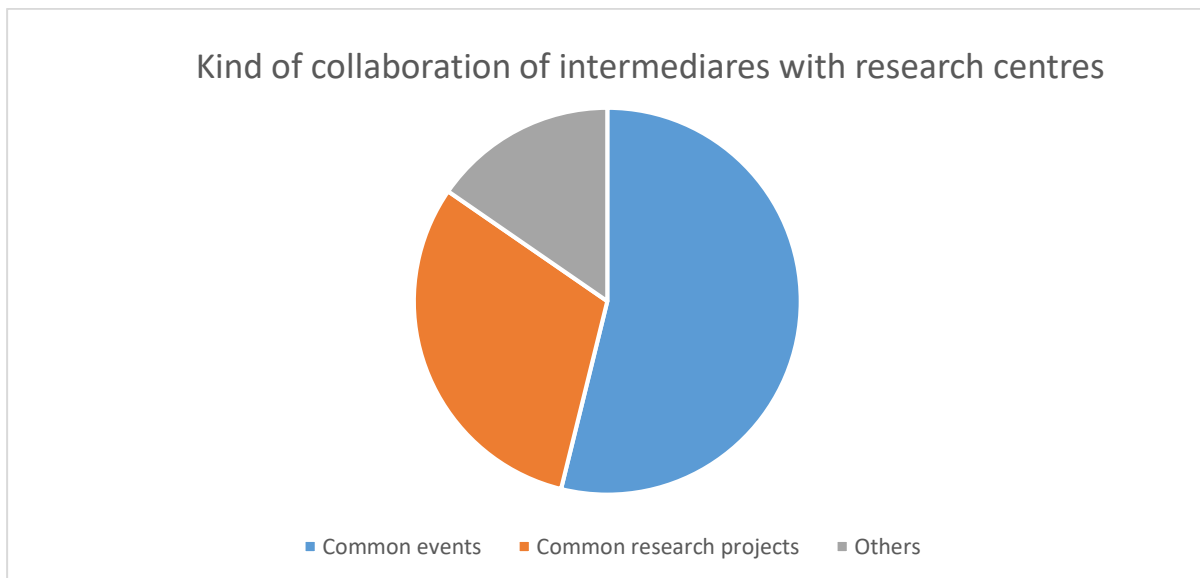


The most frequent answers were common events and then common research projects. We expect that this could be possible related to the funding opportunities. There exists some national/EU calls on joint project and also for common networking events (seminars, workshops, etc.).

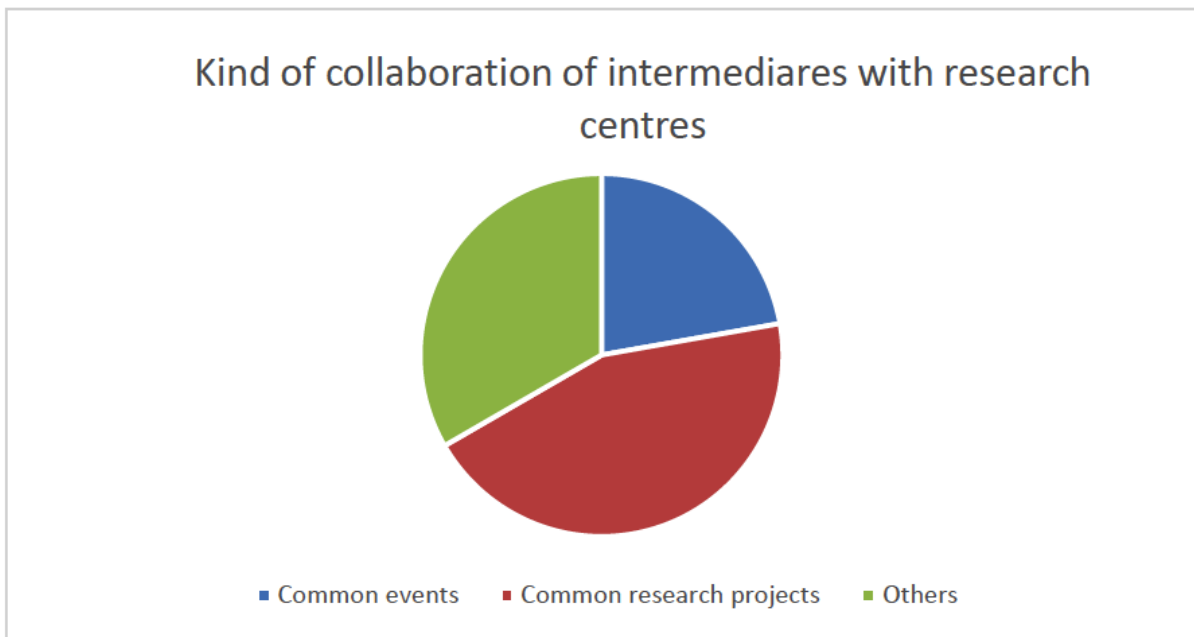


This pie chart deals with the kind of collaboration of intermediaries with research centres. Common research projects held a share of 43% closely followed by common events with an amount of 36%. 21% deal with other collaboration as mentioned. These other collaborations are projects with the technical university of Vienna, projects with the Montan University Leoben or B2B events.

***Institution for development of competence, innovation and specialization of Zadar County***

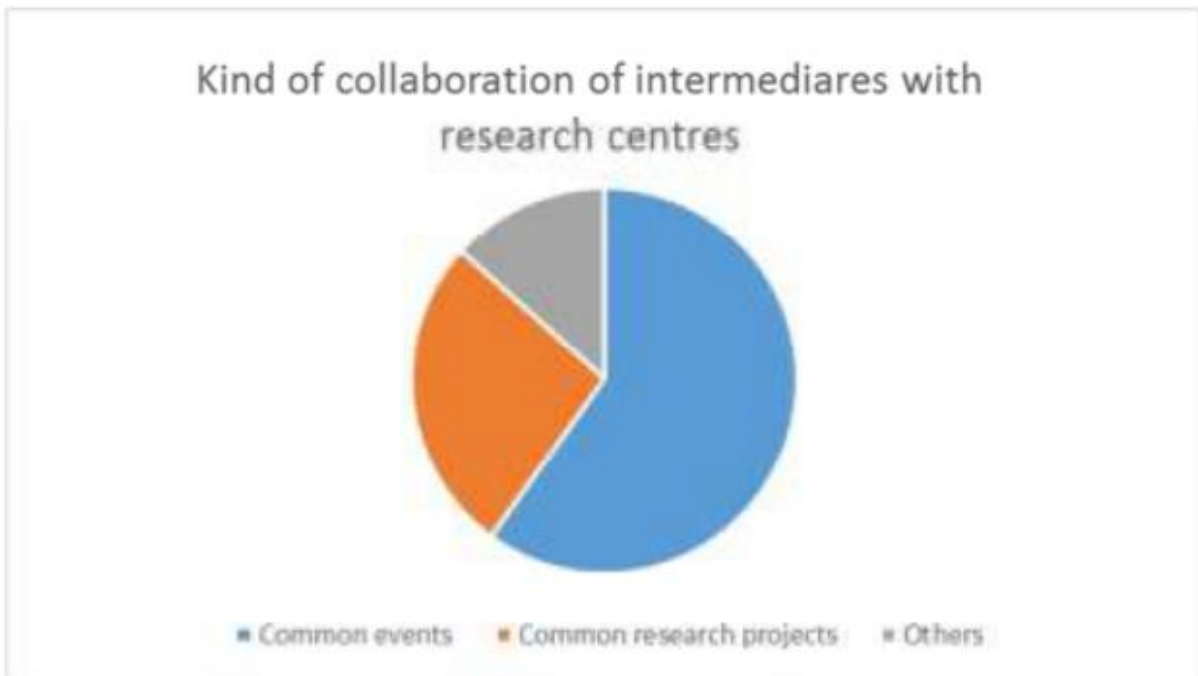


The largest share of collaboration with research centres is through common events (54%) while 31% of them collaborate in common research projects or other (15%)(various studies, implementing grants for research centres).



The largest share of collaboration with research centres is through common projects (44%) while 33% of them collaborate in common events or other (22%) (establishment of spin-off companies, EU funded projects, e.g. co-financing of botanical garden).

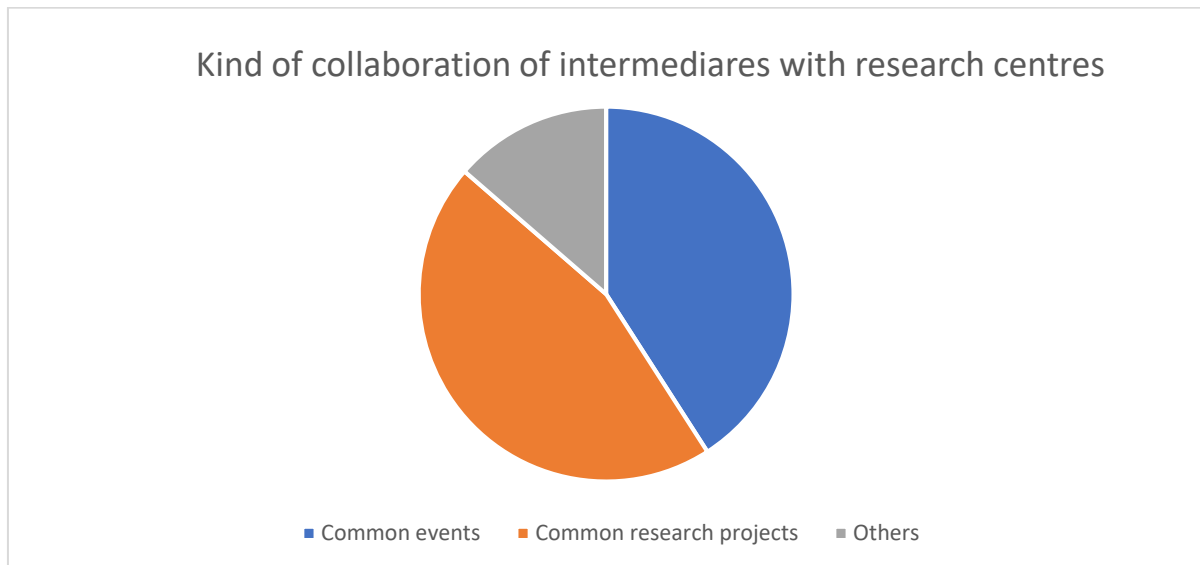
**Magurele High Tech Cluster**



The results are logic. The ministries, the regional development agencies and so on have to organize events and not common research projects. In the last case, it is possible to have the perception of conflict of interest. So, the results are normal.



## Central Bohemia Innovation Centre



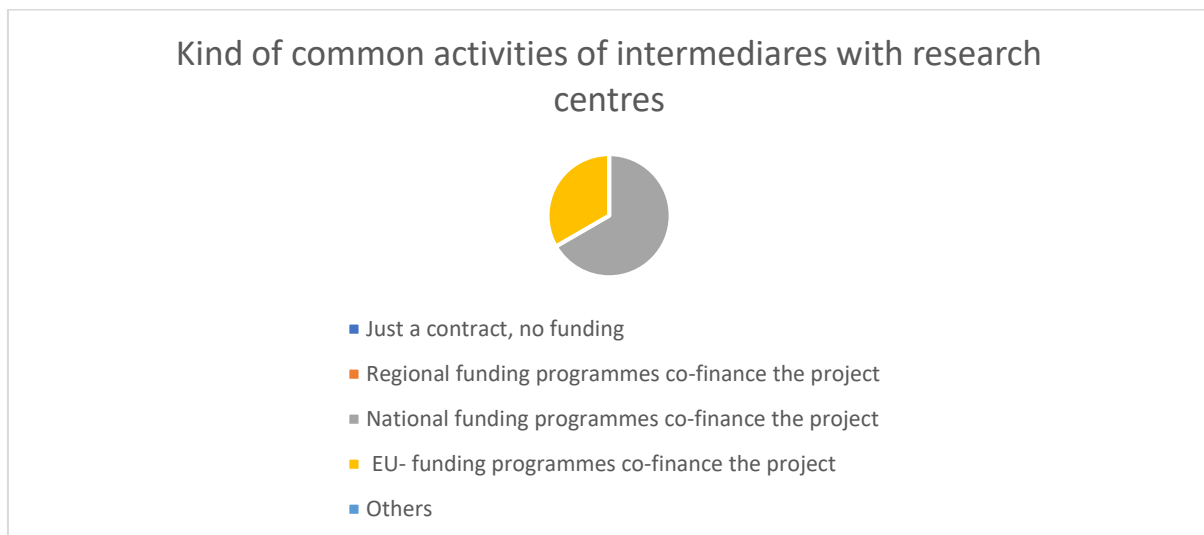
This pie chart deals with the kind of collaboration of intermediaries with research centres. Common research projects held a share of 45% closely followed by common events with an amount of 41%. 14% deal with other collaboration as mentioned.

These other collaborations are projects with the JIC, projects with the TC AV or B2B events.

For example: Assistance in matchmaking, technology transfer and project management by JIC or H2020 NCP networks by TC AV.

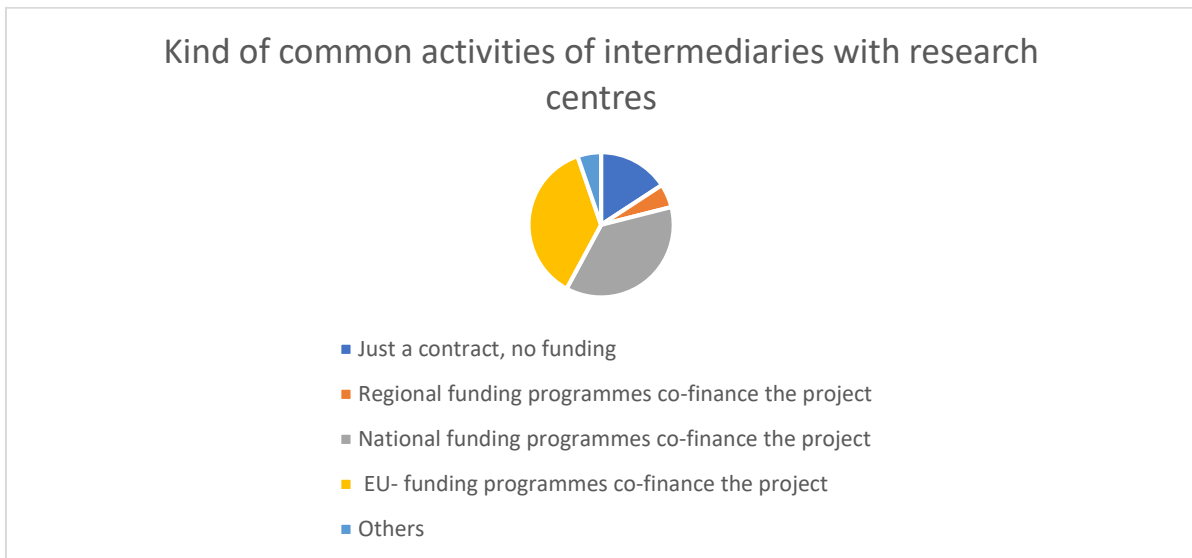
### 4.2.5 Kind of common activities of intermediaries with the research centres

#### ELI-HU Nonprofit Ltd.



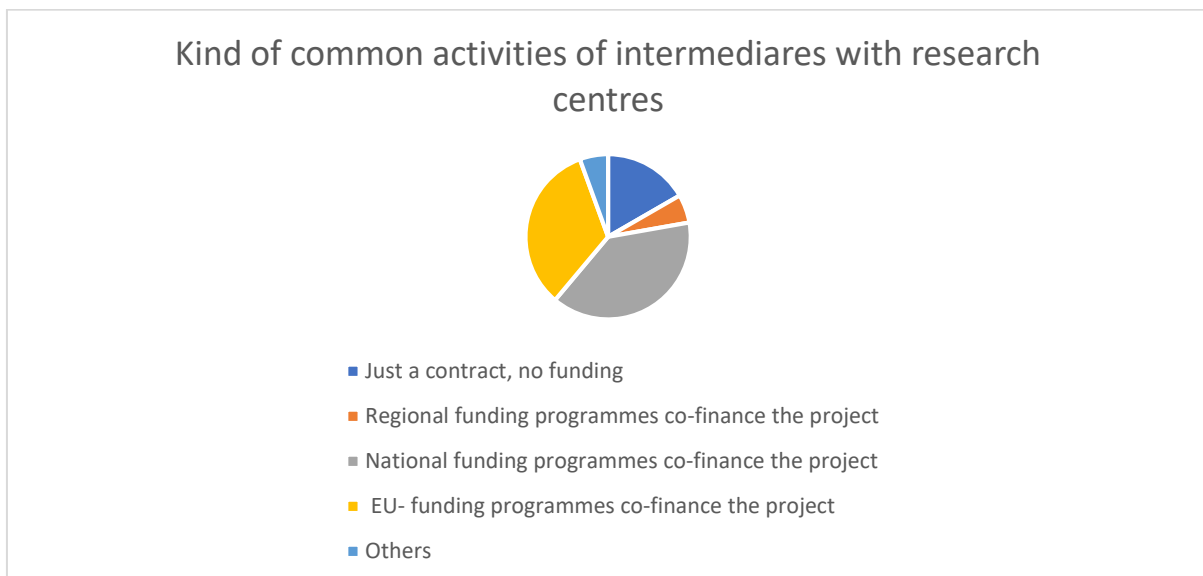
Regarding the funding basically there are two groups: cooperations with national and cooperations with EU funding. On the one hand this is good because these institutions use the possibilities offered by the state or by the EU. But on the other hand this statistic is not favourable because it means that the institutions just cooperate with each other when they can retrieve grants. This can be because the organizations do not have money from their budget can be used for cooperation or because they do not interested in cooperation when it is not supported with money.

**Development Agency of Serbia**



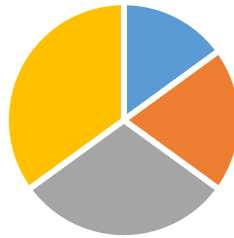
This pie chart is showing how common activities between intermediaries and research centres are financed. National funding programmes and EU- funding programmes are totally equally presented and around 73% of all common activities are financed in these ways. Regional funding programmes are not that "popular" and almost 16% of intermediaries cooperate with research centres through contract.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The pie chart is about the kind of common activities of intermediaries with research centres. About 39% of the asked institutions fund their common activities national funding programmes. About 33% of the partners fund their common activities with EU-funding programmes. 17% fund their projects with a contract and no funding's. 6-6% of the fillers fund their programmes by other financial options or regional funding.

Kind of common activities of intermediaries with research centres



- Just a contract, no funding
- Regional funding programmes co-finance the project
- National funding programmes co-finance the project
- EU- funding programmes co-finance the project
- Others

Funding of common activities of intermediaries with research centres is mainly ensured by EU and national projects with 7 and respectively 6 contracts. Regional funding programmes are providing the necessary financial resources for 4 intermediaries. Only Federation of SMEs, Chamber of Commerce Dolj and Ilfov County Council have contracts with no funding.

**Institute of Physics, Academy of Sciences of the Czech Republic**

Kind of common activities of intermediaries with research centres



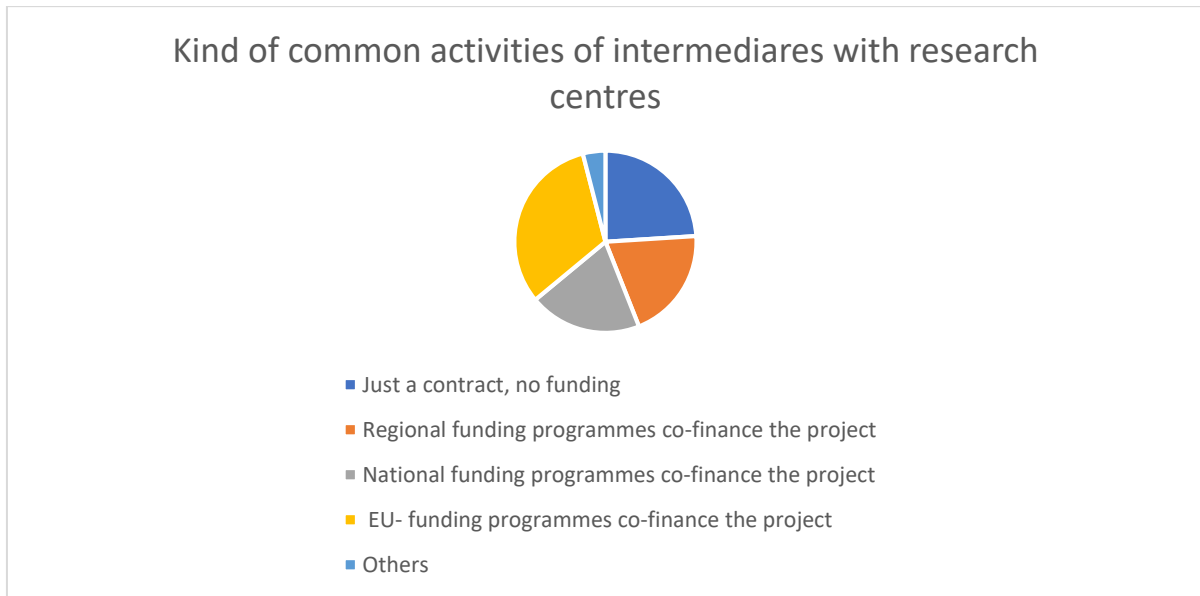
- Just a contract, no funding
- Regional funding programmes co-finance the project
- National funding programmes co-finance the project
- EU- funding programmes co-finance the project
- Others

The intermediaries are presenting the results from their point of view. The intermediaries are seeing more projects funded by the regional and national agencies (because, they are regional agencies) and EU projects because the regional agencies are allowed to apply to EU funds.

If we are looking from the research centres and companies point of view to the intermediaries we

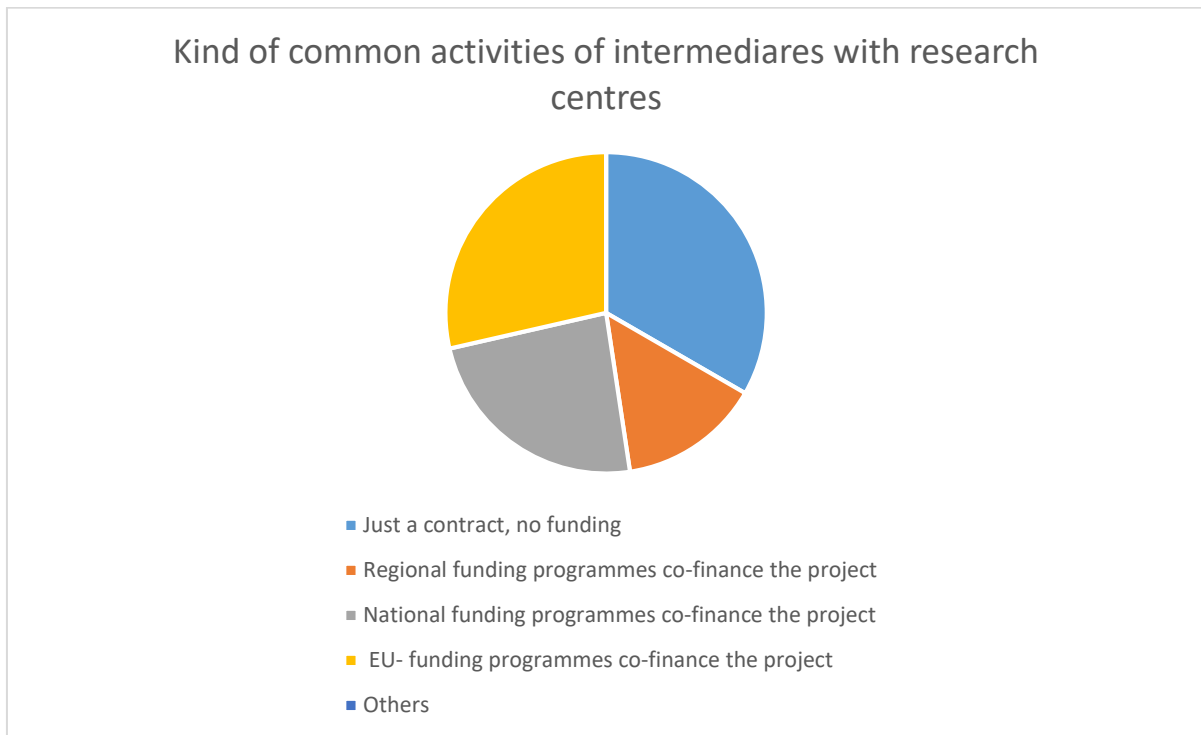
are seeing different interpretation. The national and EU funds are the main targets. Our project has a huge opportunity to propose a strategy for common approach for funding the innovative initiatives in technology transfer.

**FH JOANNEUM GESELLSCHAFT M.B.H.**



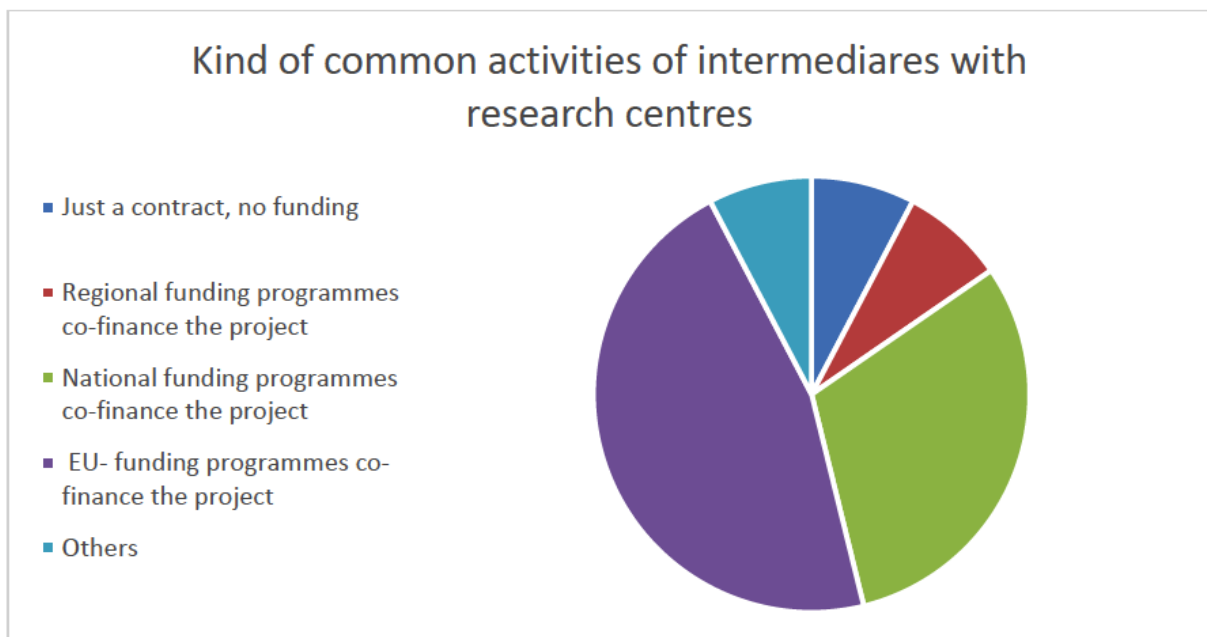
The pie chart is about the kind of common activities of intermediaries with research centres. About 32% of the surveyed companies fund their common activities with the EU- funding programmes. 24% fund their projects with a contract and no funding's. National funding programmes and regional funding programmes held a share of 20%. 1% of the sample companies have other activities with research centres.

**Institution for development of competence, innovation and specialization of Zadar County**



This pie chart is showing how are common activities between intermediaries and research centres financed. 33% works together with just a contract, no funding. 29% has National funding which co-finance the common project. National funding programmes uses 24% of surveyed Intermediaries and 14% has experience with regional funding for co-financing projects.

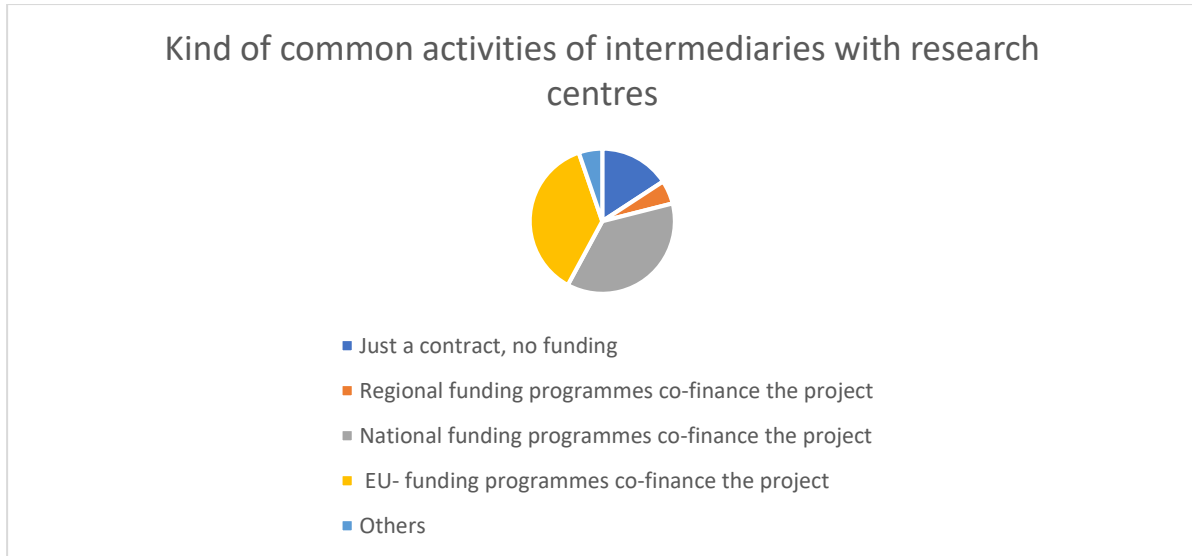
**UNIVERSITY OF MARIBOR**



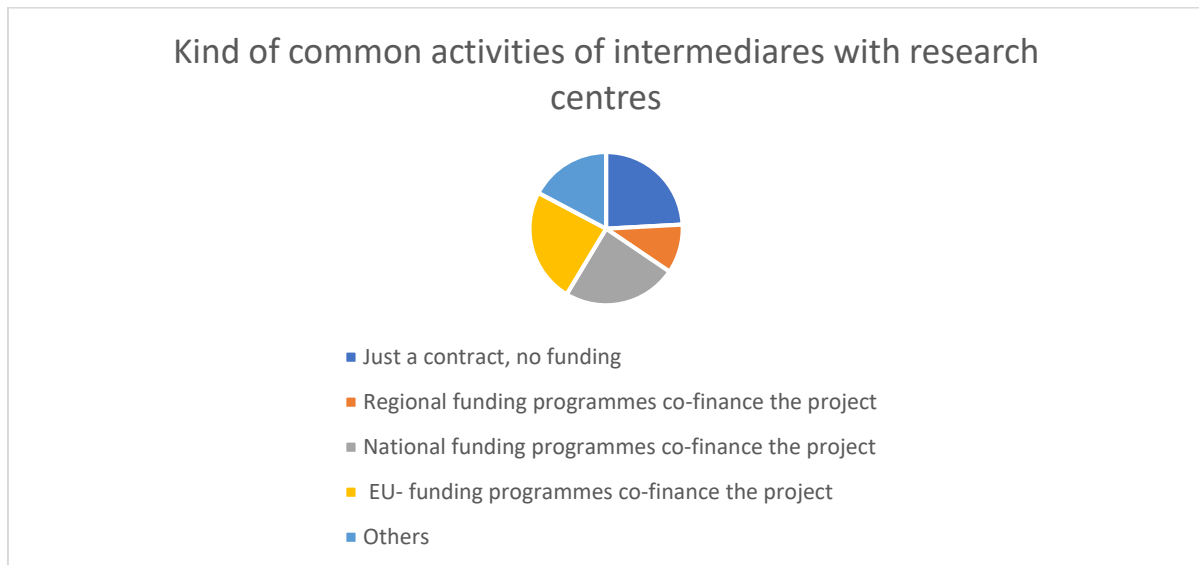
This pie chart is showing how are common activities between intermediaries and research centres financed. 46% works together through EU funding programmes, 31% through National funding which

co-finance the common projects, followed through regional funding for co-financing projects, with just a contract, no funding and market funds equally at 8%.

**Magurele High Tech Cluster**



**Central Bohemia Innovation Centre**



The pie chart is about the kind of common activities of intermediaries with research centres. About 11% of the surveyed companies fund their common activities with the Regional funding programmes. 24% fund their projects with a contract and no funding's.

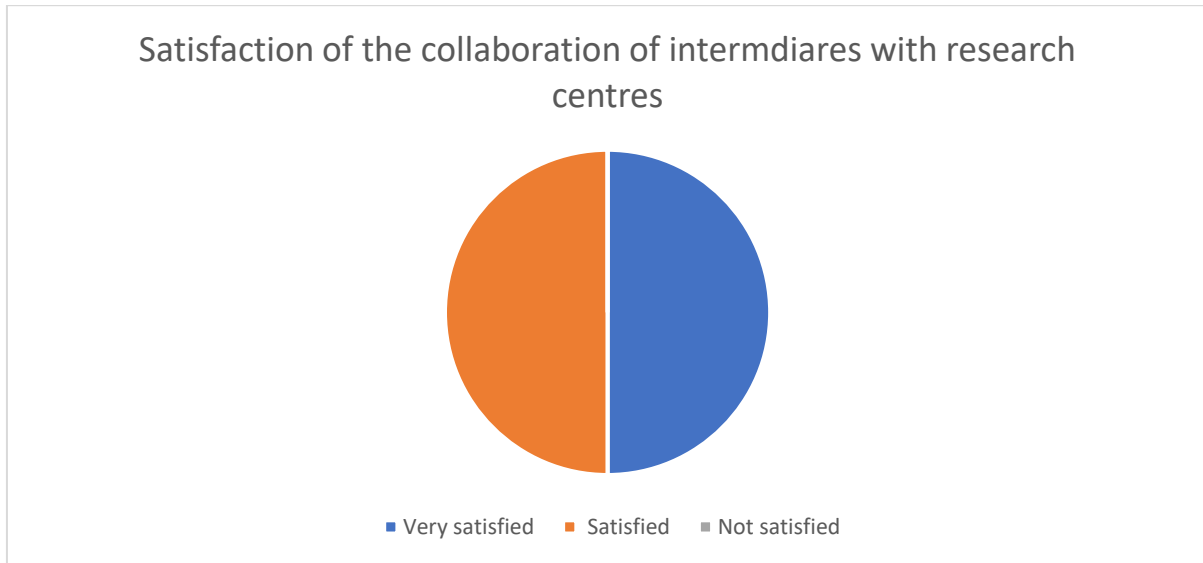
National funding programmes and EU-funding programmes held a share of 24%. 17% of the sample companies have other activities with research centres.

For example, the JIC was established within the framework of the Regional Innovation Strategy. The operation expenses are partly covered by the South Moravian Region, by the City of Brno, and last but not least from services and projects that are undertaken by the JIC.

Confederation of Industry is focused to helping with private funding.

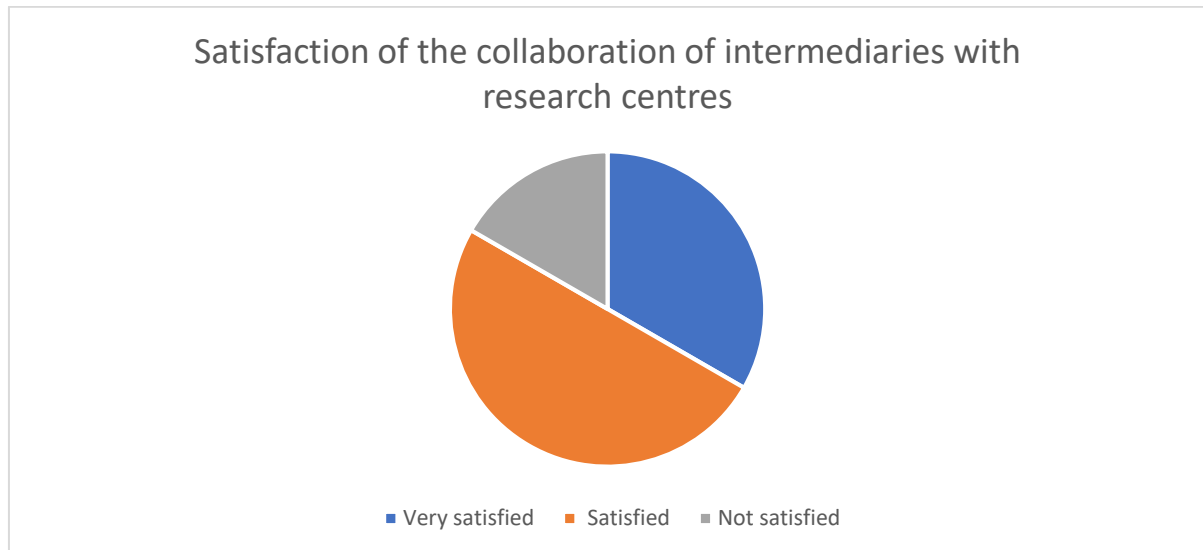
#### 4.2.6 Satisfaction of the collaboration of the intermediaries with the research centres

##### **ELI-HU Nonprofit Ltd.**



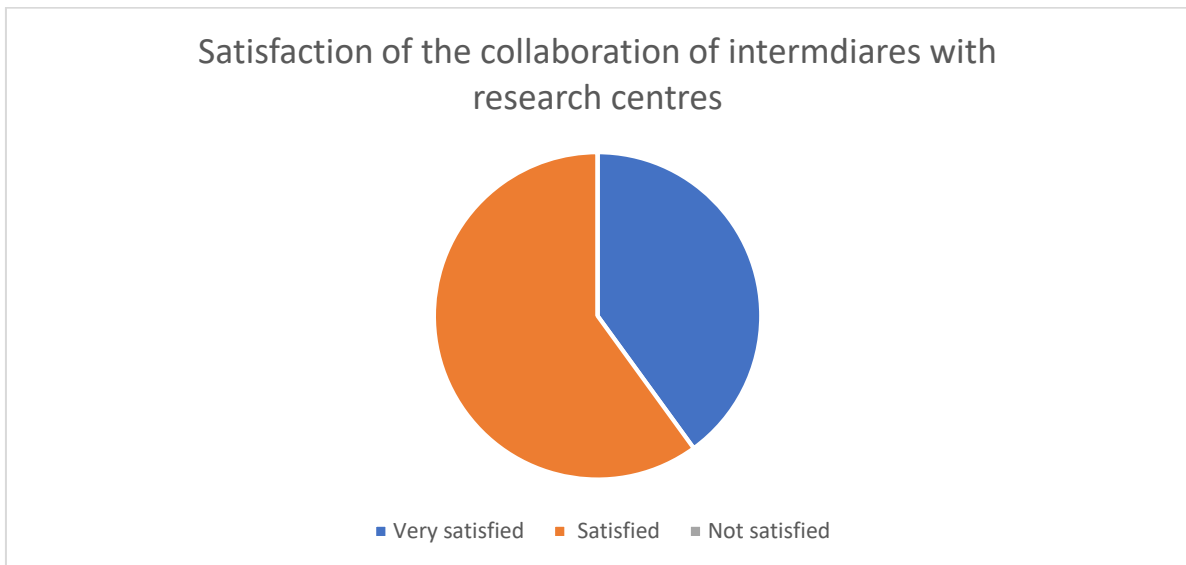
The following chart gives an overview of the satisfaction of the collaboration of intermediaries with research centres. Half of the intermediaries were satisfied with the collaboration and half of them were very satisfied. No one chose the not satisfied option.

##### **Development Agency of Serbia**



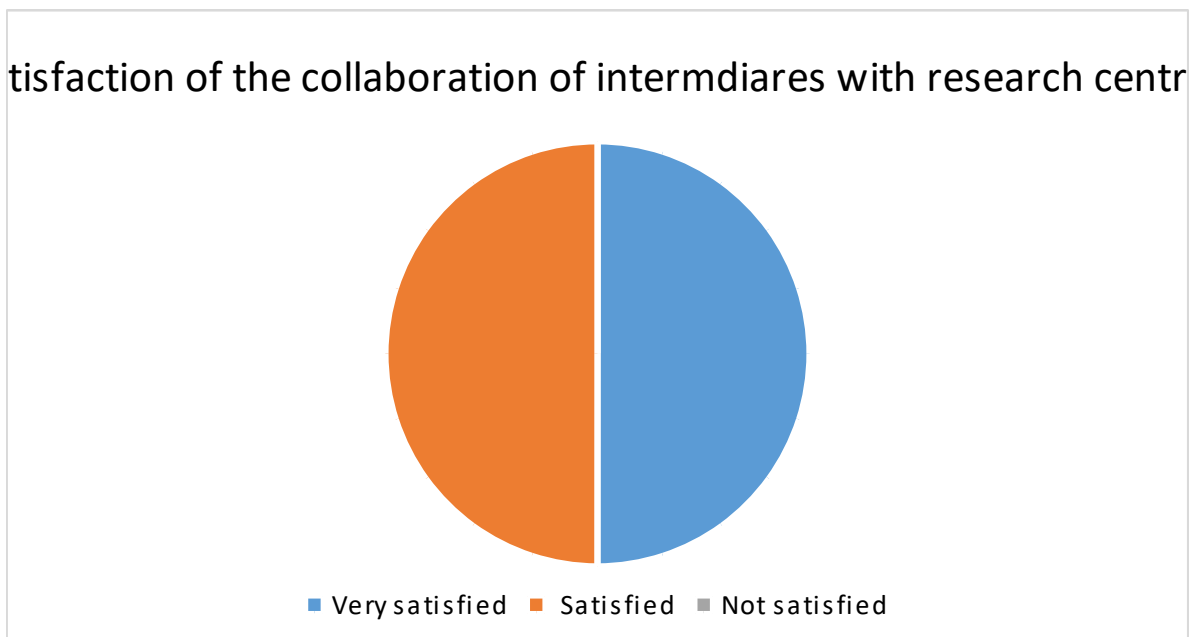
The chart gives an overview of the satisfaction of the collaboration with the research centres. 33.33% of the surveyed intermediaries states that they are very satisfied with cooperation, 50% is satisfied and the rest apparently have some complaints about working with centers.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



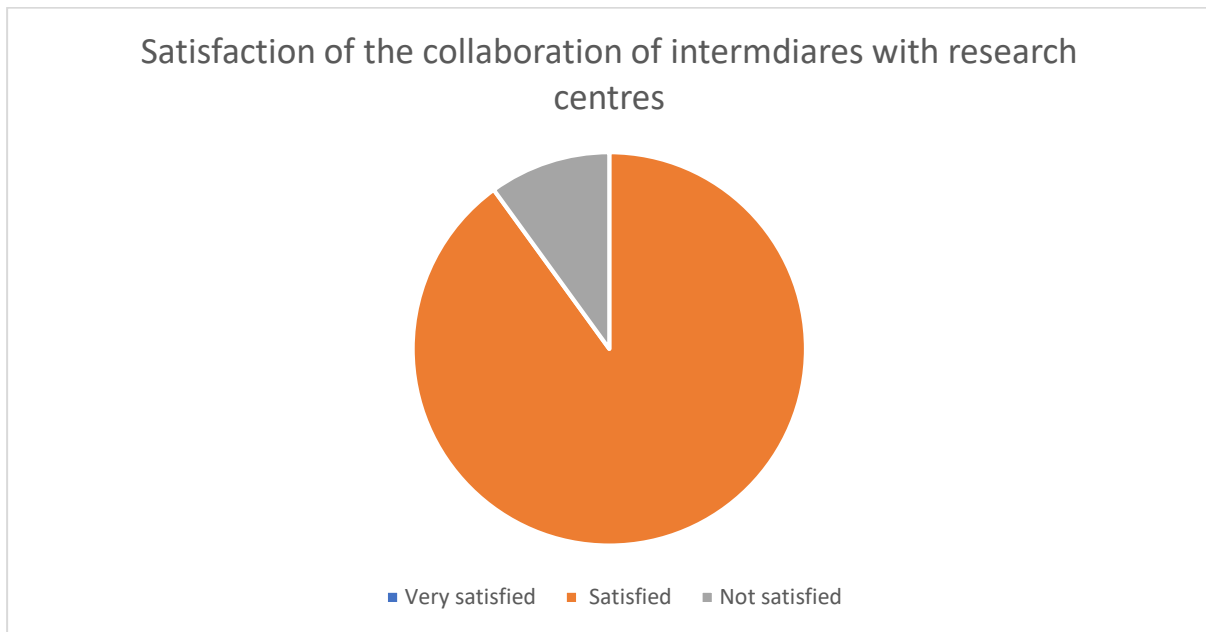
The chart gives an overview of the satisfaction of the collaboration of intermediaries with research centres. 60% of them were satisfied with the collaboration and 40% of them were very satisfied. No one chose the not satisfied option.

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



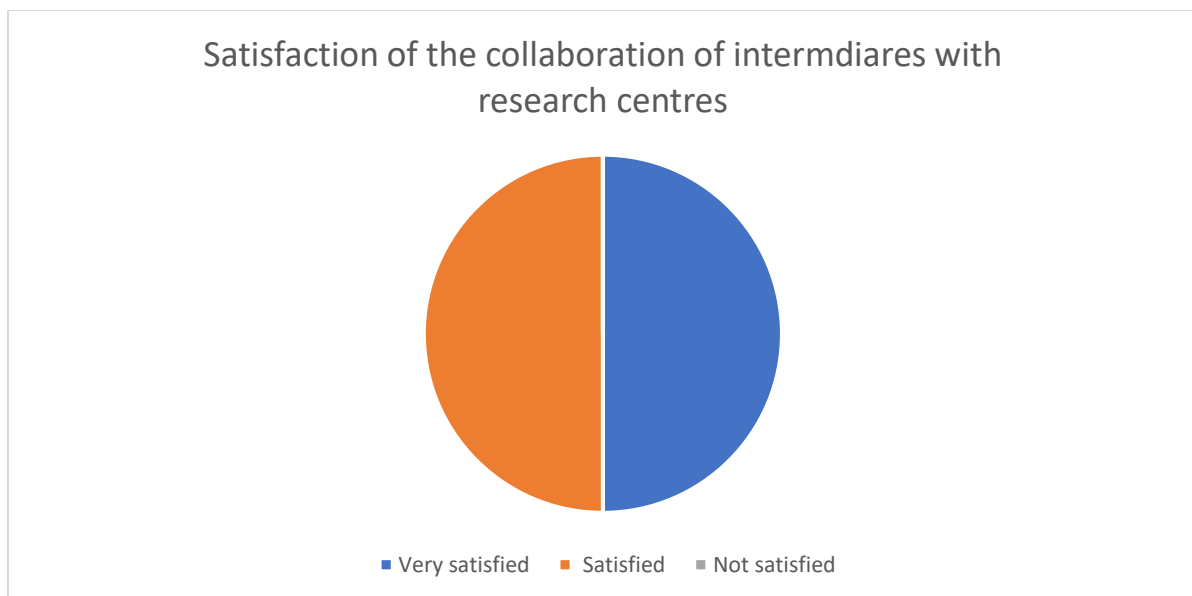
The level of satisfaction of collaboration of intermediaries with research centres balanced: 5 intermediaries are very satisfied and the other 5 are satisfied. If we try to interpret these answers connected with information on obstacles (point 2.8) we can believe that the level of satisfaction could be increased.





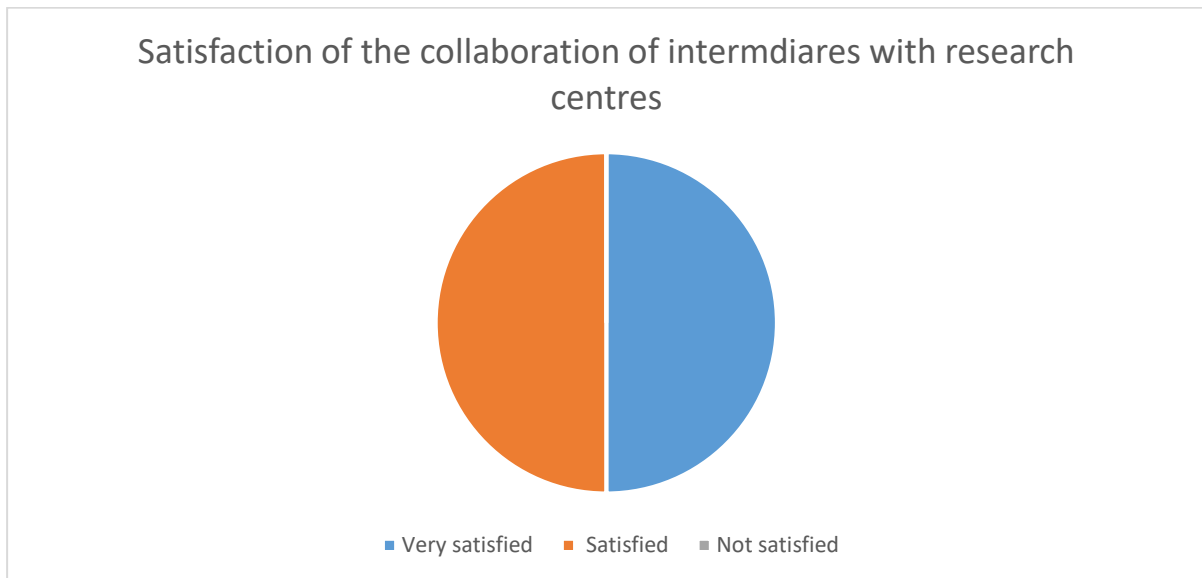
Generally, the intermediaries are satisfied with cooperation. But as they answered in 2.8, there are some topics or problems which could be better.

**FH JOANNEUM GESELLSCHAFT M.B.H.**



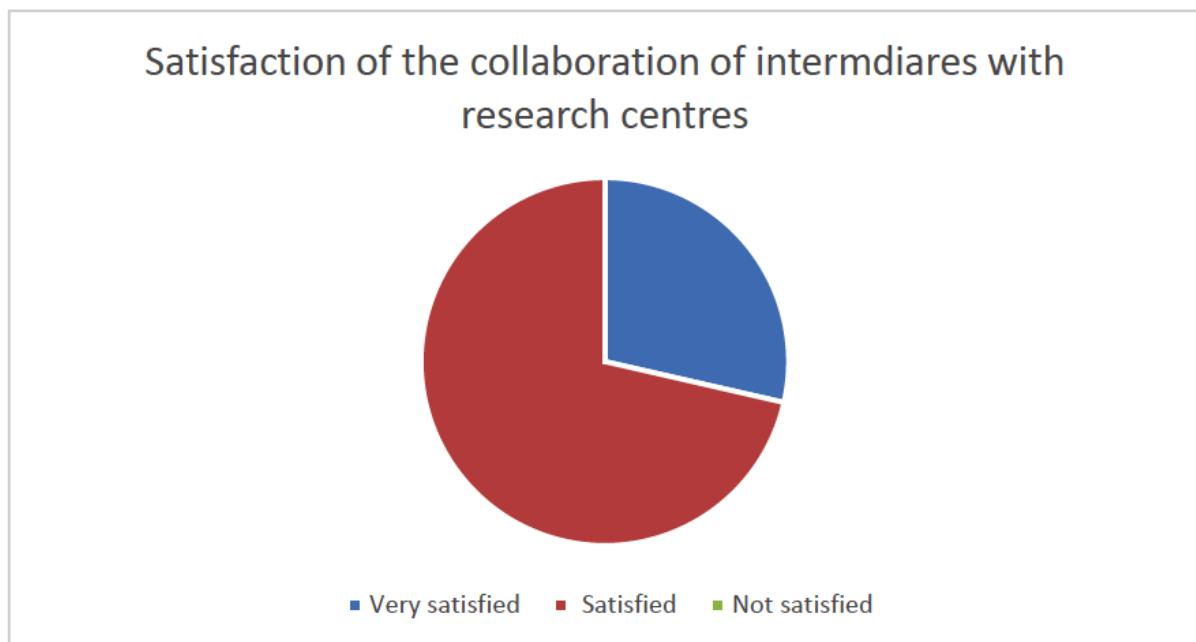
The chart gives an overview of the satisfaction of the collaboration of intermediaries with research centres. Exactly the half of companies are very satisfied and the other half is satisfied. No one is not satisfied.

***Institution for development of competence, innovation and specialization of Zadar County***



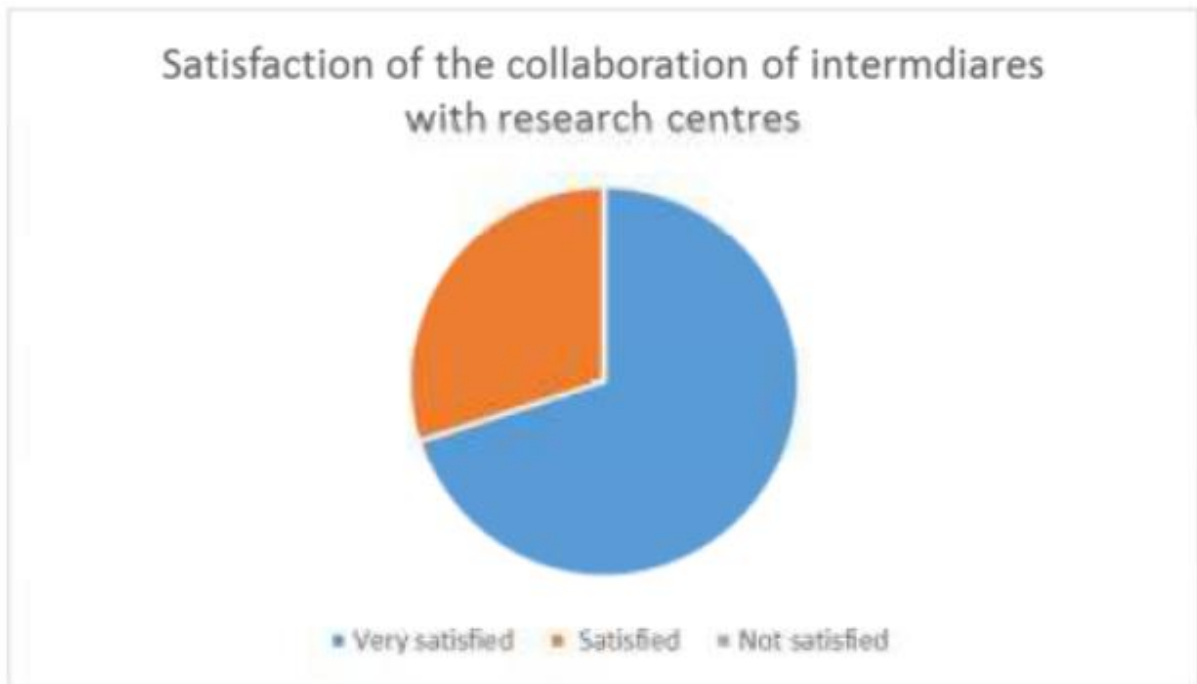
The chart gives an overview of the satisfaction of the collaboration with the research centres. 50% of the surveyed intermediaries claims that they are satisfied with cooperation while the other 50% is very satisfied.

***UNIVERSITY OF MARIBOR***



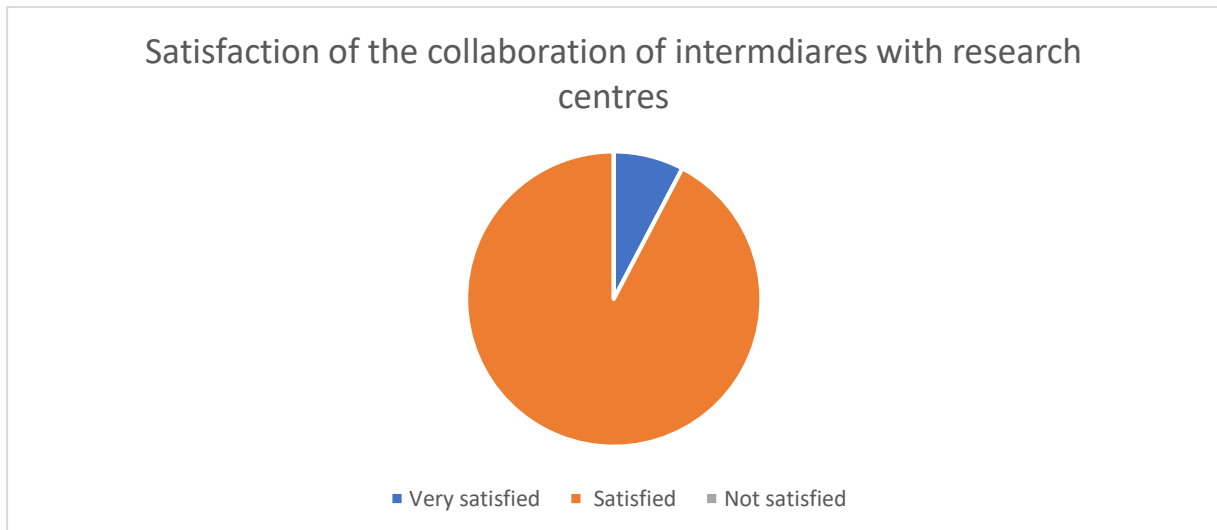
The chart gives an overview of the satisfaction of the collaboration with the research centres. 71% of the surveyed intermediaries claims that they are satisfied with cooperation while the other 29% is very satisfied.

### **Magurele High Tech Cluster**



Research centres are a committed partner for the intermediaries. They are seen as a serious partner for them and the results are seen as positive and useful for the intermediaries and their target groups.

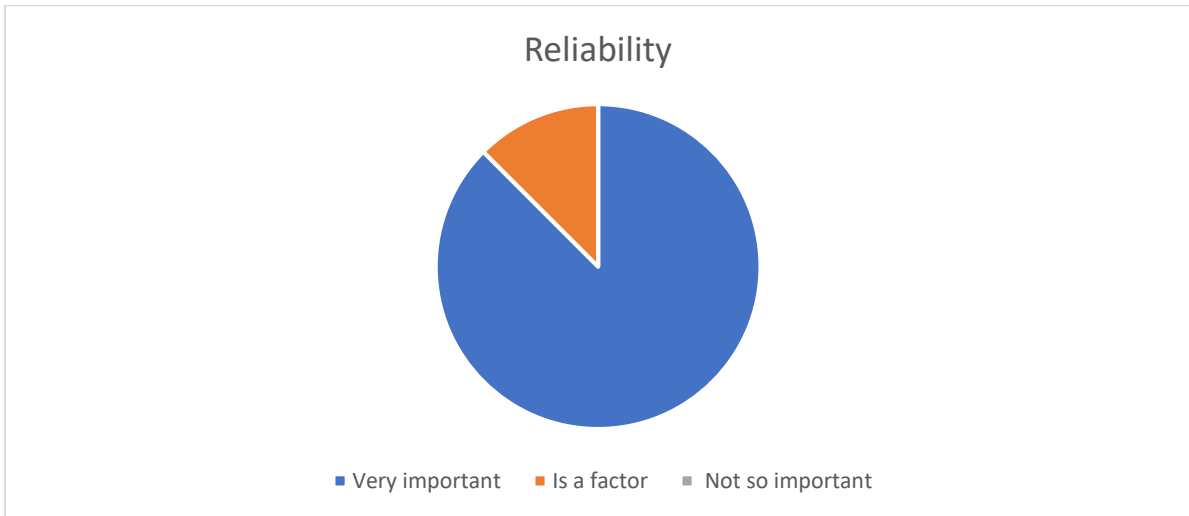
### **Central Bohemia Innovation Centre**



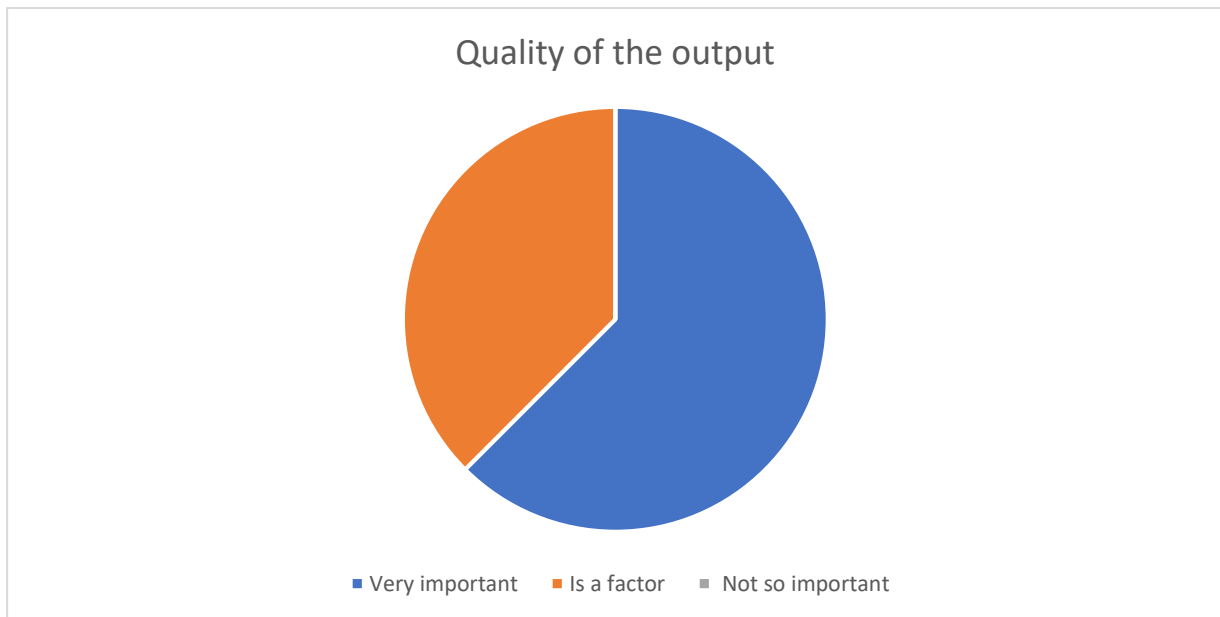
The chart gives an overview of the satisfaction of the collaboration of intermediaries with research centres. Exactly 8% of companies are very satisfied and the other satisfied. No one is satisfied.

#### 4.2.7 Important points of a collaboration of intermediaries with a research centres

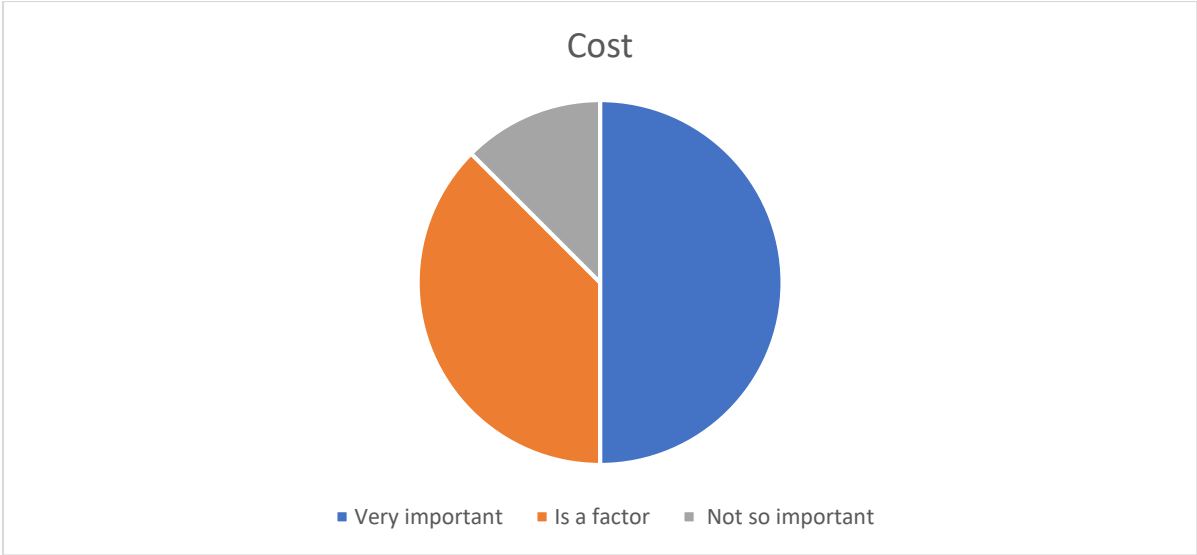
**ELI-HU Nonprofit Ltd.**



Almost all surveyed bodies replied that the collaborations are really important in their activity but this raise some questions. It would be interesting to know if collaboration is so important for all institutions why do they cooperate only when it is financed by the state or by the EU.

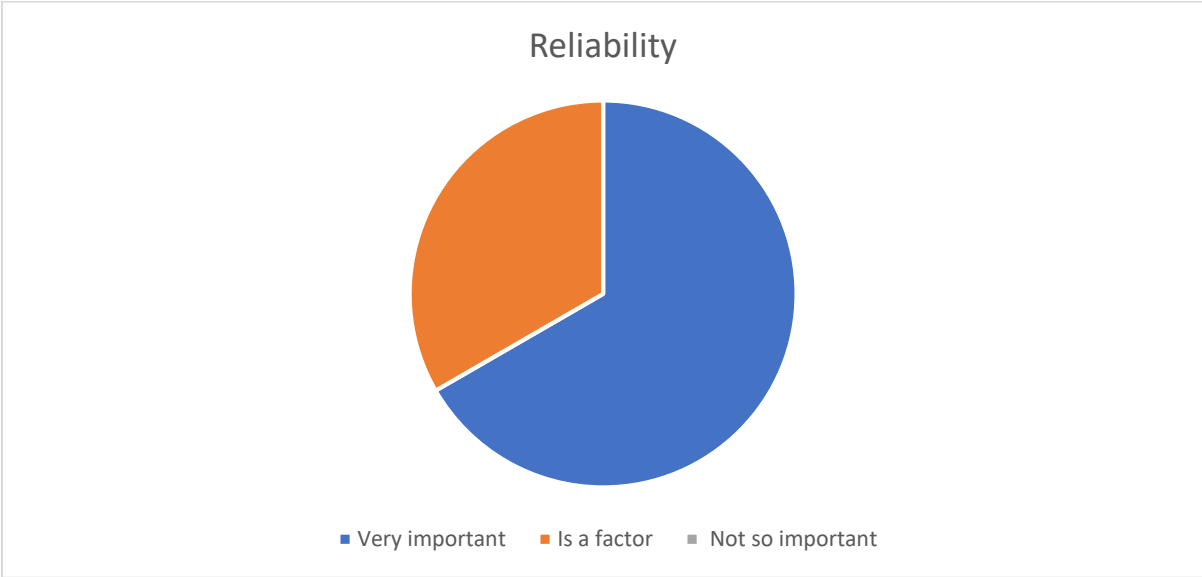


The quality of the output is very important for more than half of the organizations but for three institutions the quality of the output is just a factor. This shows to that direction that cooperation is also important for financial reasons, to ensure day-to-day work in these organizations and not just for the results.

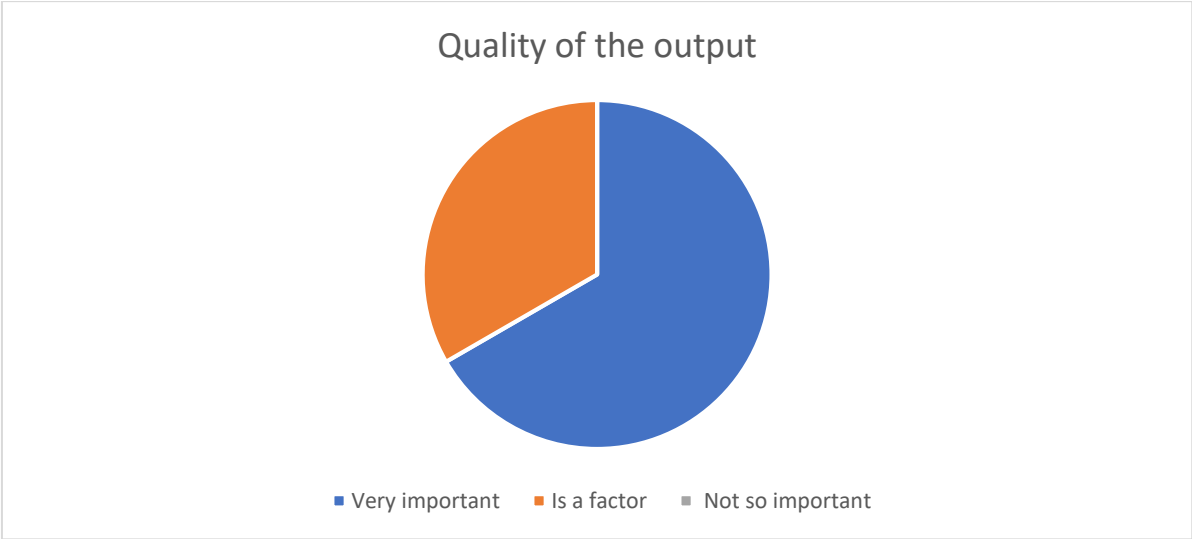


For half of the surveyed organisation cost is a very important factor regarding to cooperation, it is just a factor for three institutions or not so important for one responder.

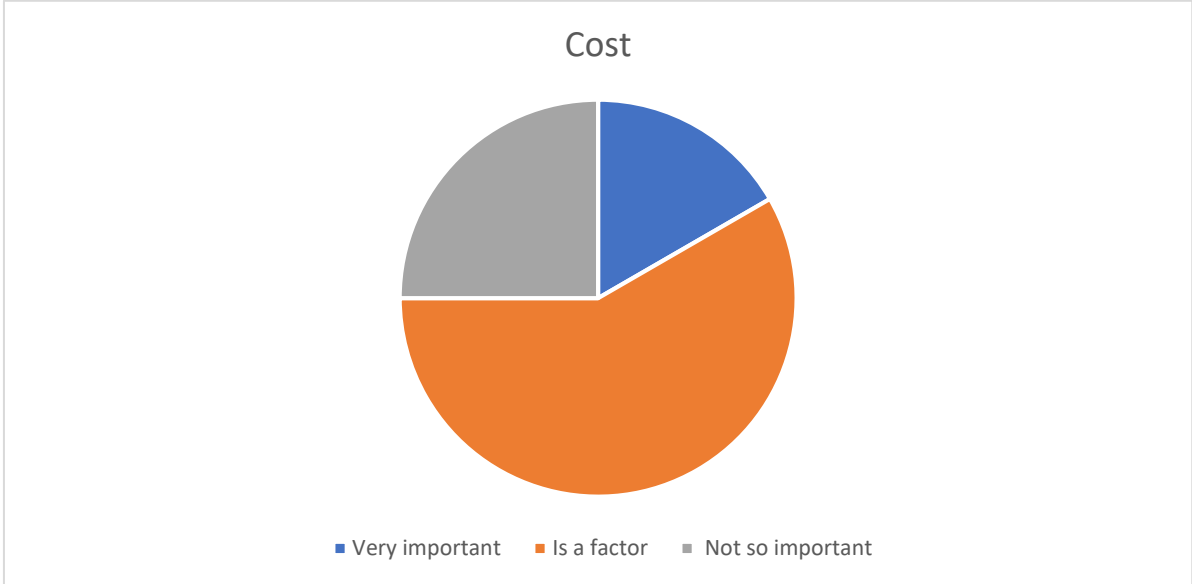
***Development Agency of Serbia***



None of the intermediaries thinks that the reliability is not important and 66.67% answered that is very important for research centre to be reliable.

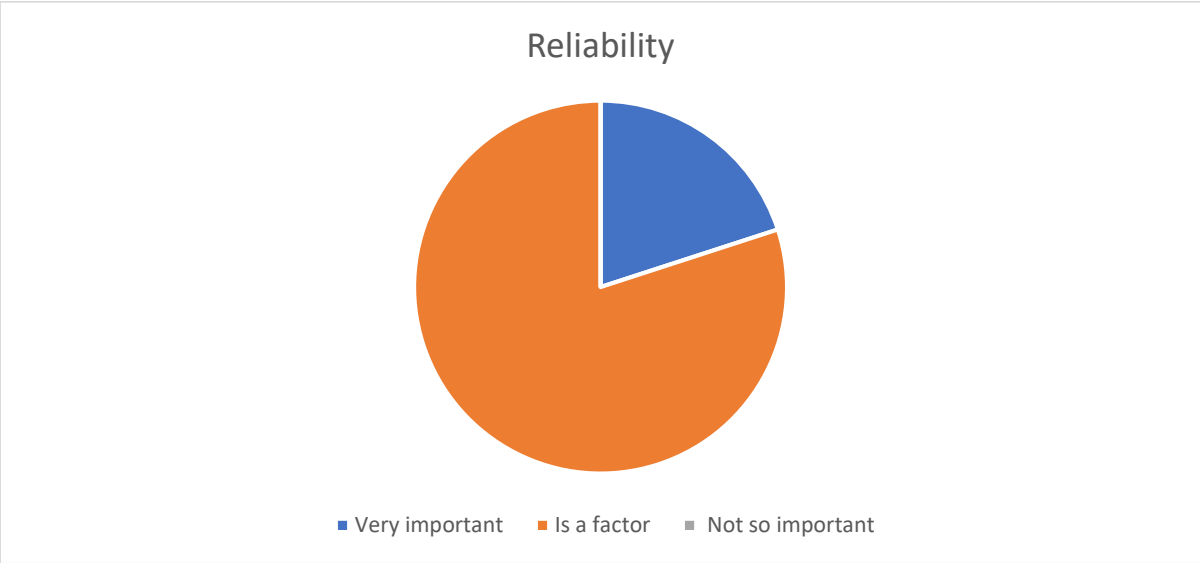


Situation with quality of the output is exactly the same as with reliability. 66.67% of intermediaries answered that the output quality is very important. So, it is deciding factor for all of them.

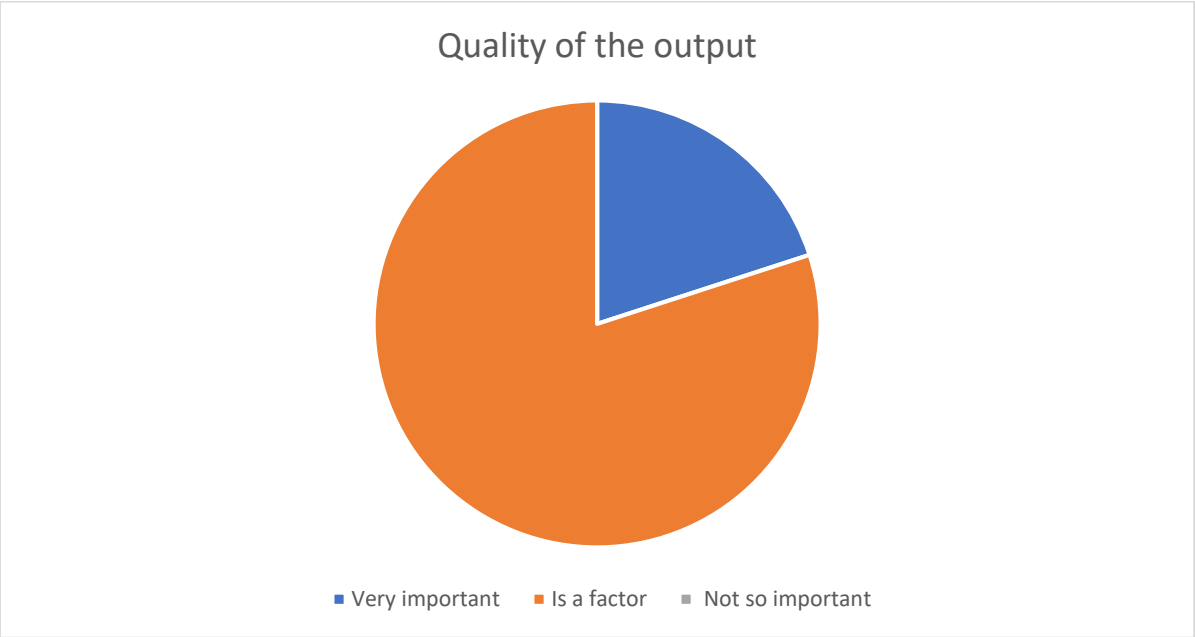


When it comes to price of common projects and collaborations, 58.3% of surveyed intermediaries see it as factor that has some significance, but for 25% of them is not that important.

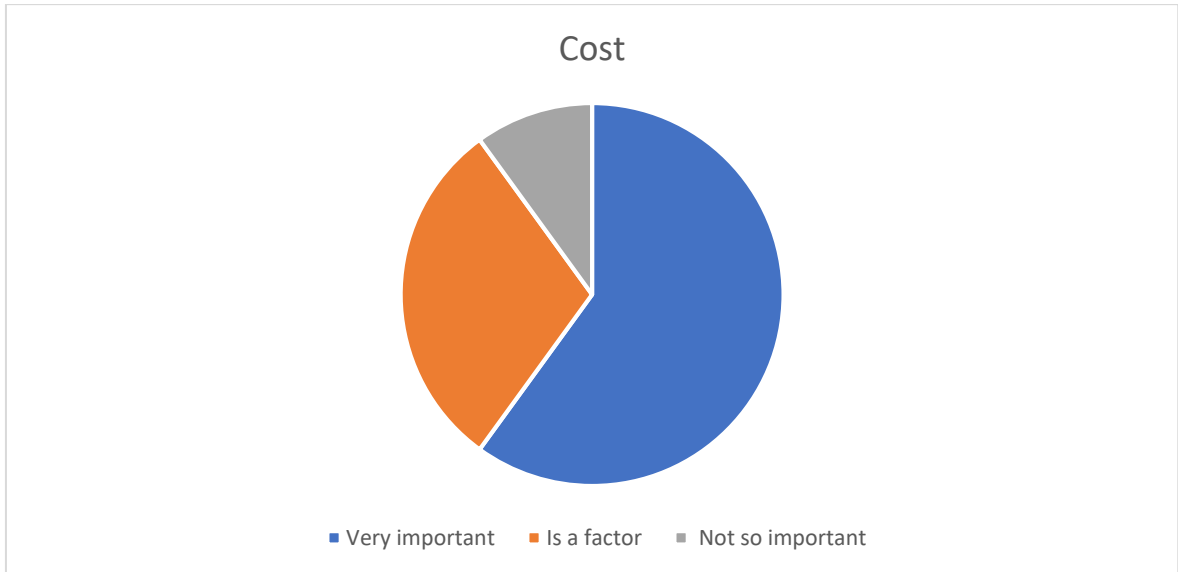
**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



This pie chart describes the reliability. Here it is clearly visible that all intermediaries attach great importance to reliability. The proportion of is a factor is 80%. For 20% of the fillers reliability is very important.

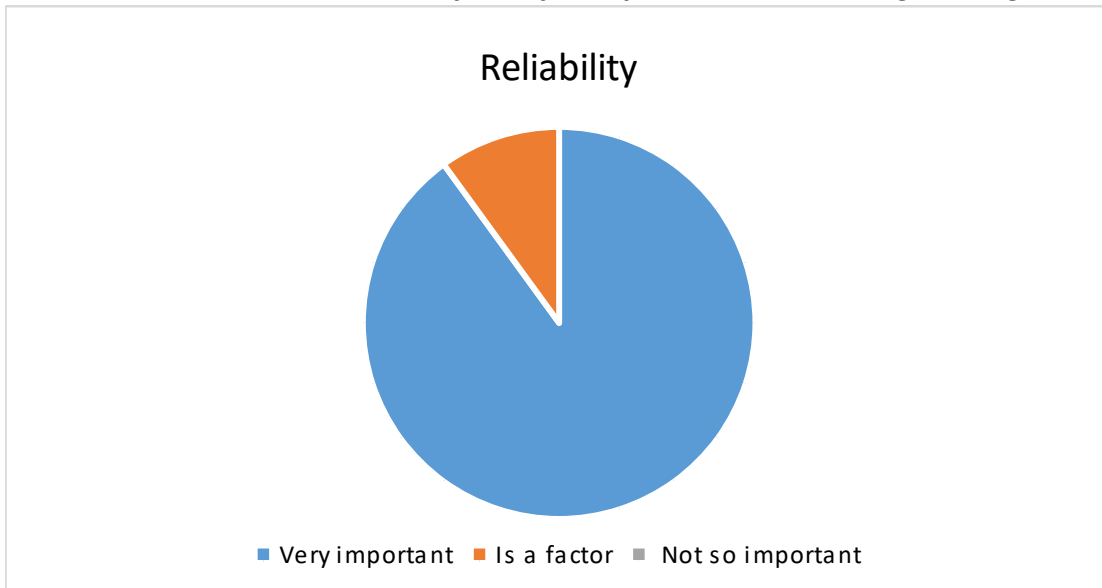


This pie chart describes the quality of the output. Here it is clearly visible that all attach great importance to the quality. The proportion of is a factor is 80%. For 20% of the asked ones, reliability is very important.



This pie chart describes the importance of costs of a collaboration of intermediaries with a research centres. As can be seen in the graph, the costs are very important for more than a half of all institutions (60%). Only 10% see the costs not so important. The rest (30%) sees it as a factor.

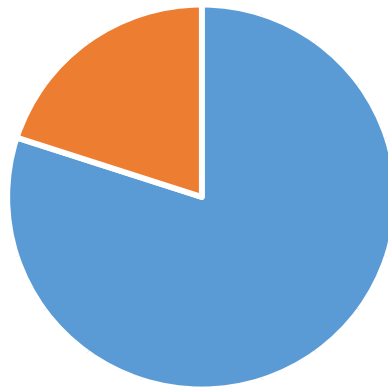
***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***



Reliability appears to be very important for intermediaries: 9 are very satisfied and only one just satisfied. It seems that reliability is more important for the intermediaries group when compared to the other groups.



### Quality of the output



■ Very important ■ Is a factor ■ Not so important

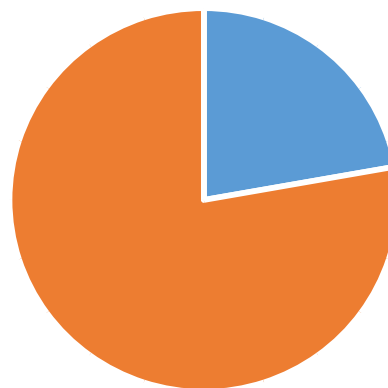
8 out of 10 intermediaries consider the quality of the output very important and only two see it as just a factor.

8 out of 10 intermediaries consider the quality of the output very important and only two see it as just a factor.

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8 out of 10 intermediaries consider the quality of the output very important and only two see it as just a factor.

### Cost

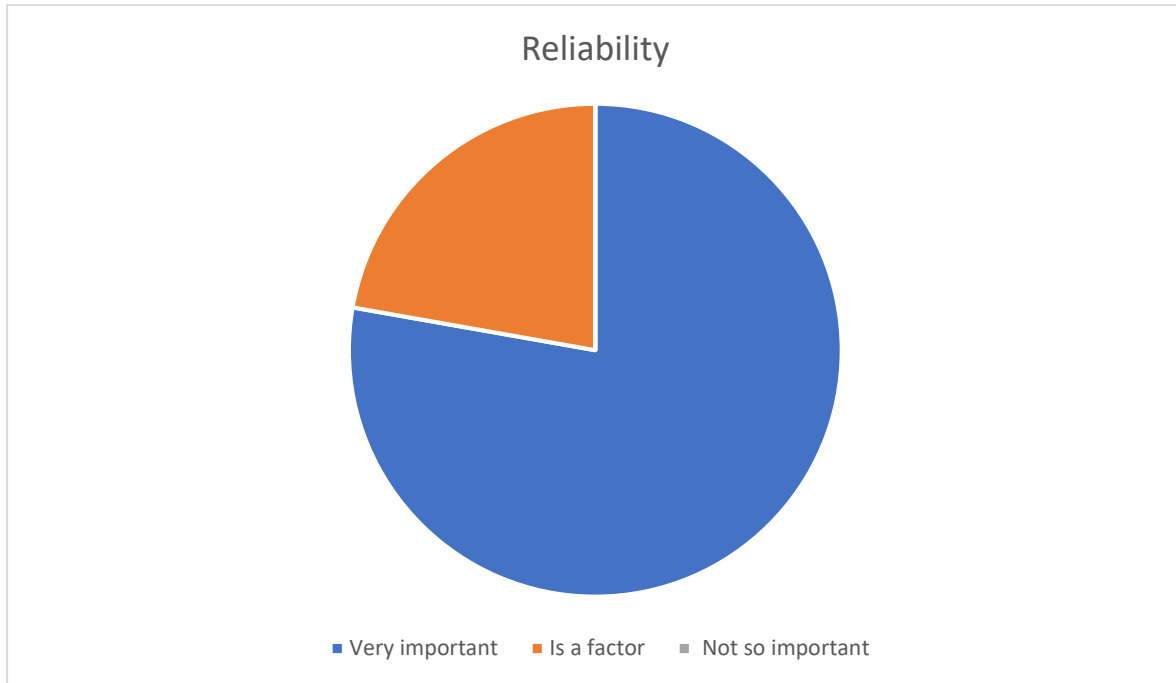


■ Very important ■ Is a factor ■ Not so important

The cost is mainly considered as a factor by 7 respondents out of 9; Two are seeing it as very important and SMRDA choose not to answer.

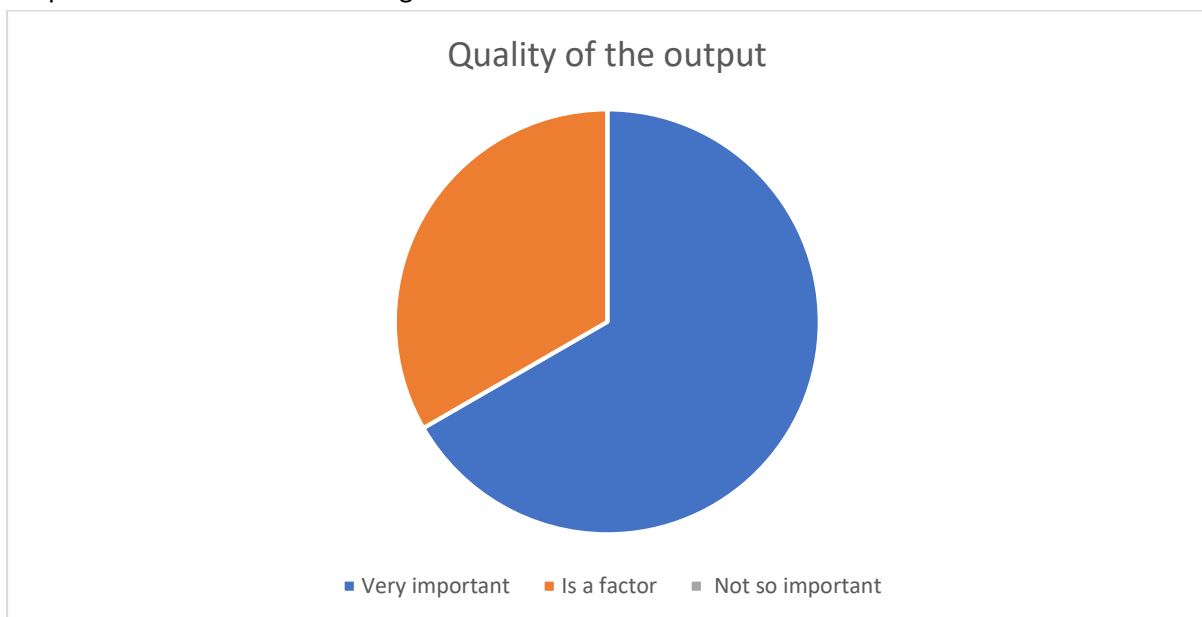
**RELIABILITY**

Reliability is the crucial and very important factor of cooperation project. Delivering project outputs, fulfilling the deadlines and follow the project implementation steps properly – these are the basic keystone of successful cooperation in relation to reliability.



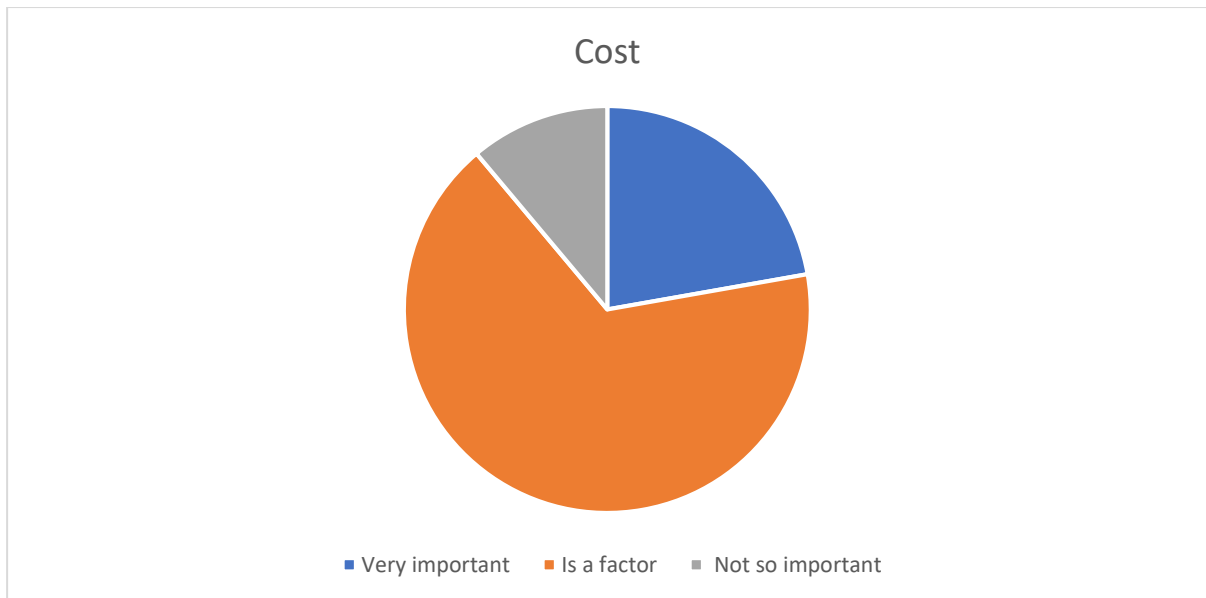
**QUALITY OF THE OUTPUT**

Quality of the output is another important key factor of joint project. There is crucial that the common agreement between partners should be made about the quality and the structure of project output to avoid misunderstanding.

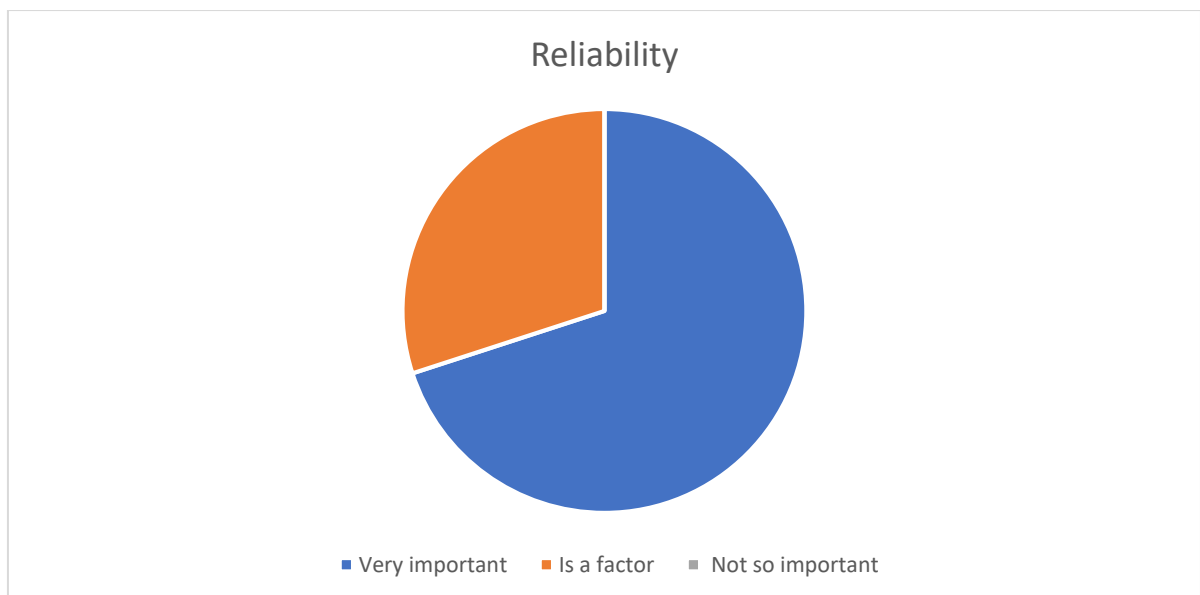


## COST

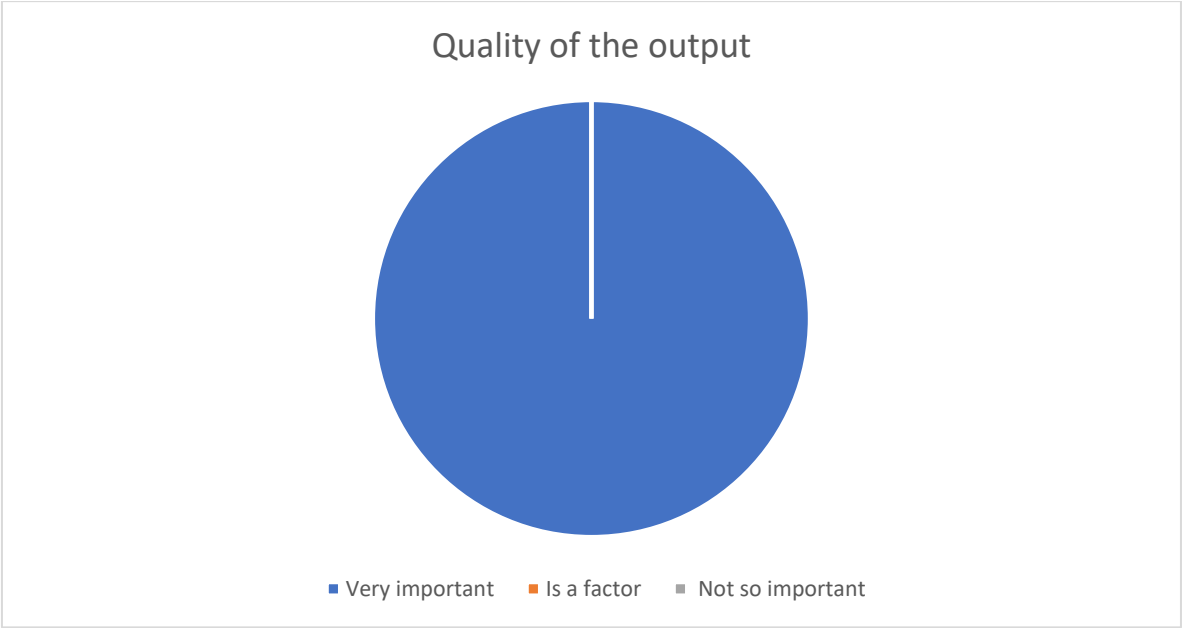
Cost is mainly marked as a factor, so it is not the most important but is one of the factors influencing the choice of supplier.



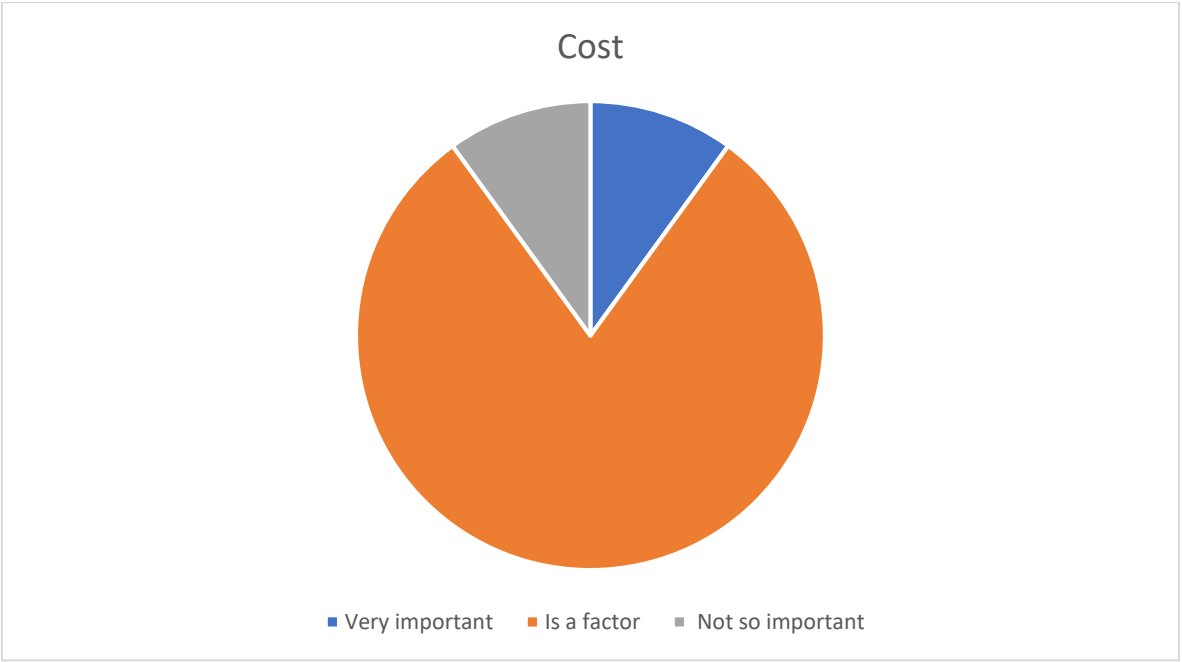
## ***FH JOANNEUM GESELLSCHAFT M.B.H.***



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 70%. For 30% of the companies reliability is only a factor.

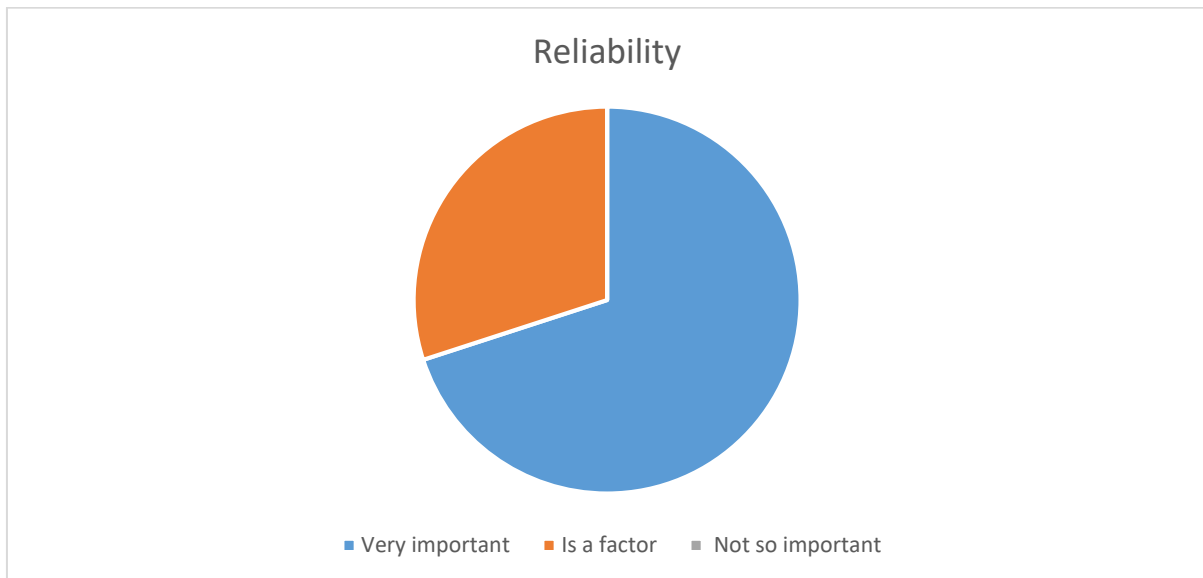


In this pie chart, you can see that all companies attach a great importance to the quality of output.

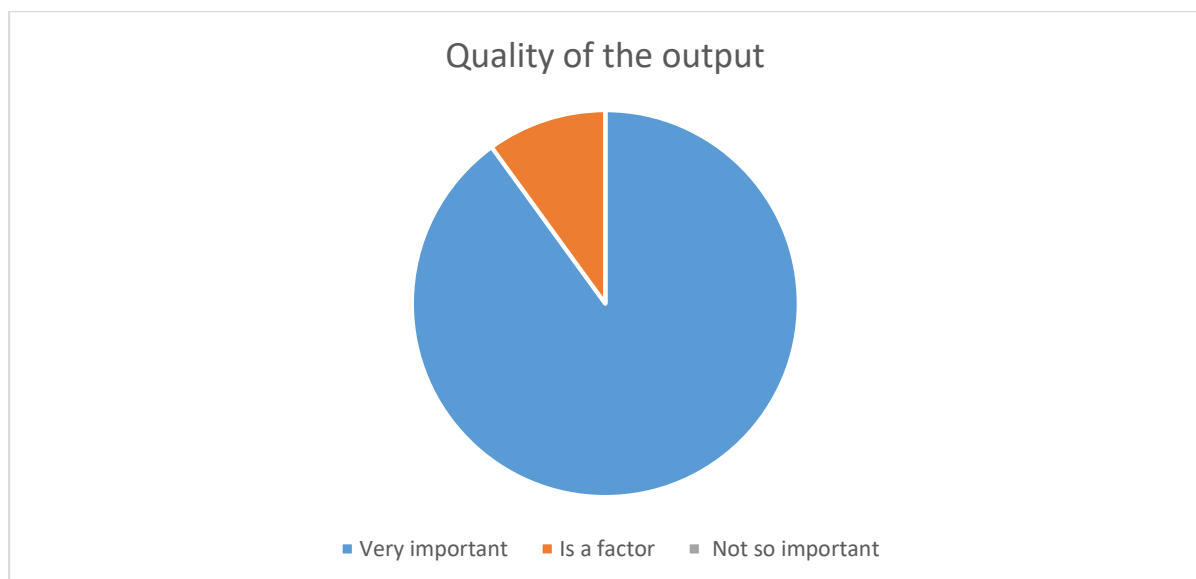


This pie chart describes the importance of costs of a collaboration of intermediaries with a research centres. As can be seen in the graph, the costs are a factor for more than a half of all companies. Only 10% see the costs as very important or only as a factor.

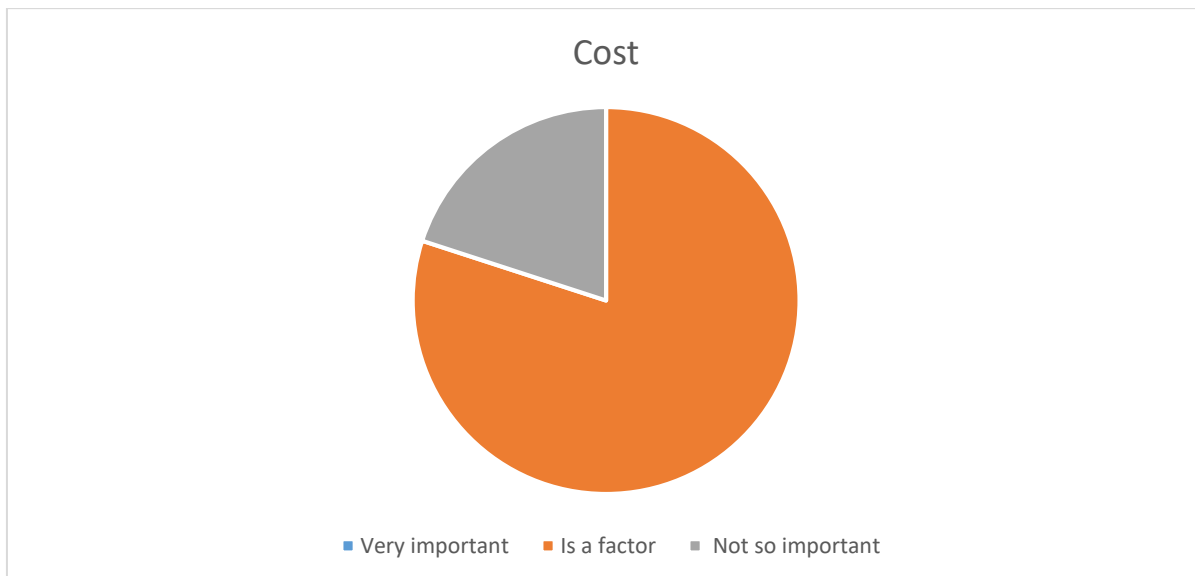
***Institution for development of competence, innovation and specialization of Zadar County***



This pie chart describes the importance of reliability in collaborations with research centres. It shows that for most of them it is very important, while only 30% claims that it is a factor.

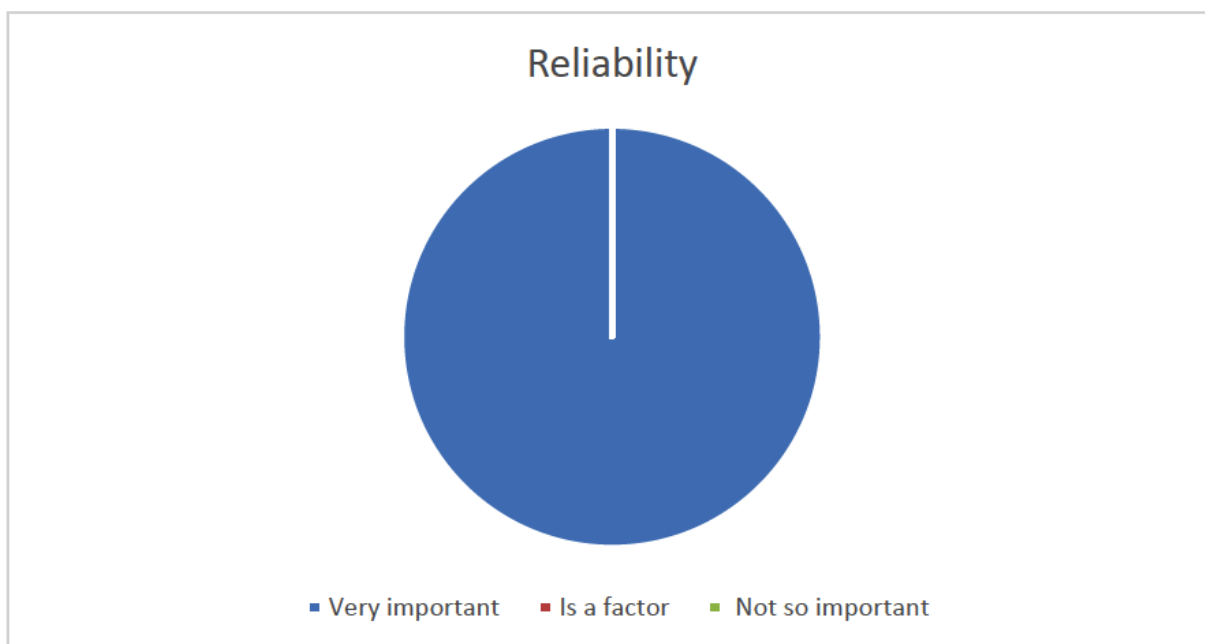


Quality of the output from collaborating with research centre is very important for 90% of surveyed intermediaries and the other 10% claims that it is a factor.

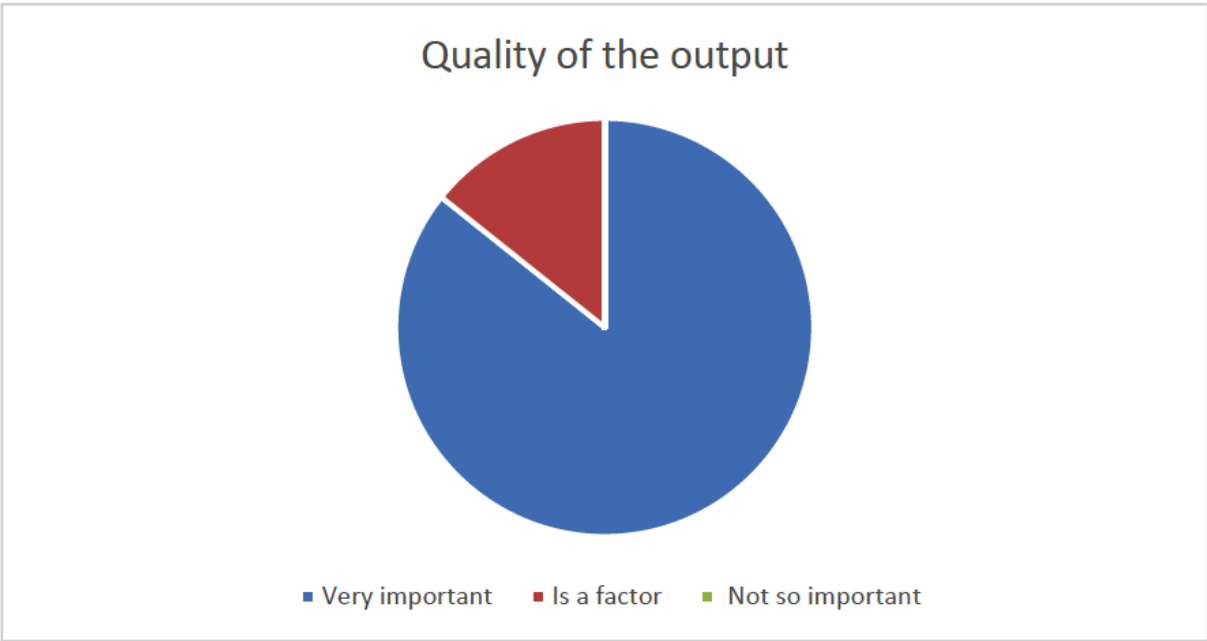


When it comes to price of common projects and collaborations, for 80% of surveyed intermediaries is a factor, but for 20% of them is not so important.

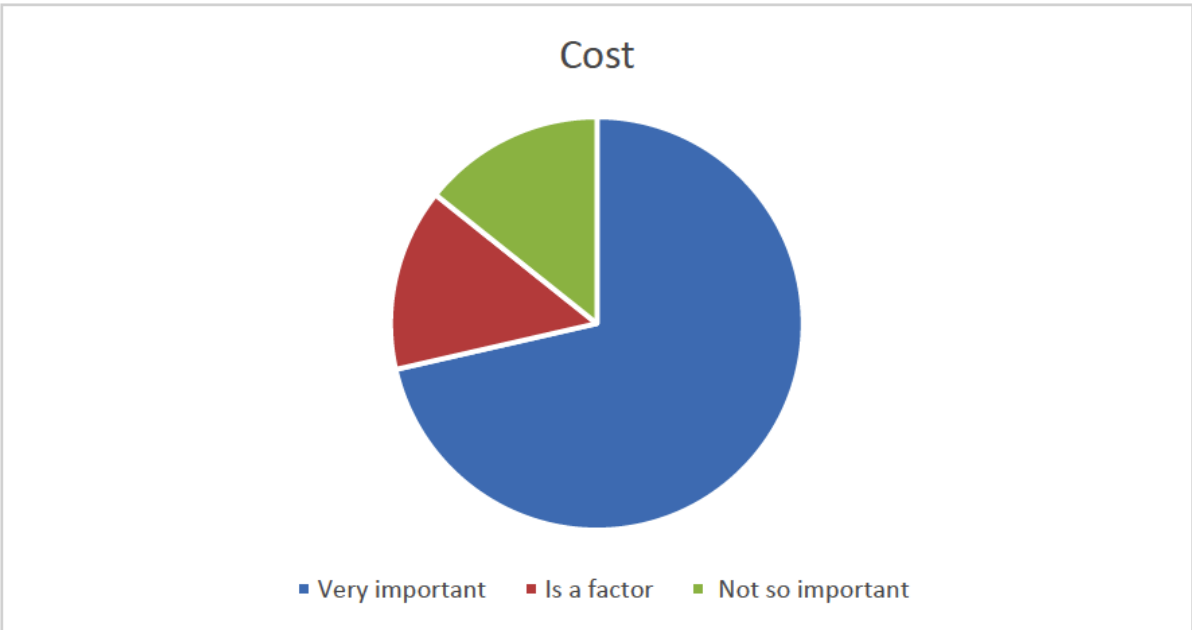
**UNIVERSITY OF MARIBOR**



This pie chart describes the importance of reliability in collaborations with research centres. It shows that for all of them it is very important.

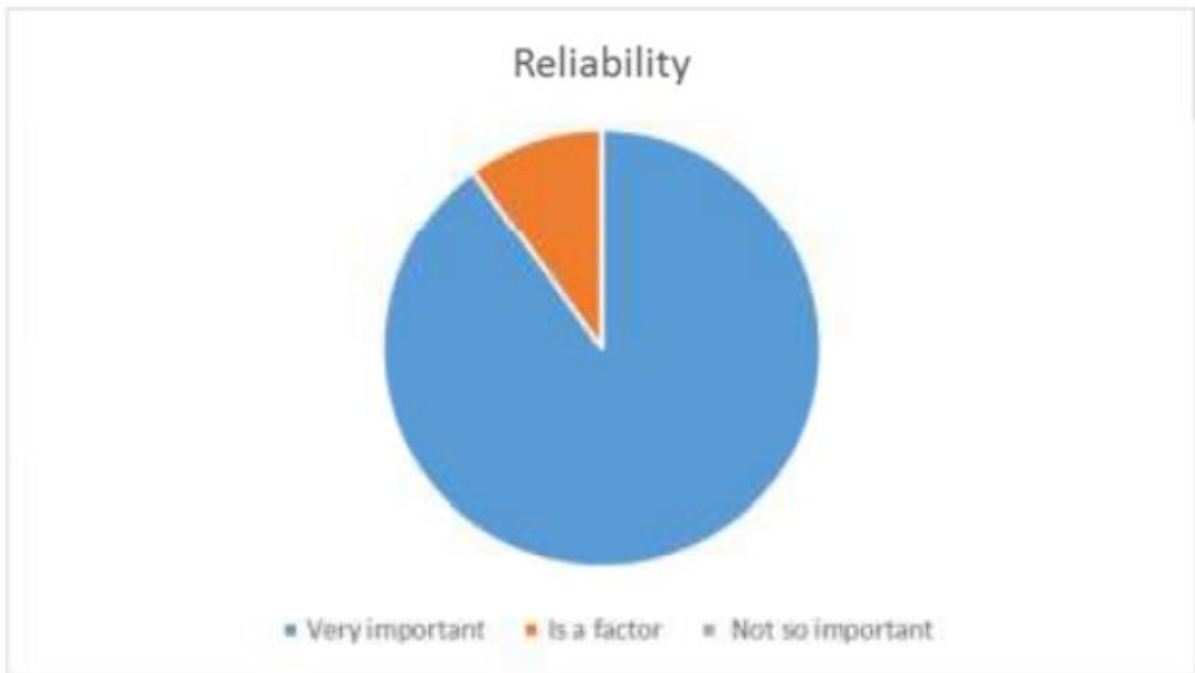


Quality of the output from collaborating with research centre is very important for 86% of surveyed intermediaries' and the other 14 % claims that it is a factor.



When it comes to price of common projects and collaborations, for 71% of surveyed intermediaries is very important, followed by it is a factor and not so important, equally at 14%.

**Magurele High Tech Cluster**

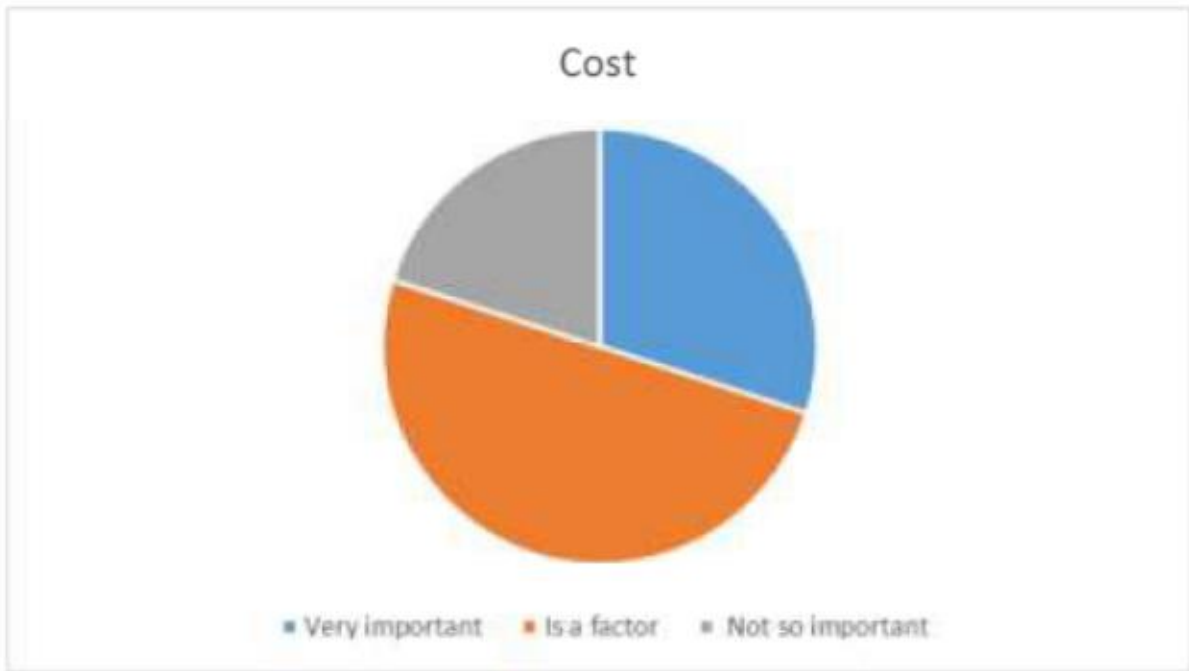


First of all, the intermediaries may rely on the cooperation with the research centres. The intermediaries may promote themselves as partners of the research centres which is generating credibility for the public opinion.



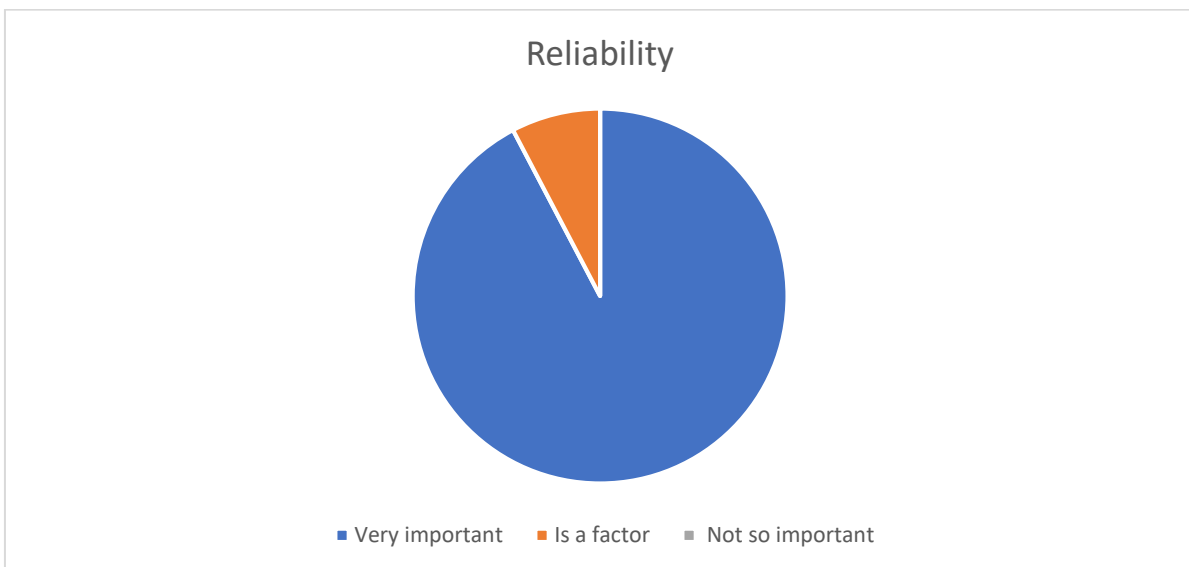
This is a great answer! The intermediaries are seeing the results of their cooperation with the research centres as very important and positive. This perception is a great foundation for future better cooperation.



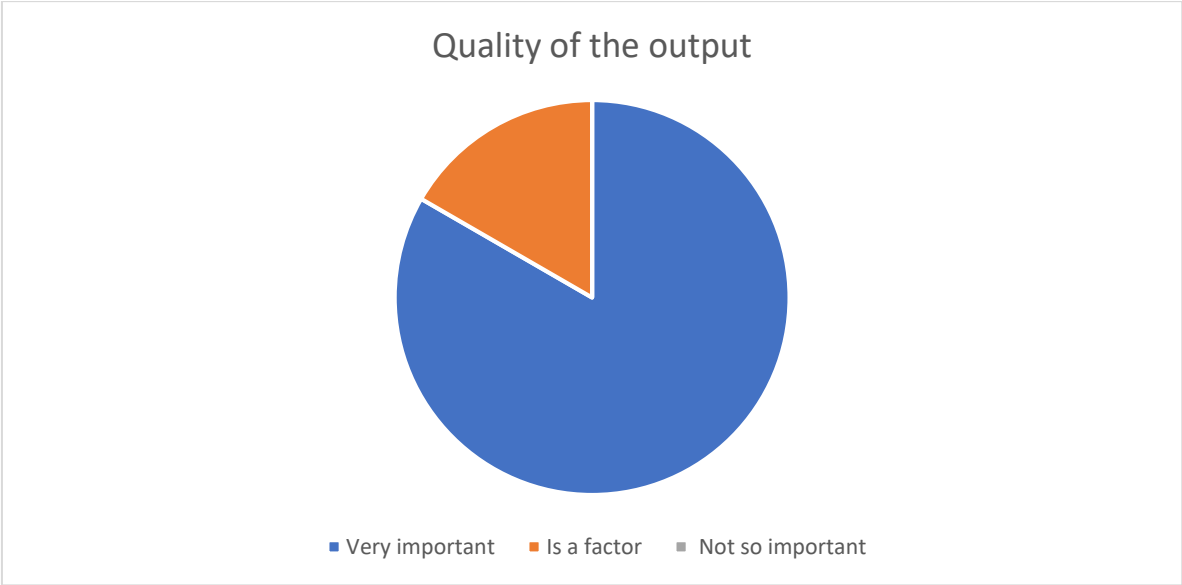


The intermediaries are not seeing the cost for the cooperation with the research centres as the main indicator. They are seeing this cooperation as an added value for their activity and for the local and national communities. This means, that the intermediaries have a solid thinking and they will evolve in a positive direction.

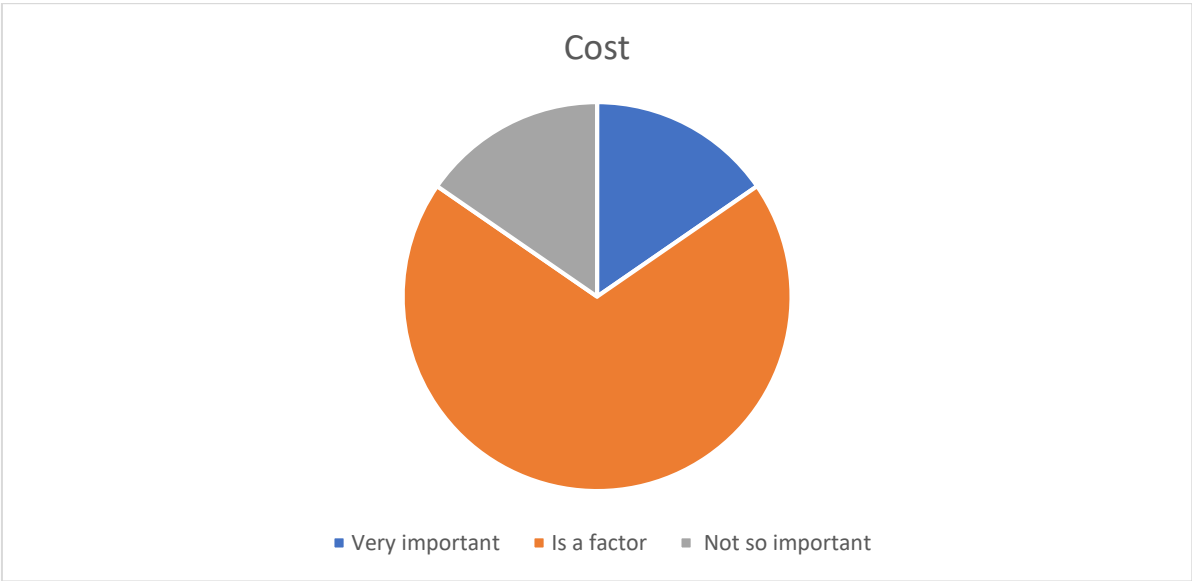
**Central Bohemia Innovation Centre**



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 92%. For 8% of the companies reliability is only a factor.



In this pie chart, you can see that all companies attach a great importance to the quality of output. The proposition of very important is 83%, for 17% of the companies quality of the output is only a factor.



This pie chart describes the importance of costs of a collaboration of intermediaries with a research centres. As can be seen in the graph, the costs are a factor for more than a half of all companies, exactly for 69%. Only 15,5% see the costs as very important or not so important.

#### **4.2.8 Obstacles of intermediaries in working together with research centres**

##### ***ELI-HU Nonprofit Ltd.***

Many intermediaries see an obstacle in financing the project. This is in line with some answers when they said that they just cooperate when the project is supported by the state or by the EU. Finding partners and bureaucracy are also serious obstacles in front of cooperations. Generally in Hungary the level of real, effective cooperations is really low. The cooperation among actors which can be competitors at the same time has no tradition in the Hungarian environment.

Different working methods can also appear as an obstacle. Public and private institutions organize the work differently in many cases. Some of them are more task-oriented and some of them are more result-oriented. This can mean problems regarding how they organize the workflow during a cooperation (e.g. do they have time to do something, keeping deadlines). Most of the cooperations are supported so the rules and expectations reduce the possibility of changes during implementing a project, overall it reduces the movement space of the organizations.

##### ***Development Agency of Serbia***

As main obstacles in cooperation with research centres intermediaries have mentioned:

- Long duration of the decision-making process,
- Poor quality of equipment that centres use,
- Lack of experience in project management
- No highly specialized research centres that can answer demand in some parts of country,
- Low level of knowledge of technical regulations outside of Serbia,
- Underdeveloped awareness of the need for cooperation with the real economic sector

##### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

Many intermediaries see an obstacle in financing the project, looking for partners or the administration matters. Others doubt the different objectives like bureaucracy. It is often difficult to stick to the timetable. An obstacle could also be the fact that research centres are sometimes not immediately available or give the time to find the right topics. Research centres are often not business-oriented or cooperation requires high costs. However, there are also fillers who had no doubts during the cooperation with research centres.

##### ***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***

Intermediaries expressed very briefly their views on the obstacles in working with research centres. These are:

1. bureaucracy;
2. high costs;
3. unpredictable funding;
4. financial limitations;

5. slow institutional collaboration;
6. low flexibility including in communication;
7. reluctance to more open collaboration;
8. a regional development agency (NERDA) considers that research centres should be:
  - a) more proactive towards valorisation of their knowledge capital and of the results of their research and
  - b) more involved in their relation with society and in particular with industry and in the regional development.

### ***Institute of Physics, Academy of Sciences of the Czech Republic***

There are several parameters which influence negatively the cooperation with research centres. The main problem is that cooperation project and applied research are often not the priorities of researchers. The private sector and research centres often have different expectations about project outputs and what is suitable for market.

Here is list of mentioned obstacles:

- different priorities of research organizations – basic research, impact articles outputs, scientific prestige
- only formal cooperation with private partners because of project;
- lack of financial resources
- rigidity of organizational structure of research centres,
- personal interests over collective values, internal affairs ,
- unreliability: deadline of deliverables, project implementation
- unclear IPR policy for product launch,

### ***FH JOANNEUM GESELLSCHAFT M.B.H.***

Many companies see an obstacle to cooperation and understanding. Others doubt the different objectives. It is often difficult for companies and research centres to stick to the timetable. An obstacle could also be the fact that research centres are sometimes not immediately available or give the time to find the right topics. Research centres are often not business-oriented or cooperation requires high costs. However, there are also companies which have no doubts in cooperating with research centres.

### ***Institution for development of competence, innovation and specialization of Zadar County***

Obstacles in collaboration intermediaries with research centres are mostly not mentioned or surveyed interminidaries claimed that there are not any. Those who think that there are problems claim that there is not enough transfer of knowledge and technology from research centres to business sector and that emphasis is put on R&D activities but with no real market outputs.

## **UNIVERSITY OF MARIBOR**

Obstacles in collaboration of intermediaries with research centres are mostly mentioned as:

- Size of the agency (if the agency is small),
- In many cases research centres don't commercialize inventions and knowledge,
- Unavailability of current research activities,
- Research organisations doesn't show interest to find out what are needs in the market,
- Administrative tasks take too long,
- Time and financial consuming.

### ***Magurele High Tech Cluster***

From the point of view of the intermediaries these are the main obstacles in the cooperation with the research entities:

- The financial aspects
- More project dedicated to the applies research
- Internal bureaucracy of the research centres and the governmental entities
- How the public entities may finance the research activities and not only.

There are fewer obstacles identified by the intermediaries than by other actors of this sensitive market. Maybe, the intermediaries having a larger picture of the market may do better comparisons between different actors and the research centres have are receiving a better assessment.

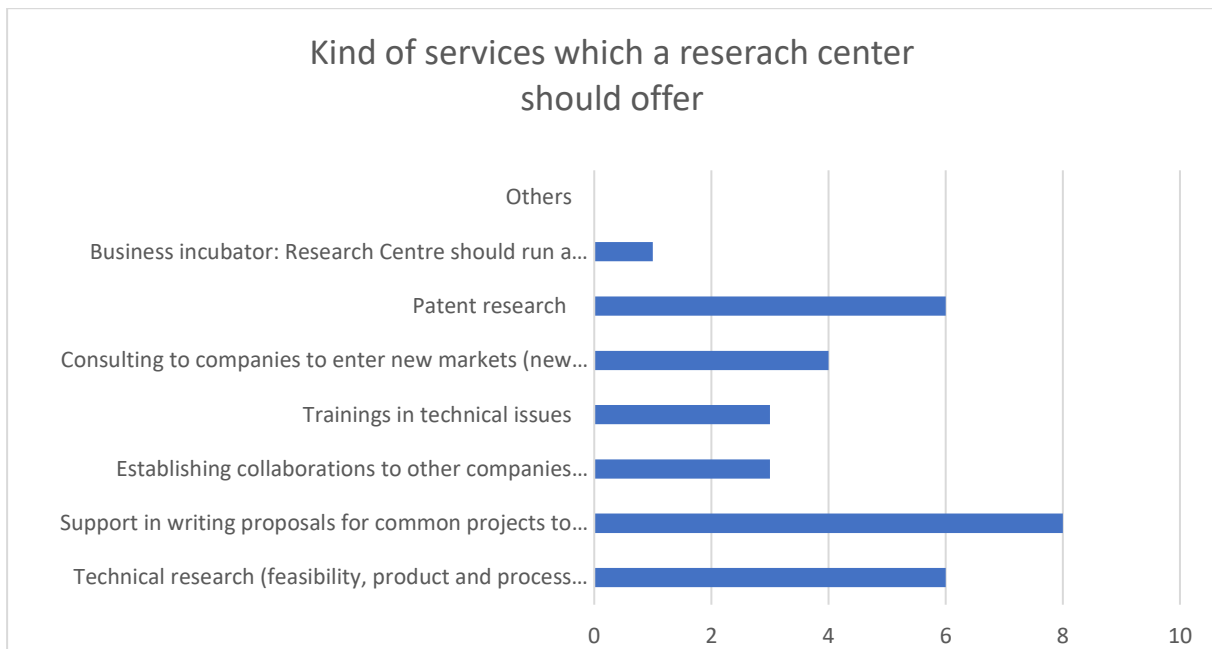
### ***Central Bohemia Innovation Centre***

Some companies see as obstacle a lack of focus on commercialization or a lack of information. Other companies see obstacles in working together with research centres and a problem with different motivation. An obstacle could be the classification of intellectual property (patent rights). Many companies see an obstacle in cooperation and understanding. Others doubt a lack availability of financial resources or different administrative requirement for asking and getting projects or rigid relevant low flexibility of programme, the workload of the staff of research institutions, administrative difficulties and administration of grants from public budget, dependence on EU or national funding. An obstacle could be the rigidity as regards their organisation structure, personal interest over collective values, timing of deliverables to name some of the most important or different way of thinking, especially with deadlines and usability for outputs for real business.

Research centres are often not business-oriented or cooperation requires high costs. However, there are also companies which have no doubts in cooperating with research centres.

#### 4.2.9 Kind of services which a research centre should offer

**ELI-HU Nonprofit Ltd.**



Most of the responders said that they need help from research institutions in writing proposals for common projects to get funding. This data shows how grant oriented are the cooperations in the region. On the second place, we can find more relevant activities in the case of cooperation with research institutions: patent and technical research. Consulting, trainings and establishment of other cooperations also appear significantly in the sample.

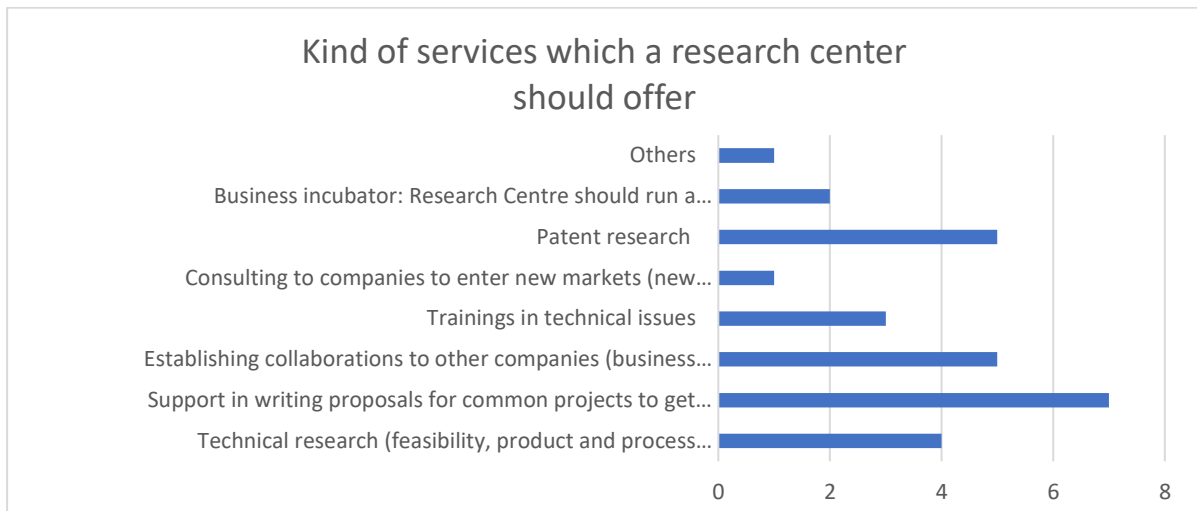
From the answers for the questionnaire stands out that the main issue regarding cooperation is the financing. Most of the organizations do not have financial sources to implement common projects and when they do it they apply for national and EU funds. On the one hand this is not good for the sector but on the other hand this process gives the opportunity to the government or to the EU to enhance effective cooperations with deliberate and relevant policies.

Secondly the economic environment such as administrative issues, business attitude should be improved in public institutions. It is also a big problem that cooperation between different actors does not have a tradition in Hungary, but it will be a long-term process to improve this kind of point of view.

#### **Main findings**

1. Financial situation is a key factor. Many actors start cooperation because of financial support of these kind of projects.
2. Better economic environment is needed. This means reducing of bureaucratic burdens, better administrative systems.
3. Cooperation does not have a tradition in Hungary.
4. The organizing of work is really different between public and private institutions which makes the cooperation harder.

## Development Agency of Serbia



Most of the responders say that they need help from research institutions in writing proposals for common projects to get funding- 25% of them. Establishing collaborations to other companies and Patent research are also highly appreciated with more than 17% for each category. Consulting to companies to enter new markets seems to be not that important- 3.5%.

## Central Transdanubian Regional Innovation Agency Nonprofit Ltd.



The bar chart shows most partners want patent research. Five out of ten want consulting's to companies to enter new markets and establishing collaborations to other companies and technical research. Four out of ten intermediaries want a business incubator this means that research centers should run a business park and business incubation system. Three out of ten wants training in technical issues whilst two out of ten wants to establish collaborations to other companies.

## Conclusions and summary

The intermediaries cooperation with research centres are high, and it mainly funded by national co-financed sources. This kind of cooperation gives satisfaction to intermediary which may require further common projects. The most important thing of this kind cooperation is cost. It can be said sometimes the cooperation depend on it. I think it is a typical Hungarian attitude, that we approach the problem

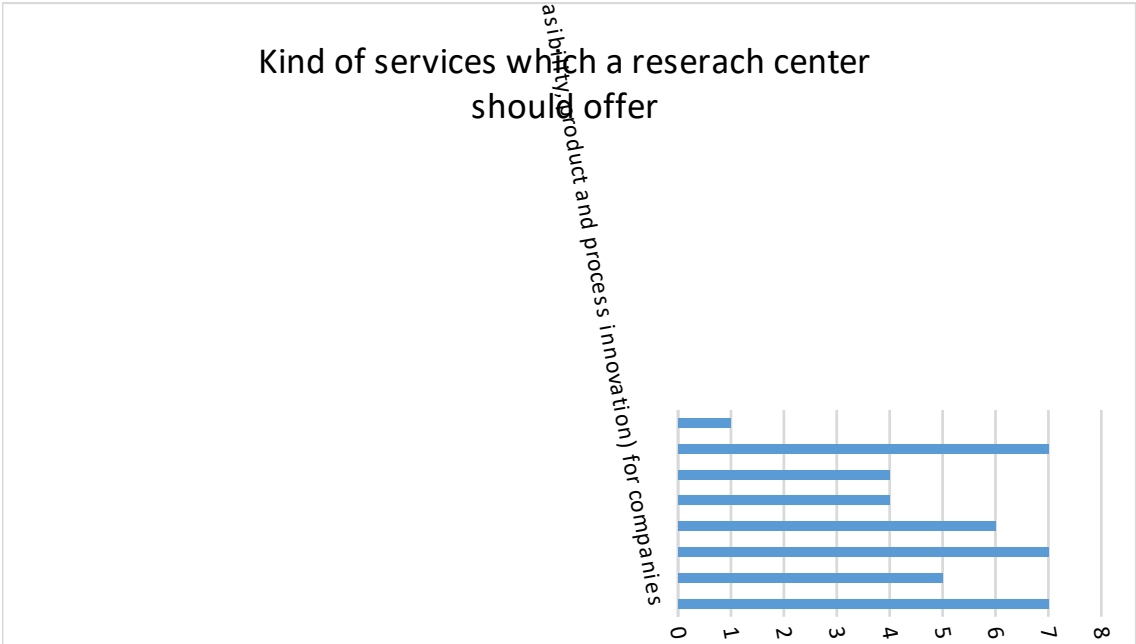
from cost side and not from the added value and a usefulness side. Confirm this statement that the quality of outputs it's only a factor.

When we analyse the kind of the services we can conclude that three main activities offered by research centres. (Patent research, Consulting to companies to enter new markets and Technical research for companies.) The patent research and technical research are typical service forms which appear on the supply side of RCs.

**Main conclusions**

- Cooperation between intermediaries and RC are existing but depend on the cost.
- Cooperation funded by national and EU's sources.
- Quality of the outputs inly a factor.

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



The intermediaries' expectation on the services the research centres should offer them are predominantly linked with research, collaboration and incubators (7 each).

Also high figures were illustrating the hope for more training (6) and project proposals (5).

Consultation and patent research with 4 nominations each are considered an expectation with remarable cooperation potential.





The feasibility studies and technical research were the most requested services from research centres. The private sector often does not have the capacity for the competition analyses, technical search and feasibility analyses of new technologies. This expert feedback could give the competition advantage on market.

The preparation of joint project proposal was an another service which could research centres provide to the Intermediaries. Intermediaries always need some project partners into the most of project so they need to find them. Intermediaries also see the possibility of cooperation on networking activities provided by research centres. This is because the networking is the main business of intermediaries, so they are supposed to request these services.

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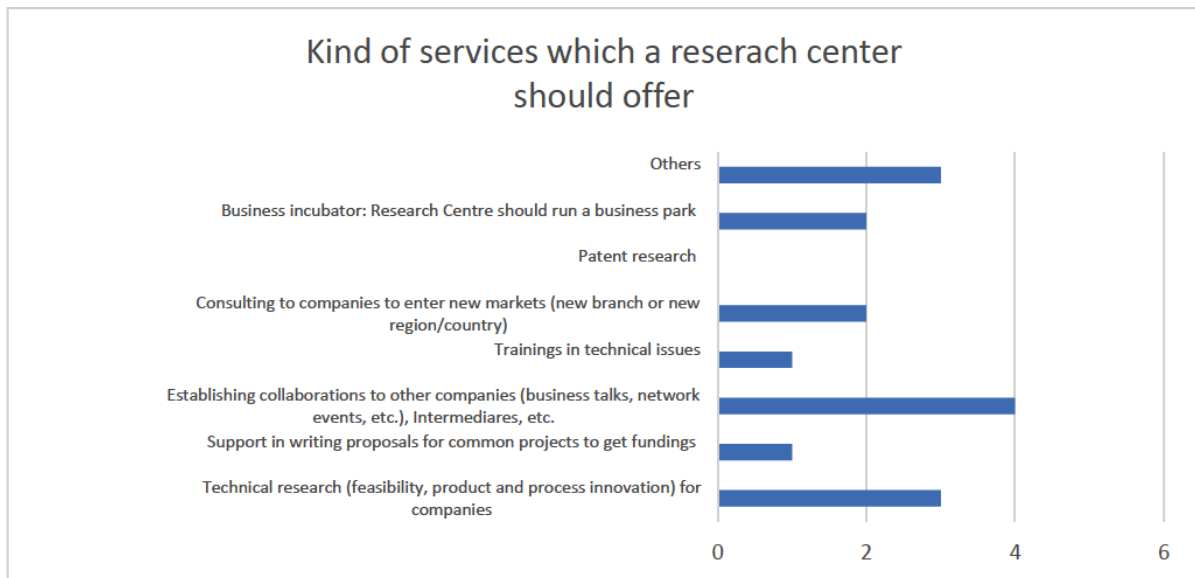


The bar chart shows most companies want a service about technical research (feasibility, product and process innovation). Six out of eleven want consulting's to companies to enter new markets and establishing collaborations to other companies. Five out of eleven intermediaries want a business incubator this means that research centres should run a business park. Patent research and support in writing proposals for common projects to get funding's held a share of three of eleven. Two companies would like to get trainings in technical issues and one company want another kind of service.

***Institution for development of competence, innovation and specialization of Zadar County***

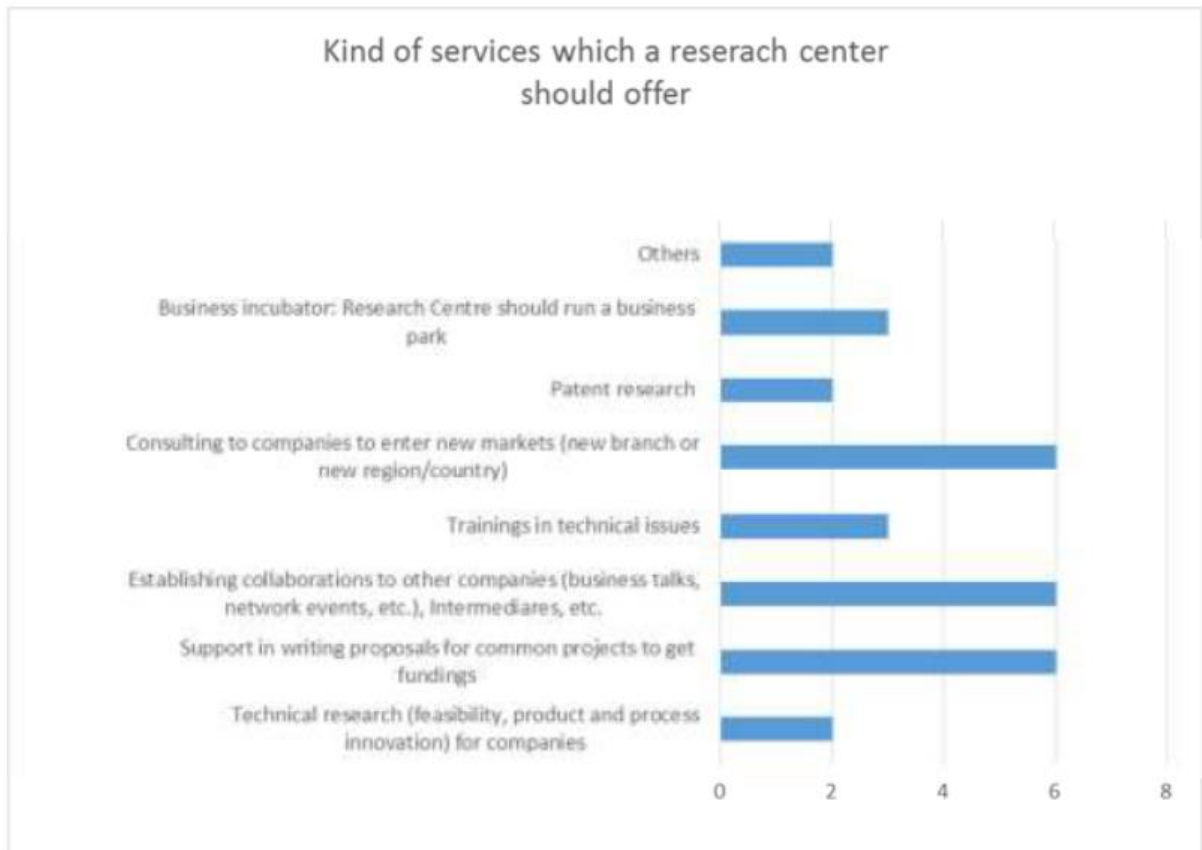


The bar chart shows what kind of service intermediaries need form research centres. 5 out of 13 have need for technical research (feasibility, product and process innovation) and establishing collaborations to other companies (business talks, network events, etc.). 4 out of 13 need support in writing proposals for common projects to get funding and trainings in technical issues. Patent research service needs 2 intermediaries and 3 of them would like consulting services to enter new markets (new branch or new region/country). Apparently, no one needs Business incubator.



The bar chart shows what kind of service intermediaries need from research centres. 4 out of 7 have need for establishing collaborations to other companies (business talks, network events, etc.), followed by technical research (feasibility, product and process innovation) and others, equally (3 out of 7). 2 out of 7 expressed need for consulting services to enter new markets (new branch or new region/country) and business incubator. 1 out of 7 would like to have trainings in technical issues and support in writing proposals for common projects to get funding. Apparently, no one needs Patent research.

**Magurele High Tech Cluster**



The intermediaries are using the research centres as the second level of intermediaries with the business companies. This approach is proving that the research centres are operating as driving force in the innovative market. The scientific and technical expertise of the research centres are not seen as so important for the market by the intermediaries as their capability to develop connection with the companies and with the new markets.

**Central Bohemia Innovation Centre**



The bar chart shows most companies want a service about technical research (feasibility, product and process innovation). Ten of thirteen intermediaries want establishing collaborations to other companies. Six of thirteen want consulting to companies to enter new markets and patent research and support in writing proposals for common projects to get funding and technical research. Four of thirteen intermediaries want a business incubator this means that research centres should run a business park. Four companies would like to get trainings in technical issues and two companies want another kind of service.

The message from JIC: The focal role of research centres in the regional ecosystem is to develop and disseminate knowledge.

And from TC AV: spreading information related to EU research, involvement in EU research.

## 5 COOPERATION OF NGO'S WITH RESEARCH CENTRES

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### 5.1 GENERAL

#### 5.1.1 General description of the NGO's

##### ***ELI-HU Nonprofit Ltd.***

1. Csemete Természetvédelmi és Környezetvédelmi Egyesület – environmental protection
2. ELSA – association of law students
3. Impro Művészeti és Oktatási egyesület – art and education
4. Junior Achievement Magyarország – business support organization
5. Regionális Média és Művészeti Alapítvány – media and art
6. Szegedi Floorball Egyesület – sport
7. Sziti Kulturális és Mentálhigiénés Egyesület – culture and mental health
8. Tappancs Állatvédő Alapítvány Szeged – animal protection

The main role of the NGOs is not to participate directly in the R&D&I process but to improve the mostly the social but the economic and natural environment as well. Several research revealed that the inclusive society facilitates the dissemination of the results of the innovation processes. The quality of life and social innovation are key factors because it makes a place more attractive for companies, researchers or skilled workforce in general.

There are several possibilities in the NGO's network however the integration of these organizations into the decision making process should be improved. The NGO's are more concentrated in larger cities. From this aspect Szeged is an important centrum, the university and the significant number and proportion of people with higher education creates a strong background. As it was mentioned before the tacit added value is more important of these associations. It would be hard to find high number of NGOs can and want to participate in innovation but associations organized along different kind of everyday activities also play important role in improving the social capacity of the Southern Great Plain.

### ***Development Agency of Serbia***

1. Cluster of rural tourism "The magic of the East"- Association of citizens, established to achieve goals in the development of rural and eco-tourism in eastern part of Serbia (<http://www.carolijaistoka.com/>)
2. **Association "The spirit of Balkans"** is a non-profit organisation for conservation of cultural heritage of eastern Serbia
3. **The Economic Innovation and Development Center of the Danube** is a non-profit organisation that contributes to the innovation and development of the economic system in all segments of economic business activity, as well as in scientific sense
4. **Innovative cluster of ecology and environmental protection** is a national association established in order to achieve the goals and tasks from the applied ecology, especially in the field of environmental protection and sustainable development
5. **Innovative cluster of energy efficiency and renewable energy sources** is founded to promote the use of ecological energy and to disseminate knowledge about the availability, benefits and social, ecological and corporate benefits of adequate exploitation of renewable energy sources
6. **Institute for Cross-border Areas** is aiming to reduce local, regional and cross-border socio-economic disparities in remote areas (<http://www.ipp.rs/eng/index.php/ipp>)
7. **Civic Library "Libergraf"**- established to raise public awareness, inform and train about the importance of air & water pollution, soil contamination, biodiversity protection etc. (<http://www.libergraf.rs>)
8. **The "Manifesto" association**- non-governmental and non-profit association, founded in order to achieve goals in the field of promoting and organizing manifestations as a way of raising tourism competitiveness
9. **Association „Sveza"**- founded as a non-governmental and non-profit association whose goal is research, realization of projects and support in the areas of human rights and civil liberties and their economic empowerment, as well as the right to a healthy environment ([www.sveza.org](http://www.sveza.org))
10. **Association „Timeka"** is non-profit civic association focused on sustainable development
11. **Timok Youth Center – TOC** is non-political, non-profit, non-governmental civil society organization, set up in order to achieve its mission to actively work on the **increase of the development of the civil society in Serbia, with a special focus on youth** ([www.toc.rs](http://www.toc.rs))
12. **Association of Business Women in Serbia** - well-known and respected partner in public-private dialogue, contributing to social and economic development, with a special focus on female entrepreneurship as a factor of economic growth ([www.poslovnezene.org.rs](http://www.poslovnezene.org.rs))

### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

Number of NGO is high in Hungary but the number of those that are significant is minor. That's why we surveyed those NGOs who are important actors in the regional economy and in the local everyday. They are not directly involved in scientific activities, but their support function is necessary in these processes. Main of the NGOs are find in the biggest towns like Székesfehérvár, Veszprém etc. where they can better evolve their activities.

Most of the asked NGOs are interest representations (No2., No4., No8. No7.) organizations. They main activities are make contact between the represented people or other organizations and government and leader of company.

Another important NGO is the talent supporter organizations (No3. No10.) Their main objectives are support talent students with scholarships. It helps student to carry out their own qualifications and scientific activities. Scientific union (No9.) focus on one specific field of science and it union of important scientist of that field. It usually supports their scientific activities with scholarships. Organization developer (No1) helps other organizations with their organization development work using state-of-the-art technological solutions and tailor-made services to achieve their mission. Entertainment associations (No5., No6.) offers mainly sports opportunities.

Name of the surveyed NGOs:

1. Civil Centrum Public Benefit Foundation
2. Regional Alliance of Civil Organisations
3. Foundation for Higher Education of Dunaújváros
4. DUNAFERR DV Trades union congress
5. DUNAFERR (Sport) Club
6. Tourism Association of Dunaújváros
7. Echo Innovation Workshop
8. Association for Rural Tourism of Fejér county
9. Regional development Science Association
10. Foundation for engineer education in Veszprém

### ***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***

- ACCES Oltenia, Association for economic and social consulting and counselling, is a non-governmental organisation promoting social, economic, cultural and educational development in Oltenia region;
- CRCA, Active Citizenship and Resources Centre Association, is an NGO promoting active behaviour of citizen in using local resources;
- INIMM, National Institute for SMEs Development through Research and Innovation is a private research centre focused on SMEs' development using RDI;
- FJCR, Federation of Jewish Communities in Romania, is a non profit, apolitical organisation, a legal person of public utility, a mosaic worship, ethnic, cultural and educational entity with a religious profile;
- Excelsior, Excelsior Association for excellence in education is an NGO promoting high quality education;
- RPS, Romanian Physical Society, is an independent, democratic NGO of high professional competence;
- ARERA, Romanian Association for rural, agricultural and food economy focused on economic issues in these fields;
- Ecology and Tourism association Braila is an NGO focussed on tourism and ecology in Braila County;
- Ecology and Tourism association Galati is an NGO focussed on tourism and ecology in Galati County;
- Ecology and Tourism association Oituz is an NGO focussed on tourism and ecology in Constanta County;

### ***Institute of Physics, Academy of Sciences of the Czech Republic***

We asked several type of NGOs – museums, association and generally beneficial organizations. These NGOs are from many specific branches or areas – environmental, social, regional development etc. NGO sector is typical for wide variety of specialization.

See the list below:

Subsidied organization – culture, museum

Association, Membership based – environmental, health care, local development, science popularization, culture + environmental + social, science policy and evaluation

Generally beneficial organization (o.p.s.) – regional development, science centre (education), education

### ***FH JOANNEUM GESELLSCHAFT M.B.H.***

*Impulsregion Fūstenfeld is kind of association NGO and belongs to location development sector. Homepage: [www.impulsregion.at](http://www.impulsregion.at)*

1. E.N.T.E.R. is an education, consulting and marketing NGO. E.N.T.E.R. is part of consulting line of business. Homepage: [www.enter-network.eu](http://www.enter-network.eu)
2. GründerInnenzentrum für Menschen mit Handicap is a kind of charitable association NGO. The main sector they belong to is social work activities. Homepage: [www.chance.at](http://www.chance.at)
3. CPC Austria is a private NGO which belongs to the environment and sustainability industry. Homepage: [www.cpc.at](http://www.cpc.at)
4. Auxilium is a kind of non profit association NGO in the field of education, training, regional development and research. Auxilium is part of education and training sector. Homepage: [www.auxilium.co.at](http://www.auxilium.co.at)
5. ROW-Regionalmanagement Obersteiermark West GmbH is a company with limited liability NGO. The main industry they belong to is the intermediate institution. Homepage: [www.row-gmbh.at](http://www.row-gmbh.at)
6. Regionalmanagement Südweststeiermark GmbH is a regional development agency NGO and belongs to regional development, EU-funding and consulting sector. Homepage: [www.eu-regionalmanagement.at](http://www.eu-regionalmanagement.at)
7. Regionalmanagement Obersteiermark Ost GmbH is kind of regional development agency NGO. This NGO is part of the service line of business. Homepage: [www.obersteiermark.at](http://www.obersteiermark.at)
8. IZB HAK Mürzzuschlag is an education and development NGO and belongs to education and research and development industry. Homepage: [www.hak-muerz.at](http://www.hak-muerz.at)



### ***Institution for development of competence, innovation and specialization of Zadar County***

1. **Croatian wood cluster** is registered as an NGO. Members of cluster are companies from wood processing industry focused on applying innovations and strengthening impact of different types of education ([www.drwniklaster.hr](http://www.drwniklaster.hr))
2. **Association BIOM** is a national grassroots non-profit organisation for nature conservation ([www.biom.hr](http://www.biom.hr))
3. **Croatian cluster competitiveness of the automotive sector** is a non-profit organisation – cluster that stimulates networking and stronger member cooperation from private, public and science and research sectors. (<http://www.aik-invest.hr/en/competitiveness/automotive-industry/foreword/>)
4. **“Društvo istraživača mora – 20 000 milja”** is a national non-profit environmental association that consists of marine explorers who are dealing with Marine ecosystem protection, Science projects and programs and Sustainable use of natural resources (<http://www.drustvo20000milja.hr/>)
5. **Association for rural development “Ravni kotari”** is non-profit organisation for rural development, environment protection promotion of rural tourism and agriculture (<http://udrugaravni-kotari.hr/>)
6. **Jadranski pomorski klaster** - The Adriatic Maritime Cluster is an association of public and private subjects that represents mutually connected crafts, firms and institutions that have common aspirations and a clearly defined mission of their activities (<http://maritimecluster.eu/>)
7. **Croatian Maritime Industry Competitiveness Cluster** - fosters the development of projects within specific areas in maritime industry, promoting innovation and competitiveness ([www.marc.hr](http://www.marc.hr))
8. **Jadranski klaster ICT** - Promotes and supports ICT companies and their effective development of tools for the implementation of innovative solutions in the economy (<http://www.ictcluster.eu/>)
9. **Eko-Zadar** is NGO for promotion of organic farming, enviromantal protection and sustainable development ([www.ekozadar.hr](http://www.ekozadar.hr))
10. **“Novigradska dagnja”** is the shellfish breeders' association which consists of shellfish farm producers. (Gornja Otišina 21, 23 240 Kruševo, Hrvatska)

### **UNIVERSITY OF MARIBOR**

NGOs that participated in our survey are listed in table below:

No.	Name of the company	Branche
1.	Hiša! Društvo za ljudi in prostore so.p	Culture, urbanism, culture heritage, social sciences and anthropology, volunteering
2.	Inštitut Antona Trstenjaka	Social security
3.	Sensei	Sport and culture
4.	E-Zavod	Business and entrepreneurship
5.	Zavod za inovativnost in podjetništvo	Business and entrepreneurship
6.	Športno društvo Center Maribor	Sport
7.	ISCOMET	Social sciences
8.	Ekološko-kulturno društvo za boljši svet	Education, ecology and culture

### ***Magurele High Tech Cluster***

1. Foundation for Democracy, Culture and Liberty, Nongovernmental Body, socio-economical
2. Foundation for Democracy, Culture and Liberty, Calarasi Branch, advanced technology transfer
3. CO2 Club Association, socio-economical
4. IND-AGRO-POL Association, Agro-Industry
5. Transparency International Romania, fight against corruption
6. APROMECA, mechatronics
7. ASSOCIATION FOR DEVELOPEMENT OF THE BUSINESS ENVIROMENT OLTENIA – ADMAO, business support
8. Asociatia Centrul de Resurse pentru Cetatenie Activa, social
9. National Institute for Small and Medium Sized Enterprises in Romania, Private Research Centre focused on SMEs development through research, development, innovation.
10. Romanian Association for Technology Transfer and Innovation (ARoTT), professional, nongovernmental and non-profit organization of technological transfer and innovation.

### ***Central Bohemia Innovation Centre***

The Healthy Cities of the Czech Republic (HCCZ) is presently the only association of Czech municipalities that stipulates in its statutes to consistently work towards sustainable development, health, and the quality of life in cities, municipalities and regions of the Czech Republic. Kind of NGO: Municipal association. Branch: Regional development - sustainable development, health & quality of life. Homepage: [www.healthycities.cz](http://www.healthycities.cz)

The ŠKODA AUTO University was founded in 2000 as the first and the only company university in Czech Republic. Its founder is ŠKODA AUTO, seated in Mladá Boleslav, is one of the most important and most dynamically evolving companies in the Czech Republic and one of the largest brands of the Volkswagen concern. Kind of NGO: Private University. Branch: Education and research. Homepage: [www.savs.cz](http://www.savs.cz)

The LAG Dolnobřežansko: Local action group (abbreviated LAG) is a community of representatives of companies, municipalities, non-profit organizations and other entities that combines the interest in the development of a particular territory. The LAG's advantage is that it works "from the bottom", meaning that the region's development initiative is based on its inhabitants. Kind of NGO: non-profit. Branch: regional development. Homepage: [www.mas-dolnobrezansko.cz](http://www.mas-dolnobrezansko.cz)

The Czech Confederation of Commerce and Tourism is top, independent, voluntary and a lobby organization of associations of big retail a distribution companies, consumer co-operatives, groups of independent retailers and franchise networks, small medium enterprises in the commerce and hospitality sector, tourism and related services etc. Kind of NGO: employer's association (independent and voluntary confederation of associations and companies operating in retail, captivity, accommodation, etc. Branch: commerce and tourism. Homepage: [www.socr.cz](http://www.socr.cz)

The local action group SVATOJÍŘSKÝ LES is an association that was founded in April 2006 and currently has 44 members. The position of the LAG among other non-profit organizations is quite unique. It includes both public and private sector experience, business and nonprofit subjects. Kind of NGO: LAG – local action group. Homepage: [www.svatojirskyles.cz](http://www.svatojirskyles.cz)

The local action group Brdy-Vltava is the facultative body of the public benefit organization Brdy-Vltava. It operates in the Central Bohemian Region in the territory of the Dobříšsko and Novoknienska Association and the Union of Municipalities of Central Povltaví. Kind of NGO: non-profit organisation which coordinates the development of the Brdy-Vltava region in all areas, develops and promotes the tourism potential of the Brdy-Vltava region, etc. Homepage: [www.brdy-vltava.cz](http://www.brdy-vltava.cz)

The Non-profit organization LAG Podlipansko has the aim to support environmental, economic and social development of the region Podlipansko, also implementation of several projects funded by EU and other sources and helping local subjects with the preparation of projects financed by the EU programmes. Kind of NGO: LAG — Local Action Group. Branch: Private non-profit body. Homepage: [www.podlipansko.cz](http://www.podlipansko.cz)

The National Cluster Association (NCA) brings together organizations and individuals with the purpose to coordinate the sustainable development of cluster initiatives and to develop cluster policy in the Czech Republic on the basis of concentration of knowledge, experience and expertise to strengthen the competitiveness of the CR. Kind of NGO: membership-based association (private legal entite). Branch: Regional and economic development. Homepage: [www.nca.cz](http://www.nca.cz)

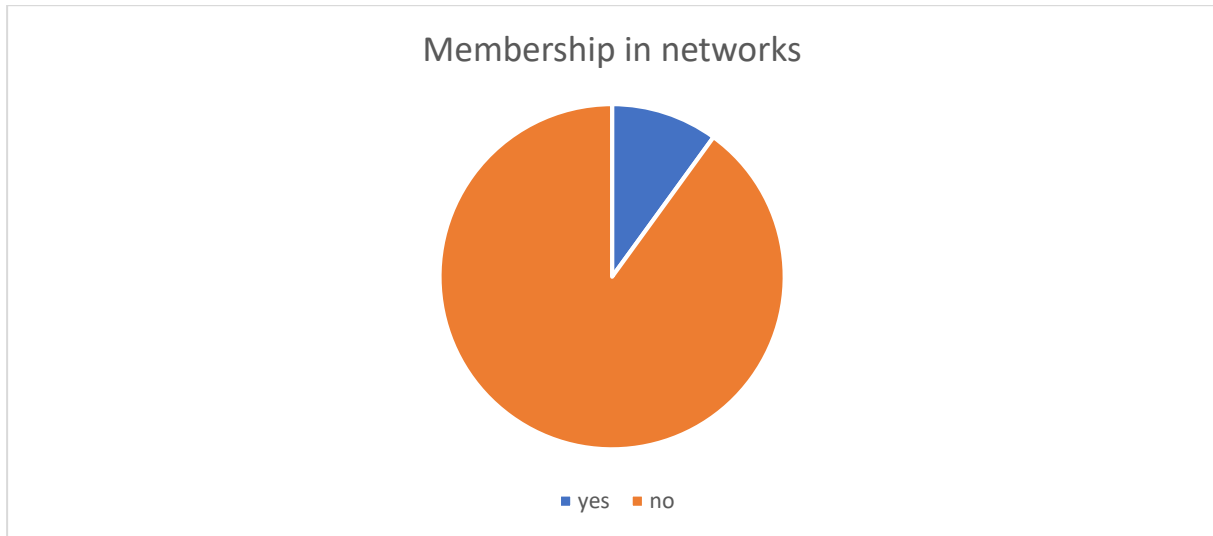
The Czechbio: the association consists of 24 commercial subjects and 5 representatives of public research institutions and universities. Branch: Biotech. Homepage: [www.czechbio.org](http://www.czechbio.org)

The Federation of the Food and Drink Industries of the Czech Republic (FFDI). Kind of NGO: federation of the food and drink industries. Branch: food and drink. Homepage: [www.foodnet.cz](http://www.foodnet.cz)

The Rakovnicko is a lag with the aim to find a way how to finance cooperation and find a common goal. Kind of NGO: Operational NGO – The main purpose of Rakovnicko o. p. s. is to control, choose and implement development-related projects for to get donation from EU Structural funds. The scope is more likely community-based, but international also. Branch: Support developing of the aspects of living in the region. That involve support of employment, rural development, social services, environment, cooperation, local production, education, tourism, and others. Homepage: [www.mas-rakovnicko.cz](http://www.mas-rakovnicko.cz)

### 5.1.2 Membership network

#### **ELI-HU Nonprofit Ltd.**



Many of the surveyed organizations replied that they are not members of any kind of networks, but the regarding the nature of these organizations the total picture is more colourful. The NGOs mostly organize their cooperation along different issues and generally speaking the willingness for cooperation is relatively high among these organizations. However the permanent cooperation should be enhanced.

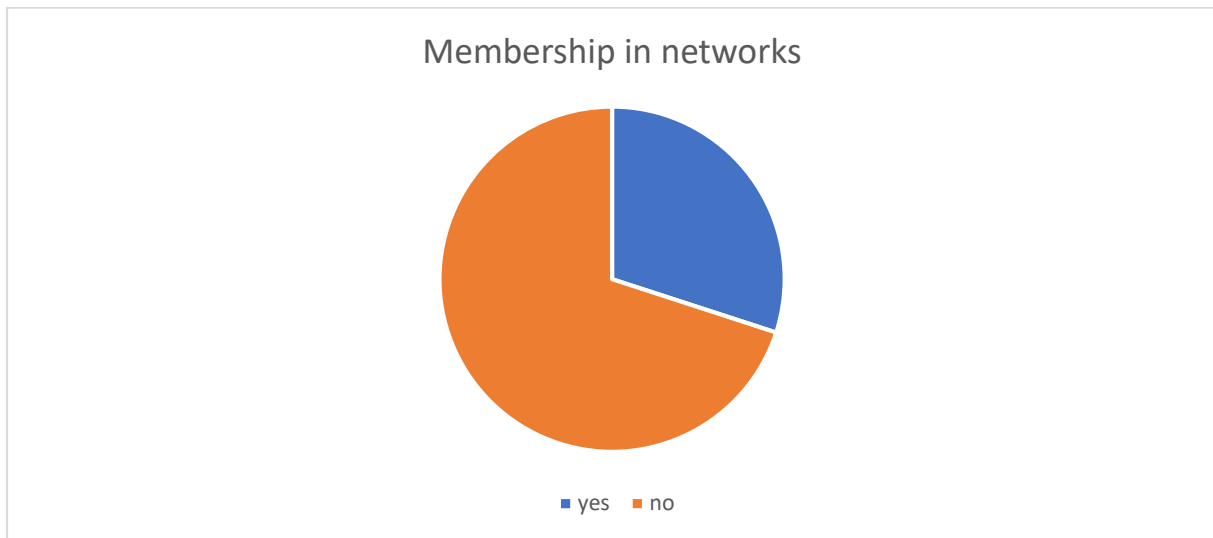
#### **Development Agency of Serbia**



Almost 60% of NGO's are members of some kind of network- they listed following networks: Serbian association of clusters, Youth council, National Association of Practitioners of Youth work.

What has to be underlined is that the majority of surveyed clusters claimed that they are a cluster member, which made this chart unreliable.

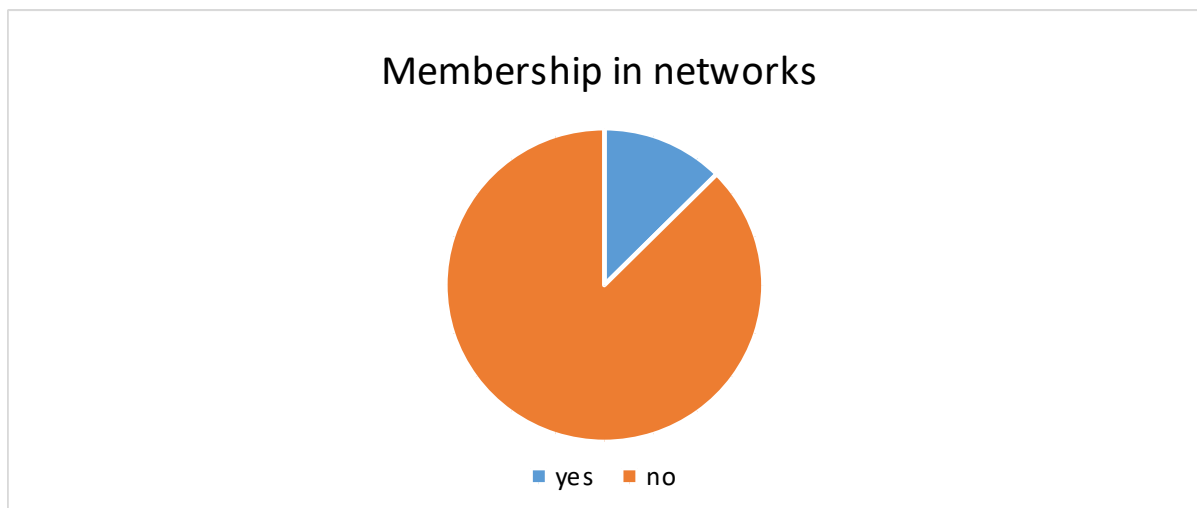
**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



70% of the surveyed NGO's are not a member of any kind of a company network. Three out of ten are members of any kind of network.

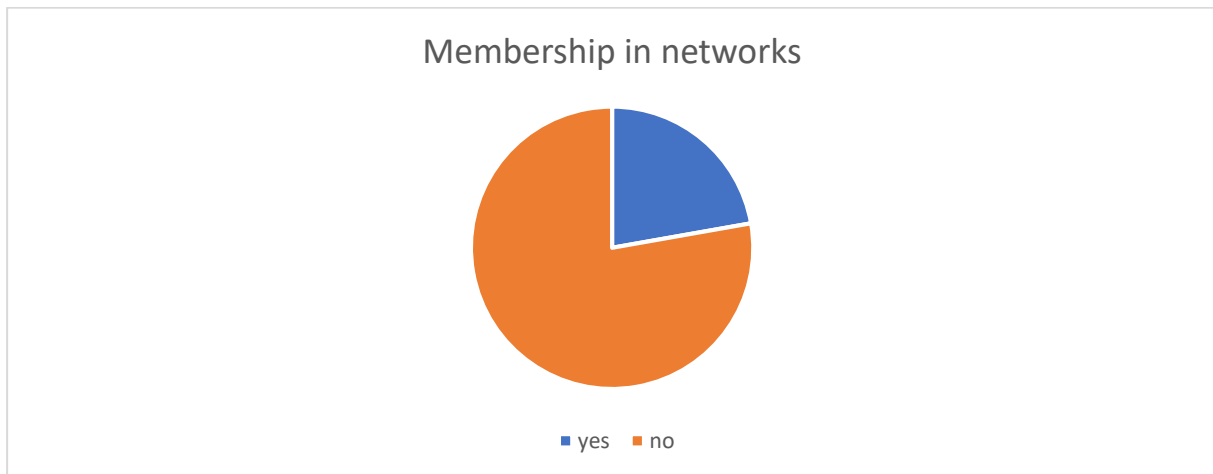
- Nóra Networking is a Labor market consultant for women.
- Hungarian football association is a national football association.
- The main field of Hungarian Touristical Agency is tourism.

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



**Institute of Physics, Academy of Sciences of the Czech Republic**

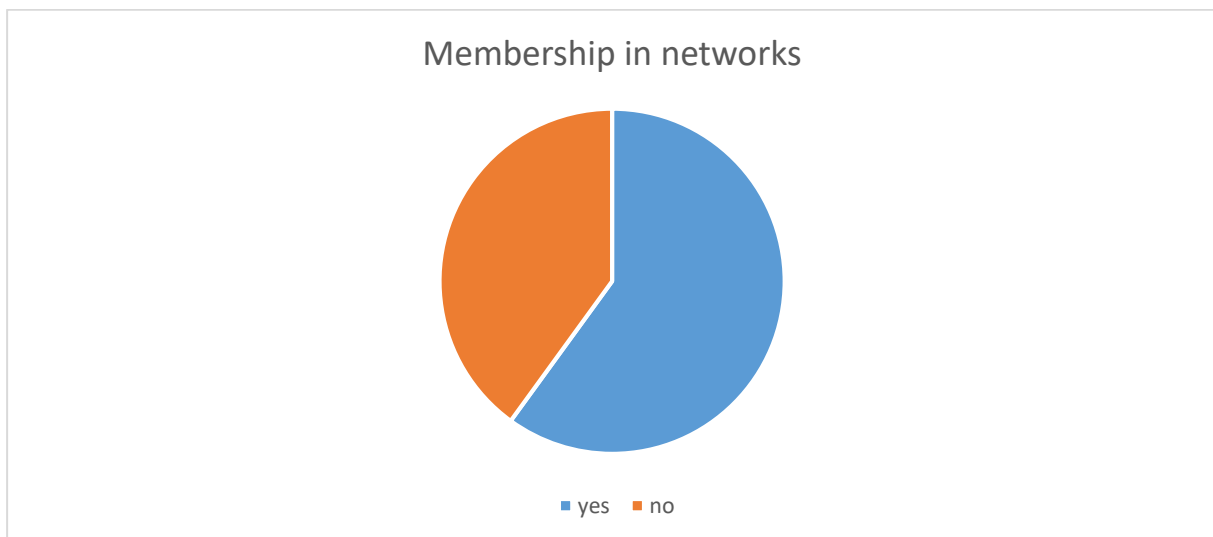
From among the 10 NGOs, only one (INIMM) is an experienced entity. The others have various degrees of experience and some of them are quite new. This may explain why 7 respondents are not members in networks and 2 chose not to answer.



78% of the surveyed companies are not a member of any kind of a company network. Only two out of nine are members of any kind of network.

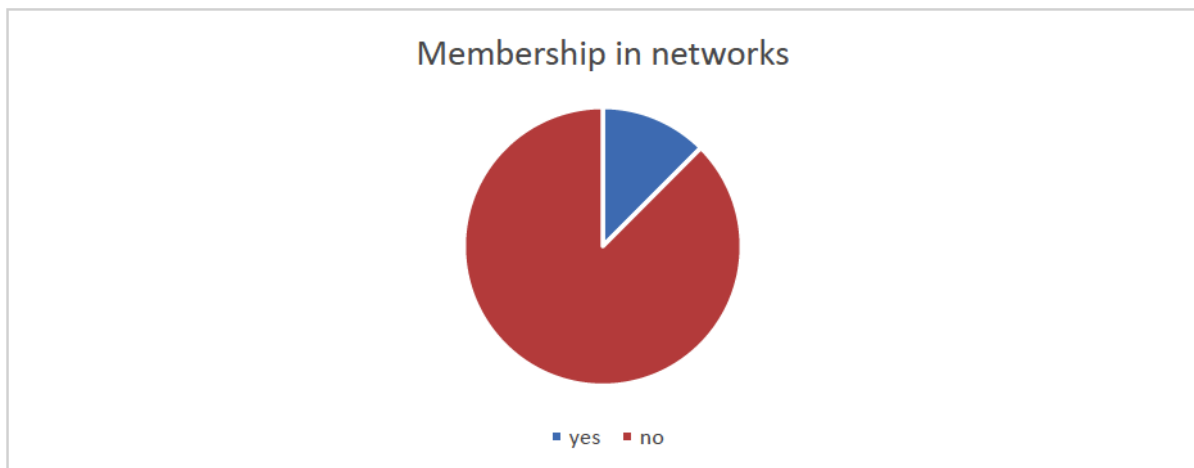
These networks are Ecoprofit Network which is an international label for technical environmental protection and is awarded to companies and individuals. Students have the opportunity to acquire the necessary environmental knowledge within the framework of their teaching and to acquire the qualifications ECOPROFIT ASSISTANT and ECOPROFIT REPRESENTATIVE and CHOC which is dedicated to promoting health & wellness by empowering, educating & advocating for our members & their families, providing access to quality health care & building trusting partnerships with our families & providers within the pediatric community.

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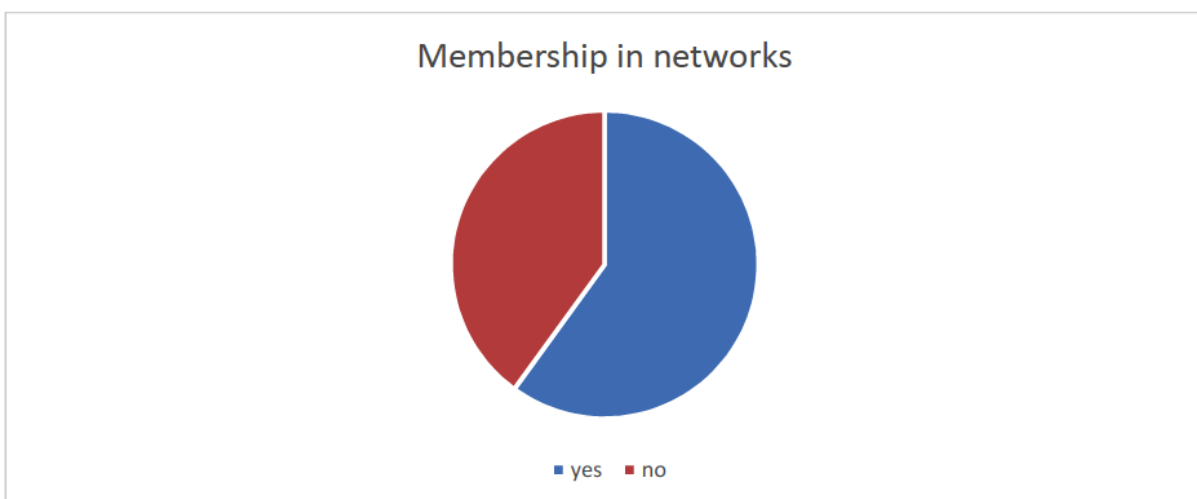
60% of NGO's are members of some kind of network. Those networks are: International Union for conservation of nature, Bird life international, Green telephone network and LAG Mareta.

Unfortunately, surveyed clusters claimed that they are a cluster member, which made this chart unrealistic.



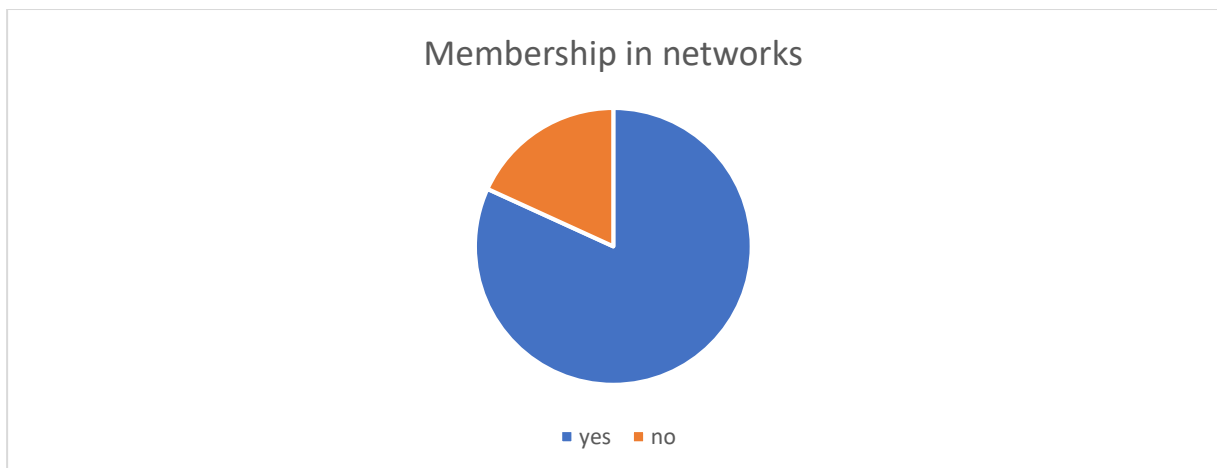
88% of NGO's are not members of any kind of network and 13% (one NGO) of NGO's is member of some kind of network. This network is called ENOLL (European Network Of Living Labs).

***Magurele High Tech Cluster***



The NGOs which answer to our questionnaire have, we may say, two characteristics: a) the majority is not technically part of any network; b) the rest of the NGOs are members in cluster networks. The non-network NGOs (let's name them so), in fact, are very active in different networks, like clusters, professional and social associations. We discuss with them and they declare that there not interested to formalise their constant cooperation with networks, especially, because of the fee they have to pay. So, the financial aspects are restraining them from networking. The network oriented NGOs are cooperating with clusters. This means, that the NGOs are business oriented, they are facilitators in clusters and the seeds for putting together competences for projects with regional, national and European funding. This conclusion is valid for the previous category, also.

### 1.1. Membership network



82% of the surveyed companies are not a member of any kind of a company network. Only two out of eleven are members of any kind of network.

These networks are:

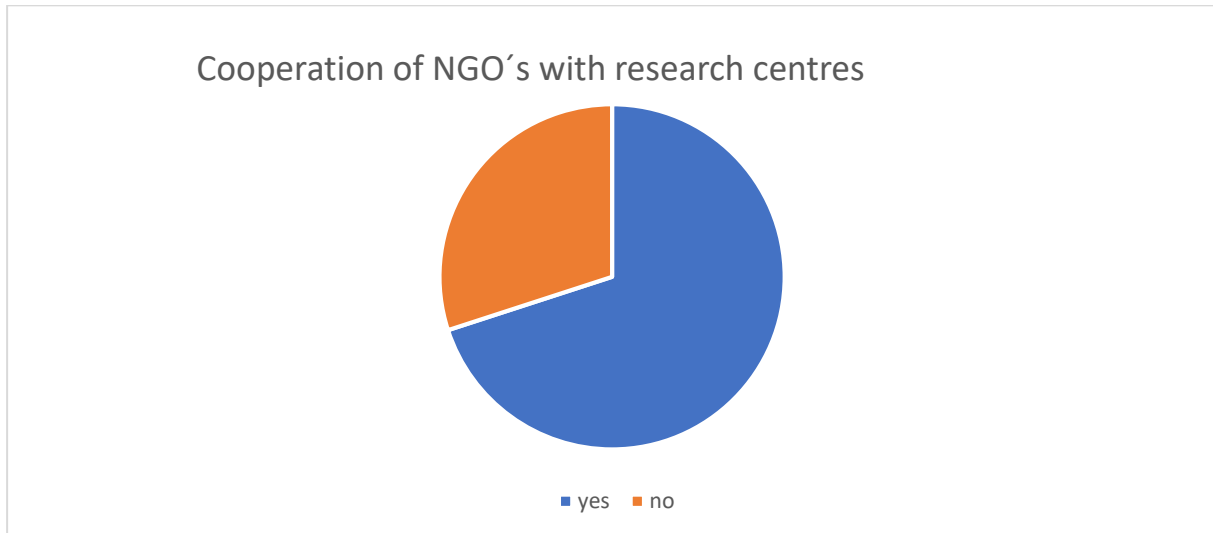
- National cluster association brings together organizations and individuals with the purpose to coordinate the sustainable development of cluster initiatives and to develop cluster policy in the Czech Republic on the basis of concentration of knowledge, experience and expertise to strengthen the competitiveness of the CR;
- Czech LAGs' possibilities of cooperation Cooperation is defined as a process of solving common problems and needs of project partners together. Cooperation projects provide added value by involving various partners with various points of view resulting in innovative solutions. Czech LAGs can obtain support for preliminary technical assistance for project preparation, ...
- Association of non-governmental and non-profit organisations of the Czech Republic;
- Association of small and medium sized enterprises and crafts of the Czech Republic;
- Tessea - Non-governmental non-profit organization, its mission is to contribute to the development of social business in the Czech Republic, with a link to regional activity;
- CSV – national rural network;
- Platform of NGO development;
- Czech Economic Society;
- Czech Logistics Association;
- AUTO-SAP;
- Euro Commerce;
- cooperation with CEBRE;
- Confederation of Industry of the Czech Republic;
- Czech Chamber of Commerce.



## 5.2 DESCRIPTION OF THE COLLABORATION OF NGO'S WITH RESEARCH CENTRES

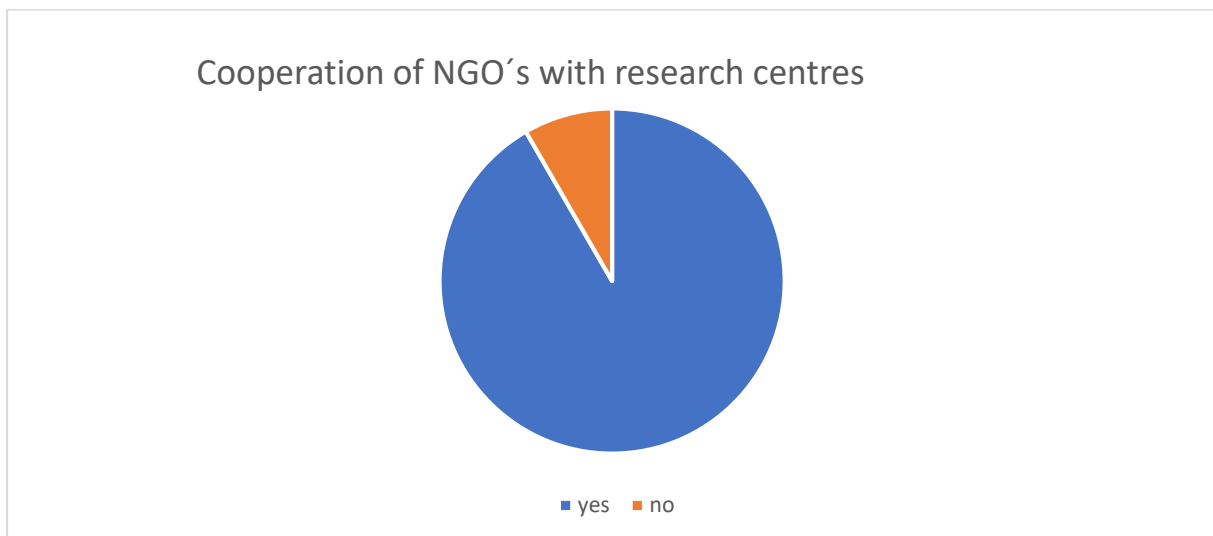
### 5.2.1 Cooperations of NGO's with research centres

#### *ELI-HU Nonprofit Ltd.*



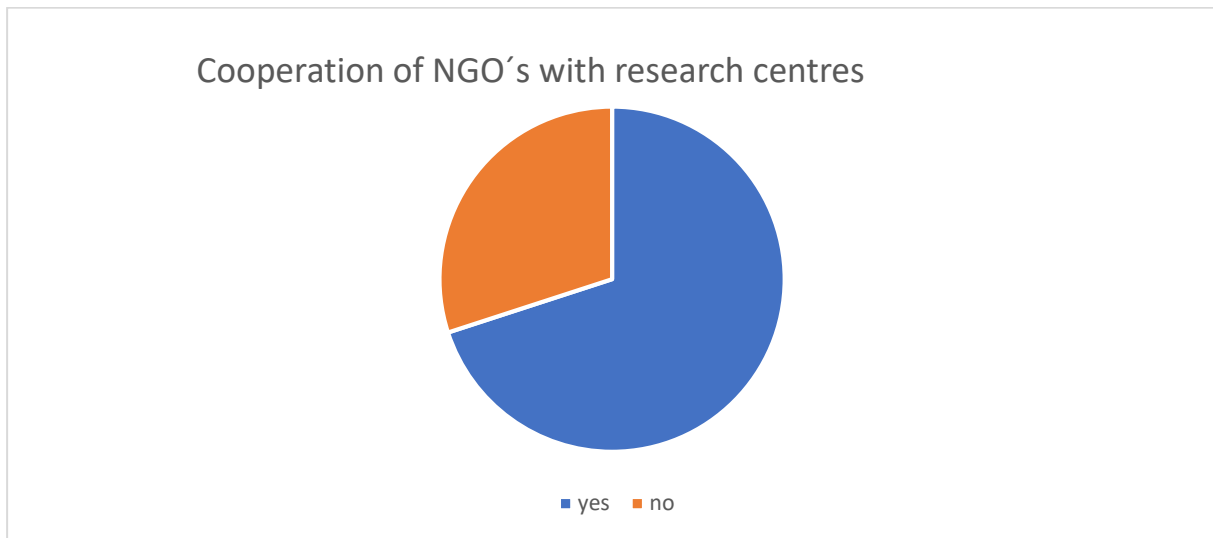
More than half of the asked NGOs responded that they have some kind of cooperation with research centres.

#### *Development Agency of Serbia*



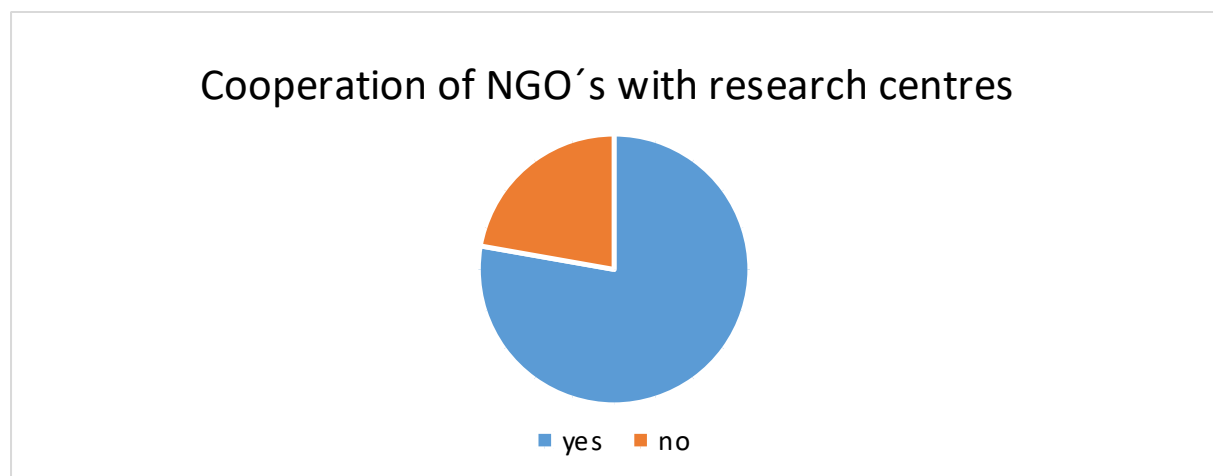
Only one surveyed NGO stated that they haven't established cooperation with research centres.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



These parts of the pie chart show the cooperation's of NGO's with research centres. It shows that more than half of the sample NGO's are working with research centres. 30% do not have a cooperation with research centres.

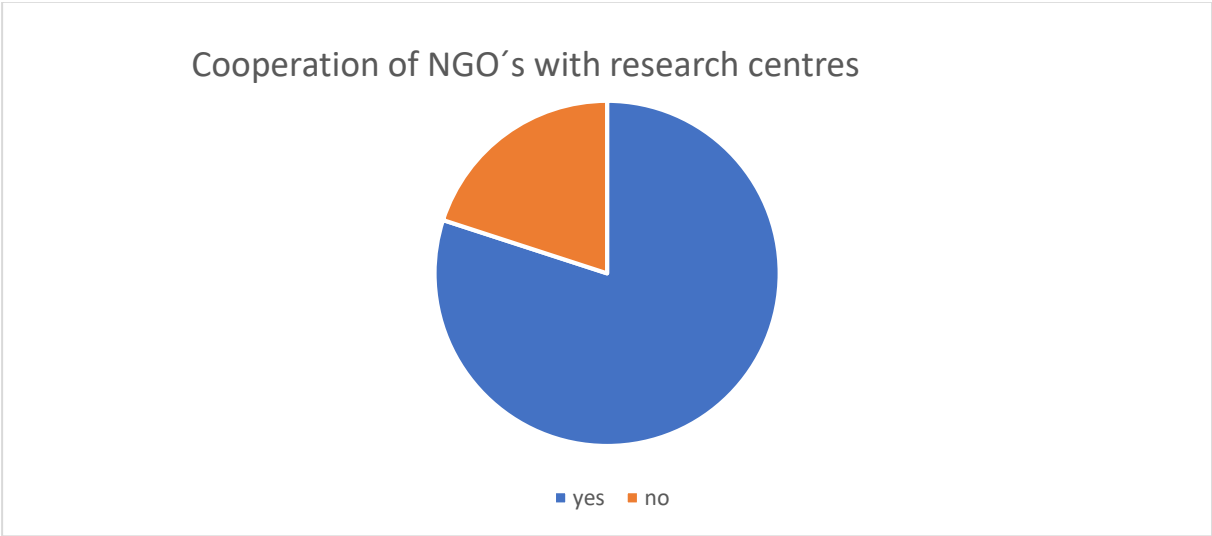
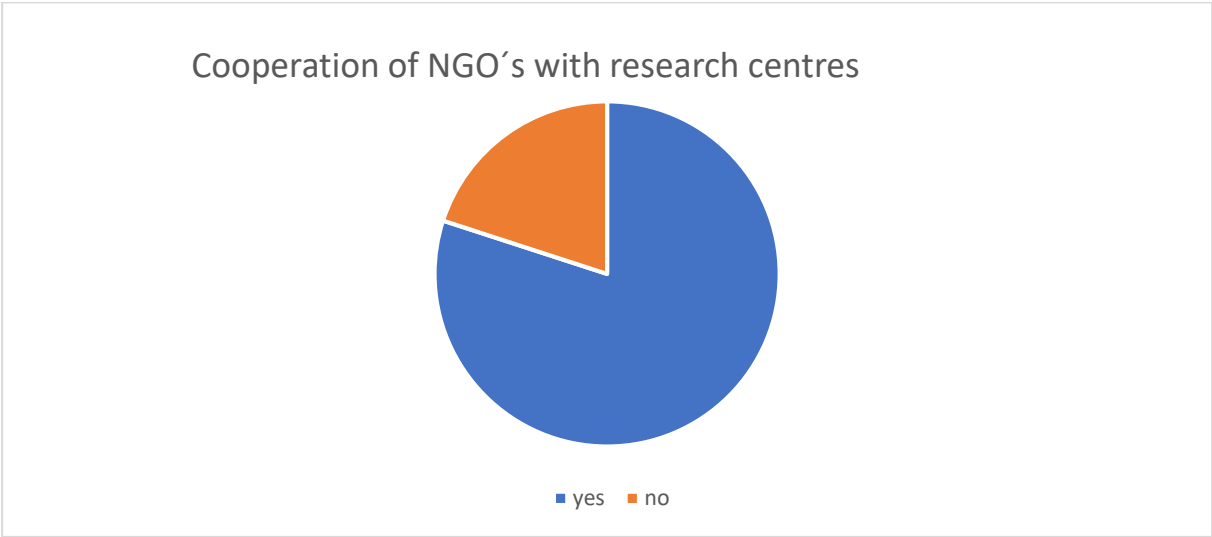
**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



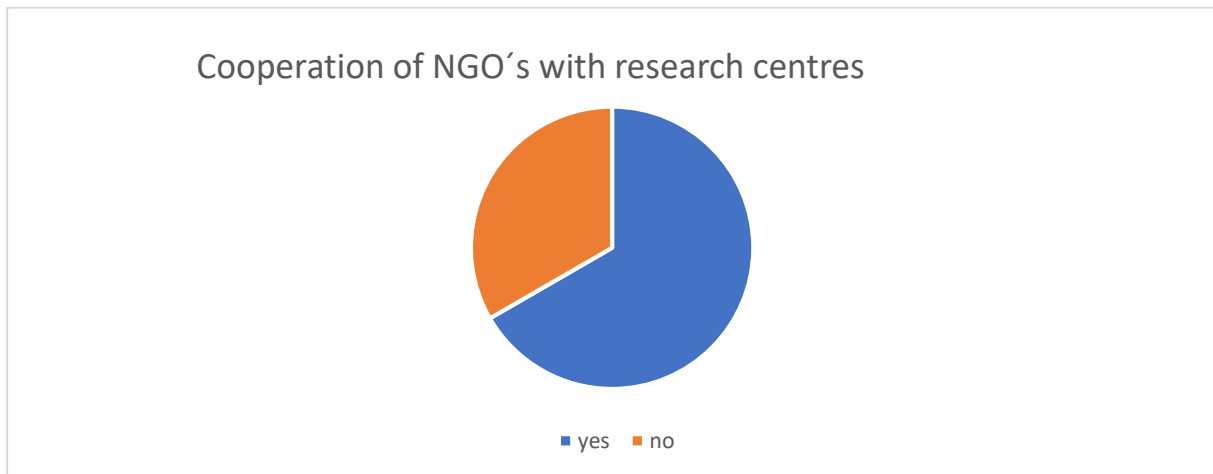
Despite their limited experience in their activity, it is a positive fact that 7 respondents declared that they cooperate with research centres. Two of them do not cooperate and one chose not to answer.

**2.1. Cooperations of NGO's with research centres**

There was established some cooperation with research centres in most of questionnaires – NGO need to use the expertise of research org. so there is high demand for their services.

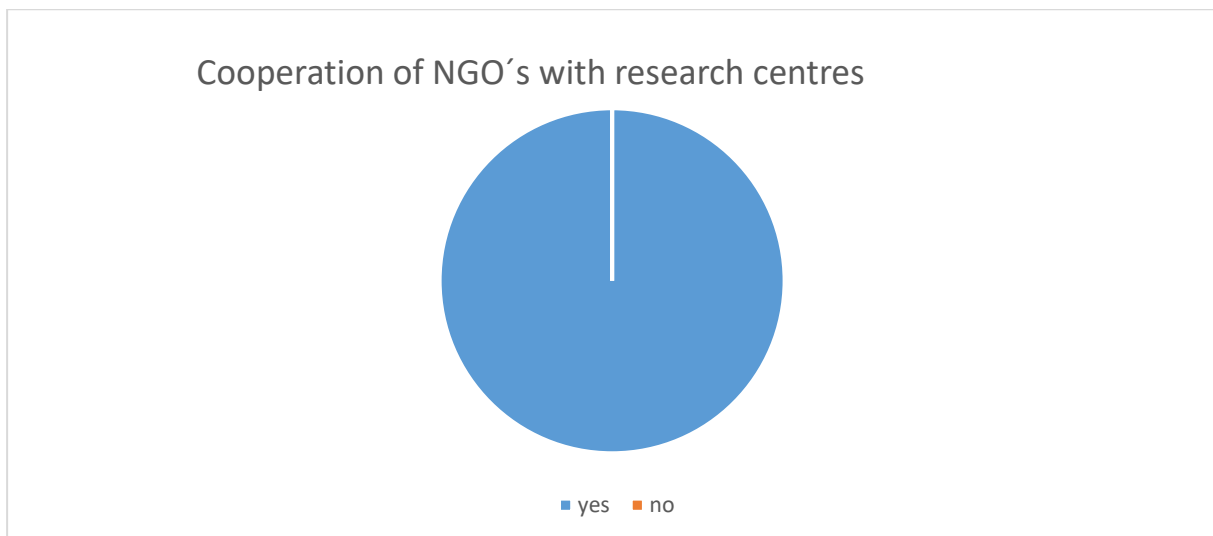


There was established some cooperation with research centres in most of questionnaires – NGO need to use the expertise of research org. so there is high demand for their services.



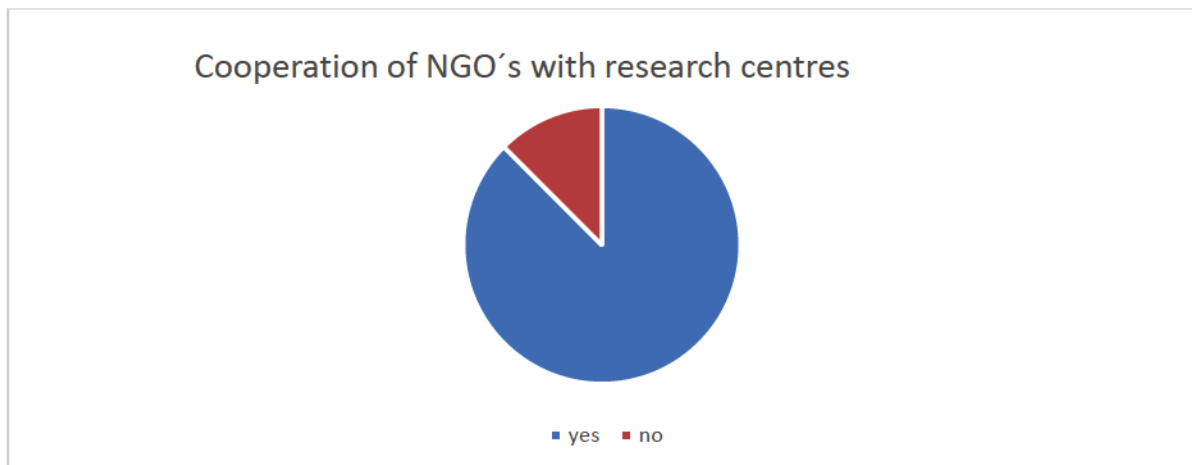
These parts of the pie chart show the cooperation's of NGO's with research centres. It shows that more than half of the sample companies are working with research centres. 33% do not have a cooperation of intermediaries with research centres.

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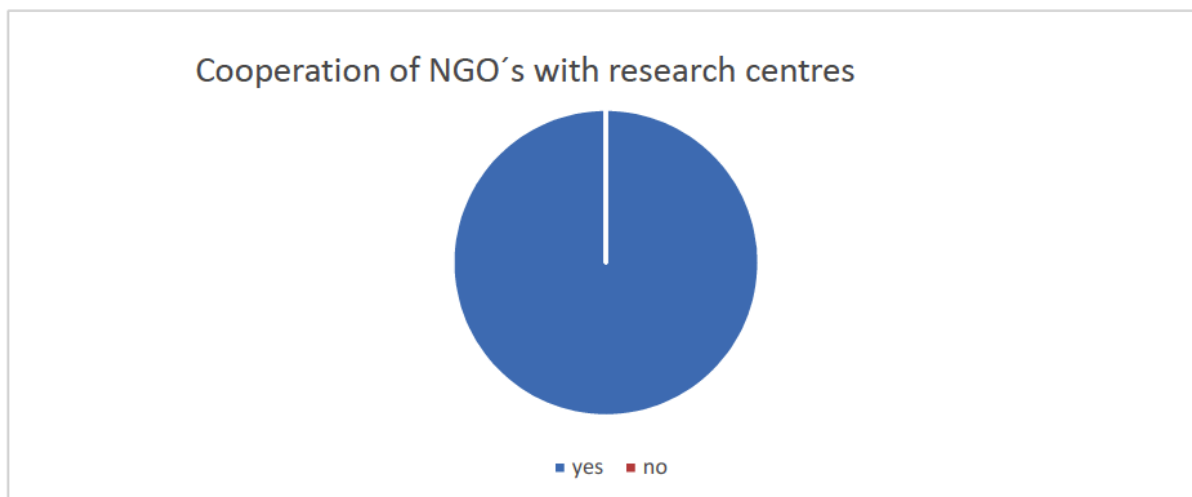
This pie chart shows that all surveyed NGO's have cooperation with research centres.

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This pie chart shows that 88% of surveyed NGO's have some kind of cooperation with research centres.

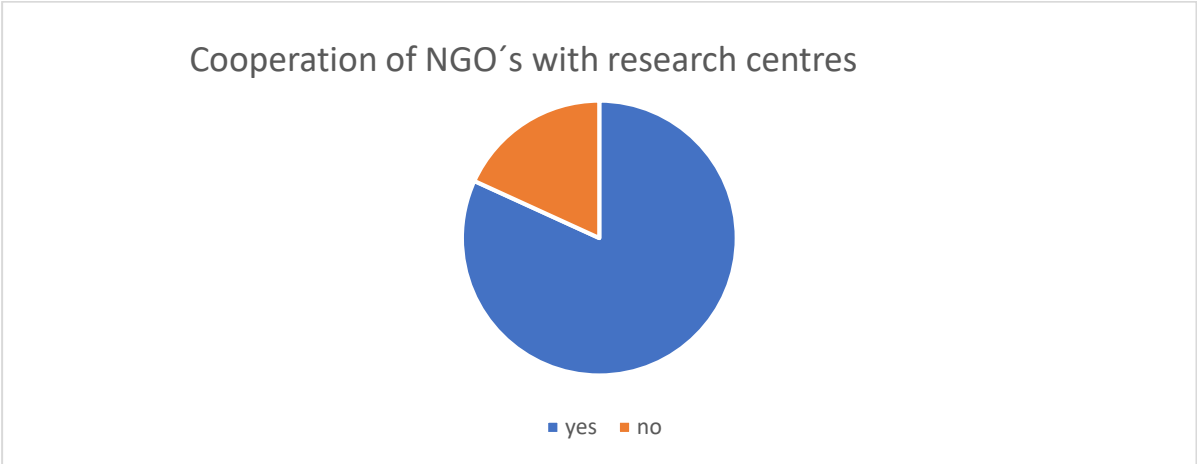
**Magurele High Tech Cluster**



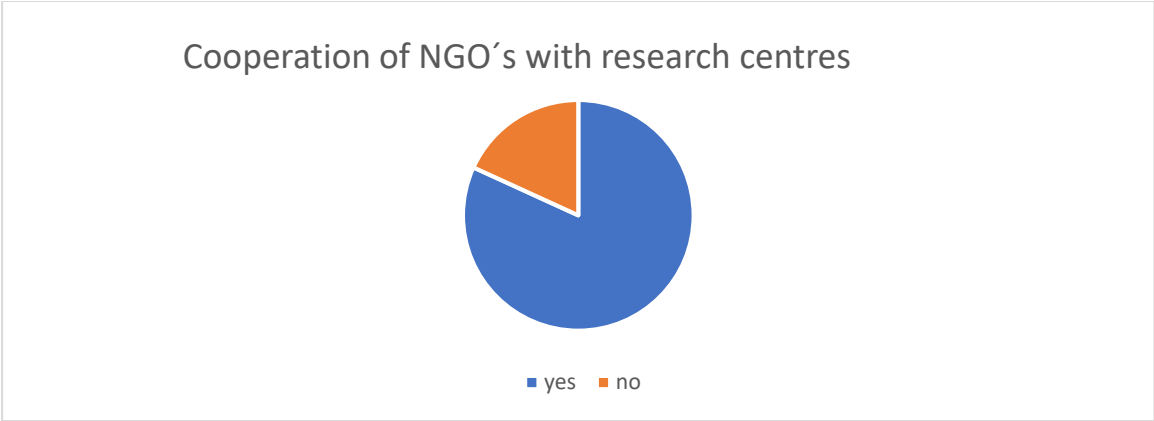
The members of the NGOs are, in the Romanian case, researchers, innovative persons and persons with social entrepreneurship attitude.

The cooperation between NGOs and research centres is a normal ingredient of the active and visible NGOs and it generating knowledge transfer and a new attitude of the citizens and the public administration regarding research and its important role in society. The NGOs' answers have a high level of representativeness for our questioner.

**2.1. Cooperation of NGO's with research centres**



These parts of the pie chart show the cooperation's of NGO's with research centres. It shows that more than half of the sample companies are working with research centres. 18% do not have a cooperation of intermediaries with research centres.



These parts of the pie chart show the cooperation's of NGO's with research centres. It shows that more than half of the sample companies are working with research centres. 18% do not have a cooperation of intermediaries with research centres.

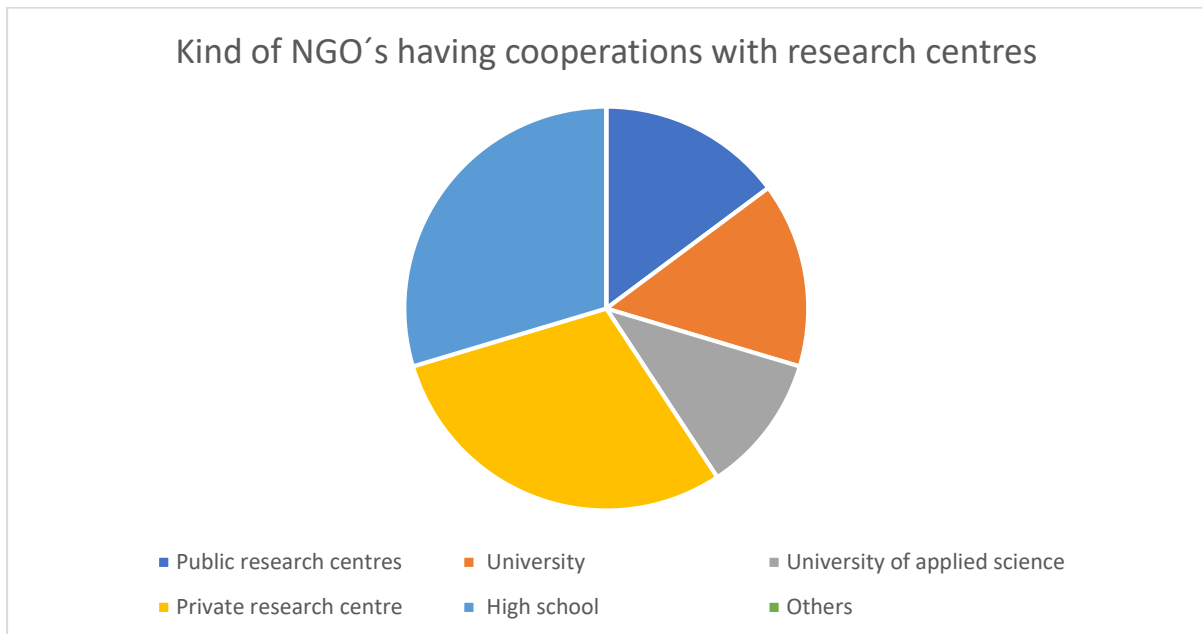
### 5.2.2 Kind of NGO's having cooperations with researcher centres

#### ELI-HU Nonprofit Ltd.



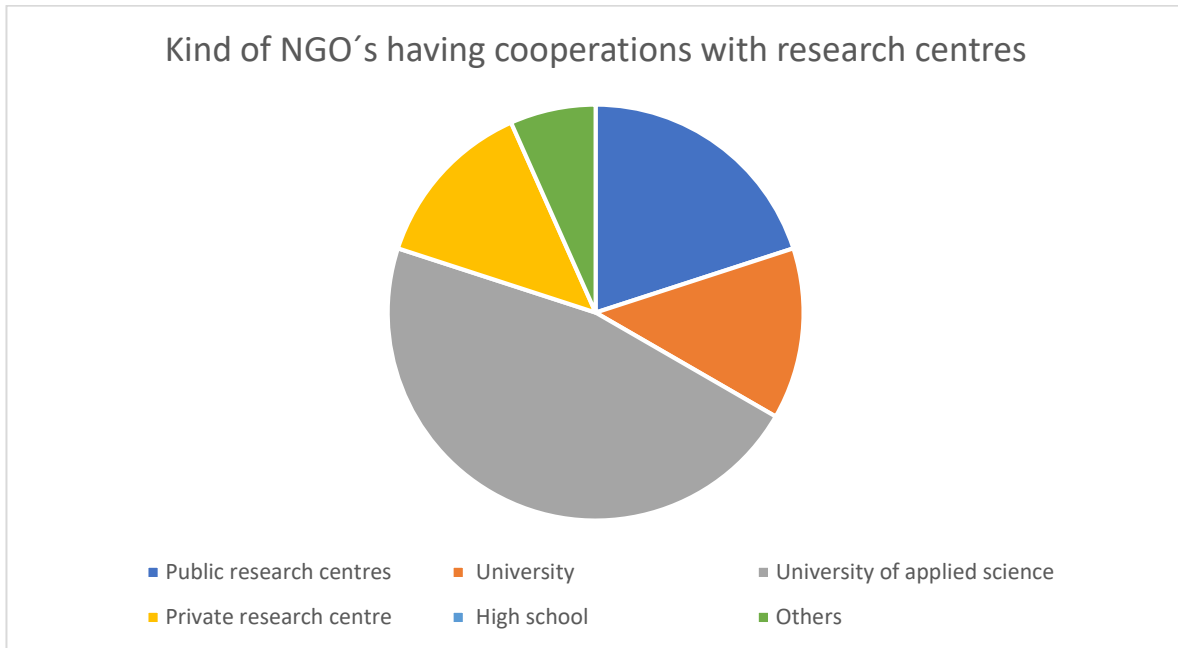
We can find every kind of research centres cooperate with NGOs and the distribution of these institutions is really colourful. This can mean that we can find willingness off cooperation among these institutions and NGOs which is favourable for the future.

#### Development Agency of Serbia



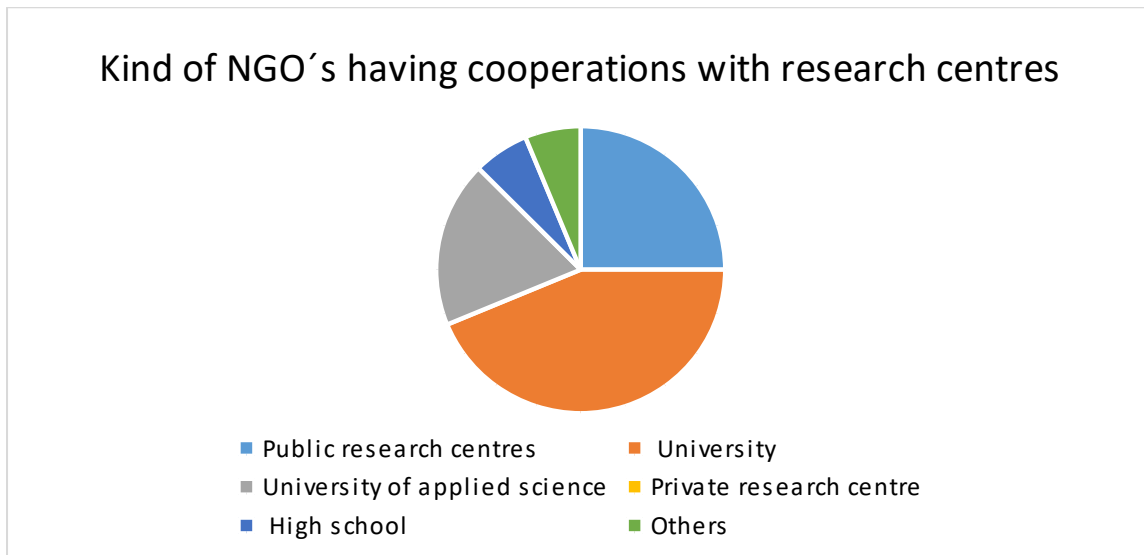
This pie chart shows types of research centres that NGO's have cooperation with and they usually work with more than just one type of centre. Surveyed NGO's cooperates mostly with Private research centres (almost 30%) and High schools (identical percentage). Other centres that don't fall under any of these categories were not mentioned.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The chart deals with the kind of NGO's having cooperation's with research centres and is divided into six parts. It highlights the fact that most NGO's have a cooperation with universities of applied sciences closely followed by public research centres. Private research centres and universities held a share of 26%. Only 13% cooperates with others. No one of the sample NGO's have cooperation's with high schools.

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**

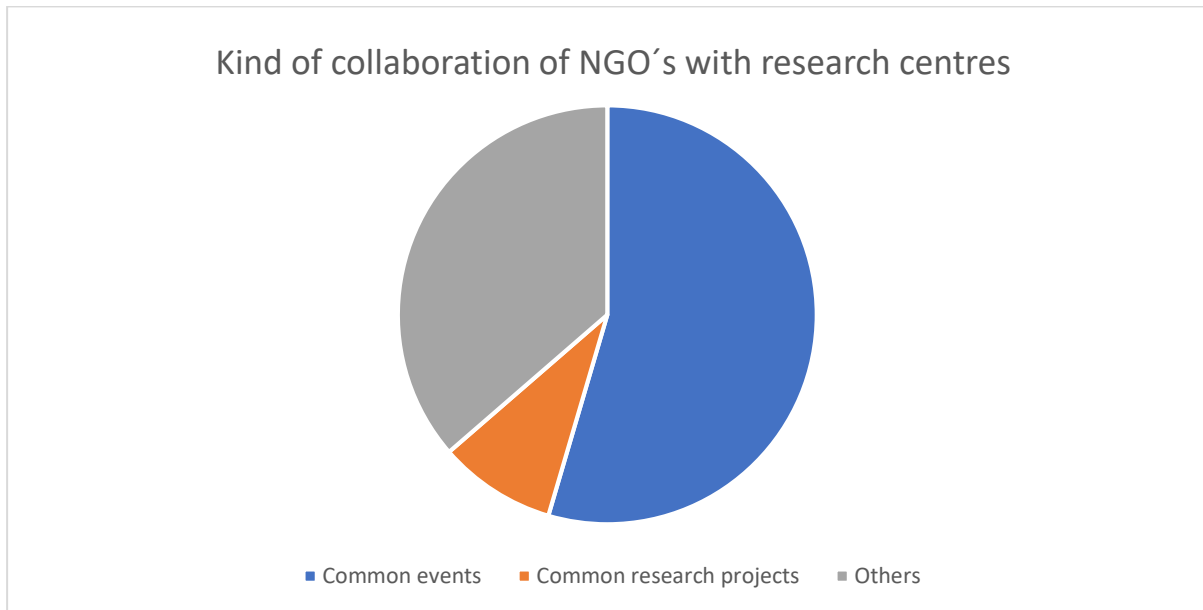


From among the 10 NGOs, 3 are active in the economic, social and cultural environment, 3 are involved in ecology and tourism, 1 in rural, agricultural and food area, 1 in science, 1 in education and 1 in SMEs development. Seven NGOs collaborate with research centres (universities – 7, public research centres – 4, universities of applied science – 3, high schools – 1, one with a museum). Three NGOs do not cooperate with research centres.



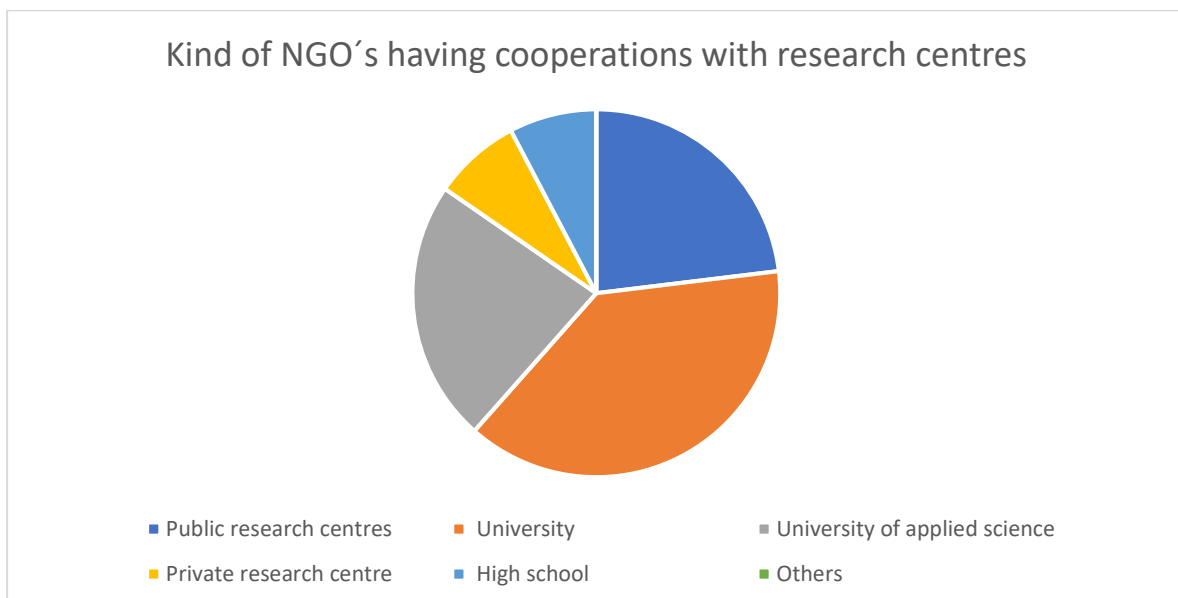
#### 2.4 Kind of collaboration of NGO's with research centres

There is big group of "other" response because of specialisation of NGO and their focus. NGO are not mainly focused on research, so common events prevail.



Other: educational activities for school and public, common applied project: research made by research organization and the outputs are used in nature conservation, volunteering projects, presentation of research results to the public,

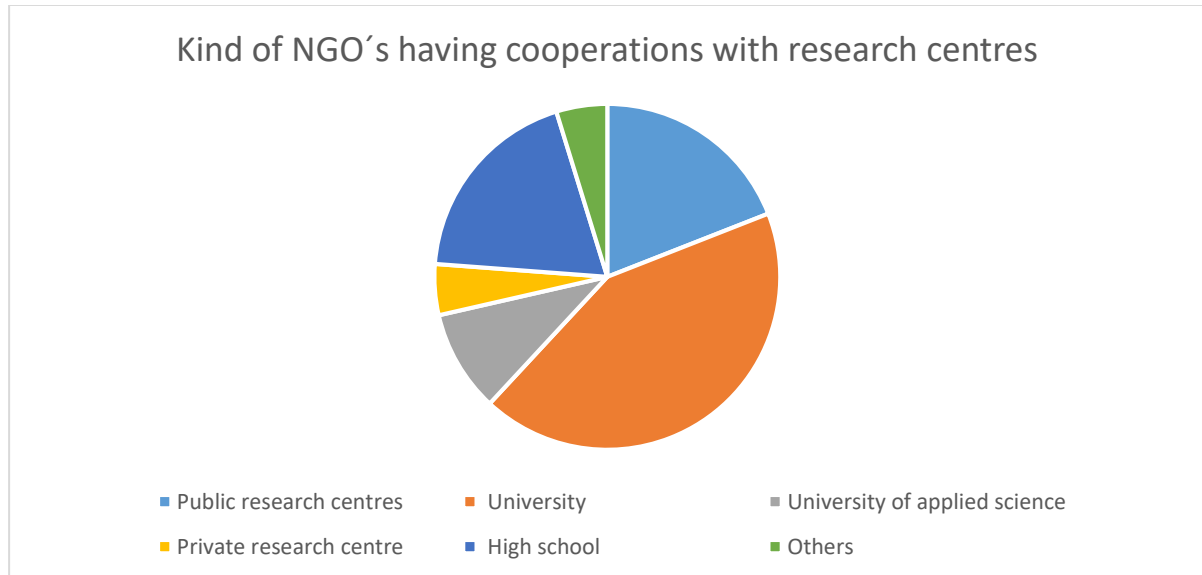
#### FH JOANNEUM GESELLSCHAFT M.B.H



The chart deals with the kind of NGO's having cooperation's with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities closely followed by university of applied science. Public research centres held a share of 23%. Eight of eleven

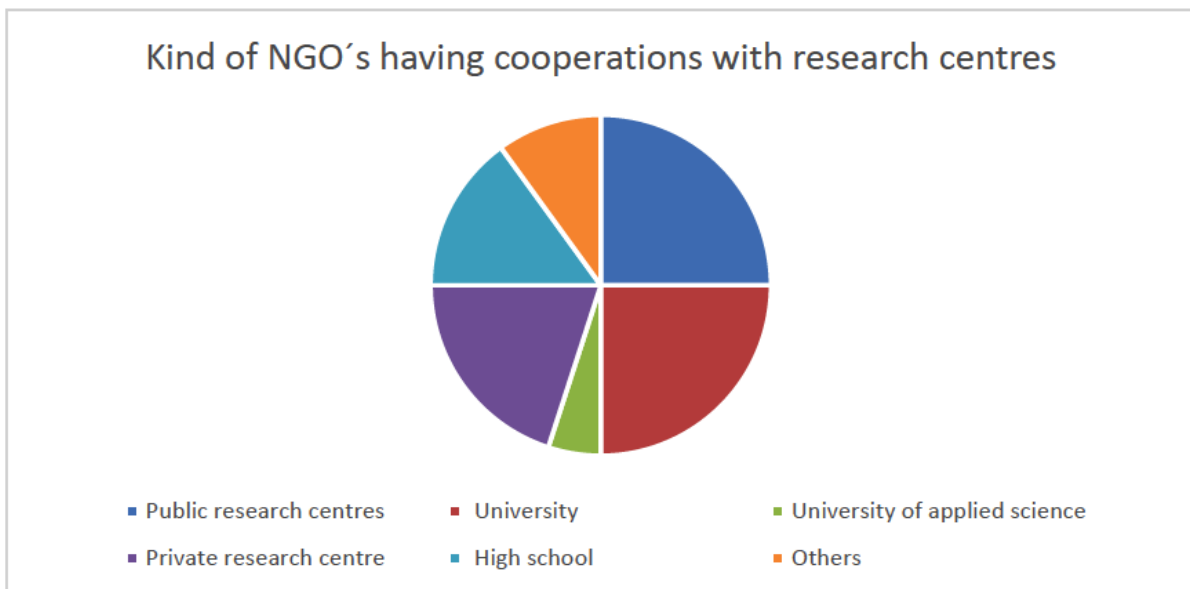
companies cooperate with private research centres and high schools. No one of the sample NGO's have cooperation's with other research centres.

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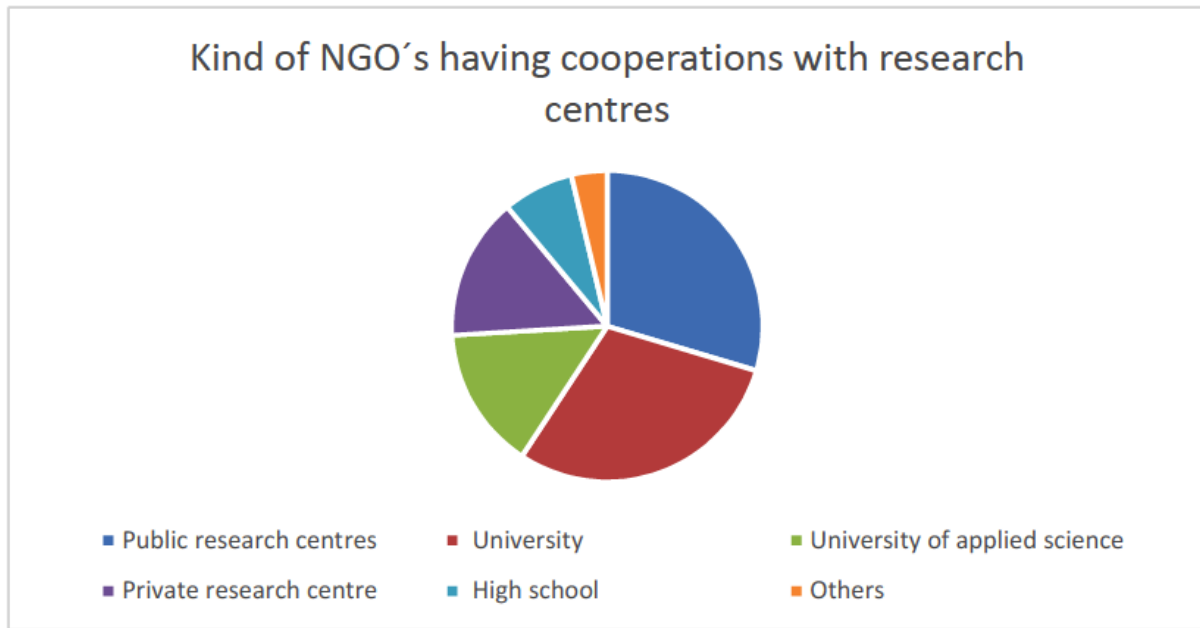
This pie chart shows that most of surveyed NGO's cooperates with University (43%), with Public research centres and High schools 19%, 10% with University of applied science and 5% with Private research centres and others.

**UNIVERSITY OF MARIBOR**



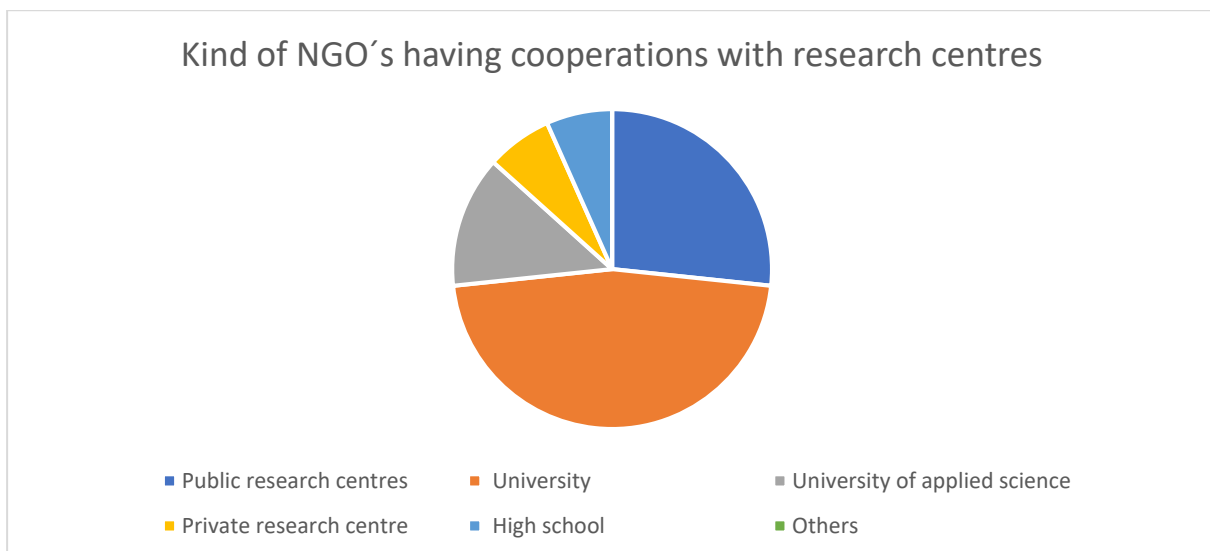
This pie chart shows that most of surveyed NGO's cooperates with Universities (43%) and with Public research centres (43%), followed by Private research centres (20%) and High schools (15%), 10% with other organisations (different types of organisation as project partners in EU funded projects and Cooperative) and 5% with Universities of applied sciences.

## Magurele High Tech Cluster



The majority of the NGOs are cooperating with public research centres. This situation has the following explanations: a) the results of the public research centres are more relevant for the NGOs; b) the public research centres have a more visible image in the Romanian society; c) the funding process for the private research centres is more restrictive than for the public sector; d) it is possible to be more difficult for the private sector to attract very gifted researchers than for the public sector because of the different tradition (which is normal) and because of the financial resources and financial stability.

### 2.2. Kind of NGO's having cooperation with researcher centres

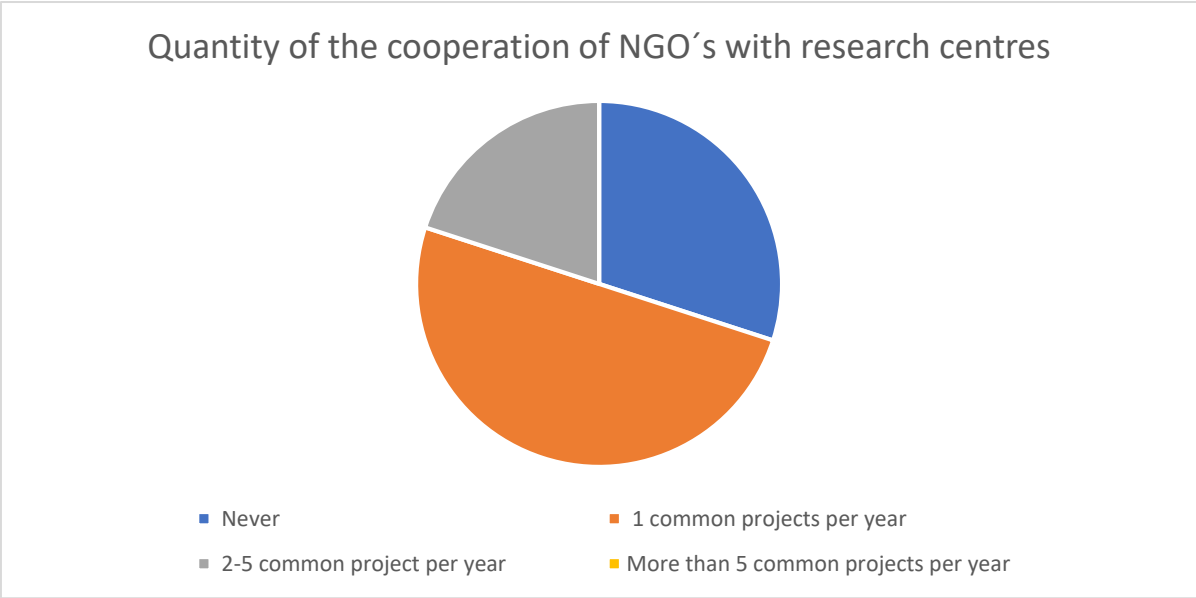


The chart deals with the kind of NGO's having cooperation's with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities closely followed by public research centres. University of applied science held a share of 13%. One of eleven companies cooperates with private research centres and high schools. No one of the sample NGO's have cooperation's with other research centres.

For example, the companies have a collaboration with universities as an opponent of thesis (Czech technical university, Prague). The name of one from the research centres is Centre of applied economic research, faculty of management and economics, Tomas Bata University in Zlin.

**5.2.3 Quantity of the cooperation of NGO's with research centres**

**ELI-HU Nonprofit Ltd.**



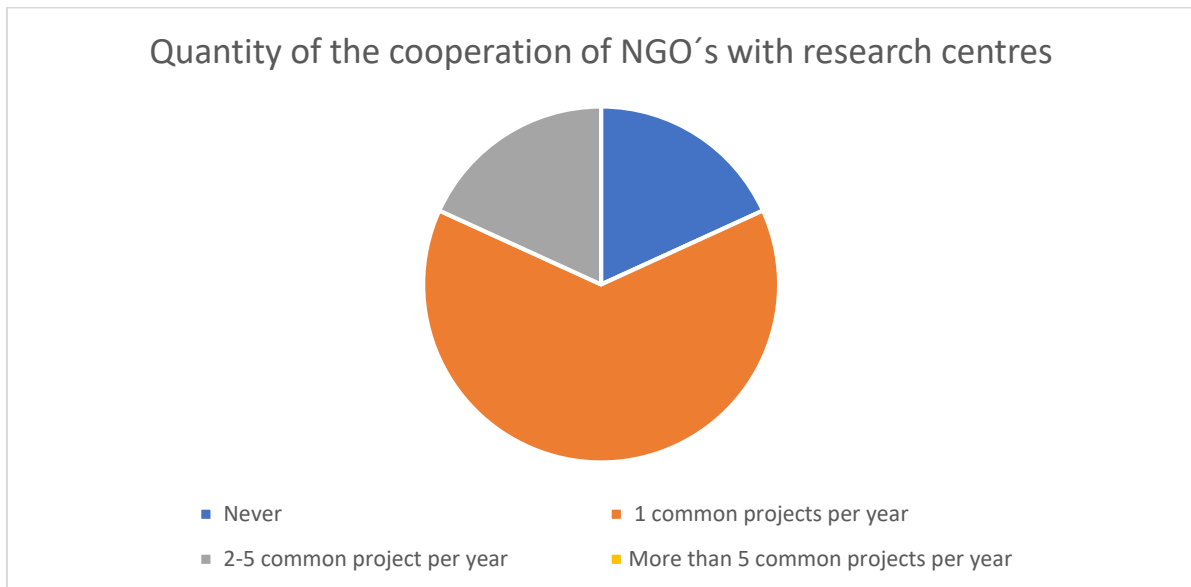
In this pie chart, you can see that half of the NGOs have one common project per a year with research centres. The number of NGOS with 2-5 common projects is significantly low and some NGOs never have common projects with research institutions. This refers to the fact which was already mentioned before that the cooperation around specific common cases is more usual than permanent collaboration.

**Development Agency of Serbia**



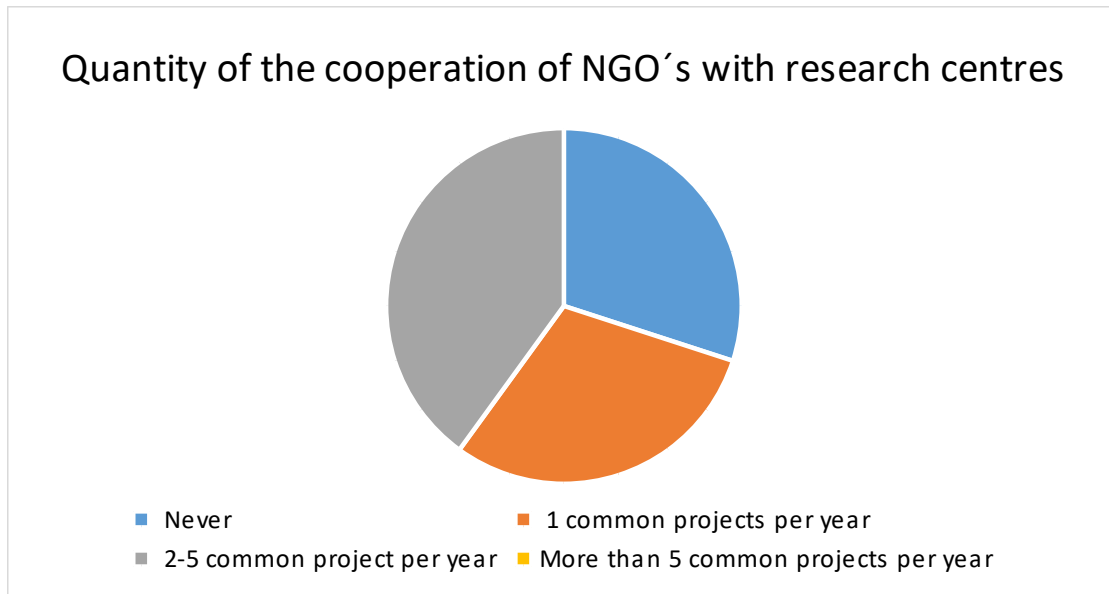
More than 65% of NGO's cooperate with research centres 1 time per year. Only 3 NGO's stated that they cooperate with them 2 -5 times per year and none of them collaborates more frequently.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



In this pie chart, you can see that 72% of the NGO'S cooperate once a year with research centres. 19% of the surveyed NGO's never cooperate with research centres, and 19% commonly have 2-5 project per year. No one of the questionnaire fillers had more than 5 common projects per year.

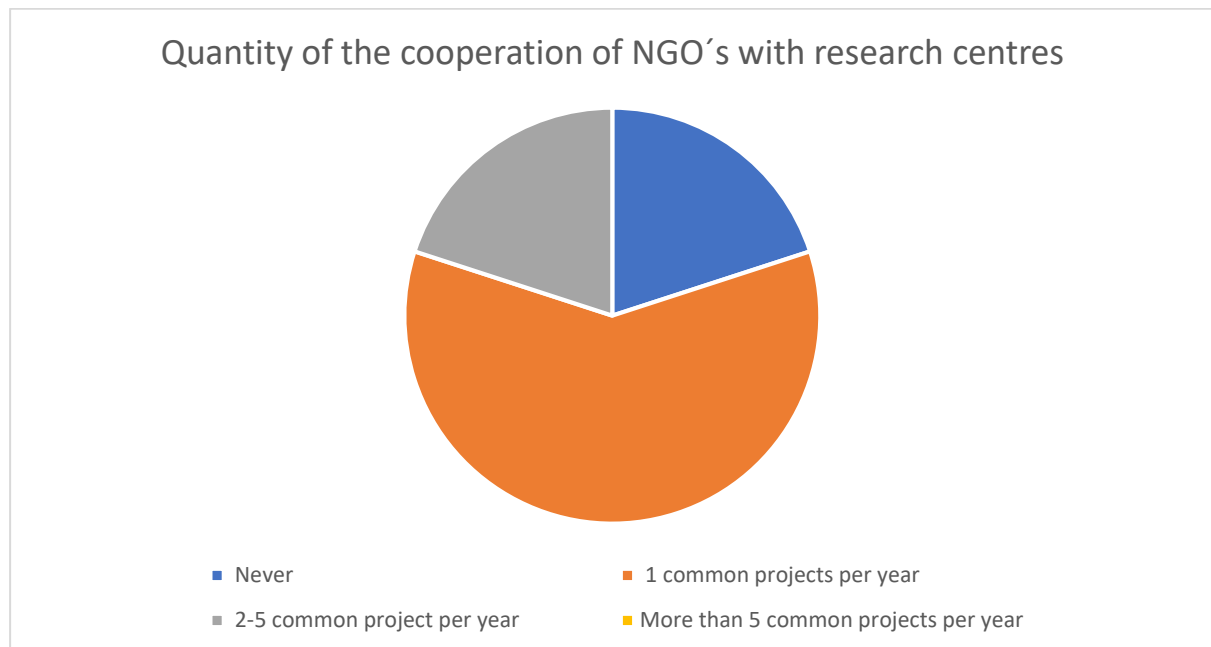
### Quantity of the cooperation of NGO's with research centres



No NGOs have more than 5 common projects per year. Four respondents have 2-5 common projects per year, 3 only a project per year and 3 have no common projects.

### **2.3 Quantity of the cooperation of NGO's with research centres**

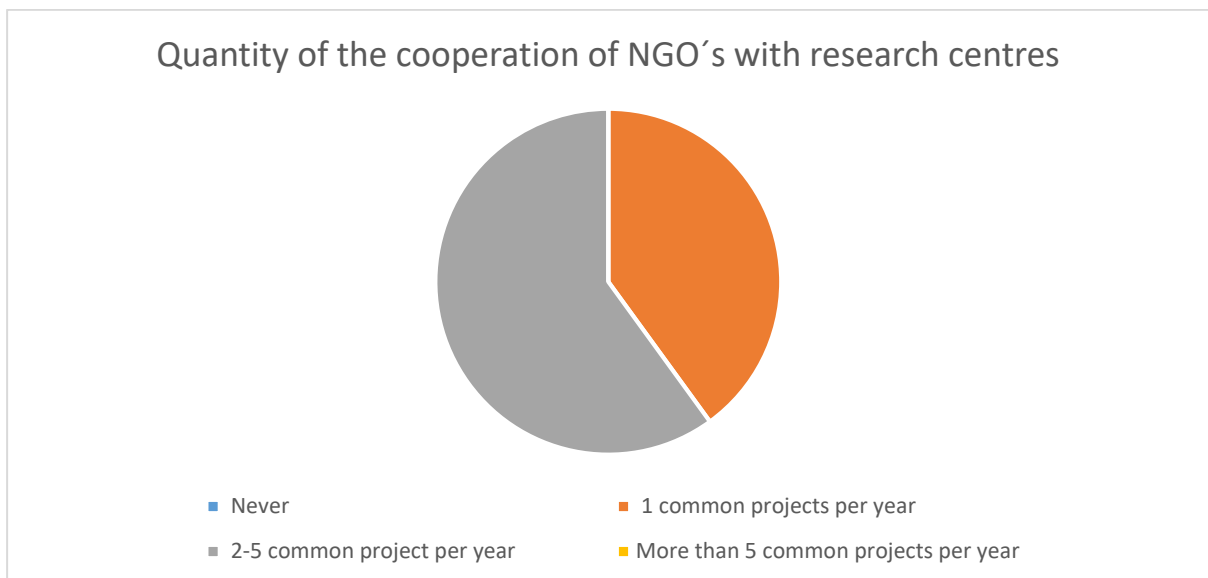
Most of NGOs respondents have max. capacity only for one common project per year.



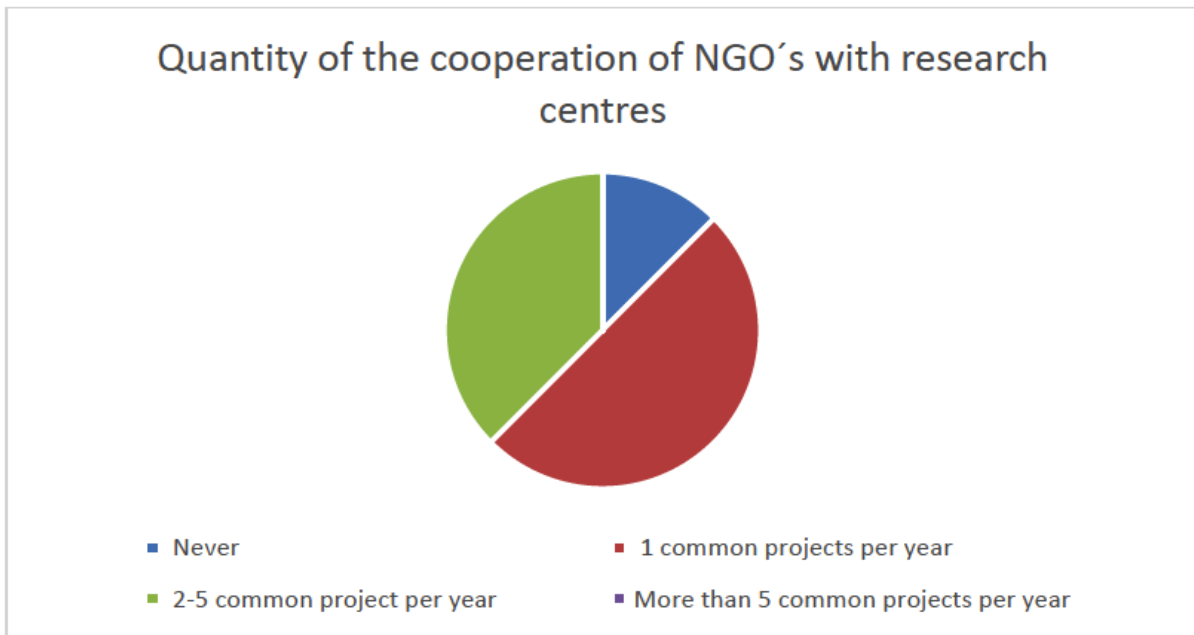


In this pie chart, you can see that 67% of the NGO'S cooperate once a year with research centres. 22% of the surveyed companies never cooperate with research centres. About 11% cooperate two to five times a year with research centres and none of the sample enterprises cooperate more than five times a year with a research centre.

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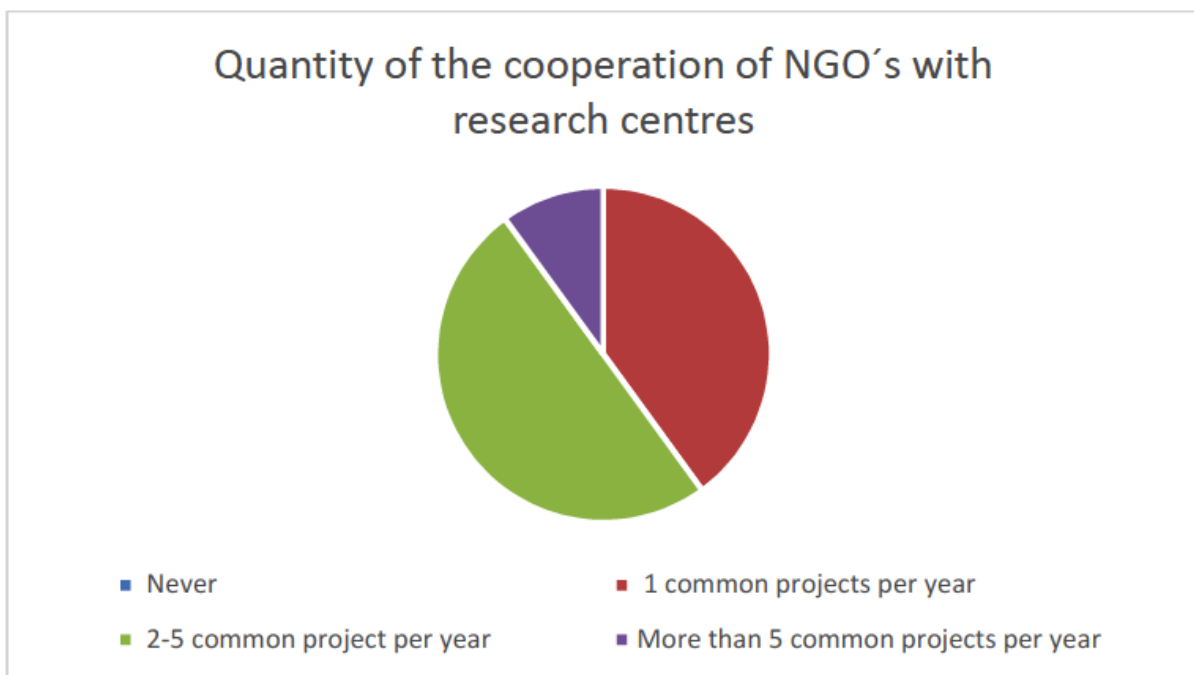


This pie chart shows that 60% of surveyed NGO's has 2-5 common projects per year with research centres and 40% of them cooperate 1 time per year.



This pie chart shows that 50% of surveyed NGO's has 1 common project per year, 38% has 2-5 common projects per year with research centres and 13% of them never cooperate with research centres.

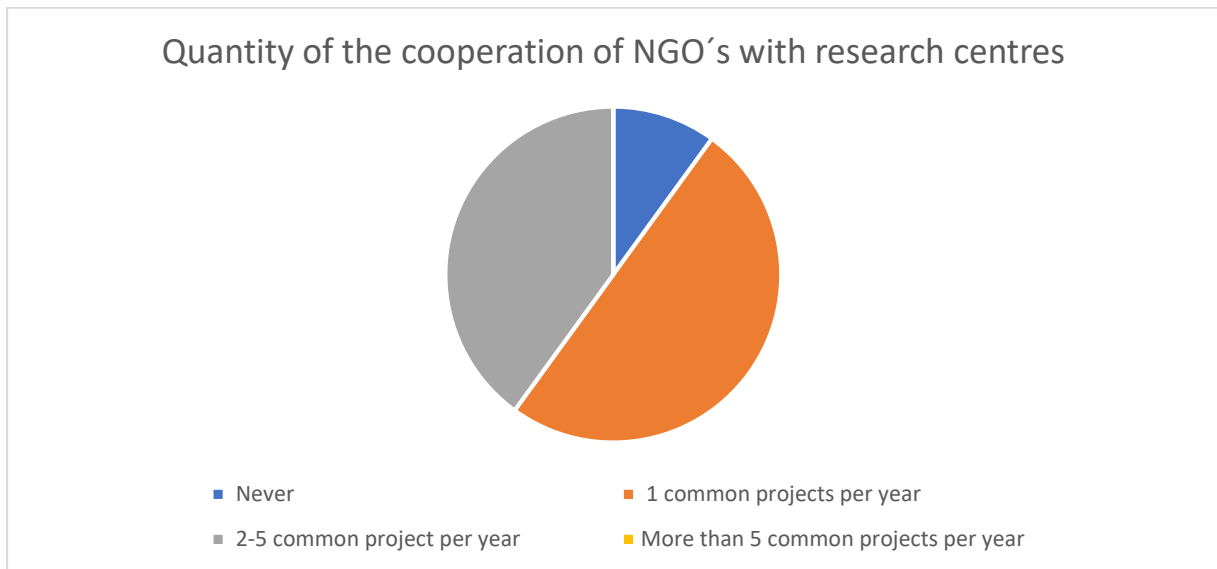
**Magurele High Tech Cluster**



All NGOs have an active cooperation with the research centres from. All of them have, at least, 1 common project per year with research centres. The average number of common project is a good one: between 2 – 5. This is demonstrating that the NGOs are carefully calibrating their efforts, human and financial resources involved in the projects to reach high standard results.



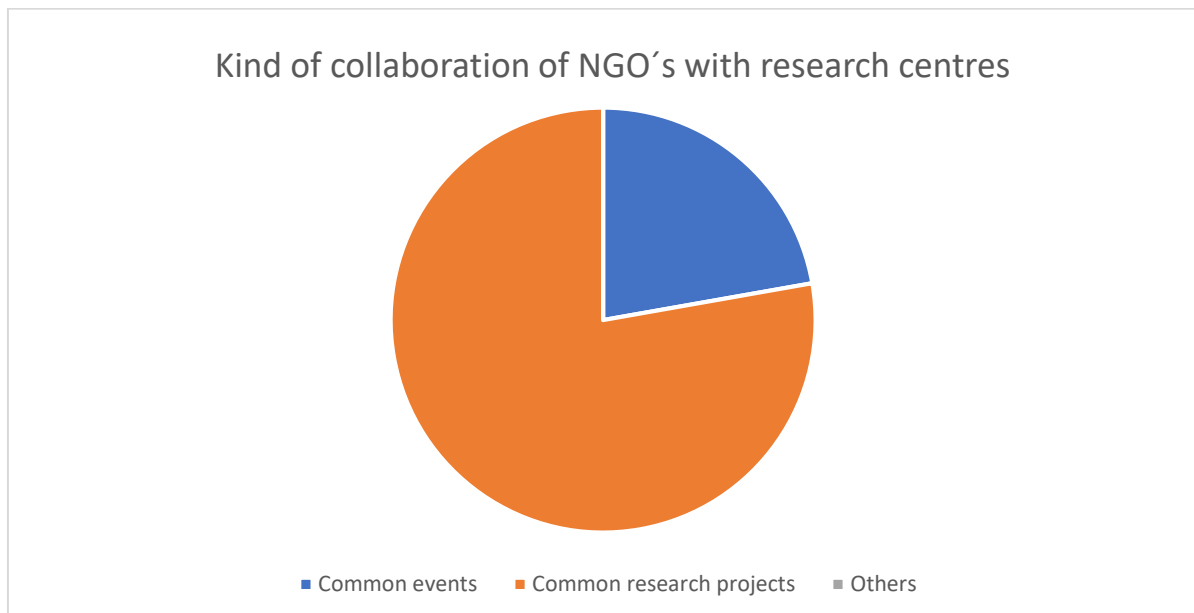
### 2.3 Quantity of the cooperation of NGO's with research centres



In this pie chart, you can see that 50% of the NGO'S cooperate once a year with research centres. 10% of the surveyed companies never cooperate with research centres. About 40% cooperate two to five times a year with research centres and none of the sample enterprises cooperate more than five times a year with a research centre.

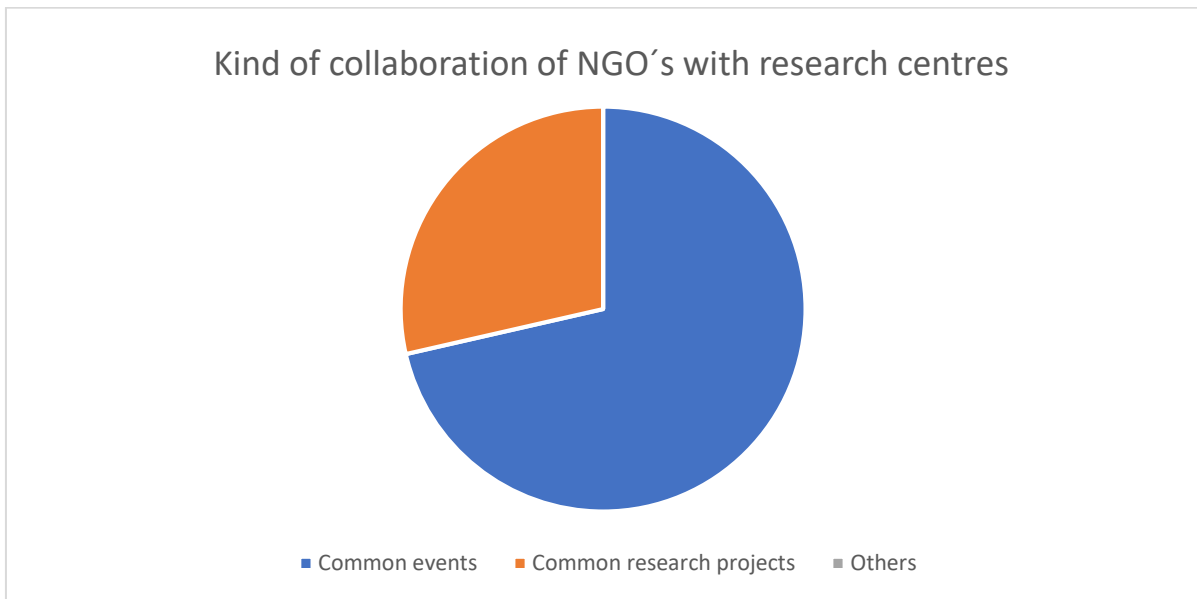
### 5.2.4 Kind of collaboration of NGO's with research centres

**ELI-HU Nonprofit Ltd.**



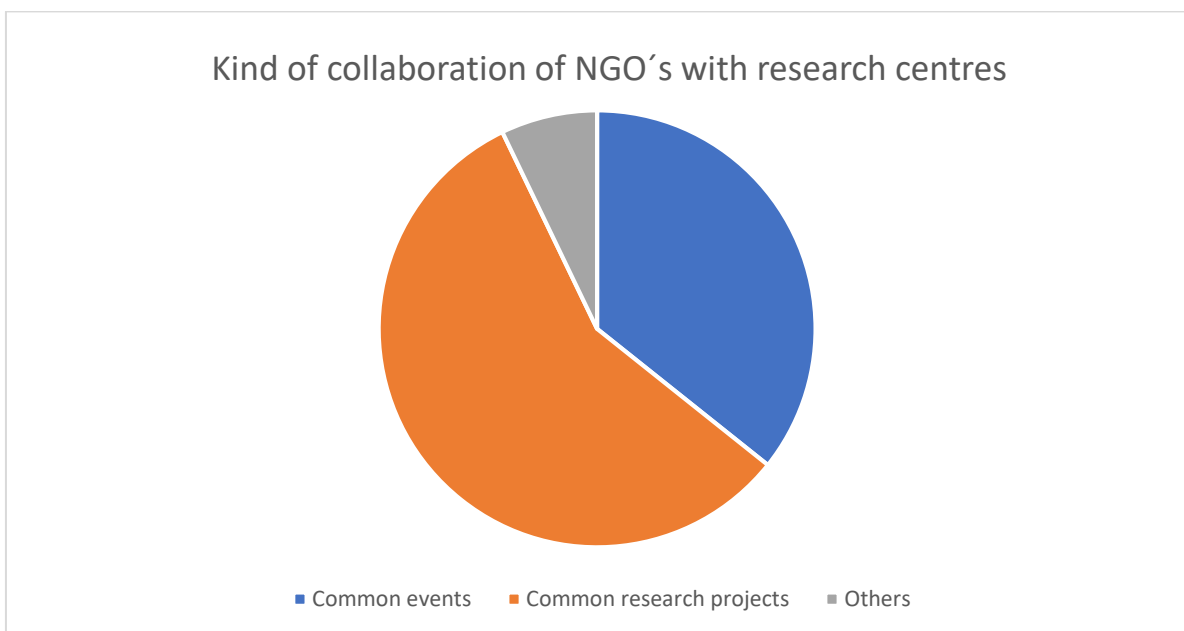
It is interesting that many NGOs answered that they have common research projects with research institutions and just a few of them said that they have common events. Usually the expectations show the opposite. These common research projects probably means social researches.

**Development Agency of Serbia**

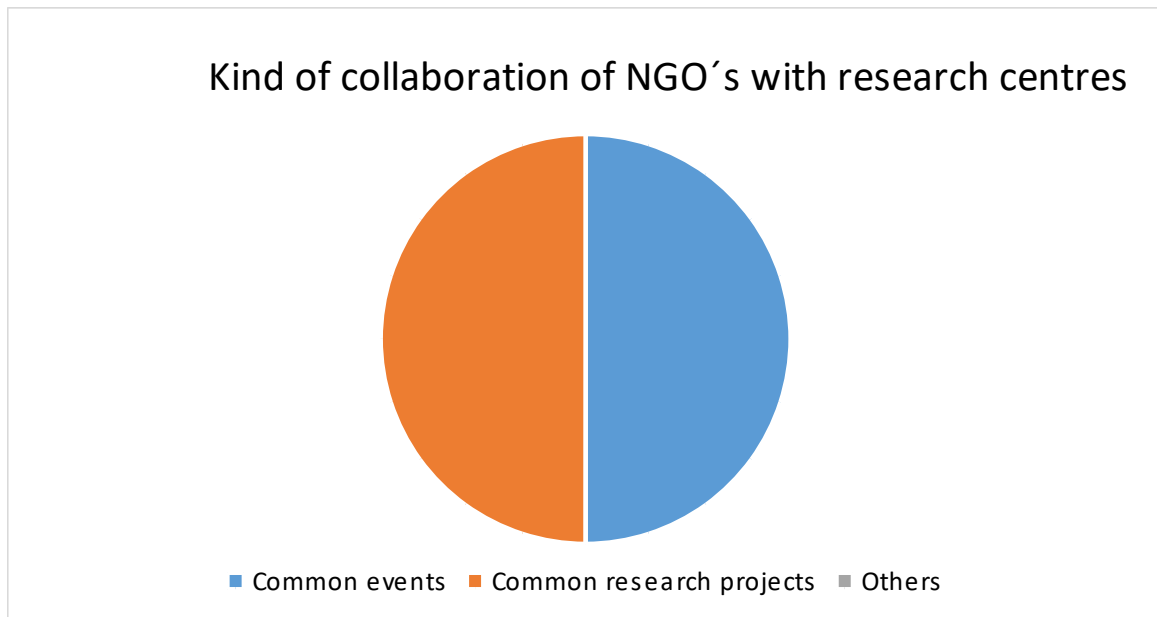


The NGO's usually collaborate in common events (71%) and common research projects (28%). No other kind of collaboration was mentioned.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



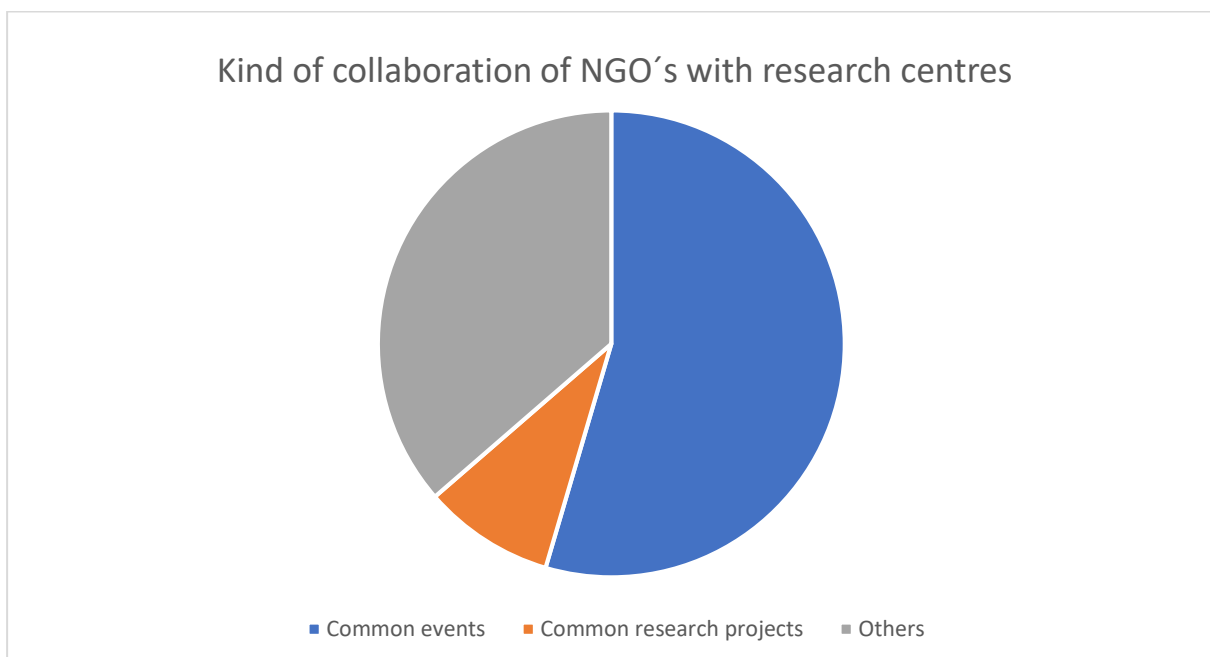
There are three parts in this pie chart. The red part shows the common research projects, the blue one deals with the common events and the green part shows all other kinds of collaboration of NGO's with research centers. The largest share is 57% and shows the common research projects. Common events held a share of 36%. 7% deals with the other collaborations like networks or projects dealing with research centers as constructor.



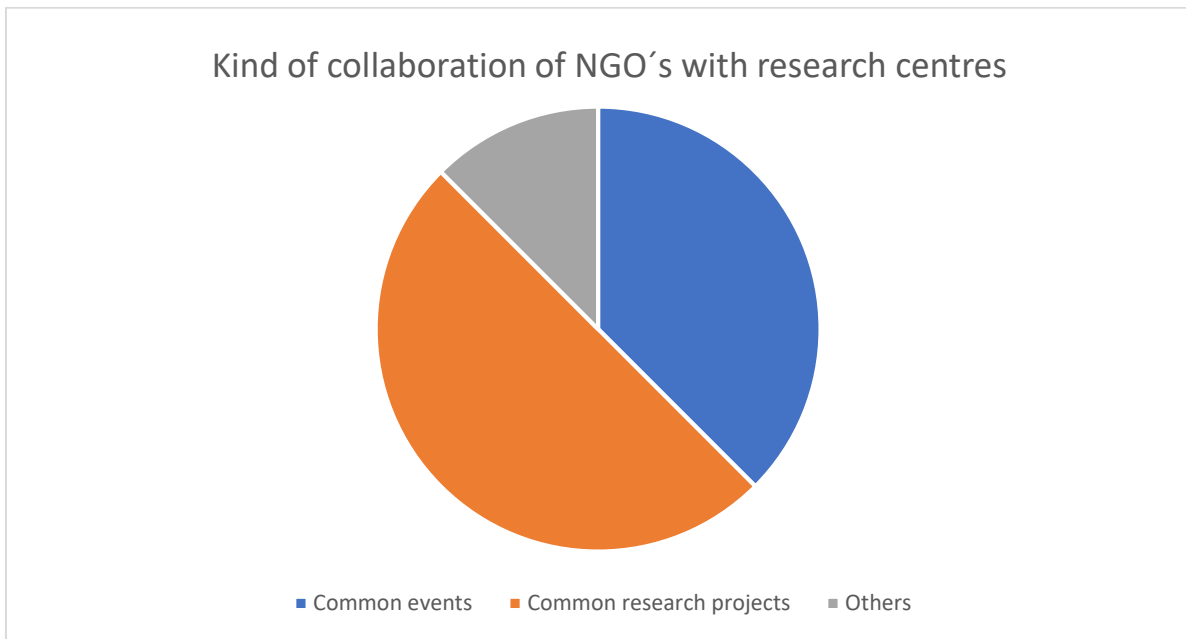
Despite their different levels of experience, it is interesting to note that 3 NGOs collaborate with research centres both in common projects and common events, 2 only in common events and 2 in common projects. Three respondents have no kind of collaboration.

**2.4 Kind of collaboration of NGO's with research centres**

There is big group of "other" response because of specialisation of NGO and their focus. NGO are not mainly focused on research, so common events prevail.

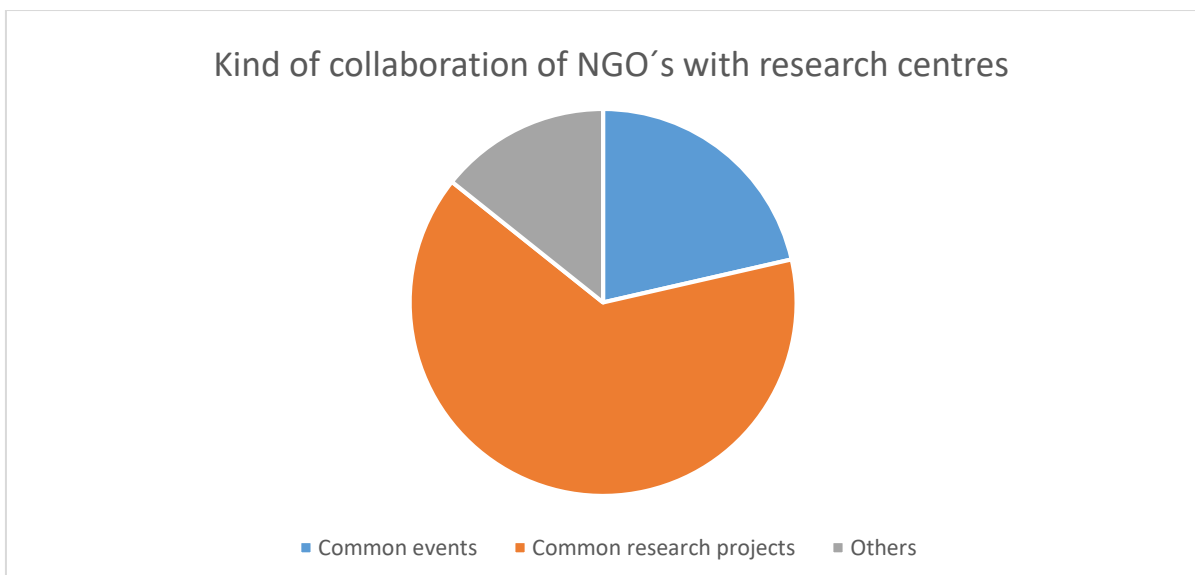


Other: educational activities for school and public, common applied project: research made by research organization and the outputs are used in nature conservation, volunteering projects, presentation of research results to the public,

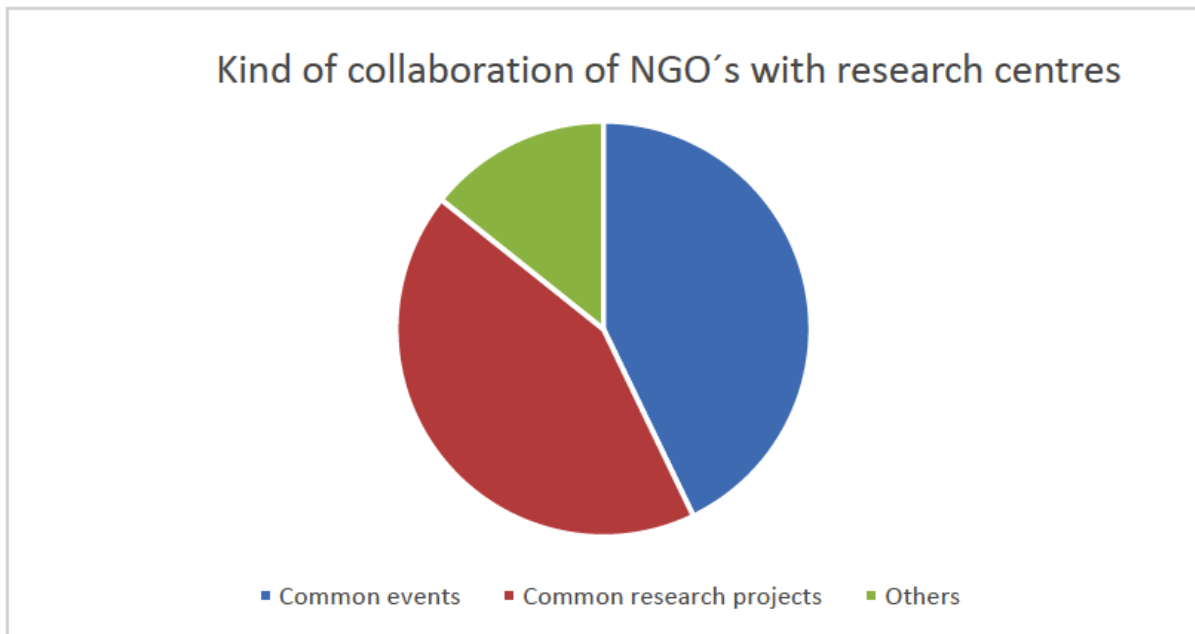


There are three parts in this pie chart. The red part shows the common research projects, the blue one deals with the common events and the green part shows all other kinds of collaboration of NGO's with research centers. The largest share is 50% and shows the common research projects. Common events held a share of 38%. 13% deal with the other collaborations like networks or projects dealing with research centres as constructor.

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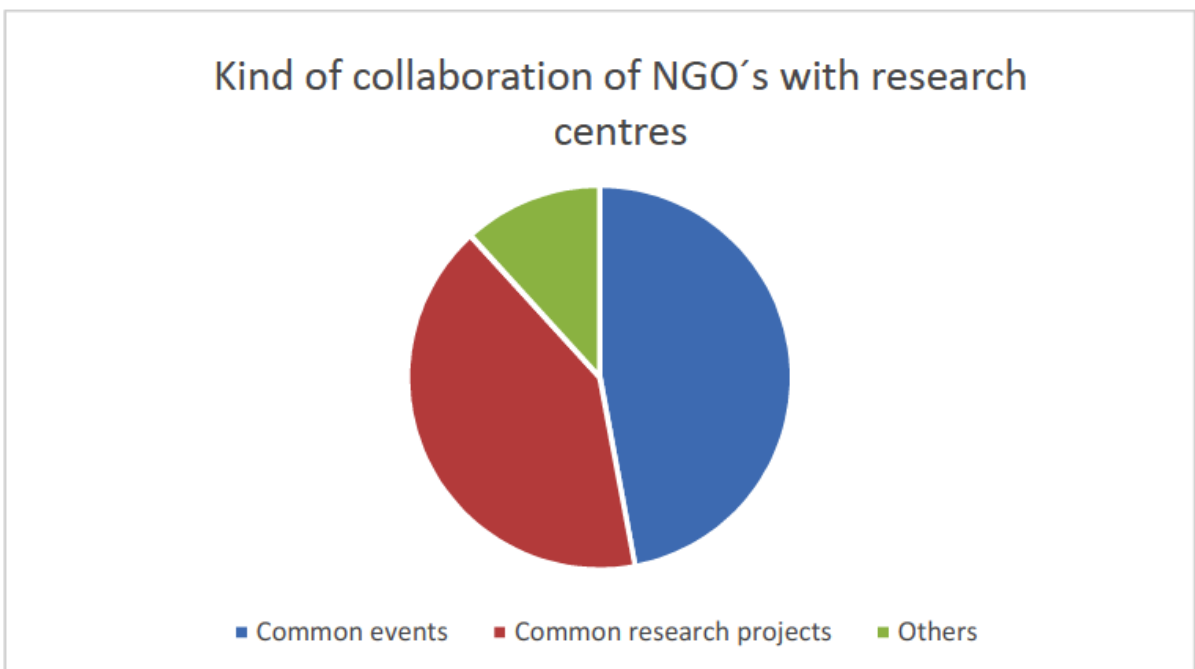


The NGO's usually collaborate in common research projects (64%) and common events 21%. Other types of collaboration (14%) are: knowledge sharing.



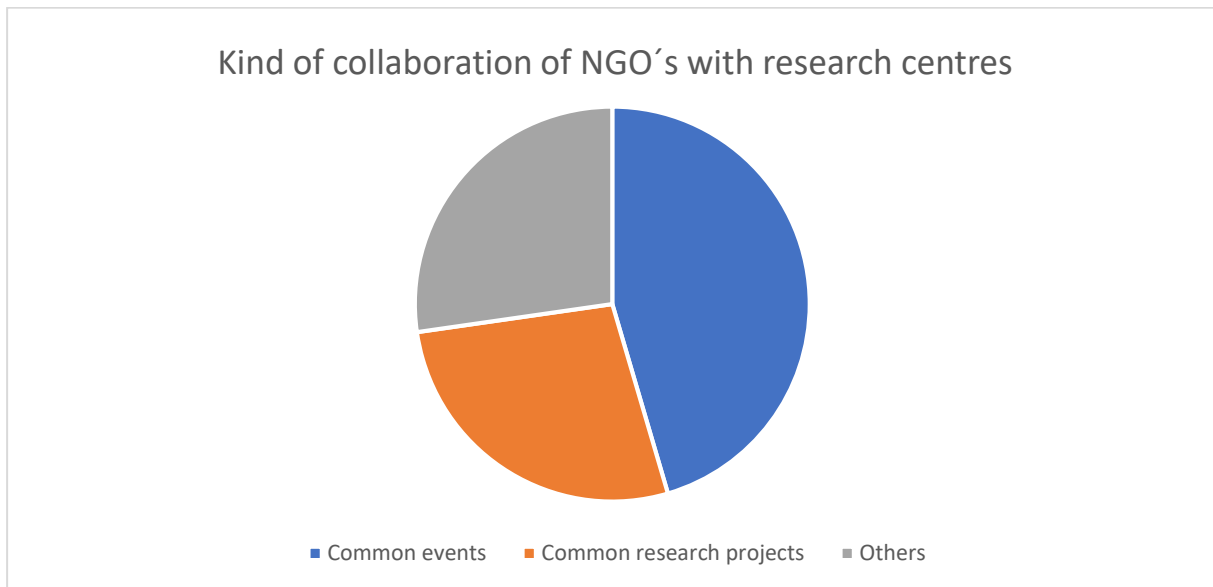
The NGO's usually collaborate in common research projects (43%) and common events (43%). Other types of collaboration (14%) are "monitoring motor skills efficiency using different measurement methods."

**Magurele High Tech Cluster**



The answers to this question are a clear example that the NGOs involved in the questioner are playing their normal role: partners for events (public communication) and common research project. From our experience, we believe that the NGOs are involved in research projects for public communication work packages. Sometimes, the NGOs are the initiators of the events because they need representatives of the research centres in their European projects. So, the cooperation is a two way connection

## 2.4 Kind of collaboration of NGO's with research centres



There are three parts in this pie chart. The red part shows the common research projects, the blue one deals with the common events and the green part shows all other kinds of collaboration of NGO's with research centres. The largest share is 45% and shows the common events. Common research projects held a share of 27% and 27% deal with the other collaborations like networks or projects dealing with research centres as constructor.

## 5.2.5 Kind of common activities of NGO's with the research centres

### ELI-HU Nonprofit Ltd.



The common activities are always based on national or EU funding, we cannot find common activities without any kind of financing behind them. These kind of common projects can mean also financing for the participating organizations.

**Development Agency of Serbia**



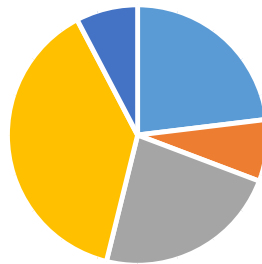
The pie chart is about the kind of common activities NGO's conduct with research centres. For 38.8% of them cooperation includes just contract, not funding. 33% of projects are funded by national programmes, 22% by regional funding programmes and the rest is funded within EU programmes.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The pie chart is about the kind of common activities of NGO's with research centres. The first three category (just a contract, no funding; regional funding programmes co-finance the project; national funding programmes co-finance the project) shares an equal part of this pie chart. 12% of the filler NGO's gets EU-funding programmes co-finance the project and only 6% gets financing from other categories.

### Kind of common activities of NGO's with research centres



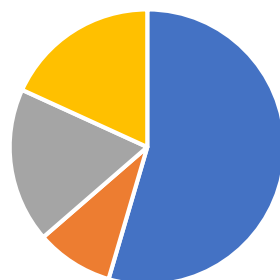
- Just a contract, no funding
- Regional funding programmes co-finance the project
- National funding programmes co-finance the project
- EU- funding programmes co-finance the project
- Others

The kind of funding of NGOs common activities with research centres is very diverse: 5 respondents receive funding from EU projects, 3 from national funds and 1 from the regional fund. There also are 3 NGOs with contracts without funding. Two NGOs have no funding.

#### **2.5. Kind of funding common activities of NGO's with the research centres**

Surprisingly, the contract is the main source of funds of NGO in survey. National, EU and regional funds altogether have the minority. Maybe this is because of respondent selection – mostly small NGO

### Kind of funding common activities of NGO's with research centres



- Just a contract, no funding
- Regional funding programmes co-finance the project
- National funding programmes co-finance the project
- EU- funding programmes co-finance the project
- Others



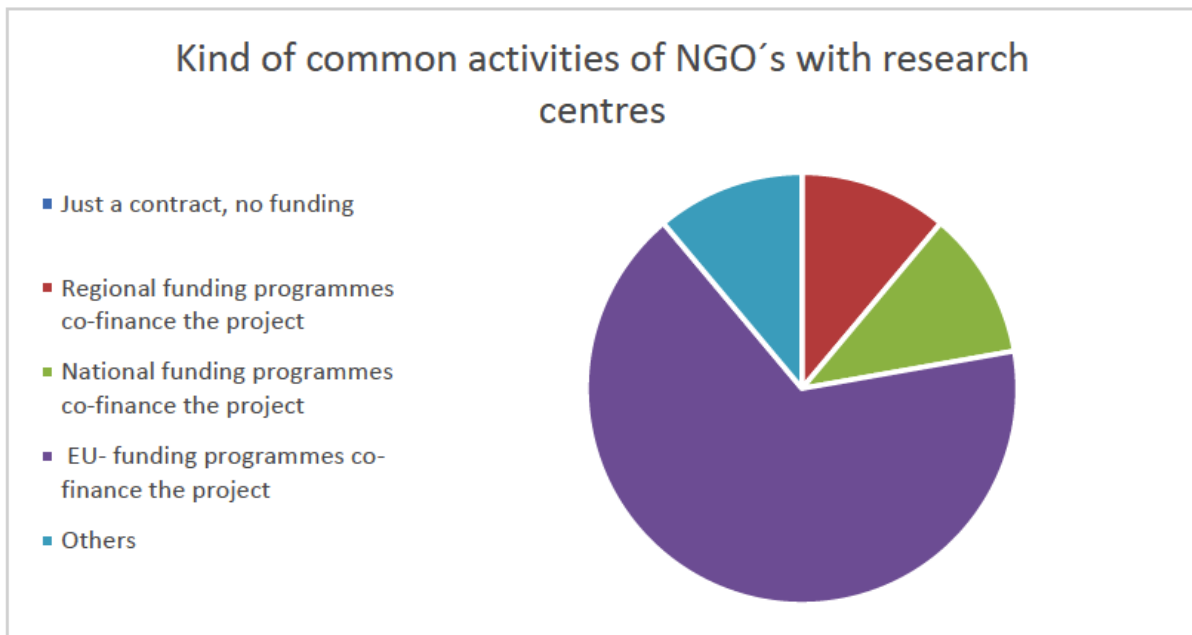


The pie chart is about the kind of common activities of NGO's with research centres. Exactly the half of the surveyed companies fund their common activities with the EU- funding programmes. 30% fund their projects with national funding programmes. Just a contact – no funding and regional funding programmes held a share of 10%. None of the companies finances projects with other programs than listed in the survey.

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The pie chart is about the kind of common activities of NGO's with research centres. 37% of projects are funded by EU, 32% from national programmes and 26% form Regional. Just a contract, without a funding has 5% of NGO's.



The pie chart is about the kind of common activities of NGO's with research centres. 67% of projects are funded with EU funds, followed by other funds equally at 11%.

**Magurele High Tech Cluster**



NGOs are focus on projects with social impact and public funds. This approach is giving them more visibility and stability. In the same time, in this way, the NGOs are reducing their capability to operate on the free market without the public support. The civil society has to have its own independence based on its own financial resources.

From the point of view of the research centres, the NGOs approach is a useful one for the following reasons: 1) the research centres are using the NGOs capabilities and it is not necessary to develop their

own competence in the related activities; 2) the research centres are reducing their costs using outsourcing.; 3) this cooperation has a strong contribution to develop a new market for services for research.

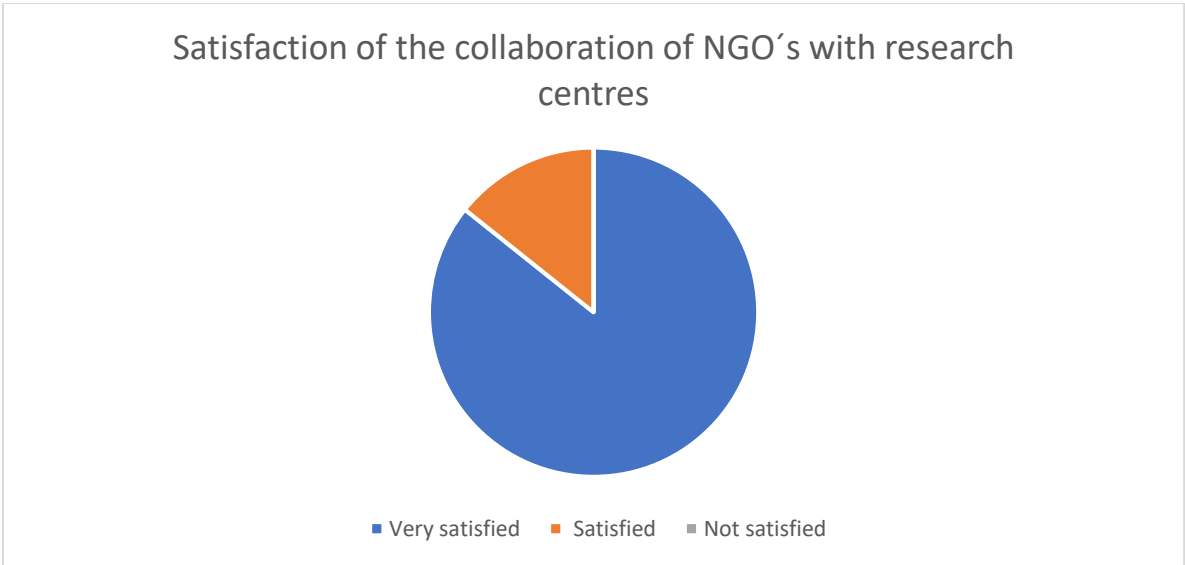
**2.5. Kind of common activities of NGO’s with the research centres**



The pie chart is about the kind of common activities of NGO’s with research centres. Almost half of the surveyed companies fund their common activities with the EU- funding programmes. 29% fund their projects with national funding programmes. Just a contact – no funding held a share of 29%. None of the companies finances projects with regional funding programmes and other programs than listed in the survey.

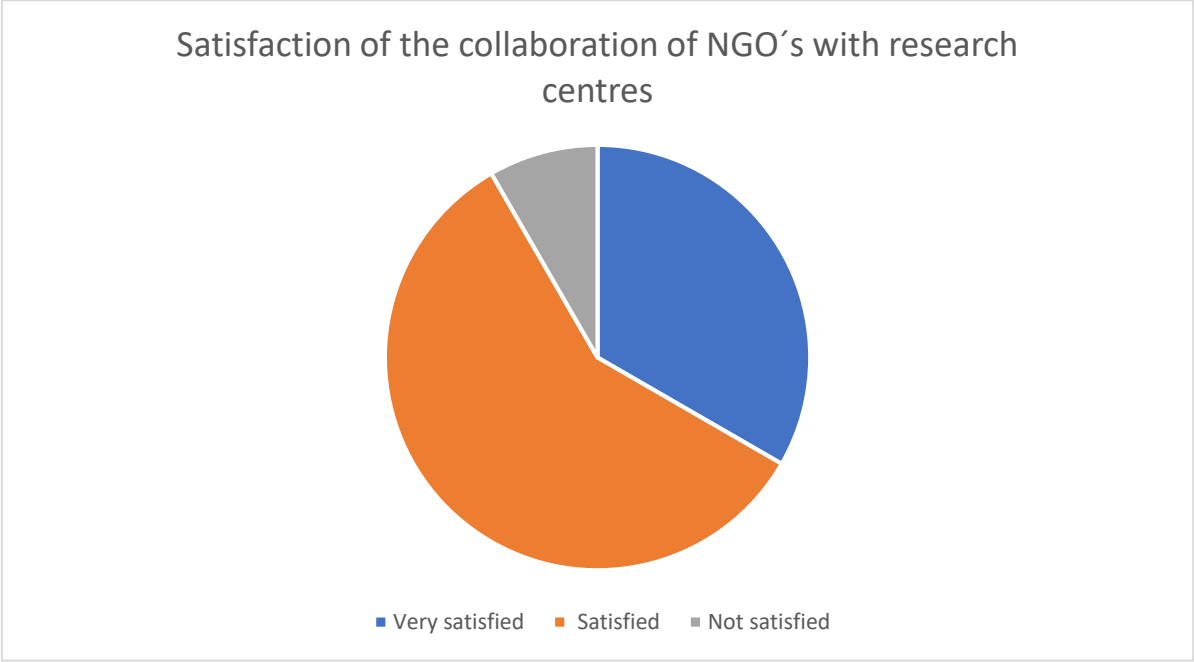
**5.2.6 Satisfaction of the collaboration of the NGO’s with the research centres**

**ELI-HU Nonprofit Ltd.**



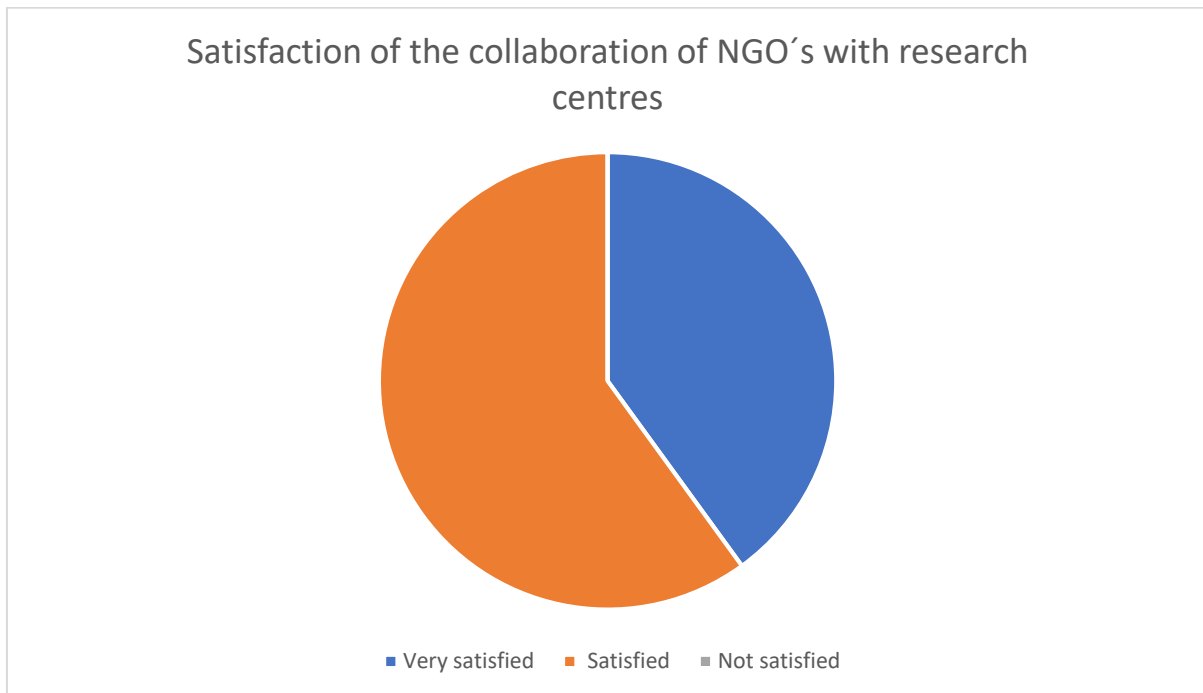
The chart gives an overview of the satisfaction of the collaboration of NGO's with research centres. Almost every responders said the they very satisfied with the cooperation with research centres and a few were "just" satisfied. No NGO replied that they were unsatisfied, this is a favourable statistics for the future.

**Development Agency of Serbia**



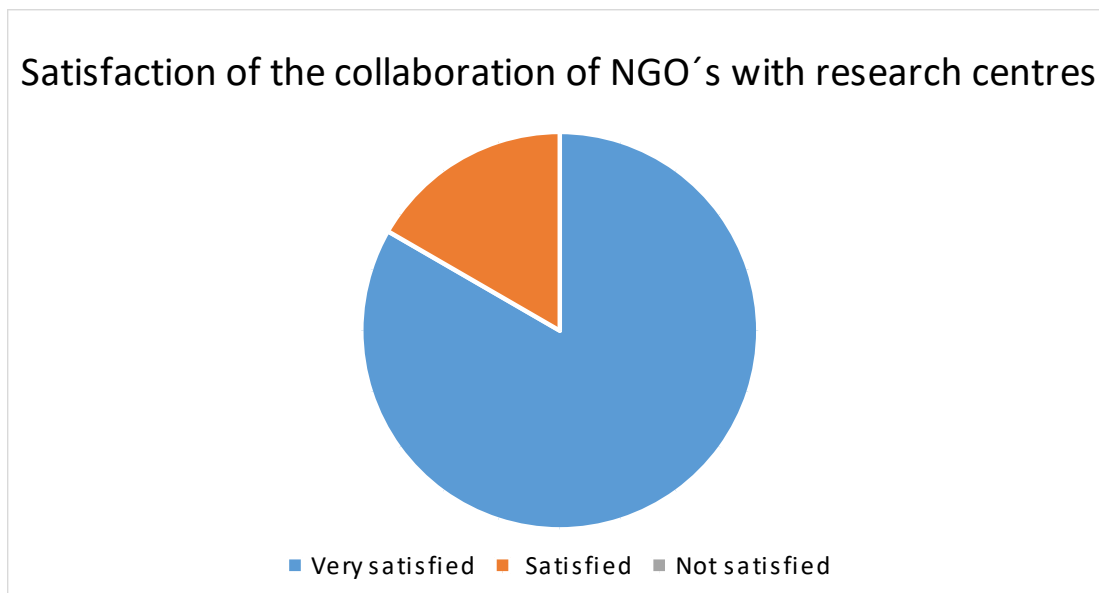
58% of NGO's are satisfied with collaboration with research centres, while 33.3% of them are very satisfied and about 8% would improve cooperation.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The chart gives an overview of the satisfaction of the collaboration of NGO's with research centres. More than a half are satisfied (60%). 40% of the NGO's which cooperate with research centres are very satisfied and no one is not satisfied.

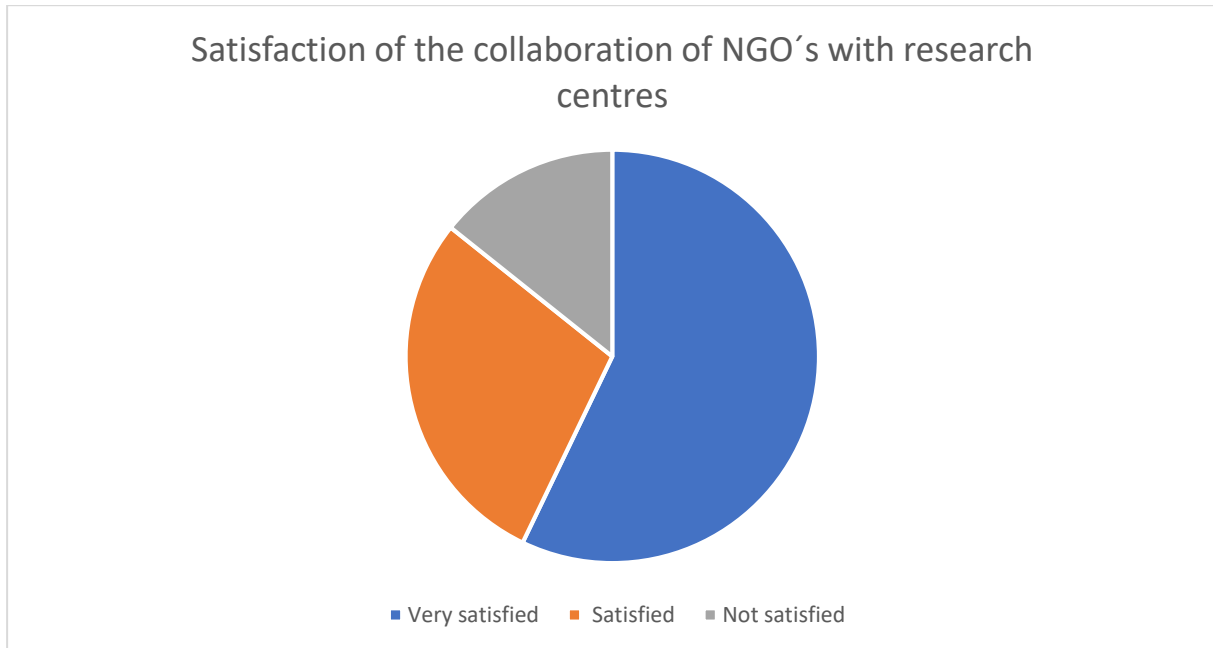
**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



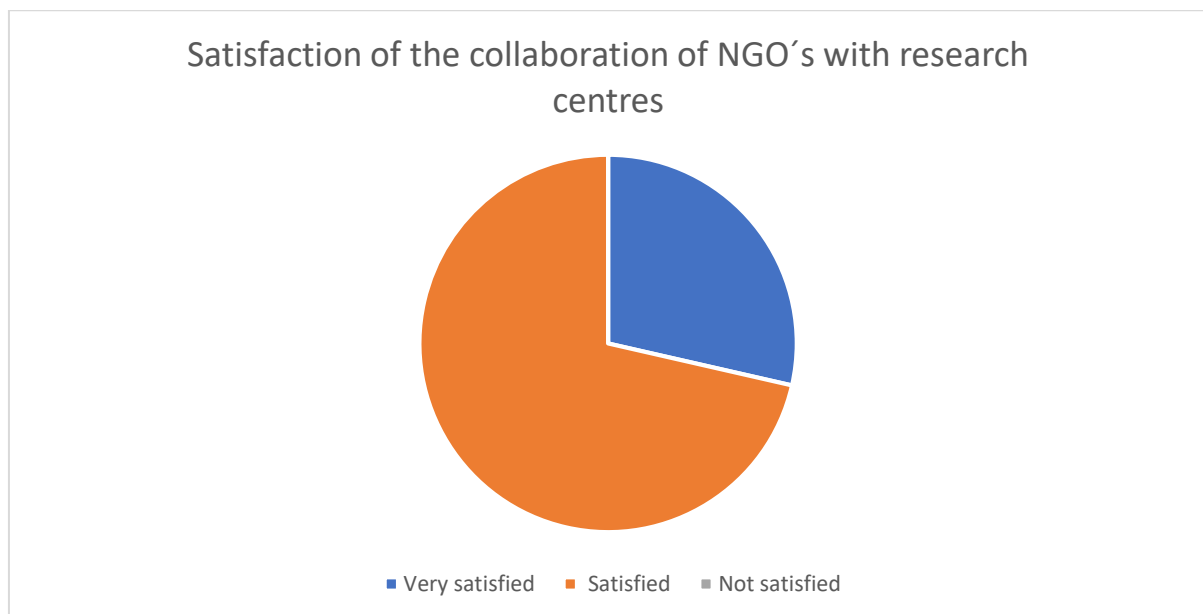
Five NGOs are very satisfied with their collaboration with research centres and only one is just satisfied. Four respondents have no reasons for satisfaction probably because they have an unsatisfactory experience in building collaboration relations.

## 2.6. Satisfaction of the collaboration of the NGO's with the research centres

Generally, yes, the NGO are satisfied with cooperation with research.

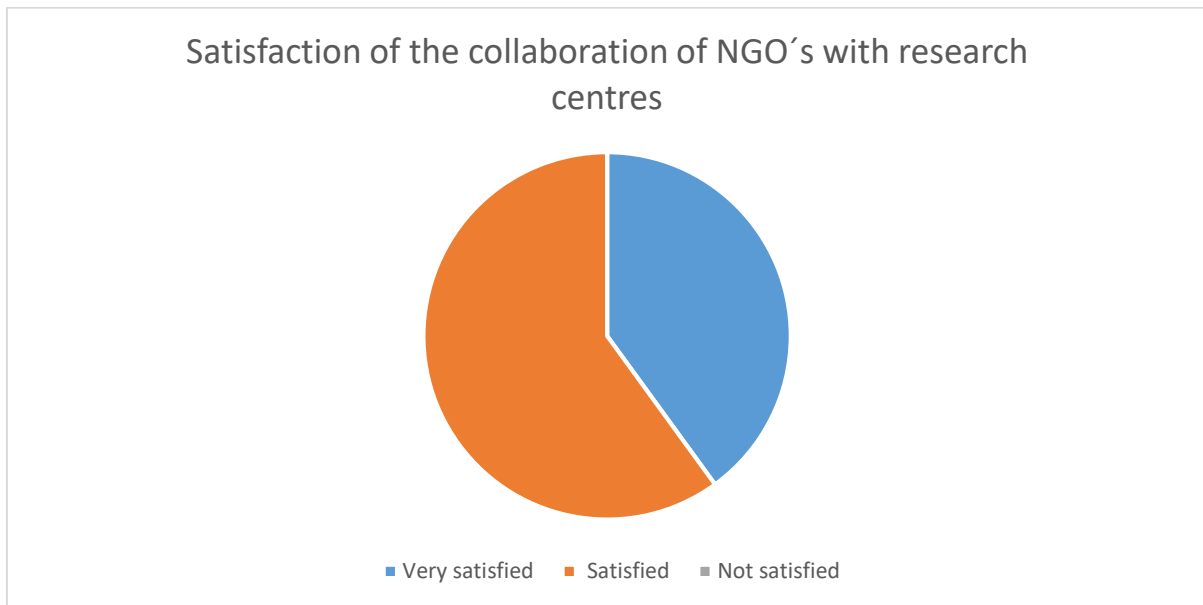


### **FH JOANNEUM GESELLSCHAFT M.B.H**



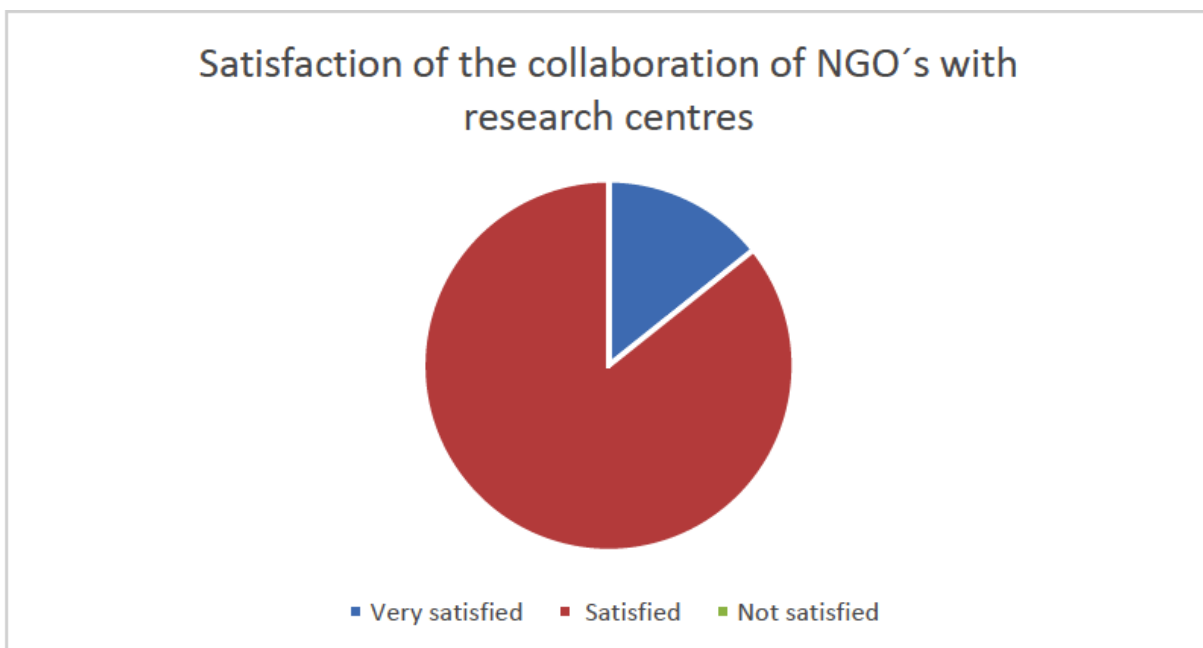
The chart gives an overview of the satisfaction of the collaboration of NGO's with research centres. More than a half are satisfied. Two of seven companies which cooperate with research centres are very satisfied and no one is not satisfied.

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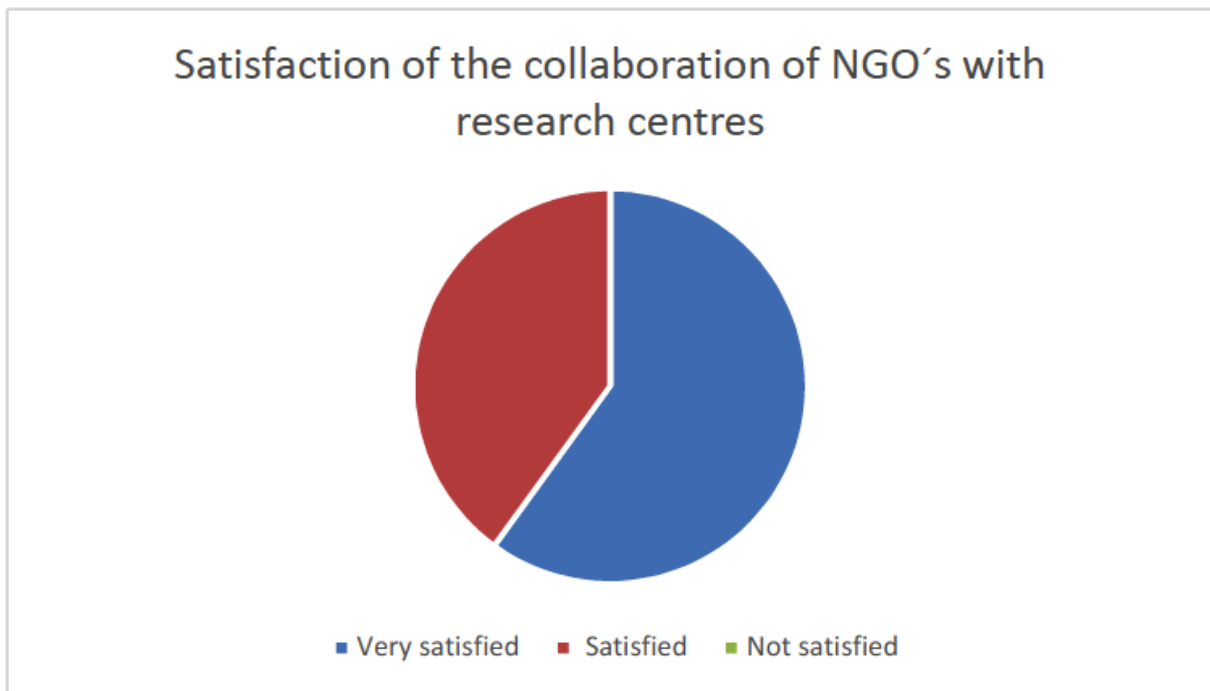
60% of NGO's are satisfied with collaboration with research centres while 40% of them are very satisfied.

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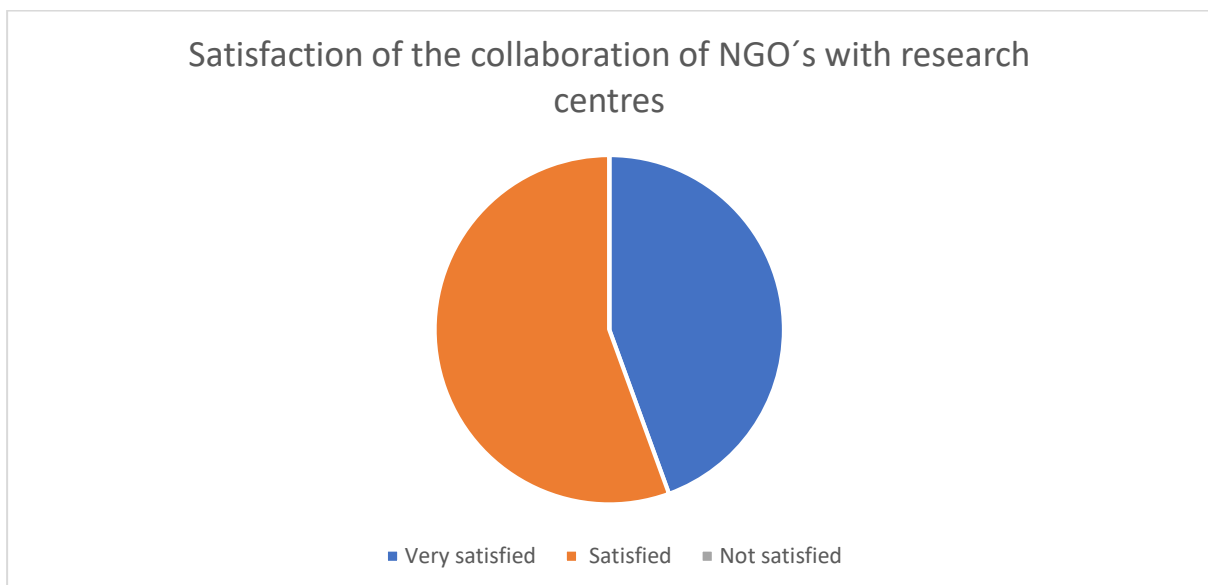
86% of NGO's are satisfied with collaboration with research centres while 14% of them are very satisfied.

**Magurele High Tech Cluster**



Working with research centres is satisfaction generator engine for the NGOs! Each side knows how to communicate with each other and how to operate in commune. The partners are receiving the expected results and they enjoy working together. More than this, in our perception based on personal experience, they have fun working together very hard!

**2.6. Satisfaction of the collaboration of the NGO's with the research centres**

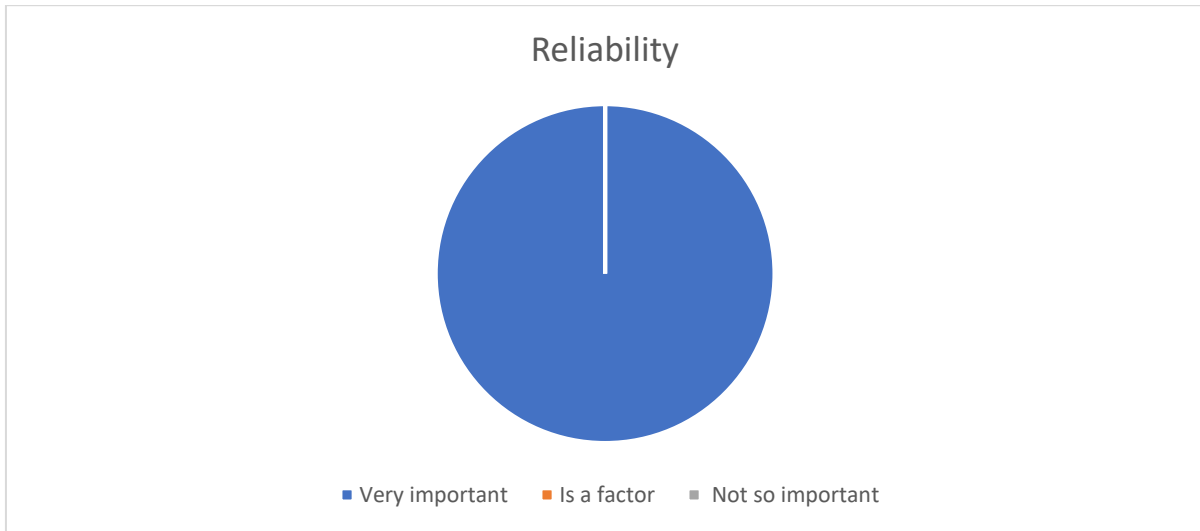


The chart gives an overview of the satisfaction of the collaboration of NGO's with research centres. More than a half are satisfied. Four of seven companies which cooperate with research centres are very satisfied and no one is not satisfied.

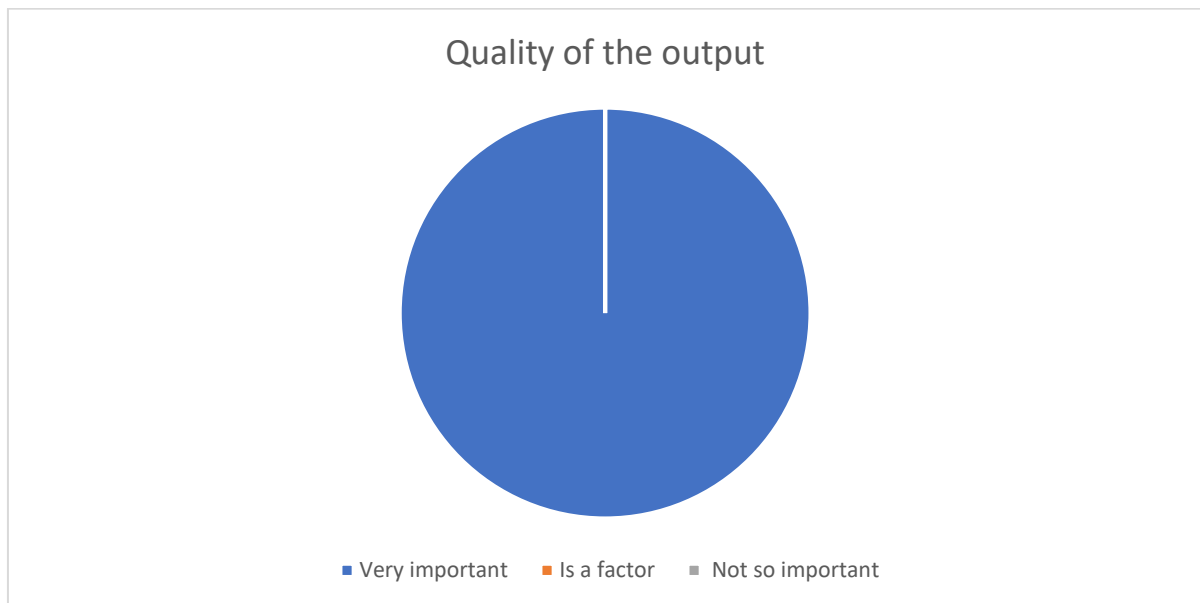


### 5.2.7 Important points of a collaboration of NGO's with a research centres

**ELI-HU Nonprofit Ltd.**



This pie chart describes the reliability. Here it is clearly visible that all NGO's attach great importance to reliability, as every filler ticked "very important" as a factor.

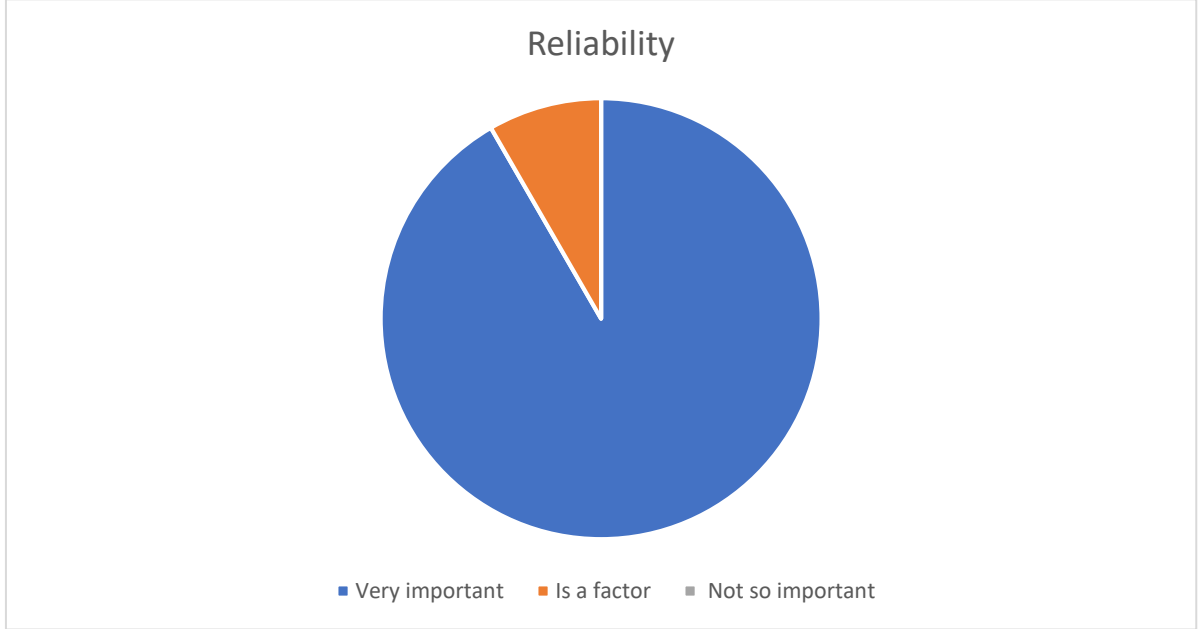


The quality of output has great values. All NGO's attach great importance to this. This and the previous data envisages strong and professional relations between the actors which can guarantee the successful future collaborations.

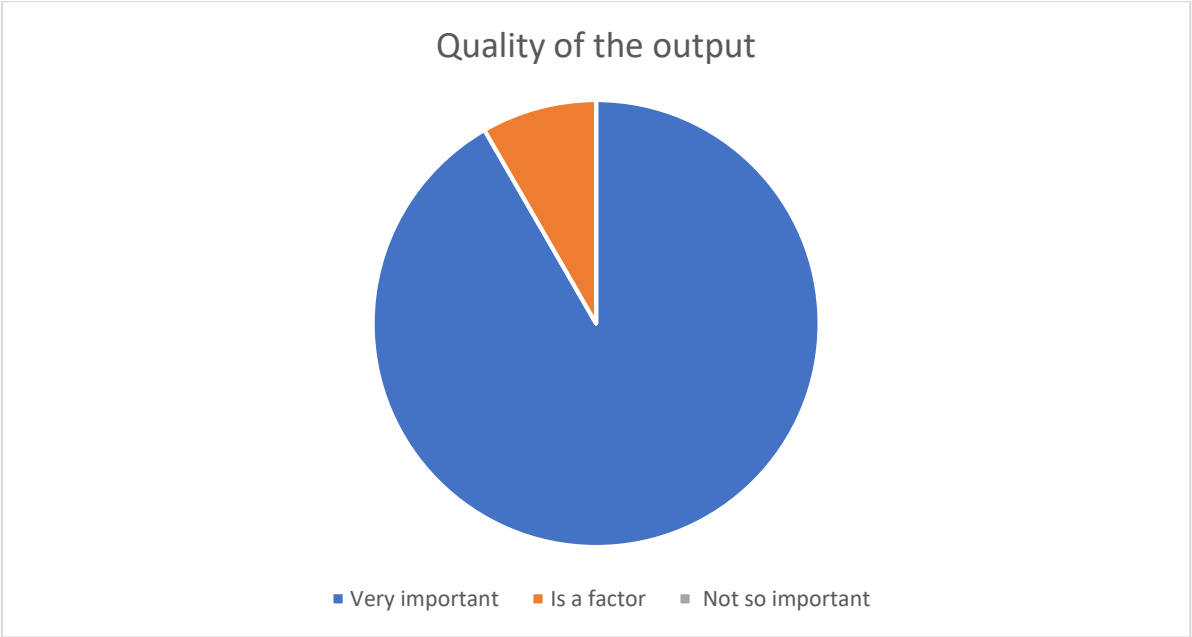


This pie chart describes the importance of costs of a collaboration of NGO's with a research centres. As can be seen in the graph, the costs are a very important factor for all of the NGO's. This is in line with the previous results where the NGOs said that all common projects are financed from natinal or EU funds.

***Development Agency of Serbia***



Almost all surveyed NGO's think that reliability is very important, for only one surveyed reliability is important.

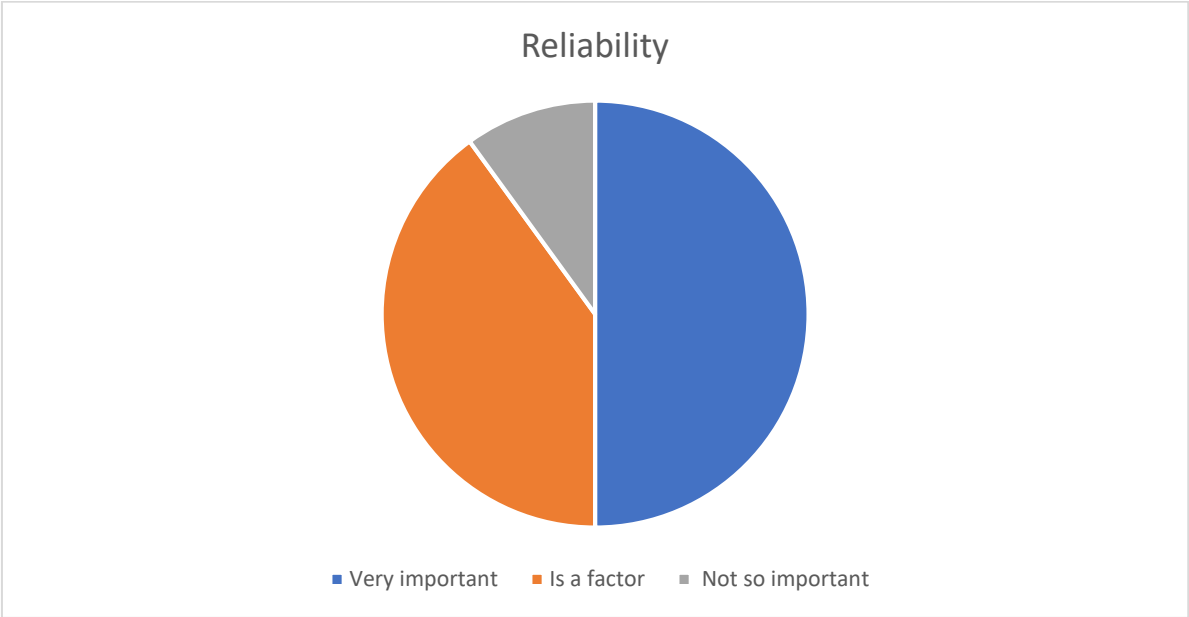


Situation with quality of the output is exactly the same as with reliability. Almost all surveyed NGO’s think that quality is very important- 91.6%.

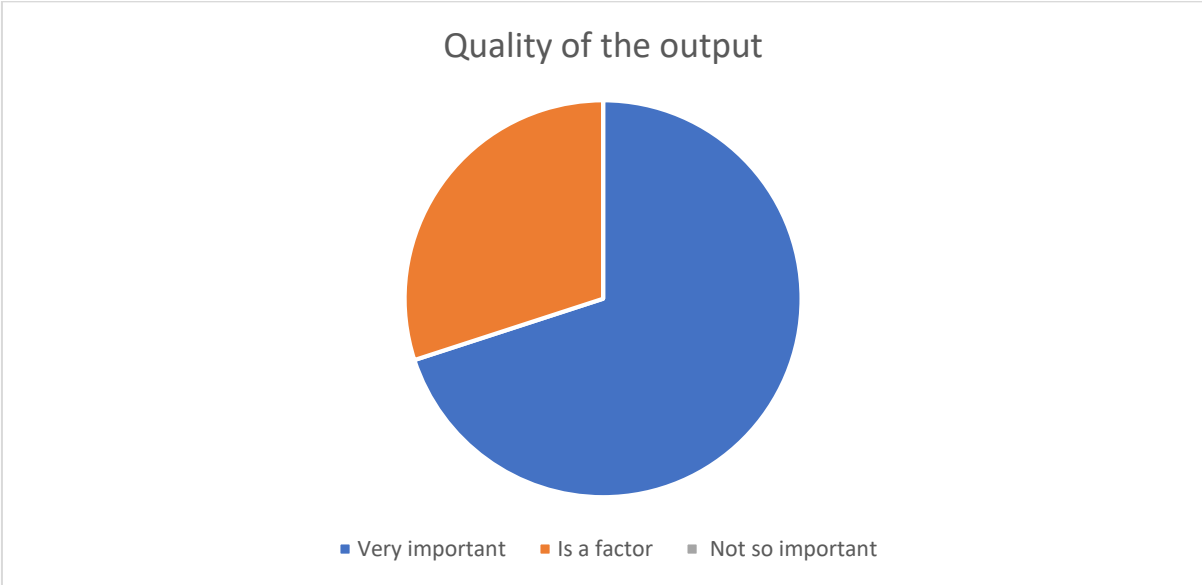


When it comes to price of common projects and collaborations, pie chart is pretty balanced- 4 surveyed NGO’s think that the cost is really important, for 3 of them it is “just” important and for 4 of them it doesn’t have importance.

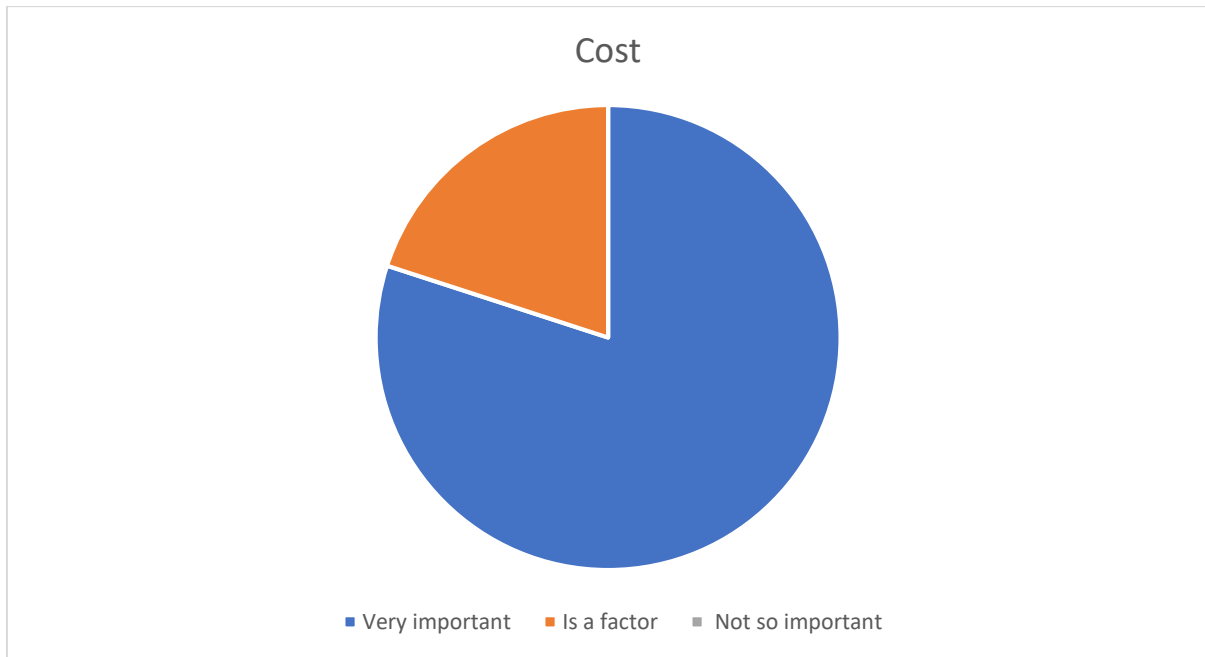
**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



This pie chart describes the reliability. Here it is clearly visible that all NGO’s attach great importance to reliability. The proportion of very important is 50%. For 10% of the NGO’s reliability was not so important, whilst it was a factor for 40%.

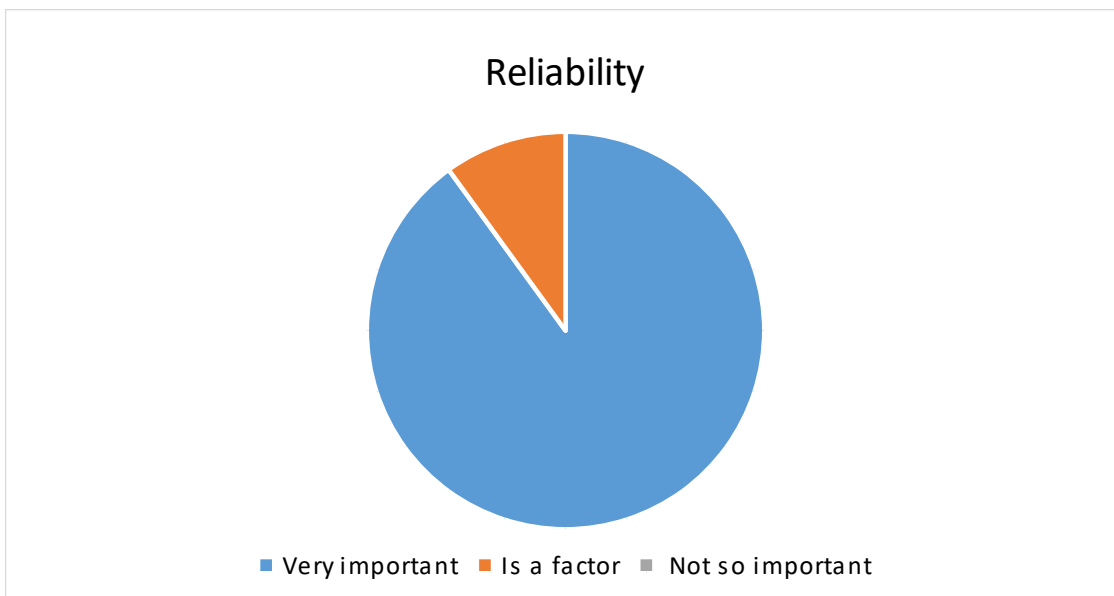


The quality of output has greater values than reliability. All NGO’s attach great importance to this. 70% of the surveyed ones said that it is very important. The rest (30%) said that is a factor.

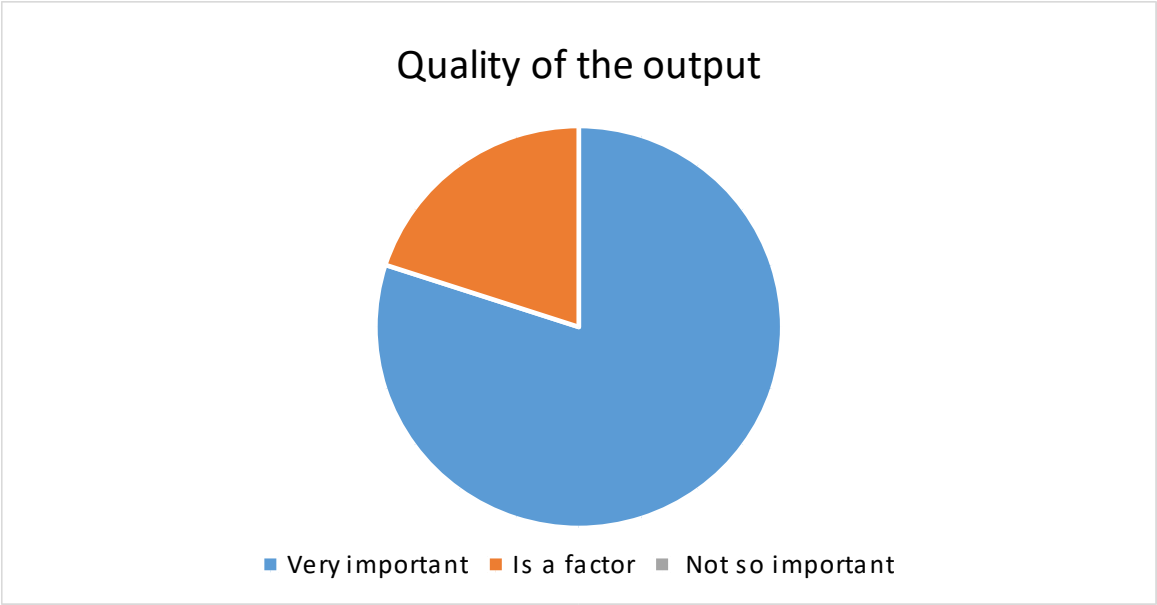


This pie chart describes the importance of costs of a collaboration of NGO's with a research centres. As can be seen in the graph, the costs are a very important factor for more than a half of all fillers (80% to be exact). Only 20% see the costs as a factor.

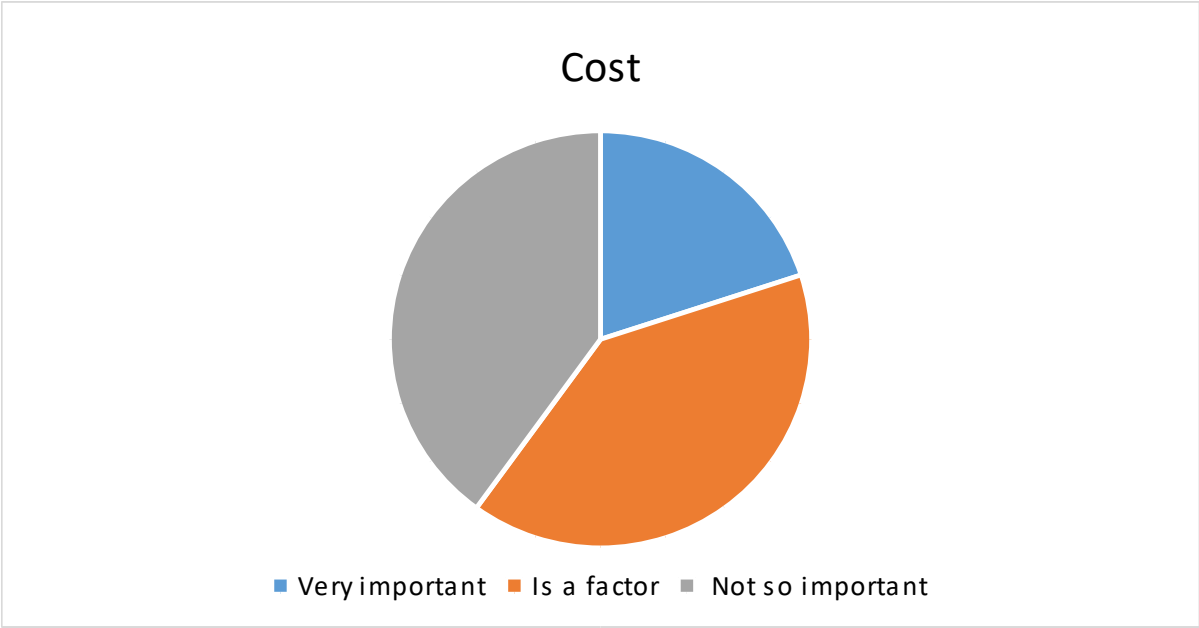
***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***



With only one exception (9 out of 10) all NGOs consider reliability as very important. The 10-th respondent considers it only a factor.



Quality is also highly appreciated by NGOs: Eight consider it as very important and 2 only as a factor.

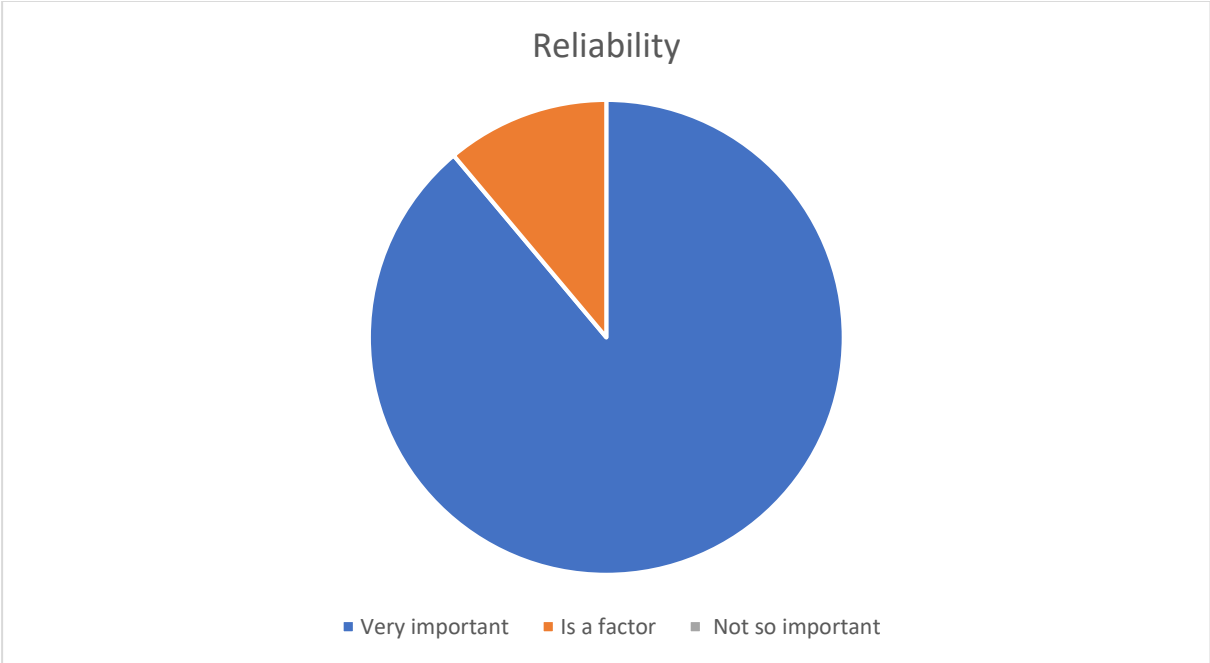


COST had a different range of appreciation: for 2 NGOs it is very important, 4 consider it just a factor and for other 4 it is not so important. The 3 respondents from the ecology and tourism sectors are of the opinion that COST is not so important. It is interesting to see that one respondent with a contract without funding considers cost as very important.

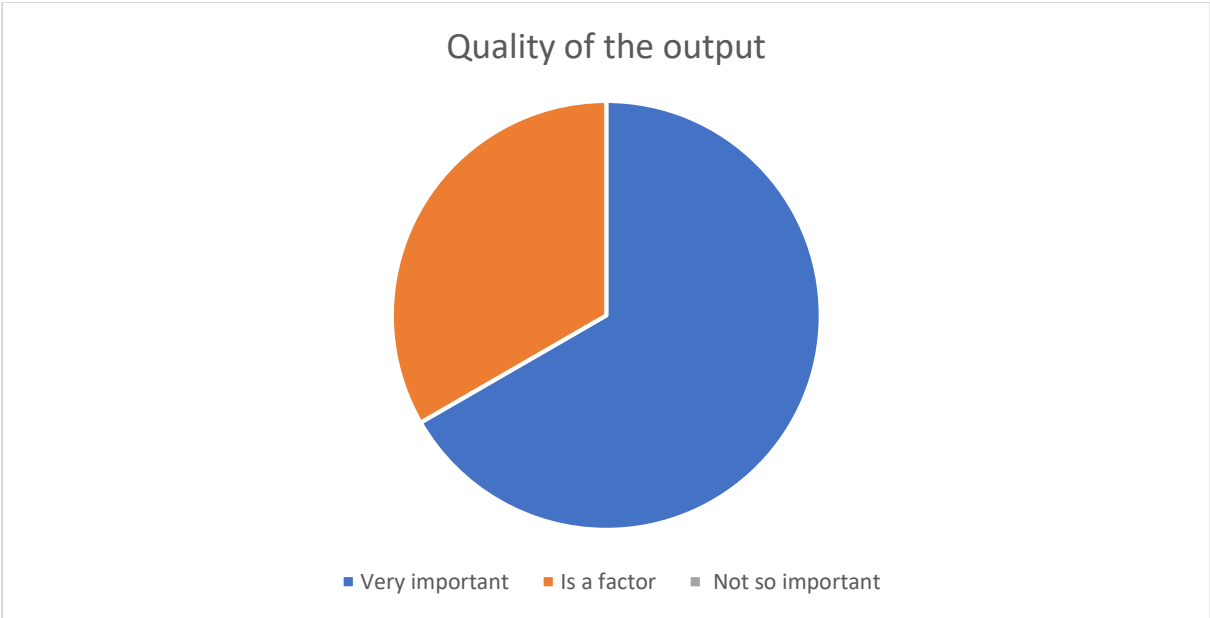
**2.7. Important points of a collaboration of NGO's with a research centres**

The reliability is the most important factor, then the output quality and surprisingly the cost is not so relevant for NGO (although the lack of funding is mentioned as an obstacle).

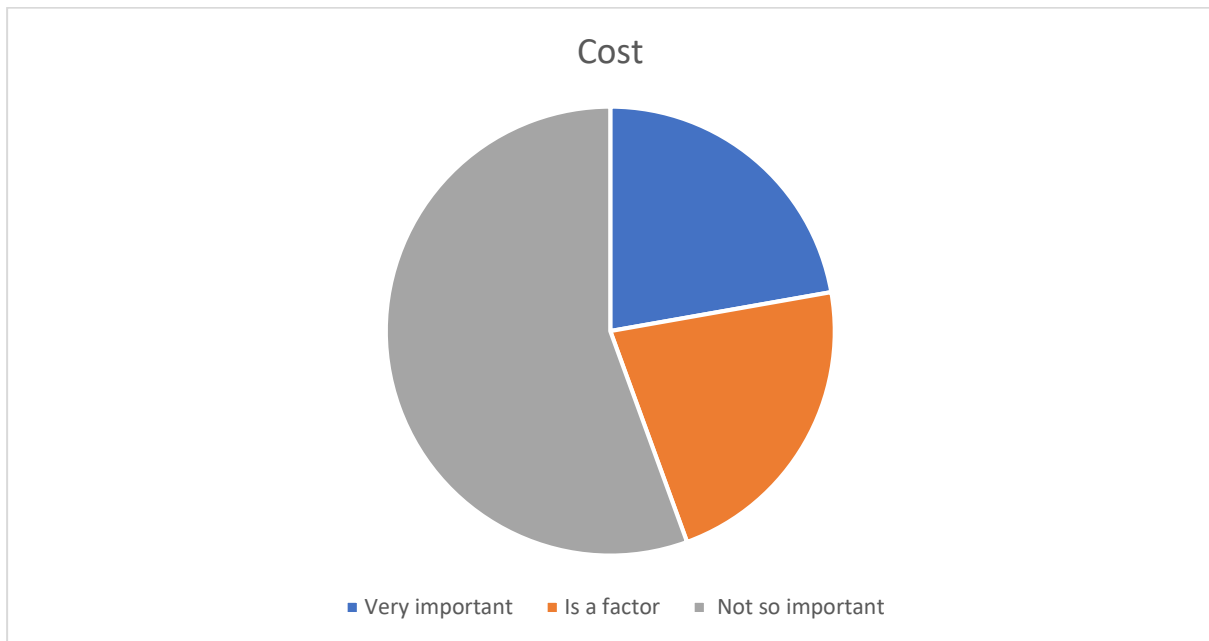
**RELIABILITY**



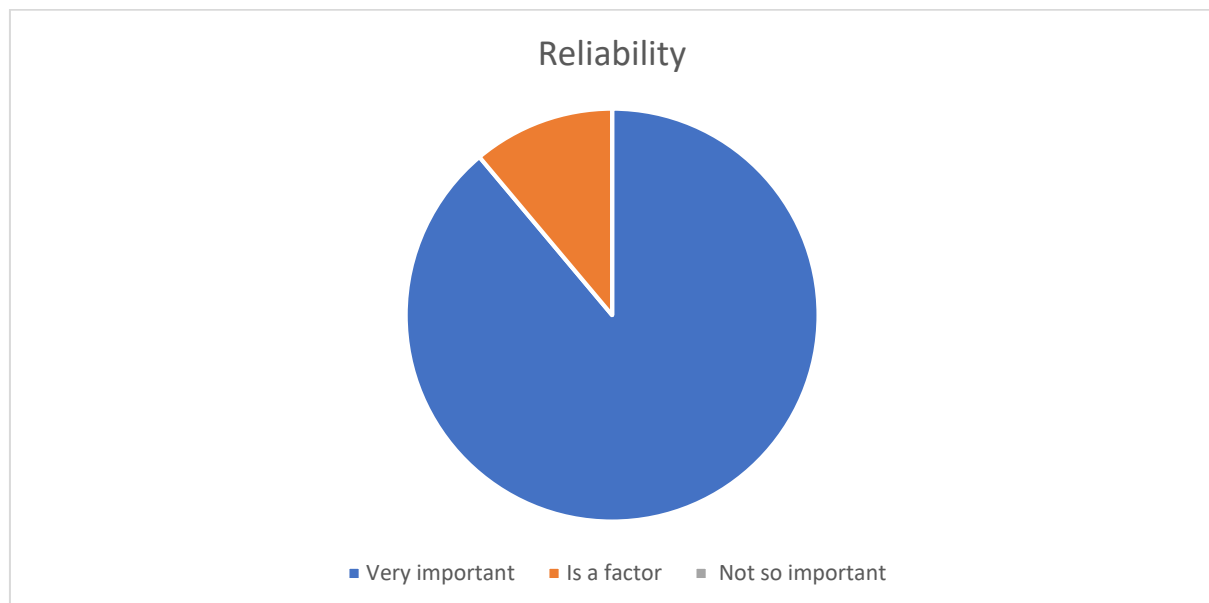
**QUALITY OF THE OUTPUT**



## COST

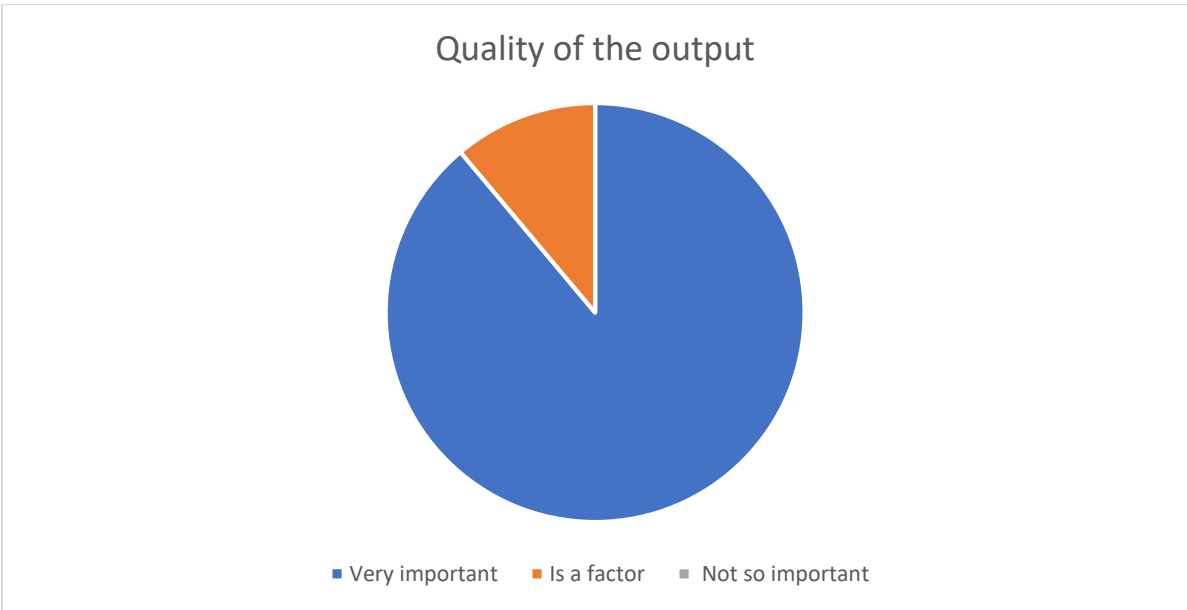


## ***FH JOANNEUM GESELLSCHAFT M.B.H***

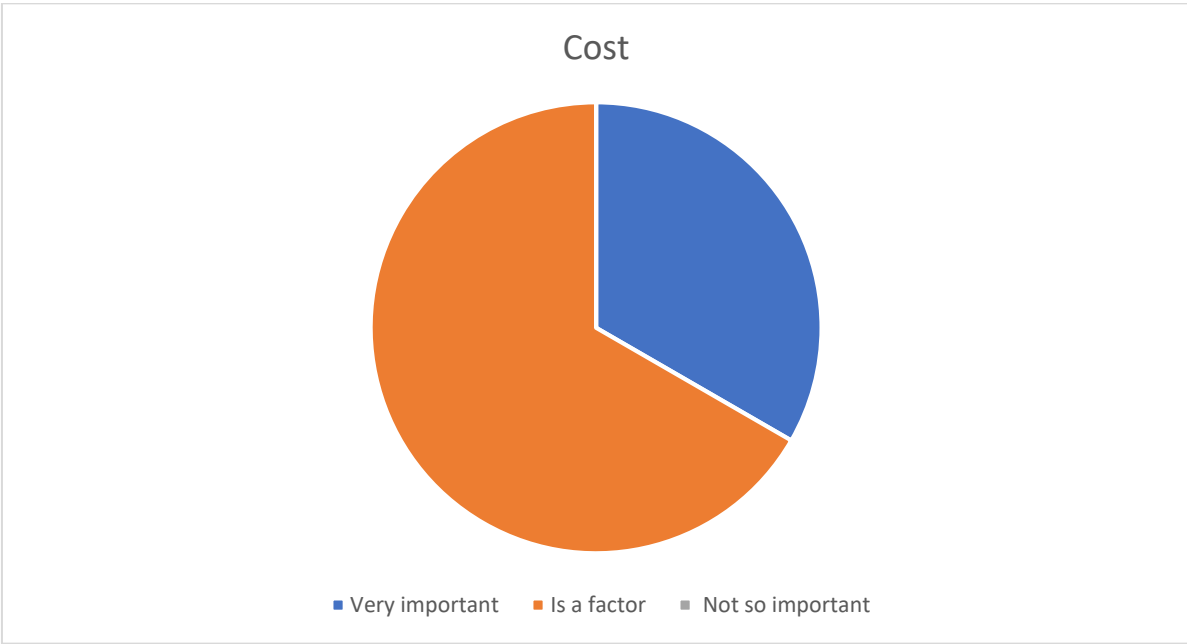


This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 89%. For 11% of the companies reliability is only a factor.



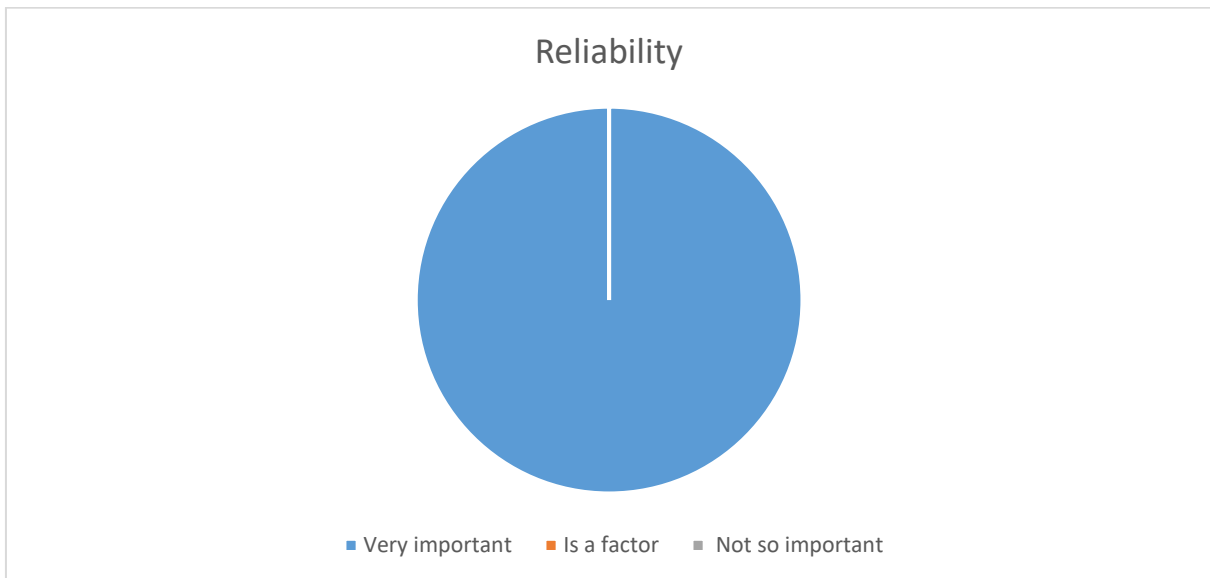


The quality of output has the same values as the reliability. All companies attach great importance to this. The quality of output plays for hardly a company a factor and no company places any value on it.

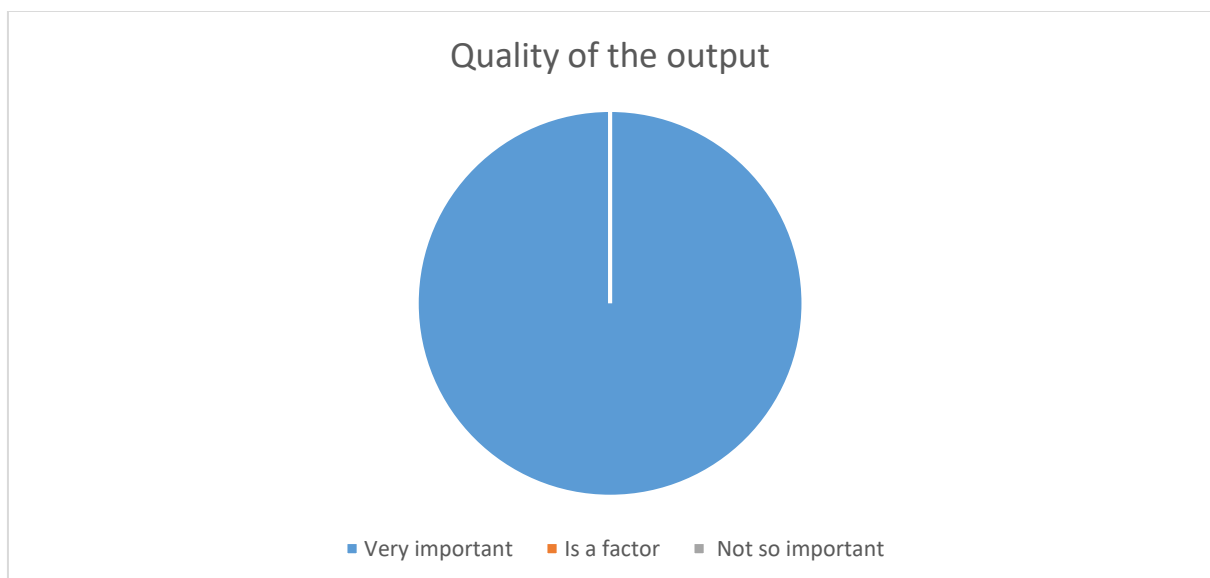


This pie chart describes the importance of costs of a collaboration of NGO's with a research centres. As can be seen in the graph, the costs are a factor for more than a half of all companies. Only 33% see the costs as very important.

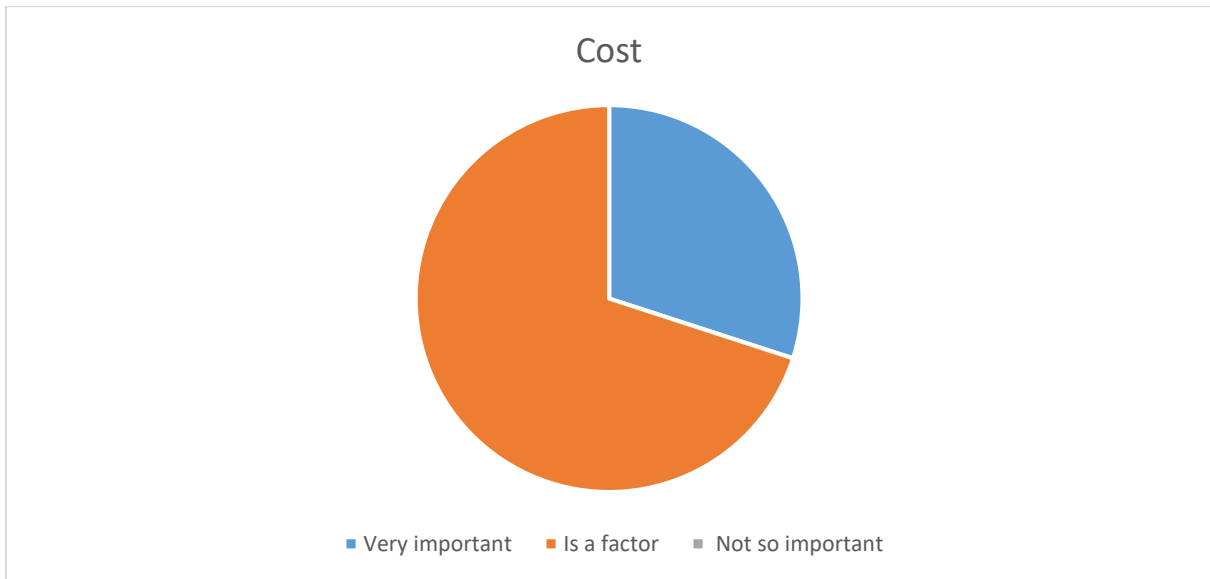
***Institution for development of competence, innovation and specialization of Zadar County***



All surveyed NGO's think that reliability is very important.

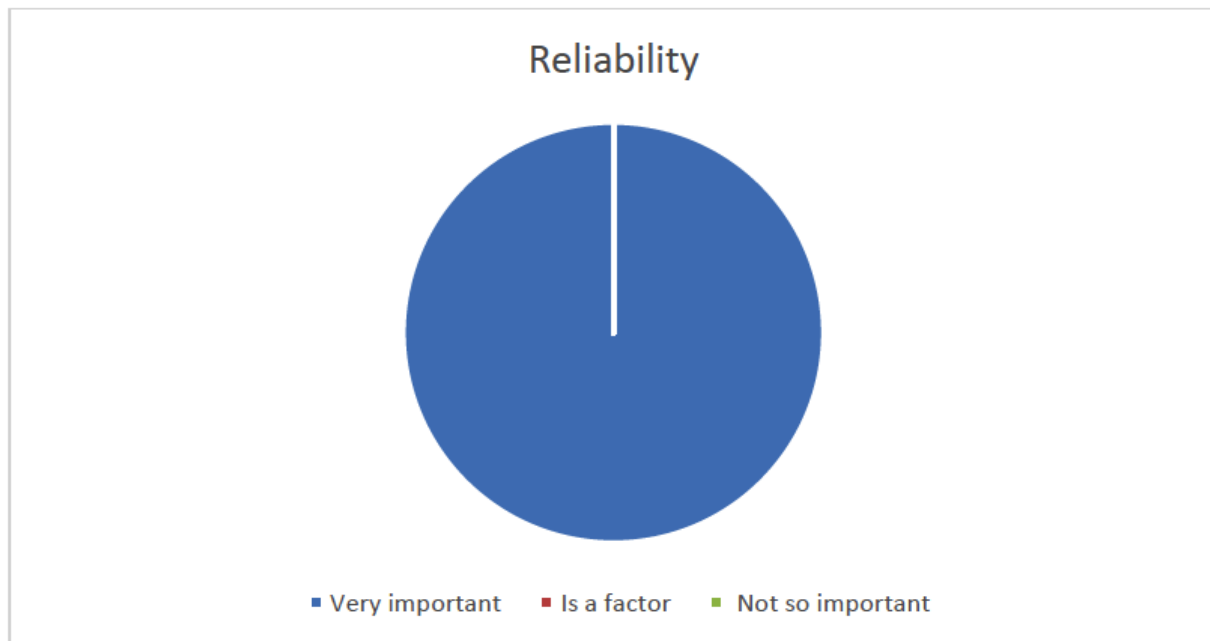


All surveyed NGO's think that quality of the output is very important.

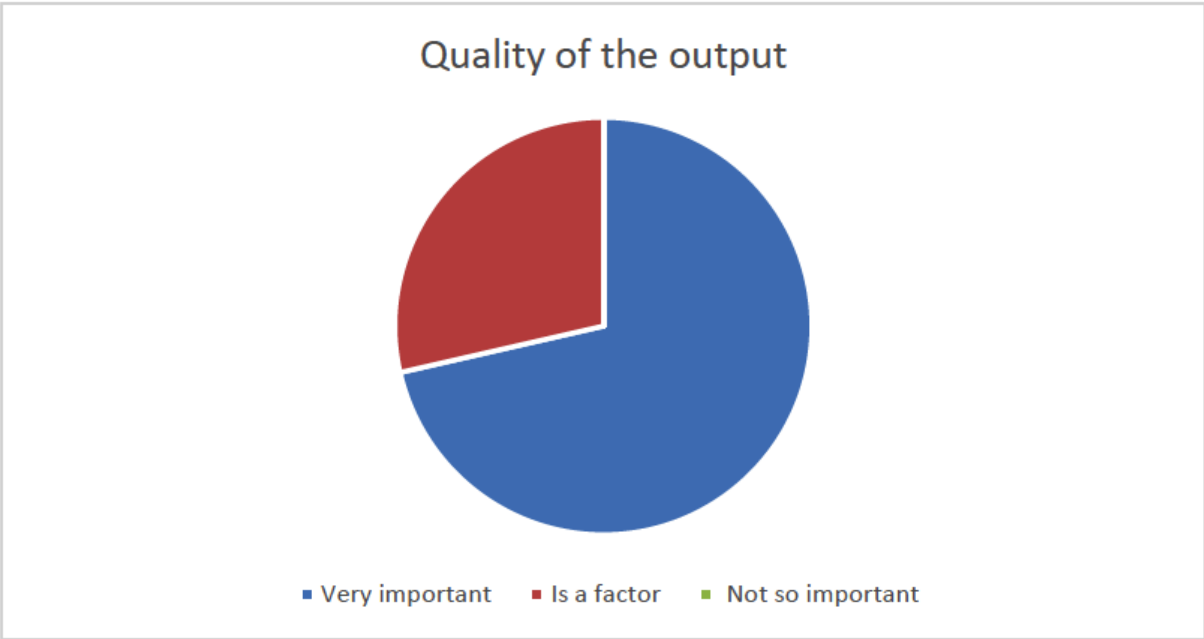


30% of surveyed NGO's think that costs are very important, and 70% of them think that it is a factor, which says that it is more important to be reliable and have a quality output, and the cost of it is secondary.

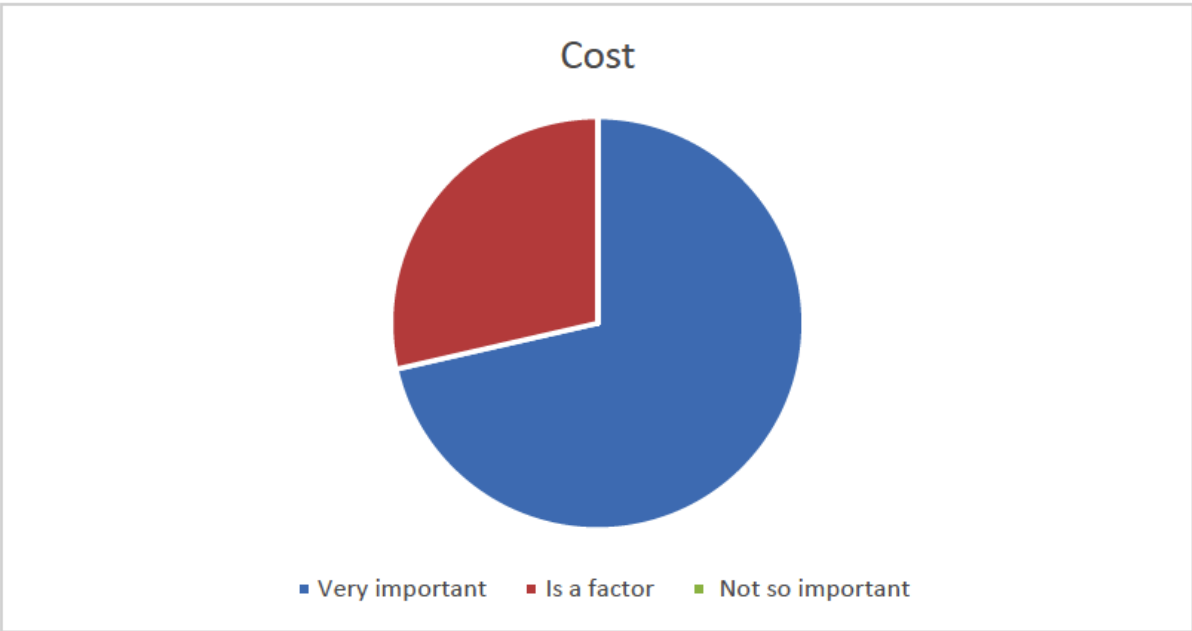
**UNIVERSITY OF MARIBOR**



All surveyed NGO's think that reliability is very important.

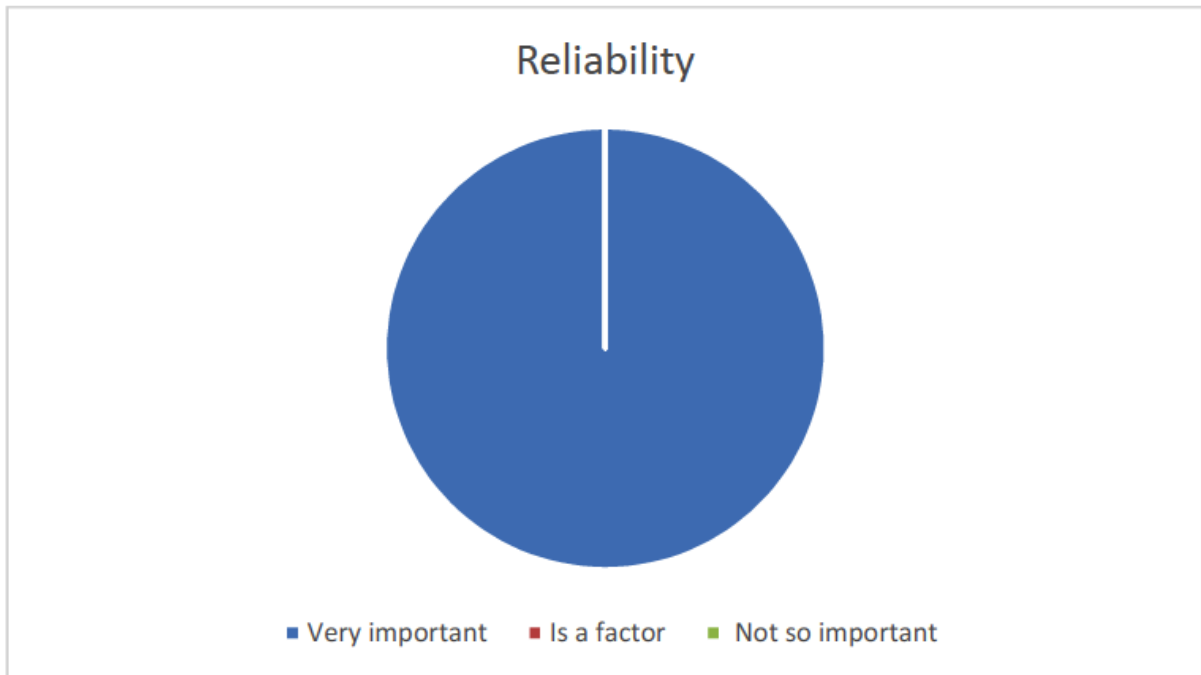


The Quality of output has nearly the same values as the cost. 29% of them thinks that is a factor, but 71% thinks that it is very important.

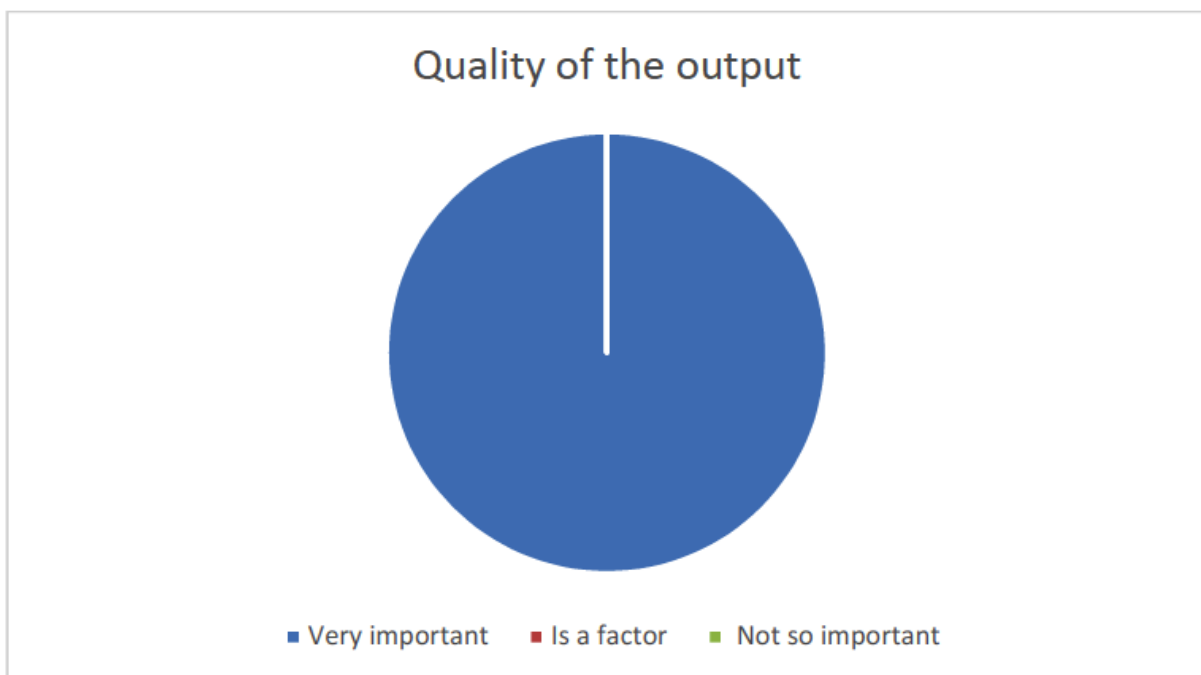


71% of surveyed NGO's think that costs are very important and 29% of them thinks that it is a factor.

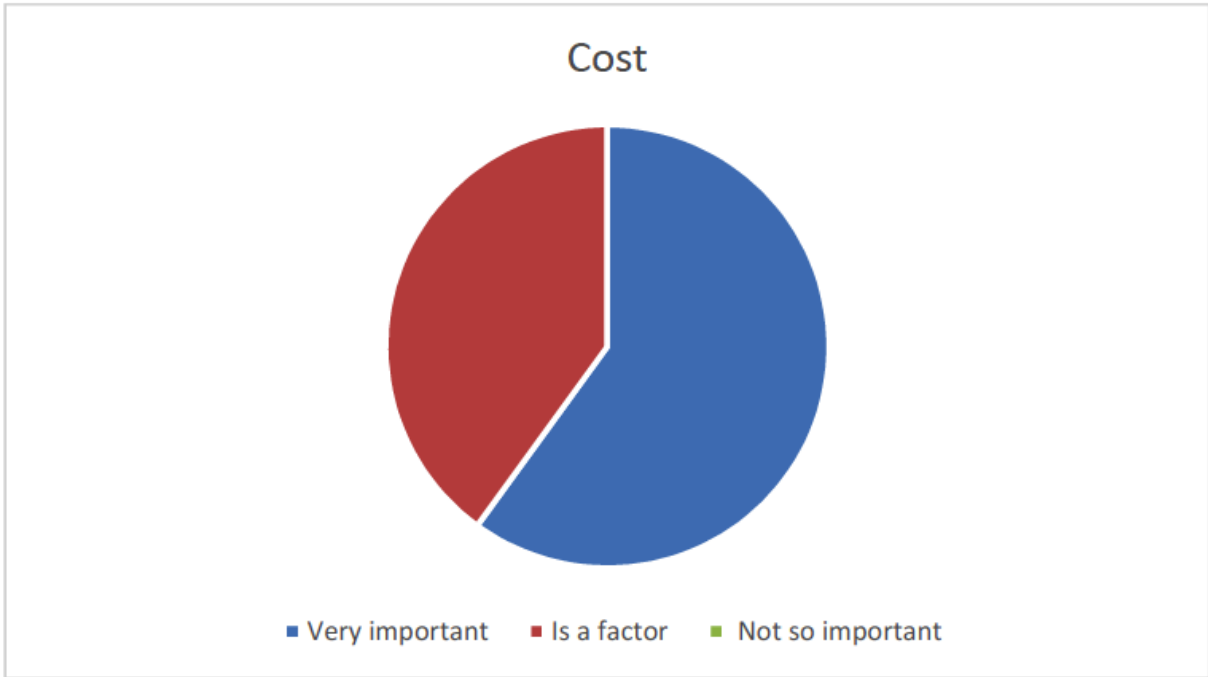
### Magurele High Tech Cluster



The NGOs know that they may rely on research centres at all levels of their cooperation. We have the opinion the research centres may use this opinion as a starting point of a more vigorous cooperation with the NGOs.



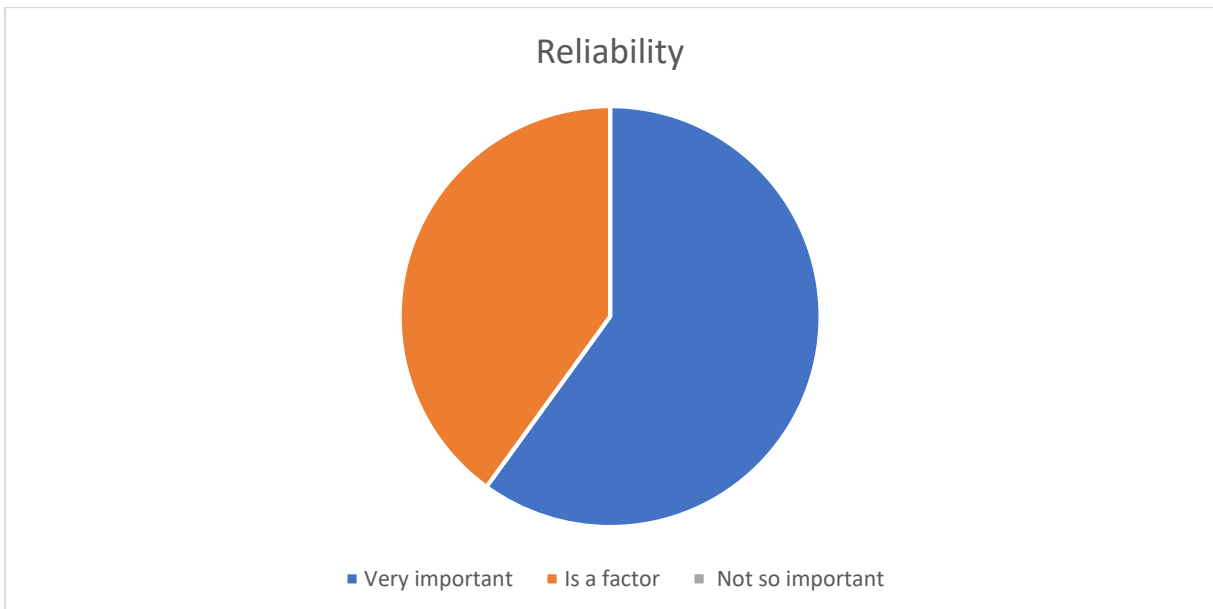
The social activists (the NGOs staff) are eager to have high standard results. They are doing their activities, usually, for free or for a small amount of money. So, their incentive is the quality of their services and products for the public recognition. In this way, the research centres are the natural partners.



Usually, the NGOs are under budgeted. The consequence is that they are looking very carefully after the costs of their initiatives. The NGOs are scrutinising very serious the costs of the common project for their final clients which are, usually as “reach” as NGOs are. So, it is their social duty to reduce the costs of each activity and the research centres have to take into consideration this approach.

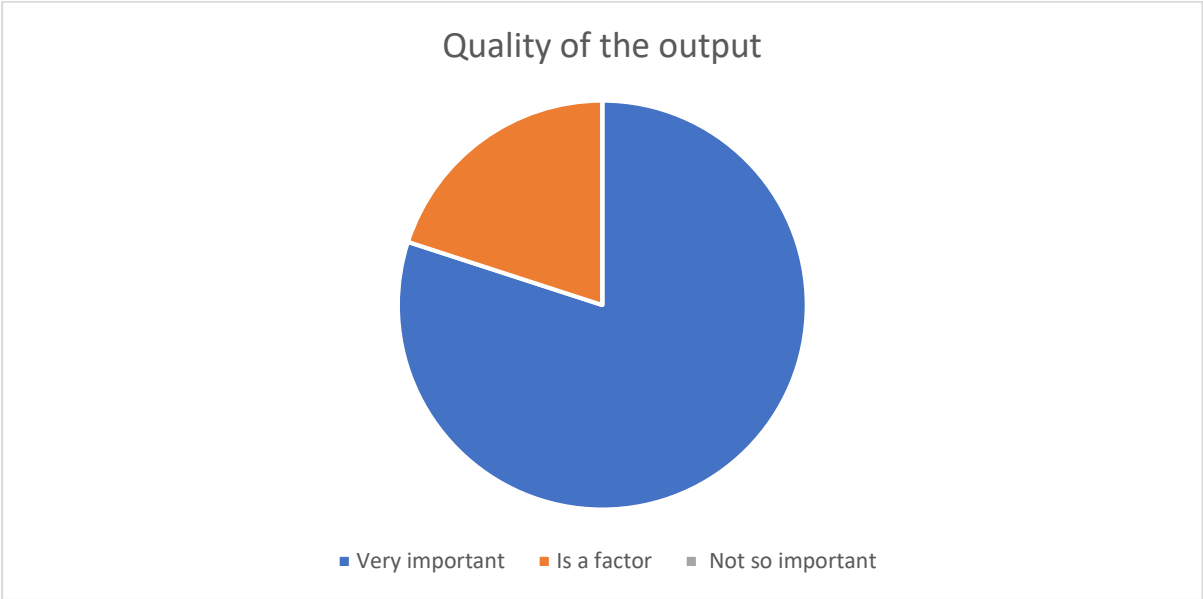
**2.7. Important points of a collaboration of NGO’s with a research centres**

**RELIABILITY**



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 60%. For 40% of the companies reliability is only a factor.

QUALITY OF THE OUTPUT



This pie chart describes the quality of output. Here it is clearly visible that all companies attach great importance to the quality. The proportion of very important is 80%. For 20% of the companies reliability is only a factor.

COST



This pie chart describes the importance of costs of a collaboration of NGO's with a research centres. As can be seen in the graph, the costs are a factor for a half of all companies. And 50% see the costs as very important.

### **5.2.8 Obstacles of NGO's in working together with research centres**

#### ***ELI-HU Nonprofit Ltd.***

NGO's see obstacles in academic approaches as these are often not possible in the projects they do. Bureaucratical and administrative issues also came up as a determining factor. Another factor is always the costs. Since the costs are often higher than expected and often there is not enough time. Moreover, this survey also revealed a different understanding of systems, processes and production. The NGOs should be more integrated to the decision making process and their acceptance in the society and politics should be higher.

#### ***Development Agency of Serbia***

As main obstacles in cooperation with research centres these problems were mentioned:

- Too wide scope of work of research centres that causes their incapability to answer the demand,
- Lack of resources to finance cooperation enhancement,
- Inadequately trained human resources among the NGO's,
- Lack of financial stability.

#### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

NGO's see obstacles in academic approaches as these are often not possible in the projects they do. Bureaucratical and administrative issues also came up as a determining factor. Another factor is always the costs. Since the costs are often higher than expected and often there is not enough time. Moreover, this survey also revealed a different understanding of systems, processes and production.

#### ***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***

NGOs very briefly presented the obstacles in their work with the research centres:

1. bureaucracy;
2. frequent changes in procedures;
3. more and more complicated access to funding;
4. some national research funding schemes not equally available to NGOs;
5. underdeveloped specific abilities and competences.

### **2.8. Obstacles of NGO's in working together with research centres**

The mentioned obstacles are listed below:

- No interest of research organisation for cooperation.
- Complicated administrative procedures of research organizations.
- Administrative and bureaucracy of grant calls



- Non suitable conditions or limits of project cooperation with research org.
- Lack of information, contact with research
- Lack of funding
- Difficulties in finding common speech or topic
- Team stability and expertise on the side of research partner

#### ***FH JOANNEUM GESELLSCHAFT M.B.H***

NGO's see obstacles in academic approaches as these are often not possible in the projects they do. Another factor is always costs and time. Since the costs are often higher than expected and often there is not enough time. Furthermore, this survey also revealed a different understanding of systems, processes and production. However, there are also NGO's which do not see any obstacles to cooperating with research centres.

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Lack of funding from national programmes, Business vs. Academic approach with regards to the time and accuracy, sometimes research centres can be slow, there is very small amount of projects during the year and inadequate support of the local government, If the research centre is a public body, they are prone to politics which influences cooperation, negative attitude towards NGO's, lack of motivated researchers, financial obstacles (not enough funding)

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Lack of funding from national and international programmes, slow response from research centres for implementation of results.

#### ***Magurele High Tech Cluster***

The main obstacles are the following:

- The cash flow research centres – NGOs it is not constant.
- Administrative issues
- The high costs of the cooperation
- Some useful national research funding scheme are not available for the NGOs, also
- Difficulties to access loans from the banks for co-financing join projects
- Lack of funds
- Bureaucracy

The main conclusion is the following: the financial aspects are the main obstacles for the NGOs to cooperate with the research centres.

## 2.8. Obstacles of NGO's in working together with research centres

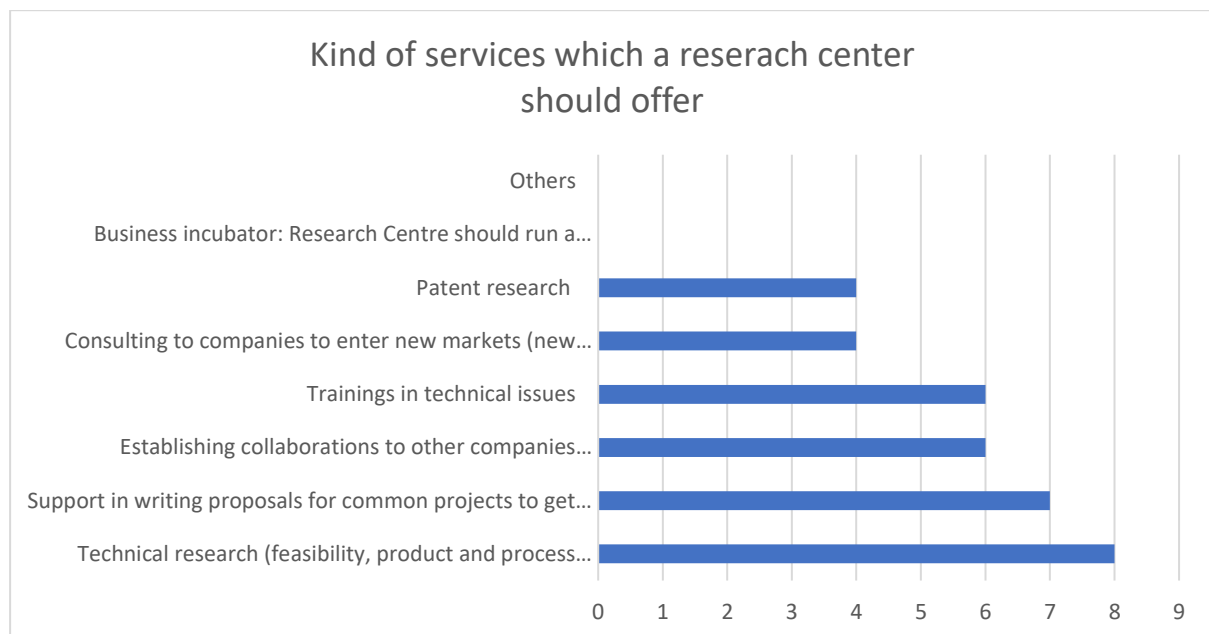
NGO's see obstacles in academic approaches as these are often not possible in the projects they do. On their opinion the research centres are mainly oriented on scientific impacts, not interested in general promotion and practical usage. An obstacle is sometimes definition or negotiation of task.

Another factor is always costs and time. There is a complicated funding scheme in Programme DELTA by TA ČR and Fraunhofer network. Since the costs are often higher than expected and often there is not enough time. Furthermore, this survey also revealed a different understanding of systems, processes and production.

However, there are also NGO's which do not see any obstacles to cooperating with research centres.

## 5.2.9 Kind of services which a research centre should offer

### ELI-HU Nonprofit Ltd.



The questionnaire identified many possible field of cooperations. The bar chart shows that most NGO's want to have technical research to be offered. Seven of the fillers wants support in writing proposals, while six-six would like to get help in establishing collaborations and trainings in technical issues. Four out of ten ticked patent research and consulting to companies.

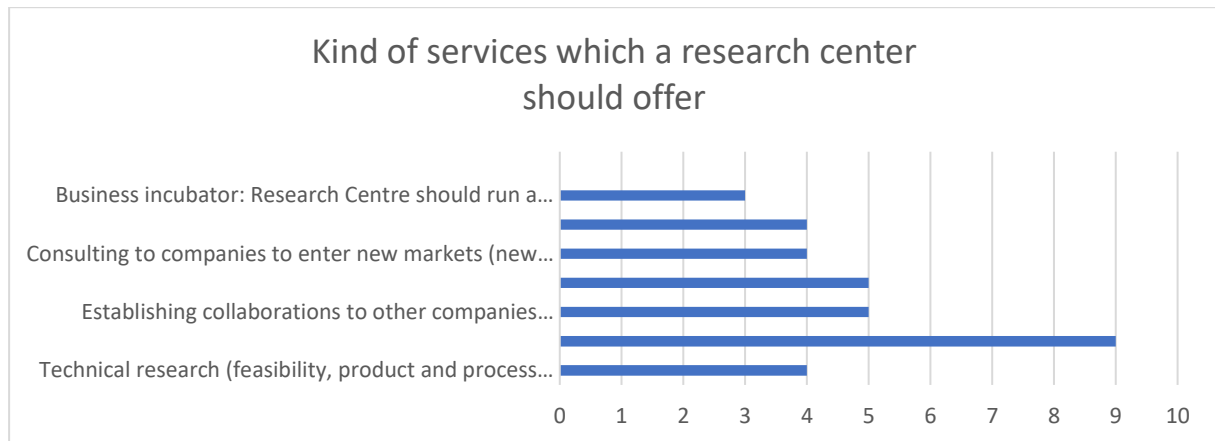
### Summary

The questionnaire revealed that there are several possibilities of cooperation between NGOs and research institutions. In additional the NGO network has significant tacit added value to the innovation process. One of the main problem is financing, the players use common projects to finance their activity through national and EU grants. It would be really hard to completely eliminate this kind of use of the grants, but to tackle the problem the quality of the output of the common projects should be checked severely.

**Main findings:**

1. High level of willingness to cooperate but common activities mostly appears along a few common cases not permanently.
2. Significant tacit added value to the innovation process.
3. Financing of these projects is an important problem which should be solved.

**Development Agency of Serbia**



Most of the responders say that they need support from research institutions in writing proposals for common projects to get funding- 26% of them. All other services that research centres should provide are equally interesting for NGO's – 10 to 15%. None of them listed any other type of service.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The bar chart shows that most NGO's (7) want to establish collaborations to other companies (business talks, network events, etc.), Intermediaries, etc. Five out of ten want a support in writing proposals for

common projects to get fundings, trainings in technical issues and consulting to companies. Only one-out of ten NGO's technical research and patent research. Nobody wants a patent search service or other services. Three out of ten wants business incubation system.

**Conclusions and summary**

The NGOs memberships in networks are very low. Their presence would be important in different networks, like clusters or business unions. But is reassuring that their cooperation with RC are high. It means 1 common project per year. They work with every kind of RCs but the universities of applied science the highest. It comes from that most of the research activities can find in the universities.

The kind of the common projects are also variable. The first three category (just a contract, no funding; regional funding programmes co-finance the project; national funding programmes co-finance the project) shares an equal part. This kind of cooperation gives satisfaction to NGOs which may require further common projects.

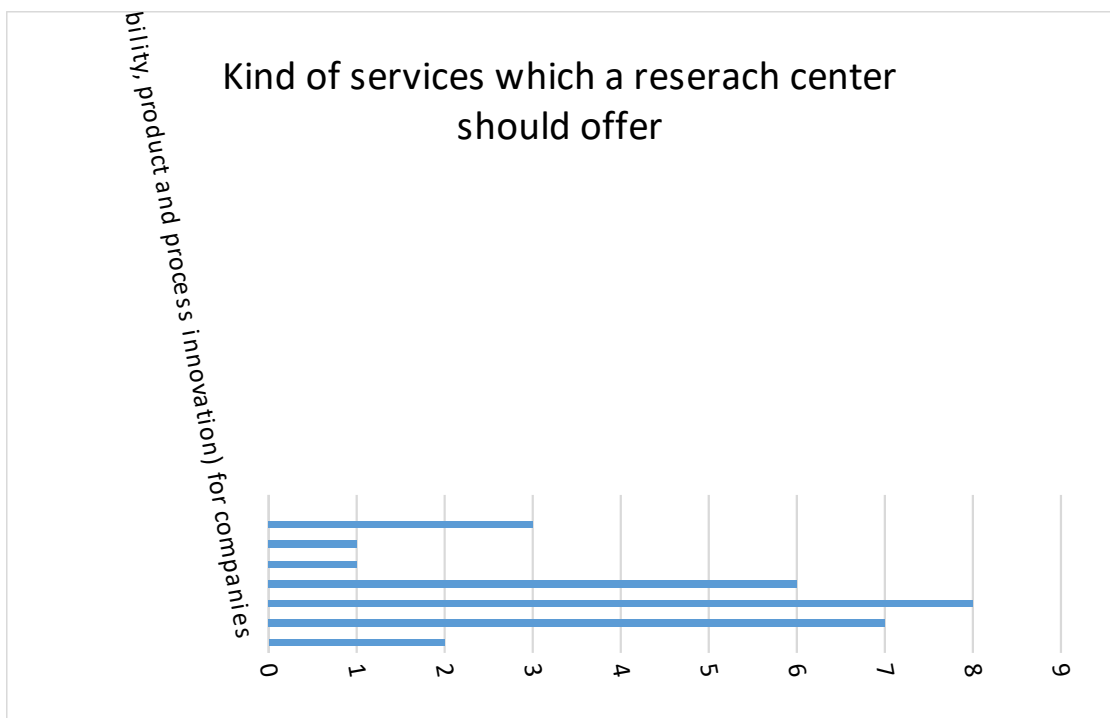
Reliability of collaborations and quality of outputs are very important, it means that NGOs require the high-quality cooperation. The cost of the cooperation is very important. Finally, we conclude that knowledge of RC services is high among the NGOs.

**Main conclusions:**

- The NGOs memberships in networks are very low
- Exist of common projects with RC

NGOs require the high-quality cooperation

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



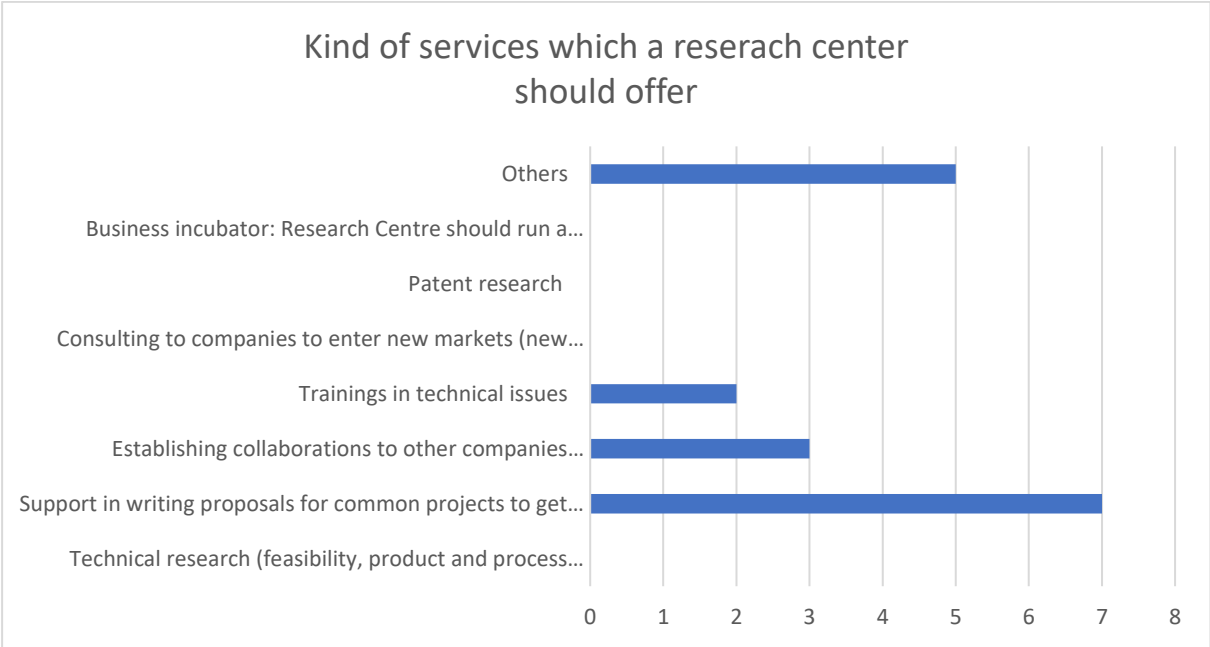
Establishing a collaboration with other companies, intermediaries etc., is required by 8 NGOs, support for writing proposals is also in high demand with 7 respondents while training in technical issues is sought by 6 respondents. It is important to note that 3 respondents consider that a research centre should run a business park.

Technical research for companies (2), consulting (1) and patent research (1) were also mentioned by NGOs interested in collaboration.

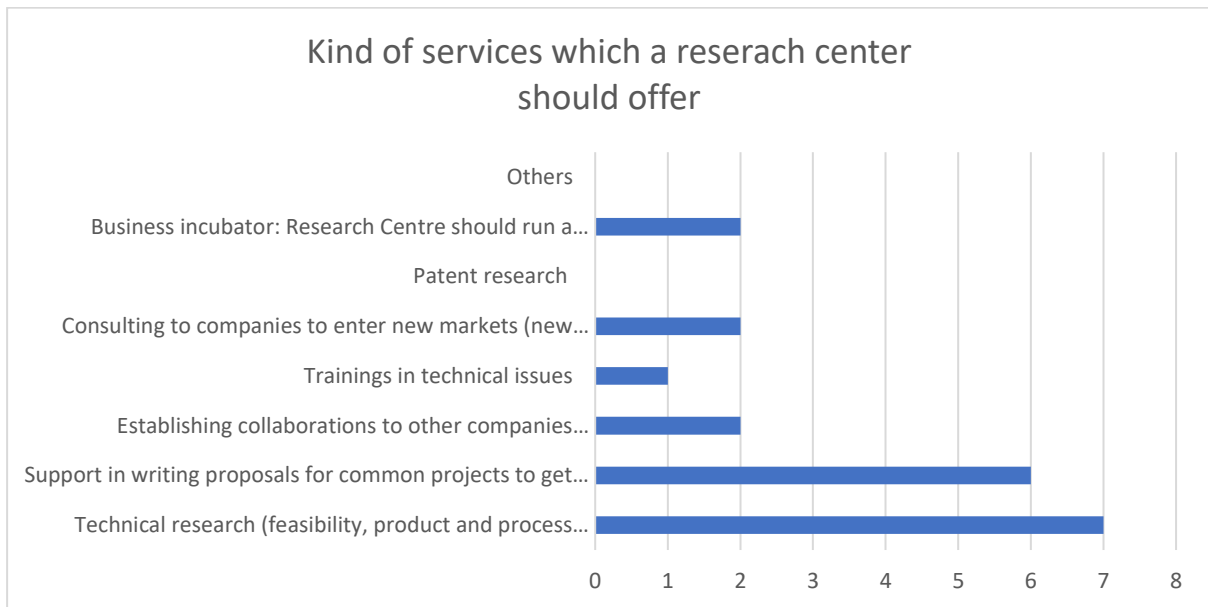
**2.9. Kind of services which a research centre should offer**

In accordance with previous answer (lack of funding), the NGO are the most interested in writing common proposals, project support and get funding for their activities.

There is also big “other” group related to the NGOs specialization, for example of science popularization.

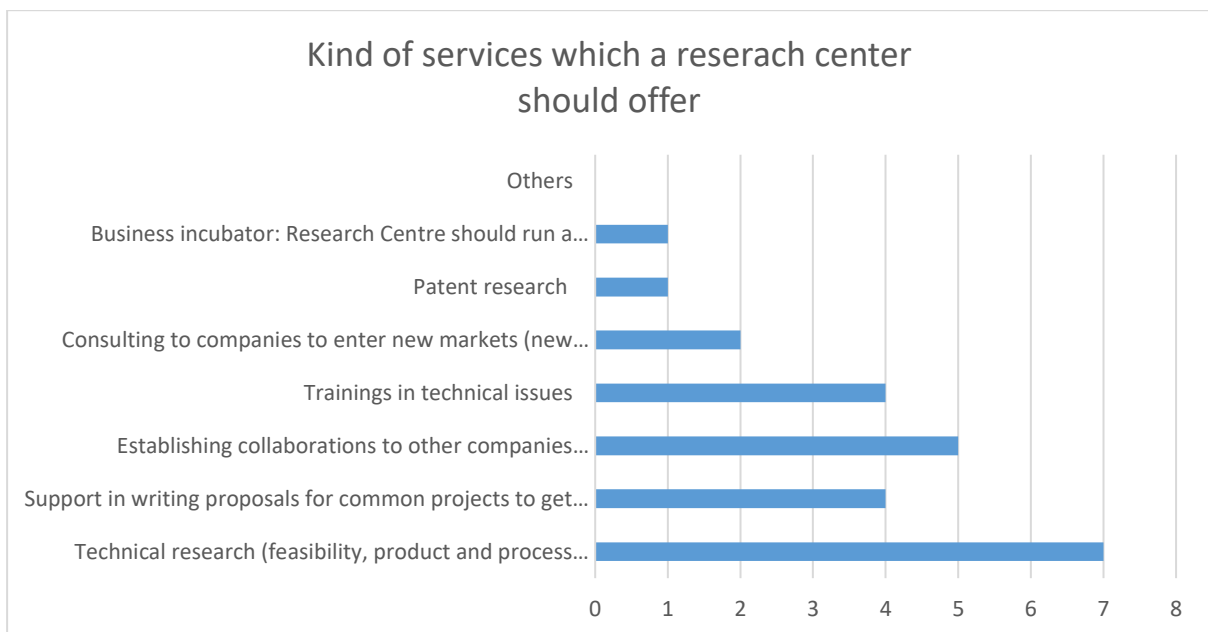


Other: applied research to provide practical advice for nature protection, volunteers, cooperation in the presentation of R&D results and science popularization, consultation about legislation news in R&D



The bar chart shows most companies want a service about technical research (feasibility, product and process innovation). Six out of nine want a support in writing proposals for common projects to get fundings. Only two out of nine NGO’s want establishing collaborations to other companies (business talks, network events, etc.), consulting to companies to enter new markets (new branch or new region/country) and business incubators. Trainings in technical issues held a share of one and nobody wants a patent search service or other sevicees.

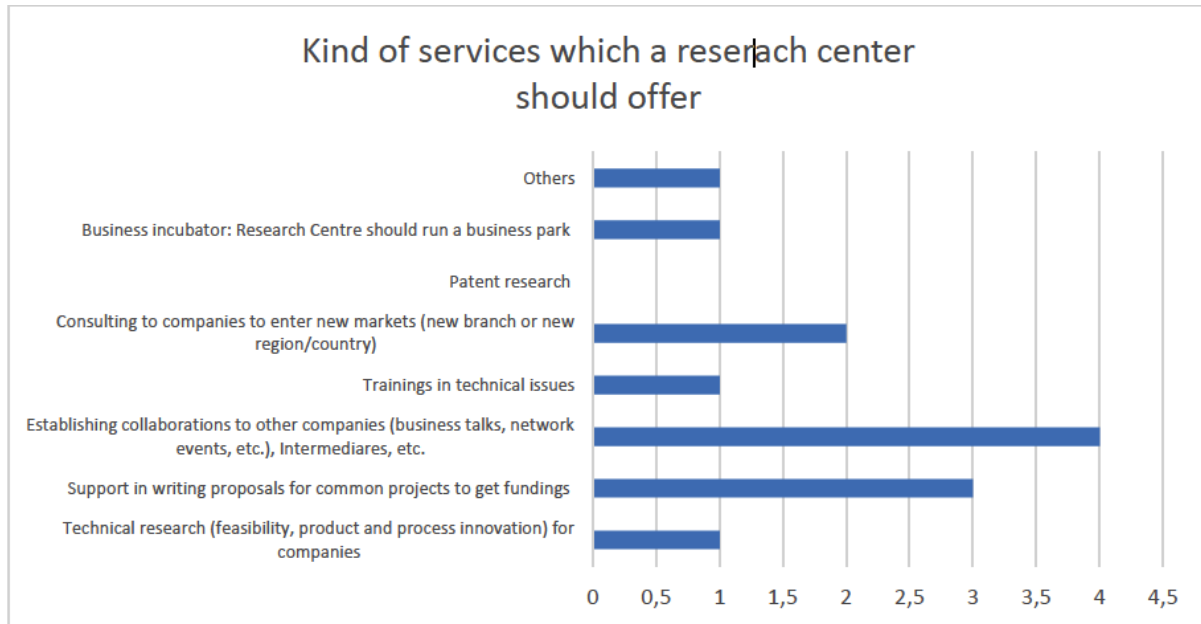
***Institution for development of competence, innovation and specialization of Zadar County***



The bar chart shows that most companies want a service about technical research (feasibility, product and process innovation) (7 form 10) and 5 out of 10 want establishing collaborations to other companies (business talks, network events, etc.). 4 from 10 need support in writing proposals for

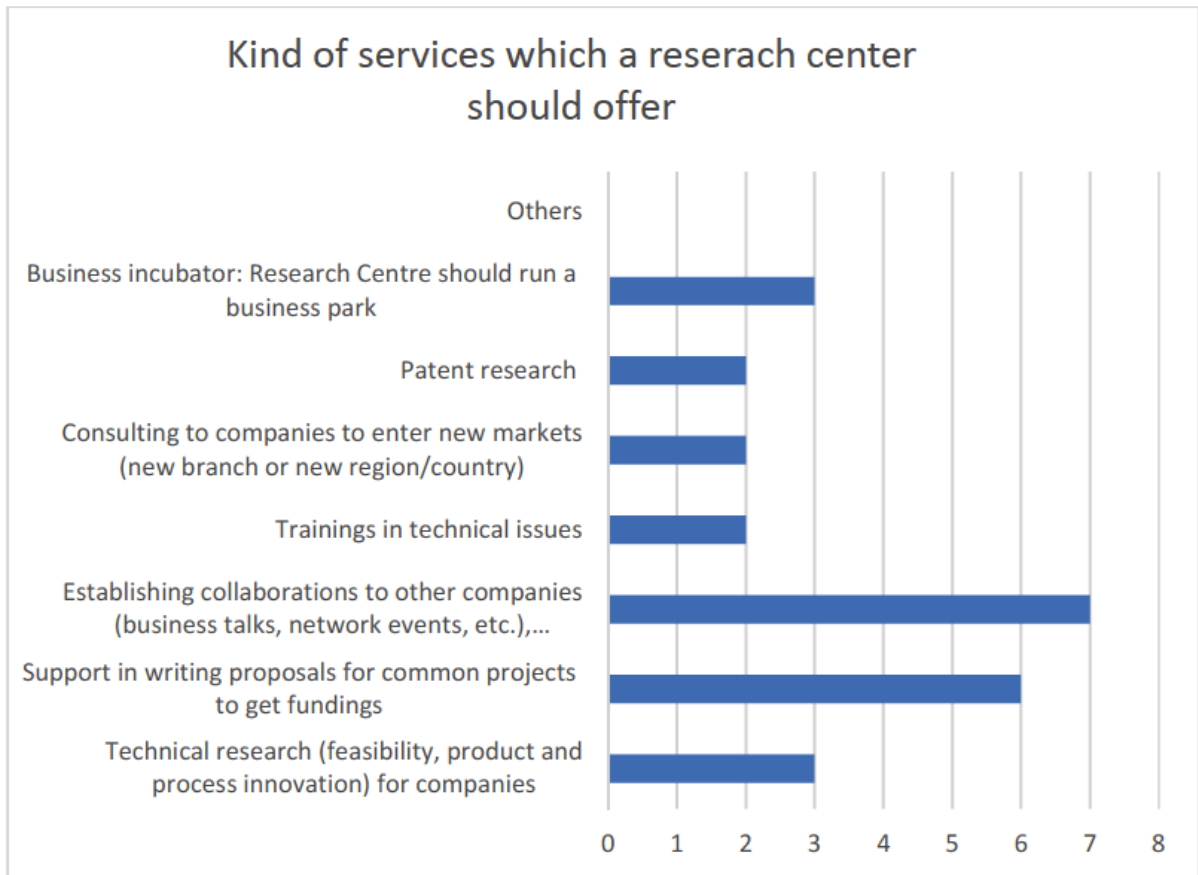
common projects to get funding and trainings in technical issues. 2 out of 10 need Consulting to enter new markets (new branch or new region/country) and only 1 out of 10 need patent research service.

### UNIVERSITY OF MARIBOR



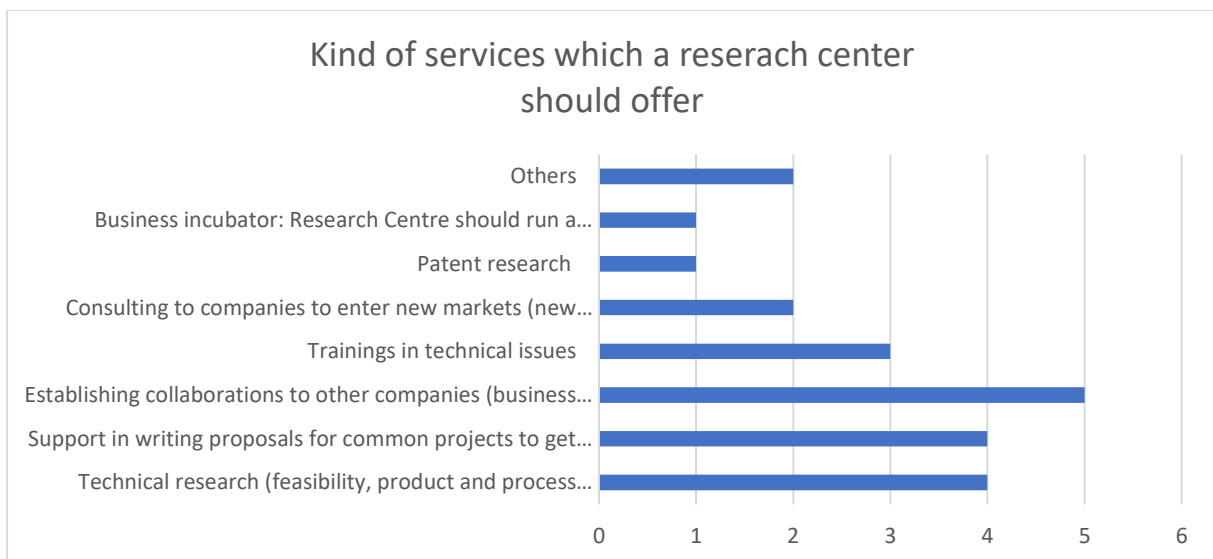
The bar chart shows that research centres should offer help with establishing collaborations to other companies (4 from 8) and support in writing proposals for common projects to get funding (3 from 8), followed by need of Consulting to enter new markets (2 from 8) and by all other services equally (1 from 8).

**Magurele High Tech Cluster**



The NGOs are expecting from the research centres support services for generating news innovative activities and funds to be able to survive on a very hard life and, if possible, to develop new activities. The NGOs are properly “reading” the competences and the availability of the research centres.

**2.9. Kind of services which a research centre should offer**



The bar chart shows most companies want establishing collaborations to other companies. Five of eleven NGO’s want establishing collaborations to other companies (business talks, network events,



etc.) and two of eleven want consulting to companies to enter new markets (new branch or new region/country) and business incubators. Four of eleven want a support in writing proposals for common projects to get funding and technical research (feasibility, product and process innovation). Trainings in technical issues held a share of three and patent research and business incubator held a share of one. Nobody wants other services. But the question is a political view of retail and development of retail. And a task of consulting not only to companies, but also our regional subjects (farmers, small-scale farmers, authorities)

## 6 RESEARCH CENTRES

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### 6.1 GENERAL

#### 6.1.1 *General description of the Research Centres*

##### ***ELI-HU Nonprofit Ltd.***

1. Bay Zoltán Közhasznú Nonprofit Kft. – biotechnology
2. Biofotonikai Kutató és Fejlesztő Kft. – R&D in biofotonics
3. Biospirál – research and consulting
4. CE Optics Természettudományi Kutató-Fejlesztő Kft. – R&D in natural sciences
5. Creative labor
6. Eötvös József Főiskola – college
7. Hódagro
8. MTA Alföldi kutató – branch of the Hungarian Academy of Sciences, geography
9. MTA Szegedi Biológiai Kutatóközpont - branch of the Hungarian Academy of Sciences, biology
10. University of Szeged - university

The research centres are mostly attached to the higher education institutions. The University of Szeged is one of the largest university in Hungary with significant research potential and infrastructure in several fields. The settlement of the Mercedes factory also generated research development on the Phallas Athéné University (former name: College of Kecskemét) in the engineering sector.

Beside the universities there are other kind of research institutions in the region. Szeged is also a centre of the agricultural R&D&I with the local institution of the Hungarian Academy of Science and with the Cereal Research Non-Profit Ltd but the agricultural research also appears other parts of the region due to the remarkable agricultural activities. The local branches of the Hungarian Academy of Science in Békéscsaba and Kecskemét has large potential in social and economic researches.

### ***Development Agency of Serbia – RAS***

1. **"3D Impulse" Laboratory** is a scientific research unit of the Faculty of Mechanical and Civil Engineering in Kraljevo, which deals with the application of digital technologies to develop new products (<http://www.3dimpuls.com/en>)
2. **"Alfatec" Inc**– innovative organizations registered in the Register of innovative activities as research and development center (<http://alfatec.rs/?lang=en>)
3. **Centre for quality**– special organizational unit within the Faculty of Mechanical Engineering in Kragujevac ([www.cqm.rs](http://www.cqm.rs))
4. Society of maintenance technicians **DOTS**- established in order to improve the function of maintenance of technical systems in all sectors of the economy (<http://www.dots.rs/>)
5. **Innovation Centre of Advanced Technologies (ICAT)**- run as a small company, introduces the high-value, cutting-edge technical solutions in the field of electrical engineering ([http://www.icnt.rs/en/about\\_us/about\\_us.php](http://www.icnt.rs/en/about_us/about_us.php))
6. **The Science & Technology Park of IHIS** – engages in developing innovative technologies and small scale production of innovative products ([www.ihis.co.rs](http://www.ihis.co.rs))
7. **The Institute Mihailo Pupin (IMP)**- leading Serbian R&D institution in information and communication technologies, the largest and the oldest in the whole Southeastern Europe ([www.pupin.rs](http://www.pupin.rs))
8. **Innovation Center of the Faculty of Technology and Metallurgy in Belgrade**– performs activities in the field of research activity, experimental and development projects in technical and technological sciences, contributing to the creation of new products, technologies, processes and services ([http://inocentar.tmf.bg.ac.rs/?page\\_id=2](http://inocentar.tmf.bg.ac.rs/?page_id=2))
9. **High Business School of Vocational Studies "Prof. Dr. Radomir Bojković" Kruševac**– performs applied and developmental research, as well as education (<http://www.indmanager.edu.rs/site1/index.php/srl/>)
10. **The University of Belgrade Faculty of Forestry**– an educational and scientific research institution with a 95-year-long tradition ([www.sfb.bg.ac.rs](http://www.sfb.bg.ac.rs))

### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

"In 2014, there were 182 research centres in CT: this is the outcome of a second consecutive year's decline (in 2012 there were still 221 centres). Overall, this indicator changes rapidly in the region: in 2011, this number was 195. The number of researchers (FTE) declined, however, only marginally, and it is definitely higher than in the early 2010s. Regional GERD kept increasing all over the 2010s, but regional GERD/GDP (1.22%) is still below the national average (1.37% in 2014). Business enterprises account for 39% of total RTDI outlays (2012). They actively collaborate with the region's universities.

At Pannon University of Veszprém researchers collaborate with a number of automotive firms and with universities in other regions in automotive industry-specific research areas. Moreover, they have broad collaboration portfolio with industrial partners in the field of ICT, in eco-industries and participate in a number of international research projects in engineering and natural sciences. Another innovative

actor is the Agricultural Institute of the Hungarian Academy of Sciences in Martonvásár, an important public research organisation that performs higher education activities as well.”<sup>1</sup>

The aspect of regional innovation system we can find more another knowledge bases too in Central Transdanubia Region.

University of Dunaújváros has a determinative R&D capacity in field of material sciences. The Ecotech is their private research laboratory where mostly do non-destructive analyses.

Edutus Collage in the last few years improved their technical R&D capacity, but they have not reached outstanding results.

Óbuda University’s education and R&D activities belong to renewable energy, security, robotics and automotive industry.

Another Hungarian Academic of Sciences’ institutes are focus on one field of agricultural.

Surveyed institutions:

- Corvinus University (Székesfehérvár)
- University of Dunaújváros
- Echo Survey
- Ecotech Nonprofit Zrt
- Edutus Collage
- Kodolányi János University
- University of Pannonia - Limnology department
- Hungarian Academy of Science – Agricultural Sciences Research Centre - Agricultural Institute
- Hungarian Academy of Sciences – Research Centre of Economic- and Regional Sciences – West-Pannon Department
- NAIK Viticulture and Wine Research Institute
- Óbuda University
- University of Pannonia

### ***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***

1. **INCAS** is a public R&D company in aerospace science, flow physics, control systems, guidance and navigation, numerical simulation and high performance computing.
2. **INOE** is a national R&D institute focused on optoelectronics.
3. **CETAL** is a research centre within INFLPR dedicated to research and innovation in advanced photonic technologies.
4. **INFLPR** – Fotoplasmat is a research centre focused on smart specialisation in eco-nanotechnologies and advanced materials.
5. **ICSI** is a national R&D institute for cryogenic and isotopic technologies focused on support for national nuclear program, hydrogen and fuel cells and specialized in services and technology transfer.

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<sup>1</sup> Source-string: <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/central-transdanubia>

6. **IFT** Iasi is a national R&D institute focused on technical Physics.
7. **RCCBN** is a research centre for carbon based nano-materials inside the national R&D institute for nano- and microtechnologies.
8. **RATEN-ICN** is a nuclear research institute inside the state company Technologies for Nuclear Energy which provide scientific and technical support for the national nuclear energy program.
9. **INSBN** is a national R&D institute focused on biological sciences.
10. **UNIBUC** –Brahms physics is a research and education centre focused on nuclear matters in extreme conditions

#### **a. General description of the Research Centres**

The research centres stakeholders consist of universities, research centres and institutes of Czech Academy of Sciences. Generally, research centres are concentrated in major cities, mainly in Prague.

From the thematic and categorized point of view, the stakeholders are focused on basic and also on applied research. There is also big group focused on education – Ph.D., university degree, etc. Some of stakeholders have very specific mission – HILASE: laser development, Algatech – research of algae, but most of stakeholders have broader range of focus.

Many of centres were modernized or already founded because of EU funds (CEITEC, BIOCEV, Hilase, Recetox, Algatech) and this confirms the importance of this funds to the modernization of R&D in the Czech Republic.

#### **FH JOANNEUM GESELLSCHAFT M.B.H**

1. Montanuniversität Leoben is a technical university. Technology is the research centre of the University. Homepage: [www.uniLeoben.ac.at](http://www.uniLeoben.ac.at)
2. Graz – University of technology belongs to the research and lecturing industry. The research centre of TU Graz is management. Homepage: [www.tugraz.at](http://www.tugraz.at)
3. Lokale Energieagentur GmbH is part of energy agency, consultant for energy and consultant engineering sector. The research centre is energy. Homepage: [www.lea.at](http://www.lea.at)
4. Joanneum Research Materials belongs to the material science and production technology line of business. The research center is materials. Homepage: [www.joanneum.at](http://www.joanneum.at)
5. Joanneum Research GmbH is part of research and development industry. Research and development is the research centre of the Joanneum Research GmbH. Homepage: [www.joanneum.at](http://www.joanneum.at)
6. FH Vienna WKW/research Cluster SMEs & Family Business belongs to education and research line of business. Management is the research centre of the FH Vienna. Homepage: [www.fh-wien.ac.at/research](http://www.fh-wien.ac.at/research)
7. FH Joanneum GmbH belongs to IT – information technology sector. IT is the research centre of the FH Joanneum GmbH. Homepage: [www.fh-joanneum.at](http://www.fh-joanneum.at)
8. FH Graz - Institute Banking and Insurance is a university. The research centre is banking and insurance. Homepage: [www.fh-joanneum.at/institut/bank-und-versicherungswirtschaft](http://www.fh-joanneum.at/institut/bank-und-versicherungswirtschaft)
9. FH Kärnten belongs to industry, production, mechanical engineering, electronics and microelectronics sector. The research centre is innovation management. Homepage: [www.fh-kaernten.at/wing](http://www.fh-kaernten.at/wing)

10. European Centre for Social Welfare Policy and Research is part of research and social policies industry. The research centre is international organisation / NGO based on Austrian law.  
Homepage: [www.euro.centre.org](http://www.euro.centre.org)
11. Graz University of technology belongs to higher education line of business. The research centre is technology. Homepage: [www.tugraz.at/go/ft-haus](http://www.tugraz.at/go/ft-haus)

***Institution for development of competence, innovation and specialization of Zadar County***

1. **Institute for Public Health Zadar** – a health institution founded to permanently perform public health activities in Zadar County that are regulated by Health Care established as an activity of interest to the Republic of Croatia. Their services include: Epidemiology service, School Health, Mental Health Protection, Microbiology and Environmental Health. ([www.zjz.hr](http://www.zjz.hr))
2. **Vocational school Vice Vlatković** – mechanical engineering and electrostatics branch. ([www.ss-strukovna-vlatkovic-zd.skole.hr](http://www.ss-strukovna-vlatkovic-zd.skole.hr))
3. **Faculty of Engineering, University of Rijeka** – engineering sciences branch. ([www.riteh.uniri.hr](http://www.riteh.uniri.hr))
4. **Faculty of Science, University of Zagreb** – Faculty Research Office that belongs to the branch of natural sciences and mathematics. ([www.pmf.unizg.hr](http://www.pmf.unizg.hr))
5. **School of Medicine, University of Zagreb** – teaching and research institution which in collaboration with its clinical bases carries out all types of biomedicine and health research. Belongs to the biomedicine and health branch. ([www.mef.unizg.hr](http://www.mef.unizg.hr))
6. **J.S Hamilton Poland** – Being a state-of-art company J.S. Hamilton Poland S.A. has a longstanding expertise in quality inspection and testing. Its laboratories have a history of more than 60 years. It provides laboratory services for food analysis. Belongs to the biosciences branch. ([www.http://hamiltonlab.lv/hr](http://hamiltonlab.lv/hr))
7. **BICRO BIOCentre Ltd** – biosciences technology commercialization and incubation centre. Belongs to the biosciences branch. ([www.biocentre.hr](http://www.biocentre.hr))
8. **Department of Ecology, Agronomy and Aquaculture – University of Zadar** – Public institution. Belongs to biotechnical sciences branch. (<http://unizd.hr/Default.aspx?alias=www.unizd.hr/poljodjelstvo&>)
9. **Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split** – Higher education institution. Belongs to the engineering branch; fields of electrical engineering, computing, mechanical engineering, basic engineering sciences and naval architecture. ([www.fesb.unist.hr](http://www.fesb.unist.hr))
10. **Faculty of food technology and biotechnology, centre for food technology and biotechnology, Zadar – University of Zagreb** – public higher education institution - teaching and research institution. Belongs to scientific branch. ([www.pbf.unig.hr](http://www.pbf.unig.hr))
11. **University of Split School of Medicine** – Higher Education institution for biomedicine and health ([www.mefst.hr](http://www.mefst.hr))

### **University of Maribor**

We have managed to get feedback from eleven research centres in our region. Research centres that participated in our survey are listed in table below:

<b>No.</b>	<b>Name of the company</b>	<b>Branche</b>
1.	Scientific research centre SAZU	Education and research (social sciences)
2.	Izobraževalno raziskovalno inštitut Ljubljana	Education and research (HR)
3.	ECERS	Education and research (social sciences)
4.	Multidisciplinarni raziskovalni institut Maribor	Education and research (multidisciplinary)
5.	The laboratory for characterization and processing of polymers - LCPP	Education and research (chemistry)
6.	Institute for the development of Social responsibility (IRDO)	Education and research (social responsibility)
7.	Research Institut FZV	Education and research (healthcare)
8.	Institute for Physics	Education and research
9.	International centre for Eco-remediation	Education and research (nature and life-science)
10.	Alma mater Europea	Education and research
11.	Pulp and paper institute	Pulp and paper industry

### **Magurele High Tech Cluster**

1. Technologies for Nuclear Energy State Owned Company – Centre of Technological Engineering – Nuclear Objectivess, engineering & design in nuclear field
2. National R&D Institute for Nonferrous and Rare Metals, industrial research
3. RITECH – condensed matter physics, advanced materials preparation and characterization
4. Geological Institute of Romania, geoscience
5. Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN HH) – IRASM Radiation Processing Centre, Basic and applied research in radiation physics and chemistry
6. National Institute for Earth Physics,
7. INCDCP-ICECHIM, chemistry research
8. INCD-ECOIND, industrial ecology research
9. Romanian National Institute of Marine Geology and Geoecology – GeoEcoMar, earth and Ocean Science/environmental sciences
10. The National R&D Institute for Textiles and Leather, Textile – Clothing – Leather – Footwear
11. Dunarea de Jos University of Galati, Centre of Excellence Polymer Processing, Manufacturing of polymers and polymer-based composites, mechanical behaviour of polymer-based composites, numerical modeling of materials and manufacturing processes

### **Central Bohemia Innovation Centre**

The **Nuclear Physics Institute of the Czech Academy of Science** conducts research in a broad field of nuclear physics, experimental as well as theoretical. The properties of nuclear matter under the heavy ion collisions at high and intermediate energies, nuclear reactions important for astrophysics or nuclear energetics, beta decays of atomic nuclei including the problem of neutrino masses are especially studied. Kind of research centres: public research institution. Branch: Nuclear physics and related sciences Homepage: <http://www.ujf.cas.cz>

The **Research Institute of Dairy (VÚM)** is an institution with an important tradition. It was founded 53 years ago. MILCOM, whose subsidiary became VÚM s.r.o. in 2004, provides services and products mainly to the dairy industry. The company also maintains a collection of pure dairy cultures, which is included in the National Program of Conservation and Utilization of the Genofon of Microorganisms and Small Animals. Kind of research centres: Applied research. Branch: Food processing. Homepage: [www.vumlekarensky.cz](http://www.vumlekarensky.cz)

The **Czech Technical University in Prague (České vysoké učení technické v Praze)** is one of the biggest and oldest technical universities in Europe. CTU currently has eight faculties (Civil Engineering, Mechanical Engineering, Electrical Engineering, Nuclear Science and Physical Engineering, Architecture, Transportation Sciences, Biomedical Engineering, Information Technology) and about 21,000 students. Kind of research centres: university. Homepage: [www.cvut.cz](http://www.cvut.cz)

The **HiLASE**. The main goal of the HiLASE project is to develop laser technologies having breakthrough technical parameters. In general, those lasers will be significantly more powerful and efficient, more compact, more stable and more easily maintained than the currently available technology. Kind of research centres: Regional R&D Centre, part of the Institute of Physics (public research organization) of the Czech Academy of Sciences. Branch: Laser Physics. Homepage: [www.hilase.cz](http://www.hilase.cz)

The **CEITEC** is a scientific centre in the fields of life sciences, advanced materials and technologies whose aim is to establish itself as a recognized centre for basic as well as applied research. CEITEC offers a state-of-the-art infrastructure and great conditions to employ excellent researchers. Kind of research centres: Research University Centre. Branch: R & D. Homepage: [www.ceitec.eu](http://www.ceitec.eu)

The **Research Institute of Geodesy, Topography and Cartography** was founded in 1954 and it's the only research institute for Czech Office for Surveying, Mapping and Cadastre. Since 2007 VÚGTK has been registered as a public research institution (v.v.i.). The institute's mission is basic and applied research in geodesy and cadastre, developing and testing new technologies, methods and software and professional consultation in areas of: creation and maintenance of Cadastre information system, geodesy and geodynamics, metrology and standardization in geodesy and cadastre, photogrammetry and remote sensing, cartography, development and production of specialized measuring tools. Kind of research centres: public research institution. Branch: Geodesy & cartography. Homepage: [www.vugtk.cz](http://www.vugtk.cz)

The **Astronomical Institute of Czech Academy of Sciences**. Kind of research centres: Astronomical Institute of the Czech Academy of Sciences is the foremost astronomy organization and one of the oldest scientific institutions in the country. The major part of the institute is located in the village Ondřejov southeast from Prague, where it operates the largest Czech optical telescope and a number of other instruments. Branch: Astronomy and astrophysics. Homepage: <http://www.asu.cas.cz>

The **BIOCEV** is a joint project of six institutes of the Academy of Sciences of the Czech Republic (Institute of Molecular Genetics, Institute of Biotechnology, Institute of Microbiology, Institute of Physiology, Institute of Experimental Medicine, and Institute of Macromolecular Chemistry) and two faculties of Charles University in Prague (Faculty of Science and 1st Faculty of Medicine). The project's goal is to establish European Centre of Excellence in biomedicine and biotechnology. Kind of research centres: public research institution. Branch: research and development, education. Homepage: <http://www.biocev.eu>

The ELI Beamlines research center aspires to install and run the world's most intense laser system. With ultra-high peak powers of 10 PW (pet watt) and focused intensities up to  $10^{24}$  W/cm<sup>2</sup> we will offer unique sources of radiation and particle beams to our users. These beamlines will enable ground breaking research not only in the fields of physics and material science, but also in biomedical research and laboratory astrophysics. Kind of research centres: research infrastructure — belong legally to the Institute of Physics, CAS, public research institute. Branch: research infrastructure — belong legally to the Institute of Physics, CAS, public research institute. Homepage: [www.eli-beam.eu](http://www.eli-beam.eu)

The **Rigaku** Innovative Technologies Europe s.r.o. is a subsidiary of Rigaku Corporation (Tokyo, Japan) producing X-ray equipment for research and industry. Its scope and number of employees are small company in the Czech Republic, but as 100% owned by a large foreign company, it is considered as a related enterprise according to the EU standard and is therefore considered to be "large" business". Rigaku Corporation has a strong interest in developing R&D, manufacturing and commercial character of Rigaku Innovative Technologies Europe s.r.o. However, research and development work was a substantial part of the activity, which corresponds to the current personnel and material equipment of the company. Branch: Rigaku Innovative Technologies Europe s.r.o. (RITE) is mainly active in research, development, and production of advanced X-ray technologies. It has been established as a European branch for research, development, and production of mainstream X-ray optics, X-ray detectors, and other special products. Homepage: [www.rigaku.com](http://www.rigaku.com)

The **University Centre for Energy Efficient Buildings, CTU** in Prague (UCEEB) was founded as an independent institute of the Czech Technical University in Prague under the auspices of four departments – Civil engineering, Mechanical Engineering, Electrical Engineering and Biomedical Engineering. The Centre's goal is to leverage synergy effects of research activities of the individual departments which are related to energy efficient buildings. Kind of research centres: University in Prague. Branch: Energy efficiency, sustainable development. Homepage: [www.uceeb.cz/en](http://www.uceeb.cz/en)

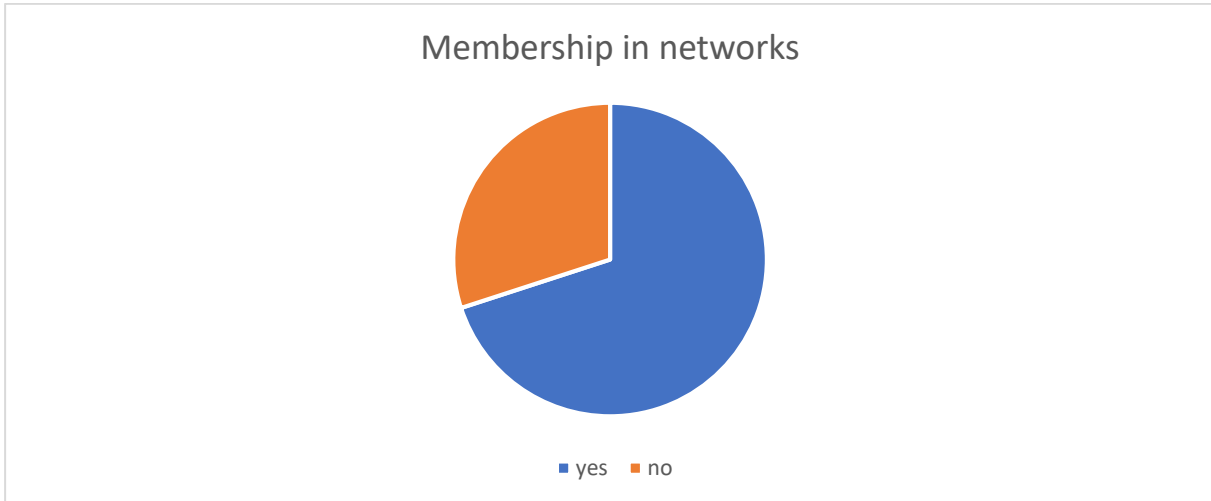


### 6.1.2 Membership network

#### ***ELI-HU Nonprofit Ltd.***

No data available.

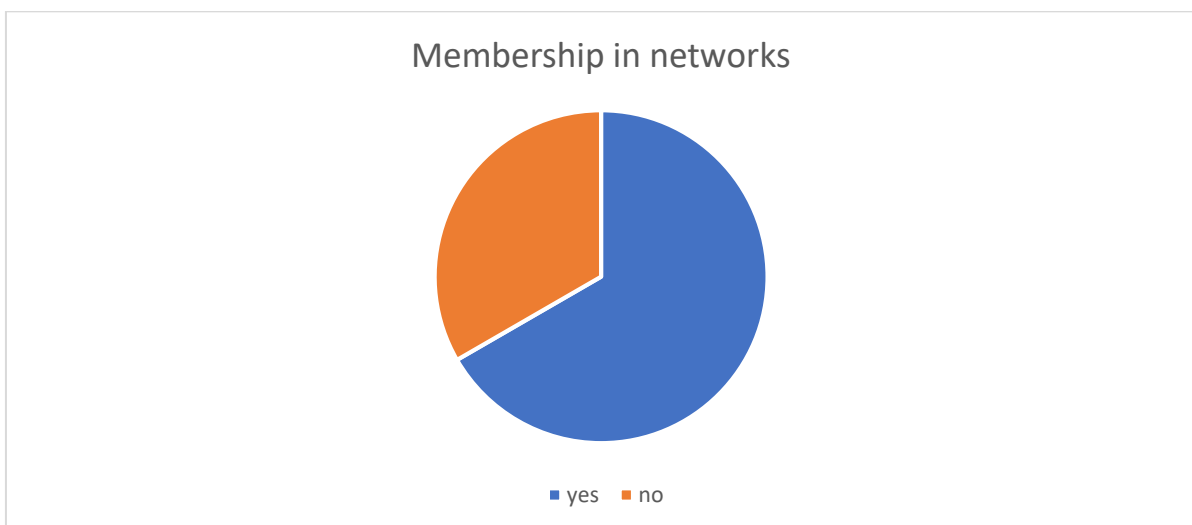
#### ***Development Agency of Serbia***



70% of the surveyed research centres are members of some kind of a company network, among others:

- **Clusters from various sector-** IT, construction industry, automotive industry, metal industry, etc.
- **Regional Chambers of Commerce**
- *European Federation of National Maintenance Societies*
- Network of technological brokers of Serbia
- Construction Chamber of Serbia

#### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***



The pie chart describes that most of the RI institutions belong to a cluster or is involved in some kind of membership network. The networks are the following:

Innoskart ICT Cluster is an organized innovative network of cluster members consisting of regional SMEs, three universities, one non-profit research institution and a knowledge centre.

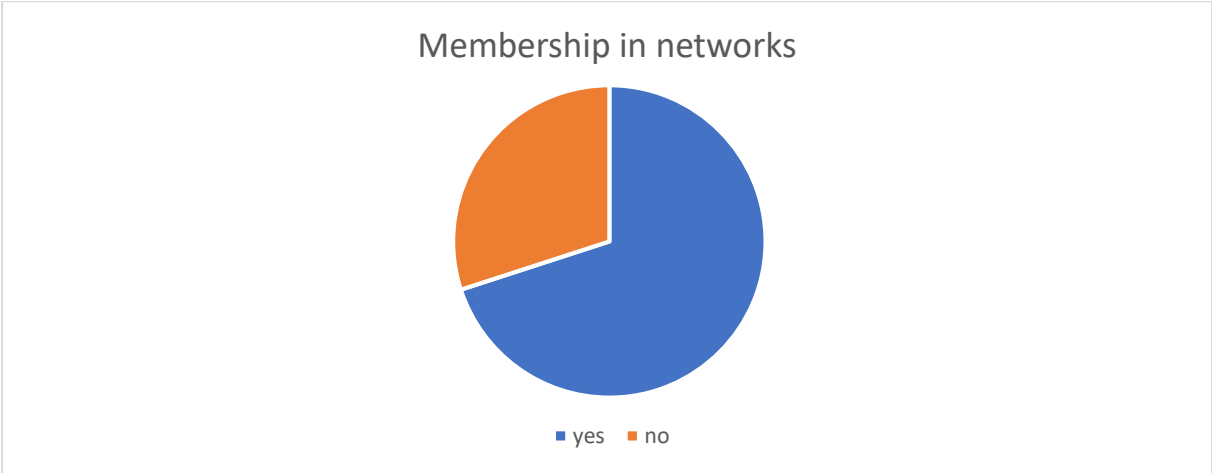
The ECOPolis Cluster, as a knowledge-based, open initiative with information flow, experience and knowledge exchange in its focus, was established to reduce industrial and agricultural environmental load. The members of the cluster joined in an effort to establish a sustainable, environment-focused economic development – generated by the key innovative sectors.

The Chamber of Commerce and Industry of Fejér County shall set an ideal example of the operation of economic self-government and propagate decent entrepreneurial behaviour as a value.

Hungarian Space Cluster deals with the space research and R&I development matters.

The Hungarian Mobility and Multimedia Cluster (MMCluster) was formed in 2007 with the purpose of bringing together the most dynamic actors in the field of mobile technology and new media in Central Hungary, mix and match their R&D and innovation capacities, and help the fruits of their cooperation succeed on the market.

***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***



The Research Centres that answered this questionnaire are either independent or part of a research institute or university. The non-inclusion in a network of some research centres may be explained as a non-direct membership or as a lack of involvement in the activities of the network whose members their institute or university are.

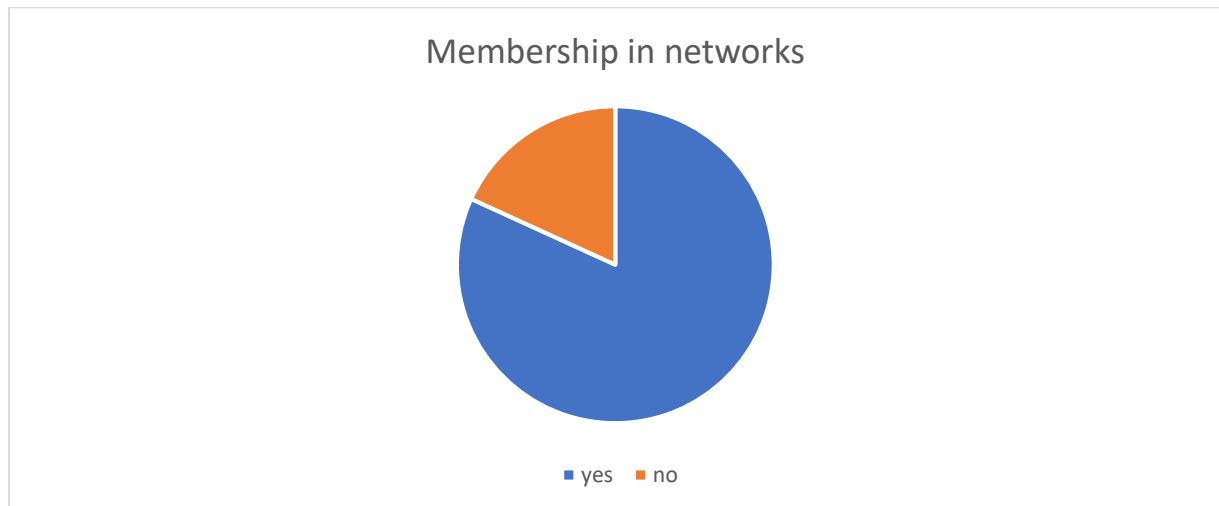
***1.1. Membership network***

Most of research centres (all except one) are in some network, because it is quite usual in research fields to be connected via these association, platforms and also sometimes clusters. There are probably several motivation for this state: there is strong interest of private sector in some research

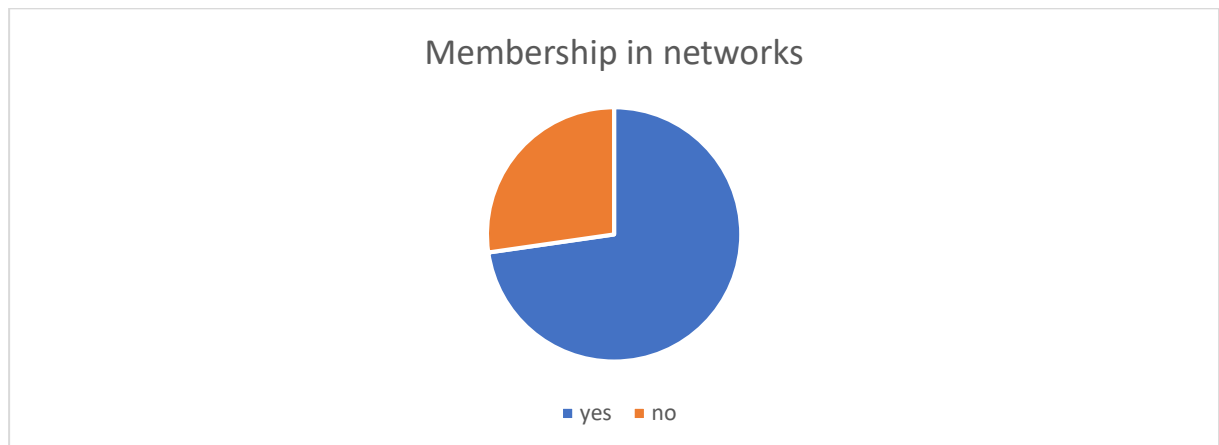
branches – hi-tech, biotechnology, pharmacy – generally branches with high added value, EU/national funds for joint project, personal relation between private sector and research

Here are written some mentioned association and clusters:

Czech Biotechnology Platform, Research organization association, Czech Bioimaging, Euro Bioimaging, Instruct, Elixir, Infrafrontier, LaserLAB, Aysu, CosyLab, BIORAF – consortium for biotechnology, National cluster association,



**FH JOANNEUM GESELLSCHAFT M.B.H**



73% of the surveyed companies are a member of any kind of a company network. This survey clearly shows that Green Tech Cluster and AC Styria is an important network.

Green Tech Cluster is the global center for innovative energy and environmental technology. 200 companies and research institutes jointly develop the green technologies of the future.

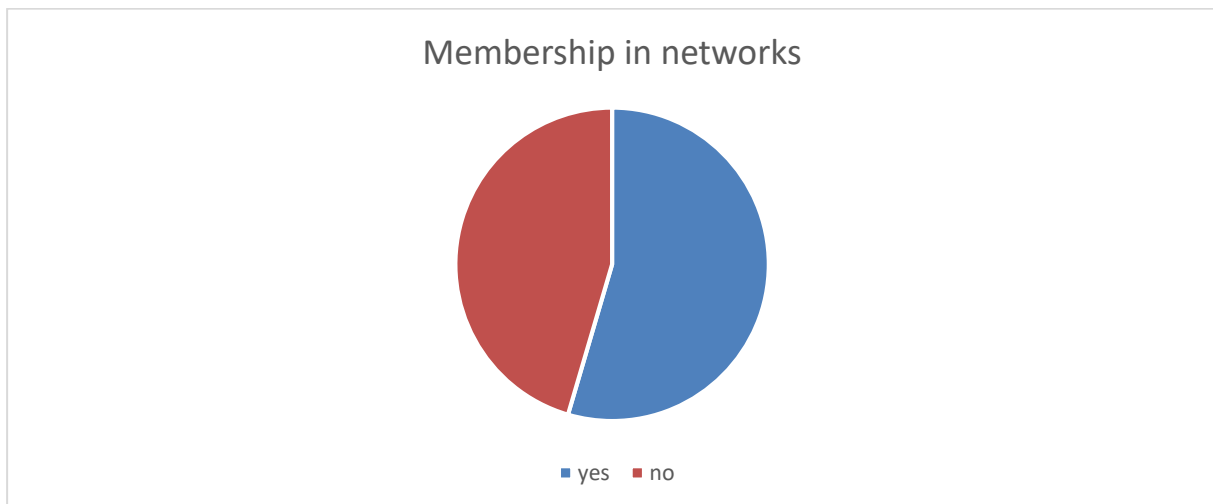
The Styrian Autocluster ACstyria GmbH is a link between economy, industry, research and public facilities in the automotive and mobility industry of Styria.

Another network would be Human.technology Styria which is an economic policy initiative to strengthen the competitiveness of Styrian companies, institutions and scientific institutions in the field

of human technology. The cooperation of business, research and research funding is a guarantee for the future success of companies.

One company also mentioned the Austrian Center for Productivity and Efficiency which is a professional adult education institute - organized as a non-profit organization - based in Vienna.

***Institution for development of competence, innovation and specialization of Zadar County***

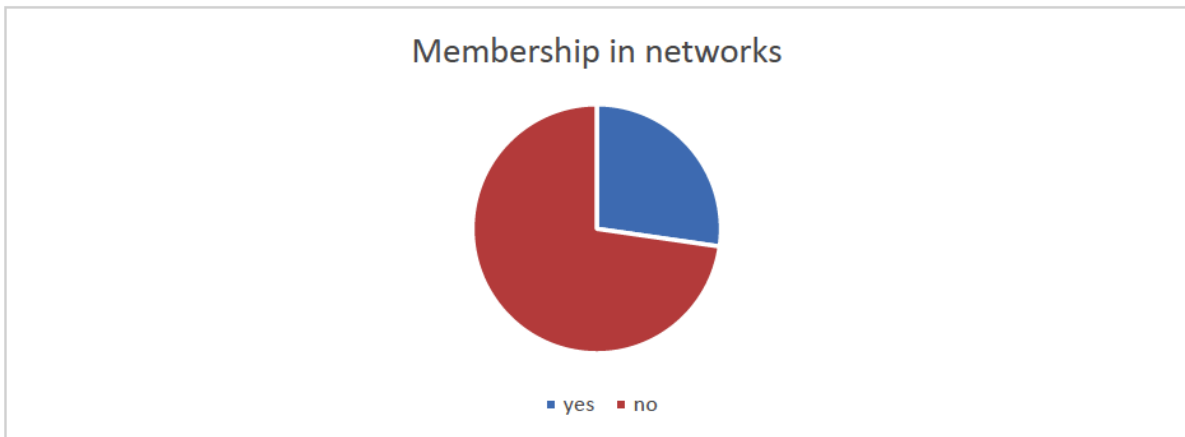


55% of the surveyed research centres are members of some kind of a company network:

- **Croatian Employers' Association (CEA)** - is a voluntary, non- profit and independent employers' association that represents, promotes and advocates for the interests of its members. The CEA was created by a group of respective Croatian entrepreneurs who recognized the potential of joint action and the importance of the employers' association in tripartite relations.
- **Croatian Chamber of Economy** - an independent professional and business organization for all legal entities engaging in business within the Republic of Croatia.
- **Croatian Defence Industry Competitiveness cluster (HKKOI)** - brings together the country's relevant SMEs in cooperation with Croatia's Ministry of Defense to spin out commercial applications from military technologies. HKKOI's members are active mainly in the fields of advanced materials, cyber security, electronics, energy, ICT, robotics and the land, maritime and naval sectors, with 90 percent of its activities arising from defense.  
The cluster is linked to Croatia's national smart specialization strategy according to which it aims to develop the following dual use areas: unmanned vehicles and vessels, advanced digital and communication technologies, anti-riot capabilities and tools to counter biological agents.  
HKKOI is focused on boosting the capacities of its SMEs by linking them to the value chains of larger enterprises to develop new products and services. The cluster is also expanding its international cooperation, and currently has contacts with the European Defense Agency and the region of Andalusia

- **CROLAB** - an association of Croatian laboratories
- **The centres of competence** - which are boosting at the moment in Croatia
- **Various Croatian Universities** – they give a support to various research activities
- **Competitiveness cluster – medical industry**
- **Personalized medicine cluster**
- **Adriatic Aero-space Association**

**University of Maribor**



Only 27% of the surveyed research institutions are member of network. Surveyed research institutions are members of the following network institutions:

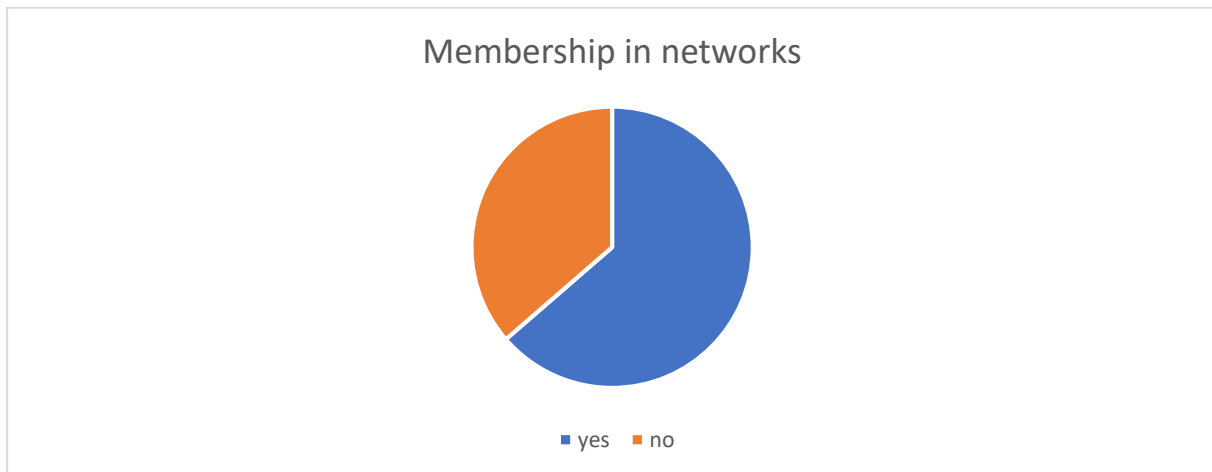
- Slovenian Innovation Hub - European Economic Interest Grouping.
- The European Business Network for Corporate Social Responsibility.
- Association of paper and paper processing industry

**Magurele High Tech Cluster**



The research entities are very well connected and well integrated in the research and business community. Their management are open to such kind of connections. One of the reasons is that the assessment of their activity is based on indicator related to the networking and cooperation with the industry.

## Central Bohemia Innovation Centre



64 % of the surveyed companies are a member of any kind of a company network.

This survey clearly shows that there is an important network, such as STAR Research & Innovation Cluster, Association of Industrial Laser Users (AILU), Association of Research Organisations, Středočeské inovační centrum, Czech Smart City Cluster, EDFRi, Czech Bioimaging, Euro Bioimaging, Instruct, Elixir Infrafrontier, Czech Space Alliance, STAR, Energy Efficient Buildings platform, Energoklastr.

**STAR Research & Innovation Cluster** is focused on complex support for regional development in a 6km<sup>2</sup> area between the municipalities of Dolní Břežany, Hodkovice and Vestec, with the aim of creating a functional science&research cluster, which will have research, development and their industrial application as the primary source of its competitiveness.

**Association of Industrial Laser Users (AILU)** was established in 1995 as an independent, non-profit making organisation run by and for laser users involved in activities including manufacturing, healthcare, academic and industrial research; as well as suppliers of laser-related products and services. Our current corporate members include leading players in the UK laser materials community.

**Association of Research Organisations (AVO)** is the only organization in the Czech Republic representing applied research. Founded in 1993 AVO has more than 80 members with more than 8000 researchers. AVO key role is to promote the Czech applied research, development and innovations on both national and international level and help to bring the R&D results into the business.

The mission of the **Czech Smart City Cluster (CSCC)** is the development of a unique partnership between companies, government, self-government, knowledge institutions and urban residents. We are pioneers of the Smart City idea in the Czech Republic. We are trying to build smart cities in which social and technological infrastructure and solutions make life easier for people and promote sustainable economic growth. We are convinced that these trends improve the quality of life in the cities for all their inhabitants and that cities become a pleasant environment for both life and work.

**Czech-BioImaging** is a national research infrastructure for biological and medical imaging. It is a distributed infrastructure of leading imaging facilities in the Czech Republic. The infrastructure provides an open access to a wide range of imaging technologies and expertise to all scientists in the Czech Republic and from abroad by a unified and coordinated logistics approach.

**Euro Bioimaging:** The European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences (Euro-BioImaging, EuBI or EuBI ERIC) provides open physical user access to a broad range of state-of-the-art technologies in biological and biomedical imaging for life scientists. In addition, EuBI will offer image data support and training for infrastructure users and providers.

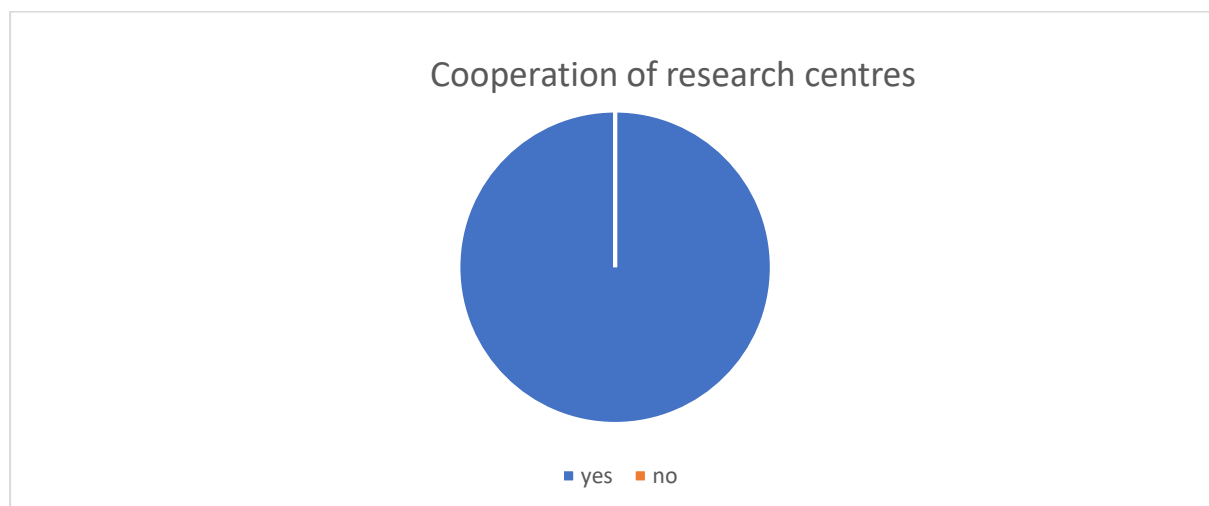
ELIXIR is an intergovernmental organisation that brings together life science resources from across Europe. These resources include databases, software tools, training materials, cloud storage and supercomputers.

The **Czech Space Alliance** (CSA) is an industrial association of, and for, the Czech space industry, with proven skills and track record in aerospace business and with broad international client base. The alliance was established in 2006 under the auspices of CzechTrade, the export promotion agency of the Ministry of Industry and Trade. During the process leading to the Czech accession to the ESA convention in 2008, it formalised its statutes and became registered as a legal entity. Its focus is on fostering successful participation of the members in competitive international space tenders, with major emphasis on ESA.

## 6.2 QUESTION TO COLLABORATION

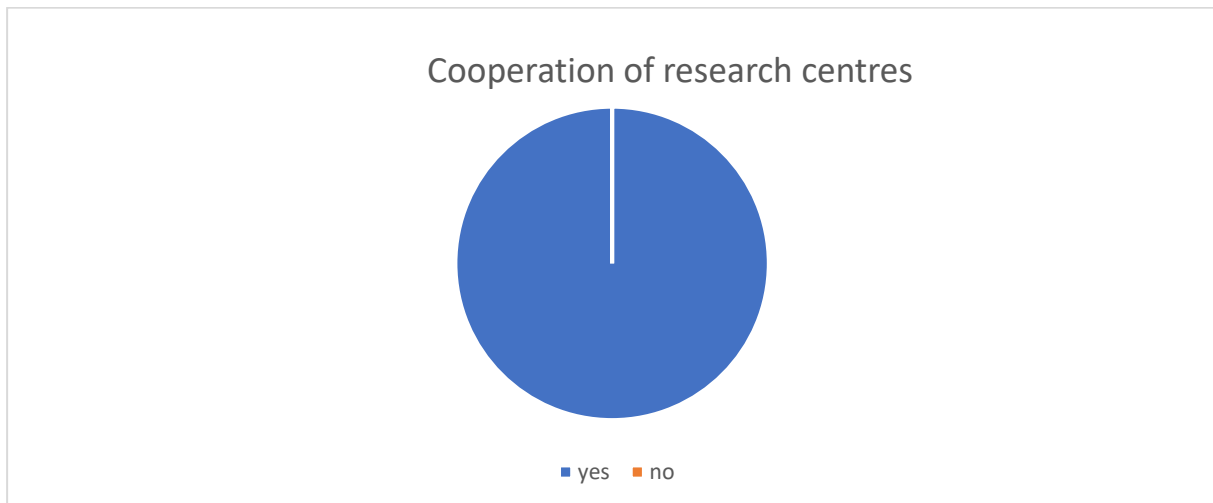
### 6.2.1 Cooperations of research centres

**ELI-HU Nonprofit Ltd.**



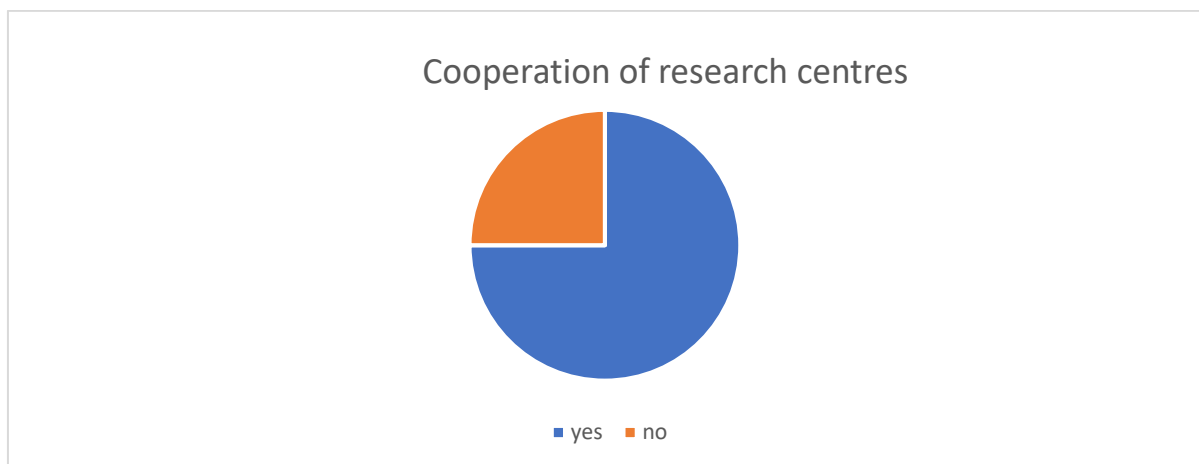
All surveyed research centres said that they have some kind of cooperation. This is favourable because this can ensure the exploitation of the results of the different researches.

**Development Agency of Serbia**



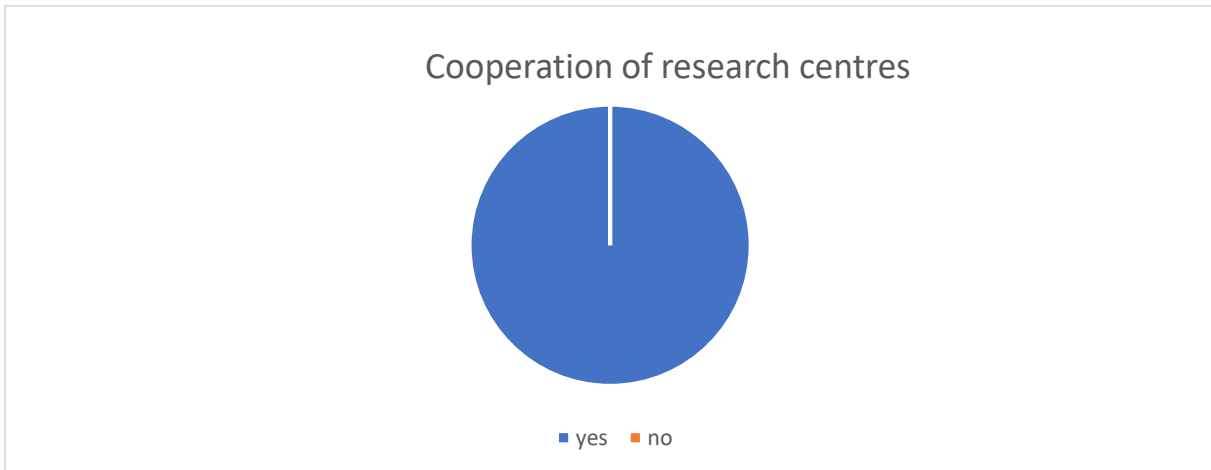
This analysis shows that all surveyed research centres cooperate with some other research centres.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



This pie chart shows the surveyed companies which have a cooperation with research centres. It shows that 75% of the sample research centres (9) cooperate with companies, 25% (3) does not.



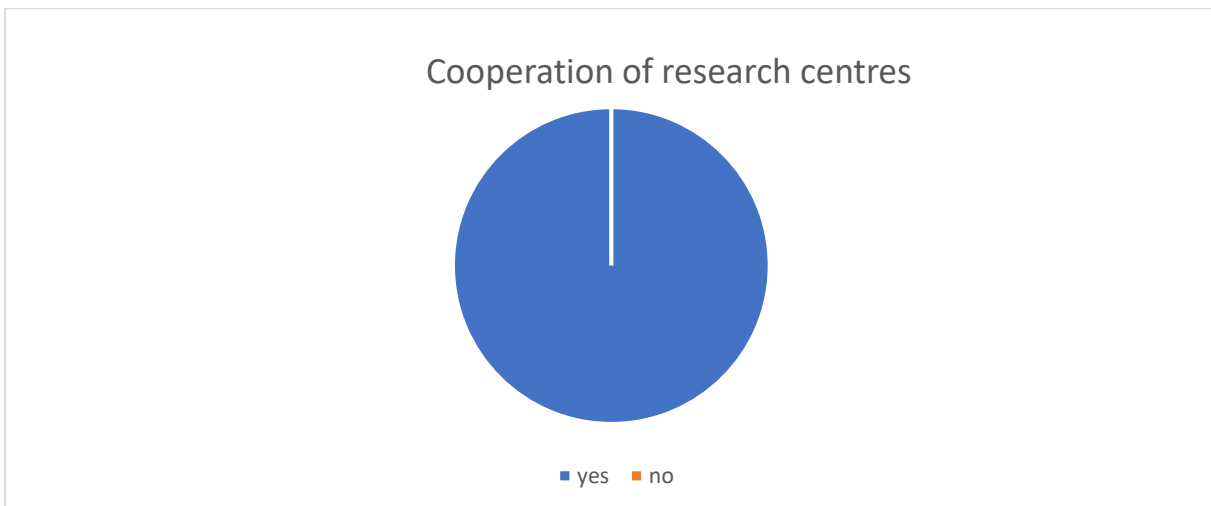


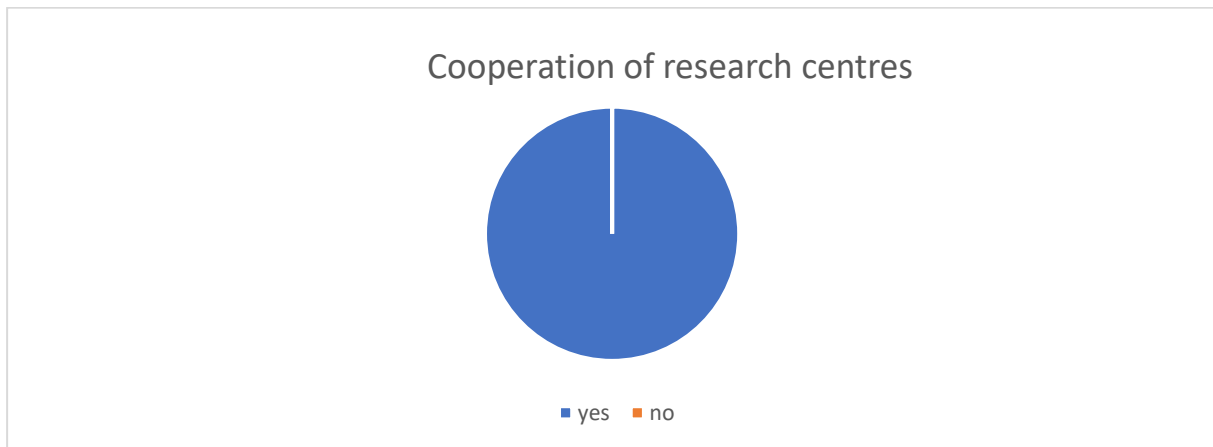
Participation of all research centres in collaboration seems to be a rule. This reflects not only the vital need for research to be connected to other researchers but also an increasing awareness among the managers of the benefits of contracts and collaboration with industry and beneficiaries. Even the small research centres realize that their funding cannot be ensured without an adequate collaboration.

### ***Part 2- Question to collaboration***

#### ***2.1. Cooperation of research centres***

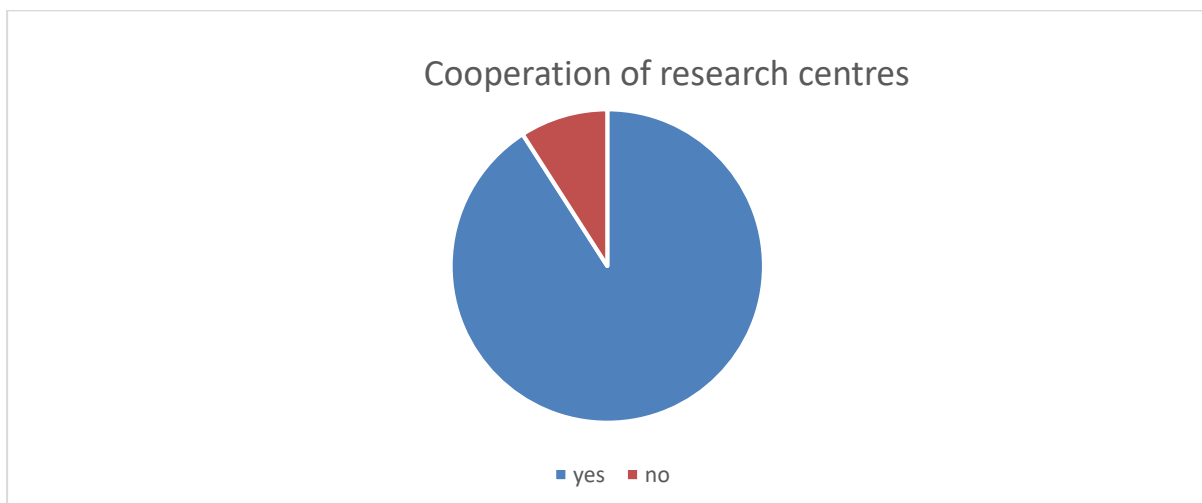
Research centres and also universities especially have some cooperation or joint project. They should cooperate with other research centres, they exchange experts and students, they could participate in joint project and joint calls – so finally cooperation is advantage in R&D.





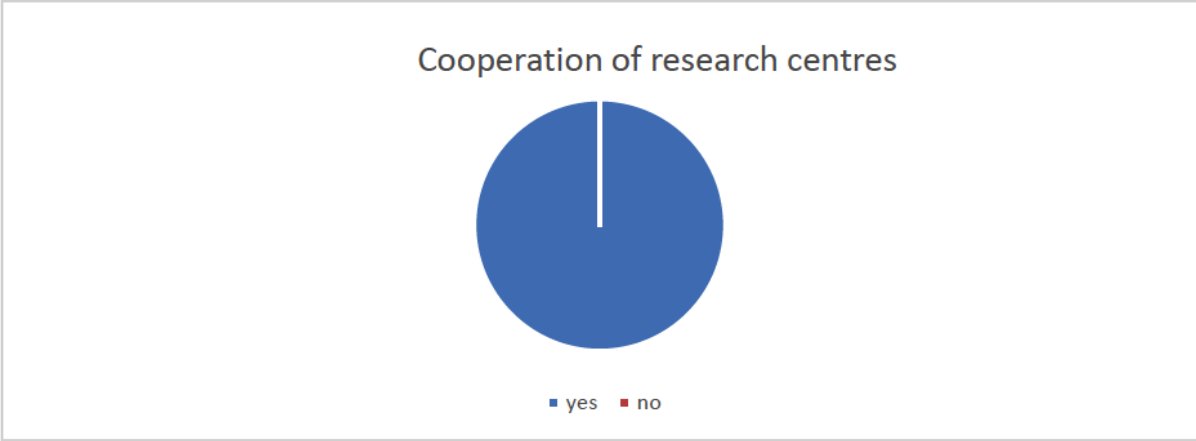
This pie chart shows the surveyed companies which have a cooperation with research centres. It shows that 100% of the sample companies cooperate with research centres.

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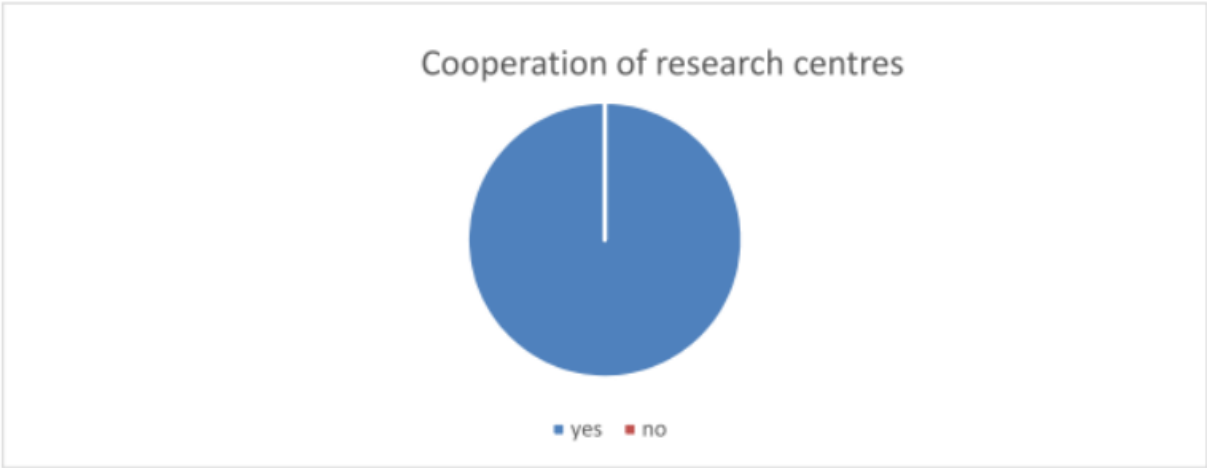
This analysis shows that 91% of surveyed companies cooperate with some other research centres.

**University of Maribor**



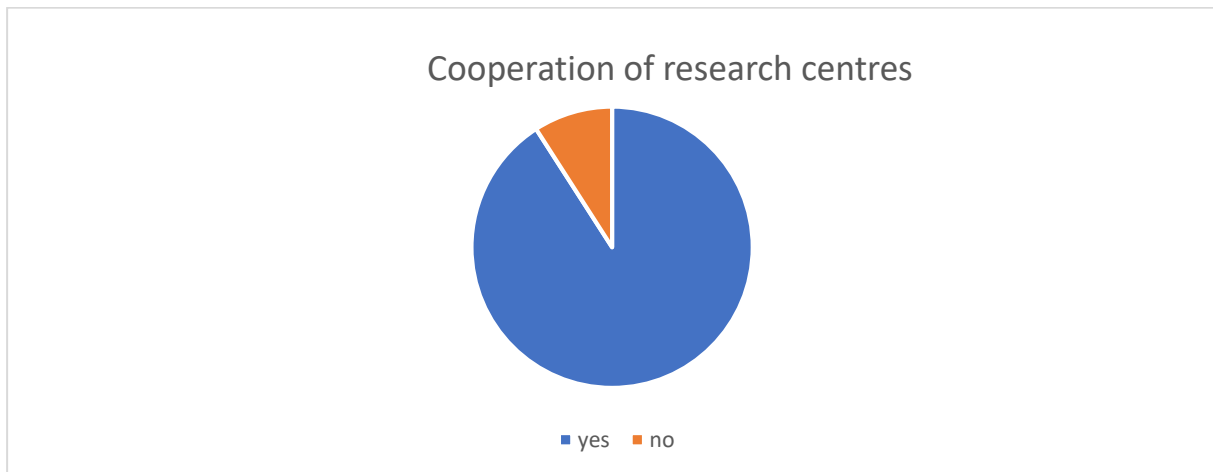
This analysis shows that all of surveyed organisations cooperate with some other research centres.

**Magurele High Tech Cluster**



The research centres have a strong cooperation between them. The answers are confirming the day by day activity: the centres are submitting together a lot of applications for national and European funds.

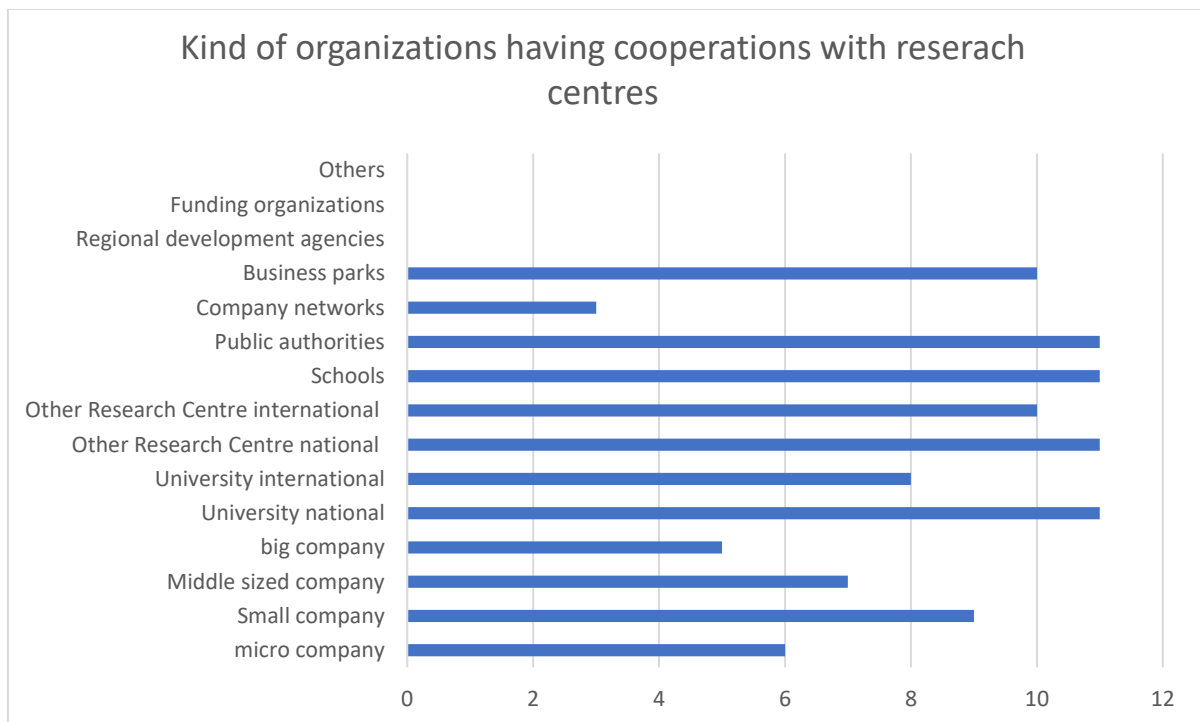
### Central Bohemia Innovation Centre



This pie chart shows the surveyed companies which have a cooperation with research centres. It shows that 91 % of the sample companies cooperate with research centres.

### 6.2.2 Description of the organizations which collaborates with RI's

#### ELI-HU Nonprofit Ltd.

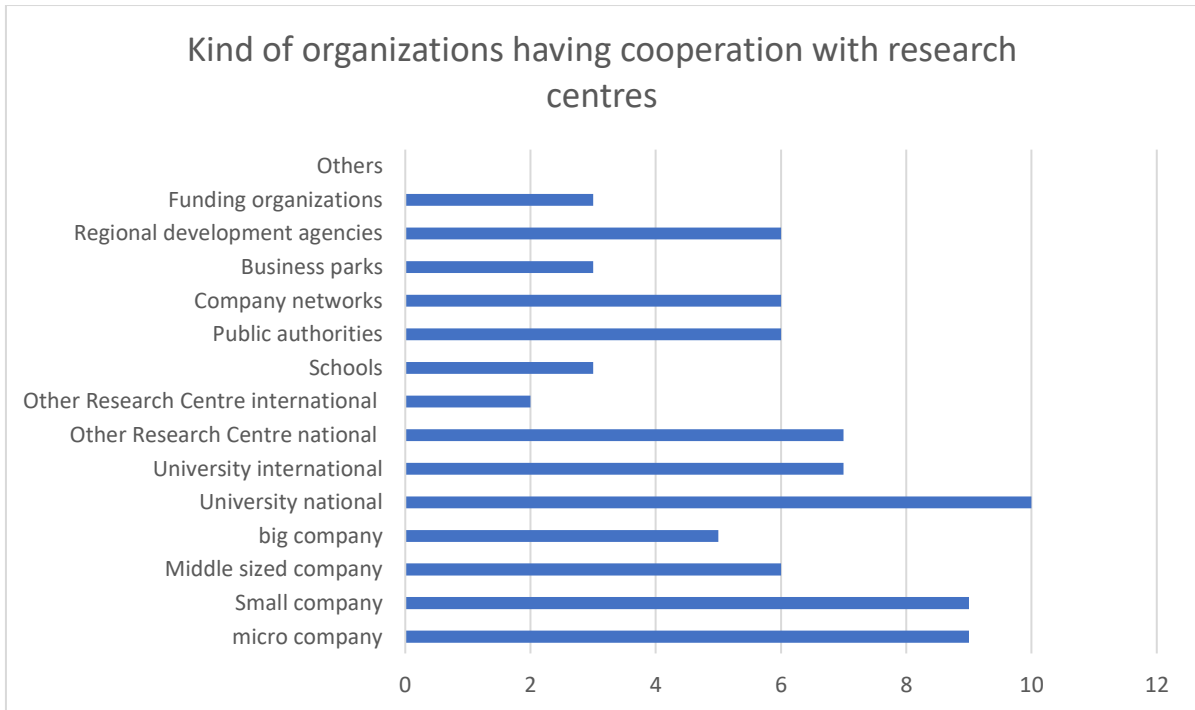


The bar chart is about the kind of collaborations the surveyed research centres have. None of the sampled companies cooperates with "others", funding organizations or regional development agencies. Ten company has indicated that they regularly collaborates with business parks and international research centres. A rising tendency could be seen at public authorities, schools, national research centres and national universities because they hold a share of eleven out eleven. Nine out of eleven chose small companies as an answer. Eight of them have cooperations with international

universities and seven have with middle sized companies. Only six RI cooperates with micro companies and five with big companies. The lowest rate of cooperation among the sample companies was cooperating with company networks (3 of them chose this as an option).

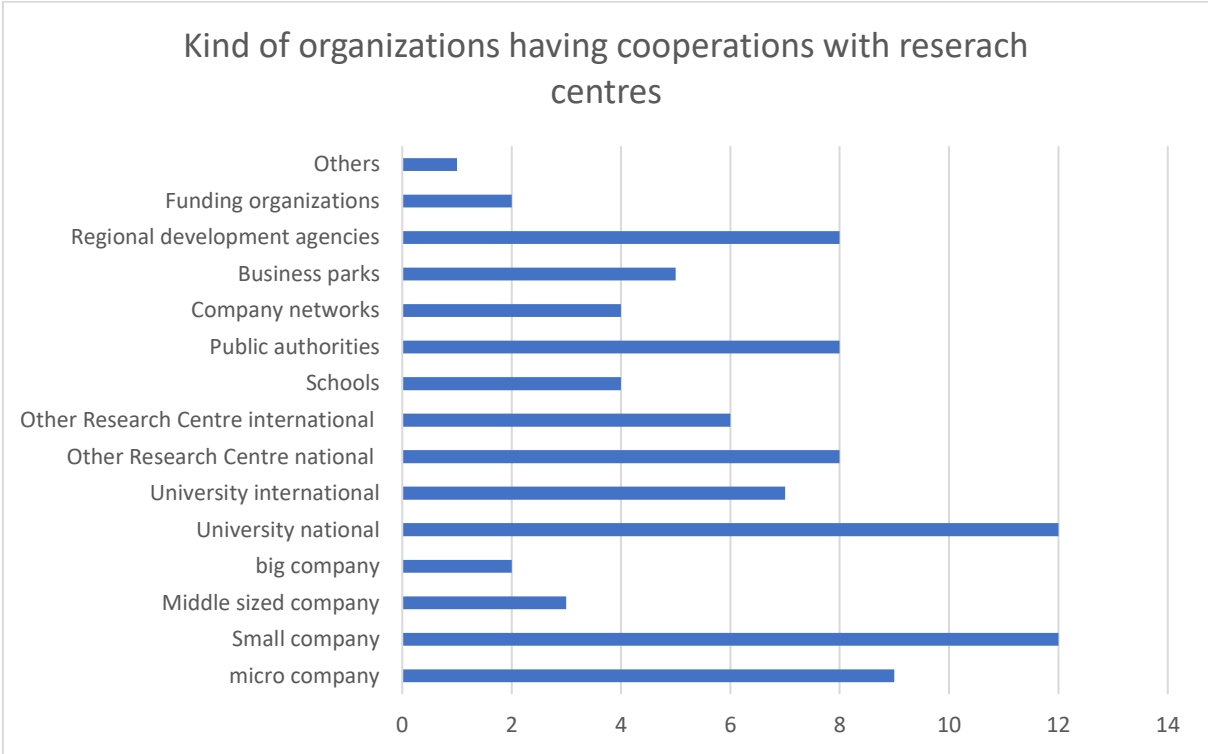
However the asked research centres have several types of cooperation but if we look at the groups we see that the level of cooperation with business actors is significantly lower than the level of cooperation with other bodies (e.g. universities, other research centres

**Development Agency of Serbia**

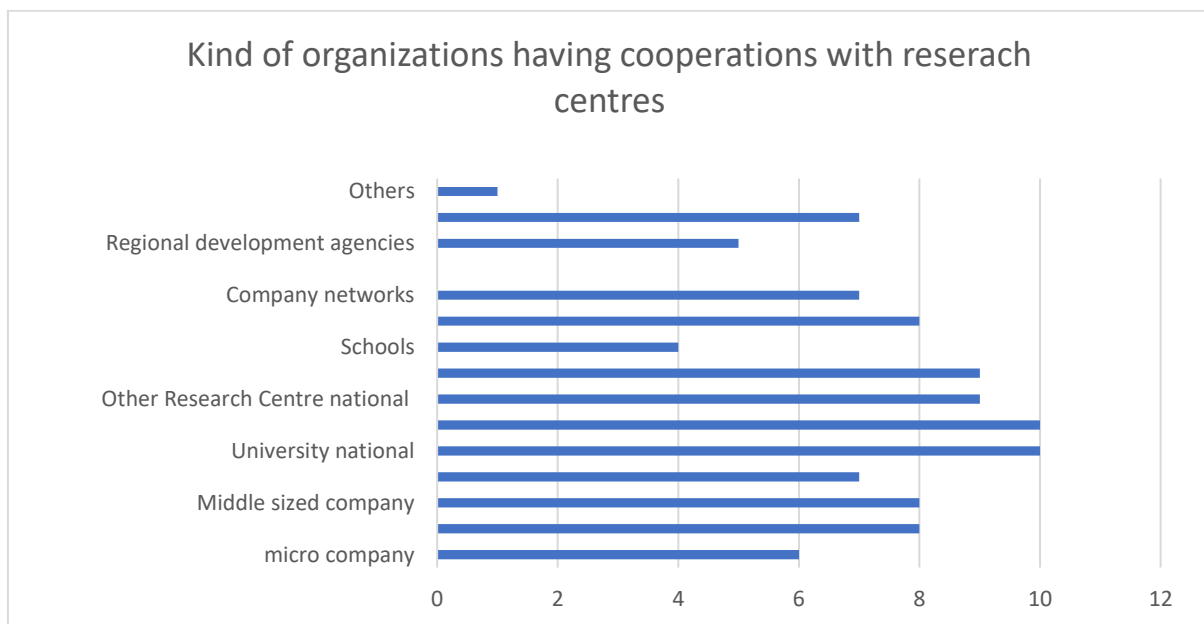


The bar chart shows the type of institution that research centres cooperate with. Mostly those are national universities (around 12%), then micro, small and medium companies (altogether almost 30%). International Universities and Other national research centres are tied up and form a portion of 17%. Public authorities and Company networks make the share of 14% and rest of the organizations generate pretty small share.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The bar chart is about the kind of collaborations the surveyed research centres have. Four of twelve companies have collaborations with company networks and eight out of twelve public authorities. Four out of twelve have collaborations with schools. Six out of twelve have commonalities with other national research centres and three out of twelve have with middle sized companies. Eight out of twelve have cooperation with regional development agencies, while five out of twelve have commonalities with business parks. The result for micro-companies is nine and national & international universities share a result of seven and twelve. Twelve companies have a collaboration with small companies and eight have with other national research centres. Only two have cooperation with funding organizations and big companies, whilst other categories share a result of only one, which is the lowest rate.



The graphic reflects the maximum interest of the research centres in collaborating with universities and other research centres at national and international level. There is a real interest in collaboration with the business environment, high differences between small, middle and big companies are not obvious, while micro companies seem to be interested only in experienced research institutes or in new research centres approaching high tech fields. The collaboration with public authorities and financial entities is almost at the level of collaboration with industry. We are aware that the potential private research centres may not be entirely along the same line.

Collaboration with Regional Development Agencies is a reality for half of the respondents. This will almost surely increase once the simplification of procedures occurs and project management experience reaches an acceptable level of risk.

Despite the fact that the need for adequate training and the interest of all research centres in high level skills is constantly increasing, the collaboration with schools is at the lowest level compared with other types of organizations.

Absence of collaboration with science parks is to be explained by the still incipient phases of science parks or due to the elitist view in which science parks and technology parks should not mix due to financial reasons and property risks.

## 2.2. Description of the organizations which collaborates with RI's

The most frequent partner for research centres are universities (national), also the business companies and other research centres are very common. The business parks are the least frequent partner – the reason is possibly because there is not to many business parks in Czechia.



## FH JOANNEUM GESELLSCHAFT M.B.H

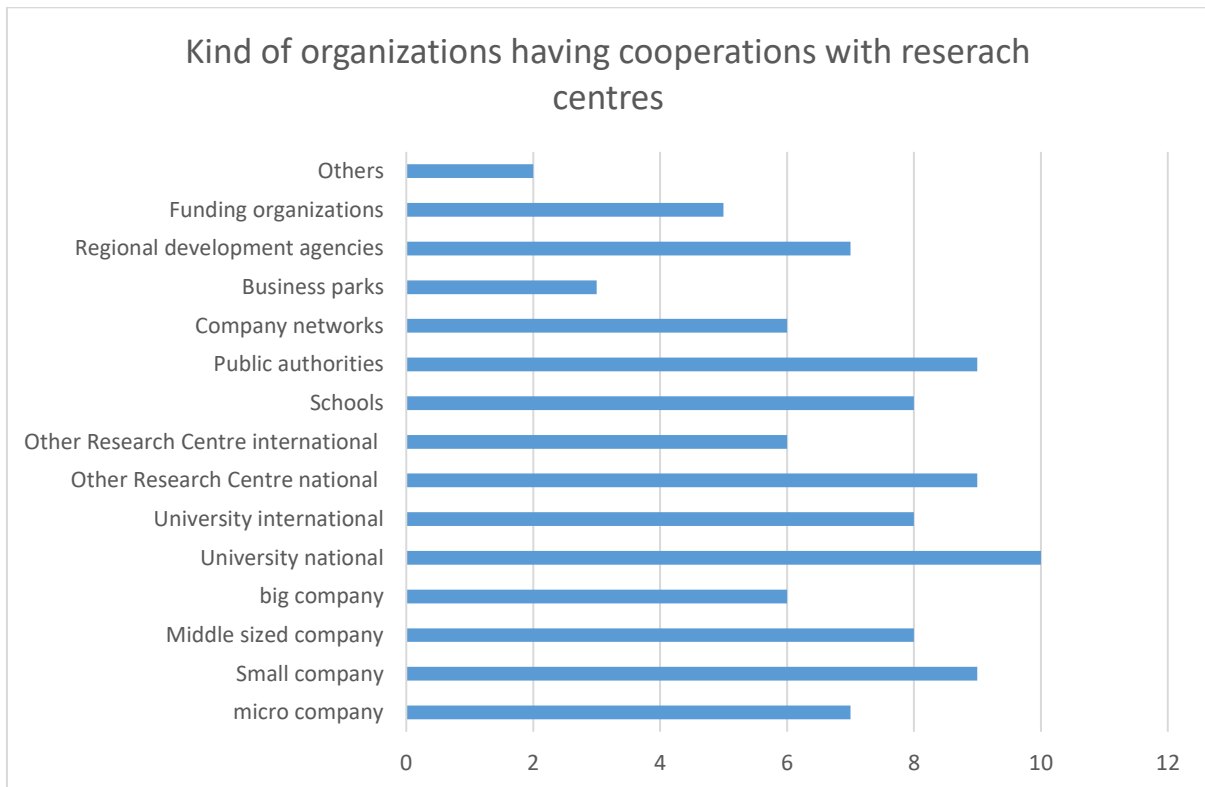


The bar chart is about the kind of collaborations the surveyed research centres have. It shows that everyone has a cooperation's with national universities. Ten of eleven companies have collaborations with international universities and big companies. Micro companies, middle sized companies, public authorities, company networks and funding organisations held a share of nine of eleven companies.



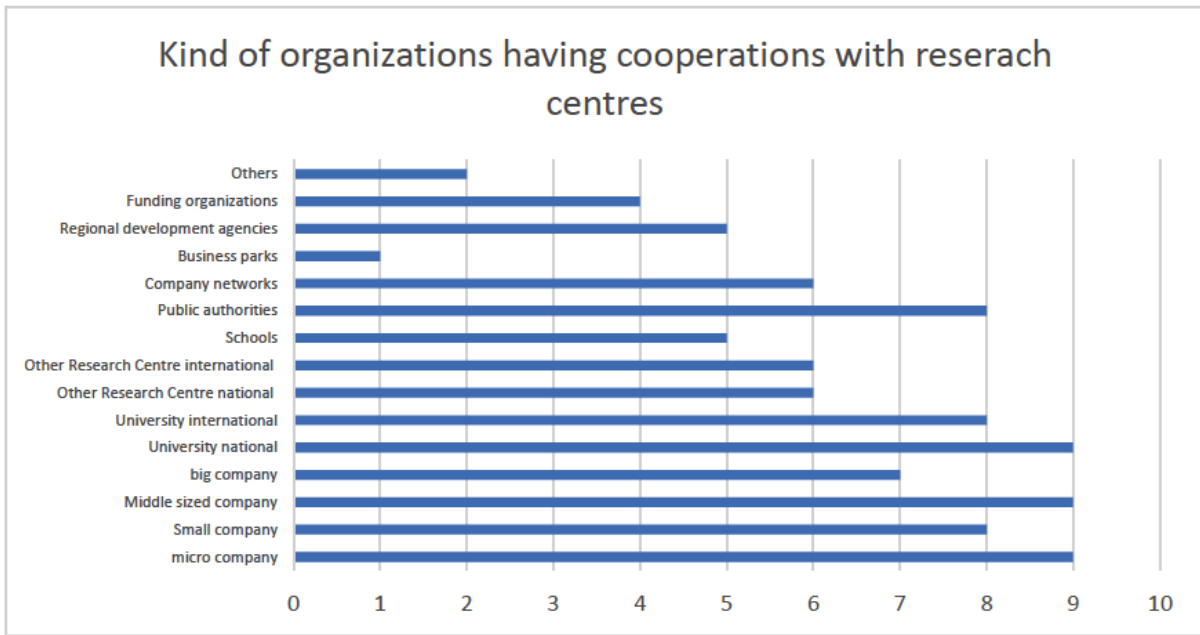
Eight companies have a collaboration with small companies and seven with other national research centres. Other international research centres and business parks account for six of eleven companies. Less than a half have a collaboration with regional development agencies and only four collaborate with schools. No one has any other collaborations.

***Institution for development of competence, innovation and specialization of Zadar County***



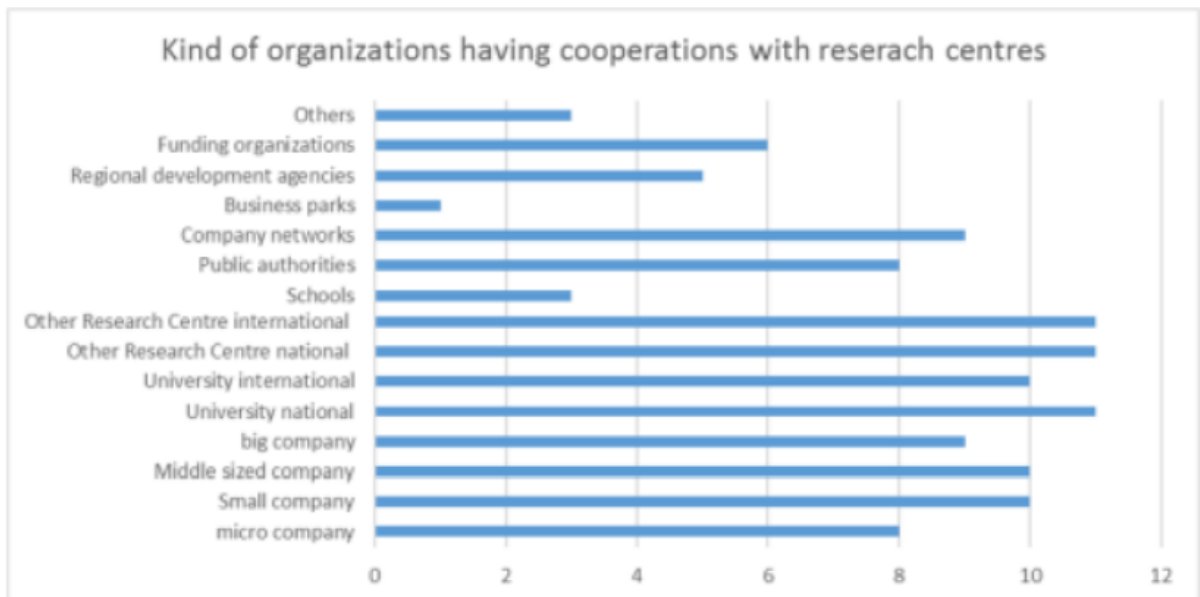
The bar chart is showing the type of institution that research centres cooperate with. Mostly those are national universities (10 out of 11), then public authorities, other national research centres and small companies (9 out of 11). Eight out of eleven of them cooperate with middle sized companies, International universities and schools. Seven surveyed research centres cooperate with micro companies and regional development agencies. Six of them cooperate with big companies, other international research centres and company networks. Only five of them cooperate with Funding organisations. Business park is mentioned 3 times and only two of them has declared that they also cooperate with other kind of organisations: Technical school in Brno and Zadar County.

**University of Maribor**



The bar chart is showing different types of institution that research centres cooperate with. Mostly those are national universities, middle sized companies and micro companies (9 out of 11), then public authorities, international universities and small companies (8 out of 11). Seven out of eleven of them cooperate with big companies, followed by cooperation with other national and international research centres and company networks (6 out of 11). Five surveyed research centres cooperate with schools and regional development agencies, followed by funding organisations (4 out of 11) and business parks (1 our of 11).

**Magurele High Tech Cluster**



The answers are proving a very balanced cooperation of the research organization between their own target – research / education and business. The answers are more or less 50 / 50%. These

results are demonstrating a huge change in the approach of the research centres regarding business, a more radical positive change than the approach of the business community.

**Central Bohemia Innovation Centre**



The bar chart is about the kind of collaborations the surveyed research centres have. It shows that everyone has a cooperation's with other national research centres. Ten of eleven companies have collaborations with national universities and international universities and other international research centres. Micro companies, small companies and middle sized companies held a share of nine of eleven companies.

Eight companies have a collaboration with schools and seven with big companies, public authorities and company networks.

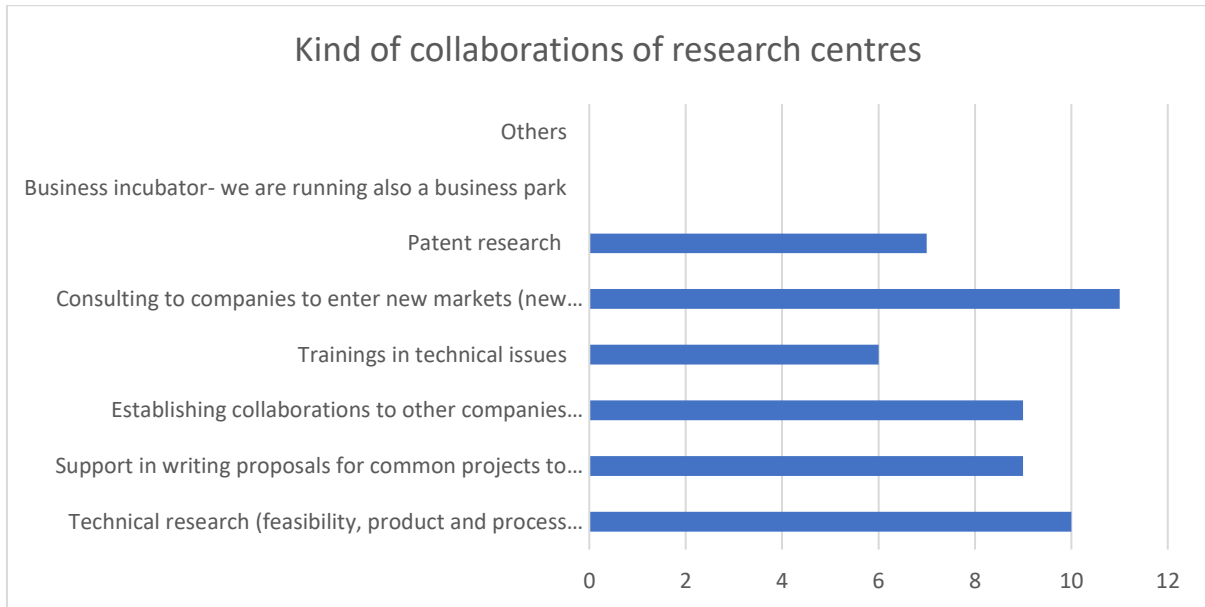
Less than a half have a collaboration with funding organizations and only four collaborate with regional development agencies. No one has any other collaborations.

So there are some examples of these organizations:

ERIC, TTS s.r.o. (micro), Advacam s.r.o. (small), HVM Plazma s.r.o., 5M s.r.o.(middle), Brucker, T NO (big), The Czech Technical University in Prague, University of Chemistry and Technology Prague, Brno University of Technology, The Czech Academy of Sciences — HiLASE and TOPTEC, University of west Bohemia, University College Dublin, University of Colorado, The Pennsylvania State University, Military University of Technology, VZLU, Laboratoire d'Optique Appliquée (LOA), eInnovation (funding organizations).

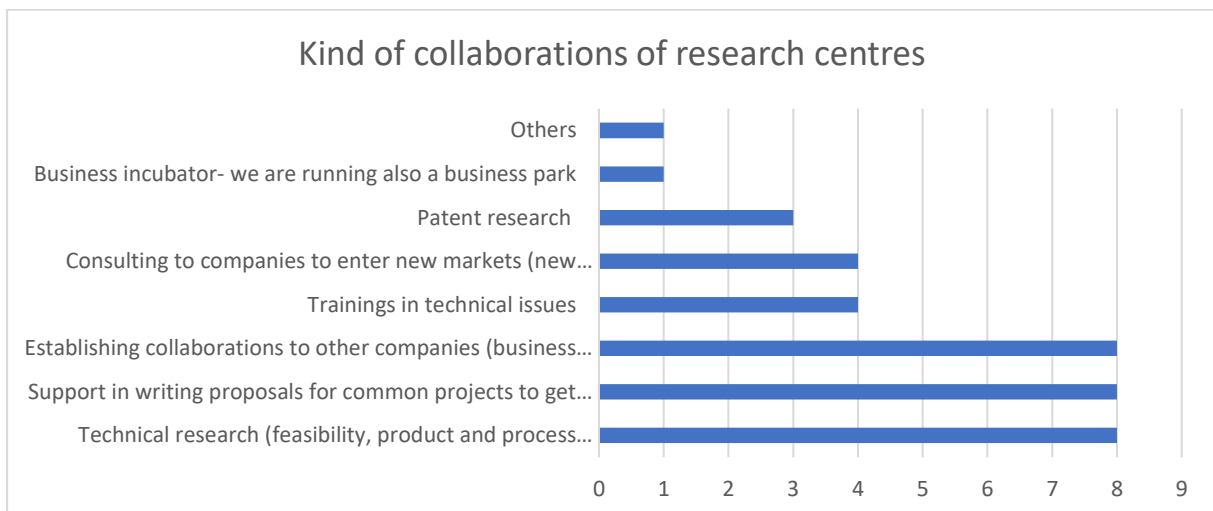
### 6.2.3 Description about the kind of collaborations of RI's

#### ELI-HU Nonprofit Ltd.



In this graphic we can see what kind of collaborations do the surveyed research centres offer. All of the companies offer consulting to companies and ten of them offers technical research. Nine out of eleven offers support in writing proposals and establishing collaborations to other companies (business talks, network events, etc.) Seven of the sampled companies offer patent research and only six of them offer trainings in technical issues. This diverse supply can ensure that all the companies want to cooperate with research centres can find the service they need.

#### Development Agency of Serbia



This graphic bar shows a type of collaborations the surveyed research centres offer. All of them provide different types of services. The most common ones are: Establishing collaborations to other companies, Giving a support in writing proposals for common projects to get funding and Technical research for companies. Trainings in technical issues and Consulting to companies to enter new

markets are tied up and get the share of 21.6%. Among other types of collaboration, research centres listed: trainings in management and IT, new technologies.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



In this graphic we can see what kind of collaborations do the surveyed research centres offer. All of the companies offer technical research (feasibility, product and process innovation) and nine of them offers support in writing proposals for common projects to get funding's. Eight out of twelve companies offer establishing collaborations to other companies (business talks, network events, etc.), and trainings in technical issues. Five out of twelve offer consulting to enter new markets (new branch or new region/country) and only two offers business incubation. Five of the companies offer patent research, whilst none of them choose option "other".

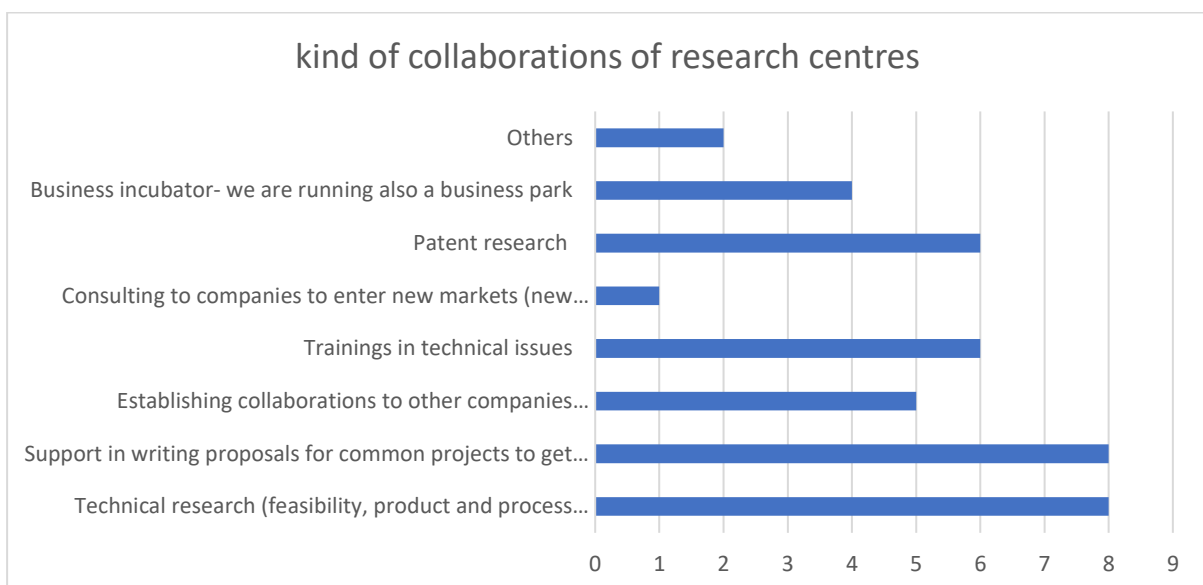


Collaboration **of** research centres compared to collaboration **with** research centres illustrates an interesting gap. Only technical research and training in technical issues are at similar levels with those reflected by collaboration with research centres.

Establishing collaboration with other companies and support for writing proposals is mentioned by 50% of respondents. Patent research is an activity developed by 4 out of ten research centres.

Providing advice to companies to enter new markets and business incubators are the two weakest points in the collaboration with research centres. With 38 positive answers from the maximum of 80 possible, it could be concluded that the collaboration initiative is likely to increase when consultancy, business incubators and a strong patent research are real initiative opportunities for collaboration.

**2.3. description about the kind of collaborations of RI's**

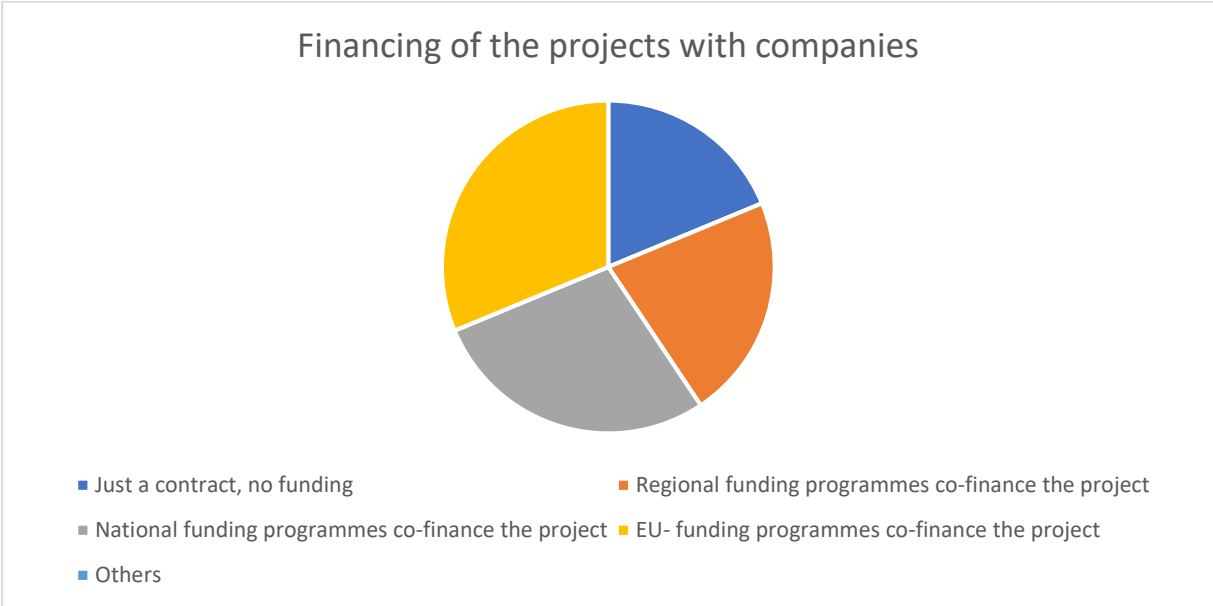


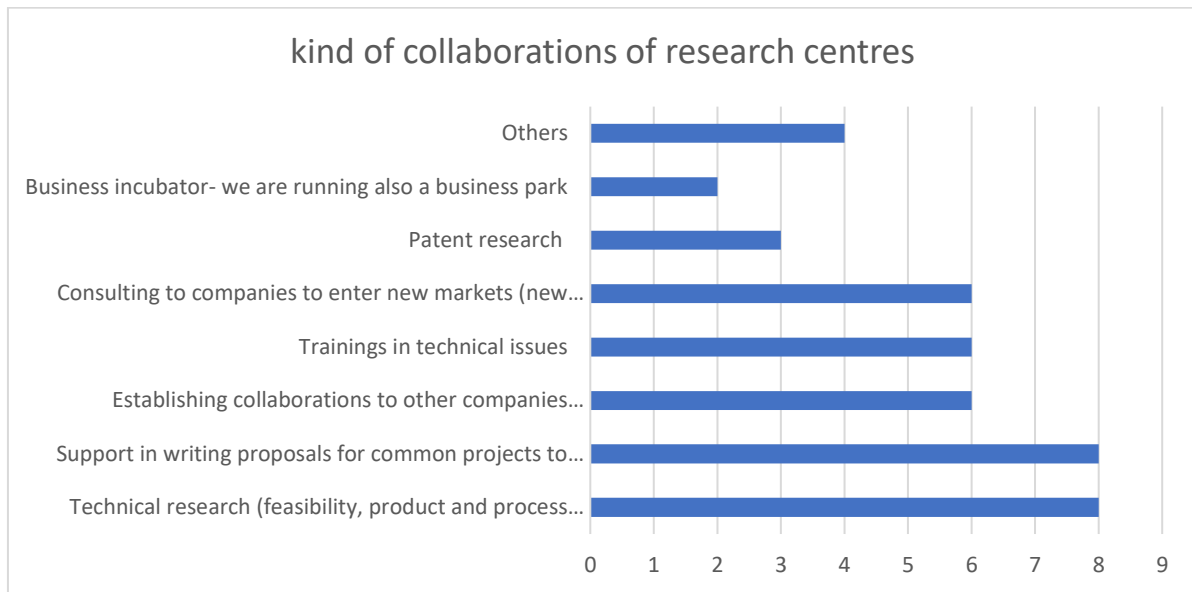
The research centres offer mainly technical research like feasibility studies and innovation in processes. Also they could offer capacity and expertise in preparing of common project – this could be valuable for business because the difficult administration is one of the obstacles of national/EU calls. The research centres could also provide patent research, trainings in technology issues or specialized laboratory services.

**2.5. Financing of the projects**

The EU funds are the most important source of financing for common project with companies. The one reason is that we chose the research centres funded by the operational programme Science and Research for Innovation (CEITEC, Algatex, Recetox, Hilase...), so they are closely connected to EU funding. National funding is also important for research centres in general in comparison to regional funding. This is because the main of R&D funding are distributed on national level In the Czech Republic and maybe sometimes there is no such strong regional connection in some centres.

Contract research makes the minority of funding and there is space for improvement.





In this graphic you can see what kind of collaborations the surveyed research centres offer. Eight of eleven companies offer technical research (feasibility, product and process innovation) and a support in writing proposals for common projects to get funding's. Six of eleven companies offer establishing collaborations to other companies (business talks, network events, etc.), intermediares, NGO's etc., trainings in technical issues and consulting to enter new markets (new branch or new region/country). Patent research held a share of three companies and business incubator held a share of two companies. Four companies offer other collaborations like improving financial education in schools, projects with bank and insurance, non-technical researches or national and international funded R&D projects.

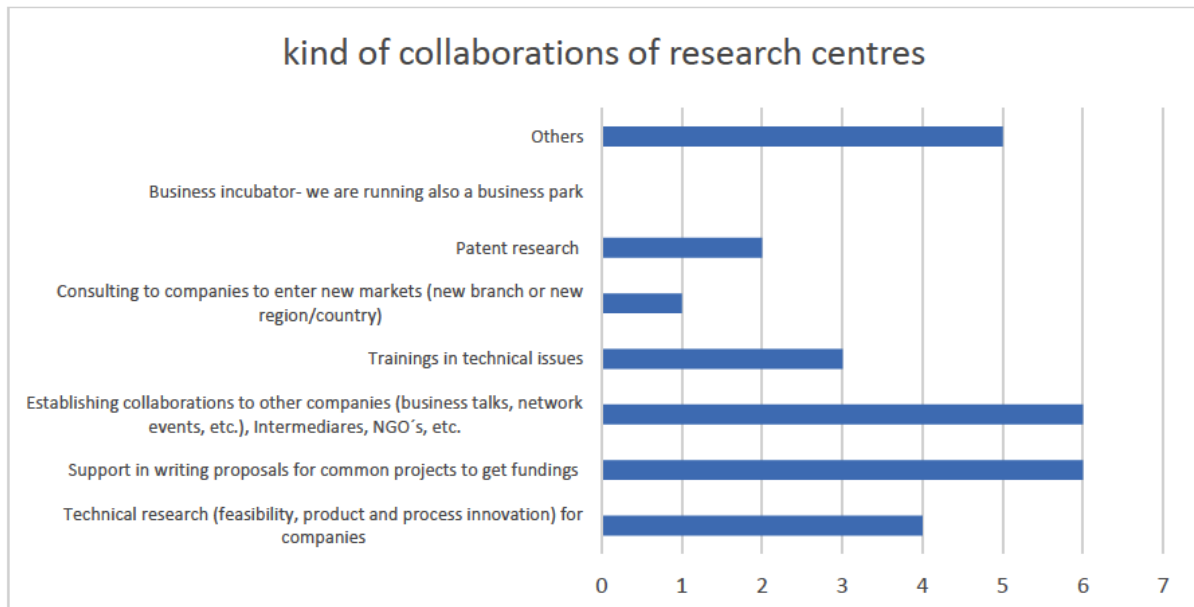
***Institution for development of competence, innovation and specialization of Zadar County***





This graphic shows a type of collaborations the surveyed research centres offer. Seven from eleven of them offer Trainings in technical issues and technical research (feasibility, product and process innovation) for companies. Six of them give a support in writing proposals for common projects to get funding and Establishing collaborations to other companies (business talks, networks events etc.). Just two research centres offer patent research. No one of surveyed research centres offers consulting, Business incubator or anything other.

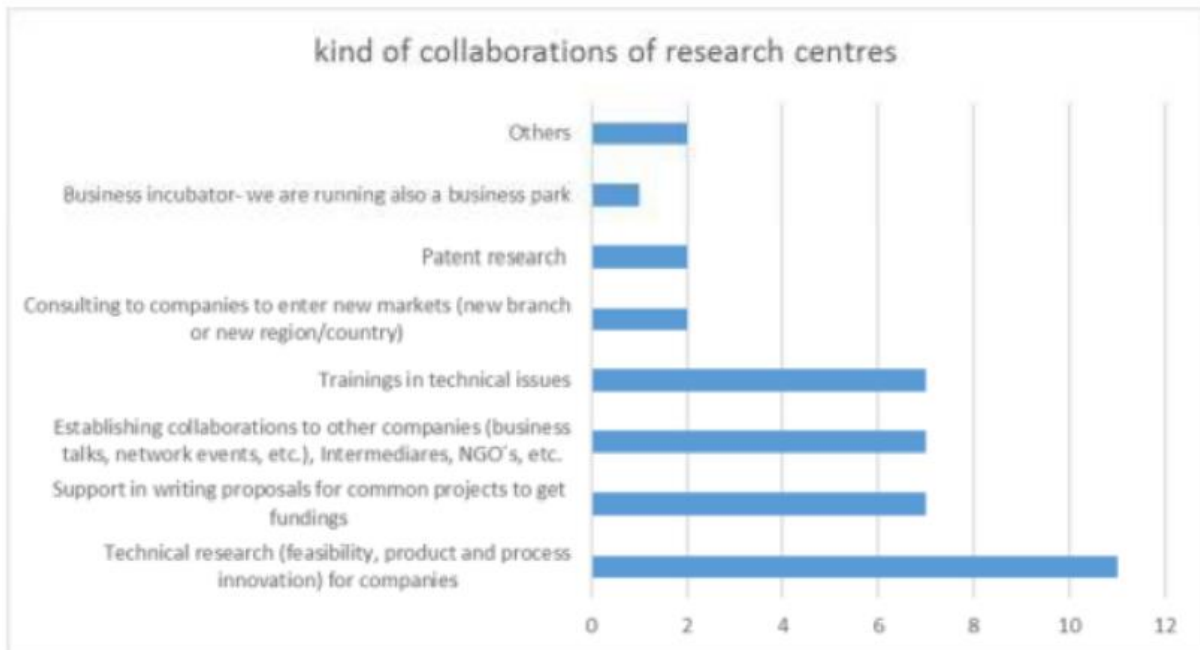
**University of Maribor**



This graphic shows a type of collaborations the surveyed research centres offer. Six from eleven of them give a support in writing proposals for common projects to get funding and establishing collaborations to other companies (business talks, networks events etc.). Four out of eleven offer technical research (feasibility, product and process innovation) for companies, followed by offering Trainings in technical issues (3 out of 11). Two of research centres offer patent research and one of them is offering consultations to enter new markets.

Five companies also offer other services as other education, evaluation and monitoring, development of products and services, market analysis, PR, implementation of green ecosystems for adoption to climate changes, implementation of learning environment and classrooms in the nature, learning polygons and motivational environments for companies.

**Magurele High Tech Cluster**



The research entities are more oriented to offer support services for the companies. This is a good start, but it is not focus on the main chain of values of the institutes. They are less preoccupied to focus on technology transfer with is, of course, more difficult. We have to accept that the companies are, also, interested to receive services very fast and not to develop a more complex and time consuming cooperation with the research entities.

**Central Bohemia Innovation Centre**



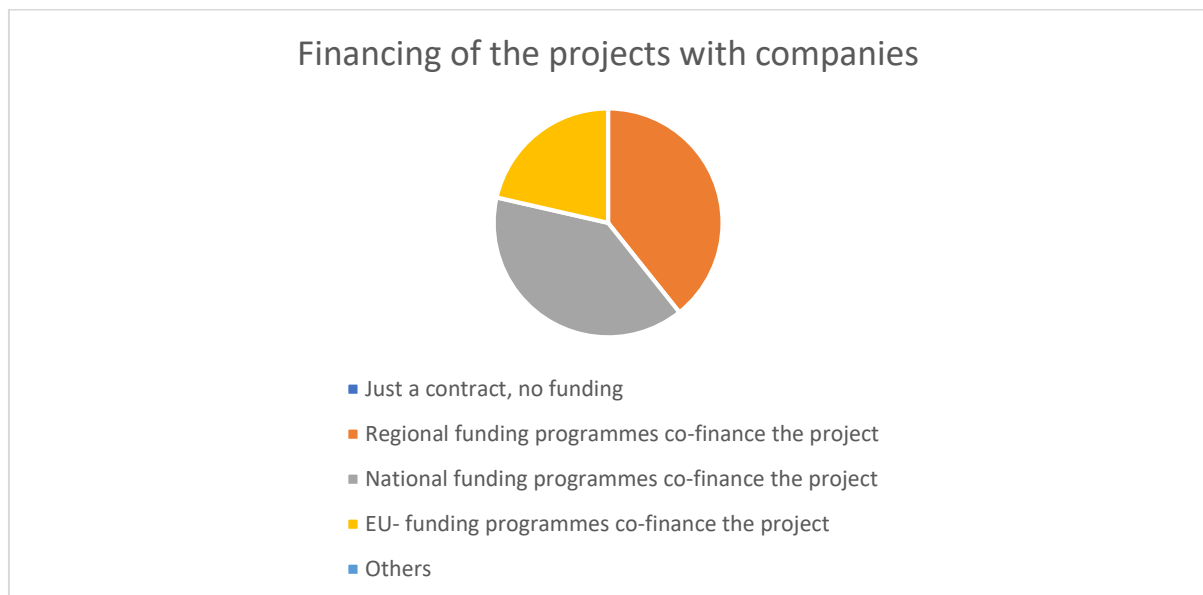
In this graphic you can see what kind of collaborations the surveyed research centres offer. Ten of eleven companies offer technical research (feasibility, product and process innovation). Seven of

eleven companies offer trainings in technical issues and six a support in writing proposals for common projects to get funding's. Four of eleven companies offer establishing collaborations to other companies (business talks, network events, etc.), intermediaries, NGO's etc., Patent research and other kind of collaborations held a share of three companies. Two of eleven companies offer consulting to enter new markets (new branch or new region/country). So there are some examples of these organizations:

UJF/NPI (others: scientific collaboration), SU participates in scientific consortia (e.g. ESA missions, H2020) which enables to establish contracts on hardware development of scientific instrumentations (telescopes, detectors on satellites) with private sectors.

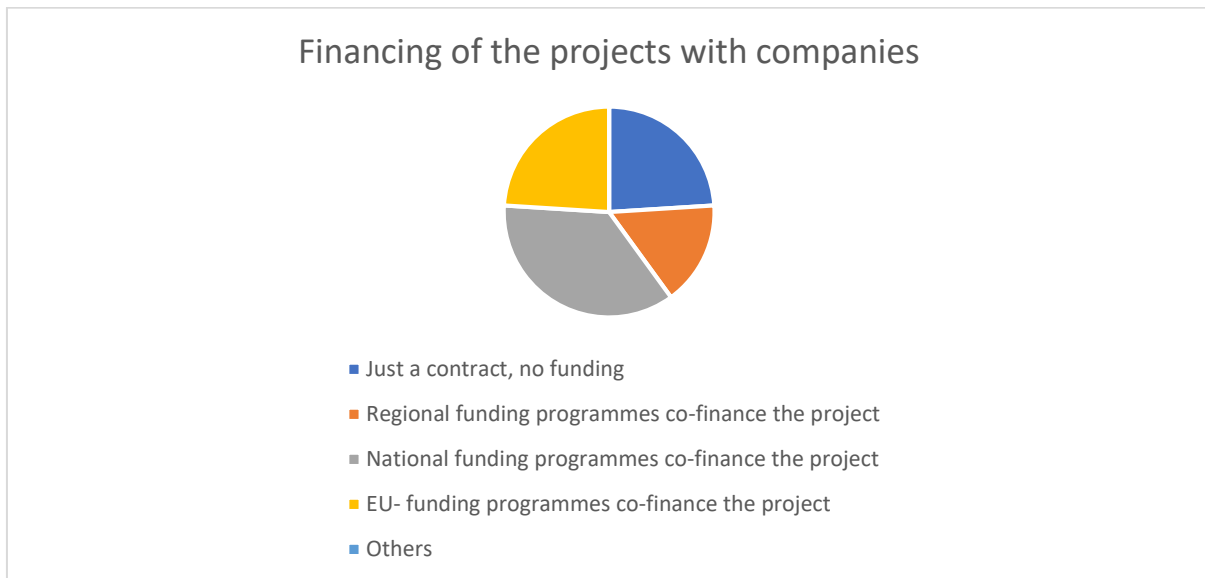
#### 6.2.4 Financing of the projects

##### **ELI-HU Nonprofit Ltd.**



Similarly to the other types of surveyed institutions the asked research centres participate in collaborations when they can receive some kind of monetary support which can mean EU, national or regional funds. This data shows that research centres collaborates with other actors in the economy when they can find some kind of monetary support.

**Development Agency of Serbia**

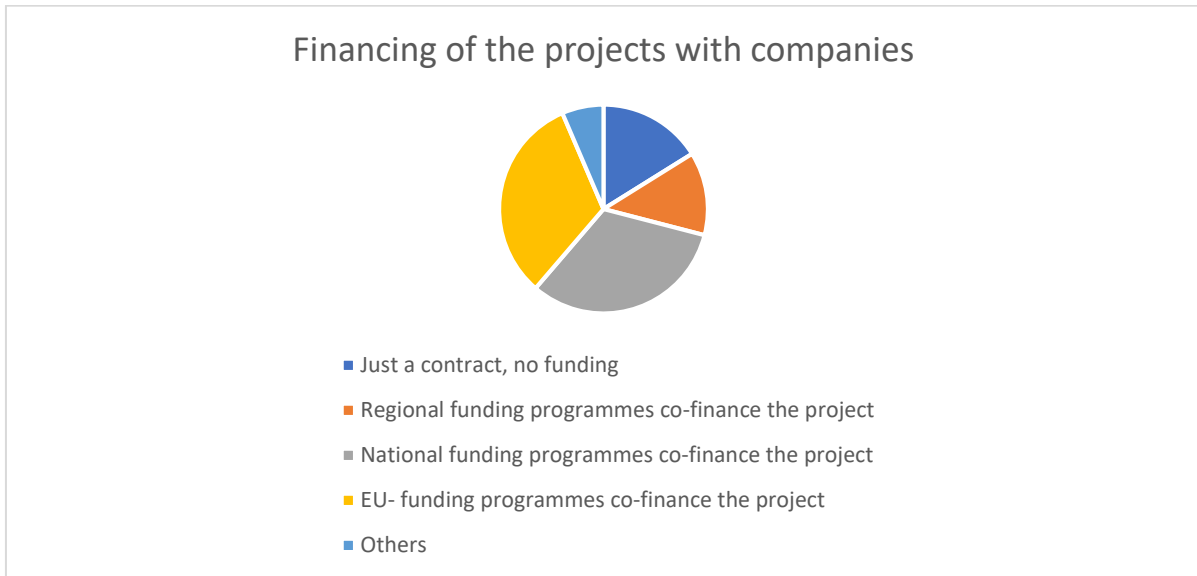


It is evident that research centres finance their work with companies mainly through national funding-36% of them. 24% receives finance from EU programmes and 16% with help of regional funding. Four of them marked that they don't get funding, just signing the contract.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



In this pie chart, we can see that 36% of the companies finance their projects with national funding programmes which co-finance the project. 36% of the surveyed companies finance their projects with EU-funding and 18% of them with just contract and no funding's. Only 10% of the companies fund their project via Regional funding programmes.



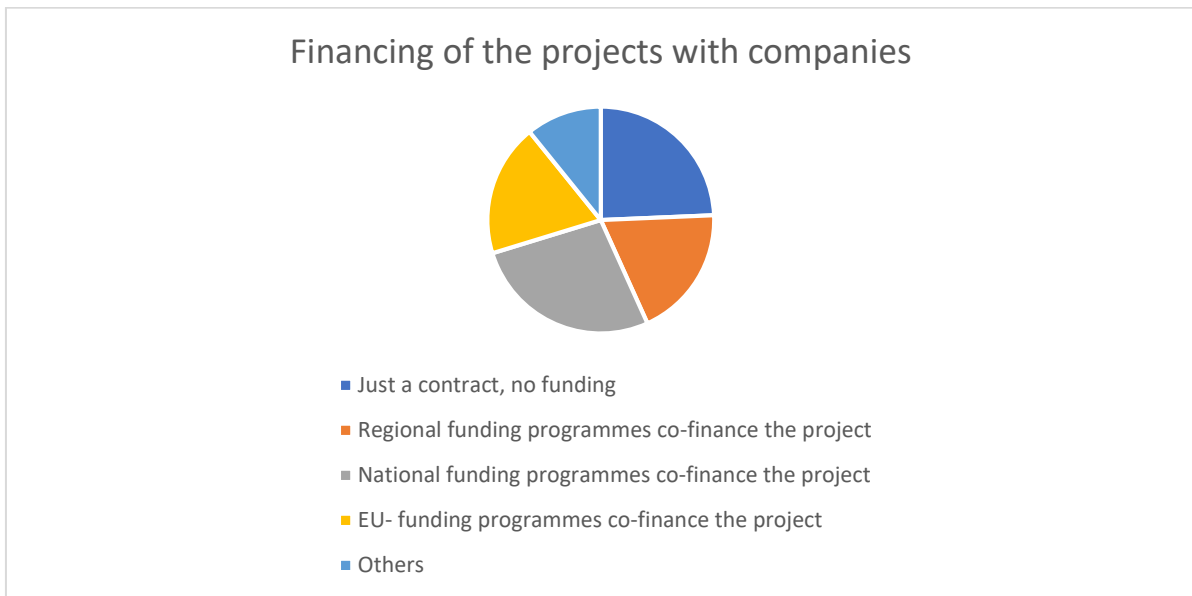
National and EU funding programs are the strongest co-funding resources and regional funding is an increasing opportunity. It cannot be ignored that quite a high percentage of contracts is outside the financial support.

### **2.5. Financing of the projects**

The EU funds are the most important source of financing for common project with companies. The one reason is that we chose the research centres funded by the operational programme Science and Research for Innovation (CEITEC, Algatex, Recetox, Hilase...), so they are closely connected to EU funding. National funding is also important for research centres in general in comparison to regional funding. This is because the main of R&D funding are distributed on national level in the Czech Republic and maybe sometimes there is no such strong regional connection in some centres.

Contract research makes the minority of funding and there is space for improvement.





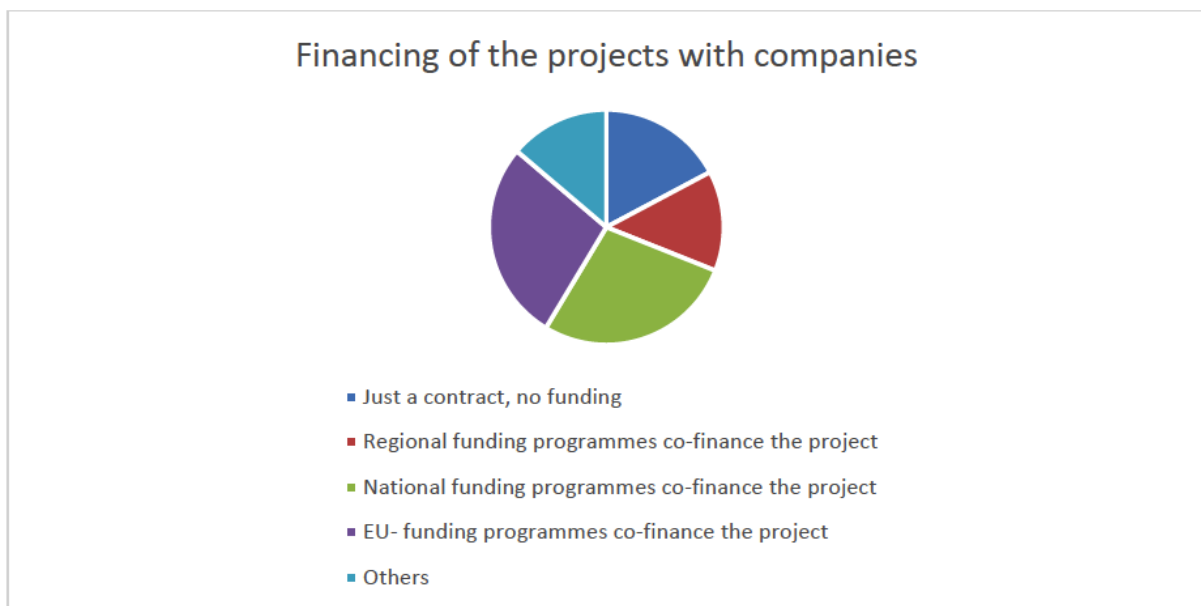
In this pie chart, you can see that 27% of companies finance their projects with national funding programmes which co-finance the project. 24% of the surveyed companies finance their projects with a contract and no funding's. Regional funding programmes co-finance the project and EU- funding programmes co-finance the project held a share of 19%. About 11% fund their project in another way then listed in the survey.

***Institution for development of competence, innovation and specialization of Zadar County***



This pie chart shows how research centres finance their work with companies. 30% of them got their finance from Eu programmes. Regional funding, just a contract, without a funding and national funding has 22% of surveyed research centres and for other kind of funding, 4% has said that they have donations.

### University of Maribor



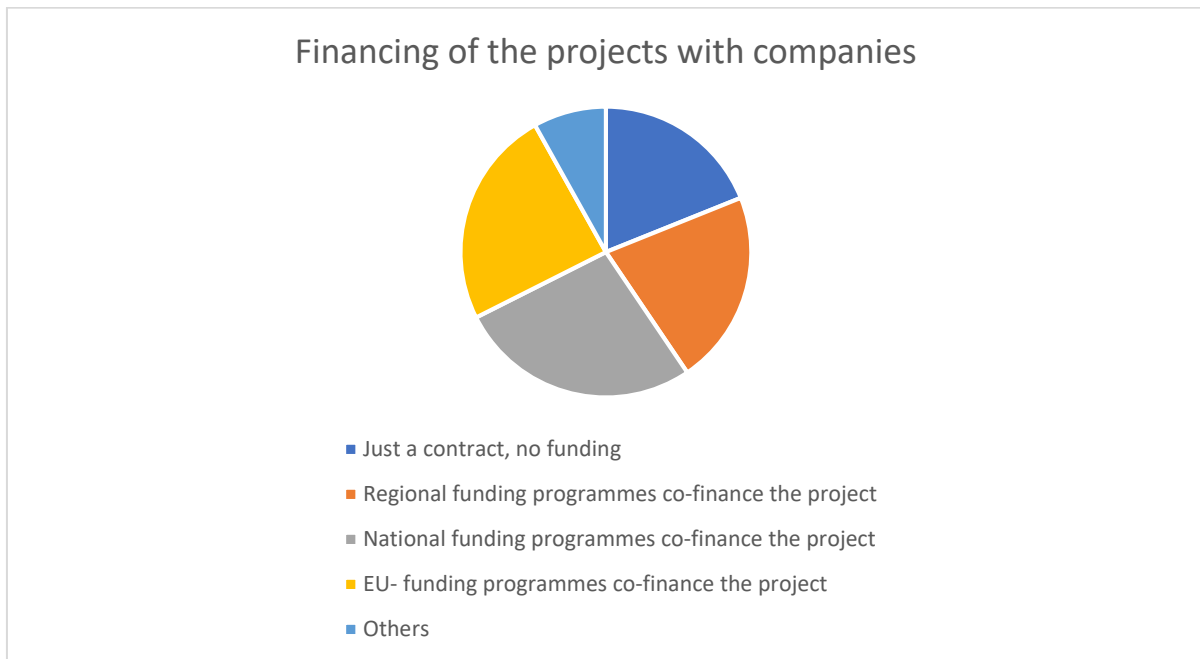
This pie chart shows how research centres finance their work with companies. 28% of them receives their finance from national and EU funded programmes. Just a contract has 17 % of surveyed research centres, followed by regional funding and other kind of funding by 14%.

### Magurele High Tech Cluster



The research centres are focus on long medium and long term cooperation with the companies. This conclusion is based on the fact that they have more contracts financed by national and European authorities when they are cooperating with the companies. Trust and long term cooperation are part of the organizational culture of the research centres.

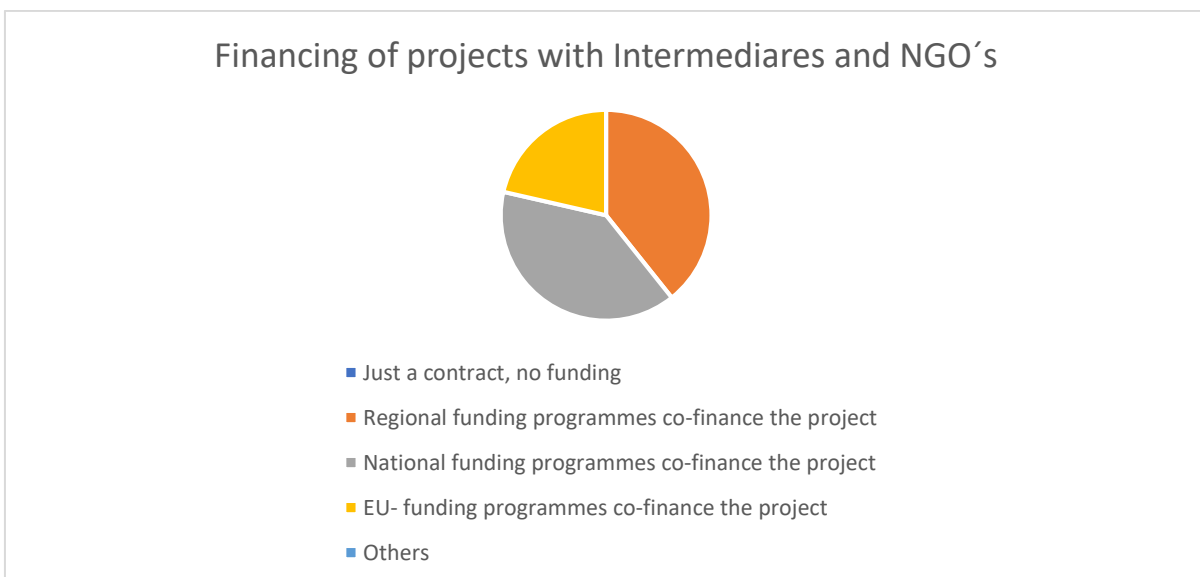
### Central Bohemia Innovation Centre



In this pie chart, you can see that 27% of companies finance their projects with national funding programmes which co-finance the project. 19% of the surveyed companies finance their projects with a contract and no funding's. Regional funding programmes co-finance the project co-finance the project held a share of 22% and EU- funding programmes 24%. About 8% fund their project in another way then listed in the survey. Example: Joint R&D

### 6.2.5 Kind of financing the projects

#### ELI-HU Nonprofit Ltd.

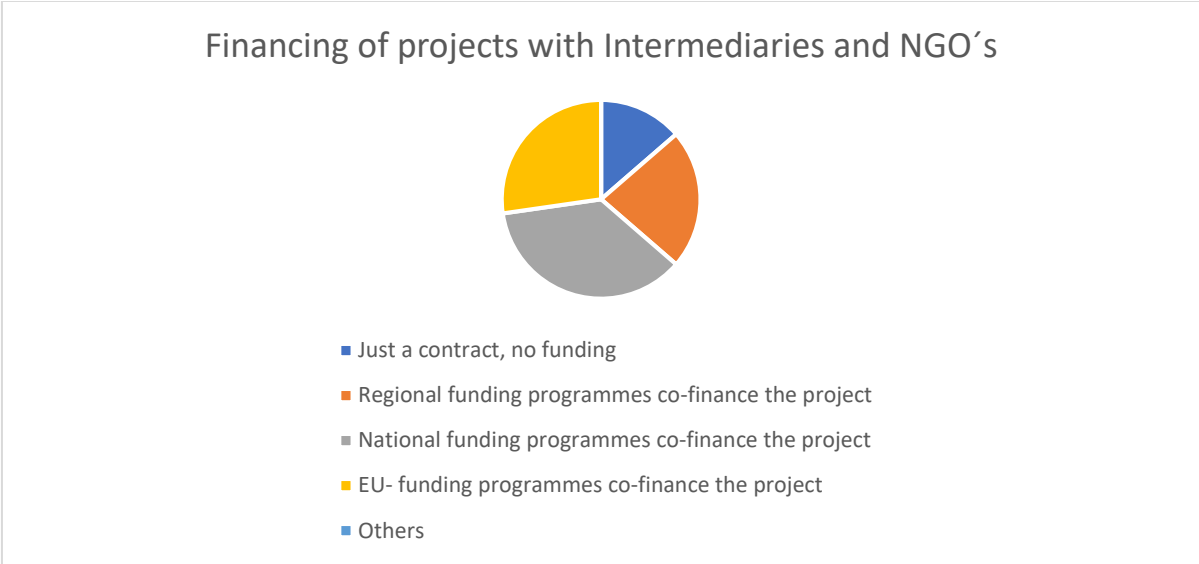


In this pie chart, we can see that the results are the same as the above mentioned one. All collaborations they participate in have some kind of funding background. It is clear that the funding is



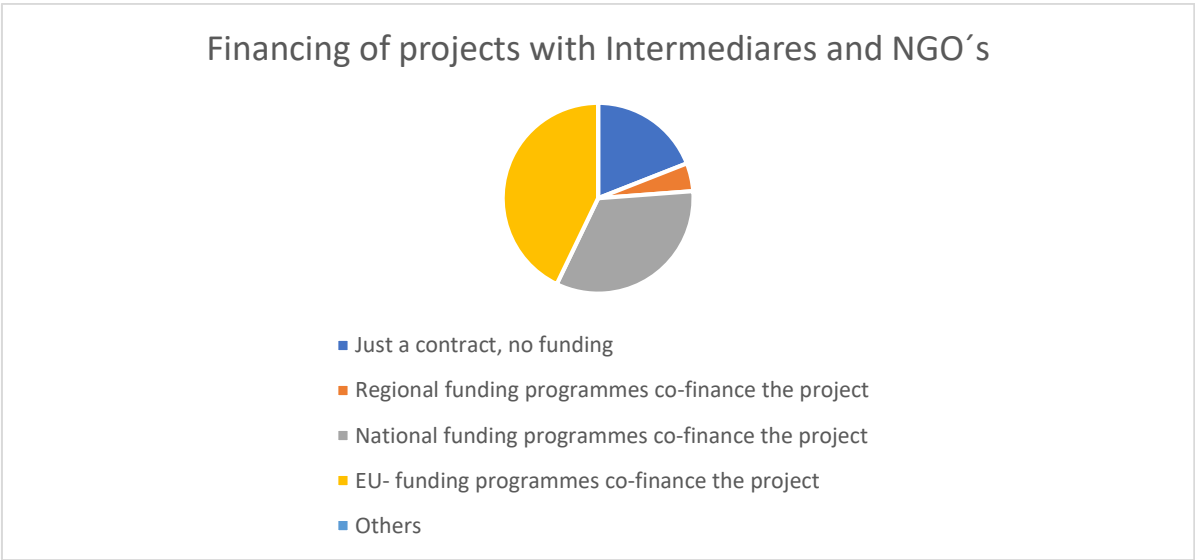
a crucial point for research centres. This statistic is not favourable because even the research centres depend on funding and have just limited income from the market.

**Development Agency of Serbia**

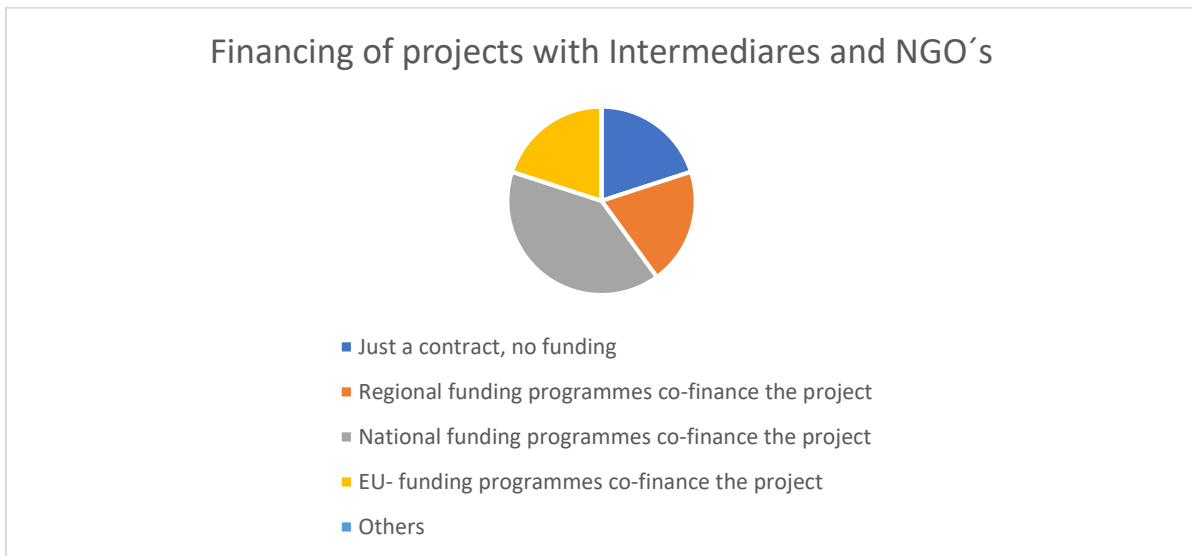


This pie chart shows how research centres finance their work with intermediaries and NGO's. Big percentage of them uses national funding- 36%, around 27% get their finance from EU programmes and 22% have regional. Three of them marked that they don't get funding, just signing the contract.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



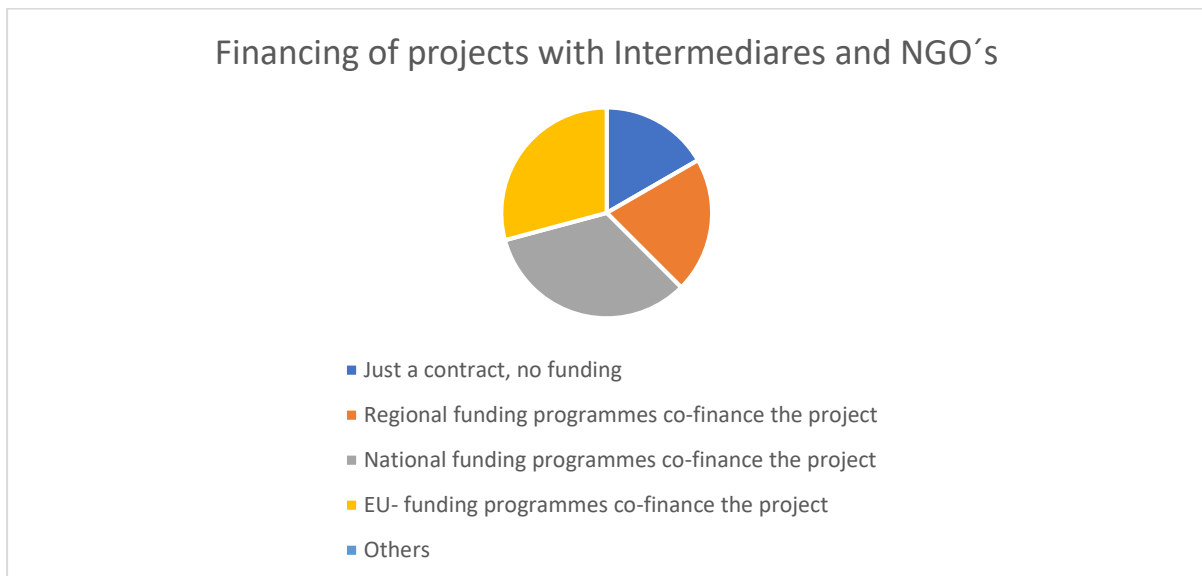
In this pie chart, you can see that 33% of the companies finance their projects with national funding programmes which co-finance the project. 10% of the surveyed companies finance their projects with a contract and no funding's. Regional funding programmes co-finance the project hold a share of 5%. About 42% fund their project by EU-funding.

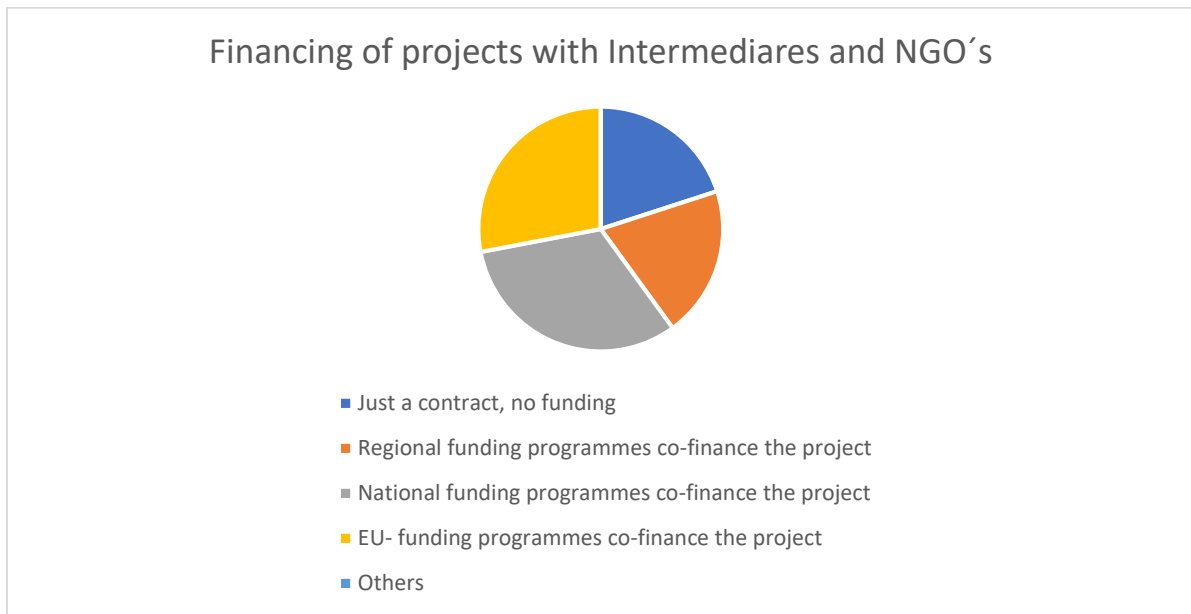


Financing of projects with intermediaries and NGOs is stronger for the projects in national funding programs. EU funding, regional funding and contracts without funding are at the same level. No other sources of funding were mentioned.

### **2.6. Kind of financing the projects**

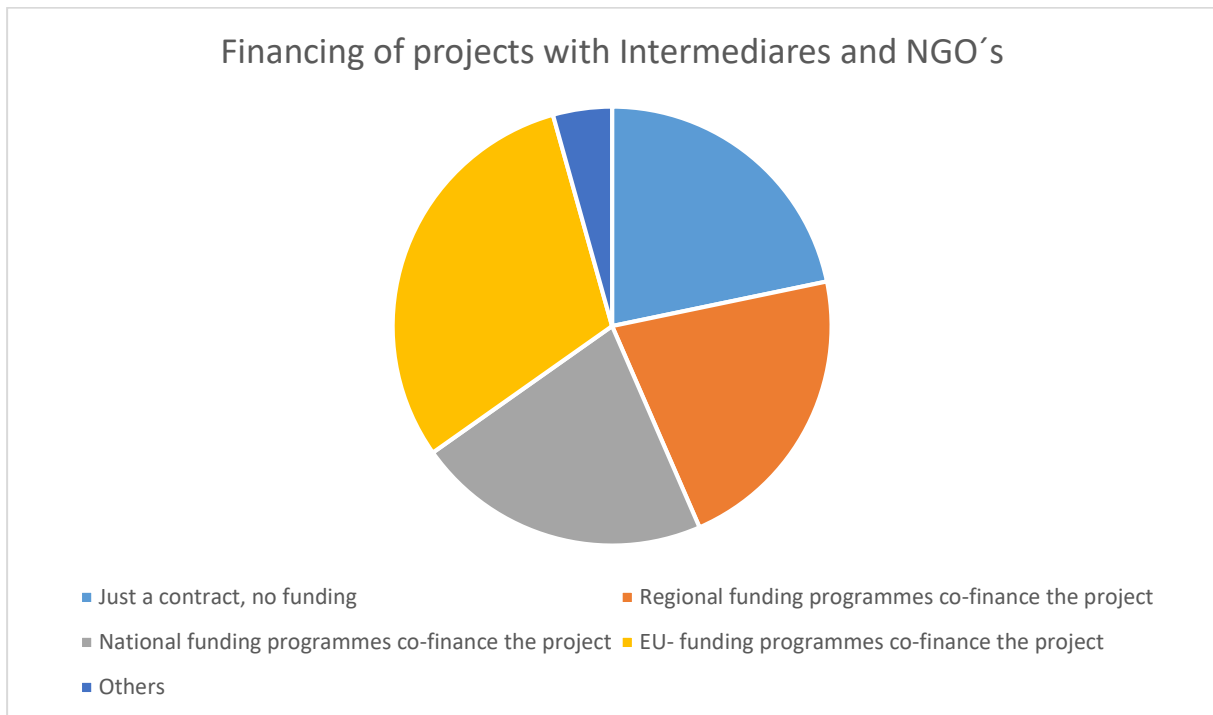
The situation is only slightly different with national funding prevailing in NGOs and Intermediaries common projects. Generally these projects are probably not so common for research centres. They are also less financed in terms of budget range.





There are five parts in this pie chart. The blue part shows just a contract and no funding, the red one deals with regional funding programmes co-finance the project, the green part shows the national funding programmes co-finance the project, the violet part deals with the EU- funding programmes co-finance the project and the light blue part shows all other kinds of fundings. The largest share is 32% it is the green part in the pie chart. EU- funding programmes co-finance the project held a share of 28%. Just a contract and no funding and regional funding programmes co-finance the project held a share of 20%. No one of the companies fund their project in another way then listed in the survey.

**Institution for development of competence, innovation and specialization of Zadar County**



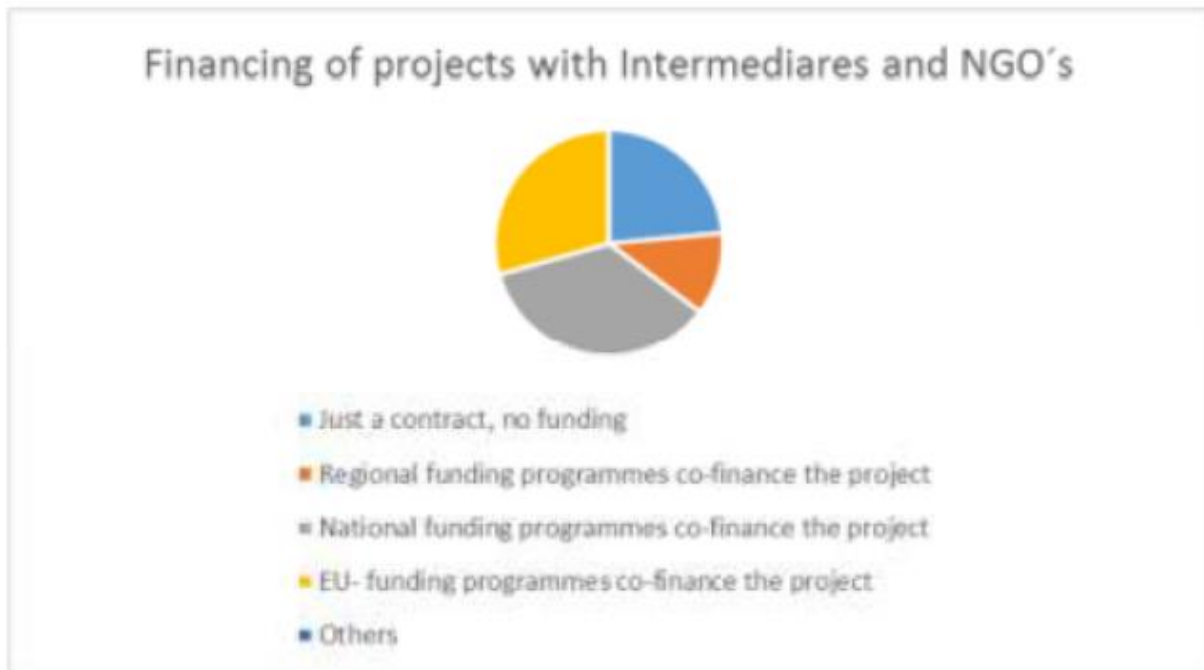
This pie chart shows how research centres finance their work with intermediaries and NGO's. 30% of them got their finance from EU programmes, 22% have regional funding, national funding and just a contract, without funding. Other kind of funding is present in 4% has but without any specifications.

**University of Maribor**



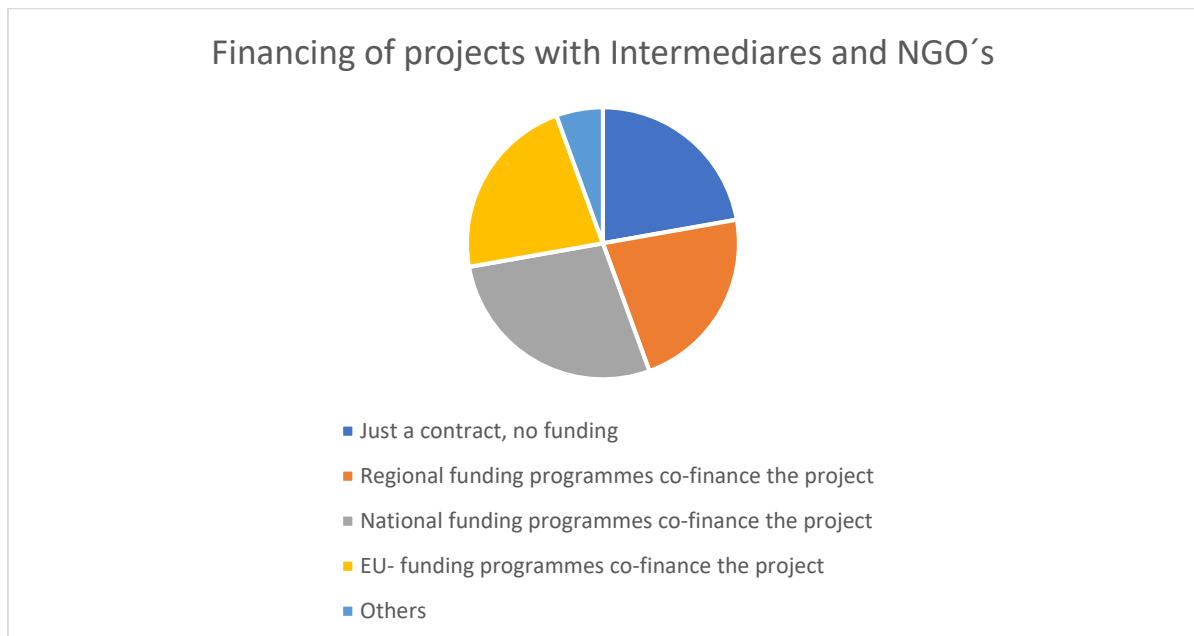
This pie chart shows how research centres finance their work with intermediaries and NGO's. 39% of them got their finance from EU programmes, 30% have national funding, followed by regional funding and just a contract, without funding (13%). Other kind of funding is present in 4%, highlighted by investment of own funds, pro-bono work and volunteering.

### **Magurele High Tech Cluster**



The cooperation with the intermediaries and NGOs it is more balanced than the previous graphic. It is to stress that the regional funding programs are less attractive for the research centres maybe because these programs are not oriented through innovation.

### **Central Bohemia Innovation Centre**

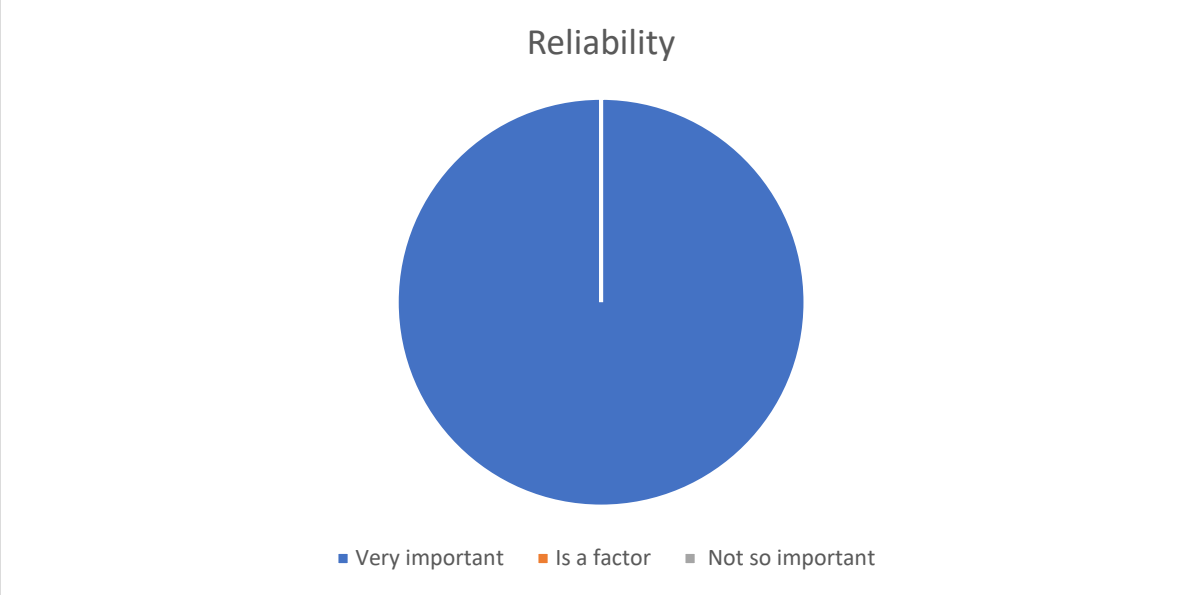


There are five parts in this pie chart. The blue part shows just a contract and no funding, the red one deals with regional funding programmes co-finance the project, the green part shows the national funding programmes co-finance the project, the violet part deals with the EU- funding programmes co-finance the project and the light blue part shows all other kinds of funding. The largest share is 28% it is the green part in the pie chart. EU- funding programmes co-finance the project and regional

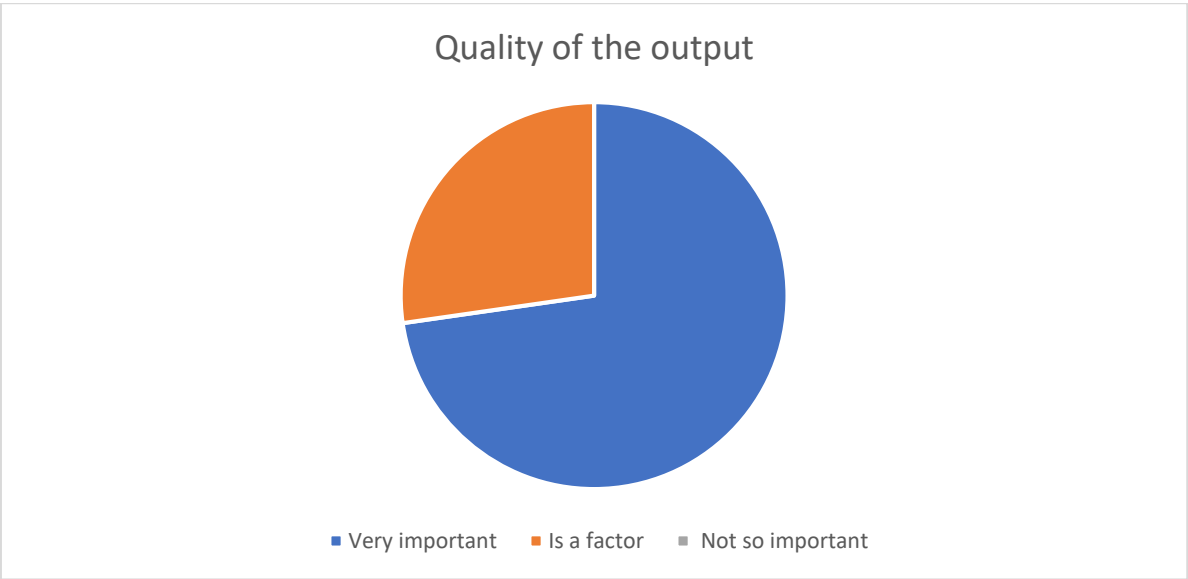
funding programmers held a share of 22%. Just a contract co-finance the project held a share of 22%. 6% of the companies fund their project in another way then listed in the survey.

**6.2.6 Important points of a collaboration with a research centres**

**ELI-HU Nonprofit Ltd.**



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability, as 100% of the sample companies said that reliability is very important during collaboration.



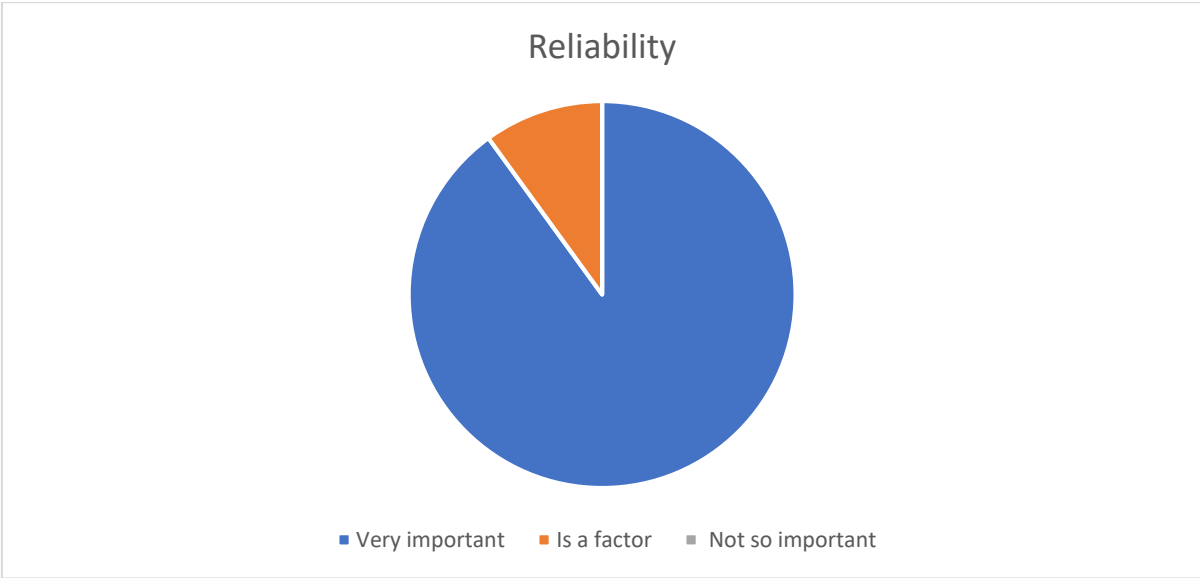
Quality of the output is very important for more than half of the surveyed research institutions, but a few of them said that it is “just” a factor. This can be in line with the funding situation of these centres

and it can mean that in many cases they use collaborations to get funding for their operation, which is not favourable because it can affect the quality and the usefulness of the outputs.

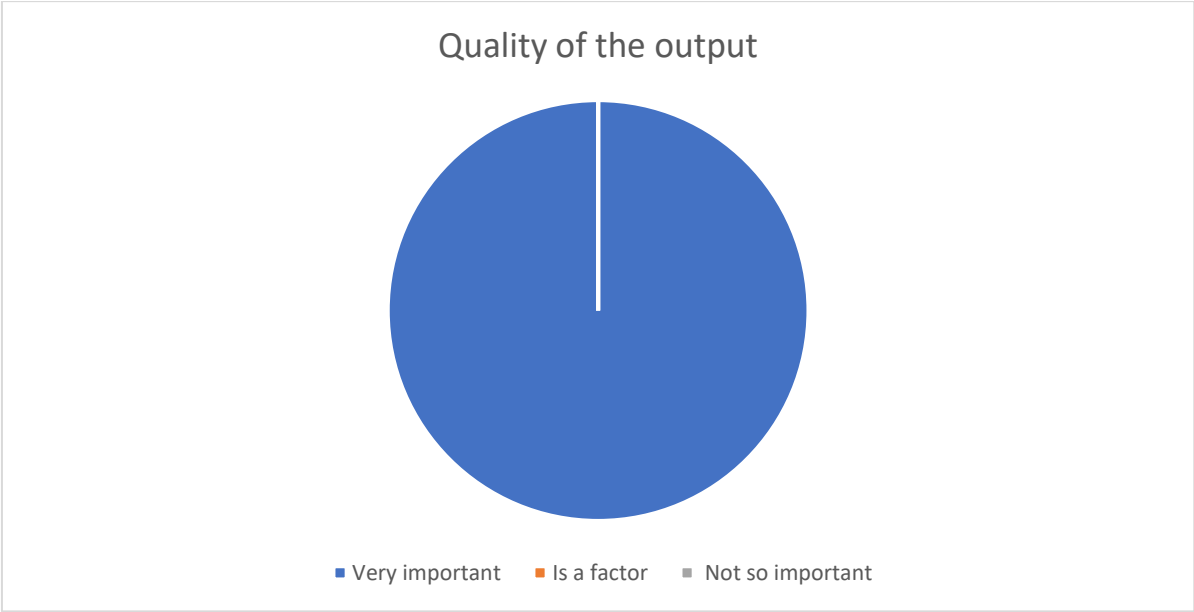


After seeing the answers for the previous questions, it is not surprising than cost is very important factor for research institutions.

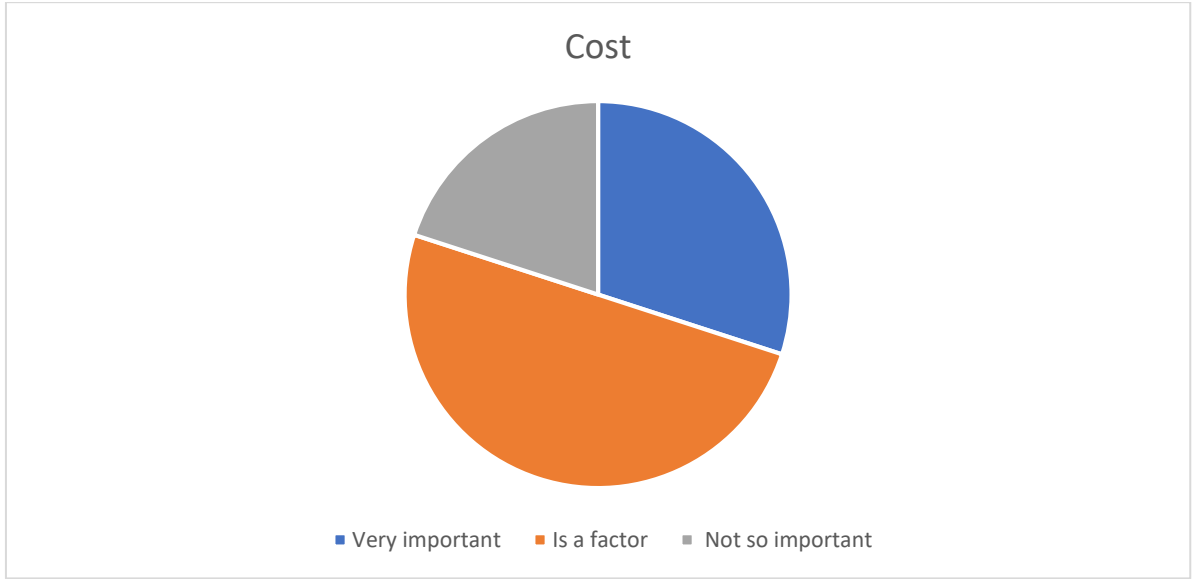
**Development Agency of Serbia**



This pie chart describes the reliability and it is obvious that research centres attach great importance to reliability. 90% of them think it is very important and only one surveyed answered with- It is a factor.



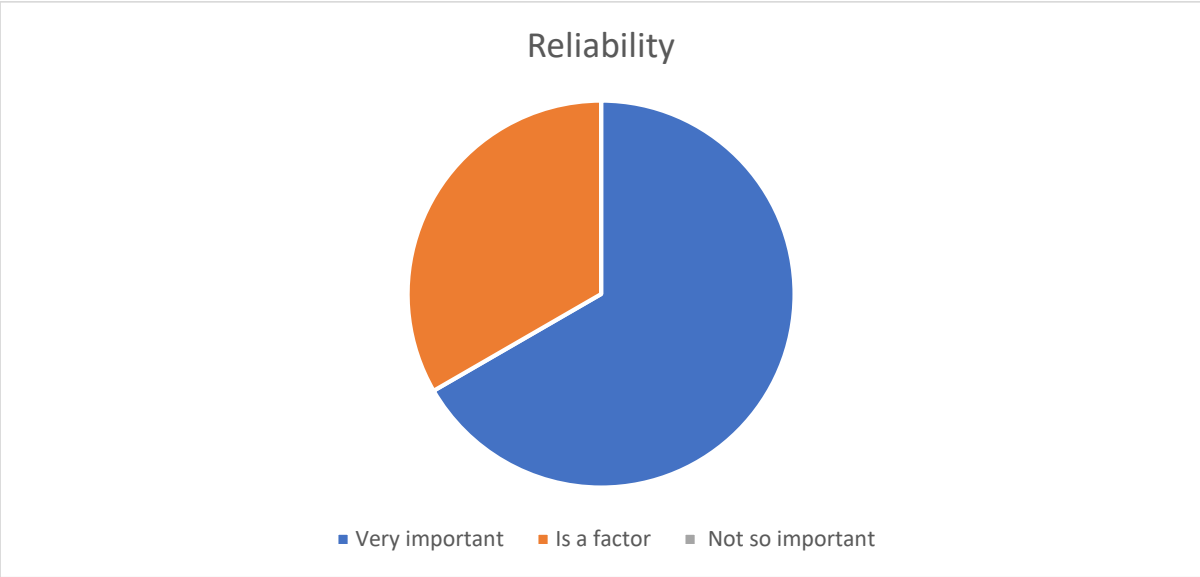
The Quality of output is very important for all centres that were surveyed.



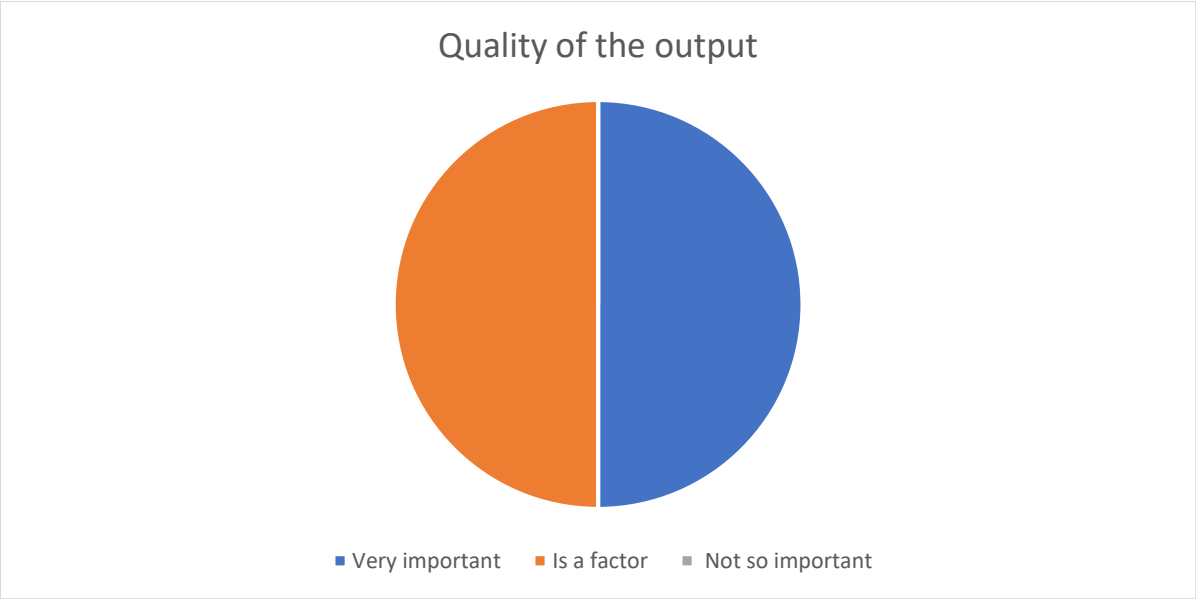
When it comes to price of common projects and collaborations, pie chart shows that the cost is really important for 3 of them, it is a factor for 5 of them and two centres believe it doesn't have importance.



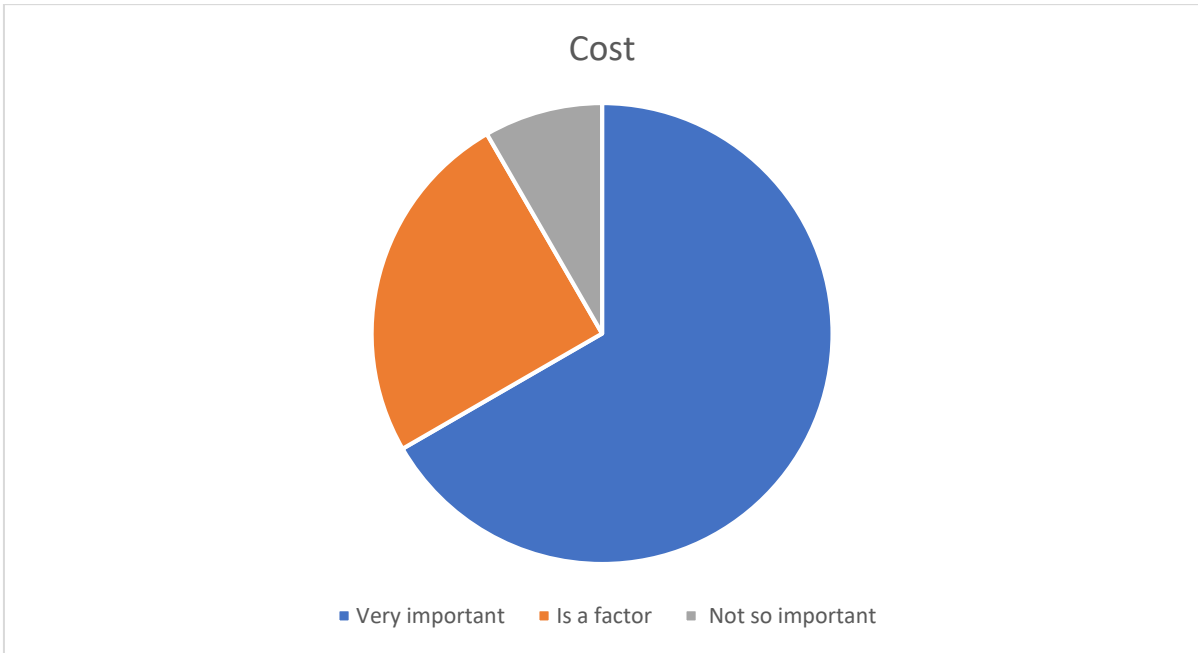
**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 67%. For 33% of the companies reliability is only a factor. No one chose the option “not so important”.

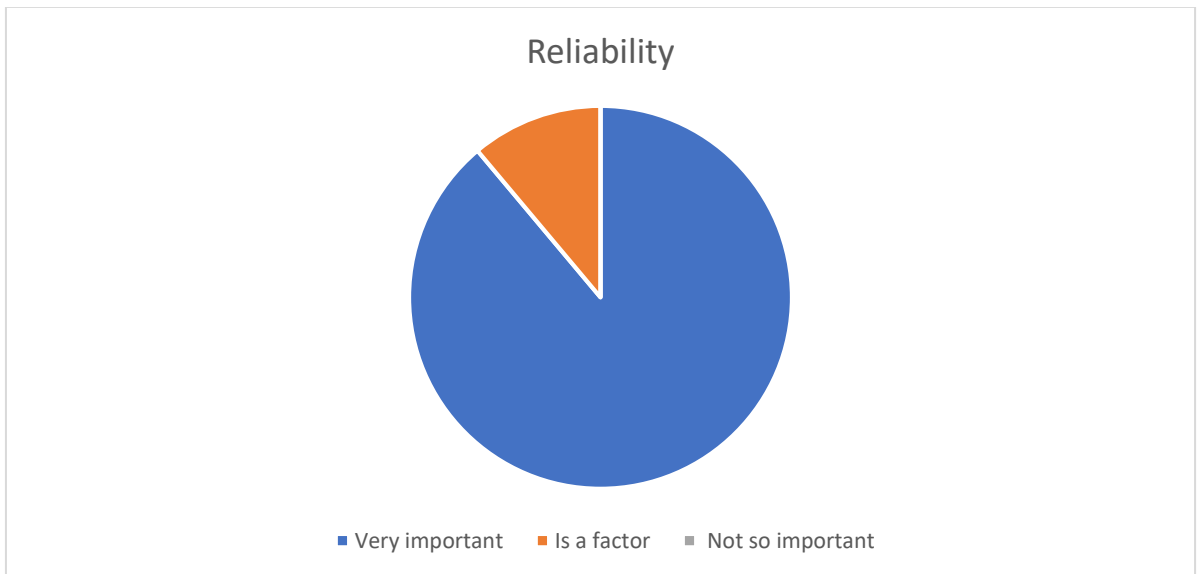


The quality of output has better values as the reliability. Half of the companies says that it is a factor (50%). 50% thinks that is it very important and no one chose “not so important” as an option.

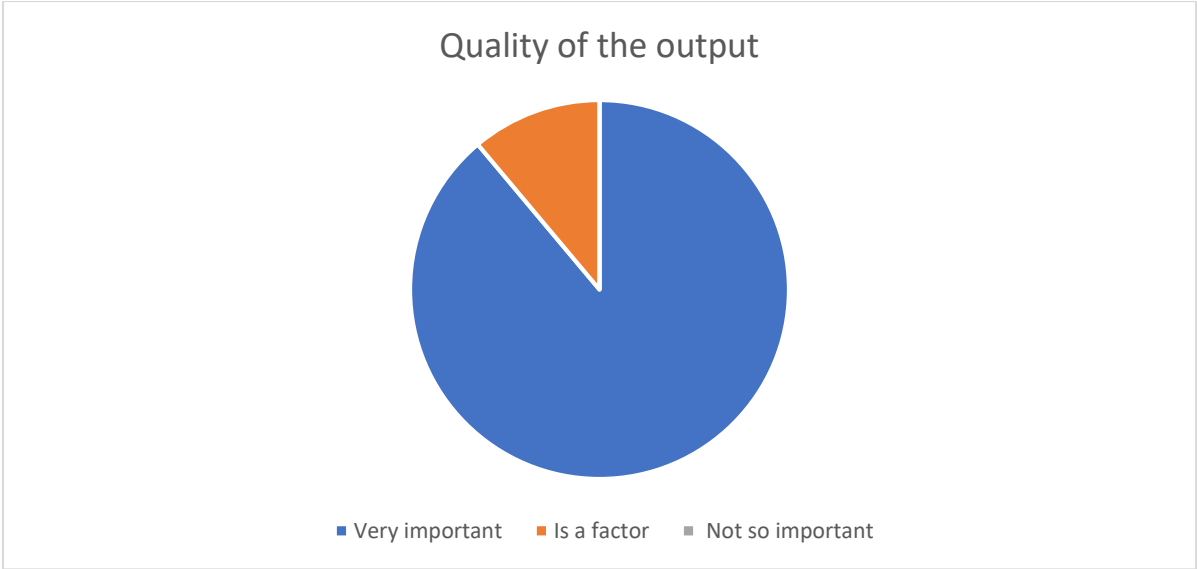


The pie chart shows that mostly the cost is important. 67% says that it is very important. 25% thinks that it is a factor, whilst 8% states that it is not so important.

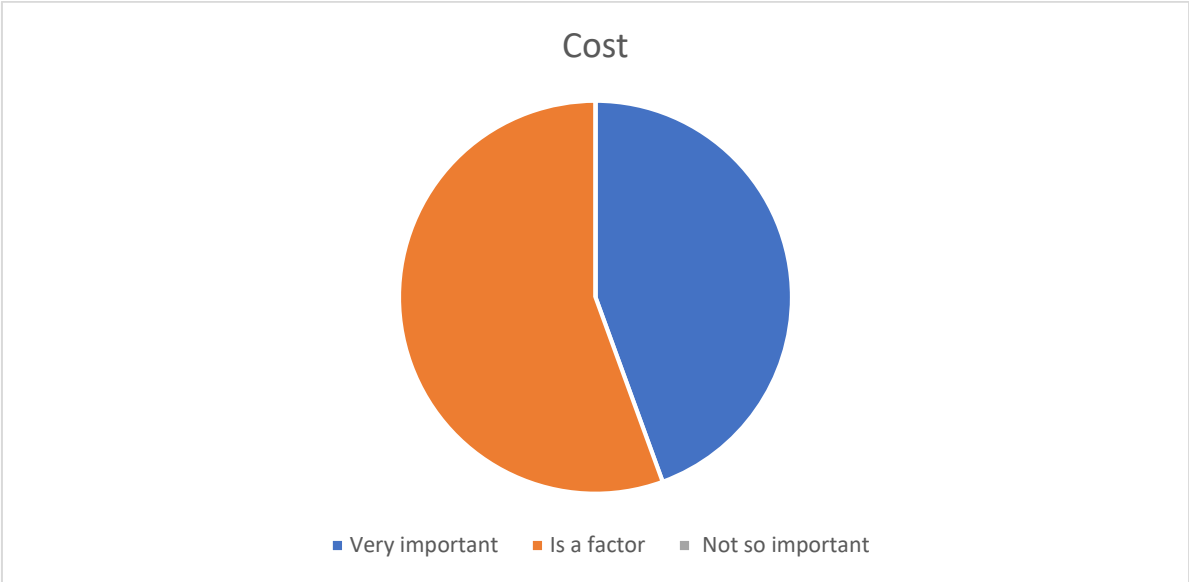
***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***



Reliability is the most important factor for the majority of respondents. Only one research center considers that reliability is just a factor. One research center did not answer.



Quality of the output is most important for 8 respondents and just a factor for only one. One research center did not answer.

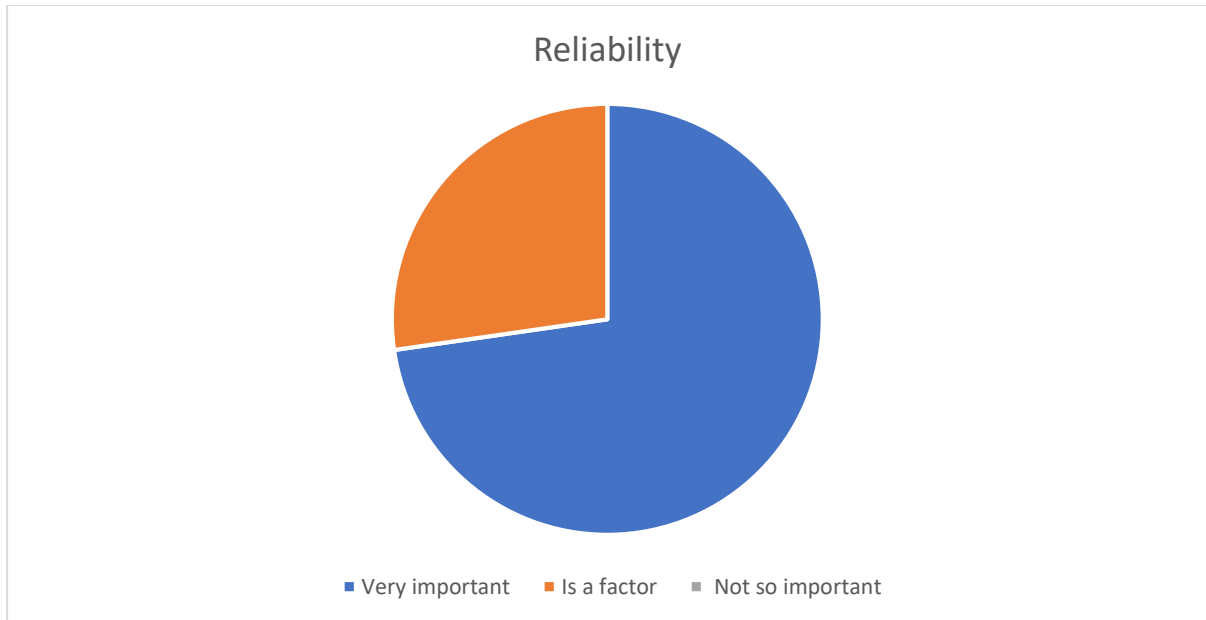


It is relevant for the general situation of research centres to consider the costs of research as very important (4) compared to the other 5 respondents who consider that cost is just a factor. It is interesting to see that most of the experienced research centres are among those that consider cost just a factor. Probably this could be explained by the ability of these centres to manage their own costs compared to other factors they may not control.

## 2.7. Important points of a collaboration with a research centres

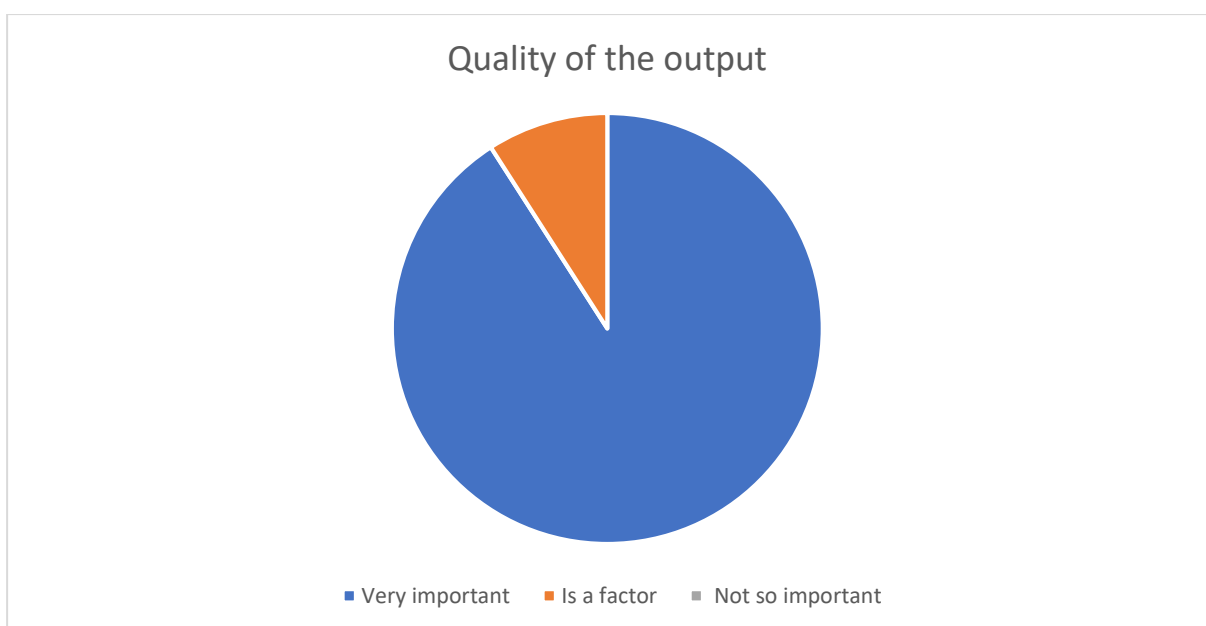
### RELIABILITY

Reliability is the second most important factor – maybe there could be problem in joint project with different setting up of research and other sectors, especially business in terms of flexibility etc.



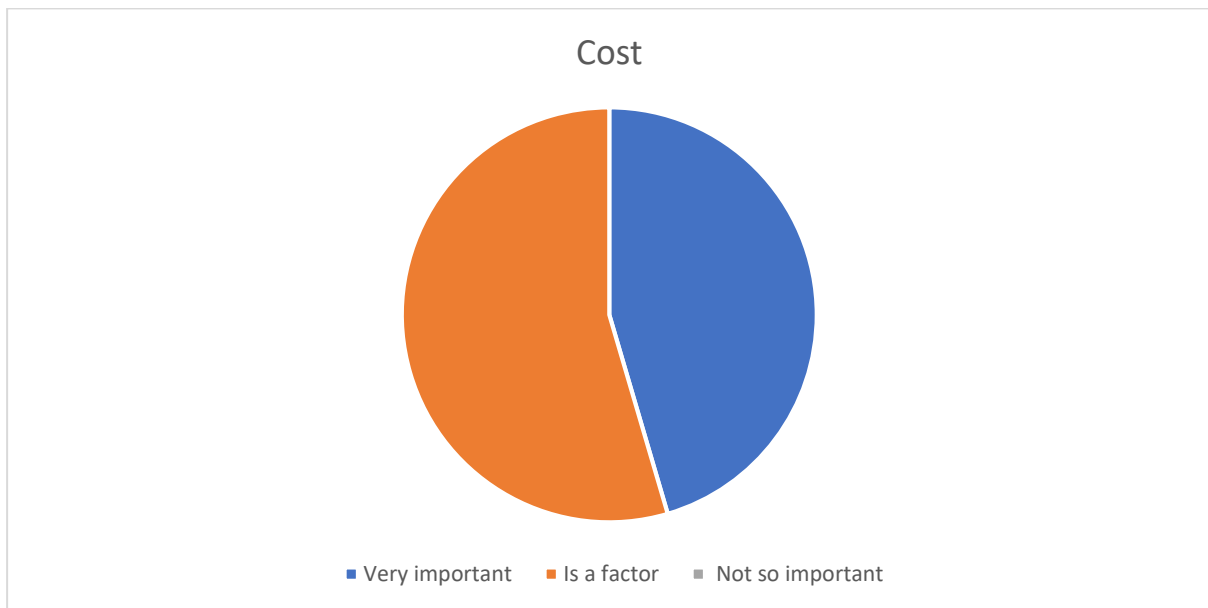
### QUALITY OF THE OUTPUT

Quality of the input is the most important factor from survey. The both side of cooperation – research centres and their partners (other research c., business, etc.) emphasized the importance of deliverables and outputs – there could be relation to the project management because project outputs/deliverables are often monitored indicators connected to the funding rules.

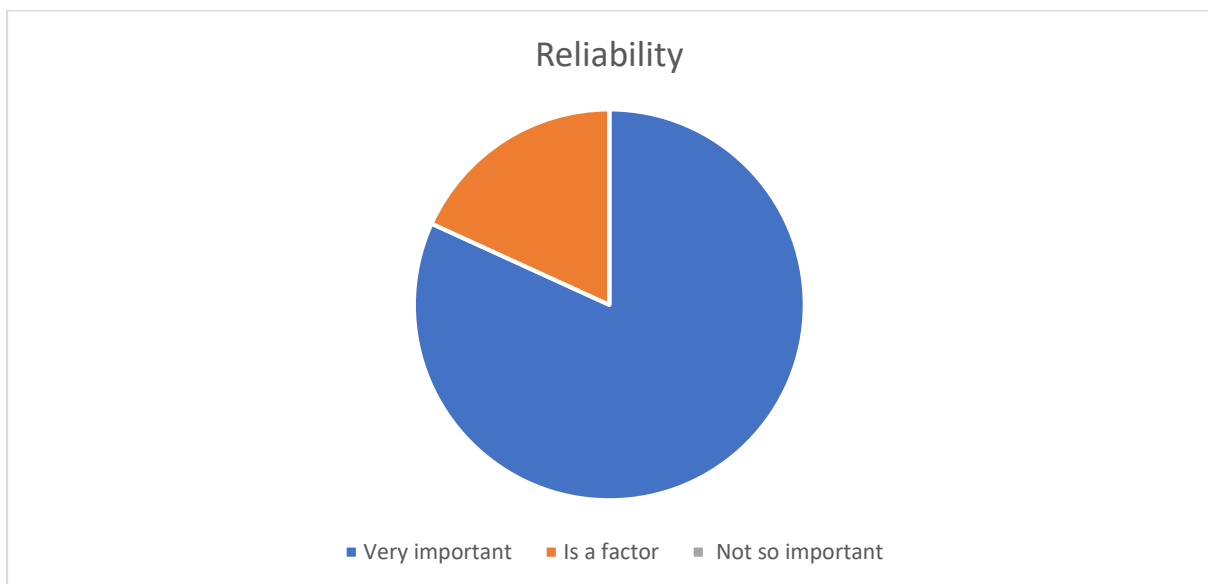


## COST

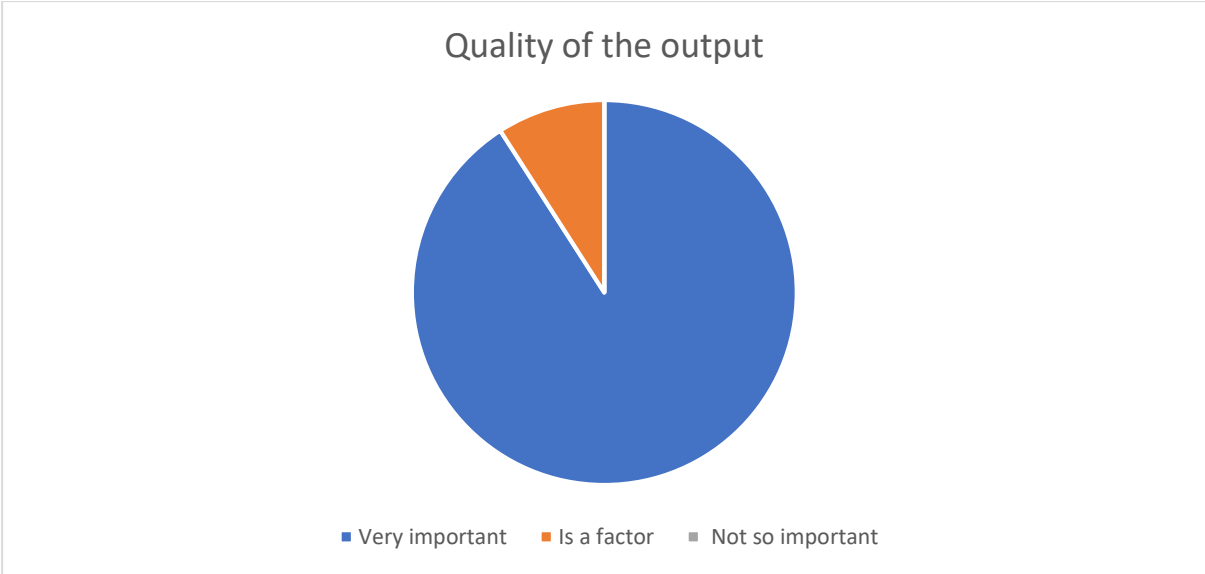
The cost is mainly noticed as a factor. The cost is one of the parameters of joint cooperation but it could respond to the amount and quality of outputs.



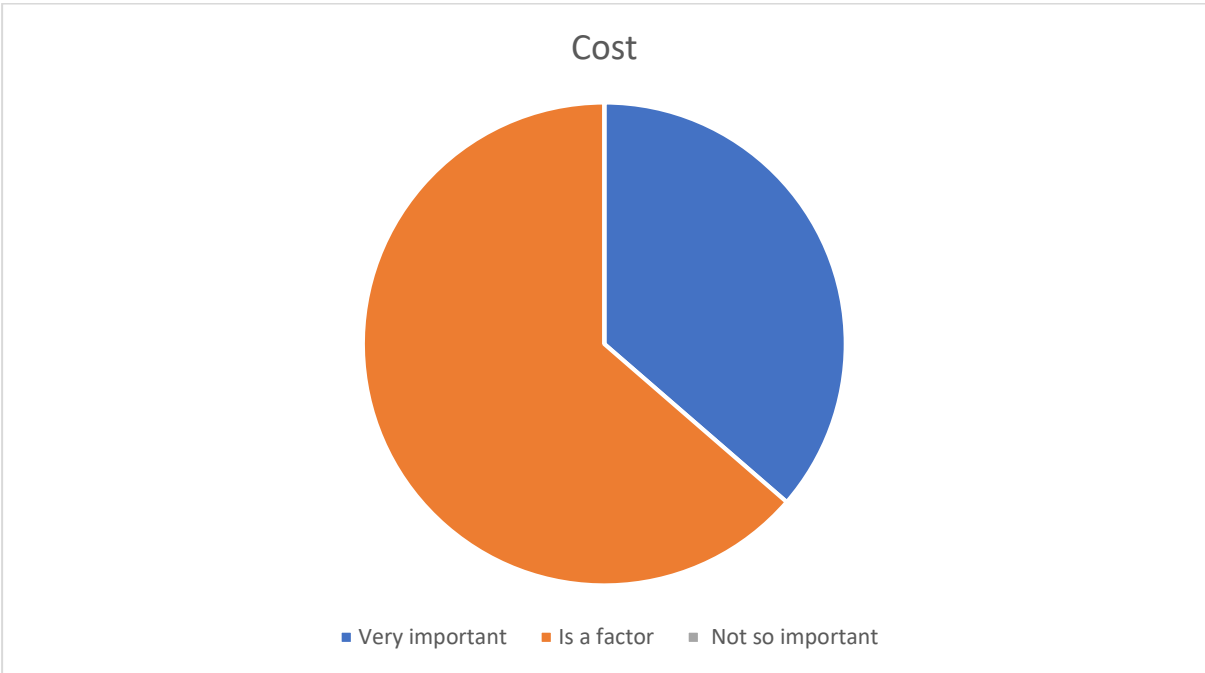
## ***FH JOANNEUM GESELLSCHAFT M.B.H***



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 82%. For 18% of the companies reliability is only a factor.

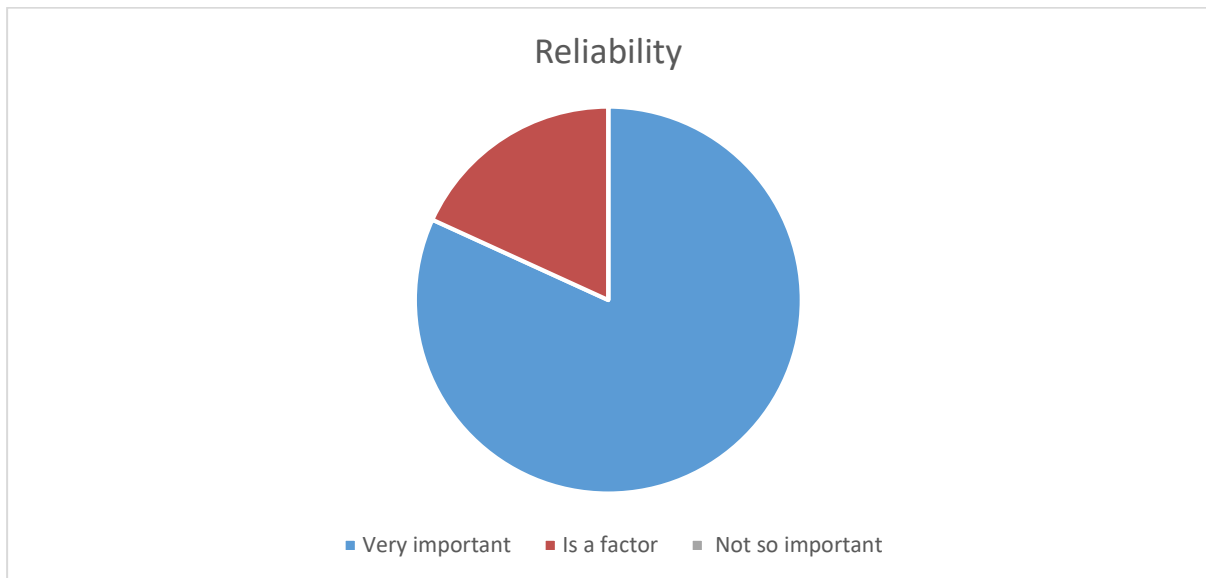


The quality of output has nearly the same values as the reliability. All companies attach great importance to this. The quality of output plays for hardly a company a factor and no company places any value on it.

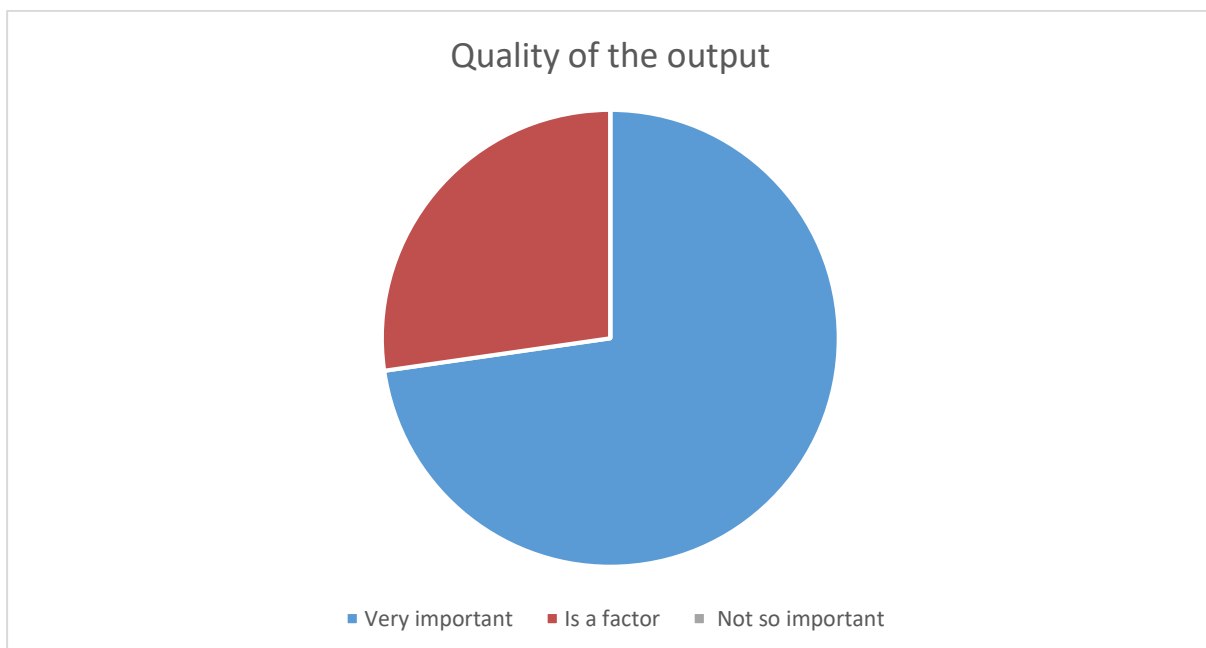


This pie chart describes the importance of costs in a collaboration with SME's, NGO's and Intermediaries. As can be seen in the graph, the costs are only a factor for more than a half of all companies. 36% see the costs very important for a collaboration.

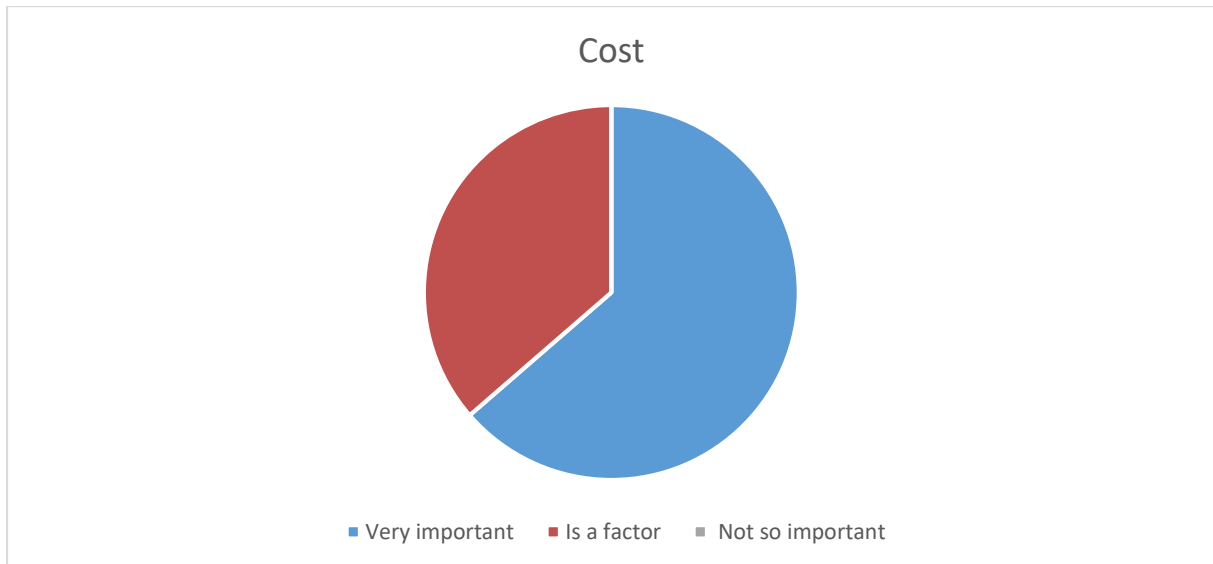
***Institution for development of competence, innovation and specialization of Zadar County***



This pie chart describes the reliability. Here is clearly visible that companies attach great importance to reliability. The proportion of very important is 82%. For 18% of the research centres is only a factor.

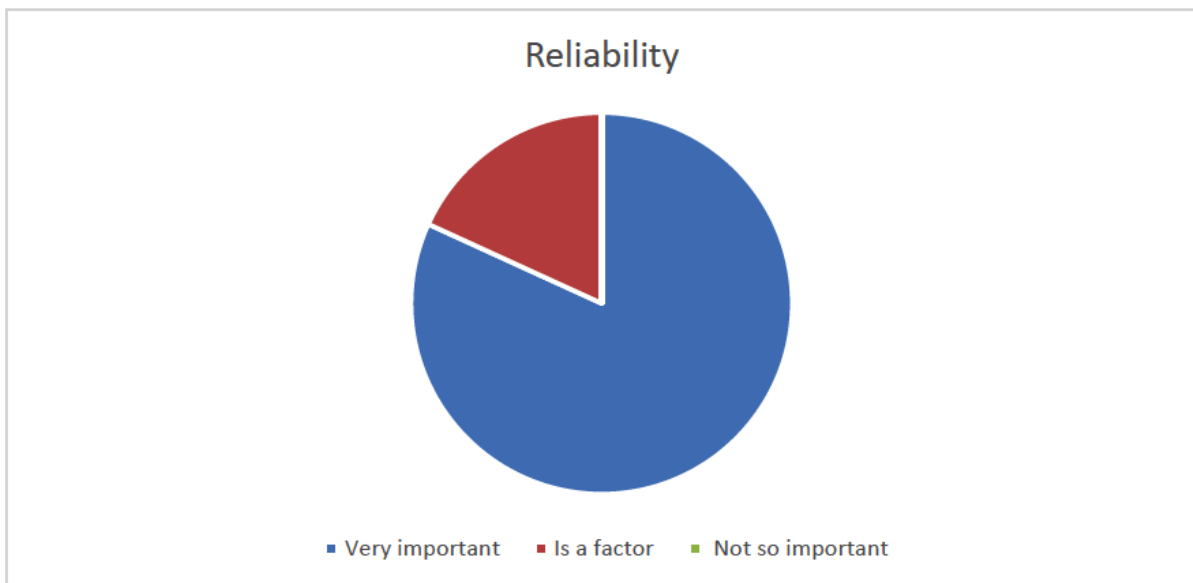


The Quality of output has nearly the same values as the reliability. Only 27% of them thinks that is a factor, but 73% thinks that it is very important.



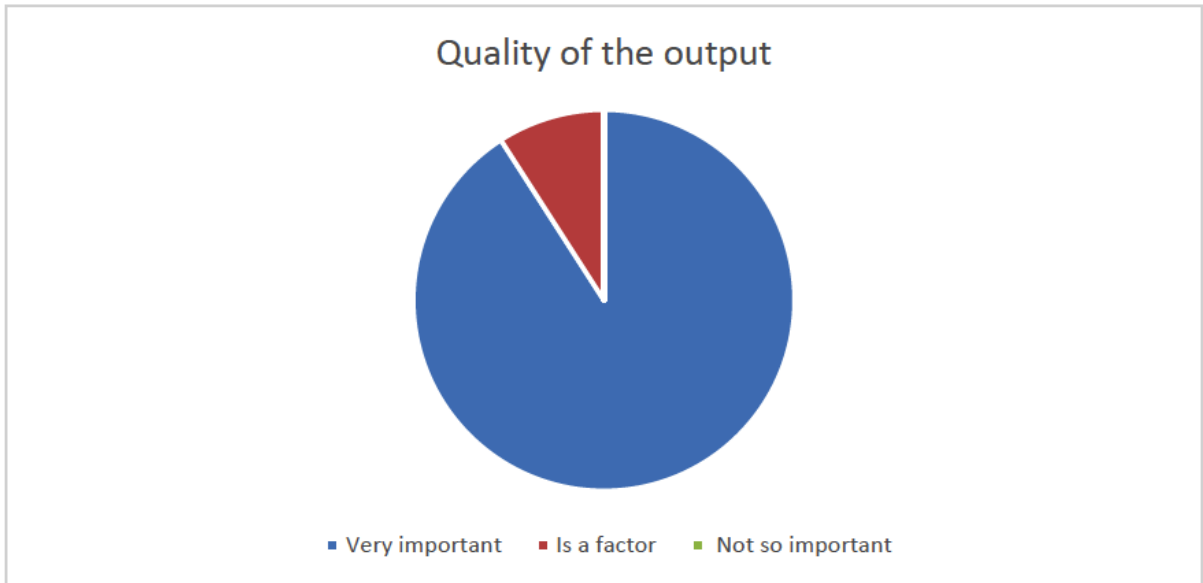
64% of surveyed research centres think that costs are very important, which says that it is more important to be reliable and have a quality output, and the cost of it is secondary.

#### ***University of Maribor***

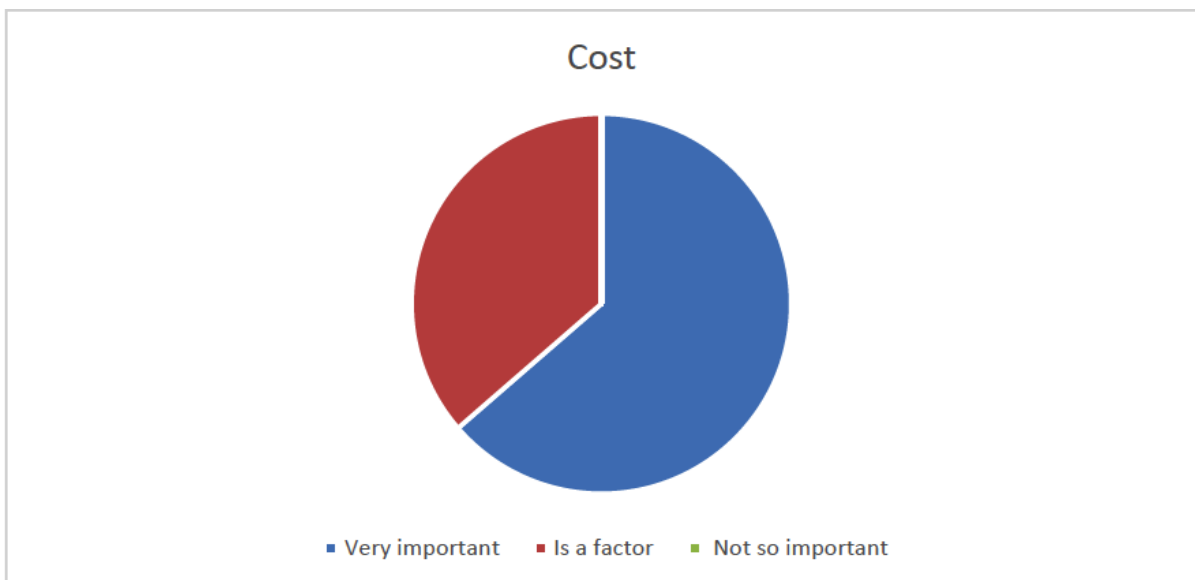


This pie chart describes the reliability. Here is clearly visible that companies attach great importance to reliability. The proportion of very important is 82%. For 18% of the research centres is only a factor.



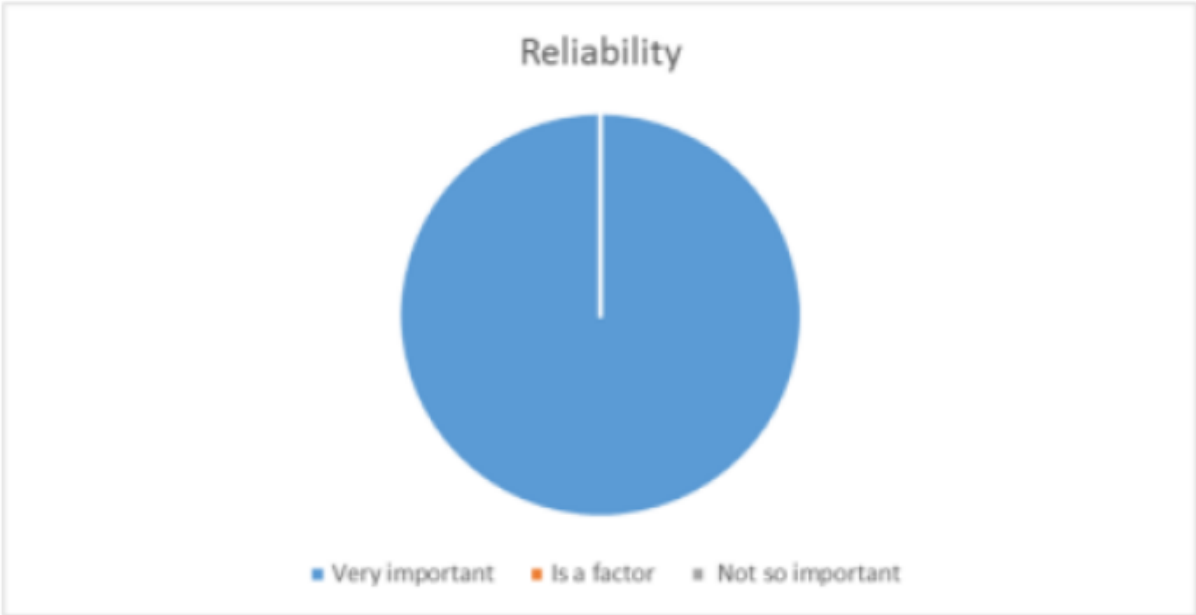


The Quality of output has nearly the same values as the reliability. Only 9% of them thinks that is a factor, but 91% thinks that it is very important.



64% of surveyed research centres thinks that costs are very important, which says that it is more important to be reliable and have a quality output, and the cost of it is secondary.

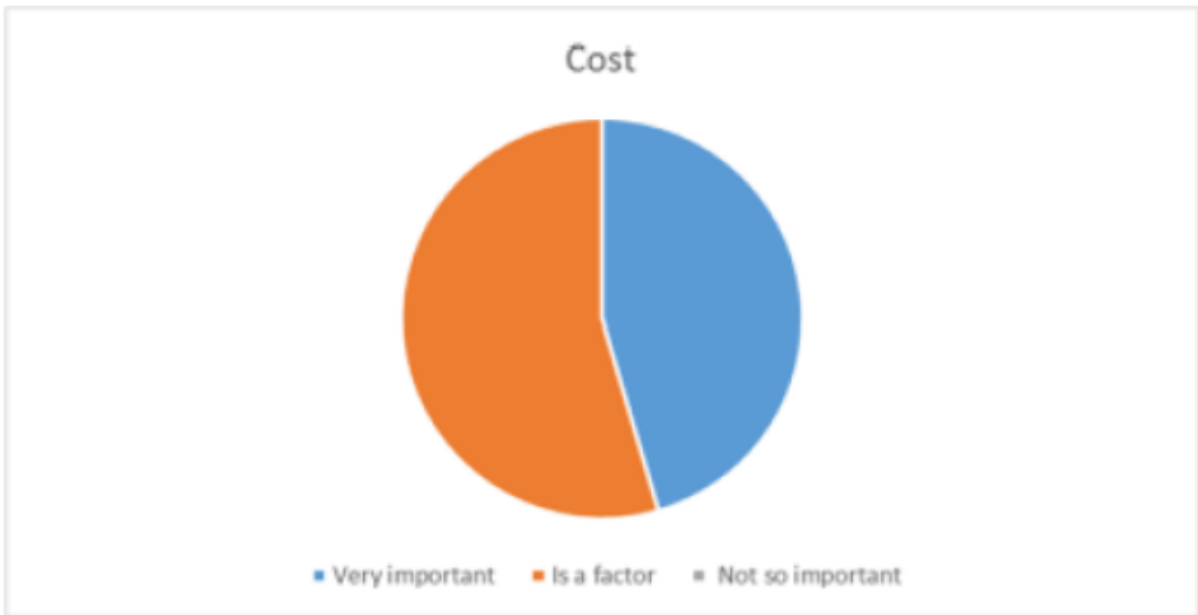
**Magurele High Tech Cluster**



Reliability is the major factor in the decision of a research centre to cooperate with another one. There scientific experience is saying that an institute it is not starting a research project with a partner they may not relay on.

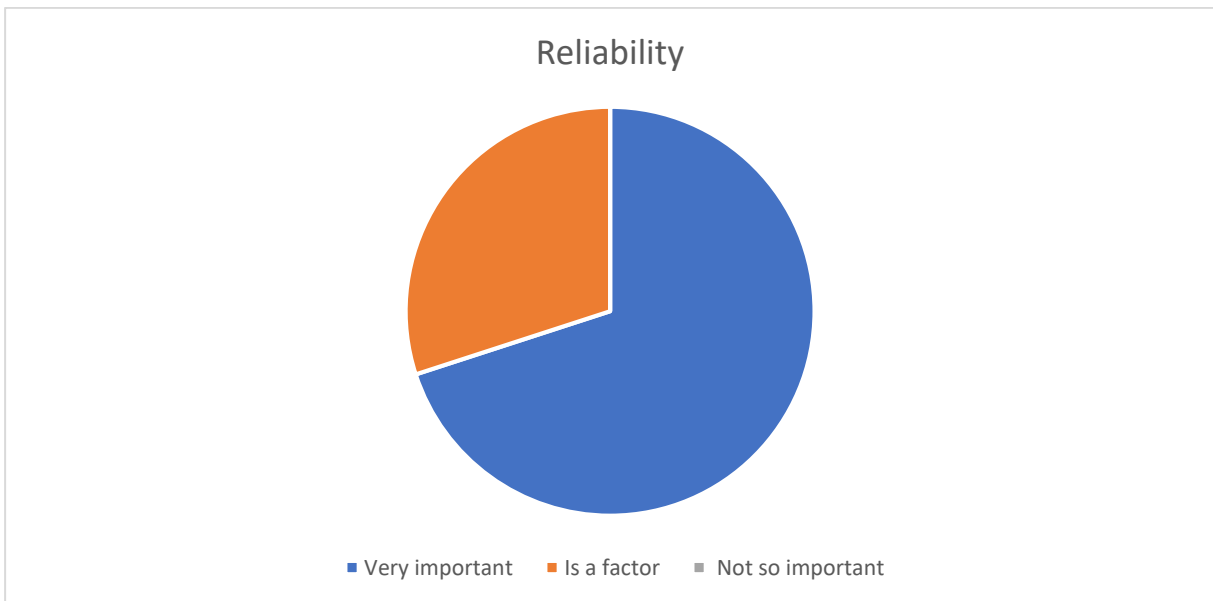


The answers to this question is conforming the result to the previous question. The reliability and the quality of the output are the main two indicators for assessing a potential partner in the research activity.

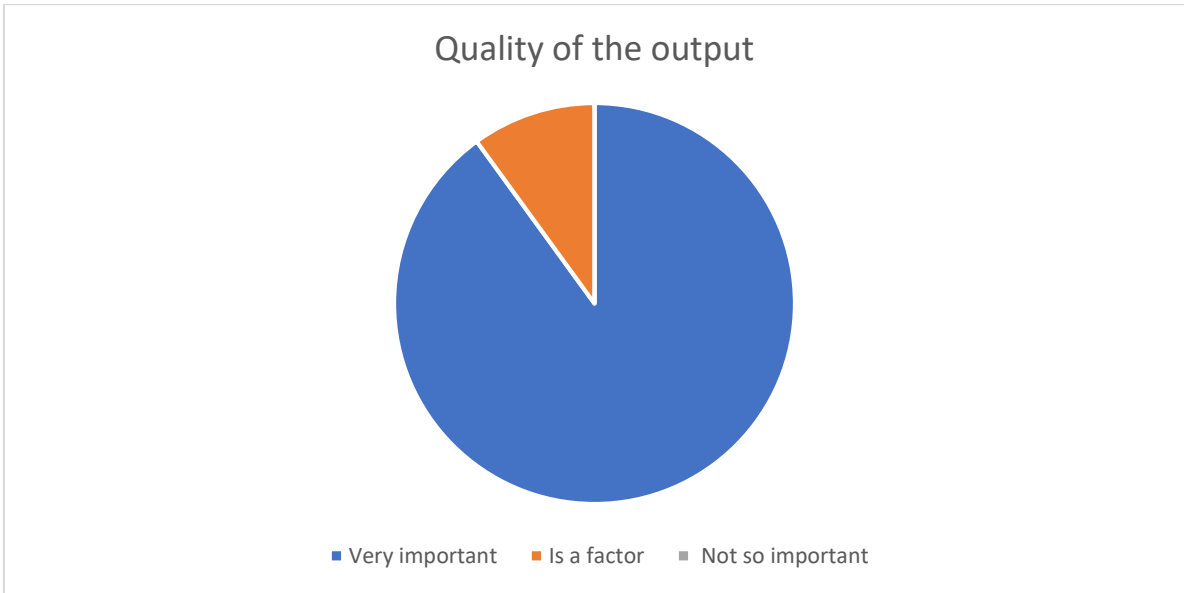


Taking into consideration that the output is the main indicator, especially in the advanced research field the cost is an factor, not THE FACTOR.

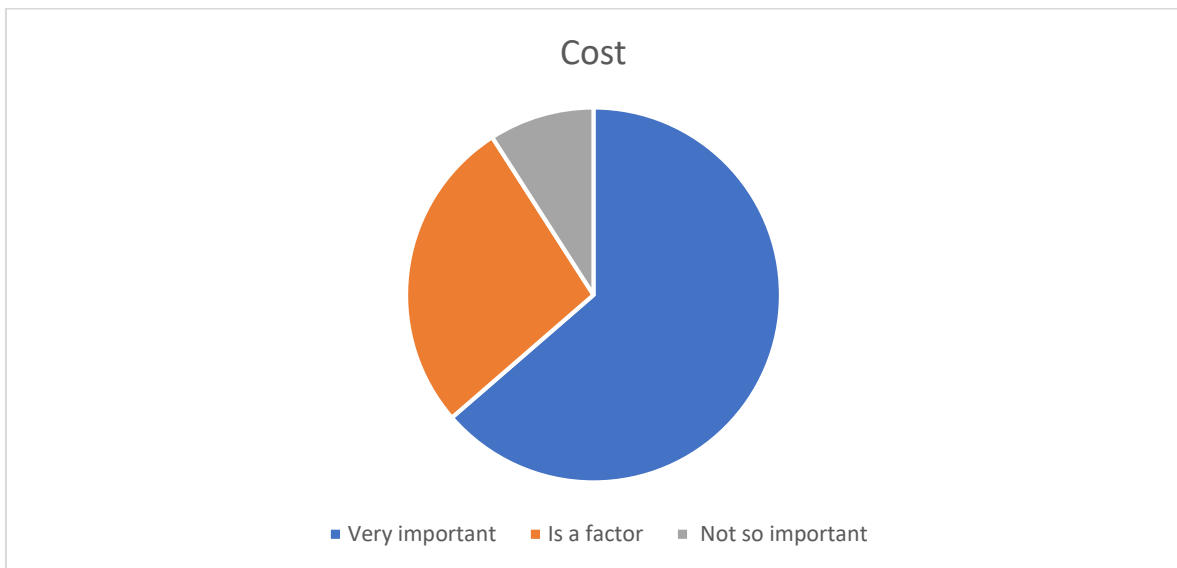
**Central Bohemia Innovation Centre**



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 70%. For 30% of the companies reliability is only a factor.



The quality of output has nearly the same values as the reliability. All companies attach great importance to this. The quality of output plays for hardly a company a factor and no company places any value on it.



This pie chart describes the importance of costs in a collaboration with SME's, NGO's and Intermediaries. As can be seen in the graph, the costs are only a factor for more than a quarter of all companies. 64% see the costs very important for a collaboration and 9% see the costs not so important.

### **6.2.7 Obstacles in working together with research centres**

#### ***ELI-HU Nonprofit Ltd.***

The Southern Great Plain has broad research infrastructure based on higher education institutions, branches of the Hungarian Academy of Sciences and research companies. These centres operate on many fields of science, so R&D&I is a strong building stone in the region's economy. Regarding these facts there are many possibilities for cooperations, but these are just used in a limited number mostly because of financial burden but administrative, bureaucratic obstacles and different working methods in different organizations are also factors in this fact.

1. Broad research infrastructure in the region
2. Lack of financial resources which pushes the research centres to cooperate when it is financially supported
3. Administrative and bureaucratic burdens
4. Lack of cooperations between companies and research centres

#### ***Development Agency of Serbia***

From ten questioned RI's six of them identified obstacles in working with companies, such as:

- Lack of knowledge of modern technologies necessary for product development
- Lack in motivation of SMEs to improve product quality
- The owners of the company are not aware of the importance of investing in the innovation capacity of the company
- Lack of professional human resources in SMEs
- Excessive focus on short-term profit
- Lack of consistency and persistence

#### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

The questioned research centres have obstacles in terms of administration, funding, time and costs and bureaucratic matters. Companies often give the RI's too less time to find the right solutions. Sometimes it simply failed because of different ways of thinking and interests. Costs are often higher than expected and SMEs often go for trial and errors instead of analysis.

#### ***Conclusions and summary***

Cooperation between research centres and companies are high. It may follow from that national tender system ensure sources to this kind of cooperation. It's strengthen, that the common projects are realized from national and EUs programmes and sources. And the other side the collaborations of small companies have the highest number. (2.1) It can be noticed that contract-based cooperation also appears. It has very substantiality because the government has an aspiration that universities raise their own incomes from industrial sector. And in Hungary most of research centre can find in the universities.

When we analyse the important points of cooperation we can observe the pursuit of quality, but the cost is the most important in this case too.

Another highest indicator of collaborations is national universities. It may come from another government's effort, that institutions of higher education need to cooperate with each other, and need to rationalize their resources in field of R&D. The international number of relations are significant but the national is higher.

The big companies' collaborations are very low, because we can find mainly foreign owned productive industries in the region; and if they do R&D, they do it at home and not in Hungary.

***Main conclusions:***

- National and EUS programmes supported common project.
- Strong cooperation with small companies and national universities.

Quality of output is important in the cooperation

***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***

The answers illustrate several issues which the research centres consider as obstacles in improving their activities, such as:

1. Sometimes companies are not familiar with the research steps, the timescale of research activities and the related costs;
2. Most of the companies cannot cover the research costs;
3. The timescale of a research project implemented in collaboration with companies, funded by public funds is not adapted to the need of companies; project evaluation period and duration of contract negotiation, etc. are too long and companies lose their interest in participating in such collaboration;
4. Researchers are not familiar with the evaluation of production costs, feasibility studies and other financial-related aspects which are crucial when it comes to the technological transfer. Trained personnel and specific departments may help;
5. Companies are generally interested in obtaining a solution which only needs to be implemented into their production, while up-scaling it is not always obvious and requires additional research and funding. Strong involvement of development engineers from both, research centre and companies, with proper funding, may solve the issue;
6. Several economic and political risks delay specific targets which imply extra costs;
7. Extremely low interest of the national SMEs (large companies not interested at all) to develop novel innovative products in cooperation with research entities or for technological transfer;
8. Non predictable financing of research in time, continuity and volume;
9. Lack of pilot lines for small scale production since research equipments are not suitable for production.

***2.8. Obstacles in working together with research centres***

Generally research centres cooperate among other research centres. There could occur several obstacles of that cooperation of research centres, for example: personal relationship, evaluation system of R&D, lack of motivation to applied/industrial research (it is correlated to evaluation).

There are many other obstacles when common projects with business sector are prepared:

- Lack of motivation, low flexibility, different value ranking, lower skill of research centres in marketing
- Lack of knowledge about business sector context, too much administrative difficulty of joint projects
- Non efficient exchange of information between research and business sector
- Expertise offer of research centres do not meet needs of companies
- Lower speed of action of research centres
- Low level of trust between research and business sector
- Missing technology transfer departments at some public research organization, missing knowledge about intellectual property rights at research community,
- bureaucracy, complicated partnership and IPR issue in joint project with companies
- Obligatory of non-public money cofinancing in some joint project calls
- Legislation barriers
- Non readiness of research centres to provide services in standard commons in business sector
- Different organization and management of business sector/research centres

#### ***FH JOANNEUM GESELLSCHAFT M.B.H***

The questioned research centres have obstacles in terms of language, funding, confidentiality, time and costs. Companies often give the RI's too less time to find the right solutions. Sometimes it simply failed because of different ways of thinking and interests. Costs are often higher than expected and SMEs often go for trial and errors instead of analysis.

#### ***Institution for development of competence, innovation and specialization of Zadar County***

From ten questioned RI's only one of them had an obstacle in working with research centres. According to them the biggest problem is low number of companies interested for cooperation in research and development. Another issue is lack of official capacity for co-financing EU projects.

#### ***University of Maribor***

Highlighted obstacles:

- Not enough interest for new, different and environment friendly regulations,
- Not familiarized with wide possibility of innovative approaches,
- Not enough added value,
- To low level of practical solutions,
- Weak connections to local and regional environment,
- Too high valued cost for work, especially deskwork.

### ***Magurele High Tech Cluster***

The obstacles seen by the research centres to work with the companies are the following:

- Differences between the targets, especially, the time frame and the value of the output
- Communication aspects during the cooperation.
- Lack of well trained staff
- Lack of financial resources to support the high risk activity like the research one.
- Confidence
- Protection of the intellectual property.

In our opinion, the main obstacles are:

1. Different approaches of the market and of the activities and different organizational cultures.
2. Lack of “translators” between research entity and companies.
3. Financial aspects.

### ***Central Bohemia Innovation Centre***

The questioned research centres have obstacles in terms of language, funding, confidentiality, time and costs. Companies often give the RI's too less time to find the right solutions. Sometimes it simply failed because of different ways of thinking and interests. Costs are often higher than expected and SMEs often go for trial and errors instead of analysis.

Others obstacles are different working culture, IPR & legal issues, quality accreditation required by the companies (e.g. ISO), Financial stability, willing to finance research, internal management and priority assigned to the project, ignorance of environment, a lot of office work, lack of information between business and research, capacity of centres, needs of companies don't meet offer, speed of action required by the companies, time pressure, lack of opportunities for geodesy & cartography research, lack of knowledge about different environment (business X research), different priorities and motivation, too difficult administration of joint project for business sector (own R&D is more effective than joint projects), lack of financing on he companies side. Many companies do not have research departments in the Czech Republic (big companies especially) so i tis hard to cooperate on research projects.



## 7 COOPERATION OF SME'S WITH RESEARCH CENTRES

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### 7.1 GENERAL

#### 7.1.1 General description of the SME's

##### **ELI-HU Nonprofit Ltd.**

1. Tár-Log Kft. – logistics service.
2. Pc Master Kft. – Trading of IT parts.
3. Árva Kft. – wood industry
4. BEK-HOLZ Kft. – wood industry
5. Eubility Group Kft. – proposal writing agency and project management. Site: <http://www.eubility.eu/>
6. Hunagro Consulting Kft. - Brokerage, service providing.
7. Kreatív Business Pénzügyi Kft. – accounting and financial management.
8. AKTOGEN Hungary Szolgáltató Korlátolt Felelősségű Társaság – Biotechnology research
9. Biopharma Kft. - BIOPHARMA Limited is active in the creation of a networking following a spirit of globalization of trade. Site: <http://www.biropharma.com/>
10. KISKUN Kutatóközpont Kft. – agricultural research centre. Site: <http://www.kiskun.co.hu/kezdolap>

In the Southern Great Plain mostly in Szeged which is the largest city in the region the services play even more important role in the economy than in the most of the other parts of the country. The sector is based on the SMEs mostly operate in the IT sector or offer business consullance. This system emerged because of the effects of the University of Szeged.

Traditionally the primary sector is really strong in the Southern Great Plain, mostly the agriculture. There are many enterprises do not just produce traditional products but try to innovate and use the results of agricultural researches and do small scale experiences.

The industrial activities are really strong in Kecskemét and in its area. This is the impact of the Mercedes factory. The factory established its own supplier network and work relatively closely with the suppliers but this is a closed network.

##### **Development Agency of Serbia**

1. **DunavNET**– IT company on a mission to constantly develop smart, innovative mobile technology solutions and solutions based on Internet of Things (IoT) and Augmented Reality in order to create Smart Environment followed by creating Smart Cities and Smart Agricultural production (<http://dunavnet.eu/>)
2. **Nauka & Praksa Ltd.**- started as a structural bureau, and then by its own drive machining, relying solely on their own knowledge and work discipline have managed to produce a whole range of machines and devices for measuring, balancing and vibration analysis (<http://naukaipraksa.co.rs/en/>)

3. **Nordwood Ltd.** – company is engaged in trade in construction materials and production of construction materials
4. **Novatronic Ltd.** – high quality manufacturer of electronic displays on domestic and foreign markets ([www.novatronic.rs](http://www.novatronic.rs))
5. **PED inspect Ltd.**- provides services in the field of inspection, certification of products and certification of management systems ([www.pedinspect.rs](http://www.pedinspect.rs))
6. **RB Generalekonomik**- technology company specialized in designing and manufacturing highly reliable M2M products for its customers worldwide. In-house design and development of highly customizable hardware and software solutions are their core competences ([www.geneko.rs](http://www.geneko.rs))
7. **TotalObserver Ltd.**– company which produces an integrated asset management software, fully adjusted for different market needs with the goal of automation of operations, increase the efficiency, effectiveness and availability of assets and the improvement of analysis (<http://www.totalobserver.com>)
8. **Wood trade 289**- trade in construction materials, production of construction materials, building material
9. **Anastasija holding.**– main activities of this company include wood processing and trade
10. **Creative AJ-** this company is dedicated to processing of fruits and vegetables

***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

SMEs are most important actors of economy process, they can ensure the development of the country and they can give the added values goods and services. In the last few years In Hungary SMEs learned to cooperate with each other. Which entrepreneur became successful, that started to collect the useful experiences and started to learn from their competitors. And on the other they realized that big companies are not enemies and they can work together and they can be supplier to them. And these big companies opened the international markets to SMEs. Certainly, the national tender system ensures the necessary new technologies for further strengthening.

And when we search of SME's failure we discover that many small companies' (with 10-15 employer) leader is lost in the problem solve. They can't think rationally because, they must role like one of employer in the company. And this kind of attitude is kill the long-term cooperation too.

In survey, we examined two sides of SMES. In the one hand, we asked innovative entrepreneurs, on the other we send questionnaire to less innovative SMEs too. They are well representing the above two categories.

<b>Name of company</b>	<b>Branches</b>
BakonySoft Ltd	ICT
Campus Club	Sport and entertainment Service
CPS Company Ltd	Manufacturing
D.E.Á.K. Ltd.	Technical
DunaComp Ltd.	ICT services
Electronic Research Centre Ltd	ICT servicies
Gódi Bt.	Business services
JTT Pro Ltd.	Security
Adware Research Ltd	Data management and related service provider, CRO
Sys-Control Ltd	Agricultural and ICT

## **Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**

- **EXOTREX** is a micro SME specialized in IT solutions for touristic industry;
- **FUTURE** is a micro SME focused on software and web based products (websites, mobile apps, web in cloud platforms);
- **Mereu Altfel** is a micro SME focused on printing services and advertising;
- **Pressage** is a micro SME focused on consultancy in communication and public relations;
- **Smartsoftteam** is a micro SME focused on software application, hardware and software support;
- **Studio Caro Design** is a micro SME dealing with object/product design and architecture;
- **Softtehnica** is a SME specialized in in services (software development, IT consulting) and products FREYA (horeca and retail), MAXIMUS (business arrangements for SMEs) AGORA (public administration);
- **BIOSINTEX** is middle size SME specialized in surgical sutures;
- **Technomed Impex** is a SME focused on dental implants and implantable devices.

### **1.2. General description of the SME's**

We asked SME from various branches and different sized. The engineering and other related branches prevails due to ELI Beamlines focus. The list of branches and kinds of SMEs is listed below:

- furniture industry – wood products
- laser and photonics - ionizing radiation detectors, laser components
- market research and marketing services
- R&D and expert services - forestry and nature protection, recycling aluminium waste, demographical research
- engineering – equipment for hydroelectric powers, construction activities, foundry industry – aluminium products
- high temperature reactors for semiconductor industry

### **FH JOANNEUM GESELLSCHAFT M.B.H**

1. Spath Micro Electronic Design is part of IT – information technology sector. Their main products/services are R&D (Research & Development), hard- and software development and rapid prototyping. Homepage: [www.meds.at](http://www.meds.at)
2. Akaryon GmbH is part of business consulting and IT – Information technology industry. Their main products/services are web-development, environmental informatics and writing proposals. Homepage: [www.akaryon.at](http://www.akaryon.at)
3. BBG Baugeräte GmbH belongs to iron and steel, construction and mining industry. Their main products are pneumatic and hydraulic machines. Homepage: [www.bbg-gmbh.at](http://www.bbg-gmbh.at)
4. Brainplus does not belong to a specific line of business. Their service is consultancy. Homepage: [www.brainplus.at](http://www.brainplus.at)
5. Finnland Block GmbH belongs to sales and construction sector. Their main products/services are houses made of wood called “Block Houses”. Homepage: [www.finnland-block.com](http://www.finnland-block.com)

6. Kieselstein – Fachpraxis für Demenz- und Hospizbegleitung is part of health sector. Their main services are mobile dementia care, nursing, hospice care and mobile intensive care. Homepage: [www.fachpraxis-kieselstein.at](http://www.fachpraxis-kieselstein.at)
7. Mea IT Services e.U. belongs to IT – information technology sector. Their main products/services are software-, web- and mobile development. Homepage: [www.mea-it.services](http://www.mea-it.services)
8. Meilenstein- Projektwerkstatt Schabereiter is part of consulting industry. Their main services are study writing, scientific writing, proposals, funding's and project management. Homepage: [www.schabereiter.at](http://www.schabereiter.at)
9. Mixed.at is part of information- and communication technology sector. Their main services are training, coaching, branding and tracking. Homepage: [www.mixed.at](http://www.mixed.at)
10. Nutrition & Health Consulting belongs to nutrition consulting line of business. Their main products/services are consulting activities for food companies and in the field of nutrition and health their services are workshops, lectures, nutritional advice and project coordination. Homepage: [www.nutrition-consulting.at](http://www.nutrition-consulting.at)
11. TCMS Training Coaching & Management Solutions is part of training and management solutions sector. Their main services are training, coaching and management solutions for project/ innovation management, continuous improvement, strategy and leadership. Homepage: [www.tcms.co.at](http://www.tcms.co.at)
12. Steirischer Blasmusikverband belongs to art sector. Their main products/services are services for wind-bands, projects for youth orchestra and seminars for volunteers.

***Institution for development of competence, innovation and specialization of Zadar County***

1. **Bio Svijet Ltd.** – Company that belongs to biological market branch. Their main services are retail, wholesale and agriculture. ([www.bio-svijet.hr](http://www.bio-svijet.hr))
2. **SAS –Strojogradnja** - Company that belongs to Electrical and Machinery Industry and Technology branch. Their main products are Special Machine Tools. The company design and manufacture according to customer requirements.( <http://www.sas-strojogradnja.hr/> )
3. **Mišlov Ltd.** - Company that belongs to fishing and processing of fish products branch. The main activity of company is catching palegic fish mainly sardine and anchovy. Their main products are fresh, frozen, marinated and salted anchovies and sardines. ([www.mislov.hr](http://www.mislov.hr) )
4. **Končar - Instrument transformers, Inc.** – Company belongs to Electrical Equipment Manufacturing / Energy brance and their main products / services are manufacture of instrument transformers. The business activity of the KONČAR Group lies mostly in production of equipment and facilities for power generation, distribution and transmission of electrical energy, industry and electric traction. ([www.koncar-mjt.hr](http://www.koncar-mjt.hr) )
5. **JGL d.d.** - JGL is a pharmaceutical company that it offers products in nearly all technological forms and different legislative categories and operates in some forty foreign markets. The main services are production and distribution of pharmaceutical products. ([www.jgl.hr](http://www.jgl.hr))
6. **HSTEC d.d.** - The company specializes in development, design and production of high speed motorized spindles, direct drives and other high speed technology, as well as for engineering, design and automation of special machine tools and systems. It belongs to Production of special machine tools branch. ([www.hstec.hr](http://www.hstec.hr))
7. **Sustainable technologies development centre Ltd CROTEH** - development and designing company in the field of design, engineering and development of technologies for the treatment

and energy recovery of biodegradable materials, waste as well as municipal and industrial wastewaters. In CROTEH's laboratory experts carry out tests of the biogas production process and determination of biogas potential and analysis and characterization of biodegradable waste materials. CROTEH belongs to the branche of tehcnical design, research and development in the field of environmental protection and biotechnology. (<http://www.croteh.eu/en/>)

8. **Cromaris d.d.** - Cromaris is a company that specializes in growing, processing and sale of indigenous Adriatic fish and shellfish. Belongs to Aquaculture – mariculture branch. Cromaris is a Croatian aquaculture leader, specializing in the cultivation and processing of white fish with specific emphasis on sea bass, sea bream and shellfish. (<http://www.cromaris.hr/en>)
9. **Gentius Ltd.** – This company is a genetic service provider thant belongs to Biotechnology branch.
10. **Marex elektrostroj Ltd.** - a company for producing the power contrtlol and distribution equipment. Founded in 1990 it is a private company with a residence in Zadar. Company's major occupation is the production of the electrical link bollards for marinas and motor camps, and in addition to that we offer the technical advisory, project planning, drawing up surveys and list of expense, professional supervision, technical examinations, and measurements, mounting and maintenance. It belongs to the branch of production of equipment and distribution and control of electricity. (<http://www.marex-elektrostroj.hr/index.php>)
11. **LTH Metalni lijev Ltd.** – The company In Croatia was founded in 1980 and joined the LTH Castings Group in 1999. Focus was predominantly raw part production. Today, using the advantages of a traditional industrial environment and the Group's synergies LTH Metal Cast offers a wide range of machining and is the most “lean” site within the LTH Castings Group. Belongs to automotive sector. The main product are die-casted (components) for cars. (<https://www.lthcastings.com/default.asp?mid=en&pid=home>)

## **UNIVERSITY OF MARIBOR**

SMEs are key and most important companies that drive our country and that produce most employments. Our goal was to include SMEs from different branches and with different numbers of employees to get diverse pool of companies participating in our survey. SMEs that were participating in our survey with questionnaires are coming from different branches and from different cities.

Companies that participated in our survey

1. Altius - Marketing and PR
2. Boxmark leather Leather - manufacturing industry
3. Inovo - IT and business processes
4. Kreatorij - IT and Design
5. Matias2 - Sporting goods and clothes
6. Medioteka - Marketing and PR
7. Pressclipping - News and PR
8. Remax - Pools and wellness
9. Riso - Business counselling and processes
10. Solvium - Education and counselling
11. Tiko-pro - Business counselling
12. Toolco - Metal-processing

### ***Magurele High Tech Cluster***

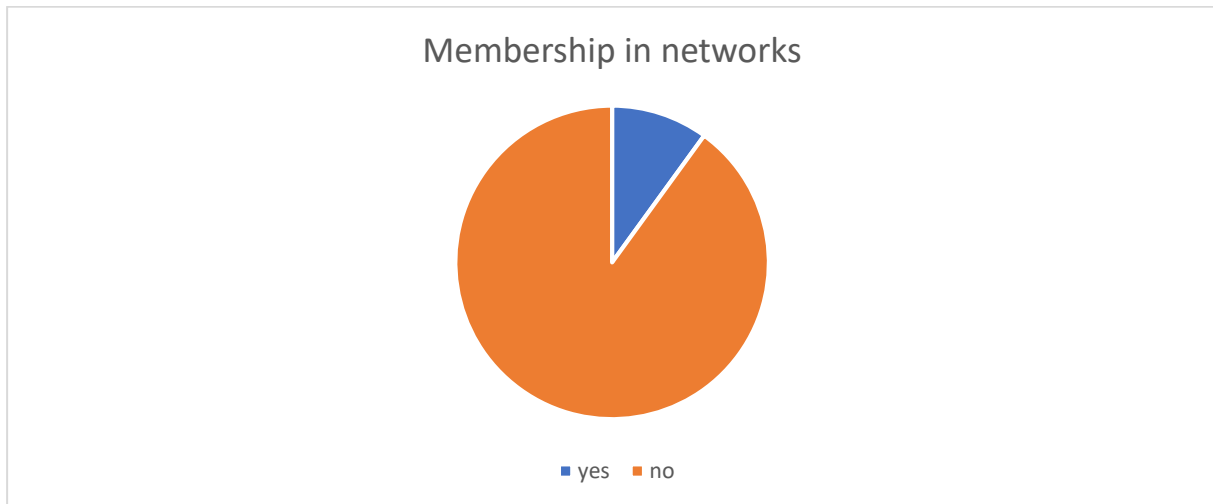
1. DENTIX MILLENIUM SRL – is a company that belongs to the health industry its main products are in the dental implantology products and prosthetics
2. Apell Laser SRL – is a company that belongs both to science and Industry, main products are laser, laser applications and scientific instruments
3. Beia Consult International SRL – is a company that belongs to the ICT industry, main products are telekommunikation systems
4. Fiber Laser Optics SRL – is a company that belongs to photonic industry, main products are Fiber laser 100W, laser engraving machine, laser solution, laser cleaning machine, laser processing services,
5. S C Pell Amar Cosmetics SRL – is a company that belongs to the dermo-cosmetics industry, main products are cosmetics of all kind
6. S C ROSEAL SA – is a company that belongs to manufacturing sealing systems industry branch, main products mechanical and magneto-fluidic sealing systems spare parts of carbon, ceramic, elastomer, PTFE for nuclear, petro-chemical, water, flood, pulp and paper and pharmaceutical industry.
7. S C Sanimed International Impex SRL is a company that belongs to pharmaceutical industry, main products are products of culture media, collagen and other new and innovative products of advanced biotechnology.
8. Spearhead Systems SRL is a company that belongs to IT industry, main products are IT monitoring, HPC, IT security, cloud and training.
9. TDP Partners is a company that belongs to the financial services industry, main product is consultancy for European grant accession.
10. Electro Optic Components SRL is a company that belongs to surveillance/security industry. Its main products are surveillance systems with military applications.
11. Optoelectronica 2001 SA is a company that belongs to photonics industry. Its main products are R&D, VDF, blasting, holograms, simulator shooting testing services -- ""v""tv ', production services, laser, optical, thermal

### 1.1. General description of the SME's

Please name and describe the SME's, from which branch are they coming from, which products to they offer (around 1 page)

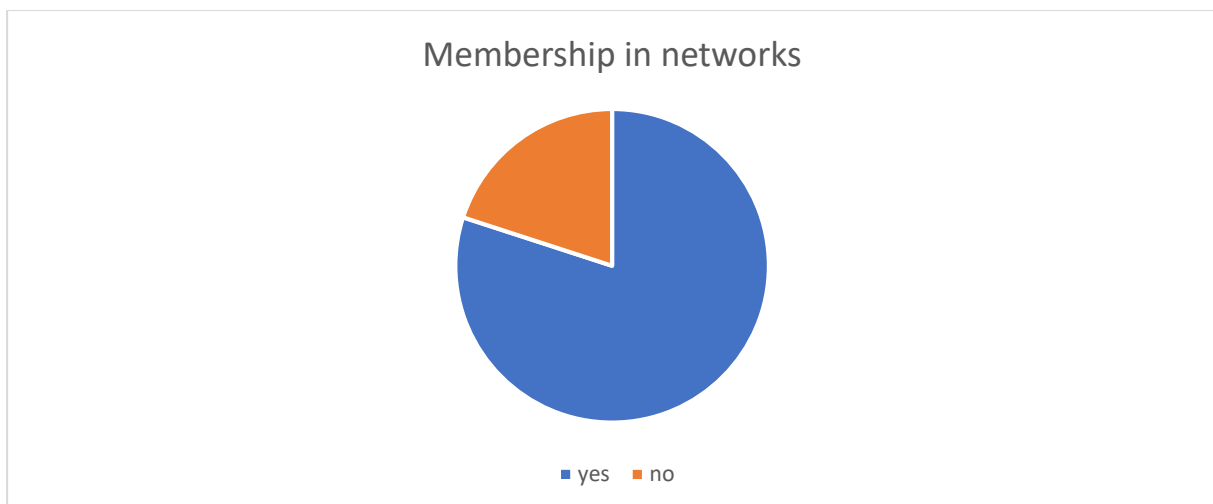
#### 7.1.2 Membership network

##### **ELI-HU Nonprofit Ltd.**



From the asked SMEs just one is member of any kind of network. One surveyed company is member of the local chamber, the other enterprises just have informal relationships.

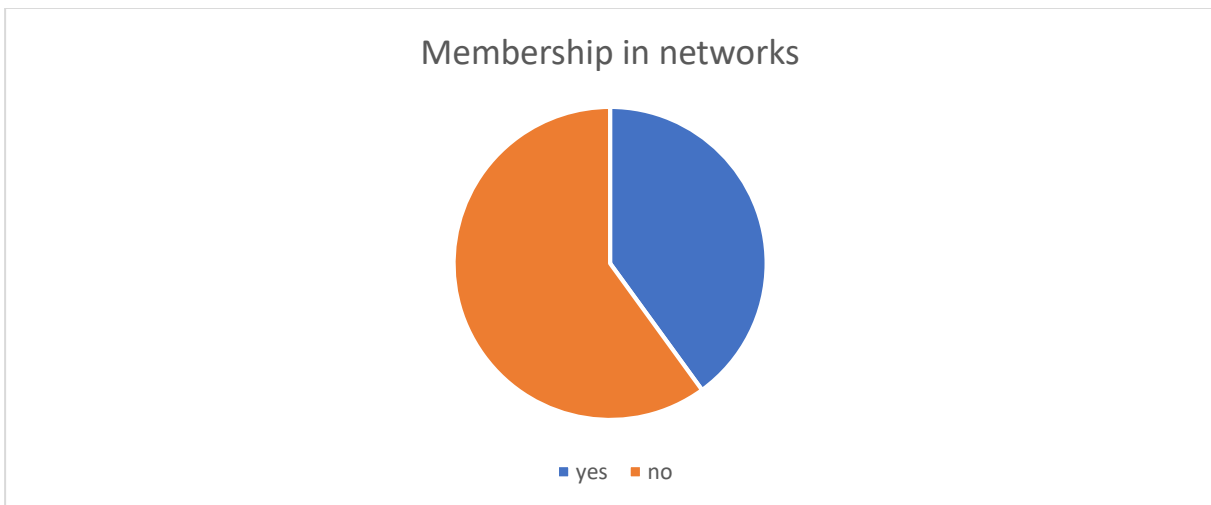
##### **Development Agency of Serbia**



80% of the surveyed companies are members of some kind of network:

- IoT Forum
  - Alliance for IoT Innovation
  - Clusters from various sectors
  - **The Society for Structural Integrity and Life**
  - Institute for Standardization of Serbia
  - Serbian chamber of Commerce

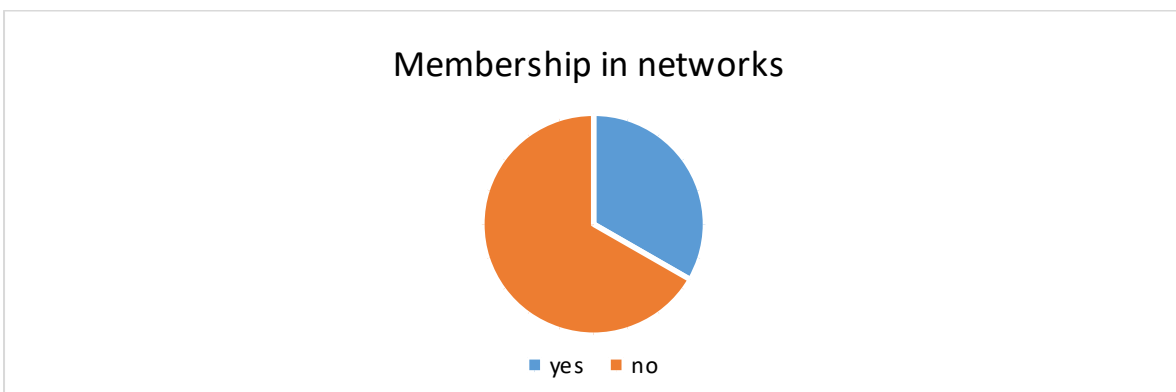
***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***



40% of the surveyed companies are a member of any kind of a company network. This survey clearly shows that Innoskart ICT Cluster is the most important network among the partners who filled out the questionnaire.

As we have already mentioned, Innoskart ICT Cluster; it is an organized innovative network of cluster members consisting of regional SMEs, three universities, one nonprofit research institution and a knowledge centre.

***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***





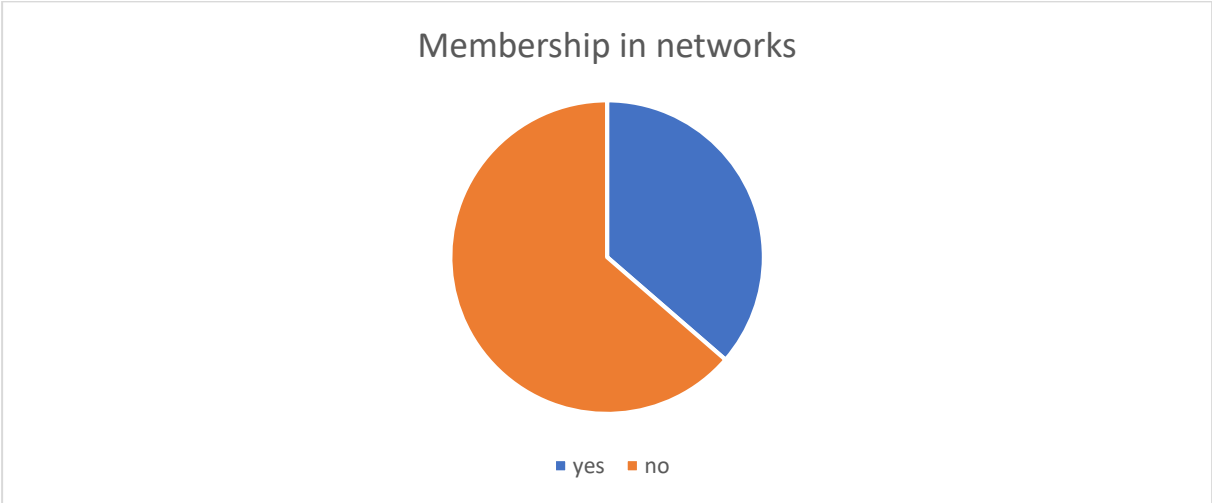
Because most of the respondents are micro companies it is reasonable to accept that the high number of non-memberships could be explained by their priorities mainly focused on overpassing the difficulties of starting new businesses and survival in the tough market conditions than for participation in different organisations.

**1.1. Membership network**

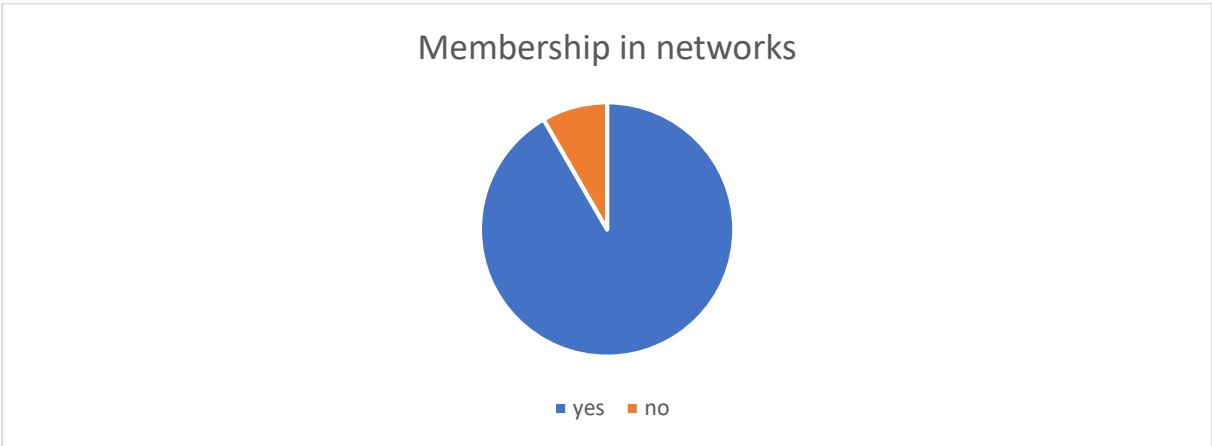
Generally medium enterprises are more often participating some association, network or cluster. Smaller enterprises do not have free capacity for these activities. Other fact is, that the SMEs are mainly on their business (and profit) and they are not so interested in networking activities because market is very competitive and for them these are extra costs with only possible profit.

Some SMEs are involved in some network:

Czech furniture producers cluster, CzechImplant, Chamber of COM, Association of industry and transportation, Czech Space Alliance



**FH JOANNEUM GESELLSCHAFT M.B.H**



92% of the surveyed companies are a member of any kind of a company network. This survey clearly shows that chamber of commerce and AC Styria is an important network.

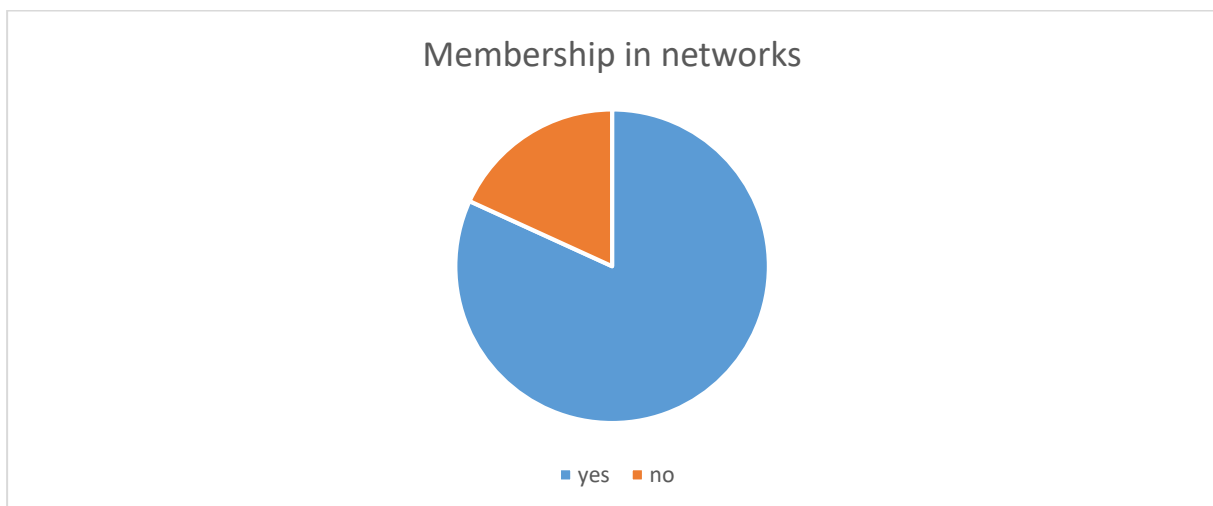
Chamber of commerce are organs for (self-) representation of the commercial and industrial interests in a federal state or a certain region.

The Styrian Autocluster ACStyria GmbH is a link between economy, industry, research and public facilities in the automotive and mobility industry of Styria.

Another network would be Green Tech Cluster, which is the global center for innovative energy and environmental technology. 200 companies and research institutes jointly develop the green technologies of the future.

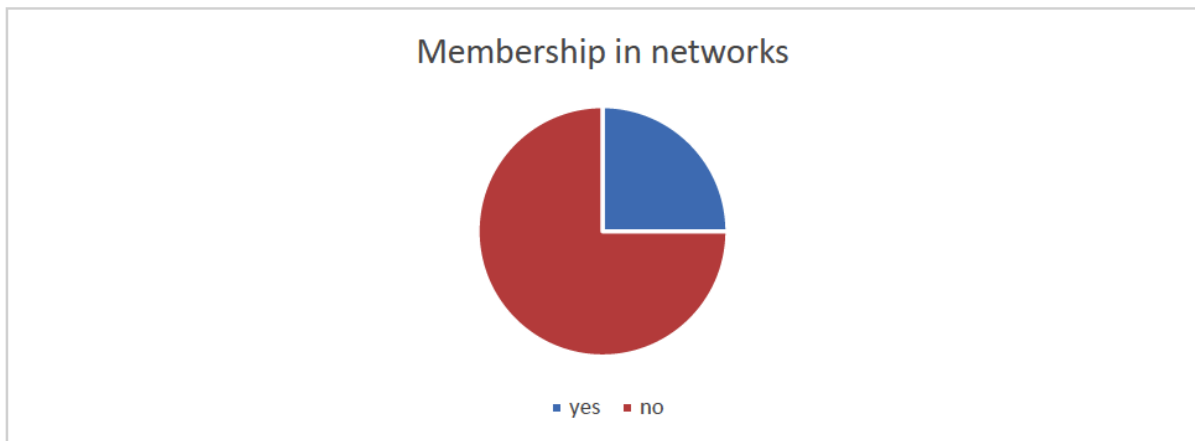
Another known network that appeared in the questionnaires is the WKO (Economic Chamber). WKO is a body governed by public law. It coordinates the activities of the Land Chambers and the legal interests of commercial businessmen.

### ***Institution for development of competence, innovation and specialization of Zadar County***



82% of the surveyed companies are members of some kind of network:

- **Croatian chamber of economy** - an independent professional and business organization for all legal entities engaging in business within the Republic of Croatia.
  - **Croatian AD-cluster** - the Croatian automotive cluster
  - **Croatian association of production engineering**
  - **CENTAI** – centre for research and development of automobile industry
  - **Croatian competitiveness cluster** – electrical and mechanical machinery industry and technology
  - **Croatian exporters**
  - **Croatian cluster of competence of health industry**
  - **Maricultural cluster Croatia**



75% of the surveyed companies are not a member of any kind of a company network. Only 25% of companies are member of any kind of a company network, which results that SMEs doesn't believe in added value that they could get from the membership in the network. This might also result in fact that membership in national Chamber of commerce and industry was compulsory until 2013 and a lot of companies leaved chambers and are not members in any other network.

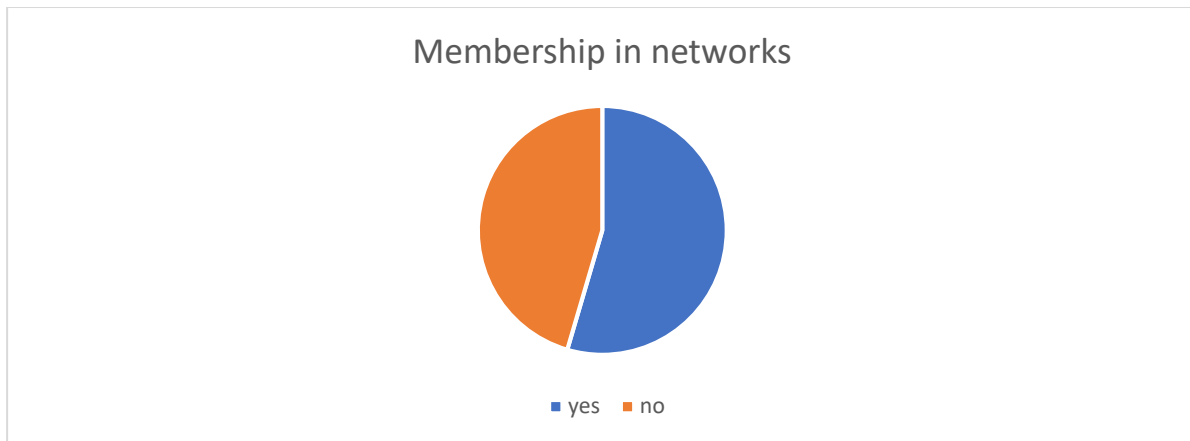
***Magurele High Tech Cluster***



All the participants to the survey are members of Magurele High Tech Cluster (MHTC), some of them are, also, members of various professional associations. The managers of the companies decided to join MHTC to be very close to the most advanced research activity from Romania and not only. They are interested to be part of consortiums to submit projects for research and technology transfer together with national research institutes and universities.

In the same time, the companies are members in chambers of commerce and industries and in professional associations. Some of them are members in other specialised clusters. MHTC is cooperating with these associations and clusters on narrowly targeted topics.

### 1.1. Membership network



55% of the surveyed companies are a member of any kind of a company network.

This survey clearly shows that chambers of commerce and the different associations are the important network.

**Chamber of commerce** are organs for (self-) representation of the commercial and industrial interests in a federal state or a certain region.

The **Association of electrical engineering companies (SPIE)** as the independent European leader in multi-technical services in the areas of energy and communications, SPIE supports its customers to design, build, operate and maintain energy-efficient and environmentally-friendly facilities.

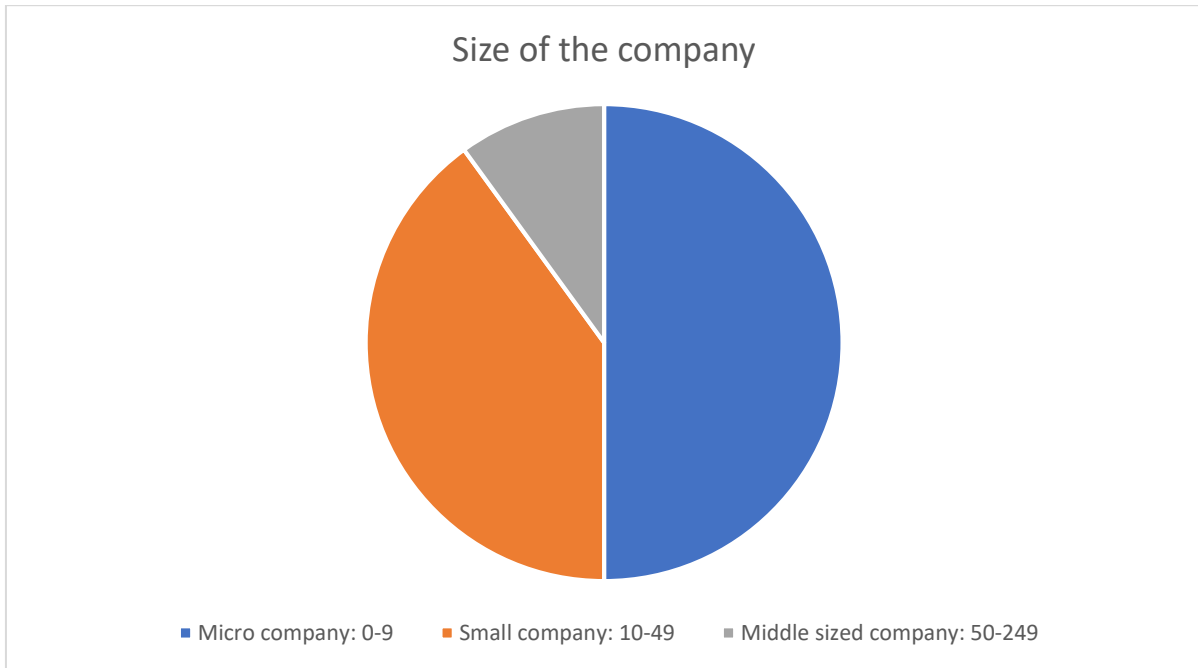
Another network would be **Association of Geophysicist (GAAG)**, which is a voluntary, non-profit, professional association of professionals working in the branch of geophysics and related topics (e.g. geotechnical engineering, hydrogeology, engineering geology and others) in the Czech Republic.

Main activities are presentation of geophysics to public authority, co-ordination between scientific and professional institutions, organizing of symposia, conferences and other activities and publishing of results from the related topics (Journal EGRSE).

Another known network that appeared in the questionnaires is the **Association of the Nanotechnology Industry of the Czech Republic** that aims to represent the interests of Czech companies and research in this field at national and European level, In the business, research and educational spheres. They want to build on the good name the Czech Republic has in this field in the world and to spread the positive awareness of nanotechnologies in society. They will also focus on active search for support and opportunities for cooperation between the commercial and research spheres.

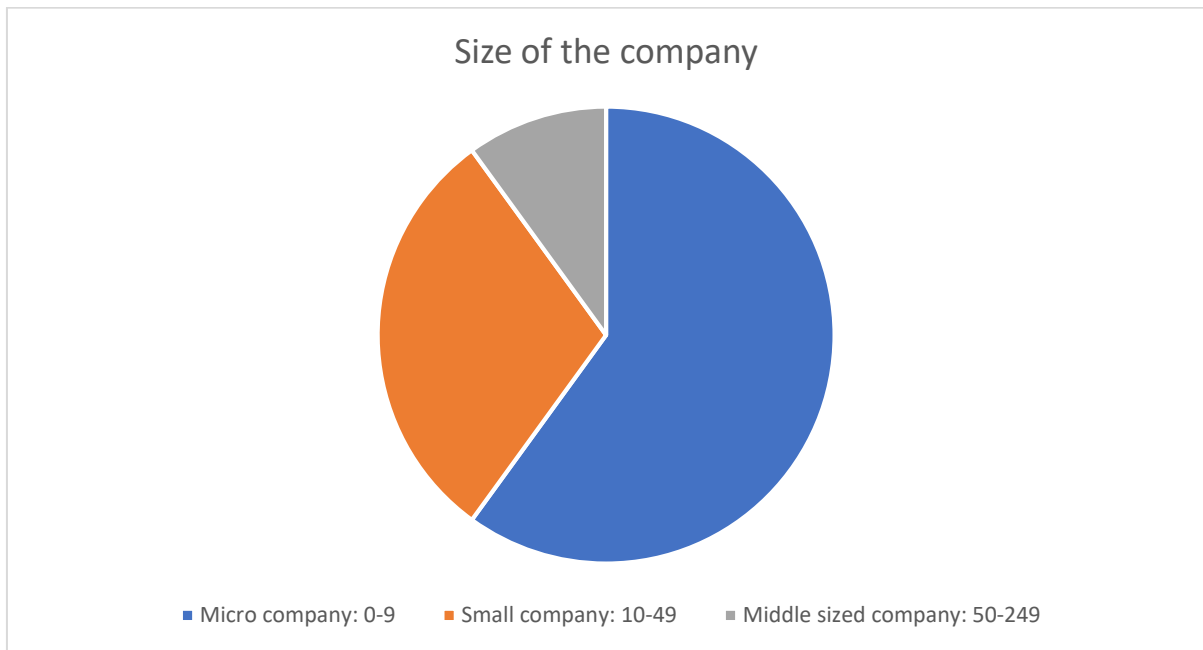
### 7.1.3 Size of the SME's

**ELI-HU Nonprofit Ltd.**



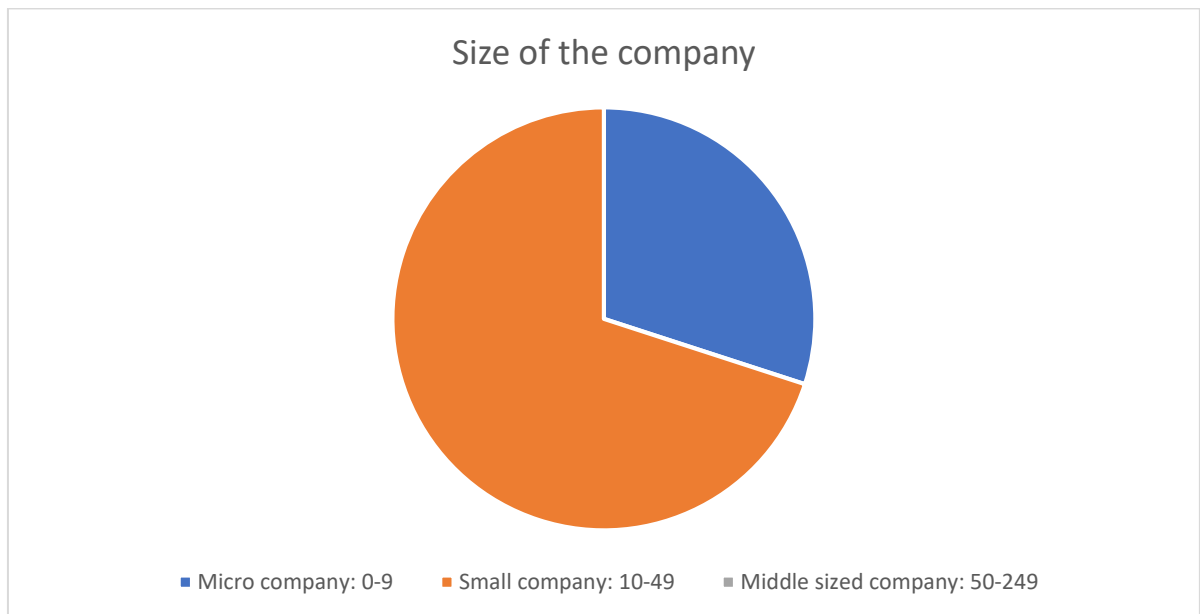
Most of the surveyed SMEs have maximum 9 employees, a few of them have more than 10 and less than 50 employees and just one of them is a middle size company. This represents well the structure of the SME sector. Smaller companies operate mostly in the agricultural activities or in services and these sectors define mostly the economy of the region. Regarding to cooperations this is not necessarily positive because smaller companies have less capacities to cooperate.

**Development Agency of Serbia**

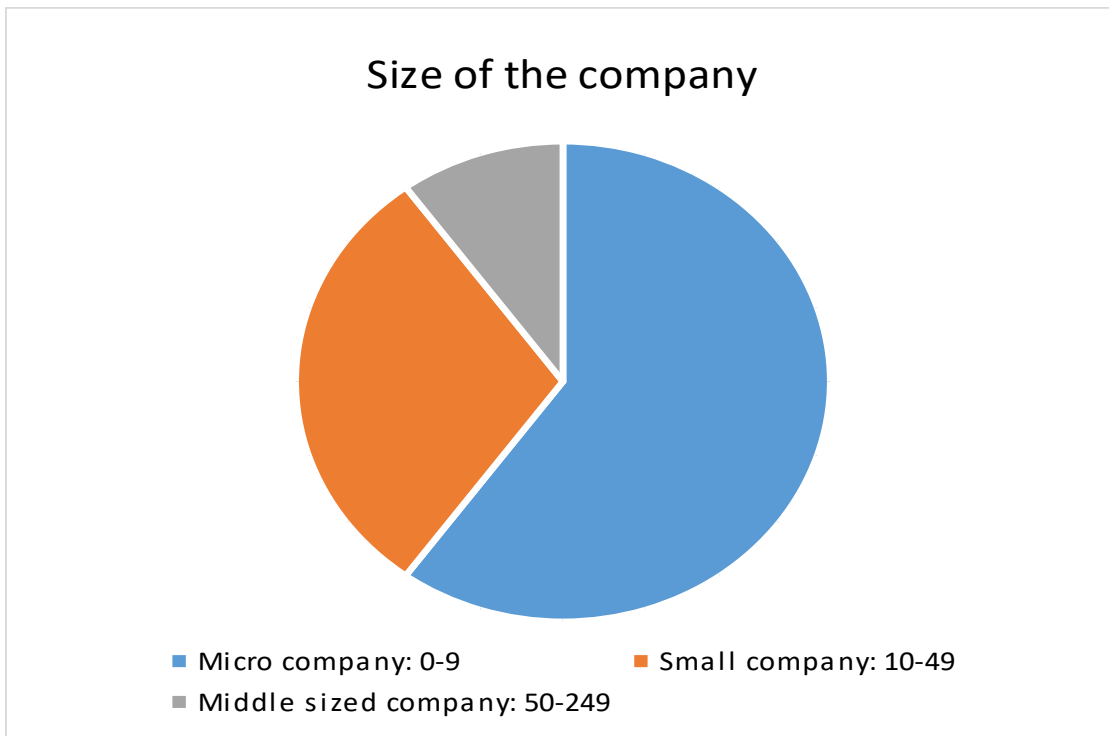


This pie chart shows that majority of surveyed SME's are micro sized companies- 60%, three of them (30%) are small companies and there is only one middle sized company.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



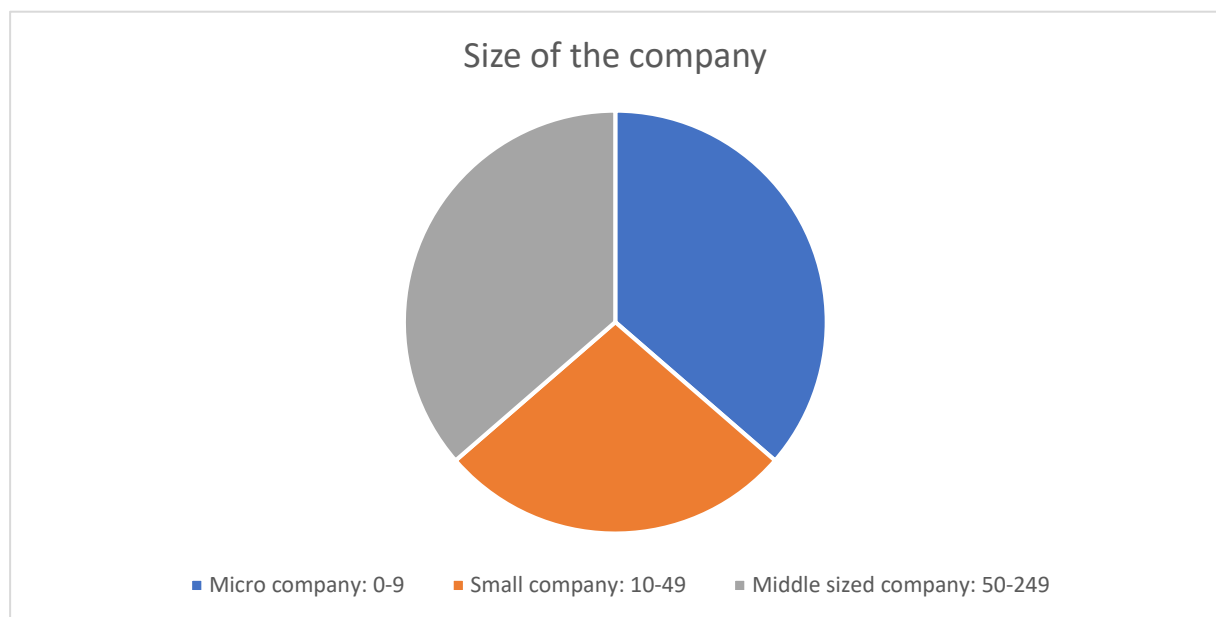
The pie chart is about the size of the companies. The chart is divided into three parts: micro-, small- and middle-sized companies. Seven out of ten companies are micro businesses. Three companies are small businesses and there were no middle-sized firms. Thus, I can say that most companies are micro-enterprises with a share of 70%. Another interesting fact that 99% of the companies in Hungary (country) are micro-companies.

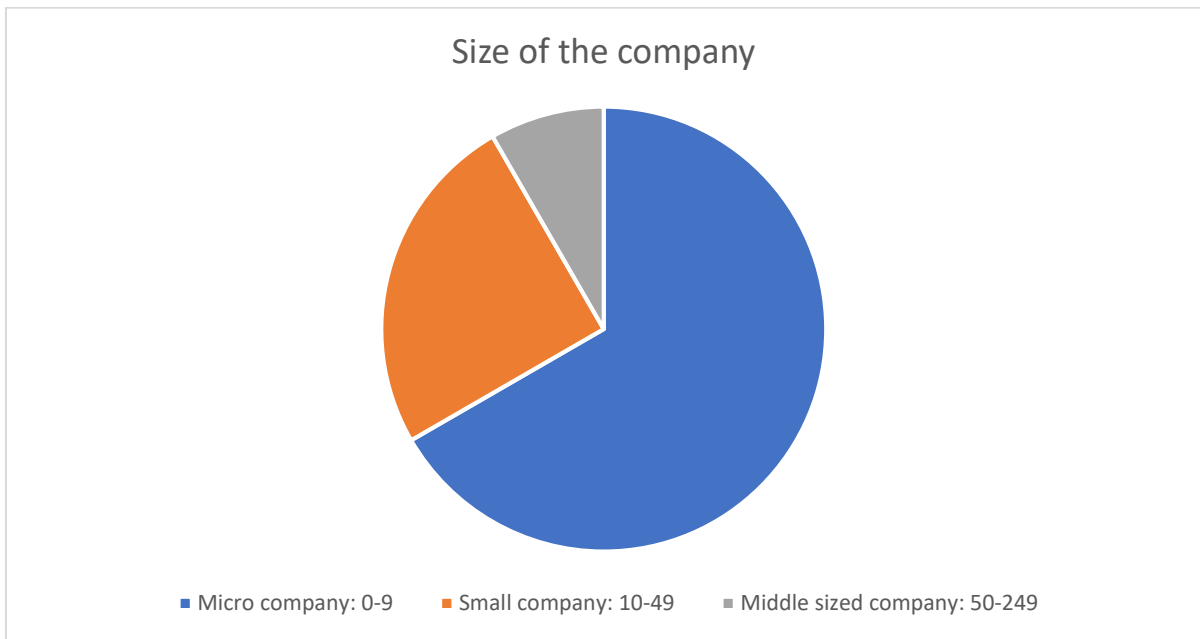


The respondents represent 6 micro companies 3 small SMEs and only 1 medium sized company. At national or regional level the percentage of micro enterprises is much smaller than it is in our respondents case.

#### **1.1. Size of the SME's**

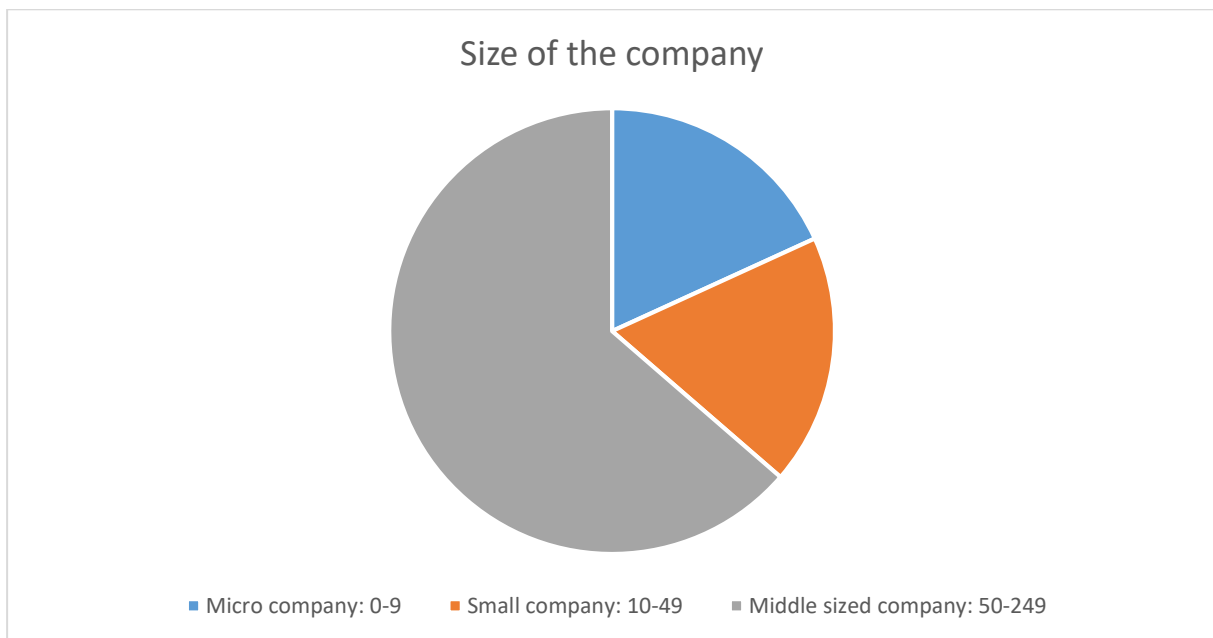
We asked of all size categories of SMEs, from micro to middle sized.





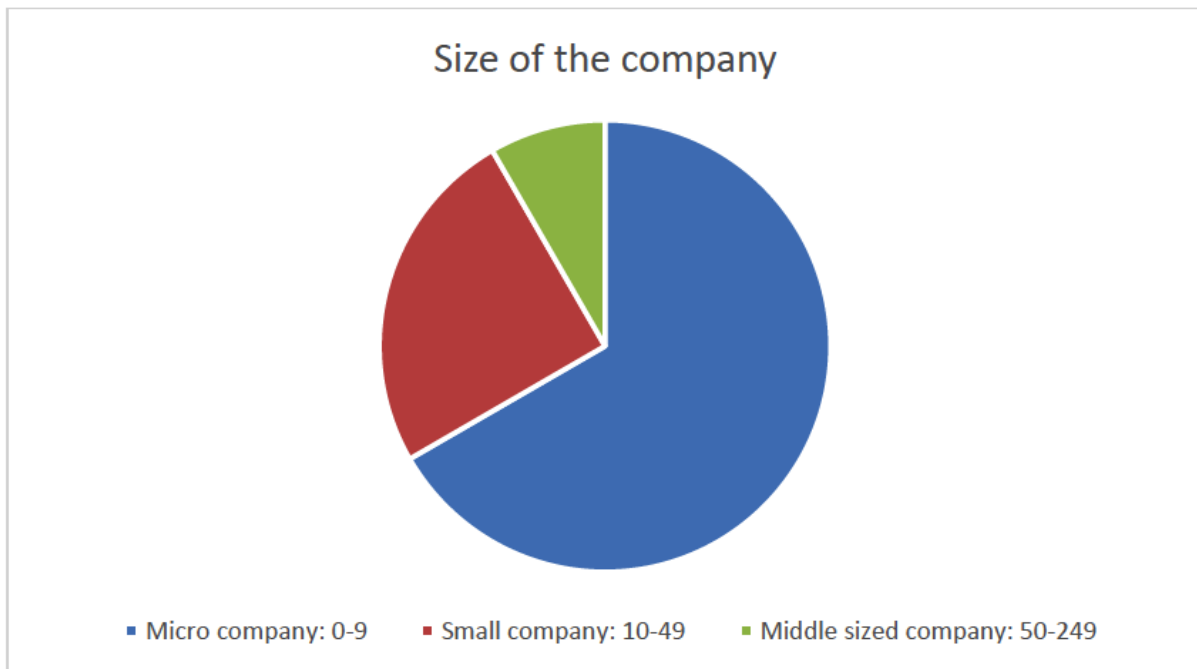
The pie chart is about the size of the company. The chart is divided into three parts: micro-, small- and middle sized companies. Eight out of eleven companies are micro businesses. Three companies are small businesses and only one company is middle sized. Thus, we can say that most companies are micro-enterprises with a share of 67%.

***Institution for development of competence, innovation and specialization of Zadar County***



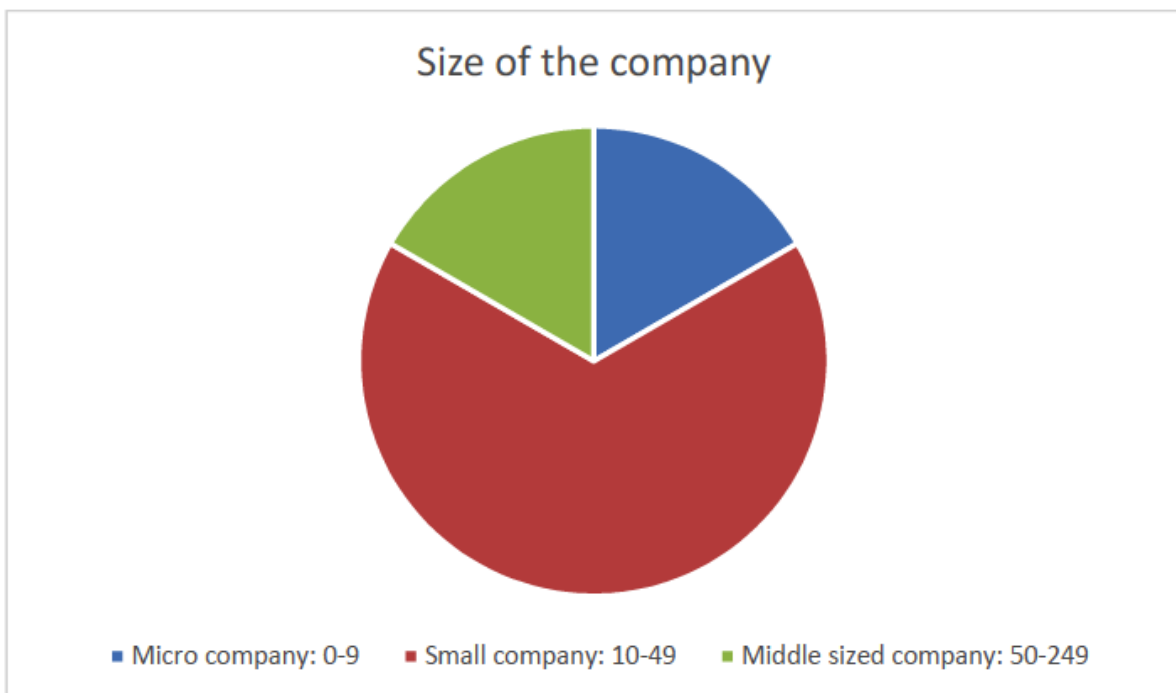
This pie chart shows that 64% of surveyed SME's are middle sized companies, and 18% out of 11 are micro or small company.





The pie chart is about the size of the company. The chart is divided into three parts: micro-, small- and middle sized companies. Eight out of twelve companies are micro businesses. Three companies are small businesses and only one company is middle sized. Thus, we can say that most companies are micro-enterprises with a share of 67%.

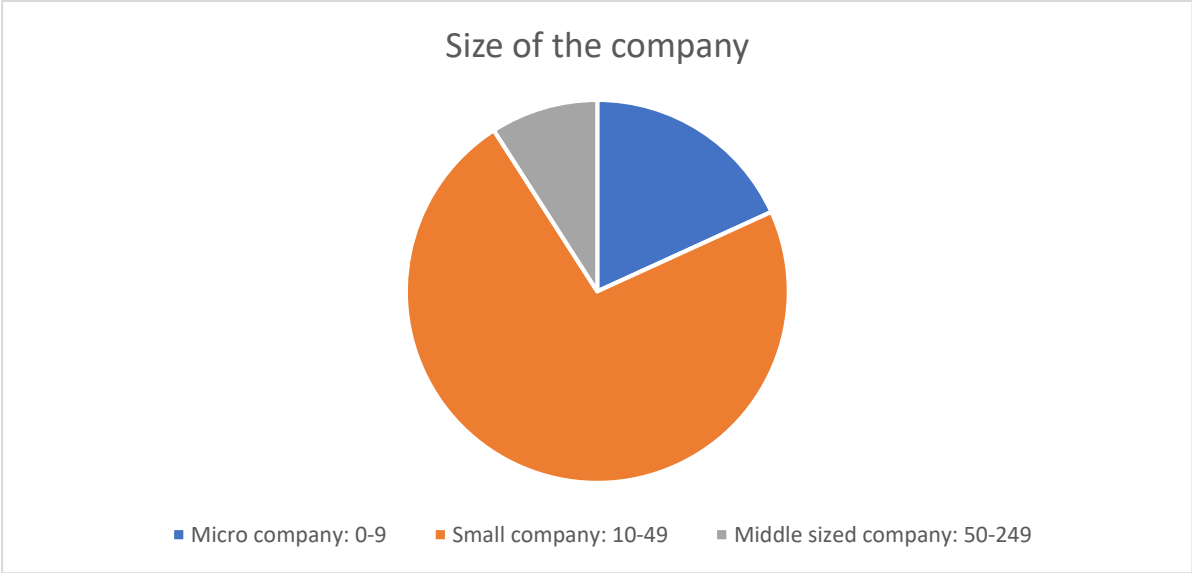
***Magurele High Tech Cluster***



The majority of the SMEs are small companies. They are innovative companies and they try to closely work with the national research institutes from MHTC for the following reasons: 1) to submit join

projects with governmental and European funds; 2) to generate new products and services for the Romanian and international markets based on technology transfer from the national scientific research; 3) to be subcontractors for the international companies which are providers of products and services for ELI-NP.

**1.1. Size of the SME's**

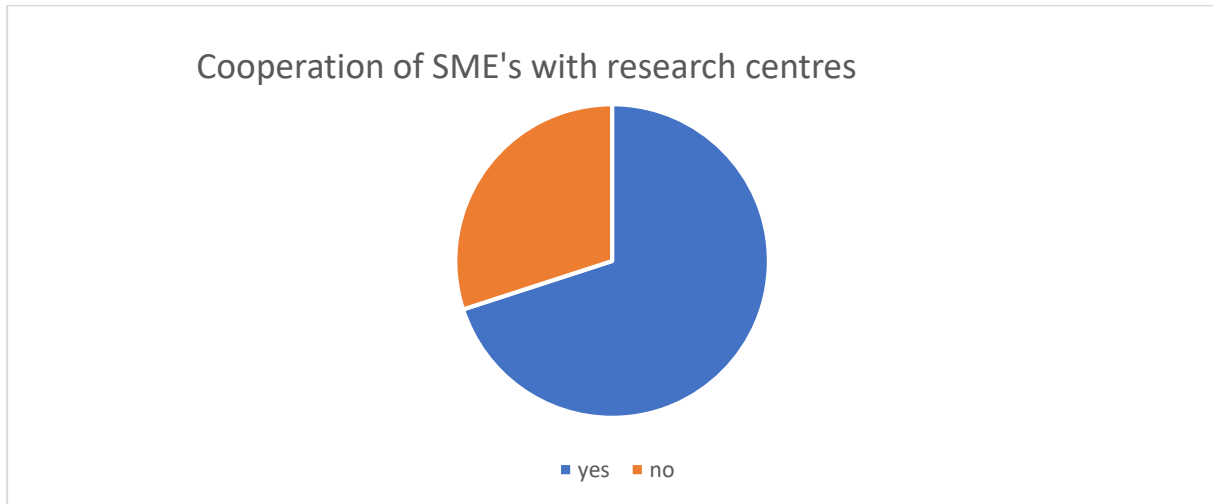


The pie chart is about the size of the company. The chart is divided into three parts: micro-, small- and middle sized companies. Eight out of eleven companies are small businesses. Two companies are micro businesses and only one company is middle sized. Thus, we can say that most companies are small-enterprises with a share of 73%.

## 7.2 DESCRIPTION OF THE COLLABORATION OF SME'S WITH RESEARCH CENTRES

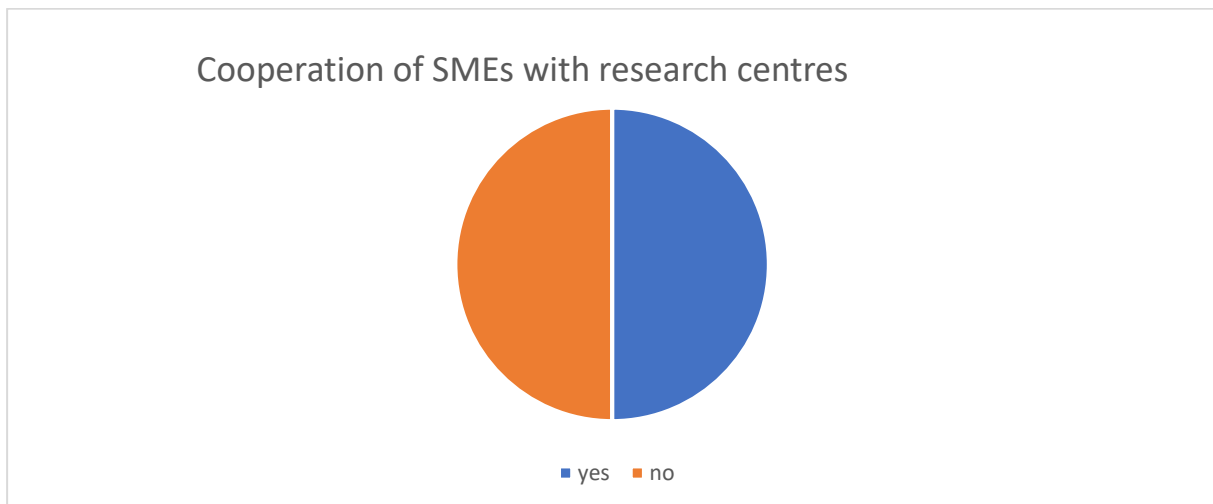
### 7.2.1 Cooperations of SME's with research centres

#### *ELI-HU Nonprofit Ltd.*



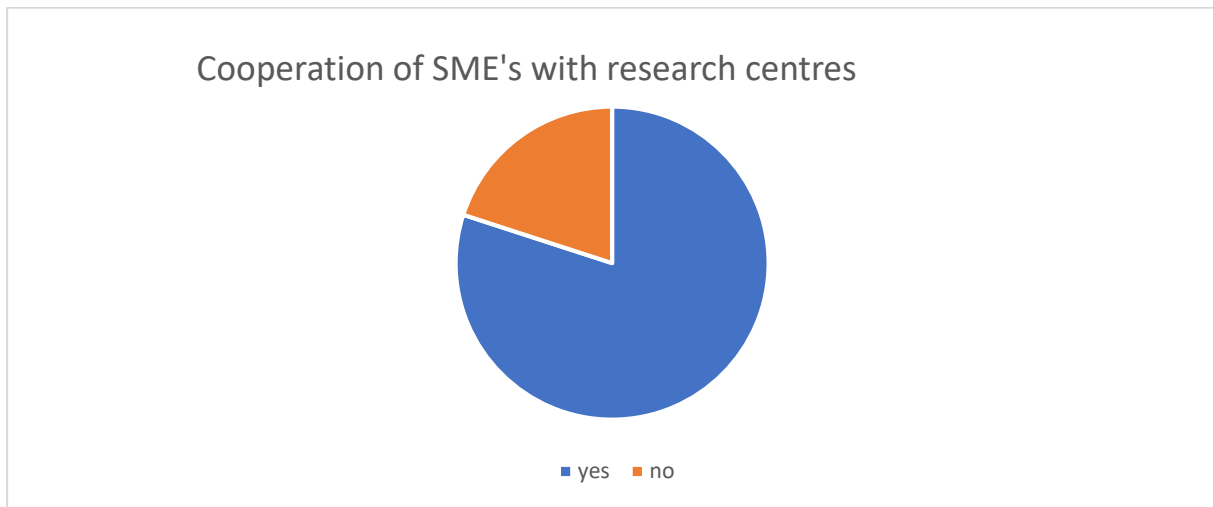
More than two third of the surveyed enterprises have cooperation with research centres which is a favourable statistic. From the asked companies these are the ones which operate in the tertiary sector.

#### *Development Agency of Serbia*



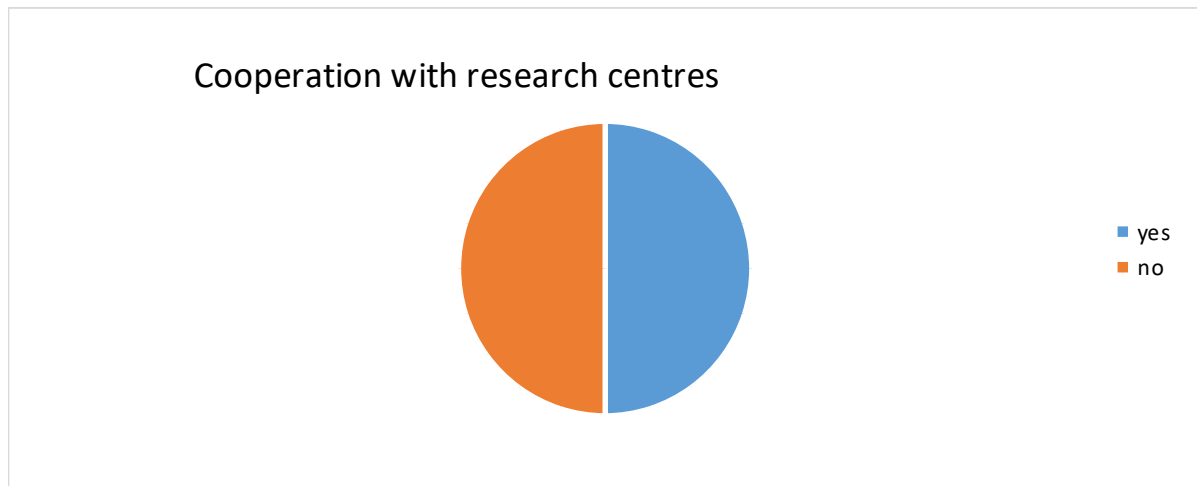
Exactly half (50%) of interviewed SME's did have some type of cooperation with research centres.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



This pie chart shows the cooperation's of SME's with research centres. It shows that more than half of the sample companies (actually 80%) are working with research centres. 20% do not have a cooperation of intermediaries with research centres.

**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**

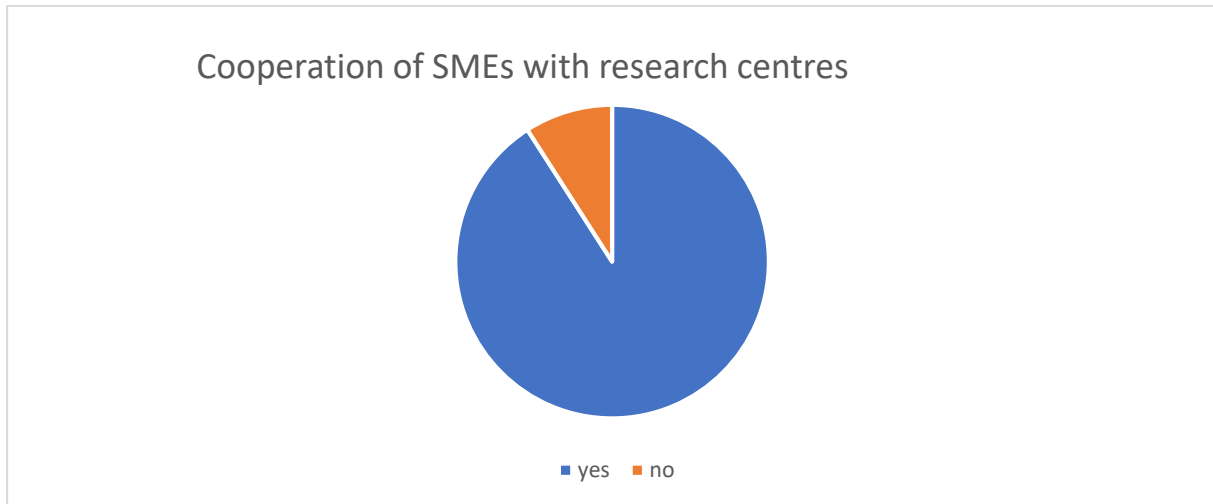


Again the number of micro companies contributed to a large proportion of negative answers. It is recognized that the cooperation with research centres is not a high priority in the start-up phase of almost every business.

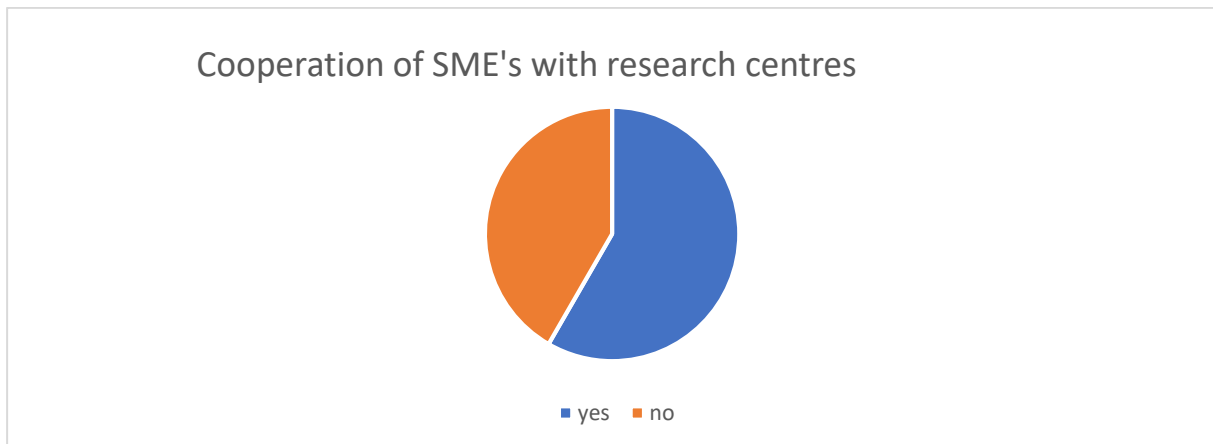
## **Part 2- description of the collaboration of SMEs with research centres**

### **2.1. Cooperations of SMEs with research centres**

Generally yes, our SMEs have some cooperation with research organization. There could be influence of our network as Institute of Physics (ELI Beamlines) – because we sent questionnaires to our previous contacts.

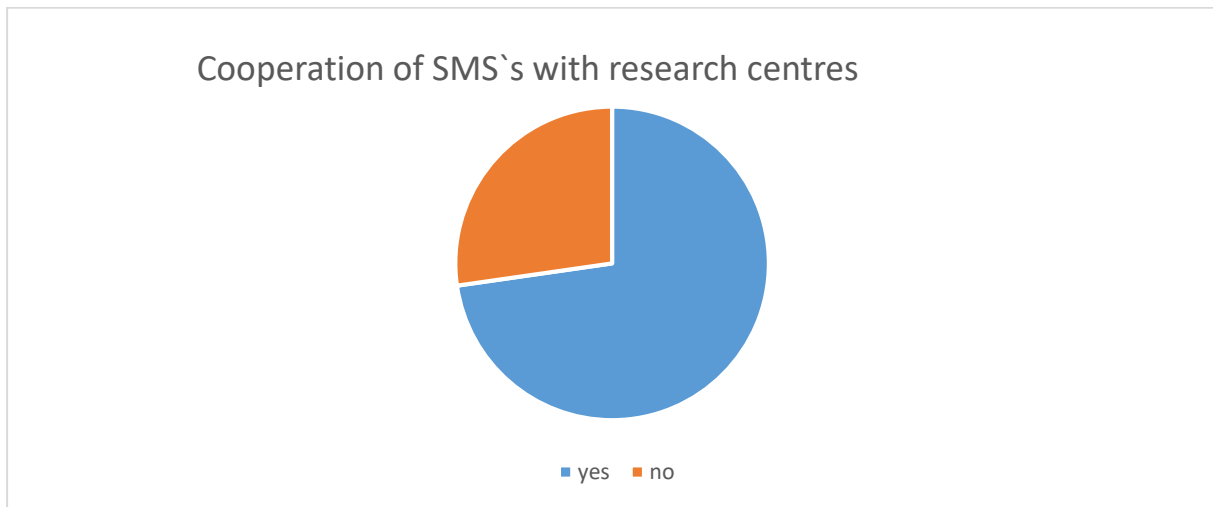


### **FH JOANNEUM GESELLSCHAFT M.B.H**



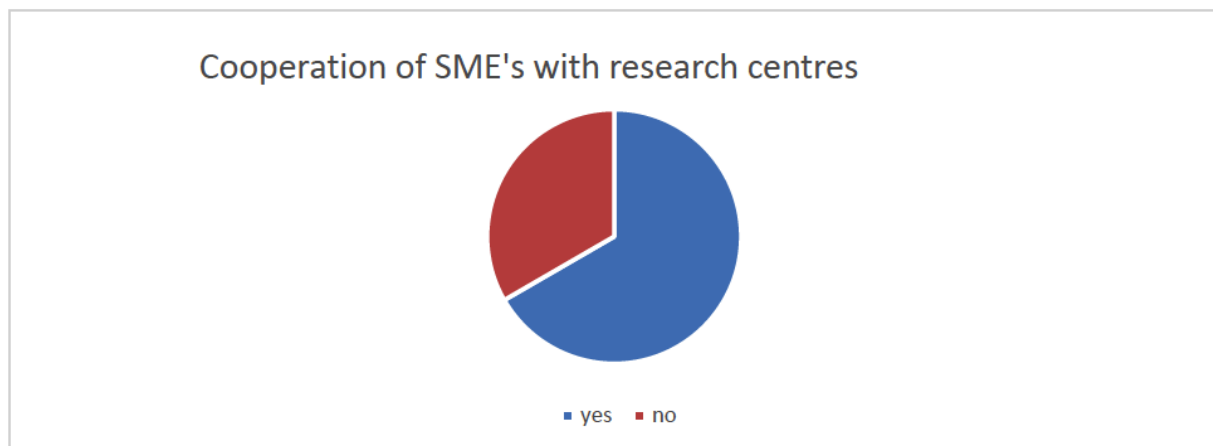
These parts of the pie chart show the cooperation's of SME's with research centres. It shows that more than half of the sample companies are working with research centres. 42% do not have a cooperation of intermediaries with research centres.

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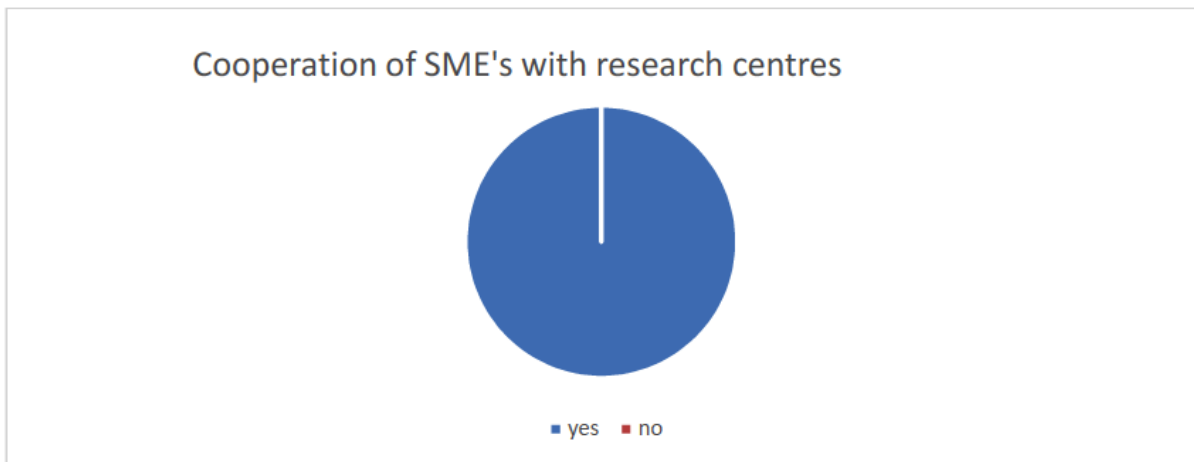
This graphic shows that 73% of SME's have some kind of cooperation with research centres.

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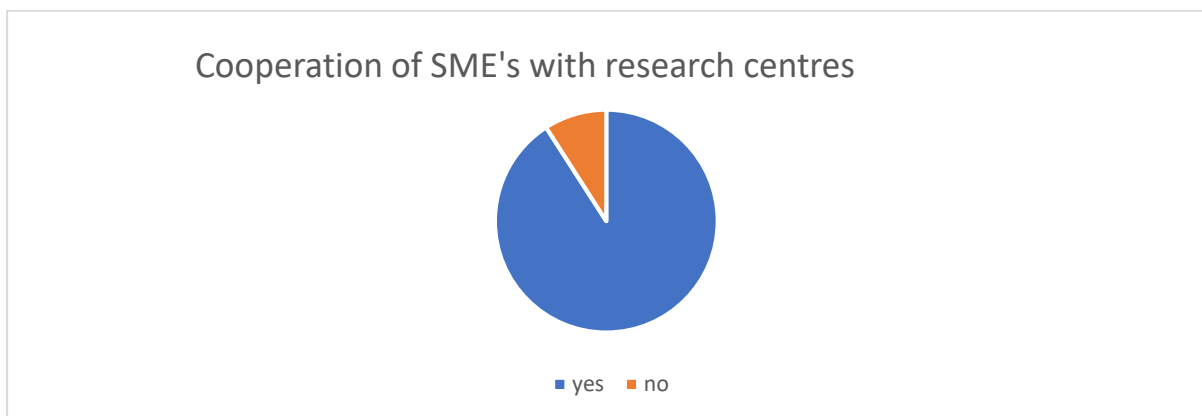
These parts of the pie chart show the cooperation's of SME's with research centres. It shows that more than half (67%) of the sample companies are working with research centres. 33% do not have a cooperation of intermediaries with research centres.

## **Magurele High Tech Cluster**



One of the criteria to accept the companies in the Cluster is to have cooperation with the national research institutes from Magurele Platform. All institutes are members of the MHTC. At the beginning this was not compulsory, but after two years of activity the general assembly of the MHTC decided to introduce this regulation which is a useful one. The cluster has created focus on advanced research and we need only innovative SMEs with a high technological level.

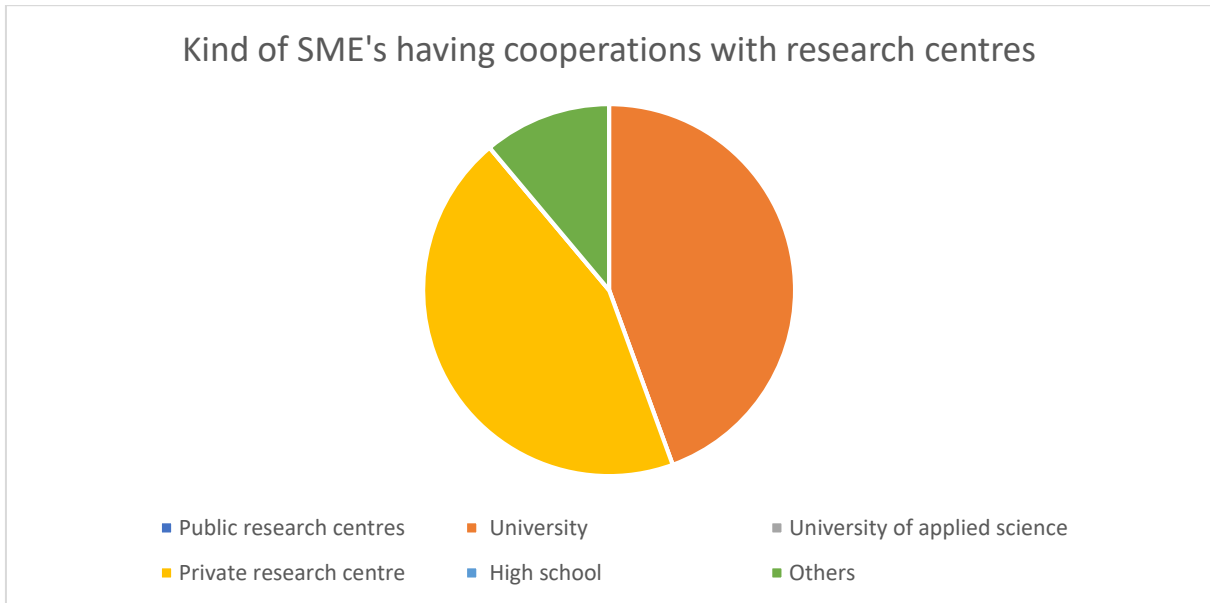
### **2.1. Cooperation of intermediaries with research centres**



These parts of the pie chart show the cooperation's of SME's with research centres. It shows that more than three quarter of the sample companies are working with research centres. 9% do not have a cooperation of intermediaries with research centres.

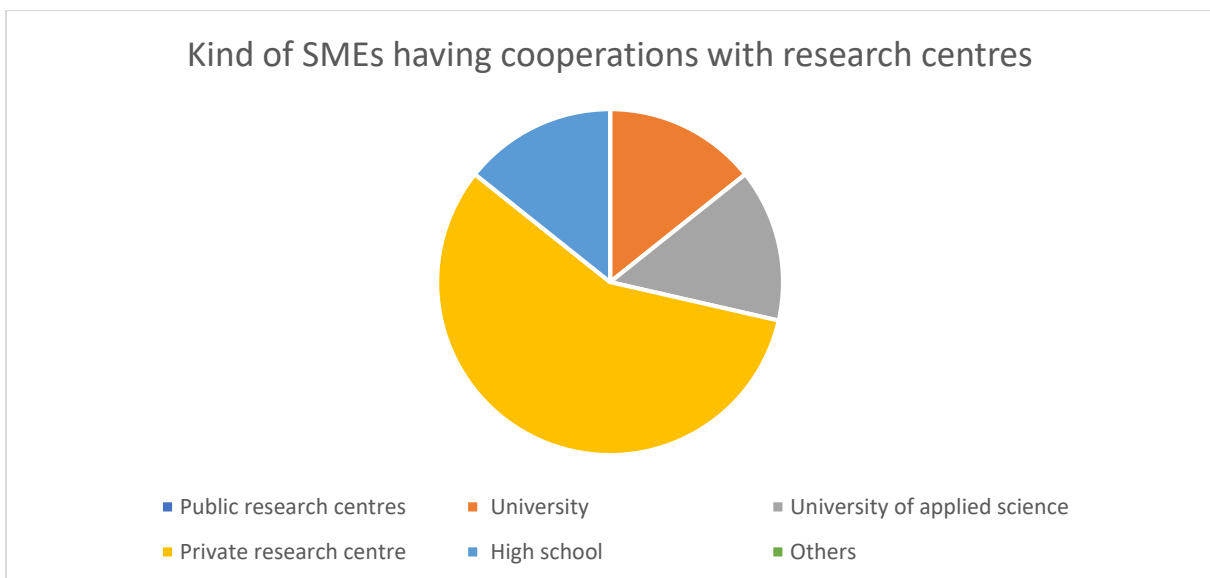
### 7.2.2 Kind of SME's having cooperations with researcher centres

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In this case the picture is not as colourful as in the case of the other surveyed institutions. The SMEs mostly cooperate with the universities and on smaller level with private research centres. The cooperation of the universities (or other higher education institutions) can ensure the better exploitation of the results of researches in universities. In addition the cooperation with private centre can strengthen the business environment so the regional economy in general. So altogether this is a favourable statistic about the asked SMEs.

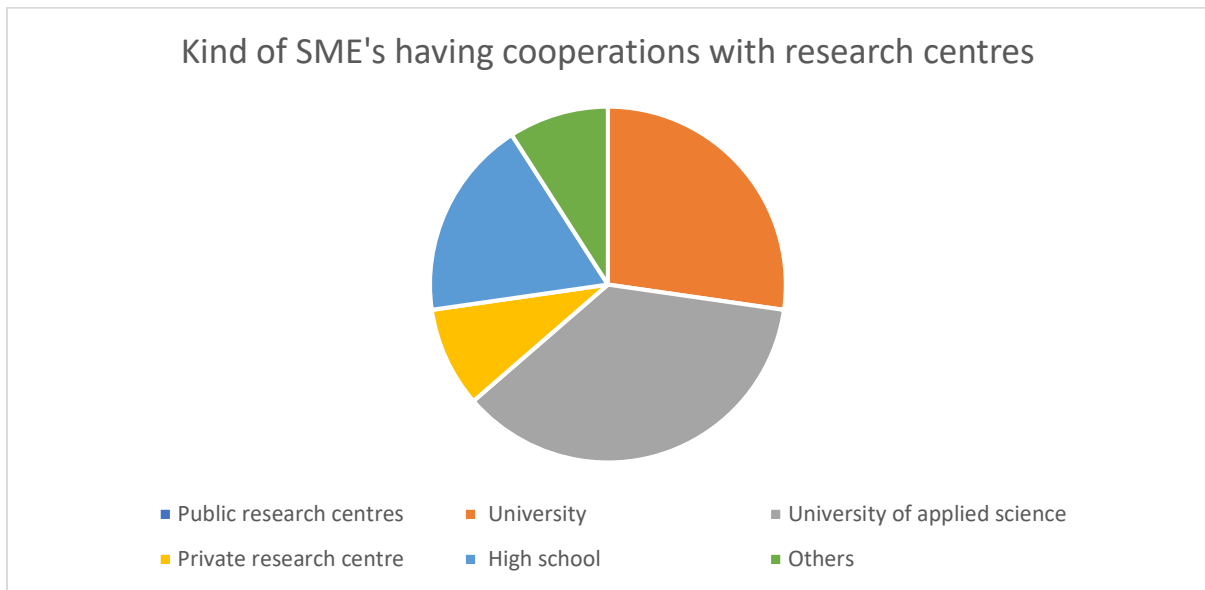
#### Development Agency of Serbia



The chart presents what kind of research centre SME's cooperate with. It is obvious that majority of them (57%) cooperate with Private research centres. Around 15% of all types of cooperation belongs to Universities and that same percentage is applicable for both Universities of applied science and High schools.

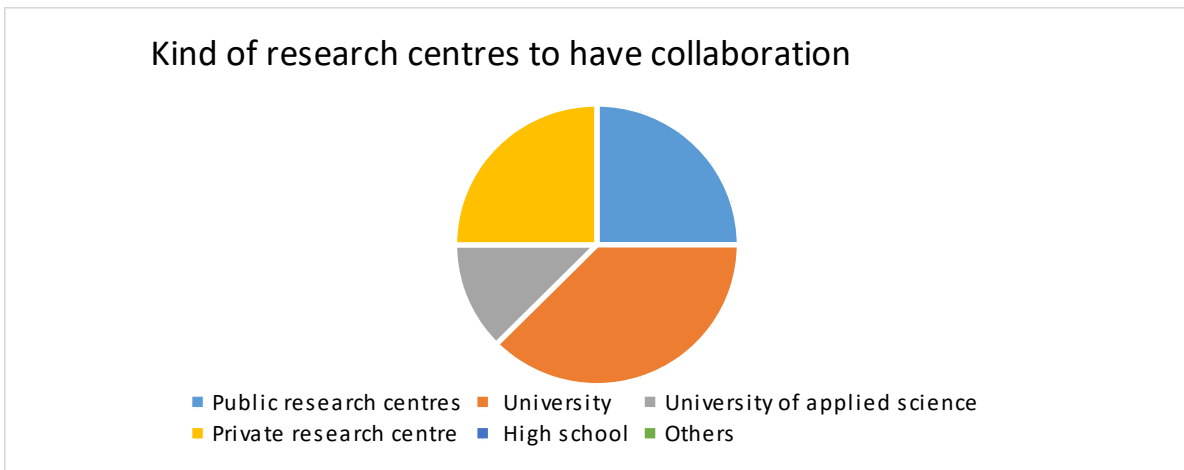


**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The chart indicates the kind of SME's having cooperation's with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities of applied sciences closely followed by universities and private research centres. Two of ten companies cooperate with high schools and only one of ten cooperates with other kind of research centres.

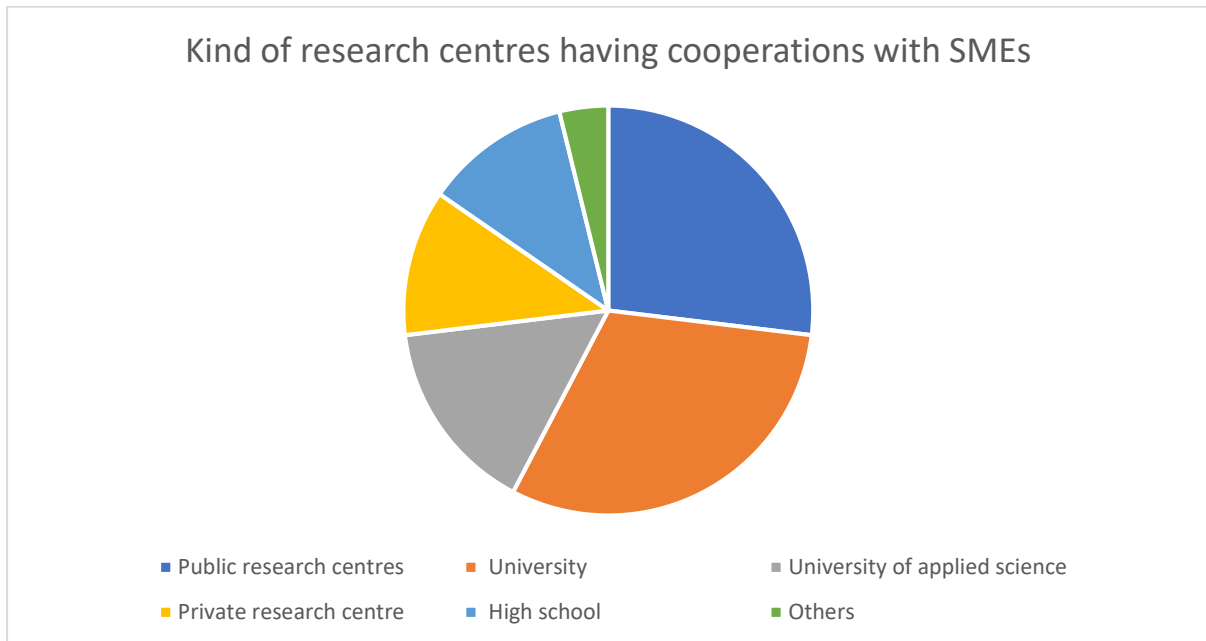
**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



Not universities for applied research but rather regular universities are a more frequent partner and this is very much connected with the companies' field of activity. A notable thing to remark is the collaboration with the private sector which is at the same level as with public research centres. The absence of collaboration with high schools and other types of potential partners is due to the small number of technical high schools available even in developed regions as Bucharest - Ilfov.

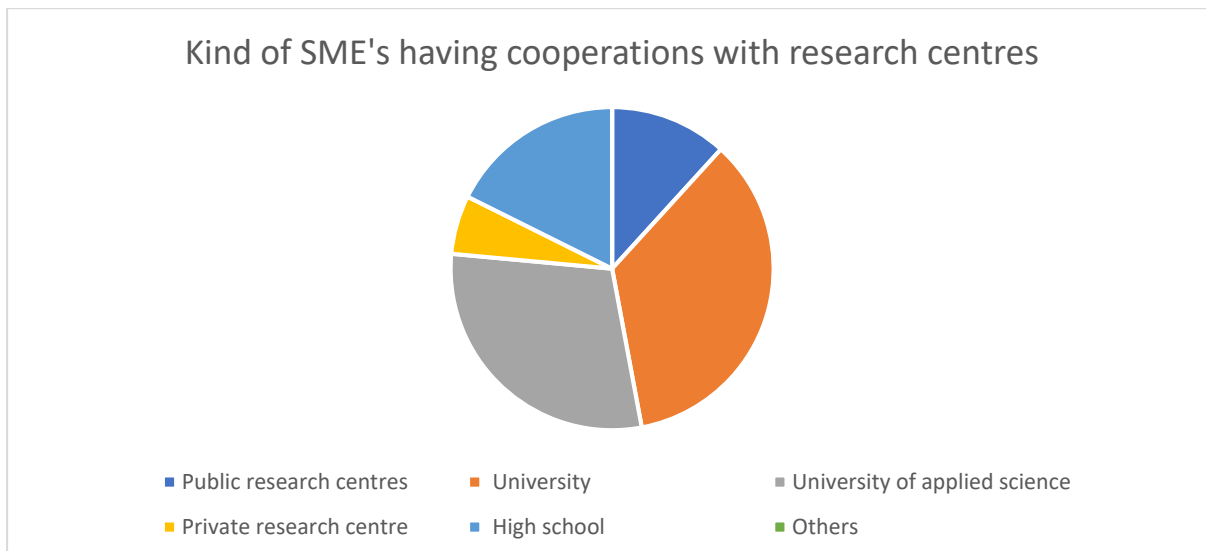
## 2.2. Kind of research centres having cooperations with SMEs

Public research centres (Czech Academy of Sciences) prevailed in that statistic, together with universities. It is common that the most specialized experts, who could be suitable for that projects, are recruited from these research organizations in Czech Rep. context.



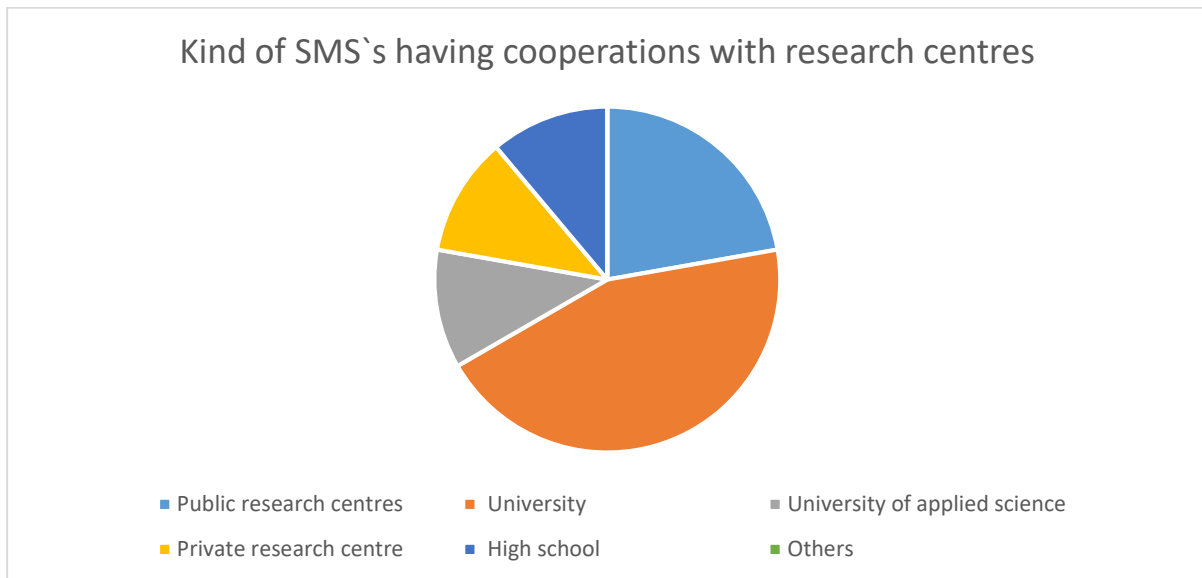
Others: NGO

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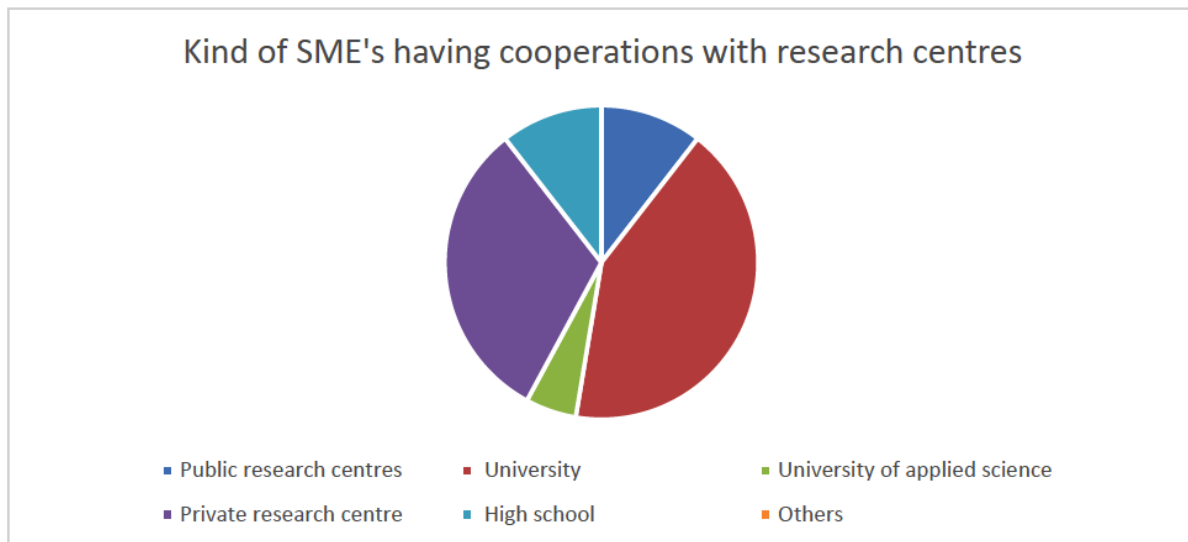
The chart deals with the kind of SME's having cooperation's with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities closely followed by university of applied science. Three of eleven companies cooperate with high schools and two of eleven with private research centres. Only one company cooperates with a private research centre. None of the companies cooperates with any other research centres as mentioned in the survey.

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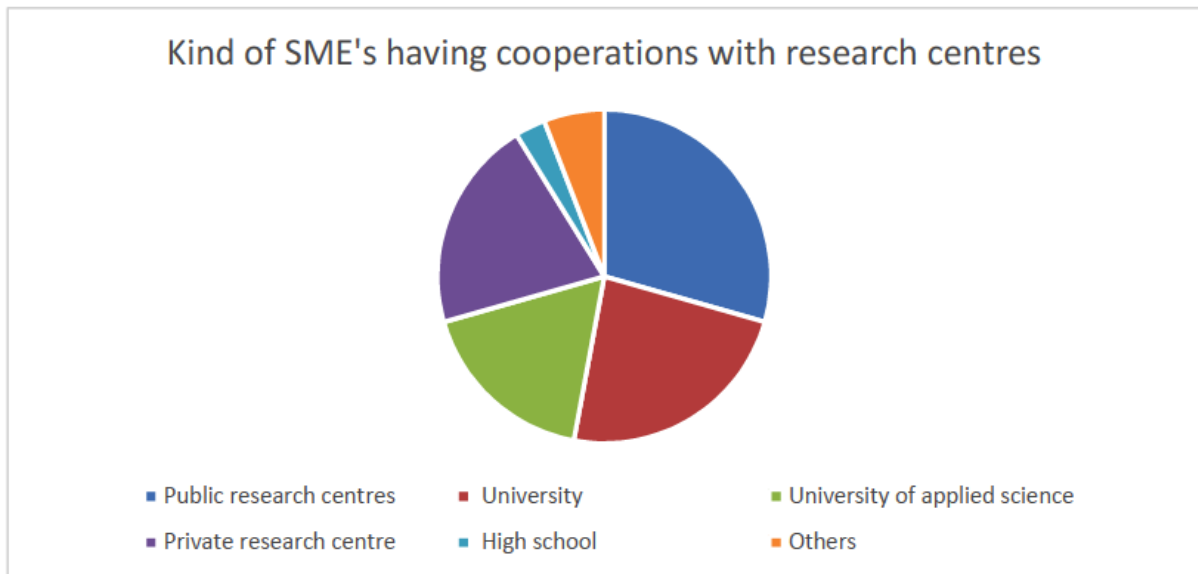
The chart deals with a kind of research centre that SME`s cooperate with. It clearly shows that most of them (44%) cooperate with Universities. 22% of them cooperate with public research centres and 11% cooperate with private research centres, high schools and university of applied science. No one declared anything for the “others” option.

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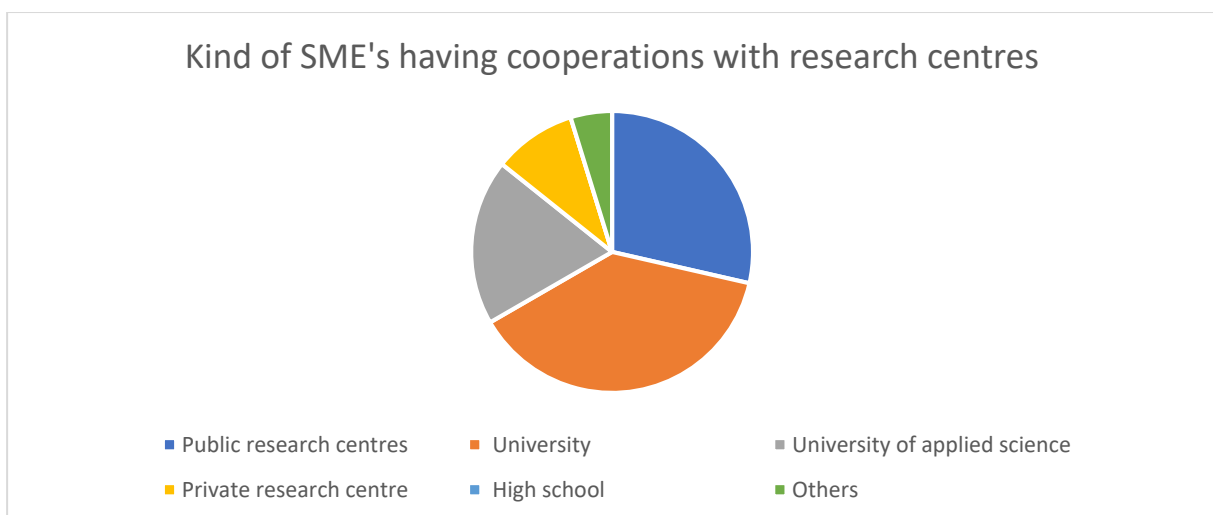
The chart deals with the kind of SME`s having cooperation`s with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities (42%) followed by private research centres (32%). Two of twelve companies cooperate with high schools (11%) and public research centres (11%). Only one company cooperates with university of applied sciences (5%). None of the companies cooperates with any other research centres as mentioned in the survey.

**Magurele High Tech Cluster**



SMEs are considering the public research centres (national scientific research institutes) as the main potential and real partner. This attitude is in concordance with the MHTC’s strategy to be focus on advanced research generated by the research institutes from Magurele. Together, Public Research Centres and Universities represent more than 50% of the partnerships of the SMEs. In the same time, we have to underline that Universities of Applied Science / Private research Centre / High Schools are representing around 40% of the options which means that the SMEs are keen to stay close to concrete aspects of the economy and of the Romanian society.

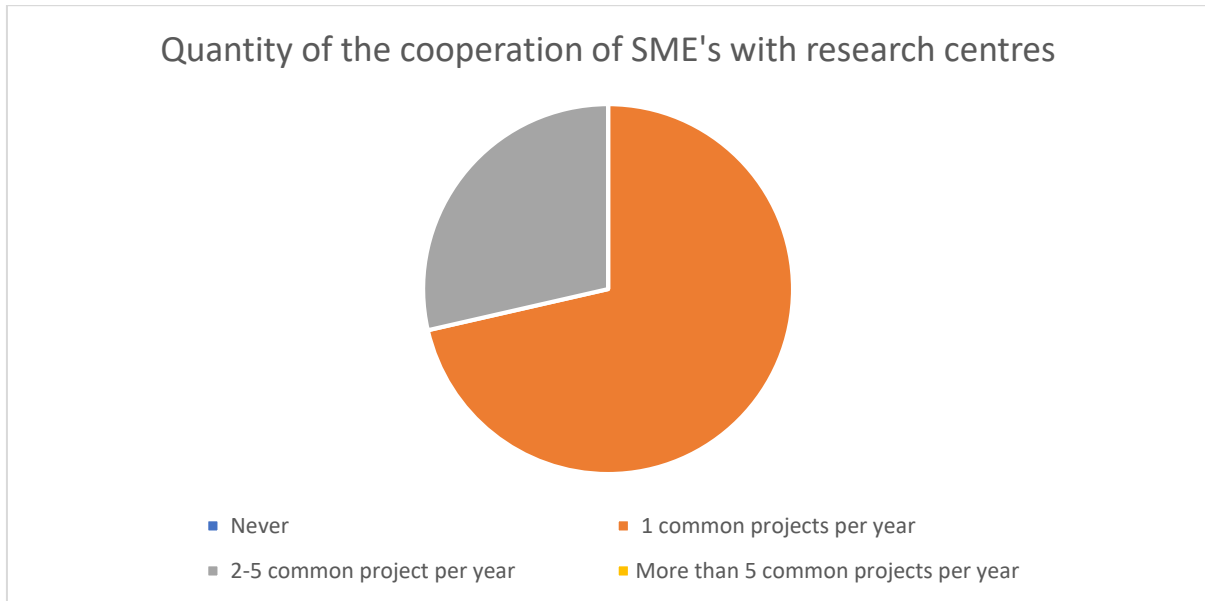
**2.2. Kind of intermediaries having cooperation with researcher centres**



The chart deals with the kind of SME’s having cooperation’s with research centres and is divided into six parts. It highlights the fact that most companies have a cooperation with universities closely followed by public research centres. Four of eleven companies cooperate with universities of applied science and wo of eleven with private research centres. Only one company cooperates with any other research centres. None of the companies cooperates with any high school as mentioned in the survey.

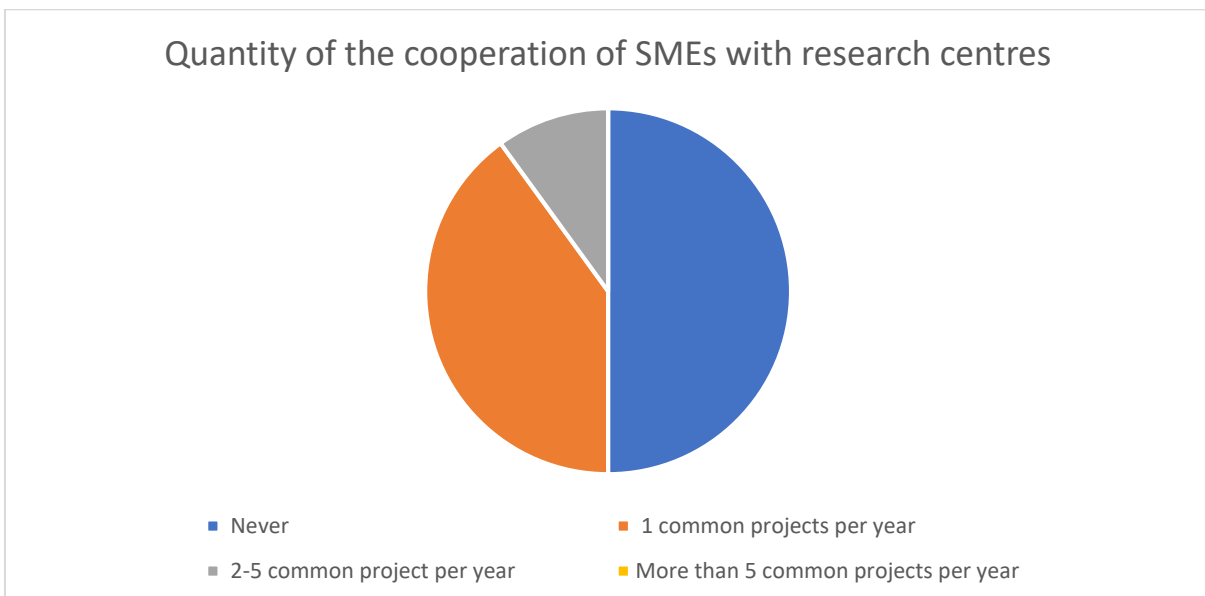
### 7.2.3 Quantity of the cooperation of SME's with research centres

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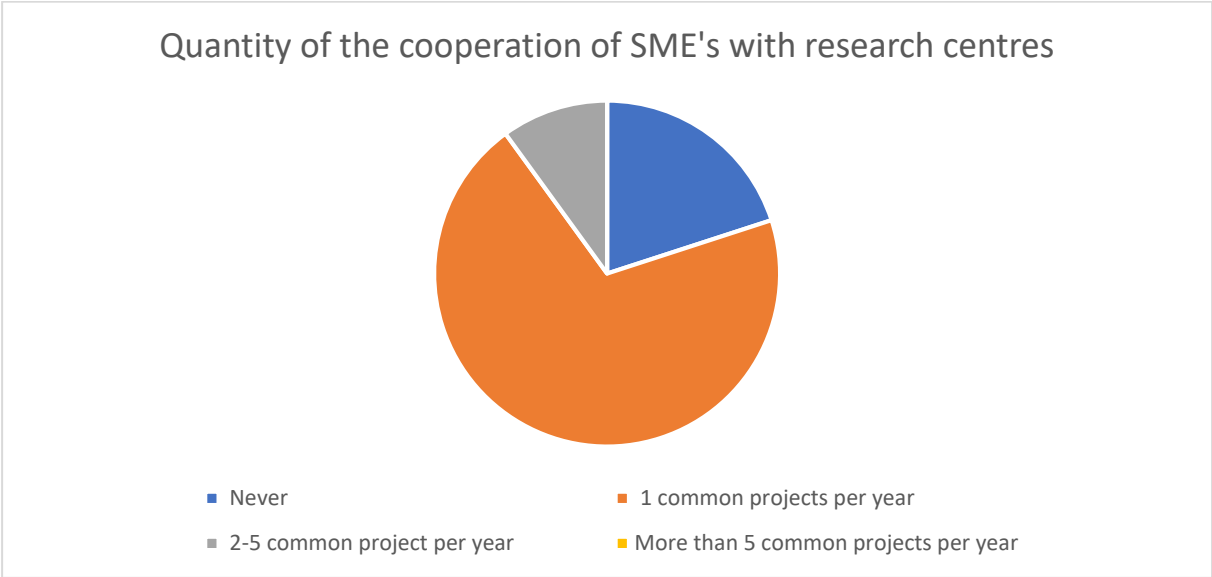
More than two third of the surveyed SMEs have just one common per research centres and a few have 2-5 common projects. No company has more than five common projects per a year with research centres. More common project would ensure the sustainable cooperation and the better exploitation of the results.

#### Development Agency of Serbia



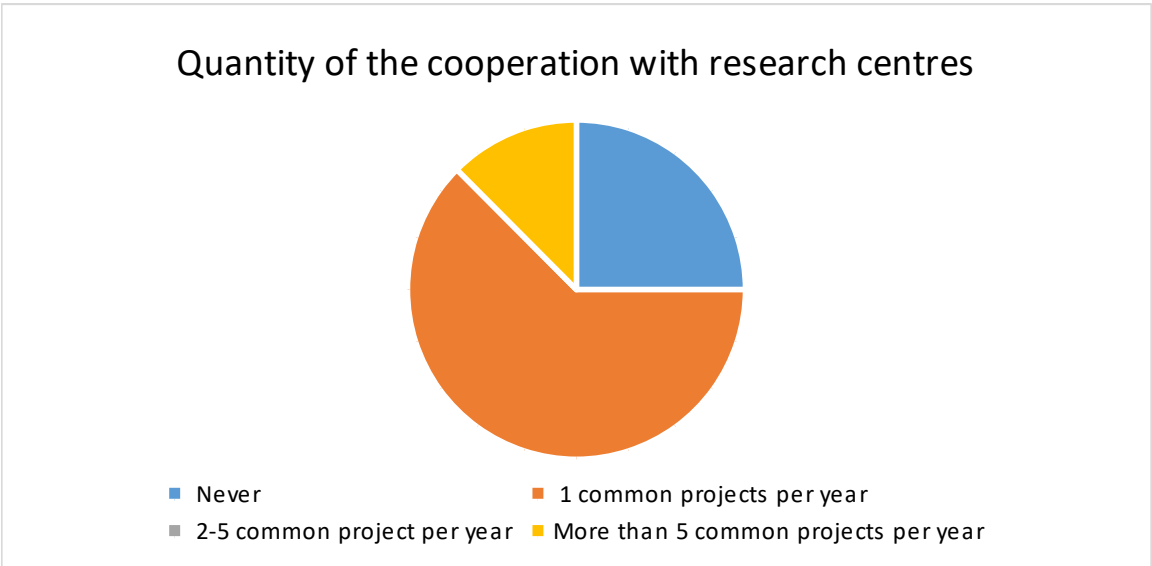
The most of our surveyed SME's (50%) don't have any projects with research centres. On the other hand 40% of them have one common project with centres per year and one SME states that they cooperate 2-5 times per year.

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Most of the interviewed companies told that they have one common project per year (six out of ten). One out of ten company said that he has 2-5 common project per year and two out of ten answered that they have no common project at all. None of the partners answered that they have more than 5 common projects per year.

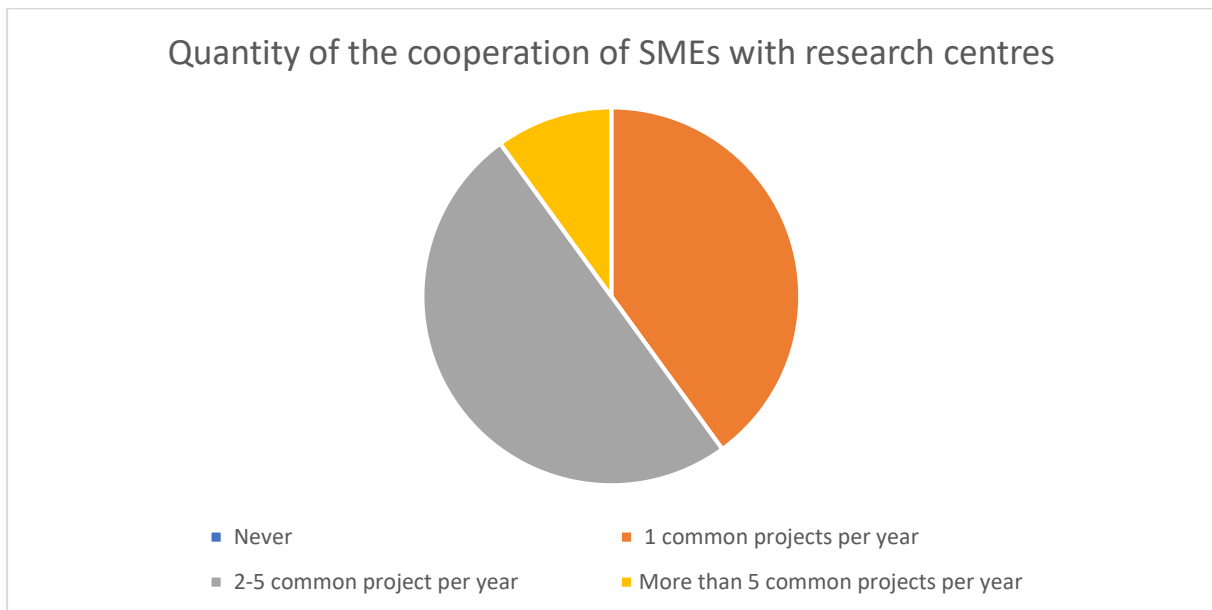
**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



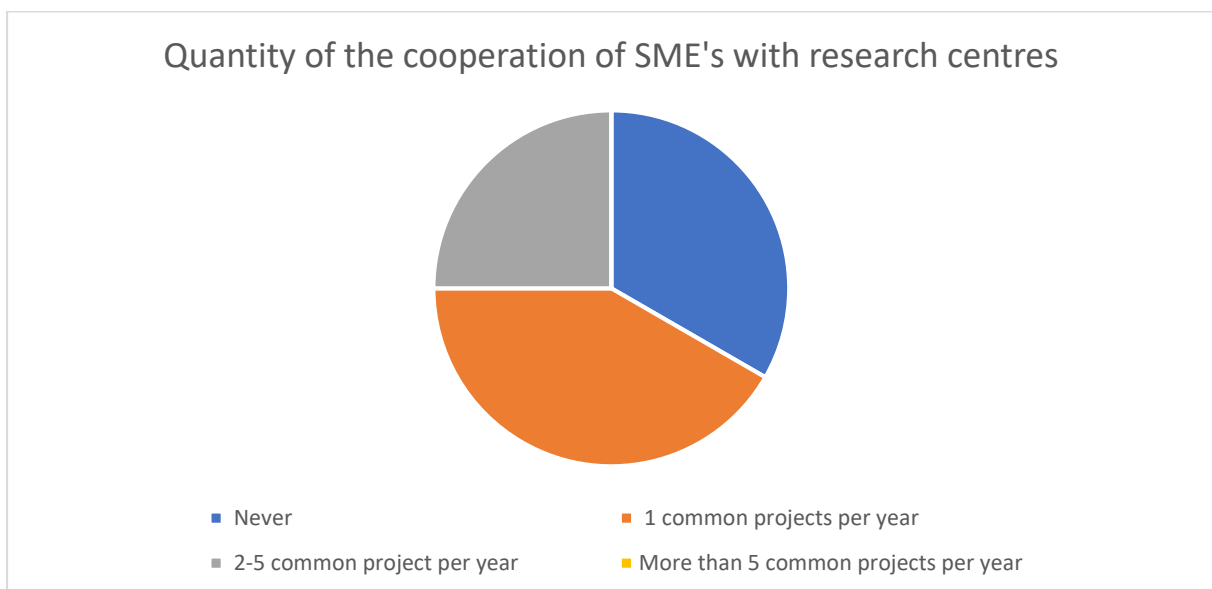
Only one SME has over 5 common projects per year. Most respondents (5) have one common project per year. There are no respondents with 2 to 5 projects. 2 respondents do not have projects at all.

### 2.3 Quantity of the cooperation of SMEs with research centres

The average amount of common research projects is 2-5 per year. More than five could be common only for specialized SMEs related to research focus.

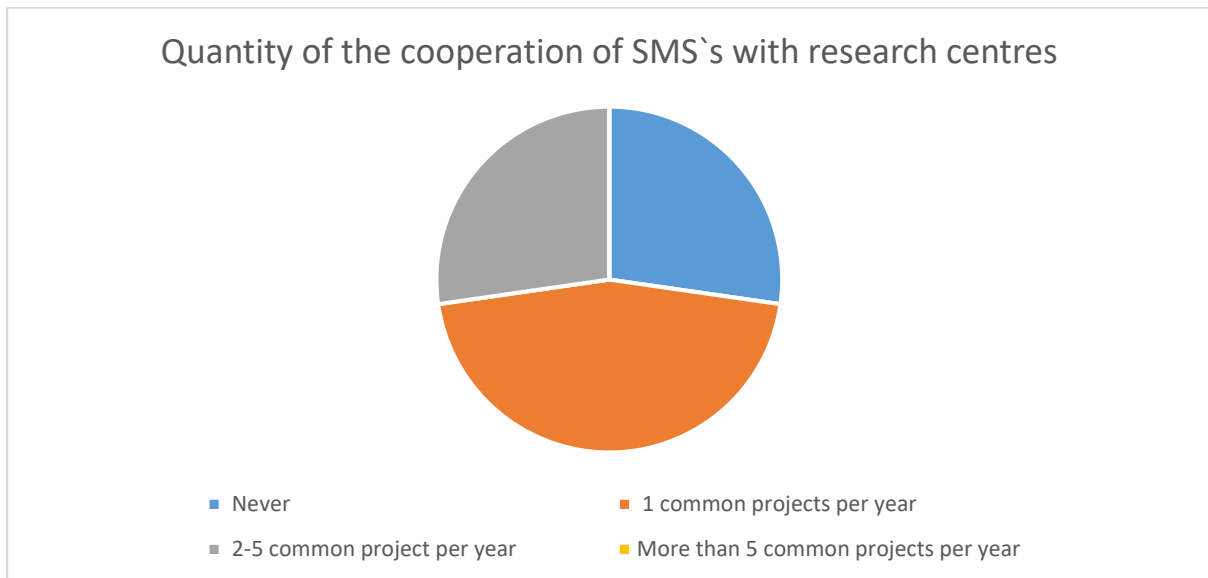


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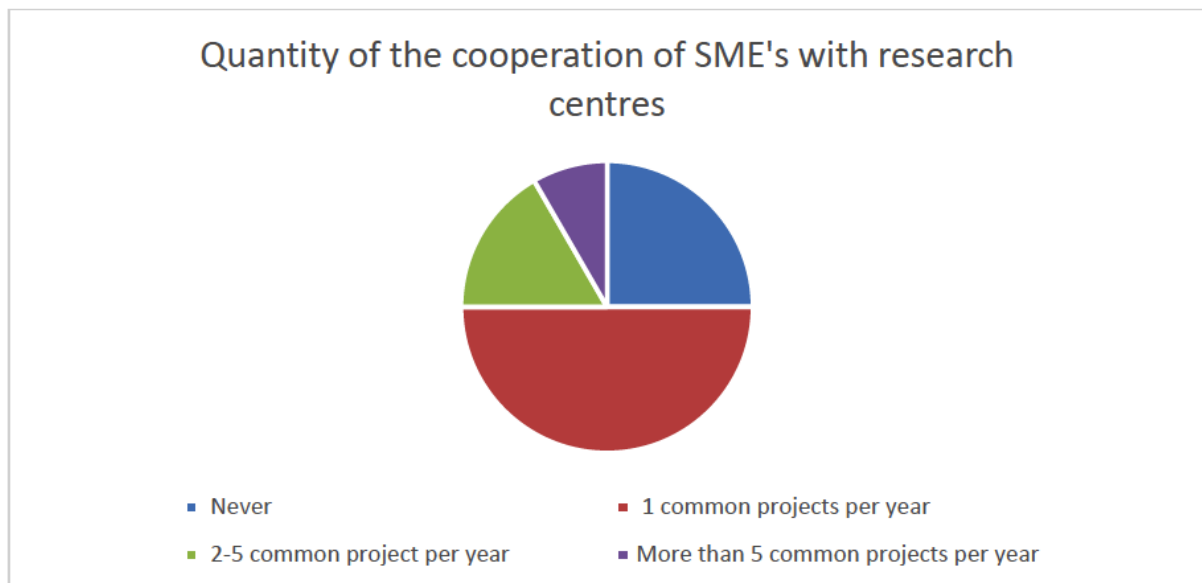
In this pie chart, you can see that 42% of companies cooperate once a year with research centres. 25% of the surveyed companies cooperate with research centres two to five times a year. About 33% never cooperate with a research centres and none of the sample enterprises cooperate more than five times a year with a research centre.

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This pie chart shows that most of our surveys (45%) have one common project with research centre per year. 27% has never cooperated, equal number as the ones that are cooperating 2-5 times per year.

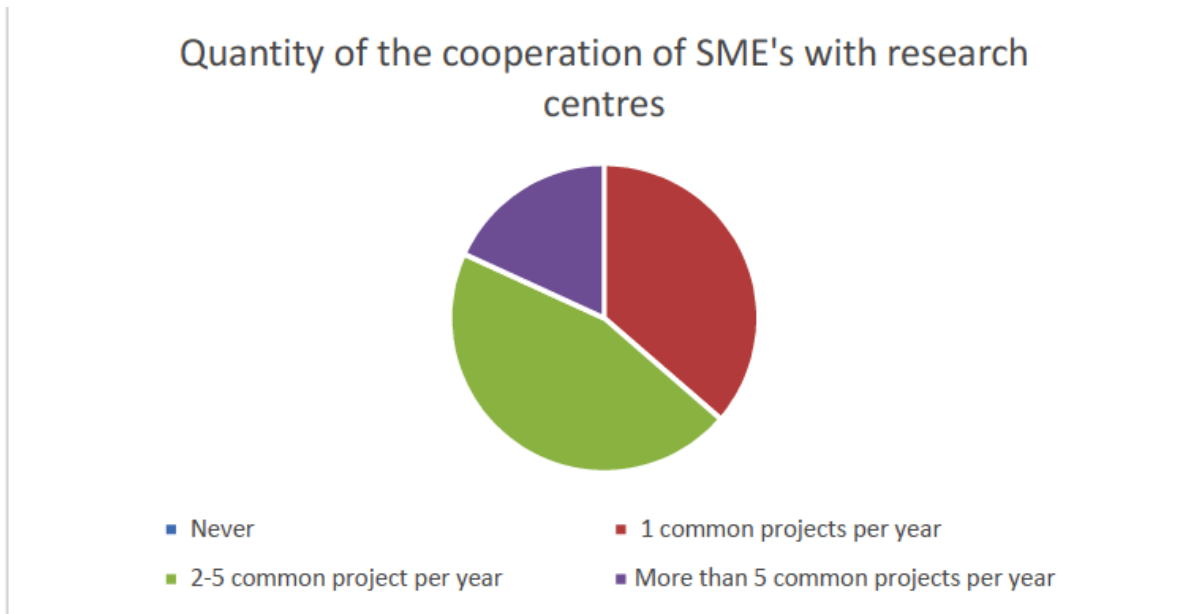
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In this pie chart, you can see that 50% of companies cooperate once a year with research centres. 25% of the surveyed companies never cooperate with research centres. About 17% cooperate with a research centres two to five times a year and 8% of companies cooperate more than five times a year with a research centre.

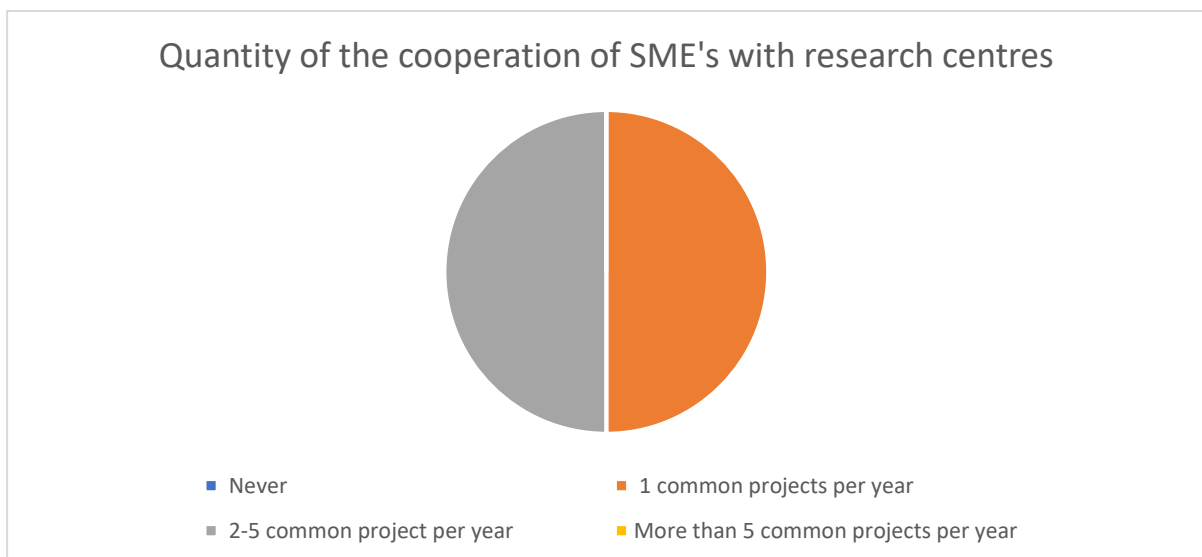


### Magurele High Tech Cluster



This graphics illustrates the level of competition for funding research projects in Romania. All companies from the panel are submitting at least once a year to a research centre for getting funds. The good news is that the strong majority is applying 2 – 5 and more projects. This means that the SMEs have the capacity to write projects and to closely work with the national scientific research institutes.

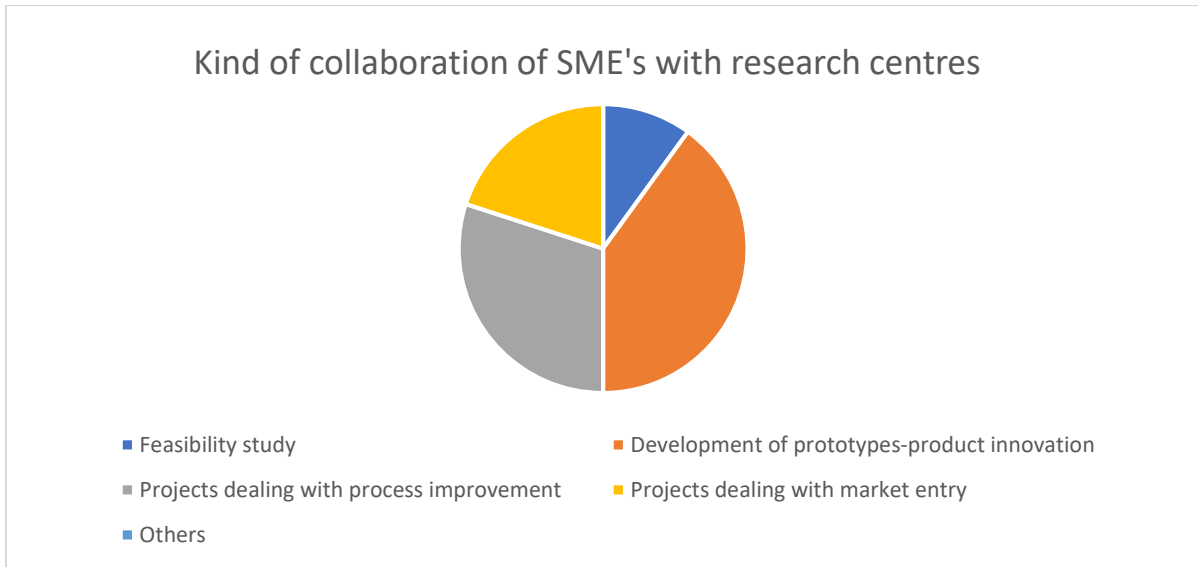
### 2.3 Quantity of the cooperation of intermediaries with research centres



In this pie chart, you can see that 50% of companies cooperate once a year with research centres. 50% of the surveyed companies cooperate with research centres two to five times a year. None of the sample enterprises cooperate never or more than five times a year with a research centre.

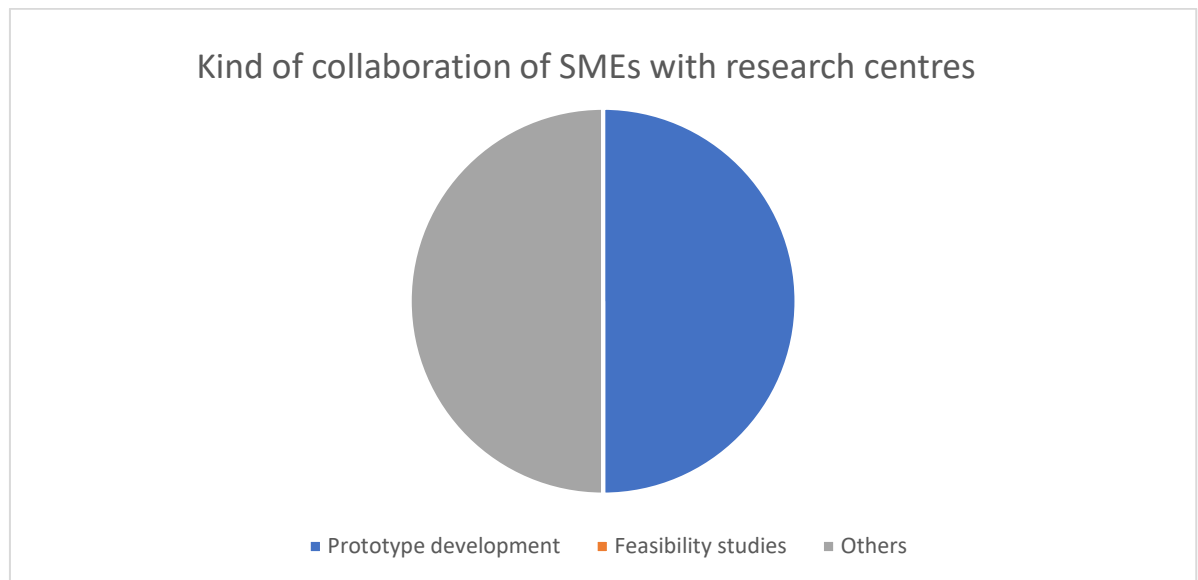
#### 7.2.4 Kind of collaboration of SME's with research centres

##### **ELI-HU Nonprofit Ltd.**



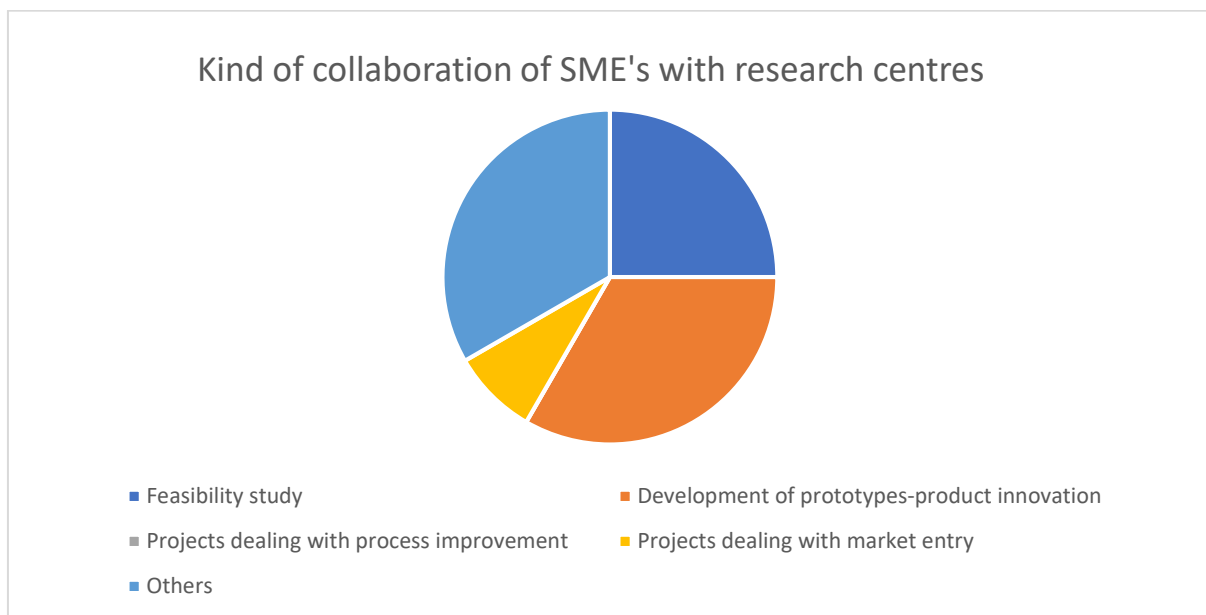
The SMEs mostly collaborate with research centres in the field of product innovation. Process improvement and projects dealing with market entry share half of the total cooperations. This means that the surveyed SMEs need business services from research centres more than collaborating in development. Feasibility studies also appear in the needed services, but just in a small number.

##### **Development Agency of Serbia**



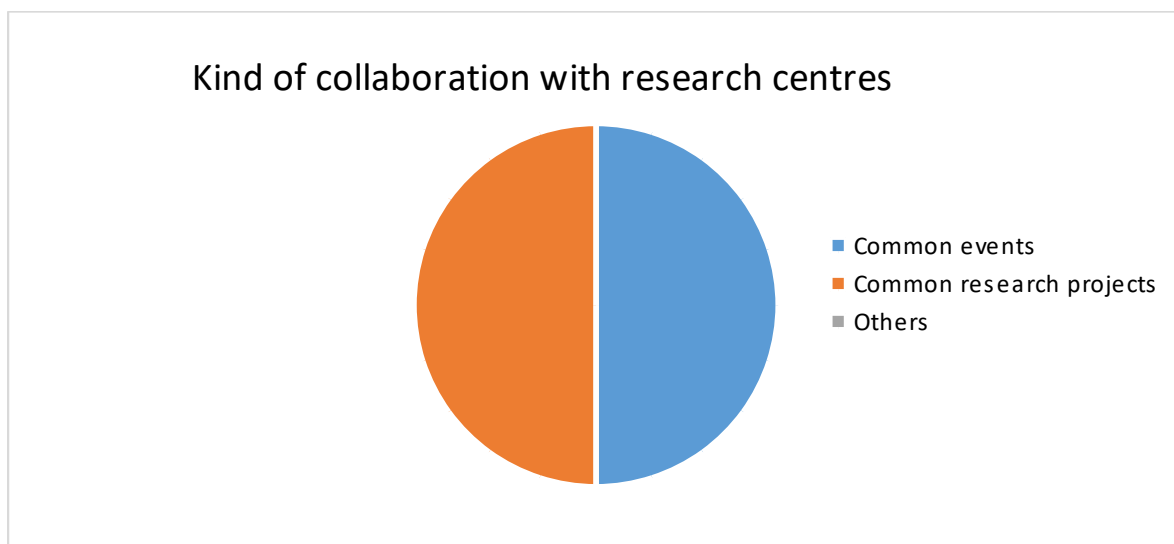
Out of 6 SMEs that answered this question- exactly half of them cooperated with research centre on Prototype development and the other half worked on other activities

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This part chart indicates the kind of common activities of SME's with research centres. Four SMEs out of ten commonly takes part in other activities that are not mentioned in the questionnaire. The most common work's aim is development of prototypes-product innovation. The next common activity is feasibility study. The number of "projects dealing with market entry" is low. All asked SMEs have no done process improvement projects before.

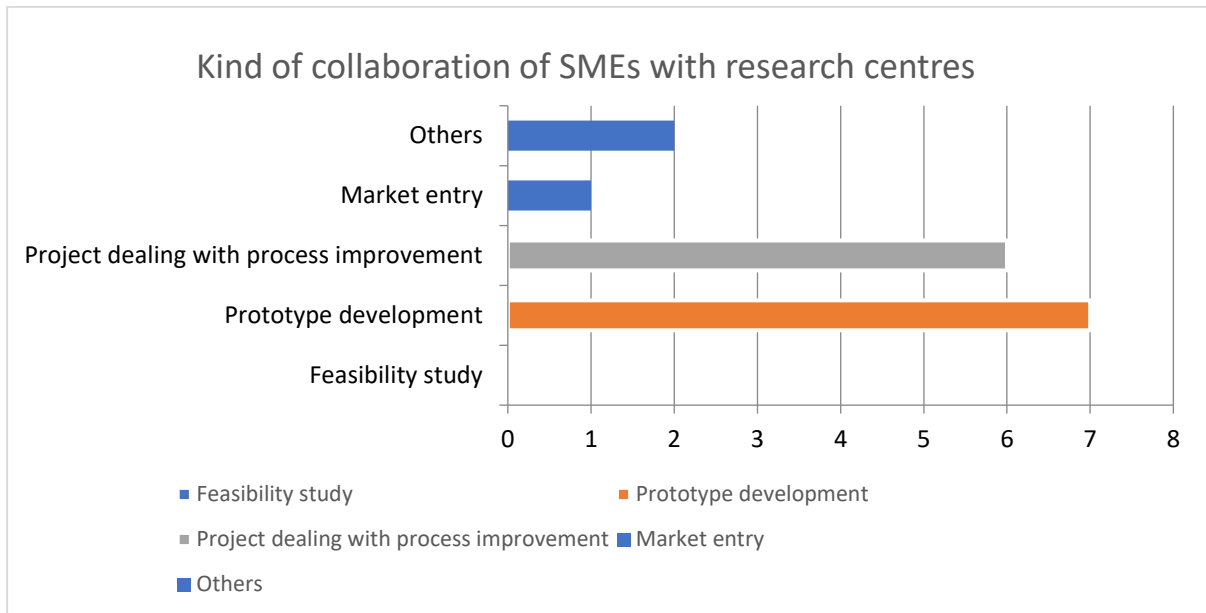
**Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering**



Analysing the responses we received it is evident that over half of the respondents have common research projects or other type of projects. We were not able to estimate the level of collaboration only by common events.

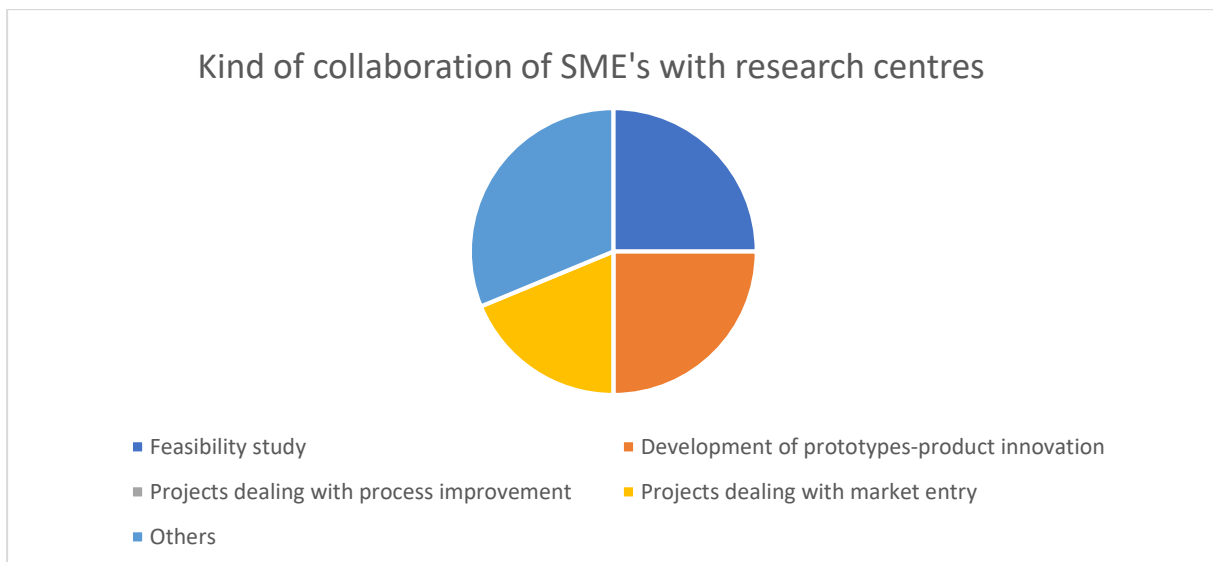
## 2.4 Kind of activities of SMEs with research centres

The highest percentage of cooperation is related to the production and its optimization – process and product innovation, prototype testing. There is also a factor that not so many research org. could help in market entry. On the other side, there is a future potential, because feasibility studies partly should be provided by technical expert from research and in our survey there are no one.



Others: marketing and market research services – contract research for research organisations; forestry, nature protection: management plan, strategies, evaluation

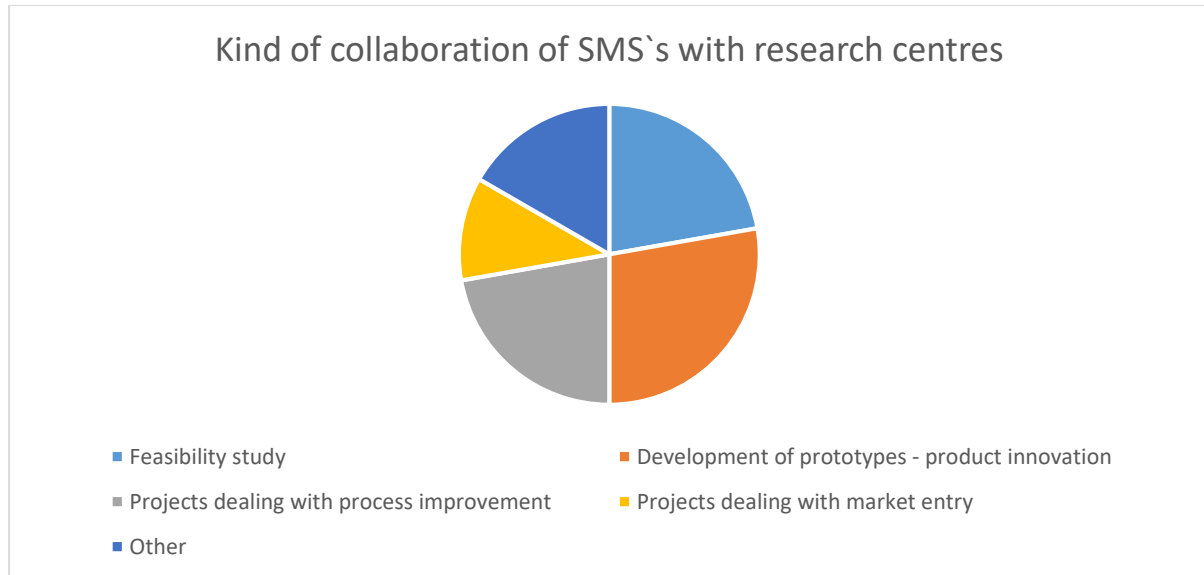
## FH JOANNEUM GESELLSCHAFT M.B.H



There are four parts in this pie chart. The dark blue part shows the feasibility studies, the red one deals with the development of prototypes-production innovation, the violet part shows the projects dealing with market entries and the light blue part shows all other kinds of collaboration of SME's with research centres. The largest share is 31% and shows other kinds of collaborations.

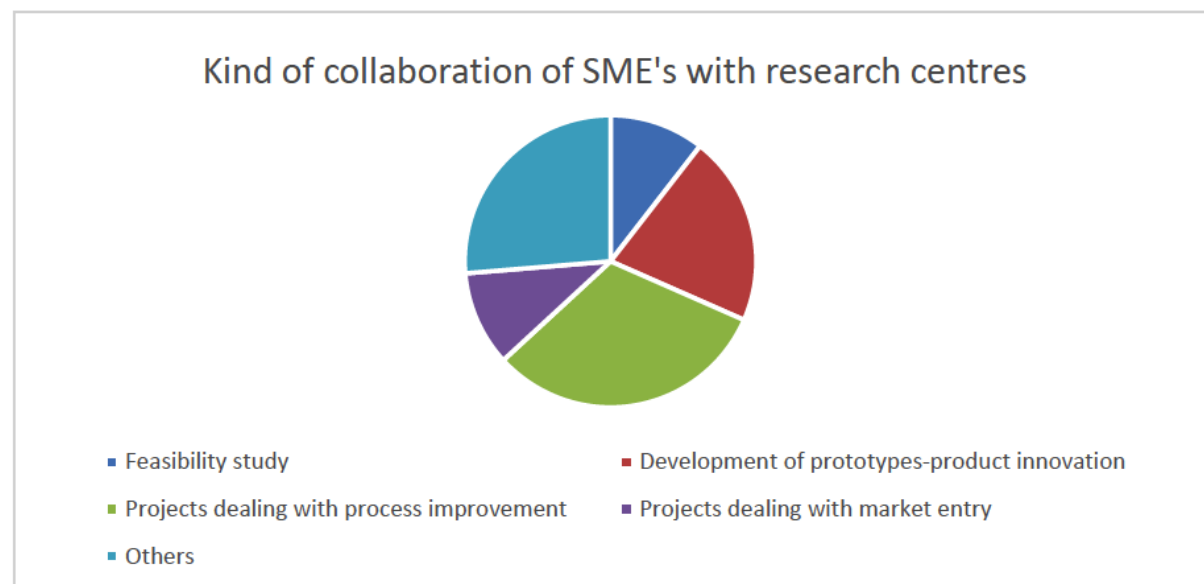
Development of prototypes-product innovation and feasibility studies held a share of 25%. 19% deal with projects dealing with market entries.

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This pie chart shows that SME's have need for research centres in these fields of work: Feasibility study – 22%, Development of prototypes- product innovation – 28%, Projects dealing with process improvement – 22%, Projects dealing with market entry – 11%, Others – 17%.

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There are 5 parts in this pie chart. The dark blue part shows the feasibility studies, the red one deals with the development of prototypes-production innovation, the violet part shows the projects dealing with market entries, green dealing with process improvements and the light blue part shows all other kinds of collaboration of SME's with research centers. The largest share is 32% and shows

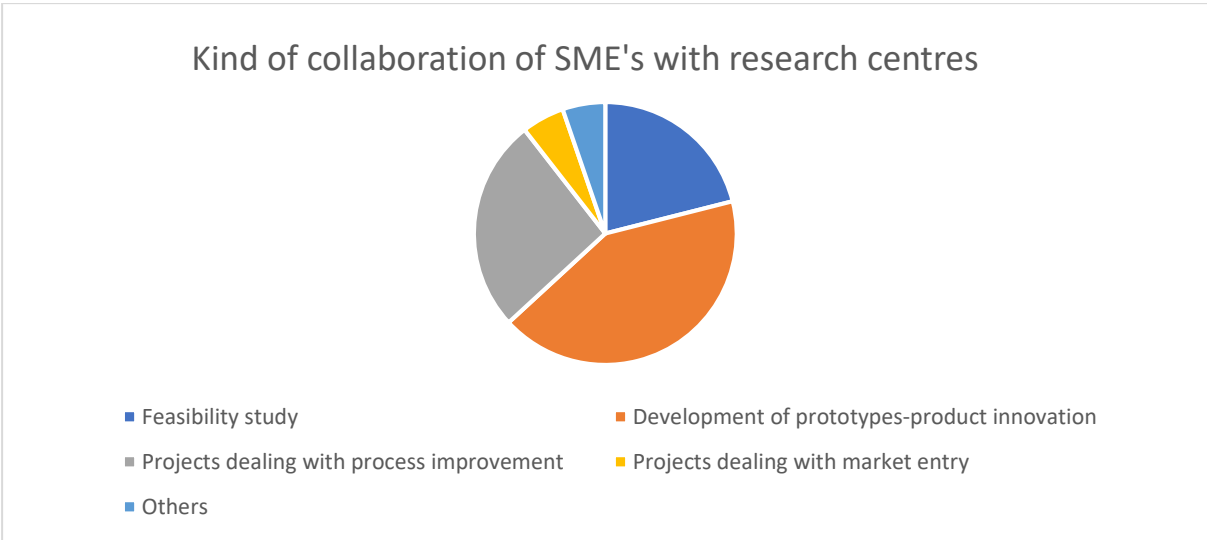
collaborations in field of process implementation. 26% shows other kinds of collaboration. Development of prototypes-product innovation shows 21% share. Feasibility studies and projects dealing with market entries held a share of 11%.

**Magurele High Tech Cluster**



The result of the answers to this question is encouraging for the potential technology transfer process in the future. Process improvement is very close to technology transfer and is a proof that the companies are looking to find in national research institutes partners to strengthen their production capability. The second option is represented by getting prototypes for the cooperation with the national research institutes and the third is market entry. This sequence of three strategic options is demonstrating that the companies know why they want to cooperate with the research centres: to increase the competitiveness in the market.

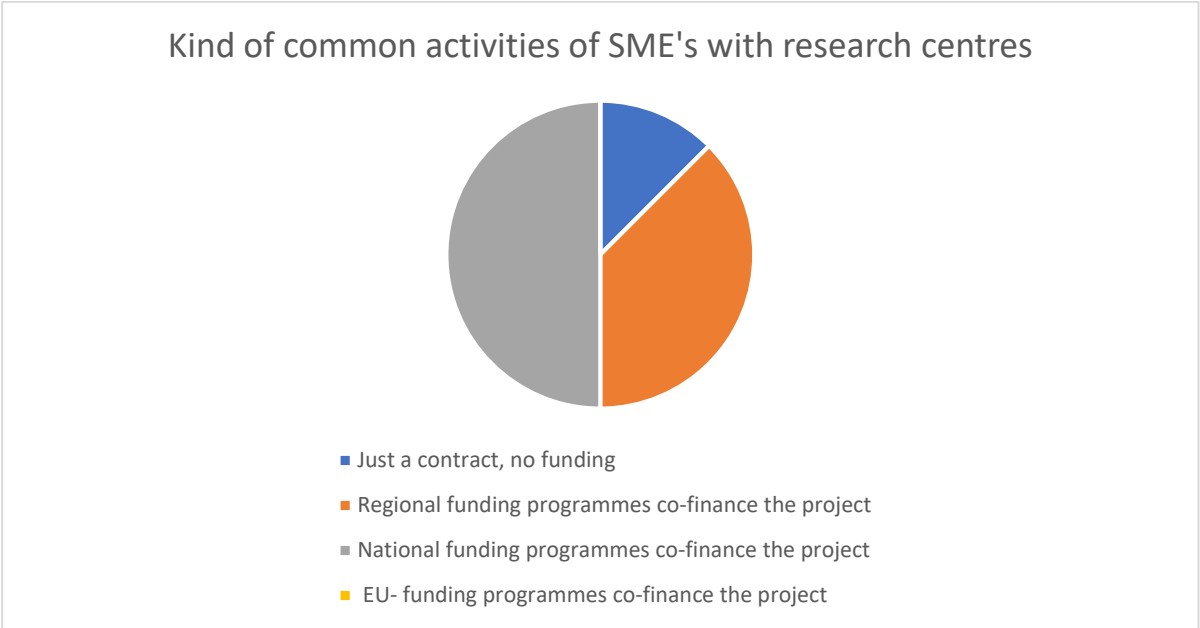
**2.4 Kind of collaboration of intermediaries with research centres**



There are four parts in this pie chart. The dark blue part shows the feasibility studies, the red one deals with the development of prototypes-production innovation, the violet part shows the projects dealing with market entries and the light blue part shows all other kinds of collaboration of SME's with research centres. The largest share is 42% and shows other kinds of collaborations. Development of prototypes-product innovation and feasibility studies held a share of 21%, 26% deal with projects dealing with process improvement. 5% deal with projects dealing with market entry and 5% with others.

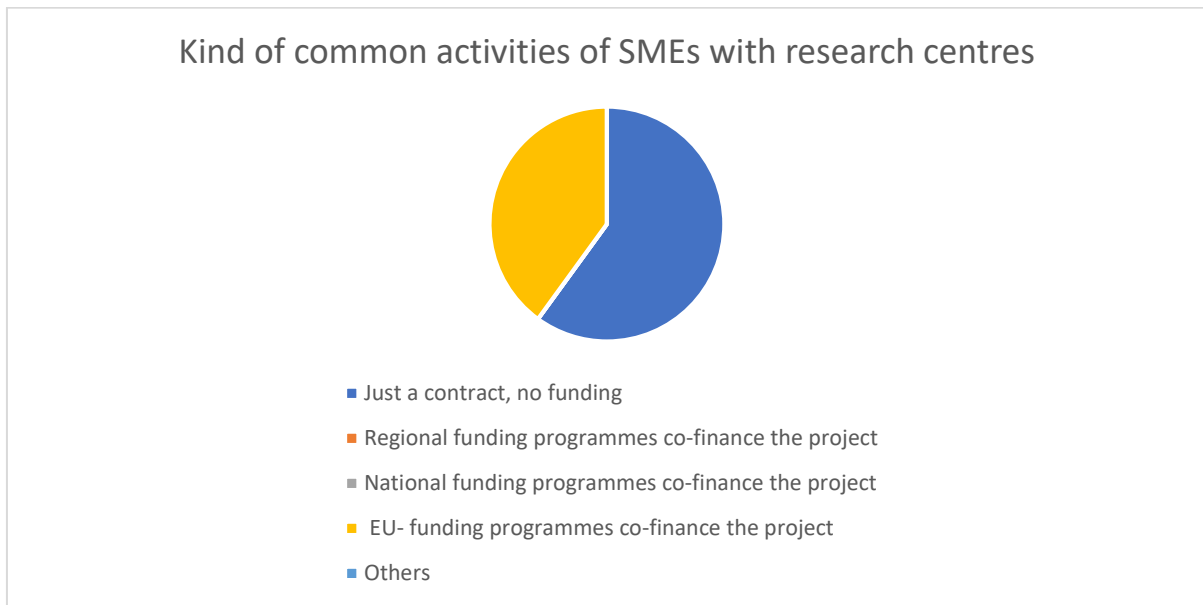
**7.2.5 Kind of common activities of SME's with the research centres**

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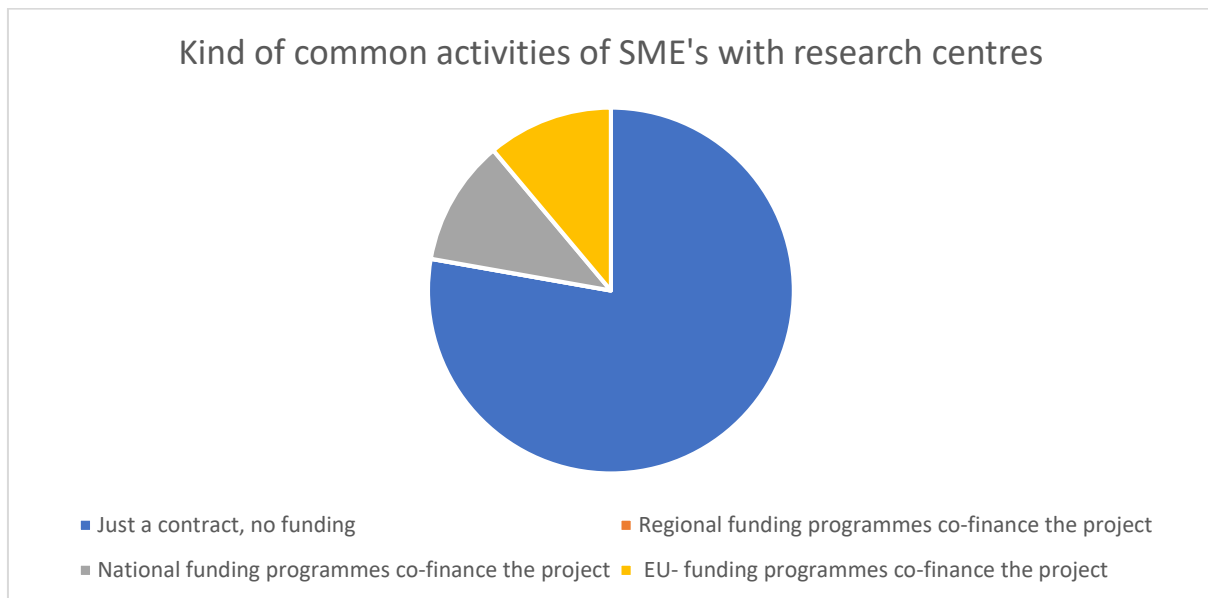
The collaborations are based on national or regional (this probably means the regional operative programmes in the programming period 2007-2013) funding programmes and market-based relationship just appeared one time among the answers. Similarly to other relevant and surveyed bodies SMEs cooperate with research centres mostly when there is some kind of funding behind the collaborations. This is not a favourable process even if we take into the consideration that SMEs should operate on a market basis.

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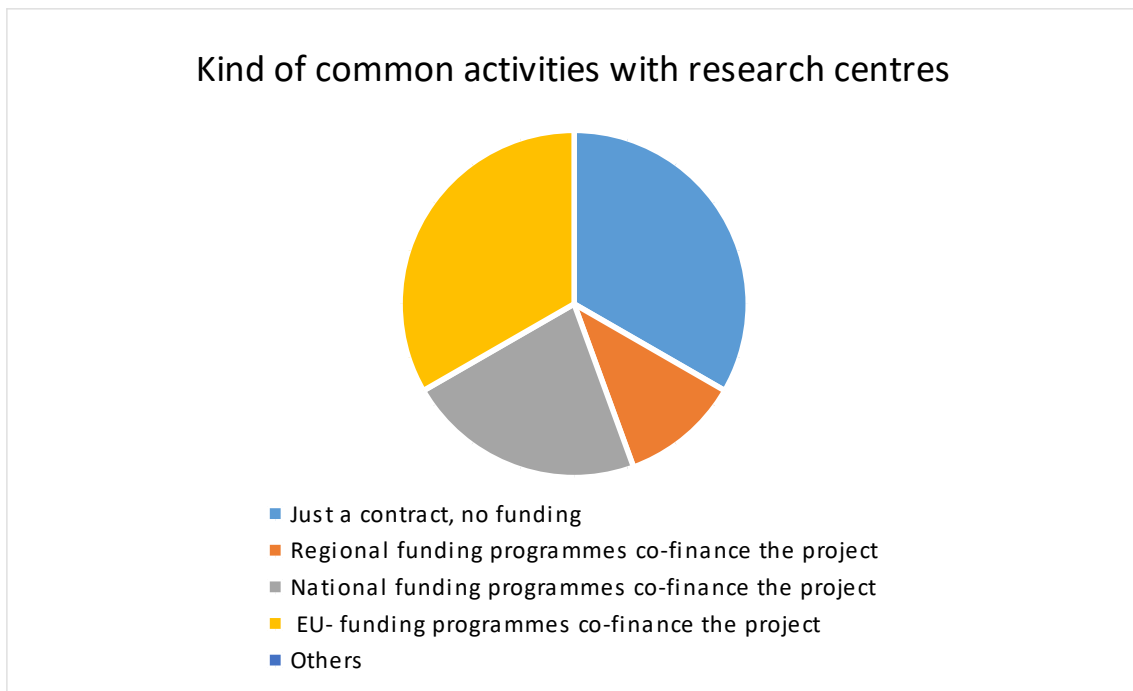
This pie chart shows how projects between SME's and research centres are financed: through a contract, without funding - 60% of them. EU- funding programmes co-financed the project for other 40% of surveyed SMEs.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The pie chart is about the kind of common activities of SME's with research centres. Our survey indicates that the most common form of funding is contracting, no other funds involved. Eight SME answered this question, what is 80% of the total sum. 20% meaning that 2 of the partners did not answer this question.

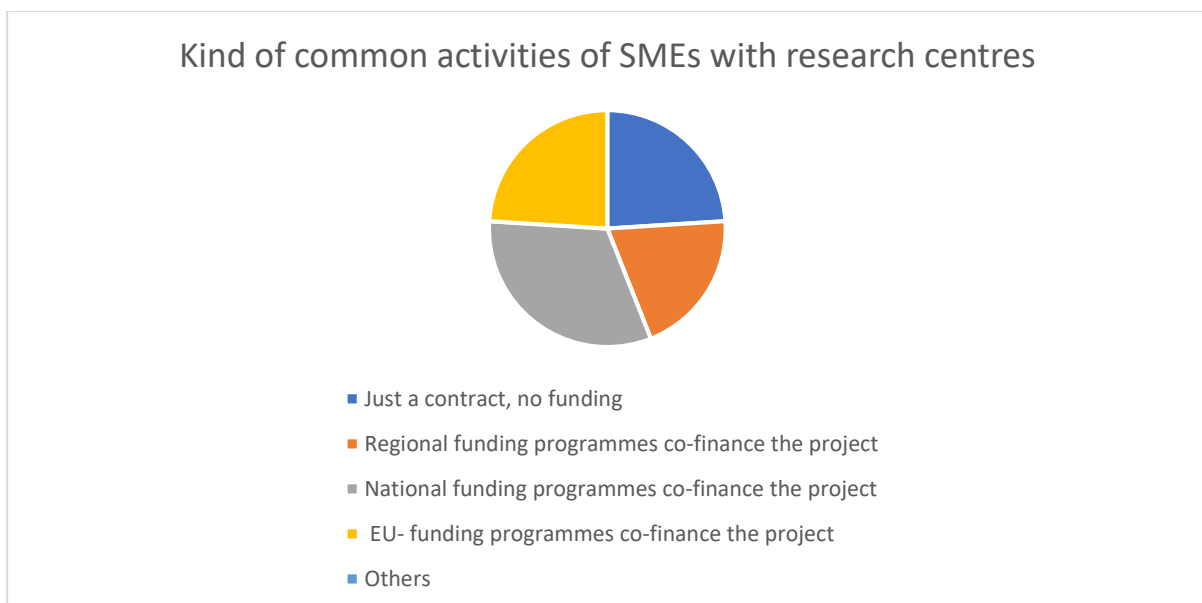


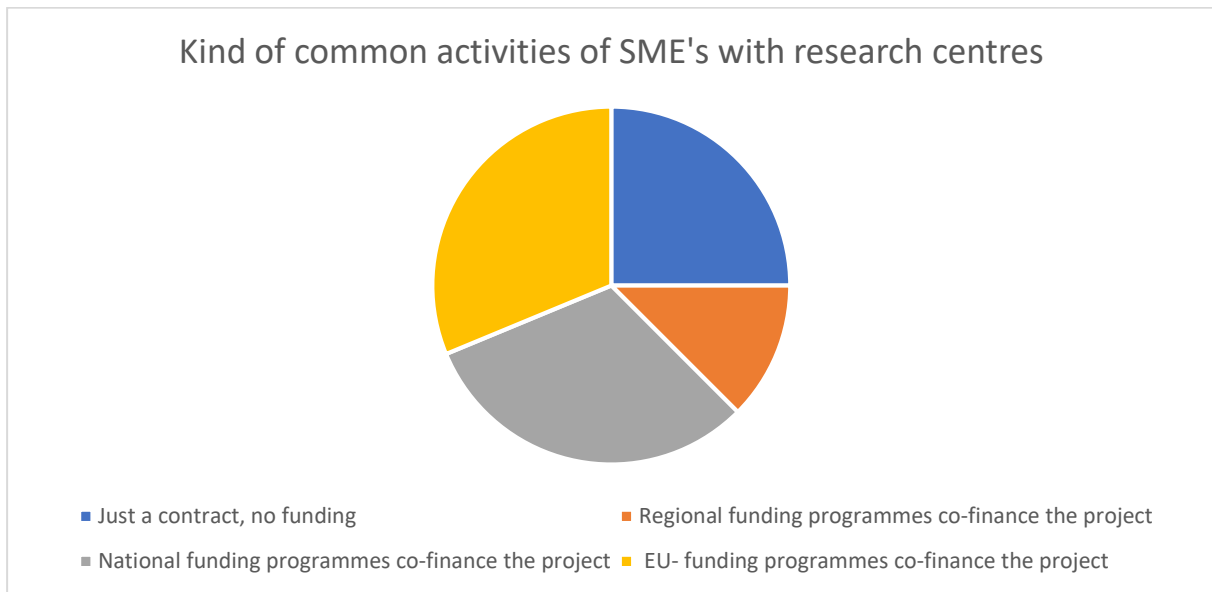


The answers show that SME funding at national level is weak (two cases). EU funding and regional funding (which means also a kind of EU funding) with 3 +1 cases is stronger. It cannot be avoided the possible explanation that the number of contracts with no funding is quite high but this could be considered also as an effect of the high number of micro companies.

**2.5. Kind of funding activities of SMEs with the research centres**

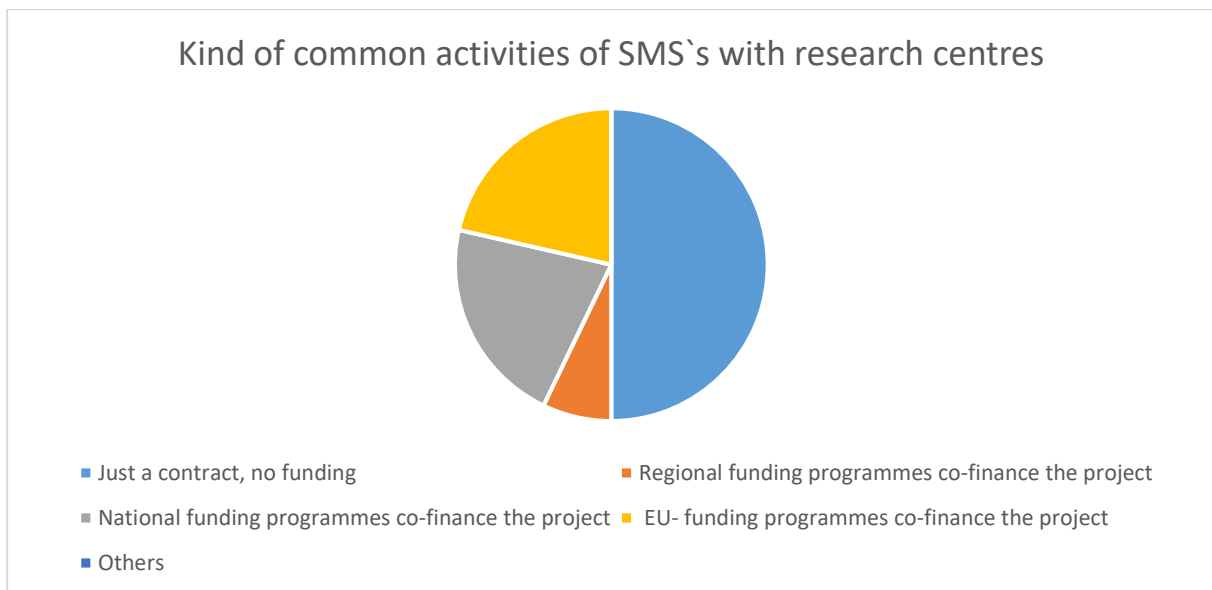
National and EU funds are the most important source of funds for SMEs. The administrative extra work is the main disadvantage for SME, for micro/small enterprises there could be difficult to get some funds because high co-financing rate.



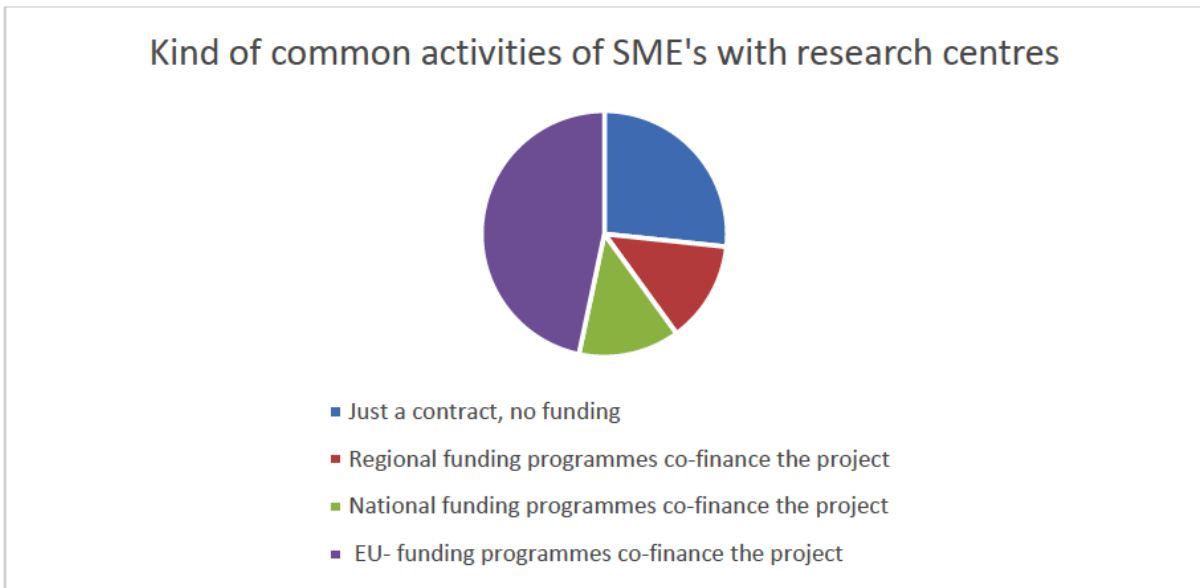


The pie chart is about the kind of common activities of SME's with research centres. National funding programs co-finances the project and EU funding programs co-finances the project own a share of 31%. Just a contract, no funding has a share of 25% and regional funding programmes co-finance the projects accounts only for 13%.

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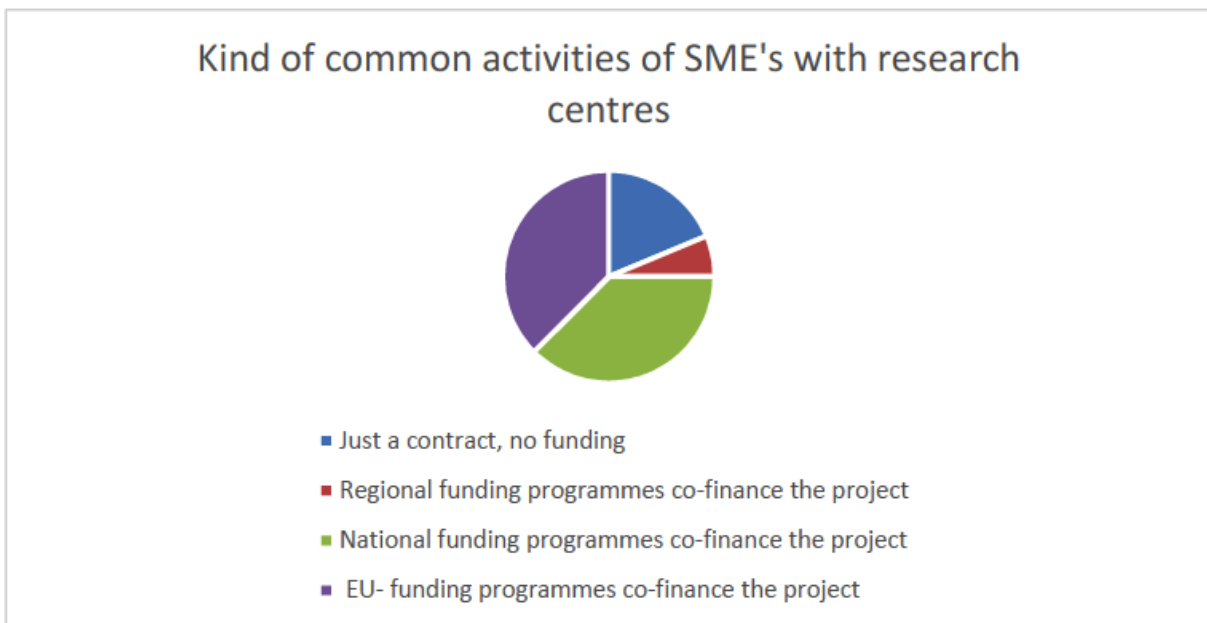


This pie chart shows how projects between SME's and research centres are financed: Juts a contract, no funding is dominating with a 50%, Regional funding programmes co-finance the project 7%, National funding programmes co-finance the project 21% and EU- funding programmes co-finance the project 21%.



The pie chart is about the kind of common activities of SME's with research centres. National funding programs co-finances the project has a share of 13%, EU funding programs co-finances the project own a share of 47%. Just a contract, no funding has a share of 27% and regional funding programmes co-finance the projects accounts only for 13%.

**Magurele High Tech Cluster**

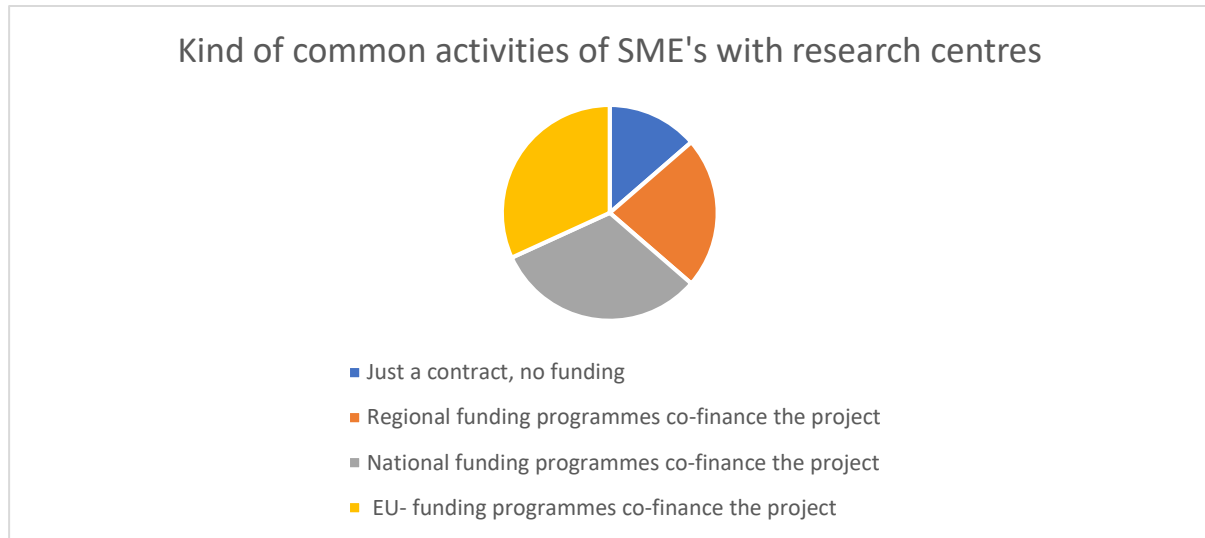


The answer to this question sustains the result to the previous question. The SMEs are interested in developing middle and long term cooperation with the research centre for developing new innovative products and services. The main potential contributors, in their vision, are, more or less, the national funds and EU funds. This is the positive conclusion. The negative observation is that the market does not offer enough private funds to develop projects and the SMEs are hardly working with the research

centres to fund their ideas. It is to appreciate that between SMEs and research centres there are commercial relations.

We have to notice that the local / regional agencies are not representing a real engine for SMEs. Even the research centres have large budgets from EU programs.

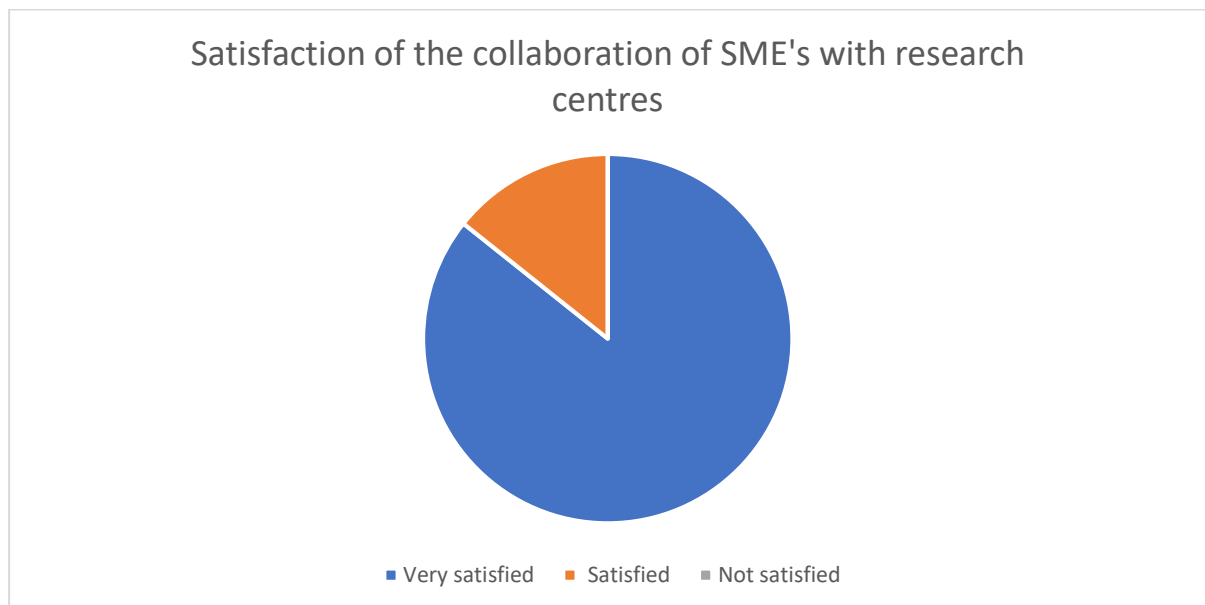
### 2.5. Kind of common activities of intermediaries with the research centres



The pie chart is about the kind of common activities of SME's with research centres. National funding programs co-finances the project and EU funding programs co-finances the project own a share of 32%. Just a contract, no funding has a share of 14% and regional funding programmes co-finance the projects accounts only for 14%.

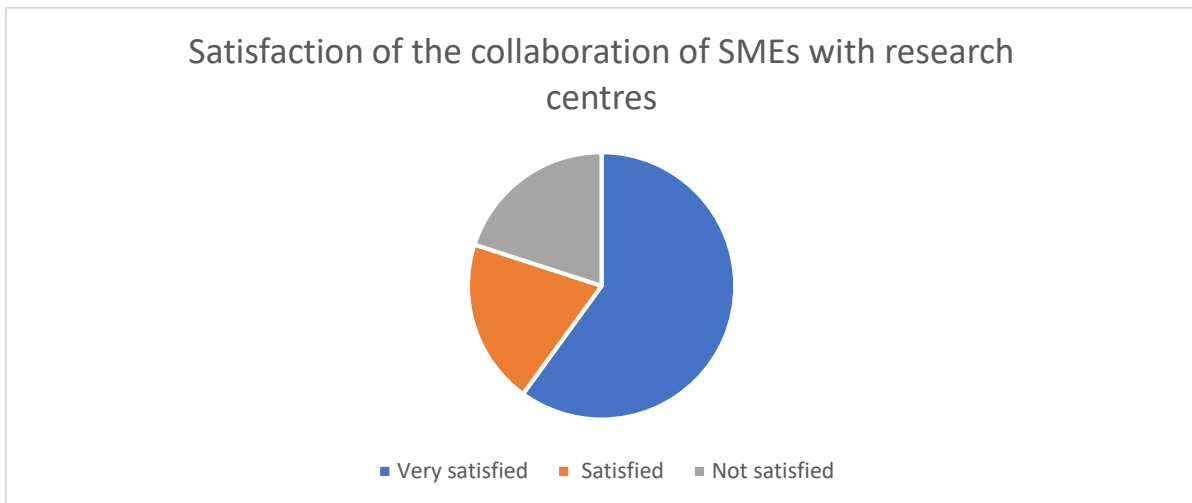
### 7.2.6 Satisfaction of the collaboration of the SME's with the research centres

**ELI-HU Nonprofit Ltd.**



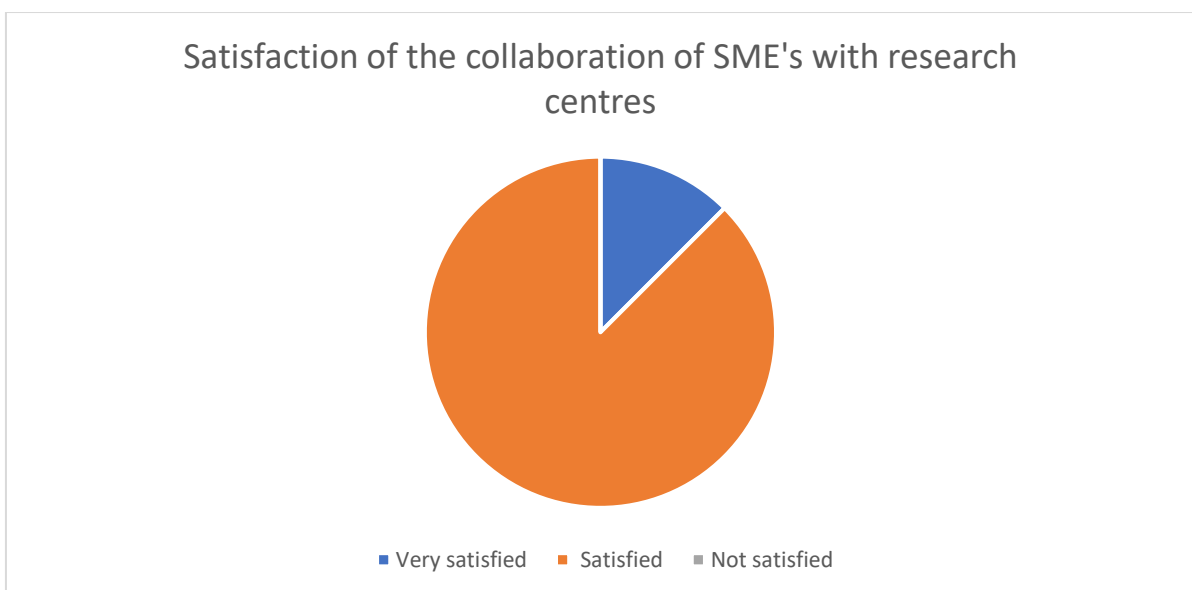
The SMEs cooperate with research centres are mostly satisfied with the cooperation. This is a good tendency regarding to the future collaborations.

**Development Agency of Serbia**



The chart gives an overview of the satisfaction of the collaboration of SME's with research centres. They are mostly very satisfied (60%), while 20% is satisfied and the same percentage is not so happy with the cooperation they experienced.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



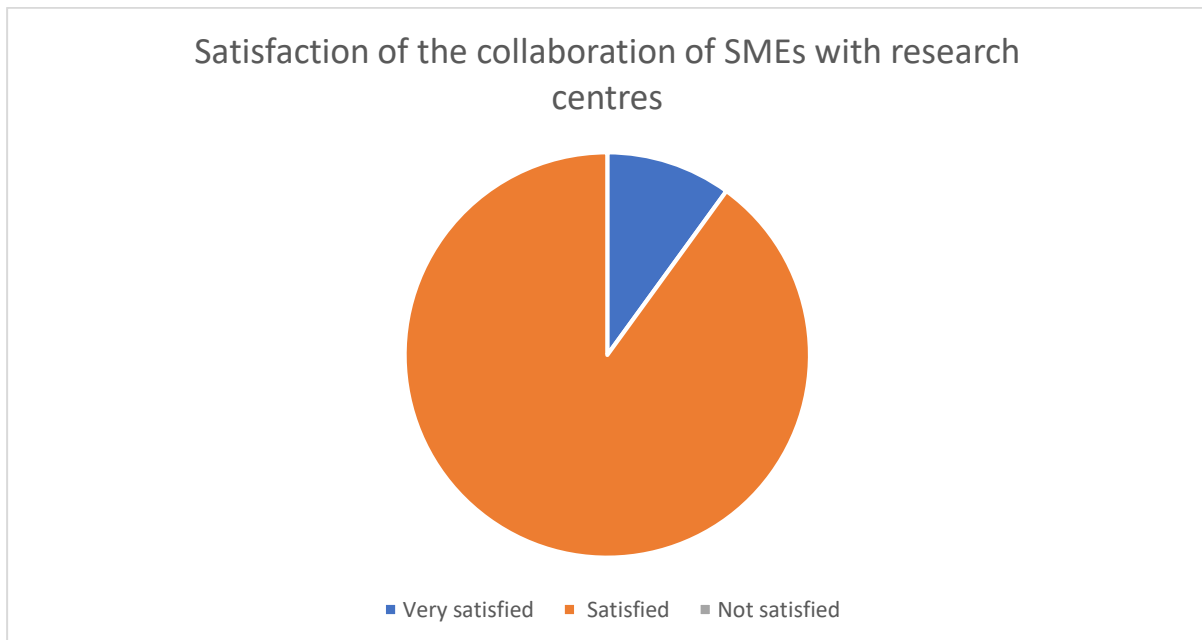
This pie chart shows that most of the partners who were asked during the interview is/was satisfied with the research centres, which is a good tendency. One out of ten SME was very satisfied with the cooperation. Fortunately, we did not receive an answer "not satisfied" which tells that all of the cooperation among the partners were great. We hope to hear about this kind of cooperation in the future.

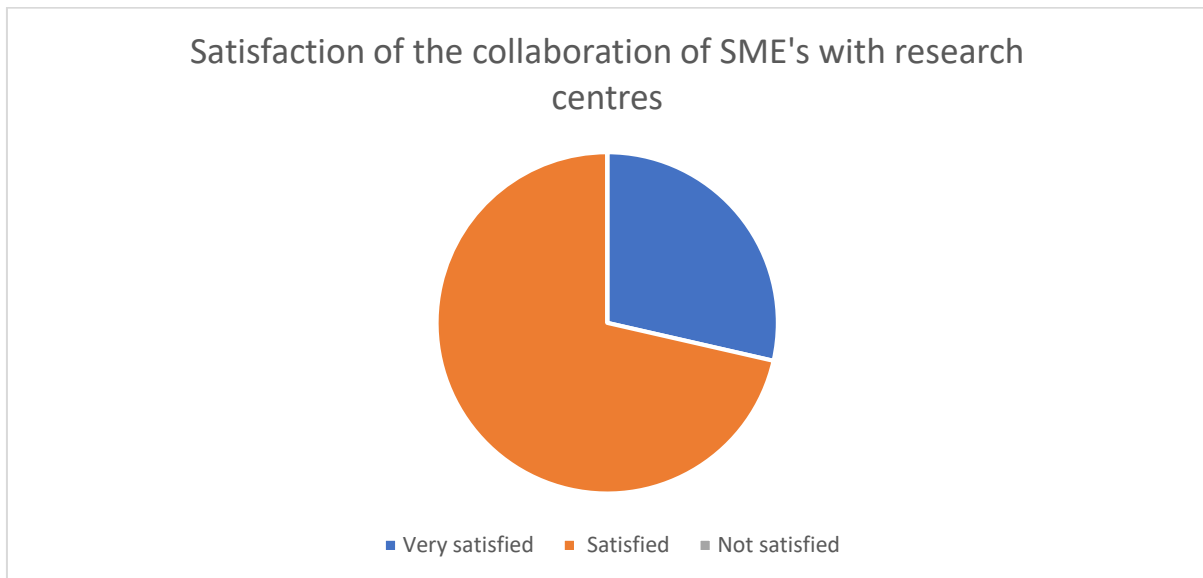


4 respondents are very satisfied or satisfied . 3 are not satisfied and other 3 choose not to answer. That could lead to the conclusion that the level of not satisfaction is much higher. This is a understandable position especially when most companies are at the beginning of their collaboration attempts.

**2.6. Satisfaction of the collaboration of the SMEs with the research centres**

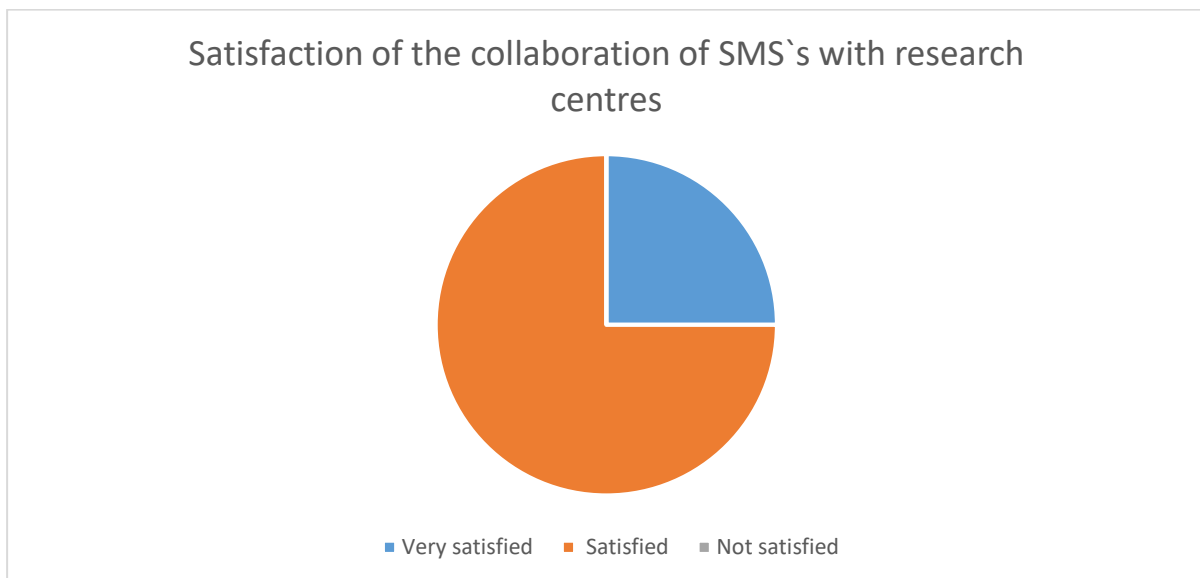
Generally, yes SMEs are satisfied, we asked dominantly SMEs which cooperate with research so they are supposed to be at least satisfied.



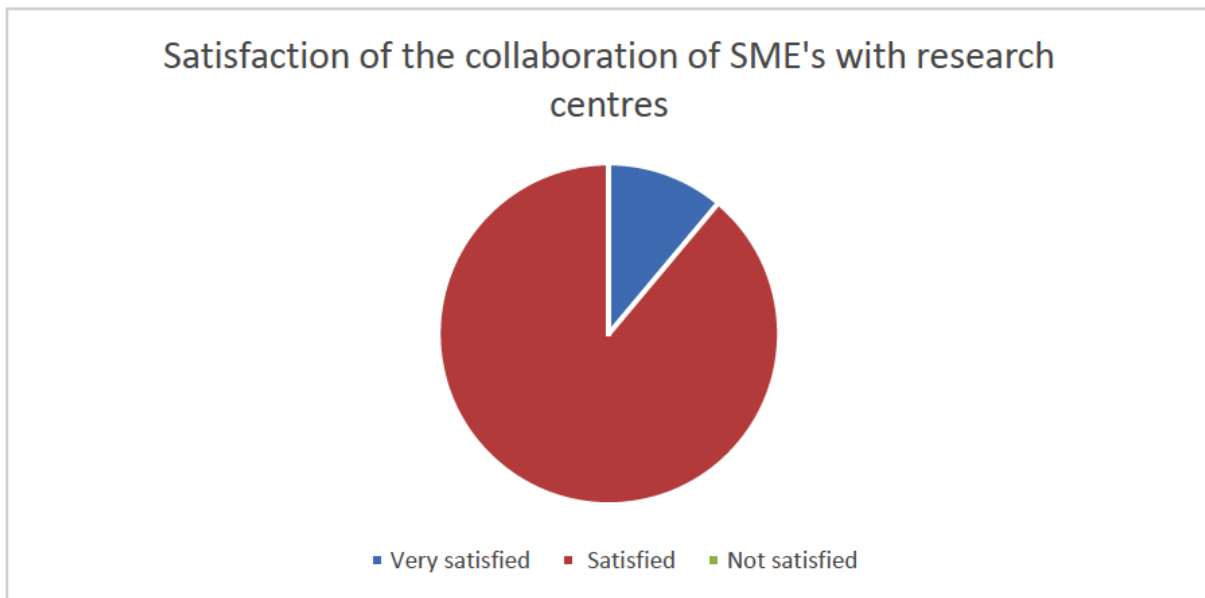


The chart gives an overview of the satisfaction of the collaboration of SME'S with research centres. More than a half are satisfied. Two of seven companies that cooperate with research centres are very satisfied and no one is not satisfied.

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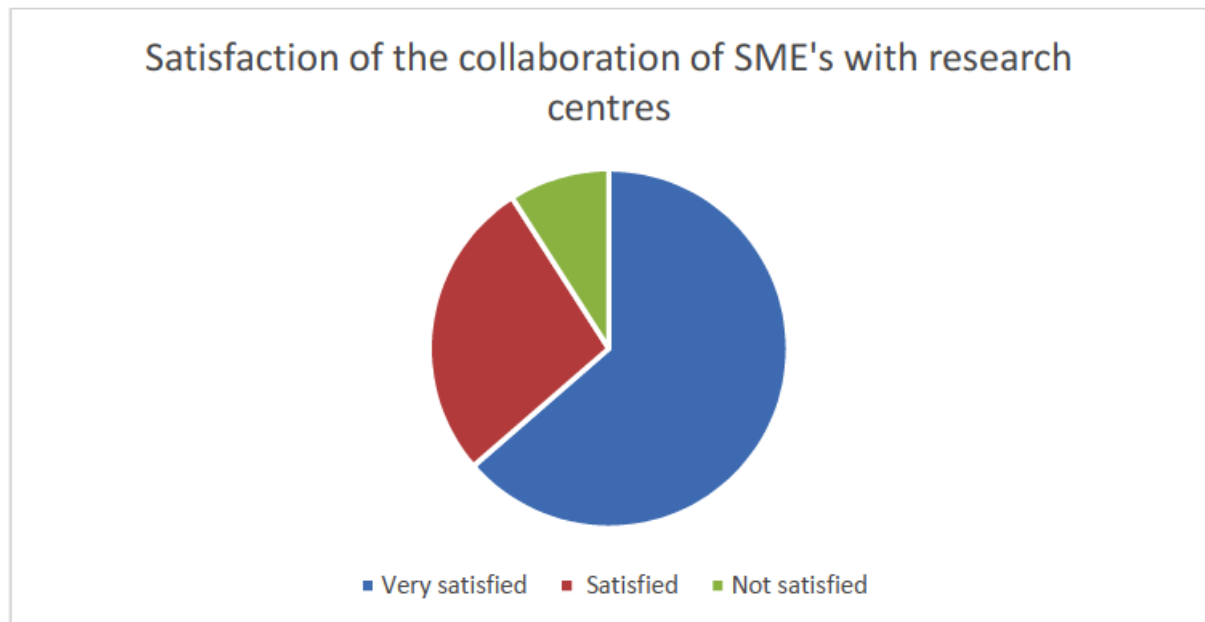


The chart gives an overview of the satisfaction of the collaboration of SME's with research centres. They are mostly satisfied (75%), while only 25% are very satisfied.



The chart gives an overview of the satisfaction of the collaboration of SME'S with research centres. Majority (89%) are satisfied. 11% of companies that cooperate with research centres are very satisfied and no one is not satisfied.

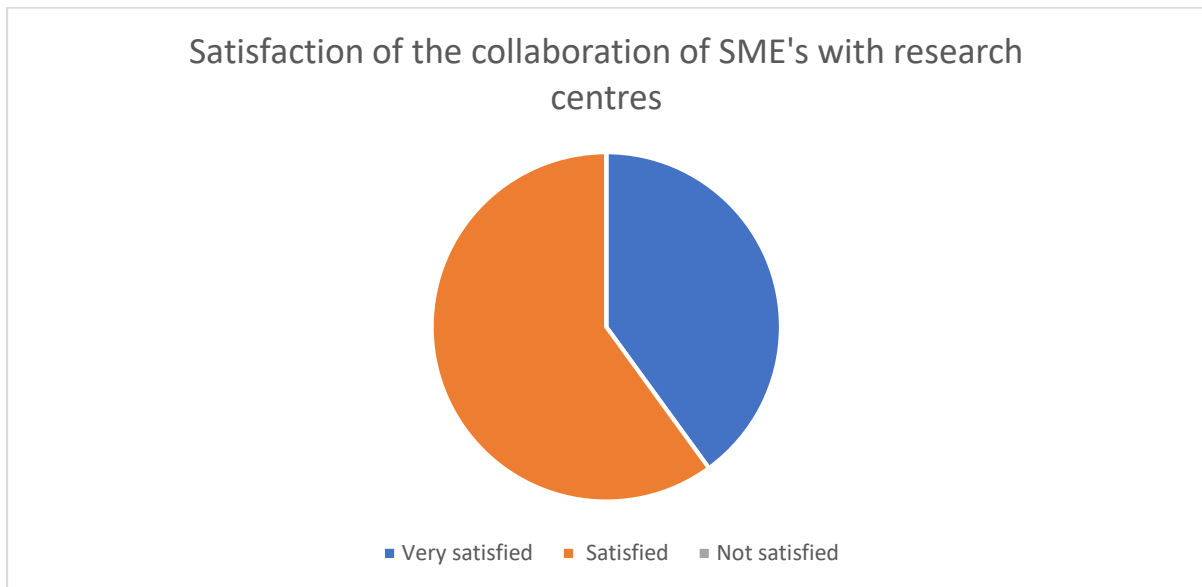
**Magurele High Tech Cluster**



The strong majority of the SMEs are very satisfied and satisfied by the cooperation with the research centres. This could mean that a rate of 25 – 40 % of success stories from the applied projects is a good one and the relationship with the research centres is a stimulating one. The companies with no satisfactions are divided in two categories: a) they did not get funds for the projects; b) the managers of the SMEs did not know exactly what to expect from the research centres and they did not know what to ask for cooperation.



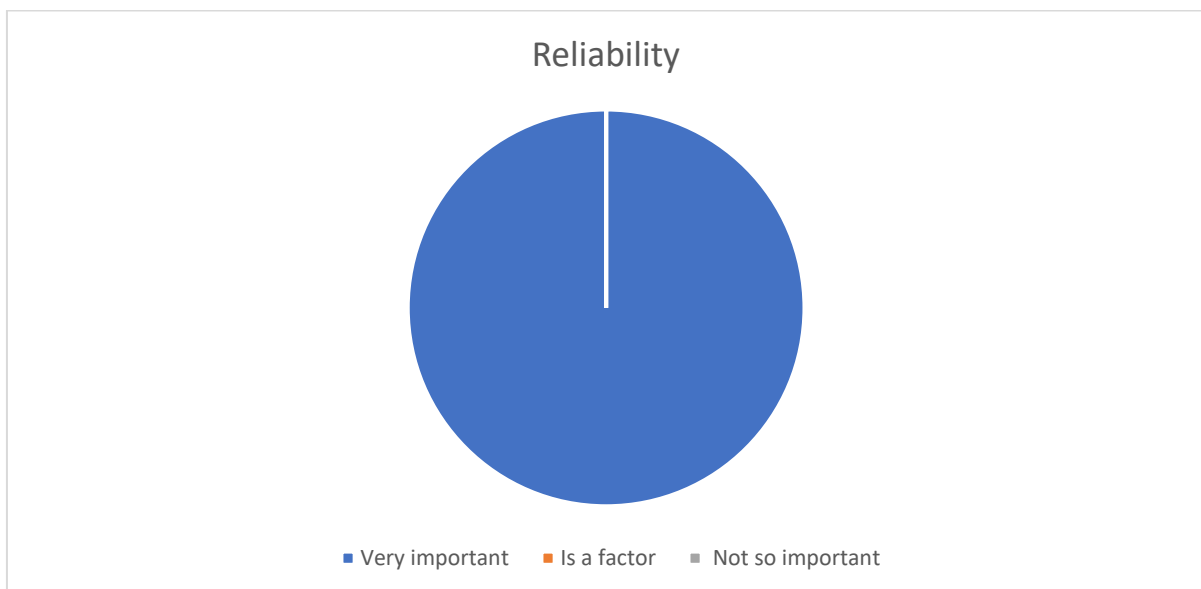
## 2.6. Satisfaction of the collaboration of the intermediaries with the research centres

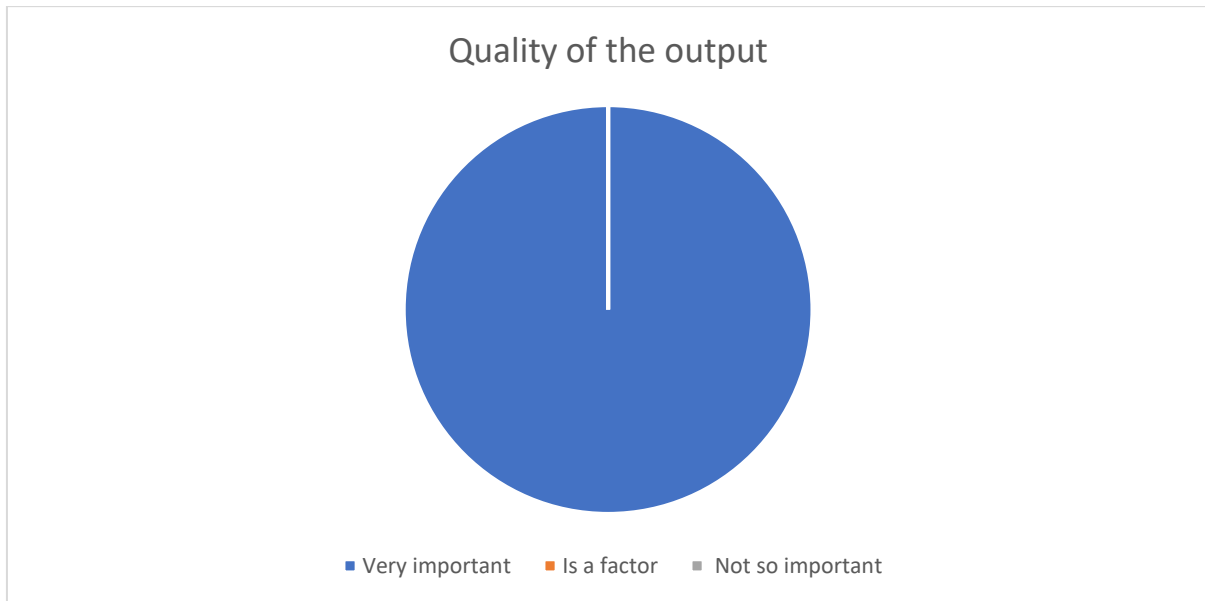


The chart gives an overview of the satisfaction of the collaboration of SME'S with research centres. More than a half are satisfied. Four of seven companies that cooperate with research centres are very satisfied and no one is not satisfied.

## 7.2.7 Important points of a collaboration of SME'S with a research centres

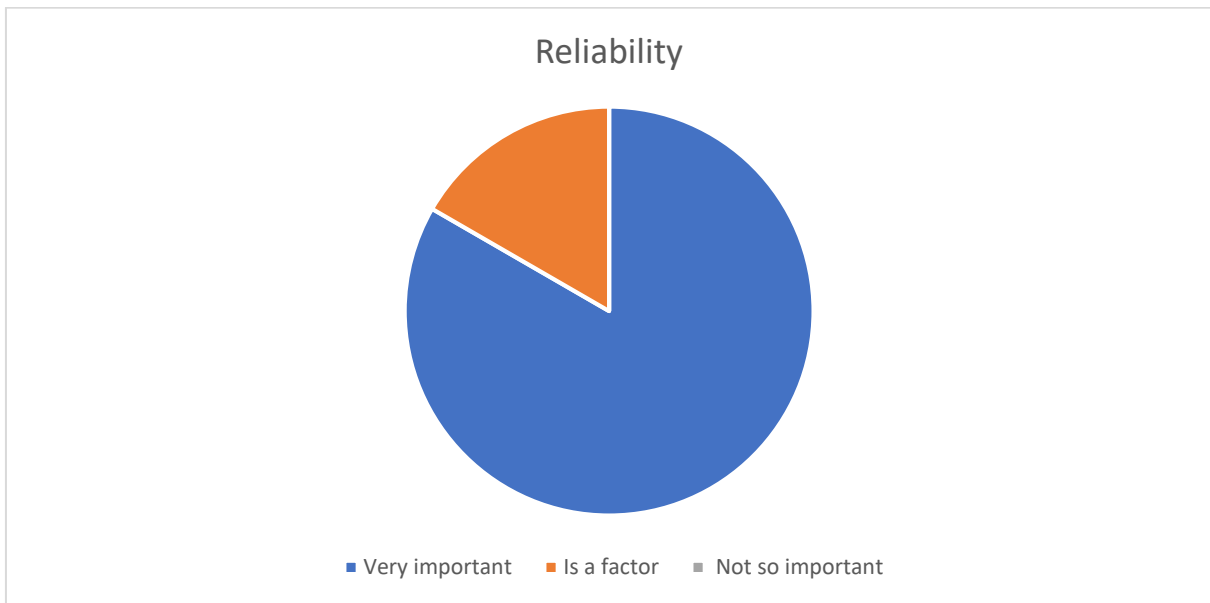
**ELI-HU Nonprofit Ltd.**



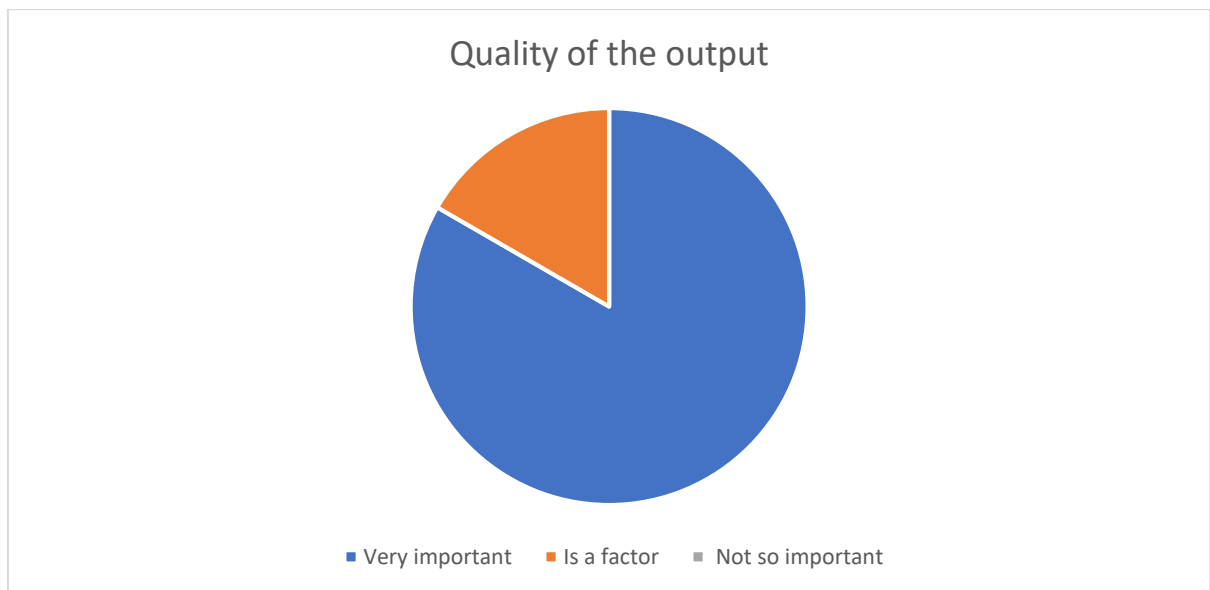


Analysing the previous three graphs together it is obvious that for all surveyed companies who cooperate with research centres all three factors (reliability, quality of the output, cost) which were asked in the questionnaire are very important. This is a large potential for the future work and it shows that with collaborations the SMEs can develop and be more effective on the market.

**Development Agency of Serbia**



This pie chart describes the reliability. It is clearly visible that all companies attach great importance to reliability. 83% of them see it as very important, while for 17% reliability is factor.

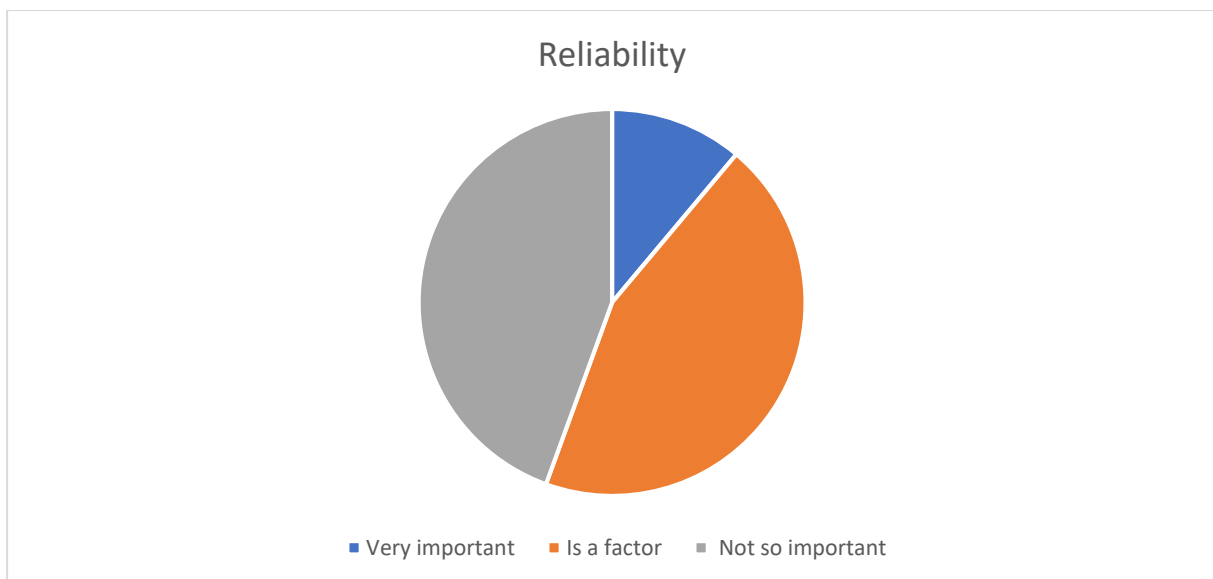


Situation with quality of the output is exactly the same as with reliability. 83% of SME's answered that the output quality is very important. So, it is deciding factor for all of them.

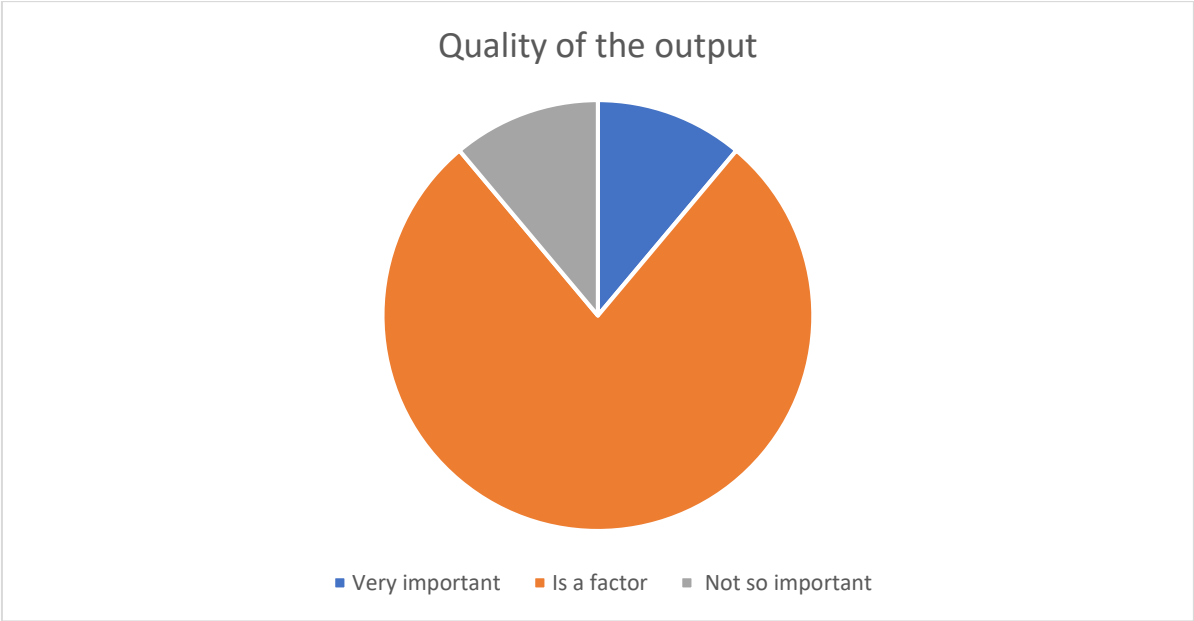


This pie chart describes the importance of the costs emerged from cooperation of SME's with a research centres. There is an equal percentage of them who see the cost is a factor, as very important and there is the same percentage that thinks the cost is not that important.

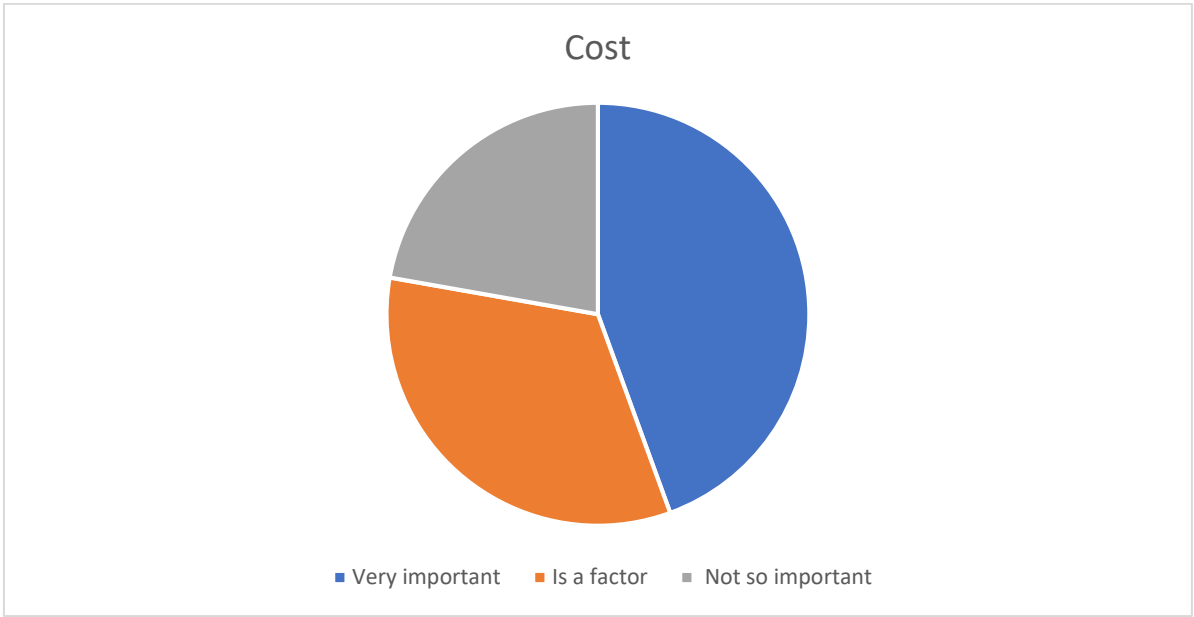
***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***



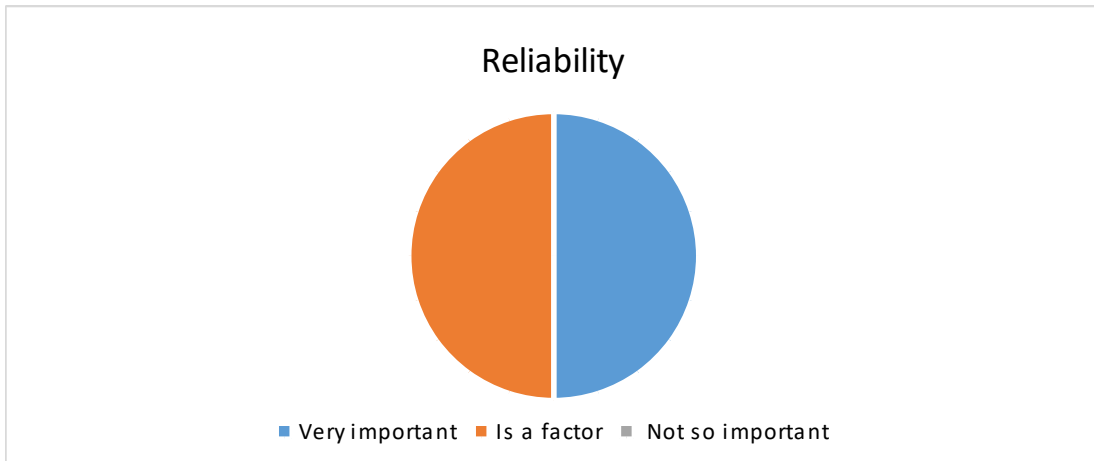
This pie chart describes the reliability. It is clearly visible the tendency of answering this question is different. For 40% of the SME's it were not so important, while 40% told that It is a factor. 10% indicated that it is very important whilst 10% did not answer the question.



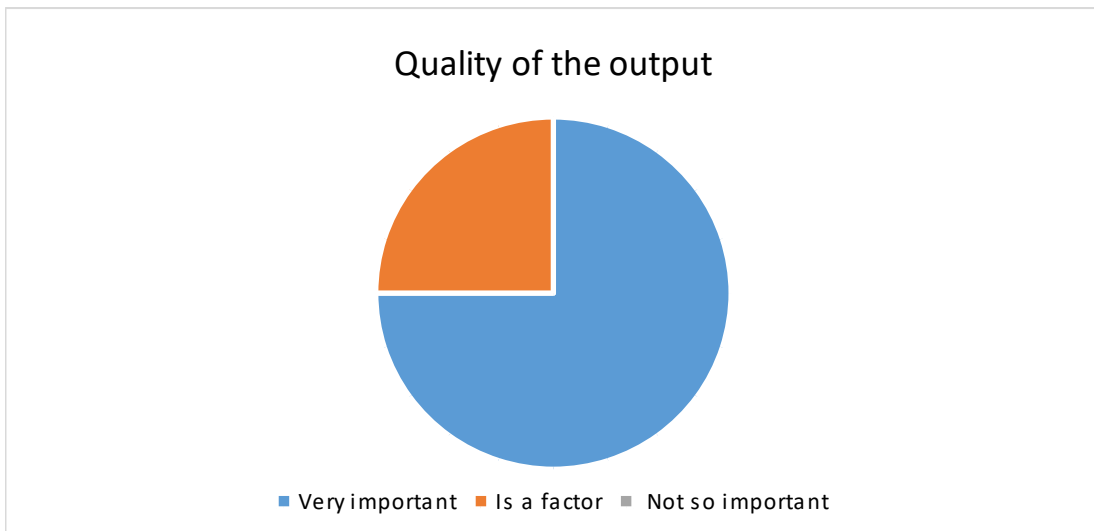
This pie chart describes the quality of the output. It is clearly visible the tendency of answering this question is unanimous. For 70% of the SME's it is a factor while for 10 % is it not so important and 10% of SME for very important. 10% did not answer the question.



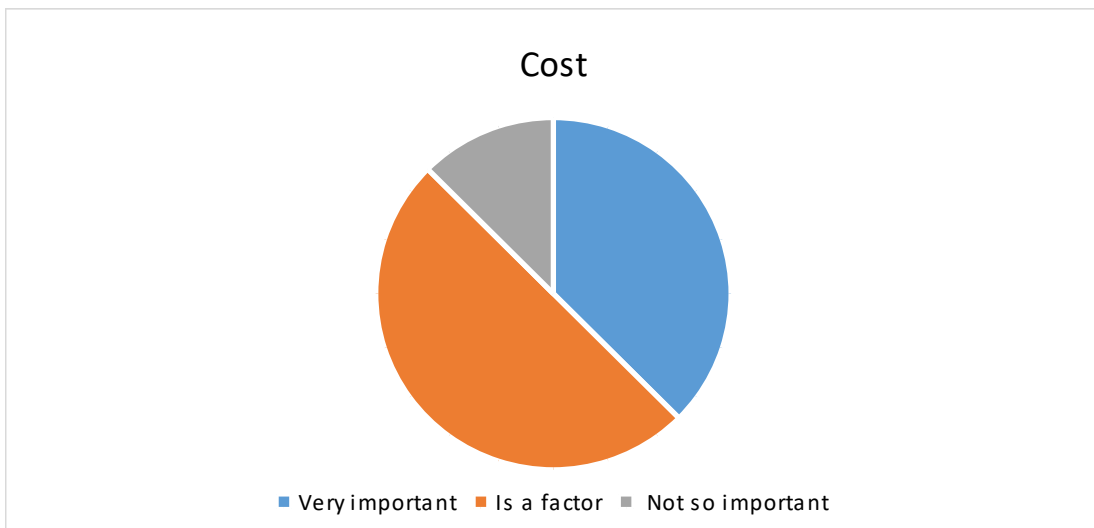
This pie chart shows the importance of cost during the cooperation. 40% of the partners answered that it is a very important factor. For 30% of them told that it is a factor during cooperation. For 20% it is not so important and 10% did not answer the question.



Then opinion that reliability is very important is at the same level with the idea that this is just a factor. 2 participants choose not to express clearly their opinion.



Most respondents (6) consider quality of the output very important and only 2 are of the opinion that this is just a factor. Two are undecided.

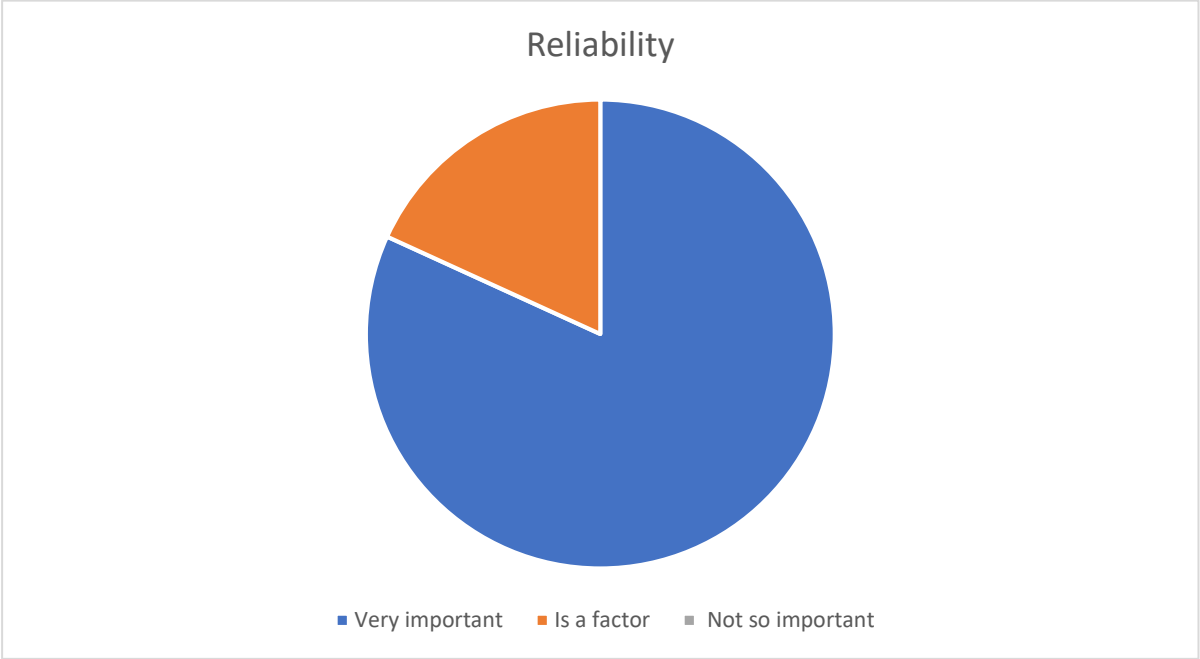


The cost issue is mainly considered just a factor and one respondent is even of the opinion that cost is not so important. It is however amazing to see that in an underfunded RDI environment the majority opinion is considering cost a not so very important economic issue in companies' life. Could this mean that survival struggle forces the competitors to accept very low costs?!

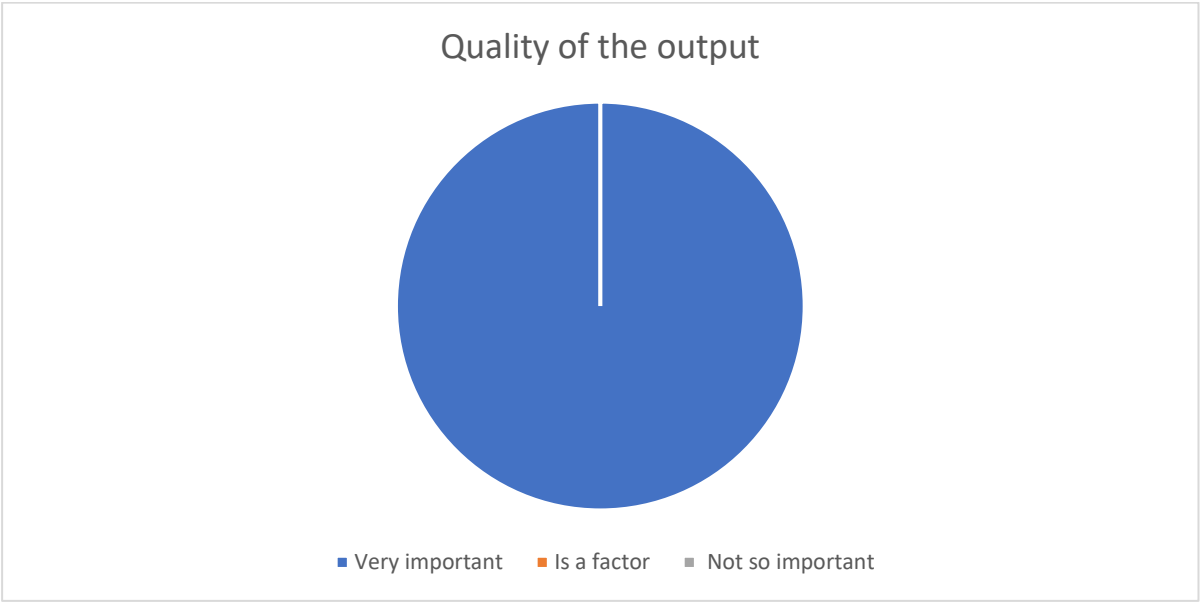
**2.7. Important points of a collaboration of SMEs with a research centres**

Quality of output is the most important parameter of common projects, then the reliability. Cost is only one of the factor of decision making before project implementation.

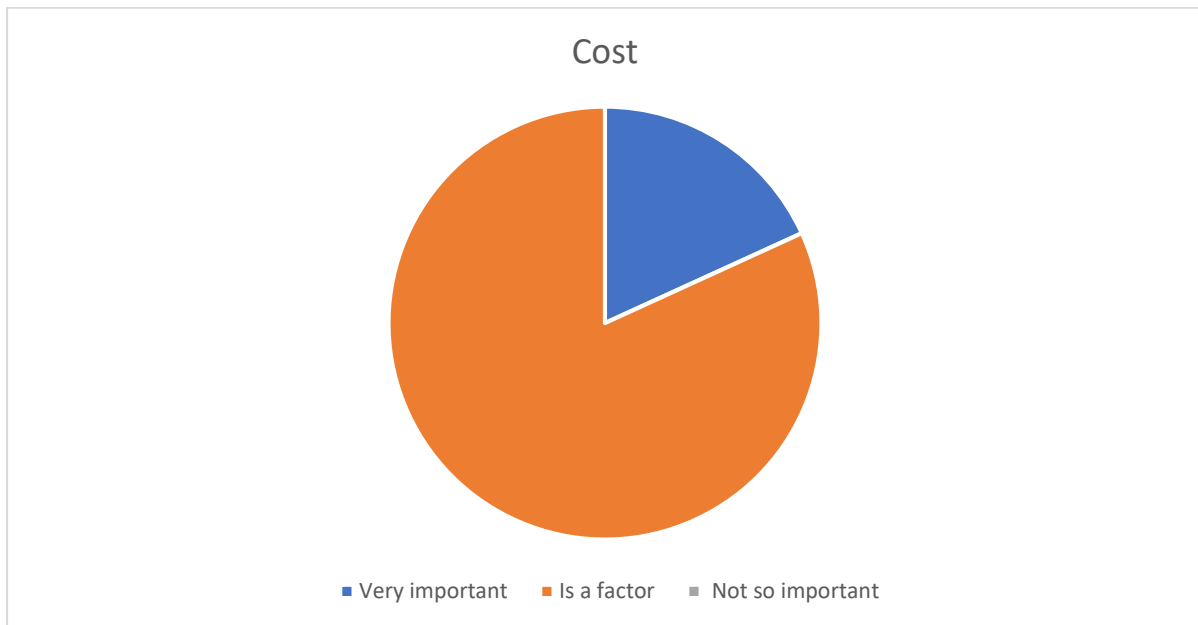
**RELIABILITY**



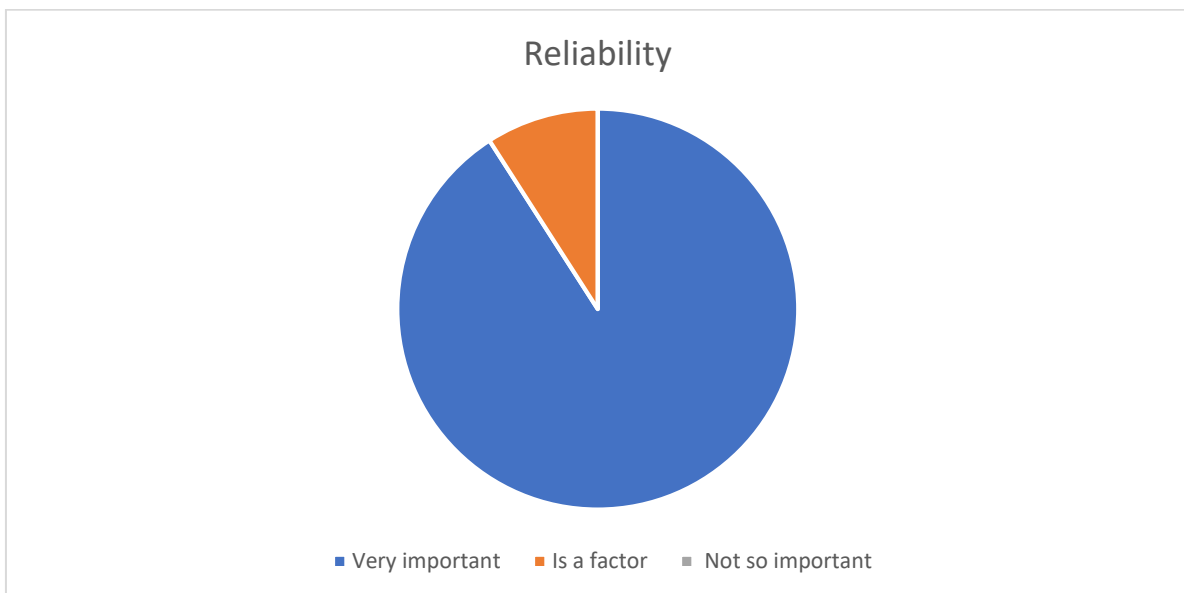
**QUALITY OF THE OUTPUT**



## COST

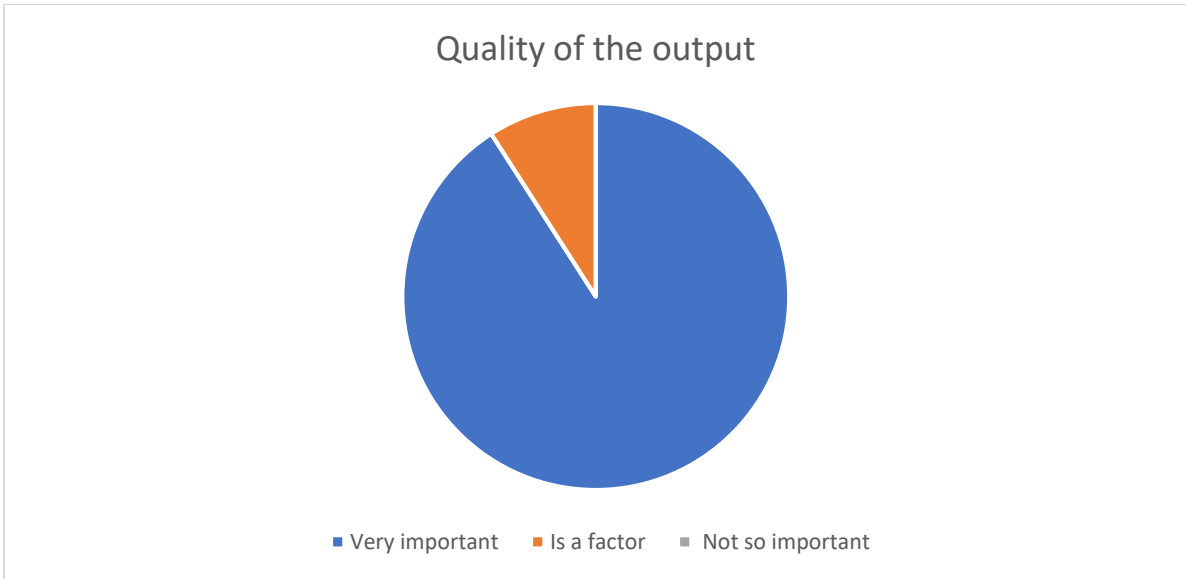


## ***FH JOANNEUM GESELLSCHAFT M.B.H***



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 91%. For 9% of the companies reliability is only a factor.



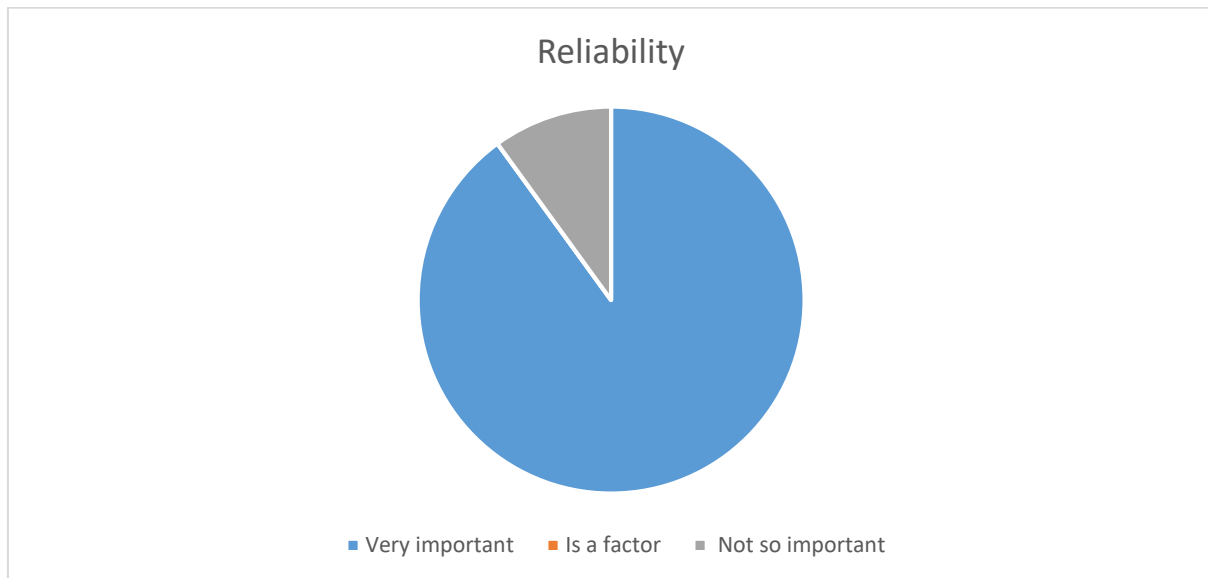


The quality of output has the same values as the reliability. All companies attach great importance to this. The quality of output plays for hardly a company a factor and no company places any value on it.

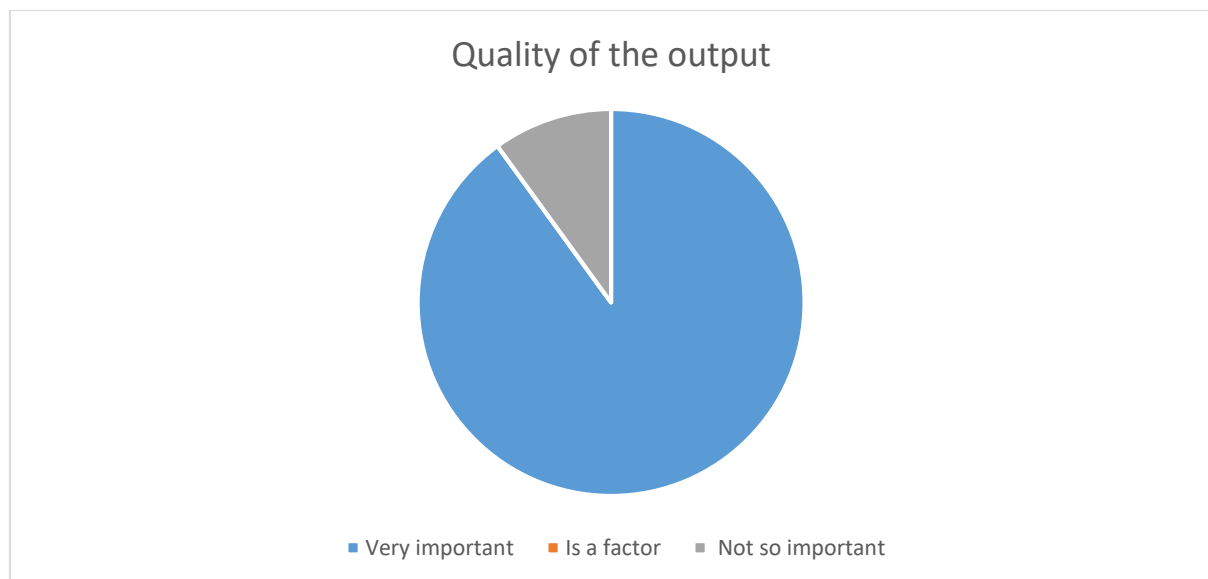


This pie chart describes the importance of costs of a collaboration of SME's with a research centres. As can be seen in the graph, the costs are a very important aspect for more than a half of all companies. Only 36% see the costs as a factor.

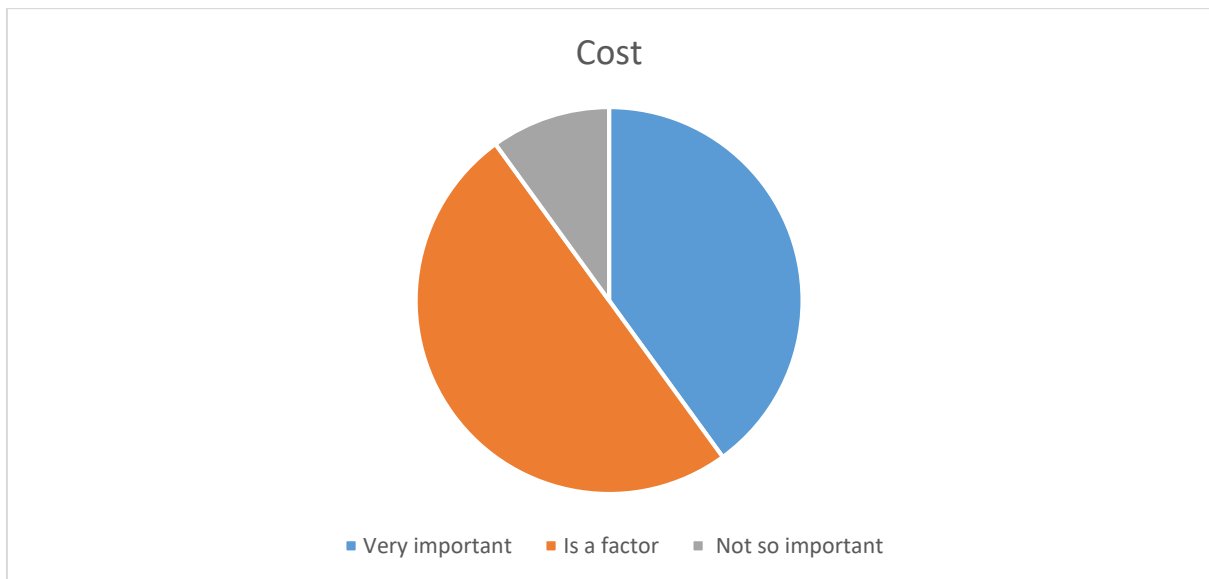
***Institution for development of competence, innovation and specialization of Zadar County***



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 90%, while for 10% reliability is not so important.

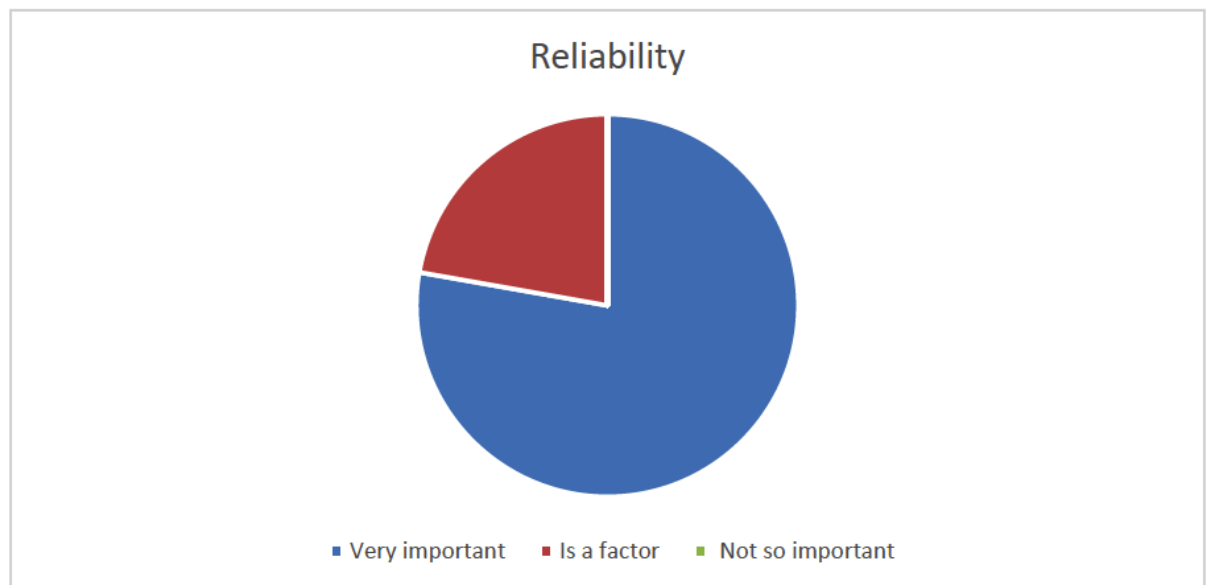


This pie chart describes the quality of the output form cooperation of SME's with a research centres. Here it is clearly visible that all companies attach great importance to quality of the output. The proportion of very important is 90%, while for 10% reliability is not so important.

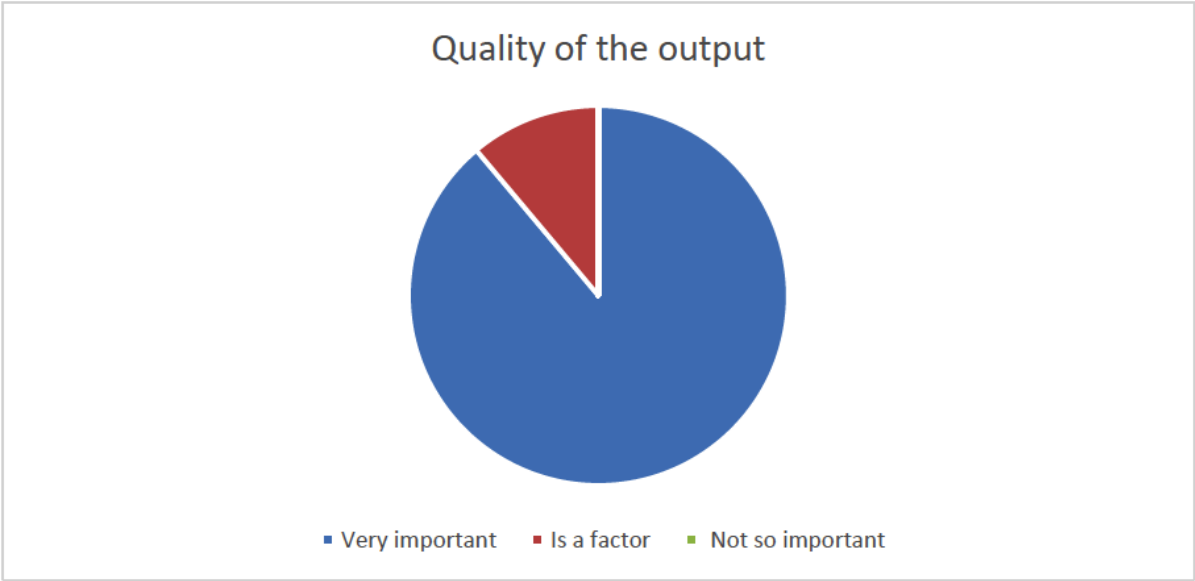


This pie chart describes the importance of the costs emerged from cooperation of SME's with a research centres. Here it is visible that for 50% of them the cost is a factor, while for 40% of them is very important. Only 10% claim that the costs are not important.

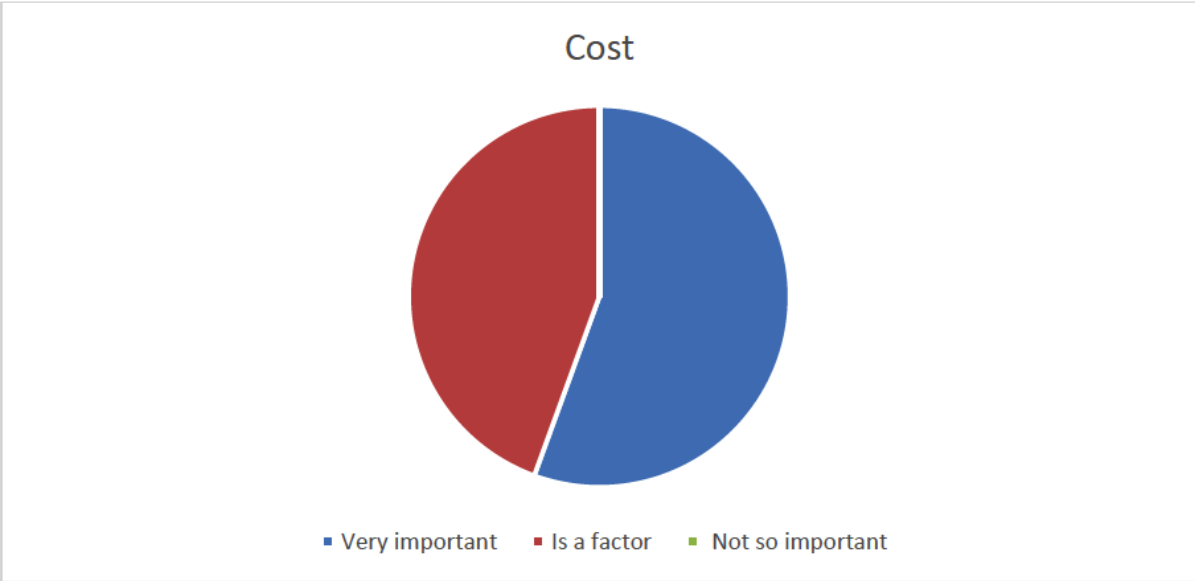
**UNIVERSITY OF MARIBOR**



This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 78%. For 22% of the companies reliability is only a factor.

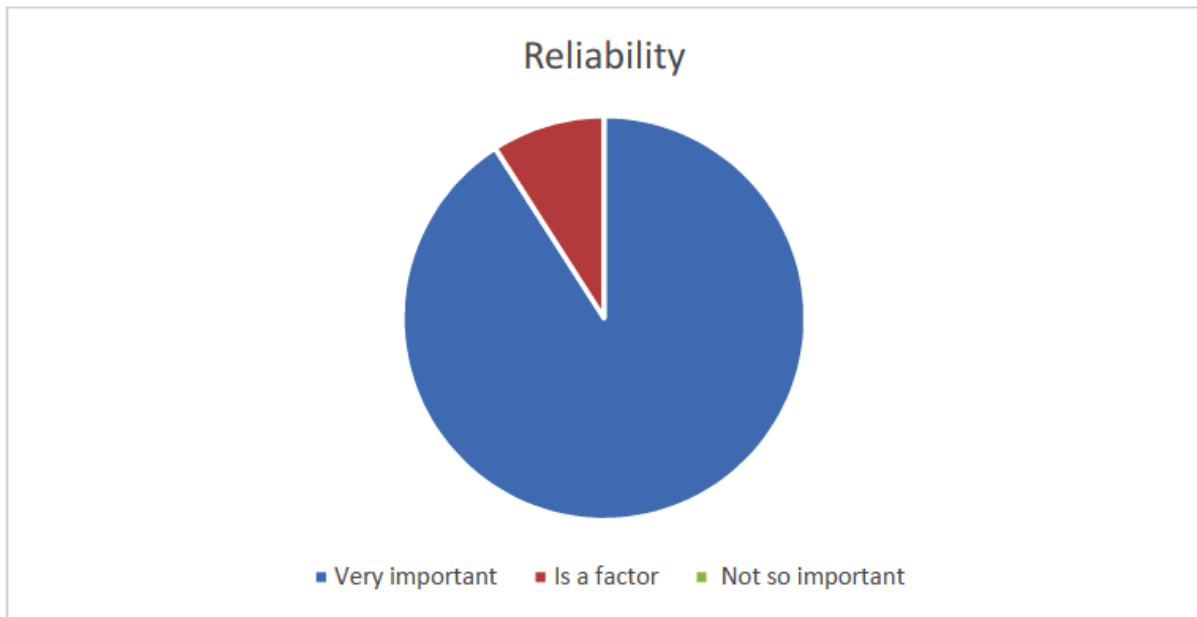


The quality of output has the same values as the reliability. All companies attach great importance to this. The quality of output plays for hardly a company a factor and no company places any value on it.

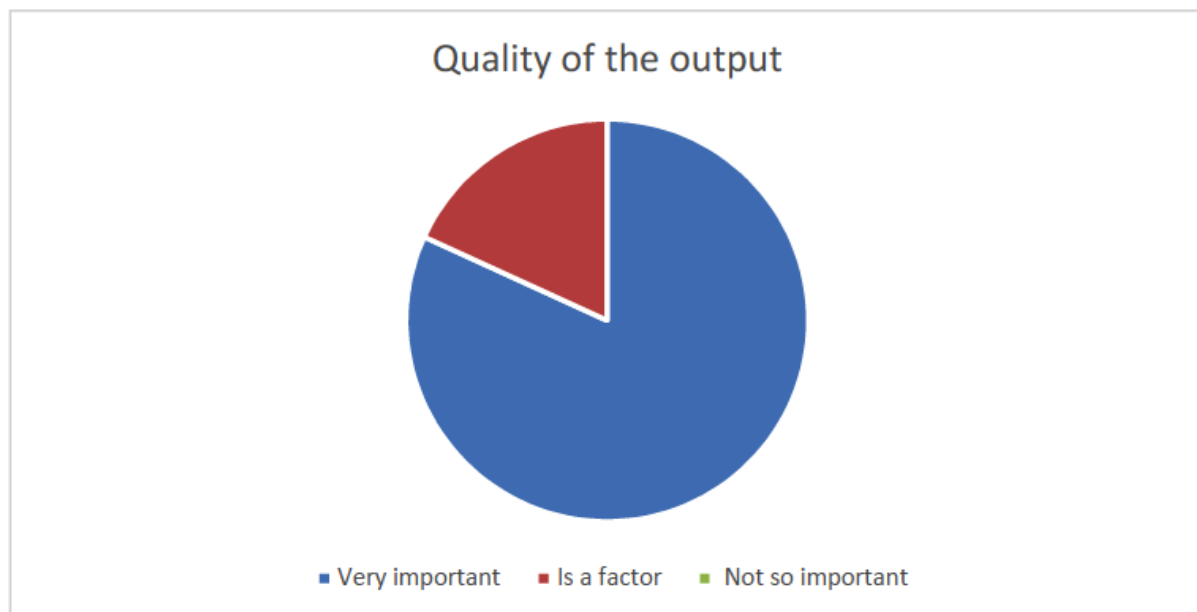


This pie chart describes the importance of costs of a collaboration of SME's with a research centres. As can be seen in the graph, the costs are a very important aspect for more than a half (56%) of all companies. 44% see the costs as a factor.

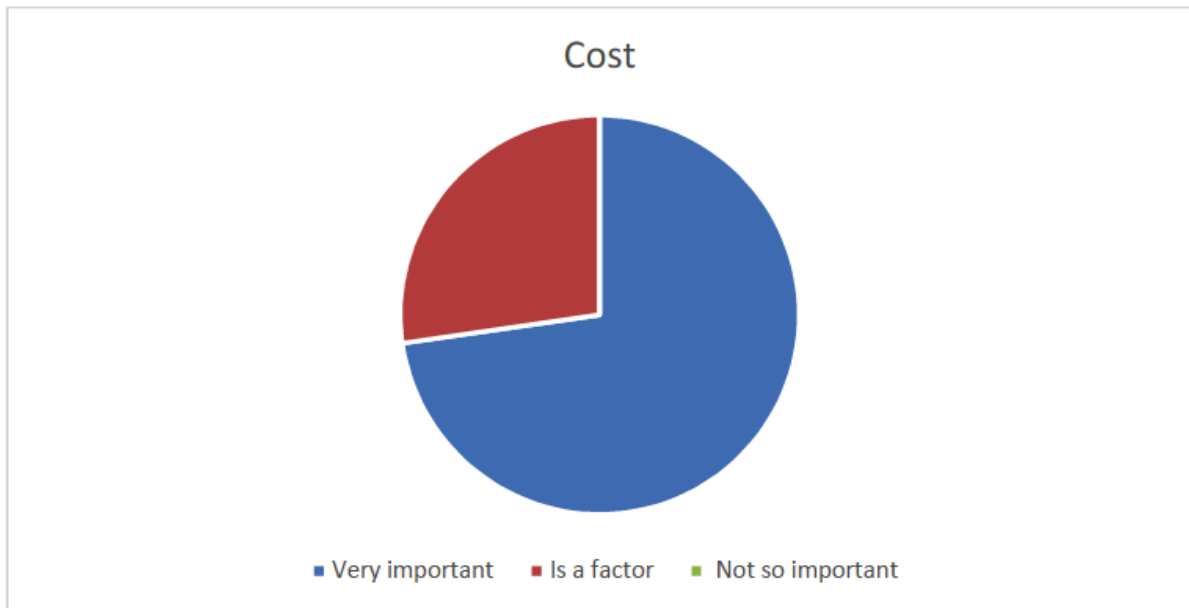
### Magurele High Tech Cluster



The research centres are reliable for the SMEs. It is difficult to start to work with a research centre, but after the SME is in a project with a research centre things are moving in the right direction. The success stories may be better presented to general public and the business associations to know that they may rely on national research institutes.



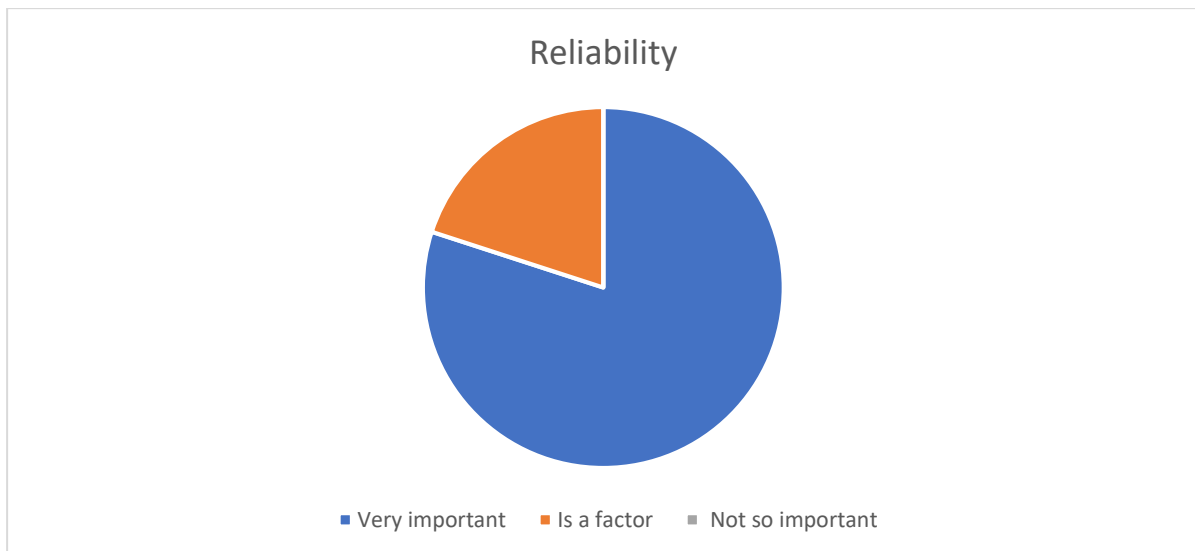
SMEs are entering in cooperation with a research centre to get a very good product of service. They are focused on high standards. This idea is representing a condition of the cooperation and the institutes have to have it in their mind all the time.



For the private companies the cost is a magic word. They do not have large budgets and the banks do not offer easily credits for SMEs. So, the managers of the SMEs are focusing a large part of their time on reducing the costs. This may represent a target for the national research institutes when they are cooperating with the SMEs.

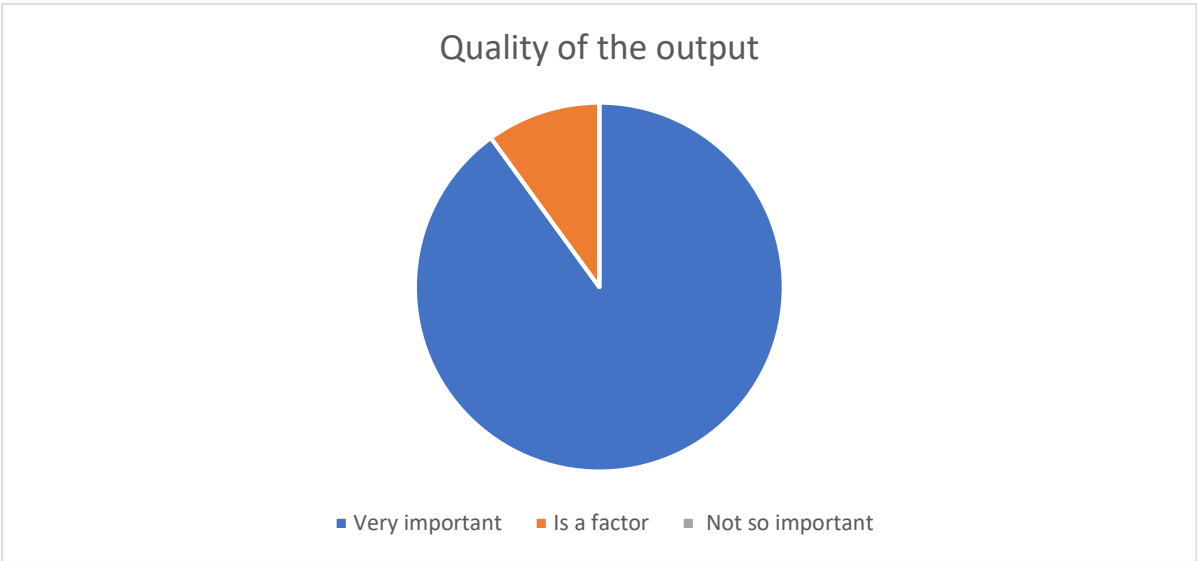
### ***2.7. Important points of a collaboration of intermediaries with a research centres***

#### **RELIABILITY**



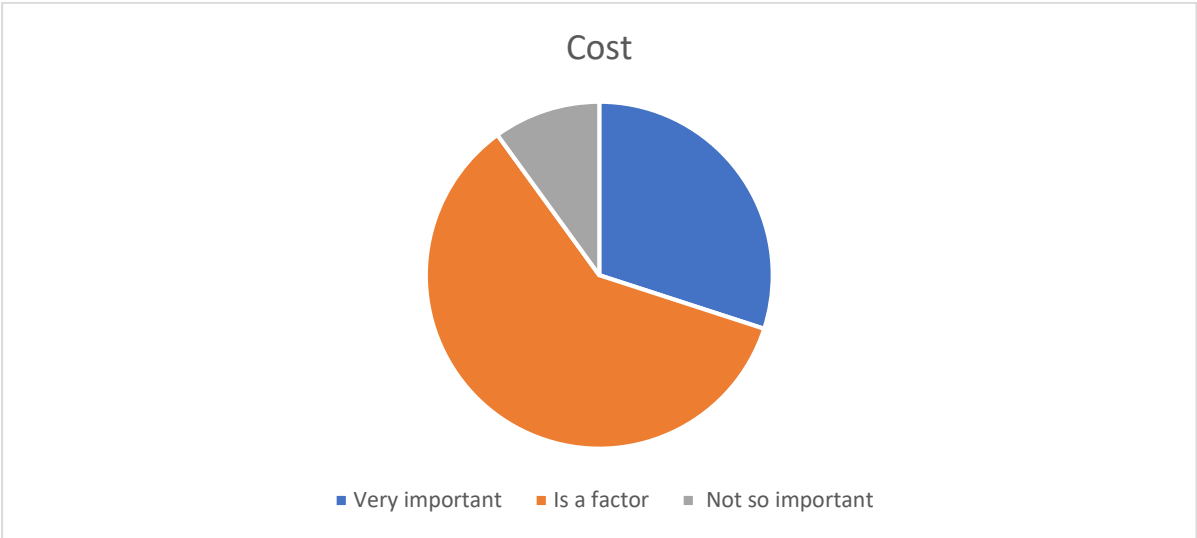
This pie chart describes the reliability. Here it is clearly visible that all companies attach great importance to reliability. The proportion of very important is 80%. For 20% of the companies reliability is only a factor.

QUALITY OF THE OUTPUT



The quality of output has almost the same values as the reliability. All companies attach great importance to this. The quality of output plays for hardly a company a factor and no company places any value on it. The proportion of very important is 90%. For 10% of the companies reliability is only a factor.

COST



This pie chart describes the importance of costs of a collaboration of SME's with a research centres. As can be seen in the graph, the costs are a very important aspect for more than a half of all companies. Only 30% see the costs as a factor and for 10% it is not important.

### **7.2.8 Obstacles of SME's in working together with research centres**

#### ***ELI-HU Nonprofit Ltd.***

The surveyed SMEs did not report any kind of obstacles. Generally speaking, low awareness and lack of business attitude can be a serious obstacle in cooperations. It can be the result of the socialist political and economic system which still have bad effects on the current status of the business environment. Different attitudes among the players (intermediaries, SMEs, research centres, NGOs, public bodies) can be also a serious obstacle during the common work. And lack of financial resources can result the low level of cooperation.

#### ***Development Agency of Serbia***

As main obstacles in cooperation with research centres SMEs have mentioned:

- Tendency towards different goals,
- Inertness of SMEs and little interest to enhance their quality of business conducting,
- Lack of information.

#### ***Central Transdanubian Regional Innovation Agency Nonprofit Ltd.***

Many companies see an obstacle in cooperation in the cost topic. This could be a problem because of the different financial administration. Another important factor was the administration issues during the projects. Others at the deficient time. Some of the companies that burocratical issues slows down the cooperation. However, there are also companies which do not see any obstacles in working together with research centres.

#### ***Horia Hulubei National Institute of R&D for Physics and Nuclear Engineering***

Please summarize and interpret the answer in around 5-10 sentences

Micro companies and SMEs were very short and clear about the obstacles in their real or potential cooperation with research centres:

1. time and financing (time to long till the market and funding not enough and unsure);
2. potential doubtful quality;
3. high costs, including for services;
4. long duration of research activities;
5. skilled personnel to difficult to find;
6. not enough developed competencies.



## **2.8. Obstacles of SMEs in working together with research centres**

- administrative and time difficulty, high co-financing for micro/small enterprises
- lack of experts in our topic
- lack of flexibility and proactive attitude of researchers to deliverables
- unreliability of research project team, time delay and quality of output
- information deficit between sectors
- big differences between production sector and R&D (priorities, capacity, goal and scope)

### ***FH JOANNEUM GESELLSCHAFT M.B.H***

Many companies see an obstacle in cooperation in the cost topic. This could be a problem because of the different financial administration. Others at the deficient time. Some of the companies think that a failure of cooperation is an obstacle. Collaboration could not work for reasons of communication or for reasons of location and time. Often, it is also difficult to find the right people to work together. However, there are also companies which do not see any obstacles in working together with research centres.

### ***Institution for development of competence, innovation and specialization of Zadar County***

Lack of support for preparing EU founded projects.

### ***UNIVERSITY OF MARIBOR***

One of the hardest tasks is to find right research organisation/institute/person that are able to deliver the task as soon as possible. For SMEs is very important to get deliverables as soon as possible, but this is not the case at research institutions.

Not enough adjustment to real problem in economy and problems in the region.

Public research institutions (including universities) are slow, inflexible and rigid institution. They also lack in communication with publics about cooperation possibilities.

### ***Magurele High Tech Cluster***

The main obstacles are:

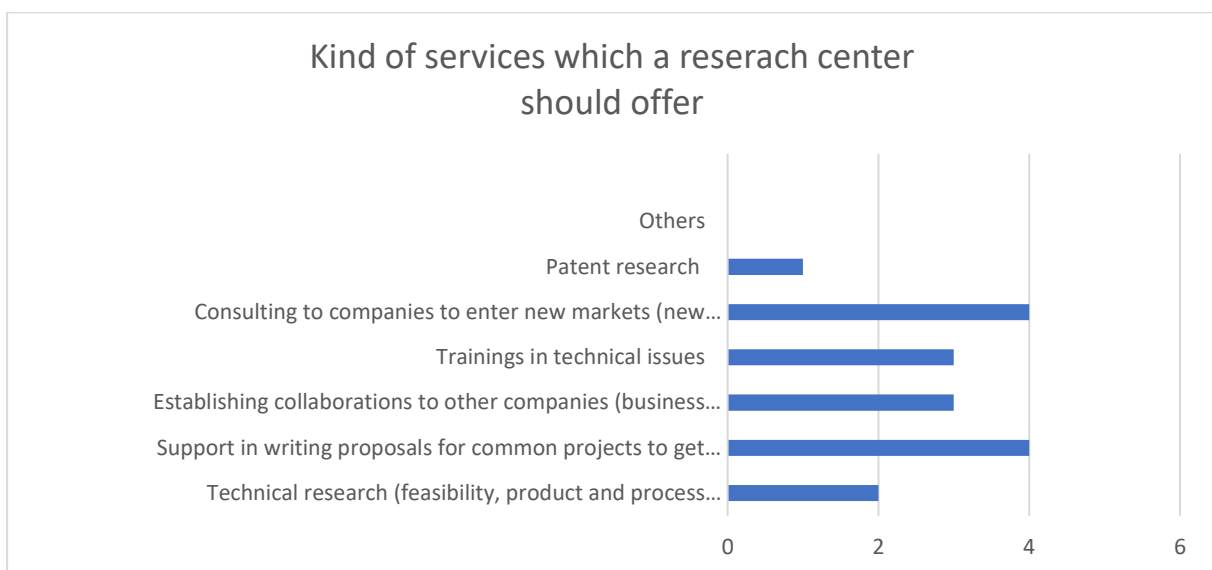
- a. The research centres do not have enough time for SMEs' projects because of their own research activity. In this case the SMEs do not represent a priority for the research centres.
- b. The research centres are not focused on the market results.
- c. The co-financing rate for common projects is too high for the SMEs.
- d. The European regulation on de minimis scheme is too restrictive
- e. The institutional obstacles existing in the research centres.

## 2.8. Obstacles of intermediaries in working together with research centres

Many companies see an obstacle in the long duration of the projects, bureaucracy and the burden of administration, lack of information or people. An obstacle of cooperation in the cost topic could be a problem because of the different financial administration. Others at the deficient time. Some of the companies think that a failure of cooperation is an obstacle. Collaboration could not work for reasons of communication or for reasons of location and time. Often, it is also difficult to find the right people to work together. However, there are also companies which do not see any obstacles in working together with research centres.

### 7.2.9 Kind of services which a research centre should offer

**ELI-HU Nonprofit Ltd.**



The surveyed companies more need business services from research centres than cooperation directly in product development. On the one hand it is good because the SMEs have recognized the potential in the professional business service and with these services they can develop the companies and the process have positive effects on the wider business environment as well. On the other hand this fact is not so positive because these SMEs are not really interested in product development and innovation which should be the main role of the research centres. So in the current situation the surveyed SMEs can adapt product prototypes and develop their business efficiency but cannot appear on the markets with newly developed products.

### **Summary, main findings**

The surveyed SMEs cooperate with research centres in relatively high number but it is sure that the level of cooperation is lower in the whole SME sector. The cooperations are mostly connected to business services not to R&D&I activities which should be the main task of research institutions. Many cases the collaborations are supported from regional or national funds and there is lack of market based cooperations.

Positive tendency that the SMEs cooperate with research institutions have good impression about them and they think cooperations are important. The obstacles are similar in the other surveyed

bodies: different business attitude and work methods, lack of financing, administrative and bureaucratic burdens.

1. Collaborations are important for the surveyed SMEs, so there is a large potential in cooperations
2. The needed services are mostly related to business support not to R&D&I

The main obstacles are the different business attitude and working methods, bureaucratic and administrative burdens and the lack of financing

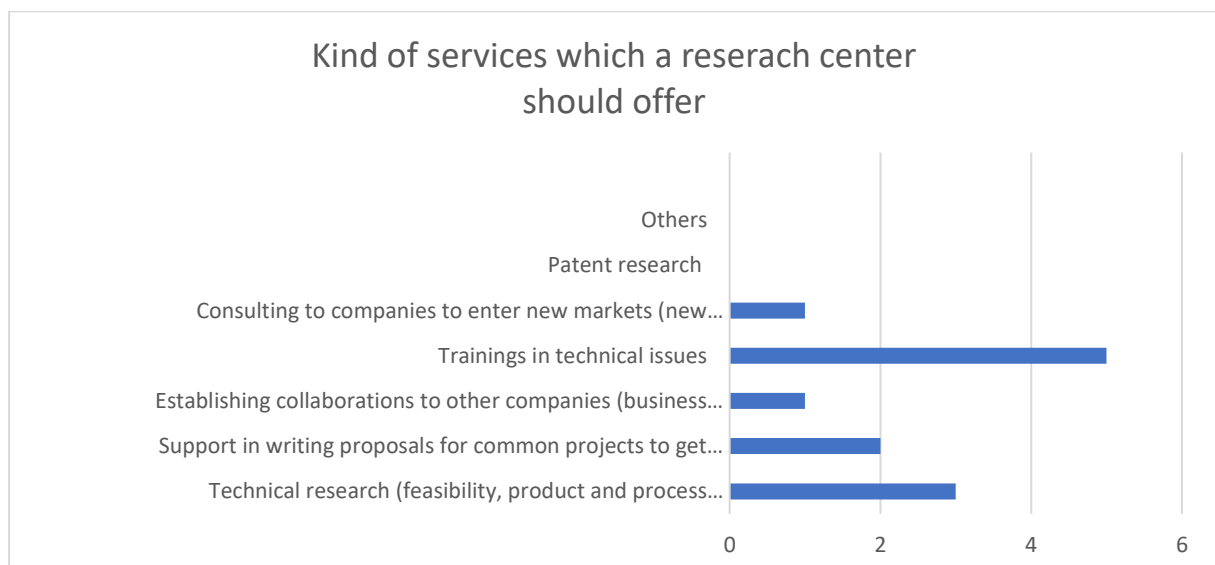
**Development Agency of Serbia**



The bar chart shows that most SMEs want a service regarding technical research (feasibility, product and process innovation)- 30% . Patent research is also desirable activity with share of 23%.

Other activities are, more or less, tied up. None of interviewed SMEs states that they would like to cooperate with research centres on Consulting to companies to enter new markets.

**Central Transdanubian Regional Innovation Agency Nonprofit Ltd.**



The bar chart shows that most companies want trainings in technical issues. Only 2-2 out of ten to establish collaborations to other companies and technical research (feasibility, product and process, etc.). At last, 10-10% of the partners who were asked during the interview wants consulting to companies to enter new markets (new branch or new region/country) and support in writing proposals for common projects.

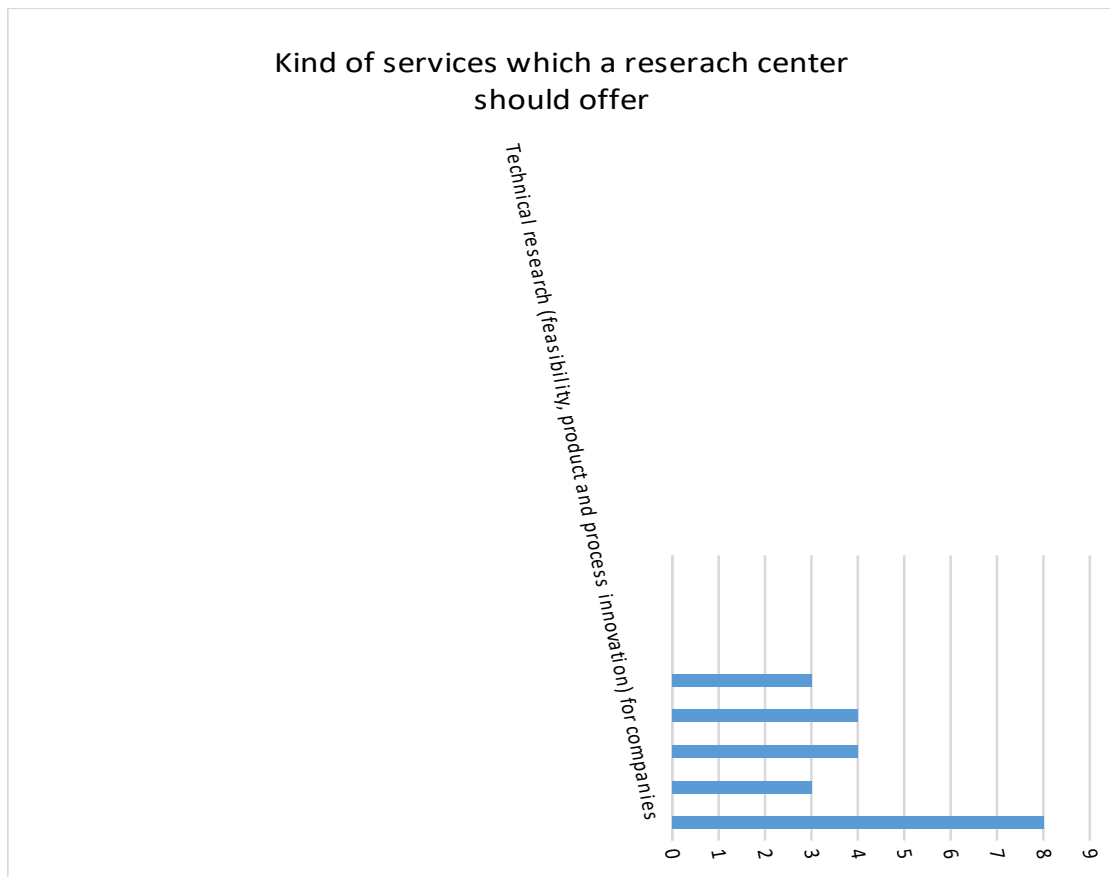
### ***Conclusions and summary***

The asked micro and small companies' memberships in networks are right but not so high. It usually means cluster membership which can be support the real cooperation and be conduce to successfulness. Most of the SMEs cooperate with research centres which means usually 1 common project per year and it founded by contracts. Only 30 % of common projects mean research projects, which is very low. The most important points of cooperation are cost in this case too and the necessary of reliability is very poor.

Most of the SMEs know the training services of RC. It maybe come from that most of the RC can find in universities where the education and R&D services sometimes blurred. Usually the SMEs don't know exactly the services of RC and they still live in that fact that RCs are working behind closed doors. It can be also result that the knowledge of technical research service is very low.

### ***Main conclusions***

- Low common research projects between SMEs and RC
- SMEs don't know exactly the services of RC

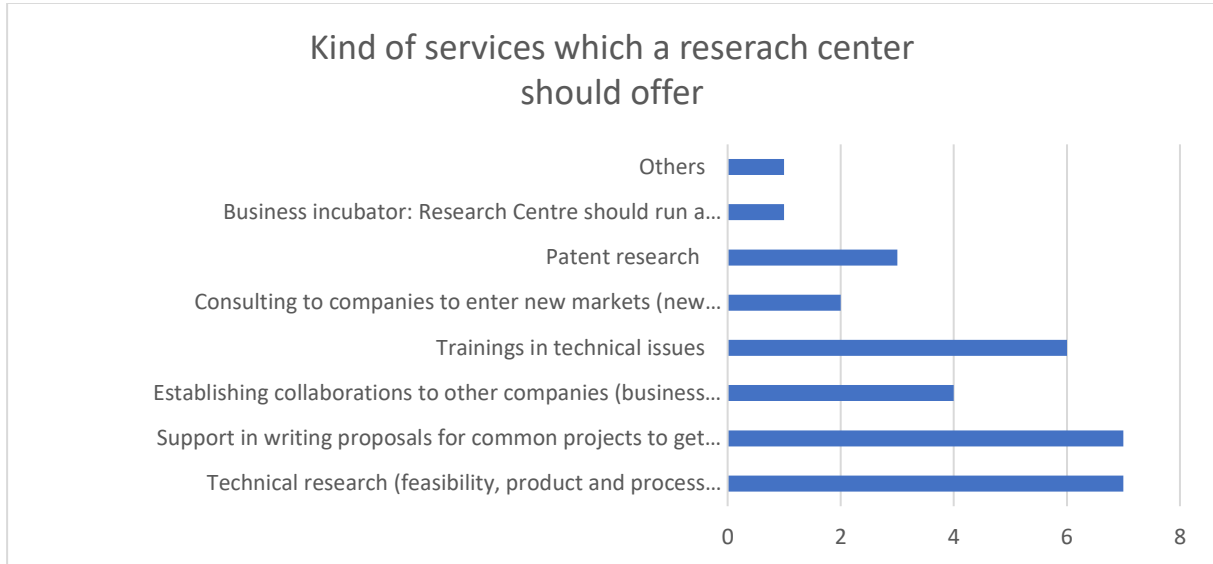


Technical research is a highly appreciated potential service. Training and establishing collaboration is also in demand but support in writing proposals or consulting companies to enter new markets are not raising a very high interest. Lack of request for business incubators and especially of patent research are illustrating that issues connected high level research and innovation is still at incipient phases at least for micro companies.

### 2.9. Kind of services which a research centre should offer

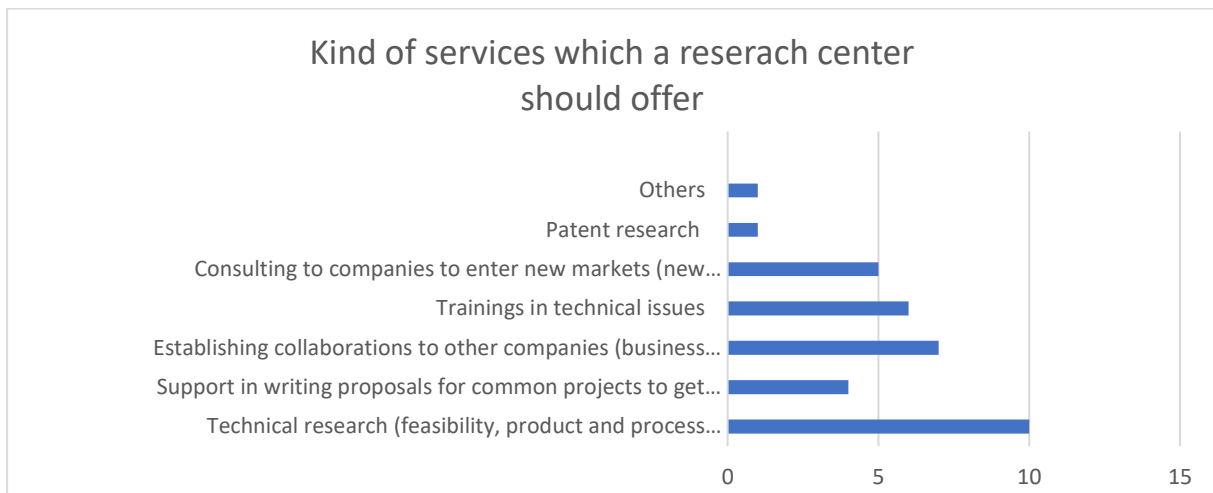
Research centres could provide “technical research”, help with administration of common project and writing proposals and trainings in technical issues.

Some companies would like to help with networking and intellectual property rights.



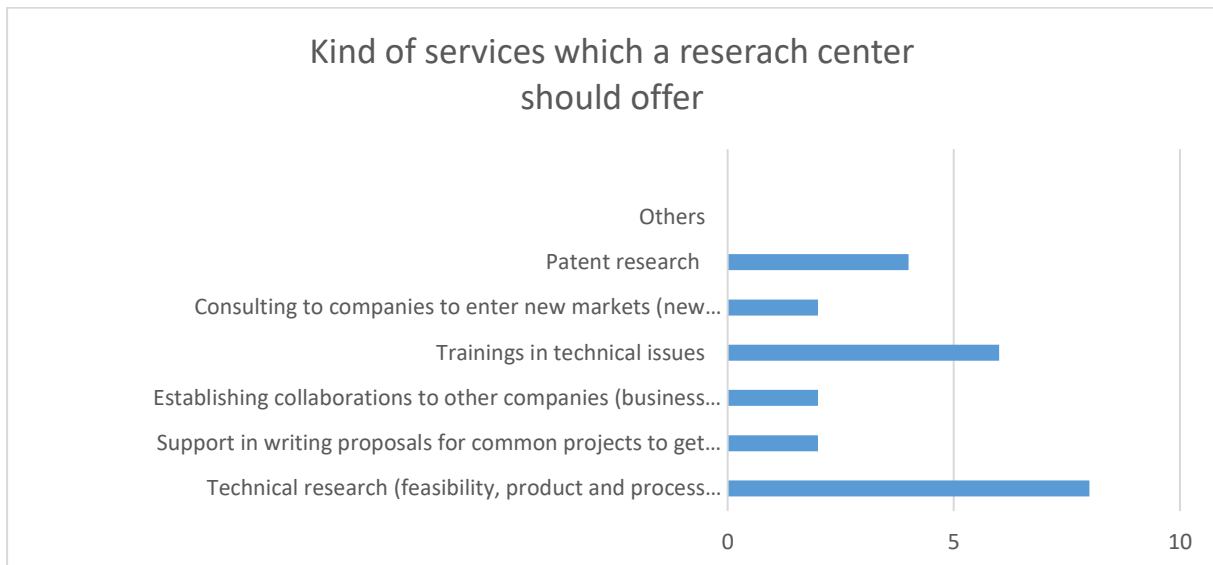
Others: Prototype development; Trademark registration

### FH JOANNEUM GESELLSCHAFT M.B.H



The bar chart shows most companies want a service about technical research (feasibility, product and process innovation). Only 4 out of eleven want a support in writing proposals for common projects to get fundings and twice as much want establishing collaborations to other companies (business talks, network events, etc.). Consulting to companies to enter new markets (new branch or new region/country) is wanted by 5 of 11 companies and trainings in technical issues supports are wanted by 6 of 11 companies. Hardly any of the surveyed companies wanted a patent research support or a support which is not listed.

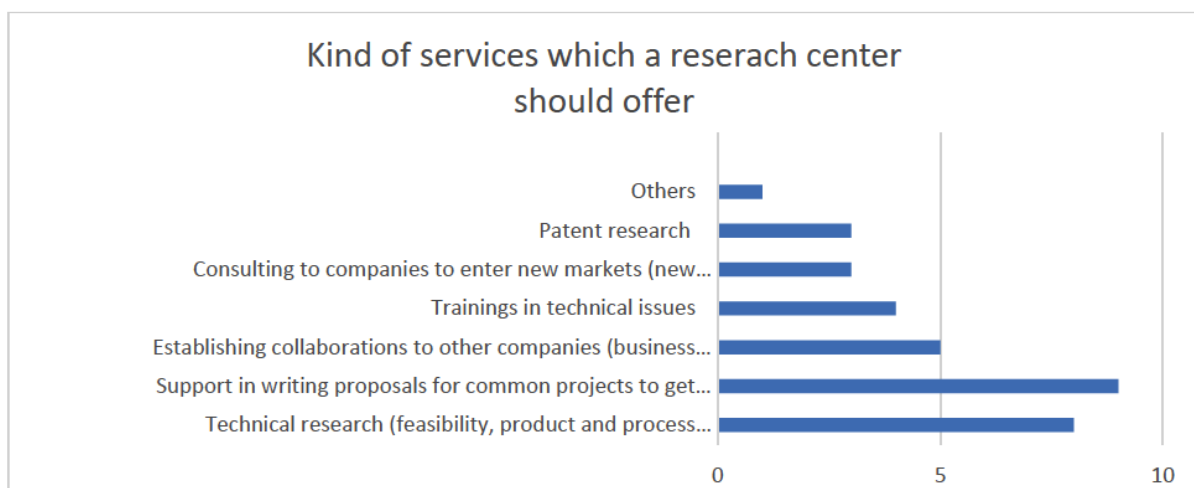
**Institution for development of competence, innovation and specialization of Zadar County**



The bar chart shows that most companies want a service about technical research (feasibility, product and process innovation) (8 from 11) and trainings in technical issues (6 from 11).

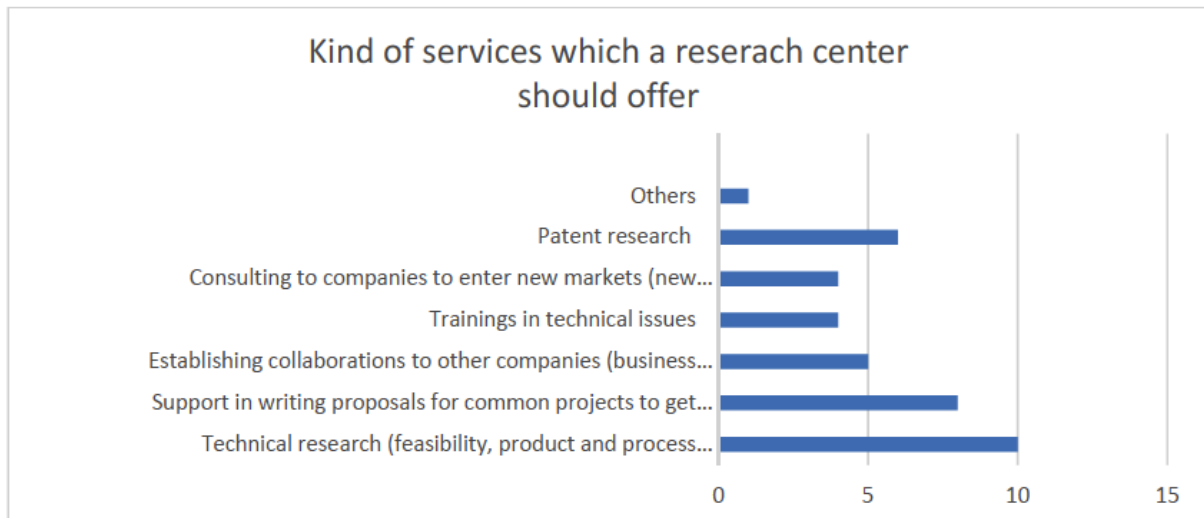
Only 4 out of 11 need patent research service, and even less (2 from 11) need support in writing proposals for common projects to get funding, Consulting to enter new markets (new branch or new region/country) and establishing collaborations to other companies (business talks, network events, etc.).

**UNIVERSITY OF MARIBOR**



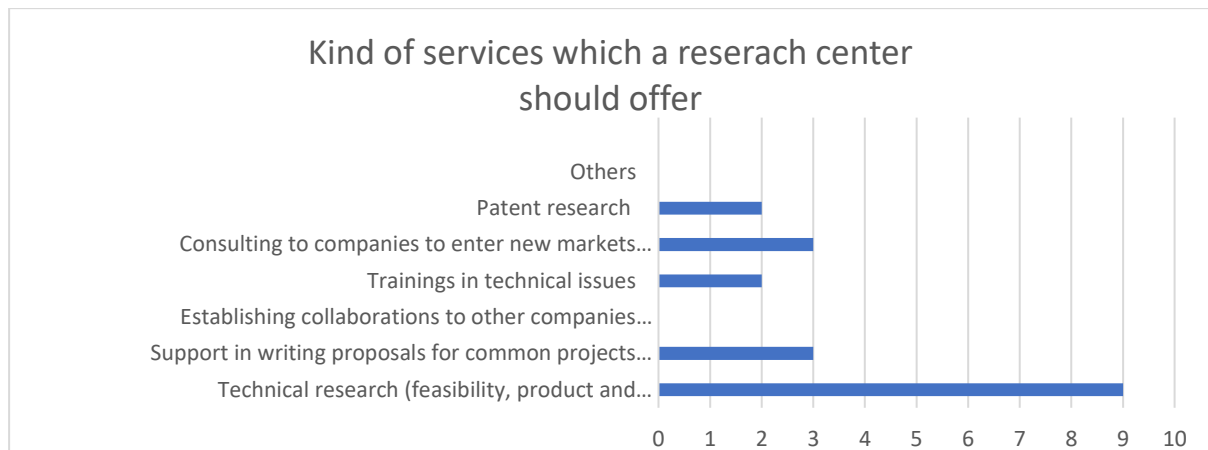
The bar chart shows most companies want a service about technical research (feasibility, product and process innovation). Most of the companies would like to have support in writing proposals for common project to get funding (9 of 12 companies) and in field of Technical research (8 of 12 companies). Only 3 out of eleven want a support in patent research and consulting to companies to enter new markets. 5 of 12 companies would like to establish collaboration to other companies with help of research centres and 4 of 12 companies would need training in technical issues. Hardly any of the surveyed companies wanted support that is not listed.

## Magurele High Tech Cluster



The answers are consistent with the rest of the answers to other questions. The SMEs know what to expect from the research centres and they know what the added value of the national research institutes is. The SMEs are expecting to receive from the national research institutes services to become more competitive in the market with new and innovative products and services (technical research and patent research are leading the answers).

### 2.9. Kind of services which a research centre should offer



The bar chart shows most companies want a service about technical research (feasibility, product and process innovation). Only 3 out of eleven want a support in writing proposals for common projects to get funding. Consulting to companies to enter new markets (new branch or new region/country) is wanted by 3 of 11 companies and trainings in technical issues supports are wanted by 2 of 11 companies. Hardly any of the surveyed companies wanted establishing collaborations to other companies (business talks, network events, etc.), a patent research support or a support which is not listed.