Intellectual output 4:
Guidelines for policy level

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1 Introduction

This Intellectual Output will respond to Specific Objective 3: Increase institutional capacity and awareness of responsible actors of industrial, technological and training policies about the role of transnational technology transfer for SMEs and extend cooperation between SMEs, Research, Service Providers and VET& Training System actors.

The Intellectual Output 4 consists of:

a) 2 sets of final guidelines, one for policy levels and the second one for VET system & Innovation system actors
b) Annex which will lead also to the set-up of a Transnational Technology Transfer Training Cooperation Network.

1.1 Guidelines for Policy levels

Guidelines for policy levels are a printed document, in all involved partner languages, which will illustrate:

- relevance of transnational technology transfer as a means for economic development,
- necessity to support through different and complementary means these processes in SMEs,
- necessity to structure an extensive cooperation network also with research, service providers (clusters, technology parks, etc.) and VET + Training system in order to extend the potential of technology transfer to the widest business audience possible,
- recommendations about how to anchor project outputs (and especially the training programme) to regional policies and mechanisms (including ESF and Smart Specialization Strategies).

The document will evidence the need of transnational cooperation as well as identify special national conditions and will be based on a questionnaire every country representative partner will distribute to relevant target audience.

Target Audience of this first guide is those actors that are planning, developing or influencing regulations:

- Policy makers
- Regional or National Development Agencies
- Industrial and other Chambers
- Research institutions with a link to the policy making
- Other institutions that are affecting the policy making

2 Interviews

Partners of the project managed to collect 11 interviews from 5 different countries (Austria, Germany, Italy, Poland, Slovenia).

2.1 Typology of policy makers

11 interviews have been collected and subsequently analysed to produce this document. The typology of policy makers that have been interviewed include:

- Regional development agency
- Regional chamber of Commerce
- Industrial association
- Local and public body
- Office responsible of implementing technology transfer project and platform
- Business Environment Institutions
- Regional government
- Deputy Head of the unit “Industry, Economy 4.0 and Cluster” from the Thuringian Ministry of Economy, Science and Digital Society
- Mayor

2.2 Role in innovation and technology transfer

The following is a list of the main activities run by the organizations to which interviewed policy makers belong:

- Supporting businesses and creating a supportive environment.
- Creation of support measures for technology transfer on regional level.
- Preparation of regional development strategies, which are including also the process of technology transfer.
- Support for SME and innovators in the field of innovation and technology development (R&D etc.)
- Innovation manager
- Association informs companies about incentives, regulatory framework, etc.
- The role of Provincia is to facilitate the exchange between policy makers and the territory
- Developing the Strategy of the Malopolska Region for 2020 in respect to the smart specialization of the region
- Stimulating the sustainable smart development of the region
- Creating the demand for innovation in the region
- Developing the infrastructure for the knowledge-based economy

- Creating the Regional Innovation Strategy of the Malopolska Region 2020 (RSI)
- Managing and monitoring implementation of the Regional Innovation Strategy of the Malopolska Region 2020 and shaping its policy, describing activities dedicated to increase technology transfer and innovation implementation in Polish SME's.
- Managing the Working Groups on Intelligent Specialization to ensure wide consultation involving entrepreneurs, as well as representatives of science, business environment institutions, administration and innovation users.
- Cooperation with the partner institutions and organisations to attract investments to Malopolska region and support regional SMEs to expand to abroad markets (not concentrate only on innovation and technology transfer).
- Regional financing institution, Reg. smart specializ., Seed Funds, Startups, FabLab, Incubator.
- Co-creates, implements, monitors and manages the innovation strategy
- Management of the implementation of the "Regional Research and Innovation Strategy for Smart Specialization for Thuringia" (RIS 3 Thuringia)
- Economy is the backbone of the region → financial supporting of enterprises is a topic, but it plays a subordinate role at the moment. The mayor should play a role in this topic, but the previous mayor did not pay enough attention to that, the interviewee is motivated to change that.

2.3 Role in the field of training and education

Above listed policy makers have following roles when training and education is in question:

- Conducting workshops through SPOT (Slovenia Business Point) consulting Pomurje
- Implement seminars and workshops for SME and innovators.
- Association supports and promotes knowledge and information among industrial companies through workshops, meetings and other activities.
- The role is to sensitize the local actors (SMEs, public and private organizations, other) to approach the field of innovation and technology transfer.
- Project coordinated by policy maker assumes dedicated training and education activities for spreading the culture of open innovation. Topic, target group (sector), place and type of event all that is defined by project coordinator.
- Just trainings for SMEs concerning selected foreign markets.
- exchange of good practices and experiences on policies (national, regional or local) between regions participating in the project.
- preparation of guidelines and implementation plans to improve SME development policies through the use of ICT.
- Participates in the identification of education needs at the higher education level
- No important role, just indirect.

3 Interview analysis

3.1 Part 1 – Relevance of Transnational Technology Transfer and Economic Development

This part provides us with an understanding of how relevant the topic (transnational technology transfer) is for interviewed policy makers and how they consider it relevant for the economic development of their territory.

KEY MESSAGE:

The technology awareness level of the enterprises and policies at regional level **is on a medium level**, which means that there is still room to improve the policies to better support technology readiness and awareness levels. On the other hand, the interviewed persons identified numerous organizations which are dedicated to transfer the technologies and provide training on this matter, according to this it is expected that technology awareness and adoption will increase in following years. It is also important to notice that **technology transfer is highly relevant for the economic development of the enterprise at regional level** and that trends on different technology domains at international level influence on the economic development at regional level.

3.1.1 Technology awareness level of the enterprises at regional level

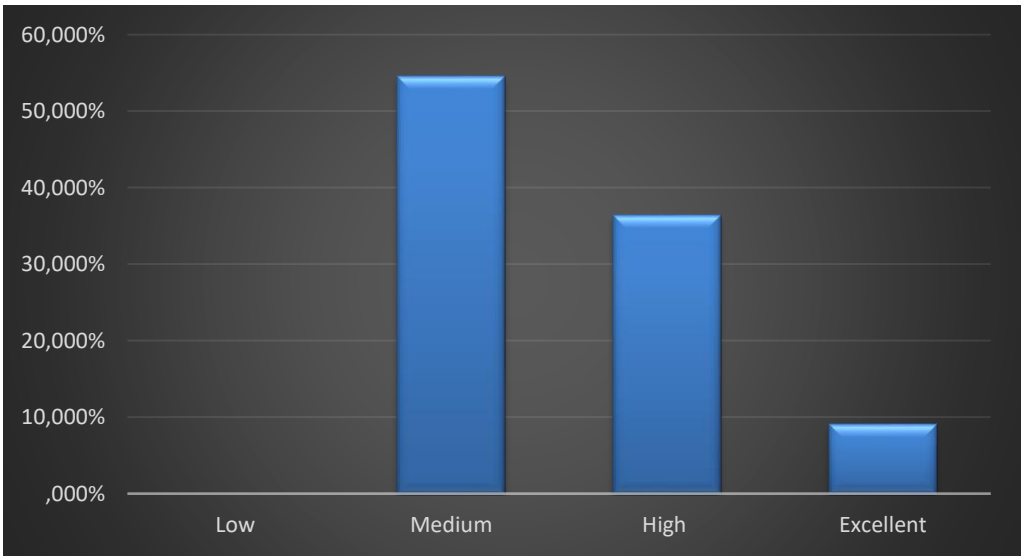

Chart 1: Technology awareness level of enterprises at regional level

Close to 55% of interviewed policy makers consider the technology awareness level of the enterprises at regional level as medium. This implies that there is still room to improve this aspect.

3.1.2 Technology awareness level of the policies at regional level

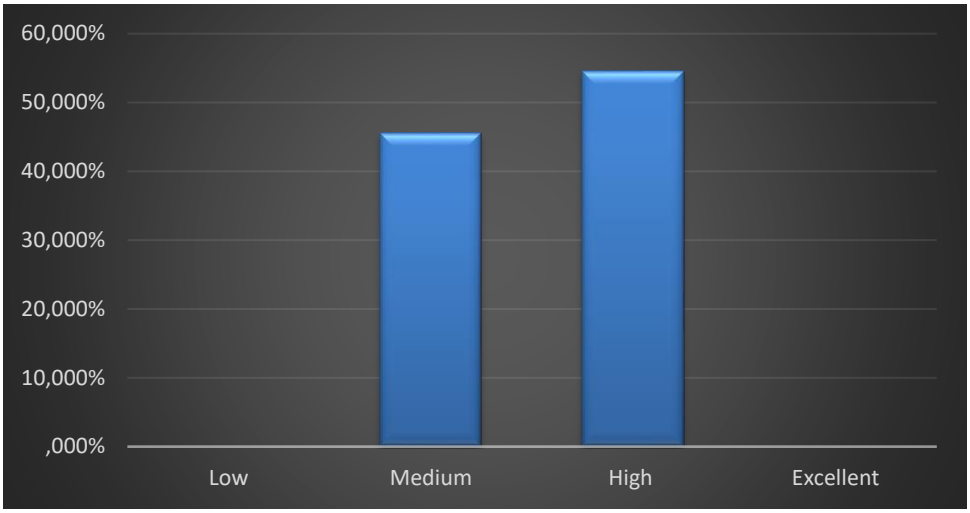

Chart 2: Technology awareness level of the policies at regional level

55% of interviewed policy makers consider the technology awareness level of the policies at regional level as high. This implies that policy makers believe that policies are more technology aware than the enterprise.

3.1.3 Dedicated organizations at regional level for technology transfer

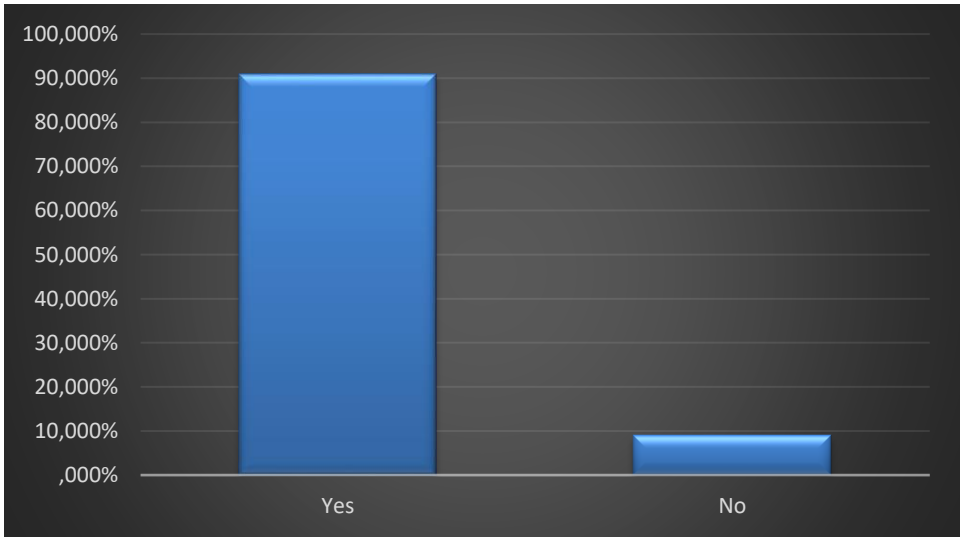

Chart 3: Dedicated organizations at regional level for technology transfer

More than 90% of interviewed policy makers know a dedicated organization which supports the technology transfer at regional level, which is a very good result.

3.1.4 List of identified dedicated organization for technology transfer

Table 1: List of identified dedicated organizations for technology transfer

AUSTRIA	• LIFE LONG Learning (TU Graz)
GERMANY	• Universities (in particular transfer offices, innovation centres), • Research institutions, competence centres, Steinbeis • Transfer Offices, Foundation for Technology, Innovation and Research Thuringia (STIFT), • Cluster and network organizations, • Thuringian Cluster Management (ThCM) • Regional Management Gotha district and Ilm district
ITALY	• Universities, • Trade associations, • SMEs, • Private organizations
POLAND	• Ministry of Entrepreneurship and Technology – innovations • Polish Association of Centers for Technology Transfer – academic association for technology transfer • Regional Development Agencies, Technology and Innovation Parks – research / innovation / technology transfer • Krakow Technology Park (Krakowski Park Technologiczny), • Jagiellonian Innovation Centre (Jagiellońskie Centrum Innowacji - LifeScience Park), • Centre for Technology Transfer CITTRU (Centrum Transferu Technologii CITTRU, • Enterprise Europe Network • AGH University of Science and Technology (AGH Centrum Transferu Technologii). • Krakow University of Technology Centre of Technology Transfer • Numerous academic and commercial centers for technology transfer • Business environment institutions,
SLOVENIA	• Knowledge and Technology Transfer Office, University Maribor

3.1.5 "Training / educational organizations" known for providing courses and degrees in innovation and technology transfer

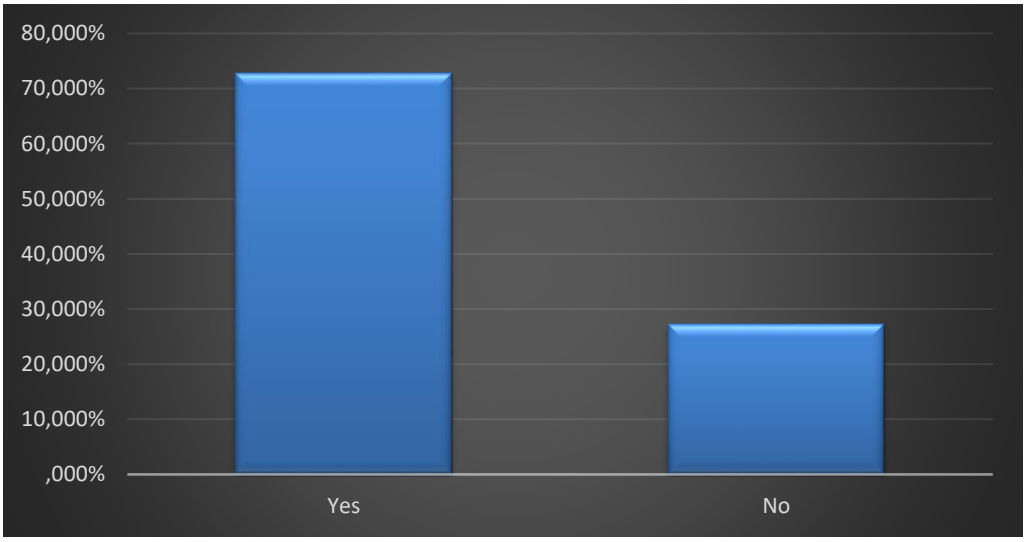

Chart 4: "Training / educations organizations" known for providing courses and degrees in innovation and technology transfer

It is interesting to see that interviewed policy makers also know training & educational organizations which are providing courses and degrees in innovation and technology transfer. More than 70% of the interviewed persons know at least one organization providing those services.

3.1.6 List of known training organizations specialized in providing technology transfer training

Table 2: List of known training organizations specialized in providing technology transfer training

AUSTRIA	• Montanuniversität – Außeninstitut – Knowledge Transfer Course • TU – internal not external
GERMANY	• Study programs in innovation / change management, in particular FSU Jena, Bauhaus University Weimar, • Nordhausen University of Applied Sciences; Offers for knowledge and technology transfer generally belong to the legal mandate of the Thuringian universities. Contents for the transfer in particular convey e.g. the courses at the TU Ilmenau and at the universities of applied sciences.

	• Projects => Mittelstand 4.0 competence center Ilmenau => they accompany enterprises with their challenges Regional Management => regional economy development
ITALY	• University of Brescia, • CFP Zanardelli, • Liceo Internazionale per l'impresa Guido Carli, • Private organizations and Universities
POLAND	• Krakow Technology Park (Krakowski Park Technologiczny), • Jagiellonian Innovation Centre (Jagiellońskie Centrum Innowacji) • LifeScience Park**),** • Centre for Technology Transfer CITTRU (Centrum Transferu Technologii CITTRU, • AGH University of Science and Technology (AGH Centrum Transferu Technologii). • Malopolska Centre of Biotechnology • Malopolska Laboratory of Energysaving Buildings • Krakow University of Technology Centre of Technology Transfer • technology centers at universities
SLOVENIA	• University Maribor – different faculties included within the University

3.1.7 Identified measures adopted at regional level to support enterprises to increase their technology awareness level

Table 3: Identified measures adopted at regional level to support enterprises to increase their technology awareness level

AUSTRIA	• Innovation room – special funding pots • Excellent trained people from HTL, MontanUni and TU, more recently also technical branches of the University of Applied Sciences – Styria as the only federal state with 2 technical universities – this has helped the companies innovate • entrepreneurial spirit – give rise as a technology leader – logistics KNAPP and SSI – RFID in the same way-all-wheel drive technology
GERMANY	• Promotion of innovation clusters and cooperation networks, implementation of communication formats of RIS3 Thuringia such as Annual event, forums and newsletters
ITALY	• Organization and realization of specific training courses

	• Lombardy region creates specific calls dedicated to start-ups (for example: Innovation Lombardy that is a platform for connecting different stakeholders) • Industry 4.0: Tax incentive for manufacturing companies that invest in special high-tech devices and equipment for technical and digital innovation. • EU Projects: European funded projects for pilot plant testing (for example TASIO, H-REII etc.) or for promotion of good practices and development of awareness on certain relevant topics (for example EE-Metal).
POLAND	• Polish Agency for Enterprise Development – opportunities for consulting services (innovation and technology) • National Contact Point – training, educating and informing enterprises about possible funds for innovations and technology development • Project “SKILLS” - exchange of good practices and experiences on policies (national, regional or local) between regions participating in the project, preparation of guidelines and implementation plans to improve SME development policies through the use of ICT. • Net of Knowledge and Practice („Sieć Wiedzy i Praktyki”) - strengthening the cooperation of science and business in Malopolska, increasing the innovativeness and competitiveness of companies from the region, creating a network of knowledge and practice. • Participation in the Vanguard Initiative to use smart specializations to boost new growth through bottom up entrepreneurial innovation and industrial speed up – Malopolska is involved in biotechnology pilot projects https://s3vanguardinitiative.eu/ • Supporting program SpaceUp „BalticSatApps” - 3-month acceleration program for startups using Copernicus satellite data: www.copernicus.eu, and mentoring, international relations, training and business contacts with the space industry. • Project “3DCentral” - the objective of the 3DCentral project is to create a network of innovation regions operating in the field of intelligent engineering technology and rapid prototyping through the so-called Knowledge Axes of Central Europe (KACE - Knowledge Axis Central Europe) • Malopolska vouchers for innovations • SPIN – Malopolska Knowledge Transfer Centers - support for entrepreneurs https://www.spin.malopolska.pl/ (Małopolskie Centra Transferu Wiedzy wsparciem dla przedsiębiorców SPIN)

	• Cyclical seminar " A patent for a good start" on how to legally protect company's ideas, inventions and techs. • Cyclical symposium "Intellectual Property w innovative economy" on how to price company's invention and evaluate a risk of the implementation.
SLOVENIA	• No specific measures have been taken by now. Everything is more or less done on a national level. • At national level there are voucher systems available which are supporting the uptake of new technology and ser-vices. • INOVATIVNA SLOVENIJA / INOVACIJE GZS – Innovation promotion and support programme: The Chamber of Commerce and Industry of Slovenia (CCIS) developed the Innovative Slovenia Programme to promote as well as nurture and support the entire process of innovation – from conception to implementation. Through a variety of activities we aim to foster the spirit of innovation in Slovenia, and thereby contribute to success in foreign markets. Pomurska gospodarska zbornica (PGZ) is the regional partner CCIS for Region Pomurje. The PGZ has the region's longest tradition in awarding innovation in Region Pomurje. • DIFFERENT WORKSHOPS for innovations and innovative companies (R&D workshops, B2B meetings etc.)

3.1.8 Technology transfer relevance for the economic development of the enterprises at regional level

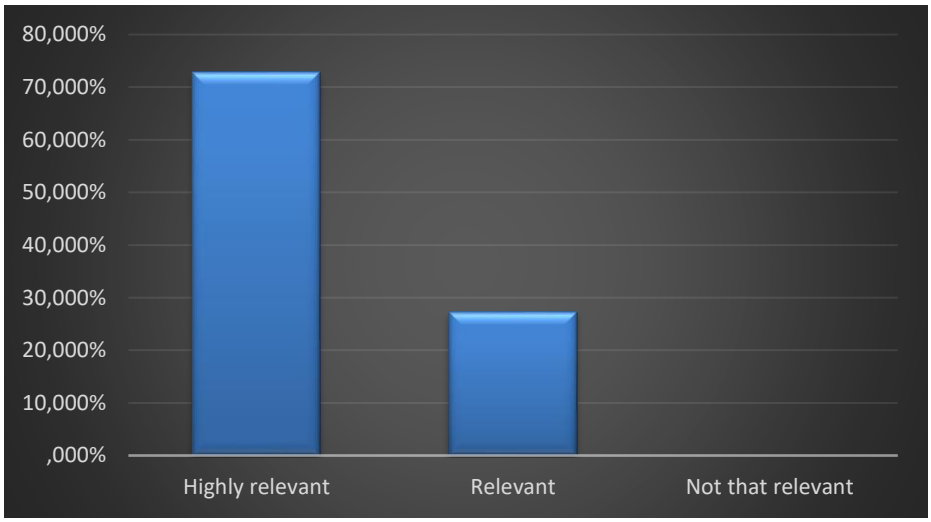

Chart 5: Technology transfer relevance for the economic development of the enterprise at regional level

More than 70% of the interviewed persons think that technology transfer is highly relevant for the economic development of the enterprises at regional level.

3.1.9 Relevance of different technology domains in transnational level for the economic development of enterprises at regional level

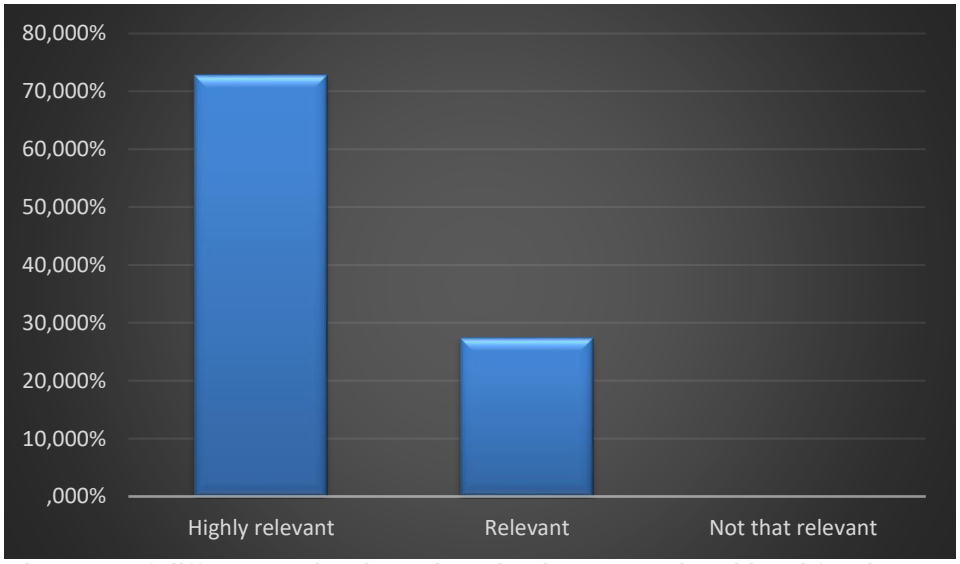

Chart 6: Relevance of different technology domains in transnational level for the economic development of enterprises at regional level

We can draw similarities to previous question since also more than 70% of the interviewed persons think that different technology domains in transnational level have a highly relevant influence on economic development of enterprises at regional level.

3.2 Part 2 – Support provided to SMEs

This part provides us with an understanding of how – through which channels – SMEs get support in the field of technology transfer and what policy makers think is the best way to do it.

KEY MESSAGE:

Interviewed persons identified plenty organizations which support the technology transfer at regional level, where the **most important support mechanisms are introduction of R&D Laboratories and introduction of the Matchmaking systems**. It is also important to notice that the **majority of SMEs turn to policy makers for support at technology transfer**, where they are given some answers and then policy organization connects them with external organization or technical office.

3.2.1 Who supports enterprises in technology transfer at regional level

Table 4: Who support enterprises in technology transfer at regional level

AUSTRIA	• Government Graz • National – Federal – Regional chain and policies for technology transfer • SCIENCE FIT www.sciencefit.at
GERMANY	• Universities (in particular transfer offices, innovation centres), research institutions, competence centres, Steinbeis • Transfer Offices, Foundation for Technology, Innovation and Research Thuringia (STIFT), cluster and network organizations, • Thuringian Cluster Management (ThCM) • economy developments of local authority district • Regional Management • Technology and Incubator Center Ilmenau
ITALY	• Public bodies for financing and dissemination • Private bodies for strategic planification • Private organizations • Universities • Trade associations
POLAND	• Open Innovation Network – Industrial Development Agency– project financed by EU, support financially technology transfer and increasing knowledge on Open Innovation • Polish Agency for Enterprise Development – dedicated programs for increasing innovations in Polish SME's including consulting in different technology fields • Technology Transfer Offices associated to large Universities • Krakow Technology Park (Krakowski Park Technologiczny), • The Marshal's Office of the Malopolska Region, • Jagiellonian Innovation Centre (Jagiellońskie Centrum Innowacji - LifeScience Park), • Centre for Technology Transfer CITTRU (Centrum Transferu Technologii CITTRU, • AGH University of Science and Technology (AGH Centrum Transferu Technologii). • Project SPIN - Malopolska Knowledge Transfer Centers - support for entrepreneurs • Regional Operational Program – grants, vouchers for innovation

	• Malopolska Festival of Innovation • Malopolska at innovation fairs, business meetings, study visits
SLOVENIA	• Chamber of commerce • Technology Park • Development Center Murska Sobota • Technology Transfer office of University of Maribor

3.2.2 Who supports enterprises in understanding the technology trends at transnational level

Table 5: Who supports enterprises in understanding the technology trends at transnational level

AUSTRIA	• Regional structure is most important • SME doesn't really start with basic research. • Start-ups and spin offs are exceptions here.
GERMANY	• Universities (especially transfer offices, innovation centres), research institutions, Thuringian Cluster Management (ThCM) • State Chancellery → invitation as local authority district to talk about problems and needs, and find solutions together with universities and enterprises and the same players from other but similar structured regions o there are some aspirations, but quite small and maybe not that structured
ITALY	• Universities • Training institutions • Trade organizations • R&D Centers • Private organizations, • Universities, • Trade associations
POLAND	• The responsibilities are divided between several institutions. Enterprises can use consultancy services to gain that kind of knowledge (sometimes with incentive) or take part in conference supported by Ministry or different entity. • Open Innovation Network – Industrial Development Agency– project financed by EU, support financially technology transfer and increasing knowledge on Open Innovation

	• Polish Agency for Enterprise Development – dedicated programs for increasing innovations in Polish SME's including consulting in different technology fields • Polish Agency for Enterprise Development provides reports on - Monitoring of national and global trends • Krakow Technology Park (Krakowski Park Technologiczny), • The Marshal's Office of the Malopolska Region, • Jagiellonian Innovation Centre (Jagiellońskie Centrum Innowacji - LifeScience Park), • Centre for Technology Transfer CITTRU (Centrum Transferu Technologii CITTRU, • AGH University of Science and Technology (AGH Centrum Transferu Technologii). • Regional government, for example by organizing economic missions. • Business environment institutions, clusters
SLOVENIA	• Chamber of commerce • Development Center Murska Sobota • Pomurje Technology Park • Different clusters

3.2.3 Importance of different support mechanisms in the field of technology transfer

Table 6: Results of importance of different support mechanisms in the field of technology transfer

	1 Not important	2 Less important	3 Important	4 More important	5 Highly important
Training & education	9,09%	0,00%	0,00%	36,36%	54,55%
Mobility of students	9,09%	18,18%	27,27%	9,09%	36,36%
Mobility of employees	9,09%	18,18%	9,09%	27,27%	36,36%
Matchmaking systems	0,00%	0,00%	9,09%	27,27%	63,64%
R&D Laboratories	0,00%	9,09%	9,09%	18,18%	63,64%
Experience factories	0,00%	0,00%	36,36%	27,27%	36,36%
Workshops & Seminars	18,18%	0,00%	9,09%	18,18%	54,55%
Study visits	9,09%	9,09%	9,09%	18,18%	54,55%
Other	0,00%	0,00%	0,00%	0,00%	27,27%

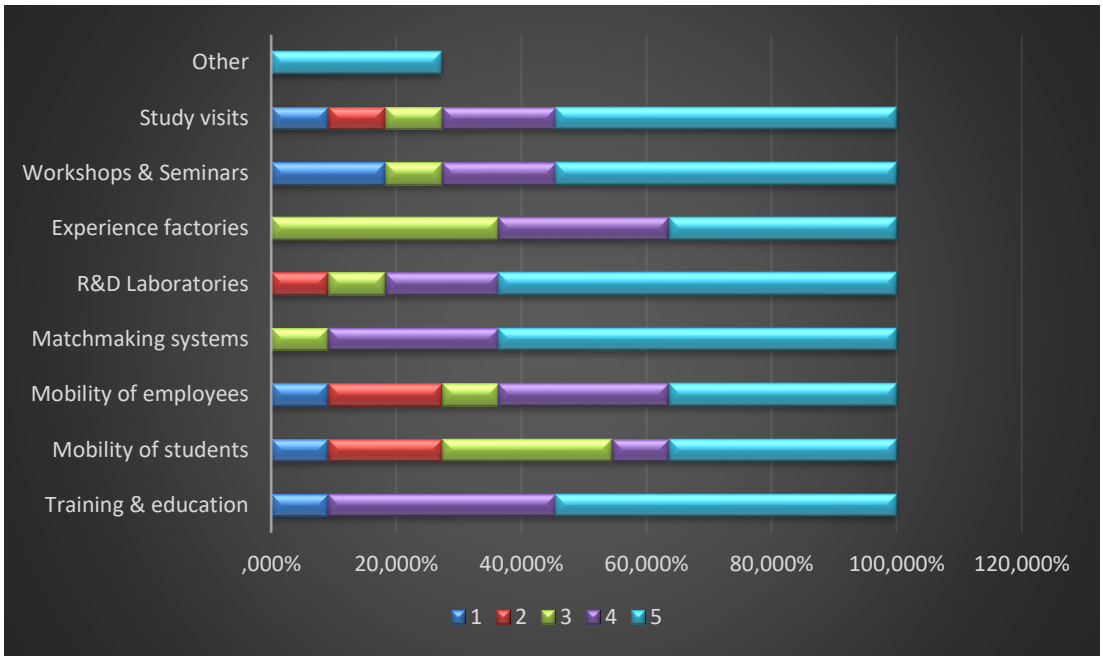

Chart 7: importance of different support mechanisms in the field of technology transfer

The table and chart show the importance of different support mechanisms in the field of technology transfer. It can be noted that the most important mechanism are R&D Laboratories and Matchmaking systems, which has been highly scored by more than 60% of interviewed persons. The least important mechanisms are workshops & seminars.

3.2.4 Other specifications

- Financial support, public funding,
- networks/cluster
- If the bridgehead DI is there in SME, then technology transfer becomes much easier.
- Recruiting academic workforce
- Big data collection and analysis
- The most important in above mentioned Matchmaking system are: cooperation & partnership.

3.2.5 Proposed support mechanisms for technology transfer

Table 7: Proposed support mechanisms for technology transfer

AUSTRIA	• Transparent way and communication of all the existing projects and support mechanisms • Matchmaking • Public project funding

	• Recruiting (HR)

GERMANY	• In addition to the institutions, there is already a comprehensive set of instruments (for example, collaborative pro-jects, research groups, staff exchanges).
	• Supporting mechanism between universities/students and the economy is necessary
	  o transferring entities for the results of the scientists and students to start-ups and other business models
	• Which exact mechanism is hard to tell, but the awareness of the possibilities and of risks needs to be addressed
	  o offers have to be created to help concerning the decision-making process. Maybe this can become part of the Curriculum.

ITALY	• To support the technology transfer it would be important to listen and analyse the needs of territory in order to create a strategic model • Funds for: R&D, training courses for employees and cooperation with research institutes such as Universities

POLAND	• Complex program providing:
	  o Training for enterprises interested in technology transfer
	  o Law consulting on IP protection and technology transfer
	  o Financing mechanism for IP transfer and financing for implementation of such technology
	  o Platform where available technologies for technology transfer will be available
	• Existing programs does not cover all of the mentioned points.
	• Better cooperation between universities in the region, trying to eliminate wild and wrong competition. Often, this wild and wrong competition means that research and development projects do not go beyond the walls of the university.
	• Create more coherent project networks and clusters of cooperation, so as not to distract funds for actions that are not compatible or distant in their assumption.
	• Very simple in the formal field and short in terms of applying funds for establishing cooperation be-tween R& D units and entrepreneurs

SLOVENIA	• Development laboratory supported by university and researchers – cooperation with university, which is supported as a Living lab, where others could learn.

	• Improve R&D knowledge in companies and in business support environment and institutions • Study Visits for SME and innovators (domestic and cross-border) • Creation of live demo sites – experience factories

3.2.6 What kind of support you would request from EU to help your region support technology transfer of enterprises?

Table 8: What kind of support you would request from EU to help your regions support technology transfer of enterprises

AUSTRIA	• The flight level on EU level is that high, that there should be a focus on real to the ground measures. • Occasionally great programs, continuation should be considered, phase 2 is the innovation barrier.
GERMANY	• better support for transnational networking platforms (for example, for the collaboration of clusters and networks) • financial support (resources and staff) for the described mechanism
ITALY	• Stronger knowledge and listening of the needs of local territories • Stronger approach to local and regional topics • Funded projects for cooperation and partnership among different EU countries
POLAND	• Promotion of open innovation. International platform dedicated for matchmaking technology donors and receivers. • From an economic point of view, resources, including EU financial resources are limited, and the demand for them from all EU members is very large. • Focused stream of funding for these areas in the Małopolska region, which can be used for those fields of innovation and high technologies that currently dominate and / or will dominate at the region's economy over the coming years and for decades: sustainable and circular economy, renewable sources of energy or new energy - biotechnology, automotive, leisure industry, internet of things. • Introducing - measures that will allow clusters to provide their own contribution (and certification) to participate in major international value chains
SLOVENIA	• Support more study visits of best practise in industry of more developed countries.

	• Create new opportunities in order to increase the R&D knowledge through different funding instruments • Support study visits and visiting of best practice implementation in other EU regions • Support the creation of experience factories (live demo sites)

3.2.7 How many of the interviewed organizations receive specific requests from SMEs to increase their technology readiness?

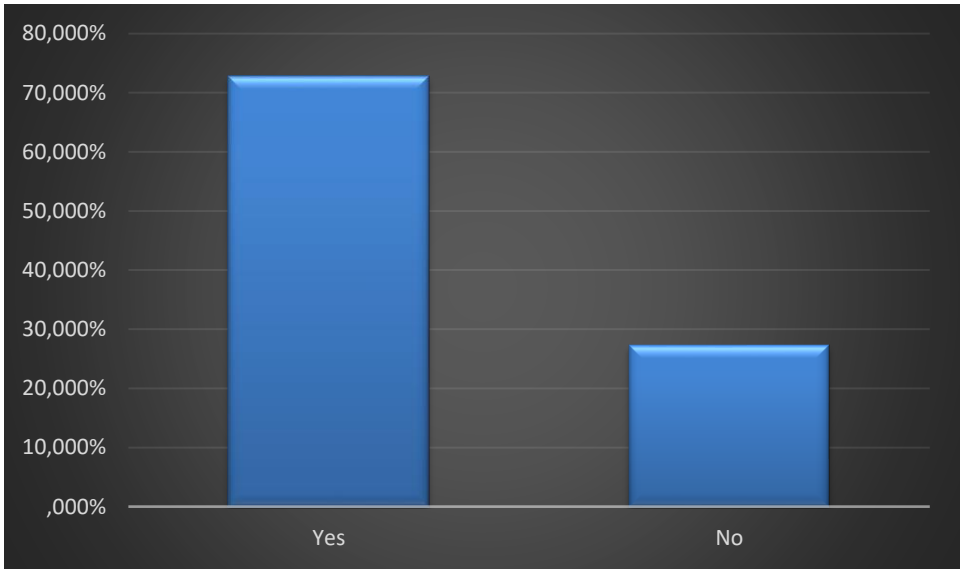

Chart 8: Does the organization you belong to, receive requests from enterprises to support them in in-creasing their technology readiness?

It is interesting to see that more than 70% of the interviewed persons received requests from SMEs on increasing their technology readiness. This summarized that SMEs actively seeks help to increase their technology readiness.

3.2.8 Type of requests received from the SMEs

- financial support
- matchmaking activities
- counselling and mentorship
- get advices and assistance in various fields and areas pertaining to innovation and technology (R&D etc.)
- Matchmaking, contract
- Sharing of policy maker strategies with local bodies and organizations

- Receiving input to collaboration and competitiveness to the territory
- Financing the innovation projects.
- Financial support for projects on low Technology Readiness Level.
- Providing contacts and information's on projects that are in the field of interest of enterprises strictly connected with new technologies and innovations.
- Possibility to invest in the field for OZE or waste recycling (where to invest in Małopolska region and how to do it, and also how to get financial assistance and grants).
- e.g. Inquiries to promote infrastructure and FTI projects, contact inquiries, policy support requests, political participation in events
- SMEs are no longer interested in obtaining general technology information

3.2.9 The process used to respond to the requests of SMEs

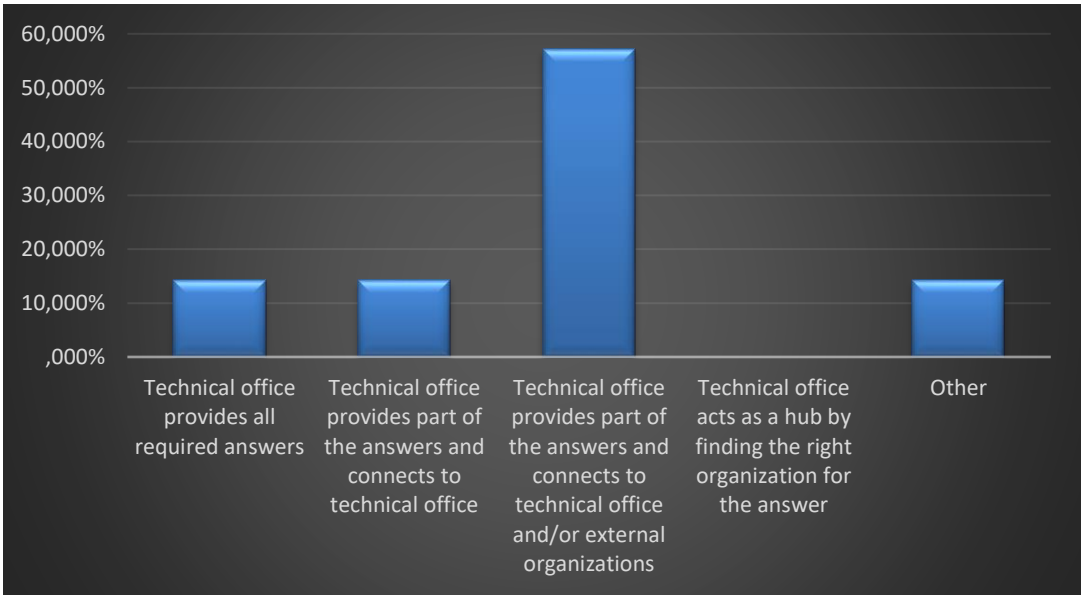

Chart 9: The process used to respond to the request of SMEs

The most commonly used process to respond to the request of SMEs is providing part of the answers and then connecting the SME to other technical office or external organization, which provides additional answers.

3.3 PART 3 - Necessity to structure an extensive cooperation network

KEY MESSAGE:

Policy makers expressed need to create **stronger relationship between regional actors** in order to structure an extensive cooperation, where the interviewed persons would mostly **focus on increasing the awareness level and opportunities of SMEs**. Cooperation between policy makers in the field of technology transfer and innovation is identified as important, where **cooperation networks are mainly done on a national and EU level**. It is noted that policy makers cooperate between themselves to exchange knowledge and experience on technology transfer approaches.

3.3.1 Regional asset to support the technology transfer

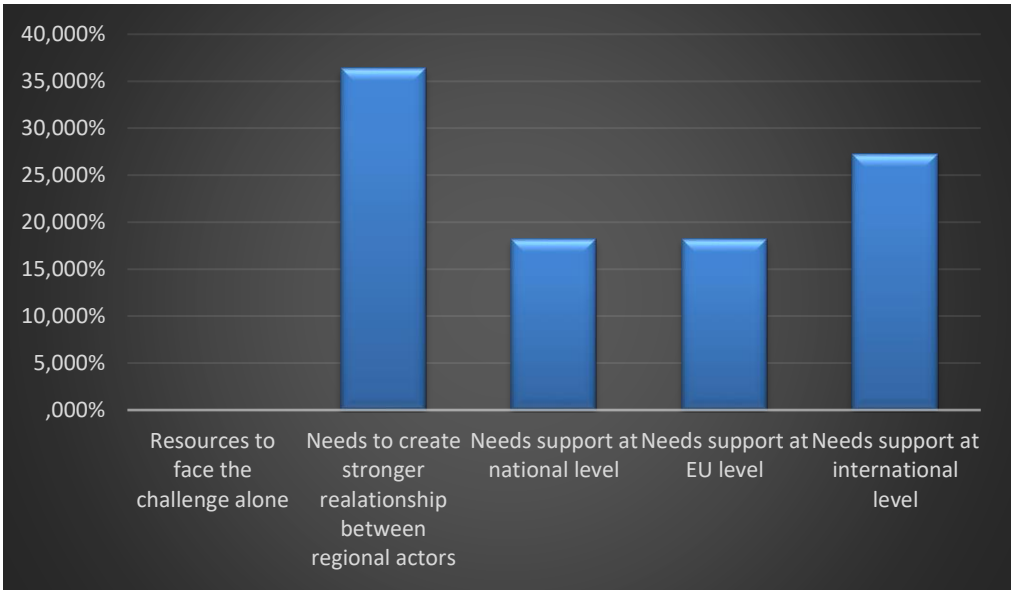

Chart 10: Regional asset to support the technology transfer

Interviewed persons says that it is necessary to create stronger relationship between regional actors in order to support the technology transfer process, another important aspect is also the support provided at international level.

3.3.2 Priorities of possible cooperation schemes with partners in the field of technology transfer

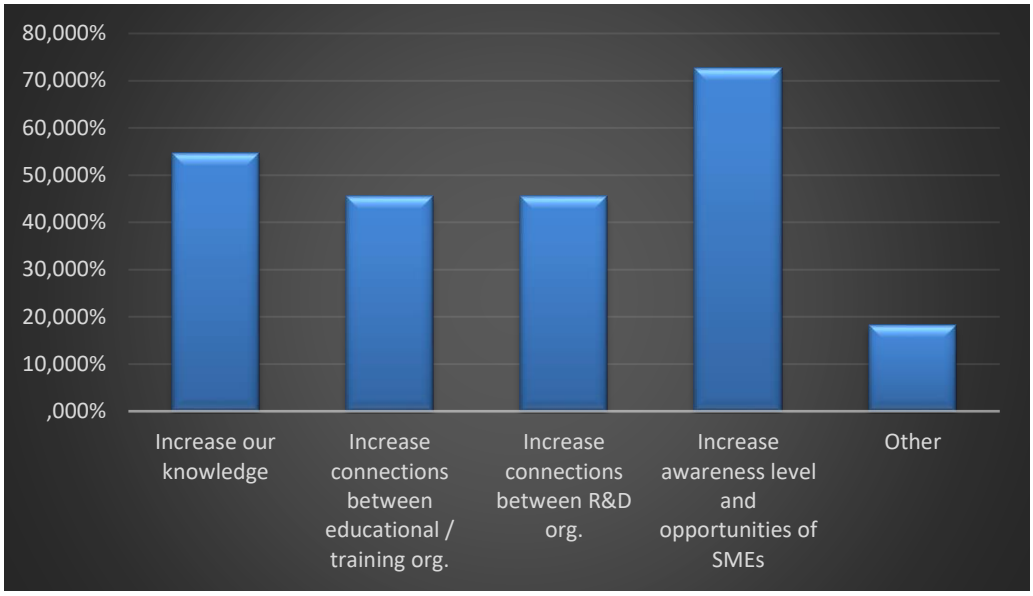

Chart 11: Priorities of possible cooperation schemes with partners in the field of technology transfer

In case of cooperation with partners the interviewed persons would mostly focus on increasing the awareness level and opportunities of SMEs.

3.3.3 Other specification

- Global companies
- Increase technology (no wild and wrong competitive) cooperation & partnership between SMEs.

3.3.4 Relevance of cooperation between policy makers in the field of technology transfer and innovation

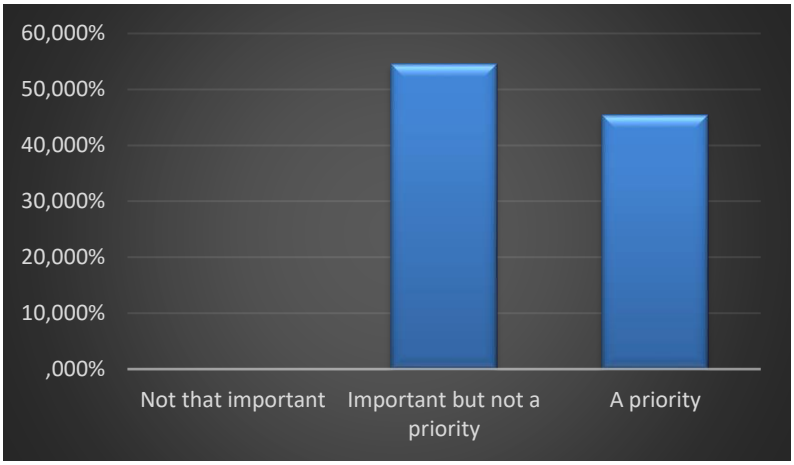

Chart 12: Relevance of cooperation between policy makers in the field of technology transfer and innovation

It is identified that the cooperation between policy makers in the field of technology transfer and innovation is important but not a priority. Although an answer of a priority is very close, which means that the cooperation is very important when coming to this aspect.

3.3.5 Are the regions involved in the project investing in creating cooperation networks on technology transfer?

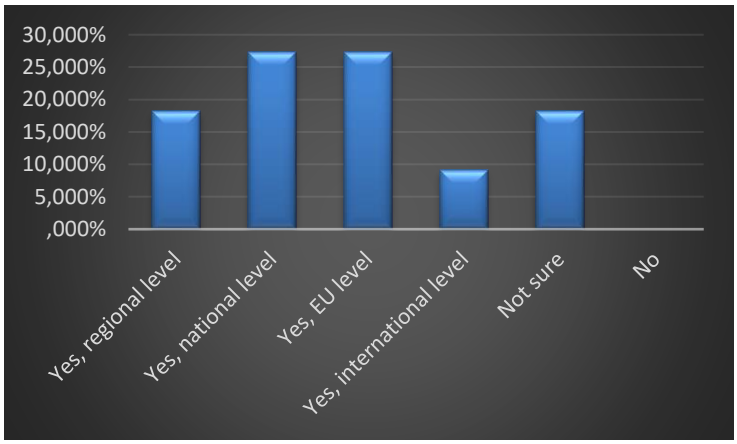

Chart 13: Are regions involved in the project investing in creating cooperation networks on technology transfers?

According to the answers, the regions are involved in project creation and creating cooperation networks on a national and EU level, not many of them choose the international level of cooperation, which means there is still a room to increase this aspect of cooperation.

3.3.6 Exchanges among policy makers to understand technology transfer approaches

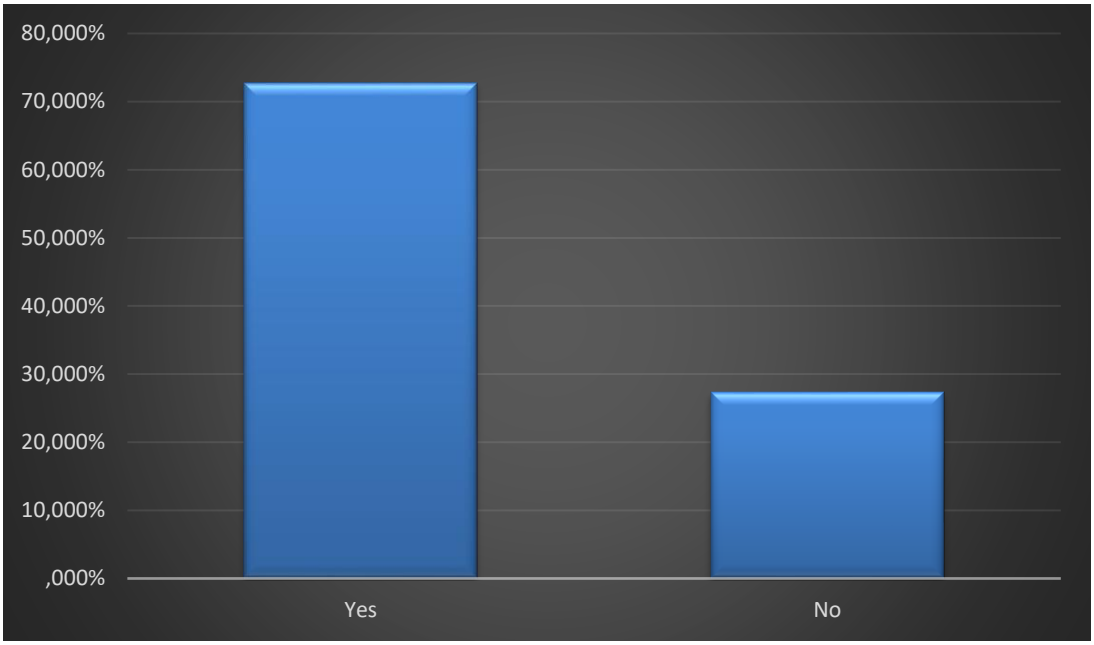

Chart 14: Exchanges among policy makers to understand technology transfer approaches

It is noted that policy makers cooperate between themselves to exchange knowledge and experience on technology transfer approaches.

3.3.7 What policy makers have learnt from visits and exchanges

- Their way of work and how they approach SMEs with the topic of Technology Transfer
- The motivation, the plan, the road map is extremely important.
- ETH Zürich, TU München, Benchmark Level
- New knowledges and experience to replicate at local level
- Their attitude to technology transfer process and how it is supported form the beginning up to the commercialization. How to develop full support mechanism engaging all partners from academia, R&D centres, investors, SME's and start-ups.
- A proactive approach to entrepreneurs (TIP program, Lower Austria)
- Support concepts in other federal states or at federal level

3.3.8 Concrete partnering experiences at regional / national level in technology transfer

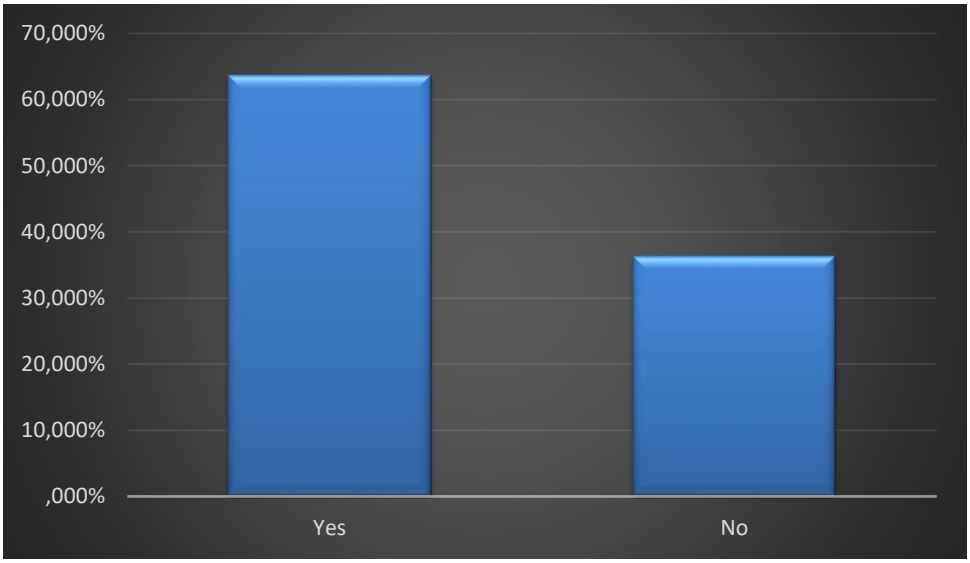

Chart 15: Concrete partnering experiences at regional / national level in technology transfer

More than 60% of interviewed persons have already been cooperating with partners on regional or national level in order to support the technology transfer process.

Table 9: Description of strengths and weaknesses, when having experience in technology transfer at regional / national level

	STRENGHTS	WEAKNESSES
AUSTRIA	• Leverage effect • Only if the region is having an advantage.	• Time consuming, communication effort
GERMANY	• involvement of core players, pooling of resources and activities;	• Broad diffusion in Thuringian SMEs
ITALY	• More experience and knowledges	• Difficulty to propose and realize new technologies at local level
POLAND	• Large knowledge about their capabilities (their technologies) • Opportunity to exchange experiences	• Almost no real connections with enterprises and small knowledge on where to commercialise technology • Time scope of cooperation

SLOVENIA	• Exchange of experience and good practices	• duration, non-infrastructure support

3.3.9 Concrete partnering experiences at EU level in technology transfer

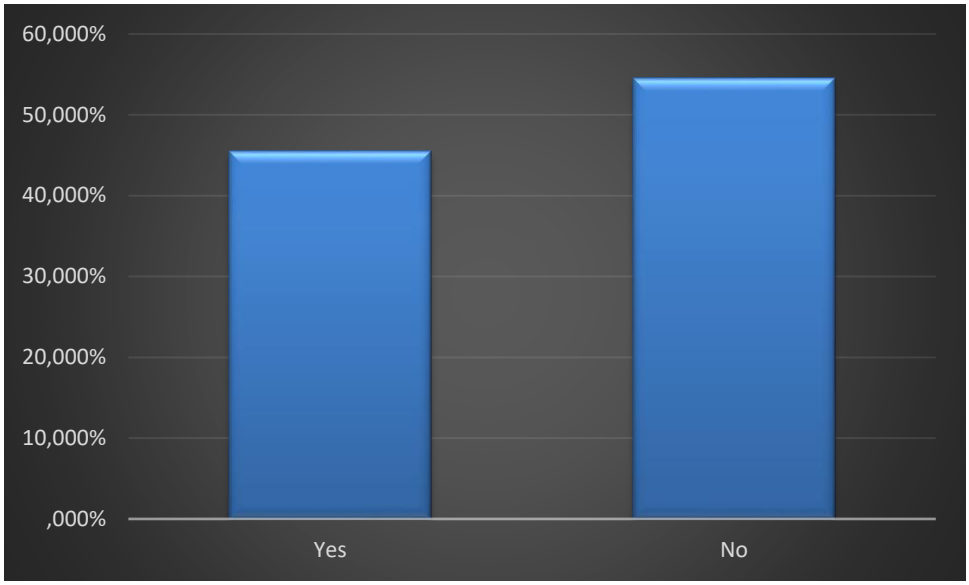

Chart 16: Concrete partnering experiences at EU level in technology transfer

Both answers are equally represented by interviewed persons. It can be noted that partners still cooperate more on regional / national level than EU level.

Table 10: Description of strength and weaknesses, when having experience in technology transfer at EU level

	STRENGHTS	WEAKNESSES
AUSTRIA	• EU – Smart city • Exchange, Benchmark	
GERMANY		
ITALY	• More experiences and knowledge • Knowledge of new approaches and methodologies used for technology transfer in other countries	• Difficulty to propose and realize new technologies at the local level • Lack of tools and fund to follow up the EU guidelines
POLAND	• Large knowledge about their capabilities (their technologies)	• Small connections with enterprises and small knowledge on

	• Opportunity to exchange experiences • Different level of needs and technological readiness • Regional SMEs entering international innovation pilots	where to commercialise technology beside their own market (national) • Distrust and wariness amongst our regional SMEs
SLOVENIA		

3.4 PART 4 – Anchoring the project to regional policies and mechanisms

KEY MESSAGE:

In order to support the technology transfer of enterprises in the region the **priority should be given to collaborative projects** with cooperation of enterprises with R & D centres, **training and education** and preparation of development funds for establishing business models, protection of intellectual property and spin-offs of universities and institutes. On the **training level** the most **support should be given to staff transfer and increasing knowledge on technology transfer, intellectual property and technology awareness level**.

3.4.1 Which priorities would you recommend in order to support technology transfer of enterprises within innovation and R&D projects in your region with ERDF funds?

Table 11: Which priorities would you recommend in order to support technology transfer of enterprises in your region with ERDF funds

AUSTRIA	• Should focus on SCIENCE BUSINESS Ventures co-financing
GERMANY	• Collaborative projects, innovation hubs, accelerators, transfer / translation agencies • Establish funding pots, that fund an economic, not scientific result, where the participants need to develop and implement business models and similar • And make the funding pots more attractive to big enterprises, since the already established measures focus on SMEs and are not attractive to bigger enterprises
ITALY	• Training and education

	• Innovation • Environment • Support and training to SMEs, R&D and low carbon emissions economy
POLAND	• Matchmaking; • Available support mechanisms; • Promotion of technology transfer benefits • The most important is making closer cooperation & partnerships between scientists and enterprises to join R&D better with practice in industry and generally in regional economy. • Cooperation of enterprises with R & D centers, • Grants for protection of intellectual property
SLOVENIA	• Regional laboratories / research centers in form of living lab – showcase of best practice • Development fund for spin-offs of universities and institutes • Autonomous robots • Industry 4.0 / smart manufacturing • Circular economy • Specific topics in the domain of technology transfer shall be addressed; this would foster real innovation and not meta level results.

3.4.2 Which priorities would you recommend in order to support technology transfer of enterprises within the training execution in your region with ESF funds?

Table 12: Which priorities would you recommend in order to support technology transfer of enterprises in your region with ESF funds?

AUSTRIA	

GERMANY	• Staff transfer (R & D / Innovation) between companies and research institutions / universities
	• awareness creation
	  o options for technology transfer on a regional level (start-ups, new business models, etc.)
	  o this will support the general technology transfer awareness of enterprises
	  o enterprises need to communicate more and exchange their ideas/problems/etc.

ITALY	• Innovation technology • Networking • Training and education • SMEs, research and innovation, low carbon emissions economy
POLAND	• Technology transfer – general knowledge, benefits, • Intellectual property – security, tax aspects, • Technology trends and new solutions for specific sectors (involvement of a larger number of companies in this process) – increasing technology awareness level • ESF funds streams to be more flexible and more focused in terms of their use for the technology transfer to enterprises and not to create unnecessary bureaucratic activities in their use. • It is necessary to have more confidence in applying for funds, but at the same time, at the stage of applying for a subsidy or grant, the project should be properly assessed at the initial decision-making level. • Informing and encouraging innovative projects activities aimed at building an innovative culture in the region
SLOVENIA	• Creation of clusters of innovative companies • Dual educational system or programmes, which enable this • Autonomous robots • Industry 4.0 / smart manufacturing • Circular economy • In many areas knowledge deficits are done on each region alone, courses should focus on lessons learned of other regions.