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RI ROAD MAP ABSTRACT

Poland, Lublin

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1 Regional Innovation Policy Context

Lublin as a strong academic center is the innovation heart of the region. The share of universities in the total value of expenditure on research and development in the region exceeds 70% and is the highest in Poland.

The development of innovation in the region is fostered by the development of an innovation culture and cooperation of enterprises as part of a cluster initiative or other formalized cooperation. In Lublin, the percentage of companies that participate in this form of cooperation is one from the highest in Poland.

The general index awarded to the Lubelskie region is 54. This means that the voivodship has great innovation potential, but there are strong barriers to its use.

This seems worrying, especially in the face of the revised EU cohesion policy for 2014-2020. This new treatment of regions' innovation presupposes a departure from the division into weak and strong regions, i.e. those that can create innovations and those that are not capable of it. The current concept in the EU financial perspective 2014-2020 assumes the definition of priority and strategic areas in a given region, the so-called smart specializations. By increasing the share of internal factors and focusing forces on these selected areas, regions have a chance to develop their own (local) innovations.

The Lubelskie Voivodeship has indicated 4 smart specializations: bioeconomy, medicine and health, low-emission energy as well as IT and automation, which have a chance for strong development and achieving a high position in the area of innovation. The problem is, however, the low rate of people working in the R&D area, which may translate into a much slower increase of knowledge in the region, and thus on a smaller scale of created innovations and a lower level of entrepreneurship.

As a consequence, this will translate into weaker competitiveness of the region. By strengthening the R&D sphere and improving efficiency, the Lubelskie Voivodship has a chance to become one of the more active regions in the field of creating innovation, and thanks to the dissemination of the concept of Responsible Innovation, including those taking into account the social and environmental aspects.

2 Regional RI Maturity

2.1 RI Performance of Regional Policy Making

RI Category	RI Component	Indicator	Type of measurement	Metric	Data source	Assessment (Modest/Moderate/Substantial) + Short description
Purpose	**Motivation for doing/supporting research/innovation**	M1: Integration of innovation/S&T in policy planning and strategies	Qualitative	Inclusion of innovation/S&T components in the official policies of the organizations (e.g. strategic plans, policy documents, etc.)	Regional policy/planning documents – Partners'/Experts' assessment	**Substanatial** On the basis of questionnaires a) Commitment - 19 people considered it to be significant or very high; b) Gender equality - 18 people were of the opinion that it was present to a large or very large extent; c) Openness - in the case of this component, 18 people were convinced that it occurs to a large or very large extent; d) Education - 20 respondents indicated that they were present to a large or very large extent; e) Ethics - 21 people that to a large or very large extent; f) Good governance - 13 people, to a large extent, but 12 indicated that it does not occur at all. In general, respondents recognized that individual RI components: commitment, gender equality, openness, education, ethics are included to a large or very large extent in strategic documents. Nevertheless, in the case of the last element 'good governance', some respondents were of the opinion that this component exists, but a large group of respondents negated its presence. This could mean unconsciousness or a gap in the integration of innovation. Without 'good governance' there is no responsible innovation,

						which is why a greater emphasis on its presence in strategic documents, projects or activities is necessary.
	Motivation for engaging with RI	M2: Integration of RI components in policy planning and strategies	Qualitative	Inclusion of RI components in the official policies of the organizations (e.g. strategic plans, policy documents, etc.)	Regional policy/planning documents – Partners'/Experts' assessment	**Moderate** On the basis of questionnaires: the majority of respondents (21 out of 25) confirmed that the authorities of the Lubelskie Voivodeship strongly involves stakeholders in the process of planning and developing innovation. This happens mainly through the creation of cooperation networks, projects implemented by the voivodship, the work of "advisory bodies", as well as seminars meetings and work in groups of experts. It can therefore be concluded that this component is sufficiently met in the opinion of the stakeholders.
		M3: Financial commitment on RI components	Quantitative	Budget allocation for RI components in the budget of regional policy makers: (a) presence of specific budget headings for RI or its components; (b) annual amount (%, or €); (b) evolution (increase, decrease, stable over the last 3 years – or other programming	Budget documents – Partners'/Experts' assessment	**Modest/Moderate** No specific RI components in the budget of regional policy makers. In ROP LV 2014-2020 approx. 265 billions PLN (225 billions PLN from ERDF) in Priority Axis 3 (Competitiveness of SMEs) and 118 billions PLN (100 billions PLN from ERDF) was dedicated to innovation support in region.

				period where appropriate)		
	Ethics (justification of intended outcomes)	E1: Significance of UNDGs in policy planning and strategies	Qualitative	Reference to UNDGs in regional policy documents (e.g. strategic plans, policy documents, etc.)	Regional policy/planning documents – Partners'/Experts' assessment	**Substantial** References to: principle of sustainable development, gender equality and principle of equal opportunities and prevention of discrimination in the ROP LV 2014-2020
Process	**Anticipation**	A1: Foresight and strategic planning activities (e.g. Scenario building, delphis, etc.) (adapted from Eastwood et al. 2017)	Quantitative/Qualitative	Number of foresight and strategic planning activities in the current and preceding governing period (e.g. regional legislature, depending on local regulation) [Presence/Absence of activities if the number is not available]	Regional policy/planning documents – Partners'/Experts' assessment	**Modest** Currently, the process of updating the Lublin Voivodeship Development Strategy (SRWL) and works on RIS LV in the new EU financial perspective are underway. In the SRWL update process, "Prospective Diagnosis of the Lubelskie Voivodship, synthesis, conclusions and recommendations for updating the Lubelskie Voivodship Development Strategy" were prepared, and then presented to the public "Assumptions for updating the Lubelskie Voivodship Development Strategy for 2014-2020 (with a perspective until 2030)". RIS assumptions will be based on the results of previous work on SRWL and will be expanded to include the results of RIS3 LV 2014-2020 evaluation.
	Public engagement	PE1: Public perceptions on public involvement in science and	Quantitative	% of respondents who stated that "the public should be consulted and public opinion	Special Eurobarometer 340 (national data), p. 87.	**Modest** According to Special Eurobarometer 340: Science and Technology 24% of respondents in Poland consider that "the public should be consulted and public opinion should be

		technology (Tsanos and Apospori 2017)		should be considered when making decisions about science and technology"		considered when making decisions about science and technology" (p. 87).
		PE2: Formalisation and extent of public involvement in regional science and technology decision-making (Tsanos and Apospori 2017)	Qualitative	Qualitative discussion and self-classification as: - Formalised / high involvement - Formalised / low involvement - Not formalised / high involvement - Not formalised / low involvement	Partners'/Experts' assessment	**Moderate** Elaboration of RIS3 LV 2014-2020 was formalised and the document was consulted with public in the process of entrepreneurial discovery (EDP).
	Responsiveness	RES1: Potential to adapt policies and strategies (adapted from Eastwood et al. 2017)	Qualitative	Existence of stakeholder/public feedback mechanisms in policy/strategy implementation	Regional policy and strategy documents/ Partners'/Experts' assessment	**Moderate** Elaboration of RIS3 LV 2014-2020 was provided with public in the process of entrepreneurial discovery (EDP).
		RES2: Openness and transparency of the planning and policy process (adapted	Qualitative	Existence of stakeholder/public communication mechanisms in policy/strategy	Regional policy and strategy documents/ Partners'/Experts' assessment	**Modest** On the basis of questionnaires: When asked about the CSR instruments used in regional policy (indicator RES2: Openness and transparency of corporate actions), only 9 people out of 25 answered in the affirmative way. A large group of respondents (11 people) had no opinion

		from Eastwood et al. 2017)		implementation procedures		regarding the openness and transparency of corporate activities.
	Reflection	REF1: Reflexive guidance in regional policy/strategy on RI (adapted from Eastwood et al. 2017)	Qualitative	Existence of offices, fora, committees, etc. for the monitoring and assessment of program/project implementation activities involving RI and its components	Regional policy and strategy documents/ Partners'/Experts' assessment	**Modest** No official offices, fora, committees, etc. for the monitoring and assessment of program/project implementation activities involving RI and its components. The Lublin Centre for Innovation Research (one of the Unit in Departament of Economy in Marshal Office) monitors and assess the implementation of RIS3 LV 2014-2020 at the regional level.
		REF2: Regional support/incentives for the use of standards and certifications related to RI (e.g. ISO, SA, UNI) (adapted from Eastwood et al. 2017)	Qualitative	Existence of regional programs/actions supporting /requiring the use of instruments such as codes of conduct and standards in R&I	Regional policy and strategy documents/ Partners'/Experts' assessment	**Modest** Marshal Office as such acts within standards established at the national level (management control in public finance sector unit), but at the same time there are no regional programs/actions supporting /requiring the use of instruments such as codes of conduct and standards in R&I
	Governance	G1: Extent of R&I networks (e.g. platforms, hubs, incubators, accelerators)	Quantitative/Qualitative	Self-assessment in terms of: - Number of networks [Existence of	Regional policy and strategy documents/ Partners'/Experts' assessment	**Modest** Lubelskie Voivodeship is a formal member of European Regions Research&Innovation Network.

		promoting / supporting RI in the region (Tsanos and Apospori 2017)		networks if the number is not available] - Extent of involvement of regional policy makers in these networks - Formal / informal character of networks		
		G2: Activities of funders to promote RI at regional level (Tsanos and Apospori 2017)	Quantitative/Qualitative	Self-assessment in terms of: - Number of funding mechanisms to support RI activities [Existence of mechanisms, if the number is not available]; - € invested in RI-relevant projects	Regional policy and strategy documents/ Partners'/Experts' assessment	**Modest** Lubelskie Voivodeship plays a role of the Management Institution for ROP LV 2014-2020 (Department for Management of ROP). In ROP LV 2014-2020 approx. 265 billions PLN (225 billions PLN from ERDF) in Priority Axis 3 (Competitiveness of SMEs) and 118 billions PLN (100 billions PLN from ERDF) was dedicated to innovation support in region. No mechanisms to support RI activities.
	Ethics (deontology)	E2: Ethical considerations in the evaluation for the regional funding of R&I	Quantitative/Qualitative	% of R&I proposals for funding by regional policy makers that are subject to	Regional policy and strategy documents/ Partners'/Experts' assessment	**Modest** No data

		proposals (Tsanos and Apospori 2017)		evaluation of ethical concerns (i.e., R&I practices, ethical implications for the objects of R&I, ethical acceptability of R&I outcomes) over total number of R&I proposals [Existence of evaluations, if the number is not available]		
Products	**Gender/equality and diversity**	GE1: Gender gap of core human resources in science and technology (Tsanos and Apospori 2017)	Quantitative	% difference between the share of economically active population for women and the share of economically active population for men in science and technology	EU regional statistical yearbook 2015, p. 256	**Modest** On the basis of questionnaire: In this case, a small group of respondents (5 people) admitted that such actions are taken. And these are mainly: conferences, workshops, activities implemented under the ROSIE project, supporting the Women's Forum, eliminating gender stereotypes in education. However, 20 people did not have an opinion or did not answer. This result indicates a lack of gender parity in the area of innovation. There is a lot to be done in this regard. It is necessary to apply the principles of gender equality when undertaking entrepreneurial and innovative actions.
	Gender/equality and diversity	GE2: Support for gender equality in regionally funded R&I projects	Quantitative/Qualitative	Number of regionally funded R&I projects supporting gender	Regional policy and strategy documents/	**Modest** No data

		(adapted from Tsanos and Apospori 2017)		equality and/or creating of RDI jobs that employ women [Existence of funded projects, if the number is not available]	Partners'/Experts' assessment	
	Open access	OA1: Regional policies for dissemination of and open access to scientific, technical and economic information (adapted from Tsanos and Apospori 2017)	Qualitative	Qualitative discussion and self-assessment in terms of: - Existence of a regional policy for open access - Regional institutional mechanisms for establishing, maintaining and monitoring open science and innovation	Partners'/Experts' assessment	**Substantial** On the basis of questionnaires: Only 2 of the 25 respondents said that they do not use such sources of information. Other people use them very often or often. 13 people, in turn, said that access to these sources in the field of innovation was ensured. 12 people said that they did not have such access or did not know about it. These results indicate a further need to develop and expand databases with access to open information sources.
		OA2: Inclusion of open access / open science measures in research policies and calls for proposals	Qualitative	Existence of Regional open science / open innovation repositories or of regional support (e.g. financial) for	Regional programming documents	**Moderate** On the basis of questionnaires: 14 respondents did not have an opinion or stated that they do not implement such a policy. And 11 people gave a positive answer. This result indicates the need for extensive promotional and information campaign for the use of open data sources.

		(adapted from Tsanos and Apospori 2017)		the participation in sector or other repositories		
	UN Development Goals	UN1: Degree of impact on UNDGs	Qualitative	Qualitative discussion and partners' assessment in terms of the UNDGs which regional policy impacts the most	Partners'/Experts' assessment	**<u>Substantial</u>** To the question: was the impact of 17 sustainable and integrated development goals on regional policy discussed during meetings organized by the Lubelskie Voivodeship (UN1 indicator: Degree of impact on UNGD goals), 20 respondents gave a positive answer. 3 people had the opposite opinion and 2 had no opinion. The analysis of the answers indicates that in the respondents' opinion the most references during meetings organized by the authorities of the Lubelskie Voivodeship concerned the issues of innovation, industry and infrastructure. Education was another such area. It can be said that these are topics that most stakeholders are interested in. Others are gender equality and climate action. The next are the fight against poverty, good health and quality of life, clean water and sanitation, economic growth and decent work, sustainable cities and communities, and partnership for goals. Areas considered less include: less inequality, underwater life, life on land, and peace, justice and strong institutions. Probably, the surveyed stakeholders paid attention mainly to those directly related to their activities.

2.2 RI Performance of Enterprise

Category	Component	Data source	Metric	Type of measurement	Indicator	Assessment (Modest/Moderate/Substantial) + Short description
Purpose	**Motivation for doing/supporting research/innovation**	RRI Development plan, "1. Formulate your goal"	Inclusion of innovation/S&T components in the official planning of the organizations (e.g. strategic plans, vision ad mission statements, etc.)	Qualitative	M1: Integration of innovation/S&T in corporate planning and strategies	**Moderate** On the basis of questionnaires: (12 out of 25) enterprises have strategic documents that refer to the planning of innovation activities. Some indicate that this is a business development strategy, others - a business model. The key provisions in these documents refer, to their task, to the development of entrepreneurship, care for the natural environment and customer satisfaction as well as responsible development of the business model. In turn, 13 respondents stated that their strategic documents contain no records or references to innovation. It can be assumed, therefore, that while some entrepreneurs are aware of the necessity to create and implement innovations, there is a large group that does not carry out such activities yet or does not conduct them, but does not treat them as strategic.
	Motivation for engaging with RI	RRI In-depth Assessment Tool	Inclusion of RI components in the official planning of the organizations (e.g. strategic plans, vision ad mission statements, etc.)	Qualitative	M2: Integration of RI components in policy planning and strategies	**Moderate** On the basis of questionnaires: a) involvement - half of the respondents confirmed referring to it in the content of strategic documents, other persons either did not answer or concluded that there were no such references;

						b) gender equality - the vast majority (i.e. 20 out of 25) have found that the content of the documents has no reference to it; c) education - half of the respondents were of the opinion that the strategic documents refer to this component; d) open access - 13 respondents out of 25 marked the answer - "none"; e) ethics - 13 people were of the opinion that there were appeals; f) good governance - half of the respondents were of the opinion that this element occurs. In summary, it can be said that the integration of RI components is very selective in SMEs. Most companies only consider four components: commitment, education, ethics and good governance. Other elements are not included
		Self-assessment (*)	Budget allocation for RI components in companies' budget: (a) presence of funded programs targeting (selected) RI components; (b) annual amount (%, or €); (b) evolution (increase, decrease, stable over the last 3 years – or other programming	Quantitative	M3: Financial commitment on RI components	**<u>Substantial</u>** a) from 6% -10% - 5 b) from 2% -5% - 10 c) no choice - 6 d) more The vast majority of entrepreneurs allocate funds for innovation, but their amount varies. Some of them invest from 6% to 10% of their budget, the others from 2% to 5%. Four entrepreneurs indicated that they spend more than 10% of the budget on innovative solutions. This result indicates that despite the lack of formal entries in the strategy, small and medium enterprises undertake innovative activities. The degree of commitment of their resources to taking up new challenges, however, largely depends on the financial condition.

			period where appropriate)			
	Ethics (justification of intended outcomes)	Self-assessment(*)	Participation in programs and schemes, and adoption of instruments both mandatory and voluntary relevant for the achievement of the UNDGs (e.g. ethics codes, voluntary guidelines, certifications, standards)	Qualitative	E1: Significance of UNDGs in companies' activities and strategies	**<u>Substantial</u>** Yes- 14 Equipment for research and development centers-1 No. 11 Most of the respondents answered this question in the affirmative, which means that enterprises show interest in innovation and take action in this direction. However, the differences are visible in the approach to the occurrence of RI components. The results obtained indicate that the following RI components are most often included in projects: education and ethics, while the least: involvement.
Process	**Anticipation**	Self-assessment(*)	Number of foresight and strategic planning activities in the current and preceding planning period (specify the relevant planning period) [Presence/Absence of activities if the number is not available]	Quantitative/ Qualitative	A1: Foresight and strategic planning activities (e.g. Scenario building, delphis, etc.) (adapted from Eastwood et al. 2017)	**<u>Substantial</u>** Yes - forecasts do - 14 They don't make such forecasts - 10.

	Public engagement	RRI In-depth Assessment Tool	Qualitative discussion and self-assessment of the companies' experience in users' engagement techniques (e.g. living labs)	Qualitative	PE1: Users' involvement in design and development processes	**<u>Substantial</u>** The vast majority of respondents answered in the affirmative. And testing and research (e.g. new products / solutions) are the method most often used for this. One of the respondents indicated the use of the "Proof of concept" method, i.e. demonstrating the validity and correctness of the idea (it is used to develop a prototype of a new solution and applies to both new ideas in the material sphere, e.g. inventions, and non-material, e.g. methodology or software). This means that entrepreneurs are aware of the importance of the so-called social participation and they know that greater involvement of external entities significantly improves the innovation of their enterprises and products
		RRI In-depth Assessment Tool	No. of public-sponsored projects on engagement in R&I joined [Presence/Absence of activities if the number is not available]	Quantitative/ Qualitative	PE2: Participation in public-sponsored engagement projects on R&I	**<u>Modest</u>** No data
	Responsiveness	RRI In-depth Assessment Tool /Self-assessment	Implementation of users/communities feedback mechanisms in companies' operations	Qualitative	RES1: Potential to adapt production processes and business strategies (adapted from Eastwood et al. 2017)	**<u>Substantial</u>** The vast majority of respondents (20 out of 25 people) answered "yes" and indicated the ways in which this is done. These are mainly: joint assessment of solutions, "tailor-made" products, the use of tools improved under the influence of opinions and the creation of consultative councils or joint search for answers to various

						issues, e.g. "where are the limits of technology?".
		RRI In-depth Assessment Tool /Self-assessment	Adoption of CSR instruments, such as social budget, sustainability reporting etc. detailing the social/ environmental value of corporate operations to customers and stakeholders	Qualitative	RES2: Openness and transparency of corporate operations (adapted from Eastwood et al. 2017)	**Substantial** On the basis of questionnaire: Five negative answers were given to this question. Other people replied that their companies use CSR instruments and these are mainly: implementation and application of the code of ethics, conducting philanthropic activities and activities involving the search for optimization solutions in the field of energy saving. The answers received clearly indicate the conduct of many socially responsible activities by enterprises, which is often an introduction or one of the first steps to implement responsible innovations.
	Reflection	Self-assessment(*)	Existence of/participation in offices, fora, committees, etc. for the monitoring and assessment companies activities relevant to RI	Qualitative	REF1: Reflexive guidance in companies strategies (adapted from Eastwood et al. 2017)	**Modest** On the basis of questionnaires: Most responses (20 people) indicate that enterprises are not involved in the work of any RI institution or advisory body. Only one positive answer indicated cooperation in this regard with the Marshal's Officeof the Lublin Province. It means, therefore, the need to increase activities encouraging social participation, which will develop cooperation in the field of RI
		Self-assessment(*)	Instruments used by companies, such as codes of conduct, standards,	Qualitative	REF2: Use of standards and certifications related to RI (e.g. ISO, SA, UNI) (adapted from Eastwood et al. 2017)	**Modest** On the basis of questionnaires: The respondents pointed to the application of the code of ethics, participation in training and implementation of ISO 9001 and 14001 as instruments used in the area of responsible innovation. Therefore, it can be said that small

			etc. related to RI (e.g. ISO, SA, UNI)			and medium-sized enterprises still resort to the available tools to a small extent to implement RI. This may be due to a lack of awareness of the need to use these solutions or due to the high costs that they must bear to implement them.
	Governance	Self-assessment(*)	Self-assessment in terms of: - Number of networks joined [Existence of networks if the number is not available] - Extent of involvement of companies in these networks (e.g. leading working groups, participating in exchanges of best practices, etc.) - Formal / informal character of netwoks	Quantitative/ Qualitative	G1: Participation in R&I networks (e.g. platforms, hubs, incubators, accelerators) promoting / supporting RI in the region (adapted from Tsanos and Apospori 2017)	**Moderate** On the basis of questionnaires: 8 respondents only declared cooperation within existing clusters in the Lubelskie Voivodeship. Two people indicated that they cooperate with many entities. The remaining 8 responded that their companies did not cooperate in a network. This means that companies want to get involved in networking, but there is also a group that does not do so. Maybe they can't or can't find the right formula for RI business cooperation.
		RRI In-depth Assessment Tool	Self-assessment in terms of: - Number of successful bids	Quantitative/ Qualitative	G2: Third party funds acquired to promote companies' RI related activities (adapted from	**Modest** On the basis of questionnaires: 3 people (out of 25) answered yes. This means that the vast majority (22 entrepreneurs) do not participate in such projects. This may be mainly

			[Existence of mechanisms, if the number is not available]; - € acquired to invest in RI-relevant projects - Sources of funds acquired by the companies		Tsanos and Apospori 2017)	due to the fact that the RI issue is new and entities are not implementing projects in this area yet. It is quite often the case that entrepreneurs are not aware that their specific activities can be attributed to the RI area and therefore indicate negative answers
	Ethics (deontology)	Self-assessment(*)	Qualitative discussion and self-assessment of the utilization of Codes of Conduct or other instruments for ensuring the integrity of R&I practices	Qualitative	E2: Adoption or adherence to Codes of Conduct or other instruments for ensuring the integrity of R&I practices in the company	**Substantial** On the basis of questionnaires: As many as 24 (out of 25) answers are positive. This result proves the high awareness of the respondents regarding the application of ethical principles in innovative activities. This result also gains credibility through the responses to the previous question about the E1 indicator, where respondents also explicitly pointed to ethics as a component in the RI area.
Products	**Gender/equality and diversity**	RRI In-depth Assessment Tool / Self-assessment	% female employee in R&I roles in companies	Quantitative	GE1: Gender gap of human resources in companies' R&D/technical offices/divisions (adapted from Tsanos and Apospori 2017)	**Substantial** On the basis of questionnaires: There were 12 positive answers, of which 8 indicate that it is from 1% to 10%, and 2 people that the percentage of women is from 11% to 20% and two that it is from 21% to 30%.

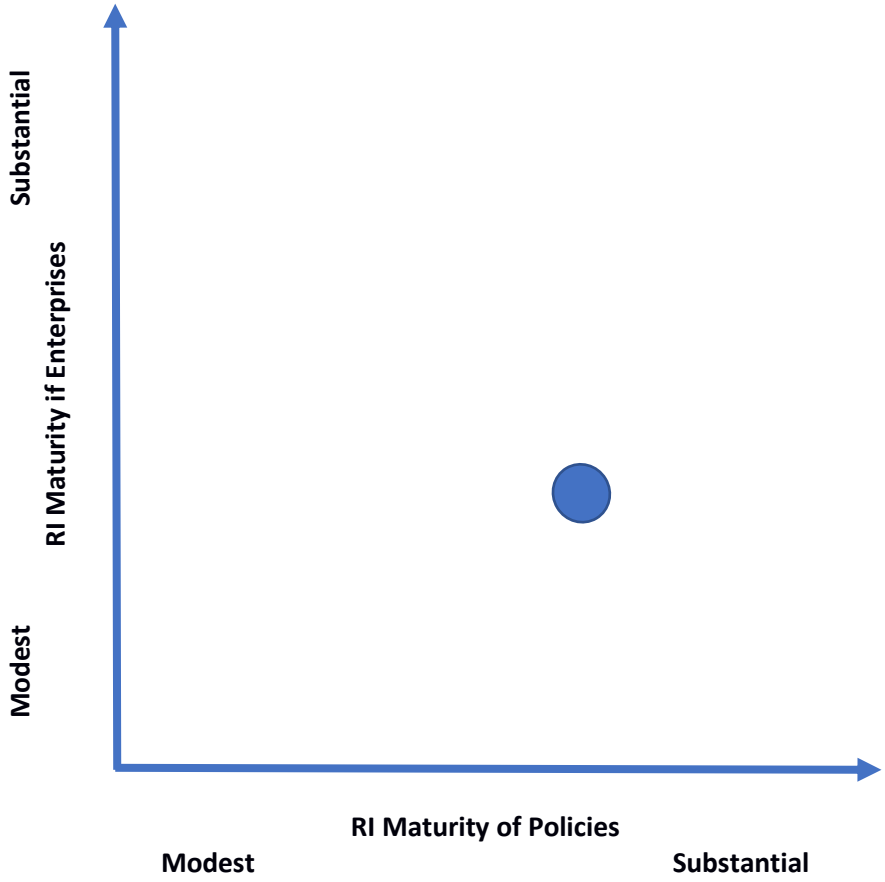
	Gender/equality and diversity	RRI In-depth Assessment Tool / Self-assessment	Number of companies' initiatives supporting gender equality and/or creating of R&I jobs that employ women [Existence of initiatives, if the number is not available]	Quantitative/ Qualitative	GE2: Companies' programs/measures to support for gender equality in R&I activities/functions	**Modest** No data
	Open access	RRI In-depth Assessment Tool / Self-assessment	Qualitative discussion and self-assessment in terms of the frequency of using open access/open data sources to know up-to-date research outputs for the business operations	Qualitative	GE2: Companies' programs/measures to support for gender equality in R&I activities/functions	**Moderate** On the basis of questionnaires: Most respondents confirmed that they use open access/open data sources on regular basis.
		RRI In-depth Assessment Tool / Self-assessment	Number of R&I funding/policy programs joined by companies [Existence of programs, if the	Quantitative/ Qualitative	OA2: Participation in R&I funding/policy programs requiring a commitment to an open access / open science policy	**Substantial** On the basis of questionnaires: 21 out of 25 respondents gave a positive answer. This means that respondents use such sources of information consciously.

			number is not available]			
	UN Development Goals	Self-assessment tool, "RI Drivers - Respondence of the innovation process to the dimensions of RRI"	Self-assessment of the impact of companies' innovative products/services on sustainable and inclusive development (10 point scale)	Quantitative	UN1: Degree of impact on UNDGs (17 indicators, on for each indicator)	**Moderate** On the basis of questionnaires: In relation to the individual objectives of UNDG, some 1/3 of respondents believe that their activities have little or no impact. 1/3 of respondents are convinced that their enterprises have a big and strong impact on sustainable and integrated development. And 1/3 did not express any opinion on this matter at all. Thus, it can be assumed that the issue of integrated and sustainable development is not taken into account when conducting business activities by entrepreneurs from the area of SMEs. This means that there is a large information gap in this area and that it must be filled by conducting an appropriate information and promotion policy.

Summary:

It is worth noting that entrepreneurs in their activities, to a limited extent, but still refer to social responsibility and environmental responsibility, examined through UNDG's sustainable and integrated development. These activities also include innovation. Therefore, efforts should be continued to increase the number of representatives of Lublin SMEs implementing RI.

2.3 Assessment of Local RI Maturity Level



Description:

This chart indicates the level of maturity in the area of responsible innovation, both achieved by the surveyed enterprises and the region. Based on the results obtained, it can be concluded that the level of RI maturity in enterprises is at an average level, between the "modest" and "significant" values.

On the other hand, in the case of the region, this maturity is much more localized closer to the term "significant". This result largely depends on the high position of the Lubelskie Voivodeship - 6th position in the ranking of regions' innovativeness.

One of the indicators that determines this place is the "Number of patents" indicator. It demonstrates the high activity of scientific and economic entities in the search for new technological and technical solutions, which in consequence may be an important factor in the market game and decide on the organization's advantage.

The EPO - European Patent Office report indicates that universities are often the driving force behind Polish patent activity. In the case of the Lubelskie Voivodeship, this statement has its justification, because in 2018 Lublin University of Technology was announced the leader of innovation in the annual ranking of universities prepared by the monthly "Perspektywy". This result was, inter alia, the number of patents pending.

Innovation as a key priority of regional policy has been described in the Regional Innovation Strategy of the Lubelskie Voivodship (RSI WL) 2014-2020, which serves to create impulses and dynamize innovation processes in the Lubelskie Voivodship. In response to this important aspect of regional policy, the innovativeness of enterprises in the spirit of sustainable development has become an important goal of the Regional Operational Program of the Lublin Voivodship for 2014-2020 (RPO WL 2014-2020), which includes 14 priority axes, including: Research and innovation, Competitiveness of enterprises, Environmentally friendly energy, Environmental protection and efficient use of resources, Labor market, Social inclusion or Education, qualifications and competences. Importantly, the European Social Fund is implemented and implemented as part of the ROP, which also emphasizes innovation through financing projects in the social area, such as: Social Economy, Entrepreneurship Development, Vocational Activation and Vocational Training.

The region largely emphasizes the development of innovation by supporting entrepreneurs and Lublin universities in this regard. It should be emphasized that extensive promotion and support activities, such as the second “European Innovation Week” organized in 2018, attracted over 60 speakers and over 1,300 stakeholders.

Voivodship authorities recognize the important role of innovation in the development of the economy and intend to continue pro-innovation activities directed at sustainable development of the region. In the longer term, a valuable complement to these activities would be to include the definition of Responsible Innovation (RI) in strategic documents.

Regional context: strategic documents of Lubelskie Voivodeship

Two main strategic documents can be identified, based on which the innovation implementation policy in the Lubelskie Voivodship is implemented, and one executive document. Those are:

1. The Development Strategy of the Lubelskie Voivodship for the years 2014-2020 (with a perspective up to 2030) (SRWL) - is a program document that defines the vision, goals and directions of the region's development. The document was developed based on numerous thematic analyzes and diagnoses as well as the results of public consultations. The document states that currently the most important challenge for development policy is building competitive advantages based on innovation and intellectual and social capital, using the internal potential of regions. The document assumes flexibility and openness to innovations and development activities, as well as receiving external support. The proposed strategic goals result from the recognition of the most important challenges facing the region and are focused on innovation, strengthening cities, developing modern villages, entrepreneurship, using the scientific potential and integrating the region to improve its cohesion.
2. The Regional Innovation Strategy of the Lubelskie Voivodship until 2020 (RSI WL 2020) is a program document that defines the most important planes for the development of the Lublin region in the context of innovation. The document defines intelligent specializations on which the voivodship's innovative activity was based. RSI assumes that within a few years the region will notice a significant increase in the innovation potential, improve the international innovation position and advance in the Regional Innovation Ranking. According to the Regional Innovation Scoreboard, in 2011 Lubelskie achieved the result of 42.5% of the EU average, in 2017 improved the result to 47.4%, to reach the result of 46.2% in 2019 and was placed in the group of Modest Innovators + regions.

Addtional one operational document:

3. The Regional Operational Program of the Lubelskie Voivodship for 2014-2020 (RPO WL 2014-2020) is one of 16 regional operational programs (16 regions in Poland) that are to serve the implementation of the Partnership Agreement (UP-Umowa Partnerstwa) in the field of cohesion policy. The UP defines Poland's strategy, priorities and conditions for the effective and efficient use of European Structural and Investment Funds in 2014-2020 to implement the EU strategy for smart, sustainable and inclusive growth.

An analysis of these documents indicates that there are no references to Responsible Innovation (RI) in their formal records. This is primarily due to the fact that the issue of Responsible Innovation raised by the EU is relatively new and only recently the European institutions encourage and promote conducting research and innovation activities in EU Member States through projects implemented under the Horizon 2020 program and ETC programs .

However, it is worth paying attention to a certain coherence of the concept of Responsible Innovation and the goals of sustainable development of the United Nations with the model of sustainable development of Poland contained in the document Strategy for Responsible Development until 2020. Sustainable development goals adopted by the UN General Assembly expressed in the document Agenda 2030, to which the government is a signatory Of the Republic of Poland, are implemented in many programs at the national level resulting from the SRD. This consistency mainly manifests itself in the equality policy pursued, the promotion of ecology and environmental protection, and what is important in the broad involvement of stakeholders.

3 Priorities for Action

Based on the analysis of strategic documents of the Lubelskie Voivodship, the SWOT analysis and the conclusions drawn from the public consultations with stakeholders (QH), the following recommendations can be proposed that will enable the development and implementation of responsible innovations (RI) in small and medium enterprises located in the Lubelskie Voivodeship.

Integrated System of Responsible Innovations

to be implemented in the Region

1. Creation of an information portal for entrepreneurs in the field of RI, including the implementation of an appropriate media policy in the field of RI in the province:
2. Creating a space to exchange views and experiences in the RI area, e.g. the Responsible Innovation Forum.
3. Involvement of voivodeship representatives in projects implemented in Poland, e.g. Sustainable Development Days 2020, CSR Week, etc.
4. Creating a publication-guidebook for SMEs.
5. Creating a publication-guide for other stakeholder groups.
6. Promotion of "good practices" in the field of RI.
7. Using various modern forms of RI e-promotion.
8. Including RI in various competitions for enterprises, eg. Ambassador of the Voivodship.
9. Promotion of enterprises implementing RI.
10. Creating a "cooperation network" in the field of RI.
11. Cooperation with universities in the region, e.g. by helping to develop appropriate curricula taking into account the subject of RI.
12. Innovative RI training for innovators and inno-brokers.
13. Cooperation with NGO's in the implementation of RI.
14. Developing evaluation tools in the field of RI for SMEs and business environment institutions.

4 Lessons from the Pilot Actions

The ROSIE project allowed SMEs to become acquainted with the concept of Responsible Innovation in two phases:

1) training part for SMEs – trainings to improve skills in terms of innovation and technical/managerial competences in the field of RI;

2) part dedicated to the pilot action in SMEs. Companies interested in an in-depth evaluation in terms of Responsible Innovation and wishing to take steps to integrate the concept of RI into their business model received direct expert support.

The entire process was divided into 5 stages:

- **Stage 1- Open call for SMEs (Capacity Building Programme)** - An invitation for SMEs interested in the concept of Responsible Innovation was published on the website of the Marshal Office of the Lubelskie Voivodeship (in short – Marshal Office). The training aimed to familiarise them with the concept of Responsible Innovation, possibilities of its application and the tools used within the project.
- **Stage 2- Training for SMEs** - On 18 June 2018, the Marshal Office of the Lubelskie Voivodeship hosted a training addressed to SMEs from Lubelskie, which lasted 8 hours and was led by the RI expert. Themes of the training included:
    - Introduction to the concept of Responsible Innovation;
    - Importance of Responsible Innovation for SMEs;
    - Dimensions of Responsible Innovation in the management of a company;
    - Tools: UNI/PdR 27:2017, STIR, Living Labs – application/ case studies.

During the training the following didactic methods were used: informative lecture, group discussion, case study and exercises to help SMEs better understand the concept of RI, demonstrate its usefulness in the innovation process and possibilities of its implementation in the company.

- **Stage 3- On-line informative training** - Businesses that could not have attended the training, but were interested in expanding their knowledge about Responsible Innovation, were offered to take part in an online training. The RI expert was involved in the preparation of materials for this training on Responsible Innovation management. The training consisted of

10 modules that introduced the concept of Responsible Innovation and recommended tools for the project. The training is still available on the website of the Marshal Office of the Lubelskie Voivodeship.

- **Stage 4-Selection of businesses for pilot actions** - After completion of the training programme, the activities within the project focused on the implementation of the pilot phase, during which five companies had the opportunity to participate in the individual Responsible Innovation Programme. Recruitment of companies for the pilot phase – stage 2 of the ROSIE project- started on 22 August 2018, and the announcement of the open call was published on the website of the Marshal Office. Six companies have submitted their applications. On 10 September 2018, a commission selected five companies for the pilot phase, and these companies showed great motivation to implement the concept of Responsible Innovation and proved that they have the necessary resources to carry out pilot actions. The implementation of the pilot phase started in September 2018 and finished at the end of January 2020 (90 h per company). The following businesses took part in this phase:
    - Jan Góźdź Eureka Grupa Inżynieria Spożywcza, Doradztwo i Projektowanie,
    - Antosiewicz.edu Katarzyna Antosiewicz,
    - Przedsiębiorstwo Urządzeń Ochrony Środowiska Biotop sp. z o.o.,
    - Industi sp. z o.o.,
    - POLSPRAY Dawid Malinowski.
- **Stage 5-Implementation of activities in participating companies** - Businesses interested in the implementation of Responsible Innovation and selected for the pilot phase received individual support from the RI expert and the opportunity to participate in the assistance programme.

The tools were directly related to actions in the pilot phase, i.e.:

- diagnosis of an enterprise in terms of responsible innovation;
- development of an improvement plan;
- implementation of the improvement plan based on tools developed within the ROSIE project with the assistance of the RI expert, and the monitoring of the implementation of pilot actions.

The following tools have been used at the Stage 3: diagnostic tools: Self-Assessment Tool, In-Depth Assessment Tool, COMPASS - Responsible Innovation Self-Check Tool; implementation tool: Design Thinking, The Ethic Canvas, The Data Ethics Canvas.

Entrepreneurs who participated in the pilot actions were satisfied with the opportunity to acquire knowledge about the Responsible Innovation concept. They stressed that the concept was presented by the RI expert in an accessible way, and the tools used helped them better understand the essence of RI. Examples of business practices, use of tools in the phase of diagnosis and implementation of improvement plans particularly important to them. The RI concept is complex and sometimes it was difficult for the representatives of SMEs to see the objective and benefits they can achieve by implementing it in their companies. SMEs were approached individually, so that tools tailored to the specific situation, experience and resources of each company could be used.

Participation in the implementation of each of the project activities allowed to formulate conclusions and recommendations for the Marshal Office:

- ✓ Tools used at the stage of diagnosis and implementation of improvement plans, as well as the order of their application were positively evaluated by the companies. It was also critical that entrepreneurs gradually familiarized themselves with the RI concept by moving from general to more specific issues, which was particularly important when diagnosing companies with a view to implementing the RI concept.
- ✓ It was essential to make entrepreneurs familiar with 17 Sustainable Development Goals of 2030 Agenda. They realised that their activities have a significant impact on ensuring a balance between three aspects of sustainable development, i.e. economic, social and environmental issues. Additionally, showing them that it might be possible to receive co-funding for their projects in these areas was a great incentive for them to depend their knowledge of the subject.
- ✓ The use of successive tools enabled them to get acquainted with the assumptions of the RI concept, its keys and practices that can be implemented in respective phases of the innovation process. The entrepreneurs found it important to identify actions that are currently implemented in the company in each key of Responsible Innovation,

which encouraged them to reflect on their activities and indicate practices worth implementing in the future. It is necessary to continue educational actions in this area.

- ✓ The entrepreneurs were satisfied with the possibility of applying the design thinking method in their businesses to create innovative products and services. Its application allowed them to approach design based on the needs and expectations of recipients of innovative solutions. It was also relevant for the participants of the workshops to take a new look at the recipients of services and to develop employees' skills in the field of empowerment and prototyping. They also appreciated the opportunity to work in a group and share their observations.

Responsible Innovation key	Activities carried out in companies
Ethics	Three companies have drawn up their own Code of Ethics.
Gender equality	According to the entrepreneurs, it is not a priority area.
Open access	One enterprise has developed principles of open access to research results.
Public engagement	Three companies have used social media to promote their responsible approach toward innovation. Three enterprises have joined new business organisations.
Science education	One enterprise has established collaboration with a social organisation to support it and raise public awareness of responsibility for the current and future state of the natural environment.
Governance	Two companies have developed concepts of tools for collecting innovative ideas.

At the same time in the process of creating RI Road Map, including discussions stakeholders during QH meetings and taking into account internal and external conditions for innovation development within SMEs it was possible to propose a universal model for implementing Responsible Innovations by SMEs in the Lubelskie voivodeship. The companies took active role as stakeholders participating in the QH meetings in elaboration of the model.

The concept of the Model

for Implementing Responsible Innovation

in SMEs

I Initial Stage:

Step 1. Analysis of social, environmental and financial challenges, including the needs of internal and external stakeholders.

Step 2. Creating an idea and identifying benefits.

Step 3. Verify compliance of the six elements responsible for innovation with the mission's vision, strategic goals and key values, as well as identification of benefits.

Step 4. Analysis of innovations in terms of achieving the Sustainable Development Goals, including determining their sources and compliance with accepted values.

II Right Stage:

Step 5. Creating an interdisciplinary team performing the task

Step 6. Consultation with stakeholders regarding the implementation of new solutions and actions taken.

Step 7. Determining the priorities of implemented innovations in the area of: social, environmental, technological, information, financial and legal.

Step 8. Analysis of potential risks in implementing innovation e.g. in the field of human safety, the environment, data management.

Step 9. Description of innovation (material scope of innovation) and developing the concept of implementing innovation: time, estimated value and potential sources of funding, implementation methods and methods.

Step 10. Decision on the implementation of new solutions including 6 elements of responsible innovation.

Step 11. Beginning of the implementation. Pilotage.

III Final Stage:

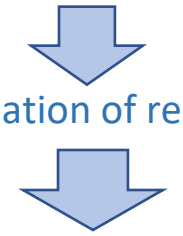
Step 12. Verification of feedback obtained from pilotage from various stakeholders.

Step 13. Analysis of the negative effects of innovation.

Step 14. Developing and implementing a social communication strategy in Responsible Innovation (RI).

Step 15. Realization and implementation of innovations.

Step 16. Evaluation of the results of implementing the innovation



5 Lessons from the Study Visits

Study Visit #01 (Milan) in October 2018 was an opportunity to exchange experiences with representatives of institutions implementing other projects in the field of Responsible Innovation form Italy. Three projects co-financed from the Horizon 2020 program were presented: PRISMA (http://www.rri-prisma.eu/), COMPASS (https://innovation-compass.eu/) and SMART-map (http: // projectsmartmap. eu /). Particularly noteworthy from our point of view was the COMPASS project, which has developed an online tool for assessing the level of responsible innovation in enterprises. The tool has been used during the diagnosis phase within the Pilot Action in Lubelskie region and complemented the In-Depth Assessment Tool. COMPASS consists of four sections:

1. Company management – 18 questions.
2. Idea generation & research – 13 questions.
3. Development & Testing – 6 questions.
4. Market & Impact – 6 questions.

Because of the scope of the survey and the wide range of topics covered, the RI expert conducted the questionnaire during several sessions. The use of the aforementioned RI diagnostic tools enabled the entrepreneurs to get acquainted with the concept of Responsible Innovation and to reflect on previous activities. Moreover, they gave impetus to explore the possibility of conducting new activities in the future. Based on statements from company representatives, a written diagnosis of each enterprise was performed with a view to implementing the RI concept.

The diagnostic document was used to create an improvement plan for each company that reflected both the needs and development possibilities of the company. This was a form of individualized support for each company in terms of implementing the concept of Responsible Innovation. The scope of the plan included: the objectives, the resources needed to implement the plan, assessment methods and communication.

Study Visit #02 (Lublin) in April 2019 offered an opportunity to meet partners, become familiar with their views and exchange opinions concerning recommended tools in the project related to the Pilot Action. Partners shared opinions about RI tools and opportunities to develop the list of recommended tools with new tools in the project like Design Thinking or the Ethics Canvas. The study visit and exchange of experiences among partners confirmed that these additional tools can be beneficial for

the implementation of the project and quite suitable for RI approach in SMEs. It was noted that there are similar problems in enterprises concerning engagement, availability, and low level of trust, independently from the partner country. Moreover, there is very little knowledge about RI and the understanding of the concept of RI. The presentations and opinions SMEs selected to the Pilot Action in Lubelskie confirmed the observations but at the same time showed interest in acquiring this knowledge.

Study visit #03 (Nova Gorica) in October 2019 allows to know Slovenia as a country which bases its economy on the tourism industry. The city of Nova Gorica is located on the border of Slovenia and Italy and once it was the border between Western Europe and the Communist Bloc (former Yugoslavia). During the first day of the delegation, ROSIE project partners from Nova Gorica invited participants to the Vipava Valley, in which participants of pilot actions in Slovenia presented the implementation of their recovery plans as part of the WPT3. Other presentations concerned:

• the communication and training platform Naš Borjač (Our Courtyard) created for the purpose of developing and communicating a clear vision of the development of the tourism sector in the region and generating project ideas. More: http://www.nasborjac.si/

• activities implemented by SRIPT (partnership for sustainable tourism) - an organization of 270 enterprises (including hotels, travel agencies, guesthouses, restaurants, companies providing transport services, universities, business environment institutions) from the tourism industry and a 115-year tradition; the partnership was established to create a critical mass in the area of tourism and to build a wide offer for potential tourists. There are five main pillars of activity in the SRIPT activity: gastronomy; human resources and competences; digitization and technologies; sustainable system and R&D.

Thanks to SRIPT, sustainable tourism has been recognized as Slovenia's 9 key smart specialization, which can base its development on research. Consequently, projects in the field of tourism, e.g. regarding the commercialization of research results and business scaling, are formally accepted for public co-financing. These projects may also include stages of product testing and experience sharing. Thanks to the presence of SRIPT on the S3 Platform and cooperation of the partnership with European regions from Finland (Lapland region) and Spain (Andalusia), associated companies can participate in

the process of internationalization and establish relations with foreign partners, e.g. through the digital platform of the Tourism of Tommorrow Laboratory Laboratory) initiated by the Andalusia region of Spain. More: https://sript.si/

• Tourism 4.0 Project with the status of a flagship research project implemented from EU funds in a consortium in cooperation with: ARCTUR (SME), the University of Ljubljana, the University of Moribor and the University of Primorska. The Tourism 4.0 partnership co-creates data-based tourism in cooperation with all stakeholders of the intelligent tourism ecosystem using the latest technologies. More: https://tourism4-0.org/about/

Due to COVID-19 pandemic Lubelskie Voivodeship was not able to travel to Slovakia and participate in the meeting. Nevertheless presentations delivered by PP3 was interesting and gave information and knowledge on how cultural and creative industry can contribute to economic growth, how institutions like regional authorities are involved in the field of creative industry and what is a role of digitalization in this process.

6 The Roadmap

1. Dissemination of the results of the ROSIE project and the concept of Responsible Innovation

The Goal	
Providing current information for entrepreneurs in the field of conducting responsible innovations. The page in the form of a bookmark will be administered by employees of the Marshal's Office.	
The Strategy	
The people	employees of the Marshal's Office, stakeholders involved in the project, external stakeholders: entrepreneurs, scientists, employees of knowledge transfer centers, media
The resources	Resources for running and maintaining a website, funds for commissioning expertise in the field of innovation and responsible innovation
Institutional incentives	Promotion the RI idea among entrepreneurs
Tasks and timeframe	Collecting information to put them on the site analysis and evaluation of collected materials together with stakeholders subpage update - depending on needs.
Opportunities and strengths	Other RI websites, business networks cooperation with universities
Threats and risks	No update no stakeholder involvement lack of interest from entrepreneurs low number of visits to the website
The Monitoring System	
Number of people visiting the bookmark on the website	
The Dissemination	
Press articles - dissemination of information about RI promoting RI in strategic documents and operational programs rewarding companies operating in the spirit of RI using European funds	

2. Dissemination of ideas and innovative solutions proposed by scientific communities and entrepreneurs (so-called good practices):

The Goal
Providing updated information to entrepreneurs about innovations developed by scientists and providing the scientific community with specific problems signaled by entrepreneurs that are the basis for creating innovation. The page in the form of a bookmark will be administered by employees of the Marshal's Office.

The Strategy	
The people	Marshal's Office employees, entrepreneurs, scientists employees of knowledge transfer centers, media
The resources	resources for website maintenance, funds for commissioning expertise in the field of innovation and responsible innovation
Institutional incentives	propagating the RI idea among entrepreneurs promoting cooperation on the science-business line financial support of real cooperation between science and business
Tasks and timeframe	gathering information to post it on the site analysis and evaluation of collected materials together with stakeholders subpage update - depending on needs.
Opportunities and strengths	Other RI websites, business networks cooperation with universities
Threats and risks	no website update, no stakeholder involvement lack of interest from entrepreneurs lack of willingness to cooperate between interested parties institutional and organizational obstacles low number of visits to the website

The Monitoring System

number of people visiting the bookmark on the website number of implemented innovations
The Dissemination
press articles - dissemination of information about RI promoting RI in strategic documents and operational programs rewarding companies operating in the spirit of RI using European funds

3. Establishment of an interdisciplinary team for Responsible Innovation cooperating with Marshal's Office

The Goal	
Establishment of a professional and diverse team that will slow down, initiate and advise on RI.	
The Strategy	
The people	Marshal's Office employees, entrepreneurs, scientists employees of knowledge transfer centers, media
The resources	meeting place
Institutional incentives	the possibility of influencing local government institutions and universities promoting cooperation on the science-business line
Tasks and timeframe	team creation regular team meetings
Opportunities and strengths	conducting pro-RI policy lobbying for RI among entrepreneurs and scientists maintaining contacts with the media and external stakeholders
Threats and risks	lack of motivation among entrepreneurs to cooperate other social problems resulting from external circumstances institutional and organizational obstacles
The Monitoring System	
number of meetings held number of actions and initiatives taken in the field of RI	
The Dissemination	

interested press articles, social media

4. Information and promotion campaign for SMEs interested in implementing Responsible Innovation

The Goal	
Promoting among entrepreneurs good examples of companies that effectively implement RI in their activities.	
The Strategy	
The people	Marshal's Office employees, entrepreneur, media
The resources	Marshal's Office employees funds for implementing the promotional campaign of enterprises
Institutional incentives	offering a free advertising campaign to entrepreneurs
Tasks and timeframe	preparation of a promotional campaign - 3 months, broadcast on social media - every 3 months
Opportunities and strengths	other RI websites, business networks cooperation with universities
Threats and risks	unsuccessful social message reluctance on the part of entrepreneurs technical difficulties in implementing the campaign lack of funds domination of public space by more important issues related to the current socio-economic situation
The Monitoring System	
number of views and plays	
The Dissemination	
promotion on the Internet and social media	

5. Cooperation with universities in creating curricula for students in the field of responsible innovation

The Goal	
Introducing RI issues to curricula for students of Lublin universities	
The Strategy	
The people	Lublin universities, lecturers conducting CSR or innovation classes, students employees of knowledge transfer centers, scientists
The resources	funds for paying practitioners - conducting classes, funds for developing materials necessary to conduct classes. resources for teaching aids
Institutional incentives	substantive knowledge, participation of experts in the classes
Tasks and timeframe	preparation of the scope of issues necessary to include in the problems of classes - 2-3 months, preparing documentation of items - 2-3 months, developing a curriculum, collecting the necessary literature, inclusion of practitioners to conduct classes
Opportunities and strengths	cooperation with Marshal's Office, cooperation with an RI expert, cooperation with knowledge transfer centers, cooperation with practitioners, participation in scientific conferences
Threats and risks	lack of interest in the subject on the part of the university, lack of interest in the subject on the part of lecturers, lack of interest in the subject on the part of students
The Monitoring System	
the number of developed new curricula on RI topics, the number of undergraduate and graduate theses in the field of RI, number of organized workshops and discussion panels,	

opinions of lecturers, student reviews
The Dissemination
informing about the substantive scope of subjects of high school students and graduates, promoting student activities in the field of RI, supporting student research clubs dealing with RI issues.

The Faculty of Management at the Lublin University of Technology has included RI issues in its curriculum. And from the 2020/2021 academic year, a subject called Social Innovation will be conducted, among others, where issues of responsibility and sustainability will be widely discussed.In addition, the same issues were included in the subject of CSR, which was lectured in the summer semester of the 2019/2020 academic year.

At the Lublin University of Technology, the "ETOS" student scientific club existing since 2009, included in its scientific interests, issues related to responsible innovations. In the years 2018-2019, scientific workshops were held dedicated to, among others this issue. Based on the analysis of this issue, several scientific papers and multimedia presentations were created and posters. Selected works take part in the VERBA VERITATIS competition organized for several years by the Conference of Financial Enterprises and the Kozminski University, which aims to raise the level of knowledge and competence in business ethics and corporate social responsibility (CSR) among young people who are just entering the labor market.) and corporate governance. In this way, ethics skills and attitudes are promoted among students and graduates of universities, which has a significant impact on the implementation of the principles of responsible development in business and society.

The issue of responsibility and sustainable development will also be discussed at PL as part of the subject of Sharing Economy, where issues related to social and economic phenomena will be presented, consisting of a fundamental change in organizational and distribution models going towards dispersed networks of connected units and communities, including both the direct provision of services by people as well as sharing, co-creation, co-buying, etc., enabling a radical increase in resource efficiency.

6. Participation in cyclical conferences and scientific panels

The Goal
Increased scientific interest in RI issues among Lublin scientists and an increase in the number of studies in this field.

The Strategy	
The people	Lublin universities academics
The resources	funds for participation in scientific events
Institutional incentives	universities supporting RI research
Tasks and timeframe	scientific cooperation with stakeholders in the field of RI
Opportunities and strengths	promoting issues related to RI in the scientific community
Threats and risks	lack of university involvement in developing RI issues, lack of interest on the part of the scientific staff in this issue

The Monitoring System
number of conferences held, number of prepared articles, speeches and posters for scientific conferences

The Dissemination
Addressing issues of responsible innovation during conference speeches, Development of various RI case studies.

RI issues in the years 2018-2019 were raised during the scientific conference "Innovations in practice". The conference has been regularly organized for eight years by the PAS Lublin Branch and the Center for Scientific and Educational Innovation in consultation with 6 Lublin universities: the Lublin University of Technology, UMCS, the University of Life Sciences, the Medical University and the Catholic University of Lublin.

The main purpose of this event is to disseminate the importance of innovative scientific achievements, as well as exchange experiences and integrate students, PhD students and young scientists. The result of participation in the event is the opportunity to establish contacts with entrepreneurs, create

interdisciplinary research teams and define areas of their possible cooperation. "Innovations in practice" allow participants to present research and review papers in the form of speeches or posters and to put abstracts of work in conference materials.

3. Summary

The implementation of Responsible Innovation in SMEs requires a new approach above all in the way public institutions, entrepreneurs and employees think. This different way of thinking creates non-standard ways of acting and opens up to "new" and "unknown". Inspiration from responsible innovations allows for the creation of new products or services that already at the concept stage respond to challenges related to, e.g. social involvement or openness of conducted research.

If a company wants to actually achieve development, innovations are necessary, but not as an end in itself, but as a means to an end.

Implementing responsible innovations means implementing changes in line with the principles of social responsibility. If the company's task is to create value for all stakeholders, innovation must reconcile the needs of different interest groups, rather than just meet the needs of individual entities. At the same time, the value of a given innovation must be commercial enough and possible to be used by a large proportion of recipients to make its introduction profitable. Innovation will be effective in this case, which at the same time will take into account the good of society and the environment and will satisfy the consumption needs of individual recipients.

The developed Road Map is designed to facilitate and encourage entrepreneurs and representatives of research institutions to take responsibility for the innovations they create and to implement them taking into account the broad social context.

The meetings of the Regional Group of Stakeholders (QH) that led to the creation of the Road Map in Responsible Innovation for the Lubelskie Voivodeship and the pilot phase of the Responsible Innovation Program in selected SME enterprises clearly showed that there is a high public awareness of the creation and implementation of innovation by SMEs in the region Lublin. However, the problem arises when it comes to the need to create and implement responsible innovations. Most stakeholders and entrepreneurs understand the term itself, are aware of its importance, but are unable to see the specific effects brought about by the implementation of RI.

The Model for the Implementation of Responsible Innovation in SMEs developed during meetings with the Stakeholder Group enables entrepreneurs and other organizations to introduce innovations that meet the criteria of responsible innovations and will be part of the concept of sustainable development. The Integrated System for Implementation and Promotion of Responsible Innovation developed in the region / country is, in turn, a practical set of recommendations on what kind of

actions should be implemented at the region / country level in order to fully integrate responsible approach to innovation with innovation policies at regional and national level. He recommends, among others, promoting the concept of Responsible Innovation in the media, introducing the concept to academic programs and cooperation of various environments to promote a responsible approach to innovation in business. Some actions are already being implemented or will be continued in the following months and years. This applies to activities such as cooperation with universities through the dissemination of ideas and innovative solutions proposed by scientific communities and entrepreneurs (so-called good practices).

The results of the ROSIE project have certainly contributed to increasing knowledge and raising awareness of the potential consequences of implementing innovations and the need to forecast their future effects. The current EU policy for years will continue to promote the concept of Responsible Research and Innovation

2021-2027. The next EU budget is expected to increase spending on sectors recognized as having the highest European added value such as research and innovation, digitization, security, climate change (environment), migration and youth. The new European research and innovation program will be called Horizon Europe and will be the program with the largest budget to date of € 100 billion. Its main goal will be to strengthen the impact of research and innovation on the development of EU policies, support the implementation of innovation by European industry, including SMEs, and meet global challenges, including climate change and the UN's sustainable development goals.

The final shape of the agreement on the Multiannual Financial Framework (MFF) for 2021-2027 will undoubtedly be influenced by Brexit and the outbreak of a pandemic caused by the new SARS-CoV-2 coronavirus and the global economic crisis that is expected. This is a big challenge for the European Commission itself and its ambitious agenda of sustainable development combined with the protection of the European model of life. The challenges recently faced by the modern world have shown how important the role of responsible research and innovation is in terms of pressing problems such as the outbreak of an epidemic or refugee crisis, as well as long-term social challenges such as security, transport, climate change and energy. This is an additional motivation for countries / regions to continue the implemented activities in the area of Responsible Research and Innovation and Responsible Innovation in business in the future EU financial perspective.