



DELIVERABLE D.T2.2.3  
FINAL RI ROAD MAP  
PP10



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## 1 Regional Innovation Policy Context

Lombardy is the fourth most populated region in Europe, with its inhabitants representing 16.5% of the Italian population. In 2017, with €380,955.24m, it is the fifth largest GDP among European regions (Eurostat, 2019) and represents more than one fifth of the National GDP. The economy of Lombardy is characterised by a wide variety of industries ranging from traditional sectors, such as agriculture and livestock to heavy and light industries. The service industry has also had a strong development in the recent decades. Lombardy's production system is still one of the most developed in Italy and Europe: at the end of 2016 there were 74 enterprises per 1000 inhabitants, one of the highest rates of entrepreneurship in Europe. SMEs dominate the market, from a shareholding point of view mostly family owned businesses, with the exception of few very large firms.

The role of Lombardy in relation to the national RTDI effort is central. In 2016, about 21% of the total Italian R&D investments are concentrated in the region (for an amount of €4,757.4m) (Eurostat, 2019).

In 2016, the expenditure for Research and Development (R&D) in Lombardy amounted to 1.3% of the GDP (Eurostat, 2019), below the European average (2%) and still far from the 3% established by the EU 2020 strategy.

In terms of the RTDI output, Lombardy performs well, in particular with regards to the scientific relevance of the publications and the ability to get access to the European funding. Patenting activity (909 EPO applications in 2012), equal to approximately 25% of the Italian average and higher than the one for Europe, but relatively weak in comparison to other European advanced areas.

The 13 educational institutions (6 public universities, 1 Technical University, 6 private universities) and the university high school (IUSS of Pavia), play a fundamental means of knowledge transfer to the region.

As of the second quarter of 2018, in Lombardy there were 2286 start-ups (the highest value in Italy), representing 24.33% of total start-ups in Italy.

According to the Regional Innovation Scoreboard 2019, **Lombardy is a Moderate+ innovator.**

Moderate+ innovators are those regions with performance between 50% and 90% of the EU average.

The innovation performance changed in the recent years, showing an increase.

The **Smart Specialisation Strategy** identified 7 Specialisation Areas:

1. Aerospace



2. Agri-food
3. Green Industry
4. Creative and cultural industries
5. Advanced manufacturing
6. Sustainable mobility

The S3 foresaw specific mechanisms for discussion and approval with stakeholders, both with regional, national and European stakeholders, as well as with the local territory through Working Groups and Public Consultations. Moreover the Strategy foresaw the creation of enabling environments for the growth of enterprises such as clusters and an open innovation platform for knowledge sharing in order to stimulate the aggregation of economic and scientific entities and share best practice, experience and knowledge.

In the last years Regione Lombardia worked specifically on Responsible Innovation and created some specific initiatives.

Regional law no. 29 of 23 November 2016 "Lombardy Is Research and Innovation" aims to foster, support and promote the Research and Innovation ecosystem of the Lombardy Region. It is a concise text, made up of just eight articles that concretely eliminate redundant bureaucracies and guarantee a certified timing. An important element is the matching of Business, which needs an innovative push, with the world of Research, which together can provide the necessary know-how and human capital to drive local growth and employment.

THE KEY POINTS OF THE LAW:

### **Three-Year Strategic Programme**

The three-year strategic programme for research, innovation and technology transfer is the key element of all the regional interventions foreseen for the 2018-2020 period. The definition and implementation of the programme is entrusted to the Steering Committee, through direct involvement with the actors of innovation and the tool for public consultation.

### **Multidisciplinary Steering Committee**

The Multidisciplinary Steering Committee has the task of coordinating all the regional policies concerning research, innovation and technology transfer through the "Three-Year Strategic Programme" so that there are no more individual initiatives but rather concerted actions, the result of an overall vision.

### **Regional Forum for Research and Innovation**



Independent body - with consultative, propositional and informative functions - composed of 10 experts in scientific, social and humanistic disciplines with a proven experience on the impact that innovations have on people's lives, selected through an international public procedure.

### **Research Day**

Scheduled for 8 November and named after Umberto Veronesi to reward researchers and companies that have distinguished themselves in research and innovation.

### **REGIONAL ASSOCIATION OF THE CHAMBERS OF COMMERCE IN LOMBARDY**

Unioncamere Lombardia is the association of the 9 public Chambers of Commerce, Industry, Agriculture and Crafts of Lombardy. Its objective is to consolidate – through actions undertaken by the Chambers of Commerce - policies and best practices that support the development of enterprises that operate in the region, to enhance Lombardy's economic leadership in Italy and in Europe.

It offers services in five macro areas of intervention to support the economic system:

- ✓ Economic information for local development
- ✓ Promotion of the territory
- ✓ Internationalization
- ✓ Small and medium-sized enterprises
- ✓ Coordination and assistance to the Chambers of Commerce

Regarding the Social Corporate Responsibility (SCR), the Association has implemented in the last years dedicated initiatives addressed at promoting the adoption of SCR in SMEs.

In particular in 2016 the Association launched a call to support 3 main areas:

- Activities for local community for sustainable development
- Activities for the development of green economy for environmental sustainability
- Activities for social innovation

The call has a budget of 850.000 € totally offered by the Regional Government and the companies could get a voucher between 20.000 and 50.000 € to pay external expertise and consultancy in the above fields (up to 50% of the total eligible costs).

In 2015 the Association signed with the Regional Government a Memorandum of Understanding aimed at promoting routes for social responsibility among SMEs in Lombardy. The MoU foresees joint action for:

- Promoting and spreading SCR in Lombardy as strategic element to improve competitiveness and development of territories;
- Indicate new productive and consume models;



- Activate joint analysis on SCR exploitation;
- Be in line with national and European actions;
- Collect and promote best practices for social, environmental and territorial development.

#### **CHAMBER OF COMMERCE OF MILAN MONZA BRIANZA LODI**

Recently the Chamber of Commerce of Milan Monza Brianza Lodi opened a new department called Inclusive Growth, with the aim of fostering policies and initiative for an economic growth that is aware of social responsibility.

In this context the Chamber of Commerce published some funding opportunities for local companies that included elements of Responsible Innovation, such as Call for Air Quality (*Bando Qualità dell'Aria* ) as it foresees additional points for:

- Companies with female entrepreneurs,
- Coherence with circular economy logics,
- Adoption of Responsible Innovation practices.

## 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	<b>SUBSTANTIAL</b> The three-year strategic programme for research, innovation and technology transfer is the key element of all the regional interventions foreseen for the 2018-2020 period. The definition and implementation of the programme is entrusted to the Steering Committee, through direct involvement with the actors of innovation and the tool for public consultation. In the Strategic Programme for research and innovation there is specific reference to Responsible Research and Innovation with reference to methodological approach and governance.
	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	<b>SUBSTANTIAL</b> Regional law no. 29 of 23 November 2016 "Lombardy Is Research and Innovation" aims to foster, support and promote the Research and Innovation ecosystem of the Lombardy Region. Moreover, in the framework of the Smart Specialisation Strategy, an Open Innovation platform has been implemented in Lombardy region: <i>The Lombardy Region's Smart Specialisation Strategy vision, that has an important impact on the regional innovation policies, represents a cultural leap regarding involvement of</i>

						<p><i>citizens in policy - decision-making process through innovative tools, both financial and enabling. Thus, a regional Open Innovation Platform has been built around the key principles of the Quadruple Helix Open Innovation model*, where "Government, industry, academia and civil participants work together to co-create the future and drive structural changes far beyond the scope of what any one organisation or person could do alone".<sup>1</sup></i></p>
		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	<p><b>MODERATE</b></p> <p>Following the Regional law no. 29 of 23 November 2016 "Lombardy Is Research and Innovation", the Lombardy region funded <b>with 106 million euro</b> block grant (from the resources of the POR FESR 2014 - 2020 - Axis I - Action I.1.b.1.3 "Support for collaborative R&amp;D activities for the development of new sustainable technologies, new products and services"), through negotiation agreements between the Lombardy Region and other public or private entities, the "<b>Research Agreements</b>" aim to foster the development of research and innovation projects with a high impact on the investments made, the partnership involved and the competitiveness of the territory. A total of 32 projects were financed by the Lombardy Region with this measure.</p> <p>The Call HUB Ricerca e Innovazione contains some elements of RRI. It opened in 2019 with a budget of 70 million euros.</p>

<sup>1</sup> <https://www.openinnovation.regione.lombardia.it/it/tools-for-innovation/the-open-innovation-platform>

				period where appropriate)		<p>At the moment there is not a plan for future funding related to RRI as these initiative are occasional and not structured.</p> <p>In 2016 the Association of Regional Chambers in Lombardy launched a call to support companies interested in adopting new models of SCR.</p> <p>The call had a budget of 850.000 € totally offered by the Regional Government and the companies could get a voucher between 20.000 and 50.000 € to pay external expertise and consultancy (up to 50% of the total eligible costs) for the following actions:</p> <ul style="list-style-type: none"> <li>- Activities for local community for sustainable development</li> <li>- Activities for the development of green economy for environmental sustainability</li> <li>- Activities for social innovation</li> </ul>
	<b>Ethics (justification of intended outcomes)</b>	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	<p><b>SUBSTANTIAL</b></p> <p><b>Rapporto Lombardia</b><sup>2</sup> is a report created by Polis-Lombardia, a regional institute for the support of policy of Lombardy region. In Rapporto Lombardia -created for regional policy makers and political, social and economic actors of the region - each goal of the UNSDGs is analysed with reference of the position of the Lombardy region towards the 21 countries of the European Union that are part of the OSCE.</p>

<sup>2</sup> <https://www.polis.lombardia.it/wps/portal/site/polis/attivita/rapporto-lombardia>

						In December 2019 has been presented the third edition: <i>Rapporto Lombardia 2019</i> .
<b>Process</b>	<b>Anticipation</b>	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	<b>MODERATE TO SUBSTANTIAL</b> The three-year Strategic programme for research, innovation and technology transfer is the key element of all the regional interventions foreseen for the 2018-2020 period. The document was issued in 2019 and it comprehend the input both of the Regional Forum for Research and Innovation (created with the regional law Lombardy is research and innovation), as well as with the input collected through a public consultation. The Strategic programme incorporates specific references to Responsible Research and Innovation.
	<b>Public engagement</b>	PE1: Public perceptions on public involvement in science and technology (Tsanos and Apospori 2017)	Quantitative	% of respondents who stated that “the public should be consulted and public opinion should be considered when making decisions about science and technology”	Special Eurobarometer 340 (national data), p. 87.	<b>MODERATE TO SUBSTANTIAL</b> Eurobarometer 340 observes that <b>41%</b> of Italian respondents wish that the public be consulted and public opinion be considered when making decisions.
		PE2:	Qualitative	Qualitative	Partners’/Experts’	<b>FORMALISED / HIGH INVOLVEMENT</b>

		Formalisation and extent of public involvement in regional science and technology decision-making (Tsanos and Apospori 2017)		discussion and self-classification as: - Formalised / high involvement - Formalised / low involvement - Not formalised / high involvement - Not formalised / low involvement	assessment	In 2018 Lombardy region promoted a public consultation – as foreseen in the Regional law 29/2016 – in order <b>to decide the priorities in the area of research, innovation and technological transfer</b> . The results of this consultation have been incorporated in the three year strategic plan. 1500 citizens took part to the consultation. Several consultations were issued in the past on innovation subjects, in 2018 there was the above mentioned consultation on the priorities in the area of research, innovation and technology transfer, and a new consultation was available to the public in the period September - November 2019 on Sustainable Development to draft the Sustainable Development Strategy with focus on bioeconomy and circular economy. At the beginning of 2020 a new consultation was opened by Regione Lombardia on the use of blockchain for the meat traceability.
	<b>Responsiveness</b>	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	<b>MODERATE</b> Regione Lombardia issues consultations on various topics related to research and innovation in order to collect the inputs from citizens and the general public. In the last year there has been – on average – one consultation per year. However the answer to these consultations is not always substantial (the one on the priorities in the area of research, innovation and technological transfer of 2018 had 1500 answers)
		RES2: Openness and transparency of the planning and policy	Qualitative	Existence of stakeholder/public communication mechanisms in	Regional policy and strategy documents/ Partners'/Experts'	<b>MODERATE TO SUBSTANTIAL</b> The regional law 29/2016 created an independent body - Regional Forum for Research and Innovation - with consultative, propositional and informative functions,

		process (adapted from Eastwood et al. 2017)		policy/strategy implementation procedures	assessment	composed of 10 experts in scientific, social and humanistic disciplines with a proven experience on the impact that innovations have on people's lives, selected through an international public procedure. The open innovation platform is also a tool for exchange and communications and several consultations were issued in the last years to ask for inputs on several topics related to innovation.
	<b>Reflection</b>	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	<b>SUBSTANTIAL</b> The regional law 29/2016 created an independent body - Regional Forum for Research and Innovation - with consultative, propositional and informative functions, composed of 10 experts in scientific, social and humanistic disciplines with a proven experience on the impact that innovations have on people's lives, selected through an international public procedure. One of its task is the monitoring of innovation policies, also from a Responsible Innovation viewpoint.
		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	<b>MODEST</b> No regional support/incentives for the use of standards and certifications related to RI are available

	<b>Governance</b>	G1: Extent of R&I networks (e.g. platforms, hubs, incubators, accelerators) promoting / supporting RI in the region (Tsanos and Apospori 2017)	Quantitative/Qualitative	Self-assessment in terms of: - Number of networks [Existence of networks if the number is not available] - Extent of involvement of regional policy makers in these networks - Formal / informal character of networks	Regional policy and strategy documents/ Partners'/Experts' assessment	<b>MODEST</b> In Lombardy there are several networks as platforms, incubators, accelerators, but none of them are specifically related to Responsible Innovation.
		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	<b>MODERATE</b> Following the Regional law no. 29 of 23 November 2016 "Lombardy Is Research and Innovation", the Lombardy region funded with 106 million euro block grant (from the resources of the POR FESR 2014 - 2020 - Axis I - Action I.1.b.1.3 "Support for collaborative R&D activities for the development of new sustainable technologies, new products and services"), through negotiation agreements between the Lombardy Region and other public or private entities, the " <b>Research Agreements</b> " aim to foster the development of research and innovation projects with a high impact on the investments made, the partnership involved and the competitiveness of the territory. A total of 32 projects were financed by the Lombardy

						<p>Region with this measure.</p> <p>106 million euros in 2016-2018</p> <p>The Call HUB Ricerca e Innovazione contains some elements of RRI. It opened in 2019 with a budget of 70 million euros.</p> <p>At the moment there is not a plan for funding related to RRI.</p>
	<b>Ethics (deontology)</b>	E2: Ethical considerations in the evaluation for the regional funding of R&I proposals (Tsanos and Apospori 2017)	Quantitative/Qualitative	% of R&I proposals for funding by regional policy makers that are subject to 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]	Regional policy and strategy documents/ Partners'/Experts' assessment	<b>MODEST</b> No ethical considerations in the evaluation for the regional funding of R&I proposals are in place.
<b>Products</b>	<b>Gender/equality and diversity</b>	GE1: Gender gap of core human	Quantitative	% difference between the share	EU regional statistical yearbook 2015, p.	<b>MODEST</b> Considering the percentage of 30-34 year olds with tertiary education working in a science and technology occupation, in

		resources in science and technology (Tsanos and Apospori 2017)		of economically active population for women and the share of economically active population for men in science and technology	256	Italy the gender gap is evident.  <a href="https://ec.europa.eu/eurostat/documents/3217494/7018888/KS-HA-15-001-EN-N.pdf">https://ec.europa.eu/eurostat/documents/3217494/7018888/KS-HA-15-001-EN-N.pdf</a>
	<b>Gender/equality and diversity</b>	GE2: Support for gender equality in regionally funded R&I projects (adapted from Tsanos and Apospori 2017)	Quantitative/Qualitative	Number of regionally funded R&I projects supporting gender equality and/or creating of RDI jobs that employ women [Existence of funded projects, if the number is not available]	Regional policy and strategy documents/ Partners'/Experts' assessment	<b>MODEST</b> There is no gender equality support in regionally funded R&I projects
	<b>Open access</b>	OA1: Regional policies for dissemination of and open access to scientific, technical and economic information (adapted from Tsanos and	Qualitative	Qualitative discussion and self-assessment in terms of: - Existence of a regional policy for open access - Regional institutional mechanisms for	Partners'/Experts' assessment	<b>SUBSTANTIAL</b> The Lombardy Region's Smart Specialisation Strategy vision, that has an important impact on the regional innovation policies, represents a cultural leap regarding involvement of citizens in policy - decision-making process through innovative tools, both financial and enabling. Thus, a regional Open Innovation Platform has been built around the key principles of the Quadruple Helix Open Innovation model*, where "Government, industry, academia and civil participants work together to co-create the future and drive structural changes far beyond the scope of what any one organisation or person could do alone".

		Apospori 2017)		establishing, maintaining and monitoring open science and innovation		<p>The Lombardy region is implementing the open innovation concept with the open innovation platform focusing on the following key objectives:</p> <ul style="list-style-type: none"> <li>• Continuous identification and involvement of key competence holders, essential to face the technology challenges</li> <li>• Continuous recognition and endorsement of strategic innovation challenges</li> <li>• Promotion and implementation of enabling conditions, facilitating successful functioning in challenging environment of technology and market changeability</li> <li>• Exploitation of R&amp;D projects and initiatives</li> </ul> <p>The Platform contains a set of tools and methodologies to support the creation of innovation ecosystems around strategic topics, identified earlier in the RIS3. The Platform is "open" and inclusive, with very low entry barriers while ensuring a good quality of transactions through an "orchestration" methodology relying on "facilitators" and "community managers" supporting other participants when they become active, validating content and rules for routing. A "reputation-based" approach is promoted at all levels, limiting centralised activities to a minimum. Multilingual interface and an open licensing of the code is foreseen in 2017, as the Platform has reached a sufficient maturity.</p> <p>The Open Innovation Platform has been opened to the public in the first months of 2015. As of October 2017, there are over 7000 registered participants. Over 200 communities have been created</p>
		OA2: Inclusion of open access / open science measures in research policies and calls for	Qualitative	Existence of Regional open science / open innovation repositories or of regional support	Regional programming documents	<p><b>SUBSTANTIAL</b> See above</p>

		proposals (adapted from Tsanos and Apospori 2017)		(e.g. financial) for the participation in sector or other repositories		
	<b>UN Development Goals</b>	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	<b>MODERATE</b> <b>Rapporto Lombardia</b> is a report created by Polis-Lombardia, a regional institute for the support of policy of Lombardy region. In Rapporto Lombardia -created for regional policy makers and political, social and economic actors of the region - each goal of the UNSDGs is analysed with reference of the position of the Lombardy region towards the 21 countries of the European Union that are part of the OSCE. In 2019 has been presented the Rapporto Lombardia 2018. The first one was presented in 2018, referring to 2017.

## 2.2 RI Performance of Enterprise

Category	Component	Data source	Metric	Type of measurement	Indicator	Assessment (Modest/Moderate/Substantial) + Short description
<b>Purpose</b>	<b>Motivation for doing/supporting research/innovation</b>	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 and mission	Qualitative	M1: Integration of innovation/S&T in corporate planning and strategies	<b>MODEST TO MODERATE</b> Most of the companies engaging in RI Pilot Action were sensitive to some of the themes of RI and they showed interest in getting involved (on different scale) in a broader vision of its aspects. The involvement of local companies in RI Pilot

			statements, etc.)			Case was not an easy task as the majority of the SMEs in Lombardy were not aware of Responsible Innovation concept as a whole.
	<b>Motivation for engaging with RI</b>	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	<b>MODEST</b> At the beginning of the RI Pilot Case, the RI consultants supported the companies in taking the RRI In-depth Assessment tool. At this stage the companies incorporated some elements of RI in the official planning of the organization, but they were not formalized or strategically organized from a RI point of view.
		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 period where appropriate)	Quantitative	M3: Financial commitment on RI components	<b>MODEST</b> No budget was allocated to RI components in companies' budget
	<b>Ethics (justification</b>	Self-assessment(*)	Participation in	Qualitative	E1: Significance of	<b>MODEST</b>

	<b>of intended outcomes)</b>		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)		UNDGs in companies' activities and strategies	Companies taking part in RI Pilot Case were not aware of UNSDGs, and they didn't use instruments, programmes and schemes to achieve them in a coherent and formalized way. Nevertheless some of the companies were taking actions in order to achieve some of the UNSDGs – as GOAL 5: Gender Equality or GOAL 12: Responsible consumption and production – in a more occasional way.
<b>Process</b>	<b>Anticipation</b>	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)	<b>MODEST</b> No foresight and strategic planning activities observed in the companies
	<b>Public engagement</b>	RRI In-depth Assessment Tool	Qualitative discussion and self-assessment of the	Qualitative	PE1: Users' involvement in design and development processes	<b>MODEST</b> No users' engagement observed in the companies

			companies' experience in users' engagement techniques (e.g. living labs)			
		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	<b>MODEST</b> No public-sponsored projects on engagement in R&I joined by the companies
	<b>Responsiveness</b>	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)	<b>MODEST</b> Some users' feedback in companies operations were already integrated in one case.
		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	Qualitative	RES2: Openness and transparency of corporate operations (adapted from Eastwood et al. 2017)	<b>MODEST</b> The companies were aware of some of the CSR instruments but they were not formally adopted.

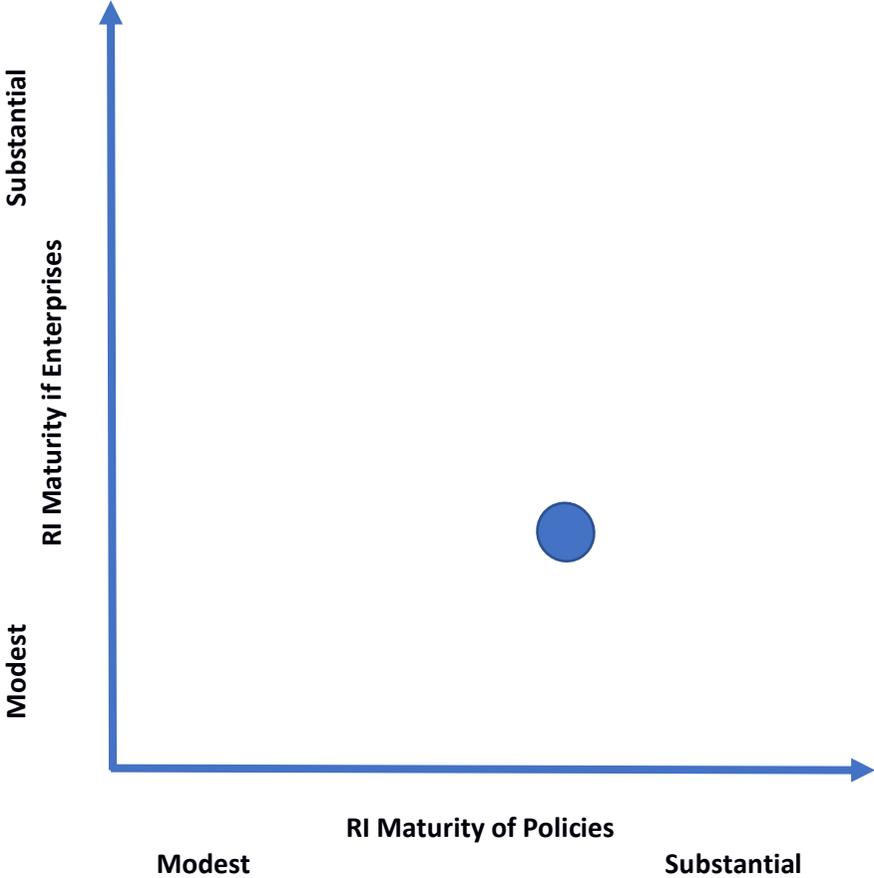
			customers and stakeholders			
	<b>Reflection</b>	Self-assessment(*)	Existence of/participation in offices, fora, committees, etc. for the monitoring and assessment companies activities relevant to RI	Qualitative	REF1: Reflexive guidance in companies strategies (adapted from Eastwood et al. 2017)	<b>MODEST</b> No participation in fora, committees, etc for the monitoring and assessment companies activities relevant to RI
		Self-assessment(*)	Instruments used by companies, such as codes of conduct, standards, etc. related to RI (e.g. ISO, SA, UNI)	Qualitative	REF2: Use of standards and certifications related to RI (e.g. ISO, SA, UNI) (adapted from Eastwood et al. 2017)	<b>MODEST</b> Companies were not using codes of conduct or standard related to RI
	<b>Governance</b>	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	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)	<b>MODEST TO MODERATE</b> Two companies of the RI Pilot Action are part of RI Networks, in particular Research Networks as Horizon 2020 consortia, regional clusters and networks for regional funds.

			networks (e.g. leading working groups, participating in exchanges of best practices, etc.) - Formal / informal character of networks			
		RRI In-depth Assessment Tool	Self-assessment in terms of: - Number of successful bids [Existence of mechanisms, if the number is not available]; - € acquired to invest in RI-relevant projects - Sources of funds acquired by the companies	Quantitative/ Qualitative	G2: Third party funds acquired to promote companies' RI related activities (adapted from Tsanos and Apospori 2017)	<b>MODEST</b> No third party funds acquired to promote companies' RI related activities
	<b>Ethics (deontology)</b>	Self-assessment(*)	Qualitative discussion and self-assessment of the utilization of Codes of Conduct or other instruments for	Qualitative	E2: Adoption or adherence to Codes of Conduct or other instruments for ensuring the integrity of R&I practices in the company	<b>MODEST</b> RI Pilot companies do not have Codes of Conduct or other instruments for ensuring the integrity of R&I practices

			ensuring the integrity of R&I practices			
<b>Products</b>	<b>Gender/equality and diversity</b>	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)	<b>MODEST</b> The presence of female employees in R&I and pivotal roles is marginal
	<b>Gender/equality and diversity</b>	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	<b>MODEST</b> No initiative for supporting gender equality registered in the RI Pilot Case companies.
	<b>Open access</b>	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	Qualitative	OA1: Evidence of use of and/or contribution to open data repositories as input to /output of innovation processes	<b>MODEST</b> No use of open access registered

			know up-to-date research outputs for the business operations			
		RRI In-depth Assessment Tool / Self-assessment	Number of R&I funding/policy programs joined by companies [Existence of programs, if the number is not available]	Quantitative/ Qualitative	OA2: Participation in R&I funding/policy programs requiring a commitment to an open access / open science policy	<b>MODEST TO MODERATE</b> Two companies are taking part in research projects requiring a commitment to open access, such as Horizon 2020 projects
	<b>UN Development Goals</b>	Self-assessment tool, “RI Drivers - Responcence 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)	<b>MODEST</b> The companies do not analyse their innovation process to the dimension of RRI

2.3 Assessment of Local RI Maturity Level



Drag and drop the dot to illustrate the local positioning



### 3 Priorities for Action

The work done with the ROSIE project delineated a clear situation in the Lombardy Region. At an institutional level there are a RI policies in place (regional law no. 29 of 23 November 2016 "Lombardy Is Research and Innovation"), aiming to foster, support and promote the Research and Innovation ecosystem of the Lombardy Region. It foresees a Three year strategic programme, a multidisciplinary steering committee, a regional forum for research and innovation and a research award. The Lombardy Region also strongly encourages Open Innovation through a dedicated platform.

On the other hand there has been some funding initiative linked to RI (Research agreement fund), but from one side the RI framework was not highlighted and on the other side these initiatives are sporadic.

From the small and medium enterprises' point of view we see very little awareness regarding RI ecosystem, practice and components.

For these reasons we're focusing on the following priorities

- Work in the already existing regional policies for RI to start targeted engagement/communication initiatives to raise firms' awareness on this subject
- Work in the already existing regional policies for RI to start targeted engagement/communication initiatives to increase RI funding initiatives for SMEs

At the beginning of 2020 the general and economic situation in Lombardia (and almost worldwide) drastically changed due to the COVID19 related emergency. The health emergency, and related lockdown, led to a tremendous economic crisis whose consequences are not yet outlined. This situation obliged national and local institutions, companies and every actor to radically re organize and revise their plans for the near to medium future. We witnessed an effort from the RI regional actors (such as the regional Forum for Research and Innovation) to provide the actors with some guidance, as On April 10th 2020, during the Coronavirus pandemic outbreak, the Forum provided Lombardy Region with "Flash Recommendations on COVID-19 Emergency", detailing concrete suggestions on the governance of key issues emerging from the SARS-CoV-2 crisis. Suggestions included: effective and transparent communication; clearly articulated and science-based as well as socioculturally situated measures; trustworthy data and technologies (such as apps) for containing and detecting contagions; innovation during (and after) the COVID-19 crisis. The Recommendations have been driven by a Responsible Research and Innovation approach to guide governance decisions through transparency, trust building and the harnessing of co-creation potential.

We adapted the roadmap to these circumstances as they modified the situation in which we move.



## 4 Lessons from the Pilot Actions

The work performed with the local SMEs has been – without doubt - the heart of ROSIE project, as well as the most challenging but stimulating part. The implementation of Responsible Innovation in the life and organisation of small companies has been a first for all the parts involved, and that's why it has been a demanding task, but also very well received by the SMEs.

First of all we experienced some difficulty in finding companies interested in applying to ROSIE open call for the selection of RI Pilot Cases. That was due to a general low awareness on Responsible Innovation between local SMEs. In fact – amongst the companies taking part in the ROSIE call – we found out that even when companies applied one or more RI keys/dimensions, they were not familiar with the concept of Responsible Innovation.

In order to find interested companies we had to direct promotion to companies that were already sensitive to RI related themes, such as Corporate and Social Responsibility, B corporations, etc.

Once we started to work with the Pilot Cases SMEs, they received with interest the training on the RI implementation techniques and tools. We decided to work with the companies on a one to one basis, creating a tailored path with each one of them. First of all we performed an initial assessment through the RI Compass self check tool. Based on the findings of the assessment we proposed to each company a support for RI implementation in their organisation, working mainly on topics such as: ethics, stakeholder analysis and engagement, how to work coherently on different RRI keys.

## 5 Lessons from the Study Visits

The **First Transnational Study Visit** was held in Milan in October 2018, and in that occasion three Horizon2020 projects active in the field of RI were presented in order to provide ROSIE partners with key practical knowledge that can be useful for them during direct work with SMEs in the pilot phase.

One of the projects presented was the Horizon 2020 COMPASS project, that is based on the assumption that adopting RI in SMEs is a matter of change in the entrepreneurial style: from profit driven to value driven. COMPASS partners developed a self-check tool supporting SMEs to assess their strengths and potentials for improvement. Moreover, it provides companies with specific measures and concrete examples of how to reach their goals in terms of RI. Innovhub was really impressed by this tool and decided to adopt it for the Pilot Case companies as a first RI assessment, in order to detect main weaknesses and tackle them thanks to the ROSIE Pilot Case activities.



During the **Second Transnational Study Visit** in Slovenia in October 2019 we were really impressed on the Pilot Cases showcased there where the Responsible Innovation was applied to service design and creative and cultural industries. It was really interesting to see how RI works in companies with non-technological innovation. Moreover, in the same Transnational Study Visit, we took part in the design thinking workshop, methodology that was used by the Slovenian partners in the pilot action with their locals SMEs. This workshop was really interesting and, after this experience, we decided to offer specific training to our SMEs on this subject. Considering that we were already in progress with our pilot cases, we decided to offer this training after the end of ROSIE project as part of our roadmap, so that it could be available not only to our pilot cases, but to all interested companies.

Innovhub was not able to take part in the Third Transnational Study Visit that took place in Slovakia in March 2020 due to the COVID 19 related limitations.



## 6 The Roadmap

### 6.1 Action #1

Innovhub SSI will organize a cycle of webinar on subjects linked to Responsible Innovation for local SMEs. The themes will include frugal innovation and design thinking.

#### The Goal

The aim is to raise awareness among local companies on Responsible Innovation and on how to implement it in the company's strategy and practices. With this cycle of webinars we intend to reach interested SMEs and provide them with knowledge about Responsible Innovation concept, on specific aspects, tools and methodologies to implement it and case studies of ROSIE Pilot Cases.

#### The Strategy

The people	This action will be organized by Innovhub SSI, with the involvement of local stakeholders such as Chamber of Commerce of Milano Lodi Monza Brianza and Fondazione Giannino Bassetti. Representatives of these organizations will take part in the organization of this cycle of seminars. Other local stakeholders will be involved in the promotion of the events.
The resources	The event will be funded with internal resources and by other EU projects (such as Enterprise Europe Network) dealing with themes such as innovation for SMEs. Timeframe: The webinars will take place in last quarter of 2020 and first quarter of 2021.
Timeframe	The webinars will take place in last quarter of 2020 and first quarter of 2021.

#### The Monitoring System

We'll prepare feedback forms for the participants for each webinar in order to collect their comments and inputs. This way we'll be able to monitor the implementation of this action.



## 6.2 Action #2

Innovhub SSI will work in close collaboration with the Chamber of Commerce of Milan Monza Brianza Lodi - and in particular with the office of Inclusive Growth - to include Responsible Innovation related criteria for funding instruments, benefits, etc. If possible with current situations and priorities by the Chamber of Commerce, we could work in order to create grants related to Responsible Innovation topics.

### The Goal

The aim is to introduce financing mechanisms for Responsible Innovation topics. On one hand this will support RI topics and practices directly to the funding and on the other hand it will indirectly promote RI topics through the promotion and dissemination of the call and of its results.

### The Strategy

The people	Innovhub SSI and the Chamber of Commerce of Milan Monza Brianza Lodi will be involved. There could be an involvement of key stakeholder such as Fondazione Giannino Bassetti and some members of the Forum for Research and Innovation of Regione Lombardia in order to collect suggestions and insights.
The resources	This initiative will be funded through internal resources and funds from the Chamber of Commerce.
Tasks and timeframe	We plan to publish the funding instruments in the last quarter of 2020 or the first quarter of 2021.

### The Monitoring System

Innovhub and the Chamber of Commerce will monitor this initiative during its implementation, but also after its conclusion in order to monitor the impact of the measure on the beneficiary.



### 6.3 Action #3

Innovhub will work as amplifier of Responsible Innovation initiatives both locally and internationally and will work as an hub on RI for small and medium enterprises.

#### The Goal

The aim is to work as hub and RI point of reference for SMEs. In the last months we saw in lombardy a series of RI related initiatives as the open consultations (for example the ones on smart working and on the Lombardy roadmap for research and innovation on circular economy, just to name the last ones), the Flash Recommendations on COVID-19 Emergency published by the Forum on Research and Innovation of Regione Lombardia, the platform Open Lombardia (in the Open Innovation Platform).

Our goal is to include Responsible Innovation news in our permanent areas of interest both internally and externally towards SMEs. We acquired a knowledge on RI thanks to ROSIE project and we intend to capitalize on it and build new initiatives and projects.

#### The Strategy

The people	This action will be completely managed by Innovhub.
The resources	This initiative will be managed with internal resources
Tasks and timeframe	This action will be ongoing as Innovhub intends to work permanently on these themes

#### The Monitoring System

We'll work in synergy with our communication area in order to create a communication and information plan and we'll evaluate it once a year together with Innovhub's global communication plan.



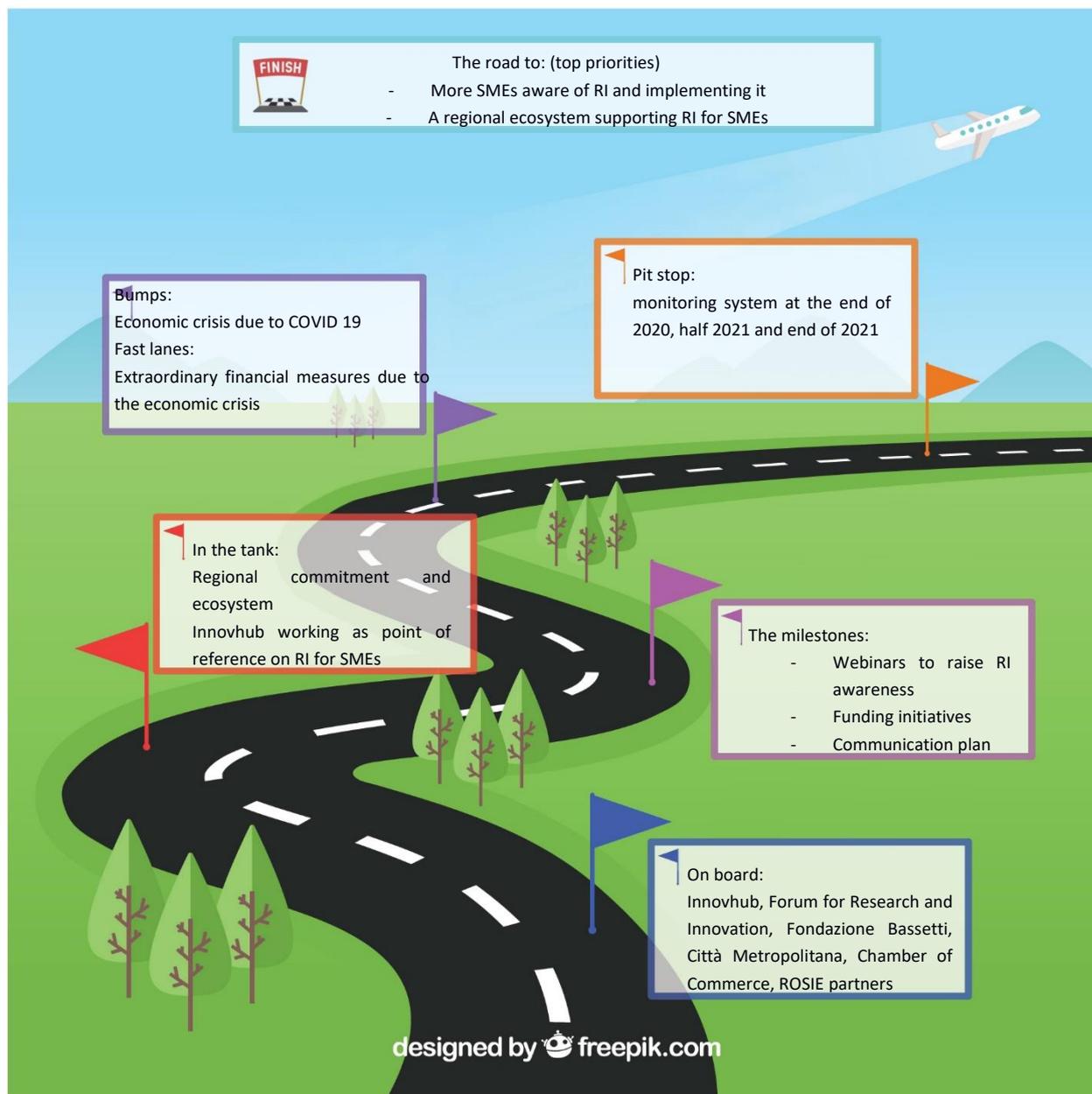
## 6.4 Action #n

In order to deliver on your identified priority/ies, you need to put in place a number of actions, stemming from what you learned from the pilot actions and the exchange with other partners. Each action can be described according to the following table.

The Goal	
What goal(s) are you trying to reach? What exactly will be achieved? What will be established and in what timeframe?	
The Strategy	
The people	Who should be involved? Who should be consulted? Should you form a team? If so, who should be included? Who are the key players? Which stakeholders might be interested/willing to participate?
The resources	What financial resources do you need? How much time will you need to invest? How much time will others have to invest? What financial resources could be allocated for support (for example, the engagement of an external expert? What resources are needed for sustainability?
Institutional incentives	What institutional support/change do you envisage? How can your institution support that change? Which incentives could your institution offer to foster that change? How might your institution benefit from that change?
Tasks and timeframe	What tasks do you need to fulfil to reach your goal? Which tasks should be tackled first/last? How much time will you need? What are your interim goals/achievements? Which tasks would you like to co-develop with other stakeholders? Which tasks can you delegate?
Opportunities and strengths	Has anybody else had the same issues as you? If so, how did he/she solve them? Where can you find resources/material that would support your development? Which networks could you join?
Threats and risks	What threats do you see that can affect your policy? What risks do these threats generate for the development of your initiatives? What prevention and mitigation actions could be put in place?
The Monitoring System	
When will you evaluate your efforts? What evaluation methods will you use? What data should be collected? How can you verify that you achieved your goal?	
The Dissemination	
What results and insights should you share with others? What results and insights are transferable? What else should be communicated? Who are your target groups/audiences? What are the appropriate channels for them? What results/insights should not be communicated, and why?	



## 6.5 A Visual Rendering of the Roadmap



<a href="https://www.freepik.com/free-photos-vectors/infographic">Infographic vector created by freepik - [www.freepik.com](https://www.freepik.com)</a>

[https://www.freepik.com/free-vector/timeline-concept-with-winding-road\\_2485842.htm](https://www.freepik.com/free-vector/timeline-concept-with-winding-road_2485842.htm)