



European  
Commission

# JRC TECHNICAL REPORT

## COVID-19 and the smart specialisation strategy

*Policy actions and  
organisational policy  
capacities*

Inmaculada Perianez-Forte

Clemente J. Navarro



2022

This publication is a Technical report by the Joint Research Centre (JRC), the European Commission's science and knowledge service. It aims to provide evidence-based scientific support to the European policymaking process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication. For information on the methodology and quality underlying the data used in this publication for which the source is neither Eurostat nor other Commission services, users should contact the referenced source. The designations employed and the presentation of material on the maps do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

#### Contact information

Name: Inmaculada Perianez-Forte  
Address: Joint Research Centre  
Edificio EXPO – Calle Inca Garcilaso 3  
41092 Sevilla, Spain  
Email: [inmaculada.perianez-forte@ec.europa.eu](mailto:inmaculada.perianez-forte@ec.europa.eu)

EU Science Hub

<https://ec.europa.eu/jrc>

JRC129753

EUR 31128 EN

PDF ISBN 978-92-76-53656-7 ISSN 1831-9424 doi:10.2760/120691

Luxembourg: Publications Office of the European Union, 2022

© European Union 2022



The reuse policy of the European Commission is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Except otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated. For any use or reproduction of photos or other material that is not owned by the EU, permission must be sought directly from the copyright holders.

All content © European Union, 2022

How to cite this report: Perianez-Forte I. and Navarro C., *COVID-19 and the smart specialisation strategy*, EUR 31128 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-53656-7, doi:10.2760/120691, JRC129753.

# Contents

1. Introduction.....	4
2. Methodology.....	5
3. Portfolio contents: priorities adequacy.....	6
Which priorities included in smart specialisation portfolios are more suitable to cope with the COVID-19 pandemic? .....	7
Should any other priorities be added?.....	9
4. Actions to cope with covid-19 and the recovery period.....	10
Improving smart specialisation strategies as regards covid-19 consequences.....	10
Improving smart specialisation strategies for the recovery period.....	13
5. Entities policy capacities: on capacity building challenges.....	17
6. Conclusions: from operational to political capacity building.....	22
Reference.....	24
List of tables.....	25
List of figures.....	26
Annexe 1 SURVEY ON SMART SPECIALISATION STRATEGIES: POLICY CAPACITIES AND IMPLEMENTATION. (31/12/20).....	27
Annexe 2 Policy actions as regards COVID-19 consequences.....	39
Annexe 3. Policy actions as regards the Recovery period.....	40

## Executive summary

- The COVID-19 pandemic has been a disruptive factor across Europe, affecting the implementation of smart specialisation and other policies. To address the consequences of the COVID-19 pandemic, the European Union and the Member States have promoted different policy initiatives.
- To understand how the COVID-19 pandemic has affected the implementation of the smart specialisation strategies and how governments have been influenced by the EU policy reforms in the last part of the 2014-2020 programming period, the Territorial Development Unit of the Joint Research Centre of the European Commission launched a survey at the end of 2020, together with the Pablo de Olavide University.
- The survey was addressed to the entities in charge of the smart specialisation strategies and sought to collect information about how the COVID-19 pandemic had affected the implementation of the smart specialisation strategies and how the entities in charge had managed the situation. Our analysis focuses on the organisational policy capacities and governance processes required to deal with COVID-19 consequences.
- The main results show the contrast between the adequacy of smart specialisation strategies portfolio contents and administrative challenges to manage and implement it due to the COVID-19 pandemic and the Recovery period. Among the most suitable priorities included in the respondents' smart specialisation strategies portfolio to cope with COVID-19 consequences are Sustainable innovation, KETs, the Digital Agenda and Public health and security. However, most entities highlight the need for policy actions to enhance their organisational structures and processes to increase actors' coordination, especially among governmental ones.
- According to respondents the feature most needed is flexibility in rules and procedures to implement and justify ongoing projects.
- In sum, with respect to the pandemic crisis, the entities in charge of the smart specialisation strategies need to improve their operational and political capacities rather than smart specialisation policy contents.
- The analysis of policy capacities confirms this 'operational' challenge to manage and implement smart specialisation policies. Nevertheless, policy actions proposed and policy capacities self-assessments, made clear the importance of governance processes. It seems that entities can more easily mobilise and integrate social stakeholders in policy-making processes than other public organisations and their policies.
- Finally, based on entities' responses, actions required to improve smart specialisation strategies and governance processes show the existence of challenges. Entities indicate difficulties coordinating policy actions and identifying a core set of public and social actors, focused on specific functions and policy sectors in governance processes.

## Acknowledgements

The authors would like to thank those policymakers who participated in the survey across Europe. Special thanks to Francesca Donati for the on-line survey design and management, her excellent work collecting answers from countries and regions and preliminary analyses. Thanks also go to Fernando Mérida, who provided valuable suggestions for elaborating the survey. The report also benefited from the support of Xabier Goenana (Head of Unit of the Knowledge for Finance, Innovation and Growth Unit of the JRC) and Alessandro Rainoldi (Head of the Territorial Development Unit of the JRC). Thanks to Karel H. Haegeman for his constant support and Anabela Santos for her suggestions for the graphs. Finally, special thanks go to Xenia Garcia Dominguez and Massimiliano Fucci for the overall revision of the graphs and document.

## Authors

Inmaculada Perianez-Forte, European Commission, Joint Research Centre, Seville, Spain.

Clemente J. Navarro, Universidad Pablo de Olavide, Seville, Spain.

## Abstract

*This report aims to understand how the COVID-19 pandemic has affected the implementation of smart specialisation strategies in the last part of the 2014-2020 period. The report focuses on organisational policy capacities and governance processes required to deal with the consequences of COVID-19. A survey was launched in 2020 to collect information about how the health crisis had affected implementation of smart specialisation strategies and how the entities in charge had managed the situation. The main results show the contrast between the adequacy of smart specialisation strategies portfolio contents and administrative challenges in managing and implementing the strategies in times of crisis and during the recovery period. Almost all entities consider priorities included in their smart specialisation strategies portfolio are adequate to cope with the consequences of COVID19. However, most highlight actions needed to enhance organisational structures and processes to increase actors' coordination, especially governmental ones. In sum, the entities in charge of the smart specialisation strategies need to improve their operational and political capacities more than smart specialisation policy contents.*

# 1. Introduction

The COVID-19 pandemic has played a disruptive factor across Europe, affecting smart specialisation implementation and other policies. To address the consequences of the COVID-19 pandemic, the European Union and the Member States have promoted different policy initiatives. To understand how the COVID-19 pandemic has affected the implementation of the smart specialisation strategies in the last part of the 2014-2020 programming period, the Territorial Development Unit of the Joint Research Centre of the European Commission launched a survey, together with the Pablo de Olavide University, at the end of 2020. The survey addressed the entities in charge of the smart specialisation strategies. It sought to collect information about how the COVID-19 pandemic had affected the smart specialisation strategies and how the entities in charge had managed the situation.

Based on the responses, this report focuses on one part of the survey: the organisational policy capacities and governance processes required to deal with COVID-19 consequences. The analysis provided pursues to shed light on the policy capacities and the type of actions needed in times of crisis.

The experience of smart specialisation in the European Union has shown the smart specialisation policy poses relevant challenges for regions regarding its policy design, priority selection, stakeholders' involvement, management and implementation. However, previous analyses have also shown these challenges vary according to regions' economic development and institutional robustness. For regions with more robust economies and institutional frameworks in North and Central Europe, smart specialisation has been a valuable instrument to refine and improve previous experiences. For those regions with weaker economies, institutional and governance systems, in Southern and especially Eastern Europe, smart specialisation implies intense challenges but also learning opportunities as regards their institutional and governance capacities (Kroll, 2015; MacCann and Ortge-Argilés, 2016; Hasink and Gong, 2019; Tripl et al. 2020).

In addition to these regional differences, the COVID-19 pandemic has added a disruptive factor across the European Union, affecting the management, implementation, and effectiveness of smart specialisation and other policies. However, this disruptive factor promoted different reactions and effects in different regions that could reinforce pre-existing differences due to their economic situation and institutional frameworks.

In this context, the European Commission has approved some 'flexibility rules' to help manage the European Cohesion Policy and, therefore, implement smart specialisation strategies. These rules imply some flexibility in managing and justifying European Structural Funds. Have these rules been used by entities in charge of smart strategy policies? Do they think these rules help to cope with COVID-19 consequences? Do they think other rules could be used and proposed regarding COVID-19 and other similar disruptive factors in the future?

This report focuses on the organisational policy capacities and governance processes required from the entities in charge of the smart specialisation to deal with COVID-19 consequences. Other elements included in the survey such as the use of flexibility rules established by the European Commission to deal with the potential impact of COVID-19 on EU Cohesion Policy and the role and perceptions of different stakeholders are analysed in another publication.

## 2. Methodology

The sample framework for this survey is national and regional entities in charge of smart specialisation strategies in the European Union and other countries. The survey was sent to the 208 entities (28 national and 181 regional) in the Member States and other countries that have established a smart specialisation strategy. Research work was done online from December 2020 to March 2021, and the final response rate is 45,2%, a total of 95 responses (88 from the Members States and Norway and eight from other countries). Response distribution shows that North and Central Europe entities have participated less than entities responsible for smart specialisation strategies in different regions (see table 1)<sup>1</sup>.

Given the focus of this report, the sample framework used for our analyses includes all entities, including both Members and non-Members States. Nevertheless, the effective sample size does not allow very complex multivariate analysis. Although other analyses have been performed to confirm the results, the most relevant results will be summarised using basic statistical techniques and tables (means or percentages).

Table 1 Population and sample distributions by geographical areas

Geographical Areas	N	n	Response rate (%)
Northern/Central	103	36	35,0
Southern	58	32	55,2
Eastern	48	27	56,3
Total	209	95	45,5

Note: this table includes EU and non-EU entities with a smart specialisation policy N: Population; n: sample

Previous studies about smart specialisation strategies and policy cohesion have shown countries and regions across Europe have different economic situations and institutional capacities (Kroll, 2015; Tripl et al., 2020). Our analysis also reflects differences across Europe between three broad geographical areas: Northern and Central, Southern and Eastern. In some cases, our research will also distinguish between convergence and competitiveness regions (Gross domestic product – GDP - less or more than 75% EU average).

<sup>1</sup> Geographical areas included the following countries and their regions: North (Austria, Belgium, France, Germany, Finland, Sweden, Denmark, Finland, France, Germany, Ireland, Luxembourg, Netherland, Sweden, UK), South (Cyprus, Greece, Italy, Malta, Portugal, Spain), East (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia). Norway has been included in the North/Central group, and the other non-EU regions in the Eastern group.



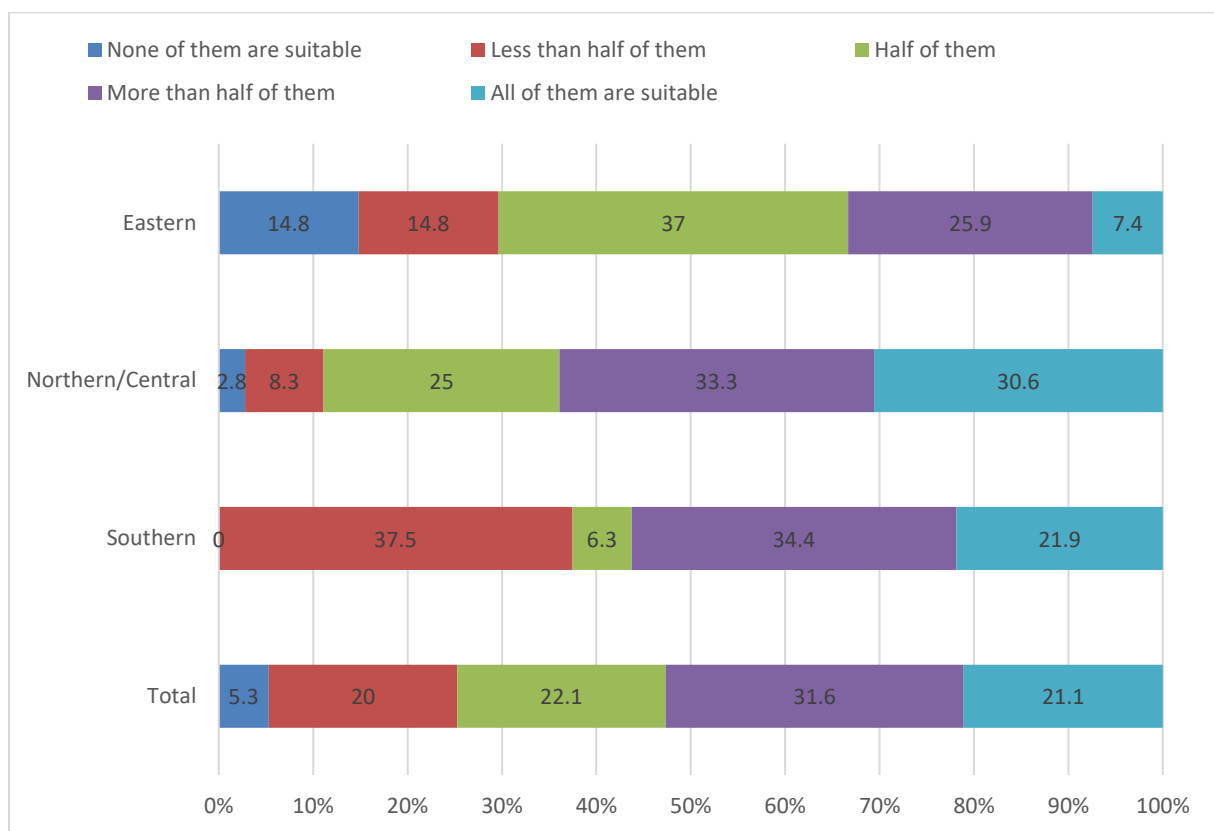
### 3. Portfolio contents: priorities adequacy

A central aspect of smart specialisation policy is its portfolio content: selecting specialisation priorities. As a place-based policy, policy portfolios vary (or at least should vary) according to regions' characteristics. Nevertheless, even if the pandemic intensity and its effects have differed across regions, its disruptive factor has posed a common challenge to adapting policy strategies and priorities. We explored in the survey the suitability of the smart specialisation priorities to address the COVID-19 pandemic. The rest of this section presents the main findings.

Do entities consider their priorities are suitable to cope with COVID-19 consequences in their territories?

75% of entities think half or more of the priorities included in their current portfolios are suitable for coping with the consequences of COVID-19. Specifically, 32% feel more than half of them, and 22% think all of them are suitable. Geographical differences show Northern/Central regions find their smart specialisation contents more suitable than Southern regions, especially Eastern regions<sup>2</sup>.

Figure 1. Priorities included in smart specialisation strategy suitability for coping with the consequences of COVID-19 and geographical areas



n = 95 responses, distributed by Northern/Central (36), Southern (32), Eastern (27)

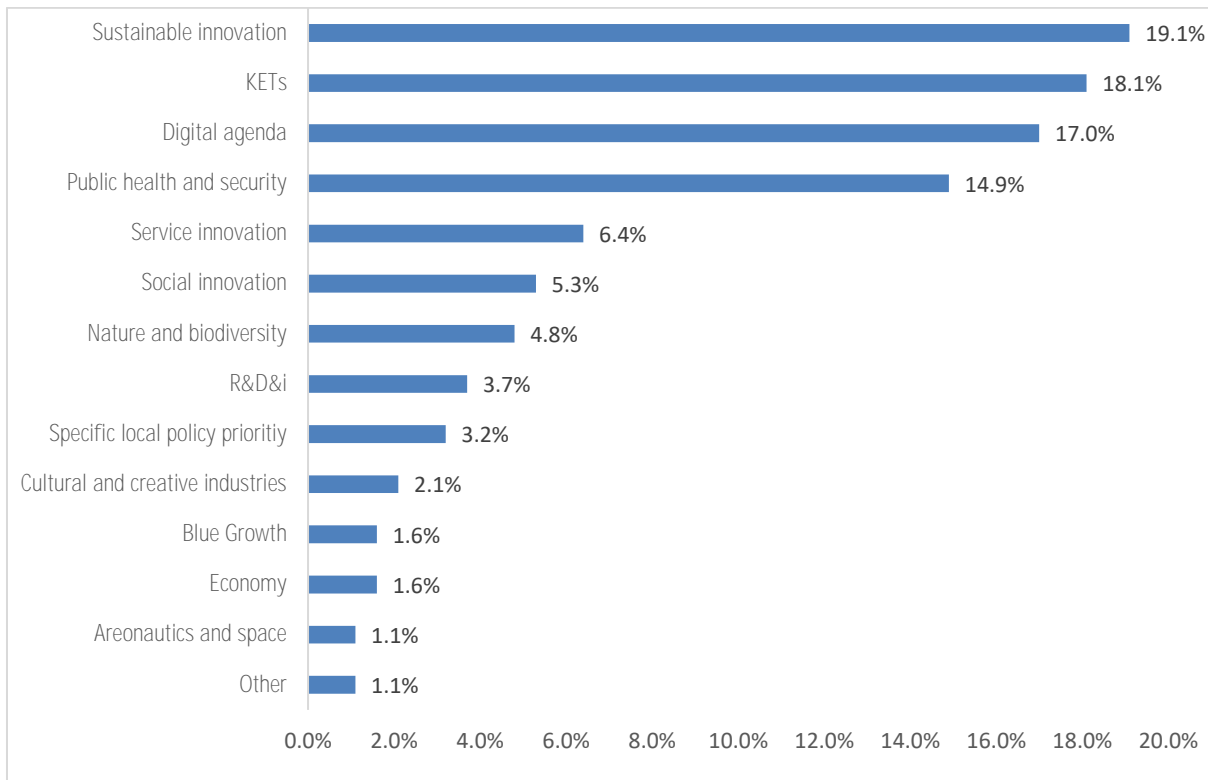
<sup>2</sup> Differences between less and more developed regions differences are not statistically significant.

## Which priorities included in smart specialisation portfolios are more suitable to cope with the COVID-19 pandemic?

The survey asked for the three more suitable priorities from each entity to deal with the COVID-19 pandemic. The selected priorities are evenly distributed across the different priority areas, although four categories stand out: Sustainable Innovation (19%), KETs (18%), Digital Agenda (17%) and Public health and security (15%). Finally, the following priorities have been identified among the least suitable categories, maybe for their specificity or cross-cutting nature: Economic, Blue Growth and Aeronautic and Space<sup>3</sup>.

Figure 2. Most suitable specialisation priorities included in smart specialisation strategies to cope with the consequences of COVID-19

Percentage over total responses



n: 188 responses.

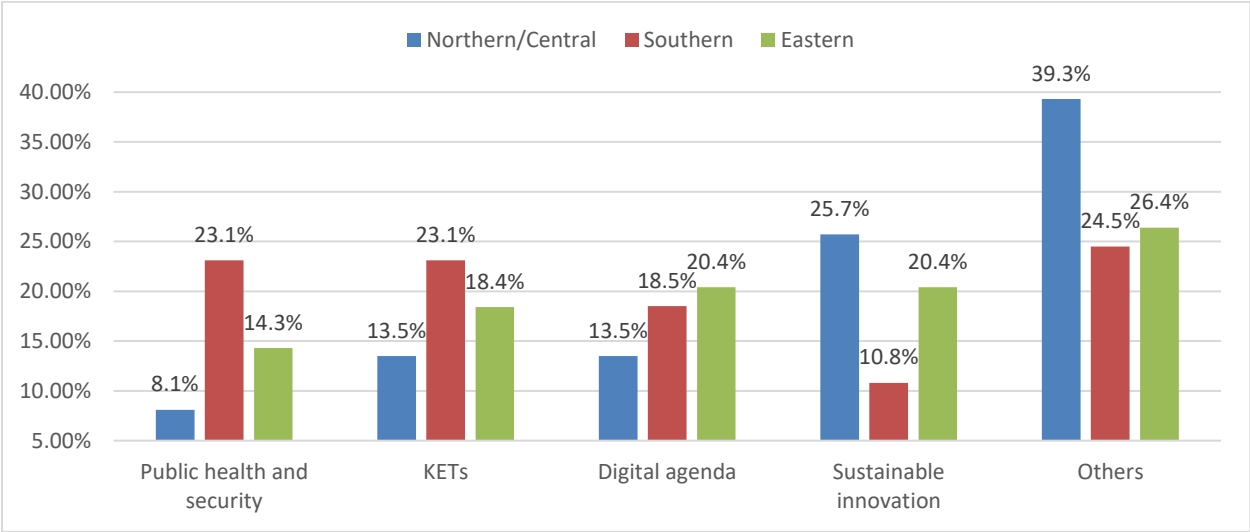
Note: this question included the option of multiple choices

Regarding the different *geographical areas*, priorities linked to innovations are more important in the North, especially Sustainable innovation priority (25,7%). In the South, the most important are KETs and Public health and security (23,1% respectively). And, finally, in the Eastern, Sustainable innovation and Digital Agenda (20,4%) are the more suitable priorities for smart specialisation strategies. Others include Economy, Aeronautics and space, R&D&I, Cultural and creative industries, Blue Growth, Specific local policy priority, Nature and biodiversity, Service innovation, Social innovation, etc. The highest values go to Social innovation with 10.8 and Service innovation with 9.5 in Northern/Central regions. R&D&I with 8.2 in Eastern regions (Figure 3).

<sup>3</sup> Entities responses have been classified according to smart specialisation priorities defined in the Smart Specialisation Platform (Sörvik and Kleibrink, 2015).

Figure 3. Most suitable specialisation priorities included smart specialisation strategies to cope with the consequences of COVID-19 and geographical areas

Percentage over total responses



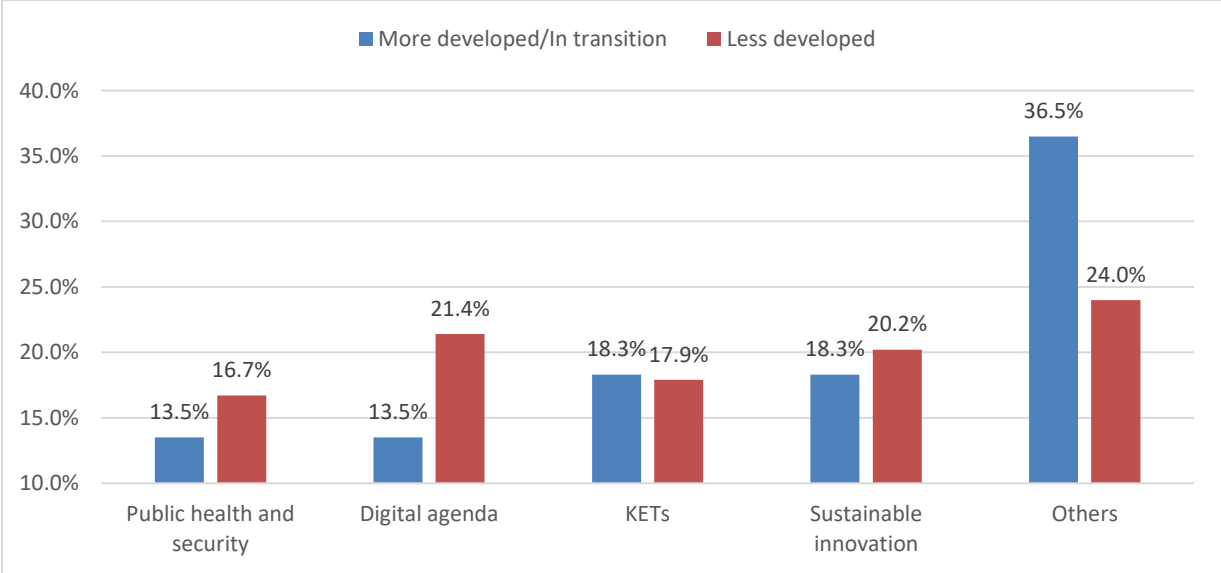
n: Total 188 responses: Northern/Central (74), Southern (65), Eastern (49)

Note: Some initial values' graphs are different than zero to make more visual the differences.

Crossing priorities data with development levels (figure 4), the most suitable priorities in the more developed/transition areas are KETs and Sustainable innovation (18% of the responses). In comparison, Digital Agenda and Public health remain at 13.5%. In the less developed territorial areas, Digital agenda (21,4%), Sustainable innovation (20,2%) and Public Health (16,7%) stand as the most suitable priorities.

Figure 4. Most suitable specialisation priorities included smart specialisation strategies to cope with the consequences of COVID-19 and development levels

Percentage over total responses



n: Total 188 responses: Less developed (84), Mored developed/ in transition (104)

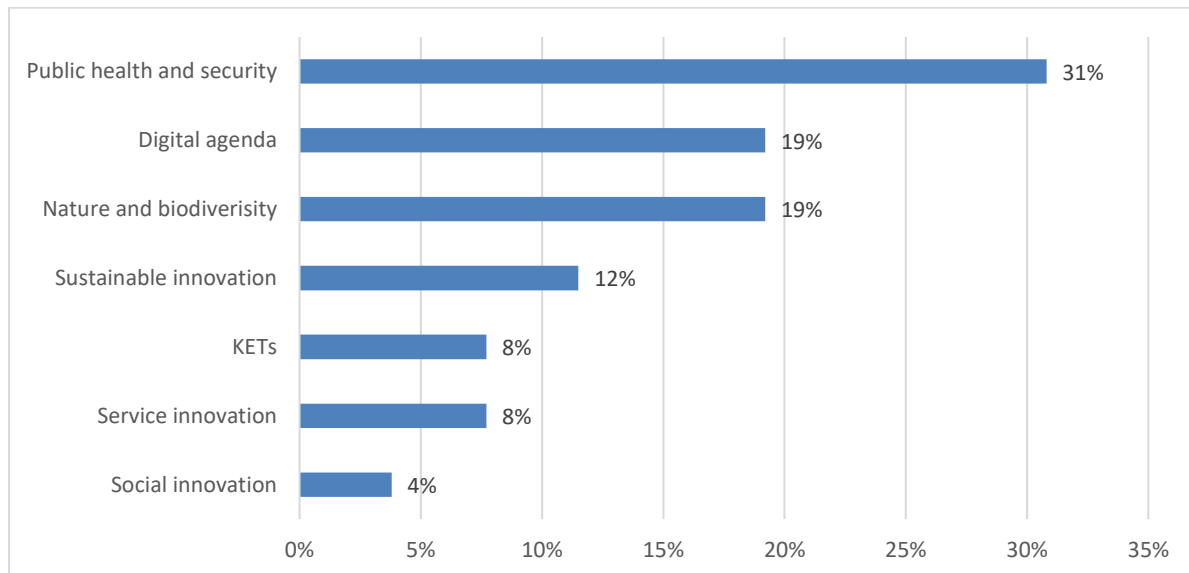
Others priorities include: Economy, Aeronautics and space, R&D&I, Cultural and creative industries, Blue Growth, Specific local policy priority, Nature and biodiversity, Service innovation, Social innovation and others. The highest values go to Social innovation with 8.7 and Service innovation with 7.7 in more developed/in transition and R&D&I with 6.0 in less developed regions.

## Should any other priorities be added?

Accordingly, with previous responses about the level of priorities adequacy (table 2), 72% of entities do not consider it necessary to include other specialisation priorities in their smart specialisation strategies portfolios. Those entities that indicate the need to have other priorities regarding COVID-19 consequences in their regions mention above all Public health and security (30,8%) followed by Digital agenda and Nature and biodiversity, mostly linked to ecotourism (about 19% both).

Figure 5. Smart specialisation priorities considering COVID-19 consequences

Percentage over total responses



n: 26 responses

In sum, entities consider that priorities included in their smart specialisation strategies are almost suitable to cope with COVID-19 consequences in their territories. Only a few entities believe smart specialisation strategies should consist of other priorities.

Entities selected: 1) as the more suitable priorities: Sustainable innovation, KETs, the Digital Agenda and Public health and security; 2) as a new new proposal: Public health and safety, the Digital Agenda, and, finally, Nature and biodiversity<sup>4</sup>.

<sup>4</sup> The number of responses for North/Central and Easter region is very low preventing to show results according to this variable. The same for the level of development variable.

## 4. Actions to cope with covid-19 and the recovery period

In addition to policy contents and due to the covid-19 crisis, other aspects of implementing the smart specialisation strategies could need some changes. This section analyses perceived required changes in management and governance processes.

### Improving smart specialisation strategies as regards covid-19 consequences.

The survey included a question to explore the necessary changes in implementing the smart specialisation strategies given the COVID-19 crisis. This question asked about the need to introduce changes regarding three main aspects:

- Smart specialisation strategies goals: policy portfolio contents as priorities, fund allocation among them and projects calls.
- Smart specialisation strategies management: RIS3 entity capacities, implementation (mechanisms to prevent delays and give more flexibility) and evaluation (reduce expected outcomes and prioritise among them).
- Smart specialisation strategies governance: processes and structures.

Responses were grouped in 12 items within each element following a five-point scale from 'not at all necessary' to 'completely necessary'. The following table shows the average for each item in this scale and, to qualify this information, the percentage of entities that answer the 'completely necessary' category. According to entities responses, the most necessary action is flexibility in rules and procedures to implement and justify ongoing projects (26% think it is completely necessary).

Table 2 Policy actions regarding the consequences of COVID-19

Mean and percentage of the total responses

Scale: 1: Not at all necessary; 5: Completely necessary

Dimensions	Items	Mean (Scale 1-5)	Completely necessary (%)
Goals: contents	Promote call for projects other than existing ones	3,24	16,8
	Reallocate budgets between smart specialisation priorities	2,77	10,5
	Introduce new smart specialisation priorities	2,42	11,6
Management	Make rules and procedures more flexible to implement and justify ongoing projects	3,71	29,5
	Promote capacity building within RIS3 responsible administrations	3,41	16,8
	Prioritise/emphasise some specific outcomes over others in the final evaluation	3,08	10,5
	Introduce new mechanisms to monitor and prevent delays in projects implementation	3,06	14,7
	Reduce levels of expected outcomes	2,94	9,5
Governance	Promote new policy instruments (e.g. agreements, partnerships)	3,36	18,9
	Improve RIS3 governance structure and processes	3,34	18,9
	Promote specific processes to increase the involvement of relevant stakeholders to define the necessary adjustments	3,24	16,8
	Promote specific processes to increase the involvement of other relevant government agencies to define the necessary adjustments	2,97	9,5

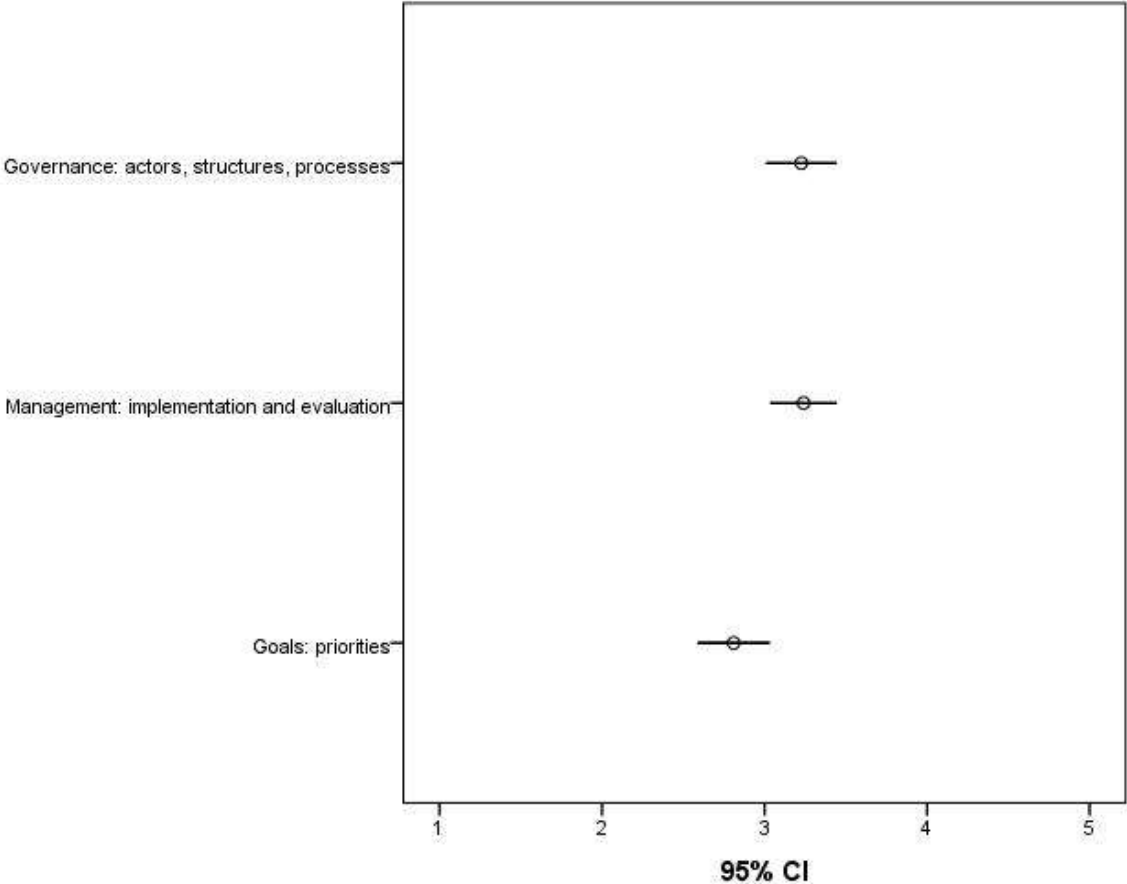
n=95.

The introduction of new calls and new policy instruments to implement RIS3, the improvement of capacities among administrators in charge of the RIS3 and governance structures and processes are also seen as

necessary (completely necessary for about 15% of entities). However, the introduction of new specialisation priorities and budget reallocation is seen as less necessary. Only 8% and 7% of responses indicate these actions are completely necessary (table 3).

Between "Smart specialisation strategies" implementation and "Contents: contents", entities have situated policy actions about actors' involvement and smart specialisation strategies evaluation. Regarding the first one, non-governmental stakeholders' involvement seems to be a little more critical than other government agencies' involvement (completely necessary for 16% and 9% of entities, respectively). And entities think that prioritising/emphasising some outcomes over others is a better policy measure than reducing t expected results regarding the final smart specialisation strategies evaluation (about 10%).

Figure 6. Policy actions regarding the consequences of COVID-19: main aspects



Five-point scales. Mean and confidence interval (95%)

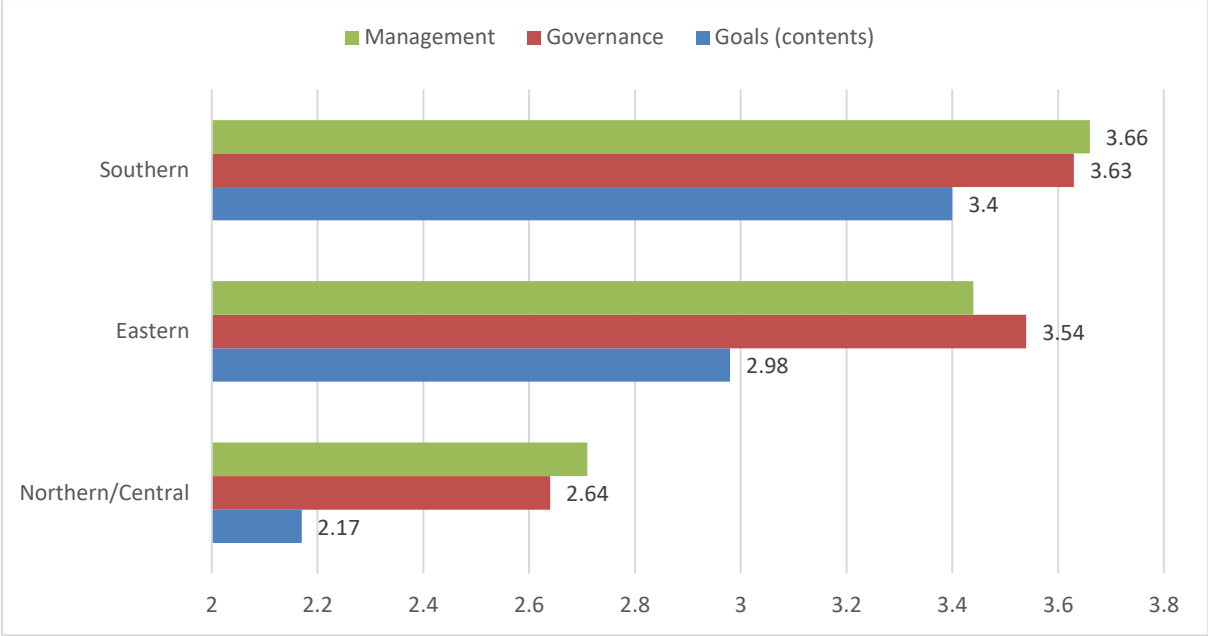
These three scales have been computed as the average of their items. T-test analyses show differences between contents scale and management and governance scales are statistically significant. Differences between management and governance scales are not statistically significant (for  $p < 0,05$ ).

In sum, COVID-19 consequences do not require essential changes in smart specialisation strategies contents; their policy portfolios' priorities are suitable. Instead, policy measures to improve governance and implementation processes are seen as more necessary: more capacity building, better governance structures and processes, and, above all, procedures flexibility. The average of items included in each aspect clearly shows the difference between smart specialisation strategies goals and the others.

The importance of policy actions to cope with COVID-19 according to geographical areas show significant differences. Policy actions are seen as more necessary among Southern European entities, less

necessary in Central and Northern Europe. The difference between the three main aspects is the same across regions; only among Eastern regions, governance aspects are slightly higher than management aspects. This pattern is similar between more and less developed territories: the scores given by the less developed countries are significantly higher (Figures 7 and 8).

Figure 7. Policy actions regarding the consequences of COVID-19 and European socio-spatial areas  
Means in scale 1-5

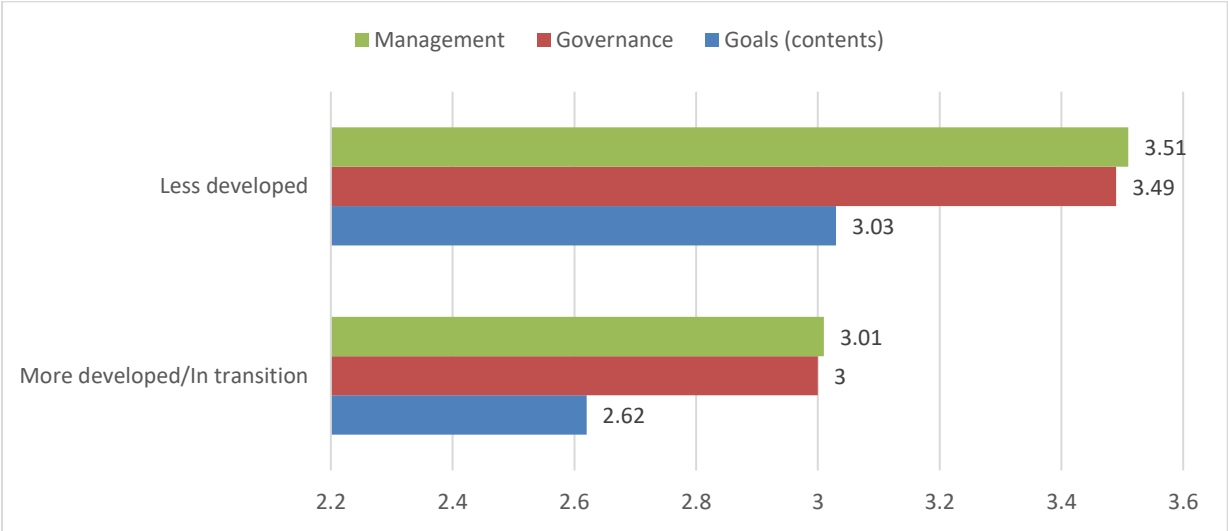


n: Total (95 responses): Northern/Central (36) , Southern (21), Eastern (27).

Note: The scale used for different questions in the survey is from 1-5. Values statistically significant are indicated throughout the report. However, generally, the graphs in this report only represent selected values.

Differences according to geographical and between development levels are statistically significant (p<0,05)

Figure 8. Policy actions regarding the consequences of COVID-19 and development levels  
Means in scale 1-5



n: Total (95 responses): Less developed (44), More developed/In transition (51).

Note: differences according to geographical and between development levels are statistically significant (p<0,05)

Table 3 shows a summary according to the importance of dimensions and items analysed. Improvements in governance and implementation, specifically, some flexibility in project implementation, are seen as the most necessary. Instead, priorities established before the COVID-19 pandemic, fund allocation, and calls for projects are already valid despite this disruptive event's consequences. This pattern is common across Europe. The analysis of the most important aspect in each of the geographical areas show only minor differences. New policy instruments and capacity building in Northern and Central regions, promote other calls and capacity building in the South, flexibility, and better governance structures in Eastern regions (see table A1 in the Annex).

Table 3 Policy actions regarding the consequences of COVID-19: a summary according to aspects and items importance

Dimensions		Items	
		Less necessary	More necessary
More necessary	Management: implementation and evaluation	New mechanisms to monitor and prevent delays	Make rules and procedures more flexible
		Reduce levels of expected outcomes	Capacity building within RIS3 responsible administrations
		Emphasise some specific outcomes	
Less necessary	Goals: priorities	Relevant government agencies' involvement for necessary adjustment	New policy instruments Governance structures and process Stakeholders' involvement for necessary adjustment
		New priorities	Calls other than existing ones
		Reallocate budgets	

### Improving smart specialisation strategies for the recovery period

Are the same kind of actions needed for the Recovery period? Entities' responses confirm the suitability of their smart specialisation strategies contents and highlight the entrepreneurial discovery process (EDP) as a central tool in smart specialisation policy as the active involvement of stakeholders in smart specialisation policy processes. The need to introduce new priorities is the only item that falls below the "neutral" response category, confirming previous analysis about the adequacy of smart specialisation strategies portfolio contents to deal with both the pandemic and the recovery period. Only 7% of entities think that introducing different smart specialisation priorities is a "completely necessary" action. On the contrary, management and governance aspects are highlighted as more necessary. Specifically, governance structures and processes to improve coordination and communication and different policy instruments seem to be more critical than increasing actors' involvement regarding the Recovery Period.



Table 4 Policy actions as regards the Recovery period

Aspects	Items	Mean (scale 1-5)	Completely necessary (%)
Goals: contents	Introduce different smart specialisation priorities	2,45	7,4
Management	Apply Entrepreneurial Discovery Process as a central tool in smart specialisation policy	3,67	34,7
	Promote different policy instruments to those used up to now	3,38	20,0
Governance	Increase the involvement of other relevant government departments/agencies	3,20	14,7
	Increase the involvement of other relevant stakeholders	3,47	18,9
	Improve governance structures and processes to ensure coordination between public departments concerned with smart specialisation policy	3,55	25,3
	Better communication and participation processes as regards stakeholders	3,61	27,4

n: 95. Scale: 1: Not at all necessary; 5: Completely necessary

A scale has been computed for each aspect showing the importance to enhance management and governance issues over portfolio contents (means equal to 3,53; 3,46 and 2,45, respectively, in table 6)<sup>5</sup>. Eastern and less developed regions show high values in three scales. However, there is also a general tendency to rate as more necessary the proposals in the management category, which receives higher scores both in Northern and Southern areas and a similar to governance one in Eastern area.

Table 5 Policy actions regarding the recovery period: socio-spatial areas and development levels.

Means in scale 1-5

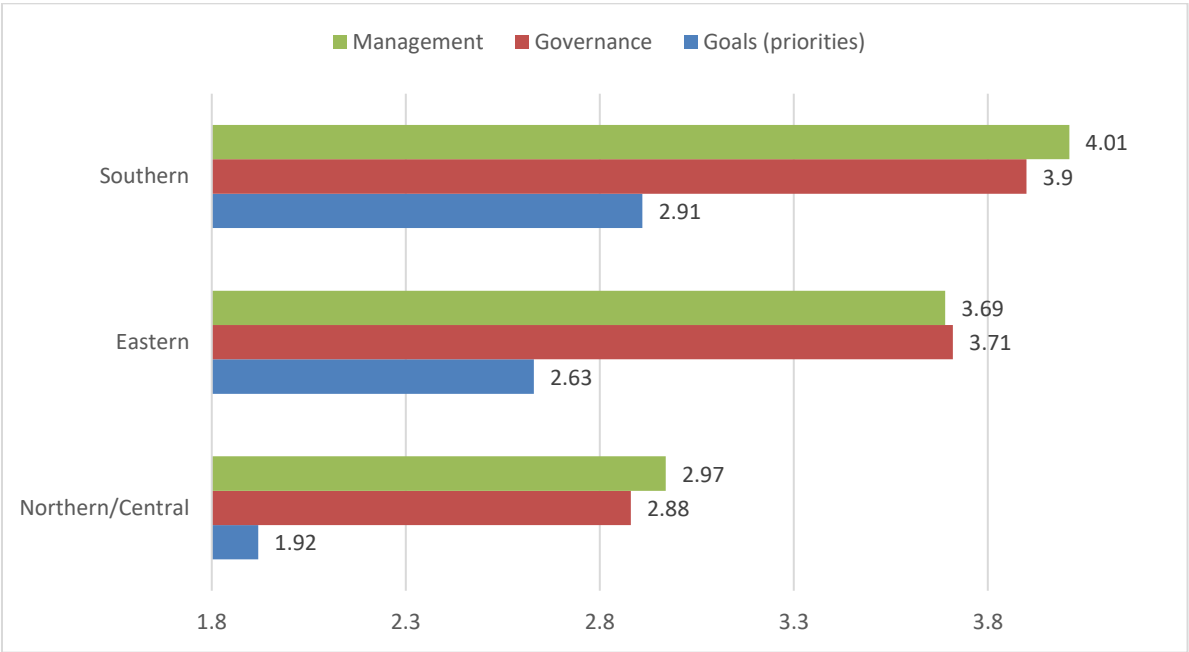
Aspects	Geographical areas			Development level		Total
	Northern/ Central	Southern	Eastern	Less	More/In transition	
Goals (priorities)	1,92	2,91	2,63	2,61	2,31	2,45
Management	2,97	4,01	3,69	3,81	3,28	3,53
Governance	2,88	3,90	3,71	3,76	3,20	3,46
n	36	32	27	44	51	95

Note: differences according to geographical and development levels are statistically significant; exception made of goals between less and more developed territories ( $p < 0,05$ )

<sup>5</sup> These three scales have been computed as the average of their items. T-test analyses show differences between contents scale and management and governance scales are statistically significant. Differences between management and governance scales are not statistically significant (for  $p < 0,05$ ).

Figure 9. Policy actions regarding the recovery period: socio-spatial areas

Means in scale 1-5

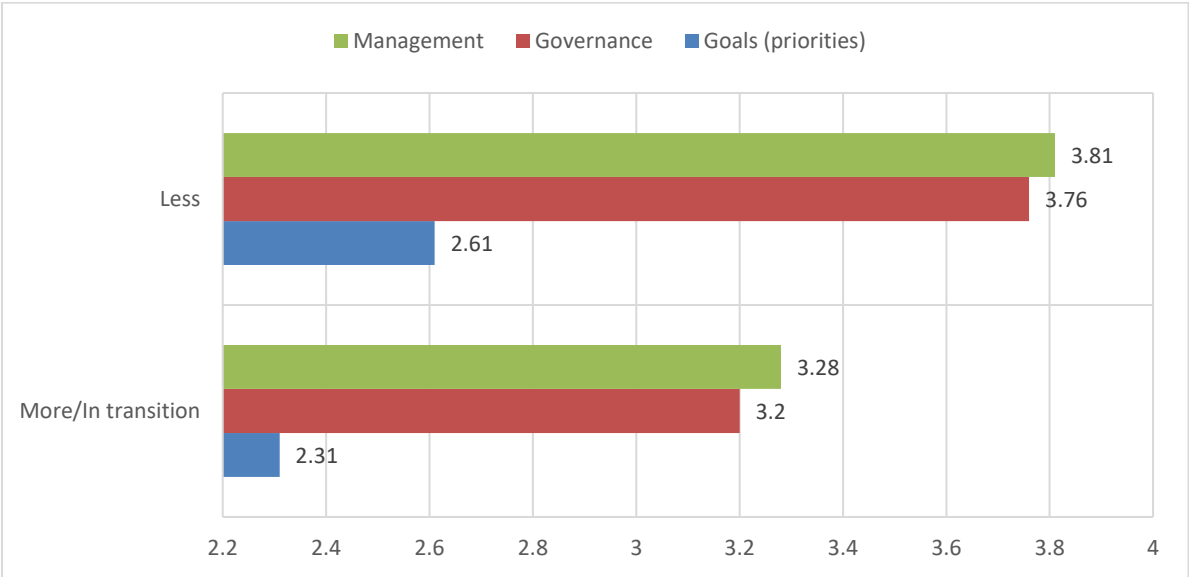


Means in scale 1-5

n: Total (95 responses): Northern/Central (36) , Southern (32), Eastern (27).

Figure 10. Policy actions regarding the recovery period: development levels

Means in scale 1-5



n: Total (95 responses): Less developed (44), More developed/In transition (51).

Note: differences according to geographical and development levels are statistically significant; exception made of goals between less and more developed territories ( $p < 0,05$ )

In summary, those items related to organisational processes, stakeholder inclusion and communication are considered the most necessary ones that receive the highest scores (see table 9). According to the data, changes in these items are needed in smart specialisation policy regarding the coming Recovery period.

The answers concerning the recovery period are in line with the policy actions to cope with COVID-19 ones. There is a tendency among respondents in the South and East areas to give greater importance to actions in all categories, even if the difference between aspects is similar across regions: management and governance improvements are needed to develop the already designed policy contents. The evaluation of priorities included in smart specialisation strategies and actions required to cope with COVID-19 and the Recovery period shows entities believe their portfolios were and are appropriate to deal with the consequences of this disruptive event. And generally, they think fund allocation and other calls for projects require less attention than management or governance aspects. Only a few entities mention the need to include Health and security as a new priority in their smart specialisation strategies; especially, among Southern and Eastern regions.

Table 6 Policy actions as regards the Recovery period: a summary according to aspects and items importance.

Dimensions		Items	
		Less necessary	More necessary
More necessary	Management	Different policy instruments	EDP as a central tool
	Governance: Actors, Structures and Processes	Relevant government department/agencies	Communication and participation process Relevant stakeholders Structures and process btw public departments
Less necessary	Goals: priorities	New priorities	

On the contrary, operational aspects linked to smart specialisation strategies management appear as the main important actions required, especially procedures flexibility regarding COVID-19. However, regardless of this aspect linked to the stress introduced in administrations by this disruptive event, governance and stakeholders' involvement also require more attention. And EDP, a process that requires organisational capacities to involve stakeholders in RIS governance processes, appears as a crucial tool to enhance these aspects according to smart specialisation strategies entities.

In sum, results suggest that entities perceive an imbalance between policy portfolio design and their policy capacities to manage and implement it, especially in those territories with more socio-economic and institutional challenges. In the following sections, some aspects regarding policy capacities and governance processes will be analysed.

## 5. Entities policy capacities: on capacity building challenges

Previous results and other studies show the importance of capacity building in smart specialisation policy, specifically regarding smart specialisation strategies entities capacities as public organisations in charge of this policy (Guzzo et al., 2018). Organisational policy capacity describes the ability of entities in charge of public policies to ensure a good policy design and implementation. Therefore, organisational capacity is an essential element to guarantee policy effectiveness. These capacities related to the three main aspects: analytical capacities regarding information and evidence used to develop different policy tasks; operational capacities to ensure organisational process needed to perform necessary policy tasks; and political policy capacities related to relationships, support and alliances with other governmental and non-governmental actors (Moore, 1995; Mulherjee and Singh, 2019).

The survey proposed three statements to obtain a general self-assessment of entities' policy capacities. Entities indicate their agreement to each of them using a five-point scale (from 'totally disagree' to 'strongly agree'). According to them, analytical capacities are higher than political and operational capacities. Most of them declare they obtain and use relevant data and information for decision making (84% responses on the 'agree' and 'strongly agree' categories), about 73% indicates they have the support and cooperation of relevant stakeholders. This percentage is equal to 66% for the existence of systems and procedures to ensure the effective use of resources to accomplish the smart specialisation strategies goals statement (Table 10).

Table 7 Smart specialisation strategies entities policy capacities: overall self-assessment

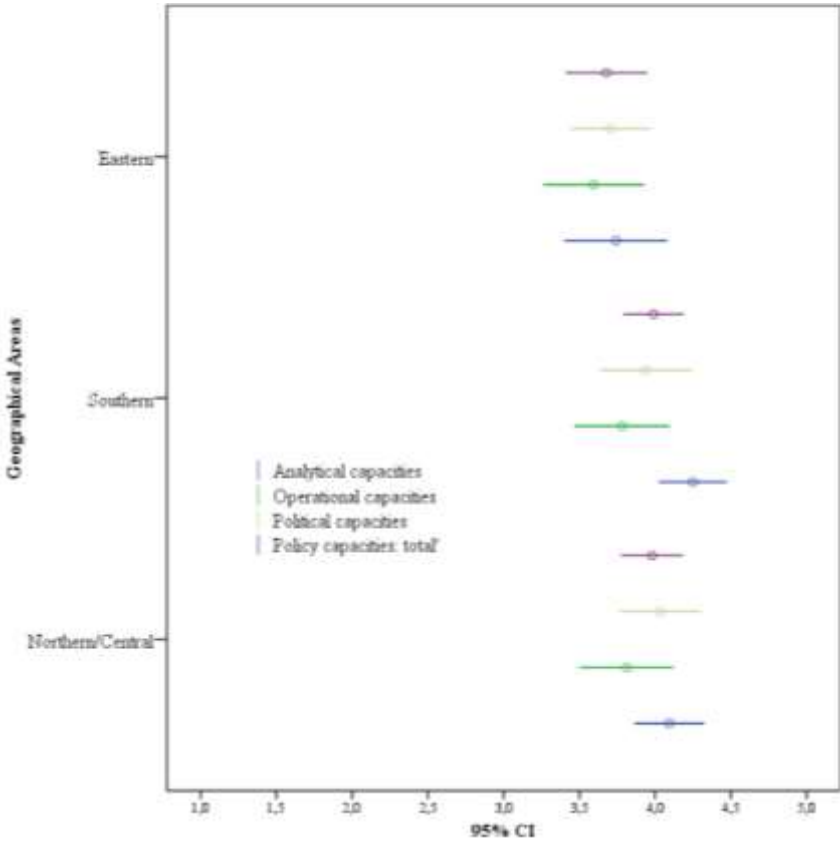
	Mean (1-5 scale)	Agree+Strongly agree (%)
<i>Analytical:</i> The entity obtains and uses relevant data and information for smart specialisation strategies decision making (management, implementation, and evaluation)	4,0	83,7
<i>Organisational:</i> The entity has systems and procedures to ensure effective use of resources to accomplish smart specialisation strategies goals	3,7	66,0
<i>Political:</i> The entity has the support and cooperation of relevant government and non-government stakeholders	3,9	72,5

N=91. Note: scale 1. Totally disagree – 5. Strongly agree.

These three items are combined to compute a general scale about policy capacities (as their average). This scale shows Eastern entities do a worse self-assessment of their organisational capacities than Southern and North/Central entities. Nevertheless, analytical capacities are higher among Southern entities and managerial and political capacities among Northern entities (Figure 11)<sup>6</sup>.

<sup>6</sup> According to T-test performed, significant differences exist between item measuring analytical capacities and the other two. Not significant differences exist between item measuring managerial and political capacities (for  $p < 0,05$ ). Differences between geographical area are statistically significant for analytical capacities ( $p < 0,05$ ) and the global scale ( $p < 0,10$ ).

Figure 11 Policy capacities according to geographical areas  
 Means and confidence interval (95%). Scales 1-5.



To provide more detailed information about policy capacities, a question was proposed about the difficulty to carry out different relevant smart specialisation strategies activities. These include activities related to managerial and organisational processes, coordination with other policies, communication with stakeholders and society, and support from relevant non-governmental and governmental stakeholders. A five-point scale was proposed: from 'very easy' to 'very difficult'. Therefore, entities responses provide information about the challenges posed by different smart specialisation strategies activities, and in that way, their policy capacities to perform them.

Table 8 Smart specialisation strategies organisational policy capacities: difficulties to perform activities

		Means (scales 1-5)				Difficult+ Very difficult
		Northern				
		Central	Southern	Eastern	Total	
Operational: management and organizational processes	Incorporating new management processes, techniques, and skills among employees	3,19	3,56	3,78	3,49	50,60
	Introducing changes within the entity to accomplish proposed objectives (e.g. new organisational processes, tasks)	3,31	3,44	3,48	3,41	47,30
Policies coordination	Produce synergies between smart specialisation strategies and other initiatives funded by the EU in your region	2,72	3,22	3,63	3,16	31,90
	Implementing joint actions for regional development (in your region) between smart specialisation strategies and other public policies	2,69	3,06	3,63	3,10	37,40
Stakeholders support	Gaining support and involvement from key policy-makers and government agencies	2,78	3,00	3,44	3,05	31,90
	Gaining support and involvement from relevant non-government stakeholders	2,91	2,75	3,15	2,92	24,20
Communication	Ensuring effective communication of decisions, calls, and previous results to stakeholders	2,91	2,75	3,37	2,99	27,50
	Ensuring effective communication with society about smart specialisation initiatives and their results	3,25	3,53	3,74	3,49	51,70

Cases: North/Central: 32; Southern: 32; Eastern: 27, Total=91. All differences between geographical areas are statically significant for  $p < 0,05$ , exception made of 'introducing changes within the entity' and 'ensuring effective communication with society'.

Figure 12 Smart specialisation strategies organisational policy capacities: difficulties to perform activities

Means (scales 1-5)



n total=91 North/Central: 32; Southern: 32; Eastern: 27,

All differences between geographical areas are statically significant for  $p < 0,05$ , exception made of 'introducing changes within the entity' and 'ensuring effective communication with society'.

Managerial and organisational processes are the cornerstone of challenges to entities policy capacities: introducing new organisational changes and processes are the most challenging task (table 11). Communication with society to disseminate initiatives and results is also a difficult task for entities. On the contrary, communication with and support of non-governmental stakeholders are the most straightforward tasks. Between operational challenges and a manageable stakeholders' environment, inter-administrative support and coordination could also be considered a relevant challenge for smart specialisation strategies entities. Entities declare policy coordination and support from other public actors more difficult than relations with non-governmental stakeholders, and also indicate they have less capacity to involve other public actors than non-governmental stakeholders.

Differences between geographical areas show challenges increase from North/Central entities to Eastern ones. However, the relative importance of organisational, inter-administrative coordination and stakeholders' relations is almost the same in each geographical area. In sum, entities declare they have more operational problems dealing with administrative process and communication with society than gaining support from relevant stakeholders or communicating with them. However, their responses indicate more difficulties regarding governmental than non-governmental ones, and they also indicate problems in promoting policy coordination. Therefore, although operational capacity building related to organisational structure and process requires attention, entities responses also demonstrate the relevance of enhancing political capacities regarding inter-administrative coordination in their regions.

Table 9 Challenges for smart specialisation strategies entities policy capacities: a summary

Dimensions		Items	
		Less important	More important
More important	Operational and communication		Processes and skills Organisational changes  Communication with society
	Synergies between policies		Between smart specialisation strategies and other EU policies  Between RIS and other regional policies
	Support and communication	Communication with stakeholders Non-government stakeholders support	Governmental stakeholders support
Less important			



## 6. Conclusions: from operational to political capacity building

The main results show the contrast between the adequacy of smart specialisation strategies portfolio contents and administrative challenges to manage and implement it due to the COVID-19 pandemic and the Recovery period. Almost all entities consider priorities included in their smart specialisation strategies portfolio are adequate to cope with COVID19 consequences. However, most of them highlight actions to enhance their organisational structures and processes. In the second place, the need to improve governance structures to increase actors coordination, above all, among governmental ones. In sum, the entities in charge of the smart specialisation strategies need to improve their operational and political capacities more than smart specialisation policy contents.

The analysis of policy capacities confirms this ‘operational’ challenge faced by entities to manage and implement smart specialisation policies. This issue is the cornerstone of capacity building for them. Nevertheless, policy actions proposed and policy capacities self-assessments made clear the importance of governance processes. Entities can more easily mobilise and integrate social stakeholders in policy-making processes than other public organisations and their policies.

In sum, based on entities’ responses, actions required to improve smart specialisation strategies and governance processes show the importance of their operational challenges. The analysis of their organisational policy capacities confirms it. However, these analyses also show the existence of challenges related to governance structures and processes. Entities indicate difficulties coordinating policy actions and identifying a core set of public and social actors focused on specific functions and policy sectors in governance processes who are crucial to smart specialisation policies due to the resources and acknowledgement that they provide.

Table 10 Smart specialisation policy and COVID-19: actions, organisational capacities and governance.

Aspect			General pattern		More important in each socio-economic area (specific categories)		
					North/ Central	South	East
Actions as regards COVID19	More important		Management: capacity building and flexibility		New instruments	New calls for projects	Governance structures
			Governance and actors				
Actions as regards Recovery Period	Less important		Portfolio Contents				
	More important		Managements: and new tools	EDP	Involve relevant stakeholders	other	Coordination between public departments
		Governance and actors					
		Portfolio contents					
Policy capacities: levels	Better		Analytical		Medium	High	Low
	Worse		Management		High	Medium	Low

Policy capacities: challenges	More important	Organisational management Communication with society	Organisational process with	Management process and skills	Management process and skills
	Less important	Support and communication stakeholders	Both with	Both	Only stakeholders' support

## Reference

- Aranguren, MJ.; Magro, E.; Navarro, M. and Wilson, J.R. (2019): Governance of the territorial entrepreneurial discovery process: looking under the bonnet of RIS3, *Regional Studies*, 53:4, 451-461.
- Guzzo; F.; Gianelle, C. and Marinelli, E. (2018): Smart Specialisation at work: the policy makers' view on strategy design and implementation S3 Working Paper Series No. 15/2018, European Commission, Joint Research Centre.
- Marinelli, E. and Periañez-Forte, I. (2017): Smart Specialisation at work: The entrepreneurial discovery as a continuous process S3 Working Paper Series No. 12/2017, European Commission, Joint Research Centre.
- McCann, Ph. And Ortega-Argilés (2015): Smart Specialization, Regional Growth and Applications to European Union Cohesion Policy, *Regional Studies*, 49:8, 1291-1302.
- Moore, M.H. (1995): *Creating public value: strategic management in governments*, Cambridge, Harvard University Press
- Mukherjee, I. and Singh, A. (2019): Policy effectiveness and capacity: two sides of the design coin, *Policy Design and Practice*, 2(2): 103-144.
- Periañez-Forte, I. and Wilson, J. (2021): Entrepreneurial discovery process across Europe: tools and mechanisms, Smart Specialisation-JRC Policy Insights, February 2021.
- Sörvik, J. and Kleibrink, A. (2015): Mapping Innovation Priorities and Specialisation Patterns in Europe, S3 Working Paper Series No 08/2015, European Commission, Joint Research Centre.
- Aranguren, MJ.; Magro, E.; Navarro, M. and Wilson, J.R. (2019): Governance of the territorial entrepreneurial discovery process: looking under the bonnet of RIS3, *Regional Studies*, 53:4, 451-461.

## List of tables

Table 1 Population and sample distributions by geographical areas .....	5
Table 2 Policy actions regarding the consequences of COVID-19 .....	10
Table 3 Policy actions regarding the consequences of COVID-19: a summary according to aspects and items importance .....	13
Table 4 Policy actions as regards the Recovery period .....	14
Table 5 Policy actions regarding the recovery period: socio-spatial areas and development levels.....	14
Table 6 Policy actions as regards the Recovery period: a summary according to aspects and items importance.....	16
Table 7 Smart specialisation strategies entities policy capacities: overall self-assessment.....	17
Table 8 Smart specialisation strategies organisational policy capacities: difficulties to perform activities ...	19
Table 9 Challenges for smart specialisation strategies entities policy capacities: a summary .....	21
Table 10 Smart specialisation policy and COVID-19: actions, organisational capacities and governance. ....	22

List of figures

Figure 1. Priorities included in smart specialisation strategy suitability for coping with the consequences of COVID-19 and geographical areas ..... 6

Figure 2. Most suitable specialisation priorities included in smart specialisation strategies to cope with the consequences of COVID-19..... 7

Figure 3. Most suitable specialisation priorities included smart specialisation strategies to cope with the consequences of COVID-19 and geographical areas ..... 8

Figure 4. Most suitable specialisation priorities included smart specialisation strategies to cope with the consequences of COVID-19 and development levels ..... 8

Figure 5. Smart specialisation priorities considering COVID-19 consequences ..... 9

Figure 6. Policy actions regarding the consequences of COVID-19: main aspects .....11

Figure 7. Policy actions regarding the consequences of COVID-19 and European socio-spatial areas .....12

Figure 8. Policy actions regarding the consequences of COVID-19 and development levels .....12

Figure 9. Policy actions regarding the recovery period: socio-spatial areas .....15

Figure 10. Policy actions regarding the recovery period: development levels .....15

Figure 11 Policy capacities according to geographical areas .....18

Figure 12 Smart specialisation strategies organisational policy capacities: difficulties to perform activities 20

## Annexe 1 SURVEY ON SMART SPECIALISATION STRATEGIES: POLICY CAPACITIES AND IMPLEMENTATION. (31/12/20)

The B.3 Territorial Development Unit of the Joint Research Centre (JRC) is developing different research activities to analyse the Smart Specialisation Strategies (RIS3) implementation across EU countries and regions.

This survey aims to understand some aspects of the entity in charge responsible of the RIS3 management and the factors affecting RIS3 implementation (during the programming period 2014-2020). Due to the current relevance of COVID-19 pandemic, some questions try to understand its impact on RIS3 activities.

The survey is addressed to the institutions in charge of the design and implementation of regional and national RIS3. Ideally, the survey should be completed by personnel directly involved in RIS3 design and implementation.

Answering the survey will not take more than 15-20 minutes. Please, answer questions as regards your region or country according to your RIS3 (regional or national).

The survey is not constructed to elicit confidential information. Nevertheless, should you consider that any element of the survey may raise confidentiality issues please contact the JRC. The name/data of the individual participants will not be made public.

Contacts for enquiry [Inmaculada.Perianez-Forte@ec.europa.eu](mailto:Inmaculada.Perianez-Forte@ec.europa.eu)

[Fernando.MERIDA-MARTIN@ec.europa.eu](mailto:Fernando.MERIDA-MARTIN@ec.europa.eu)

Q01. Countries

Q01i. Countries/Regions

Q02. Please indicate the institution you are representing

A.THE ENTITY IN CHARGE OF RIS3.

The following questions are devoted to understanding some aspects of the entity in charge of the RIS3.

Q101.Which of the following options best describes the institution/entity in charge of RIS3 in your region/country?

1. A public department/organisation only focused on RIS3 (go to Q102)
2. A public department/organisation with broader policy responsibilities (go to Q101a)
3. A public agency only focused on RIS3 (go to Q102)
4. A public agency with broader policy responsibilities (go to Q101a)
5. A non-public entity (go to Q103)

Q101a. Please indicate other policy responsibilities in charge of the entity

1. No
2. Yes
  1. Higher education
  2. Vocational education
  3. Research and Innovation
  4. Economic development
  5. Employment
  6. ESIF Management in the region/country
  7. Other (please specify) (go to Q102a)

Q101b. Other

Q102. Did the entity exist before 2014?

1. No
2. Yes

Q103. Approximately, how many full-time equivalent employees are working specifically on RIS3 policy design, implementation, and evaluation in your entity?

Q104. Does your entity have

1. No
2. Yes
  1. An information system that includes indicators to monitor RIS3 implementation
  2. An information system that includes RIS3 outcomes and impact indicators
  3. Stable external services (consultancy or academic organisations) to support RIS3 activities
  4. An intermediate evaluation report carried out before 2020.

Q105. Does the entity have the legal power to make decisions about strategic aspects of the RIS3? E.g. to define and modify priorities, to allocate funds among them, to design projects' calls...

1. No
2. Yes

Q106. Does the entity have a 'collective governing body' including stakeholders' representatives?

1. No (go to Q107)
2. Yes (go to Q106a)

Q106a. Agreements and decisions made by this collective body...

1. Are an input among others to decision making
2. Should be discussed before any decision making
3. Are binding decision to be incorporate in RIS3 policy actions

Q106b. Which of the following stakeholders are represented in such a collective governing body?

1. No
2. Yes
  1. HEI and Universities
  2. Vocational Education and Training Institutions (VETs)
  3. Research and technology organisations
  4. Intermediary organisations
  5. European Union institutions
  6. National government and administration (different from RIS responsible body)
  7. Regional government and administration (different from RIS responsible body)
  8. Local governments and administrations
  9. Large or transnational companies
  10. Local and SME companies
  11. Financial actors
  12. Trade unions
  13. Civic associations and NGO's providing services (health, social services, dependent and elderly people)
  14. Prosumers, users, and their associations

15. Mass media

16. RIS3 responsible body

Q106c. Which of the following departments/agencies are represented in such a collective governing body?

1. No

2. Yes

1. Research and Innovation

2. Education: universities, vocational training,...

3. Economic development

4. Employment

5. Public Works, transport, infrastructures

6. Environment/Energy/Sustainability

7. Agriculture (agrofood)

8. Health

9. Social policies (elderly, ...)

10. Culture, tourism, leisure,

Q107. Based on your experience, independently from the formal procedures, how influential is each of the following actors over RIS3 activities

1. Not at all influential

2. Slightly influential

3. Somewhat influential

4. Very influential

5. One of the most influential actors

1. HEI and Universities

2. Vocational Education and Training Institutions (VETs)

3. Research and technology organisations

4. Intermediary organisations

5. European Union institutions

6. National government and administration (different from RIS responsible body)

7. Regional government and administration (different from RIS responsible body)

8. Local governments and administrations

9. Large or transnational companies

10. Local and SME companies

11. Financial actors

12. Trade unions

13. Civic associations and NGO's providing services (health, social services, dependent and elderly people,)

14. Prosumers, users, and their associations

15. Mass media

17. RIS3 responsible body

B. IMPLEMENTATION OF SMART SPECIALISATION POLICY AND COVID-19



This section aims to understand aspects of the RIS3 implementation, and the adaptations introduced due to the consequences of COVID19 pandemic in your region/country.

Q201. How would you rate the importance of the following factors as facilitators of the RIS3 implementation in your region/country?

1. Not important
2. Slightly important
3. Moderately important
4. Important
5. Very important

1. Own agency resources and capacities (budget, personnel, relevant information, adequate skills...)
2. Relations between managerial and political authorities
3. European Commission guidelines to design, implement and evaluate RIS3
4. Availability of stakeholders with knowledge and capacity to develop initiatives
5. RIS3 budget in your region/country
6. Region/country's Established RIS3 objectives and targets
7. Relations with other departments/public agencies in your region/country
8. Relations among stakeholders in the regional innovation ecosystem
9. Region/country legal framework (to launch calls, to ensure projects implementation,...)
10. Instruments used to monitor stakeholders' implementation of projects
11. European Commission regulations and procedures
12. Rules used to design projects calls
13. Entrepreneurial Discovery Process: previous experience and results in your region/country

Q202. Just before the COVID-19 pandemic, what was your assessment of the level of implementation of the RIS3 action plan? Please consider implementation as financial execution of FEDER Funds allocated to RIS3

Please indicate the percentage in the following space

0%-100%

Q203. How many of the priorities included in your smart specialisation strategy are suitable for coping with the consequences of COVID-19 in your region/country?

1. None of them are suitable
2. Less than half of them
3. Half of them
4. More than half of them
5. All of them are suitable

Q204. Could you please indicate the three most suitable specialisation priorities included in your RIS3 to cope with the consequences of COVID-19 in your region/country?

- 1...
- 2...
- 3...

Q205. Do you think smart specialisation priorities not included in your smart specialisation strategy should be prioritised considering the consequences of COVID-19 in your region?

1. No (go to Q206)
2. Yes (Go to Q205a)

Q205a. Please could you indicate these smart specialisation priorities?

- 1...
- 2...
- 3...

Q206. To what extent is it necessary to adopt the following policy actions in your RIS3 regarding the consequences of COVID-19 in your region/country?

1. Not at all necessary
2. Slightly necessary
3. Somewhat necessary
4. Fairly necessary
5. Completely necessary

1. Introduce new smart specialisation priorities
2. Reallocate budgets between smart specialisation priorities
3. Promote call for projects other than existing ones
4. Promote new policy instruments (e.g. agreements, partnerships)
5. Introduce new mechanisms to monitor and prevent delays in projects implementation
6. Make rules and procedures more flexible to implement and justify ongoing projects
7. Reduce levels of expected outcomes
8. Prioritise/emphasise specific outcomes over others in the final evaluation
9. Promote specific processes to increase the involvement of other relevant government agencies to define the necessary adjustments
10. Promote specific processes to increase the involvement of relevant stakeholders to define the necessary adjustments
11. Promote capacity building within RIS3 responsible administrations
12. Improve RIS3 governance structure and processes

Q207. What is your estimation about the level of the RIS3 implementation at the end of the 2014-2020 programming period? Please consider implementation as financial execution of FEDER Funds allocated to RIS3

Please indicate the percentage in the following space

0%-100%

Q208. Thinking about the 'recovery period', to what extent would it be necessary to adopt the following policy actions in your smart specialisation policy?

1. Not at all necessary
2. Slightly necessary
3. Somewhat necessary
4. Fairly necessary
5. Completely necessary

1. Introduce different smart specialisation priorities
2. Promote different policy instruments to those used up to now
3. Increase the involvement of other relevant government departments/agencies
4. Increase the involvement of other relevant stakeholders
5. Improve governance structures and processes to ensure coordination between public departments concerned with smart specialisation policy

6. Better communication and participation processes as regards stakeholders
7. Apply Entrepreneurial Discovery Process as a central tool in smart specialisation policy

### C. ESIF AND 'FLEXIBILITY RULES'

The EU has promoted some 'flexibility rules' for the use of the European Structural and Investments Funds in response to the COVID-19 outbreak. These rules introduce flexibility in

- Action plans: thematic concentration is not required
- Procedures: Partnership Agreements amendments not necessary, postponement of summary reports
- Funds financing: under certain circumstances 100% co-financing, financing of finalised projects, or SMEs
- Funds management: transfer of resources between different funds (ERDF, ESF, and CF)
- General: COVID-19 outbreak can be invoked as a reason for force majeure

Q301. Have these rules been used to manage RIS3 in your region/country?

1. No need to use
  2. Already used
  3. Will use
1. Action plans
  2. Procedures
  3. Fund financing
  4. Funds management
  5. General

Q302. As regards RIS3, could you rate the usefulness of the following rules to cope with the COVID-19 pandemic?

1. Not at all useful
  2. Not very useful
  3. Neutral
  4. Useful
  5. Very useful
1. Action plans
  2. Procedures
  3. Fund financing
  4. Funds management
  5. General

Q303. Please, could you indicate other possible flexibility rules that could be promoted to cope with COVID-19?

- 1...
- 2...
- 3...

Q304. Please, rate the importance of ESIF in your region/country as...

1. Not important at all
2. Of little importance
3. Of average importance

4. Very important

5. Absolutely essential

1. A critical source of economic funds to develop RIS3

2. A useful instrument to promote policies better than those already in place

3. An effective instrument to improve regional innovation system performance (economic growth, employment, innovation capacity...)

#### D. RIS3 MANAGEMENT

This section is devoted to understand some aspects of organisational and management processes linked to the RIS3

Q401. Please rate the quality of evidence used by the entity to make policy decisions related to the Smart specialisation strategy.

1. Very low

2. Low

3. Neutral

4. High

5. Very high

1. To improve the decisions taken by the RIS3 team (e.g. definition of smart specialisation priorities and objectives, allocation of financial resources,...

2. To monitor the RIS3 implementation (e.g. objectives accomplished, resources spent, etc.).

3. To ensure synergies between the RIS3 and other policies (e.g. information and existing analyses of other policies, the information provided by managers and public officials,...)

4. To align the RIS3 priorities with market opportunities (e.g. existing analysis of this issue, consultations with businesses, or work done by experts,...).

Q402. As regards RIS3 management, how frequently does your entity perform the following tasks?

1. Less than once a year

2. Once a year

3. Every six months

4. Every three months

5. Once a month

1. To provide skills and information to RIS3 team to efficiently manage the design and implementation of the Smart specialisation strategy (e.g. training, exchange of experiences, field visits).

2. To update the policy actions/calls/smart specialisation strategy according to the information obtained about its the implementation.

3. To organise meetings with other public departments to ensure policy coordination with the smart specialisation strategy.

4. To organise meetings with private actors to ensure the alignment of policy action with market demands.

Q403. As regards RIS3 management, how would you rate the level of difficulty in performing the following actions in your entity?

1. Very easy

2. Easy

3. Neutral

4. Difficult

5. Very difficult

1. Produce synergies between RIS3 and other initiatives funded by the EU in your region
2. Incorporating new management processes, techniques, and skills among employees
3. Ensuring effective communication with society about smart specialisation initiatives and their results.
4. Implementing joint actions for regional development (in your region) between RIS3 and other public policies
5. Introducing changes within the entity to accomplish proposed objectives (e.g. new organisational processes, tasks,...)
6. Gaining support and involvement from key policy-makers and government agencies
7. Gaining support and involvement from relevant non-government stakeholders
8. Ensuring effective communication of decisions, calls, and previous results to stakeholders

Q404. Do you agree with the following sentences describing your entity?

1. Strongly disagree
2. Disagree
3. Neither agree or disagree (neutral)
4. Agree
5. Strongly agree

1. The entity obtains and uses relevant data and information for RIS3 decision making (management, implementation, and evaluation)
2. The entity has systems and procedures to ensure effective use of resources to accomplish RIS3 goals
3. The entity has the support and cooperation of relevant government and non-government stakeholders

#### E. RIS3, COVID-19 AND STAKEHOLDERS INVOLVEMENT

This section tries to understand the stakeholders' role in policy processes and decisions adopted in your RIS3 to cope with COVID19 pandemic (e.g. adapt priorities, budget changes, new calls, ...)

Q501. Please indicate the level of stakeholders' participation in these processes

1. Very low
  2. Low
  3. Neutral
  4. High
  5. Very high
1. HEI and Universities
  2. Vocational Education and Training Institutions (VETs)
  3. Research and technology organisations
  4. Intermediary organisations
  5. European Union institutions
  6. National government and administration (different from RIS responsible body)
  7. Regional government and administration (different from RIS responsible body)
  8. Local governments and administrations
  9. Large or transnational companies
  10. Local and SME companies
  11. Financial actors

12. Trade unions
13. Civic associations and NGO's providing services (health, social services, dependent and elderly people,...)
14. Prosumers, users, and their associations
15. Mass media

Q502. Please indicate the level of participation by the following public offices, departments, or agencies in your region/country in these processes.

1. Very low
2. Low
3. Neutral
4. High
5. Very high

1. Research and Innovation
2. Education: universities, vocational training,...
3. Economic development
4. Employment
5. Public Works, transport, infrastructures
6. Environment/Energy/Sustainability
7. Agriculture (agro-food)
8. Health
9. Social policies (elderly,...)
10. Culture, tourism, leisure,...

Q503. Please indicate the most important type of contribution provided by each group of stakeholders to policy processes designed to help cope with the COVID-19 pandemic

You can mark all that you consider appropriate or the option 'none of them'

1. No
2. Yes

Specialised knowledge/expertise

Leadership: capacity to influence and mobilise other

Legitimacy

Resources and capacity to develop initiatives

None of them

1. HEI and Universities
2. Vocational Education and Training Institutions (VETs)
3. Research and technology organisations
4. Intermediary organisations
5. European Union institutions
6. National government and administration (different from RIS responsible body)
7. Regional government and administration (different from RIS responsible body)
8. Local governments and administrations
9. Large or transnational companies

10. Local and SME companies
11. Financial actors
12. Trade unions
13. Civic associations and NGO's providing services (health, social services, dependent and elderly people)
14. Prosumers, users, and their associations
15. Mass media
17. RIS3 responsible body

Q504. Independently from the formal procedures, how influential is each of the following stakeholders to introduce changes in the RIS3 as regards the consequences of COVID-19?

1. Not at all influential
2. Slightly influential
3. Somewhat influential
4. Very influential
5. One of the most influential actors

1. HEI and Universities
2. Vocational Education and Training Institutions (VETs)
3. Research and technology organisations
4. Intermediary organisations
5. European Union institutions
6. National government and administration (different from RIS responsible body)
7. Regional government and administration (different from RIS responsible body)
8. Local governments and administrations
9. Large or transnational companies
10. Local and SME companies
11. Financial actors
12. Trade unions
13. Civic associations and NGO's providing services (health, social services, dependent and elderly people,...)
14. Prosumers, users, and their associations
15. Mass media
16. RIS3 responsible body

Q505. How far do you agree with the following statements about the effect of COVID-19 on smart specialisation policy in your region/country?

1. Strongly disagree
  2. Disagree
  3. Neither agree or disagree
  4. Agree
  5. Strongly agree
1. Promoted administrative and management innovations in your entity
  2. Increased mobilisation and interaction among actors involved in smart specialisation policy
  3. Increased innovative proposals by stakeholders

4. Promoted new online platform to improve communication among actors engaged in smart specialisation policy
5. Increased interest of private actors in the smart specialisation policy
6. Increased interest of public institution in the smart specialisation policy
7. Eroded trust between actor engaged in the regional innovation system

Q506. Has your entity have used any of the following processes to involve stakeholders in RIS3 adaptation to COVID-19? Please, indicate the use of online instruments in each case

1. No
  2. Yes, only face-to-face
  3. Yes, face-to-face and online instruments
  4. Yes, only on-line instruments
1. Brochures, pamphlets, magazines, facts, numbers, and figures to inform about RIS3 activities
  2. Surveys, consultations, information gathering about stakeholders
  3. Meetings, communications, to exchange information
  4. Focus groups, meetings, deliberative processes to encourage consensus-building regarding recommendations to be adopted by public actors)
  5. Formal instruments or bodies to adopt shared decisions included in policymaking (e.g. Organisms, decision-processes to produce formal co-decisions between public actors and stakeholders)

Q507. Could you indicate whether your region/country has developed new ways to organise EDP activities due to the COVID-19 crisis? If yes, could you provide some information about these new activities?



## F. SOCIO-DEMOGRAPHIC AND EXPERIENCE

Finally, could you answer the following socio-demographic questions?

Q601. Gender

1. Female
2. Male
3. Do not answer

Q602. Which best describes the category of your current position

1. Administrative staff
2. Management staff

Q603. Years in...

The current position ...

This entity ...

Public policy-related work ...

Q604. Please indicate your name and email (name and email will not be released publicly)

Name:

Email:

Q605. Please, could you indicate a web link to your RIS3 action plan (in English, if possible)?

## Annexe 2 Policy actions as regards COVID-19 consequences

Aspect	Northern/Central	Southern	Eastern	Total
Introduce new smart specialisation priorities	1,92	2,94	2,48	2,42
Reallocate budgets between smart specialisation priorities	2,00	3,41	3,04	2,77
Promote call for projects other than existing ones	2,58	3,84	3,41	3,24
Promote new policy instruments (e.g. agreements, partnerships)	2,83	3,75	3,59	3,36
Introduce new mechanisms to monitor and prevent delays in projects implementation	2,47	3,56	3,26	3,06
Make rules and procedures more flexible to implement and justify ongoing projects	3,14	4,28	3,78	3,71
Reduce levels of expected outcomes	2,33	3,16	3,48	2,94
Prioritise/emphasise some specific outcomes over others in the final evaluation	2,72	3,44	3,15	3,08
Promote specific processes to increase the involvement of other relevant government agencies to define the necessary adjustments	2,31	3,41	3,33	2,97
Promote specific processes to increase the involvement of relevant stakeholders to define the necessary adjustments	2,69	3,63	3,52	3,24
Promote capacity building within smart specialisation strategies responsible administrations	2,89	3,88	3,56	3,41
Improve smart specialisation strategies governance structure and processes	2,72	3,72	3,7	3,34

### Annexe 3. Policy actions as regards the Recovery period.

Aspects	Northern/Central	Southern	Eastern	Total
Introduce different smart specialisation priorities	1,92	2,91	2,63	2,45
Promote different policy instruments to those used up to now	2,81	3,88	3,56	3,38
Increase the involvement of other relevant government departments/agencies	2,53	3,69	3,52	3,2
Increase the involvement of other relevant stakeholders	3,03	3,81	3,67	3,47
Improve governance structures and processes to ensure coordination between public departments concerned with smart specialisation policy	2,92	4,16	3,67	3,55
Better communication and participation processes as regards stakeholders	3,03	3,94	4	3,61
Apply Entrepreneurial Discovery Process as a central tool in smart specialisation policy	3,14	4,16	3,81	3,67

---

All differences are statistically significant ( $p < 0,05$ )

## GETTING IN TOUCH WITH THE EU

### In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)

### On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by electronic mail via: [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)

## FINDING INFORMATION ABOUT THE EU

### Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: [https://europa.eu/european-union/index\\_en](https://europa.eu/european-union/index_en)

### EU publications

You can download or order free and priced EU publications from EU Bookshop at: <https://publications.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)).

## The European Commission's science and knowledge service

Joint Research Centre

### JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



**EU Science Hub**  
[ec.europa.eu/jrc](https://ec.europa.eu/jrc)



@EU\_ScienceHub



EU Science Hub - Joint Research Centre



EU Science, Research and Innovation



EU Science Hub



Publications Office  
of the European Union

doi:10.2760/120691

ISBN 978-92-76-53656-7