



Assessment of support to the development and implementation of smart specialisation strategies provided by the European Commission from 2010 to 2017

Call for Tenders N° 2018CE16BAT078

Final Report

AUTHORS

Julie Pellegrin (CSIL)

Gelsomina Catalano (CSIL)

With support from Francesca Ardizzon (CSIL) and Claudia Gloazzo (European Policies Research Centre)

Scientific advisers: Francesco Prota (University of Bari "Aldo Moro") and Gianni Carbonaro (CSIL)

ACKNOWLEDGEMENTS

The authors are grateful for the very helpful insights received from Peter Berkowitz, Jitka Vocaskova and Marek Przeor (DG Regional and Urban Policy Directorate) and from Fernando Hervas Soriano (Joint Research Centre). They also express their gratitude to all experts, regional and country representatives who contributed to inform this report by replying the survey, joining the workshop and accepting an interview. The authors are responsible for any remaining errors or omissions.

The information and views set out in this report are those of the authors and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

EUROPEAN COMMISSION

Directorate-General for Regional and Urban Policy
Directorate G — Smart and Sustainable Growth and Programme Implementation IV
Unit G1 – Smart and Sustainable Growth

Contact: Peter Berkowitz

E-mail: REGIO-G1-HEAD-OF-UNIT@ec.europa.eu

European Commission
B-1049 Brussels

**Assessment of support to the
development and
implementation of smart
specialisation strategies
provided by the European
Commission from 2010 to
2017**

Final Report

***Europe Direct is a service to help you find answers
to your questions about the European Union.***

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Manuscript completed in December 2019

The European Commission is not liable for any consequence stemming from the reuse of this publication.

Luxembourg: Publications Office of the European Union, 2020

ISBN 978-92-76-20888-4
doi: 10.2776/589793

© European Union, 2020

Reuse is authorised provided the source is acknowledged.

The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

CONTENTS

ABSTRACT.....	1
EXECUTIVE SUMMARY.....	2
INTRODUCTION	5
1 METHODOLOGY	6
1.1 Objectives and scope	6
1.2 Methodological approach	6
1.2.1 Criteria of assessment.....	7
1.2.2 Analytical activities	8
1.2.3 Data collection tools.....	9
2 NEEDS FOR SUPPORT: EXPECTED VS PERCEIVED NEEDS.....	12
2.1 Expected needs – literature review	12
2.1.1 Needs across different types of Member States and regions	12
2.1.2 Needs for support related to regulatory obligations	18
2.2 Perceived needs identified through primary data collection.....	25
2.2.1 Overview	25
2.2.2 Evidence from interviews/workshop	27
2.2.3 Needs for support across types of regions	32
3 MAP OF EC SUPPORT.....	34
3.1 Main features of the three categories of support	34
3.1.1 Non-customised support	35
3.1.2 Customised support	37
3.1.3 Highly customised support	38
3.1.4 Cost of support.....	40
3.2 Time distribution of the EC support	40
3.3 Geographical distribution of the EC support.....	43
3.3.1 Non-customised support	43
3.3.2 Customised support	45
3.3.3 Highly customised support	47
3.3.4 Overall distribution of EC support.....	48
3.3.5 Alternative types of support	49
4 RELEVANCE AND EFFECTIVENESS OF INDIVIDUAL SUPPORT INSTRUMENTS	51
4.1 How support instruments matched needs (comparative perspective).....	51
4.1.1 Relevance of support instruments across RIS3 stages	52
4.1.2 Relevance of support instruments by type of regions.....	54
4.2 Assessment of individual support instruments	57
4.2.1 Non-customised support	58
4.2.2 Customised support	61
4.2.3 Highly customised support	65
4.2.4 Alternative forms of support.....	68
5 OVERALL ASSESSMENT OF THE SYSTEM OF SUPPORT: WHAT WORKED AND WHAT DID NOT	70
5.1 Tangible and intangible effects of EC support	70
5.1.1 Effects on prioritisation, EDP, governance	70
5.1.2 Learning effect and added value	72
5.1.3 The role of the ex-ante conditionality	74
5.2 Efficiency issues in the management of support.....	76
5.2.1 Timeliness	76
5.2.2 Human and financial resources	78
5.2.3 Knowledge management and access to information.....	80
5.3 External and internal coherence of support	81
5.3.1 De facto a coherent set	81
5.3.2 Coordination with alternative support	81
5.4 Framework conditions	83
5.4.1 The articulation between RIS3 and OP.....	83
5.4.2 Governance framework and political factors	84
6 FOCUS OF FUTURE SUPPORT.....	86
6.1 Evolution of needs for support: what to give priority to in the future	86
6.1.1 Future needs across RIS3 stages and types of regions.....	86
6.1.2 Future needs related to regulatory requirements	87

6.2	Future relevance and improvement of existing instruments.....	89
6.3	Future options.....	91
6.4	Possible alternatives in case of phasing out / reduced support.....	94
7	CONCLUSIONS AND RECOMMENDATIONS.....	96
7.1	Conclusions.....	96
7.1.1	Background.....	96
7.1.2	Needs for support (“perceived” needs vs “real” needs)	97
7.1.3	Relevance.....	97
7.1.4	Effectiveness.....	98
7.1.5	Efficiency.....	99
7.1.6	Coherence	100
7.1.7	Added Value.....	100
7.2	Recommendations	104
	1) General organisation of the support	104
	2) Streamlining the portfolio of support instruments	105
	REFERENCES	106
	ANNEX I. ASSESSMENT MATRIX AND EVALUATION CRITERIA	110
	RELEVANCE.....	110
	EFFECTIVENESS	112
	EFFICIENCY	114
	COHERENCE.....	115
	EU ADDED VALUE	116
	ANNEX II. METHODOLOGICAL TOOLS.....	118
	SCOPING AND IN-DEPTH INTERVIEWS	118
	ONLINE SURVEY	122
	WORKSHOP.....	124
	ANNEX III. COMPLETE LIST OF CONSULTED STAKEHOLDERS	127
	ANNEX IV. RESOURCES MOBILISED FOR HIGHLY CUSTOMISED SUPPORT (AMI-CEI EXPERTS)	130
	ANNEX V. COMPLETE LIST OF EC SUPPORT INSTRUMENTS BY CATEGORY OF INSTRUMENT (NON-CUSTOMISED AND CUSTOMISED SUPPORT)	132
	ANNEX VI. ESTIMATION OF THE BENEFICIARIES OF CUSTOMISED SUPPORT.....	142

LIST OF ABBREVIATIONS

AA	Administrative agreement
AMI CEI or AMI	Appel à Manifestation d'Intérêt – Call for Expression of Interest
CF	Cohesion Fund
DG	Directorate General
DG Growth	DG for Internal Market, Industry, Entrepreneurship and SMEs
DG Regio	DG for Regional and Urban Policy
EC	European Commission
EDP	Entrepreneurial Discovery Process
EQI	European Quality of Government Index
ERDF	European Regional Development Fund
ESF	European Social Fund
ESIF	European Structural and Investment Funds
EU	European Union
EU13	Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.
EU15	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.
EU28	Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.
ExAC	Ex-ante conditionality
FP	Framework Programme
H2020	Horizon 2020
HESS	Higher Education for Smart Specialisation
ICT	Information and Communication Technologies
JRC	Joint Research Centre
MS	Member States
OP	Operational Programme
PACA	Provence-Alpes-Côte d'Azur

PXL	Peer Exchange Learning
REMT_h	RIS3 in the region of Eastern Macedonia and Thrace
R&I	Research and Innovation
RIS	Regional Innovation System
RIS3	Research and Innovation Strategies for Smart Specialisation
S2E	Stairway to Excellence
S3	Smart Specialisation Strategy
SRSP	Structural Reform Support Programme
SWOT	Strengths, weaknesses, opportunities and threats
TA	Technical Assistance
TO1	Thematic Objective 1
YEI	Youth Employment Initiative

LIST OF BOXES

Box 1.	Scope of the study	6
Box 2.	Study's evaluation criteria.....	7
Box 3.	RIS3 stages	13
Box 4.	A typology of regions facing different challenges in RIS3	17
Box 5.	<i>Ex-ante</i> conditionality and enabling condition	18
Box 6.	Measures to support industrial transition	24
Box 7.	Examples of difficulties in understanding the RIS3 concept and benefits ..	28
Box 8.	Examples of difficulties in the prioritisation exercise	29
Box 9.	Examples of difficulties with monitoring RIS3	31
Box 10.	Examples of needs related to the development of projects by companies .	31
Box 11.	Examples of the need to promote interregional cooperation	32
Box 12.	The S3 platform.....	35
Box 13.	Main guidance documents for the design and implementation of RIS3	36
Box 14.	IT tools supporting the design and implementation of RIS3	36
Box 15.	Administrative Agreements between DG Regio and JRC	40
Box 16.	Non-customised support - Quotes from consulted stakeholders	61
Box 17.	Customised support - Quotes from consulted stakeholders.....	65
Box 18.	Highly customised support – Quotes from consulted stakeholders	67
Box 19.	Examples of issues with administrative capacity	79
Box 20.	Coordination issues in the provision of EC support – quotes from consulted stakeholders	83
Box 21.	Examples of coordination issues between RIS3 and OP	84
Box 22.	Examples of coordination issues between the national and regional levels	85
Box 23.	Suggestions for improvements – Quotes from consulted stakeholders	94

LIST OF FIGURES

Figure 1.	An introduction to the methodological elements.....	7
Figure 2.	The EC support categories in a nutshell	8
Figure 3.	The reconstruction of the intervention logic.....	9
Figure 4.	MS and regions classified by level of development and innovation performance, as well as type of countries (EU 15 / EU 13).	11
Figure 5.	Map of needs for support to RIS3.....	20
Figure 6.	Specific needs faced by MS and regions	26
Figure 7.	Most challenging steps across phases of RIS3.....	27
Figure 8.	Countries and regions most in needs	33
Figure 9.	Time distribution of additional guidelines and Knowledge Repository studies	41
Figure 10.	Time distribution of events and conferences	42
Figure 11.	Time distribution of peer reviews and PXL workshops	42
Figure 12.	Time distribution of AMI-CEI experts contracts	43
Figure 13.	The use of guidance documents across users of the EC support	43
Figure 14.	The use of the Knowledge Repository	44
Figure 15.	The use of IT Tools	45
Figure 16.	Geographical distribution of customised support at a national and regional level.....	46
Figure 17.	Type of events and conferences by frequency of participation.....	47
Figure 18.	Number of contracts per Member State	48
Figure 19.	Geographical distribution of the combination of customised and highly customised support by countries and regions	49
Figure 20.	Alternative types of support used by countries and regions	50
Figure 21.	How EC supports instruments matched users' expectations	52
Figure 22.	Relevance of different EC supports in addressing countries and regions' needs during the design and implementation phase	53
Figure 23.	How EC supports instruments matched users' expectations depending on their levels of development	54
Figure 24.	How EC supports instruments matched users' expectations depending on different innovation performance	56
Figure 25.	Usefulness of guidance documents in meetings countries and regions' needs	58
Figure 26.	The usefulness of Knowledge Repository in targeting specific needs	59
Figure 27.	The usefulness of IT Tools in targeting specific needs	60
Figure 28.	Relevance of peer review workshops and PXL in addressing most pressing needs amongst regions.....	62
Figure 29.	Relevance of S3 cooperation workshops and Thematic Platforms support in addressing most pressing needs amongst regions	63
Figure 30.	Relevance of AMI-CEI expert support in addressing most pressing needs amongst regions.....	66
Figure 31.	Aspects effectively addressed by EC support according to RIS3 authorities and Managing Authorities	71
Figure 32.	Aspects effectively addressed by EC support according to EC Officers and AMI-CEI experts	71
Figure 33.	A comparison between past and future needs.....	72
Figure 34.	EC legal requirements effectively addressed by EC support by category of respondents	75

Figure 35.	The effect of the EC support on the timeliness of preparation, approval and implementation of RIS3 according to RIS3 users and Managing Authorities	76
Figure 36.	The effect of the EC support on the timeliness of preparation, approval and implementation of RIS3 according to EC Officers and AMI-CEI experts	77
Figure 37.	Users of EC support and Managing Authorities assessing the relevance of the support in ensuring efficient use of resources within national/regional administration	78
Figure 38.	EC Officers assessing the relevance of the support in ensuring efficient use of resources within national/regional administration	78
Figure 39.	Coordination between EC support and alternative types of support according to users of EC support and Managing Authorities	82
Figure 40.	Coordination between EC support and alternative types of support according to EC Officers VS AMI-CEI experts	82
Figure 41.	An overview of future needs.....	87
Figure 42.	Future EC requirements requiring EC support	88
Figure 43.	Assessment of the usefulness of the different categories of EC support in meeting future needs with respect to the past	91
Figure 44.	Impact of reducing or phasing out EC support on users of EC support and Managing Authorities.....	94
Figure 45.	Regional Innovation performance.....	119
Figure 46.	Quality of government index, 2017	119
Figure 47.	Eligibility to EU Structural Funds 2014-2020.....	119
Figure 48.	The sample of interviews in a nutshell	120
Figure 49.	Countries and regions covered by in-depth interviews	121
Figure 50.	The national coverage of the online survey	123
Figure 51.	The regional coverage of the online survey	123

LIST OF TABLES

Table 1.	Mapping of EC support	34
Table 2.	Focus of AMI-CEI expert support according to the outcome documents....	39
Table 3.	The usefulness of the EC support for what and for whom	57
Table 4.	Alternative types of support available	68
Table 5.	RIS3 success stories	73
Table 6.	Future relevance of existing instruments and room for improvements	89
Table 7.	EC support according to the evaluation criteria, in a nutshell.....	102
Table 8.	Complete list of participants	124
Table 9.	Agenda of the workshop	124
Table 10.	Resources mobilised to support RIS3 through the AMI CEI list.....	130
Table 11.	Support through the AMI-CEI list to the thematic platforms	130
Table 12.	Support through the AMI-CEI list of experts per year and type of beneficiary (EU28, Member States, regions)	131
Table 13.	Complete list of Guidance documents	132
Table 14.	Complete list of Additional guidelines	132
Table 15.	Complete list of the nine guidance drafted by AMI-CEI experts	133
Table 16.	Complete list of the 7 IT Tools.....	133
Table 17.	Complete list of the 123 studies and research analyses included in the Knowledge Repository section of the S3 platform.....	133
Table 18.	Complete list of the 19 Peer review workshops	136
Table 19.	Complete list of the 11 PXL workshops	137
Table 20.	Complete list of support activities for Thematic Platforms	137
Table 21.	Complete list of the 44 S3 cooperation workshops	139
Table 22.	Complete list of the 69 "Other events".....	140
Table 23.	List of Operational Programmes related to TO1 and Registered Regions on the S3 Platform	143

ABSTRACT

This study assesses the support provided by the European Commission (EC) to the development and implementation of **smart specialisation strategies** (RIS3) based on consultations with stakeholders involved in the process. To help regions develop RIS3, the EC put in place a range of instruments providing **non-customised** (guides), **customised** (workshops) and **highly customised** (AMI-CEI experts) support.

The study shows that despite a limited budget, support ensured an adequately diversified geographical distribution. However, highly customised support was abnormally concentrated during the design phase. Overall, EC support is characterised by a **difficulty in acknowledging the differentiated capacity of regions** to implement RIS3 and absorb support. The **added value** of support can be maximised by concentrating on the basics of RIS3 (governance, functioning of “Entrepreneurial Discovery Process” and monitoring and evaluation), which are at the core of the new “enabling condition” over the 2021–2027 programming period. It is recommended to establish **an efficient knowledge management system** and to **streamline the portfolio of support instruments**, in particular by reviewing the management of the AMI-CEI list.

EXECUTIVE SUMMARY

Objective and approach

This study assesses the support provided by the European Commission (EC) to regions and countries for the **development and implementation of smart specialisation strategies** (RIS3). The objective is to assess whether support requires adjustments in light of the lessons from implementation between 2010 and 2020 and the changes introduced in the regulatory framework for the 2021–2027 programming period.

Assessment is conducted mainly through desk research, in-depth interviews, an online survey and a workshop to identify the perceptions of stakeholders involved in the RIS3 process (i.e., authorities in charge of RIS3, managing authorities, experts delivering support, and EC officials). In line with the Better Regulations Guidelines and the requirements of the Tender Specifications, research was guided by **five evaluation criteria** to assess the **relevance, effectiveness, efficiency, coherence and EU added value** of the support.

Background

The introduction of RIS3 as an *ex-ante* conditionality (ExAC) in the 2014–2020 programming period represented a **landmark in the ESIF policy framework**. To help regions develop RIS3 strategies and comply with the ExAC, the EC put in place a range of support mechanisms, which, in accordance with the classification adopted in this study, ranged from **non-customised** (guidance documents, IT tools and knowledge repository available from the S3 platform) to **customised** (thematic platforms, peer review, PXL and S3 cooperation workshops) and **highly customised** support (provided by AMI-CEI experts).¹

Main Findings

Non-customised and customised support was spread across regions and countries throughout the programming period. Highly customised support was concentrated in Southern and Eastern Europe and almost exclusively during the design phase in relation to the fulfilment of the *ex-ante* conditionality.

Relevance and effectiveness. Despite the small budget available compared to the total budget for smart specialisation, EC support nevertheless ensured an adequately diversified geographical distribution and was, in principle, relevant for addressing differentiated needs across regions and countries. However, due to the concentration of some support (AMI-CEI experts) at the outset of the programming period, some issues arising during implementation were left unaddressed:

- **Non-customised support**, such as guidance documents, was particularly relevant during the design phase for understanding the concept and complying with ExAC, but its effectiveness was limited by certain weaknesses (e.g., too generic and overly long).
- **Customised support** in particular peer-review workshops was widely appreciated by a broad range of regions, allowing them to learn from others' experience. However, the effectiveness of this form of support strongly depended on the ability

¹ A number of other pilot projects were undertaken to provide support to lagging regions, but these are not assessed in this study. Such support was complementary to that provided through the S3 platform under the specific Administrative Agreement with DG REGIO, and it helped to both develop and test methodological guides and support tools.

and willingness of regions to apply the lessons learnt to their own context. The sustainability of the effects of this form of support is particularly fragile.

- During the design phase, **highly customised support** aided regions in complying with the ExAC and establishing an entrepreneurial discovery process (EDP). It was flexible and quick to mobilise, but its effectiveness depended on the quality and experience of experts. The limited use during the implementation phase – despite it being needed – revealed the challenge of moving from the design phase to the implementation phase.

In the absence of a comprehensive evaluation of RIS3, the tangible effects of EC support are difficult to document. However, there is evidence of **learning effects** in some regions, generally with medium innovation performance. In other regions facing structural difficulties or characterised by limited administrative capacity, EC support aided compliance with ex-ante conditionality, but without producing lasting effects during implementation. When EC support came to an end, the regions quickly went back to “business as usual” – for example, in relation to the maintenance of governance structures. In these regions, some basic needs persisted (e.g., managing the EDP, setting up the governance system and even understanding the concept of RIS3). This might be an indication of the **immaturity of the RIS3 process in some regions**, thus raising doubts about the capabilities of these regions to follow up on recommendations. In these regions, EC support has only limited impact in the absence of systemic change.

Efficiency. The main limitation of EC support in terms of efficiency relates to knowledge management. Both the AMI-CEI database and the S3 platform contain extensive information concerning the wide experience and output of support accumulated with RIS3 on the ground since 2012. Yet, their exploitation for policy learning is minimal.

Coherence and EU added value. EC support instruments were combined in a pragmatic manner, and also with alternative forms of support. Besides fostering learning effects in some regions, EC support was instrumental in developing an active community of practice and produced a wealth of evidence on the RIS3 experience across regions. Another key element of EU added value is that it provides a **common understanding and framework of the RIS3 approach**.

Overall, this study found an extensive but differentiated process of learning for some regions and countries since the introduction of the RIS3 concept in 2010. In this context, EC support is characterised by a **difficulty in reflecting the differentiated capacities of regions** to implement RIS3 and absorb support.

Lessons learnt and recommendations

The key issue for the 2021–2027 programming period is to find ways to stimulate sustainable change in regional governance of the RIS3 process. The next generation of support should **focus more strongly on the long-term effectiveness of the mechanisms put in place by providing more explicit support for the processes required by the new enabling condition**. Changes introduced for 2021–2027 seek to address some of the weaknesses in the current approach to smart specialisation by shifting the focus of conditionality from the initial establishment of the strategy to its implementation as a process governed by the entrepreneurial discovery process throughout the period. Furthermore, greater emphasis will be placed on the necessary preconditions for functioning research and innovation ecosystems. The support system will therefore need to be adapted to this new framework, and also possibly include alternative forms of support. The study recommends that EC support be rationalised and streamlined to be more effective and efficient. Different lines of action are proposed.

1) The added value of support should be maximised by concentrating on the basics of RIS3 and by differentiating support according to regions' capacity to absorb it.

In line with the requirements of the enabling condition linked to RIS3 in the future programming period, EC support should concentrate on the basic elements of RIS3 – governance, the functioning of EDP and monitoring and evaluation – and ensure that they are embedded and implemented properly in all EU regions. In order to achieve that, EC support should take into account the differentiated degrees of preparedness of regions to embrace smart specialisation strategy approach, as well as their varying levels of progress towards RIS3 implementation. In the context of the limited budget available, the EC should increase the added value of support by adapting it in accordance with regions' capacity to absorb support.

2) A coordinated and efficient knowledge management system should be set up.

There is a great need to establish a proper knowledge management system to make the most of the wealth and variety of evidence produced on RIS3 implementation. The JRC should play the role of a knowledge centre for the key building blocks of RIS3 and concentrate on the lessons learned and the knowledge capitalisation in the areas of governance, prioritisation, and monitoring and evaluation.

3) The portfolio of support instruments should be streamlined.

The S3 platform website should become a key reference point (a "knowledge centre") reflecting the latest knowledge on RIS3 best practice. The most relevant IT tools could be merged in a single database and a corresponding platform with updated data and a user-friendly interface. The functioning of the AMI-CEI list should be reviewed, and mechanisms should be put in place to ensure capitalisation and sharing of knowledge.

INTRODUCTION

The objectives of this study are to undertake a mid-term assessment of the support provided by the European Commission for the development and implementation of RIS3. The purpose is to **assess whether such support is currently provided effectively and efficiently** and how appropriate it is to deal with the new regulatory conditions set for the 2021–2027 programming period. The objective is to formulate **recommendations** for the remaining years of RIS3 implementation and post-2020.

The smart specialisation approach is a **new way of delivering regional innovation policy**. Since 2014–2020 smart specialisation operated within the framework of Cohesion Policy as an “*ex-ante* conditionality”, a pre-condition for the effective and efficient use of EU funds. In 2021–2027, smart specialisation strategies will become an “enabling condition”, with corresponding criteria necessary to fulfil in order to access funding. Smart specialisation has two distinctive characteristics, compared to traditional innovation policy. First, it focuses on specific economic activities or strength, through a process of selection of interventions and, second, it is based on the so-called entrepreneurial discovery process, that brings together public and private sector actors in an experimentalist process (Foray and Goenaga 2013; Foray 2015; Radošević et al. 2017). RIS3 is part of a policy cycle that requires the translation of a policy objective into a strategy selecting priorities. The strategy is converted into policy initiatives and instruments tailored to the needs of entrepreneurial actors (Reid and Maroulis 2017).

While taking place following some previous experience of innovation policy development at a regional level, this approach introduced **new concepts**, which had not undergone prior empirical testing on how they would work in reality. It was expected that the adoption of the RIS3 approach would **thus generate a series of needs for support**, more or less significant depending on the capacities of regional authorities to internalise new conceptual developments and their overall level of administrative capacity. In this context, the **European Commission deployed different instruments of support using two main channels: the S3 platform and experts from the “AMI-CEI”² list.**

This study is not intended to conduct a conventional evaluation but rather to provide an assessment of the support delivered by the EC to help regions designing and implementing their RIS3. This assessment takes place along the criteria of relevance, efficiency, effectiveness, coherence and EU added value set in the Better Regulations Guidelines. It is **mainly based on the perceptions of stakeholders involved the RIS3 process** (i.e., authorities in charge of RIS3, Managing Authorities, experts and EC officials, etc.) and in particular RIS3 authorities who made use of EC support. As detailed in the next chapter, evidence collected mainly derives from desk research, views expressed in interviews, an online survey, and during a workshop. After the methodological chapter, the report is organised as follows: needs for support are identified from the literature, and from primary data collection (Chapter 2), followed by an overall picture of how support was distributed in time and across regions/countries (Chapter 3). Next, the assessment of EC support is proposed, first by instrument, asking the extent to which support instruments targeted regions’ needs (Chapter 4). Afterwards, the analysis is carried out in overall terms by looking at the perceived effects of EC support on RIS3 constituent features, its added value, and limitations (Chapter 5). An assessment of future needs, possible improvements of existing instruments and post-2020 scenarios is proposed in Chapter 6, while the final Chapter provides conclusions and recommendations.

² “*Appel à Manifestation d’Intérêt* – Call for Expression of Interest”

1 METHODOLOGY

1.1 Objectives and scope

The scope of this study specifically focuses on the support provided by the Directorate General of Regional and Urban Policy (hereafter DG Regio) technical assistance and the Joint Research Centre (JRC) internal budget over the period 2010–2018,³ including:

- Support delivered through the S3 platform⁴
- Contracts stemming from the call for expressions of interest (AMI - CEI) expert list
- Guidance documents

Box 1. Scope of the study

The support to RIS3 examined in the study includes guidance documents, the knowledge repository and IT tools made available on the S3 platform, the thematic platforms for conferences and meetings, S3 cooperation workshops, peer review workshops, peer eXchange and Learning (PXL) workshops as well as the support provided by independent (AMI-CEI) experts appointed by DG Regio during the preparation and design of the strategies.

Source: CSIL

The scope of this study does not cover other sources of support, such as the European Parliament pilot projects and the Targeted Support provided by JRC as part of the S3 platform.⁵

1.2 Methodological approach

The methodological approach adopted for this assessment was based on three interrelated elements, such as:

- Evaluation criteria
- Analytical activities
- Data collection tools

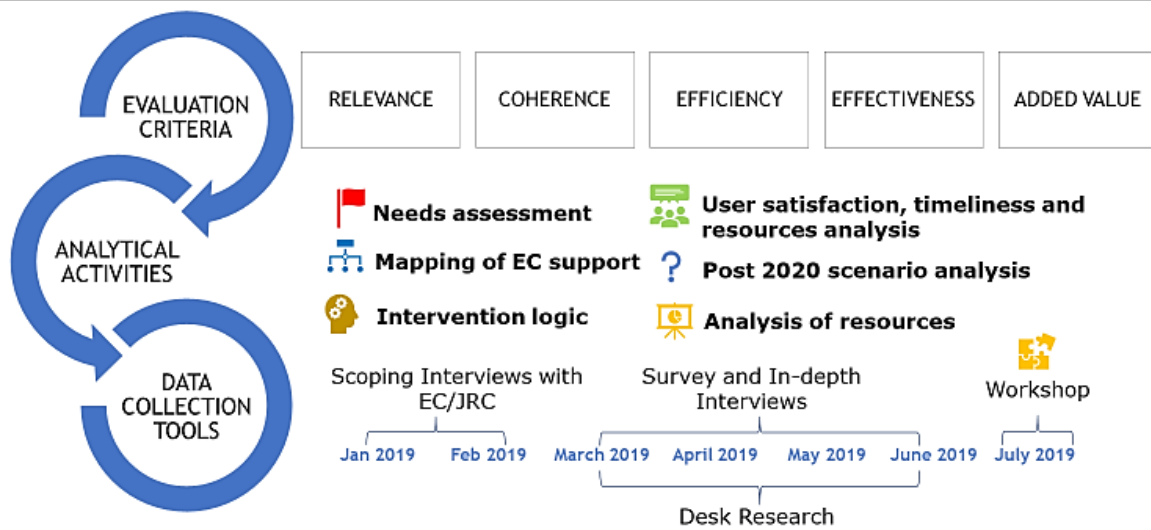
In line with the Better Regulations Guidelines and with the requirements of the Tender Specifications, the study was guided by **five evaluation criteria** addressed to assess the **relevance, effectiveness, efficiency, coherence, EU added value** of the support. Each criterion was then organised along with a set of specific evaluation questions, which were answered through different **analytical activities**. Activities included mapping and assessing needs and support provided, analysis of users' satisfaction, resources employed, timeliness in delivery and future scenarios, as well as an overall reconstruction of the intervention logic. The evidence basis for answering to the different evaluation questions was finally provided by various **tools for data collection**, such as a desk analysis, scoping and in-depth interviews, an online survey and a workshop. Figure 1 below presents, in a nutshell, the methodological elements of this study, while more details are provided in the following sections.

³ According to the Tender Specifications, the scope of the study should cover activities from 2010 until 2017, possibly also first half 2018 if data was already available. As data of 2018 was available on the S3 platform, the period covered by the assessment is 2010–2018.

⁴ <https://s3platform.jrc.ec.europa.eu/>

⁵ These forms of assistance include support to RIS3 in the region of Eastern Macedonia and Thrace (REMTh), RIS3 in Lagging regions, Stairway to Excellence (S2E) and the Higher Education Smart Specialisation (HESS) project.

Figure 1. An introduction to the methodological elements



Source: CSIL

These three methodological elements have been combined and structured in an **assessment matrix** (provided in 0), which defines how the evaluation questions have been answered.

1.2.1 Criteria of assessment

The **five evaluation criteria** defined in the Better Regulations Guidelines used to guide the present assessment are detailed in Box 2, below.

Box 2. Study's evaluation criteria

Relevance investigated whether there is a mismatch between needs/problems to be tackled and the objectives of EC support to RIS3. The assessment focused on the following relevance-related aspects: i) the relevance of the support to improve the quality of preparation and implementation of RIS3; ii) the extent to which the support respond to Member States and regions' needs as well as to EC' requirements; iii) the extent and the geography of the actual use of support.

Effectiveness focused on how successful the EC support to RIS3 has been in achieving or progressing towards its objectives. Given the timing of the assessment, this analysis focused on the timeliness of preparation and approval of RIS3. It looked at implementation aspects only in terms of administrative and governance set-up and prioritisation, but not at the results in terms of delivering more effective RIS3 strategies.

Efficiency assessed the relationship between the resources used to deliver the EC support and the changes generated. The analysis specifically investigated whether the current arrangements allow for a timely and efficiently provision of the support to pinpoint areas where there is potential to reduce inefficiencies.

Coherence investigated whether synergies are sufficiently exploited between EC support to RIS3 and other complementary policy initiatives or if, on the contrary, the actions of EC support to RIS3 overlaps with different activities and national or EU level.

EU added value looked at the added value stemming from the EU support to RIS3 as compared to actions undertaken at national/regional level. Thus, it investigated the consequences of possible phasing out or reduction as well as recognised benefits of the support as perceived by the beneficiaries.

Source: CSIL (for more details, see Annex I)

1.2.2 Analytical activities

The study relied on several intertwined analytical activities which were addressed to provide an answer to the different evaluation questions. These include:

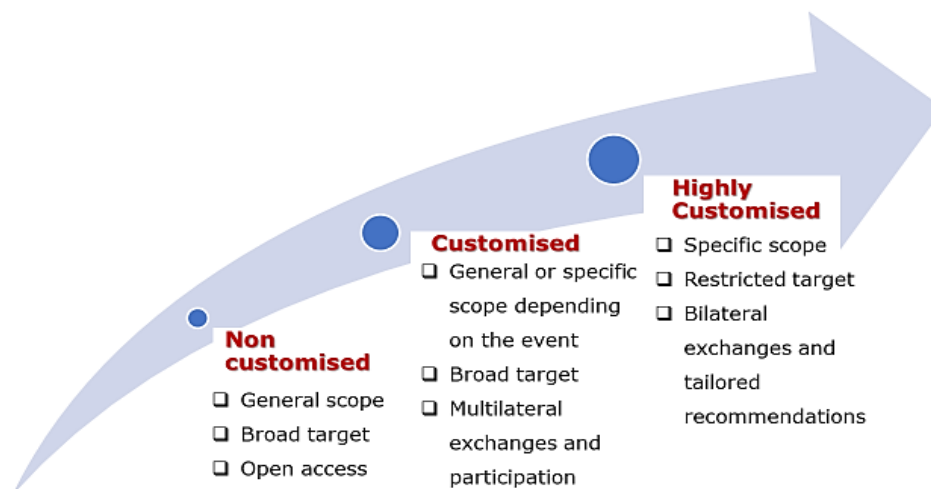
Needs assessment. The mapping and analysis of the different needs perceived by Member States (MS) and regions were carried out to i) explore needs variation across the different phases of the RIS3 policy cycle, from its design to the implementation; ii) investigate potential patterns across different types of MS (EU13 vs EU15) and regions (in terms of level of development, innovation performance and quality of the governance structure).

Mapping EC support. Given the heterogeneity of the various forms of support analysed in the study, a map of EC support provided so far, and classification according to homogeneous characteristics were needed. The discriminating factor used for this classification was the degree of customisation of the support, which was defined by considering the following three criteria:

- The **scope** of the support, related to the topic tackled with a specific type of support. It ranges from a general to a more specific topic and activities.
- The **target** of the support, related to the type of audience. It ranges from a broad or narrower target audience.
- The **deliverable** of the support, related to the output delivered to beneficiaries through EU assistance. It can include a report/guidance, free access to link and data sources, participation to events, multilateral or bilateral exchange, tailored recommendations.

The above mentioned three aspects are interrelated and were considered all together when differentiating the full range of activities. Based on these three characteristics, the assistance provided by the EC and JRC was classified as **non-customised, customised and highly customised**. This classification is used to draw conclusions on the category of support which is found to be more suitable depending on the specific needs as well as typologies of countries and regions. Figure 2 below summarises this categorisation, while more details on the results of this activity are provided in Chapter 3.

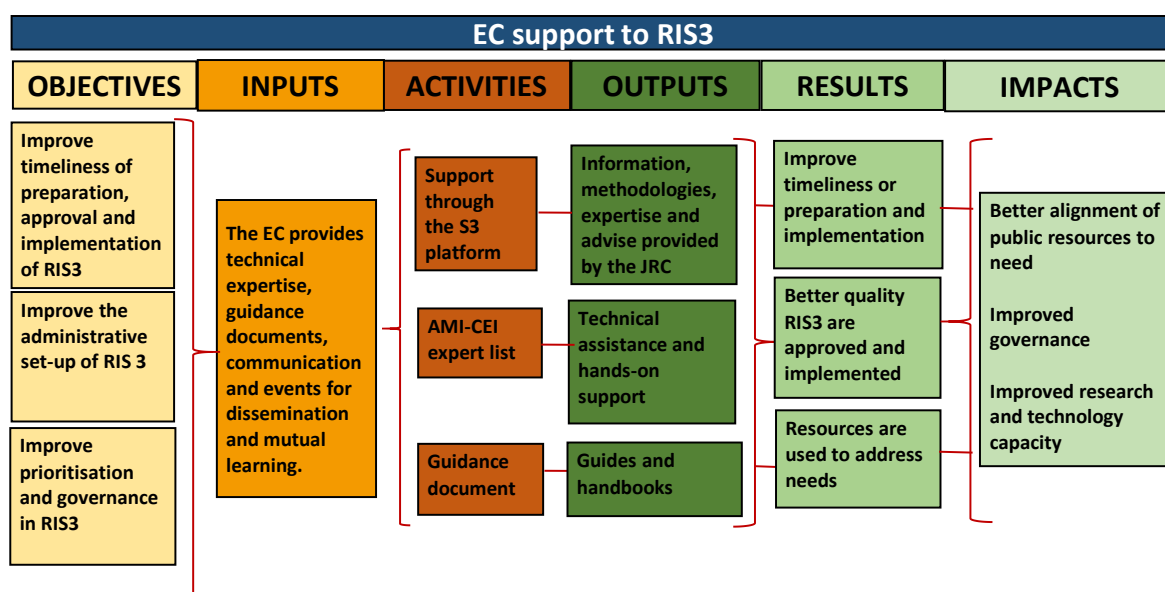
Figure 2. The EC support categories in a nutshell



Source: CSIL

Reconstruction of the intervention logic. The reconstruction of the intervention logic was necessary to understand the rationale behind the provision and use of EC support. Evidence collected through the needs assessment and support mapping showed that the key objectives of EC support to RIS3 are improving the preparation, approval and implementation of RIS3, enhancing the process of prioritisation and governance and targeting support to address specific needs. A variety of activities are carried out, and different outputs are delivered to beneficiaries to achieve these objectives. Expected impacts from the support include the acceleration of the design and implementation of RIS3, targeting resources to the needs, better prioritisation and governance as well as enhanced research and technology capacity.

Figure 3. The reconstruction of the intervention logic



Source: CSIL

Users satisfactions, timeliness and resources analysis. This activity consisted in gathering the perceptions and opinion from interviewed and surveyed stakeholders. It aimed to analyse the effectiveness and efficiency of EC support in delivering timely support, thus improving the timeliness of preparation and implementation of RIS3 strategies, as well as the quality of EC support. Particular attention was dedicated to its relevance in addressing the different needs across beneficiaries.

Scenario post-2020. Building on previous activities, a scenario analysis was performed to identify expected needs. It investigated, for example, how needs had evolved as compared to those in place when EC support was designed and implemented; potential improvements; and changes in the delivery of future support. It also analysed the consequences of possible phasing out or reduction of EC support.

Results of these activities are narratively presented in Sections 2, 3 and 4 of this report to provide an answer to the evaluation questions.

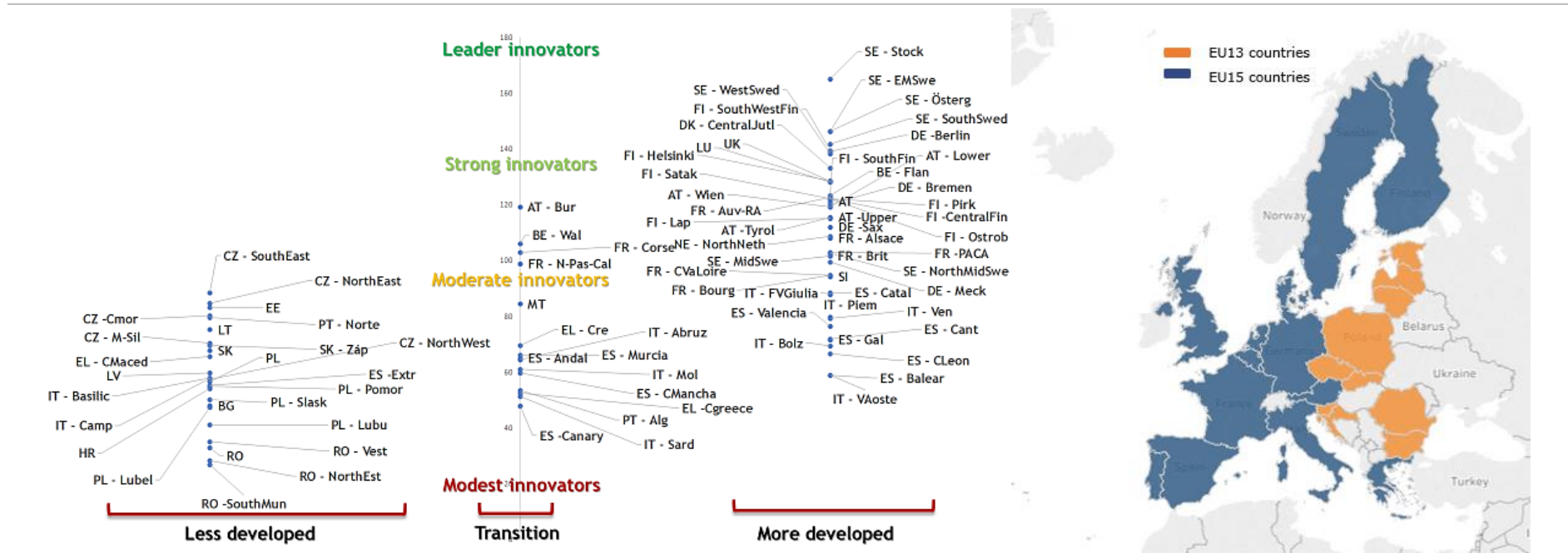
1.2.3 Data collection tools

The evidence collected for this assessment builds on different information sources, such as (see Annex II for more details):

- **Five scoping interviews** with *DG Regio officers, JRC staff and National Coordinators*.
- **Desk research** reviewing a wide range of documents: *the S3 Platform, official documents, previous studies on RIS3, academic literature, etc.* The complete list of documents which have been consulted is provided in the Reference's section.
- **41 in-depth interviews** - *run from March 26th to May 22nd, 2019* – of which 6 with DG Regio, 4 with JRC, 5 with AMI-CEI experts, 26 with authorities dealing with RIS3 at national and regional level across 19 EU countries. The full list of countries and regions covered by interviews is provided in Annex III;
- **182 questionnaires collected through an online survey** - *run from April 2nd and May 27th, 2019*.
- **A workshop** held on July 4th, 2019. It gathered more than 40 participants representing different categories of perspectives and stakeholders, such as officials from the European Commission and the JRC, authorities dealing with design and implementation of RIS3 at the national and regional level and independent experts (e.g. AMI-CEI experts providing support and academics).

While collecting this evidence, attention was paid to ensure good representativeness in terms of level of development (less developed, transition and more developed regions); innovation performance (modest, moderate, strong and leader innovators); and geographical coverage (EU15 vs EU13) of MS and regions across the European Union. As showed by the Figure 4, the study, overall, has covered nearly all 28 MS, either at a regional or national level, considering a well-balanced selection of countries and regions based on the criteria mentioned above.

Figure 4. MS and regions classified by level of development and innovation performance, as well as type of countries (EU 15 / EU 13).



Source: CSIL

2 NEEDS FOR SUPPORT: EXPECTED VS PERCEIVED NEEDS

Emerging evidence from the empirical literature identifies a series of issues that hamper the effective development of RIS3, ranging from **more structural deficiencies to limitations in administrative capacity**. These are varyingly amenable to policy support.

The literature review shows that **different typologies of regions** meet challenges of distinct nature and variable intensity. Structurally weak regions face the most challenging issues, especially during implementation.

Support was expected by regions to fulfil **basic needs** in terms of understanding the concept, setting up the governance structure, and managing the entrepreneurial discovery process, which are also at the core of the future enabling condition over 2021-2027.

The need for support identified by regions tended to be concentrated on the design phase, particularly in relation to the fulfilment of the *ex-ante* conditionality. Contrary to findings from the literature, these needs do not appear to vary widely according to the typology of regions. This suggests a certain disconnection between **real difficulties and perceived needs for support**.

The preparation and implementation of smart specialisation strategies translate into several needs. Expected needs for support are explored first through a literature review and then compared with evidence from primary evidence collected on the ground.

2.1 Expected needs – literature review

2.1.1 Needs across different types of Member States and regions

RIS3 in a nutshell and need for support

Briefly described, the smart specialisation approach proposes to concentrate resources into carefully defined priority areas which are in line with the region's existing assets and at the same time allow to take advantage of innovation opportunities. Prioritisation (intended as the definition and choice of priority areas) is critical for the success of this strategy. It also affects the process of concretisation of priorities into projects and policy programmes. Underlying this process is an entrepreneurial discovery process (EDP), which encourages collaborative actions among all innovation actors and follows a "permanent process of navigation" (Foray et al. 2018). Learning, experimentation and a firm commitment to a common direction of change are crucial to the success of smart specialisation strategies (Foray, David, et al. 2009; Foray et al. 2018).

The European Commission embraced the concept of smart specialisation in 2010. It then became one of the pillars of Cohesion Policy during the 2014–2020 programming period. The adoption of RIS3 was introduced as a requirement (*ex-ante* conditionality) for European regions to access Cohesion Policy funding under Thematic Objective 1 "Strengthening research, technological development and innovation".⁶

⁶ Regulation (EU) 1301/2013 of the European Parliament and of the Council of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006.

The novelty of the approach and the *ex-ante* conditionality requirement suggested that Member States and regions would have needed support to help to steer their RIS3 process. Various steps characterise the preparation/design and implementation of smart specialisation strategies and needs for support are expected to be varyingly distributed within the process. For example, the RIS3 guide (Foray et al. 2012) and wheel (European Commission 2013) envisaged six stages with several requirements underneath.⁷ These resources referred primarily to the preparation/design of the strategies, but they are at work also during implementation.

Box 3. RIS3 stages

The **first stage** was the analysis of the regional or national context. It included appraising the endowment in assets through SWOT analyses and other tools assessing the innovation potential of a territory. It also included evaluating the positioning of the country/region in international value chains, its collaboration in international networks and an appraisal of the entrepreneurial base and dynamics.

The **second stage** was the governance of RIS3 which encompassed having the management structures in place, the interactive and broad participation of stakeholders through collaborative leadership principles, the use of tools to enhance such collaborative processes and the related communication processes.

The **third stage** included elaborating a shared vision on the present and future innovation challenges. This stage focused on having a broad view of innovation to include organisational, service and market innovation dimensions and embracing an inclusive and sustainable economic development policy. Also, an analysis of risks and future scenarios had to be carried out.

The **fourth stage** focused on the identification of priorities. It encompassed revising previously identified priorities and identifying areas for competitive advantage, checking for consistency with the analysis carried out in the first stage and the result of the EDP. Finally, this included ensuring that each priority achieved critical mass and that resources were concentrated on a limited number of priorities.

The **fifth stage** was the adoption of an appropriate policy mix. The choice of the policy mix could include, for instance, roadmaps, experimentation through pilot actions, ensuring a balance between focused and horizontal measures and meeting the framework conditions.

The **sixth and last stage** was monitoring and evaluating the strategy. A limited number of indicators with baseline and expected targets had to be identified, mechanisms to ensure data collection and analysis for monitoring purposes foreseen and the use of such information for updating the strategy had to be set up.

Source: RIS3 wheel (European Commission 2013)

As illustrated in Figure 3 in Chapter 1 above, the intervention logic implicitly underlying the deployment of RIS3 support shows that the objectives relate timeliness, improvement of administrative set-up, prioritisation and governance. The expected impact correlates with better alignment of public resource to needs, improved governance and improved R&D capacity.

As a form of technical assistance (TA), EC support to RIS3 is expected to help address shortcomings, limitations or obstacles materialising along the stages above when designing and implementing RIS3. One first important issue is to understand how deep and structural these deficiencies are, and to what extent they can be addressed by TA/RIS3 support given that structural change is, in principle, not the primary objective of TA in general and EC support to RIS3 in particular (European Commission et al. 2016).

⁷ Recently, Foray proposed a simplified approach focusing on 3 rather than 6 steps: 1) identify thematic priority area, 2) establish a transformational roadmap, 3) implementation through an Action Plan (Foray 2019).

Although the 2014–2020 programming period is yet to be closed and no comprehensive formal evaluation of RIS3 has been carried out so far, a number of potential and actual issues in connection to the RIS3 exercise have been identified through the literature. Factors hampering the effective development of RIS3 can be addressed on a continuum, from the most structural to the more short-term and operational issues.

Economic and institutional structural (pre)conditions

On the structural end of the spectrum, a recent trend in the literature identifies some structural preconditions necessary to carry out a successful RIS3. One condition is defined in terms of economic structure dealing with the specialisation profile of specific regions. According to some analysts, some regions have only limited capacities in few (or no) technological domains and/or lack critical mass in any technological domain (Kroll et al. 2014; Guzzini and Iacobucci 2016; McCann and Ortega-Argilés 2016a). This area goes beyond the remit of RIS3 support.

Other scholars identify the **mismatch between functional and political-administrative boundaries** in regions as a critical challenge to RIS3 design. The issue for RIS3 is to be conducted at the most appropriate level, i.e. neither too high nor too low levels of governance (Capello and Kroll 2016). The need to identify functional areas for innovation within a country, beyond administrative borders, presented a challenge for the exploitation of potential complementarities in specialisation domains across regions, the creation of inter-regional partnerships for strengthening international value chains, the need for adequate policy intelligence and policy learning capacities (Nauwelaers et al. 2015).

Another relevant condition for the successful development of RIS3 identified in the literature review regards the institutional capacity characterising the concerned regions. In the early phase of RIS3 development, the institutional context and capacities required were assumed as given. However, mounting evidence shows that this is one of the significant factor affecting RIS3 implementation (Foray et al. 2018). In the first place, RIS3 requires a functioning regional innovation system (RIS). **RIS3 are built on the predicament that a quadruple helix governance system should exist to support the design and implementation phase.** Participation of all relevant stakeholders in the decision-making process is essential for building on local knowledge to exploit the untapped potential. This participatory approach is also a necessary characteristic of place-based development strategies. The inclusion of lower-level local actors, which would usually be excluded from shaping top-down centrally-organised policies, is supposed to guarantee that development benefits are diffused and distributed throughout the local economic system. This approach is meant to ultimately avoid “policy capture”, whereby major players can shape and influence the policy design and deliver in their interests (McCann and Ortega-Argilés 2016a).

Yet, in many EU countries and regions, national and regional innovation systems are still fragmented. Local authorities engaged in the RIS3 design lamented the **difficulty of engaging firms and civil society groups in the priority-setting process** (Guzzo et al. 2018a). Other factors that can hinder RIS3 developments are “capacity building barriers” at work in catching up regions, namely absorption and networking capabilities, (Papamichail et al. 2019). Interactions among the various actors are infrequent and of limited strategic value, which inevitably limits trust and impedes collaborations. Regions with less-developed research and innovation (R&I) systems tend to be over-bureaucratic, over-politicised, non-responsive, non-transparent, lacking strategic vision, with

widespread rent-seeking behaviour and low trust among the key actors. Their underdeveloped institutional framework, together with a general risk-averse attitude, limit significantly the capacity to exploit the EDP/RIS3 process (Blazek and Morgan 2018). In such a context, **managing an intensely collaborative process** - as the EDP seeks to be - is at best challenging. Worst, it is argued that EDP could put regions in various lock-in scenarios given the focus on existing structures and the potential influence of vested interests on crucial decisions about priorities (Hassink and Gong 2019). In response to these different difficulties, Foray has recently reconsidered the necessity to choose priority areas through EDP and proposed using formal analytical methods (Foray 2019).⁸

Administrative capacity

Moving further on the continuum of issues hindering the effective implementation of RIS3 towards less structural factors, possibly more amenable to RIS3 support, administrative capacity also appears to be a central determinant of RIS3 performance. Administrative capacity and governance are considered to be necessary to drive a diversion from path dependency and lock-in patterns on established technological and industrial structures (Landabaso 1997; Reid and Stanovnik 2013). RIS3 requires strong leadership, enabling public administration, vision, openness to the external world, and the institutional and administrative capacity to promote an EDP and monitor the evolution of the strategy (European Commission 2017a).

Administrative capacity can be said to have three dimensions: governance structure, human resources, systems and tools (European Commission et al. 2016). In the case of RIS3, the literature reveals a series of issues along these three dimensions, making it difficult to design and implement RIS3 in their different components (prioritisation, EDP, etc..).

Among the most pressing challenges faced by administrators while building the management teams were reported to be internal **bureaucratic hurdles, lack of resources for recruitment and training, insufficient coordination** among government departments and the limited availability of skills at the local level (Guzzo et al. 2018a). The lack of skilled personnel involving and managing stakeholders for RIS3 was placed at the root of this problem within many public administrations (Guzzo et al. 2018a). The presence of a dedicated administrative and technically competent management team was pointed as a key factor for the success of prioritisation (Gianelle et al. 2018).

Some public administrations suffer from a **knowledge deficit** affecting their ability to perform, for instance, the preliminary analysis of the regional context and potential necessary to prioritise (Foray et al. 2018). Guzzini and Iacobucci (2016) examined the studies underlying the choice of priorities and found they were mostly incomplete, not grounded on robust methodologies and instead based on qualitative/anecdotal considerations. According to the authors, this circumstance was mainly motivated by a lack of clarity in the RIS3 guidelines on relevant methodology. The availability of tools for analysis and comparative assessment of regional economies was reported as one of the most pressing challenges faced by regions also by Gianelle et al. 2014. Other research suggests that regions struggle with lack of data, availability of data when needed (timeliness), lack of evaluation studies and monitoring information on past policies. This situation makes the analysis of the regional context difficult (Guzzo et al. 2018a).

⁸ D. Foray recently acknowledged that this "provision was very difficult to follow and generated a high level of stress within the community of regional policymakers. And this was unnecessary" (Foray 2019).

Patterns across Member States and regions

All these different factors of weakness, i.e., structural issues and management-related ones, combine to determine the varying degree of RIS3 success across MS and regions. The literature identifies different performance recorded by the constituent features of the RIS3 (EDP, prioritisation, M&E, appropriate governance, etc.), which to some extent depend on the levels of the Member States and regions' institutional development and administrative capacity. These differentiations show where (geographically and functionally) room for improvement is needed and therefore, where support could have a role to play.

The level of development and administrative capacity play a critical discriminating role and differs significantly across the EU-28 countries (Foray et al. 2018). Lack of administrative capacity has been observed in many backward regions (Capello and Kroll 2016). Specifically, institutional and governance capabilities can be particularly weak in regions in Southern and Eastern Europe. This peculiarity has implications for how both the EDP and prioritisation are carried out.

As far as EDP is concerned, evidence suggests that (...) *dialogue remains an ambitious objective in most regions with less-developed R&I systems* (Blazek and Morgan, 2018). Those regions experience an overwhelming dominance of universities and the academic world in the prioritisation exercise, which is skewed away from application-oriented strategies (Capello and Kroll 2016). RIS3 priorities in those regions have been often set based on existing academic research capabilities (Vallance et al. 2018).

It has been pointed out that most structurally weak regions might lack enough potential to develop promising entrepreneurial discovery processes because of their weak existing structure and limited institutional capabilities (Hassink and Gong 2019). This deficit could explain why the most successful cases presented in the theoretical literature are located in structurally strong regions (Foray 2015; Hassink and Gong 2019).

In structurally weak regions, governments, whose role cannot be understated, may simply lack the knowledge and capabilities to enter such a process (Kroll et al. 2014; McCann and Ortega-Argilés 2016a; Morgan and et al. 2016; Foray et al. 2018). In these cases, the gap between what RIS3 requires and the institutional capacity on the ground is so large that the policy design and implementation process varies little from traditional (top-down) governance modes (McCann and Ortega-Argilés 2016b; Gianelle et al. 2019). As some studies have shown, in some regions, participatory and collaborative EDPs were not even established, or they took place mostly symbolically (Foray et al. 2018).

For example, in Eastern European regions, the promotion of bottom-up consultation processes caused friction with top-down planning systems (Kroll et al. 2014; Kroll 2015a). In Greece, firms do not recognise regional governments as entities in charge of business development. Therefore, they do not attend round tables and conferences. Instead, bilateral meetings are organised to engage the private sector, thus limiting opportunities for collective learning and trust-building (Kroll et al. 2014). **EDP functions poorly also when local firms do not have enough knowledge and capabilities to participate** in the process actively. In these cases, regional governments might need to play a more prominent role in EDP, going beyond a facilitator/catalyst role (Magro Montero et al. 2011).

As far as prioritisation is concerned, a recent survey on the smart specialisation experience across European regions indicates that identification of priority areas through EDP is not perceived as problematic by the relevant public authorities. Only 31% of respondents found

that prioritisation is very difficult or difficult (Guzzo et al. 2018a). However, evidence collected on the ground shows that the process is fraught with difficulties and that it depends on the type of regions concerned. Structurally weak regions show a tendency to prioritise along with centralised policy objectives. They tend to replicate at the local level what is thought to be strategic at the national and worldwide levels (Capello and Kroll 2016). Five out of eight Southern regions in Italy have identified life science as an industry of specialisation and the remainder prioritised ICTs and bio-tech (Caramis and Fay Lucianetti 2016). These results raise some doubts about the appropriateness of specialisation/prioritisation patterns for the future development of these regions (Capello and Kroll 2016). On the contrary, the experience of countries with consolidated R&I policy capacity suggests that, while regions might have managed to narrow down priorities successfully, more can still be achieved in terms of horizontal-types of priorities (Kramer 2018). More in general, existing evidence reveals that the process has not always been fully understood and/or pursued by practitioners (Foray 2015; Gianelle et al. 2018).

On this basis, some analysts go as far as to consider that the effectiveness of RIS3 as an instrument to boost the economies of structurally weak regions should be seriously questioned (Hassink and Gong 2019). Foray suggested that intermediate regions, rather than extremely weak or advanced regions, are likely to be those who can benefit the most from RIS3 (Foray 2019). Without entering into this discussion, for this study, it should be considered that **categories of regions record varying degrees of success in their RIS3. Such results presumably imply that they have different needs for support.** Box 4 offers an example of typology.

Box 4. A typology of regions facing different challenges in RIS3

Three categories of regions are identified that reflect different points of departure and therefore encounter distinct challenges in RIS3 preparation/design and implementation (McCann and Ortega-Argilés 2016b). The “**starters**” are those member states and regions where the practice of smart specialisation was introduced in 2014-2020; they had institutional obstacles in terms of traditional planning cultures and centralist governance systems hindered the process. The “**active beneficiaries**” are regions with some previous experience with elements of the process (e.g. participatory approaches). Most of these regions, however, faced severe budgetary pressures throughout the economic and financial crisis of the last decade. The “**drivers**” are the countries where regional innovation policy was already well-established before 2014-2020. These countries faced the challenge of amending already established routines, overcoming fragmentation and improving coordination.

The three categories covered, respectively, **Central Eastern European countries, Southern European and Northern countries**. In Central Europe, a need was perceived to change administrative routines prompted by broad-based consultations. In Southern Europe, the initial lack of resources and professional capacity to successfully perform RIS3 processes was considered an opportunity. These countries suffered the pressure to rationalise the support measures in the wake of the financial crisis and seized the moment to introduce novel approaches. In Eastern Europe, there was a general mismatch between RIS3 ideas and local governance systems, which did not allow to exploit the full potential of the smart specialisation approach. Northern countries, as frontrunners, had to go through a process of adjustment and adaptation, which was sometimes a contested process.

Source: Kroll et al. 2014; Kroll 2015a

Policy learning and support

The hypothesis flowing from the evidence above is that **different categories of regions need diverse support measures** to address their respective area of weakness. Some issues are so structural that they seem *prima facie* out of the reach of RIS3 support. However, the literature identified promising learning possibilities, which lead to

encouraging hypotheses that RIS3 support can make a difference. A thin line distinguishes needs beyond the remit of support and those for which support can do something. TA/RIS3 support cannot have a direct and immediate impact on structural factors. Still, it can ignite a gradual process of change by focusing on administrative capacity or spearheading new practices.

The literature points to several transformative processes initiated by the introduction of the RIS3 approach. In several regions, especially the most backward ones, opening up to the smart specialisation approach has led to changes within single innovation actors – in terms of their roles and governance - as well as across the regional innovation ecosystem. It has also influenced intensity and modes of collaborations within the ecosystem (Frohlich and Hassink 2018; Vallance et al. 2018; Tripl et al. 2019). Recent evidence has shown that structurally weak regions benefit from policy learning and system building efforts (Tripl et al. 2019). One of the effects of RIS3 processes in those regions may lie in their contribution to changing routines and practices of governance (Kroll 2015a).

2.1.2 Needs for support related to regulatory obligations

As mentioned earlier, the adoption of a smart specialisation strategy was introduced as an ex-ante conditionality in the 2014–2020 programming period, and it will be the object of an enabling condition in the 2021–2027 programming period. A series of criteria is thus provided to assess compliance with these conditions (see Box 5, below).

Box 5. Ex-ante conditionality and enabling condition

During the 2014–2020 programming period,⁹ **ex-ante conditionalities** were introduced to ensure that the necessary conditions for the effective and efficient use of ESI Funds are in place. There were seven general ExAC and 29 thematic ExAC which set out sector-specific conditions for relevant investment areas under 11 Thematic Objectives. In order to be able to access funding under Thematic Objective 1 (TO1) “Strengthening research, technological development and innovation”, the corresponding ex-ante conditionality requires that **a national or regional smart specialisation strategy is in place** that:

- a) is based on a SWOT or similar analysis to concentrate resources on a limited set of research and innovation priorities;
- b) outlines measures to stimulate private RTD investment;
- c) contains a monitoring mechanism.

Besides, a framework outlining available budgetary resources for research and innovation must be adopted.

For the 2021–2027 programming period, the new **enabling conditions** will continue the approach introduced by the *ex-ante* conditionalities. These are fewer and more focussed on the goals of the fund concerned. Each enabling condition will be linked to a specific policy objective (reduced from 11 to 5 in the post-2020 programming period). In contrast to the 2014–2020 period, **the principle will be strengthened since being monitored and applied throughout the entire period**. MS will only be able to declare expenditure related to specific objectives when the enabling condition is fulfilled. If the enabling condition results to be no longer fulfilled, MS will be given the opportunity to present observations within one month. They will be able to include expenditure in payment applications only once the fulfilment is ensured again (Art 11, COM (2018) 375 final).

The enabling conditions will still **include smart specialisation strategies to guide investments in research and innovation**. The policy scope of smart specialisation has been enlarged to cover also SME support and digitalisation and skills for RIS3. Accordingly, new criteria have been added. Overall, **seven fulfilment** criteria have been agreed (Council of the European Union, 2019) for meeting the enabling condition for smart specialisation:

- Analyses of challenges, including bottlenecks for innovation diffusion.

⁹ Regulation (EU) No 1303/2013 of the European Parliament and the Council of 17 December 2013 laying down common provisions on the ERDF, the ESF, the CF, the EARFD and the EMFF.

- Existing competent regional/national institutions or bodies, responsible for the management of the smart specialisation strategy.
- Monitoring and evaluation tools to measure performance towards the objectives of the strategy.
- A functioning stakeholder co-operation, i.e. entrepreneurial discovery process (EDP).
- Actions necessary to improve the national or regional research and innovation systems, where relevant.
- Actions to support the industrial transition, where relevant
- Measures for internationalisation.

Amongst these, there are **core fulfilment criteria** subject to a strict assessment of compliance a *sound EDP, governance and monitoring and evaluation* – while the **other criteria** will give rise to an **open dialogue** between the European Commission and the MS and the regions as the policy cycle unfolds. The fulfilment will no longer be a one-off exercise at the beginning but will be **ongoing** during the whole programming period.

Source: CSIL based on EU Regulation 1303/2013 and Council of the European Union (2019)

The fulfilment criteria for the enabling condition, which will be introduced with the 2021–2027 regulations provide a useful reference to identify corresponding regions' need for support and organise them by blocks of macro-needs. With a view of producing operational recommendations for the post-2020 programming period, Figure 5 offers a synthetic view of the needs for support identified in the literature, grouped in categories that correspond to these fulfilment criteria. It can be read as follows. To address these blocks of needs, different support tools were provided in 2014-2020, ranging from non-customised to highly-customised instruments. The relevance and effectiveness of each support tool vary for each region based on the type of need and the policy stage.

Figure 5. Map of needs for support to RIS3



Source: CSIL elaboration

The sections below detail the core elements considered in this mapping exercise, starting with the three fulfilment criteria at the core of RIS3.

Competent regional/national institution or body, responsible for the management of the smart specialisation strategy

This fulfilment criterion focuses on the presence of structures to manage strategies, rather than on overall governance requirements. The identification of competent bodies and the precise definition of tasks, roles and responsibilities is a pre-condition for a good RIS3, as outlined in the RIS3 Guide and assessment wheel. These factors are embedded in the governance arrangements for the region. At the stage of implementation, governance and administration matters were perceived to be the most challenging tasks in Southern European regions (Kroll 2015b).

The lack of skilled personnel involving and managing stakeholders for RIS3 was reported as a problem within public administration. Internal bureaucratic hurdles, lack of resources for recruitment and training, insufficient coordination among government departments and limited availability of skills at a local level were among the most pressing challenges faced by administrators while building management teams (Guzzo et al. 2018a). A dedicated administrative and technically competent management team was emphasised as a critical factor for the success of prioritisation (Gianelle et al. 2018). Coordination and communication difficulties between the various structures (ministries and organisations) involved in smart specialisation hampered the capacity to combine all available expertise in one, working unit. This instance was particularly pressing for less developed regions. Better coordination within administration areas – reported by leading regions of Central, Northern and Southern Europe (Kroll 2018a) - and between levels of territorial governance was said to be a relevant tool to address the regions' needs (McCann and Ortega-Argilés 2016b).

The combination of different needs, agendas and expectations of the various territorial levels was perceived as a fundamental challenge among others related to the RIS3 governance for the elaboration of a shared vision for the future. Back in 2015, the UK and Ireland experienced ambivalent political perceptions and lack of political commitment, which might have resulted in the discontinued use of this approach (Kroll 2015b). The lack of clear political commitment for a more active engagement of sub-regional governments and stakeholders were included among the implementation challenges experienced by EU regions in the following years too. The lack of trust between authorities and actors placed at different territorial levels was also included among the emerging needs (Guzzo et al. 2018a).

Functioning stakeholder cooperation and “entrepreneurial discovery process”

The entrepreneurial discovery process is the central element of both RIS3 preparation/design (prioritisation) and implementation. EDP was included as a milestone in the implementation guide (Gianelle et al. 2016), and it constitutes a continuous and iterative search and refinement process of priorities. **A pre-condition for the success of the EDP is that local administrations shall be used to work closely with businesses and be open to their views.** In regions more in need of “publicly triggered EDP” public administrations tended to be locked into a traditional planning culture, lacked strategic capacities and were sub-optimally connected with the regional business sector. Thus the smart specialisation approach faced a substantial “EDP paradox”. In general, the process requires the participation of a wide range of stakeholders, to define a limited number of clear priorities at the outset (Capello and Kroll 2016).

Prioritisation, in particular, requires specific governance arrangements. The capacity of the strategy management bodies to effectively support and monitor the development of vast sets of activities is crucial for a functioning EDP. Each of these sets of priorities potentially requires specific competences, dedicated administrative and technical resources (Gianelle et al. 2018, 2019). The selection of priorities may be hampered by very dense priority trees and a series of factors (lobbying, a higher political return for widespread public support measures), a risk-averse attitude of policymakers and the cross-cutting lack of adequate institutional and administrative capacity (OECD 2013; Gianelle et al. 2014).

A continuous EDP is necessary to keep stakeholders engaged in the refinement of the priority-areas, identification of policy instruments, and in the RIS3 governance and monitoring mechanisms that help map and deliver the strategy throughout RIS3 implementation (Marinelli and Forte 2017). The UK case shows that improving the links between public, private sector, civil society and universities is critical for the success of innovation policies. This outcome applies to the EDP, especially, given the fundamental role of the quadruple helix model in EDP (Ortega-Argilés and McCann 2014). A key challenge is the restricted engagement in active processes of entrepreneurial discovery at regional level (Capello and Kroll 2016), in particular, an active engagement of the civil society. Empirical evidence shows that, in several countries, civil society was rarely involved in RIS3 design (Polverari 2016, 2018). Also, some types of businesses (local branches of global corporations and start-ups) are often under-represented in the EDP (Guzzo et al. 2018a). Getting enterprises involved was mentioned as a critical challenge in priority selection, and the involvement of SMEs was perceived to require strengthened support in RIS3 implementation (European Commission 2017b).

Monitoring and evaluation tools to measure performance towards the objectives of the strategy

Monitoring and evaluation are carried out through instruments that allow measuring the achievement of target indicators on performance. The RIS3 guide conventionally identified the set-up and integration of monitoring and evaluation mechanisms as a pre-condition for smart specialisation strategies.

Survey respondents of the JRC study on RIS3 implementation (Guzzo et al. 2018a), reported this task as the most challenging of the six steps of the RIS3. Overall, setting up a monitoring and evaluation system was found demanding in terms of analytical capacity, primary data collection endeavour, resources and the participation of actors. Monitoring the progress of the overall strategy and the development of specific R&I priority areas were especially demanding. The use of information gathered was hampered by technical barriers: the measures took a long time before they could show significant outcomes, the data could not be broken down in sufficient detail to be useful, and monitoring and evaluation findings were not readily available when needed. Data availability and comparability in monitoring systems at the regional level were also perceived as critical determinants of RIS3 success. In particular, the access to quantitative and qualitative data already gathered was reported to be extremely relevant at all territorial levels (Guzzo et al. 2018a) (Gianelle and Kleibrink 2015). The EDP also puts strains on the monitoring and management systems for RIS3, for which appropriate data and monitoring tools are required (Vezzani et al. 2017). A gap in the availability of suitable indicators and processes also affected the monitoring and evaluation of policy mixes (Nauwelaers et al. 2015). The Fraunhofer ISI survey noted that the empirical basis offered by RIS3 monitoring mechanisms was still insufficient to justify strategy adjustment. It highlighted that more

and urgent support was required to strengthen the capacity to collect evidence and to design relevant monitoring systems (European Commission 2017*b*; Kroll 2018*b*).

Analysis of challenges including bottlenecks for innovation diffusion

The availability of instruments (tools for analysis and comparative assessment of regional economies) providing the necessary analytical underpinning for the process of strategy design, was arguably one of the most pressing challenges for the design and implementation of RIS3 (Gianelle et al. 2014). Other research found that the analysis of the context and potential for innovation could be hindered by several factors, i.e. the lack of data and the availability of data when needed, the lack of evaluation studies and monitoring information on past policies (Guzzo et al. 2018*a*). The provision of forecasting technology and market tools (e.g. market-mapping tools/data-sets) emerged as a need too (European Commission 2017*b*). More experienced regions considered the requirement of SWOT analyses, for instance instead of scientific reviews, to be too limiting, in comparison with the more advanced use of analytical tools in place in their regions (Fraunhofer ISI 2013).

Specifically for innovation diffusion, a crucial challenge was the demanding creative decision process, whereby investments in knowledge and human capital had to be matched with the identification of areas of specialisation and knowledge domains in territories. The search and discovery process had to put the entrepreneurial base centre-stage, in a bottom-up process of reorientation towards new innovative and related fields (Camagni and Capello 2013). Challenges to this process were, for example, the resistance to bottom-up approaches, which has often been noted (Capello and Kroll 2016), the lack of a lively entrepreneurial base or dynamics - a criterion to be assessed in the first stage of the wheel - or the difficulties in engaging the entrepreneurial base, local élites and all stakeholders, among which HEI and the civil society (McCann and Ortega-Argilés 2015). Challenges in getting civil society groups involved and the lack of skills and capabilities in some groups of stakeholders were also reported (Guzzo et al. 2018*a*).

Actions necessary to improve national or regional research and innovation systems, where relevant

The improvement of research and innovation eco-systems has several dimensions, which can be ultimately addressed through a holistic approach to policy-making, including all public policy areas with implications for innovation. The challenges emerging in this respect were associated to the existence of different rules governing various funding sources, and, contextually, the difficulty in creating synergies between policies and funding managed by different organisations from different territorial levels (EU, national, regional). Also, a general lack of skills and capabilities within administrations was perceived to affect the policy mix tailoring. Last, some crucial challenges related to the engagement of universities, public research organisations and enterprises (Guzzo et al. 2018*a*). Moreover, the reorganisation of old policy mixes and the design of new policy configurations required an open attitude towards change on behalf of the public administration (Nauwelaers et al. 2015). The Europe 2020 flagship initiative Innovation Union document provided a self-assessment tool on the features of well-performing national and regional research and innovation systems, which can be used to guide the (self)assessment of this criteria, and the consequent actions needed (European Commission 2011).

Actions to support the industrial transition, where relevant

RIS3 is an opportunity to try new approaches to tackle different challenges of the industrial transition faced by the regions, both due to the heritage of past economic activities, but also the need to adapt to emergence of transformative technologies such as automation or additive print. For example, RIS3 can address the problem of a weak SME base (due to a strong heritage of carbon-intensive industries in a given region, for example). It can also help tackle unemployment resulting from deindustrialisation and limited investment opportunities linked to declining traditional industries. A pilot action on “Regions in Industrial Transition” – launched in 2018 by the European Commission – showed that RIS3 could facilitate a forward-looking approach to industrial transformation. Based on the experience of ten European countries and regions,¹⁰ specific lessons were learnt on how RIS3 can help address industrial transition. It can boost innovation capacity, remove investment barriers, equip workers with the right skills and prepare for industrial and societal change (European Commission, 2019). A number of measures were identified to help address the challenges of industrial transition under four main headings (see Box 6). The pilot action showed that their regions’ identification and combination of measures might require expert support. Its results are expected to feed into the implementation of the smart specialisation in 2021–2027.

Box 6. Measures to support industrial transition

Promoting entrepreneurship and mobilising the private sector. Regions should aim to strengthen networks between industry, research, public services, and civil society, whose cooperation can help promote industrial diversification. Such systems can be built around regional innovation strategies, such as smart specialisation priorities, through open project calls and cross-cluster and cross-sector collaboration.

Preparing for the jobs of the future. Regions should continue upgrading the skills and production capabilities of existing industries, in order to modernise their local industrial base. At the same time, they should promote diversification of the local economy towards more future-oriented economic sectors (e.g. through mapping of industry and skills or regional skills foresight exercises), thus anticipating skills needs for an industrial transition.

Broadening and diffusing innovation. To address the lack of innovation capacity in SMEs and start-ups, regions should accelerate the digital transformation, expand business innovation networks with large businesses and support clusters as well as strengthen links between academia and local business spheres.

Ensuring a just and inclusive transition. Regions should provide individually targeted training not only to displaced workers but also to specific groups with lower employment rates such as women or young people. Furthermore, regions could better measure and integrate well-being indicators beyond GDP in regional development strategies as well as revive the peri-urban areas affected by a decline in local industrial activity.

Source: CSIL based on OECD (2019).

Measures for internationalisation

Transnational cooperation involves sharing knowledge, coordinating and exploiting synergies with RIS3 initiatives in other countries and regions. Three major challenges were identified in this area. A first challenge is how to **strengthen internal networks**, that may be somewhat fragmented in some regions. Transnational learning can support and reinforce the RIS3 process within the region. A second challenge is how to **strengthen a regional innovation eco-system** by opening it up and connecting to transnational or macro-regional knowledge networks. Transnational learning, comparative analyses and the

¹⁰ Hauts-de-France (FR), Norra Mellansverige (North-Middle Sweden), Piemonte (Italy), Saxony (Germany), Wallonia (Belgium), Cantabria (Spain), Centre Val de Loire (France), East-North Finland, Lithuania, Slovenia.

sharing of EDP outcomes may help regions identifying new strategic interests. A third challenge is how to **create economic growth through transnational collaboration** and innovation in a context characterised by varying access to leading R&D and upstream innovation facilities and skills needed in downstream testing and industrial upscaling. Cooperation may create links for these various regions to identify themselves and cooperate (Gianelle et al. 2016).

The need to strengthen cooperation with other regions and international networks emerged in particular from the public consultation on smart specialisation. Respondents demanded additional support for exchanging experiences, consolidating communities of practice, identifying potential partners to develop joint projects and sharing good practice (European Commission 2017b). In the 2017 version of the Fraunhofer ISI survey, a keen interest in additional funding for different types of interregional collaboration was reported, mostly among lagging regions (Kroll 2018b). Support for interregional cooperation was one of the areas for which the consulted authorities required strengthened support and demanded new support mechanisms. Further assistance for identifying and sharing policy instruments, mechanisms and good practices was found to be needed especially during the EDP (Marinelli and Forte 2017).

2.2 Perceived needs identified through primary data collection

This section confronts the hypotheses drawn from the literature review above with evidence from primary data collection (survey and interviews).

2.2.1 Overview

According to respondents to the survey, **setting the governance structure** and understanding the **RIS3 concept**¹¹ are the most pressing needs for the development of RIS3. The two following challenges by order of priority are: managing the **EDP** and **sharing good practices and knowledge** (see Figure 6). While there are expectations from the literature review that setting the governance structure and running the EDP would be a critical area requiring support, basic needs in terms of understanding of the notion and needs to exchange were downplayed.

¹¹ The question was "What were your needs in requesting support?"

Figure 6. Specific needs faced by MS and regions



Source: CSIL processing of the survey's data.

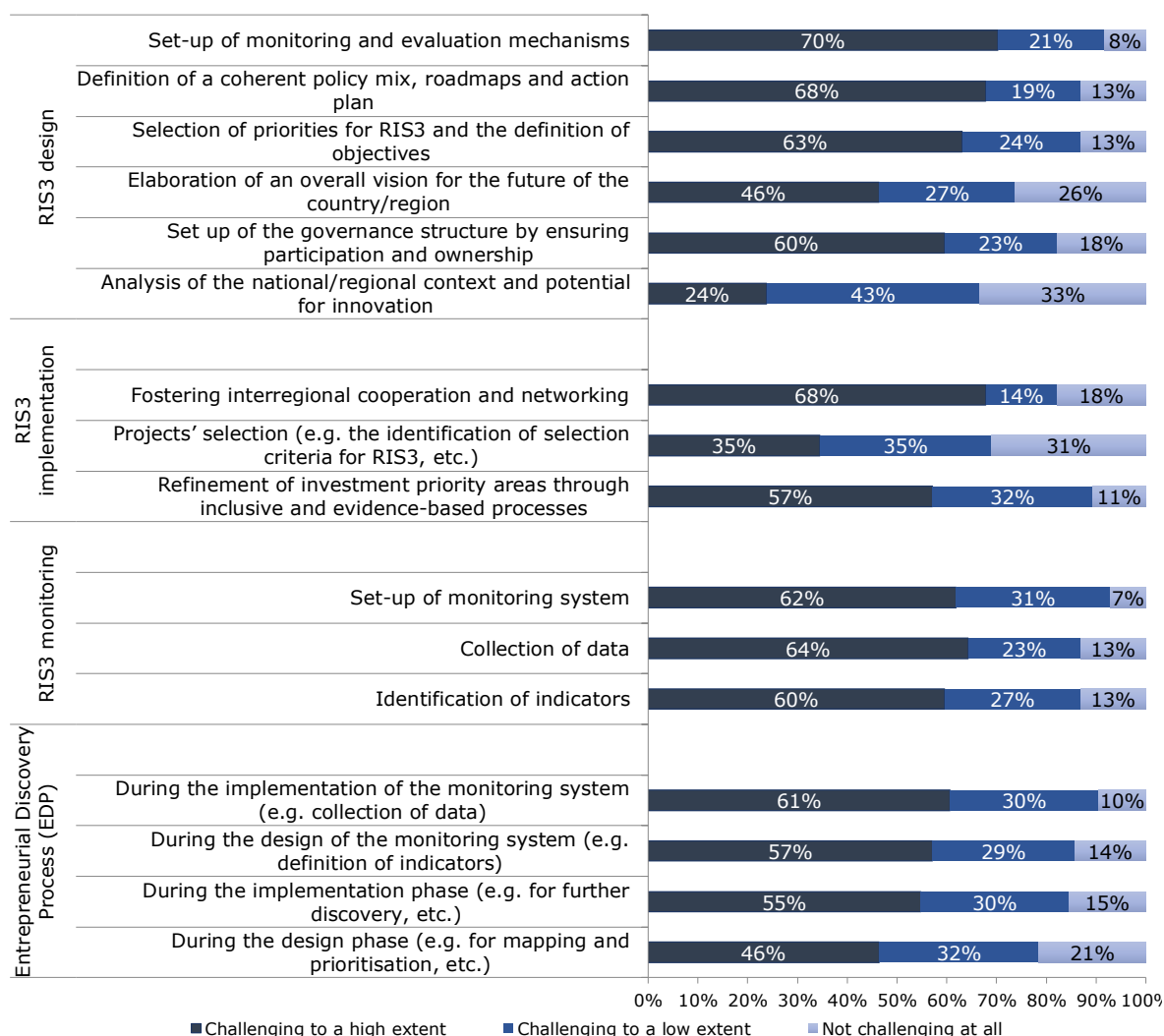
Note: Number of survey respondents (138 in total, of which 84 Authorities dealing with RIS3 at the national and regional level and 54 Managing Authorities responsible for ESIF management)

In contradiction with evidence from the literature, less pressing needs concern the prioritisation exercise or the translation of priorities into projects.

For consulted stakeholders, *a priori* needs are most pressing during the **design phase**. In contrast, less urgent needs for support characterise the implementation phase. Again, this outcome contrast with the literature, which identifies many hurdles during implementation. Figure 7¹² below confirms that respondents to the survey considered specific matters to be more challenging during the design phase. In particular, the integration of monitoring and evaluation mechanisms in the strategy, the definition of a coherent policy mix, roadmaps and action plan and the identification and selection of priorities were considered to be the most challenging steps. In relative terms, the need to foster interregional cooperation and networking has been identified as the most challenging step during the **implementation phase**, followed by the refinement of investment priorities areas. Setting-up and running a monitoring system has been considered one of the significant challenges by most countries and regions during the design phase. In contrast, data collection has represented a problematic step during the implementation phase. For regions reviewed, introducing and employing the EDP and setting and implementing the monitoring and evaluation systems are significant challenges across all stages.

¹² The question was "how challenging are the following steps?" – therefore independently from the request of support.

Figure 7. Most challenging steps across phases of RIS3



Source: CSIL processing of the survey's results.

Note: % of survey respondents (Total of 84 Authorities dealing with RIS3 at national and regional level).

2.2.2 Evidence from interviews/workshop

Qualitative evidence from interviews and the workshop illustrates the reasons why challenges and needs for support were considered to be relevant and for whom – what type of region.

Needs for support during the design phase

Understanding the notion

Evidence from interviews and workshop showed that the introduction of the RIS3 approach implied to overcome old modalities and procedures in favour of a more place-based and strategic approach to innovation strategies. This adjustment involved a mind-set change in the policy design, in which different strategies should coexist beyond and across administrative boundaries, sectors and level of governments. **Understanding the RIS3 approach** was reported to be difficult **for most regions reviewed** (see Box 7).

This difficulty has been detected primarily in countries that were new to designing an innovation strategy (*Greece, Andalucía - ES, Abruzzo - IT, Molise - IT, Malta, Lubuskie - PL, North East - RO*). However, understanding RIS3, as it was introduced by the Commission in 2012, proved complicated even for regions that had already developed a

regional strategy for innovation. For them, the RIS3 approach was entirely new, and they had to adapt these strategies to the EC requirements (*Lubuskie – PL, Northern Netherlands– NL, Saxony – DE, Östergötland – SE*).

Box 7. Examples of difficulties in understanding the RIS3 concept and benefits

Greece	"The country faced challenges during the design phase, especially with regard to the understanding of the concept of the smart specialisation. In particular, both the notions of Smart Specialisation and Entrepreneurial Discovery were new and challenging in many aspects: conceptualization, implementation, governance, monitoring, evaluation, mobilization of stakeholders etc."
Andalucía (ES)	"The support was most needed during the design phase in order to get a better understanding of the concept of RIS3 as well as to raise awareness among local and regional stakeholders on the importance to have it".
Abruzzo (IT)	"In general, the various types of support have been useful to understand the RIS3 concept better and to start the whole design process before and after implementation."
Molise (IT)	"The region encountered many difficulties typical of a small reality, where the RIS3 concept was new, especially in the local context, and therefore needed to be understood ".
Northern Netherlands (NL)	"During the design phase, the smart specialisation was a new concept, and there was not a strong knowledge of it . Therefore, the main challenge was understanding of the concept, before in a theoretical perspective and then in a practical one".
Lubuskie (PL)	"When it started to work on the RIS3, the region faced several needs, such as understanding the concept of the strategy, understanding how to design it and how to meet the EC requirements".
North-East Romania (RO)	"Smart specialisation was a new concept in Romania [...], and support helped to address the need to understand and bring the concept inside Romania ".

Source: CSIL processing of interviews

The need for support to comply with ExAC

In relation with the RIS3 concept understanding, the need to follow specific procedures defined by the Commission, and to comply with the **ExAC for accessing the European Structural and Investment Funds (ESIF), were perceived differently depending on the financial implications attached to the ExAC.**

Less developed and transition regions in Eastern (e.g. *Latvia, Lithuania, Lubuskie - PL, Pomorskie - PL, North-East - RO*) and Southern Europe (e.g. *Molise – IT, Algarve – PT, Greece*) faced difficulties in respecting the methodologies and procedures proposed by the EC. This aspect represented a significant challenge because, in these countries/regions, the importance of ESIF is higher. Thus, fulfilling the ExAC was of strategic importance to access European Funds.

Even more developed regions had difficulties in complying with the ExAC requirement. It happened to regions with an influential culture of innovation and already used to adopt regional development strategies in the field of innovation (e.g. *Austria, Bremen - DE, Saxony - DE, Central Jutland – DK*). In this respect, the issue was to adapt existing strategies in accordance with the new EC requirements. Still, the incentive to do so was less imperative because of the minor financial implications.

What proved to be challenging, as highlighted especially by AMI experts and EC officers, was the identification of **potential gains or benefits arising from the adoption of the RIS3 beyond the possibility of receiving funding** once the ExAC fulfilled.

The need for support to set an effective governance structure

Concerning issues arising concerning the **setting of governance structure**, evidence collected overall confirms the main findings from the survey. Amongst them, the lack of **local responsiveness, capacity and expertise** within the public administration are factors explaining why internalizing the RIS3 concept at the institutional level within a suitable governance structure has been hard in some regions, as highlighted by EC officers as well as AMI-CEI experts.

Prioritisation

Less developed and moderate innovators regions faced challenges with the **mapping and prioritising exercise** (Greece, Slovakia, Lithuania, Malta, South Moravia - CZ, Abruzzo - IT, Molise - IT, Lubuskie - PL, Slaskie - PL, Algarve - PT). Such difficulty also arose for **more developed regions** (PACA - FR), especially when dealing with coordination between different levels of governance (Östergötland - SE). Discussions at the workshop unveiled the political dimension of the prioritisation process, and its associated cost (opting for investing in priority areas at the expenses of others). Box 8 below provides a selection of examples.

Box 8. Examples of difficulties in the prioritisation exercise

Greece	Some difficulties in the definition of priorities were encountered in Greece, mainly because of the problematic mobilisation and involvement of relevant stakeholders for ultimately organising the steering groups.
PACA (FR)	<i>"The support was most needed during the design phase in order to understand the Commission's requirements better, especially concerning the prioritisation exercise. In fact, the region has a low specialised and not strongly industrialised economy and the identification of leading sectors in the field of innovation was quite difficult".</i>
Molise (IT)	The region Molise found the prioritisation exercise to be challenging due to the difficulty in involving stakeholders.
Lithuania	<i>"Among the challenges in the design of the strategy, the fragmentation of priorities and strategies was a key problem in the past. The second challenge was how to define the priorities".</i>
Lubuskie (PL)	<i>"Since the region was not specialised on specific sectors, the prioritisation process resulted to be very challenging".</i>
Slaskie (PL)	Some difficulties were encountered in the Slaskie region concerning the prioritisation exercise. The latter was more than once criticised by the business sphere , as only a few areas were included. This criticism was overcome only in 2018 when two areas were added.
Algarve (PT)	<i>"The main challenges faced by the region during the design phase concern the definition of priorities and, more in detail, the identification of challenges to non-traditional sectors open to innovation in an economy which, for almost 80%, is around the tourism sector. In this context, it was difficult to gather a sufficient number of relevant stakeholders (critical mass) (e.g. businesses, universities, etc.)".</i>
Östergötland (SE)	<i>"Prioritising at NUTS3 level took a lot of energy and costed some political capital and then making the people understand the concept and buy into it was demanding".</i>
Slovakia	The country identified, as one of the main challenges in applying RIS3 approach, the specification of domains of smart specialisation , which was hampered mainly by the lack of experts with experience in the field of strategic management of research and innovation in the public administration.

Source: CSIL processing of interviews

Sharing good practice and knowledge

All instances translated into the need of **sharing good practices and benchmarking**. Indeed, introducing an innovative approach such as the RIS3 “forced” the majority of countries and regions to rethink innovation policies in a new perspective. To comply with specific European requirements, they had to put in practice a completely new process. Having exchanges with other MS and regions, especially with the most similar ones, has been considered an essential element for promoting mutual learning and for identifying benchmark regions or good practice examples.

“Transversal” needs across phases: EDP and monitoring

The need for support to introduce and continue the EDP

The need to involve stakeholders and introducing/running the EDP has been felt across regions. Less developed and transition regions, where there is a weak culture of innovation or where administrations do not have the necessary expertise for gathering relevant stakeholders from different arenas for ultimately guiding the mapping and prioritising exercise, generally found the process more challenging (*South Moravia – CZ, Algarve – PT, Abruzzo – IT, Molise – It, Campania – IT, Lubuskie – PL, Pomorskie – PL, Andalucia – ES, North-East - RO*). As highlighted by some AMI-CEI experts, the **business sector was insufficiently involved** in the RIS3 process. This evidence has been confirmed by the fact that the countries and regions with significant difficulty in mobilising stakeholders within this process are generally transition and less developed regions or regions that, even though considered “more developed”, have a moderate propensity to innovate. In Greece, similar difficulties were encountered both at the national and regional level. This circumstance may be explained by the Country’s limited culture of innovation when RIS3 was introduced in 2014.

The need for setting and running the monitoring system

Evidence from in-depth interviews highlighted that designing and implementing the monitoring and evaluation system resulted in being a demanding task in terms of analytical capacity, data collection, resources and actors' participation. Existing literature unveiled that **data availability and comparability are perceived as key determinants of RIS3 success**. Consistently, it was one of the main difficulties registered while designing the monitoring system. Problems emerged in relation with the **selection of indicators** to align with the Operational Programme (OP), between the national and regional contexts (*Galicia – ES*) or with other European countries and regions, as well as between different sectors (Latvia). During the implementation phase, the main difficulties were data availability and accessibility (*Greece, Lithuania*). Moreover, the coordination of results between different levels (regional, national and European) was reported as a source of difficulty (*Molise – IT*), because of the comparability of results. This problem emerged due to the lack of uniformity in the taxonomy, indicators or code of specialisations used across different regions, even within the same Member States.

Designing and running the monitoring system has represented a challenge not only for less developed regions but also for more developed regions, thus independently from their level of development or propensity to innovate, or quality of governance. The identification of suitable indicators during the design phase as well as ensuring data collection during the implementation phase proved to be two main challenges also in countries and regions with a confirmed culture of monitoring and evaluation (see Box 9 below).

Box 9. Examples of difficulties with monitoring RIS3

Galicia (ES)	<i>"During the implementation, the main challenge concerned the set-up of the monitoring system, [...] which is a common challenge of Spanish regions. This need is the result of a lack of experience in this issue. The main problems concern the selection of indicators and the understanding of how the regional monitoring system should be aligned within the national or European context, thus with respect to other regions or Member States. In fact, while setting-up this monitoring system, each region has to design its own system but, in order to be comparable, there should be similar systems across regions and countries, and no guidance has been provided for further clarifying this aspect".</i>
Greece	<i>"The choice of indicators and the design of the monitoring system represented other challenges faced by the country during both the design and implementation phase."</i>
Latvia	Latvia experienced some problems regarding the monitoring system and more specifically on how to merge incomparable data in different sectors.
Northern Netherlands (NL)	<i>"During the implementation phase, another challenge faced by the region concerns the understanding of the monitoring phase".</i>

Source: CSIL processing of interviews

Needs for support during the implementation phase

Projects and priorities

In contrast with the findings from the survey, during the interviews, some stakeholders mentioned difficulties related to **translating RIS3 into projects** and **identifying projects according to the selected priorities**. Indeed, applying the RIS3 approach into practice meant to identify concrete projects to invest under the priorities identified in the RIS3 strategic document. Interviewees said that such difficulty was mostly related to the multi-level governance structure and the articulation of administrations in charge of designing and preparation RIS3 and managing OP.

Box 10. Examples of needs related to the development of projects by companies

Lubuskie (PL)	<i>"The main challenge the region has been facing - and is still dealing with - is the capacity of companies to innovate according to the innovation criteria established with the RIS3. Although several supports were spent in this regard (e.g. the one mentioned by the World Bank below), the companies are not able to innovate according to the criteria of the RIS3, and therefore the region is facing difficulties in spending money and finance projects".</i>
North-East (RO)	<i>"In the North East of Romania, the challenge was not only convincing DG Regio but also convincing the ministry to allocate money for projects. In the beginning, the national strategy and the calls for projects were mostly designed to comply with the ex-ante conditionality and state aid requirements. Then, it was acknowledged that, with too many restrictions, the stakeholders wouldn't participate. So, there was a need for the calls for proposals to reflect the capabilities of the stakeholders. There was a need to strike a balance between the strategic outcomes and the expectations of the stakeholders, so as to adjust the calls according to their expectations. In general, there is a need for better and more diverse programming".</i>
Östergötland (SE)	<i>"The challenge is that the investments do not correspond to a priority. In the Swedish case, when the regional RIS3-strategies are not clearly determining the allocation of ERDF, this funding is missing.</i>

Source: CSIL processing of interviews

Interregional cooperation

In-depth interviews confirmed that **fostering interregional cooperation** has been one of the primary needs characterising the implementation phase. Once the RIS3 concept has been understood and internalized within the political and economic ecosystem, countries

and regions have generally felt the needs to overcome regional barriers in their innovation policies, in line with the main trend which sees research and innovation networks increasingly global. This tendency concerns the need to remain competitive in the global economy, which requires identifying complementarities and exploiting new or existing value chains to ensure the competitiveness of MS and regions over time.

The need to promote interregional and international cooperation gained particular relevance in countries and regions with a more advanced ecosystem and an established culture of innovation (*Austria, Saxony – DE, Lapland – FI*). It was also felt where the support received during the design phase had proved to be relevant for building such culture of innovation (*South Moravia – CZ, Andalucía – ES, PACA – FR*), as shown in Box 11.

Box 11. Examples of the need to promote interregional cooperation

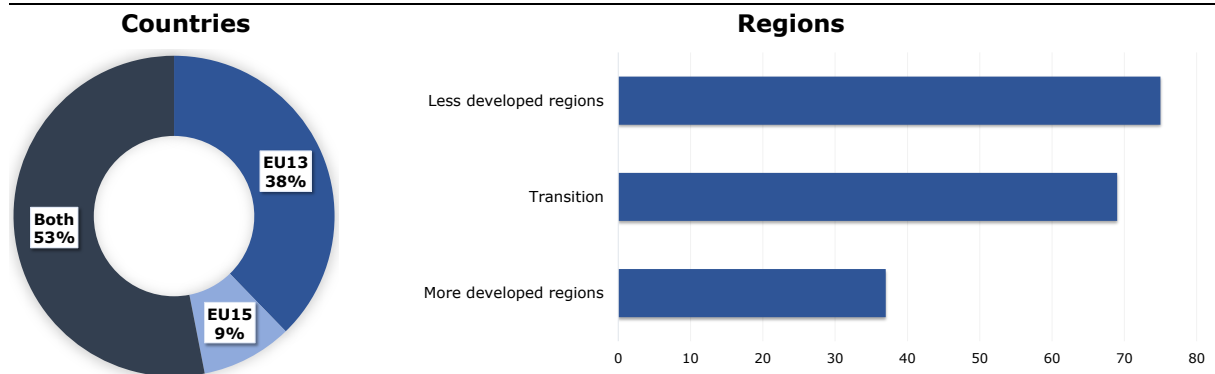
Austria	Austria regions show a keen interest in cooperating with other regions outside Austria to match their needs and strengths.
Saxony (DE)	Although recognising difficulties in managing funds to this end, Saxony highlighted the need to promote cross-border cooperation , thus strengthening partnerships already existing (e.g. with Poland or the Czech Republic).
South Moravia (CZ)	Amongst the most pressing needs, South Moravia identified the need for international or interregional collaboration .
Andalucía (ES)	Building partnerships and creating cooperation was also identified by the Spanish region Andalucía, which is one of the more actively involved regions in Thematic Platforms for RIS3.
Lapland (FI)	<i>"The underlying reason/need was simply for Lapland to be part of the European Union regions and actively play its part. They wanted to show that they had something to share and have the possibility to cooperate with the EU partners to exchange their knowledge. Also, they wanted businesses to be acknowledged".</i>
PACA (FR)	The identification of partners outside regional and national borders was also highlighted as one of the primary needs of the French region PACA, which is also involved in Thematic Platforms.

Source: CSIL processing of interviews

2.2.3 Needs for support across types of regions

When asked to identify countries and regions most in need of support, stakeholders with a broader overview (such as Managing Authorities, EC and JRC officers, AMI experts and academics), recognised that less developed and transition regions and EU13 countries might encounter more challenges, in conformity with findings from the literature. However, they do not exclude that more developed regions and EU15 countries also need EC support (see Figure 8).

Figure 8. Countries and regions most in needs



Source: CSIL processing of the survey's results. **Note:** % and number of survey respondents (98 in total, of which 54 Managing Authorities, 6 EC Officers, 9 AMI-CEI experts, 29 falling under the category "Others")

Moreover, when looking at the primary needs perceived by RIS3 Authorities at a national and regional level, differences between different types of regions can be noted, but lines are somewhat blurred. Some needs are shared by different kinds of regions, irrespective of the level of development or innovation performance. Understanding the concept and the benefits of RIS3 and complying with ExAC, setting the governance structure for RIS3, managing the EDP, setting up the M&E system and sharing good practices with peer regions are needs identified by most of countries and regions. An exception is represented by the need for promoting the internationalisation of national/regional actors, specifically felt by more developed and leader innovator regions.

3 MAP OF EC SUPPORT

In order to support regions in addressing the different challenges they face when designing and implementing RIS3, the **EC has devised a number of different instruments**, which can be classified according to their degree of customisation.

Non-customised and customised support are **spread across regions and countries and throughout the programming period**.

Highly customised support is **concentrated where needs are expected to be greatest** – i.e., in Southern / Eastern Europe. However, this takes place almost exclusively **during the design phase in relation to the fulfilment of the ex-ante conditionality**, and thus complex issues materialising during implementation are left unaddressed.

The **overall budget** of these support instruments is small compared to the budget available for smart specialisation strategies

In response to the needs identified above, the EC has devised several support instruments. A thorough mapping of the different EC support activities falling within this assessment and their classification in categories with homogeneous characteristics is proposed in this chapter.

3.1 Main features of the three categories of support

As introduced in Chapter 1, the level of customisation of the support was the main criteria to distinguish between the different forms of assistance. It relies on three different dimensions – namely the scope, the target and the final deliverable of the assistance – on which basis the EC support has been classified as **non-customised, customised** and **highly customised**. Table 1 below provides an overview of this classification. It also presents a mapping of the support activities offered by the EC over the period 2010–2018 (for a detailed list of all support activities, see Annex IV).

Table 1. Mapping of EC support

Category of support	Instrument
NON-CUSTOMISED	Guidance documents <ul style="list-style-type: none"> - 1 document for the design of RIS3: "RIS3 Guide", published in 2012 - 2 documents for RIS3 implementation: "S3 Implementation Handbook" (2016) and "Smart Stories, Implementing Smart Specialisation across Europe" (2016) - Additional guidelines: 26 commission guides, 13 data sources and 31 links for further support - 9 guidance documents drafted by AMI-CEI experts at EU28 level
	IT Tools <ul style="list-style-type: none"> - 7 tools, including Eye@RIS3; ESIF – Viewer; ICT Monitoring Tool; Regional Benchmarking; EU Trade; R&I Regional Viewer; Digital Innovation Hubs
	Knowledge repository: 123 studies and research analyses
CUSTOMISED	Events and workshops for: <ul style="list-style-type: none"> - Peer review workshops: 19 Peer reviews of Regional RIS3 2012-2014 - Thematic Platforms: 91 events/workshops + 15 contracts under the AMI List experts for Thematic Smart Specialisation Platforms (1 for the Global Methodology, 7 for the Agri-Food Platform, 7 for the Industrial Modernisation Platform).

	<ul style="list-style-type: none"> - RIS3 cooperation: 44 events/workshops - PXL workshops: 11 from 2015 onwards <p>Other events: 69 events/workshops</p>
HIGHLY CUSTOMISED	<p>Contracts under Call for Expressions of Interest (AMI – CEI) expert list¹³</p> <ul style="list-style-type: none"> - 142 contracts: 41 contracts delivered at MS level, 95 at a regional level and 6 both at a regional and national level.

Source: CSIL based on S3 platform and DG Regio data.

The following sections provide detailed information on each category of support.

3.1.1 Non-customised support

This category comprises support activities focused on **general topics** concerning the RIS3 design and implementation, addressed to a **broad audience** of stakeholders and providing as final deliverable a written document or an open link made available on the S3 platform (see Box 12 below). It contains **guidance documents**, research studies and analyses collected in the section **Knowledge Repository** of the S3 platform and **IT Tools**, as well as guides provided by AMI CEI experts at EU28 level.

Box 12. The S3 platform

The S3 platform was established in 2011 to provide information, methodologies, expertise and advice to national and regional policymakers, as well as promote mutual learning, transnational cooperation and contribute to academic debates around the concept of RIS3. It is hosted by the Institute for Prospective Technological Studies in Seville, part of the European Commission's Joint Research Centre (JRC). Main activities of the S3 platform are:

- Description and development of the RIS3 concept.
- RIS3 assessment.
- Support for development and implementation of RIS3 through operational programmes.
- Benchmarking and targeted support to individual Member States and regions.
- Support in creating value chains of the EU dimension building on RIS3 activities identified in the MS and regions (thematic RIS3 platforms).
- Conceptual and methodological guidance.
- Academic research and analysis.
- Mutual learning.
- Communication and events.
- Mirror group.

Source: CSIL

Several **guidance documents** have been drafted by the EC, JRC and by individual AMI CEI experts to support countries and regions with the design and implementation of the RIS3. Amongst these, the **RIS3 Guide**¹⁴ (issued in 2012) represents the reference document for the design phase while the **S3 Implementation Handbook**¹⁵ and **Smart Stories, Implementing Smart Specialisation across Europe**¹⁶ (both published in 2016) for the implementation phase. A brief description of these three documents is

¹³ It is worth highlighting that assistance from the AMI CEI experts may take place under all categories of support. In this classification, the contribution of AMI-CEI experts in drafting guidance documents is included within the category of non-customised support, while the contribution of AMI-CEI experts within the context of Thematic Platforms falls under the category of customised support and tailored support to a specific country or region is considered part of the category of highly customised support.

¹⁴ <https://s3platform.jrc.ec.europa.eu/s3-guide>

¹⁵ <https://s3platform.jrc.ec.europa.eu/s3-implementation-handbook>

¹⁶ <https://s3platform.jrc.ec.europa.eu/documents/20182/154972/S3PbookletFINAL-RE-EDITION.pdf/cc71c8a8-6722-4816-836e-014c24df185f>

provided in Box 13 below. The EC provided additional guidelines through the S3 platform (see Annex V for full details). They are *Commission guidelines* (e.g. focusing on SME, social innovation, EU institutions); *data sources* (e.g. KTES observatory data, FP4-7 data, EU cluster observatory data); *links* to relevant information (e.g. relevant organisations such as clusters, projects implementation examples), Also, ten guidance documents have been drafted and delivered by AMI CEI expert at EU28 level.

Box 13. Main guidance documents for the design and implementation of RIS3

RIS3 Guide

The Guide on Research and Innovation Strategies for Smart Specialisation is targeted at Managing Authorities of ESIF programmes, policymakers and regional development professionals. It sets out the concept and provides orientations on how to develop RIS3. It is structured around six practical steps: 1) *Analysing the innovation potential*; 2) *Setting out the RIS3 process and governance*; 3) *Developing a shared vision*; 4) *Identifying the priorities*; 5) *Defining an action plan with a coherent policy mix*; 6) *Monitoring and evaluating*.

S3 Implementation Handbook

Drawing on empirical evidence, "Implementing Smart Specialisation Strategies: A Handbook" targets policymakers and regional development professionals who are crafting their innovation policy according to a common set of principles and methodologies. The handbook aims at taking stock of the Smart Specialisation experience and presenting its current state of the art, both in terms of conceptual developments and practical implementation. It addresses five key milestones of the implementation process: 1) The Entrepreneurial Discovery Process (EDP) cycle: from priority selection to strategy implementation; 2) Good governance: principles and challenges; 3) From priorities to projects: selection criteria and selection process; 4) Transnational cooperation and value chains; 5) Monitoring.

Smart Stories, Implementing Smart Specialisation across Europe

The Smart Stories provide a direct account of how Managing Authorities implement their Smart Specialisation Strategies. By reflecting how managing authorities have used the RIS3 concept to develop their innovation-driven economic transformation agenda at a national and regional level, the leaflet provides a collection of over 30 such first-hand experiences as examples of good practices in the implementation of RIS3.

Source: CSIL based on the S3 platform.

Non-customised support provided by the EC includes **7 IT Tools**, which are freely accessible from the S3 platform. They aim to help countries and regions with different aspects of the RIS3 design and implementation, ranging from the prioritisation process (e.g. *EYE@RIS3*) to interregional cooperation and creation of partnerships among various actors throughout Europe (e.g. regional benchmarking). Box 14 below provides a brief description of these tools.

Box 14. IT tools supporting the design and implementation of RIS3

EYE@RIS3: Intended as a tool to help strategy development, this is an online database of RIS3 priorities by regions and allows to produce a realistic map of the process of RIS3 development.

ESIF – Viewer: Containing data from the ESIF Operational Programmes (OP), this tool is aimed at providing a search channel of planned investments in ESIF data (ERDF, CF, ESF and YEI) per country, region, OP-type and different categories of intervention.

ICT Monitoring Tool: This tool is similar to the ESIF-Viewer but focused explicitly on planned investments in ICT at a regional level, based on three broad dimensions: amounts, keywords and financial forms.

Regional Benchmarking: By helping to identify structurally similar regions across Europe, this is an interactive tool for Regional Benchmarking.

EU Trade: This tool provides the analysis of inter-regional trade flows and the competitive position of regions in Europe. It aims to make it possible to assess regional assets and analyse a region's economic situation as a first fundamental step in the process of building RIS3.

R&I Regional Viewer: This tool allows the comparison of Research & Innovation investments under different funding channels and EU programmes across EU Regions, i.e. economic indicators from Eurostat, planned R&I-related investments under ESIF, and Horizon 2020 funding captured by stakeholders.

Digital Innovation Hubs: Being an online catalogue, which contains comprehensive information on digital innovation hubs in Europe, this tool aims at helping companies get access to competences needed to digitize their products and services.

Source: CSIL based on the S3 platform.

Additional guidelines, data sources, as well as general studies and analyses, are also **provided within the Knowledge Repository,** which is freely accessible through the S3 platform. Their objective is to analyse different concepts related to the more general RIS3, such as Cluster policy, SMEs growth and innovation, social innovation, synergies with other EU innovation policies and programmes.

Overall, **123 studies and research analyses** have been counted in this repository.

- 44 of them deal with the content and dynamics of setting up thematic platforms;
- 35 deal with RIS3 cooperation activities and results (e.g. examples of projects);
- 26 deal with general aspects of RIS3 design and implementation (e.g. monitoring, EDP); 13 deal with the concept of smart specialisation in general, innovation processes and ESIF funds;
- 4 deal with peer reviews dynamics and results;
- 1 deals with the IT tool.

Some of these guides stem from AMI-CEI contracts whose aim was to deliver support to EU28 Member States and regions for a better understanding of these concepts.

3.1.2 Customised support

The category of customised support includes a variety of **hands-on support activities,** whose common denominators are the more specific topics. They aim to a **restricted audience** concerning forms of non-customised support and final deliverable, which generally consists of participating in an event or a workshop where support is delivered in a multilateral way of exchange. Groups of countries and regions are gathered together to discuss on a specific topic, which may range from general aspects related to the RIS3 design and implementation (i.e. the monitoring system, synergies between innovation programmes etc.) to the focus on RIS3 cooperation and thematic platforms.

Amongst them, **peer reviews** and **PXL workshops** gather groups of countries and regions for mutual learning and exploration of methods to design and implement RIS3. Nineteen peer reviews workshops were organised between 2012 and 2014. For these events, a group of regions are invited to discuss more general or specific issues related to smart specialisation. They act as peer-review of each other's work on RIS3; an open audience of regions is invited to attend. Since 2015, PXL workshops replaced peer reviews. So far, 11 of them have been organised. They involve a restricted number of MS and regions which share similarities (e.g. governance structure). Participants are invited to discuss specific aspects of the design and implementation of RIS3 with the main objective to learn from each other.

Within this category, **thematic platforms** are particularly relevant as they are created for further promoting interregional cooperation in different fields, such as **energy, industrial modernisation and agri-food sectors.** In this context, support is generally provided under the form of seminars and workshops. Still, starting from 2016, also AMI-CEI experts have been involved, to help regions to organise around these platforms. These experts generally support regions in elaborating concept and scoping notes or meeting notes following conferences or workshops dedicated to the promotion of cooperation within these specific fields. Overall, **91 events and workshops for thematic platforms** have been counted across EU countries and regions. In addition, **15 contracts** have been delivered **under the AMI CEI list of experts for thematic smart specialisation platforms,** of

which 1 for the global methodology, 7 for the agri-food platform, 7 for the industrial modernisation platform, for a total amount of 290,000 EUR.¹⁷

This category also includes workshops addressed to support the **S3 cooperation** amongst MS and regions by sharing insights about macro-regional strengths, comparative advantages and potential future growth areas. Overall, **44 events** related to the RIS3 cooperation were counted.

Further 69 other **events and conferences** were organised, still with a focus on RIS3 design and implementation and involving a wide range of countries and regions. Differently from the other forms of assistance falling within this category, they do not deal with thematic platforms, RIS3 cooperation, nor they pursue an exchange/mutual learning objective. They can be described as events addressed to inform MS and regions on aspects related to RIS3, such as EDP, innovation procurements, KETs, clusters, the status of RIS3 implementation, etc.

3.1.3 Highly customised support

Individual support to Member States or regions, implying a bilateral way of interaction as well as tailored recommendations relating to the design or implementation of the RIS3, falls under the definition of highly customised support. This category includes the support provided by the **experts appointed by DG Regio from the AMI-CEI list**, with more restricted target and the specific topic.¹⁸ Overall, **142 contracts** have been concluded to provide countries and regions support for RIS3 design and implementation.

An overview of the AMI-CEI contracts related to RIS3¹⁹ has highlighted that this kind of support has addressed the **revision of RIS3 strategies** during the design phase based on the EC RIS3 guide, the **assessment of compliance with the ExAC** and the **coherence with operational programmes** (see Table 2). The tangible outcome of support provided by AMI-CEI experts generally consists of RIS3 assessment grids or reports reviewing RIS3 strategies and analysing their compliance with the **ExAC**.

¹⁷ Basing on data provided by DG Regio.

¹⁸ If assessed, targeted supports – delivered in REMTh, lagging regions, stairway to excellence and the HESS project - would have been included in this category. From our review of the S3 platform, overall 54 activities within the category targeted supports have been delivered, including REMTh (9 events/workshops), RIS3 Support in Lagging Regions (17 events/workshops), Stairway to Excellence (20 events/workshops) and the HESS project (8 events/workshops).

¹⁹ Overview based on documents provided by DG Regio.

Table 2. Focus of AMI-CEI expert support according to the outcome documents

Focus of AMI-CEI expert support	Brief description	Type of document	Number of documents	Related budget (in EUR)
RIS3 assessment during the design phase	Assessment of the design process and RIS3 strategy following the steps envisaged in the RIS3 guide	-77 Assessment reports - 2 Reports - 5 Meeting notes/presentations - 9 N.A.	93	1.673.300
RIS3 assessment during the implementation phase	Assessment of the implementation process of the RIS3 strategy	-2 N.A.	2	100.000
Ex-ante conditionality compliance	Ex-ante conditionality compliance concerning research and innovation (1.1), research and innovation infrastructure (1.2) and digital growth (2.1)	-17 Assessment grids -2 Assessment reports	19	398.300
Ex-ante conditionality compliance and check of coherence with operational programmes	Check of coherence with the operational programmes in place in addition to the ex-ante conditionality compliance concerning research and innovation (1.1), research and innovation infrastructure (1.2) and digital growth (2.1)	-11 Assessment grids - 4 Assessment reports	15	453.700
Ex-ante conditionality compliance (ICT 2.2)	Ex-ante conditionality compliance concerning only Next Generation Network (NGN) – Broadband Infrastructure (2.2)	-1 Assessment grid -2 Assessment reports -2 N.A.	5	86.900
Support for RIS3 design	Practical actions envisaged to support the design of the strategy	-3 Meeting notes/presentations -4 Reports	7	126.100
Support for RIS3 implementation	Practical actions envisaged to support the implementation of the strategy	-1 Report	1	16.100
Total			142	2.854.400

Source: CSIL based on DG Regio data and documents on AMI-CEI contracts

3.1.4 Cost of support

The provision of non-customised and customised support is regulated by Administrative Agreements (AA) stipulated between JRC and the Commission every two years. These agreements cover five Work Packages on monitoring, interregional cooperation, communication and web tools etc. (see Box 15). Overall, there are about 20 people involved in the framework of each Administrative Agreements in addition to 15 other experts.²⁰

Box 15. Administrative Agreements between DG Regio and JRC

Between 2011 and 2018, three administrative agreements were concluded between DG Regio and JRC for the support of the S3 platform with the total value of **7 million EUR**, covering respectively the periods 2011-2013, 2014-2016 and 2017-2019²¹.

The **budget for the fourth phase**, covering the period **2017–2018**, amounts to around **2.2 million EUR** (European Commission, 2018). The objective of this latest agreement is to continue supporting the implementation, monitoring and evolution of the RIS3 strategies in MS by:

- (1) **RIS3 Implementation support**, including data collection, analysis, good practice examples and their dissemination, guidance material, training, monitoring of the implementation RIS3s and in particular **the production of an S3 Handbook with recommendations for actions based on lessons learned and cases/examples**;
- 2) **Thematic smart specialisation platforms** to foster cooperation around related RIS3 priorities (energy, industrial modernisation, agri-food and possible additional themes) among relevant policymakers, research and cluster bodies, enterprises, along value chains;
- (3) **RIS3 concept development**, including on monitoring, evaluation, support to RIS3 action plan completion, support to RIS3 revisions.

Source: CSIL based on the Tender Specifications and the EC 2018 Financing Decision on Technical Assistance – Annex I: ERDF & CF (European Commission, 2018).

As to highly customised support, the 142 contracts detailed in Table 2 above represent around **2.8 million EUR** covering the period 2012–2016.

Overall, the budget allocated to the provision of support for RIS3 is **small**. Resources amount to **9.8 million EUR** (7 million through the S3 platform and 2.8 million through AMI contracts). In contrast, **39 billion EUR**²² is the financing volume of the ERDF allocated to the Thematic Objective 1 Research and Innovation, which is subject to compliance with the RIS3 *ex-ante* conditionality.

3.2 Time distribution of the EC support

Non-customised support was made available across the entire period from 2010 onwards. Similarly, forms of **customised support**, including events and conferences, were organised since 2011, although a peak can be registered in their provision during the implementation phase. Peer reviews and PXL workshops represent an exception. The former was held across the design phase and the latter during the implementation phase. Conversely, **highly customised support** from AMI-CEI experts, was provided primarily during the design phase, over the period 2012–2014.

²⁰ Source: interviews with EC officials.

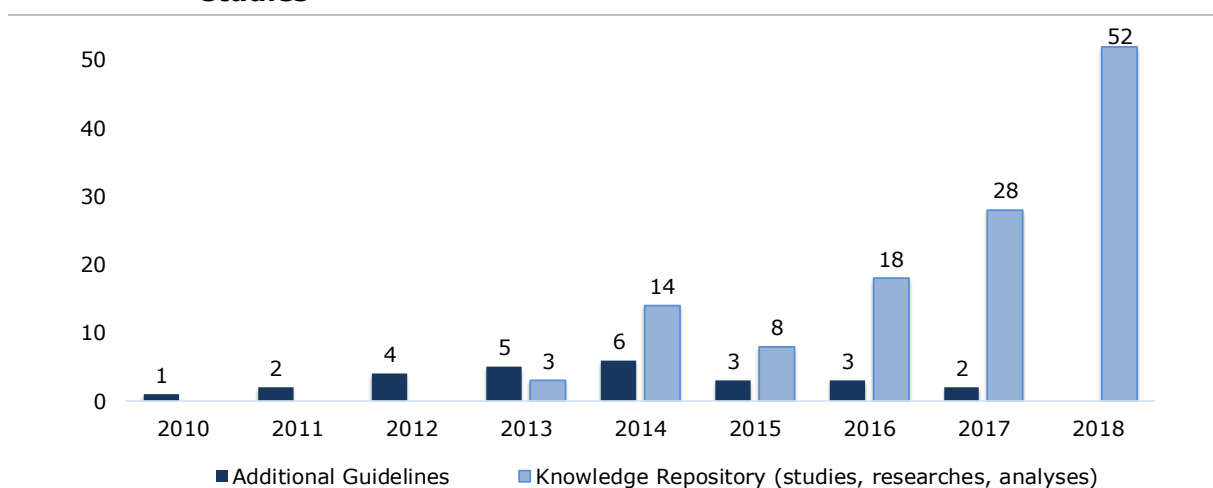
²¹ Source: Tender Specifications.

²² This information is retrieved from the JRC ESIF-viewer <https://s3platform.jrc.ec.europa.eu/esif-viewer>

As concerns forms of **non-customised support**, guidance documents, studies and research analysis of the Knowledge Repository and IT Tools were provided across the entire RIS3 policy cycle from 2010 onwards. More specifically, data sources, useful links and IT tools were made available since the creation of the S3 platform, across all RIS3 stages. The **RIS3 Guide** and the **S3 Implementation Handbook** represents two main pillars of the design and implementation phase, respectively. They were published in 2012 and 2016 respectively, without any additional update or modification throughout the remaining period.

Conversely, for additional Commission guidelines and studies and research of the Knowledge Repository, dates of publication show that the former was published especially during the design phase. In contrast, the latter was published primarily from 2014, as shown in Figure 9.

Figure 9. Time distribution of additional guidelines and Knowledge Repository studies

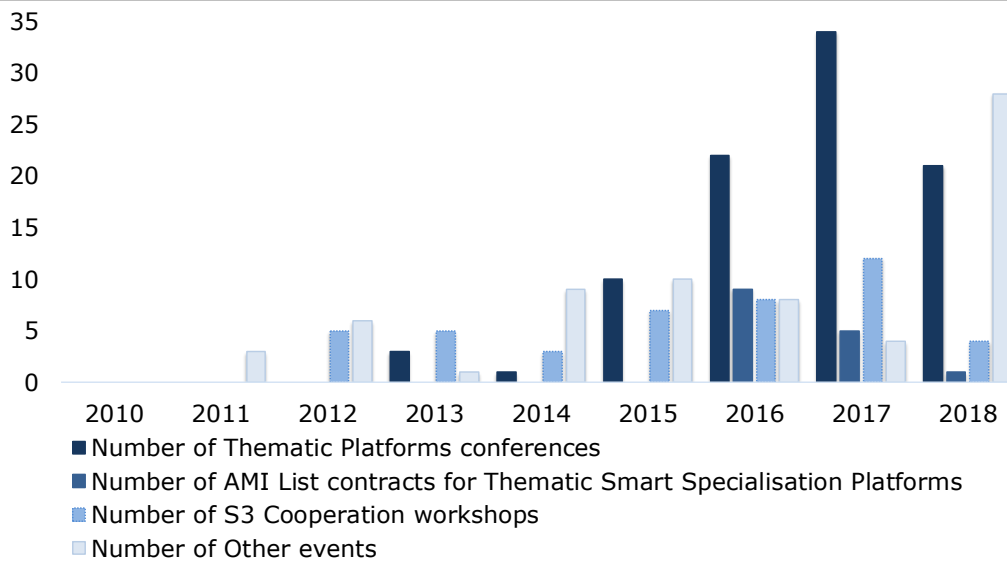


Source: CSIL based on desk research. **Note:** Number of guidelines and studies

In terms of customised support, Figure 10 shows that most of **events and conferences** were organised across the entire RIS3 policy cycle, with a peak during the implementation phase. Indeed, after 2015, a relatively higher number of conferences in the context of Thematic Platforms, S3 cooperation workshops and other more general events were organised.

More in detail, as concerns **Thematic Platforms**, conferences were organised since 2013, with a boom in 2016 and 2017, while experts of the AMI-CEI list were appointed for supporting Thematic Platforms particularly over the period 2016-2018, with the majority of contracts issued in 2016. Conversely, the organisation of **S3 cooperation workshops and more general events**, although provided since 2012, exploded in 2016 and 2018 respectively.

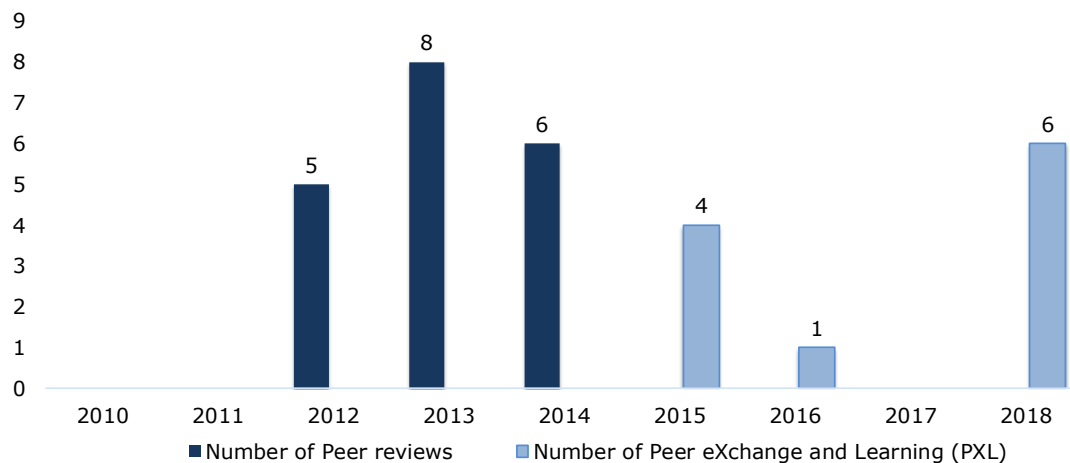
Figure 10. Time distribution of events and conferences



Source: CSIL based on desk research. **Note:** Number of contracts and events.

A more homogeneous distribution across RIS3 stages can be identified for **peer reviews and PXL workshops**. The former was organised since the introduction of RIS3 adoption as an ExAC for accessing ESIF until 2014. The latter, representing an evolution of peer reviews in practical terms, was provided over the implementation period, from 2015 onwards. Figure 11 shows that the number of Peer review workshops was high across the entire design phase period with a peak in 2013. Conversely, PXL workshops were less in relative terms and a comparable number of events only in 2018.

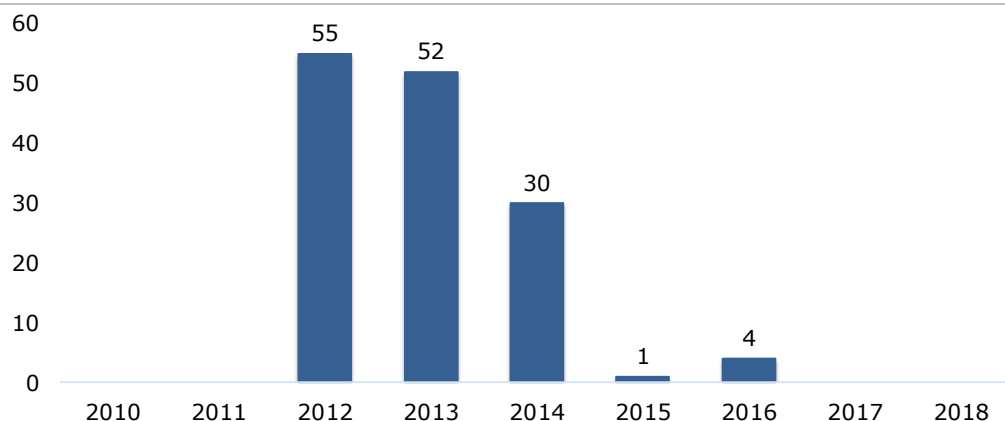
Figure 11. Time distribution of peer reviews and PXL workshops



Source: CSIL based on desk research. **Note:** Number of workshops.

Based on the data provided by the Commission, a different picture arises for the highly customised support for the other categories of assistance. As Figure 12 shows, AMI-CEI experts were appointed during the design phase, especially in 2012 and 2013 and, to a lesser extent, in 2014. During the implementation phase, instead, only a low number of contracts were issued in 2015 and 2016, respectively.

Figure 12. Time distribution of AMI-CEI experts contracts



Source: CSIL based on desk research. **Note:** Number of contracts.

More than 90% of AMI-CEI experts were appointed during the design phase, especially in 2012 and 2013. Similarly, nearly 90% of the total amount of resources, which is about 3.36 Million EUR considering all categories of support, was spent in the period 2011–2014 (see Annex IV).

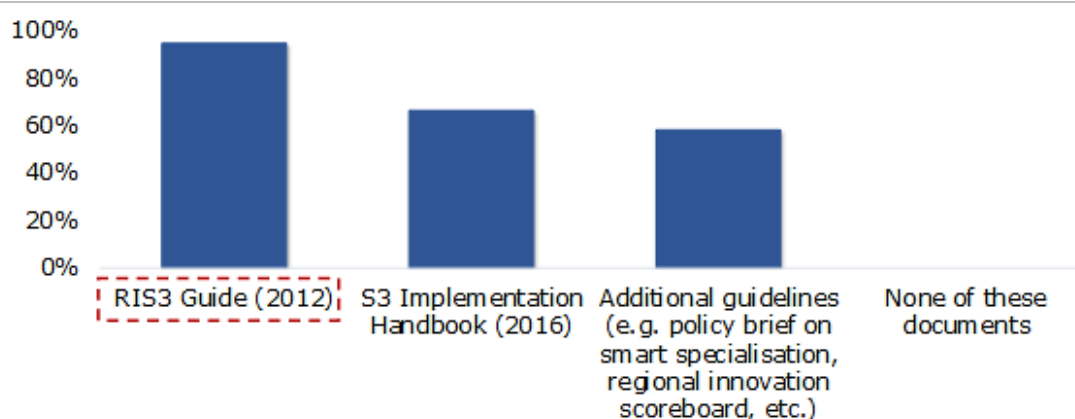
3.3 Geographical distribution of the EC support

This section provides an overview of the geographical distribution of the three different categories of EC support across the Member States and regions.²³

3.3.1 Non-customised support

According to the survey, **Guidance documents** were consulted by nearly all Member States and regions, implying an almost complete geographical coverage.²⁴ The **RIS3 Guide** – dealing with the design of the strategy - **is the most consulted one** (95% of authorities dealing with RIS3 and answering to the survey have declared to have used this guide), followed by the S3 Implementation Handbook published in 2016, as shown in Figure 13.

Figure 13. The use of guidance documents across users of the EC support



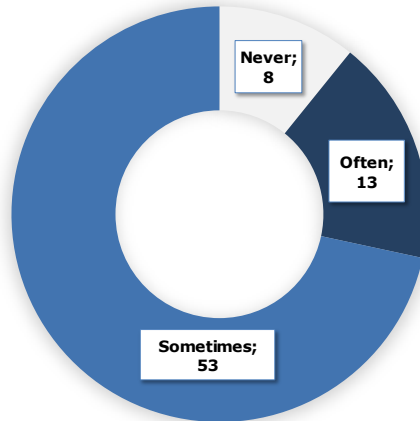
Source: CSIL processing of the survey's results. **Note:** % of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

²³ The following paragraphs relies on evidence from an in-depth desk review of the S3 platform (registered regions are considered as beneficiary of non-customised and customised support), in-depth interviews and survey. Evidence on the use of highly customised support draws on a review of the AMI-CEI contracts.

²⁴ There is no evidence that statistics are available on the number of downloads or on access to the IT websites

Similarly, Figure 14 shows that research analyses available in the **Knowledge Repository** section of the S3 platform were frequently accessed by almost all consulted stakeholders (only 11% of consulted stakeholders never consulted one).

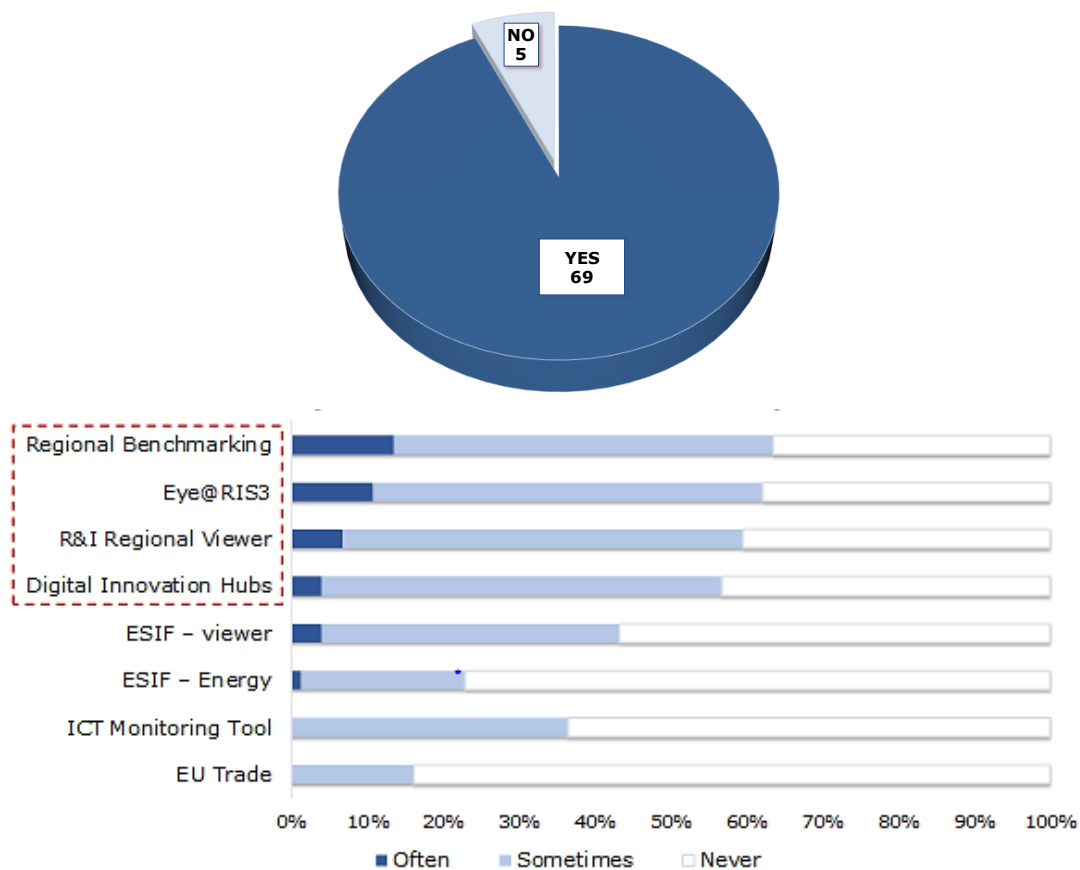
Figure 14. The use of the Knowledge Repository



Source: CSIL processing of the survey's results. **Note:** Number of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

Finally, according to the online survey, a majority of authorities dealing with RIS3 have used IT Tools "sometimes". Only a few respondents have not benefitted from this type of support. The IT tools most frequently used were the **Regional Benchmarking, Eye@RIS3 and R&I Regional Viewer**, followed by the Digital Innovation Hubs (see Figure 15).

Figure 15. The use of IT Tools



Source: CSIL processing of the survey's results. **Note:** Number and % of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

Among the **most used IT Tools**, more developed and transition regions or authorities dealing with RIS3 at a national level have accessed the S3 platform to consult the *Digital Innovation Hub*, *R&I Regional Viewer*, *Regional Benchmarking*, and *Eye@RIS3*. In comparison, less frequent use and knowledge of this type of support are noted amongst less developed regions.

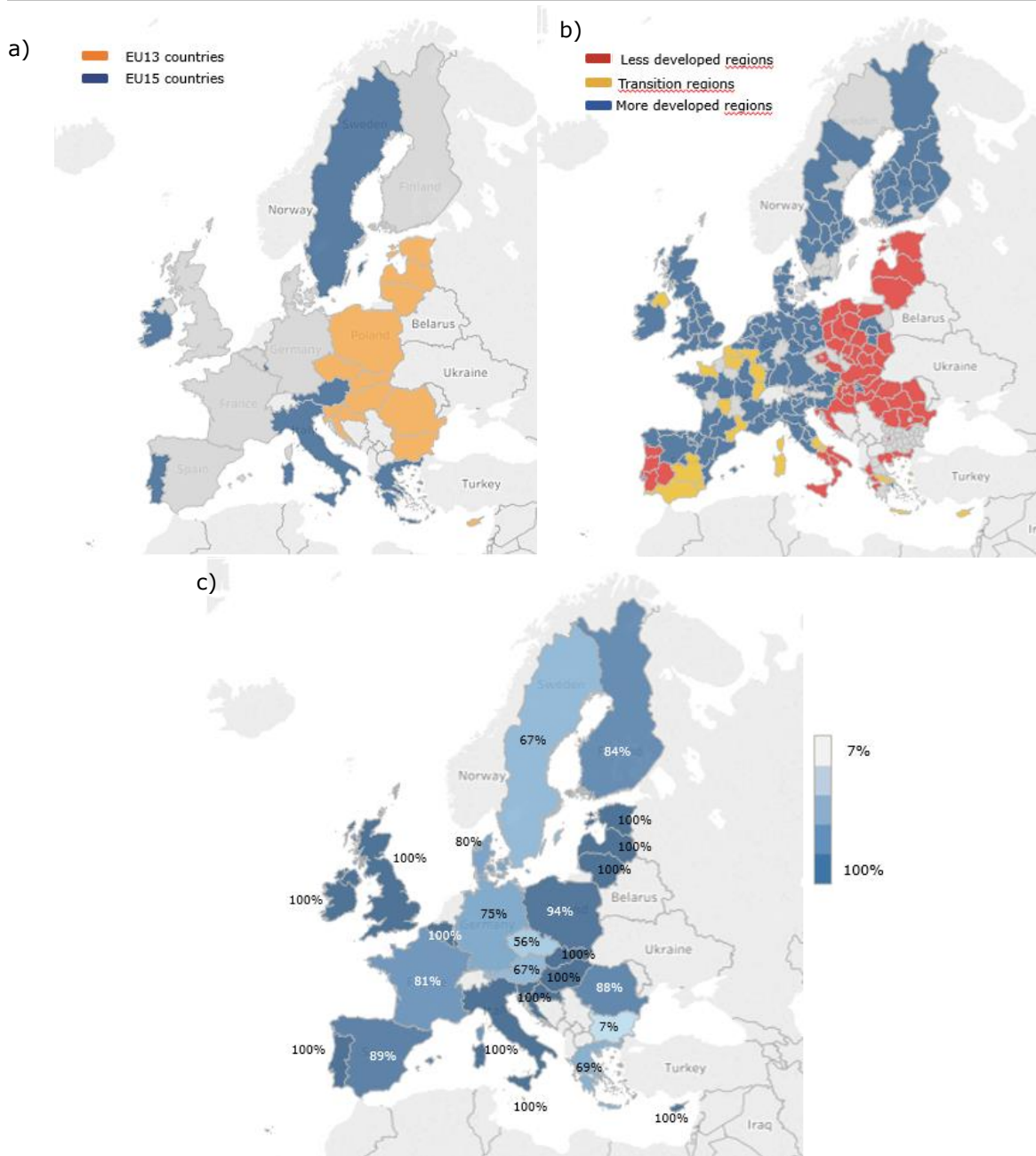
3.3.2 Customised support

Combined evidence from desk research, interviews and survey show that most of European Member States and regions have participated at least once in events, conferences or peer reviews and PXL workshops on RIS3, or have been involved in Thematic Platforms by an AMI CEI expert²⁵ (see Figure 16). At the national level (Figure 16.a), support is concentrated in Eastern European countries, while at the regional level, the distribution is more varied, covering all geographic areas of Europe (Figure 16.b). Greece, Italy and Poland receive support both at the national and regional level, while countries such as Spain, France, Germany and Finland receive support only at the regional level. In relative terms, Figure 16.c shows that, in most of the countries, more than half of the regions are

²⁵ There is no data readily available to identify the beneficiaries of customised (there is no centralised database, and no lists of regions participating to peer review workshops for example). For an explanation of the method used to approximate the number of beneficiaries of customised support see Annex VI).

covered by customised support²⁶. The only exception is Bulgaria, where only two regions at NUTS3 level out of 28 have received this type of support.

Figure 16. Geographical distribution of customised support at a national and regional level



Legend: countries and regions coloured have received some forms of customised support

Source: CSIL based on in-depth interviews, online survey and desk research.

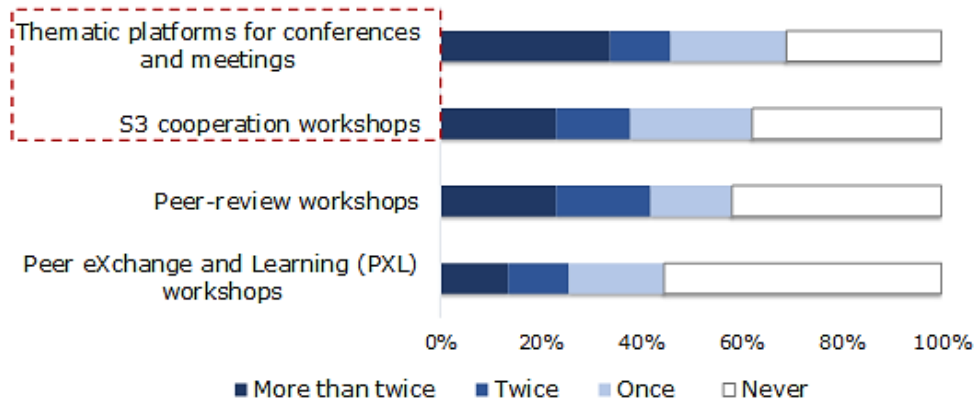
Note: c) is based on the percentage of regions receiving customised support out of the total number of regions (the different NUTS level considered depending on the administrative level used for RIS3 within each Member State).

²⁶ In this respect it should be noted that different administrative NUTS level have been considered for each Member State on the basis of the level which better reflects the administrative level at which the S3 is developed:

- Only at national level: Cyprus, Estonia, Croatia, Ireland, Lithuania, Luxembourg, Latvia, Malta, Slovenia;
- At NUTS1 level: Belgium, Germany, Denmark, Netherlands, UK;
- At NUTS2 level: Austria, Czechia, Greece, Spain, France, Hungary, Italy, Poland, Portugal, Romania, Slovakia;
- At NUTS3 level: Bulgaria, Finland, Sweden.

Figure 17 shows that the level of attendance to **Thematic Platforms events and S3 cooperation workshops** is generally higher compared to Peer reviews and PXL workshops, which are indeed targeted to a reduced audience of regions.

Figure 17. Type of events and conferences by frequency of participation



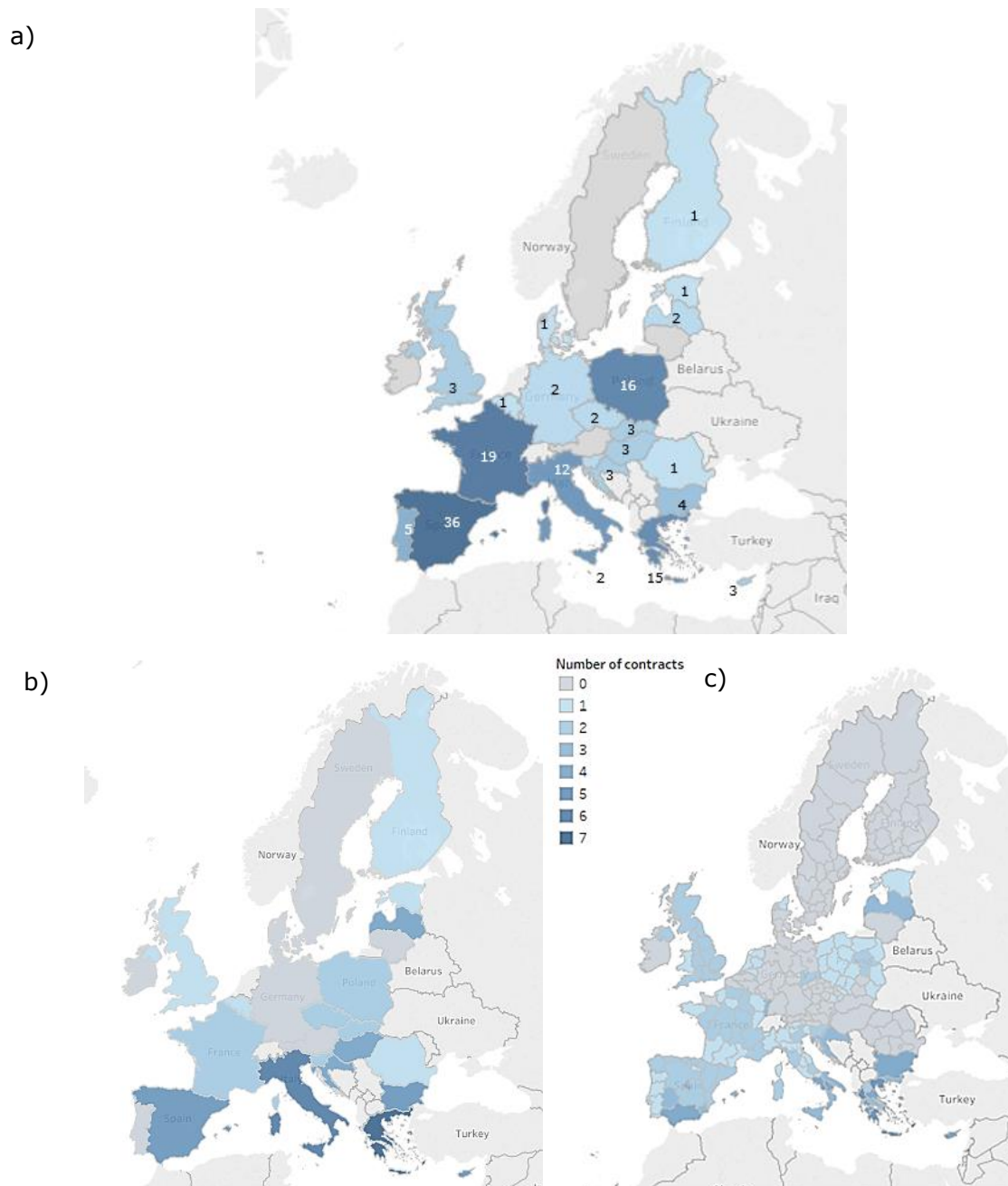
Source: CSIL processing of the survey's results. **Note:** % of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

3.3.3 Highly customised support

Highly customised support has been delivered both at the national and regional level, to a total of 20 Member States and more than 100 regions. Spain, France, Poland, Greece and Italy are the countries with the highest number of contracts (both national and regional-see Figure18.a). Countries receiving more support from AMI-CEI experts at the national level are Greece and Italy, followed by Spain, Cyprus and Bulgaria (see Figure 18.b). The picture is similar at the regional level, where Greek regions are the ones receiving the highest number of contracts followed by most of the Spanish and Italian regions (see Figure 18.c).

There are **differences compared to the distribution of non-customised and customised support**. At national level countries such as Spain, France, Finland, the Netherlands and Belgium have mostly received highly customised support. However, when focusing on the regional level, the distribution is more concentrated in Southern European regions and some Eastern European regions, together with England, Northern Ireland, North Denmark, Belgian and French regions.

Figure 18. Number of contracts per Member State

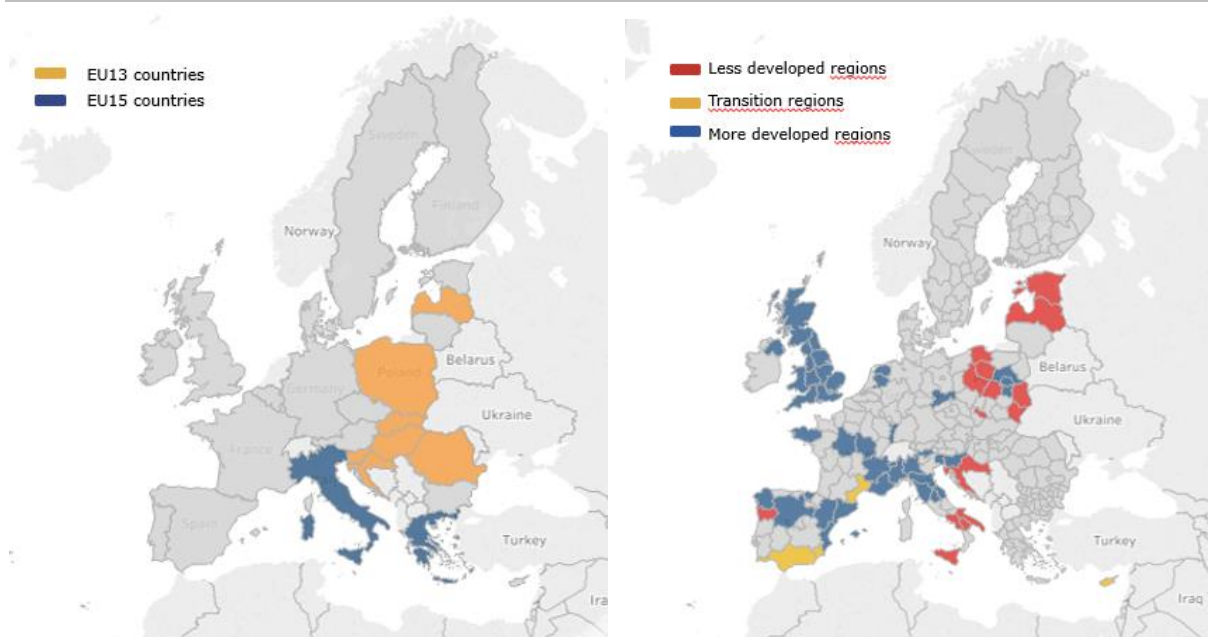


Source: CSIL based on desk research of AMI-CEI contracts. **Note:** a) It is based on the total number of contracts covering both national and regional level, which are equal to 142 (of which 3 are excluded from the map since they cover more than one country)

3.3.4 Overall distribution of EC support

By combining the mapping of the geographical distribution of customised support and highly-customised support, Figure 19 shows that Eastern European countries, together with Italy and Greece, receive both types of support at the national level. Support at a regional level; instead, combined support is more widespread. Especially in Southern and Central European regions, in Italy, France and Spain, both categories of support are combined.

Figure 19. Geographical distribution of the combination of customised and highly customised support by countries and regions



Legend: countries and regions coloured have received both customised and highly-customised support.

Source: CSIL based on in-depth interviews, online survey and desk research.

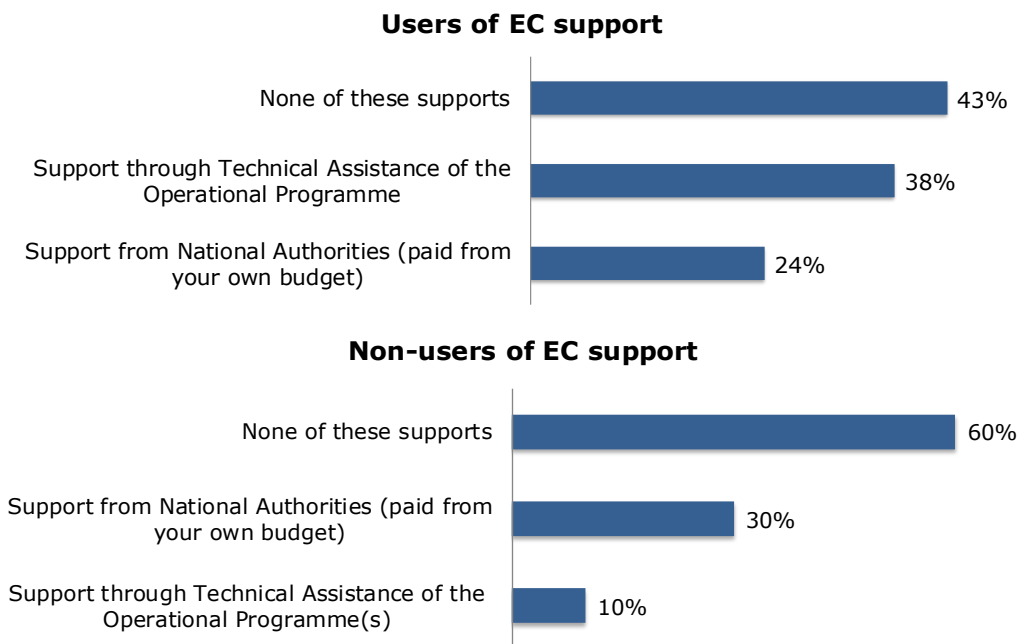
Figure 19 shows that the majority of non-beneficiaries or less supported regions (those receiving only non-customised support) are in the Northern and Central Europe, with some exception in Eastern Europe (i.e. Hungary and most of the regions in the Czech Republic and Romania). At the national level, on the contrary, the countries non-beneficiaries of customised or highly customised support are Germany, Denmark and Luxembourg.

3.3.5 Alternative types of support

Beyond the support on which this study focuses, it is worth noting that additional support was available to RIS3 authorities by national and regional authorities as well as by other DGs of the European Commission. Evidence from interviews confirms that both national and regional authorities have been using **technical assistance** for supporting the design and the implementation of RIS3. In most cases, an expert has been appointed with the main task to help the EDP and prioritisation processes or to review the quality of RIS3 strategy. Other forms of support have been used by the stakeholders interviewed to share experiences (e.g. workshop or meetings organised by DG Growth and national authorities), to support the EDP and deal with specific issues such as global value chain (support provided by World Bank), to develop national guidance and assess the status of the strategy (e.g. support provide by OECD).

Amongst these alternative types of support, results from the online survey reveal that Technical Assistance of the Operational Programme was used by nearly 30% of authorities dealing with RIS3, which have also benefitted from the EC support. Authorities that have not used EC support have mostly relied on the support provided by national authorities (30% of respondents), as shown in Figure 20.

Figure 20. Alternative types of support used by countries and regions



Source: CSIL processing of the survey's data. **Note:** Percentage of survey respondents (84 in total, of which 74 Authorities at national and regional level declaring to have used the EC support vs 10 Authorities at national and regional level declaring to have not used the EC support)

4 RELEVANCE AND EFFECTIVENESS OF INDIVIDUAL SUPPORT INSTRUMENTS

There does not appear to be marked patterns according to which support instruments are preferred at one stage of the RIS3 process or by a category of regions.

Non-customised support was particularly useful during the design phase (e.g., to understand the concept and to comply with ExAC) but its effectiveness is limited by some drawbacks (e.g., too long and general, lack of timely delivery, etc.).

Customised support was found to be useful for learning from others' experience and about specific issues. However, its effectiveness strongly depends on the ability and willingness of regions to apply the lessons learnt to their own context. As such, the sustainability of the effects of this form of support is particularly fragile.

Highly customised support was most helpful during the design phase, facilitating compliance with ExAC and EDP. It is flexible and can be mobilised quickly, but its effectiveness depends on the competence and attitude of experts (too academic, no practical experience, etc.). Its limited use during the implementation phase – despite being needed – hampers its effectiveness.

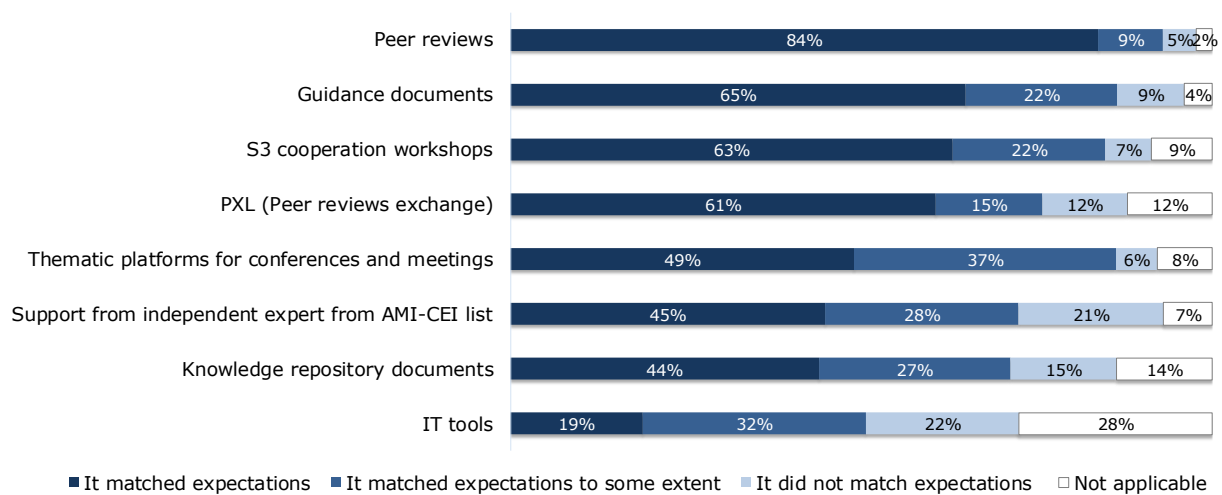
In a comparative perspective, **workshops**, which facilitate exchanges of experience, are **most highly valued** by support users, while IT tools appear to be less effective. The support by AMI-CEI experts is more controversial.

This chapter aims to assess whether the three categories of support (non-customised, customised and highly customised) matched countries and regions' needs over 2010–2017. Specifically, it explores the most appreciated types of support, and how they have been used to respond to the needs across RIS3 stages in different types of regions.

4.1 How support instruments matched needs (comparative perspective)

According to evidence collected through the online survey, support that matched best countries and regions' expectations have been peer reviews, guidance documents and other forms of **customised support**, such as S3 cooperation workshops and PXL. AMI-CEI expert support and the IT tools were the least appreciated (see Figure 21).

Figure 21. How EC supports instruments matched users' expectations

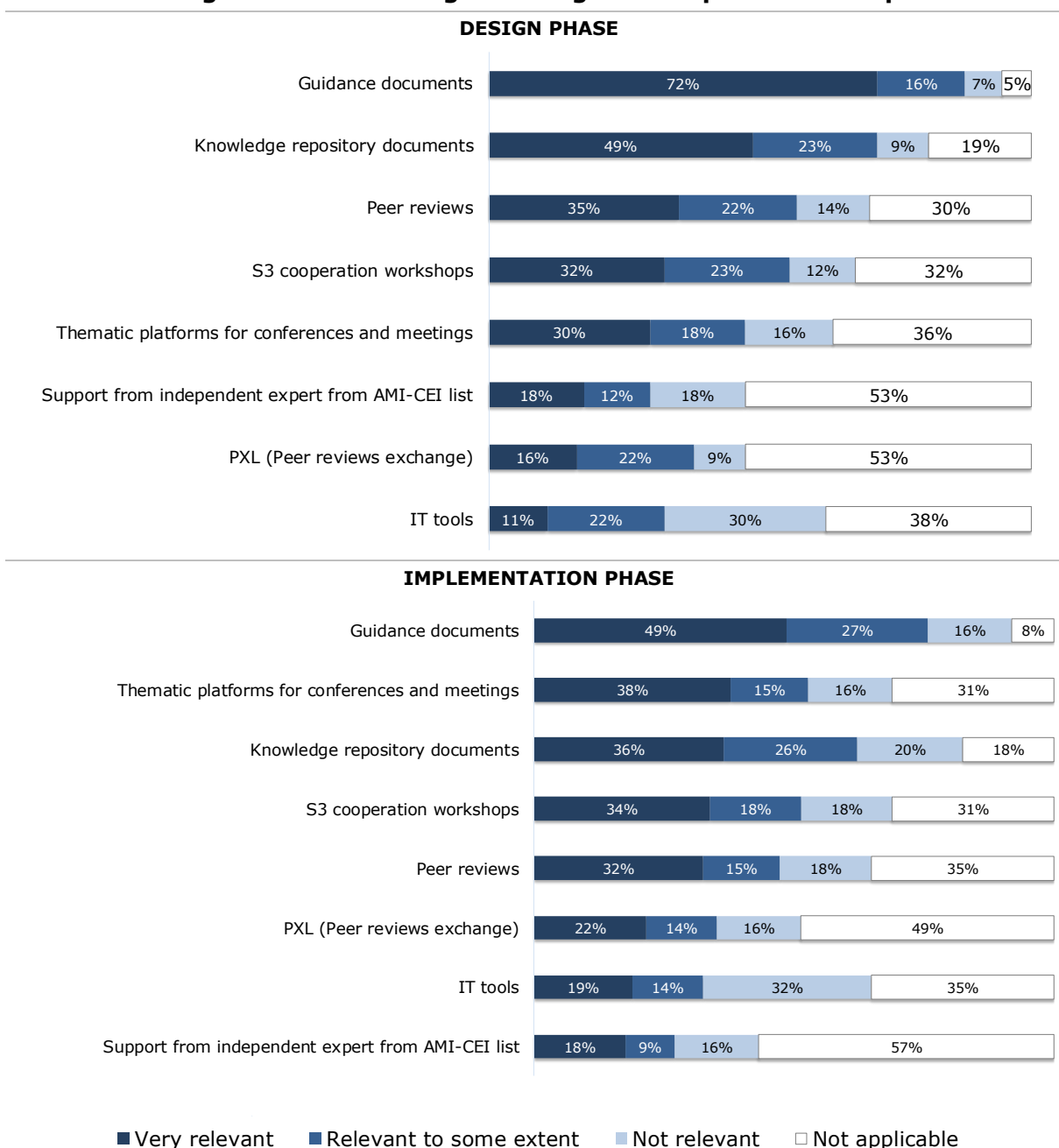


Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

4.1.1 Relevance of support instruments across RIS3 stages

Interestingly, the assessment of support instruments shows limited variation depending on the phase, suggesting that these instruments are not strongly "specialised". Both during the design and the implementation phase, national and regional authorities identified guidance documents as the most relevant type of support. Instead, IT Tools and support from AMI-CEI experts resulted as the least appropriate. For other types of support, some differences across the two stages emerge more clearly. During the design phase, studies provided in the Knowledge Repository section and S3 cooperation workshops are generally assessed positively, whereas, during the implementation phase, S3 cooperation workshops and Thematic Platforms perform comparatively better (see Figure 22).

Figure 22. Relevance of different EC supports in addressing countries and regions' needs during the design and implementation phase



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support).

Evidence from interviews (e.g. Malta, Slovenia, South Moravia-CZ, Molise-IT, Valencian Community-ES) and workshop discussion (AMI experts and Molise-IT) confirm that in general, EC support was **less effective during the implementation phase**. EC support has been primarily focused on the design and preparation of the strategy, while relatively limited attention was paid to implementation on the ground (AMI-CEI experts, Malta).

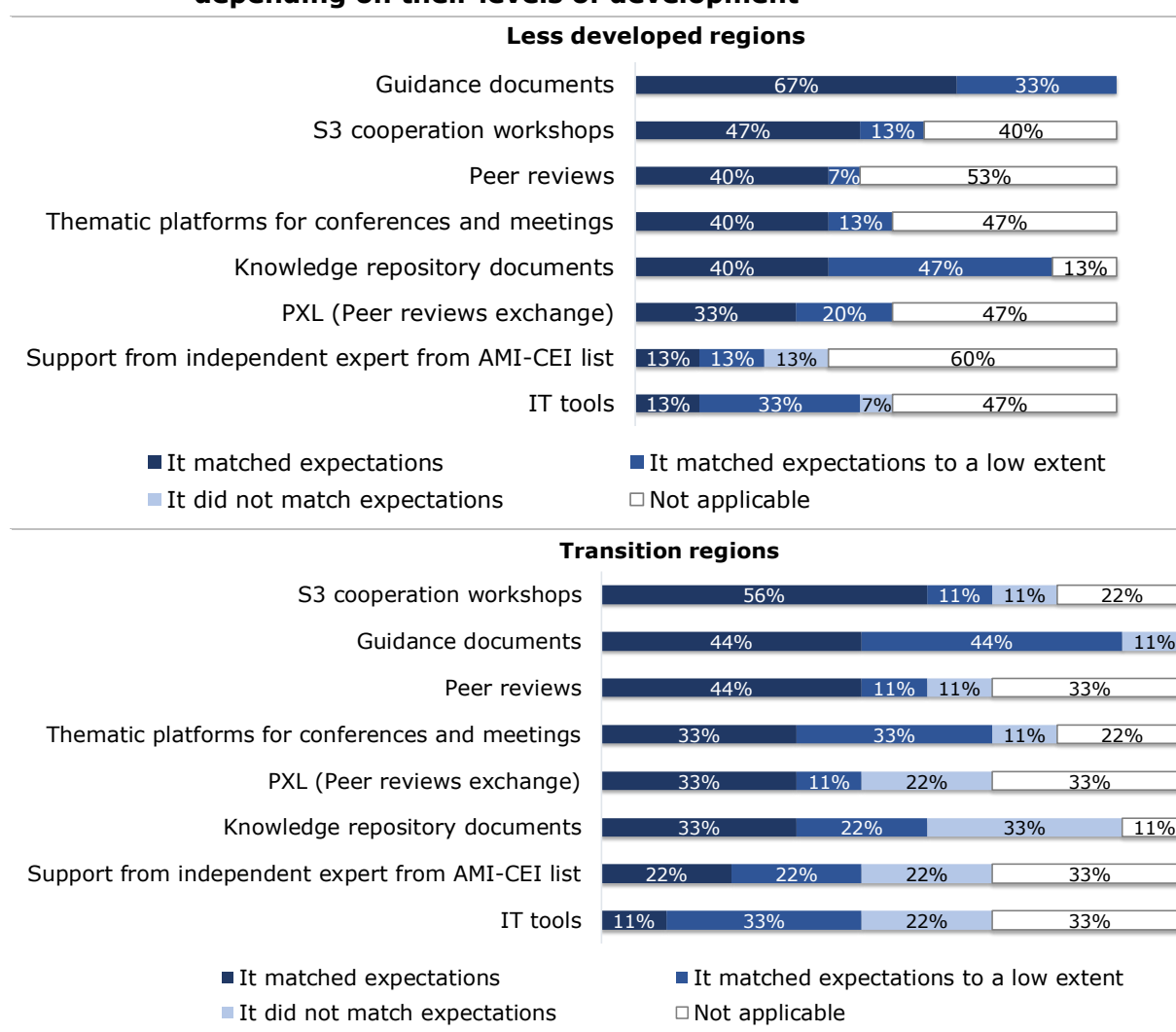
The support was found to be useful in triggering the EDP process during the design phase, especially about the analyses of the regional context. At the same time, limited attention was paid on how to support the implementation or co-development of the EDP. Also, much support was addressed to the set-up of the monitoring system and the definition of the RIS3 priorities. This was then limited once the OP had been adopted, and priorities had to

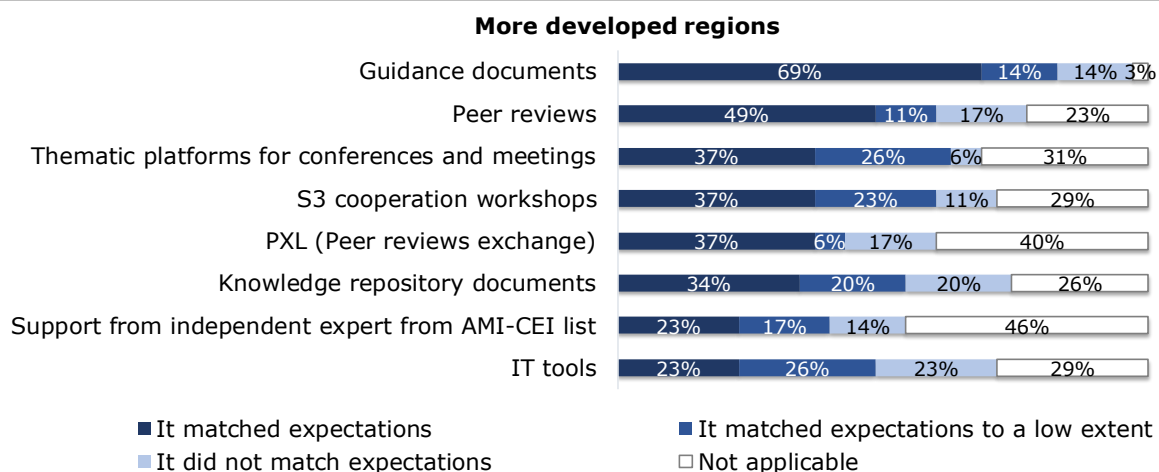
be translated into projects as well as the monitoring system implemented (*AMI-CEI experts, Malta*).

4.1.2 Relevance of support instruments by type of regions

Coherently with the evidence stemming from the previous mapping of needs, no clear pattern in the appreciation of the different types of EC support can be identified across different types of countries/regions. None of the categories of support is appreciated by a specific type of region based on its level of development. Figure 23 shows that the level of development does not correspond to different levels of satisfaction. Guidance documents and cooperation workshops rank overall rather high, while expert support and IT tools rather low. The only result standing out is that peer reviews are not so appreciated in less developed regions compared to other types of regions.

Figure 23. How EC supports instruments matched users' expectations depending on their levels of development

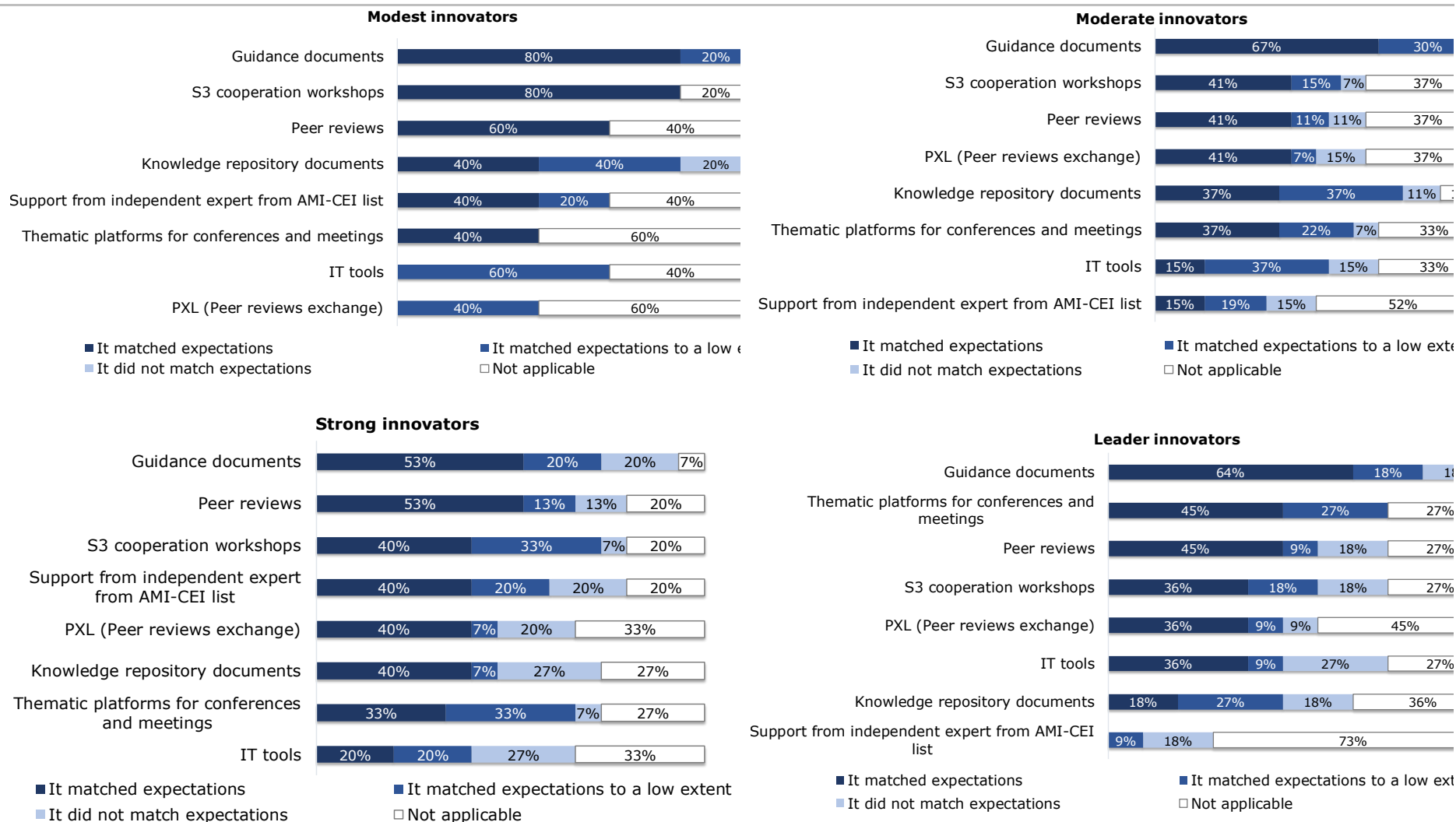




Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

There is generally a higher variation of regions' satisfaction according to their level of innovation performance, especially concerning the least appreciated types of support (Figure 24). While guidance documents, peer reviews and S3 cooperation workshops generally rank high across all categories, the situation is different for other types of support. For instance, PXL workshops are the least appreciated type of support of regions showing a modest innovation performance, but they are perceived as relevant across all other types of innovators. IT Tools and Thematic Platforms do not rank high, except in the case of leader innovators regions, which show less dissatisfaction for IT tools and even rate Thematic Platforms in the second position after guidance documents. Finally, some variation can also be detected concerning the support from AMI-CEI experts, which generally ranks low except in the case of regions showing a modest or a strong innovation performance.

Figure 24. How EC supports instruments matched users' expectations depending on different innovation performance



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

4.2 Assessment of individual support instruments

This section aims to assess the extent to which EC support instruments to RIS3 are effective and relevant in addressing countries and regions' needs as well as to detect their respective strength and weaknesses. Table 3 below gives an overview of these aspects, which are further detailed in the following sections.

Table 3. The usefulness of the EC support for what and for whom

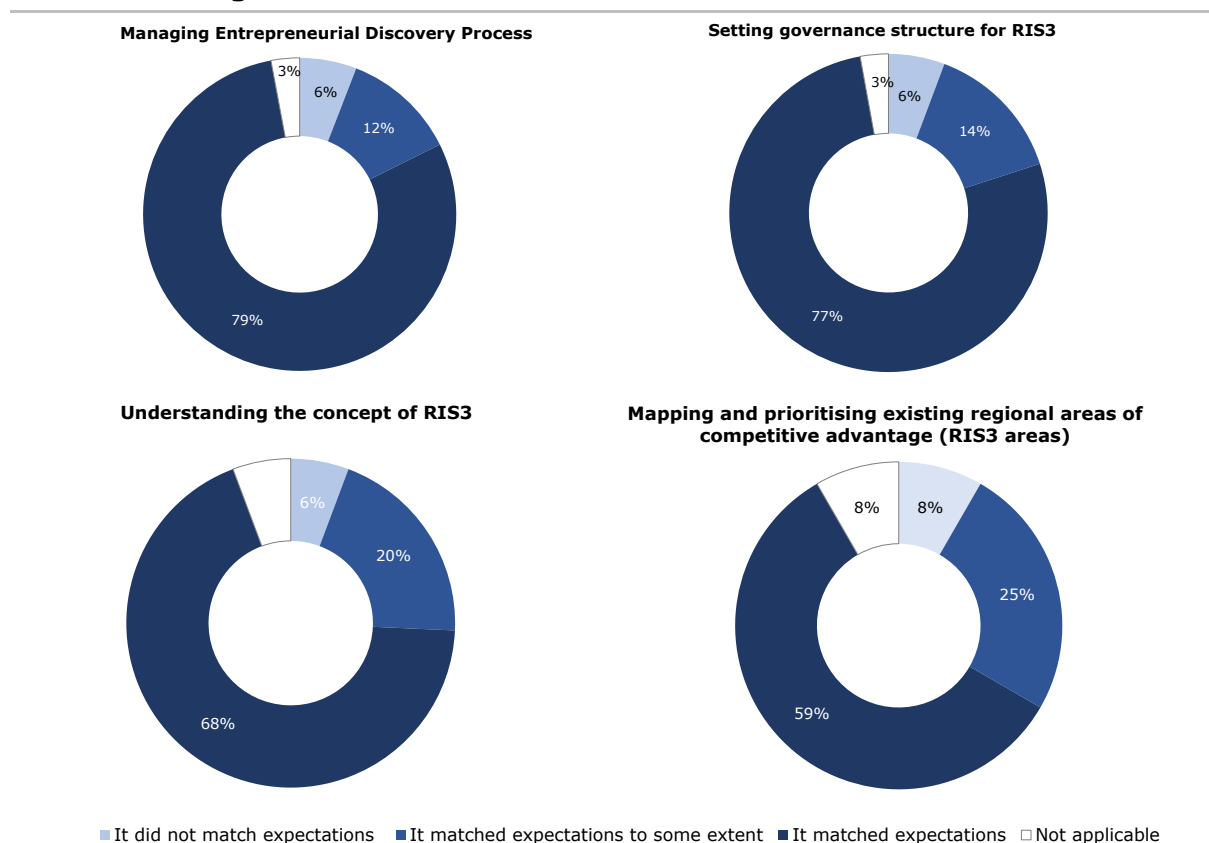
Category of support	Useful for what	Useful for whom	PROS	CONS
Non-customised (Guidance Documents)	Understanding the concepts and objectives of RIS3 Learning about its advantages as a mechanism to introduce changes in the innovation system Ensuring the strategy is designed in compliance with ExAC and procedures (e.g. prioritisation process, EDP) Mostly useful at the outset of the programming period	All type of regions	A reference library, easy access	Content too general and abstract Not timely delivered
Non-customised (IT Tools)	Benchmarking (and finding partners)	Mostly advanced regions	Easy to access	Data and information not always up to date and reliable
Customised (Thematic Platforms)	Promotion of interregional cooperation: useful for establishing patterns of collaboration with regions or countries showing complementarities or specialised in specific sectors	Used and appreciated by most advanced regions	Exploitation of complementarities Opportunity for cooperation Opportunity for networking and sharing good practices	Their effectiveness mostly depends on the region/country's capacity to adapt lessons to its context Useful only for regions/countries sharing the same challenges and/or RIS3 status Organisational issues
Customised (Peer reviews and PXL)	Sharing examples of good practice with similar regions Learn from others' experience and about specific issues (monitoring and evaluation, internationalization.) Validate specific choices Mostly relevant during implementation phase	Widely popular		
Highly customised (AMI-CEI experts)	Helped comply with <i>ex-ante</i> conditionality Addressed specific needs (EDP, bringing together stakeholders) Addressed lack of administrative capacity.	Especially appreciated during design by less prepared regions	Helpful for adapting the advice and concepts to the different regional contexts Flexible and quick to mobilise	Effectiveness depends on the competence and attitude of experts Too academic approach and lack of practical advice Limited demand/use during the implementation phase

Source: CSIL processing of survey, interviews, workshop.

4.2.1 Non-customised support

According to evidence collected through the online survey, a high share of RIS3 authorities (overall around 90% of respondents) found that guidance documents matched (entirely or to some extent) expectations mostly during the design phase concerning the following needs: i) understanding the RIS3 concept, ii) managing the EDP; iii) setting of the governance structure and iv) carrying out the prioritisation process (Figure 25).

Figure 25. Usefulness of guidance documents in meetings countries and regions' needs



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

Opinions collected during interviews and at the workshop confirmed that **guidance documents** were considered to be useful. Presenting compliance requirements on paper, facilitated in applying sound methods in the analysis of the regional context. They were found to play an important role in regions of Southern and Eastern Europe - such as *Andalucía - ES, Algarve - PT, Molise - IT, Greece*. Guidance documents have helped in understanding the meaning of the strategy, explaining concepts and objectives to relevant stakeholders. They also allowed learning about the advantages of using RIS3 to change the innovation system and contribute to economic development. In other contexts, such as in more developed regions of Central and North European countries boasting a strong innovation tradition (e.g. *Saxony - DE, Northern Netherlands - NL*) and in RIS3 pioneering regions of Eastern European countries (e.g. *South Moravia - CZ*), guidance documents were found to be a helpful reference tool for ensuring that the strategy complied with EC requirements (*ex-ante* conditionality) and procedures (e.g. prioritisation process, EDP).

Some concerns were put forward about the usefulness of guidance documents in practice and to address some specific needs (*Algarve - PT, Andalucía - ES*). Most cited criticism

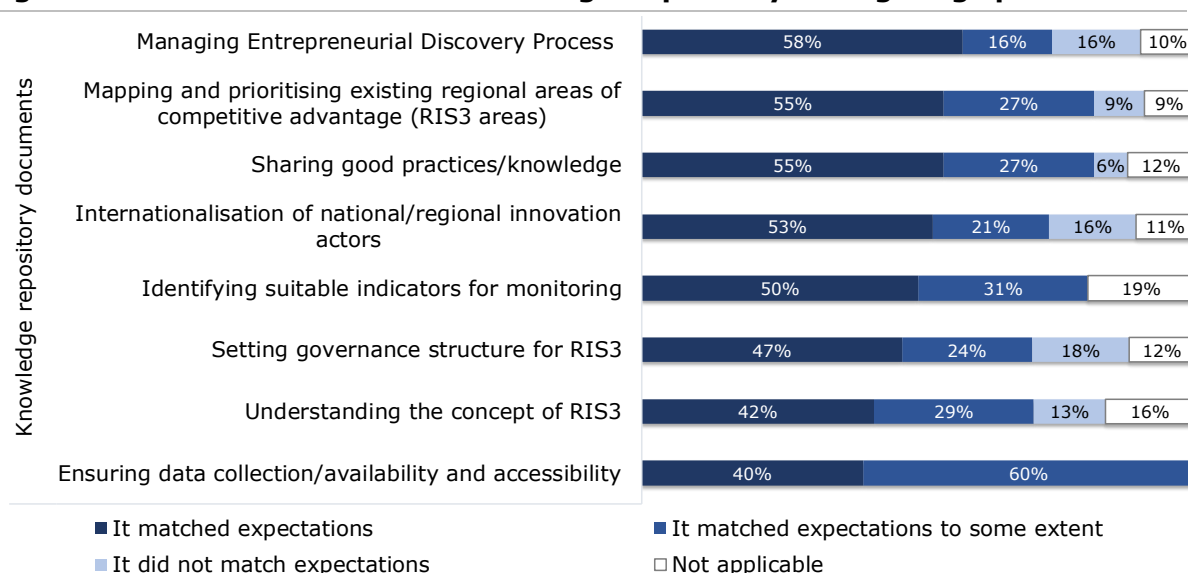
related to the content and length of such documents. Despite providing some examples, content looks too long (*Austria*), too general and far away from regional specificities and needs (*Slovakia, Abruzzo – IT, Galicia – ES, Lithuania, Pomorskie – PL*) or specific issues related to the design and implementation of the strategy. Also, some concerns were raised about the timing the guidelines were issued, such as not being available when needed but only at a later stage (*Friuli Venezia Giulia – IT*). *Central Denmark – DK, Bremen – DE* and *Lapland – FI* expressed concerns about the different approaches and methodologies proposed and their strong academic approach, too far from reality.

Concerns about the effectiveness of this tool are also raised in the literature. Guidance documents are considered counterproductive when rigidly presenting a complex process. D. Foray, the author of one of the RIS3 guides, retrospectively considered that guides should be avoided when one wishes to “*convince public agencies and regional governments regarding the implementation of a policy concept*” (Foray 2019).

Evidence from this study shows that in some countries, initiatives were launched to develop more useful and concise guidance documents. For example, Austria initiated a project with the OECD designed to bring the concept of smart specialisation into more practical use, in collaboration with the region of Flanders (BE) and Finland. As a result of this project, a 7-page self-assessment tool called “*RIS3 KEY*” was developed and translated into seven languages (German, English, Spanish, Czech, French, Slovenian and Serbian) by interested regions.²⁷

Similarly to guidance documents, studies and analyses published in the Knowledge Repository section of the S3 Platform were also found to be useful by survey respondents at the outset of the programming period especially for managing the EDP and for mapping and prioritising existing regional areas of competitive advantage (Figure 26).

Figure 26. The usefulness of Knowledge Repository in targeting specific needs



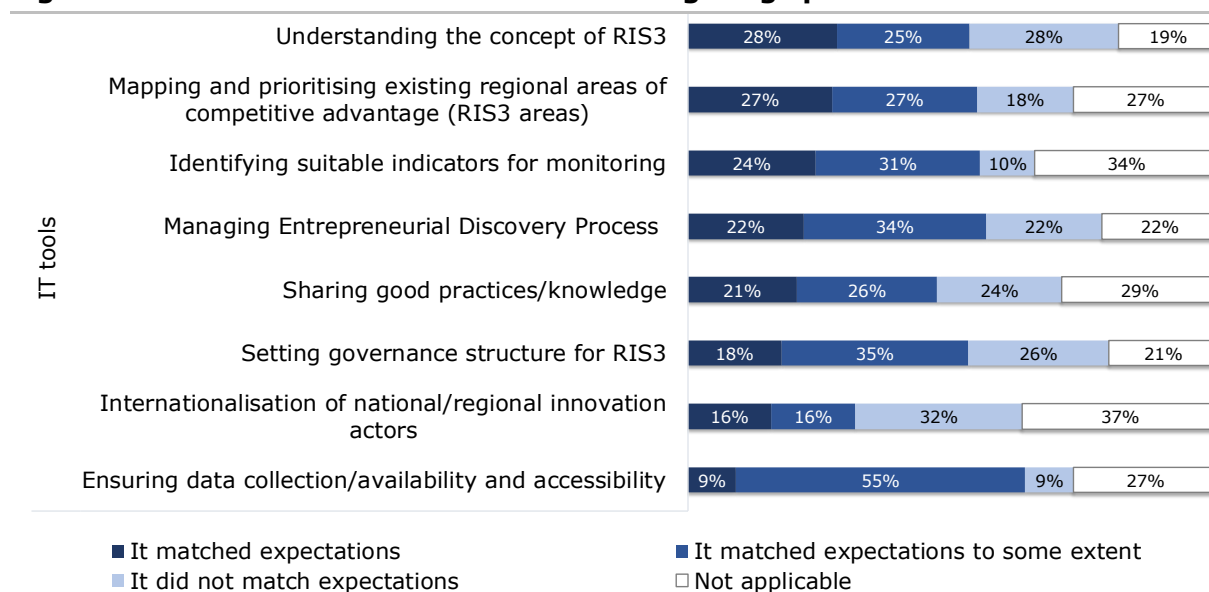
Source: CSIL processing of the survey’s results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

Other forms of **non-customised support** - such as **IT Tools** made available on the S3 platform - were, in comparison, less appreciated by the stakeholders consulted. Only

²⁷ See www.era.gv.at/regions.

around 50% of survey respondents, having accessed IT tools at least once, deemed that this type of support matched their expectations. Specifically, they were found useful to meet the need of ensuring data collection and availability (see Figure 27). However, some concerns about their systematisation and the need for an update were raised during the interviews and workshop. A considerable amount of knowledge and data is, in fact, in principle available. Still, it was recognised that such information is not always up to date and therefore reliable (e.g. AMI-CEI expert and Latvia). Information was also said to be difficult to find and access (Lapland – FIN).

Figure 27. The usefulness of IT Tools in targeting specific needs



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

Of interest is the fact that IT tools were not seen as contributing significantly to foster interregional cooperation, although this is one of their primary *raison d'être*. Amongst the IT tools, the Eye@RIS3 and the Regional Benchmarking Tools have been most frequently cited by interviews and workshop participants as one of the most effective IT tools. They facilitated finding out how the RIS3 process was designed and implemented across regions (Galicia – ES, Abruzzo – IT).

Box 16. Non-customised support - Quotes from consulted stakeholders

PROS	CONS
<ul style="list-style-type: none"> - <i>The guidance documents were very useful for the design of the strategy by providing methods and clearly explaining them.</i> [PACA (FR) - Authority responsible for RIS3] - <i>Guidance documents were very helpful during the design phase to understand the concept of the RIS3 and how to properly structure the strategy, especially regarding the prioritisation process.</i> [Lubuskie (PL) - Authority responsible for RIS3, Andalucía (ES) - Authority responsible for RIS3] - <i>The guide was something to ensure that the strategy complied with all the requirements, and the process was correctly followed.</i> [Saxony (DE) - Authority responsible for RIS3] - <i>Guidance documents are useful because they give an overview of the procedures, are easy to understand and help in explaining concepts and objectives to stakeholders, thus resulting to be necessary for gaining their support.</i> [Algarve (PT) - Authority responsible for RIS3] - <i>The guidance documents, as well as information made available on the S3 platform, were considered as a sort of library/ one-stop-shop service where looking for some easily available info/data as well as for ensuring that the region was moving in the right way.</i> [South Moravia (CZ) - Authority responsible for RIS3] 	<ul style="list-style-type: none"> - <i>Guidance documents and Knowledge repository documents, even though useful, were not made available when needed (but only at a later stage).</i> [Friuli-Venezia Giulia (IT) - Authority responsible for RIS3] - <i>The RIS3 guide with its more than 120 pages wasn't really interesting for the regions to use.</i> [Austria - Authority responsible for RIS3] - <i>More difficult has been to use guidance documents, as the proposed methodologies differed from the ones generally adopted by the region.</i> [Central Jutland (DK) - Authority responsible for RIS3] - <i>Guidance documents were not effective: they are too general and far away from the regional context. They do not take into account the different regional specificities and needs</i> [Pomorskie (PL) - Authority responsible for RIS3, Lithuania - Authority responsible for RIS3, Galicia (ES) - Authority responsible for RIS3] - <i>Guidance documents did not provide any specific guidance on how to adapt regional strategies to the national strategy, in cases such as Poland, where both types of RIS3 are designed.</i> [Slaskie (PL) - Authority responsible for RIS3] - <i>IT tools contain obsolete data.</i> [Campania (IT) - Authority responsible for RIS3] - <i>IT Tools find their limits very early even if they are interesting... but they are still unable to model the complexity of the regional ecosystems.</i> [CENTRE-VAL DE LOIRE (FR) - Managing Authority]

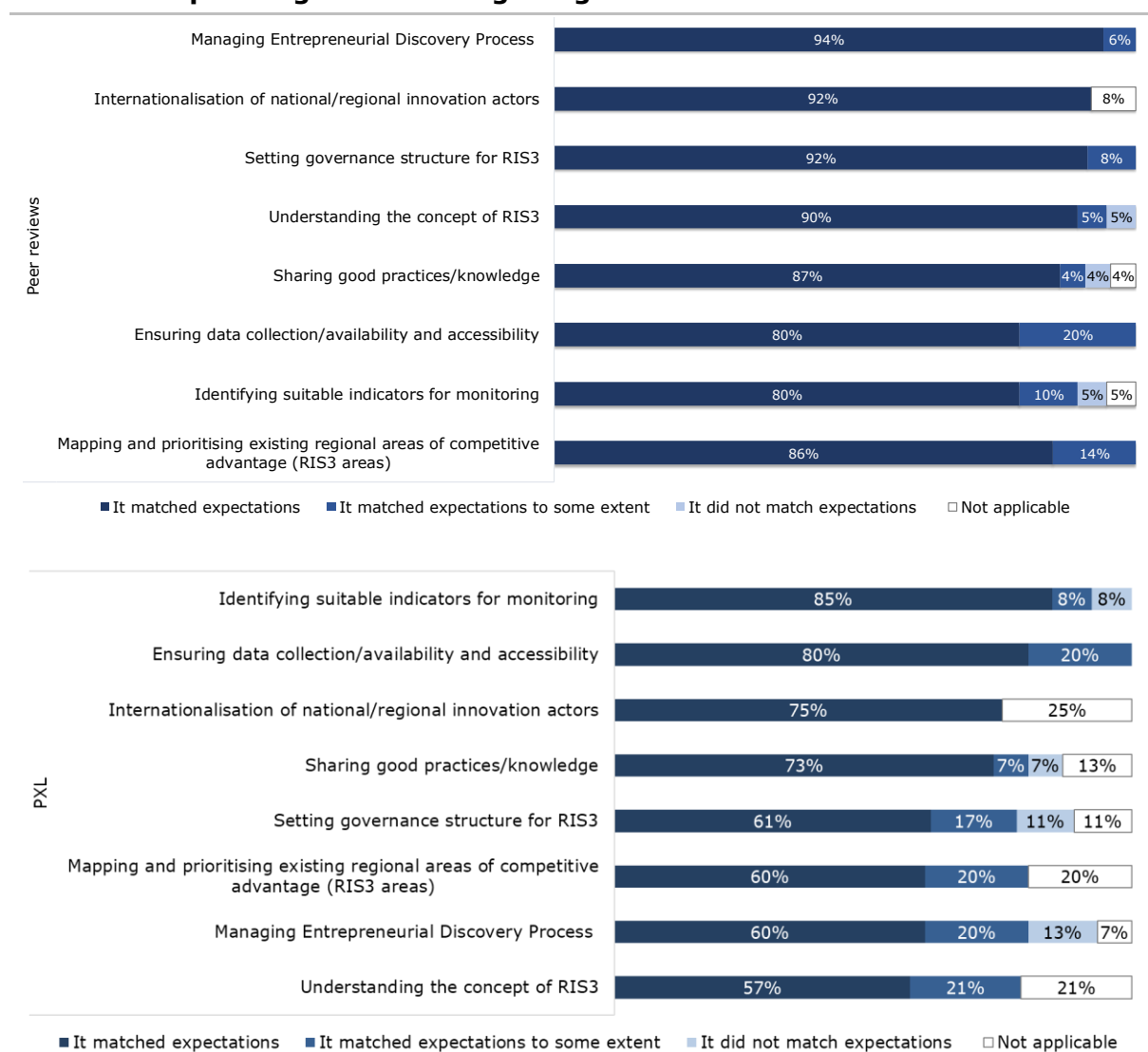
Source: CSIL processing of interviews and survey's results

4.2.2 Customised support

All different types of customised support were generally deemed to be useful. They were considered significant to target more specific needs not adequately addressed by non-customised support, such as the need for sharing good practices and knowledge and interregional cooperation or particular challenges related to the design and implementation of the monitoring system.

As shown in Figure 28, according to RIS3 authorities, both peer review and PXL workshops were found to match expectations of their needs. It is interesting to note that peer reviews – which were provided mostly during the design phase until 2014 - were found to be helpful also for the prioritisation process (such as mapping and prioritising existing regional areas of competitive advantages). Regarding PXL, survey respondents agreed on the usefulness of this tool to compare and share practices related to RIS3 (for example to compare the regional legal framework to other European systems - *Friuli-Venezia Giulia – IT*).

Figure 28. Relevance of peer review workshops and PXL in addressing most pressing needs amongst regions



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

Peer review and PXL workshops were mentioned mainly by the stakeholders during interviews and the stakeholders' workshop. They said that they were useful and effective tools for addressing needs, especially during the implementation phase (*Campania – IT, Greece, Galicia – ES, PACA – FR, Malta, North-East – RO, Northern Netherlands – NL*). They were recognised as an opportunity to *share experiences and good practices* with other regions, to *learn from other regions' approaches* to RIS3 or to validate that their strategies were going in the right direction. Such types of support were found particularly useful for learning about specific issues of the RIS3, such as the *monitoring system (Campania – IT, Algarve – PT, Latvia), internationalisation, governance structure, building partnership and fostering cooperation*. Another recognised advantage concerns the opportunity that peer review and PXL workshops offer to discuss with JRC and other experts at EU and international level (*Greece, PACA – FR, Campana – IT*). Consulted stakeholders (e.g. EC officers and JRC) referred that it created a "*community of practice*".

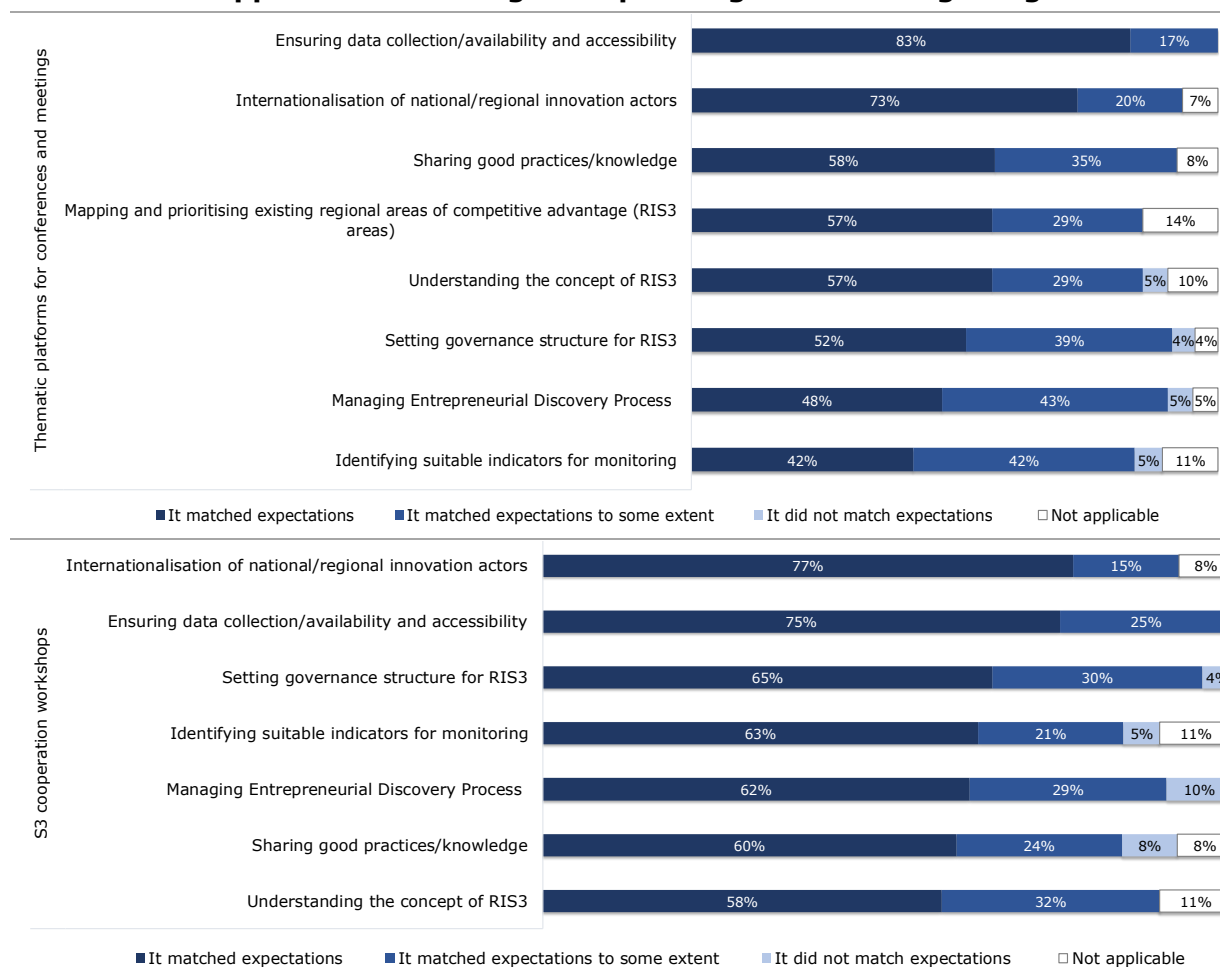
It has been argued that the effectiveness of peer review and PXL workshops mostly depends on the type of audience taking part in these specific types of events. Some

stakeholders considered that peer reviews and PXL were targeted to a too heterogeneous type of audience. For example, they addressed regions at a different stage of RIS3 implementation or face different challenges and problems (e.g. basing on their experience/status of the strategy, they have nothing to share or add to the discussion)- and are thus not effective in providing targeted recommendations (e.g. Sweden, Finland, Castilla y León – ES, Pomorskie – PL).

AMI-CEI experts expressed some concerns about the effectiveness of this tool in fostering durable changes on the ground. They argued that when workshop participants are back home, they have limited opportunity to apply and share their newly acquired knowledge.

To a lesser extent, **thematic platforms and S3 cooperation workshops** were overall appreciated by stakeholders consulted. As highlighted in Figure 29, these types of support were particularly useful for promoting interregional cooperation and sharing good practices and knowledge with peer countries and regions concerning specific needs, such as the monitoring or prioritisation exercise.

Figure 29. Relevance of S3 cooperation workshops and Thematic Platforms support in addressing most pressing needs amongst regions



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

This kind of support has been very much appreciated by regions that are actively involved in thematic platforms (e.g. agri-food, industrial modernisation, energy, etc.). It facilitated in creating partnerships within selected sectoral priorities (e.g. Andalucía – ES, Lapland -

FI or PACA – FR, Northern Netherlands - NL, etc.). Conversely, it was considered less useful for regions less advanced in the RIS3 process (e.g. *Molise - IT, Pomorskie - PL*). One limitation mentioned relates with the little information available about forthcoming events (e.g. date, place, how regions can join, etc.).

There is limited evidence from this study on how much customised support effectively led to improvements in the design and implementation of RIS3. Overall, it was found that its effectiveness in addressing country/regions' needs strongly depends on the ability and willingness of regions to apply the lessons learnt at workshops to their context. Also, interactions held during peer review and PXL workshops are found to be more productive and stimulating when the audience is homogenous, such as including participants who face common challenges and can tell about their experience in tackling them.

This outcome is in line with findings from literature showing that **customised support**, such as peer review workshops, **can be useful for knowledge and information sharing**, learning together, policy dialogue, as well as advocacy (promoting new ideas) and transparency (presenting own RIS3). However, the overall learning process resulting from any of these activities can unfold over time because of some regions' limited capacity (further clarifications may be needed). Many anticipated outcomes might not always be achievable shortly after peer review exercises but could take longer to be fully realised and understood.

Box 17. Customised support - Quotes from consulted stakeholders

PROS	CONS
<ul style="list-style-type: none"> - <i>PXL was very useful to compare the regional legal framework (for example, as far as Clusters are concerned) to other European systems. [Friuli-Venezia Giulia (IT) - Authority responsible for RIS3]</i> - <i>PXL workshops were really good as they allowed to understand the functioning of the monitoring system, for instance, how to merge incomparable data in different sectors. They were an occasion to find out that all regions faced the same problems and that we were going in the right direction. [Latvia - Authority responsible for RIS3 and Northern Netherlands (NL) - Authority responsible for RIS3]</i> - <i>To validate own solutions/activities, i.e. double-checking if other regions are doing the same. In this context, peer reviews are fundamental. [Lithuania - Authority responsible for RIS3]</i> - <i>Peer review can be a very useful tool to build partnership and create cooperation. [Andalucía (ES) - Authority responsible for RIS3]</i> 	<ul style="list-style-type: none"> - <i>Good information and contacts, but difficult to follow up once back home due to lack of legitimacy of the RIS3-process. It would have been valuable if more of our regional representatives at a higher level had prioritized participation in the process and in exchange of experience. Direct/personalized invitation would be welcome [Stockholm (SE) - Authority responsible for RIS3]</i> - <i>I'm not sure that the exchange of good practices is really helpful. In many events regions just explain what they are doing, which is many times not very relevant for other regions. There have been efforts from JRC to improve methodologies and to make workshops more dynamic. But the challenge is huge since the regions are very diverse and the needs and the challenges also. [Catalonia (ES) - Authority responsible for RIS3]</i> - <i>The number of different platforms, partnerships and networks etc. is confusing. It is not easy to find out which ones would be useful for our organization and which ones for our different stakeholders. It would be very useful if the information about all these different platforms were collected to one database so that one could find them all and compare them. [Helsinki-Uusimaa (FI) - Authority responsible for RIS3]</i> - <i>Support activities such as Peer Reviews or PXL or assistance through the S3 Platform are not a type of support suitable for each region. The EC and the JRC should provide support tailored to specific needs. The recommendations address a broad audience of regions with different traditions of innovation policies. Thus, the common methodologies provided did not help to build the process necessary for the preparation of the RIS3. [Pomorskie (PL) - Authority responsible for RIS3]</i>

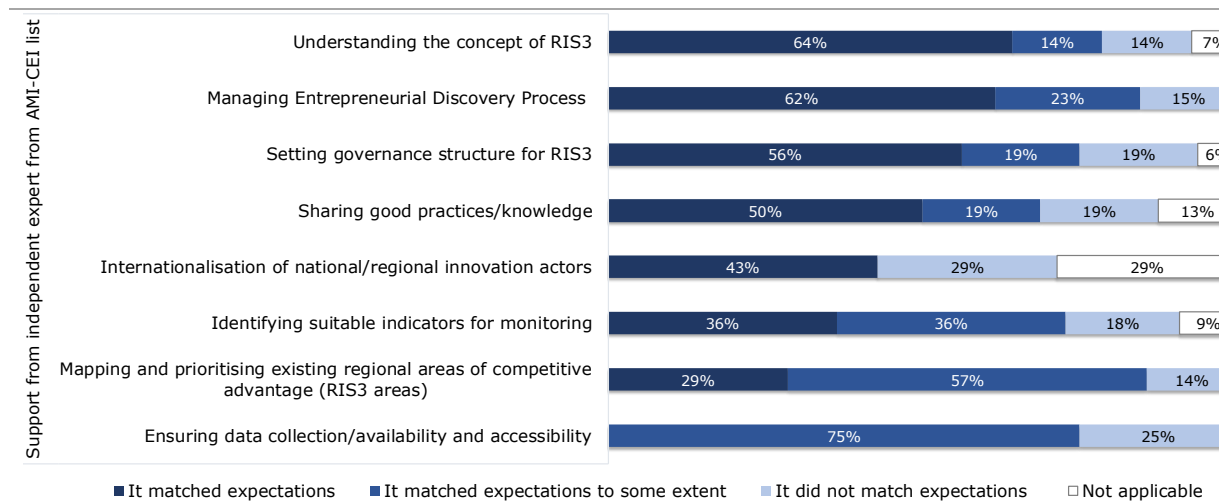
Source: CSIL processing of interviews and survey's results

4.2.3 Highly customised support

Contrasting opinions have been found about the usefulness of the highly customised support, such as the support provided by the **experts included in the AMI-CEI list**. This kind of support has been used mainly during the **design phase** of the RIS3 (for more details, see Section 2) bringing about different perceptions across MS and regions, both negative and positive.

Results from the survey (see Figure 30) shows that support provided by AMI-CEI experts mostly matched expectations about the following needs: i) understanding the concept of RIS3, ii) managing EDP, iii) setting governance structure and iv) sharing good practices.

Figure 30. Relevance of AMI-CEI expert support in addressing most pressing needs amongst regions



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support)

This is broadly confirmed by interviews according to which the support was found to be particularly helpful to carry out both **EDP** and **prioritisation**, by bringing together different stakeholders and identifying priorities (*Slaskie -PL, Portugal, PACA – FR, Galicia – ES, Abruzzo – IT, Campania – IT, Algarve – PT, Malta, Molise-IT*). As pointed out by an AMI expert, "people don't meet unless you go there. This helps impose discipline and its benefits". Stakeholders AMI-CEI experts were also said to be particularly helpful in raising the awareness of politicians on the importance of RIS3 and its usefulness as an approach (*Andalucía – ES*). Workshop discussions highlighted that AMI-CEI experts act as a "trusted third party", ensuring political backing via the endorsement from the Commission. This situation helps prioritisation, which requires to make choices entailing potential political risks (*Andalucía – ES*). Finally, AMI-CEI experts contributed to **adapting less customised support** (e.g., guidance) **to the local context**.

The AMI-CEI support was considered to be helpful also from the EC perspective (*Interview with EC officials*) since it can be **quickly mobilised** according to the knowledge and experience needed for assessing the compliance with ex-ante conditionality.

Overall, this support was found to be particularly relevant for helping regions with lower administrative capacity – South/East-Central Europe - to comply with the ex-ante conditionality at the beginning of the programming period but also to improve governance and help with EDP. However, although recognising potential benefits, stakeholders raised concerns on the **content** and **approach** used during the delivery of this support. In some occasions, it was found to be **too academic**, since the expert did not boast enough experience on how to implement concepts into practice. A shared opinion amongst the different categories of interviewees is that not all the experts involved in the provision of the support had the proper skills and the relevant knowledge to deal with regional specificities and RIS3 issues (*Andalucía – ES, Castilla y León - ES*). Concerns were also raised about inconsistencies between guidance/advice provided by different experts appointed from the AMI-CEI list (e.g. *Greece*) and/or between AMI-CEI experts and other types of support available such as advice provided by experts selected at national or regional level (e.g. *Molise – IT*).

Some countries and regions (e.g. Portugal, Greece, Italy, Lubuskie-PL, etc.) have not recognised effects. For them, experts acted mostly as observers of the work performed by the regions (e.g. meeting a few times with working groups and looking at how they were dealing with the strategy). They did not deliver a final report including suggestions and recommendations to the region, as it was expected. It was even thought that AMI-CEI experts were working for the EC rather than for the region (Greece).

A further weakness highlighted concerning the delivery of this support concerns the time allocated to the assignment (usually 15 days), which was considered not enough for helping countries/regions with RIS3.

While used mainly during the design phase to fulfil the requirements of the *ex-ante* conditionality, the demand for this support was limited during the implementation phase (see Section 2 for details), although it was needed. This imbalance was stressed as a weakness by both national and regional authorities (Greece, South Moravia – CZ) as well as by some AMI-CEI experts.

The evidence collected through the workshop discussion confirms the findings described above. It was argued that the AMI-CEI expert support could only work well in national and regional contexts if the expert is independent, but not detached from the local context in which he/she has to provide advice (PACA – FR). The expert can also build on broader knowledge of other EC policies and global challenges.

Box 18 below describes some practical experiences of countries and regions benefitting from AMI-CEI experts' support.

Box 18. Highly customised support – Quotes from consulted stakeholders

PROS	CONS
<ul style="list-style-type: none"> - <i>The use of an AMI-CEI expert for ex-ante evaluation of the strategy was very useful.</i> [Croatia - Authority responsible for RIS3] - <i>The assistance provided by the expert was particularly relevant for building the EDP.</i> [Galicia (ES) - Authority responsible for RIS3] - <i>The support of the expert was helpful in the definition and selection of smart specialisation areas and the EDP.</i> [Malta - Authority responsible for RIS3] - <i>The expert was used during the design phase in order to help the government to become aware of the RIS3 approach and concept (which was not easy to accept at that time) as well as to adapt general guidelines to the regional context and guide the building of EDP</i> [Andalucía, - Authority responsible for RIS3]. 	<ul style="list-style-type: none"> - The support of the expert from the design to the implementation phase would have been well received.. [Valencian Community (ES) - Authority responsible for RIS3] - <i>Experts, during the preparation of the RIS3 strategies, had little knowledge about ESIF.</i> [Managing Authority] - Experts' support depends on the quality of the expert, and on his/her expertise on the particular subject. [Castilla y León (ES) - Authority responsible for RIS3] - <i>Experts' support has been interesting and clear but somehow less useful in practice than customised support. In fact, they did not provide technical support, but they rather provided analyses and comments on the regional RIS3. Moreover, their comments were not always easy to follow.</i> [PACA (FR) - Authority responsible for RIS3] - <i>Expert's support can be deemed to be too academic in some occasion, as the expert does not always have enough practical experience (e.g. how to do it).</i> [Algarve (PT) - Authority responsible for RIS3 and CENTRE-VAL DE LOIRE (FR) - Authority responsible for RIS3]

Source: CSIL processing of interviews and survey's results

4.2.4 Alternative forms of support

Finally, evidence was collected on the use of other forms of support by the stakeholders reviewed in this study. Table 4 below shows that RIS3 authorities indeed availed themselves of different types of available support.

Table 4. Alternative types of support available

Level of provision	Type of support	Description/ Examples from interviews
National / regional level	Technical assistance of the Operational Programme	<p>The budget allocated to Technical Assistance in the context of the national or regional Operational Programme and devoted to the support to RIS3 design and implementation</p> <p><i>E.g. ESIF technical assistance budget was used in the Czech Republic to finance a national initiative supporting regions with the elaboration of a strategy that fits well with the national strategy (e.g. to seek national synergies, complementarities).</i></p> <p><i>In Andalusia (Spain), technical assistance was used to cover the costs of the secretary's activities related to RIS3 implementation.</i></p> <p><i>In the Lubuskie region (Poland), external experts were appointed directly by the regional administration and paid with OP technical assistance budget.</i></p> <p><i>In Algarve (Portugal), an expert was appointed by relying on technical assistance budget for helping with the EDP and prioritisation processes.</i></p> <p><i>In Slovakia, technical assistance was used to strengthen the administrative capacity of those bodies responsible for coordinating the implementation of RIS3 at a national level.</i></p> <p><i>Molise region (IT) relied on the use of technical assistance to appoint an expert with the main task of improving the quality of RIS3 strategy (document review).</i></p>
	Support from regional or national authorities	<p>Support based on national or regional authorities' budget (e.g. allocated to appoint external consultants providing advisory services in the context of RIS3)</p> <p><i>E.g. Lubuskie region (Poland) relied on the support provided by a national authority in the form of regional forum meetings enabling exchanges and mutual learning amongst Polish regions.</i></p>
	Cluster collaboration platforms	<p>National or regional cluster organisation providing support also to RIS3 design and implementation</p>
European level	European Parliament Pilot Actions	<p>Pilot projects and preparatory actions (PP/PAs) introduced in the European Parliament budget that aims at testing new policy initiatives and/or preparing the ground for the adoption of future measures in the field of RIS3</p> <p><i>E.g. Lagging regions project, Stairway to Excellence etc. Lagging regions project, in particular, has been referred to in very positive terms by a number of less developed regions</i></p>
	DG Growth support	<p>DG Growth organises workshops and appoints experts also for supporting the design and implementation of RIS3.</p> <p><i>Auvergne-Rhone Alpes (France) and Pomorkies (Poland) joined workshops organised by DG Growth to share experiences.</i></p>
	DG RTD support	<p>DG RTD; managing H2020 funds, has created the Online S3 project (Platform for Smart Specialisation Policy Advice) and provides additional support to RIS3 in the context of the Policy Support Facility Instrument</p>
International level	World Bank support to RIS3	<p>Support provided by the World Bank to design and implementation of RIS3</p>

Assessment of support to the development and implementation of smart specialisation strategies provided by the European Commission from 2010 to 2017

Level of provision	Type of support	Description/ Examples from interviews
		<p><i>E.g. Lubuskie region (Poland) cooperated with the World Bank for the EDP process. To this end, experts from the World Bank organised 24 interviews with companies to discuss strategy management.</i></p> <p><i>E.g. Slaskie region (Poland) received support by the World Bank, especially concerning the set-up of the EDP.</i></p> <p><i>In Croatia, the World Bank was involved during implementation to deal with unknown issues for the country, such as the global value chain.</i></p>
	OECD support to RIS3	<p>Support provided by the OECD to design and implementation of RIS3</p> <p><i>E.g. Austria initiated a project with the OECD intended to bring the concept of smart specialisation into more practical use, in collaboration with the region of Flanders (BE) and Finland. As a result of this project, a 7-page self-assessment tool called "RIS3 KEY" was developed and translated into 7 languages (German, English, Spanish, Czech, French, Slovenian and Serbian) by interested regions (www.era.gv.at/regions).</i></p> <p><i>E.g. Central Jutland (Denmark) benefitted from the support of OECD consisting of a study carried out by World Bank experts to assess the status of the strategy (e.g. need for cross-sectoral cooperation, national-regional coordination and closer involvement with knowledge institutions).</i></p>

Source: CSIL based desk research and interviews

5 OVERALL ASSESSMENT OF THE SYSTEM OF SUPPORT: WHAT WORKED AND WHAT DID NOT

Tangible effects of support in terms of improved practices are difficult to document in the absence of systematic evaluation, but the **persistence of specific basic needs** (e.g., managing the EDP, setting the governance system and even understanding the S3 concept) is a sign that there are weaknesses that EC support needs to address better.

Among the regions surveyed in this study, **learning effects** have been observed in a set of regions with medium innovation performance. In other regions facing structural difficulties or characterised by limited administrative capacity, EC support facilitated compliance with ex-ante conditionality, but without producing lasting effects during implementation.

Deficiencies in **knowledge management** characterised both the AMI-CEI database and the S3 platform, limiting exploitation of the wide experience accumulated with RIS3 on the ground since 2012.

The support was found to be of limited utility in tackling specific difficulties concerning the **regulatory framework or the institutional and political context** (e.g., issues arising from the difficult articulation between RIS3 and OP).

Other **specific factors** limited the effectiveness of individual instruments – e.g., in terms of timeliness, quality and experience of involved experts, access to information, etc.

This chapter presents an overall assessment of the effects of EC support on RIS3. The factors hampering the effectiveness and efficiency of EC support, and those constituting its added value are explored.

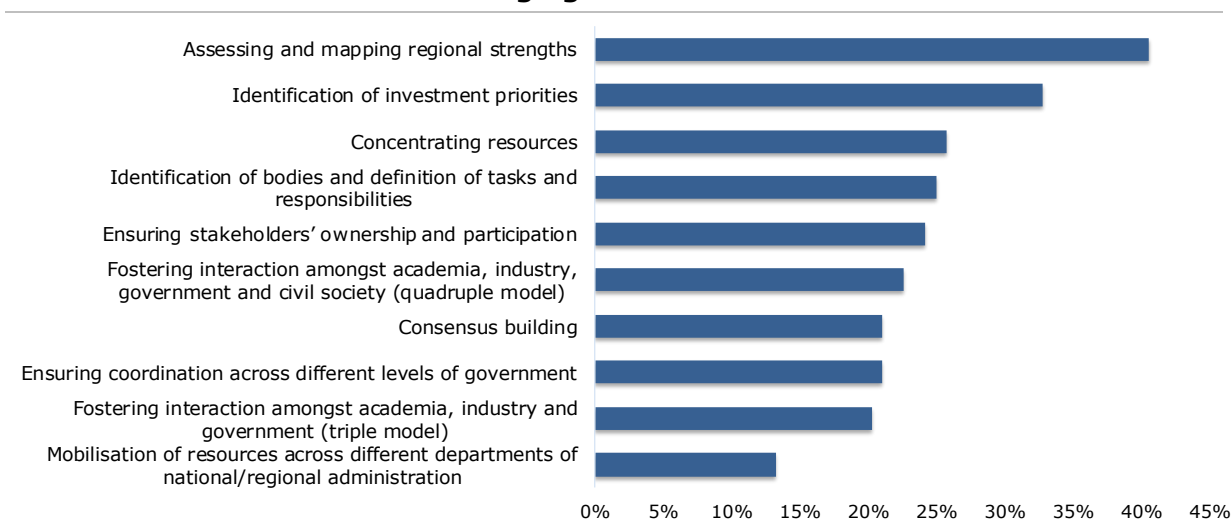
5.1 Tangible and intangible effects of EC support

5.1.1 Effects on prioritisation, EDP, governance

RIS3 authorities, Managing Authorities and other respondents (AMI experts and EC officers) identify “assessing and mapping regional strengths” and the “identification of investment priorities” as the aspects most effectively addressed by the EC support (see Figures 31 and 32 **Error! Reference source not found.**). This view corresponds to critical areas as identified by the literature (see Chapter 2), which raises some doubts about the actual effectiveness of the support.

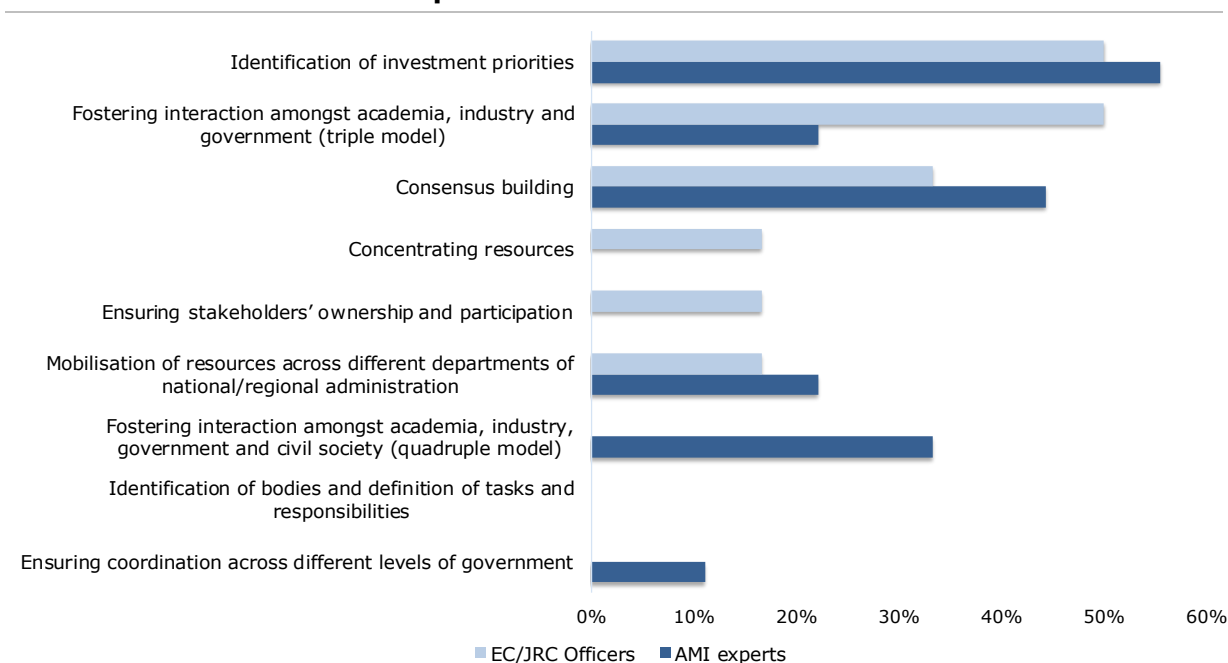
For other aspects, RIS3 authorities are less consensual. For example, only a few of them found that support helps to ensure stakeholders’ ownership and participation. At the same time, EC officials are more positive about the contribution of support in triggering interaction amongst academia, industry, government and civil society.

Figure 31. Aspects effectively addressed by EC support according to RIS3 authorities and Managing Authorities



Source: CSIL processing of the survey's results. **Note a):** Percentage of survey respondents (128 in total, of which 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support and 54 Managing Authorities responsible for ESIF management). **Note b):** respondents were asked to pick up maximum 3 items for which the support was most helpful

Figure 32. Aspects effectively addressed by EC support according to EC Officers and AMI-CEI experts



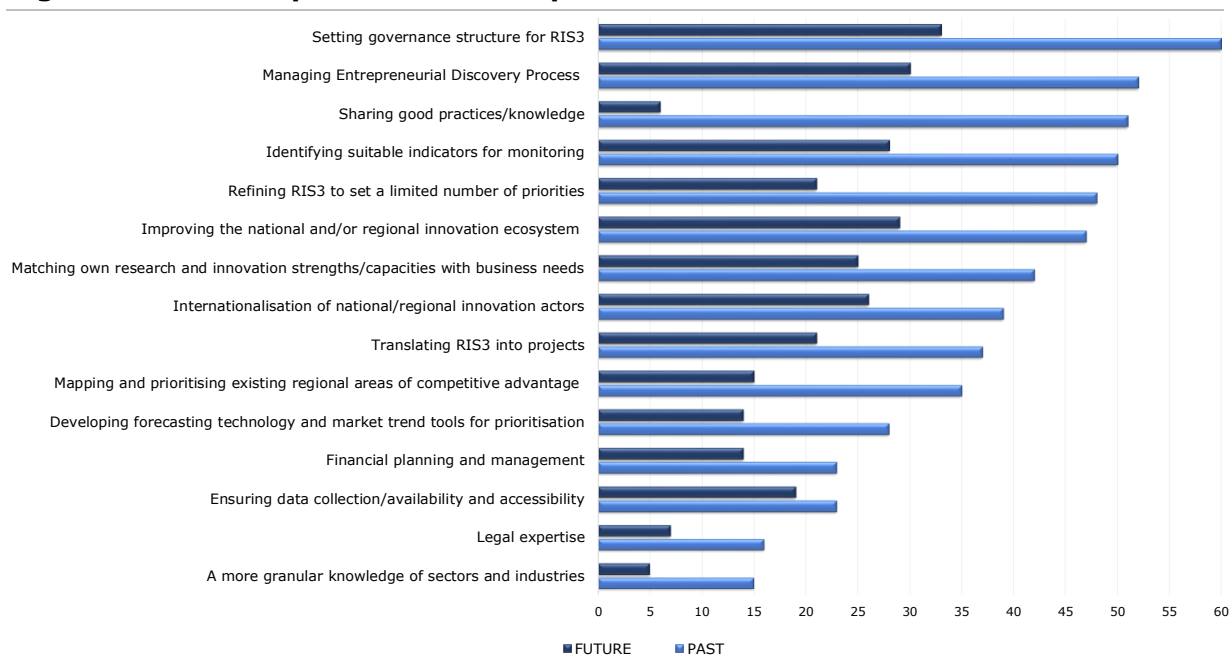
Source: CSIL processing of the survey's results. **Note a):** Percentage of survey respondents (15 in total, of which 6 EC Officers VS 9 AMI-CEI experts). **Note b):** respondents were asked to pick up maximum 3 items for which the support was most helpful

On the contrary, EC officials and AMI experts consider that EC support has been much less effective as far as governance is concerned (identification of responsible bodies, ensuring coordination across levels of government).

Even if they are not directly comparable, it is interesting to confront these views with the opinions of stakeholders concerning future requests to understand whether needs have been evolving, perhaps as the result of support.

It appears that reasonably basic needs, mostly at the design stage, will keep being the most pressing needs. Figure 33 shows that needs that had been perceived as the strongest in the past remain strong in the future. In particular, **setting the governance structure, managing the EDP and identifying indicators for monitoring**, which displayed amongst the most substantial challenges in the past and which correspond to core fulfilment criteria (see Chapter 6), are confirmed to be of crucial concern for the future too.

Figure 33. A comparison between past and future needs



Source: CSIL processing of the survey's results. **Note:** Number of survey respondents (138 in total, of which 84 Authorities dealing with RIS3 at the national and regional level and 54 Managing Authorities responsible for ESIF management)

The persistence of needs for support regarding the core elements of RIS3 may be interpreted as a signal of difficulties in the effectiveness of support. At the same time, Figure 33 suggests that some learning does occur over a broad spectrum of related matter as future needs are systematically lower than past ones.

5.1.2 Learning effect and added value

Besides concrete outcomes and progress attributable to support, which are difficult to document in the absence of a comprehensive evaluation of RIS3, some hypotheses can be proposed about more intangible effects.

In a set of regions, **EC support made a difference**. Among the different cases reviewed during this study, some regions showed a peculiar interest for and commitment to RIS3, availing themselves of various forms of support and endeavouring to seize this opportunity to engage their innovation ecosystem in the process of change. In these regions, the RIS3 notion was taken seriously, and the EC support appeared to be effective in triggering and managing the underlying change process, making possible a leap forward (see Table 5).

Prima facie, these regions are generally transition/less developed ones with modest to moderate innovation performance. In fact, in conformity with the absence of patterns between types of regions identified above, these cases do not fit easily in categories defined by the level of development or innovation performance. This goes together with the fact that the levels of innovation performance and development are not perfectly correlated as

shown in Figure 4 in Chapter 1: a category of regions defined by a given level of performance might include regions with different levels of development. This may explain why either modest or strong innovators positively value the support of AMI-CEI experts as compared to moderate and leading innovators. Interestingly, it seems to concern regions which were themselves leaders (in terms of development and innovation performance) compared to their national counterparts (*i.e.*, *North-East – RO*, *South-Moravia – CZ*, *Slaskie – PL*). Even if their performance is below EU average, it is above the national average of their country – which explains why these regions embraced the RIS3 notion and turned to inspiration outside their national context and/or European partnerships.

Table 5. RIS3 success stories

Region/ Country and main features	Success factors
<p>North-East (RO) <i>Less developed</i> <i>Modest innovator</i> <i>EQI below the EU average</i></p>	<p>Although without formally developed competencies for R&I, the North-East Romanian region used RIS3 to build awareness and capacity inside the organisation and involve stakeholders in the process of innovation. Through their initiative, they consulted over 250 representatives of institutions from the 'quadruple helix'. Moreover, finding inspiration through international cooperation, in 2015, the region signed a bilateral agreement with the Alliance of Northern Netherlands Provinces (SNN). It aims to jointly address societal challenges and bolster economic growth in both regions. It will be achieved through newly created regional innovation incubators and living labs, tools that can drive RIS3 implementation by creating space for companies to share ideas, innovate and receive support to solve their problems. Results are already visible: potential common priorities (agro-food, waste, water, new materials and energy) have been mapped based on value chain principles. A governance and coordination system is being constructed with widespread stakeholder participation, and sources of finance have been identified.²⁸</p>
<p>South Moravian region (CZ)</p>	<p>Being one of the first regions in the Czech Republic in terms of development and innovation performance, South Moravian region is an example of a region with a recent history of regional innovation policy. However, the importance of the smart specialisation strategy grown over time, and RIS3 is currently seen as a coordinated implementation strategy with a real impact on the economic specialisation of the region. An essential step for an agreement over the strategy was the creation, in 2009, of the South Moravian Innovation Centre (JIC), responsible for managing innovation policy. The created institution facilitated building a broad-based coalition of actors, ranging from public authorities to research centres and industry representatives. It represents a best practice in terms of leadership for pro-active transformative governance of smart specialisation.</p>
<p>Slaskie (PL) <i>Less developed</i> <i>Moderate innovator</i> <i>EQI below the EU average</i></p>	<p><i>Slaskie</i> was the first region in Poland to adopted a regional innovation strategy, even before the adoption of the RIS3 concept in 2012. Nevertheless, RIS3 has been accepted as an opportunity for further improving regional innovation policies. Many initiatives have been introduced, including the Network of Regional Specialisation Observatories project, aimed at monitoring, measuring, supporting and anticipating market trends in the three priority domains of Energy, Medicine and ICTs.²⁹</p>

²⁸ <https://s3platform.jrc.ec.europa.eu/-/strategic-cooperation-with-north-netherlands?inheritRedirect=true>

²⁹ <https://s3platform.jrc.ec.europa.eu/-/innovation-monitoring-system-based-on-specialised-observatories-and-smart-indexes?inheritRedirect=true>

<p>Lithuania <i>Less developed</i> <i>Moderate innovator</i> <i>EQI below the EU average</i></p>	<p>The Smart Specialisation approach in Lithuania had effects on stakeholder engagement, decision-making processes, monitoring and evaluation mechanisms and many more. Stakeholders were particularly active during the interim evaluation of the strategy, and as a result, priorities were reformulated at the end of 2018. Stakeholders' involvement is currently considered as a fundamental process in the country. <i>"The capacity to gather evidence and the on-going exchange with stakeholders in the context of continuous EDP are crucial elements, to extract meaningful interpretations/conclusions from data."</i>³⁰</p>
<p>Andalucía (ES) <i>Transition</i> <i>Moderate innovator</i> <i>EQI below EU average</i></p>	<p><i>Andalucía</i> is another example of a region where RIS3 provided a real boost to the regional innovation policy, once the concept has been understood and endorsed at a political level. The introduction of the Entrepreneurial Discovery Process allowed the region to discover transversal opportunities in several innovative domains. It also fostered interregional cooperation opportunities in the context of Thematic Platforms, which helped the region to find partners across Europe.</p>
<p>Centre-Val de Loire (FR) <i>More developed</i> <i>Strong innovator</i> <i>EQI above EU average</i></p>	<p><i>Centre-Val de Loire</i> is an example of a more developed region where EC support was essential for understanding and applying the RIS3 approach. Four factors were instrumental, such as i) highest political authorities were involved from the beginning, ii) priorities were chosen based on clear and agreed on criteria, iii) the Entrepreneurial Discovery Process only involved entrepreneurs who had a vision for the future of their company and, more broadly, of the emerging value chains, iv) a genuine dialogue was established with stakeholders and not just a formal consultation. The process allowed the region to change more easily and focus the policy mix. Concrete implementation of RIS3 on the ground can be illustrated by the fact that the region has already approved five major projects linked to RIS3 priorities, which are based on their ability to generate socio-economic impact.</p>

Source: CSIL processing of interviews' finding and based on the S3 platform

According to evidence collected through in-depth interviews and at the workshop, most of the stakeholders consulted **acknowledge the added value of EC support**. EC support is recognised to bring value not only because of the positive effects on the design and implementation of RIS3 and on a broader learning process but also because it contributed to **ensuring the credibility** of the whole exercise (*Andalucía – ES, PACA – FR, Algarve – PT*). Through the support granted, the Commission was identified as a **"trusted third party"**, essential to reach national and regional institutions better, involve politicians and, as a result, to ultimately legitimising political choices. EC support was said to have a fundamental political function by including the EC as an authoritative partner, helping regions to forge their strategic approach. In this context, elements such as dialogue and trust emerged as crucial success factors in the provision of support, which were essential features to maximise the expected positive effects. A few regions noted that the best way to capitalise EC support is to be actively involved in an exchange process with support providers and peers (*Lapland – FI, Andalucía – ES*).

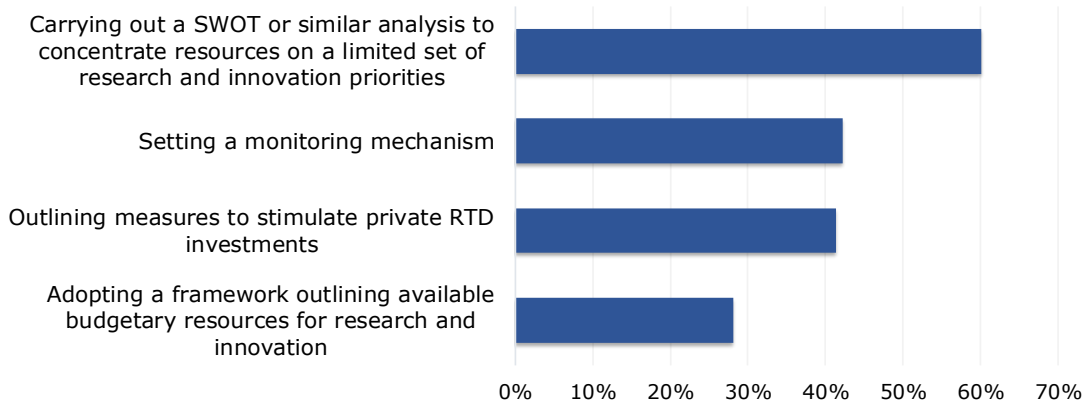
5.1.3 The role of the ex-ante conditionality

As shown in Chapter 4, EC support has helped MS and regions to understand EC legal requirements and in successfully complying with ExAC. The survey's responses illustrated in Figure 34 reveal that EC support was found to be specifically helpful in meeting needs

³⁰ <https://s3platform.jrc.ec.europa.eu/-/governing-edp-in-s3-priority-setting?inheritRedirect=true>

related to the requirement of carrying out a SWOT analysis but less so for setting monitoring mechanisms and outlining measures to stimulate private R&D investments.

Figure 34. EC legal requirements effectively addressed by EC support by category of respondents



Source: CSIL processing of the survey's results. Note: Percentage of survey respondents (128 in total, of which 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support and 54 Managing Authorities responsible for ESIF management).

The relation between ExAC and support also works the other way round. The hypothesis is that the **ExAC mechanisms produced real effects on regions' commitment** that the support system contributed to diffuse. As the opportunity cost of non-compliance was high (because of the potential consequence on the related funding share), some of these countries/regions (i.e., *Campania - IT, Lithuania, Andalucía - ES*) took the exercise seriously. Eventually, they got convinced of the benefits of RIS3 beyond its implications in financial terms.

The notion was less enthusiastically embraced where the incentive represented by the ExAC was lower or where already established practices were/are at work. But still, it could represent a learning opportunity in intermediate / more developed regions too (e.g., *Centre Val de Loire - FR*). In other cases, the ExAC merely triggered a "compliance approach", i.e. a tick-the-box exercise aimed at obtaining funding. Some EC Officers and AMI-CEI experts highlighted that asking to comply with ExAC has sometimes been accompanied by a lack of understanding of the actual benefit deriving from the application of such an approach. RIS3 became a resource allocation issue rather than an opportunity for producing an effective change in the way innovation policies are implemented.

Interestingly, it was argued during the workshop that the higher concentration of EC support in the design phase might have conveyed the message that also the Commission was more interested in compliance than in actual implementation.

In the cases of countries/regions with a longstanding culture of innovation and where the relevance of EU Funds is quite low (e.g. *Sweden, Austria, etc.*), the compliance with *ex-ante* conditionality was found to be cumbersome and was sometimes circumvented. For example, in Austria, there was already a national strategy - which is still running until 2020 - and most of the regions had their innovation strategies. The choice was to ensure that the national policy complied with *ex-ante* conditionality, without requiring that regional ones would also comply. The Austrian approach was instead to ask regions whenever they drafted new strategies to take on board the smart specialisation concept. That was also

why Austrian regions did not use support from JRC and DG Regio. Similarly, in Sweden, the national level interfered with the need to comply with EAC at the regional level.

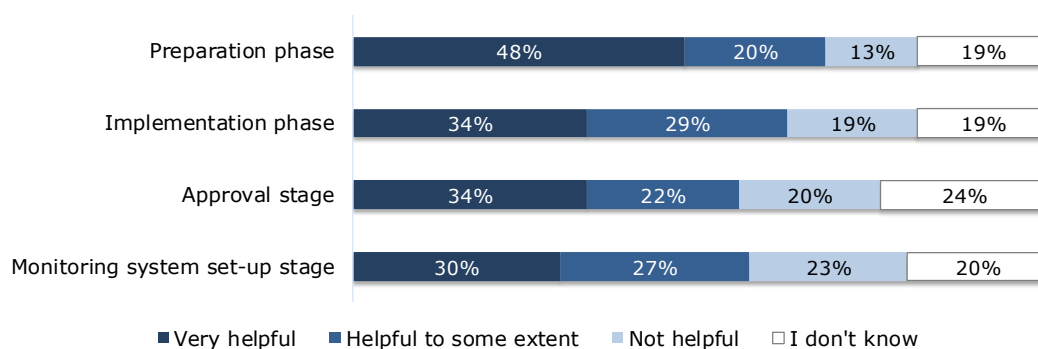
5.2 Efficiency issues in the management of support

5.2.1 Timeliness

Timeliness in preparing and implementing RIS3

In the absence of accessible information on the date of approval of RIS3 (see also section 5.2.3 below), evidence from survey and interviews is used to bring element on the effects of support on the timeliness of RIS3. The survey shows that at first sight, EC support was found to have accelerated the timeliness of RIS3 development. However, this positive effect varies depending on whether the preparation, approval or implementation of RIS3 is concerned (see Figure below **Error! Reference source not found.**). While 68% of survey's respondents found the EC support to be helpful for the timely preparation of RIS3, 56% of them recognised this positive effect for RIS3 approval, thus mitigating the overall positive impact of support.

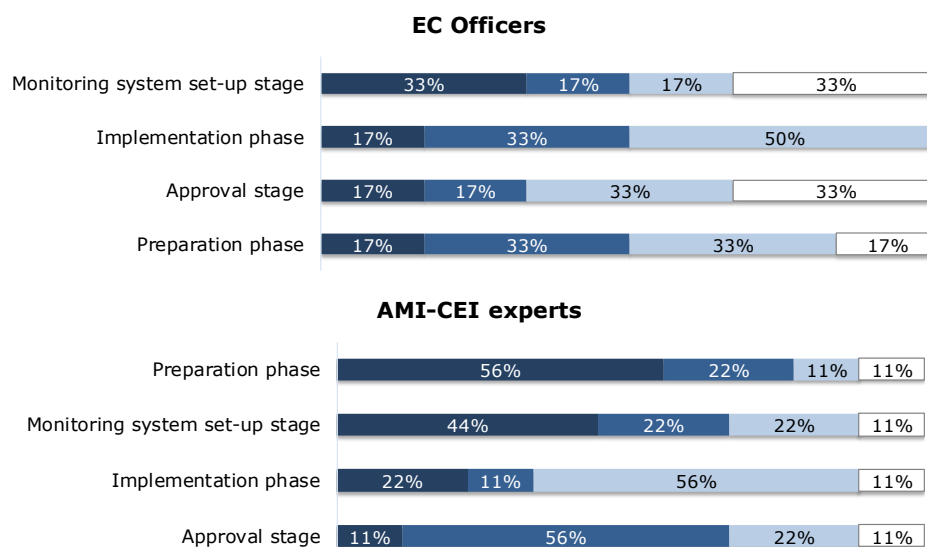
Figure 35. The effect of the EC support on the timeliness of preparation, approval and implementation of RIS3 according to RIS3 users and Managing Authorities



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (128 in total, of which 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support and 54 Managing Authorities responsible for ESIF management).

Differentiating by categories of stakeholders, it is interesting to note that most of AMI-CEI experts, as well as EC officers, found that the support provided during the implementation phase and to the set-up of the monitoring system was not helpful or less helpful from a timeliness perspective (see Figure 36).

Figure 36. The effect of the EC support on the timeliness of preparation, approval and implementation of RIS3 according to EC Officers and AMI-CEI experts



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (15 in total, of which 6 EC Officers VS 9 AMI-CEI experts).

Evidence collected through in-depth interviews confirmed the lack of evidence on this issue. In a few cases, EC support has been deemed helpful to design RIS3 in a timely way (Malta) and therefore to gain in terms of time (*PACA – FR*) or even to recover an initial difficult phase that was delaying the adoption of the strategy (*Abruzzo – IT*).

Timely delivery of support and time dedicated to support

The **delivery of EC support was sometimes insufficiently timely**. A mismatch was found between the time when needs across countries and regions emerged and the time when EC support was provided. For instance, a vacuum was reported at the beginning of the programming period, before implementing regulations were published and the guides published. Concern has also been raised about the support provided to the monitoring system during the implementation phase. Sometimes, this led to the set up of alternative support at a national level, for example, in Italy.

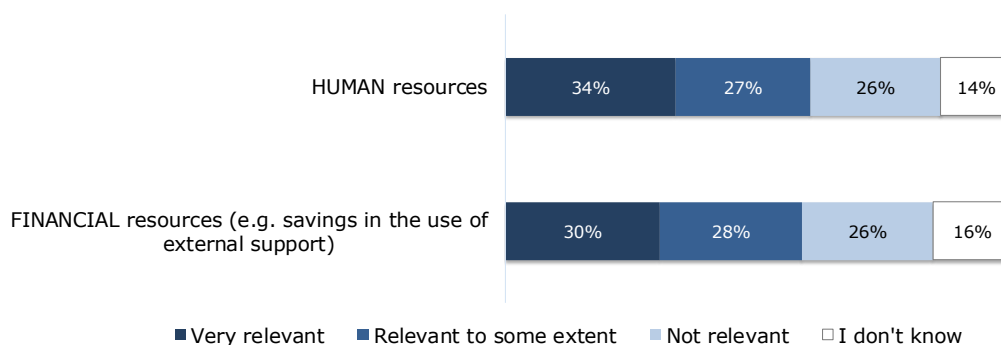
The **limited time dedicated to the provision of the EC support** was also deemed an important factor that may have hampered its effective delivery. In-depth interviews and the online survey confirm this time-related problem primarily about the support provided by AMI-CEI experts, both for customised support (e.g. to Thematic Platforms) and highly customised support. The length of support by AMI-CEI expert usually takes 15 days. Some consulted stakeholders (e.g. AMI experts, EC officials, Greece) highlighted that time for providing more tailored support is generally limited and insufficient to satisfy countries and regions' needs properly.

Lack of continuity in the provision of support across the entire policy cycle was identified as a significant concern (*Greece, Galicia – ES, Valencian Community – ES, Algarve – PT*). AMI-CEI experts noted that EC support had focused mainly on the preparation and design of the strategies, with keen attention to the phase of analysis of potential competitive advantages, rather than on the implementation aspects such as instruments, budget, actions or monitoring (as documented at length in Chapter 3).

5.2.2 Human and financial resources

Some indication of the effects of EC support on the **efficient use of financial and human resources** within national and regional administrations is available from the survey. Regions considered that EC support was overall relevant in this regard. RIS3 authorities and managing authorities found that the support was very relevant or relevant to some extent both for financial (58% of respondents) and human resources (61% of respondents – see Figure 37).

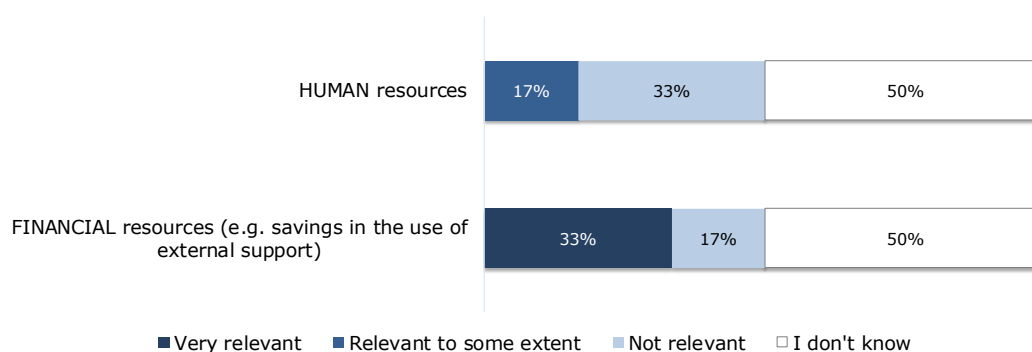
Figure 37. Users of EC support and Managing Authorities assessing the relevance of the support in ensuring efficient use of resources within national/regional administration



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (128 in total, of which 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support and 54 Managing Authorities responsible for ESIF management).

However, a contrasting assessment is provided by EC/JRC officers who considered that the support was not so relevant in ensuring efficient use of human resources (33% of respondents). On the contrast, it was appropriate concerning the use of financial resources (33% of them considered EC support as very relevant vs 17% stating its irrelevance, see Figure 38).

Figure 38. EC Officers assessing the relevance of the support in ensuring efficient use of resources within national/regional administration



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (Total of 6 EC Officers)

The only evidence from interviews in this respect is the case of Abruzzo (IT) which noted how individual support provided by AMI-CEI expert has allowed the region to achieve a better allocation of resources.

If limited evidence is available to show that support improved human and financial resources management, there are indications that the relationship goes in the other

direction too. **The lack of human and financial resources at the national/regional level** is cited by the interviewees as a factor hampering the effectiveness of support. As argued by some interviewees (*Lapland – FI, PACA – FR,*), despite the need and interest for a specific type of support (mostly peer review or workshop), the participation was made challenging by a shortage of staff within national and regional authorities. The latter issue becomes particularly relevant for small regions with limited human resources to invest in these activities even if they boast long term tradition in innovation (e.g. *Bremen in Germany, Molise-IT*). Also, concerns about the lack of resources were raised about the practical implementation of the RIS3 and, more specifically, concerning the managing of the EDP and the promotion of interregional innovation investment projects (*South Moravia – CZ, Andalucía – ES*).

Staff turnover is an issue worsening the availability of skilled staff within regional administrations. As highlighted by the less developed region *Campania - IT*, for instance, the problem of staff turnover might have a downside for the timeliness of preparation or implementation of RIS3, as a result of asymmetric information between previous and new staff. Moreover, it is amongst the main issues related to the governance structure for RIS3 which hamper EC support's effectiveness, as staff turnover implies the constant need for competence development and for internalising the RIS3 concepts and benefits.

Beyond the shortage of human and financial resources, a broader issue relates to the level of **administrative capacity** (see Box 19). Some regions lacked specialised and skilled experts within their public administrations as they lack funding for training people to ultimately create a competent and dedicated team of experts with permanent roles (*North-East – RO, Slovakia*).

Box 19. Examples of issues with administrative capacity

- "The region **lacked the necessary experience** for building the process on its own without any kind of support". [Galicia (ES) – Authority responsible for RIS3]
- "In general, the region has encountered difficulties typical of a small reality, including a lack of administrative resources, a lack of financial resources to provide special services to businesses, and **a lack of tradition towards innovation**". [Molise (IT) – Authority responsible for RIS3]
- Latvia, during the design of RIS3, suffered from a **lack of capacity and expertise** within the public administration. [Latvia – Authority responsible for RIS3]
- Lithuania experienced «**internal and bureaucratic issues**» within the public administration, which hampered the implementation of RIS3. [Lithuania – Authority responsible for RIS3]
- In Romania, there was a **need to build awareness and capacity** and **create a team of experts inside the organisation**. [North-East (RO) – Authority responsible for RIS3]
- "Slovakia **lacks experts with international experience in the field of strategic management** of research and innovation". [Slovakia – Authority responsible for RIS3]

Source: CSIL processing of interviews

Human and financial resources at EU level

Concern has been expressed about **human resources devoted by the EC** to support countries and regions in the preparation and implementation of RIS3. The perception was that DG Regio services were **understaffed**, both during the assessment of ExAC and approval and implementation of RIS3. During the implementation, an intricate pattern of interaction between JRC and DG Regio officials was reported, with the former in charge of tracking issues on the ground, which the latter then addressed.

Competence was also a contested issue. Some AMI-CEI experts highlighted the potential lack of required specialisation and experience within the EC. At the same time,

EC Officers raised the problem of staff turnover within JRC, where there would be a high variability of competence and knowledge because most JRC Officers work on a temporary basis. Indeed, the current arrangement governing the JRC mandate represents a difficulty to adequately manage human resources and ensure staff continuity and commitment, making it difficult to plan resources on the appropriate time scale. As presented in Chapter 3, the provision of JRC support to RIS3 is regulated by Administrative Agreements (AA) stipulated with the Commission every two years (the last one expired in July 2019). Overall, there are about 20 people involved in the framework of each Administrative Agreements in addition to 15 additional experts.

Finally, another issue in terms of human resource management concerns the system to hire and manage AMI experts. **Several limitations were identified**, such as the *ad-hoc* management of single contracts, and the absence of terms of reference underlying their mission. Moreover, the evaluation and selection of the experts were found to be time demanding and there seem to be limited quality control measures.

5.2.3 Knowledge management and access to information

Combined evidence also shows weakness in knowledge management, mainly reflected in the **lack of capitalisation of the wealth of knowledge accumulated**, but also **merely in accessing it**.

The dissemination of information about the availability of the different types of EC support represents a shortcoming of the current system of EC support. According to interviews and workshop discussions (e.g. *Lapland – FI*, *Helsinki-Uusimaa – FI*), a large amount of information and knowledge is made available through the S3 platform, which is however difficult to find, manage and internalise. While it was recognised that a lot of information is in principle available, issues concerning its efficient organisation were raised. Moreover, it was pointed out that there is very limited information on the types of support available (*PACA – FR*), especially concerning workshops or peer reviews. Some regions (e.g. *Stockholm – SE*) expressed disappointments regarding the lack of invitations to these events over the period considered.

More fundamentally, basic information on RIS3 support is missing, starting with elementary information on RIS3 (e.g., on the real number of RIS3,³¹ and their main features such as their date of adoption, the process of revision, etc.), which is not centralised in a single database. In this context, the EC does not efficiently monitor the provision of support, thus missing information on types of interventions provided or the beneficiaries to which those interventions are targeted. Little track is kept of the utilisation of the support delivered through the S3 platform (e.g., web access, number of downloads, a database of participants, etc.). Also, for the appointment of AMI-CEI experts, the database owned by the Commission is not sufficient to collect information on the types of support provided. Moreover, output documents prepared by experts after each mission are not standardised, thus preventing from learning by comparing, and from assessing the effects of support.

This issue might be explained by limitations in human resource management within national and regional administration. However, the lack of capitalisation of the knowledge accumulated by EC and AMI-CEI experts' interventions on the ground may also be the result of the weak interest in monitoring the (cost) effectiveness of EC support. Overall,

³¹ See the effort made in this study to approximate the total number of RIS3 in Chapter 3 / Annex VI.

there is a real difficulty in taking advantage of the advice and experience collected during years of RIS3 design and implementation.

5.3 External and internal coherence of support

5.3.1 De facto a coherent set

Stakeholders consulted in this study often had an overall approach to EC *as a whole*, without distinguishing the different instruments. They generally considered that the **various support instruments were overall de facto complementary**. There was hardly any mention of overlap during interviews and at the workshop. RIS3 authorities appeared to have mobilised the different tools without a precise plan, in a “menu” approach, pragmatically establishing a mix adapted to their needs. The supply of a variety of forms of support could be contemporaneous and complementary used by regions according to their specific needs, and level of development in the RIS3 process. That was done, on an ad hoc basis and without planning it.

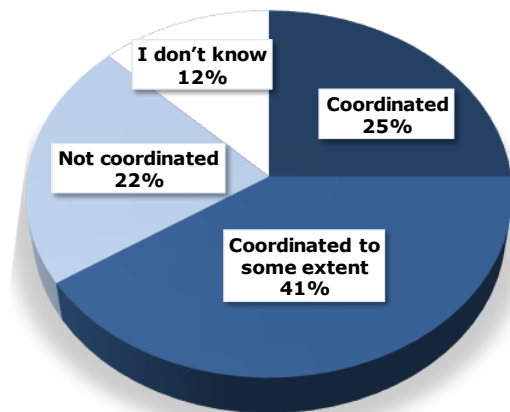
5.3.2 Coordination with alternative support

Insufficient coordination was found between EC support and other types of assistance. In particular, some stakeholders (*Catalonia – ES, Malta*) expressed concerns about the lack of coordination with **alternative models of support offered at European level** by other DGs supporting the innovation process (e.g. DG RTD, DG GROWTH etc., see Chapter 3 for an overview). These DGs have different approaches to help Research and Innovation. The lack of coordination, or even interaction, can be detrimental to the formulation and implementation of effective strategies.

Inconsistencies were found to a lower extent with alternative support provided to RIS3 by national and regional authorities (e.g. *Molise – IT*). In some cases, stakeholders highlighted that these types of support were more relevant than the EC support. This shows that it may be challenging to translate theoretical synergic approaches into practical actions of cooperation and coordination between EC, JRC and National Authorities. In this area, improvements are needed (*Lapland – FI*).

These findings are confirmed by the evidence collected from the online survey, showing that coordination between EC support and alternative types of support is, in general, not strongly valued. Authorities dealing with RIS3 and Managing Authorities perceived the delivery of these two different types of support as coordinated only to some extent, as shown in Figure 39.

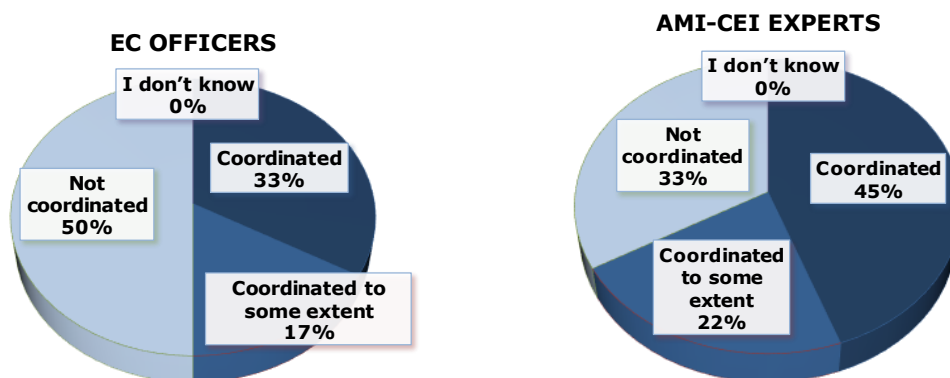
Figure 39. Coordination between EC support and alternative types of support according to users of EC support and Managing Authorities



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (128 in total, of which 74 Authorities dealing with RIS3 at the national and regional level and 54 Managing Authorities responsible for ESIF management)

Also, AMI-CEI experts and EC Officers have a negative perception about coordination, as the majority of them considered EC support as not coordinated with alternative advisory services (see Figure 40).

Figure 40. Coordination between EC support and alternative types of support according to EC Officers VS AMI-CEI experts



Source: CSIL processing of the survey's results. **Note:** Percentage of survey respondents (15 in total, of which 6 EC Officers and 9 AMI-CEI experts)

Box 20 gives an overview of users' perceptions of coordination issues arising during the provision of EC support.

Box 20. Coordination issues in the provision of EC support – quotes from consulted stakeholders

<p>INCONSISTENCIES BETWEEN DG REGIO SUPPORT AND OTHER DGs</p>	<ul style="list-style-type: none"> - Synergic approaches are in the papers but not always in the actions. [Lapland (FI) - Authority responsible for RIS3] - The diverse interpretations of RIS3 from different DG from the EC has also been a challenge for JRC's support to regions. [Catalonia (ES) - Authority responsible for RIS3] - The implementation phase is even more confusing than the design phase, as there is an issue concerning the dialogue between DG Regio and DG RTD [Malta - Authority responsible for RIS3] - There is some overlap between what DG Regio wants to achieve and the vision of other DGs involved in shaping EU innovation processes, but possibly still some mismatch in coordinating the approaches of different DGs. [EC Officer]
<p>INCONSISTENCIES WITH ALTERNATIVE TYPES OF SUPPORT</p>	<ul style="list-style-type: none"> - There has been no coordination except for the participation of DG Regio in meetings of the Spanish IDI Network. Technical Assistance instruments have not been used to improve this coordination and give real support to the management of regional RIS3. [Valencian Community (ES) - Authority responsible for RIS3] - Need for better coordination with Spanish Red I+D+i. Coordinating with Foro ADR (Spanish Association of RDAs) will improve RIS3 in the Regions. [Murcia (ES) - Authority responsible for RIS3] - There are limits to the current set-up and, given that there are other R&I support routes offered by various EC initiatives, it would be useful to use the current system in combination with other opportunities. [EC Officer]

Source: CSIL processing of interviews and survey's results

5.4 Framework conditions

Different framework conditions were inadequately anticipated by EC support and influenced its effectiveness and efficiency.

5.4.1 The articulation between RIS3 and OP

The difficult articulation between RIS3 and the OP within the ESIF framework is one factor that limited the effective implementation of RIS3, and which could have been better addressed by EC support. From an operational point of view, RIS3 do not rely on their budget. It is rather a guidance mechanism through which ESI funds are channelled to induce positive changes in countries or regions and a sort of “platform through which consensus on priorities is found and a series of steps to make the priorities happen” (South Moravia - CZ). Interviews and discussions during the workshop identified the **lack of coordination between the implementation of the Operational Programmes and RIS3** whose responsibilities is usually entrusted to different entities (respectively to the managing authority and authority for RIS3, i.e., a third body appointed explicitly for the design and implementation of RIS3) as the main difficulty. In some countries (e.g. Slovakia, Sweden) and some regions (Italian regions), there was a strong effort put in the preparation of the RIS3. Still, the implementation of the OP was then not fully in line with the strategy. In some cases, this lack of coordination led to a failure of the OP and a de-commitment of funds (Slovakia). Integrating RIS3 within the OP was concern mainly for countries/regions where the governance for RIS3 and OP is structured and managed at different levels.

Box 21. Examples of coordination issues between RIS3 and OP

Sweden	<p>The Swedish case represents an emblematic example of a coordination problem arising from diverging governance structures for RIS3 and ESIF, linked primarily to the issue of prioritisation. In Sweden, ESIF funds are allocated to NUTS2 level regions even if there is no administrative body corresponding to the NUT2 level. Therefore, each county, which corresponds to the third level of division in the EU NUTS system (NUTS3), has to design its smart specialisation strategy. This situation required an additional effort in terms of resources. It also raised issues of coordination between different NUTS level as, in terms of internal governance arrangements, the directives to the regions did not provide a clear indication on whether a strategy at NUTS3 level should exist.</p>
Austria	<p>In Austria, there is only a national Operational Programme, but RIS3 is required both at the national and regional level, thus implying an additional challenge beyond the one of complying with the ExAC. More specifically, the country faced a specific difficulty in convincing the European Commission that linking regional smart specialisation strategies with the ExAC requirements did not make sense for the Austrian regions.</p>
Finland	<p>In Finland, regions manage a part of the budget of the national OP, but they are not involved in the smart specialisation process. More specifically, as smart specialisation is not considered of particular importance at the national level, regions are not considered in the process, even though they understood its importance.</p>

Source: CSIL processing of interviews

5.4.2 Governance framework and political factors

A last set of factors were particularly challenging, or even clearly beyond remits of EC support. Problems regarding the **articulation between the national and regional level and issues of ownership of RIS3 within the governance structure** are aspects that impaired the effective implementation of RIS3 about which support can have a limited contribution. Lack of coordination between local, regional and national levels reveal how the setting of the governance structure has been an issue for countries where both the regional and national levels are involved in the design of RIS3. Problems for the coordination of regional and national RIS3 regarded, for example, *Poland, Italy and Greece*. These countries are characterised by different types of regions with diverging administrative capacities and cultures of innovation. In contrast, problems of coordination between different levels of governance have been identified mainly in countries characterised by a stronger culture of innovation and a higher level of development. RIS3 is also run simultaneously at the national and regional level in *Portugal* (see examples in Box 22).

Different interviewees insisted that **political factors** may have a negative impact on the implementation of RIS3, delaying or hampering the process (*Andalucía - ES, Abruzzo - IT, EC Officers*), on which support has limited grip. For example, the national authorities are not always supportive of RIS3 development at regional level (*Andalucía - ES*). Also, political turnover and elections determine the need to keep the notion fresh to politicians showing that political commitment to RIS3 plays an important role – and conversely, RIS3 has critical political implications (through the prioritisation process).

Box 22. Examples of coordination issues between the national and regional levels

South Moravia (CZ)	The leading role in the context of RIS3 is of the national level as OP is run at a national level. However, regions, seeking to be recognised by stakeholders, were also interested in complying with ExAC.
Greece	<i>"The main challenge faced by Greece during the preparation of the RIS3 concerns the difficulty in finding a link between the national and the regional RSI3. Specifically, there was the need to coordinate these two levels, not only with respect to the design and implementation of the RIS3 but also with respect to the governance system".</i>
Campania (IT)	<i>"Since the introduction of the RIS3, the Region has looked carefully at the multilevel dimension of governance, considering that to integrate the regional strategy with the national and European one it is necessary to act within a framework that clearly defines the division of roles and tasks".</i>
Slaskie (PL)	Slaskie (PL) identified as one of the main challenges of RIS3 the alignment of the regional strategies to the national one .
North-East Romania (RO)	<i>"There was a need to establish a multi-level dialogue in Romania (national-regional level)".</i>
Östergötland (SE)	<i>"In the implementation of the strategy, the crucial challenge was/is the national governance of smart specialisation, due to the "unwillingness" of the national level to embrace the concept".</i>

Source: CSIL processing of interviews

6 FOCUS OF FUTURE SUPPORT

Setting the governance of RIS3, managing the EDP, improving the research and innovation eco-system and identifying suitable indicators for monitoring are needs for support that are set to stay in the post-2020 period. These needs are also at the **core of the future enabling condition** substituting the current system of ex-ante conditionality.

Improvements are claimed by regions for all types of support in order to address future needs. There is some **specific expectation concerning the role of AMI-CEI experts and that of IT tools** in this respect. In contrast, learning by exchanging is considered less of a priority.

According to regions, **phasing out or reducing** the Commission's support of RIS3 **would have a negative impact** on regions/countries, especially those that are less developed or are modest innovators. To some extent, this is coherent with the disproportionate expectations placed on the support. **Alternative types of support** could be envisaged under a phase-out scenario.

This section discusses the future of the EC support for RIS3. First, it shows the specific needs that countries and regions will face in the future, including how these have evolved – compared to the past and concerning forthcoming EC requirements. Second, it examines the specific improvements to the various types of support provided by the EC in 2014–2020 to meet these needs in the future adequately. Last, it provides insights on the consequences of phased out/reduced EC support and reflects on potential alternatives.

6.1 Evolution of needs for support: what to give priority to in the future

6.1.1 Future needs across RIS3 stages and types of regions

To understand to what the EC support should give priority in the future, an assessment of the most pressing needs perceived about the RIS3 design and implementation was carried out.

As shown by Figure 41, results from the online survey overall point out that **setting the governance of RIS3, managing the EDP and identifying suitable indicators for monitoring** will be among the most pressing needs among countries and regions. These are relatively basic needs, and most importantly, they are at the core of the new enabling condition. Interestingly, EC officers instead put forward the need for internationalisation and for translating RIS3 into projects as a priority, i.e., more elaborated needs during implementation. This variance illustrates a relative disconnect between reasonable expectations by the EC and the actual situation on the ground, which is further behind than anticipated. Another relevant result is that the priority placed on sharing good practices has dramatically diminished compared to past needs.

Figure 41. An overview of future needs



Source: CSIL processing of the survey's results. **Note:** Number of survey respondents (138 in total, of which 84 Authorities dealing with RIS3 at the national and regional level and 54 Managing Authorities responsible for ESIF management)

Evidence collected through in-depth interviews and discussion during the workshop overall confirmed online survey findings. The governance dimension is expected to be particularly pressing for the **entrepreneurial discovery process**. The EDP and its governance emerged as priorities still relevant for the future (*Algarve - PT, Greece, Andalucía - ES*). In particular, there is a continuous need to identify stakeholders which can invest in the priorities identified, as well as new actors, given the broadened scope of the policy objective for RIS3 (*Algarve - PT*). Overall, there is a need to set up a more marked operational governance structure for the EDP (*Greece*). Similar to the issues in the current programming period identified in the previous chapters, no pronounced patterns differentiating regions are observed.

Additional needs not captured by the online survey were brought out in the context of in-depth interviews, notably the need to **clarify the RIS3 competences attributed to the national and the regional level in the future**. More coordination and developing a system of shared responsibilities would be needed (*Nord-Est - RO*). A need to attribute responsibilities and roles, while improving communications and dialogue is also perceived within regional administrations (*Campania - IT*). During the workshop, an AMI-CEI expert highlighted that this was perceived in the past, and for some regions, it remains a need to be addressed.

According to all stakeholders consulted, **implementation "on the ground" is set to remain a substantial challenge**. It urges strong monitoring (*EC officers*) to avoid negative impacts on the dynamics of the overall strategy. In this respect, the future support provided by the Commission and the JRC should balance preparation needs with the support to the design and implementation of the strategy (*AMI experts*).

6.1.2 Future needs in relation to regulatory requirements

Beside needs inherent to the RIS3 process, an important new contextual element will have to be taken into account in the next programming period with the new enabling conditions expected to replace the ex-ante conditionalities at work in the 2014–2020 programming period.

In the 2021–2027 programming period, smart specialisation strategies will be a new enabling condition guiding investments in research and innovation. In contrast to the

2014–2020 period, the enabling condition will be monitored and applied **throughout the entire period** and not just at its beginning. It will also include more criteria to reflect the extended coverage of RIS3. Among these, three are “**core**” **fulfilment criteria** subject to a strict assessment of compliance, namely *a sound EDP, governance and monitoring and evaluation*, while the other four thematic criteria will rather be the object of an open dialogue between the European Commission and the regions during implementation (for more detail see Box 5 in Chapter 2).

The online survey’s respondents expressed their views on the emerging needs following the introduction of the future enabling condition. Among the different fulfilment criteria, establishing a monitoring system attracted the most attention (Figure 42).

Figure 42. Future EC requirements requiring EC support



Source: CSIL processing of the survey’s results. **Note:** Percentage of survey respondents (138 in total, of which 84 Authorities dealing with RIS3 at the national and regional level and 54 Managing Authorities responsible for ESIF management)

It is interesting to identify a certain discontinuity in the survey’s responses between the needs identified in the absolute (Figure 42 above) and needs identified about the fulfilment criteria. For example, measures for international collaboration are expected to require more support than actually would be the case without reference to the corresponding fulfilment criteria. Regions are arguably worried about the conditions of applicability of the enabling condition at a time (when stakeholders were questioned) when they had limited access to new and updated information.

The interviews provided more fine-grain on these issues. Most interviewees expressed concern on the compliance with the fulfilment criteria (*Northern Netherlands - NL, Pomorskie - PL, Slovenia*). In particular, they raised the need to help **to understand the new enabling condition** (*Malta*) and clarifying the requirements and the **evidence needed to fulfil** such requirements (*South Moravia - CZ, Bremen - DE, Abruzzo - IT, Lubuskie - PL, Algarve - PT, Nord-East - RO*). Several interviewees noted that the new enabling condition is too broad (*PACA-FR, Lithuania*) and should be respected for the whole programming period, which has implications for the monitoring of the strategy and also for the choice of the policy mix. In particular, some interviewees said that there was no clarity on how some of the necessary aspects for complying with the conditions will operate (*Greece, Galicia - ES*), urging for differentiated criteria to apply to countries and regions (*Greece*). Particular concern was expressed on the measurement of impacts (*Bremen - DE,*

Nord-East - RO). Support tools should be provided on the evaluation of the effects of regional RIS3, primarily focusing on the uniformity of indicators for OPs and smart specialisation strategies (*PACA - FR*). The definition of the monitoring and evaluation system and the choice of indicators were mentioned as pressing needs (*Andalucía - ES, Malta*).

Additional guidance will be needed (*South Moravia - CZ*), with specific methodologies for the periodic fulfilment of the new criteria (*PACA - FR*). If no clarifications were provided, then the European Commission would have to make less detailed requirements and leave it open to countries/regions how to show compliance (*Bremen - DE*). According to some consulted EC Officers, this situation may be an intended consequence of how the conditions were structured. The approach, it has been noted, was to let regions explain what they meant by a specific requirement, to trigger dialogue with the European Commission.

6.2 Future relevance and improvement of existing instruments

The stakeholders reviewed in the study identified improvements necessary at the level of individual instruments. Table 6 offers a synthetic view of the proposed actions to take.

Table 6. Future relevance of existing instruments and room for improvements

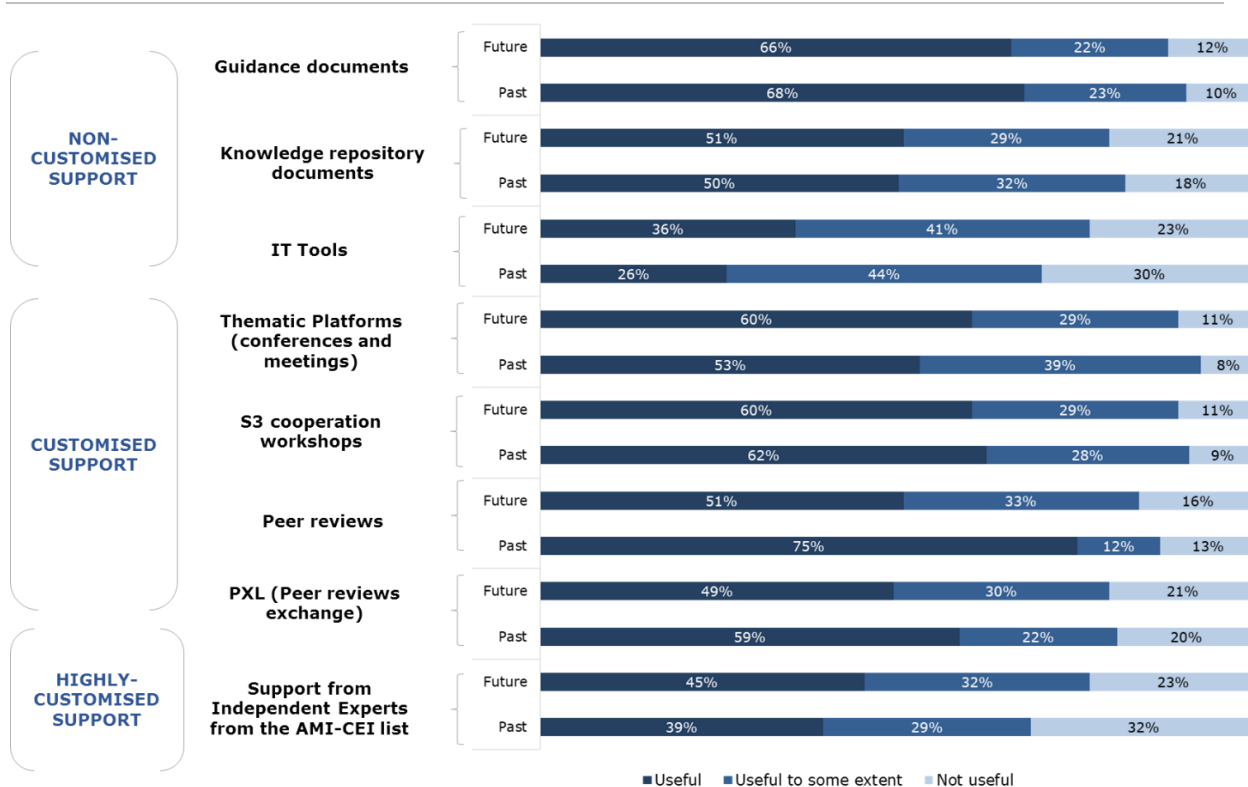
Category of support	Future relevance	Suggested improvements
Non-customised support	<p>Guidance documents:</p> <ul style="list-style-type: none"> - Still, a reference to deepen understanding of RIS3 concept and to check the fulfilment of future enabling condition (<i>South Moravia - CZ, Greece, Malta, Lithuania, Andalucía - ES</i>) 	<p>Guidance documents:</p> <ul style="list-style-type: none"> - <i>Re-organisation of information:</i> more effective classification and organisation of the guides and studies currently available, based on their potential usefulness (<i>Lapland - FI</i>) - <i>From theory to practice:</i> guides should include more practical examples and methodologies on concrete RIS3 design and implementation respectively (<i>Northern Netherlands - NL, Algarve - PT</i>) - <i>From general to specific:</i> guides should be more context-specific and target selected types of regions and needs (<i>Slaskie - PL, Galicia - ES, Abruzzo - IT</i>)
	<p>IT tools:</p> <ul style="list-style-type: none"> - Lower relevance with respect to the past but, if re-organised, potentially useful for benchmarking (<i>South Moravia - CZ</i>) 	<p>IT tools:</p> <ul style="list-style-type: none"> - <i>Re-organisation of information:</i> the creation of a unique repository of successfully implemented support measures to be frequently updated (<i>Latvia, Lapland - FI</i>)
Customised support	<p>Peer reviews, PXL and workshops:</p> <ul style="list-style-type: none"> - Lower relevance as compared to the past, but potentially still useful for benchmarking and learning from examples of good practice on specific issues/themes related to RIS3 design and implementation (<i>PACA - FR, Galicia - ES</i>) 	<p>Peer reviews, PXL and workshops:</p>

		<ul style="list-style-type: none"> - <i>A need for selection</i>: regions should be limited in number (<i>Campania - IT</i>) and selected considering their potential homogeneity (<i>Lithuania, Greece, Malta</i>), while events should focus on specific issues and objectives selected in a bottom-up way (<i>Lapland - FI, Pomorskie - PL</i>) - <i>Systematic organisation</i>: centralised organisation of the events in an easily accessible location and according to a similar format (<i>Lapland - FI, South Moravia - CZ</i>)
	<p>Thematic platforms</p> <ul style="list-style-type: none"> - Higher relevance with respect to the past for fostering interregional cooperation (<i>PACA - FR, Andalucía - ES</i>) 	<p>Thematic platforms</p> <ul style="list-style-type: none"> - <i>A higher level of publicity</i>: it was urged to provide more hands-on information on the thematic platforms, specifically on how to join and on the available funding opportunities (<i>Bremen - DE, Galicia - ES, Pomorskie - PL, Östergötland - SE</i>)
<p>Highly customised support</p>	<ul style="list-style-type: none"> - Potentially relevant to address specific needs still perceived in less-advanced regions (i.e. lack of administrative capacity, EDP management) 	<ul style="list-style-type: none"> - <i>From theory to practice</i>: experts should bring practical experience to implementing the strategy, following a “problem-solution” approach (<i>Andalucía - ES, Lapland - FI, Algarve - PT</i>) - <i>From general to specific</i>: experts should not provide general support on RIS3, instead they should focus on specific needs and work on precise tasks (<i>Centre-Val de Loire - FR</i>) - <i>From temporary to continuous support</i>: support should not focus on a specific phase of the policy cycle or be limited to a short period, but it should be provided with continuity and across both the design and implementation phases (<i>Malta</i>) - <i>From a top-down to a bottom-up selection process</i>: regions should be more involved in the selection process of experts (<i>Lapland - FI</i>)

Source: CSIL

The Figure 43 compares the usefulness of the different support instruments in meeting future needs compared with the past.

Figure 43. Assessment of the usefulness of the different categories of EC support in meeting future needs with respect to the past



Source: CSIL processing of the survey's results. **Note:** Percentage of respondents (Total of 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support).

Amongst the different types of support, it is worth pointing out that, in a future perspective, IT tools, thematic platforms and the support from AMI experts are perceived to increase their usefulness as compared to the past. Conversely, peer review/PXL and workshops are considered less useful for addressing future needs. Guidance documents were highly valued in the past, and they will be still appreciated in the future.

6.3 Future options

Specific themes were reiterated during interviews and workshop discussions; they were identified as factors or areas of improvement.

Combination and consistency of support instruments

The types of **support currently available should be maintained and used in complementary ways** (*Abruzzo - IT, Latvia*). An EC Officer expressed the view that the best combination of support would imply a mix of services delivered by the JRC and by national experts. These insights were reinforced during the workshop. An AMI-CEI expert noted the need to maintain generic support in some regions for the fundamentals of RIS3 and blend it with targeted support to help adapt notions and approaches to the local contexts. Generic support (e.g. in the form of guidance) was perceived as necessary even in the future as a source to verify the correctness of own solutions and a tool to validate own efforts (*Andalucía - ES*).

It was also suggested to pay greater attention towards **the consistency between the various types of EC support** (*Campania - IT, Greece*), especially relevant in the context

of expert support (*Centre-Val de Loire - FR*), as well as with alternative types of support (*Algarve - PT*). An interviewee also suggested creating a horizontal department focusing on RIS3 between different DGs in the Commission (*Slovakia*).

Improvements on the allocation of support amongst regions

Support should **be focused on regions with significant administrative capacity shortcomings** or in need of basic assistance. Evidence collected from interviews pointed out that top-performing regions may not need smart specialisation, either the regions in need of structural interventions. But regions in between these two categories could still benefit from the RIS3 approach. These points were also touched upon during the workshop discussions. An AMI-CEI expert argued that there is evidence that, if introduced in an already well-defined path of innovation policy, RIS3 can constitute an upgrade of the national or regional ecosystem. Other workshop participants highlighted that this should not mean having differentiated regimes of support. In the context of “customised” types of support, such as workshops, more developed regions can sometimes be teachers for less developed regions. Other times, more developed regions can learn from less developed ones, suggesting that the level of development should not be used as a parameter to differentiate support (*PACA - FR*).

Customised support

There is still a **need for customised support** to better address regions’ different needs. It emerged clearly in interviews with regions (*Austria, Andalucía - ES, Abruzzo - IT, Lubuskie - PL, Pomorskie - PL, Algarve -PT, Slovakia*), but also during the workshop (*Molise - IT, Malta*). Differences in terms of size, capacity and established relations between government and stakeholders should be taken into account (*Bremen-DE*). In particular, differentiated support based on the level of advancement with innovation policies is perceived to be crucial.

In this context, spearhead regions need encouragement to experiment (*Austria*). Many EC Officers shared the view that more **experiments** and pilot actions would be needed. Specific support for experimentation projects (e.g. through the industrial transition platform) should be developed, with one region suggesting that funding should be attached to such initiatives (*Slovenia*).

More thematically specialised support

The support provided by the Commission and JRC should not only be more customised but also be **more focused on specific themes**. Findings from interviews and workshop pointed out that it should clarify how to implement initiatives on particular themes, topics, targeting specific challenges and given sectors (*Saxony - DE, Pomorskie - PL, North-East - RO*). Workshop participants expressed the need for further administrative capacity building, especially in lagging regions, (*Greece*), but also in more developed regions, which could take the form of capacity building on vocational and professional education (*Lapland - FI*). Individual and targeted support may be particularly relevant in certain thematic areas such as internationalisation and industrial transition and concerning the implementation of the monitoring system (*Galicia - ES, Lubuskie - PL, Pomorskie - PL, North-East - RO*).

Flexibility

More flexibility is needed in the approach taken by the EC. A region expressed the view that no imposition should be made on the process and the structures chosen by countries/regions (*Bremen - DE*), especially in contexts having a consolidated mode of doing innovation policy. An EC Officer too, noting the risk of disengagement from countries and regions, suggested not to impose standard views, but rather convincing regions to address own problems in individual ways.

Training and competence

Interviews asked for **more events to train human resources on innovation** in general, the design and implementation of the smart specialisation strategy, and specific fields of innovation in particular, to raise the competences of the institutions involved in the RIS3 (*Auvergne-Rhone-Alpes - FR, Lubuskie - PL, Pomorskie - PL*). Additional funding could be needed to attract and retain trained, dedicated teams of permanent human resources (*Nord-East - RO*).

Improvements on the time dedicated to support

Several countries/regions also expressed the wish for **more continuous support**. The support offered by the Commission and the JRC should be long-term and cover all the programming period, from the design to the implementation phase (*Andalucía - ES, Galicia - ES, Lithuania, PACA - FR*). It could take the form of advice and benchmark (*Slaskie - PL*). An example of continuous support could be that of experts being appointed during all the process, working in continuity with some regions as a reference contact.

Box 23. Suggestions for improvements – Quotes from consulted stakeholders

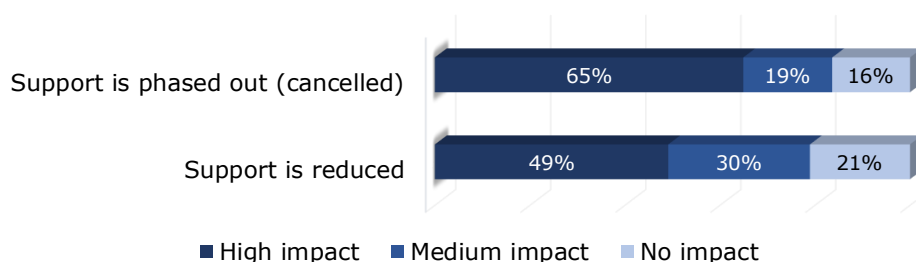
<p>The way support is delivered</p>	<p>“Strengthened coordination between the support provided by DG Regio through AMI-experts, JRC support through thematic workshops and external evaluation is needed” [Campania (IT) – Authorities responsible for RIS3] “It’s not a good idea to single out one type of support activity. Different forms of support should be combined to address one specific issue.” [Latvia – Authorities responsible for RIS3]</p>
<p>The content of support</p>	<p>“Support to international benchmarking and international collaboration or interregional collaboration will still be needed in the future”. [South Moravia (CZ) – Authorities responsible for RIS3] “The Commission should initiate the cooperation between the regions on specific themes, e.g. artificial intelligence (AI). (...) The EC (and the regions too) must be more proactive in fostering cooperation. (...) It should define concrete terms for incorporating new themes such as AI.” [Saxony (DE) – Authorities responsible for RIS3]</p>
<p>The time dedicated to support</p>	<p>“The support should be provided in a long-term perspective” [Andalucía (ES) – Authorities responsible for RIS3] “The Commission and JRC should provide the different types of support over all the programming period, from the design to the implementation phase. Somehow, this support should be provided with a sort of continuity, in order to guide regions during all the process.” [Galicia (ES) – Authorities responsible for RIS3]</p>
<p>The distribution of support amongst regions</p>	<p>“The Commission (...) has understood that the regions are different, and no one-size-fits-all approach is possible. More developed and lagging regions require special treatment, spearhead regions need encouragement to try something unconventional.” [Austria – Authorities responsible for RIS3] “Specific support is still needed – maybe not everywhere, but in some places. It would not be realistic to completely stop it where there is a substantial need in terms of administrative capacity”. [EC Officer] “In a number of EU countries and regions, there is not much need for support from EC to prepare RIS3 (...). Having said that, in order to be efficient, the support, where necessary, should be tailor-made. (...) The implication is that support could be re-directed and concentrated on regions with specific needs, possibly those which may still need basic support”. [EC Officer]</p>

Source: CSIL processing of interviews and survey’s results

6.4 Possible alternatives in case of phasing out / reduced support

Converging evidence from interviews, workshop and survey underline how negative the hypothesis of phasing out or reducing support would be in regions’ perspective. Results from the online survey (see Figure 44) show that 80% of respondents expect to be significantly impacted by such decisions.

Figure 44. Impact of reducing or phasing out EC support on users of EC support and Managing Authorities



Source: CSIL processing of the survey’s results. Note: Percentage of survey respondents (128 in total, of which 74 Authorities dealing with RIS3 at national and regional level declaring to have used the EC support and 54 Managing Authorities responsible for ESIF management)

Interestingly, more developed regions have concerns too about a no-support scenario. According to interviewees, there would be first a problem of validation of countries/regions solutions (*South Moravia - CZ*) or even a **lack of legitimization of smart specialisation strategies** (*Molise - IT*). Some asserted that **the overall process would be highly slowed down** (*Abruzzo - IT*), others reflected on the **negative consequences in terms of access to critical information** especially concerning compliance with the Commission requirements (*Campania - IT*). Also, if support phase-out, the **opportunities for interregional dialogue would be missing** (*Campania - IT*). These negative consequences could only be offset by high levels of expertise in the teams managing the ESI funds (*Pomorskie - PL*) and, still, the **planning and implementation of complex aspects of the new strategy would suffer** (*Northern Netherlands - NL*).

Alternative forms of support

While asserting that reduced EC support would make the RIS3 process more difficult in general, a few regions considered that guidance would be needed from alternative sources (*Latvia*). The **support provided through the Structural Reform Support Programme (SRSP)** was mentioned as a potential alternative to phased-out/reduced support in interviews with the Commission and the JRC. An EC Officer expressed the view that SRSP might improve coordination. At the same time, another stated that support would be less focused on industrial restructuring and RIS3, with the risk of losing the know-how and sensitivity accumulated by DG Regio over the years in its relations with regions. If this was the case, the SRSP should be massively consolidated in the field of innovation policy.

Amongst the alternative forms of support being considered most successful until now (albeit outside the scope of this study), there was the **support provided to lagging regions** (*Greece, Campania - IT, Algarve - PT*). An EC Officer noted that, depending on the region, certain types of targeted support (e.g. the lagging regions and HESS projects) might be the most valuable to address a region's needs. Therefore, these types of alternative support should be maintained and possibly reinforced in the future (*EC official*).

An alternative source of support to regions could be provided by **other international institutions such as the OECD and the World Bank** (*Central Denmark - DK, Latvia, Lubuskie - PL, Slaskie - PL*), which boast good balance between academics and practitioners. The European Commission and JRC could join forces with these institutions to provide some form of joint support.

Among the alternative instruments offered by the European Commission, two types – already used in the 2014–2020 period (see Section 2.1) could be further developed. First, potential support involving several DGs (especially DG Regio and DG Growth) could be a valuable alternative for the future. Second, it would be good capitalising on the experience with INTERREG to develop cooperation projects on RIS3.

Other potentially viable options – suggested by workshop participants - could be **twinning for EDP** (*Lapland - FI*), and an **instrument** to foster interregional cooperation **on the model of the H2020 “SME instrument”** as well as other instruments offered by H2020 (*Algarve-PT*).³²

³² An instrument for “interregional innovation investments” is under negotiations for 2021--2027.

7 CONCLUSIONS AND RECOMMENDATIONS

The conclusions inferred from the evidence collected for this study can be summarised along with the five evaluation criteria as follows:

Relevance With a limited budget available, EC support ensured an adequately diversified geographical distribution and was relevant for addressing differentiated needs across regions and countries. However, the concentration of some support (AMI-CEI experts) at the outset of the programming period resulted in some issues that had arisen during implementation being left unaddressed.

Effectiveness In the absence of a comprehensive evaluation of RIS3, tangible effects are difficult to document, but there is evidence of learning effects in some regions. In other regions facing structural difficulties or characterised by limited administrative capacity, EC support facilitated compliance with ex-ante conditionality, but without producing lasting effects during implementation. Some specific factors limited the effectiveness of individual instruments.

Efficiency EC support represents a small share of the total budget available to carry out RIS3. One main weakness of EC support from the perspective of efficiency is knowledge management.

Coherence EC support instruments were combined in a pragmatic manner, and also with alternative forms of support.

EU added value EC support was found to foster learning effects where preconditions were met in terms of administrative capacity, but there is limited evidence of its impact otherwise. It helped develop an active community of practice and produced a wealth of evidence on RIS3 experience across regions.

Overall, EC support should better **reflect differences in the capacity of regions to implement RIS3 and absorb support**. In line with the new regulatory provisions proposed for 2021–2027, EC support should concentrate on three core elements of the RIS3 process: governance, an effective entrepreneurial discovery process, and monitoring and evaluation – not only during design but also implementation. Specific improvements can be proposed for each instrument.

7.1 Conclusions

7.1.1 Background

The adoption of the smart specialisation concept as a guiding principle to implement regional innovation strategies in 2010, and its introduction as an ex-ante conditionality in the 2014–2020 programming period, represented a **culture change** for most regions, whether developed and already well acquainted with regional innovation policy practices or less developed with lower innovation performance. In the face of the novelty of the RIS3 approach, regions (and countries) **requested support to develop RIS3 strategies as a basis for the fulfilment of the ex-ante conditionality**.

The EC put in place a range of mechanisms, which, in accordance with the classification adopted in this study, ranged from **non-customised** (guidance documents, IT tools and knowledge repository available from the S3 platform) to **customised** (thematic platforms, peer review, PXL and S3 cooperation workshops) and **highly-customised** support (provided by AMI-CEI experts). Support had an important role at the outset of the

programming period. AMI-CEI experts were especially active in the early phase of the design of the strategies. Peer review, PXL and guidance documents were provided throughout the entire policy cycle, while the other forms of support, such as the thematic platform and S3 cooperation workshops, took place later in the policy cycle. AMI support was concentrated in less developed regions in Southern and Central Eastern Europe, while customised support was spread across all regions, regardless of whether they were less or more developed. Thematic platforms had greater use among more developed regions.

7.1.2 Needs for support ("perceived" needs vs "real" needs)

As this study is mostly based on stakeholders' views, an initial caveat is necessary. Regions consulted in this study were asked to identify their needs for support. Interestingly, the evidence collected does not suggest patterns in which less developed regions would have more needs, possibly of a basic nature, while more advanced regions would have less but more sophisticated needs (e.g., cooperation, monitoring and evaluation). **This contrasts with expectations and emerging findings from the literature,**³³ which identify different types of regions corresponding to differentiated capacities to devise and implement a successful RIS3. Nor does it correspond to findings from this literature, which identify implementation as the main bottleneck, particularly as regards setting priorities and translating them into projects. This helps contextualise the needs *perceived* by regions as identified by this study and suggests that a number of regions had **difficulties in identifying and expressing their own real needs**. This may reflect the way in which regions' perceptions of their needs were shaped by the services on offer.

7.1.3 Relevance

Support ensured an adequately diversified geographical distribution and was, in principle, relevant for addressing differentiated needs across levels of development and innovation performance. Indeed, highly customised support was concentrated where administration capacity was lower, while customised and non-customised support was broadly distributed across regions – both more and less developed, and with different levels of innovation performance. According to regions, support was needed to help **understand the concept, establish an appropriate governance system and manage the entrepreneurial discovery process** – i.e., mostly during the design phase. However, the concentration of some support (AMI-CEI experts) at the outset of the programming period left unaddressed some issues arising during implementation. A closer look at single categories of support instruments reveals a nuanced picture:

- **Non-customised support** was particularly relevant at the outset of the programming period in order to understand the concept of RIS3 and ensure that the strategy was designed in compliance with ex-ante conditionality, and also, to a lesser extent, during implementation as an easily accessible source of reference information.
- **Customised support** and, in particular, peer review workshops were widely appreciated by a broad range of regions. Customised support responded to regions' perceived need to exchange and learn from others' experience. Some stakeholders questioned the relevance of exchange of experience in improving RIS3 design on the ground in regions which had difficulty understanding the basics of RIS3. The relevance of customised support was possibly higher during implementation, but it

³³ Although no formal evaluation of the RIS3 approach has been carried out to date, a growing number of empirical studies at the national and regional levels are focusing on various RIS3 implementation issues and first results.

strongly depended on the ability and willingness of regions to apply the lessons learnt during the workshops.

- **Highly customised support** (AMI experts) was particularly relevant for helping regions with a lower administrative capacity to comply with the ex-ante conditionality at the beginning of the programming period, and also to improve governance and help with EDP (bringing stakeholders together). The concentration of AMI experts' support in South / East Central Europe indeed corresponds, prima facie, to cases where needs are higher. However, the limited use of this support during implementation reveals the difficulty of moving from design to implementation.

Relevance with respect to future requirements

The evidence collected showed that, to a large extent, **EC support was relevant for addressing the ex-ante conditionality**. In the future programming period, this conditionality will change. First, the fulfilment of the new enabling condition linked to smart specialisation will no longer be a one-off exercise at the beginning but will be ongoing throughout the entire programming period. Second, the scope of the smart specialisation has changed and will also cover SME support, digitalisation and skills for RIS3. To reflect the enlarged scope of the RIS3, **new criteria will be added to the enabling condition**: assessment of bottlenecks for innovation diffusion, measures for industrial transition, measures for international cooperation and actions to improve the research and innovation systems.

The basic elements of the RIS3 – **governance, functioning EDP and monitoring and evaluation** – will remain the core criteria of the enabling condition, and the Commission intends to be strict regarding their fulfilment. The newly added criteria will be discussed between the Member States/regions and the Commission as the policy cycle unfolds. Regions already anticipate less interest in exchanging with peers as a learning modality, which requires adaptation of the current arrangements. They also have higher expectations as regards expert support (e.g., the preparedness of the experts and their knowledge of the local context) as well as the functionality of IT tools.

7.1.4 Effectiveness

When asked about the effectiveness of EC support in general terms, regions reported that **support contributed to improving the design and implementation of RIS3**. Support was said to be helpful in better understanding the RIS3 concept and its potential benefits, in managing the entrepreneurial discovery process, in improving prioritisation, governance and overall timeliness, in designing a better monitoring system, etc. In general, regions valued guidance documents and S3 cooperation/peer-review workshops positively, whereas they tended to be more critical about the effective contribution of IT tools, and they offered a mixed response to AMI expert support.

However, beyond perceptions, and in the absence of a comprehensive evaluation of RIS3, the **tangible effects of EC support are difficult to document**. For example, the extent to which customised support led to improvements in RIS3 practice is not clear, and there is little concrete evidence of follow-up of support actions, beyond the fulfilment of the ex-ante conditionality.

Based on regions' reported experience and expert views, the study indicates that **although learning has taken place, there has been a persistence of certain basic problems**.

This includes, for example, the management of the EDP, with many regions still experiencing problems in understanding the requirements, setting up a good governance system, etc. It is as though some regions have not progressed since the beginning of the RIS3 policy process. In particular, prioritisation is an area where the available literature shows that many regions had difficulties and that this is where progress is needed in the future. Yet, the regions reviewed in the study did not specifically identify prioritisation as an area needing support, nor did they identify particular limitations of support in this respect. This might be an indication of the immaturity of the RIS3 process in some regions, and raises some doubt about all regions having equal capabilities for absorbing support and implementing RIS3.

Overall, it appears that **there are still many regions where the basics of the RIS3 – governance, EDP and monitoring and evaluation – are not yet embedded, and this should be addressed as a priority in the future.** It should be noted, however, that in regions where there is a clear need for structural reforms and where there are issues with administrative capacity, EC support will always have only limited impact in the absence of systemic change, which is beyond its remit.

Additionally, a number of **specific gaps** have been identified. First, **some needs were felt to have been ineffectively addressed.** The support was not always well equipped to deal with issues in the ESIF regulatory framework such as the difficult articulation between the operational programme level and RIS3, or the misalignment between RIS3 and other regional/national initiatives. Second, **a number of factors were found to have hampered the effective delivery of support.** Shortage of skilled staff at both EC and national/regional levels, weak administrative capacity or adverse political influence at regional level were external factors that amplified intrinsic weaknesses, sometimes significantly limiting the effective delivery of support. Also, specific factors limited the effectiveness of the different forms of support (e.g., guidance documents are considered to be too generic and overly long, the sustainability of the effects of workshops depending on the capacity of stakeholders to report and diffuse lessons learnt, and much depends on the quality and experience of AMI-CEI experts). The timeliness of delivery of some instruments (e.g., the belated release of the 2012 guide) and the access to information about support instruments (e.g., when and where workshops are organised) were also issues at stake.

7.1.5 Efficiency

The present study identifies **various issues concerning the efficiency of support.** In the context of a low budget, the total cost of AMI experts' support seems reasonable in the face of the potentially in-depth highly customised support they can deliver – and also compared to the JRC budget. However, the system for hiring and managing AMI experts suffered from a number of limitations. Evaluating and selecting experts is time-consuming, the system has limited quality control measures, and the outputs (reports, analyses, minutes from the meetings) are not standardised. In some cases, it may be difficult for an expert from the given region to provide a broader perspective of the challenges facing the region.

Also, **weaknesses in knowledge management** prevent regions from taking advantage of the data and experience collected during years of RIS3 design and implementation. The AMI-CEI expert system is characterised by a lack of capitalisation on the wealth of knowledge accumulated by experts' interventions on the ground. JRC activities also face issues in terms of knowledge management. Very little information is available to keep track

of the utilisation of the support provided (e.g., web access, number of downloads, a database of participants, etc.), which would enable assessment of its (cost) effectiveness.

7.1.6 Coherence

Concerning coherence with other support instruments, **no overlap was reported**, but nor was evidence of synergies. There was little attempt to adopt an integrated and coordinated approach to support at EU, national or regional levels. The evidence collected in the study suggests that regions used the different instruments available to them on an ad hoc basis – i.e., without explicit planning or strong reference to specific needs. Sometimes, **support instruments were de facto and pragmatically used in a complementary way**. For example, highly customised support by AMI-CEI experts was found to complement non-customised support like guidance documents and to adapt general principles to local specificities.

7.1.7 Added Value

When asked about the possibility that EC support could be diminished or suspended, regions generally express **concern, arguing in favour of maintaining it**. One rationale frequently put forward is the fact that the EC acts as a “trusted third party”, with EC support having a very important political function, encouraging and justifying the regions’ decisions to adopt the RIS3 approach. According to regions, EC support represented an authoritative reference enhancing the bargaining position of authorities in charge of designing and implementing RIS3 with respect to other regional and especially national authorities less inclined to devolve too much room for manoeuvre to regions. The notion of a “trusted third party” is relevant in some cases, but in many regions, the EC support did not succeed in changing the situation on the ground, and when the support finished, the regions quickly went back to “business as usual”.

While concrete outcomes and progress attributable to support are difficult to document, an interesting finding (or hypothesis) of the study concerns **“learning” effects**. As suggested above, some learning did take place, but it appears to be unevenly distributed across regions. Indeed, EC support seems to be most effective in the regions showing real interest and commitment. These regions often had medium innovation performance or were below the EU average, but they led their respective countries in this aspect. One hypothesis is that some regions were serious about taking the steps necessary to comply with the ex-ante conditionality, and discovered the benefits associated with / expected from RIS3. In contrast, other regions took a more instrumental view. This included developed regions well acquainted with the notion and practise of innovation policy, and, in contrast, regions further behind in the process of understanding and applying the RIS3 approach. In these cases, the focus was on the fulfilment of the ex-ante conditionality without real commitment and lasting effects during implementation.

Besides strengthened capacity in some regions, the support also resulted in the **creation of a wealth of evidence on practices and experience of RIS3**, as well as a consolidated community of practice, which previously did not exist (as testified by the lively discussions held at the study’s workshop and many other similar events).

In addition, a key element of the EU added value of support was to **provide a common understanding and framework of the RIS3 approach**. Given some limitations of the current knowledge management and knowledge capitalisation, this is an area that could be better addressed in the future.

Finally, while the use of EC support can certainly be justified in some cases, there is a need for greater understanding and clarity on its **added value in comparison with other forms of support** such as the technical assistance available in the operational programmes, which, in principle, can be easily deployed to support RIS3 design and implementation.

* * *

Overall, the evidence collected for this study shows that there has been **an extensive but differentiated process of learning** for some regions and countries since the introduction of the RIS3 concept in 2010. Besides specific achievements and drawbacks of the support, taken as a whole and instrument by instrument, there is a difficulty in acknowledging the differentiated capacity of regions to implement RIS3 and absorb support, which should be the priority of future support. Another key question for the future would be to find ways how to stimulate sustainable change in regional governance of the RIS3 process.

The following table provides detailed answers to the study's research questions, instrument by instrument.

Table 7. EC support according to the evaluation criteria, in a nutshell

Category of support	RELEVANCE	EFFECTIVENESS	EFFICIENCY	COHERENCE	ADDED VALUE
Non-customised support	<p>Guidance documents:</p> <ul style="list-style-type: none"> - An easily accessible reference. Mostly relevant at the outset of the programming period for deepening understanding of the RIS3 concept and checking the conformity of the adopted approach with ex-ante conditionalities. - Less relevant for less developed regions who need to adapt generic guidance to their specific context. <p>IT tools:</p> <ul style="list-style-type: none"> - Some IT tools were relevant for benchmarking and finding partners (regional benchmarking, eye@RIS3, R&I regional viewer, digital innovation hub). - Mostly used by more developed regions. 	<p>Guidance documents:</p> <ul style="list-style-type: none"> - Effectiveness limited by drawbacks: too general, insufficiently practice-oriented, not updated, and not timely delivered. <p>IT tools:</p> <ul style="list-style-type: none"> - Least effective instruments according to regions. - Data and information not always up to date and reliable. 	<ul style="list-style-type: none"> - Limited evidence prevents assessment of its efficiency. 	<ul style="list-style-type: none"> - No overlap. Synergies not documented. 	<ul style="list-style-type: none"> - Guidance documents: - Contribute to setting up a common support framework
Customised support	<p>Peer reviews and PXL:</p> <ul style="list-style-type: none"> - Learn from others' experience and about specific issues. - Validate specific choices. - Mostly relevant during the implementation phase. - Broadly distributed across regions, both more and less developed ones and with different levels of innovation performance. <p>Thematic platforms</p> <ul style="list-style-type: none"> - Interregional cooperation. - Mostly used by more developed regions. 	<p>Peer reviews and PXL</p> <ul style="list-style-type: none"> - Effectiveness depends on the capacity of regions to adapt lessons to own context, and to diffuse lessons learnt. <p>Thematic platforms</p> <ul style="list-style-type: none"> - Helped to find partners on thematic platforms. 	<ul style="list-style-type: none"> - Limited evidence prevents assessment of its efficiency. 	<ul style="list-style-type: none"> - No overlap. Synergies not documented. 	<ul style="list-style-type: none"> - Contribute to establishing a community of practice. - Pool knowledge about RIS3 experience.

Assessment of support to the development and implementation of smart specialisation strategies provided by the European Commission from 2010 to 2017

<p>Highly customised support</p>	<ul style="list-style-type: none"> - Relevant for addressing lack of administrative capacity. - Aid compliance with ex-ante conditionality at the beginning of the programming period, but also improve governance and help with EDP. 	<ul style="list-style-type: none"> - Aided compliance with ex-ante conditionality. - Addressed specific needs (EDP, bringing together stakeholders). - Flexible and quick to mobilise. - Effectiveness depends on the competence and attitude of experts (too academic, not sufficiently practical). - Un-operational during implementation. 	<p>A number of limitations: evaluating and selecting experts is time-consuming; limited quality control measures, and the outputs are not standardised; lack of capitalisation on the wealth of knowledge accumulated.</p>	<ul style="list-style-type: none"> - Potentially high with non-customised support (guidance documents). 	<ul style="list-style-type: none"> - The experts acted as a trusted third party.
---	---	---	--	--	---

7.2 Recommendations

The next generation of support should focus more strongly on the long-term effectiveness of the mechanisms put in place **by providing more explicit support to the processes required by the new enabling condition**. Changes introduced for 2021–2027 seek to address some of the weaknesses in the current approach to smart specialisation by shifting the focus of conditionality from the initial establishment of the strategy to its implementation as a process governed by the entrepreneurial discovery process throughout the period. Furthermore, greater emphasis has been placed on the necessary preconditions for functioning research and innovation ecosystems. The support system will therefore need to be adapted to this new framework.

EC support should be rationalised and streamlined to be more effective and efficient. Different lines of actions could be envisaged, both in terms of the general organisation of the support and concerning specific support instruments.

1) General organisation of the support

Two main principles should underline the general organisation of support.

The added value of support should be maximised by concentrating on the basics of RIS3 and by differentiating support according to the capacity of regions to absorb it.

In line with the requirements of the enabling condition linked to RIS3 in the 2021–2027 programming period, future EC support should focus on the basic elements of the RIS3 – governance, functioning of EDP, and monitoring and evaluation – and ensure that they are embedded and implemented properly across all EU regions.

In order to achieve that, EC support should account for the differentiated degrees of preparedness of regions to embrace the RIS3 approach, and levels of progress towards RIS3 implementation. In order to increase the added value of support, the EC should adapt support to the capacity of regions to absorb it. This requires that support be *customised* – i.e., that it should focus on issues of specific interest to the concerned regions where needs are the strongest, and its modality should be adapted to each region's profile.

The fact that the nature of the enabling condition will change in the future, and its fulfilment will be monitored and verified throughout the programming period, will contribute to strengthening a structured dialogue between the EC and regions, which has been requested by regions. This will provide the EC with an opportunity to identify the optimal form of support adapted to the regions considered. The hope is that regions will grasp this opportunity to engage in self-learning, and use EC support accordingly.

A coordinated and efficient knowledge management system

There is a great need to establish a proper knowledge management system to make the most of the wealth and variety of evidence collected about RIS3 experience in many different regional and national contexts throughout the EU. Setting up such a system would make it possible to capitalise on the vast amount of practical knowledge accumulated since 2012.

All available information should be centralised in one single online platform, where updated information is efficiently organised and publicised.

Given the experience gathered in the current programming period, the JRC should play the role of a knowledge centre for the key building blocks of the RIS3 and concentrate on the lessons learned and on knowledge capitalisation in the areas of governance, prioritisation, and monitoring and evaluation.

2) Streamlining the portfolio of support instruments

Given the limited human and financial resources in the future, it appears necessary to revise the content of the portfolio of instruments, which, thus far, has been constituted on an ad hoc basis. Some instruments can be improved, while others could be downsized or even eliminated.

- **Knowledge centre.** As mentioned above, it is necessary to have clear information and advice on RIS3 that is accessible at any time. The S3 platform website should become a key reference point reflecting the latest state of knowledge on RIS3 good practice. All information should be easily accessible, well-structured and contain highly practical indications.
- **IT tools.** The most relevant IT tools could be merged in a single database and corresponding platform with updated data and a user-friendly interface.
- **Workshops** should be organised around clear objectives. Topics should be identified in a bottom-up way, but they should follow the same format, thus making it possible to capitalise on lessons learnt. They could take place in Brussels or be conducted as virtual meetings, taking advantage of available technology (teleconference, etc.).
- **Single experts.** Management of the AMI-CEI list should be rethought to address the current limitations of the system. The costs of expertise should be shared with the beneficiary regions to enable the EC to focus on those areas with the greatest European added value. Alternatively, a small pool of permanent experts (external and/or from the JRC) could be set up. These experts would have specific competence on a major horizontal theme (e.g., monitoring) and could interact with regions where necessary.

REFERENCES

1. Blazek, J. and Morgan, K. 2018. *The Institutional Worlds of Entrepreneurial Discovery: finding a place for less developed regions*. In A. Mariussen et al. (Eds). Routledge, Abingdon.
2. Camagni, R. and Capello, R. 2013. Regional Innovation Patterns and the EU Regional Policy Reform: Toward Smart Innovation Policies. *Growth and Change* 44 (2): 355–389.
3. Capello, R. and Kroll, H. 2016. From theory to practice in smart specialization strategy: emerging limits and possible future trajectories. *European Planning Studies* 24 (8): 1393–1406.
4. Caramis, A. and Fay Lucianetti, L. 2016. Scoperta Imprenditoriale e Strategie di Specializzazione Intelligente: dalla Teoria alla Pratica. *Scienze Regionali – Italian Journal of Regional Science*.
5. Council of the European Union. 2019. Cohesion Policy Legislative Package 2021–2027 - Partial mandate for negotiations with the European Parliament 6147/19 ADD 1.
6. European Commission. 2011. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 flagship initiative Innovation Union: SEC(2010) 1161.
7. European Commission. 2013. *Annex III: a practical approach to RIS3 and its (self-) assessment*.
8. European Commission. 2017a. *Strengthening Innovation in Europe's Regions: Towards resilient, inclusive and sustainable growth at territorial level*. In COMMISSION STAFF WORKING DOCUMENT Accompanying the Document COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS.
9. European Commission. 2017b. *Summary of the public consultation on Smart Specialisation: 'A fresh approach to European growth and jobs through regional innovation strategies'*. European Commission.
10. European Commission. 2018. *Financing Decision on Technical Assistance – Annex I: ERDF & CF*. Downloaded from https://ec.europa.eu/regional_policy/sources/tender/pdf/official/2018_financing_decision_ta_erdf_cf.pdf on 1 August 2019.
11. European Commission, Directorate-General for Regional and Urban Policy 2019. *Regions in industrial transition: no region left behind*, https://ec.europa.eu/regional_policy/sources/docgener/brochure/Industrial_transition_no_region_left_behind_en.pdf
12. European Commission, 2018. *Financing Decision on Technical Assistance – Annex I: ERDF & CF*, available at https://ec.europa.eu/regional_policy/sources/tender/pdf/official/2017_after_midterm_ta_wd.pdf
13. European Commission, Directorate-General for Regional and Urban Policy, KPMG and Prognos. 2016. Delivery system: ex post evaluation of Cohesion Policy programmes

2007-2013, focusing on the European Regional Development Fund (ERDF) and the Cohesion Fund (CF): final report: work package 12.

14. European Parliament and Council. 2013. Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006.
15. Foray, D. 2015. Smart specialisation. Opportunities and challenges for regional innovation policy. Routledge, London.
16. Foray, D. 2019. In response to 'Six critical questions about smart specialisation'. *European Planning Studies* 27 (10): 2066–2078.
17. Foray, D. and Goenaga, X. 2013. The goals of smart specialisation. In *S3 Policy Brief Series*. Joint Research Centre - Seville.
18. Foray, D., David, P.A. and Hall, B.H. 2009. Smart Specialisation – The Concept. *Knowledge Economists Policy Brief* (9).
19. Foray, D., Morgan, K. and Radosevic, S. 2018. The role of smart specialisation in the EU research and innovation policy landscape: 20.
20. Foray, D., Goddard, J., Beldarrain, X.G., Landabaso, M., McCann, P., Morgan, K., Nauwelaers, C. and Ortega-Argilés, R. 2012. *Guide to Research and Innovation Strategies for Smart Specialisation (RIS 3)*. European Commission.
21. Fraunhofer ISI. 2013. Smart specialisation approaches: A new policy paradigm on its way from concept to practice. Final results.
22. Frohlich, K. and Hassink, R. 2018. Smart Specialization and the Role of Universities and Science Parks. *World Technopolis Review* 7 (2): 74–81.
23. Gianelle, C. and Kleibrink, A. 2015. Monitoring Mechanisms for Smart Specialisation Strategies. In *S3 Policy Brief Series*. 24 pp.
24. Gianelle, C., Guzzo, F. and Mieszkowski, K. 2018. Smart Specialisation at work: Assessing investment priorities. In *S3 Working Paper Series*. 24 pp.
25. Gianelle, C., Guzzo, F. and Mieszkowski, K. 2019. Smart Specialisation: what gets lost in translation from concept to practice? *Regional Studies*: 1–12.
26. Gianelle, C., Goenaga, X., González Vázquez, I. and Thissen, M. 2014. Smart specialisation in the tangled web of European inter-regional trade. *European Journal of Innovation Management* 17 (4): 472–491.
27. Gianelle, C., Kyriakou, D., Cohen, C. and Przeor, M. 2016. *Implementing Smart Specialisation Strategies. A Handbook*. European Commission, Brussels.
28. Guzzini, E. and Iacobucci. 2016. Relatedness and connectivity in technological domains: missing links in S3 design and implementation AU - Iacobucci, Donato. *European Planning Studies* 24 (8): 1511–1526.

29. Guzzo, F., Gianelle, C. and Marinelli, E. 2018a. Smart Specialisation at work: policy makers' view on strategy design and implementation. In S3 Working Paper Series.
30. Guzzo, F., Gianelle, C. and Marinelli, E. 2018b. Smart Specialisation at work: policy makers' view on strategy design and implementation. In S3 Working Paper Series.
31. Hassink, R. and Gong, H. 2019. Six critical questions about smart specialization. *European Planning Studies* 27 (10): 2049–2065.
32. Kramer, D.J.-P. 2018. RIS3 strategies in Germany 2014–2020 – Managing the strategy journey. : 36.
33. Kroll, H. 2015a. Efforts to Implement Smart Specialization in Practice—Leading Unlike Horses to the Water. *European Planning Studies* 23 (10): 2079–2098.
34. Kroll, H. 2015b. First results of the Fraunhofer ISI – RIS3 survey 2015. Karlsruhe: Fraunhofer ISI.
35. Kroll, H. 2018a. Results of the 2018 RIS3 survey. Review and outlook beyond 2020.
36. Kroll, H. 2018b. Smart Specialisation Strategies 2017 Survey Results. Fraunhofer ISI.
37. Kroll, H., Müller, E., Schnabl, E. and Zenker, A. 2014. From smart concept to challenging practice – how European regions deal with the commission's request for novel innovation strategies. Working papers firms and region no. R2/2014. Karlsruhe: Fraunhofer ISI.
38. Landabaso, M. 1997. The Regional Innovation Paradox: Innovation Policy and Industrial Policy. *The Journal of Technology Transfer* 27 (1): 97–110.
39. Magro Montero, E., Aranguren, M.J. and Mikel Navarro, M. 2011. Smart Specialisation Strategies: The Case of the Basque Country. Working Papers 2011R07 Orkestra-Basque Institute of Competitiveness.
40. Marinelli, E. and Forte, I.P. 2017. Smart Specialisation at work: The entrepreneurial discovery as a continuous process. In S3 Working Paper Series. Publications Office of the European Union, Luxembourg, 25 pp.
41. McCann, P. and Ortega-Argilés, R. 2015. Smart Specialization, Regional Growth and Applications to European Union Cohesion Policy. *Regional Studies* 49 (8): 1291–1302.
42. McCann, P. and Ortega-Argilés, R. 2016a. Smart Specialisation: Insights from the EU Experience and Implications for Other Economies. : 15.
43. McCann, P. and Ortega-Argilés, R. 2016b. The early experience of smart specialization implementation in EU cohesion policy. *European Planning Studies* 24 (8): 1407–1427.
44. Morgan, K. and et al. 2016. SmartSpec: Smart Specialisation for Regional Innovation. Final Report to the European Commission FP7 Project Number 320131.
45. Nauwelaers, C., Forte, I.P. and Midtkandal, I. 2015. RIS3 Implementation and Policy Mixes. In S3 Policy Brief Series. 28 pp.
46. OECD. 2013. Innovation Driven-Growth in Regions: The Role of Smart Specialisation. OECD Publishing, Paris.

47. OECD (2019), *Regions in Industrial Transition: Policies for People and Places*, OECD Publishing, Paris, <https://doi.org/10.1787/c76ec2a1-en>.
48. Ortega-Argilés, R. and McCann, P. 2014. Smart specialisation in European regions: issues of strategy, institutions and implementation. *European Journal of Innovation Management* 17 (4): 409–427.
49. Papamichail, G., Rosiello, A. and Wield, D. 2019. Capacity-building barriers to S3 implementation: an empirical framework for catch-up regions. *Innovation: The European Journal of Social Science Research* 32 (1): 66–84.
50. Polverari, L. 2016. Implementing smart specialisation in 2014-20 ESIF programmes IQ-Net Thematic paper 39(2). European Policy Research Centre, University of Strathclyde, Glasgow.
51. Polverari, L. 2018. Innovation as a regional development driver: Necessary shift or policy misdirection? European Policy Research Paper. University of Strathclyde Publishing.
52. Radošević, S. 2017. Assessing EU Smart Specialization Policy in a Comparative Perspective. In: *Advances in the Theory of Smart Specialization* [Internet Resource], 2–31. London, London.
53. Radošević, S., Curaj, A., Gheorghiu, R., Andreescu, L., Wade, I. and Elsevier. 2017. *Advances in the theory of smart specialization* [internet resource]. London, London.
54. Reid, A. and Stanovnik, P. 2013. The development of a Smart Specialisation Strategy (S3) for Slovenia. A Report to the European Commission, DG Research & Innovation. Technopolis - IER.
55. Reid, A. and Maroulis, N. 2017. From Strategy to Implementation: The Real Challenge for Smart Specialization Policy. In: Radošević, S., Curaj, A., Gheorghiu, R., Andreescu, L. and Wade, I. (eds.), *Advances in the Theory of Smart Specialization* [Internet Resource], London, London.
56. Tripl, M., Zukauskaitė, E. and Healy, A. 2019. Shaping smart specialization: the role of place-specific factors in advanced, intermediate and less-developed European regions. *Regional Studies*: 1–13.
57. Vallance, P., Blažek, J., Edwards, J. and Květoň, V. 2018. Smart specialisation in regions with less-developed research and innovation systems: A changing role for universities? *Environment and Planning C: Politics and Space* 36 (2): 219–238.
58. Vezzani, A., Baccan, M., Candu, A., Castelli, A., Dosso, M. and Gkotsis, P. 2017. Smart Specialisation, seizing new industrial opportunities.

ANNEX I. ASSESSMENT MATRIX AND EVALUATION CRITERIA

RELEVANCE

RELEVANCE				
Sub-questions	Assessment criteria	Indicators/Descriptors	Source of information	Analytical activities
EQ 1: To what extent is support from the Commission to RIS3 a relevant tool to improve the quality of preparation and implementation of RIS3?				
EQ 1.1: Improve the quality of preparation	The support provided by the Commission was designed and implemented to provide an appropriate answer to the most pressing barriers faced by the different categories of regions in the preparation and implementation of RIS3.	> Description of the logic behind the design and implementation of the tool (<i>e.g. why a tool has been specifically selected/required as compared to others</i>)	In-depth interviews (EC/JRC/AMI experts/MA)	Reconstruction intervention logic
EQ 1.2: Improve the quality of implementation		> Description of the main challenging phases of preparation and implementation of the RIS3	In-depth interviews (EC/JRC/AMI experts/MA), Online survey	Reconstruction intervention logic
		> Description of the main characteristics of the EC support and how it is expected to cope with the existing challenges in preparing and implementing RIS3	Desk research In-depth interviews (EC/JRC/AMI experts/MA)	Mapping of support activities Needs assessment
		> Qualitative Assessment of the relevance of support services	In-depth interviews (EC/JRC/AMI experts/MA)	Mapping of support activities Needs assessment
		> N. of respondents stating that the EC support is a relevant tool to improve the quality of preparation and implementation by: - type of support - type of country/region	Online survey	Users' satisfaction
EQ 2: To what extent is support from the Commission to RIS3 responding to Member States and regions' needs?				
EQ 2.1: What are MS and regions' needs?	There is a good match between the various forms of support and the deliverable provided by the Commission and the different needs of the countries/regions in the preparation and implementation of RIS3.	> Type and nature of relevant needs mentioned. > Description of needs	Desk review In-depth interviews (EC/JRC/AMI experts/MA) Online survey	Needs assessment Reconstruction intervention logic Mapping of support activities Users' satisfaction
EQ 2.2: What needs were addressed by the EC support?		> Description of needs specifically addressed by the EC support	Online survey In-depth interviews (EC/JRC/AMI experts/MA)	Needs assessment

RELEVANCE				
Sub-questions	Assessment criteria	Indicators/Descriptors	Source of information	Analytical activities
EQ 3: To what extent is support from the Commission to RIS3 responding to the Commission's requirements?				
EQ 3.1: What are Commissions requirements?	There is a good match between the support provided by the Commission under the different forms and the Commission's requirements in the preparation of RIS3	> Description of requirements indicated by the EC/JRC services/literature/addressed by EC in support of the development and implementation of RIS3	Desk review In-depth interviews (MA/EC/AMI experts/JRC)	Needs assessment Mapping of support activities
		> Description of requirements met by the EC support: - ex-ante conditionality - other	Online survey In-depth interviews (MA/EC/AMI experts/JRC)	Needs assessment Mapping of support activities
		>Qualitative assessment of the relevance of support services in meeting Commission's requirements.	In-depth interview (MA/EC/AMI experts/JRC)	Needs assessment
EQ 4: To what extent have MS/regions demanded and used the support provided by the Commission? What is the geographical distribution of support? Is it targeted on those that most need the support?				
EQ 4.1: How many/which MS and regions demanded and used the support?	The support provided by the Commission has broad coverage in terms of geography and type of regions (innovation profile based on their position in the Innovation Union Scoreboard) to meet those most in need	> N. of countries/regions benefitting from the support service, by: - type of support - country/regions (geographical distribution, innovation level distribution)	Desk review (Regional Innovation Scoreboard; AMI-CEI agreements) Online survey	Mapping of activities
		> Share of beneficiary countries/regions on total countries/regions adopting RIS3	Online survey Desk review (official data on countries/regions adopting RIS3)	Mapping of activities
		> Identification of type of countries/regions most in need and related reasons	Desk-review In-depth interviews (MA/AMI experts/EC/JRC) Online survey	Needs assessment Reconstruction intervention logic
		> Qualitative assessment of the relevance of the EC support in terms of geographical coverage	In-depth interviews (MA/AMI experts/EC/JRC)	Needs assessment Reconstruction intervention logic
EQ 4.2: What is the geographical and typology distribution?				
EQ 4.3: Which are the most in need and why?				

EFFECTIVENESS

EFFECTIVENESS				
Sub-questions	Assessment criteria	Indicators/Descriptors	Source of information	Analytical activities
EQ 5: Is the current support from the Commission to RIS3 administrative set-up effective in addressing the needs identified by the MS/regions?				
	The support provided by the Commission was designed and implemented to provide an effective answer to the most pressing barriers to preparation and implementation of RIS3	<ul style="list-style-type: none"> > Description of expected and actual effects of the support on the RIS3 administrative set-up by RIS3 (e.g. <i>timeliness, better prioritisation, improved governance set-up, stronger consensus, more effective dialogue among stakeholders</i>) > N. of respondents stating that the EC support matched the country/region's expectations By type of support By needs By type of country/regions 	<ul style="list-style-type: none"> In-depth interviews (EC/JRC/AMI experts/MA) Online survey 	<ul style="list-style-type: none"> Users' satisfaction Reconstruction of intervention logic Users' satisfaction
EQ 6: What is the effect of the support from the Commission for RIS3 on the timeliness of preparation, approval and implementation of RIS3 strategies?				
EQ 6.1: Timeliness of preparation	The support provided by the Commission accelerates the RIS3 preparation, approval and implementation in beneficiary countries/regions	<ul style="list-style-type: none"> > n. of months for RIS3 development for beneficiaries and non-beneficiaries by: - type of service - typology of country/region 	Online survey	Timeliness analysis
EQ 6.2: Timeliness of approval		<ul style="list-style-type: none"> > N. of respondents stating that EC support was helpful to improve timeliness - type of service - typology of country/region - by needs 	Online survey	Users' satisfaction
EQ 6.3: Timeliness of implementation		<ul style="list-style-type: none"> > Qualitative assessment (perception) of timeliness 	In-depth interviews (MA/AMI experts/EC/JRC)	Timeliness analysis
EQ 7: To what extent does support from the Commission for RIS3 activities have an effect on prioritisation and governance?				
EQ 7.1: Effect on prioritisation		<ul style="list-style-type: none"> > n. of respondents stating that the support has a positive effect on prioritisation by: - type of service - typology of country/region - by needs/challenges 	Online survey	Users' satisfaction
EQ 7.2: Effect on governance				

EFFECTIVENESS				
Sub-questions	Assessment criteria	Indicators/Descriptors	Source of information	Analytical activities
	The support provided by the Commission improved different aspects of prioritisation and governance of RIS3 according to the specificities of the beneficiary countries/regions and with a different type of support.	<ul style="list-style-type: none"> > n. of respondents stating that the support has positive effect on governance by: <ul style="list-style-type: none"> - type of service - typology of country/region - by needs/challenges > Qualitative assessment of the effectiveness of support on prioritisation and governance (e.g. consistency of priorities, critical mass; improved broad participation (including the private sector, knowledge organisations, etc.), communication; application of triple/quadruple models) 	<ul style="list-style-type: none"> Online survey In-depth interviews (MA/AMI experts/EC/JRC) 	<ul style="list-style-type: none"> Users' satisfaction Reconstruction of intervention logic
EQ 8: How effectively are different types of support targeted to specific needs?				
	The support provided by the Commission was targeted in such a way as to enhance effectiveness in tackling the specific needs	<ul style="list-style-type: none"> > Breakdown from previous EQ by type of support and regions/needs > Qualitative assessment (perception) of the effectiveness of EC support by specific needs 	<ul style="list-style-type: none"> Online survey In-depth interviews (MA/AMI experts/EC/JRC) 	<ul style="list-style-type: none"> Users' satisfaction Reconstruction of intervention logic

EFFICIENCY

EFFICIENCY				
Sub-questions	Assessment criteria	Indicators/Descriptors	Source of information	Analytical activities
E19 Do the current arrangements (including the system of planning and management of assignments) of support from the Commission for RIS3 in cooperation with the Member States and with all the relevant Commission services allow for efficient use of financial and human resources at all level?				
EQ 9.1: Efficient use of financial resources	The support provided by the Commission was planned and managed as to make efficient use of financial and human resources in cooperation with MS and other Commission services.	> Description of the current arrangements for collaboration with MS and other Commission services	In-depth interviews (EC/JRC)	Reconstruction of intervention logic
		> N. of respondents stating that the EC support has allowed to efficient use of financial and human resources	Online survey	Users satisfaction
		By type of service By type of country/regions		
EQ 9.2: Efficient use of human resources		> Qualitative assessment (perception) of efficiency in the use of financial and human resources	In-depth interviews (MA/ EC/JRC)	Users satisfaction
EQ 10: Is the support delivered in the most efficient way by the Commission?				
	The support provided by the Commission is delivered in an efficient way	> Qualitative assessment of the efficiency in the support delivery	In-depth interviews (MA/AMI experts/EC/JRC)	Users satisfaction
EQ 11: Is the support provided in a timely way?				
	The support provided by the Commission is delivered in a timely way	> N. of respondents stating that the timely delivery of the support works well (not an aspect to be improved)	Online survey	Users satisfaction
		> Description of measures in place to ensure timely delivery of support	In-depth interviews (AMI experts/EC/JRC)	Mapping of the support Users satisfaction
		> Qualitative assessment (perception) of the timeliness in the support delivery	In-depth interviews (MA/AMI experts/EC/JRC)	Users satisfaction

COHERENCE

COHERENCE				
Sub-questions	Assessment criteria	Indicators/Descriptors	Source of information	Analytical activities
EQ12 To what extent is support from the Commission for RIS3 coherent (i.e. coordinated, complementary, looking for synergies and avoiding duplications) with other advisory services available to beneficiaries at European or national level?				
EQ 12.1: Coordinated	The support provided by the Commission was designed and implemented to ensure coordination, complementarity and synergies with existing other advisory services	> Description of alternative advisory services and their main characteristics	Desk Research In-depth interviews (MA)	Mapping of the support (alternative services)
EQ 12.2: Complementary		> N. of respondents using alternative support	Online Survey	Mapping of the support (alternative services)
EQ 12.3: Looking for synergies and avoiding duplications		> N. of respondents stating that the EC support was provided in a coordinated way - By type of support - By country/regions	Online Survey	Users' satisfaction
		> Qualitative assessment/perception of the coherence of support services against other advisory services.	In-depth interviews (MA)	Users' satisfaction
		> Type and nature of inconsistencies with other advisory services.	Online Survey In-depth interviews (MA)	Users' satisfaction
EQ 13: To what extent is the support provided by the Commission for RIS3 coherent (i.e. coordinated, complementary, looking for synergies and avoiding duplications) with Commissions' guidance on RIS3?				
	The support provided by the Commission is coherent with the Commission's guidance on RIS3	> Qualitative assessment (perception) of the coherence of support services with the Commission's guidance	In-depth interviews (AMI) experts/EC/JRC)	Users' satisfaction
		> Type and nature of incoherence identified between the support and the Commission's guidance	In-depth interviews (AMI) experts/EC/JRC) Online Survey	Users' satisfaction

EU ADDED VALUE

EU ADDED VALUE				
Sub-questions	Assessment criteria	Indicators/Descriptors	Data collection tools	Analytical activities
EQ 14: What would be the potential consequences of phasing out of support from the Commission for RIS3?				
	If phased out the support provided by the Commission would bring negative consequences	<ul style="list-style-type: none"> > N. of respondents stating that phasing out the EC support would have a high impact on RIS3 design and implementation -by type of service -by type of country/region - by needs 	Online survey	Future scenario
		<ul style="list-style-type: none"> > Description of the potential consequences of phasing out the support 	In-depth interviews (MA, EC/AMI expert/JRC) Workshop Online survey	Future scenario
EQ 15: What would be the potential consequences of reducing support from the Commission for RIS3?				
	If reduced, the support provided by the Commission would bring negative consequences	<ul style="list-style-type: none"> > N. of respondents stating that reducing the EC support would have a high impact on RIS3 design and implementation -by type of service -by type of country/region - by needs 	Online survey	Future scenario
		<ul style="list-style-type: none"> > Description of the potential consequences of reducing the support 	In-depth interviews (MA, EC/AMI expert/JRC) Online survey Workshop	Future scenario
EQ 16: What do the beneficiaries identify as the benefits of support provided by the Commission for RIS3 implementation?				
	The support provided by the Commission brings benefits which are recognised by the beneficiaries	<ul style="list-style-type: none"> > Description of benefits identified by beneficiaries - type of service - type of country/region 	Online survey	Users' satisfaction
		<ul style="list-style-type: none"> > Description of potential areas for improvement 	In-depth interviews (MA/AMI experts/EC/JRC) Online survey Workshop	Users satisfaction Future scenario
		<ul style="list-style-type: none"> > Qualitative assessment of the benefits of the EC support compared to other advisory services 	In-depth interviews (MA)	Users' satisfaction

EU ADDED VALUE				
Sub-questions	Assessment criteria	Indicators/Descriptors	Data collection tools	Analytical activities
		> Description of the primary needs expected in the future by type of country/region	In-depth interviews (MA/AMI expert/EC/JRC) Online survey Workshop	Users' satisfaction Future scenario
		>Description of the main expected EC requirement for which the EC support would be most needed by type of country/region	In-depth interviews (MA/AMI expert/EC/JRC) Online survey Workshop	Users' satisfaction Future scenario
		> Description of the main useful EC support services to address the country/regions needs by type of country/region	Online survey In-depth interviews (MA/AMI expert/EC/JRC) Workshop	Users' satisfaction Future scenario

ANNEX II. METHODOLOGICAL TOOLS

SCOPING AND IN-DEPTH INTERVIEWS

With the aim of **collecting qualitative information** on the relevance, effectiveness, efficiency, coherence and EU added value of EC support, scoping interviews in the first instance and in-depth interviews at a more advanced stage of the assessment have been carried out to complete and fine-tune the reconstruction of the intervention logic, the needs assessment as well as the mapping of EC support services preliminary collected through the desk analysis. The ultimate aim is to collect qualitative evidence which is expected to help to fill the assessment matrix and answers the study's evaluation questions.

Concerning the interviews with beneficiaries, the selection has been guided by a number of criteria:

- Balance between EU15/EU13 countries;
- Balance between more developed/less developed regions;
- Ranking within the Innovation Scoreboard;
- Balance between different quality of governance scores;
- Balance between different type of EC support services, with the inclusion of examples of countries/regions which did not receive highly-customised support;
- Performance on RIS3 preparation and implementation (e.g. late/early approval, good/not so good implementation performance, etc.).

The selection of a sample of beneficiaries implied, as a **first step**, the analysis of the state of play with RIS3 across Europe by looking at **the number of strategies adopted by country, both at national and regional level**. This analysis relied firstly on the information gathered from a review of EU countries and regions enrolled in the S3 platform.³⁴ Overall, the platform counts 38 countries (including the EU28 MS plus ten non-EU countries)³⁵ and 195 regions (of which 179 from EU MS). However, the registration on the platform is not mandatory but rather open to any regional and national administrations (from EU, candidate, neighbouring countries and non-EU third country) that wish to be involved and participate in the S3 Platform. Therefore, to have a comprehensive mapping of the RIS3 state of play across EU, a cross-check has been performed to complete the evidence collected from the platform by looking at the RIS3 Strategies Repository (last updated on February 2017) which has been created as part of the OnlineS3 project.³⁶ The main findings of this exercise are that 22 out of 28 EU Member States have adopted a national RIS3. In some cases, priorities have been set out, but there is no strategy formally adopted. Amongst countries, RIS3 have been adopted at different NUTS level (see for instance Finland, Sweden and the Czech Republic at NUTS 3 level).

This analysis has been then completed by looking at the position of countries and regions within the Innovation Scoreboard according to the last available data (from 2018 for MS and 2017 for regions). Further elements considered include the quality of the governance across EU regions, measured by the European Quality of Government Index and at the

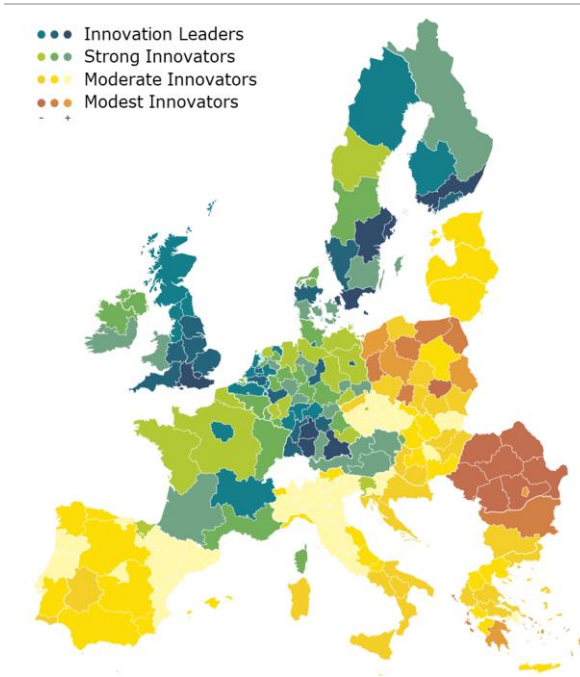
³⁴ <http://s3platform.jrc.ec.europa.eu/regions>

³⁵ Such as Albania, Australia, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Moldova, Montenegro, Norway, Serbia and Ukraine. It is worth noting that not all the countries enrolled on the platform have adopted RIS3 strategy at national level (NUTS 0). This is for instance the case of Belgium, Finland, the Netherlands, Spain and UK.

³⁶ The repository is updated on February 14th, 2017. It is available at <https://www.onlines3.eu/ris3-strategies-repository/>

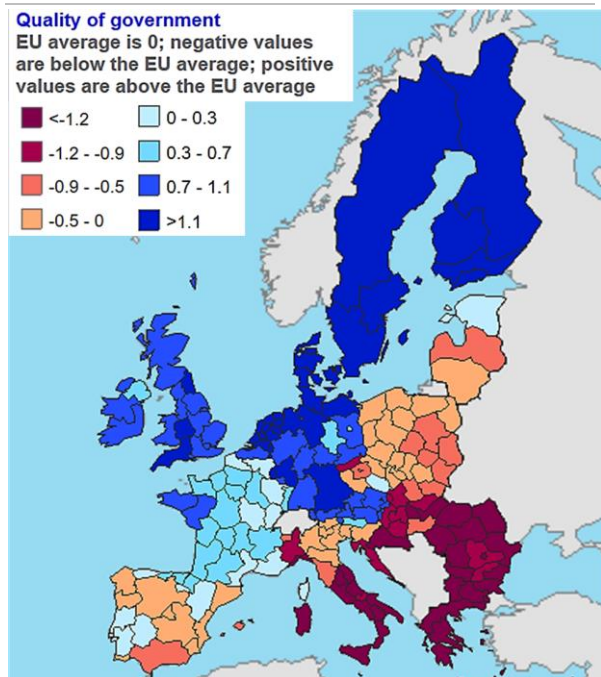
different levels of development (more developed, less developed and transition regions) as defined in the Common Provision Regulation. These three criteria are shown in the figures below.

Figure 45. Regional Innovation performance



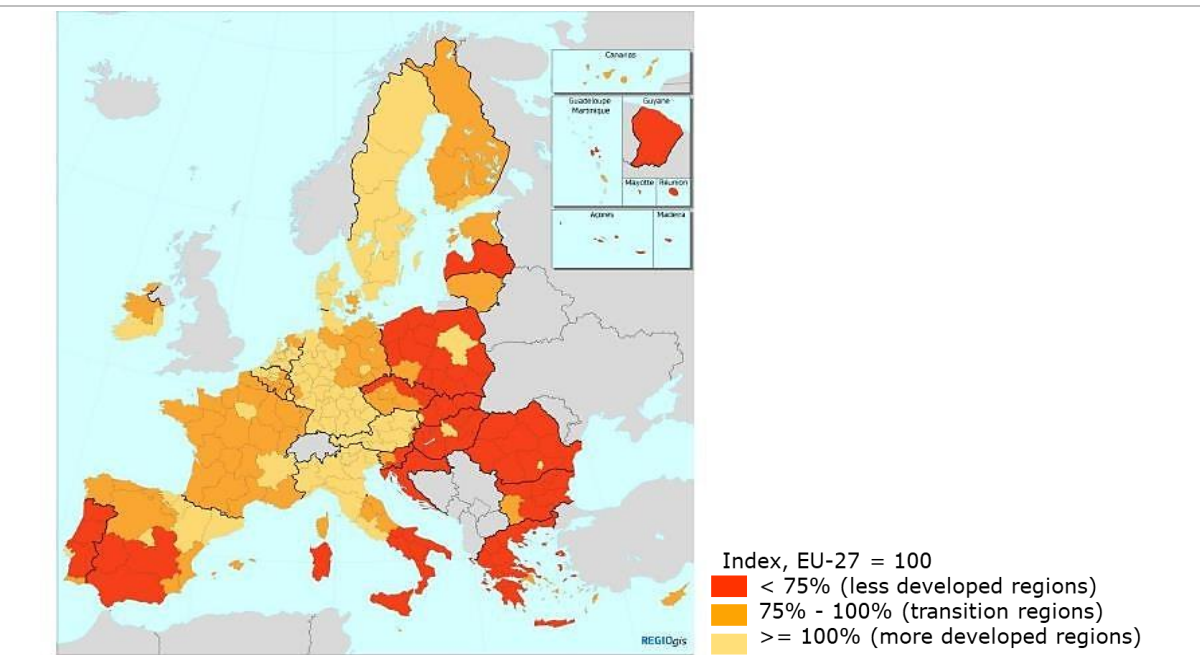
Source: European Commission, Regional Innovation Scoreboard 2017

Figure 46. Quality of government index, 2017



Source: European Quality of Government Index 2017

Figure 47. Eligibility to EU Structural Funds 2014-2020



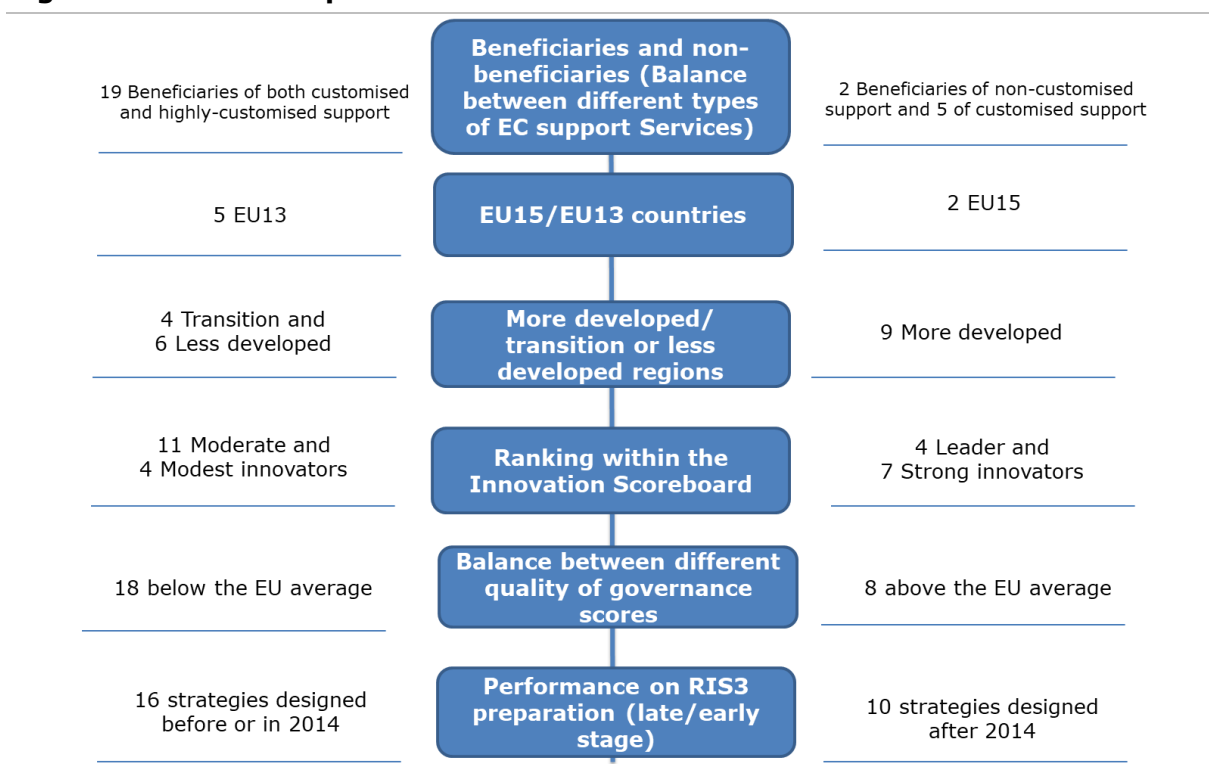
Source: Regulation (EU) No 1303/2013

As a second step, the distribution of the EC support has been analysed by looking at the information made available from a desk review of the S3 platform and of the AMI-CEI list of contracts provided by DG Regio. The objective of mapping the geographical distribution of support is to balance the selection of countries and regions and specially to identify examples of countries/regions non-beneficiaries of EC support. For this last element, it has already been highlighted the difficulty in identifying regions not benefitting from any types of support. Therefore, by assuming that all regions should have consulted at least the guidance documents provided by the Commission to design and implement their Smart Specialisation Strategies, the attention has been focused on the distribution of customised and highly customised EC support. The complete mapping of customised support in the first instance, however, has not been possible because of the challenges faced with the identification of regions participating to events and conferences as from the information available on the S3 platform. To this extent, only data from MS or regions participating in peer review or PXL workshops were gathered.

In view of a balanced selection of regions/countries for in-depth interviews, **fifteen beneficiaries and five non-beneficiaries (or beneficiaries of non-customised support) have been therefore preliminary selected based on the distribution of a specific customised EC support activity (peer review and PXL workshops) and of highly customised EC support**, as from the information made available by the desk research. These findings have been then fine-tuned by combining results from the online survey, the desk research and in-depth interviews when the information was available. The revised analysis and mapping of distribution is provided in Part 2 of this final report.

The **final sample of interviewees includes seven countries and 19 regions**. This selection, as mentioned before, is the result of a proper balancing exercise, whose outcome is represented in the following figure.

Figure 48. The sample of interviews in a nutshell



Source: CSIL based on interviews and a desk review

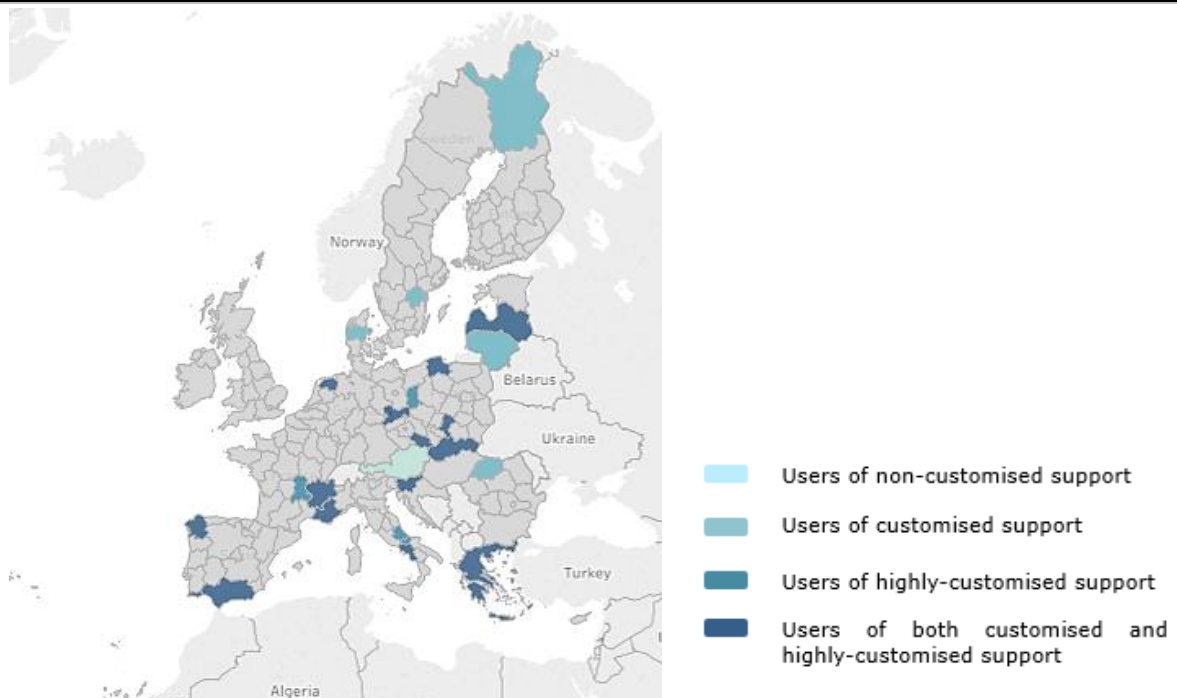
Interviews have been managed by phone, and the discussions have been guided by an interview checklist prepared in the first instance on the basis of the assessment matrix. Each discussion has then been tailored and adapted according to the different roles of interviewees and the types of services they have been dealing with. First contacts have been made through a letter of introduction. Interview guides have then been shared before each interview to get the interviewee familiar with the topic. An interview note has been prepared after each interview to report the main message of the discussion and shared with the interviewee for cross-checking and validation.

Data collected from the interviews have then been processed and **aggregated** to identify the main messages and patterns within different types of stakeholders and/or countries and regions. The main findings have then been used also to draft the background paper for the workshop and for this final report.

Overall, **41 in-depth interviews have been carried out** for this study according to the following breakdown:

- 26 interviews with beneficiaries of different types of support according to the varying degree of customisation (2 beneficiaries of only non-customised support, five beneficiaries of only customised support, 19 recipients of highly customised support);
- Five interviews with experts from AMI - CEI list;
- Six interviews with DG Regio staff;
- Four interviews with JRC staff.

Figure 49. Countries and regions covered by in-depth interviews



Source: CSIL based on interviews and a desk review

ONLINE SURVEY

In parallel with the data collection through in-depth interviews, an online survey has been **launched on 19th March and has run for nearly nine weeks (until 27th May)**. Its main objective was to collect a broad spectrum of perceptions and views and gather a comprehensive overview of all the activities delivered, the current needs, the modalities of implementation and the effects achieved.

By **targeting a more comprehensive range of stakeholders who have been dealing with RIS3 from different perspectives**, either as beneficiaries or as providers of the EC support, the survey is intended to collect more quantitative information to be combined with the qualitative data collected through interviews.

In order to reach this broad audience, the questionnaire has been disseminated – through a web link – through different channels, including the official EC consultation platform administered by the EC services and social media (e.g. Twitter, LinkedIn). Moreover, to increase the response rate, DG Regio has officially announced and launched the survey. JRC and geographical desk units have given an additional contribution by further disseminating and enhancing the visibility of the survey.

Overall, the questionnaire has been **designed based on the five evaluation criteria and the related questions**. Moreover, it has been organised in different modules. An initial list of issues common to all the typologies of stakeholders made it possible to compare opinions on the same topics from the various stakeholders' perspectives. In contrast, other more specific questions differentiate, for instance, between beneficiaries of EC support and the non-beneficiaries as well as from the providers of the support (e.g. AMI-CEI experts).

The final number of respondents who have answered all the questions amounts to **182 stakeholders**, of which:

- 84 stakeholders from the authorities responsible for the national (17) and the regional RIS3 (67);
- 64 National coordination units or Managing Authorities responsible for the use of EU funds and especially in charge of smart specialisation strategies at national (22) and regional (32) level;
- 6 European Commission Officer providing support to countries and regions (i.e. DG Regio, JRC);
- 9 Independent experts having delivered technical support through AMI- CEI expert list or JRC support to RIS3;
- 29 stakeholders not identifiable within the previous categories (i.e. academics, etc.).

Overall, the online survey covers the majority of the 28 Member States either at national or regional level, except for the Netherlands, Lithuania, Denmark and Ireland.

By looking at the coverage at national level, the following figure shows that the survey covered 11 MS out of 28.

Figure 50. The national coverage of the online survey

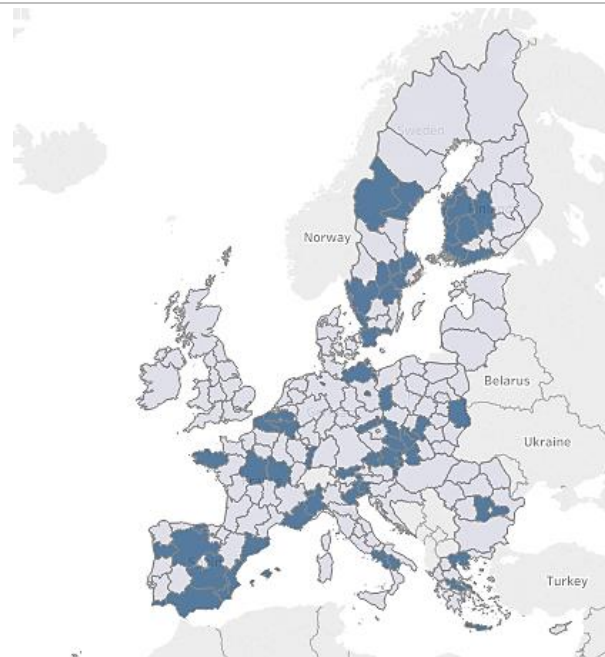


Legend: countries highlighted in blue are covered by the online survey.

Source: CSIL based on the online survey

At the regional level, nearly 60 different regions result to be covered. As shown below, regional respondents are quite varied. Most of them are Spanish, French, Czech, Italian, Finnish and Swedish regions, thus ensuring the coverage of different types of countries and regions from various areas across Europe.

Figure 51. The regional coverage of the online survey



Legend: regions highlighted in blue are covered by the survey.

Source: CSIL based on the online survey

WORKSHOP

A stakeholder workshop was an integral part of the assessment and aimed at discussing the preliminary evidence stemming from the online surveys and interviews, with the ultimate objective of reflecting on the policy implications of the study's findings and producing a feasible and relevant set of recommendations.

The workshop was held on the 4th of July 2019 in Brussels. It was attended by a total of 31 participants, including policymakers, academic experts and national and regional stakeholders, as detailed in the following complete list of participants provided in Table 8.

Table 8. Complete list of participants

6 European Commission and JRC Officials
5 Experts and Academics
20 National and Regional Representatives from:
Austria
Belgium
Croatia
CZ - South Moravian Region
DE - Bremen
ES - Andalucia
FI - Lapland
FR - PACA
FR - Centre Val de Loire
Greece
IT - Campania
IT - Molise
Lithuania
Malta
PT - Algarve
RO - Nord-Est

Evaluation team		
NAME	AFFILIATION	ATTENDANCE STATUS
Julie Pellegrin	Centre for Industrial Studies Project Manager	YES
Gelsomina Catalano	Centre for Industrial Studies Deputy Project Manager	YES
Francesco Prota	University of Bari "Aldo Moro" Scientific Director	YES
Claudia Gloazzo	Centre for Industrial Studies Expert	YES
Francesca Ardizzon	Centre for Industrial Studies Junior analyst	YES

Source: CSIL based on the workshop's attendance list

The workshop was organised over a full working day and pursued **two specific objectives** which were reflected in the agenda, as shown in Table 9 below.

Table 9. Agenda of the workshop

MORNING SESSION	
10:00 – 10:20	Welcome coffee and registration
10:20 – 10:45	Introduction Welcome address by DG Regio

	Kick-off and key parameters of the study "Assessment of support to the development and implementation of smart specialisation strategies provided by the European Commission from 2010 to 2017" (<i>J. Catalano - CSIL</i>)
10:45 – 13:00	Plenary session (<i>Part I</i>) Needs and support from 2010 until now Needs and support at different stages of S3 deployment and across different types of regions Presentation and open discussion (presentation by J. Catalano – CSIL; moderation by F. Prota – University of Bari "Aldo Moro") Coffee break (10') Targeting support to needs – what worked and what didn't Presentation and open discussion (presentation by J. Pellegrin – CSIL; moderation by F. Prota – University of Bari "Aldo Moro")
13.00 – 13:45	<i>Lunch break</i>
AFTERNOON SESSION	
13:45– 15:45	Plenary session (<i>Part II</i>) Future needs and support post-2020: Introductory remarks: the policy framework post-2020 EC on enabling condition What to give priority to - enabling condition and other challenges E.g. priority setting, widening policy scope, EDP, etc Mini presentation and open discussion (presentation by J. Catalano – CSIL; moderation by J. Pellegrin - CSIL) How to provide adequate support – options and future scenario E.g. differentiation, rationalisation, phasing out, more / less customised, more / less focused, etc Mini presentations and open discussion (presentations by C. Gloazzo – CSIL and F. Prota – University of Bari "Aldo Moro"; moderation by J. Pellegrin - CSIL)
15:45 – 16:00	Concluding remarks (CSIL, EC)

Source: CSIL

The first objective was to discuss the efficiency and effectiveness of the support provided by the European Commission to address the needs related to the design and implementation of smart specialisation strategies (RIS3) to draw lessons learnt from the 2014–2020 programming period. In order to pursue this objective, plenary sessions were organised in the morning to take stock of past and current experience with EC support, by highlighting the countries/regions needs as well as what worked well and what worked less well. The second objective was to discuss the design of the support to RIS3 to adequately address future needs, including compliance with the regulatory conditions for 2021–2027. Plenary sessions - organised during the afternoon session - revolved around the future needs, on how to improve current support, on the consequences for phasing-out or reducing EC support as well as on alternative types of support.

Therefore, based on the preliminary evidence gathered through in-depth interviews and the online survey, the presentations and the discussions revolved around four main themes:

- the identification of needs for the different stages of the process of defining and implementing RIS3 and for different types of countries/regions, emerging from the study findings;
- what worked and what did not work of the EC support for RIS3;
- how existing support could be fine-tuned, and new tools found to improve the EC support;
- future scenarios within the framework of ongoing discussions on the future of RIS3.

Amongst the **main conclusions** stemming from the workshop, the discussions showed countries and regions experienced an extensive learning process since the introduction of

the RIS3 concept. This factor resulted in strengthened capacity building and the creation of a community of practice, which did not exist before. It also created a wealth of evidence on practices and experience with RIS3, which requires to establish a proper knowledge management system to make the best of it.

In this context, the main findings are that support will still be needed in the future to improve capacity, the governance of RIS3 and for the broader involvement of regional stakeholders in the EDP. There is a need to focus on the European added value and adapt EC support to the widening scope of the RIS3 process and new transformational challenges. More specifically, the EC support should be more adapted to the regional needs and thematically focused.

Concerning the main categories of EC support the main conclusions are:

- Guidance documents and expert support at the two extremes of the spectrum between the non-customised and highly customised forms of support and other support in between are complementary.
- Guidance documents should not be too generic and instead focus on specific issues or themes.
- AMI-CEI experts should be close to specific regional contexts but with a comprehensive outlook. They could be mandated by the EC but selected by the regions. They are expected to act as “trusted third party” providing adequate political backing to encourage regions to take risks, make mistakes and learn. Experts are seen as an important feature of the governance and the effectiveness of RIS3 in the future programming period.

ANNEX III. COMPLETE LIST OF CONSULTED STAKEHOLDERS

Member State	Region	NUTS level	Data collection tool
Austria (AT)	At national level	At national level	<ul style="list-style-type: none"> • In-depth interviews • Workshop
	Burgenland	NUTS2	<ul style="list-style-type: none"> • Online survey
	Lower Austria	NUTS2	<ul style="list-style-type: none"> • Online survey
	Upper Austria	NUTS2	<ul style="list-style-type: none"> • Online survey
	Tyrol	NUTS2	<ul style="list-style-type: none"> • Online survey
	Vienna	NUTS2	<ul style="list-style-type: none"> • Online survey
Belgium	At national level	At national level	<ul style="list-style-type: none"> • Online survey
	Wallonia	NUTS1	<ul style="list-style-type: none"> • Online survey
	Vlaams-Brabant	NUTS2	<ul style="list-style-type: none"> • Workshop
Bulgaria (BG)	At national level	At national level	<ul style="list-style-type: none"> • Online survey
Croatia (HR)	At national level	At national level	<ul style="list-style-type: none"> • Workshop • Online survey
Czech Republic (CZ)	Southeast	NUTS2	<ul style="list-style-type: none"> • Online survey
	Moravian-Silesian	NUTS2	<ul style="list-style-type: none"> • Online survey
	Northeast	NUTS2	<ul style="list-style-type: none"> • Online survey
	Northwest	NUTS2	<ul style="list-style-type: none"> • Online survey
	Central Moravia	NUTS2	<ul style="list-style-type: none"> • Online survey
	South Moravia	NUTS3	<ul style="list-style-type: none"> • In-depth interviews • Workshop
Denmark (DK)	Central Jutland	NUTS2	<ul style="list-style-type: none"> • In-depth interviews
Estonia (EE)	At national level	At national level	<ul style="list-style-type: none"> • Online survey
Finland (FI)	South Finland	NUTS1	<ul style="list-style-type: none"> • Online survey
	Helsinki-Uusimaa	NUTS1	<ul style="list-style-type: none"> • Online survey
	North & East Finland	NUTS1	<ul style="list-style-type: none"> • Online survey
	Lapland	NUTS3	<ul style="list-style-type: none"> • In-depth interviews • Workshop • Online survey
	Satakunta	NUTS3	<ul style="list-style-type: none"> • Online survey
	Ostrobothnia	NUTS3	<ul style="list-style-type: none"> • Online survey
France (FR)	Alsace	NUTS2	<ul style="list-style-type: none"> • Online survey
	Auvergne-Rhône-Alpes	NUTS2	<ul style="list-style-type: none"> • In-depth interviews
	Brittany	NUTS2	<ul style="list-style-type: none"> • Online survey
	Burgundy	NUTS2	<ul style="list-style-type: none"> • Online survey
	Centre Val de Loire	NUTS2	<ul style="list-style-type: none"> • Workshop • Online survey
	Martinique	NUTS2	<ul style="list-style-type: none"> • Online survey
	Nord-Pas de Calais	NUTS2	<ul style="list-style-type: none"> • Online survey
	Provence-Alpes-Côte d'Azur (PACA)	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Workshop • Online survey
Germany (DE)	Bremen	NUTS1	<ul style="list-style-type: none"> • In-depth interviews • Online survey
	Saxony	NUTS1	<ul style="list-style-type: none"> • In-depth interviews
	Berlin	NUTS1	<ul style="list-style-type: none"> • Online survey
	Mecklenburg-Vorpommern	NUTS1	<ul style="list-style-type: none"> • Online survey

Member State	Region	NUTS level	Data collection tool
Greece (EL)	At national level	At national level	<ul style="list-style-type: none"> • In-depth interviews • Online survey • Workshop
	Central Macedonia	NUTS2	<ul style="list-style-type: none"> • Online survey
	Central Greece	NUTS2	<ul style="list-style-type: none"> • Online survey
Italy (IT)	Crete	NUTS2	<ul style="list-style-type: none"> • Online survey
	At national level	At national level	<ul style="list-style-type: none"> • Online survey
	Abruzzo	NUTS2	<ul style="list-style-type: none"> • In-depth interviews
	Aosta Valley	NUTS2	<ul style="list-style-type: none"> • Online survey
	Basilicata	NUTS2	<ul style="list-style-type: none"> • Online survey
	Campania	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Workshop • Online survey
	Friuli-Venezia Giulia	NUTS2	<ul style="list-style-type: none"> • Online survey
	Molise	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Workshop
	Piedmont	NUTS2	<ul style="list-style-type: none"> • Online survey
	South Tyrol	NUTS2	<ul style="list-style-type: none"> • Online survey
Latvia (LV)	Veneto	NUTS2	<ul style="list-style-type: none"> • Online survey
	At national level	At national level	<ul style="list-style-type: none"> • In-depth interviews • Online survey
Lithuania (LT)	At national level	At national level	<ul style="list-style-type: none"> • In-depth interviews • Workshop
Malta (MT)	At national level	At national level	<ul style="list-style-type: none"> • In-depth interviews • Workshop • Online survey
The Netherlands (NL)	Northern Netherlands	NUTS1	<ul style="list-style-type: none"> • In-depth interviews
Poland (PL)	At national level	At national level	<ul style="list-style-type: none"> • Online survey
	Lubuskie	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Online survey
	Lubelskie	NUTS2	<ul style="list-style-type: none"> • Online survey
	Podkarpackie	NUTS2	<ul style="list-style-type: none"> • Online survey
	Pomorskie	NUTS2	<ul style="list-style-type: none"> • In-depth interviews
Portugal (PT)	Slaskie	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Online survey
	Algarve	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Workshop • Online survey
	Azores	NUTS2	<ul style="list-style-type: none"> • Online survey
Romania (RO)	Norte	NUTS2	<ul style="list-style-type: none"> • Online survey
	North-East	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Workshop
Slovenia (SI)	Sud-Muntenia	NUTS2	<ul style="list-style-type: none"> • Online survey
	At national level	At national level	<ul style="list-style-type: none"> • In-depth interviews • Online survey
Slovakia (SK)	At national level	At national level	<ul style="list-style-type: none"> • In-depth interviews • Online survey
	Western Slovakia	NUTS2	<ul style="list-style-type: none"> • Online survey
Spain (ES)	Andalucía	NUTS2	<ul style="list-style-type: none"> • In-depth interviews • Workshop • Online survey
	Balearic Islands	NUTS2	<ul style="list-style-type: none"> • Online survey

Member State	Region	NUTS level	Data collection tool
	Canary Islands	NUTS2	• Online survey
	Cantabria	NUTS2	• Online survey
	Castilla y León	NUTS2	• Online survey
	Castilla-La Mancha	NUTS2	• Online survey
	Catalonia	NUTS2	• Online survey
	Galicia	NUTS2	• In-depth interviews
	Murcia	NUTS2	• Online survey
	Valencian Community	NUTS2	• Online survey
Sweden (SE)	East Middle Sweden	NUTS2	• Online survey
	Middle Norrland	NUTS2	• Online survey
	South Sweden	NUTS2	• Online survey
	Stockholm	NUTS2	• Online survey
	West Sweden	NUTS2	• Online survey
	Östergötland	NUTS3	• In-depth interviews • Online survey
United Kingdom (UK)	At national level	At national level	• Online survey

Source: CSIL

ANNEX IV. RESOURCES MOBILISED FOR HIGHLY CUSTOMISED SUPPORT (AMI-CEI EXPERTS)

The amount of resources spent on services provided by AMI-CEI expert has been collected based on the complete list of AMI-CEI contracts which has been provided by the Commission within the database "AMI List Experts_RIS3 analysis and TSSP_(2016-2018)" and through a list of documents related to each contract. Evidence collected, therefore, reveals that the total number of contracts amounts to 183.

The following table provides an overview of the number of contracts and the amounts allocated, by **differentiating between the different support provided by the AMI-CEI experts at European (non-customised support, 26), national and regional level (highly-customised support, 142)** as well as by considering separately support to groups of regions involved in **thematic platforms (customised support, 15)**.

Table 10. Resources mobilised to support RIS3 through the AMI CEI list

	Number of contracts provided by the Commission	Amount (EUR)
Support to groups of regions involved in thematic platforms	15	290,236
Support to EU28	26	510,000
Support to MS	41	753,600
Support to Regions	95 ³⁷	1,951,200
Support to MS and Regions	6	149,600
Total	183	3,654,636

Source: CSIL based on the elaboration of DG Regio data and documents on AMI-CEI contracts.

Concerning support provided to thematic platforms, overall 15 contracts (of which 9 in 2016, 5 in 2017 and 1 in 2018) were financed through AMI-CEI list for a total amount of **290,236 EUR**. The below table provides an overview of the distribution of this support by platforms.

Table 11. Support through the AMI-CEI list to the thematic platforms

Thematic platform	Number	Amount (EUR)	Specific partnership supported
-	1	14,250	- Global Methodology
Agri-food	7	114,955	- Traceability and Big Data (2) - High-technology Farming (3) - Smart Electronic System (1) - Nutritional Ingredients (1)
Industrial Modernisation	7	161,031	- Industry 4.0 (4) - Textile (1) - Sport, Industry 4.0 (1) - Photonics (1)

Source: CSIL based on the elaboration of DG Regio data and documents on AMI-CEI contracts.

³⁷ The amount of two contracts was not available.

In addition, since 2011 **168 contracts** have been financed to support RIS3 at EU, national and regional level through the AMI-CEI list for a total amount of **3,364,400 EUR** mostly concentrated between 2012 and 2014 and with an average price of 20,000 EUR per contract.

AMI-CEI EXPERTS SUPPORT (NON-CUSTOMISED SUPPORT AND HIGHLY CUSTOMISED)

Table 12. Support through the AMI-CEI list of experts per year and type of beneficiary (EU28, Member States, regions)

Year of issuing of the contract	Coverage	Number of contracts	Amount (EUR)
2011	EU28	7	31,500
	National level	/	/
	Regional level	/	/
	Both levels	/	/
	<i>Total</i>	7	31,500
2012	EU28	1	9,800
	National level	19	370,300
	Regional level	33	598,800
	Both levels	3	75,700
	<i>Total</i>	56	1,054,600
2013	EU28	8	189,100
	National level	12	189,500
	Regional level	39	700,700
	Both levels	1	6,900
	<i>Total</i>	60	1,086,200
2014	EU28	4	145,600
	National level	9	164,700
	Regional level	19	551,700
	Both levels	2	67,000
	<i>Total</i>	34	929,000
2015	EU28	/	/
	National level	1	29,100
	Regional level	/	/
	Both levels	/	/
	<i>Total</i>	1	29,100
2016	EU28	3	67,950
	National level	/	/
	Regional level	4	100,000
	Both levels	/	/
	<i>Total</i>	5	167,950
2017	EU28	3	66,050
	National level	/	/
	Regional level	/	/
	Both levels	/	/
	<i>Total</i>	3	66,050
2011-2017	EU28	26	510,000
	National level	41	753,600
	Regional level	95	1,951,200
	Both levels	6	149,600
	<i>Total</i>	168	3,364,400

Source: CSIL based on the elaboration of DG Regio data and documents on AMI-CEI contracts.

ANNEX V. COMPLETE LIST OF EC SUPPORT INSTRUMENTS BY CATEGORY OF INSTRUMENT (NON-CUSTOMISED AND CUSTOMISED SUPPORT)

NON-CUSTOMISED SUPPORT

Table 13. Complete list of Guidance documents

1 Guidance – RIS3 Design	RIS3 Guide (2012)
2 Guidance – RIS3 Implementation	S3 Implementation Handbook (2016) "Smart Stories, Implementing Smart Specialisation across Europe" (2016)

Source: CSIL based on S3 platform.

Table 14. Complete list of Additional guidelines

26 Commission Guides	
2010	1. The Smart Guide to Innovation-Based Incubators (IBI) (2010)
2011	2. Connecting Universities to Regional Growth: A Practical Guide (2011)
	3. Driving energy efficient innovation through procurement (2011)
2012	4. Connecting Smart and Sustainable Growth through Smart Specialisation (2012)
	5. How can cultural and creative industries contribute to economic transformation through smart specialisation? (2012)
	6. How can cultural and creative industries contribute to economic transformation through smart specialisation? (2012)
	7. How can cultural and creative industries contribute to economic transformation through smart specialisation? (2012)
2013	8. The Guide to Multi-Benefit Cohesion Policy Investments in Nature and Green Infrastructure (2013)
	9. Innovation - How to convert research into commercial success? (2013)
	10. New Practical Guide to EU Funding Opportunities for Research and Innovation (Funding opportunities until 2013)
	11. Regional policy for smart growth of SMEs (2013)
	12. Guide to Social Innovation (2013)
2014	13. Broadband Investment Guide (2014)
	14. The Digital Agenda Toolbox (2014)
	15. Assessment Grid for Evaluating Strategic Policy Frameworks for Digital Growth & Next Generation Network Plans (2014)
	16. Enabling synergies between European Structural and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes - Guidance for policy-makers and implementing bodies (2014)
	17. Setting up, managing and evaluating EU Science And Technology Parks - An advice and guidance report on good practice (2014)
	18. Supporting the internationalisation of SMEs (2014)
2015	19. Smart Guide on Regional Transport Innovation Strategy (2015)
	20. Fostering SMEs growth through digital transformation (2015)
	21. Guidance for public authorities on Public Procurement of Innovation (2015)
2016	22. Enhancing Access to, and the Use and Quality of ICT (2016)
	23. Regional Innovation Ecosystems - Learning from the EU 's Cities and Regions (2016)
	24. Smart Guide to Cluster Policy (2016)

2017	25. Digital Innovation Hubs: Mainstreaming Digital Innovation Across All Sectors (2017)
	26. Place-Based Innovation Ecosystems: Espoo Innovation Garden and Aalto University - Finland (2017)

13 Data sources

[Policy Brief on Smart Specialisation](#), Fraunhofer ISI

[EU Cluster observatory](#)

[Regional Innovation Scoreboards](#)

[RIM Plus - Regional Innovation Monitor Plus](#)

[Digital Entrepreneurship Monitor](#)

[European Investment Project Portal \(EIPP\)](#)

[Regional Competitiveness Index 2013](#)

[Eurostat «Regional Statistics Illustrated» per NUTS2 region 2003-2011](#)

[KETs Observatory](#)

[FP7 data 2007-13](#)

[FP6 data 2002-6](#)

[FP5 data 1998-2002](#)

[FP4 data 1994-98](#)

Source: CSIL based on S3 platform.

Table 15. Complete list of the nine guidance drafted by AMI-CEI experts

	2011CE160AT037 - "Concept paper on social innovation"
	2011CE160AT041 - "Mini-Study Smart Specialisation in Space"
2011	2011CE160AT050 - "S3 case studies"
	2011CE160AT099 - "Guide Innovation Strategies for SS-Chapter links"
	2011CE160AT101 - "Guide Smart cluster strategies"
2012	2012CE160AT117 - "Final report - Cluster guide revision RR rev"
2013	2013CE160AT002 - "SME support actions for SF programmes"
	2013CE160AT032 - "EU funding of Science & Techn. Parks"
2014	2014CE160AT095 - "Guidance-Report"

Source: CSIL based on DG Regio data. **Note:** Contract reference number and title.

Table 16. Complete list of the 7 IT Tools

[Eye@RIS3](#)

[ESIF - Viewer](#)

[ICT Monitoring Tool](#)

[Regional Benchmarking](#)

[EU Trade](#)

[R&I Regional Viewer](#)

[Digital Innovation Hubs](#)

Source: CSIL based on S3 platform.

Table 17. Complete list of the 123 studies and research analyses included in the Knowledge Repository section of the S3 platform

Theme: RIS3 Design and implementation	
	<ul style="list-style-type: none"> Other guides related to aspects of the S3
2013	<ul style="list-style-type: none"> The goals of Smart Specialisation (2013) Smart specialisation programmes and implementation (2013)
2014	<ul style="list-style-type: none"> Breaking with the past in smart specialisation: A new model of selection of business stakeholders within the entrepreneurial process of discovery (2014) The Role of Government Institutions for Smart Specialisation and Regional Development (2014)

	<ul style="list-style-type: none"> • Regional Branching and Smart Specialisation Policy (2014) • Regional benchmarking in the smart specialisation process: Identification of reference regions based on structural similarity (2014) • RIS3 Implementation and Policy Mixes (2014)
2015	<ul style="list-style-type: none"> • Mapping Innovation Priorities and Specialisation Patterns in Europe (2015) • Monitoring Mechanisms for Smart Specialisation Strategies (2015) • Global Value Chains and Smart Specialisation Strategy. Thematic Work on the Understanding of Global Value Chains and their Analysis within the Context of Smart Specialisation (2015)
2016	<ul style="list-style-type: none"> • Global Value Chains Mapping: Methodology and Cases for Policy Makers. Thematic Work on Value Chain Mapping in the Context of Smart Specialisation (2016) • Industry Global Value Chains, Connectivity and Regional Smart Specialisation in Europe. An Overview of Theoretical Approaches and Mapping Methodologies. (2016) • Fraunhofer Policy Brief on Smart Specialisation (2016)
2017	<ul style="list-style-type: none"> • Smart Specialisation at work: Analysis of the calls launched under ERDF Operational Programmes (2017) • Smart Specialisation at work: The entrepreneurial discovery as a continuous process (2017) • Innovation Camp Methodology Handbook (2017) • Smart specialisation, seizing industrial opportunities (2017)
2018	<ul style="list-style-type: none"> • Smart Specialisation, Territorial Innovation and Policy Change - Special Issue of the Public Policy Portuguese Journal (2018) • Appendix FW Document on EDP (2018) • Framework Document on EDP (2018) • Digital Innovation Hubs in Smart Specialisation Strategies (2018) • Guiding investments in place-based development. Priority setting in regional innovation strategies (2018) • Norte Region Smart Specialisation Strategy (NORTE RIS3). A Monitoring System Methodological Approach for MONITORIS3 Project (2018) • Smart Specialisation at work: Assessing investment priorities (2018) • Synergies between Interreg Europe and Smart Specialisation: A methodological proposal to enhance policy learning (2018) • Squaring the circle: lessons from the role-playing exercises on S3 regional and multi-level governance (2018)
Theme: Peer Review	
2014	<ul style="list-style-type: none"> • The S3 Platform Peer Review Methodology (2014) • Taking stock of S3 Peer Review Workshops (2014)
2017	<ul style="list-style-type: none"> • Peer Review of the Moldovan Research and Innovation System (2017) • PSF report on Ukrainian R&I system (2017)
Theme: S3 cooperation	
2013	<ul style="list-style-type: none"> • EU-Latin America Cooperation on Regional Innovation Systems in the Framework of Regional Policy (2013)
2014	<ul style="list-style-type: none"> • Developing Danube R&I Projects across Borders - How to Make the Joint Use of EU-Funds a Reality? (2014) • Inter-Regional Collaboration in Research and Innovation Strategies for Smart Specialisation (RIS3) (2014)
2015	<ul style="list-style-type: none"> • External dimensions of smart specialisations: Opportunities and challenges for trans-regional and transnational cooperation in EU13 (2015) • Annual Report of the JRC-IPTS activities within the Danube-INCO.NET project (2015)
2016	<ul style="list-style-type: none"> • How Outward-looking is Smart Specialisation? - Results from a survey on inter-regional collaboration in Smart Specialisation Strategies (RIS3) (2016) • Smart Specialisation: Creating Growth through Trans-national cooperation and Value Chains (2016) • China RIO Report (2016) • Macro-regional strategies in changing times – EUSBSR, EUSDR, EUSALP and EUSAIR headed towards the future together (2016) • Commission staff working document - Accompanying the "Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU macro-regional strategies" (2016) • RIO Country Report Brazil 2015 (2016)
2017	<ul style="list-style-type: none"> • Report – The Role of Smart Specialisation in the EU Enlargement and Neighbourhood Policies (2017) • Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of EU macro-regional strategies (2017)

	<ul style="list-style-type: none"> • S3 Danube INCO.NET Flyer (2017) • Innovation and Regional Specialisation in Latin America (2017) • Added-value of the macro-regional strategies for projects and programmes (2017) • Report on the Implementation of the European Neighbourhood Policy Review (2017) • Smart Specialisation in EU and Chile, challenges and opportunities. Towards a transcontinental policy learning dialogue methodology. (2017) • Interregional cooperation to increase innovation investment across EU borders (2017) • National innovation and smart specialisation governance in the Baltic Sea region (2017) • Innovación y especialización regional en América Latina (2017) • Multi-Level Governance of Innovation and Smart Specialisation (2017) • Making the Most of Macro-regional Strategies (2017)
2018	<ul style="list-style-type: none"> • 10 Things to Know About Transnational Cooperation (2018) • Supporting an Innovation Agenda for the Western Balkans - Tools and Methodologies (2018) • Smart Specialisation Worldwide - United Mexican States (2018) • Smart Specialisation Worldwide - Argentine Republic (2018) • Smart Specialisation Worldwide - Commonwealth of Australia(2018) • Smart Specialisation Worldwide - Federative Republic of Brazil (2018) • Smart Specialisation Worldwide - People's Republic of China (2018) • Smart Specialisation Worldwide - Republic of Colombia (2018) • Smart Specialisation Worldwide - Republic of Peru (2018) • Smart Specialisation Worldwide - Republic of Chile (2018) • Annual Report on the Smart EU MacroRegions (2018)
Theme: Thematic Platforms	
2014	<ul style="list-style-type: none"> • Synergies between the Transport component of Horizon 2020 and the Cohesion Policy 2014-20 (2014) • Preliminary report on KETs priorities declared by regions in the context of their work on Research and Innovation Strategies for Smart Specialisation (RIS3) (2014) • Digital Growth Strategies in EU Regions: Taking Stock from Learning Activities (2014)
2016	<ul style="list-style-type: none"> • Assessment of strategies for ICT investments using European Structural and Investment Funds: reflections from experts and practical examples (2016) • Food and gastronomy as elements of regional innovation strategies (2016) • Blue Growth and Smart Specialisation: How to catch maritime growth through 'Value Nets' (2016) • Mapping regional energy interests for S3PEnergy (2016) • Mapping EU investments in ICT - description of an online tool and initial observations (2016)
2017	<ul style="list-style-type: none"> • Dynamics of Smart Specialisation Agri-food Trans-regional Cooperation (2017) • Concept Note - Partnership of European Regions on Sustainable Buildings (2017) • Implementing smart specialisation - thematic platform on industrial modernisation (2017) • Capitalising on Smart Specialisation and Interreg, the case of energy (2017)
2018	<ul style="list-style-type: none"> • Smart specialisation and social innovation: from policy relations to opportunities and challenges (2018) • Workshop on regional heating and cooling priorities and financing in the framework of the Smart Specialisation Platform (S3P-E H&C) (2018) • Promoting solar electricity exports from southern to central and northern European countries: Extremadura case study (2018) • Good practices for Smart Specialisation in energy (2018) • Interregional partnership for Smart Specialisation on Bioenergy (2018) • Interregional partnership for Smart Specialisation on Marine Renewable Energy (2018) • Interregional partnership for Smart Specialisation on Smart Grids (2018) • Interregional partnership for Smart Specialisation on Solar Energy (2018) • Interregional partnership for Smart Specialisation on Sustainable Buildings (2018) • Interregional partnership for Smart Specialisation on High Performance Production through 3D-printing (2018) • Interregional partnership for Smart Specialisation on advanced manufacturing for energy applications (2018) • Interregional partnership for Smart Specialisation on artificial intelligence and human machine interface (2018) • Interregional partnership for Smart Specialisation on advanced materials for batteries for electro-mobility and stationary energy storage (2018) • Interregional partnership for Smart Specialisation on chemicals (2018)

	• Interregional partnership for Smart Specialisation on digitalisation and safety for tourism (2018)
	• Interregional partnership for Smart Specialisation on cybersecurity (2018)
	• Interregional partnership for Smart Specialisation on medical technologies (2018)
	• Interregional partnership for Smart Specialisation on new nano-enabled products (2018)
	• Interregional partnership for Smart Specialisation on personalised medicine (2018)
	• Interregional partnership for Smart Specialisation on photonics (2018)
	• Interregional partnership for Smart Specialisation on safe and sustainable mobility (2018)
	• Interregional partnership for Smart Specialisation on SME integration to industry 4.0. (2018)
	• Interregional partnership for Smart Specialisation on social economy (2018)
	• Interregional partnership for Smart Specialisation on sport (2018)
	• Interregional partnership for Smart Specialisation on textile innovation (2018)
	• Interregional partnership for Smart Specialisation on efficient and sustainable manufacturing (2018)
	• Interregional partnership for Smart Specialisation on innovative use of non-food biomass (2018)
	• Interregional partnership for Smart Specialisation on Smart Sensors for Agri-food (2018)
	• Interregional partnership for Smart Specialisation on Consumer involvement on Agri-food innovation (2018)
	• Interregional partnership for Smart Specialisation on Traceability and Big Data (2018)
	• Interregional partnership for Smart Specialisation on High Tech Farming (2018)
	• Interregional partnership for Smart Specialisation on Nutritional Ingredients (2018)
Theme: Other	
2014	• Smart specialisation in the tangled web of European inter-regional trade (2014) • The Role of Science Parks in Smart Specialisation Strategies (2014)
2015	• Research and Technology Organisations and Smart Specialisation (2015) • Best practices and informal guidance on how to implement the Comprehensive Assessment at Member State level (2015)
2016	• European Structural and Investment Funds and European Fund for Strategic Investments complementarities: Ensuring coordination, synergies and complementarity (2016) • EU Funds working together for jobs and growth: Synergies between the R&I Framework Programmes and the European Structural & Investment Funds (2016) • Research for REGI Committee - Maximisation of Synergies Between European Structural and Investment Funds and Other EU Instruments to Attain EUROPE 2020 Goals (2016) • An analysis of drivers, barriers and readiness factors of EU companies for adopting advanced manufacturing products and technologies (2016)
2017	• Review of the state of development of clusters in EaP countries (2017) • European Commission reflection paper on harnessing globalisation (2017) • Promoting innovation in transition countries: A trajectory for smart specialisation (2017) • EU Research & Innovation for and with Cities - Yearly mapping report (2017) • Reconciling Smart Specialisation Strategies with State aid - Not an Impossible Mission (2017)

Source: CSIL based on S3 platform.

CUSTOMISED SUPPORT

Table 18. Complete list of the 19 Peer review workshops

2012	• First S3P Peer Discussion Workshop (2012) • Second S3P Peer Discussion Workshop (2012) • Peer Discussion As a Step Towards RIS3 in Ponta Delgada (PT) (2012) • Peer review workshop in Pisa (IT) (2012) • Peer review workshop in Strasbourg (FR) 2012
2013	• Workshop 'Peer Discussion as a Step Towards RIS3' in Palma de Mallorca (ES) (2013) • Workshop 'Peer Discussion as a Step Towards RIS3' in Brno (CZ) (2013) • S3 Peer-Review Workshop: 'Stakeholder Engagement and the RIS3 Governance' in Vaasa (FI) (2013) • S3 Peer Review Workshop for National RIS3 in Budapest (HU) (2013) • S3 Peer Review: Tourism as a RIS3 Priority - Faro (PT) (2013) • Peer Review Workshop in Heraklion (Crete, GR) (2013) • Peer Review Workshop in Potsdam (DE) (2013) • Digital Growth Peer Review Workshop (2013)

2014	• Peer Review workshop for National RIS3 in Riga (LV) (2014)
	• S3P Peer-Review Workshop for National RIS3 in Portoroz (SI) (2014)
	• Peer-Review Workshop for Regional RIS3 in Novi Sad (RS) (2014)
	• Peer Review Workshop in Dublin (2014)
	• Digital Growth & Smart Specialisation (2014)
	• Peer Review Workshop in Baiona, Vigo (Galicia/Spain) (2014)

Source: CSIL based on S3 platform.

Table 19. Complete list of the 11 PXL workshops

2015	• In-depth Peer Review Workshop: Region of Eastern Macedonia and Thrace (GR) (2015)
	• Peer Review Workshop in Podkarpackie (PL) (2015)
	• Thematic Peer-Review Workshop on RIS3 Governance (2015)
2016	• Monitoring Smart Specialisation - Peer eXchange & Learning (PXL) (2015)
	• Pilot Peer Review on integrated sustainable urban development strategies (2016)
2018	• Peer eXchange and Learning (PXL) workshop on Policy Instruments (2018)
	• Peer eXchange and Learning (PXL) workshop on the entrepreneurial discovery process (EDP) (2018)
	• Peer eXchange and Learning (PXL) workshop on Entrepreneurial Discovery Process (EDP), Policy Instruments and Monitoring (2018)
	• Peer eXchange and Learning (PXL) workshop on Multi-level Governance for RIS3 (2018)
	• Peer Learning workshop on VET & S3 (2018)
	• Peer eXchange and Learning (PXL) workshop on Monitoring for Smart Specialisation Strategies (2018)

Source: CSIL on the basis of S3 platform.

Table 20. Complete list of support activities for Thematic Platforms

Events and workshops	
2013	• Unleashing the Potential Of Advanced Manufacturing Technologies Using S3 (2013)
	• Pilot Workshop on Priority Setting and Collaboration in ICT (2013)
	• KETs for Smart Specialisation Strategies (RIS3) in Agro-food (2013)
2014	• Thematic Workshop on Transportation and Logistics in RIS3 (2014)
2015	• Thematic workshop on RIS3 and Fuel Cells & Hydrogen (2015)
	• RIM Plus Workshop - "Developing new industrial value chains through open innovation collaboration spaces" (2015)
	• Country event in Brno (CZ) (2015)
	• Launch Event of the European Smart Specialisation Platform on Energy (2015)
	• Conference on synergy between Clean Sky and ESIF (2015)
	• Second Platform Event of the RIM Plus (2015)
	• Food, Gastronomy & Bio-Economy as Elements of Reg. Innovation Strategies (2015)
	• RIS3 Implementation Workshop on Blue Growth (2015)
2016	• Dual use technologies within the framework of RIS3 in Europe (2015)
	• Towards a Model of Sustainable Construction and Energy Efficient Buildings (2015)
	• The Role of City-Regions in the Achievement of a Low Carbon Economy, COST-JRC Joint Workshop (2016)
	• World Sustainable Energy Days (2016)
	• Smart Specialisation Platform on Energy / ERRIN "Embedding Energy Union in the Regions" (2016)
	• Industrial Technologies for Regional Growth (2016)
	• RIM Plus Workshop "Connecting innovation community of Industry 4.0 and smart systems" (2016)
	• CoR/DG RTD seminar on Bioeconomy-related Research and Innovation (R&I) (2016)
	• INFORMATION DAY: 11 MAY 2016, S3 Platform on Industrial Modernisation and Investment (2016)
	• INFORMATION DAY: 12 MAY 2016, S3P Agri-Food (2016)
2016	• Re-power EU Conference of the European Technology and Innovation Platforms, Photovoltaics and Smart Grids (2016)
	• Smart Specialisation in Energy, how Europe's regions are implementing their priorities (2016)
	• S3PEnergy: Smart Mediterraneo. Best practices, innovation and pilot projects in smart grid development in the Mediterranean region (2016)
	• How to build Smart Energy Regions (2016)

Events and workshops	
	<ul style="list-style-type: none"> • European Week of Regions and Cities (2016) • RC Annual Conference - Human Capital for Territorial Growth (2016) • FOOD 2030: Research & Innovation for Tomorrow's Nutrition & Food Systems (2016) • From smart specialisation to investment projects for industry modernisation session organised by DG GROW in the frame of the 14th European Week of Regions and Cities (2016) • Smart Specialisation in Energy and innovation in European Regions (2016) • Bratislava Bioeconomy Conference (2016) • Smart Grid Challenges and Opportunities in the Baltic Region (2016) • Kick-off Event of the Smart Specialisation Platform on Industrial Modernisation and launch of the Wafify campaign (2016) • Second peer-review workshop on Integrated Sustainable Urban Development Strategies (2016) • Kick-off Event of the Smart Specialisation Platform on Agri-Food (2016)
	<ul style="list-style-type: none"> • European Industry Day (2017) • Nanotechnologies and Advanced Materials Pilot Projects Test-beds for industry and private investments (2017) • The first Steering Committee meeting of the Smart Specialisation Platform for Industrial Modernisation (2017) • Seminar on 'Innovative Energy Solutions for European Regions and Cities' (2017) • Marine Renewable Energy S3Partnership working meeting - videoconference (2017) • S3P Agrifood - Technical meeting of the thematic partnership on "Traceability and Big data" (2017) • Wafify matchmaking event on Biotechnology in Healthcare (2017) • Wafify matchmaking event on ICT applications in Tourism and Cultural Industries (2017) • Wafify - Agora matchmaking event on Internet of Things (2017) • Working meeting S3 MRE Partnership (2017) • Kick-off meeting of the Solar S3 Partnership (2017) • Working meeting Sustainable Buildings S3 Partnership - Brussels (2017) • Smart Regions 2.0 Conference: Maximising Europe's Innovation Potential (2017) • WATIFY Matchmaking Event on Digitalisation in Fashion (2017) • WATIFY Matchmaking Event on Photonics (2017) • Workshop on Maritime and port applications (2017)
2017	<ul style="list-style-type: none"> • S3P - Textile innovation partnership high level group meeting (2017) • Smart Specialisation in Energy, driving societal challenges (2017) • Working meeting Sustainable Buildings S3 Partnership - Debrecen (HU) (2017) • Wafify webinar on Cyber-security based on visibility (2017) • Wafify webinar on Value chain analysis - a tool for competitive advantage (2017) • Wafify webinar on Internet of Things and Energy (2017) • Wafify webinars - what's coming up in August (2017) • Kick-off meeting of the S3P - Industry Photonics partnership (2017) • Wafify webinars - what is coming up in September and October (2017) • EU financing for innovation in tourism (2017) • European Week of Regions and Cities' workshop on Investment for Industry Modernisation in European regions (2017) • S3PEnergy in the European week of Regions and Cities - EWRC (2017) • Innovation camp smart specialisation in energy (2017) • GROW your REGION: Boosting Smart Interregional Collaboration through Clusters (2017) • Sustainable Buildings Partnership working meeting (2017) • Energy - Smart Grids Workshop: ETIP SNET South Eastern Region (2017) • Reconfirm Thematic partnership on Digitalisation and Safety for Tourism meeting (2017) • S3P Textile Innovation partnership - Collaboration lab (2017)
2018	<ul style="list-style-type: none"> • Smart Grids partnership working meeting (2018) • Solar partnership working meeting (2018) • Sustainable Buildings Partnership working meeting (2018) • S3PEnergy - High Level Event (2018) • Bioenergy partnership working meeting (2018) • European Technology Transformation Week (2018) • EU Industry Day 2018 - Workshop by the Smart Sensor Systems 4 Agri-Food Partnership (2018) • Second European Industry Day (2018)

Events and workshops	
	<ul style="list-style-type: none"> • Coordination-working meeting of the Solar Smart Specialisation partnership (2018) • Andalusia Digital Week (2018) • S3P-Industry and Interreg Europe working for Industrial modernisation (2018) • The 3rd Steering Committee meeting of S3P-Industry (2018) • 1st Concentrated Solar Power - Implementation Working Group Meeting (2018) • Workshop on regional heating and cooling priorities and financing in the framework of the Smart Specialisation Platform (S3P-E H&C) (2018) • European Sustainable Week –EUSEW (2018) • S3P Agri-food Working Committee Semi-annual Meeting (2018) • Development of the Smart Specialisation in Energy (2018) • European Week of Regions and Cities on Bottom-up partnerships for industrial modernisation (2018) • Challenges and opportunities for interregional cooperation in agri-food systems (2018) • S3 Thematic Platforms Days: Conference and Meetings (2018) • Sustainable Buildings Partnership Working Meeting (2018)
15 Contracts under the AMI-CEI list of experts for Thematic Platforms	
	<ul style="list-style-type: none"> • 2016CE160AT028 - "Final Report" • 2016CE160AT062 - "Final Report S3 Thematic Platform Food chain traceability_big" • 2016CE160AT094 - "Final Report on Industry 4.0" • 2016CE160AT063 - "Expert support for the RIS3 Scoping Note Agri-Food Tuscany"
2016	<ul style="list-style-type: none"> • 2016CE160AT095 - "S3 Agri-Food Platform" • 2016CE160AT059 - "S3 Industrial Modernisation Platform" • 2016CE160AT096 - "S3 Industrial Modernisation Platform" • 2016CE160AT052 - "Expert support Scoping Note on Smart Engineering" • 2016CE160AT093 - "Final Report - Industry 4.0 Workshop Report"
2017	<ul style="list-style-type: none"> • 2017CE160AT063 - "Final Report-Partnership Smart Sensors" • 2017CE160AT020 - "Final Report -S3 TBD agrifood partnership June17" • 2017CE160AT037 - "FINAL report 3" • 2017CE160AT032 - "Industry 4.0 Concept Note_Final Version 07112017" • 2017CE160AT083 • 2018CE160AT076

Source: CSIL based on S3 platform and DG Regio data. **Note:** Contract reference number and title.

Table 21. Complete list of the 44 S3 cooperation workshops

	<ul style="list-style-type: none"> • RIS3 Event in the Baltic Sea Region (2012) • Outreach event for the Danube Region (2012)
2012	<ul style="list-style-type: none"> • Regions for Economic Change Conference, Brussels (BE) (2012) • Smart Investment for Smart Specialisation (2012) • Smart Specialisation in the Atlantic Arc (2012)
	<ul style="list-style-type: none"> • Research & Innovation, Atlantic Ports, Overview of the Atlantic Action Plan (2013) • The Atlantic Forum Workshop (2013)
2013	<ul style="list-style-type: none"> • S3 SEMINAR on Research and Innovation Strategies for Smart Specialisation (RIS3) and transnational cooperation for an innovative Danube Region (2013) • RIS3 in the Baltic Sea Region (2013) • Atlantic Arc Innovation Working Group (2013)
	<ul style="list-style-type: none"> • Financial design of transnational R&I projects, Vienna (AT) (2014)
2014	<ul style="list-style-type: none"> • Workshop on Collaboration in Smart Specialisation(2014) • Connecting RIS3 in Baltic Sea Region (2014)
	<ul style="list-style-type: none"> • Connecting RIS3 in Baltic Sea Region (2015) • Danube S3 Workshop "Gathering Opportunities Around RIS3 Priorities"(2015) • JRC Annual Event on the Scientific Support to the Danube Strategy (2015)
2015	<ul style="list-style-type: none"> • Paving the way for joint actions in the Danube Region: Second Stakeholders Workshop of Danube-INCO.NET (2015) • The way forward in aligning transnational R&I funding and activities in the Danube Region (2015) • Towards a sustainable regional development based on innovation and research strategies (2015) • Vanguard Initiative Brussels Network Meeting (2015)

2016	• Rethinking the region and regionalism in Australia, challenges and opportunities for the 21st century (2016)
	• S3 Design Learning Workshop (2016)
	• Smart Specialisation Strategies in the BSR perspective (2016)
	• JRC Information Events in Kiev (UA) (2016)
	• Macro-Regional Innovation Week: At the crossroads of three European Macro-Regions: Danube, Adriatic-Ionian and Alpine (2016)
	• Smart Specialisation in EU and Chile, common challenges and opportunities (2016)
	• "LIVING ROOM OF EMERGING INDUSTRIES IN MILAN" - SECOND EDITION (2016)
	• Smart Specialisation cooperation in Central Europe – Networking Workshop (2016)
2017	• Workshop on Investment Vehicles and Financial Instruments supporting Technology Transfer and Innovation (2017)
	• Launching event study: Smart Specialisation in Latin America (2017)
	• Synergies: Sustainable Growth in Marine and Maritime Sectors of Slovenia in the Northern Adriatic - Bluemed meeting on macro-regional level (2017)
	• Starting Smart Specialisation: Experiences from the EU for innovation and economic transformation (2017)
	• 8th Annual Forum of the EU Strategy for the Baltic Sea Region (2017)
	• Central European cooperation workshop and Watify Matchmaking Event on Industry 4.0 (2017)
	• SME Conference "Smart Specialisation: Engine for Economic Growth in the Regions of the Republic of Moldova" (2017)
	• Panel on Research and Innovation Strategy for Smart Specialisation of Montenegro (2017)
	• 6th Annual Forum of the EUSDR (2017)
	• Workshop Smart Specialisation in Brazil, channels and opportunities for regional policies of innovation and Kick-Off Sectorial Dialogues project: smart specialisation in Brazil (2017)
	• Smart towns in Central and Eastern Europe Workshop (2017)
	• Innovation Camp Belgrade: Building Scenarios for the Software Industry (2017)
2018	• JRC Macro-Regional Innovation Week (2018)
	• Smart Specialisation in EU and Latin America (2018)
	• Workshop on Research and Innovation in the EUSAIR (2018)
	• The 9th Annual Forum of the EU Strategy for the Baltic Sea Region (2018)

Source: CSIL based on S3 platform.

Table 22. Complete list of the 69 "Other events"

2011	• SMART SPECIALISATION STRATEGIES: concept and tools (2011)
	• Meeting on Smart Specialisation in Andalusia (2011)
	• EU Research and Innovation (2011)
2012	• Seminar on Smart Specialisation (2012)
	• Joint Workshop on Smart Specialisation Strategies (2012)
	• Country event in Brno (CZ) (2012)
	• WIRE Conference (2012)
	• Smart Specialisation in the UK (2012)
2013	• SMEs and Smart Specialisation (2012)
	• THEMATIC WORKSHOP: "Economic Indicators and Monitoring and Evaluation Tools for Smart Specialisation Strategies (RIS3) (2013)
2014	• The Role of Science Parks in Smart Specialisation (2014)
	• Joining forces through S3: Synergies between ESIF and H2020 for KETs (2014)
	• How to develop and implement your RIS3 priorities (2014)
	• Mutual Learning - Training of Trainers (2014)
	• Digital Innovation for Regional Growth (2014)
	• Digital Growth & Smart Specialisation (2014)
	• S3 Governance: "Entrepreneurial discovery process" (2014)
	• Open Days University (2014)
• Monitoring Smart Specialisation (2014)	
2015	• Challenges and Monitoring Implementation (2015)
	• Partnership for Innovation and Socio-Economic Impact (2015)
	• Delivering Smart Specialisation and Economic Transformation through Clusters (2015)
	• KETs for Regional Growth: Synergies between Horizon 2020 and ESIF (2015)

	<ul style="list-style-type: none"> • Research and Technology Organisations (RTOs) and Smart Specialisation (2015) • Week of Innovative Regions in Europe (WIRE 2015) • RIS3 Workshop with the Maltese Administration (2015) • EARTO-JRC Joint Event (2015) • Living Room of Emerging Industries in Milan (2015) • UNECE Applied Seminar - United Nations Economic Commission for Europe (2015)
2016	<ul style="list-style-type: none"> • Innovation procurement workshop for the environment sector - Rome - 4 May (2016) • SMART REGIONS Conference (2016) • WIRE 2016 - The Power of Regional Innovation Ecosystems (2016) • The result orientation: Cohesion Policy at work (2016) • 1st SMARTER Conference on Smart Specialisation and Territorial Development (2016) • EU Innovation Procurement event (2016) • SMART SPECIALISATION AND CULTURAL HERITAGE: AN ENGINE FOR INNOVATION AND GROWTH (2016) • European Cluster Conference (2016)
2017	<ul style="list-style-type: none"> • First CatLabs Innovation Camp (2017) • EUROPEAN DEVELOPMENT DAYS (2017) • Digital Assembly 2017 in Valletta: "Digital Europe: Investing in the Future" (2017) • Digital Innovation Hubs and Smart Specialisation Workshops (2017)
2018	<ul style="list-style-type: none"> • S3P - Industry Photonics partnership workshop (2018) • New JRC MOOC on monitoring Smart Specialisation strategies: Presentation at the Committee of Regions (2018) • Workshop on RIS3 Cross-regional Learning (2018) • University-Business Forum (2018) • Developing synergies between Joint Undertakings and ESIF for optimising RIS3 implementation (2018) • Università, Alta Formazione e Smart Specialisation in Puglia (2018) • Collaboration Opportunities and Synergies between RIS3 and EIT-RIS (2018) • JRC Support to Evidence-Based Policy at the Territorial Level (2018) • Central European Cooperation in Smart Specialisation on the Application of ICT and Advanced Manufacturing Solutions in the Food Supply Chain workshop (2018) • Tourism and Sports - WATIFY Matchmaking Event (2018) • Smart Specialisation and Technology Transfer as Innovation Drivers for Regional Growth (2018) • European Day of social economy enterprises (2018) • Investing in the Textile and Clothing Factories of the Future in Europe (2018) • Workshop: "Insights on assessing the Smart Specialisation experience so far" (2018) • WIRE 2018: Week of Innovative Regions in Europe (2018) • Creating value together - Towards business partnerships between social economy and traditional enterprises (2018) • Smart specialisation as the innovation driver for country's competitiveness (2018) • Training workshop for pilot lines (2018) • AGORADA+ 2018: INNOVATION IN DEVELOPMENT AGENCIES (2018) • Peer Learning workshop on VET & S3 (2018) • Discover the activities of the Knowledge Centre for Territorial Policies in a dedicated session next 26th September in Seville (2018) • 2018 SMARTER Conference on Smart Specialisation and Territorial Development (2018) • Defence and Dual-Use Technologies (2018) • European Week of Regions and Cities workshop on Co-creating strategic interregional collaboration: partnerships, clusters & SMEs (2018) • KICK-OFF MEETING THEMATIC AREA CHEMICALS (2018) • ICT NCPs network (Ideal-ist) information day (2018) • Workshop: Smart Specialisation @ Work, evidence from four years of implementation (2018) • Smart Specialisation: from the EU to the world (2018)

Source: CSIL on the basis of S3 platform.

ANNEX VI. ESTIMATION OF THE BENEFICIARIES OF CUSTOMISED SUPPORT.

The comparison between the number of national and regional Operational Programme related to the Thematic Objective 1 – Research and Innovation (TO1)³⁸ in the period 2014–2020 and the number of countries and regions registered on the S3 Platform provides an approximation of the beneficiaries of customised support out of the total number of countries and regions which have adopted RIS3. In this respect, the first variable may be used as a proxy of the number of RIS3 adopted both at the national and regional level. Conversely, the second one can be used as a proxy of the number of regions which have received some forms of customised support. It can be assumed that countries and regions registered on the S3 Platform have participated at least once to events or conferences on RIS3 organised by the EC.

The details of this comparison are shown in the table included below, which summarises, for each of the 28 Member States, how many Operational Programmes related to TO1 were adopted and how many regions registered on the S3 Platform, by specifying their administrative level. In brief, the main result is that at the national level, 22 Member States have adopted RIS3, but only 20 of them are registered on the S3 Platform.³⁹ Conversely, as concerns the regional level, the desk research has shown that 141 regions (at a different NUTS level depending on the level adopted in the country) have a regional operational programme related to TO1 and thus have adopted RIS3. In contrast, on the S3 Platform more than 170 regions are registered (excluding countries for which no regional division is adopted).⁴⁰ Therefore, compared to the number of regions having adopted RIS3, a higher number of regions were beneficiaries of customised support. This result may be explained by the fact that in countries such as Finland, Austria, Bulgaria, Romania and Sweden, regions are interested in applying the RIS3 approach even though the “official RIS3” is adopted at a different administrative level, as highlighted by evidence collected through stakeholders’ consultation.

Besides, the survey’s results and the horizontal analysis of interviews reveal that other regions beyond the ones listed in the S3 Platform have received some forms of customised support. Some examples are the Austrian region of Burgenland involved in Thematic Platforms, the Czech Southeast region which was a participant of workshops on S3 cooperation, the Greek region of Central Greece, the Swedish regions of East-Central and South Sweden and the Slovakian regions which are beneficiaries of both thematic platforms and S3 cooperation workshops.

³⁸ Part I of Regulation (EU) No 1303/2013 of the European Parliament and the Council of 17 December 2013, laying down common provisions on the ERDF, the ESF, the CF, the EARFD and the EMFF and laying down general provisions on the ERDF, the ESF, the CF and the EMFF and repealing Council Regulation (EC) No 1083/2006, O.J., L 347, 20.12.2013, p. 320, lay down the Ex Ante Conditionality for all investment priorities under thematic objective no. 1. Such investments, foreseen in the respective Operational Programme, are subject to the compliance with this ExAC which imposes the existence of a national or regional smart specialisation strategy in line with the National Reform Programme, to leverage private research and innovation expenditure, which complies with the features of well-performing national or regional R&I systems.

³⁹ Finland and Spain, although having a national OP related to TO1, are not registered on the S3 Platform.

⁴⁰ E.g. Estonia, Latvia, Lithuania, Cyprus, Luxembourg, Malta, Slovenia.

Table 23. List of Operational Programmes related to TO1 and Registered Regions on the S3 Platform

Country	Registration on the S3 Platform	National and regional OPs (related to TO1) in the country
Austria	Registration at national and regional level, with five regions registered at NUTS2 level (out of nine): <ul style="list-style-type: none"> • Lower Austria • Upper Austria • Salzburg • Styria • Vienna 	One national OP: <i>-Investments in Growth and Employment Austria 2014–2020 - Operational Programme for the use of the ERDF funds</i>
Belgium	Registration only at regional level, with three regions registered at NUTS1 level (out of three): <ul style="list-style-type: none"> • Brussels Region • Flemish Region • Walloon Region 	Only three regional OPs at NUTS1 level: <ul style="list-style-type: none"> - <i>OP Brussels Capital Region</i> - <i>OP Flanders</i> - <i>OP Wallonia</i>
Bulgaria	Registration at national and regional level, with two regions registered at NUTS3 level (out of twenty-eight): <ul style="list-style-type: none"> • Ruse Province • Sofia City 	Only two national Ops: <ul style="list-style-type: none"> - <i>Operational Programme Science and Education for Smart Growth</i> - <i>Operational programme "Innovations and Competitiveness"</i>
Czechia	Registration at national and regional level, with three regions registered at NUTS2 level (out of eight): <ul style="list-style-type: none"> • Moravian Silesia Region • Prague • Central Bohemian Region And three regions registered at NUTS3 level (out of fourteen): <ul style="list-style-type: none"> • South Moravian Region • Zlín Region • South Bohemian Region 	Two national OPs and one regional OP at NUTS2 level (Prague): <ul style="list-style-type: none"> - Enterprise and Innovation for Competitiveness - OP Research, Development and Education - OP Prague – Growth Pole
Cyprus	Registration only at national level (no regional division)	Only one national OP: <ul style="list-style-type: none"> - Competitiveness and sustainable development
Denmark	Registration only at regional level, with three regions registered at NUTS1 level (out of five): <ul style="list-style-type: none"> • Central Jutland • North Jutland • Region of Southern Denmark 	Only one national OP: <ul style="list-style-type: none"> - Innovation and Sustainable Growth in Businesses. National Programme for the European Regional Fund – 2014-2020
Estonia	Registration only at national level (no regional division)	Only one national OP: <ul style="list-style-type: none"> - Operational Programme for Cohesion Policy Funding 2014-2020
Greece	Registration at national and regional level, with eight regions registered at NUTS2 level (out of thirteen): <ul style="list-style-type: none"> • East Macedonia, Thrace • Attica • Western Greece • Ionian Islands • Epirus • Central Macedonia • Crete • North Aegean 	One national OP and thirteen regional OPs at NUTS2 level: <ul style="list-style-type: none"> - <i>Competitiveness, Entrepreneurship And Innovation Op</i> - <i>Attica Op</i> - <i>Continental Greece Op</i> - <i>Crete Op</i> - <i>Eastern Macedonia-Thrace Op</i> - <i>Ionian Islands Op</i> - <i>North Aegean Op</i> - <i>Peloponnesus Op</i> - <i>South Aegean Op</i> - <i>Thessaly Op</i> - <i>Western Greece Op</i> - <i>Western Macedonia Op</i> - <i>Central Macedonia Op</i> - <i>Epirus Op</i>

Country	Registration on the S3 Platform	National and regional OPs (related to TO1) in the country
Spain	Registration only at regional level, with seventeen regions registered at NUTS2 level (out of nineteen): <ul style="list-style-type: none"> • Andalusia • Aragon • Canary Islands • Cantabria • Castile and Leon • Castile-La Mancha • Catalonia • Madrid • Navarre • Valencia • Extremadura • Galicia • Balearic Islands • Rioja • Basque Country • Asturias • Murcia 	One national OP and seventeen regional OPs at NUTS2 level: <ul style="list-style-type: none"> - Multiregional OP for Spain ERDF 2014-20 -Andalucía ERDF 2014-20 OP -Aragón ERDF 2014-20 OP -Asturias ERDF 2014-20 OP -Balears ERDF 2014-20 OP -Canary Islands ERDF 2014-20 OP -Cantabria ERDF 2014-20 OP -Castilla y León ERDF 2014-20 OP -Castilla-La Mancha ERDF 2014-20 OP -Cataluña ERDF 2014-20 OP -Comunidad Valenciana ERDF 2014-20 OP -Extremadura ERDF 2014-20 OP -Galicia ERDF 2014-20 OP -La Rioja ERDF 2014-20 OP -Madrid ERDF 2014-20 OP -Murcia ERDF 2014-20 OP -Navarra ERDF 2014-20 OP -País Vasco ERDF 2014-20 OP
Finland	Registration only at regional level, with sixteen regions registered at NUTS3 level (out of nineteen): <ul style="list-style-type: none"> • Southern Ostrobothnia • Etelä-Savo • South Karelia • Helsinki-Uusimaa • Kainuu • Kanta-Häme • Central Ostrobothnia • Central Finland • Lapland • Päijät-Häme • Pirkanmaa • Ostrobothnia • North Karelia • Northern Ostrobothnia • Pohjois-Savo • Satakunta • Southwest Finland 	One national OP and one regional OP at NUTS3 level (Åland): <ul style="list-style-type: none"> - Sustainable growth and jobs 2014–2020 - Structural Funds Programme of Finland - Entrepreneurship and skills, Åland Structural Fund Programme 2014-2020

Country	Registration on the S3 Platform	National and regional OPs (related to TO1) in the country
France	<p>Registration only at regional level, with twenty-two regions registered at NUTS2 level (out of twenty-seven):</p> <ul style="list-style-type: none"> • Alsace • Aquitaine • Lower Normandy • Burgundy • Brittany • Centre • Champagne-Ardenne • Corsica • Franche-Comté • Guadeloupe • French Guiana • Languedoc-Roussillon • Limousin • Lorraine • Martinique • Midi-Pyrénées • Nord/Pas-de-Calais • Pays de Loire Region • Picardie • Provence-Alpes-Côte d’Azur • Réunion • Rhône-Alpes 	<p>Twenty-six regional OPs at NUTS2 level:</p> <ul style="list-style-type: none"> -Interregional programme Alsace 2014–2020 -Interregional programme Massif Central 2014–2020 -Interregional programme Réunion Conseil Régional 2014–2020 -Operational Programme ERDF-ESF ile-de-France et Seine 2014–2020 -Regional programme Aquitaine 2014–2020 -Regional programme Auvergne 2014–2020 -Regional programme Basse-Normandie 2014–2020 -Regional programme Bourgogne 2014–2020 -Regional programme Bretagne 2014–2020 -Regional programme Centre 2014–2020 -Regional programme Champagne-Ardenne 2014–2020 -Regional programme Corse 2014–2020 -Regional programme Franche-Comté et Jura 2014–2020 -Regional programme Guadeloupe Conseil Régional 2014–2020 -Regional programme Guyane Conseil Régional 2014–2020 -Regional programme Haute-Normandie 2014–2020 -Regional programme Languedoc-Roussillon 2014–2020 -Regional programme Limousin 2014–2020 -Regional programme Martinique Conseil Régional 2014–2020 -Regional programme Midi-Pyrénées et Garonne 2014–2020 -Regional programme Nord-Pas de Calais 2014–2020 -Regional programme Pays de la Loire 2014–2020 -Regional programme Picardie 2014–2020 -Regional programme Poitou Charentes 2014–2020 -Regional programme Provence -Alpes Côte d’Azur 2014–2020 -Regional programme Rhône Alpes 2014–2020
Germany	<p>Registration only at regional level, with eleven regions registered at NUTS1 level (out of sixteen):</p> <ul style="list-style-type: none"> • Baden-Württemberg • Bavaria • Berlin • Brandenburg • Mecklenburg-Western Pomerania • Lower Saxony • North Rhine-Westphalia • Saxony • Saxony-Anhalt • Schleswig-Holstein • Thuringia • • And one region registered at NUTS2 level (out of 38): • Weser-Ems 	<p>Sixteen regional OPs at NUTS1 level:</p> <ul style="list-style-type: none"> -OP Baden-Württemberg ERDF 2014–2020 -OP Bayern ERDF 2014–2020 -OP Berlin ERDF 2014–2020 -OP Brandenburg ERDF 2014–2020 -OP Bremen ERDF 2014–2020 -OP Hamburg ERDF 2014–2020 -OP Hessen ERDF 2014–2020 -OP Mecklenburg-Vorpommern ERDF 2014–2020 -OP Niedersachsen ERDF/ESF 2014–2020 -OP Nordrhein-Westfalen ERDF 2014–2020 -OP Rheinland-Pfalz ERDF 2014–2020 -OP Saarland ERDF 2014–2020 -OP Sachsen ERDF 2014–2020 -OP Sachsen-Anhalt ERDF 2014–2020 -OP Schleswig-Holstein ERDF 2014–2020 -OP Thüringen ERDF 2014–2020
Croatia	Registration only at national level	<p>Only one national OP:</p> <ul style="list-style-type: none"> - Competitiveness and Cohesion OP

Country	Registration on the S3 Platform	National and regional OPs (related to TO1) in the country
Hungary	Registration at national and regional level, with seven regions registered at NUTS2 level (out of seven): <ul style="list-style-type: none"> • South Great Plain • South Transdanubia • North Great Plain • North Hungary • Central Transdanubia • Central Hungary • West Transdanubia 	One national OP and one regional OP at NUTS2 level (Central Hungary): <ul style="list-style-type: none"> - Economic Development and Innovation Operational Programme - Competitive Central-Hungary OP
Ireland	<ul style="list-style-type: none"> • Registration only at national level 	Two regional OPs: <ul style="list-style-type: none"> -Border, Midland and Western Regional Operational Programme 2014-2020 -Southern & Eastern Regional Operational Programme
Italy	Registration at national and regional level, with twenty-one regions registered at NUTS2 level (out of twenty-one): <ul style="list-style-type: none"> • Abruzzo • Basilicata • Calabria • Campania • Emilia-Romagna • Friuli-Venezia Giulia • Lazio • Liguria • Lombardy • Marche • Molise • Piedmont • Autonomous Province of Bolzano • Autonomous Province of Trento • Apulia • Sardinia • Sicily • Tuscany • Umbria • Valle d'Aosta • Veneto 	Two national OPs and twenty-one regional OPs at NUTS2 level: <ul style="list-style-type: none"> - National Operational Programme on Enterprises and Competitiveness -National Operational Programme on Research and Innovation -ROP Abruzzo ERDF -ROP Basilicata ERDF -ROP Calabria ERDF ESF -ROP Campania ERDF -ROP Emilia Romagna ERDF -ROP Friuli Venezia Giulia ERDF -ROP Lazio ERDF -ROP Liguria ERDF -ROP Lombardia ERDF -ROP Marche ERDF -ROP Molise ERDF ESF -ROP PA Bolzano ERDF -ROP PA Trento ERDF -ROP Piemonte ERDF
Lithuania	Registration only at national level (no regional division)	Only one national OP: <ul style="list-style-type: none"> - Operational Programme for EU Structural Funds Investments for 2014-2020
Luxembourg	Registration only at national level (no regional division)	Only one national OP: <ul style="list-style-type: none"> -Operational Programme ERDF Luxembourg 2014-2020
Latvia	Registration only at national level (no regional division)	Only one national OP: <ul style="list-style-type: none"> - Growth and Employment
Malta	Registration only at national level (no regional division)	Only one national OP: <ul style="list-style-type: none"> - Fostering a competitive and sustainable economy to meet our challenges
Netherlands	Registration only at regional level, with four regions registered at NUTS1 level (out of four): <ul style="list-style-type: none"> • East Netherlands • North Netherlands • South Netherlands • West Netherlands And one region registered at NUTS2 level (out of twelve): <ul style="list-style-type: none"> • North Brabant 	Only four regional OPs at NUTS1 level: <ul style="list-style-type: none"> - OP East Netherlands ERDF 2014-2020 -OP North Netherlands ERDF 2014-2020 -OP South Netherlands ERDF 2014-2020 -OP West Netherlands ERDF 2014-2020

Country	Registration on the S3 Platform	National and regional OPs (related to TO1) in the country
Poland	<p>Registration at national and regional level, with sixteen regions registered at NUTS2 level (out of seventeen):</p> <ul style="list-style-type: none"> • Dolnoslaskie • Kujawsko-Pomorskie • Łódzkie • Lubelskie • Lubuskie • Malopolskie • Mazowieckie • Opolskie • Podkarpackie • Podlaskie • Pomorskie • Slaskie • Swietokrzyskie • Warminsko-Mazurskie • Wielkopolskie • Zachodniopomorskie 	<p>One national OP and sixteen regional OPs at NUTS2 level:</p> <ul style="list-style-type: none"> - OP Smart growth -ROP 1 Regional Operational Programme for Dolnośląskie Voivodeship 2014–2020 -ROP 10 Regional Operational Programme for Podlaskie Voivodeship -ROP 11 Regional Operational Programme for Pomorskie Voivodeship -ROP 12 Regional Operational Programme for Śląskie Voivodeship -ROP 13 Regional Operational Programme for Świętokrzyskie Voivodeship -ROP 14 Regional Operational Programme for Warmińsko-Mazurskie Voivodeship -ROP 15 Regional Operational Programme for Wielkopolskie Voivodeship -ROP 16 Regional Operational Programme for Zachodniopomorskie Voivodeship -ROP 2 Regional Operational Programme for Kujawsko-Pomorskie Voivodeship 2014–2020 -ROP 3 Regional Operational Programme for Lubelskie Voivodeship 2014–2020 -ROP 4 Regional Operational Programme for Lubuskie Voivodeship 2014–2020 -ROP 5 Regional Operational Programme for Łódzkie Voivodeship 2014–2020 -ROP 6 Regional Operational Programme for Małopolskie Voivodeship 2014–2020 -ROP 7 Regional Operational Programme for Mazowieckie Voivodeship 2014–2020 -ROP 8 Regional Operational Programme for Opolskie Voivodeship -ROP 9 Regional Operational Programme for Podkarpackie Voivodeship
Portugal	<p>Registration at national and regional level, with seven regions registered at NUTS2 level (out of seven):</p> <ul style="list-style-type: none"> • Alentejo • Algarve • Centre • Lisbon • North • Madeira • Azores 	<p>One national OP and seven regional OPs at NUTS2 level:</p> <ul style="list-style-type: none"> - <i>Competitiveness and Internationalisation OP</i> -<i>Regional OP Alentejo</i> -<i>Regional OP Algarve</i> -<i>Regional OP Azores (Autonomous Region)</i> -<i>Regional OP Centro</i> -<i>Regional OP Lisboa</i> -<i>Regional OP Madeira (Autonomous Region)</i> -<i>Regional OP Norte</i>
Romania	<p>Registration at national and regional level, with seven regions registered at NUTS2 level (out of eight):</p> <ul style="list-style-type: none"> • Centre • North-East • North-West • South-Muntenia • South-East • South-West Oltenia • West 	<p>Only two national OPs:</p> <ul style="list-style-type: none"> - <i>Competitiveness Operational Programme</i> -<i>Regional Operational Programme</i>

Country	Registration on the S3 Platform	National and regional OPs (related to TO1) in the country
Sweden	Registration at national and regional level, with eleven regions registered at NUTS1 level (out of twenty-one): <ul style="list-style-type: none"> • Dalarna County • Gävleborg County • Jämtland County • Örebro County • Östergötland County • Skåne County • Södermanland County • Stockholm County • Värmland County • Västerbotten County • Västra Götaland County 	One national OP and eight regional OPs at NUTS2 level: <ul style="list-style-type: none"> - National regional fund programme for investments in growth and jobs 2014–2020 - Central Norrland -East-Central Sweden -North-Central Sweden -Småland and islands -South Sweden -Stockholm -Upper Norrland -West Sweden
Slovenia	Registration only at national level	Only one national OP: <ul style="list-style-type: none"> - Operational Programme for the Implementation of the EU Cohesion Policy in the period 2014 – 2020
Slovakia	Registration at national and regional level, with one region registered at NUTS2 level (out of four): <ul style="list-style-type: none"> • Bratislava 	Only one national OP: <ul style="list-style-type: none"> - <i>Research and Innovation</i>
UK	Registration only at regional level, with four countries at (NUTS1) out of four: <ul style="list-style-type: none"> • England • Wales • Northern Ireland • Scotland And seven regions registered at NUTS2 level (out of forty): <ul style="list-style-type: none"> • Buckinghamshire CC • Cornwall and Isles of Scilly • Greater Manchester • Kent CC • Northamptonshire • Tees Valley and Durham • West Midlands 	Only five regional OPs at NUTS1 level (two for Wales): <ul style="list-style-type: none"> - <i>United Kingdom - ERDF East Wales</i> -<i>United Kingdom - ERDF England</i> -<i>United Kingdom - ERDF Northern Ireland</i> -<i>United Kingdom - ERDF Scotland</i> -<i>United Kingdom - ERDF West Wales and The Valleys</i>

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

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 email via: 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

EU publications

You can download or order free and priced EU publications 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).

EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>

Open data from the EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.

