



RIS3 IN EUROPE AND TRANSITION TOWARDS RIS4

This document is a supporting material to the capacity building organized for the Asian counterpart of the IURC project (concretely China) in the framework of the International Urban and Regional Cooperation (IURC) Project. The training session was held on the new approach to smart specialization for the 2021-2027 programming period but starting with main approach to S3, learning about good practices in defining and implementing the Smart Specialization strategy following the methodology recommended by the European Commission.



This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of the IURC Programme and do not necessarily reflect the views of the European Union.





The role of territories in global competitiveness

The purpose of this section is to put in light some theoretical framework to understand current territorial policy trends and some insights on how the concept of Smart specialization evolved into a territorial strategic process. The idea is to start with the evolutionary approach to the competitiveness which tackles two important ideas:

- 1) The global competition model has changed over time.
- 2) The role of territories and public policies has changed.

Thus, for the **competition models**, the changes could be understood as competitive sophistication and differentiation, the innovation as an open process, the values chains experience "glocalization" and complex productive systems and the specialized diversification is becoming a baseline for future development.

For the **territory and policy changes** focus in being done on the territorial specialization approaches, on the value added and R&D&I, on governance and on strategies. In line with the above-mentioned rationale, the changes are being influencing the paradigm of industries as well and raise two important questions: *What technologies will lead the next innovation wave?* and *What industries will generate the next economic transformation?* In any case, an integrated territorial policy is needed, and the key is to identify on time the trends in order to unlock those elements that allow adapting to changes and trends.

TIME and CYCLES (Dynamics of market trends, technical change and the international context) TERRITORIAL DEVELOPMENT is INTERNATIONAL TECNICAL MARKET not fixed and depends on timely COMPETENCE CHANGE TRENDS actions and appropriate to TERRITORIAL DEVELOPMENT (internal and external) context factors are conditioned from outside, they are built within Context and international trends Identify on time the trends and depend on the historical (exogenous factors) in order to unlock thos legacy elements that allow adapting to **KEY** changes and trends THREATS **OPPORTUNITIES FUTURE** PAST **PRESENT** TERRITORIAL (Historical heritage) (Starting point) STRATEGY Based on realistic diagnosis and linked to endogenous, exogenous and historical factors WEAKNESSES STRENGHTS ENVIRONMENT ▶ Restructuring and reindustrialization Technological modernization and inovation Past Territorial assets SOCIAL CAPITAL Specialization + Diversification conditions (endogenous factors) Proactive and supportive $\underline{\textbf{participation}}$ with the territory RESOURCES OF THE HUMAN CAPITAL FISICAL ASSETS KNOWLEDGE

Figure 1. The process of territorial benefits construction

THE PROCESS OF TERRITORIAL BENEFITS CONSTRUCTION
(The search for territorial smart specialization configuration in time)

Source: Infyde





In this such a complex context, it seems that reaching to certain level of development, traditional measures do not increase the marginal improvements in territorial development. For instance, a traditional policy mix is driven but abundance in infrastructure, when new policy mix is more innovation based and the driver is R&D.

From theory to practice: the RIS3

The rationale on "jumping" to smart specialization lays within the Cohesion Policy perspective that proved its contribution to gap reduction, but it seems that reaching to certain level of development, traditional measures do not increase the marginal improvements in territorial development.

It is worth mentioning in this context, that there is a solid European learning experience in regional strategies and three timeframes could be basically considered: from 1990 to 2000 period that focused on building up an innovation system and to science and technology definition; from 2000 to 2010 period where the focus was on innovation system dynamization and between 2010 and 2020 year aiming a sustainable knowledge society. Thus, each period has its specific orientation and instruments (see the below figure):

CONTEXT **CHARACTERISTICS** The path of **EUROPEAN** ORIENTATION 990... Building-up an innovation system innovation tied to R&D and Technological innovations generating new **LEARNING** products and processes as well as incremental improvements in them. technology, stakeholders around the system, S&T policy definition **EXPERIENCE** INSTRUMENTS 995... in regional •R&D+T support Quality ICT investments Sensibilization strategies... ORIENTATION Implementation of a new or improved product 2000 (products/service) or process, marketi Innovation system dinamization: triple helix, cooperation echnique, organizational model within the networks, R&D+I policy integration, broad innovation organization or regarding external relations 005... INSTRUMENTS Ed. (2005) New sectors Clusters & networks •R&D+I collaboration From RTP, RITTP Intermediate agents Internationalisation Transference & RIS To... 2010... ORIENTATION ...RIS3 THE BROAD CONCEPT OF INNOVATION, Sustainable knowledge society: specialised diversity, global based on research and business models focus, socio-environmental sustainability design, brand image and value for end-user taking into account the different stakeholder 2015.. INSTRUMENTS within the innovation cycle • Intermediate agents • Public procurement Europe 2020 Innovation Union (2010) New sectors 020 Regulation Key Enabling ·Social & networks Technologies (KET) •Global alliances SMART SPECIALISATION STRATEGIES (RIS3)

Figure 2. The European learning experience in regional strategies

Source: Infyde

From the above illustration, it can be observed that RIS3 is an added value in terms of orientation and instruments for regional strategies. In the first case, territorial strategic reflection tackles specialized diversity and socio-environmental sustainability. In the second case (instrument), the novelty consists in valuing the key enabling technologies (KETs), public procurement and social factors and building networks.

In this evolving context, a **rethinking of the strategic actions** in the regions towards a smart specialization model was necessary, and a critical reflection of the cohesion actions has been done. The actions raising from cohesion policy have so far:

- Changed the focus regional policy **towards a more strategic perspective** linked to innovation and action.
- To ease mechanisms to establish or develop **regional consensus** bases.
- Boost a change of culture to innovation as more than a linear process and positioning it as a highlight of the political agenda.





- Increase the **participation of agents** who are the real stars of changes in the territory.
- Integrated territorial policy starts from a deep **territorial diagnosis**, **identify those strengths but also** weakness that could be transformed into opportunities leading thus to Smart Specialization strategy.

INTERRELATIONSHIPS: a t products New Territoria INSTRUMENTS **ACTORS ESTRATEGY** > Private companies Reflection Prioritization competitors ≻Knowledge agents Nev TERRITORY standards >Other public sector > Financial sector New ➤Third sector technologies New social demands Coordination and environmental demands INTERRELATIONSHIPS: a terri Policies in other fields are also required Policy influence capacity

Figure 3. An integrated territorial policy

Source: Infyde

Therefore, smart specialization is the mechanism for building the territorial competitive advantage across time thought specialized diversification. Smart specialization is a continuous process of generating employment and wealth for the territories. In these terms, the areas of specialization mean a related variety which intersection may house entrepreneurial discoveries. In practical terms, RIS3 strategy logics is as it follows:

Table 1. RIS3 Strategy: WHAT, WHY, HOW and WHO?

| Item | Description | | | | |
|-------|--|--|--|--|--|
| WHAT? | The direction to go from current to desired situation. Clear objectives to improve economic competitiveness. A set of actions and programs. A detailed roadmap with those actions and programs. | | | | |
| WHY? | There is no unlimited capacity for investment. We cannot invest in all technologies, products and markets. Investment must go to most appropriate opportunities. | | | | |
| HOW? | Identification of sectors and strategic technologies. Definition of overall strategic guidelines. Determination of concrete actions. Estimation of the financial resources. Establishment of monitoring & evaluation mechanisms. Establishment of consensus mechanisms. | | | | |
| WHO? | Main responsible: Territorial authorities. Operational responsible: all territorial actors. | | | | |





| Item | Description | | | |
|------|-------------|--|--|--|
| | • | Daily responsible: management unit. | | |
| | • | Daily support: thematic experts (OPTIONAL) | | |

Source: Infyde elaboration

In this sense, through a consensus and extensive territorial participation, there are distinguished the following common stages in strategic planning applied to RIS3¹:

- **1.** Establishing a **strategic Committee** that are representatives of major regional actors involved in triple-quadruple helix whose role is to energize the strategic process through a participatory process.
- **2.** Employing **competitive analysis**: it means a diagnosis which includes a quantitative and qualitative analysis and global trends analysis to identify territorial weaknesses and strengths and threats and opportunities.
- 3. Definition of strategic core that includes establishing a vision, a mission, and strategic objectives.
- **4.** Definition of **operational part** that implies the definition of strategic lines, strategic actions and specific projects.
- **5.** The **committed resources** and their planning are then established, these being of public-private nature, the role of regional stakeholders is also defined, and mid- and long-term planning is also in place.
- **6.** The **evaluation and monitoring system** definition implies a quantitative monitoring, qualitative assessment, and evaluation through a well-defined and realistic dashboard of indicators.

In the end, to achieve useful insight from the RIS3 definition and during its implementation the **success factors** are:

- Long term focus/vision.
- Awareness of the being a process to an end, not a goal itself.
- Leadership engagement during the whole process.
- Adequate management structure.
- High level of social capital and trust.
- Broad participatory processes in definition and implementation.
- Real commitment (resources).
- Open mind at all levels: absence of risk aversion.

In Europe, since 2014, the RIS3 implementation has experienced different stages. In this sense, the prioritization efforts were on most competitive niches (high tech) and the collaboration within thematic platform (agri-food, advance manufacturing, energy) was a priority as well. In line with this, the search for positioning in international markets was a priority for Europe. In structural and policy making terms, there was a clear focus on governance consolidation, entrepreneurial discoveries and evaluation/monitoring processes and schemes. Finally challenges in implementation were also detected thus conducting towards changes in designing and delivery of the policy (from financing to services).

In this context, based on pillars such as global perspective, the prioritization, related diversity and specialized diversification through the entrepreneurial discoveries three stages (the period are indicative) in RIS3 process in Europe could be delimitated:

- O During 2011-2014, there was a period of reflection and definition which elements were:
- Priority setting
- o SWOT definition
- $\circ \quad \text{ Participatory governance }$
- Entrepreneurial discovery

¹ Del Castillo, J. Paton, J. y Barroeta, B. (2016) "Territorial governance in the context of RIS3 Smart Specialisation Strategies" in Jucevicius, R., Bruneckiene, J., y Von Carlsburg (eds) "International Practices of Smart Development". Peter Lang





- Measures and policies
- During 2015-2020, there was a period of implementation which elements were:
 - Participatory governance
 - Entrepreneurial discovery
 - o Action Plan implementation
 - Strategy improvement
- During 2015-2022, there was a period of monitoring and evaluation which elements were:
 - Intervention logic
 - Indicators (output & result)
 - Monitoring system

Due to the potential for territorial development, the interest in Smart specialization methodology and RIS3 is growing worldwide. The USA is now promoting its RIS, Australia its RIS3 and some parts of East Asia as well. There is a particular demand in Latin American countries and a very active process of mutual learning has been developed in the framework of international collaboration on regional policy between EU and LA. Among them, during 2010-2013, Chile is worth noting due to "Proyecto Red" (Network Project). Under the RED, the EU has worked with the Chilean government and regions, to develop regional innovation policies using the EU's RIS methodology (in practice RIS3). The RED results have contributed to improving the definition of regional public policies to support innovation, particularly in the use of the regional part of the Fund for Innovation and Competitiveness (FIC-R). In this legislature, the Government of Chile in its Agenda for Productivity, Innovation and Growth has launched various Strategic Programs for Productive Development based on the principle of Smart Specialization, with national or regional dimension.

Despite its success in Europe, and in Latin America, RIS3, has also received some criticism in terms of election of priorities, in the exploitation of related variety and the prioritization in the context of an open economy. Hence, in the **process of prioritization**, there was observed that not all regions find themselves in the same starting point in terms of entrepreneur's capability which can result in bigger gaps between regions. Also, it is quite complicated to reach critical mass and enough excellence in R&D in many regions is complicated. Besides, preferences of one and another environment are not always the same. And it was also observed that the intermediate structures must play a proactive and compromised role in the strategies. Concerning the specialized diversification, it was seen that *a high degree of specialization also involves a bigger weakness* when it comes to potential crisis, technical changes, and product/technology cycles. *It is complicated to identify clearly which is the frontier of "related diversity"*. The novelty of this approach does not offer clear methodologies for it. Likewise, the scarce critical entrepreneurial mass, scarce social capital, scarce experience of the regional Administration, and *a unfavorable regional context could make the governance not viable* if correct measures are not taken. Finally, in the global context, the governance approach in an open economy is not very extended. This is why they must learn to define the regional strategies in a region-country-European frame.

In conclusion, from different RIS3 evaluations made by Fraunhofer (2014, 2016, 2017) and EC (2017), the RIS 3 showcased the following limitations:

- The speed and tightness of the deadlines limit the strategic thinking level and participation, resulting in a mere conversion of current strategies.
- The key for a RIS3 is not the set of priorities, but the set of procedures that allow us to reach them and agree upon them.
- "Lock-in" problem in the participation process by specific groups and "lobbies".
- Generalized regional inertia considering only own characteristics.
- The RIS3 is not about prioritizing sectors or technologies, but areas of activities where creative combination of both generates innovations with market opportunities (at international level).
- The RIS3 is not a milestone in the form of an static document; but a process that modifies and enhances **the priorities** to adapt them to different contexts.





From RIS3 to RIS4: some conclusions in the view of the new period (2021-2027).

In 2010, the Commission urged national and regional governments in Europe to develop smart specialization strategies (RIS3). The idea was to identify priority areas for innovation-oriented investment as a key factor in developing and combining local research and innovation (R&I) capacities with business needs and societal challenges.

Between 2011 and 2014, almost all regions in Europe started to define RIS3 and, as a result, more than 120 smart specialization strategies have been developed since 2014 as an ex-ante condition for the approval of Operational Programs supporting investment in R&D&I. Thus, the period prior to the official launch of the Strategies, and the period after it up to the present, has been a very interesting first exercise on how to methodologically transfer the theoretical postulates around the concept of smart specialization. Specifically, the RIS3 methodology, which incorporates smart specialization, seeks to define framework strategies that, at a regional level combine the different dimensions that influence regional competitive advantage and the capacity for economic transformation of the territory, taking into account the casuistry of each one of its zones, through policies adapted to the territory ("place-based") and also based on a participatory process.

Generally, the Smart specialization and RIS3 has raised great interest worldwide and especially among EU regions, but its success depended a lot on the ecosystem conditions that the methodology was applied, and strategies were defined. In this sense, the economic and financial crisis and the impact of sanitary crisis (COVID-19) strongly affected the budget for R&D&I (both private and public). Likewise, RIS3 exercises have shown a lax priority setting, that is, a higher number of specialized areas than what each regional economic structure may justify. Additionally, the strategic reflections without external perspective and low interaction between the different levels of governance was a challenge during the implementation process. This also coupled with the fact that even though entrepreneurial discoveries are in the core of the strategies there was limited real application (or at least an operative one) of them. In terms of policy instruments and measures, they still lack specific (and adapted) approaches to cover the specific need of sectors and innovation: they are not only rather horizontal but also quite traditional regarding past periods. In the end, although the evaluation and monitoring designing efforts have increased considerably, it still lacks a coherent definition of indicators as well as a feasible ongoing improvement system.

The new European programming period 2021-2027 has brought with it a series of changes in the Cohesion Policy regulations. The Common Provisions Regulation (RDC) in its proposed version of May 28, 2018² included among its main novelties the simplification in terms of objectives, which are now renamed Political Objectives (PO) compared to Thematic Objectives (OT) period 2014 -2020, reducing from 11 to 5. Of these 5, the OP 1 specifically seeks to achieve "a smarter Europe, promoting a smart innovative economic transformation", and which is broken down, in turn, into 4 specific objectives:

- 1) Improvement of research and innovation capacities and the assimilation of advanced technologies.
- 2) Taking advantage of the advantages of digitization for citizens, companies and Administrations.
- 3) Promotion of growth and competitiveness of SMEs
- 4) Development of capacities for smart specialization, industrial transition and entrepreneurship.

As a result, under the new OP1 the RIS3 model used as an ex-ante condition in 2014-2020 has now become an enabling condition for OP1. This new enabling condition reinforces the aspects of continuity and coresponsibility in compliance throughout the period, with a greater focus on results. It thus increases its scope in the field of digitization, SME competitiveness, and the development of capabilities for smart specialization. In the new programming period (2021-2027) to achieve "a smarter Europe by promoting innovative and smart

² Proposal for Regulation COM (2018) 375 of May 29, 2018 [Proposal for Regulation of Common Provisions] Annex IV Thematic enabling conditions applicable to the ERDF, the ESF and the Cohesion Fund – Article 11, section 1.





economic transformation", the thematic enabling condition applicable to ERDF, ESF+ and Cohesion Fund (Article 11(1) was "Good governance of national or regional smart specialization strategy". As stated in the REGULATION (EU) 2021/1060 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 the smart specialization strategy shall be supported by up-to-take analysis, a competent regional/national institution or body, effective monitoring and evaluation tools, entrepreneurial discovery process, support the industrial transition and promote the international collaboration as it follows:

Table 2. Thematic enabling conditions applicable to ERDF, ESF+ and the Cohesion Fund – Article 15(1)

| Policy Objective | Specific objective | Name of enabling condition | Fulfilment criteria for the enabling condition |
|--|--|---|---|
| 1. A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity | ERDF: Developing and enhancing research and innovation capacities and the uptake of advanced technologies Developing skills for smart specialisation, industrial transition and entrepreneurship | 1.1. Good governance of national or regional smart specialisation strategy | Up-to-date analysis of the bottlenecks for innovation diffusion, including digitalization. Existence of competent regional/national institution or body, responsible for the management of the smart specialization strategy. Monitoring and evaluation tools to measure performance towards the objectives of the strategy. Effective functioning of entrepreneurial discovery process. Actions necessary to improve national or regional research and innovation systems. Actions to manage industrial transition. Measures for international collaborations. |

Source: Annex IV retrieved from the REGULATION (EU) 2021/1060 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/Puri-CELEX:32021R1060

In the new programming period (2021-2027), the smart and sustainable specialization strategies (RIS4) put in light three baseline features³:

- "...smart specialisation strategies for sustainable and inclusive growth...".
- "...will ensure the correct structuring of innovation-related and enterprise-related incentives at the local and sub-national scales...".
- "...will foster movement towards the European Green Deal objectives..."

As can be observed structural and systemic differences are perceived in the framework of RIS4. Likewise, Mccann and Soete (2020) have analyzed the difference between S3 and 34, tackling each level of intervention logics as it follows:

Table 3. Differences between RIS3 and RIS4

| Intervention Logic | RIS3 | RIS4 |
|--|--|---|
| SWOT analysis | Appraise endowments in assets. Assess innovation potential in a territory. Appraise entrepreneurial base and dynamics. Identify international networks and value chains | S3+ "Position the SWOT analysis in the ecological and digital transitions of the energy, manufacturing, agri-food, housing, and mobility systems". |
| • Participation of stakeholders in quadruple helix | | **Role of the state goes beyond being facilitator and catalyst to co-create system transformation. This requires management reforms and capacity building to work cross-domains, cross-departments, cross-sectors and cross-disciplines". |

³ Mccann, P. and Soete, L., Place-based innovation for sustainability, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-20392-6, doi:10.2760/250023, JRC121271





| Intervention Logic | RIS3 | RIS4 |
|--------------------|---|--|
| Visión | Shared vision on present and future innovation challenges Strategy medium-term | S3+ "Vision goes beyond the R&I system. Could be a societal vision: "Which is the future we want – here?" or an industrial vision: "promising areas for the future"." |
| Prioritisation | Revision of previous priorities Identify areas of competitive advantage Verify critical mass of budget for achieving each priority | \$3+ "If the priorities are aligned or in the same overall direction as the overall EU-level investments (and regulatory changes), then the potential of reaching critical mass and of crowding-in of private investment and of EU funds increases." |
| Implementation | Broad definition of innovation Balance between focused and horizontal measures Upgrading existing industry using KETs and digital Experimentation in pilot actions Innovation ecosystems International collaboration search for value chains | "The Implementation is driven by innovation but mobilises in synergy with other policy areas and investments, such as infrastructure, skills, etc. The scope is broader with systemic innovation and industrial transitions." "The local framework conditions to innovation are now also European. When local entrepreneurs detect barriers or resistance to innovation for sustainability this can be channelled in "Green Deals" to the national and EU policy level." "Cooperation and mutual learning with other actors of change is facilitated by regional thematic network but the new network externalities are broader emerging from the reorientation of EU network of actors (European technological platforms, European partnerships, industrial alliances, EIT Knowledge and Innovation Communities, etc.) moving in the same direction." |
| Monitor & Evaluate | Indicators with targets and baseline Mechanism for data collection and analysis Information used for updating the strategy | S3+ "The monitoring and evaluation go beyond the R&I system; indicators and targets correspond to the granularity of the vision in the regional or urban strategy. A continuous policy learning dynamism is introduced. Particular attention is given to early detection of signs of trade-offs between sustainable/smart/inclusiveness.". |

Source: Mccann, P. and Soete, L., Place-based innovation for sustainability, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-20392-6, doi:10.2760/250023, JRC121271

Based on the RIS3 methodology, the lessons learned from the processes of the current programming period, the midterm evaluation carried out, and the new indications contained in the draft Regulations for the period 2021-2026, the process of defining the new RIS3 must consider a sufficient level of detail to:

- Generate capacities to facilitate the continued economic and social transformation of the region by absorbing the results of innovations of excellence ("top-down" approach), based on experiences already gained both in the region itself and in other regions. RIS3 strategies (learning from experience).
- Generate capacities to contribute to the development of own innovations and participate in the channels that generate them at a national and international level ("bottom-up" approach), but above all innovations appropriate to the regional reality that allow the generation of competitive goods and services in a context of globalization.
- Become an integrating Strategy for the different aspects of territorial development, including R&D&I, digitization (for companies, cities, and government), competitiveness and growth of SMEs, and even the development of capacities that facilitate the process of industrial transition and entrepreneurship and entrepreneurial discovery (aspects all included under Political Objective 1 of the 2021-2027 Cohesion Policy).





Biobliography and recommended literature

COM (2018) 375 of May 29, 2018 [Proposal for Regulation of Common Provisions] Annex IV Thematic enabling conditions applicable to the ERDF, the ESF and the Cohesion Fund – Article 11, section 1

Del Castillo, J.; Paton, J; Barroeta, B. (2015) "Smart Specialisation for Economic Change: The Case of Spain". Publicado en Symphonya – Emerging Issues in Management.

Del Castillo, J. Paton, J. y Barroeta, B. (2016) "Territorial governance in the context of RIS3 Smart Specialisation Strategies" en Jucevicius, R., Bruneckiene, J., y Von Carlsburg (eds) "International Practices of Smart Development". Peter Lang

European Commission. "Smart Specialisation Platform" https://s3platform.jrc.ec.europa.eu/what-we-do

European Commission. "Towards RIS3 2.0: enabling conditions" https://errin.eu/sites/default/files/2019-10/Towards%20RIS3%202.0%20-%20Enabling%20Conditions Marek%20Przeor.pdf

European experiences of international collaboration on regional policy:

- BRAZIL (2007): https://ec.europa.eu/regional policy/en/policy/cooperation/international/brazil/
- ARGENTINA (2012):
 http://ec.europa.eu/regional-policy/en/policy/cooperation/international/latin-america/argentina/
- CHILE (2010): http://ec.europa.eu/regional-policy/en/policy/cooperation/international/latin-america/chile/
- PERU (2013): http://ec.europa.eu/regional-policy/en/policy/cooperation/international/latin-america/peru/
- MEXICO (2014):
 http://ec.europa.eu/regional-policy/en/policy/cooperation/international/latin-america/mexico/
 COLOMBIA (2015):
- http://ec.europa.eu/regional_policy/en/policy/cooperation/international/latin-america/colombia/
 URBELAC (URBAN field):
- http://ec.europa.eu/regional_policy/en/policy/cooperation/international/latinamerica/urbelac/
 CROSS-BORDER AREA:
- http://ec.europa.eu/regional policy/en/policy/cooperation/international/latin-america/eulac-cbc/
 RIS COOPERATION:
- http://ec.europa.eu/regional-policy/en/policy/cooperation/international/latin-america/eulac-ris/
 CROSS-BORDER RIS COOPERATION
- http://ec.europa.eu/regional-policy/en/policy/cooperation/international/latin-america/eulac-cbris/
 CENTRAL AMERICA:
- http://ec.europa.eu/regional-policy/en/policy/cooperation/international/latin-america/sica/
 IUC POGRAMME (2016-2019)
 https://ec.europa.eu/regional-policy/en/policy/cooperation/international/urban/
- INNOVAL I & INNOVAL II (2018/2020).

EYE@RIS3 tool http://s3platform.jrc.ec.europa.eu/map

Mccann, P. and Soete, L., Place-based innovation for sustainability, Publications Office of the European Union,





Luxembourg, 2020, ISBN 978-92-76-20392-6, doi:10.2760/250023, JRC121271

Foray. D. et al (2012). "Guide to Research and Innovation Strategies for Smart Specialisation (RIS 3)". JRC. https://s3platform.jrc.ec.europa.eu/en/w/guide-on-research-and-innovation-strategies-for-smart-specialisation-ris3-guide-

Fraunhofer (2016) "Policy Brief on Smart Specialisation".

https://www.isi.fraunhofer.de/content/dam/isi/dokumente/ccp/2016/Kroll_2016_Policy_Brief_on_Smart_Specialisation.pdf

REGULATION (EU) 2021/1060 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy. Available at: https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R1060