

Updated Policy Brief on
Synergies between R&I partnerships &
European Structural and Investment Funds (ESIF)

LAST UPDATE
June 2021

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1. Executive Summary

Creating synergies among different programmes and funding sources have not been explicitly addressed in the 2014 - 2020 programming period, while, in relation to the next programming period, the relevant legislation is not yet finalised. However, the debate about synergies has been increasing and reaching out a wide audience, but, although there are possibilities to proceed in this direction, any attempts have been rather sporadic.

ERA-LEARN has been actively supporting the partnerships in exchanging views and experiences about creating synergies between different funding sources, namely Horizon 2020 and ESIF. This report is an update of the 2019 ERA-LEARN Policy Brief produced in 2019 outlining the state of affairs in terms of the possibilities and the reality of utilising ESIF in European public partnerships in R&I. The aim of this policy brief is to improve knowledge of all relevant stakeholders (European Partnerships, national and regional stakeholders responsible for the management and implementation of national and regional operational programmes), in establishing synergies between Cohesion Policy Funds and the future R&I partnerships.

The updated Policy brief builds on surveys that were carried out in 2020, via email and telephone exchanges, and addressed three distinct target groups: a) representatives of European public partnerships, b) people involved in the EOSC Regional Projects, and c) Regional Authorities dealing with the Smart Specialisation Strategies (S3). Furthermore, the updated Policy Brief is accompanied by a rich list of good practices identified in Horizon 2020 partnerships included in a separate document. In addition, as soon as the relevant legislative basis is finalised, this Policy Brief will be followed by a publication including “Tools for Synergies” based on the new legal basis of the next Multi-annual Financial Framework, 2021-2027 and corresponding to the new features of the partnerships under Horizon Europe.

The surveys tried to retrieve information from the different target audiences on their experiences of synergies in four main areas:

- measures to create the necessary pre-conditions for participation in R&I Partnerships (e.g., by supporting relevant infrastructures, or capacity building activities) (up-stream activities);
- measures to support follow-up of partnership-funded projects in terms of exploiting their research results (down-stream activities);
- measures for funding ‘additional activities’ of R&I Partnerships;
- direct support/funding of R&I partnership-supported projects with national/regional ESIF;
- main barriers and obstacles in designing and implementing synergies across different funding sources, notable H2020 and ESIF.

Based on the experience of R&I partnerships, creating synergies among different funding sources may already be realised although not in the most visible way. Despite the debate, in the last programming period, on the need to push for synergies among different funding programmes on the side of the European Commission, there have been no systematic efforts to guide and support the actual creation of synergies. There may have been cases where synergies were achieved, i.e., in supporting some partners' in-kind contributions, or at project level, although such information may not have reached the partnership's hierarchy. This point is relevant for all the areas addressed, i.e., up-stream or down-stream activities as well as additional activities. Some cases of partnerships exist, however, where certain countries have used ESIF to directly support their part of the approved research proposals - these funds were not eligible to be considered for the EU top-up funding for the specific country.

Creating synergies across different programmes and funding sources necessitates shared awareness and interest on all the different sides involved. In other words, it is not enough that the representatives of European partnerships focus their efforts and try to find feasible ways to accomplish synergies. The same holds true also for the national / regional authorities responsible for the Smart Specialization Strategies (S3) that underline the Operational Programmes through which ESIF funds are utilised.

The experiences of the Regional Authorities were richer in terms of possibilities to support up-stream or down-stream activities in research and innovation. Regional measures supporting 'up-stream' actions hold strong potential for synergies in the new programming period that is marked by an emphasis in international collaboration including through R&I partnerships. Several regions reported measures aiming at supporting research infrastructures and developing R&I capacity in their Regional Operative Programmes (ROP). These may well have contributed to facilitating participation in R&I Partnerships, although, they were not specifically geared to partnerships. Yet, some exceptions exist such as the Estonian RITA and Mobilitas Plus programmes.

Experiences also exist in relation to measures supporting 'down-stream' actions. Although, the uptake of research results coming from partnership-supported projects is not explicitly targeted by the Operational Programmes, there are several examples of national/regional programmes supporting such activities that might also be exploited by partnership projects.

The EOSC Pillar Regional Projects offer a set of examples of sequential synergies, where ESIF investments in infrastructure, for instance, facilitated participation to H2020 including partnerships (up-stream sequential funding).

The main barriers identified in designing and implementing synergies across different EU funding sources are regulatory, organizational or attitudinal. There is reluctance to proceed in applying synergies due to technical/regulatory difficulties and incompatibilities caused by the different regulatory frameworks governing the different funding sources. Organizationally, there is lack of specified roles and responsibilities in relation to designing and implementing synergies, besides the lack of specific procedures and guidelines. In addition, the 'silo' mentality in implementing EU funds along with the lack of practical information to guide the process do not favour a positive attitude towards creating synergies.

Accordingly, it is recommended that improved dialogue and interaction is established between the European Partnerships and the S3 Authorities involved to facilitate the implementation of

synergies in the next programming period. Increasing awareness on the potential and benefits of synergies is important, as is breaking of policy-silos both at the European Commission and the national/regional levels. The cross-disciplinary and multi-level governance approach supported by European Partnerships maximise the need to use different funding sources (at EU, national, regional level), while the importance of international collaboration is also marked in realising the goals of Smart Specialisation Strategies. As a result, synergies become not only a desired, but also necessary, route for addressing shared goals among countries as well as S3 goals. This should be communicated both to the services and agencies preparing European partnerships as well as S3 Authorities.

Knowledge needs to be improved on all sides (European partnerships, Regional Authorities) about the different instruments that are available for R&I cooperation and the opportunities for synergies among them, and clear guidance should be provided by the European Commission addressing the policy design as well as the implementation levels. Although there are certain good practices that reveal a deliberate attempt to open up resources that are available only at territorial level to a wider scope, these need to multiply to fully exploit the potential benefits of synergies among various programmes and funding sources. The next programming period is providing a favourable context in this direction.

2. Introduction

Establishing synergies between R&I partnerships and other relevant European and national/regional programmes and initiatives has gained significant momentum in the preparation of the new partnerships under Horizon Europe. The Draft Criteria Framework for the creation of new partnerships clearly states that the proposal for a new partnership should describe how it may establish synergies with other EU programmes, (such as the Connecting Europe Facility, the European Structural and Investment Funds, the Digital Europe programme, the Emission Trading System Innovation Fund, InvestEU) in view of facilitating coherence and synergies within the EU research and innovation landscape.¹

ERA-LEARN has been actively supporting the partnerships in exchanging views and experiences about creating synergies between different funding sources, namely Horizon 2020 and ESIF. Based on desk research of available documents, a report was prepared in 2019² outlining the state of affairs in terms of the possibilities and the reality of utilising ESIF in European public partnerships in R&I. The report addressed the policy level by identifying the new elements in the European Commission proposals for the European programmes in the next Multi-annual Financial Framework 2021-2027, as well as the operational level by identifying good practices in combining different funding sources realised or addressed to Partnership Instruments.

The current report is an update of the 2019 Policy Brief building on new surveys that were carried out in 2020, via email and telephone exchanges, and addressed three distinct target groups:

- representatives of European public partnerships in research and innovation (seven partnerships addressed including institutionalised, co-programmed partnerships and the EIT-KICs)³
- people involved in the [EOSC Regional Projects](#) that were addressed through an open consultation in view of the preparation of the new EOSC partnership – 14 responses coming mainly from Widening countries were collected, and
- Regional Authorities dealing with the Smart Specialisation Strategies (S3) that were addressed through an online questionnaire and interviews – the views of 20 organisations were collected.

¹ Council of the EU, Brussels, [Draft Criteria Framework](#). 23 November 2018.

² ERA-LEARN "[Policy brief on the potential coordination between European Structural and Investment Funds \(ESIF\) and transnational P2P](#)"

³ Other types of partnerships (ERA-NET Cofunds, JPIs) were not targeted as there is already in-house knowledge and experience on the challenges facing such partnerships in creating synergies due to the involvement of the Ministry in many JPIs and ERA-NETs. This knowledge was documented in the 2019 ERA-LEARN "[Policy brief on the potential coordination between European Structural and Investment Funds \(ESIF\) and transnational P2P](#)".

Although the numbers of responses collected are not large, the findings are indicative of the main issues that were identified in the relevant literature and quite similar to the issues faced by other types of partnerships, such as ERA-NET Cofunds. The survey findings offer a deeper understanding of these issues.

Furthermore, the updated policy brief is accompanied by a rich list of good practices identified in Horizon 2020 partnerships that are presented in a user-friendly way and can hopefully inspire the new partnerships currently being created. These good practices are included in a separate [document](#).

As soon as the relevant legislative basis is fixed, this policy brief will also be followed by a publication including “Tools for Synergies” based on the new legal basis of the next Multi-annual Financial Framework, 2021-2027 and corresponding to the new features of the partnerships under Horizon Europe.

Overall, the aim of this policy brief is to improve knowledge of all relevant stakeholders (European Partnerships, national and regional stakeholders responsible for the management and implementation of national and regional operational programmes), in establishing synergies between Cohesion Policy Funds and the future R&I partnerships.

The policy brief includes three more main sections. Section 2, that follows the Introduction (Section 1), presents the main results of the extensive survey that was carried out across the three main target audiences mentioned above. Section 3, then, presents some recommendations responding to the main challenges identified and further reflections in relation to the next programming period. This is then followed by Section 4 that includes the conclusions from the preceding analysis. The Annex hosts the detailed methodology of the three surveys and the questionnaires used.

We owe special thanks to all the people involved in the surveys that provided us with valuable insights at various levels. A special thank also goes to our colleagues from the Consortium GARR for their enthusiastic and professional support in carrying out the EOSC Open Consultation. Special thanks are also due to the ERA-LEARN partners for commenting and editing earlier versions of the report and helping to improve it.

3. Survey findings

The findings presented below draw on three survey sources that addressed three different target groups:

- a survey of representatives (via email and telephone exchanges)⁴ of R&I partnerships that are involved in the process of establishing the new partnership under Horizon Europe, focusing more on partnerships with an increased role of the industry sector; the sample addressed included the partnerships Key Digital Technologies (KDT), Photonics, Clean Steel - Low Carbon Steelmaking, Carbon Neutral and Circular Industry, People-centric sustainable built environment (Built4People), EOSC European Open Science Cloud (EOSC) Partnership, and EIT KICs (i.e. institutionalised and co-programmed partnerships and the EIT-KICs)
- An open consultation organised under the EOSC Pillar project that addressed the members of the [EOSC Regional Projects](#) and gathered 14 responses mostly coming from Widening Countries (Hungary, Czech Republic, Greece, Romania, Bosnia and Herzegovina, Italy, Bulgaria, Sweden, Belgium, Portugal).
- A survey (via email and telephone exchanges) with Regional Authorities responsible for S3 development and implementation that gathered 20 responses from 12 countries.

Overall, the aim of these surveys was two-fold: a) to identify any experiences of synergies between different funding sources across different measures and activities, and b) to identify relevant barriers and obstacles in designing and implementing measures/activities supported by synergistic funds.⁵

3.1 Experiences of partnership representatives

Experiences of partnership representatives on synergies were drawn across the following:

- support measures to create pre-condition for the participation to the R&I Partnerships, in terms of investments in infrastructures, training, capacity building etc.;
- support measures for the exploitation/deployment of technologies/services' prototypes developed by R&I Partnerships funded projects;

⁴ Questionnaires were sent by email and feedback was collected by email, but the opportunity was also offered to fill in the questionnaire via a telephone discussion to those that required this.

⁵ There are analytically presented in section 3.4.

- support measures for funding ‘additional activities’⁶ of R&I Partnerships;
- direct support/funding with the national/regional ESIF to increase the budget for R&I Partnership supported projects.

The findings are summarised as follows.

Creating synergies among different funding sources may already be realised although not in the most visible way

The governing bodies of R&I partnerships surveyed have not particularly been paying attention to combining funds coming from other sources, nor are engaged in exchanging experiences with other partnerships on this subject. Despite the debate, in the last programming period, on the need to push for synergies among different funding programmes on the side of the European Commission, there have been no systematic efforts to guide and support the actual creation of synergies. In similar lines, EIT KICs reported that, even if the use of ESIF is demonstrated in the implementation of the activities by partners, the coordinating structures would not be aware of any best practices due to lack of dissemination of such information within the partnership but also lack of responsiveness by the S3 authorities to relevant requests.

However, as clarified by the survey respondents, there may have been cases where synergies were achieved, i.e., in supporting some partners’ in-kind contributions, or at project level, although such information may not have reached the partnership’s hierarchy. For example, the creation of pilots and demonstrators in Spire’s projects request very large investments and a lifetime of at least 3 years. These projects, that are financially supported by large industries, may have also benefited from certain subsidies under national/regional programmes thus exploiting ESIF. However, such actions would have been carried out at the project level with the local authorities without informing the partnership management.

The same insight has been provided by other partnership representatives. Photonics established several distributed pilot lines where equipment and operations may have been funded by regional resources. However, such information, may have never reached the partnership’s governance structure.

Notwithstanding, there are other examples where synergies with ERDF have been implemented in a more visible way. The ECSEL Joint Undertaking, for instance, reported that 22 ECSEL projects in total involved some partners with ESIF funding. Nonetheless, since the ECSEL Office is not involved in any way in managing or monitoring ESIF contribution, further information is not possible about concrete examples of the synergies implemented including in the case of developing prototypes and demonstrators. This is unfortunate, especially considering that ECSEL projects produce a large number of demonstrators/prototypes; typically, 10 per project.

⁶ Additional Activities refer to R&I Partnership activities not directly linked to call for proposal management and projects funding such as: facilities empowerment, Dissemination-communication activities, stakeholders’ engagement, and so on. For a more information visit the [ERA-LEARN Website](#).

Regarding the cPPPs the issue has long been acknowledged. As recommended by the Expert Group⁷, a deeper involvement of Member States in cPPPs may contribute to create the conditions for the alignment of regional and national policies and building synergies with structural funds. It is important to collect data both at projects' level and at partnership level about the synergies implemented with the aim to provide best practice and to monitor the alignment of national and regional policies to partnership objectives.

Additional activities render themselves for combining different sources of funds as they usually do not have to do with supporting actual research that has been the core activity of the partnerships. However, no such case was reported. In the case of cPPPs, additional activities have been funded through association fees, while other partners contributed to such activities through in-kind contributions. Other partnerships, such as ECSEL for instance, specified that partners that participated in additional activities (dissemination) might have been utilising ERDF funds for this purpose, although this was not explicitly documented in this way.

3.2 Experiences of the members of the EOSC Pillar Regional Projects

The EOSC Pillar (2019-2022) project brings together the representatives of the fast-growing national initiatives for the coordination of data infrastructures and services in Italy, France, Germany, Austria and Belgium. The project aims at creating the conditions for the establishment of an agile and efficient federation model for trans-national open science services, and serves as a preparatory phase for the development of the new partnership EOSC under Horizon Europe. It also offers the possibility to identify those experiences that have set the pre-conditions, especially in terms of research capacity and availability of infrastructures, for the contribution of national research systems to the realisation of EOSC. As ESIF is a vital source of funds supporting capacity building and infrastructures, ERA LEARN in collaboration with the project EOSC Pillar organised in July 2020 a Webinar on synergies and complementarities between Horizon 2020 and ESIF and launched an on-line open consultation addressing participants in the EOSC Regional Projects with the aim to identify experiences of synergies that could inspire the design of the new EOSC partnership under Horizon Europe.

The EOSC Pillar has created a set of examples of sequential synergies⁸. These should be useful in view of establishing the new European Partnership EOSC.

Several experiences have been identified that have set the pre-conditions, especially in terms of research capacity and availability of infrastructures, for the realisation of EOSC including examples of sequential synergies at different levels, both national and regional. The nature and the scope of all the EOSC-focused initiatives was mainly to either set new or empower existing

⁷ Mid-term review of the contractual Public Private Partnerships (cPPPs) under Horizon 2020

⁸ Sequential funding: ESIF investments enable Horizon 2020 participation, e.g., funds for research infrastructure investments improve the success rate in H2020 projects (up-stream sequential funding). Horizon 2020 project results are used or further developed with subsequent ESIF investments, e.g., market deployment or training (i.e., down-stream sequential funding).

e-infrastructures and computing infrastructures. Complementary regional and national projects aimed basically to increase the computing capacity, expand the interconnection of national networks and improve the e-services of the public administration. The analysed initiatives led to strengthening of the national/regional infrastructures and capability.

An example is the project implemented by the Government Informatics Development Agency (KIFÜ) in Hungary, titled “Development of supercomputing services for Hungarian ICT companies”. As a result of this project, a new high-performance computing (HPC) cluster will be created and be operational by the end of 2021. This will be located in the Supercomputer Centre at the University of Debrecen, which has the highest performance today and the most modern technical conditions in Hungary. This project contributes to creating the necessary pre-conditions for Hungary to join the EOSC partnership. In addition to building the infrastructure, KIFÜ also prepares the Hungarian scientific and business communities to use the HPC infrastructure and introduce HPC knowledge into higher education topics. The aim is to build capacity that will lead to research and industrial projects. These actions are realised with national and ESIF funding and are directly contributing to creating the conditions needed for joining relevant partnerships, thus pointing to sequential synergies between different funding sources.

In a similar vein, the Hephaestus project provides all Greek academic and research institutions with advanced network e-infrastructures and services that lead to benefits arising from automation in the management and operation of wired and wireless network infrastructure, optimization of the interoperability of the institutions' networks with the EDYTE (National Network of Infrastructure Technology and Research), international cooperation of Greek researchers, achieving economies of scale in the supply and long-term maintenance of infrastructure, as well as in the use of telecommunications services, and enhancing the potential for advanced scientific research. The project is set to be concluded in 2023. Another project HELIX - National Digital Infrastructure for Research - is the expansion / upgrade and availability of the e-infrastructures NNCRI (National Network and Computational Research Infrastructure), OpenAIRE-D and HELNET. The project is implemented in partnership with the Research Center for Innovation in Information Technologies, Communications and Knowledge, "Athena" and the University of Thessaly. Both projects are supported by ESIF under the Greek NSRF 2014-2020 and are implemented by GRNET - National Infrastructures for Research and Technology in Greece.

The Italian project IBISCO - Infrastructure for Big data and Scientific COmputing led by INFN (National Institute for Nuclear Physics) aims to substantially strengthen the scientific computing infrastructure in Southern Italy; and, thus, contribute to the Italian Computing and Data Infrastructure (ICDI), laying the foundations for its southern part that will fit into the national project. The project was funded by the Ministry for Universities and Research funded through the National Operative Programme – Research and Innovation 2014-2020.

Similarly, in Portugal, the project “RCTS100 - Rede Ciência, Tecnologia e Sociedade a 100 Gbits” aims to develop national capabilities for communication and computing of large volumes of data, to develop national capacities for the shared packaging of digital research infrastructures, and provide advanced collaboration services allowing the participation of the national scientific

community in projects of strategic interest. The project also places emphasis on capacities for open access to research data, knowledge and other research resources by Universities, Polytechnics and national research units. At the same time, the modernisation and training of the Public Administration is addressed by the project “Diretório de Repositórios Digitais” (DRD). The projects were funded through the Portuguese National Competitiveness and Internationalisation Operational Programme by combining ERDF and Cohesion Fund⁹, and led by FCCN, the Scientific Computing Unit of FCT – Foundation for Science and Technology.

In the future, the new European Partnership EOSC will strongly encourage and coordinate efforts on synergies, and the already accumulated experience should be vital in ensuring effectiveness.

3.3 Experiences of S3 Regional Authorities

Experiences of Regional Authorities on synergies were drawn across the following:

- measures implemented for creating in the regional eco-system the pre-conditions for the participation in the EU R&I collaboration such as investments in research infrastructures, training, capacity building etc. for the development and enhancement of R&I capacities (“up-stream” actions¹⁰).
- measures for further take up/deployment of technologies/services ‘prototypes developed within R&I Partnerships funded projects (“down-stream” actions¹¹);
- measures for supporting/funding implementing ‘additional activities’ of R&I Partnerships EU-funded project (such as facilities empowerment, dissemination-communication activities, stakeholders ‘engagement, etc.);
- measures for directly supporting or funding R&I Partnership;

Overall, the respondents considered the S3 Strategies as enabling factors for activating very significant collaborations among different stakeholders. The 2021-2027 programming period regulations is laying down many possibilities for enhancing synergies. The processes for their activation also now appear more mature thanks to the raised awareness about the importance of synergies and the expressed need to receive structured guidance and advice on implementation.

The findings are summarised as follows.

⁹ The Cohesion Fund (not to be confused with the Cohesion Policy Funds) is supporting Member States whose Gross National Income (GNI) per inhabitant is less than 90 % of the EU average. It aims to reduce economic and social disparities and to promote sustainable development. For the 2014-2020 period, the Cohesion Fund concerns Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia. It is subject to the same rules of programming, management and monitoring as the ERDF and ESF through the Common Provisions Regulation.

¹⁰ (Regulation (EU) No 1303/2013 of 17 December 2013, Annex I, 4.3 – Common Strategic Framework)

¹¹ Ibidem

Regional measures supporting ‘up-stream’ actions hold strong potential for synergies in the new programming period that is marked by an emphasis in international collaboration including through R&I partnerships

Creating synergies across different programmes and funding sources necessitates shared awareness and interest on all the different sides involved. In other words, it is not enough that the representatives of European partnerships focus their efforts and try to find feasible ways to accomplish synergies. The same holds true also for the national / regional authorities responsible for the Smart Specialization Strategies (S3) that underline the Operational Programmes through which ESIF funds are utilised. The 20 responses received by the S3 authorities showed that, for the programming period 2014-2020, several regions included measures aiming at supporting research infrastructures and developing R&I capacity in their Regional Operative Programmes (ROP). These may well have contributed to facilitating participation in R&I Partnerships, although, it was acknowledged that they were not specifically geared to partnerships.

However, the case of the Estonian RITA programme is a noteworthy exception. The aim of the RITA programme is to stimulate usage of research results in solving socio-economic problems and to build up competences in Ministries and a systematic well-coordinated approach to commission applied research for corresponding policy fields of Estonia. Participation of Estonia in EU and ERA research initiatives (including partnerships) in addressing grand challenges is supported through RITA. Thus, the programme applies a systematic approach in both building capacities as well as supporting participation in EU and ERA initiatives including partnerships. In addition, the Estonian OP (2014-2020) provided support for participation of Estonia in ERA initiatives, the Innovation Union and Horizon 2020 (including partnerships). Such participation was mostly supported by the programme Mobilitas Plus that covered eligible costs related to ERA Chair, teaming-twinning activities, ERA-NETs, JPIs, JTIs, Art. 185 and 187 partnerships and the EIT KICs.

Several respondents pointed out that they were not aware of specific measures in the 2014-2020 Operational Programme which may support participation in R&I partnerships. Yet, all of them acknowledged the need for more solutions and opportunities for synergies through a harmonised approach and recognised the need of raising awareness about R&I Partnerships and their objectives. In addition, the timing of the survey, amidst drafting the new Operational Programmes, made it difficult for respondents to discuss any future prospects.

Some references to R&I partnerships and synergies in programmes or actions under preparation for the period post-2020 surfaced in the survey responses. The Extremadura Region is currently designing its new RIS3 Strategy and Action Plan, including the instruments for their implementation, which will be part of the regional ERDF Operational Programme 2021- 2027. Instruments for deploying the RIS3 will be newly defined and will include a co-financing instrument for Horizon Europe partnerships for the period 2021-2027. The North-West Regional Development Agency in Romania highlighted the importance of complementarity between different funds in the future ROP, 2021-2027. Creating synergies will be particularly relevant for specific calls.

The Ministry of Education and Research in Estonia advocated, during the negotiations with the European Commission that were ongoing at the time of the survey, to include supporting measures for partnerships in the next operational plan. The interventions would involve support for research institutions (both public and private) to participate in international R&D networks, including partnerships. In addition, the Estonian representative suggested that specific measures be designed to support enterprises to participate in international cooperation including Horizon Europe partnerships. It is important to build capacity and help enterprises to carry out preliminary studies and product development. Secondly, a support system should be developed informing and helping enterprises to increase international cooperation via connecting them with research organisations outside Estonia.

Other respondents, however, with less experience in synergies and knowledge about partnerships, found it rather difficult to grasp the possibility to combine the territorial nature of ESIF with the wider European partnerships focusing mainly on research and less on innovation and competitiveness.

Overall, based on the responses to the survey, we may conclude that creating and exploiting synergies between different funding sources was not a major feature in the implementation of OPs in the 2014-2020 programming period. However, this is now visibly changing in the next programming period, with various measures being designed aiming at raising awareness and capacities of research organisations as well as SMEs, and, thus, creating the pre-conditions needed for their participation in international collaboration activities including European partnerships.

Regional measures supporting ‘down-stream’ actions can be designed in a synergistic mode across various funding sources

Currently, the uptake of research results coming from partnership-supported projects is not explicitly targeted by the Operational Programmes. However, there are some noteworthy insights that can inspire future actions. Several opportunities that support the further development of technologies and services and allow the uptake of research results have been reported. Although these are not specifically dedicated to following up on partnership-supported projects, they can be exploited by projects’ participants to follow up the research results at the national level.

In the case of Estonia’s Operational Programme, the goal of the programme “Product development support for enterprises” is to help enterprises develop new products or services in-house and to open new business opportunities. The Finnish Regional Operational Program provides measures to support the implementation of complementary actions to EU-funded research and innovation projects and INTERREG project.

Another interesting example is the "Grant supporting the cooperation with University 2020"¹² in the Portugal’s Operational Programme. This supports the cooperation among companies or

¹² From Portuguese: “Sistema de Incentivos à Investigação e Desenvolvimento Tecnológico (SI I&DT) – projetos em Copromoção.

between companies and academic/research institutions in projects led by companies and including industrial research and experimental development activities.

In addition, within the framework of the Polish Regional Operational Program for the Podlaskie Voivodeship 2014-2020 (RPOWP), it is possible to finance innovation activities towards the industrialisation of prototypes. Financial support covers the industrial research and development phase, including the development of prototypes, demonstrators, pilot projects, etc.

In the case of the Czech Republic, the follow-up of international partnership projects in ESIF programmes is possible through the operational programmes (OP) focused on research and innovations. For example, in the OP Entrepreneurship and Innovation for Competitiveness the Priority Axis 1 “Development of research and development for innovation” encourages the establishment of synergies with H2020 programmes and schemes such as FET, Research infrastructures, Enabling and Industrial technologies, Innovations in SMEs, as well as the ERC. In addition, the “Seal of Excellence” type of support is being used in the country at the national level (by the Technology Agency of the Czech Republic’s support programmes).

In fact, the “Seal of Excellence” (SoE) is acknowledged as the main synergy instrument by several S3 Authorities, since it is the first ready-to-use tool for Managing Authorities in order to give alternative funding opportunities to researchers and SMEs by activating ERDF through National / Regional Operational Programmes. The “Seal of Excellence” scheme enables support of mono-beneficiary proposals that were not eventually funded under Horizon 2020 (under the EIC Accelerator, MSCA, ERC Proof of Concept) due to budget limits although of high-quality. The SoE recognises the value of the proposal and helps Member States and regions to easily identify and, if they wish, financially support these by other means, e.g., by using Cohesion policy funds. After its launch in 2015, several Managing Authorities established alternative measures for funding SoE Projects, mainly using ERDF for the EIC Accelerator Pilot¹³. To support the Managing Authorities in dealing with the different rules and procedures of Horizon 2020 and ESIF for the application of the SoE, the European Commission published an Explanatory Note¹⁴ on the State Aid rule application to SoE proposals under the SME Instrument.

Although proposals of multiple partners are not eligible for the SoE, the scheme represents a good practice to foster synergies among different EU funding sources. In fact, it inspired the introduction of the Synergy Labels, introduced by the JUs Clean Sky and Bio Based Industry¹⁵.

Direct support of R&I partnerships through ESIF funds is also possible, although scarce

The combination of ESIF with H2020 funding to directly support partnerships (not just additional activities) has been implemented by ERA-NETs and JTI ECSEL. ESIF was used to increase

¹³ Full list about national implementation of [“Seal of Excellence”](#)

¹⁴ Brussels, 4.1.2017 SWD (2017) 11 final

¹⁵ See [catalogue](#)

partners' budget for funding national/regional participants in the partnership calls. This additional funding was not eligible for calculating the respective EU top-up funding for the country. This was implemented in the case of several ERA-NETs including MANUNET, M-ERA.NET, PhotonicSensing, ERA-NET PerMed and ERA-NET Concentrated Solar Power.¹⁶

3.4 Main obstacles and barrier in designing and implementing synergies across various funding sources

Although synergies are considered one of the most powerful opportunities of optimization and internationalization of national and regional research policies, there is a large consensus regarding the existence of several factors that put in place significant obstacles.

Considering both the relevant literature¹⁷ and the analysis of the findings of the survey to S3 Authorities, the barriers and obstacles can be grouped into three categories:

- Regulatory barriers
- Organizational barriers
- Attitudinal barriers

These are analysed below.

Reluctance and technical/regulatory difficulties may be overcome if a strategic orientation towards synergies is emphasized in the next programming period

Regulatory barriers represent technical and are exogenous factors that may affect the policy implementation by the organizations appointed to deal with synergies.

Although synergies of funds are very much encouraged at the policy level, there are several hurdles that are impeding progress at the operational level. The Managing Authorities that responded to the survey are rather reluctant to try to combine different funding sources when designing measures and activities, as these have different regulatory references and legislative frameworks working with different intervention logics, which increase the complexity level.

A key issue is the possibility to fall into the risk of “double funding” the same measures with different EU funds. This entails a serious threat to render the respective measures ineligible for funding, thus jeopardising the design of whole programmes. In the absence of any concrete guidance on the side of the EC on how such a risk can be avoided, there is great reluctance to take steps further.

¹⁶ These cases are described in detail in the [Good Practice Case Catalogue](#) accompanying the Policy Brief

¹⁷ As discussed in the 2019 ERA-LEARN Policy Brief on the potential Coordination between European Structural and Investment Funds (ESIF) and transnational P2P

The State Aid rules are considered an obstacle for implementing synergies, since the combination of different EU funding increases the administrative burden for specific arrangements concerning:

- Eligible costs: Interpretations of “cost item” in order to match eligible costs’ definitions are different between H2020 and ESIF rules.
- The H2020 eligible budget is far higher in relation to the upper limit of the budget for national / regional beneficiaries set by the State Aid rules (specifically in the case of Seal of Excellence granted projects)
- State Aid intensity is different in relation to different territories - National authorities should provide equitable grants to participants established in different country’s areas, especially in those countries where the National Operational Programmes allocate resources with different intensity according to 3 categories of regions (less-developed; transition; more-developed). This is not the case for H2020 and National Authorities need to make sound arrangements when using ESIF.
- The [De Minimis rule](#) presents a limitation to the total funds that an SME can be granted in a period of three years (€ 200,000) and waving this rule is quite heavy in terms of administration effort and time.¹⁸
- The monitoring rules and procedures for certification of costs are different between H2020 and ESIF.

The geographical limitations concerning the activities supported by the Regional Operational Programmes may also be a limiting factor in creating synergies with activities performed by a partnership. Activities supported by ROPs need to be performed in the specific geographical area addressed (intervention area). However, the Cohesion Policy Programs do allow for a certain percentage of resources to be allocated outside the intervention area. Yet, this is rarely practiced as it entails difficulties in auditing and certifying eligibility of expenses in the ‘foreign’ areas of intervention. This is relevant for supporting additional activities, for instance, of partnerships, where costs may be incurred outside the intervention area.

As noted by the respondents to the survey of the S3 Authorities, the administrative effort needed to implement synergies, i.e., auditing and certifying costs incurred under different programmes and, thus, regulatory frameworks and participation rules, is disproportionate to the actual amount of funds being combined. Besides the technical difficulties, however, the Managing Authorities do welcome a more strategic perspective on synergies which is a positive sign in view of the next programming period.

¹⁸ The Covid outbreak and the increasing state of crisis of the European economy brought the State Aid Temporary Framework, adopted on 19th March 2020, to enable Member States to use the full flexibility foreseen under State Aid rules by raising the De Minimis ceilings.

In addition, being in a period of transition between two different legislative frameworks and the consequent uncertainty around the new legislative framework, has not allowed, so far, any attempt to define synergy pathways. That said, the programming process of the Cohesion Policy currently underway and the new Horizon Europe's provisions encouraging synergies are improving prospects.

Lack of specific roles and responsibilities in relation to designing and implementing synergies, as well as lack of specific procedures and guidelines and incompatibility across different programmes hinder progress towards synergies' implementation.

The reality is that management of the same regional programme may spread across several administrative and support structures at the regional level. This does not allow for a general overview of the whole programme to be shared by all units or structures involved. Linked to this, authorities do not seem to encourage administrative procedures that are not well designed and tested; thus, a re-organisation or restructuring possibility is highly unlikely. This also makes it difficult to assign roles and responsibilities for creating and managing synergies, as they need to span several administrative units.

The individual units or structures dealing with programme management are usually not aware of all relevant funding initiatives, besides those that are directly linked to the programme they manage. However, even in the cases where the necessary skills and competences for the strategic programming and implementation of synergies are already available in the S3/Managing Authorities, the lack of specific procedures and guidelines discourage the uptake of such initiatives, which are also often linked to political decisions.

To create synergies between two programmes it would be necessary to try to synchronize the various activities of the different programmes. This is extremely difficult, as the experience of R&I partnerships shows, given the different policy-cycles and timings across countries, let alone across the regional, national and European levels that need to converge for creating synergistic opportunities.

The 'silo' mentality in implementing EU funds along with lack of practical information to guide the process do not favour a positive attitude towards creating synergies

The main attitudinal barrier was noted to be the "silo" mentality in implementing EU funds in Member States. This makes it difficult to pursue synergies because EU objectives are often divided across traditional ministerial or departmental portfolios or are based on political bargaining rather than synergistic logic.

In general, organisations are lacking an attitude towards developing synergies, which can be due to several factors. The lack of appropriate information is one. Although, many relevant publications exist, they may hardly reach the right stakeholders or may not sufficiently addressing the need for practical tools and clear references, leaving the responsibility to explore and find the

right pathway “from scratch” to those that want to implement synergies. Despite the strong interest in finding opportunities to implement synergies, the respondents complained about the lack of structured information at the practical level that can guide the whole process, from the planning to the auditing phases.

Language barriers should also be considered as another negative factor, along with other elements mentioned by respondents such as:

- Turnover of people and changing responsibilities. Managing Authorities use technical assistance providers, which are mainly external consultancy companies selected through public procurement. This hinders in-house capacity building.
- Lack of propensity for innovation of public administration, limiting the possibility to accept changes in internal procedures and administrative processes to the better, and lack of inter-institutional collaboration.
- Limited team working approaches: public organisations may often find it difficult to establish a positive working environment based on collaboration among people with complementary backgrounds and skills working together towards common goals, even more so across the different levels of hierarchy.

4. Recommendations and further reflections

The establishment of synergies between EU funds have been a rather complicated exercise, whose success has been hindered by several conditionalities. Although the survey revealed several factors that have influenced the possibility to design activities in a synergistic mode, two factors stand out that either discouraged or did not favour the conditions for creating synergies between different funding sources. The first is the regulatory obstacles and barriers (i.e., eligibility of budget and costs, incompatibilities of State Aid rules, risk of double funding, inability of implementing operations and related certification and auditing of costs occurring outside the intervention area, etc.). The second one is the lack of concrete guidance and of effective communication between the policy design and the policy implementation level either at the EU or the national/regional levels.

This section draws certain key messages and recommendations in three areas stemming from the key challenges discussed in the previous section. These challenges are: a) the lack of communication and interaction between European partnerships and the other players involved (S3 authorities, regional agencies, etc.), b) the limited awareness of the different funding instruments that can be synergised, and c) the need to improve existing tools for cooperation within European partnerships.

Improve dialogue and interaction between European Partnerships and different players involved to facilitate the implementation of synergies in the next programming period.

A key aspect for implementing synergies of funds is certainly the coordination and collaboration among the policy and decision-makers at any level (regional/national/European). The main actors involved should create suitable coordination spaces for aligning roles and responsibilities. In particular:

- European institutions: the different DGs involved (RTD, REGIO) should intensify the synergies debate, facilitate alignment of regulations and implementation rules among different programmes, and provide legal / administrative guidance and support to Managing Authorities and Partnership stakeholders in order to fruitfully exploit the potential of the new European Partnerships. Several activities have been realised by DG RTD in coordination with DG REGIO in order to present and disseminate the new synergies landscape and these efforts will be intensified along the finalization of the relevant regulations.
- European partnerships: at the early stages of the programming phase in which the drafting of new operational programmes is still ongoing, the European Partnerships' stakeholders have the opportunity to open a dialogue with the Managing Authorities on Cohesion Policy Funds

in order to co-create a proper funding landscape for implementing certain measures in a synergistic mode

- National institutions: it is key to enable coordination among the various national authorities and setting up of a common approach towards implementation of synergies. A priority should be to coordinate the different responsible entities and actors (Ministries, Departments, Funding Agencies, Regional Authorities) dealing with Cohesion policy funds and break the silo approach among institutions;
- Regional authorities: silos may also exist at the regional level. While it is important to set up coordination mechanisms and structures, a continuous loop on programming, monitoring and assessment should also be set up involving all relevant stakeholders (Development Agencies, Regional competence centres, S3 Authorities, etc.)

Improve the knowledge about the different instruments for cooperation and the opportunities for synergies among them

(e.g.: European Partnerships, Territorial Cooperation Investments, Interregional Innovation Investments and European Grouping of Territorial Cooperation, European Innovation partnerships, Joint programming initiatives, Excellence Hubs).

European R&I Partnership are geared towards merging and orienting research efforts in strategic fields of shared interest, thus tackling fragmentation of research and innovation activities across countries. This makes them an important instrument for strengthening the ERA. At the same time, Structural Funds are oriented towards improving “place-based ecosystems” giving, however, increased emphasis in international collaboration as one of the enabling conditions for good S3 governance. Creating synergies will maximise the quality and impact of activities of both policy implementation tools.

In this regard, it is crucial to raise awareness in Regional Authorities of all the available instruments funded through Cohesion Policy Funds as well as through EU programmes and their respective intervention logics to explore opportunities for synergies. It is extremely important to go beyond the “silo” approach and foster a mission-oriented approach involving all levels from policy design to management and implementation.

Improve the implementation of cooperation tools within European Partnerships.

The successful efforts carried out in the field of strategic planning and synchronization of Structural Funds by certain Joint Undertakings (i.e., ECSEL, Clean Sky 2 and BBI) are useful, good practices in implementing synergies in a cooperation scheme including Funding Organisations and Managing Authorities.

It is also relevant to strengthen the role of Policy Boards (or Member States Board) in the European Partnerships with industry participation (i.e., the Co-programmed Partnerships) to facilitate the dialogue at national level for implementing synergies among different funding sources. It is also worth to explore the feasibility to develop bi-lateral collaborations based on Memoranda of Understanding with Member States/Regions to ensure directionality and alignment

towards EU priorities for those Authorities not entering the partnership with a formal role, but nonetheless encouraging the creation of a synergic alignment of funding landscape, disclosing additional resources and synchronization measures for beneficiaries.

A favourable context in the next programming period

Synergies are considered a key factor for maximizing the quantity, quality, and impact of R&I investments. A strong effort is being deployed in the direction of drafting operative bridges between different regulations also reflecting the complementarities between the different intervention logics of EU programmes and Funds. In the next programming period, synergies will be strongly encouraged at strategic level to convey different resources towards mission-oriented policy objectives.

The Horizon Europe Regulations recently adopted and the upcoming Common Provisions Regulation (CPR) for shared management funds, including for the EU cohesion policy funds, include, for the first time, aligned provisions to enable better interaction between the programmes. In addition, the General Block Exemptions Regulation will facilitate State Aid for synergies measures. All the above define a new strategic synergy policy framework involving the key actors responsible for research and cohesion at all levels. At the same time, it sets ambitious objectives and actions fully in line with the objectives of the new ERA Communication to promote Cohesion investments and reforms in R&I.

5. Conclusions

Creating synergies among different programmes and funding sources have not been explicitly addressed in the 2014 - 2020 programming period, while, in relation to the next programming period, the relevant legislation is not yet finalised. However, the debate about synergies has been increasing and reaching out a wide audience, but, although there are possibilities to proceed in this direction, any attempts have been rather sporadic.

The opportunities and potential advantages coming from synergies are probably not widely captured by relevant stakeholders. This can be partly attributed to a lack of systemic guidance on the side of the European Commission on how synergies can be designed and implemented although some guidance has indeed been published ¹⁹, on the one hand, and, on the other, a general concern that implementing synergies implies a considerable administrative burden, since Horizon 2020 and ESIF are underlined by two different intervention logics and regulatory frameworks.

To make progress with implementing synergies among different funding sources requires coordinated efforts at all levels (regional/national/European). Increasing awareness on the potential and benefits of synergies is important, as is breaking of policy-silos both at the European Commission and the national/regional levels. Concrete and clear guidance addressing the policy design as well as the implementation levels in the light of the new regulations is also key.

National and Regional Governments are the main players in the field because of their responsibility over strategies (Partnership Agreements, RIS3) and funds (Operational Programmes). However, different administrative support structures have the responsibility to manage participation to different EU Programmes. Yet, many skills and competences related to the process of setting up synergies are transversal to such organisational set ups. This often creates an impasse, where no subject takes responsibility of stimulating the delivery of synergies.

S3 Authorities may play an important role in helping R&I and Cohesion Policy sides to develop strategic, synergistic ties. Many of them have the necessary skills for the strategic programming and implementation of synergies but are discouraged to make progress due to lack of guidance. The relevance of European Partnership's strategic R&I agendas to societal and technological challenges should also help S3 and Managing Authorities recognise their value and consider them a wider framework supporting the realisation of S3 specific objectives.

¹⁹ Main guidance publications are: "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, and the JRC report: "Joint Undertakings: analysis of collaboration mechanisms with ESI Funds in an S3 context" 2019.

Although there are certain [good practices](#) that reveal a deliberate attempt to open up resources that are available only at territorial level to a wider scope, these need to multiply to fully exploit the potential benefits of synergies among various programmes and funding sources.

R&I partnerships should exploit the opportunity to increase their impact by enhancing synergies with other EU instruments and funding courses. The cross-disciplinary and multi-level governance approach supported by European Partnerships maximise the need to use different funding sources (at EU, national, regional level) to address common societal and technology challenges. At the same, the importance of international collaboration is also marked in realising the goals of Smart Specialisation Strategies. As a result, establishing synergies becomes not only a desired, but also necessary, route for addressing shared goals among countries as well as S3 goals. This should be communicated both to the services and agencies preparing European partnerships as well as S3 Authorities. The new provisions for synergies between EU Programmes introduced in this programming period are expected to create favourable conditions which need to be fully exploited.

6. Annexes

6.1 Detailed methodology

Based on the analysis documented in the 2018 ERA-LEARN "[Policy brief on the potential coordination between European Structural and Investment Funds \(ESIF\) and transnational P2P](#)", creating synergies among different funding sources is a difficult and complicated task, at least in the context of the existing legislation. Further analysis was also deemed necessary to understand the exact barriers and obstacles and possibly identify certain good practices.

To this end, it was decided to examine existing partnerships under Horizon 2020 to understand better the added value and modalities of combining funds at regional and European level in the context of EU R&I partnerships. However, while the primary target group was representatives of the European Partnership in the making in view of Horizon Europe, the investigation necessitated to expand it and include other cohorts with experience in implementing actions based on synergistic funding sources even from other, than the partnership, perspective. The survey, therefore, was conducted following subsequent phases, along the need to adjust time by time terminology and questionnaires. In particular, it included the following phases.²⁰

1- Survey of the representatives of European Partnerships (through email and telephone exchanges)

The goal was to understand in which way the designing process of new European Partnerships being established were taking into consideration the past experiences of creating synergies between Horizon 2020 and ESIF. A sample of representatives from both the private and public research sectors were selected, also taking into account the different implementation modalities of the new European Partnership instrument (institutionalised, co-programmed and co-funded)²¹.

The following table includes the partnerships that were addressed along with the corresponding type and their predecessors in Horizon 2020. The exceptions are EOSC and Clean Steel - Low Carbon Steelmaking partnership which have no predecessors in Horizon 2020.

²⁰ All the different questionnaires used are included in the following annexes.

²¹ Other types of partnerships (ERA-NET Cofunds, JPIs) were not targeted as there is already in-house knowledge and experience on the challenges facing such partnerships in creating synergies due to the involvement of the Ministry in many JPIs and ERA-NETs. This knowledge was documented in the 2019 ERA-LEARN "[Policy brief on the potential coordination between European Structural and Investment Funds \(ESIF\) and transnational P2P](#)".

Table 1: European R&I partnerships addressed in the survey

Horizon Europe forms of implementation	European Partnership title	Horizon 2020 Predecessor (where relevant)
Institutionalised with Participating States (Art.187)	Key Digital Technologies (KDT)	ECSEL Joint Undertaking
Co-programmed with Industry at core	Photonics	Contractual Public Private Partnership 'Photonics21'
Co-programmed with Industry at core	Clean Steel - Low Carbon Steelmaking	New partnership, building on the contractual PPP SPIRE on energy intensive industries
Co-programmed with Industry at core	Carbon Neutral and Circular Industry	Sustainable Process Industry partnership SPIRE
Co-programmed with Industry at core	People-centric sustainable built environment (Built4People)	PPP Energy Efficient Buildings
Co-programmed with Member States	EOSC European Open Science Cloud (EOSC) Partnership	New partnership under Horizon Europe; it has no H2020 predecessor.
EIT KICs	EIT KICs	EIT KICs

The questionnaire attempted to retrieve any experiences of synergies in relation to the following:

- support measures to create the necessary pre-conditions for participation to the R&I Partnerships, in terms of investments in infrastructures, training, capacity building etc;
- support measures for the exploitation/deployment of technologies, services, or prototypes developed by R&I Partnerships funded projects;
- support measures for funding additional activities of R&I Partnerships;
- direct support/funding with the national/regional ESIF to implement R&I Partnership activities (including research projects);
- identification of barriers for developing and implementing synergies.

The questionnaires are available in the Annex 6.2.

2 – Open consultation of the [EOSC regional projects](#)

The [EOSC Pillar](#) (2019-2022) received funding under Horizon 2020 under the INFRAEOSC 5b call and brings together the representatives of the fast-growing national initiatives for the coordination of data infrastructures and services in Italy, France, Germany, Austria and Belgium. The project aims at creating the conditions for the establishment of an agile and efficient federation model for trans-national open science services covering the full spectrum of European research communities. This project contributed to the development of the new partnership EOSC under Horizon Europe. It also offered the possibility to identify those experiences that have set the pre-conditions, especially in terms of research capacity and availability of infrastructures, for the contribution of national research systems to the realisation of EOSC.

As ESIF is a vital source of funds supporting capacity building and infrastructures, the EOSC Pillar organised in July 2020 a Webinar on synergies and complementarities between Horizon 2020 and ESIF. During the webinar, an on-line open consultation was announced towards participants of EOSC "[Regional Projects](#)" with the aim to understand how synergies have, during the current programming period, contributed to implementing or upgrading EOSC-related infrastructures and resources; and to provide input to the new programming of the Cohesion Policy funds to support participation in the future European Partnership.

The consultation lasted until 4 September 2020. In total 14 respondents provided information and responses, mostly from Widening Countries (Hungary, Czech Republic, Greece, Romania, Bosnia and Herzegovina, Italy, Bulgaria, Sweden, Belgium, Portugal).

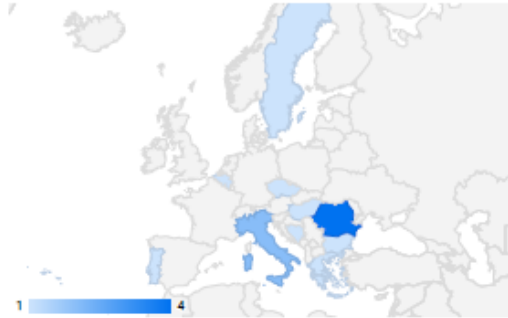
The questionnaire tailored for this target is available in Annex 6.3.

Figure 1: Statistics on the responses received for the open consultation of the EOSC Regional projects

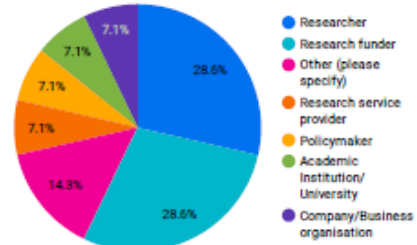


Synergies between Horizon and ESIF in EOSC Partnership

Responses by country



Background of respondents

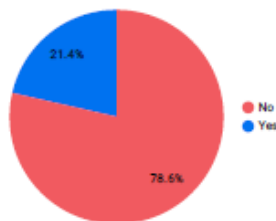


Types of funding received

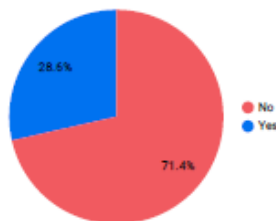
- 0 - European Territorial Cooperation: Cross border (Interreg A) and Transnational (Interreg B) and Interregional (Interreg C) programs.
- 2 - Horizon Europe
- 5 - National and Regional ERDF (NOP or ROP)
- 3 - Others

Competitive Calls

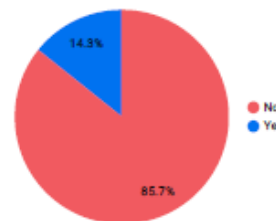
Took part in competitive calls



Received funding for training/research

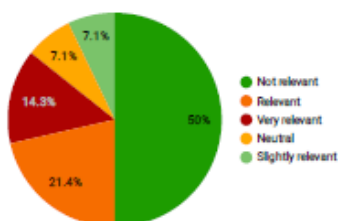


Took part in calls for e-services

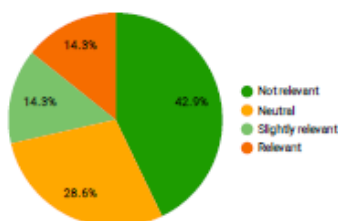


Barriers

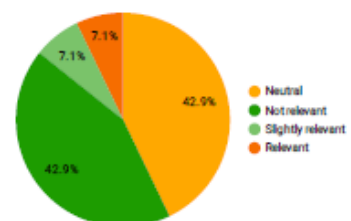
Regulatory barriers



Organisational barriers



Attitudinal barriers



3 – Survey of the Regional Authorities responsible for Smart Specialisation Strategy (S3)

A survey (including both an online questionnaire and interviews) was also conducted during August and September 2020 including representatives of national and regional institutions²² responsible for the development and implementation of the Smart Specialization Strategies. Being the owners of national and regional S3s, this target group is relevant to address with the development of synergies among cohesion and other types of funds, and international collaboration is one of the "enabling conditions" of the S3 good governance. The members of this particular target group stand in a unique position for developing and improving synergies. They can set up multilevel policies and have access to stakeholders of all the value chain.

An online questionnaire was sent to contact people of S3 in the regions of the EU-27 countries (about 400 contact persons, 10% of whom were not reached due to bounced emails). Altogether, we collected 20 responses from 12 countries, either via the on-line questionnaire or by means of interviews, as described in the next Table. About 85% of the respondents were representatives of regions or ministries, while the remaining part consisted of innovation centres, universities, and foundations. The 20 organisations that shared their views with us either through the questionnaire or the interviews are listed below.

Table 2: Respondents to the survey of the S3 Authorities and other regional stakeholders

Country-Organization	Respondent	Number
Czech Republic	Central Bohemian Innovation Centre	1
Estonia	Ministry of Education and Research	1
Finland	Regional Council of Southwest Finland Regional Council of South Ostrobothnia Regional Council of Päijät-Häme South-Eastern Finland University of Applied Sciences – Xamk	4
Italy	Regione Puglia Regione Veneto Regione Marche	3
Lithuania	Government Strategic Analysis Center	1
Poland	Managing Authority of the Regional Operational Program of the Podlaskie Voivodeship	1
Portugal	University of Algarve	1
Romania	North-West Regional Development Agency	1
Spain	Generalitat de Catalunya Foundation FUNDECYT Scientific and Technological Park of Extremadura	2
France	Region Haute de France	1

²² [Institutions registered in the S3 Platform](#)

Country-Organization	Respondent	Number
Sweden	Region Gavleborg Region Jamtland Harjedalen Region Stockholm	3
The Netherland	Northern Netherlands Alliance (SNN)	1

The aim of the involvement of these representatives was twofold: to open a dialogue on European Partnerships and evaluate the regional authorities' awareness of the R&I Partnership in Horizon 2020 as well as of future Horizon Europe Partnerships; and to retrieve any useful, past experiences on good practices about synergies. In particular, we explicitly asked if the following modalities of cooperation between ESIF and research funds for R&I Partnerships have been implemented or considered for implementation:

- measures implemented for creating in the regional eco-system the pre-conditions for the participation in the EU R&I collaboration such as investments in research infrastructures, training, capacity building etc. for the development and enhancement of R&I capacities ("up-stream" actions²³).
- measures for further take up/deployment of technologies/services 'prototypes developed within R&I Partnerships funded projects ("down-stream" actions²⁴);
- measures for supporting/funding implementing additional activities of R&I Partnerships EU-funded project (such as facilities empowerment, dissemination-communication activities, stakeholders 'engagement, etc.);
- measures for directly supporting or funding R&I Partnership;
- obstacles and barriers encountered in implementing synergies.

The questionnaire tailored for this target is available in Annex 6.4.

²³ (Regulation (EU) No 1303/2013 of 17 December 2013, Annex I, 4.3 – Common Strategic Framework)

²⁴ Ibidem

6.2 Questionnaires for R&I partnerships

Co-programmed (Photonics – EEB)

1. Future partners of PPPs may profit of ERDF funding measures for building pre-condition for their participation in the Partnership, in terms of investments in infrastructures, training, capacity building etc.
2. Can you provide an example of such synergistic use of ERDF?
3. Do you know about any ERDF supporting measures that allowed the further take up/ deployment of technologies/services 'prototypes developed within PPP's funded projects (including closer to the market activities, prototyping, pilot lines, early product validation actions, advanced manufacturing capabilities and first production)?
4. Can you provide an example?
5. Did your PPP realise any demonstrator with a parallel support through ERDF contributions to cPPPs members at national/local level?
6. If yes, please provide an example, and if possible, by quoting the funding measure and the scope of the call
7. To the extent of your knowledge, any of the cPPP members received support/funding from National/Regional ERDF for implementing additional activities such as facilities empowerment, Dissemination-communication activities, stakeholders 'engagement, etc.?
8. Can you provide an example?
9. To the extent of your knowledge, any of the cPPP members received support/funding from National/Regional ERDF for implementing own RTD activities as additional activities to the PPP? If yes, can you provide examples?
10. Did you establish collaboration with regional policies authorities? Considering the cPPP members' contribution, did you take into account the regional S3 and its potential for supporting additional, parallel activities of the associated members that enrich the Partnership offer and or their eco-system? Can you provide an example?

Institutional partnership based on Article 185 with MS (based on EMPIR)

1. Future Partnership may profit of ERDF supporting measures for building pre-condition for their participation in the Partnership, in terms of investments in infrastructures, training, capacity building etc.
2. Can you provide an example of such synergistic use of ERDF?
3. Do you know about any ERDF funding measures that allowed the further take up/ deployment of technologies/services 'prototypes developed within EMPIR funded projects?

4. Can you provide an example?
5. Did any EMPIR member realise/participate to demonstrator's deployment with the further support though ERDF contributions to partners at member states/local level?
6. If yes, please provide an example, and if possible, by quoting the funding measure and the scope of the call
7. To the extent of your knowledge, any of the EMPIR members received support/funding from National/Regional ERDF for implementing additional activities such as facilities empowerment, Dissemination-communication activities, stakeholders 'engagement, etc.?
8. Can you provide an example?
9. To the extent of your knowledge, any of the EMPIR members received support/funding from National/Regional ERDF for implementing own RTD activities as additional activities within the implementation of the Partnership? If yes, can you provide examples?
10. Did you establish collaboration with regional policies authorities? Considering the Partnership members' contribution, did you take into account the regional S3 and its potential for supporting additional, parallel activities of the associated members that enrich the Partnership offer? Can you provide an example?

Institutional partnership based on Article 187 (based on Clean Sky)

1. Future partners of Partnership may profit of ERDF funding measures for building pre-condition for their participation, in terms of investments in infrastructures, training, capacity building etc.
2. Can you provide an example of such synergistic use of ERDF?
3. Do you know about any ERDF funding measures that allowed the further take up/ deployment of technologies/services 'prototypes developed by the JTI funded projects? Can you provide an example?
4. Did your JTI realise any demonstrator with the further support though ERDF contributions to members at national/local level?
5. If yes, please provide an example, and if possible, by quoting the funding measure and the scope of the call
6. To the extent of your knowledge, any of the JTI members received support/funding from National/Regional ERDF for implementing additional activities such as facilities empowerment, Dissemination-communication activities, stakeholders 'engagement, etc.?
7. Can you provide an example?
8. To the extent of your knowledge, any of the JTI member received support/funding from National/Regional ERDF for implementing own RTD activities as additional activities for the benefit of the JTI? If yes, can you provide examples?

9. Did you establish collaboration with regional policies authorities? Considering the JTI members' contribution, did you take into account the regional S3 and its potential for supporting additional, parallel activities of the associated members that enrich the Partnership offer? Can you provide an example?

Institutional partnership based on Article 187 with MS participation (based on EuroHPC)

1. Do you know about any ERDF funding measures that allowed the further take up/ deployment of technologies/services 'prototypes developed by EuroHPC funded projects? Can you provide an example?
2. Did any EuroHPC member realise demonstrators with the further support though ERDF contributions at national/local level?
3. If yes, please provide an example, and if possible, by quoting the funding measure and the scope of the call
4. To the extent of your knowledge, any of EuroHPC members benefited of support/funding from National ERDF for implementing additional activities such as facilities empowerment, Dissemination-communication activities, stakeholders 'engagement, etc.?
5. Can you provide an example?
6. Do you establish collaboration with regional policies authorities and its S3 development process in order to improve local eco-systems? Can you provide an example?

EIT KICs

1. Do you know any ERDF funding measures that supported the implementation of Innovation Community added-value activities, usually funded by the EIT contribution? Can you provide examples?
2. To the extent of your knowledge, any of the KICs members received support/funding from National/Regional ERDF for implementing additional activities such as facilities empowerment, Dissemination-communication activities, stakeholders 'engagement, etc.? Can you provide an example?
3. To the extent of your knowledge, any of the KICs members received support/funding from National/Regional ERDF for implementing own RTD activities as additional activities to the KICs? If yes, can you provide examples?
4. Any of the KICs established collaboration with multiple regional policies authorities /managing authorities for converging funds on a shared strategy (Innovation Community Strategy) for the related sector? Can you provide an example?
5. In creating synergies among EU and Structural funds, which kind of critical hurdles partners faced in the path: information and competences lack or organizational and administrative barriers?

6.3 EOSC Pillar Open Consultation

List of questions

Respondent's information

Name *:

Name of the organisation *:

I am giving my contribution as *:

- Researcher
- Research funder
- Research service provider
- Policy Maker
- Academic institution/University
- Research (and Technology) Organisation
- Company/Business organisation
- Other (Please Specify)

Country of origin *:

In the current Programming Period (2014 - 2020):

1. Did your organisation receive funding from National (NOP) or Regional Operative Programmes (ROP) addressed to support investments in EOSC and Open Science related infrastructures, equipment, e-services?

a. Yes

a1. if yes, please specify:

- European Territorial Cooperation: Cross border (Interreg A) and Transnational (Interreg B) and Interregional (Interreg C) programs
- Horizon Europe
- National and Regional ERDF (NOP or ROP)
- Others, specify

a2. Please, provide the name/s, link(s) and short description of the project(s)

b. No

2. Did your organisation take part in competitive calls launched by NOP - ROP funding research projects (not infrastructure, equipment and services) in EOSC related fields?

a. Yes

a1. If yes, please provide the name/s, link(s) and a short description of the project(s)

b. No

3. Did your organisation receive funding from NOP or ROP addressed to support training, research grants for the empowerment of human capital (ESF)?

a. Yes

a1. If yes, please provide the name/s, link(s) and a short description of the project(s)

b. No

4. Did your organisation take part in competitive calls launched by NOP - ROP funding for e-services provisions to Public authorities in EOSC related fields or EOSC based services?

a. Yes

a1. If yes, please provide the name/s, link(s) and short description of the project(s)

b. No

5. In your experience, which barriers to the combination between European structural and investment funds (ESIF) and Horizon 2020 Partnership Instruments do you envisage?

Barrier	1. not relevant	2	3	4	5. very relevant
a. regulatory barriers					
b. organisational barriers					
c. attitudinal barriers					

Provide the motivations of your choice

If you find any important barriers missing, please indicate which ones, and explain why these are important.

6. Was the production/exploitation of FAIR data an issue of relevance in your funded project/call-for-funding?

a. Yes

a1. If yes, please indicate which ones and explain why

b. No

c. I don't know

7. Do National/regional running funding schemes consider eligible "in-kind contribution" to a Horizon 2020 project?

a. Yes

a1. If Yes, could you outline which costs are eligible for "in kind" calculation (personnel, equipment, goods, services)? How do you calculate your in-kind contribution?

b. No

8. Do you have any additional comments or suggestions for implementing synergies among EU funds?

6.4 Questionnaire to S3 Authorities

1. R&I Partnerships may profit of ESIF supporting measures for building pre-condition for their participation in the Partnership, in terms of investments in infrastructures, training, capacity building, etc. Is this opportunity foreseen in your regional program, and / or are you aware of the fact that there is an intention to foresee it in the next programming period?
2. In the current Regional Operational Program, are there any measure that have allowed the further take up/ deployment of technologies/services 'prototypes developed within R&I Partnerships funded projects? Can you provide an example?
3. In the current Regional Operational Program, are provide any measures supporting/funding implementing additional activities of R&I Partnerships EU-funded project (such as facilities empowerment, dissemination-communication activities, stakeholders 'engagement, etc.)? Can you provide an example?
4. More generally, to the extent of your knowledge, has your organization provided direct support / funding with the national/regional ESIF to implement R&I Partnership activities?
5. Have you established collaboration between regional policy authorities and R&I Partnerships basing on S3 strategy?
6. Do you know if there have been specific synergies (combining the ESIF and R&I Partnerships project EU-funded) implemented taking into account regional S3? Can you give an example?

Below you can find questions related to barriers and obstacles in the implementation of the synergies mentioned above.

- a) Are you adequately informed about the opportunities for regional and national synergies between ESIF and R&I Partnerships?
- b) Based on your knowledge, does your organization have specific skills (eg. legal and administrative competence) to plan and implement synergies?
- c) Do you think implementing synergies could be an opportunity for your organization and would you like to know more? Do you think there are specific barriers / obstacles in the implementation of the synergies mentioned above? Could you please describe it briefly?

6.5 List of acronyms

BBI - Bio Based Industry
CPPP - Contractual Public-Private Partnership
CPR - Common Provisions Regulation
CSA – Coordinating and Supporting Action
EC - European Commission
EIC - European Innovation Council
EIT - European Institute of Innovation & Technology
ERDF - European Regional Development Fund
ESF - European Social Fund
ESIF - European Structural and Investment Funds
EU - European Union
FET - Future and Emerging Technologies
GBER - General Block Exemption Regulation
H2020 - Horizon 2020
HE - Horizon Europe
JTI - Joint Technology Initiative
JU - Joint Undertaking
JU CS2 - Clean Sky2 Joint Undertaking
KIC - Knowledge and Innovation Community
MA - Managing Authority
MFF - Multiannual Financial Framework
MoU - Memorandum of Understanding
MSCA - Marie Skłodowska-Curie actions
NOP - National Operative Programme
OP - Operative Programme
P2P - Public-Public Partnership
PPP - Public-Private Partnership
R&D – Research and Development
R&I – Research and Innovation
ROP - Regional Operative Programme
RIS3 – Research and Innovation Strategies for Smart Specialization Strategies
S3 - Smart Specialization Strategies
SME - Small and Medium-sized Enterprise
SoE - Seal of Excellence

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