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1. Introduction

1.1. Scope of the report: defining trans-regional level

Europe continuously develops and changes. Common challenges shape Europe's growth and have a considerable influence on European possible development paths of different parts of Europe, their regions and cities. In order to tackle common challenges, a number of instruments and initiatives oriented towards the collaboration and coordination of national research and innovation strategies and programmes have been set up. Nevertheless, within the Public-to-public experience the regional aspect has been less analysed, and in particular the question of how to include and capitalize the regional approach within the wider context of the joint programming.

In our analysis, trans-regional level includes all the collaborative and transnational approaches and experiences undertaken at European level having a "regional component". The latter is intended as territorial area characterized by proximity or homogeneous geographic or morphologic and climatic elements, common economic, cultural and social challenges and needs as well as common objectives and strategies especially in the long term perspective. A key aspect is the need to approach development challenges and potentials in a wider geographical context, as in the abovementioned cases appropriate responses require joint approaches across national boundaries.

In our approach, trans-regional level has a broad meaning, taking into consideration: initiatives developed in areas in which the common challenges and opportunities deriving from geographic characterization are the motivation or the main driver for collaborating, including P2Ps actions, ex. Art. 185 and further specific regional initiatives (e.g. Nordfords, DACH); Initiatives and programmes developed in specific areas in which the geographic identity is the "pre-requisite" for collaborating and develop joint programmes (cross-border, transnational and inter-regional, including in particular the Macro-regional strategies); initiatives developed in the context of non-regional P2P problem-based initiatives, stimulating additional pathways focused on regional characterization; further initiatives focusing on intensive use of ESIF and smart specialization and synergies with Horizon 2020 (e.g. Vanguard Initiative).

The concept of "region" used in the analysis goes beyond the "political-administrative" connotation, to embrace the areas (with different actors to be involved, such as regions, provinces, municipalities, public and private entities) pushed by common challenges and opportunities to cooperate and elaborate joint strategies across national/regional borders.

1.2. Objectives

The report analyses alignment across regional programmes and within initiatives developed at regional level. In investigating the alignment possibilities at regional and trans-regional level, we aim at identifying good practice examples and guidelines on how to effectively achieve alignment in different P2P initiatives. Furthermore, the goal of the report is to underline if and how the regional perspective could facilitate the alignment of national research programmes or be an added value to the alignment process.

1.3. Methodology

The methodology adopted includes a desk analysis of a broad perspective of initiatives developed at regional level, the implementation of interviews with representatives of the abovementioned regional initiatives and an additional in depth analysis of a number of them, examined as good practice of alignment at strategic, operational and financial level.

2. *The Regional collaboration in the EU*

2.1. The EU territorial cooperation and regional policy and the Smart Specialisation

The regional policy, at the core of the European policies and EU main investment policy in terms of available budget, aims to strengthen economic, social and territorial cohesion¹. Via the European Structural and Investments Funds, the cohesion policy supports research & innovation².

Within the cohesion policy, the European territorial cooperation³ provides a framework for the implementation of joint actions and policy exchanges towards common goals between national, regional and local actors from different Member States to solve common problems. The transnational cooperation programmes, funded through the European Development Fund (ERDF), allow regions to work together on common issues, including research linkages and innovation.

Within the current programming period, the smart specialization strategy⁴ (RIS3 – Research and innovation strategies for Smart Specialisation) has been introduced as strategic approach to economic development through targeted support for research and innovation. It involves a process of developing multi-stakeholder governance mechanisms, setting strategic priorities and using smart policies to maximize the knowledge-based development potential of a region. Integrated smart specialization strategies respond to complex development challenges by adapting the policy to the regional context.

National/Regional Research and Innovation Strategies for Smart Specialisation are integrated agendas that:

- focus policy support and investments on key national/regional priorities, challenges and needs for knowledge-based development;
- build on each country/region's strengths, competitive advantages and potential for excellence;
- support technological as well as practice-based innovation and aim at stimulate private sector investment;
- fully involve stakeholders and encourage innovation and experimentation;
- are evidence-based and include sound monitoring and evaluation systems.

¹ EU regional policy accounts for € 351.8 billion of the EU budget for 2014-20, out of a total € 1.082 billion.

² The European Structural and Investments Funds (ESIF) include: the European Regional Development Funds (ERDF), the European Social Funds (ESF), the Cohesion Funds, the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries (EMFF).

³ The European Territorial Cooperation (ETC), also known as Interreg, is one of the two goals of the cohesion policy. The main objective of the ETC is to promote an harmonious economic, social and territorial development of the Union. ETC is built around three strands of cooperation: cross-border (Interreg A), transnational (Interreg B) and Interregional (Interreg C). http://ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial.

⁴ Regulation (EU) 1301/2013 of the European Parliament and of the Council of 17 December 2013 is the legal base defining the smart specialization.

The smart specialization facilitates the interregional cooperation and creation of value chains as:

- Emphasizes that creating critical mass at territorial level is essential if the EU and its industries are to be competitive on a global scale;
- Considers that the local and regional authorities are the appropriate location for addressing innovative ecosystems, forging the necessary links between EU policies, industry, research centers, higher education institutions and citizens;
- Considers that it is crucial to have sufficient information and coordination capacity, the ideal outcome of which would be a fully-fledged, coherent system of complementarities, removing inefficiencies arising from duplication and simple imitation.

The smart specialization offers the EU countries to reinvent their R&I strategies while building on their national/regional assets, strengths and potentials. At the same time, countries can improve international, inter-sectoral and public-private collaboration, as well as focus on niche activities to stimulate growth. By developing and implementing Research and Innovation Strategies for Smart Specialisation, EU countries have the opportunity to address challenges, bring expected growth in their regions as well as increase their trans-regional and transnational collaboration.

Smart specialisation is a massive collective effort involving countries and regions in mapping and exploring local strengths and weaknesses in R&D&I capabilities and assessing them within the wider international context⁵. This process involves a large number of local stakeholders that may include foreign operators, such as direct investors or foreign R&D organizations.

The international and trans-regional dimensions are considered a crucial component of the S3. RIS3 is a key part of the EU regional policy, supporting thematic concentration and reinforcing strategic planning and performance orientation.

The smart specialization as an ex-ante conditionality⁶ for using R&I funds represents an opportunity to leverage substantial EU structural and Investments Funds. National and regional authorities shall design their smart specialization strategies so that the European Structural and Investments Funds can be used more efficiently and synergies between different EU, national and regional policies as well as public and private investments can be increased.

2.2. Synergies between Horizon 2020 and structural funds for research and innovation

Research and Innovation are significantly supported by EU programs and initiatives, as Joint Programming Initiatives, ERA-NET cofund instrument, Art. 185 initiatives, Joint Technology Initiatives, European Innovation Partnerships, the European Territorial Cooperation programmes (cross border cooperation, transnational cooperation, interregional cooperation and cooperation outside the EU). A range of instruments can be

⁵ JRC technical report “External dimensions of smart specialization: opportunities and challenges for transnational collaboration in the EU-13”.

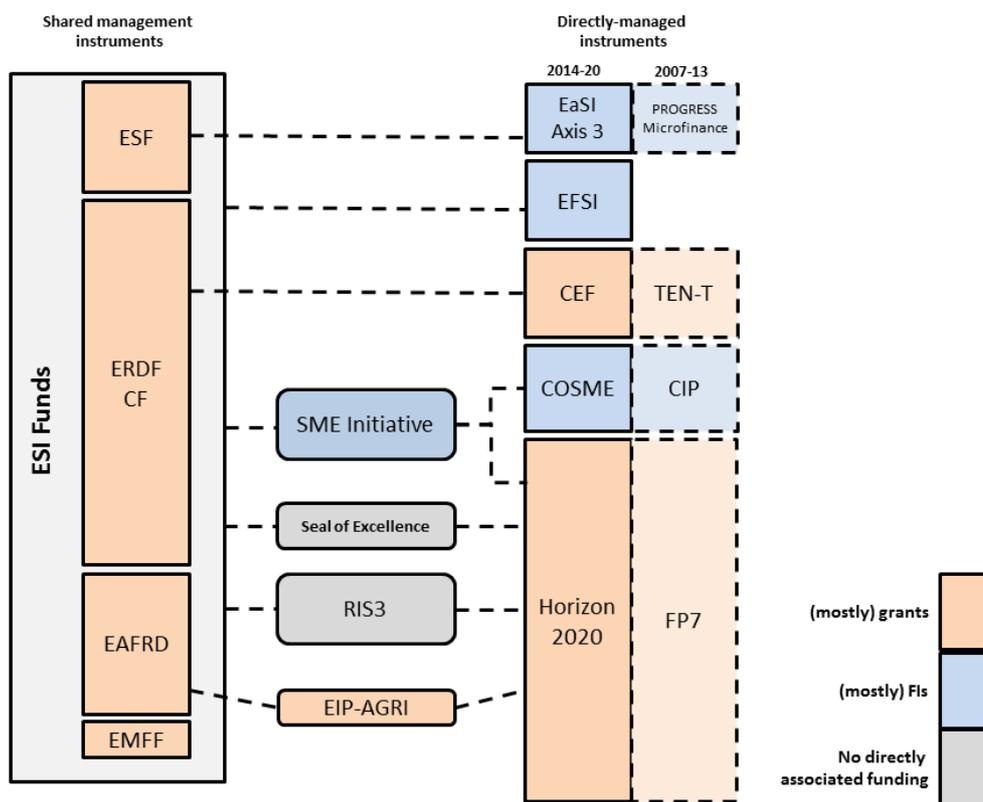
⁶ The RIS3 ex-ante conditionality requires EU member states to concentrate resources on a limited set of research and innovation priorities; outlines measures to stimulate private research, technology and development investment; contains a monitoring and review system; sees a Member State has adopted a framework outlining available budgetary resources for resource and innovation; sees a Member States has adopted a multi-annual plan for budgeting and prioritization of investments linked to EU priorities (European Strategy Forum on Research Infrastructures – ESFRI).

applied in the inter-regional context, and regions can jointly invest in R&I projects, research infrastructures, innovation support services and clusters.

In order to amplify the R&I investments and their impact, the issue of combining different EU funds and of creating synergies among them, in particular Horizon 2020 and European Structural and Investments funds, has become a key point of current and future financial programming.

The ESIF Common Provisions Regulation⁷ emphasized the importance of synergies, encouraging in particular synergies with Horizon 2020, including in design and implementation of the smart specialization strategies. The smart specialization strategies had to explore how to make the most of innovation impacts of H2020 and create synergies with the ESIF. The foundation on which the RIS3 are based goes further the efficient use the Structural and Investments funds, the aim being to generate synergies between regional innovation and development policies and financial instruments, in order to prevent duplication.

Figure 1. Relationships between ESIF and directly-managed EU instruments (source: European Parliament – Research for Regi Committee – Maximisation of Synergies between European Structural and Investment Funds and other EU Instruments to Attain Europe 2020 Goals)



⁷ Regulation (EU) 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006. Text available on <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1303>.

Some examples of synergies have been developed at programming and strategic level, as well as project level. In some cases, synergies have been created thanks to the combination of funding from Horizon 2020 and ESIF or other sources for coordinated parallel actions that complement each other.

Clean Sky2 Joint Undertaking (CSJU), in charge of managing **Clean Sky Joint Technology Initiative (JTI)**⁸ is active in developing close interactions with the European Structural Investments Funds and in underpinning smart specialization efforts in the field of activities covered by the CSJU⁹. Clean Sky JU encourages in particular synergies with ESIF by allowing complementary activities to be proposed by applicants to CSJU calls and by broadening the scope, adding parallel activities or continuing CSJU co-funded project/activities through ESIF in synergy with Clean Sky 2 Programme and its technology roadmap¹⁰. In this perspective, at strategic level, the CSJU has launched an action plan on synergies and is developing close interactions with interested Member States and Regions in Europe to discuss strategies and possible cooperation via a tailored made approach and incorporating modalities depending on the level of interest and commitment which a Region may decide to engage with¹¹. With the overall goal of identifying potential actors, the CSJU is developing a mapping of member states and regions with an interest in engaging into cooperation with the CSJU based on their smart specialization strategies.

The provisional mapping elaborated has demonstrated that many Smart Specializations (RIS3) and Operational Programmes 2014-2020 include aeronautics or areas correlated to the Clean Sky Programme as thematic areas/priorities for ESIF funding¹². To facilitate the abovementioned synergies, the signature of a Memorandum of Understanding (MoU) is used as instrument able to provide a strategic approach as well as the opportunity to discuss in advance with member states and regional authorities' ways to stimulate synergies, based on the regional strategy/RIS3 and the applicable ESIF regional funding instruments which can identify thematic objectives or align the regional funding instruments to support possible pilot projects. So far, CSJU signed thirteen MoUs at national or regional level¹³ and a pilot phase with a number of member states/region has been developed, in view of launching pilot projects and identifying best practices for further member states and regions¹⁴.

In order to foster synergies and drive appropriate mechanisms for cooperation to be adapted to the regional funding schemes envisaged under the Operational Programmes (OP), four scenarios have been identified:

⁸ Clean Sky JTI, established in 2008, is a Public-Private Partnership in the field of aeronautical research between the European Commission and industry. Its mission is to develop breakthrough technologies to increase the environmental performances of airplanes and air transport, resulting in less noisy and more efficient fuel efficient aircraft, hence making a key contribution to achieving the environmental objectives.

⁹ Council regulation 558/2014 of 6 May 2014.

¹⁰ <http://www.cleansky.eu/httpdocs/structural-funds-and-regions>.

¹¹ The aim of such cooperation is to strengthen the R&I innovation capacity and the European dimension of the Regions in aeronautics, to identify areas of technical cooperation which could complement the Programme and support its overall objectives, and to globally achieve a leverage effect from synergies between ESIF and the Clean Sky funding.

¹² http://www.cleansky.eu/sites/default/files/inline-files/CS%20JU%20regional%20mapping_June2017.pdf.

¹³ MoU has been signed at regional level with: Occitanie (France); Andalusia, Catalonia, Castilla La Mancha, Castilla Y Leon (Spain); Campania (Italy); Flevoland and South Holland (The Netherlands); Ostergötland and Vastra Götaland (Sweden); at states level with Romania, Czech Republic and Portugal.

¹⁴ 8 pilot projects have been signed so far. <http://www.cleansky.eu/pilot-casesprojects>

1. Upstream support: Regional ESIF support for developing capabilities/skills/infrastructures of a local entity in view of planned participation to future Clean Sky calls. Clean Sky Joint Undertaking role is to inform the Managing Authority of the expected Programme priorities/roadmap and content of future calls for Core Partners and Call for Proposals.
2. Parallel funding: Applicant to the Clean Sky call (for Core Partners and Call for Proposals) proposing in parallel a complementary and separate set of ESIF activities may be granted ESIF support. Applicants are encouraged to identify upfront the ESIF funding schemes or OP priorities which may be looked at for requesting ESIF support to the complementary activities proposed to the JU.
3. Sequential funding: CS member or partner proposing a continuation/spin-off/amplification of a CS project with ESIF support. During a R&I project development, new ways for technology research, further improvements, higher TRL, complements for reaching a final market uptake, or spinoffs, are always identified. This may be proposed to CSJU for pre-assessment or evaluation and if positive, submitted through the Regional ESIF call.
4. Thematic approach: Region to complement CS Programme through the definition, consistently with its own RIS3 policy, of appropriate areas/themes not addressed in CS but contributing to the overall objectives. Consistently with the Smart Specialisations of a Region, CSJU may propose relevant themes for the regional Calls.

The common principle of all these scenarios, is the “asynchronicity”, implying that there is no try to synchronize calls or funding decisions. CS and Regional procedures/applicable rules will apply respectively to the supported activities.

At project level, synergies and combination of funding have been developed by some **ERA-NETS projects**, as for instance **Manunet III**¹⁵ and **M-ERA.net**¹⁶. In M-ERA.net initiative¹⁷, network of 41 public funding organisations including 29 national and 12 regional organisations from 28 European and non-European countries, a number of participating regions co-funds research and innovation projects by using ESIF. The combination of funding from Horizon 2020 and ESIF is subject to strict rules to avoid double funding for the same cost item, and requires to clearly identify in advance which cost items are supported through which funding instrument. In the abovementioned example, by using ESIF to fund research and innovation projects, EU top up cannot be distributed to these participants.

Up to now some obstacles have been encountered to implement the abovementioned synergies, due in particular to separate regulations and operational rules for funds and instruments, state aid issues, different governance levels and actors involved, no double funding principle between national/regional calls. Specific challenges encountered for the RIS3 implementation concerns the multi-level governance, building trust and commitment, legal and administrative challenges due to complex state aid and funding rules, administrative capacity, limitations in training and mobility, experience and awareness of opportunities and tools. Focusing on the main challenges to link P2P and RIS3, they mainly relate to multi-level governance, the different communities involved in P2P and RIS3, different actors involved, in particular different national ministries/regional authorities dealing with structural funds/RIS3 and with JPIs/national research funding, lack

¹⁵ <http://www.manunet.net/>.

¹⁶ <https://m-era.net/>.

¹⁷ M-ERA.net started in 2012 under FP7 scheme and was funded as ERANET cofund instrument under Horizon 2020 programme.

of national budget for participation in JPIs and difficulties in using structural funds for Joint programming, different types/role of regional managing authorities.

2.3. The EU Macro-Regional Strategies concept and experience

In line with the joint programming approach to pool national research efforts to tackle common grand challenges, at regional level there is an increasing demand for joint approaches to common development challenges. The Macro-regional strategies give emphasis on the need to approach development challenges and potentials in a wider geographical context.

In terms of alignment at trans-regional level, the Macro-regional strategies are in particular intended to foster the alignment of strategies and of resources and the coordination between different stakeholders in order to address common challenges in a defined geographical area.

The specific objective of the Macro-regional strategies is to establish a framework to address common challenges and deficiencies in governance structures to ensure that a range of strategic actions to tackle the challenges are implemented in the most efficient, effective and coherent way.

A key point made by the Macro-regional Strategies is the principle of “no new funding”, implying that no own budget has been allocated to the strategies. This principle requires the alignment of funding from existing sources (the European Union, national, regional and/or local) and more efficient use of available funding to the jointly agreed actions and projects. The strategies must be supported by European structural and Investment Funds as well as other EU policies and funding instruments and/or international financial institutions. The transnational cooperation programmes (as for instance the Danube Transnational Programme and the Baltic Sea Region Programme¹⁸) are funding instruments contributing to the realization of EU policies and strategies, including macro-regional strategies. The concept of alignment of funding calls for a joint overview of priorities and optimization of funding by pooling resources, cooperation and effective coordination between programmes and funding instruments.

Focusing on the political and administrative level, the Macro-regional strategies aim at introducing, at regional level, integrated governance approaches, in order to tackle the need for better coordination and increase the effectiveness and efficiency of policy making. Without creating new institutions, they offer a new integrated approach to finding more efficient policy modalities and better coordination among existing institutions, as they are to be supported by a multi-level and multi-actor governance approach. The strategies have created working structure around priority areas, selected in a bottom-up process of consultation, with political leadership in each area taken by participating countries, regions or organisations, supported by the European Commission. The added value of the macro-regional strategies is this pragmatic approach that provides a platform for bringing together various actors, policies and financial resources towards common objectives. A key aspect of the multi-level coordination is the development of thematic orientations of a macro-regional strategy. The strategies focus on themes identified in a “bottom-up” process, where various consultations process and in particular national representatives play an important role. The basic idea is that macro-regional strategies work on issues which are perceived as common and important to the participating countries. The Macro-regional strategies have the ambition to align various existing policies and funds

¹⁸ The Interreg Baltic Sea Region programme funds come from the European Regional Development Funds (ERDF), the European Neighbourhood Instrument (ENI) and Norwegian national funding. <https://www.interreg-baltic.eu>

around the regional challenges, and they have the potential to mobilize a wide range of stakeholders and create a shared ownership.

The strategies can influence the respective priorities from each regional development plan for a European macro-region, contributing to create comprehensive synergies within an integrated approach. The macro-regional approach can effectively work if a strong cooperation between regional, national and local levels is set up to plan together and align funding.

The added value of the macro-regional strategies relies to both strategic, funding and operational level. Considering the strategic level, macro-regional strategies offer a strategic framework of objectives and priorities of a particular region. This is based on the specific challenges which are relevant to the respective macro-region and help projects to define and link their objectives, as well as programmes to align their objectives.

At funding level, macro-regional strategies can contribute to a better alignment of funding, to approach macro-regional challenges and opportunities in a more coordinated way, going beyond the funding possibilities of single programmes. Though the “No new funding” principle might be seen as a weakness, it seems to constitute an innovative factor, given that all actors are stimulated towards a greater degree of coordination and synergies of the various financial resources available at different levels. The purpose is to use existing funds more effectively and in a more coordinated way.

Focusing on the operational level, macro-regional strategies offer a structure for projects to increase their networking opportunities, to share their knowledge and experience, increase the project results’ visibility and dissemination and the capitalization of project results. They can contribute to develop projects which are more relevant within the programme objectives as well as to provide support to higher quality projects.

As far as the territorial cooperation is concerned, the European territorial cooperation programmes and projects can benefit from the cooperation within the macro-regional context. The alignment of strategic research and innovation roadmaps, in which the smart specialisation could play an important role, could facilitate the transnational R&I cooperation. Several priority areas and activities identified within the EU macro-regional strategies have some related activities in the planned national/regional R&I activities. Consequently, better and closer alignment among regional/national R&I priorities to be supported through the ESIF financing in the territorial cooperation countries/regions and the priority areas at the respective macro-regional level would help the transnational cooperation. Furthermore, being supported at higher political level, the macro-regional strategies involve key actors on a specific thematic field, that are not always reached by the territorial cooperation.

Currently there are four EU macro-regional strategies in place¹⁹, the European Union Strategy for the Baltic Sea Region (EUSBSR)²⁰, the European Union Strategy for the Danube Region (EUSDR)²¹, the European

¹⁹ In addition, there are proposals and debates on the creation of strategies for other macro-regions, in particular for the Carpathian Region, the North Sea, the Black Sea, the Western and Eastern parts of the Mediterranean Sea and the coastal region of the Atlantic Arc.

²⁰ The EUSBSR is the first Macro-regional strategy adopted in 2009. The strategy involves eight EU member states, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden, as well as EU neighbouring countries (Norway, Belarus, Iceland and Russia). The strategy has three objectives: save the sea, connect the region, increase prosperity. More information on www.balticsea-region-strategy.eu.

Union Strategy for the Adriatic and Ionian Region (EUSAIR)²² and the European Union Strategy for the Alpine Region (EUSALP)²³. These strategies rely on actions, processes and projects that help achieve their objectives. As they do not have their own resources, they rely on processes and projects which either do not require funding or are funded by a variety of funding sources, such as Interreg programmes, ESIF, EU managed programmes or others.

A practical example of the contribution of macro-regional strategies to develop projects which are more relevant within the programme objectives is the **seed money facility**. The seed money facility is funding provided by the Interreg programme to support the preparation of projects that contribute to one of the priority areas and explicitly addressing the challenges listed in with the Action Plan of the respective EU Strategy. With seed money, support projects can be prepared for any EU or national funding source available in the region, e.g. the European Structural and Investment Funds programmes. The seed money facility has been applied by the EU strategy for the Baltic sea region²⁴ and the Strategy for the Danube region²⁵, embedded also in the regional programmes concerning these areas.

The macro-regional strategies intend to develop coordinated policies and actions, enhancing closer cooperation within the concerned territory. In the long-term perspective the macro-regional strategies can thus contribute to align strategies and funding. In the meanwhile, some good practices have been developed.

Within the Danube region, at strategic level, Slovakia decided to align all national support to research and development with the priorities defined by the macro-regional strategy and provide additional support to R&D projects having transnational or macro-regional perspective. The EUSDR targets on inland waterways have been included in the Austrian Master Plan for Transport²⁶.

Romania and Bulgaria agreed to work together and share equipment on the Danube waterways by signing a Memorandum of Understanding (October 2012). In particular, an Inter-Ministerial Committee for Sustainable Development of Inland Waterways Transport on the Romanian-Bulgarian common sector of the Danube was

²¹ The EUSDR was adopted in 2011. It involves nine EU Member States, Austria, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Romania, Slovakia and Slovenia, as well as five non-EU Member States, Bosnia-Herzegovina, Moldova, Montenegro, Serbia and Ukraine. The Strategy is organized in four pillars: connecting the region, protecting the environment, building prosperity and strengthening the region. More information on www.danube-region.eu.

²² EUSAIR was adopted in 2014. Four EU MS are involved, Croatia, Greece, Italy and Slovenia, and four non-EU countries, Albania, Bosnia-Herzegovina, Montenegro and Serbia. The Strategy is organised under four pillars: Blue growth, connecting the region, environmental quality, sustainable tourism. More information on www.adriatic-ionian.eu.

²³ EUSALP was adopted in 2015. The strategy concerns 5 EU MS, Austria, France, Germany, Italy and Slovenia, and 2 non-EU countries, Liechtenstein and Switzerland. The strategy has four objectives: economic growth and innovation, mobility and connectivity, environment and energy, cross-cutting policy area – governance, including institutional capacity. More information on www.alpine-region.eu.

²⁴ In the EU strategy for the Baltic sea region, the seed money applications are evaluated by the Seed Money Committee, composed of members of the Interreg Baltic Sea Region Committee and EUSBSR Policy Area and Horizontal Action Coordinators. The final selection of projects is done by the Monitoring Committee of the Programme. The seed money funding is granted for a period up to one year, as it is intended to support the projects in their initial phase. More information available at <http://seed.eusbsr.eu>.

²⁵ Seed money facility START Danube Region, www.danube-capacitycooperation.eu/start-overview.

²⁶ Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2013) 468 final.

developed, based on this Memorandum. The committee adopted a joint Action Plan for improving the navigation conditions of the river.

In the Baltic area, the Nordic health and life science innovation strengths, that has been expanded to the Baltic context by the project ScanBalt Bioregion, are taken up in the Estonian strategy for biotechnology.

In terms of alignment of funding, a “Danube Region Research and Innovation Fund” (DRRIF) has been launched as a flagship project to identify, mobilize and distribute funds. Furthermore, a DRRIF working group has been set up to enhance and accelerate the implementation of the goals of the Strategy for the Danube Region and to better coordinate national, regional and EU funds to stimulate excellence in research areas specific for the region.

In the Baltic region, the available resources have been concentrated on higher-level priorities, with Sweden and Finland which have mobilized own resources to implement initiatives in the framework of the Baltic Macro-regional Strategy.

The experience of the Macro-regional strategies represents an EU added value in the following terms:

- ✓ Provides strategic orientation for prioritizing thematic area and areas of common needs and offering a strategic framework for programmes to shape their priorities with the overall macro-region. This has been already recognized by Interreg and funding sources such as Horizon 2020, TEN-T and Life programme. It can also be a potential added value for ESIF funded programmes.
- ✓ Easier alignment of funding EU-wide programmes. The strategies ask to pool resources addressing macro-regional needs and consequently can create a stronger higher level than what could be done by a single programme.
- ✓ Easier alignment of thematic and specific objectives of ESIF programmes and for ESIF implementation partnerships through already existing strategic objectives in the macro-region.
- ✓ Easier consensus in defining programme priorities and objectives between different actors. Macro-regional strategies help in building easier consensus on the programme objectives and facilitate the decision on the programme priorities. This added value is stronger for Interreg and other funding sources outside ESIF (Horizon 2020, Life programme,...), but it has also been acknowledged by ESIF regional programmes.
- ✓ Potential for coordination across programmes and enhanced link between ESIF, Interreg and EU wide programmes²⁷.

In the perspective of the P2P, the Macro-regional strategies approach has similarities with the Joint Programme Initiatives under several aspects:

- Address common challenges: Macro-regional strategies are built to join forces to approach common challenges relevant to the specific geographical area. Differently from the JPI, the challenges are specifically relating to the macro-region.
- Coordination of policies and strategies: Macro-regional strategies are integrated frameworks which allow EU and Member states to identify needs and match them to available resources, through the coordination of policies. They can thus contribute to the alignment, at broad regional level, of strategies and policies.

²⁷ Interact, Added value of macro-regional strategies – programme and project perspective, Final report study, February 2017.

- More efficient funding: Macro-regional Strategies consider how to mobilise relevant existing funding sources and use them more efficiently. They can potentially increase synergies and funding opportunities, with regional and national programmes. As ultimate goal, the macro-regions, are intended to contribute to the alignment of funding at regional level.
- Transnationality: Macro-regional strategies offer at regional level a new framework for approaching common regional challenges and potentials, which cannot be solved by the countries independently.
- Stakeholders involvement: The macro-regional strategies governance frameworks rely on a wide range of stakeholders, that are committed in the long-term perspective.

These similarities can pave the way for the creation of strategic synergies and join forces to address shared territorial or global challenges. Macro-regions foster the greater cooperation between states and regions. This can be fundamental to support the larger involvement of regions in P2P initiatives.

Macro-regions are a stable and long term commitment to tackle challenges and make the most of opportunities that can be handled better through cooperation. Due to the growing attention to regional challenges and opportunities, the Macro-regional strategies can become a driving force for defining and implementing shared priorities via various actions, programmes and projects. As such they have a wider regional impact and may become catalysts for cooperation in the wider region. Yet, on an overall level there is a need to closer align the Strategies with the National/regional policies and to other strategies and policies. Macro-regional strategies need in particular to capitalize on the added value they can offer to processes, projects and programmes.

3. Good practices and key factors of success of regional initiatives in terms of alignment

Instruments and initiatives oriented towards the collaboration, coordination and alignment of R&I national strategies and programmes have been developed over the past years to tackle common challenges and strengthen European competitiveness. Among these initiatives, Public to Public Partnerships (P2Ps) aim at coordinating and fostering collaboration between national/regional research and innovation strategies involving varying degree of cooperation and joint efforts. They span from the closest integration via the setting up of joint programmes (Art. 185 initiatives), to Joint Programme Initiatives (JPIs) developing common visions and Strategic Research Agendas to address great societal challenges to joint calls and other joint activities (ERA-NET instrument). Among initiatives tackling major common societal challenges, specific initiatives have been developed in the context of regional collaboration, focusing on particular geographic areas or proximity, or having regions as main actors of the collaboration. The regional characterization has been the main driver for collaboration among national/regional actors in some experiences, the pre-requisite for developing common initiatives to tackle common challenges in other experiences. Furthermore, regions are becoming more and more active in joint initiatives and play a fundamental role in smart specialization strategies and in possible synergies between ESFI and Horizon 2020.

A number of initiatives developed at regional level attained important results towards the alignment of national/regional R&I programmes and can be taken as good practice examples for further initiatives at regional and non-regional level. Specific case studies have been drafted on seven initiatives developed at regional level. Each case study is available on ERA-LEARN 2020 website (<https://www.era-learn.eu/alignment/trans-regional-perspective>).

The main achievements of these initiatives and their added value in terms of alignment are summarized in the following paragraphs.

3.1. Collaboration on strategic and programme level based on proximity models facilitated by common historic, political and cultural background or further similarities

Common historic, cultural and political background and similarities are fundamental aspects that lead to a high degree of mutual trust and can pave the way for a close collaboration in research and innovation. This is the case of the Nordic Countries, where the specific context and the peculiarities of the Nordic region favour the setting up of mechanisms promoting the alignment of national programmes and activities. The formal cooperation and the instruments set up under the Nordic cooperation has proved to be one of the most ambitious comprehensive regional cooperation initiatives developed in Europe. **NordForsk**²⁸ is a good practice in establishing, in regions with long tradition of “trust-based cooperation”, an *ad hoc* organisation providing funding for and facilitating cooperation in research and research infrastructures. It is a best practice example of alignment of funding thanks to the extended use of the true common pot and can thus provide important lessons for public-to-public collaboration to be developed at regional level. On the other hand, the relatively narrow number of countries involved facilitates, compared to the wider European level, the introduction of strict form of collaborations, in particular the establishment of common institutions and the use of common-pot funding mode.

Of particular value of the Nordic cooperation in research and innovation is the ability to build, via the established structures and in a short period of time, common-pot funded research collaboration based on national priorities. The main benefits of using the common pot relies on fostering excellence in research, by allocating funding to best projects, regardless of how much each country has contributed to the pot until the budget has been used up. This allows the optimal use of the available budget maximising the number of projects to be funded. The peculiar element of this regional initiative can be summarised by the concept of trust. This trust is linked to the fact that in the Nordic region there are a Nordic cultural community, similar prioritisation and a sort of common identity, which facilitate the process towards creating joint programmes or common pot schemes. The most important achievement of NordForsk concerns the extended use of the real common pot, fostering the alignment of funding. This mechanism was successfully developed in joint programmes as well as large-scale initiatives like the Top-Level Research Initiative. The real common pot approach, compared to other funding modes, is the optimal option to fund excellent research and best projects while ensuring full spending of the allocated budget.

The mutual trust among the countries involved seems to be a pre-requisite for an extended and effective use of this instrument, especially when large joint programmes are concerned. Focusing on the regional perspective, cooperation among countries having similar background is fundamental to create a critical mass to reach best results in research and innovation and meet common challenges, especially grand challenges. The real common pot mode has bounding conditions that make it easier to adopt it in regional, bi-lateral or tri-lateral cooperation. The establishment of common and joint structures to adopt and manage joint programmes and initiatives is needed for an effective and efficient regional cooperation.

²⁸ Alignment at Trans-regional Level Case Study N.1, “The Nordic Research Collaboration – NordForsk, available at <https://www.era-learn.eu/alignment/trans-regional-perspective>.

Shared vision and similar funding procedures among research funding agencies of Germany, Austria and Switzerland led to the adoption of the “Lead Agency Procedure”, via the **DACH Agreement**²⁹. The DACH Agreement, signed in 2008 between the German Research Foundation Deutsche Forschungsgemeinschaft (DFG), the Austrian Science Fund (FWF) and the Swiss National Science Foundation (SNSF) relates to the mutual opening of the respective funding programmes with the objective to simplify the execution of cross-border research projects. Simplification is achieved by making one of the funding agencies the only responsible of evaluation process of the transnational projects – “Lead Agency” process.

The DACH Agreement, and the related Lead Agency Procedure, is a concrete and successful example of cooperation at trans-regional level which represents a good practice in implementing inter-operability and creates a basis for the alignment at operational level.

The basic principle of the Lead Agency Procedure is that the Research Funding Organisations (RFOs) from two or more countries engage in a cooperation in which one of the RFO involved takes the leading role. The Lead Agency is in particular in charge of carrying out the review process and making recommendation on application approval. Transnational and collaborative applications are evaluated by a single organisation – the Lead Agency. Positive funding decisions from the Lead Agency are accepted by the partner organisations, who then finance the project applicants of the respective country. The procedure implies that the role of the Lead Agency is in principle up to the agency located in the country in which the requested funding is higher. Each partner organisation, while acting as Lead Agency, will follow its own national rules for reviewing the projects.

This mechanism was successfully introduced and implemented because the three funding agencies share the same vision and follow, in their funding procedures, the same guiding principles: fund excellence; investigator driven research; fund excellence regardless the scientific discipline and topic.

The main benefits of the Lead Agency Procedure are:

- No need for double or distributed evaluation: funding decisions are made by the Lead Agency and then accepted by the partner organisations. This also reduces bureaucracy for the projects applicants and the administrative burden and costs for the agencies.
- Greater continuity through a long-lasting cooperation via the Lead Agency Agreement, considering that the Lead Agency Process foresees the possibility to change the role of RFOs on the basis of each specific joint call.
- Fund the best research from all disciplines.

Furthermore, the adoption of common submission and evaluation procedures, using the scheme of Legal Agency Procedure can concretely foster and strengthen cooperation among Joint Programming actors, with particular reference to the implementation of joint research calls.

The already existing cooperation among RFOs of the countries involved (D, A and CH) was at the beginning a key element for the development of the DACH Agreement, facilitating the implementation of the Lead Agency Procedure. Nevertheless, the Lead Agency Procedure represents a valuable example of inter-operability and an appropriate framework for the identification of good practices and mutual learning exercises amongst RFOs, with a high degree of replicability. The efficiency and replicability of the mechanism is confirmed by the number of Lead Agency Agreements signed between Research Funding Organisations within and outside Europe, which has considerably grown over recent years.

²⁹ Alignment at Trans-regional Level Case Study N 6 - The DACH Agreement and the Lead Agency Procedure, <https://www.era-learn.eu/alignment/trans-regional-perspective>.

3.2. Regional initiatives and programmes set up to tackle common geographical challenges – problem-based models

A number of regional initiatives stem from the common challenges and opportunities linked to a particular geographical and territorial area, such as the Baltic region, the Danube region and the Mediterranean sea area for the BLUEMED initiative and PRIMA.

Initiatives adopted ex Art. 185 of the Treaty on the Functioning of the European Union (TFUE) represent the closest integration of national and EU programmes, enabling the EU to participate in research programmes jointly undertaken by several Member States as well as in the structure created for the execution of the joint programmes.

Among the art. 185 initiatives, the joint **Baltic Sea research and development programme (BONUS)**³⁰ grounds on a regional perspective. The initiative was built by eight Participating States - Denmark, Germany, Estonia, Latvia, Lithuania, Poland, Finland and Sweden – which have been involved over the years in the Baltic sea Region Programme, addressing most of the relevant problems and gaps related to innovation, intermodality and eutrophication of the Baltic sea region³¹.

The Baltic region, which re-emerged as a transnational macro-region after the fall of the iron curtain and the subsequent geopolitical changes that followed in its wake at the beginning of the 1990s, went on to reinvent new tools, ways and methods of collaboration around common challenges. The foundation of VASAB – Vision and Strategies around the Baltic Sea – was of the early initiatives laying the groundwork for further cooperation on spatial development issues between 11 Baltic states, including non-EU Member States like Norway, Belarus and the Russian federation. Since then, a voluntary approach to cooperation between the national ministries in charge of spatial development oversaw the challenge of developing a common framework allowing national spatial development policies to promote transnational cooperation between regions and cities. Thanks to the possibilities offered by EU Cohesion and Neighbourhood policies, the cross-border dimension was emphasised as well as the need for greater interaction between the Baltic Sea Region Programme (BSR) and the neighbouring regions and within the BSR itself. The cooperation process in the region developed in parallel with DG Regio, which started to prepare an EU Strategy for the Baltic sea Region and BONUS, the Joint Baltic Sea research and development programme, as a Treaty on the Functioning of the European Union (TFUE) Article 185 activity. Since its inception in 2007, BONUS has built a unique, macroregional collaboration of research and innovation funding institutions that supports sustainable development of the Baltic Sea ecosystem services through research and innovation. BONUS is considered an EU-wide pioneer in creating a macroregional governance network for research and innovation and a forerunner in testing many of the principles now implemented in Horizon 2020 such as pursuing challenge-oriented interdisciplinary research, bringing closer science and innovation and involving stakeholders across multitude of sectors in all phases of the programme. Its main aim is to overcome research fragmentation by integrating national programmes into a single centrally managed programme

³⁰ Alignment at Trans-regional Level Case Study N.2 – BONUS. <https://www.era-learn.eu/alignment/trans-regional-perspective>.

³¹ The Baltic Sea Region Programme is one of the European Territorial Cooperation programmes focusing on regional development and cooperation of the involved countries around the Baltic Sea.

which will more effectively provide solutions supporting sustainable development, effective and long-term management and policy that is “fit-for-purpose” and based on sound scientific knowledge derived from multidisciplinary research.

BONUS programme has enabled participating countries to achieve strong alignment at strategic and operational levels, thanks to: i) the elaboration of a common vision and Developing a Strategic Research Agenda; ii) the improvement of a research capacity across Europe thanks to joint training and capacity building activities for participating researchers and the sharing of national research infrastructures; iii) a better visibility and dissemination of research data at European and international level; iv) the intensification of cross-border cooperation with various European initiatives in the Baltic region and the cooperation with non-European Countries.

As art. 185 initiative, BONUS seeks to integrate national research programmes and requires integration at managerial level (through a dedicated implementation structure – DIS); scientific level by the establishment of central programming and a common excellence-based evaluation; financial level which may be achieved through a “common pot” that pools Participating States’ and EU funds and common funding rules. As initiative having a regional approach, the programme also plays a key role in fostering joint programming within the EU as well as with the international actors involved in the relevant research and innovation arena of regional seas, including funders, academia, industries and public governance institutions. At the same time, it supports EU macroregional and sea-basin strategies and can contribute to build the EU marine and maritime research and innovation area³².

In terms of alignment, BONUS programme main achievements relates strategic, funding and operational levels. At strategic level, the programme fostered the cross-border cooperation and synergies with initiatives at EU level, in particular EUSBSR and JPI Oceans. In its efforts to broaden the cooperation with various regional initiatives, BONUS attempts to align to the European Union Strategy for the Baltic Sea Region (EUSBSR)³³ by fostering a better cooperation and more efficient use of new knowledge and coordination of funding. Aligning the funding in the context of the EUSBSR becomes possible when the objectives of the EUSBSR coincide with the one or several of the themes derived from strategic objectives included in the BONUS strategic research agenda³⁴. Within the ongoing funding scheme (BONUS programme 2012-2017),

³² BONUS programme. Since signing in 1974 the Convention on the Protection of the Environment of the Baltic Sea Area a vast number of other Baltic Sea regional collaborations with relevance to sustainability have also emerged. BONUS works closely with and contributes to a number of key European, regional and national programmes including a wide array of different actors on varying levels and capacities. The two central intergovernmental organisations of the region: HELCOM and Visions and Strategies around the Baltic Sea (known as VASAB) lead together the development of coherent maritime spatial planning of the Baltic Sea. In parallel, a considerable number of networks and collaborations, such as the Council of the Baltic Sea States (CBSS), Baltic Sea Parliamentary Conference (BSPC), Baltic Sea States sub regional Cooperation (BSSSC), Baltic Sea Forum, Baltic Development Forum (BDF) and Baltic Sea Action Group have been established, all aiming at facilitating the implementation of the environmental and sustainability objectives.

³³ The European Union Strategy for the Baltic Sea Region (EUSBSR) is the first macro-regional strategy in Europe. It aims at reinforcing cooperation within this large region in order to face several challenges by working together as well as promoting a more balanced development in the area. The Strategy was approved by the European Council in 2009 following a communication from the European Commission. In this respect, it provides an integrated framework for improving the environmental condition of the sea, transport bottlenecks and energy interconnections as well as facilitating the development of competitive markets across borders and common networks for research and innovation.

³⁴ Eight out of the fifteen priority areas are clearly within the scope of BONUS (1, 2, 3, 4, 5, 9, 13 and 14) while priority area 7, exploiting the full potential of the region in research and innovation is, fully aligned with the core objective of

a good example of the alignment and coordination of funding is the BONUS call 2012: Innovation, organized in collaboration with the EUSBSR flagship project “BSR Stars” and bringing innovation funding agencies of the participating countries to a joint funding cooperation. As a result, a total of 13 innovation projects now implement the objectives common for both the EUSBSR and BONUS and cover three key themes of the BONUS strategic research agenda with the co-funding by 13 different funding agencies in the eight Baltic Sea states and the EU’s Seventh Programme for research, technological development and demonstration. BONUS is in synergy with and complement within geographic and thematic scope of the key strategic objectives Joint Programming Initiative “Healthy and Productive Seas and Oceans”³⁵. In the perspective of capitalizing R&I outcomes while avoiding duplication of efforts, BONUS and JPI Oceans governing bodies³⁶ established a Joint Working Group in charge of aligning the strategic research and innovation agendas of both programmes and developing concrete mechanisms of coordination of the implementation plans. At operation level, BONUS effectively increased the collaboration with Russian federation agencies, signing several memoranda of understanding. Under the terms of these agreements, the Russian funding agencies undertake to financially support a Russian participant within a BONUS project if it is positively evaluated by both the Russian body and BONUS. The Russian funding agencies finance the Russian participants with own budget on the basis of the virtual common pot. Finally, BONUS peculiarity is the provision of allocating up to 25% of the EUR 50 million national contributions towards BONUS which may be provided as in-kind infrastructure contributions free of charge to BONUS beneficiaries. The provision of in-kind infrastructures is beneficial to Participating States and the related National Funding as reduces the national cash contributions and per se creates added value and increases the efficiency of the limited resources towards research within the Baltic Sea countries³⁷.

In recent years, the challenges and opportunities concerning the Mediterranean Sea region and its peculiarities have reached growing attention. Two main initiatives have been developed: **Blue Growth research and Innovation Initiative for the Mediterranean - BLUEMED Initiative; Partnership for Research and Innovation in the Mediterranean Area – PRIMA**³⁸.

BONUS to “integrate the Baltic Sea system research into a durable, cooperative, interdisciplinary, well integrated and focused multinational programme in support of the region’s sustainable development” (BONUS, 2010).

³⁵ The Joint Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans) was established in 2011 as a coordinating and integrating strategic platform, open to all EU Member States and Associated Countries who invest in marine and maritime research. JPI Oceans covers all European sea basins with 21 participating countries and provides a long-term integrated approach to marine and maritime research and technology development in Europe.

³⁶ The Joint Working Group was established by the BONUS Steering Committee and JPI Oceans Management Board.

³⁷ The BONUS Programme listed an inventory with all the facilities (the research ships, field stations and advanced computing facilities) potentially available for the applicants to BONUS calls. Due to national differences concerning organisation of access to large infrastructures, the ‘infrastructure provider’ may in this context be the owner of the infrastructure, or the body administrating or granting the right to use a large infrastructure free of charge for the benefit of the BONUS projects. The national authorities provide research infrastructures to applicants and the use of them is subordinated to a bilateral agreement between a national infrastructure providers and BONUS EEIG.

³⁸ The Partnership for Research and Innovation in the Mediterranean Area – PRIMA consists of 19 participating countries: Algeria, Croatia, Cyprus, Egypt, France, Germany, Greece, Israel, Italy, Jordan, Lebanon, Luxembourg, Malta, Morocco, Portugal, Slovenia, Spain, Tunisia and Turkey. The main goal of the ten-year initiative (2018-28) is to devise new R&I approaches to improve water availability and sustainable agriculture production in the Mediterranean Region. The PRIMA programme, that will be launched in January 2018 as Art. 185, will be financed through a combination of funding from participating countries and contribution from the EU through Horizon 2020.

<http://www.prima4med.org/>

The **BLUEMED initiative**³⁹ is the result of the efforts of 9 EU member states bordering the Mediterranean sea (Cyprus, Croatia, France, Greece, Italy, Malta, Slovenia and Spain, plus Portugal), to foster a sustainable blue growth in the Mediterranean sea area⁴⁰. Its final goal is to contribute to align or integrate the funding strategies, R&I funds and infrastructures at regional, national and EU level, by avoiding duplication, improving the effectiveness in the use of resources and maximizing the leverage effects. The unique feature of this regional initiative relies on the collaboration initiated by EU Mediterranean countries at political level and developed informally, without the support of a defined organisational structure. The adoption of a common vision and common strategic research priorities is a key factor to foster the alignment of national/regional research programmes. The BLUEMED initiative elaboration of the Strategic Research and Innovation Agenda grounded on the strong political endorsement and ownership of the countries involved. This strong commitment characterizes the entire process driving from the initiative set up to the adoption of the SRIA⁴¹. It relies on the effective and efficient collaboration among the delegates, started and continued informally without the support of a dedicated organisational structure, based on strong political mandate, mutual trust and shared vision on the need to define a common approach to R&I in the Mediterranean. The SRIA, officially adopted in October 2015 in Venice, reflects the agreement on long term R&I priorities and strategies needed to face common great challenges concerning the specific area of the Mediterranean Sea. In the Venice Declaration, the Countries agreed to coordinate and integrate efforts to implement the BLUEMED SRIA by actively promoting synergies and complementarities among all the involved stakeholders at local, regional and national level, as well as among Member States at European level, in order to provide added value to regional, national and EU investments by removing barriers, avoiding duplication and reducing fragmentation⁴².

BLUEMED represents a good practice of alignment at strategic level, involving from one side the EU Mediterranean Countries, who committed at political level to adopt common research priorities and strategic agenda, and from the other side, the European Commission DG RTD and MARE, which facilitated and supported the process, with the continuous involvement of the regional, national and European stakeholders in the process. At funding level, the initiative developed to mobilize regional, national, macro-regional and EU existing funding and to channel future R&I funding. It is a good example of alignment of research and

³⁹ Alignment at Trans-regional level Case Study N. 7 – The BLUEMED initiative. <https://www.era-learn.eu/alignment/trans-regional-perspective>.

⁴⁰ The process driving to the development of the BLUEMED initiative started informally in 2014 within the Horizon 2020 Programme Committee on Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research, and Bioeconomy (so-called Societal Challenge 2 - SC2) meetings.

⁴¹ From February 2015, the Countries participating in the process, on the basis of the mapping and the Vision document, started picking up the specific research and innovation priorities. Following the approach used in all the previous steps of the process, the abovementioned priorities were shared at national level and afterwards at European level with relevant stakeholders. By April 2015 the Strategic Research and Innovation agenda was finalised. In October 2015, the BLUEMED SRIA was published and officially presented to the EU Ministers for R&I and education in Venice for political endorsement. The SRIA was signed by 10 countries (Cyprus, Croatia, France, Greece, Italy, Malta, Portugal, Romania, Slovenia and Spain) which agree to coordinate and integrate their efforts to implement the SRIA.

⁴² In the Venice declaration the Countries committed in particular to: promoting the cooperation in research and innovation between all Mediterranean countries; engaging with public and private stakeholders, including small and medium enterprises, in R&I actions of cooperation; supporting knowledge-based policy making; prioritizing the implementation of cross-cutting actions with high societal impact; ensuring the effective and efficient use of resources and infrastructures by Member States cooperation and joint actions; developing innovative sea-related competences, particularly at technical, doctoral and first stage researchers level.

innovation funding on the identified and shared priorities. This is an ongoing process that will explain its full impact and potential in the forthcoming years, as the smart specialisation strategies under revision at national, regional and macro-regional will take BLUEMED priorities into account.

The BLUEMED initiative process originates from the need to address the blue growth issues concerning the Mediterranean and its unique features. In order to face the common challenges and define effective responses to natural and anthropogenic pressures of the Mediterranean Sea and promote its blue growth, a macro-regional approach was necessary.

With the final objective to contribute to align funding strategies, R&I funds and infrastructures in the Mediterranean at regional, national and EU level, BLUEMED initiative has been developing an intensive dialogue and collaboration with EU macro-regional and trans-national initiatives, in particular the European Strategy for the Adriatic Ionian Region (EUSAIR), the Union for Mediterranean (UfM), and the Initiative for the sustainable development of the blue economy in the western Mediterranean (WESTMED).

The BLUEMED SRIA has becoming a driving pillar for other regional initiatives focusing on the Mediterranean, being mentioned in several EU and international initiatives and actions, such as EUSAIR, UfM and WESTMED, then contributing to align the strategies relating to R&I in the Mediterranean and drive the actions towards the shared priorities.

3.3. Initiatives based on Shared issue models

Among the experiences developed at regional level following a “shared issue models”, the Art. 185 initiative **European and Developing Countries Clinical Trials Partnership – EDCTP**⁴³ – is a good practice example of alignment at financial, operational and strategic level and a catalyst model for other programmes aimed at coordinated international collaboration. EDCTP, focusing common research priorities and health needs relevant to Europe and Sub-Saharan Africa, has been instrumental in raising the European Union’s visibility on the international agenda for global health and in one of its strongest instruments for fostering cooperation with Africa⁴⁴. The programme developed a unique funding approach, integrating clinical research and capacity building activities as “Integrated Projects” conducted by collaborative consortia of European and African partners, together with like-minded organisations. This approach has facilitated a certain coordination and alignment of European national research programmes and activities. Furthermore, the approach has fostered African leadership in clinical research and has strengthened the ethics and regulatory environment for conducting clinical trials in sub-Saharan Africa. The EDCTP programme thus brings together the individual strengths of participating European and African countries.

⁴³ Alignment at Trans-regional level Case Study N. 3 – EDCTP. <https://www.era-learn.eu/alignment/trans-regional-perspective>.

⁴⁴ The first EDCTP programme (EDCTP1) was established in 2003 as European response to the global health crisis caused by the three main poverty-related diseases HIV/AIDS, tuberculosis and malaria. The programme was jointly undertaken by 14 European Union countries, Norway and Switzerland, in collaboration with countries in sub-Saharan Africa. The second EDCTP programme, running over the period 2014-2024, currently consists of 13 EU Member states (Austria, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom), Norway and Switzerland and 14 African Countries (Burkina Faso, Cameroon, Congo, Gabon, The Gambia, Ghana, Mali, Mozambique, Niger, Senegal, South Africa, Tanzania, Uganda, and Zambia). EDCTP2 Basic Act: Decision No 556/2014/EU of the European Parliament and of the Council of 15 May 2014 on the participation of the Union in a second European and Developing Countries Clinical Trials Partnership Programme (EDCTP2) jointly undertaken by several Member States, Official Journal of the European Union, OJ L 169, 7.6. 2014.

EDCTP developed a unique networking and integration of European national programmes and investments by maintaining and reinforcing the partnership with sub-Saharan Africa and like-minded organisations. The mission of networking is to build relationship and brokering sustainable partnerships in order to leverage funds and align global and local health research agendas to facilitate EDCTP's overall mission. Being one of the main pillars of EDCTP's programme, networking is conducted through activities that strengthen the coordination and integration of European national programmes; build strong north-south partnerships; support the transfer of technology, and ensure the sustainability of the partnership. Experience from EDCTP1 has shown that improved coordination of European research and collaborations in Africa is of great benefit to all partners, reinforcing the impact of the European contribution. Networking includes:

- European (north-north) networking, aiming at coordinating national funding;
- North-south networking, to strengthen project and institutional collaboration. At institutional level, the programme's goal is to forge alliances between European institutes and their African partners to promote joint strategies in training, research and capacity strengthening within the scope of EDCTP and ensure that the EDCTP programme has full political support by governments and decision makers in the Developing Countries; at scientific level, the main objective is to identify and secure the support of the scientific and clinical communities in the Developing Countries.
- African (south-south) networking, which includes regional Networks of Excellence, supports sharing of local expertise and enables local capacity in multicenter international studies.
- Networking with external stakeholders, to strengthen the collaboration with partners in the private sectors.

EDCTP, as well as providing added European value in channelling common efforts to tackle the societal challenges of PRDs, also provides a cost-effective mechanism where member countries may work with other stakeholders to share risks and benefits. A valuable example is the TB consortium of consortia, known as the *Pan African Consortium for Evaluation of Antituberculosis Antibiotics* (PanACEA), established by EDCTP as a different approach towards funding clinical trials than through normal calls for proposals⁴⁵. PanACEA, which is funded by EDCTP (including sub-Saharan African countries and the EC), Bill and Melinda Gates Foundation, Sequella (a pharmaceutical company) and TB Global Alliance (a PDP), comprises three networks involving 22 institutions; 11 in Africa, 10 in Europe and 1 in USA.

3.4. Use of Smart specialization strategies by regions via political commitment

An example of initiative having its foundation at regional level is the **Vanguard**⁴⁶ Initiative New Growth through Smart Specialisation. The initiative grounded on the political cooperation on an interregional basis building on the smart specialisation strategies and the alignment of priorities and roadmaps, to achieve

⁴⁵ On 31 May 2007, in Dublin, the European and Developing Countries Clinical Trials Partnership (EDCTP) held a stakeholder meeting to address the state of TB drugs. With the goal of shortening and simplifying treatment of drug-sensitive TB, EDCTP recommended a brokered approach to conducting clinical trials for new drugs. An important outcome of this meeting was a Call for Expression of Interest issued on 1 August 2007. Subsequently, EDCTP invited five applicants, each representing a consortium of institutions, to participate in a brokered meeting held in The Hague on 4 December 2007.

⁴⁶ Alignment at Trans-regional level Case Study N. 5 – The Vanguard Initiative. <https://www.era-learn.eu/alignment/trans-regional-perspective>.

complementarities⁴⁷. The Vanguard initiative is driven by a political commitment of regions to use their smart specialisation strategies to boost new growth through bottom-up entrepreneurial innovation and industrial renewal in European priority areas⁴⁸. This is delivered by aligning regional areas of strengths and enabling co-investment on the basis of regional smart specialization strategies.

Regions are committed to build synergies and complementarities in smart specialisation strategies to increase world-class clusters and clusters networks, in particular through pilots and large-scale demonstrators, with the overall goal to provide necessary stimulus for revitalizing European industrial growth. Following the European Commission Communication “For a European Industrial Renaissance” suggesting Member States to combine regional and industrial policy tools to create Smart Specialisation Platforms to help regions roll out smart specialisation programmes by facilitating contacts between firms and clusters, 10 European regions⁴⁹ with a consolidated history of cooperation and involved in ERRIN network, thanks to a bottom-up perspective set up the Vanguard Initiative. Vanguard introduced a new approach bringing regions together to discuss common objectives and find complementarities, develop joint strategic action plans and align strategic investments arising from these roadmaps. The overall objective of this approach is to create “inter-regional smart specialisation platforms”. The initiative has so far launched 5 pilot projects⁵⁰, where partner regions are committed to build critical mass and complementary specialisation in the defined emerging areas and to align strategic investments, combining their resources with European investments.

The Vanguard Initiative for New Growth through Smart Specialisation seeks to better position and embed the smart specialisation agenda within relevant EU policy frameworks through the following activities:

- Matching strategic roadmaps between regional, national and European policy levels: setting up of interregional networks that will foster alignment between innovation roadmaps for co-investment in European priority areas; support the European priority areas for the future of industry, in particular those that are identified in the Industrial Policy Communication of October 2012⁵¹. Indeed, the Vanguard Initiative has supported DG Enterprise in its development of a smart specialisation platform for Advanced Manufacturing (ADMA). Vanguard Initiative regions are committed to developing joint roadmaps for building critical mass and complementary specialisations in emerging industries.
- Aligning strategic investments, arising from these roadmaps, in order to open new industrial pathways via flagship projects such as demonstrators and pilots identified in the European priority areas. Vanguard Initiative regions are committed to combining their resources with European investments in these focus areas.

⁴⁷ The political leaders of 15 European industrial regions gathered on 30 January 2014 in Brussels to engage in a joint effort for the industrial future of Europe.

⁴⁸ The regions have committed by signing the Milan Declaration. The Milan declaration is available at http://www.s3vanguardinitiative.eu/sites/default/files/contact/image/final_declaration_of_milan_final_27_10.pdf.

⁴⁹ Basque Country, Flanders, Lombardia, Malopolska, North Rhine Westphalia, Scotland, Skåne Region, Southeast Netherlands, Tampere Region and Wallonia. The initiative is now made up of over 30 European regions.

⁵⁰ The pilot projects have been launched on: Bio-economy – Interregional cooperation on innovative use of non-food Biomass; Efficient and Sustainable Manufacturing; High Performance Production through 3D-Printing; Making EU the global leader in components for marine renewables and offshore energy applications; Vanguard Initiative pilot projects on New nano-enabled Products. <http://www.s3vanguardinitiative.eu/pilotinitiatives>.

⁵¹ These priority areas are: Markets for advanced manufacturing and technologies for clean production; Markets for key enabling technologies; Bio-based product market; Sustainable industrial policy, construction and raw materials; Clean vehicles and vessels; Smart grids.

- Upgrading regional partnerships and clusters with global potential, which are identified in smart specialisation strategies, to European world-class clusters that can compete globally. Vanguard Initiative regions are committed to internationalising their cluster initiatives in cross-border and interregional networked European clusters and partnerships⁵². It engages in pilots for interregional and transnational cluster policy development. Moreover, it explores solutions to leverage public-private investments through European Investment Bank/European Investment Fund, in order to support demonstration and piloting of new value chains in European industry clusters.
- Facilitating access to combined funding for co-investment projects, taking advantage of better synergies between regional, national and European instruments to support this interregional collaboration.

Focusing on alignment, the Vanguard initiative has enabled participating countries to achieve strong alignment at operational and financial level thanks to:

- The development of a common methodology in 4 steps (learn, connect, demonstrate and commercialise). This approach was used and tested in the industry-led pilot projects and joint demonstration cases.
- Use of different sources of funding at regional, national and European level. The bulk of the costs of the Pilot projects are funded by the co-leads of the Pilots. The Vanguard initiative has been evaluating the possibility to include various funding from the European Structural and Investment Funds and the European Fund for Strategic Investment, while future Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) actions could create links with the Vanguard initiative.
- Opening to the private sector for improving the access to financial instruments.

3.5. Joint European research infrastructure at regional level

Research infrastructures and their use at Union level are fundamental for the development of the European Research Area. The European Strategy Forum on Research Infrastructures (ESFRI), set up in 2002, has a key role in policy-making on research infrastructures in Europe and contributes to the development of the Strategic Roadmap that identifies Research Infrastructures of pan-European interest meeting the long-term needs of Europe's research communities across all scientific areas⁵³. ESFRI Roadmaps are meant to provide a coherent and strategic vision to ensure Europe has excellent Research Infrastructures (RIs) accessible to all leading researcher and to fully exploit the potential for scientific advancement and innovation⁵⁴. A European Research Infrastructure Consortium (ERIC)⁵⁵ was established to facilitate the joint establishment and operation of large European research infrastructures among several Member States and

⁵² Vanguard Initiative, New Growth by smart specialisation, Engagement for the future of industry in Europe Brussels, 8 November 2013.

⁵³ Since 2006, ESFRI has defined and periodically updated Roadmaps. On 17th January 2017, ESFRI launched the 2018 Roadmap update process. More information at http://ec.europa.eu/research/infrastructures/index_en.cfm?pg=esfri.

⁵⁴ ESFRI Roadmap 2016. <http://www.esfri.eu/roadmap-2016>.

⁵⁵ The European Research Infrastructure Consortium (ERIC) was established as a new legal instrument on 25 June 2009 Council Regulation (EC)723/2009.

associated countries. The **Central European Research Infrastructure Consortium⁵⁶ (CERIC-ERIC**, acronym CERIC), set up under the ERIC legal framework, is an integrated multidisciplinary research infrastructure for basic and applied research in the field of materials, biomaterials and nanotechnology established at regional level⁵⁷. The Central East European Area has an excellent historical scientific tradition but, due to the historical-economic and political events of the past century, Central East European Countries had fewer opportunities to invest in large research infrastructures and develop them at pan European dimension. This situation has however been changing thanks to a coherent effort by all countries in the area, that have developed or are developing roadmaps for Research Infrastructures (RIs)⁵⁸. CERIC aims at contributing to speedy and cost effective catch up of this Region in the field of analysis and synthesis facilities for advances materials and life science with a Research Infrastructure of pan European quality and relevance⁵⁹, and at contribute to European top-level research and technological development and demonstration programs. It provides open access to the Member's scientific facilities, such as synchrotron light sources, neutron sources, nuclear magnetic resonance apparatus and similar, based on international peer review.

CERIC has been built by integrating leading national research institutes into a unique international infrastructure, creating great opportunities to enhance the circulation of human resources, ideas and innovations⁶⁰. The driving force behind is the common scope to be relevant and attractive at the international level. CERIC is expected to increase the effectiveness of national research systems through its contribution to scientific excellence but also by improving the quality and capability in education and technology, and in the attraction of other socioeconomic returns. In this respect, the particular added value of CERIC lies in the mutual learning and exchange of good practices between the Countries in Central Europe.

CERIC pan-European approach avoids duplication and fragmentation in the research system and increases the integration and competitiveness of the European Research Area (ERA). Being open to other Countries, it speeds up East-West alignment in the European Research Area.

The founding Parties contribute "in kind" by making available the access and use of existing and new planned facilities and resources, to be integrated into a common research infrastructures capable of offering high-quality services.

CERIC many benefits and capacity to achieve strong alignment at strategic and operational levels, relates to the following aspects:

1. Integration of research infrastructures and open access. CERIC has a clear pan-European added value linked with facilities which deliver top-level services attracting a widely diversified and international

⁵⁶ Alignment at Trans-regional level Case Study N. 4 – Ceric-Eric. <https://www.era-learn.eu/alignment/trans-regional-perspective>

⁵⁷ CERIC is an ERIC set up in June 2014, by the Commission Implementing decision of 24 June 2014 on setting-up the Central European Research Infrastructure Consortium (CERIC-ERIC) (2014/392/EU).

⁵⁸ The European Commission and ESFRI encourage Member States and Associated Countries to develop national roadmaps for research infrastructures (RIs). Till now, 24 national roadmaps were published by the Member and Associated countries.

⁵⁹ The Founding parties of CERIC are Central East European Area Countries - Czech Republic, Austria, Romania, Serbia, Slovenia - and Italy, where is located (City of Trieste). In 2016 Hungary and Poland joined the Consortium.

⁶⁰ The CERIC distributed infrastructure is a single legal entity offering: a common, web operated access point describing and offering the available integrated services; a common entry point for users proposals and a common evaluation system to select them and an access time to multiple instrumental facilities; free and open access to these facilities based on quality selection only; support and logistic services as required.

community of scientific users. Integrating available resources (instrumental as well as human) as in-kind contributions to CERIC and opening them to international use and excellence driven competition enhance the excellence and optimise the use of the resources.

2. Strategies to strengthen human capacity-building through training activities for researchers and pupils. CERIC, as distributed research infrastructures, is a natural knowledge triangle among research, education and industry. Strengthening and multiplying knowledge triangles are fundamental objectives of the Europe 2020 and Innovation strategies.

3. Collaboration with the industry. CERIC selects the most appropriate partners/types of mechanisms considering specifically the active transfer and exploitation of intellectual property, with a responsible framework management of intellectual property. The CERIC Partner Facilities have an exceptional body of skills and technical expertise individually, and various experiences of interaction with industry. By working together and expanding the outreach to industry in the region and beyond, this concentration of knowledge significantly enables the region's competitiveness and the attraction of further industrial activities. In fact, CERIC partner facilities have long standing relations with the industrial partners. The first non-disclosure agreements between industrial partners and CERIC Consortium were signed in 2016, covering service measurements, R&D and product developments.

4. Definition of monitoring and evaluation system compliant with ERA Roadmap and national ERA Action Plans. CERIC had put in place a comprehensive framework, which is used: internally, as a management tool, helping in improving performance and achieving results; externally, to demonstrate the effectiveness, efficiency and accountability of CERIC.

5. Use of different funds: national, top-up funds and ESIF and Horizon 2020. The decision on setting-up the CERIC has foreseen that each CERIC member should contribute in-kind by operating, making available and continuously upgrading one Partner Facility for a total investment value exceeding EUR 100 million and a total annual operation cost exceeding EUR 10 million⁶¹. CERIC utilises national, structural and EU framework programme funds. Operations are funded with national funds, either contributed in-kind, or in-cash in the case of the Host Country contribution (Italy). Equipment is either financed using national and, in eligible countries also European structural and investment funds. Also, within the current programming period. The ordinary activities of CERIC (mainly open access) are covered through the national funds, while investments into the infrastructures of European interest are often subject of a targeted call which, in some CERIC member Countries, is co-funded through the European Structural and Investment Funds (ESIF)⁶². The CERIC ERIC can also be funded through other kind of funds such as ESIF and Horizon 2020. Indeed, CERIC applied for a proposal funded in the Coordination and Support Actions (CSA) and for the topic "Developing new world-class research infrastructures".

⁶¹ The Italian Republic has provided a host contribution of EUR 5,5 million (cash contributions) to the establishment and strengthening of CERIC-ERIC integrated operations, while considering further contributions to upgrade and strengthen CERIC integration and operation, including training, technology transfer and communication. Commission Implementing decision of 24 June 2014 on setting-up the Central European Research Infrastructure Consortium (CERIC-ERIC) (2014/392/EU).

⁶² Currently, only the data for 2015 are available, demonstrating that the total costs of the ordinary scientific and technical activities in the first full year of operation of the CERIC-ERIC partner facilities was € 6,853,321.65 EUR. The number is to increase in 2016, primarily due to the addition of a new member, Poland, with synchrotron Solaris. In addition to these, largely in-kind contributions, € 609,500 was paid by the Italian Ministry of Education, University and Scientific Research to Central Administration to support the Consortium's starting activities in 2015.

4. Conclusions

Over the years, progress has been made towards the alignment of national research programmes. Transnational research programming plays a key role in supporting and encouraging alignment. Within the broad context of Public to public initiatives, the regional approach can bring an added value to further stimulate alignment at strategic, operational and funding level.

Besides joint programming initiatives aimed at tackling global grand societal challenges, a number of trans-regional initiatives and programmes, focusing on common regional challenges and opportunities, emerged as valuable good practice examples towards the collaboration, coordination and alignment of regional and/or national R&I strategies and programmes. They can be used as valuable example for other regional or non-regional initiatives, adding a new perspective and approach to public to public partnerships experience.

The regional and trans-regional level can in particular:

- Facilitate the set up and development of joint initiatives and programmes in areas and regions where a long-lasting tradition of collaboration, or similarities in the R&I vision, landscape or procedures exist;
- Make it easier the far-reaching use of the real common pot among countries sharing mutual trust built on long-lasting previous collaboration experiences;
- Stimulate the involvement of regions in P2P initiatives to tackle specific innovation needs;
- Encourage the creation of a critical mass to reach best results in R&I to meet common regional challenges via the development of political commitment;
- Experiment more efficient use of funding, by channelling diverse funding sources towards common regional priorities.

Yet, the trans-regional perspective emphasizes the need to foster synergies between EU R&I funds, in particular ESIF and Horizon 2020, as fundamental step to make a better use of EU public R&D resources and realize the European Research Area. Even if good practice examples at strategic and project level have been developed, a more comprehensive approach should be introduced, especially in the perspective of the next framework programming period.

REFERENCES

Alignment at trans-regional level – Case Study No. 1 – NordForsk

Available at <https://www.era-learn.eu/alignment/trans-regional-perspective>

Alignment at trans-regional level – Case Study No. 2 – Bonus

Available at <https://www.era-learn.eu/alignment/trans-regional-perspective>

Alignment at trans-regional level – Case Study No. 3 – EDCTP

Available at <https://www.era-learn.eu/alignment/trans-regional-perspective>

Alignment at trans-regional level – Case Study No. 4 – CERIC-ERIC

Available at <https://www.era-learn.eu/alignment/trans-regional-perspective>

Alignment at trans-regional level – Case Study No. 5 – The Vanguard Initiative

Available at <https://www.era-learn.eu/alignment/trans-regional-perspective>

Alignment at trans-regional level – Case Study No. 6 – the DACH Agreement and the Lead Agency Procedure

Available at <https://www.era-learn.eu/alignment/trans-regional-perspective>

Alignment at trans-regional level – Case Study No. 7 – the BLUEMED Initiative

Available at <https://www.era-learn.eu/alignment/trans-regional-perspective>

Council regulation 558/2014 of 6 May 2014 establishing the Clean Sky 2 Joint Undertaking

Available at https://ec.europa.eu/research/participants/data/ref/h2020/other/legal/jtis/cleansky-establact_en.pdf

European Commission, Directorate-General for Regional and Urban policy, Enabling synergies between European Structural and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes, 2014

Available at http://ec.europa.eu/regional_policy/en/information/publications/guides/2014/enabling-synergies-between-european-structural-and-investment-funds-horizon-2020-and-other-research-innovation-and-competitiveness-related-union-programmes

European Commission, Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions concerning the added value of macro-regional strategies COM(2013) 468 final

Available at

http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/baltic/com_added_value_macro_region_strategy_en.pdf

European Parliament, Directorate-General for Internal Policies, Policy Department Structural and Cohesion Policies, Research for Regi Committee – Maximisation of Synergies between European Structural and

Investment Funds and other EU Instruments to Attain Europe 2020 Goals, June 2016

Available at

[http://www.europarl.europa.eu/RegData/etudes/STUD/2016/585872/IPOL_STU\(2016\)585872_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2016/585872/IPOL_STU(2016)585872_EN.pdf)

Interact, Added value of macro-regional strategies – programme and project perspective, Final report study, February 2017

Available at

http://ec.europa.eu/regional_policy/en/newsroom/news/2017/03/17-03-2017-macro-regional-strategies-what-s-the-added-value-for-projects-and-programmes

JRC technical reports External dimensions of smart specialization: opportunities and challenges for transnational collaboration in the EU-13, S3 Working Paper Series N. 9/2015

Available at

http://s3platform.jrc.ec.europa.eu/documents/20182/114874/JRC96030_External_Dimensions_of_S3.pdf/c4ede230-18fa-46fe-a996-079bbd7fe71d

JRC technical reports, Synergies between EU R&I Funding Programmes. Policy Suggestions from the Launching Event of the Stairway to Excellence Project, Policy Brief Series N. 12/2014

Available at

http://s3platform.jrc.ec.europa.eu/documents/20182/114990/JRC92829_Synergies_EU_R%26I_Funding_Progs.pdf/2300a545-5902-46a9-b5e6-8cd286020fb9

JRC technical reports – Added value of transnational research programming: lessons from longstanding programme collaborations in Europe

Available at

<https://www.era-learn.eu/monitoring-and-assessment/netwatch-archive/policy-briefs/netwatch-policy-brief-no-3>

Regulation (EU) 1301/2013 of the European Parliament and of the Council of 17 December 2013

Available at

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1301>

Regulation (EU) 1301/2013 of the European Parliament and of the Council of 17 December 2013 is the legal base defining the smart specialization

Available at

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R1301>

Regulation (EU) 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006.

Available at

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R1303>

Consulted websites

ec.europa.eu/regional_policy/en/policy/cooperation/european-territorial

ec.europa.eu/research/infrastructures/index_en.cfm?pg=esfri

m-era.net/

seed.eusbsr.eu

www.adriatic-ionician.eu

www.alpine-region.eu

www.balticsea-region-strategy.eu

www.cleansky.eu

www.danube-region.eu

www.esfri.eu/roadmap-2016

www.interreg-baltic.eu

www.manunet.net/

www.prima4med.org/