

Mutual Learning Exercise (MLE)

on Alignment and Interoperability of Research Programmes

National Coordination

National Preconditions

CHANGE OF

Thematic Report No 2

Research and Innovation

February– 2017

EARNING

Mutual Learning Exercise (MLE) on Alignment and Interoperability of Research Programmes National Coordination – National Preconditions – Thematic Report No 2

European Commission Directorate-General for Research and Innovation Directorate A — Policy Development and Coordination Unit A.4 - Analysis and monitoring of national research and innovation policies Contact (H2020 PSF MLE): Mata Truco Calbet, Coordinator of the MLE on Alignment and Interoperability, Unit A4 - Marta.TRUCO-CALBET@ec.europa.eu

Contact (H2020 PSF coordination team):

Román ARJONA, Chief Economist and Head of Unit A4 - Roman.ARJONA-GRACIA@ec.europa.eu Stéphane VANKALCK, PSF Head of Sector, Unit A4 - Stéphane.VANKALCK@ec.europa.eu Diana SENCZYSZYN, PSF Team Leader, Unit A4 - Diana.SENCZYSZYN@ec.europa.eu

European Commission B-1049 Brussels

Manuscript completed in February 2017.

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

© European Union, 2017.

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

Cover Image © Eurotop.be 2017

Mutual Learning Exercise (MLE) on Alignment and Interoperability of Research Programmes National Coordination National Preconditions

Thematic Report No 2

Prepared by the independent expert: Angus Hunter

Table of Contents

1	INTRODUC	CTION 3						
2	METHODO	LOGY						
3	KEY FACT	KEY FACTORS FOR THE IMPROVEMENT OF NATIONAL PRECONDITIONS						
	3.1 3.2	Political Commitment to the Joint Programming Process						
	3.3	Dedicated budget for participation in JPP activities9						
	3.4 partic	Lead ministry/agency with dedicated human resources to enable effective ipation						
	3.5	Flexible funding for participation in joint programming 11						
4	THE WAY	FORWARD: OPPORTUNITIES FOR IMPROVEMENT13						

List of figures

Figure 1The self-assessment tool MLE Alignment and Interoperability: National Preconditions5

1 INTRODUCTION

This is the second of five reports that will be produced as the main deliverables of the Mutual Learning Exercise (MLE) on Alignment and Interoperability of Research Programmes. It is concerned with the role that **National Preconditions** play for a more efficient and effective participation in the Joint Programming Process (JPP)¹ including Joint Programming Initiatives (JPIs) and other public-to-public partnerships (P2Ps).

The report builds on a Challenge Paper on "National Preconditions" and the feedback provided by participating countries at the MLE workshops held in Brussels (3 October 2016), Vienna (16 October 2016) and Ljubljana (15 December 2016). The analysis is also based on the background evidence (including available national ERA Roadmaps) and the results of a self-assessment exercise.

More specifically, it provides a self-assessment framework for MS/AC^2 to better identify strengths and weaknesses of the national R&D system and scope for improvement.

The Report focuses on the five main National Preconditions that MS/AC have recognised as key factors to enable alignment and interoperability, namely:

- Political commitment to the Joint Programming Process
- A national research & innovation system that prioritises societal challenges
- A dedicated budget for participation in JPP activities
- Lead ministry/agency with dedicated human resources to enable effective participation
- Flexible funding for participation in joint programming

Each of the preconditions is discussed with their barriers and illustrated with examples of good practice. This is followed by some general conclusions on 'opportunities for improvement' with more specific ideas on country-specific actions that have been inspired by the MLE.

Two more specific reports (considering the other key factors related to 'National Governance Structures' and 'Communication Flows and Visibility') will be produced based on the Country Visit workshops in Slovenia (15 December 2016) and Norway (17 February 2017). They will complement the outcomes of this report. A final report of this MLE will subsequently be produced with case examples of progress that has been made by the participating countries.

2 METHODOLOGY

A self-assessment framework has been developed as a learning tool to allow each participating country to carry out a customised analysis of the five factors related to National Preconditions that enable alignment and interoperability. The self-assessment framework allows the user to:

 Describe the current national situation and rate its degree of alignment with each of the preconditions (score 1 – 5)

¹ Throughout the report the terms 'JPP' and 'joint programming' are used in the widest sense to include not only the JPIs but also other P2Ps such as ERA-NETs and Article 185 initiatives.

² EU Member States and Associated Countries

- Consider the barriers to improvement of the preconditions and the degree of difficulty in overcoming them (very low, low, medium, high, very high)
- Propose opportunities for improvement based on the self-assessment and peer learning

Ten country representatives completed the self-assessment table for their country (Austria, Denmark, Estonia, France, Norway, Portugal, Romania, Slovenia, Sweden and Turkey).

The assessment framework is used as a learning tool, to help individual countries consider where and how they can improve alignment and interoperability. The self-assessment conclusions of each country are not published, as they are elaborated by only a small number of national representatives and as such do not represent an "official" selfassessment.

Key Factors	Degree of Alignment				Self Assessment					
PRECONDITIONS	1	2	3	4	5	National Situation	Score for Alignment	Barriers to Improvement	Score for Barriers	Scope for Learning & Improvement
Political commitment to the Joint Programming Process	Political culture that favours only national RDI activities				Clear commitment and targets within national RDI strategy and ERA Roadmap	Briefly describe the national sitiation	What score would you give (1-5) for the national situation	What would be the main barriers to improvement	How would you rate the barriers (very low, low, medium, high or very high)	What do you think could be done to improve that national situation?
A national research & innovation 2 system that prioritises societal challenges	Societal research is not on the agenda of either the funding organisations or the researchers				Societal challenge research is prioritised and relevant ministries are involved	Briefly describe the national sitiation	What score would you give (1-5) for the national situation	What would be the main barriers to improvement	How would you describe the barriers (very low, low, medium, high or very high)	What do you think could be done to improve that national situation?
¹³ Dedicated budget for participation in JPP activities	Funding options depend on availability of suitable budget and commmitment of budget holder				A substantial budget is ring-fenced for P2P activities and allocated using robust criteria	Briefly describe the national sitiation	What score would you give (1-5) for the national situation	What would be the main barriers to improvement	How would you describe the barriers (very low, low, medium, high or very high)	What do you think could be done to improve that national situation?
Lead ministry/agency with dedicated 4 human resources to enable effective participation	Individuals do not have any dedicated time or budget to lead P2P participation				Lead organisation has sufficient resources/authority to represent the country	Briefly describe the national sitiation	What score would you give (1-5) for the national situation	What would be the main barriers to improvement	How would you rate the barriers (very low, low, medium, high or very high)	What do you think could be done to improve that national situation?
Flexible funding instruments for participation in joint programming	Participation is inhibited by traditional rules and restrictions				Existing rules are suffiently flexible or specific instruments have been introduced	Briefly describe the national sitiation	What score would you give (1-5) for the national situation	What would be the main barriers to improvement	How would you rate the barriers (very low, low, medium, high or very high)	What do you think could be done to improve that national situation?

Figure 1The self-assessment tool MLE Alignment and Interoperability: National Preconditions

3 KEY FACTORS FOR THE IMPROVEMENT OF NATIONAL PRECONDITIONS

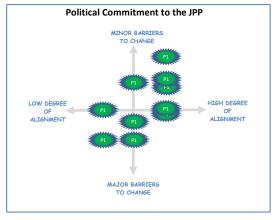
The five 'National Preconditions' are considered below in more detail.

Each of the preconditions is discussed in a similar way including an overview of the main results of the self-assessment by participating countries in the MLE and a summary of the main barriers encountered by MS/ACs. It then highlights some good practices examples (including some from outside the participating countries) and concludes with a general overview of opportunities for improvement.

Country-specific opportunities for improvement that were inspired by participation in the MLE can be found in Section 4.

3.1 Political Commitment to the Joint Programming Process

The first, and probably most important, of the national preconditions for alignment and interoperability is 'political commitment to the Joint Programming Process'. This factor is clearly fundamental to the relative success of the JPP in helping to address societal challenges. Normally it would be sufficient to have such commitment at the level of both State Secretary and the Director General of the Science/Research Ministry. However, in the case of the JPIs, and other 'societal challenge' P2Ps, it is essential that such commitment is also apparent in the upper hierarchal levels of those ministries that are responsible for societal



challenges related to environment, health, transport, etc.

• Overview of the results of the self-assessment tool:

The pattern of results from the self-assessment framework shows two groups of countries, one with a relatively well developed political commitment and consequently minor barriers to change and another one with lower political support and higher barriers to change. The general feeling from the MLE participants was that the agreement to develop national ERA Roadmaps had increased the visibility and political commitment to joint programming.

• Main barriers to change:

Beside an overall issue of the political relevance of research and innovation for societal challenges, some MS/ACs expressed concern that political commitment may only be present within the research ministry with less evidence amongst other ministries that are responsible for the societal challenges and/or innovation. Various barriers were highlighted including lack of an overarching, cross-ministerial strategy and convincing policy makers about the benefits of international cooperation and/or joint programming.

Good practice examples:

In order to increase political commitment for the JPP, it is important to gain political commitment at the highest level and beyond the national R&D system. One example of where this has been achieved is Germany.

In **Germany**, the R&D ministry worked very closely with the German Parliament and eventually obtained strong political support for its overall ERA strategy, including its commitment to joint programming, which helped to also motivate other ministries to look at opportunities from participation in the JPP. In Austria, the research ministry developed a self-standing strategy for integrating demands from other ministries in the R&D strategy formulation, which eventually led to a much stronger ownership of sectorial ministries for the JPP. Another approach to eventually improve political commitment is to better identify the benefits of participation by means of mapping and evaluation exercises, such as planned in Cyprus and Denmark. Last, but not least, is to fully integrate joint programming within national policies such as internationalisation strategies as in France and Denmark or revisions of national R&D strategies as in the Netherlands (Top Sectors programme).

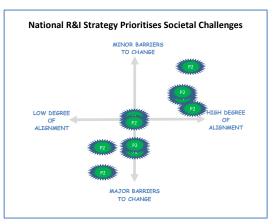
• Opportunities for improvement:

The good practice examples highlight current approaches to build-up strategic partnerships within and outside the R&D community, to better "make the case" for national policy makers to support the JPP and eventually integrate joint programming within existing policy processes.

Some inspiration on options to improve political commitment can be found by considering the inter-relationship with other Key Factors related to governance and/or communication. For example, Governance Factor No 6 (measuring impacts) is clearly one way of bringing the JPP to the attention of policy makers (communication). It may also be that lessons can be learned from the P2Ps on how to attract the attention of policy makers as some have been mentioned at the level of G7 Science Ministers (e.g. JPI Oceans) and/or are engaged with intergroups of the European Parliament (BiodivERsA).

3.2 A national research & innovation system that prioritises societal challenges

In most countries there is a disconnection between those ministries that have the policy lead for particular societal challenges and those ministries/agencies that hold the research and/or innovation budgets. A more integrated and inclusive approach is needed to prioritise societal challenge research and ensure that the outputs are exploited by both policy stakeholders and the market. This should ideally be embedded within the national R&I strategy and associated governance systems.



• Overview of the results of the self-assessment tool:

The pattern of results from the self-assessment is broadly similar to that for 'political commitment'. The main difference is that only four of the 10 participating countries consider that they are well aligned with this key factor.

Clearly, there can be a significant lag between policy commitments made at the ERA level and the opportunity to integrate such policies within the national programming cycles. This can be easier to implement when the ministries that are responsible for societal challenge policies have a strong commitment to R&D or at least some involvement in research programming where it has a relevance to their policy agenda.

• Main barriers to change:

For many EU countries, societal challenge R&D is rather "unusual" within the overall science and innovation governance, which is traditionally rather disciplinary and/or technology specific. Although there is a general trend towards more societal challenge R&D policy, its concrete implementation and identification of impacts remains unclear and complex. In addition, a generic barrier in many (if not all) countries seems to be the culture of the research community, which has not yet embraced the trend towards challenge-based research.

• Good practice examples:

In most national settings, it is highly unlikely that the overall R&D policy will completely be geared towards societal challenges R&D in the short to medium term. Quite promising are approaches to develop certain "niches" for societal challenges R&D and connect them with the JPP. An example here is the 'Global Challenges Research Fund' of the UK, which will provide also the programme background for the UK's participation in joint programming related to the challenges faced by developing countries. Also, the Strategic Healthy Agri-Food Research Plan in Ireland has recently been developed by the Ministry for Food and Agriculture and is based in many parts on the SRIA of JPI FACCE. Another approach is to seek the integration of the JPP in policy processes that are not mainly R&D driven, but developed in the context of wider national interests. An example of this approach can be found in Greece, where the smart specialisation strategy provides the national policy context for participation in joint programming.

As mentioned above, the prioritisation of societal challenge research is becoming more common in some countries as they update their strategies. Some specific examples are apparent in France, Estonia and Sweden.

The Estonian Research and Development and Innovation Strategy 2014-2020 (Knowledge-based Estonia) has four priorities including societal challenges.

France published a national research strategy in 2015 (France-Europe 2020) that focusses on 10 societal challenges with a strong synergy to those of Horizon 2020.

Some countries, however, may not have explicitly prioritised societal challenge research within the national system but are sufficiently flexible to participate in relevant activities at the European level. One such example is that of Portugal.

Portugal has a long tradition of international collaboration in science and technology. Its research funding system has thus evolved in a way that is quite flexible and interoperable with those of other countries. The influence of Horizon 2020 and the JPP means that both policy makers and the research community are now more engaged in those societal challenge research priorities that are relevant to the national context.

Part of the solution on how to improve this precondition may also be found in other key factors related to governance (e.g. coordination between ministries across policy domains) and communications (communication with researchers to increase interest and participation).

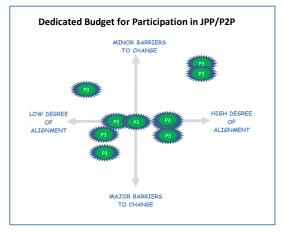
• Opportunities for improvement:

Some MLE participants feel that there is an opportunity to build on the policy commitments that are being made in the new or emerging national research & innovation strategies. However, they also recognise that new governance structures will be needed to translate such aspirations into concrete action on societal challenge research.

Part of the solution on how to improve this precondition may be found in other key factors related to governance (e.g. coordination between ministries across policy domains) and communications (attraction of researchers).

3.3 Dedicated budget for participation in JPP activities

A number of the MLE participants indicated that their country's ability to participate actively in particular JPIs and/or other P2Ps is dependent on whether the relevant national fundina organisation has a budget or not. Several of the interviews highlighted either that budgets are becoming more stretched in those countries that participate broadly in joint programming calls and/or that differentials between national budgets may be unfavourable to overall national dedicated participation. А budget for participation in JPP activities is clearly one way to improve the preconditions but it may not be a practical option in situations where the national budgets are relatively low.



• Overview of the results of the self-assessment tool:

The pattern of responses from the self-assessment indicates quite a spread of national situations. It also suggests that the barriers to improvement are generally perceived as relatively high.

A dedicated central budget that is allocated in a transparent way, based on national priorities and potential impacts, was considered by some of the MLE participants to be a good way. Nearly half of those that completed the self-assessment indicated that they had some form of dedicated budget for participation in joint programming.

• Main barriers to change:

Some barriers identified by participants include lack of R&D budget in sectoral ministries, non-existence of national research budgets for societal challenges and influential stakeholders lobbying to protect the national share of shrinking budgets. It appears that some funding agencies do not like the rigidity of ring-fenced budgets – preferring to have a flexible lump sum.

Good practice examples:

There are a number of good practices applied across Europe. Some countries use the revision or establishment of a national R&D strategy to introduce a dedicated budget for joint programming such as in Romania.

Romania has set up a dedicated sub-programme to support the Joint Programming Process within the current National Plan for RD&I (2015-2020).

Another approach is to enlarge the scope of a specific budget for international cooperation as in the Czech Republic where the existing interexcellence programme might be extended to allow also for JPP participation. A third practice based on incentives can be found in Sweden.

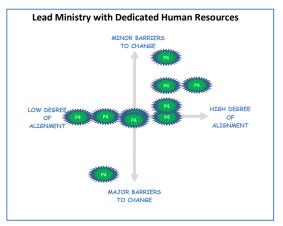
Sweden has a dedicated budget for participation in joint programming that is under the control of the managing organisation for the research councils. This budget tops-up the contribution from each research council for participating in various JPPs. The managing organisation decides which JPI/P2P collaborations to finance depending on policy considerations and financial commitments from the individual research councils. There are also indications in some of the national ERA Roadmaps that dedicated budgets for participation in joint programming may become more common in the future. Cyprus and The Netherlands, for example, have made specific commitments.

• Opportunities for improvement:

There seems to be a number of ways to address this factor including national programmes that address societal challenges. In addition, when the challenge is also prioritised in smart specialisation strategies then it could be possible to secure ring-fenced budgets from the Structural Funds. More generally, a number of the participants considered that a dedicated budget would be more practical if there was some kind of top-down criteria for national investment in joint programming and at least a nominal pre-allocation of budgets between national and transnational priorities. Again, the inter-relationship with other key factors related to governance and communication is obvious. For example, an effective approach to inter-ministerial coordination could exert strong pressure to dedicate at least a national research budget for societal challenges.

3.4 Lead ministry/agency with dedicated human resources to enable effective participation

Participation in JPP activities at the European level requires a significant level of human resources, well beyond the required resources for national programmes. This is especially the case for societal challenge research & innovation activities that need to involve national stakeholders in addition to the research ministries/agencies. Ideally, a lead ministry or agency would be mandated to coordinate national participation and be allocated sufficient resource to do so. The parallel MLE report on governance will present in more detail the different issues here.



This can be particularly important for the larger, more research-intensive countries where resources for participation can be quite diverse and uncoordinated. For the smaller, and less research-intensive, countries the issue is not so much about coordination of human resources but the lack of them. For some there may be just a few individuals that are responsible for coordinating the national participation in the JPP. This can lead to a position where such countries find it impossible to participate in all activities of the JPP and are therefore excluded from realising the wider benefits of joint programming.

• Overview of the results of the self-assessment tool:

The self-assessment results indicate a rather mixed picture. Half of the country-specific responses indicate medium or lower alignment with this key factor. For most, the barriers to improvement are regarded as medium.

There are clearly a variety of national models to enable participation in the JPP. For some countries, it is the science or research ministry whilst, in others, the coordination function is delegated to an agency. It seems, however, that there are still a number of countries that have apparently not officially defined which organisation will have the lead role. This obviously has a consequential impact on availability of human resources.

• Main barriers to change:

Often, resources at national level are calculated on the basis of experiences with national programmes. As international networks such as JPIs entail higher transaction costs, countries have difficulties in providing the appropriate resources. To make matters worse,

many ministries or agencies are faced with demands for a ban on recruitment and/or staff reductions and thus the human resource capacity is already overloaded.

• Good practice examples:

It seems that limited good practices are available for this key factor. This may be connected with the issue of political commitment and the relevance of societal challenges R&D. Once the political commitment is strong and societal challenge R&D is an integral part of national policy, it is more likely that the necessary resources will be provided. It seems, however, that some countries are at least addressing this issue by starting mapping and/or evaluation activities on their specific JPP participation in order to identify future opportunities for participation. Overall, one can argue that once the (national) benefits of participation in joint programming are clearly identified and communicated, the appropriate resources will be provided. Norway is considered to be an excellent example of this.

Norway is one example of a research-intensive country that has implemented a national structure and processes for efficient and effective participation in the JPP. The Research Council of Norway (RCN) acts as the implementing agency on behalf of the ministries that provide funding for societal challenge research. Both are involved in JPI Governing Boards with the Ministry of Research taking an overall coordinating role.

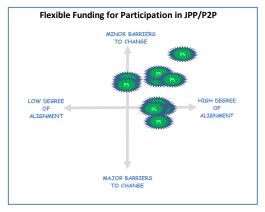
• Opportunities for improvement:

Two main ideas for improvement were highlighted. On one side there is a need for better communication of the potential policy benefits that can be achieved through effective, and coordinated, national participation in joint programming – and that these will only be achieved if there are adequate resources to realise such benefits. On the other, simplification of JPP procedures can reduce the administrative burden. Another practical option for some countries is to rely on expert stakeholders (such as researchers in public research institutes) when faced with limited human resources in the lead ministry.

As this subject overlaps with the governance and communication topics it will also be covered in more detail within the MLE Reports on "National Governance Structures" and "Communication Flows and Visibility" as the three topics are not mutually exclusive

3.5 Flexible funding for participation in joint programming

This factor covers several issues including both the national funding instruments and limitations that may be embedded in the rules of national funding organisations and/or programmes. For example, some countries find it relatively easy to allocate substantial funding for joint research projects but cannot co-invest in other joint activities or JPP infrastructure. Also, there are often restrictions in types of research and/or beneficiaries that can be funded by a particular ministry or agency.



• Overview of the results of the self-assessment tool:

The feedback from the self-assessment indicates that none of the MLE participants consider this key factor to be a major problem. All but one indicated that the flexibility of their existing funding instruments is high or very high with mainly low or medium barriers to improvement. This apparent high degree of alignment on this factor is rather surprising. Also, whilst the rules may be flexible in terms of providing [virtual common pot] funding for joint research calls there is much less flexibility in contributing to even rather small 'real common pot' budgets. There are often also restrictions on the type of organisations and research activities that can be funded.

• Main barriers to change:

While literally all countries have the possibility to provide funding to national participants in international research consortia, most countries have substantive difficulties to provide funding for the higher coordination efforts of joint programming, including funding for secretariats or other central structures required for the JPP. In addition, in times of often shrinking budgets, countries have to argue more when providing funding to international activities such as joint programming. Seeing the substantive increases of national contributions to the JPP over recent years, some countries seem to have reached the limit of a nationally acceptable balance between national R&D programmes and national contributions to joint programming.

• Good practice examples:

As with the previous key factor (i.e. human resources) available evidence provides limited good practice examples. Seeing the replies from the self-assessment, but also from other sources, it becomes clear that this factor is currently not considered a major issue. However, it will become an issue, once a certain balance between available budgets for national programmes and contributions to JPPs is reached. For example, Cyprus uses the whole of its international cooperation budget for participation in joint programming, while for Germany it is only about 10%. Again, the current mapping and evaluation exercises being carried out in some countries should provide the basis for more strategic discussion on funding opportunities in the future. Turkey is an example of a country that has a strong commitment to the JPP and is improving the flexibility of its rules for participation.

Turkey is at a stage of developing a stronger focus on thematic priorities such as energy, water and food in The National Science, Technology and Innovation Strategy. Since full participation in joint programming is regarded as critical for the national RDI system, the rules are being redesigned to create a more flexible

Another approach, which is currently discussed in some countries, is a stronger involvement of RPOs (research performing organisations) in joint programming by integrating participation in the JPP within the performance based funding mechanisms of the main block funding instruments.

• Opportunities for improvement:

France also provided some insights into how this precondition can be improved. The triangular approach of France for participation in JPIs (involving ministries, agencies and public research organisations) ensures overall funding flexibility. Another suggestion was that there could be merit in carrying out a comprehensive mapping of national budgets against national and ERA priorities to identify gaps and options for new or improved instruments.

4 THE WAY FORWARD: OPPORTUNITIES FOR IMPROVEMENT

As discussed above, the MLE participants used the learning & improvement framework to carry out an informal assessment of their national situation and barriers to improvement in relation to the five 'preconditions'. This allowed them to consider their country's strengths & weaknesses and where there is most scope for learning and improvement. On this basis an exchange of ideas took place during the Vienna country visit.

This chapter presents a summary of the main opportunities for change that have been identified so far by national participants.

Austria

Austria scores reasonably well against the five preconditions and the barriers to improvement seem to be on the lower side. Nevertheless, several interesting possibilities for improvement were identified:

- In order to improve political commitment, it was considered that the subject of Joint Programming needs to be on the agenda of the Austrian Council for Science and Technology to support the process of priority setting.
- This, and the need to influence the autonomous universities more towards challengeorientated research, could perhaps be achieved by launching a public stakeholder consultation to get a broader view on priorities and to convince universities of the importance of societal challenges.
- Another option is to work with the Ministry of Finance to increase the involvement of the sectoral ministries. One of the tools to elevate the subject to the policy level is a national theses paper³ on 'Alignment in Austria' that was presented at the MLE workshop in Vienna.

Some examples of approaches used in other countries were also considered to be interesting for learning such as Estonia (scientific counsellors in other ministries), Denmark (Research2025) and the UK (interdisciplinary research centres).

Denmark

Whilst Denmark has quite a flexible system that enables participation in joint programming, and prioritises societal challenge research, there is increasing competition for funding between national and international priorities. Societal challenge research is already integral to the current Research2020 priorities in Denmark and this will continue in the next version (Research2025), which will also have a stronger emphasis on the European dimension. Nonetheless, it seems that there will still be a need to generate stronger support for investment in international activities amongst influential stakeholders. For example:

- More visibility is needed on the possibilities for joint programming and results/impacts
- A mapping of funding instruments could perhaps be carried out to identify where improvements are needed
- Danish researchers are very 'international' and could be encouraged to promote the benefits to the funding agencies

³ <u>https://rio.jrc.ec.europa.eu/en/policy-support-facility/mle-alignment-and-interoperability-research-programmes-national-coordination</u>

The Austrian approach to develop a national paper on Alignment (mentioned above) was considered to be an opportunity to communicate with Danish policy-level stakeholders on how the national preconditions can be improved.

Estonia

For Estonia, there are still significant barriers to achieve political commitment and sufficient budgets for participation in the JPP.

Whilst the societal challenge approach is embedded in the RDI strategy for 2014-2020, the main issue is implementation. In particular, political commitment amongst the thematic ministries needs to be increased in order to foster their involvement and responsibilities for societal challenge research. Scientific councillors are being appointed by the Estonian Research Council to create a coordination link with each of the thematic ministries but there is some concern about how influential they will be without additional measures. The MLE has highlighted this risk and suggests that:

- A team-based approach that enables each of the counsellors to develop a sectoral R&D strategy and priorities within a coordinated framework is needed to maximise their influence. This would also highlight the need for specific budgets
- A synergy mapping of the priorities set in 'Knowledge-based Estonia' with those of the JPI SRIAs could also be helpful

The main area of interest for learning is therefore how to implement inter-ministerial management processes.

France

Whilst France is a very active player in the the JPP, there is a concern that this may not be apparent enough at the highest political levels. The feasibility of two specific ideas are therefore being explored:

- An inter-ministerial high-level forum
- A high-level political event on joint programming such as an annual 'ERA Conference'

The experience of Austria and Germany might offer some learning on how best to implement these ideas.

Romania

The National Research, Development and Innovation Plan in Romania for the 2015-2020 period includes a dedicated sub-programme for participation in JPIs, which is expected to commence in 2017. This should ensure more active participation of the other ministries in joint programming in spite of very limited national research budgets.

The Romanian participant in the MLE is keen to learn from other countries about how to develop an action plan for inter-ministerial coordination to participate in joint programming activities.

Slovenia

The self-assessment for Slovenia indicates that there is a need for policy-level commitment towards mission-orientated research and ensure that there are sufficient human resources to participate effectively in the JPP.

The ERA Roadmap foresees a "strengthening of the role of JPI SRIAs in devising priorities of RDI policy". In order to achieve this:

- The MLE workshop in Slovenia will be used as a first step to engage with senior policylevel stakeholders (State Secretary and Director General) and increase their personal commitment to further increase commitment at the policy level.
- Mission orientated research could be introduced into the 'interdisciplinary' pillar of the calls for projects that are published by the Slovenian research funding body.

Progress has already been made on the first of these as the State Secretary joined the meeting in Slovenia.

Getting in touch with the EU

IN PERSON

All over the European Union there are hundreds of Europe Direct Information Centres. You can find the address of the centre nearest you at: http://europa.eu/contact

ON THE PHONE OR BY E-MAIL

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

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

Finding information about the EU

ONLINE

Information about the European Union in all the official languages of the EU is available on the Europa website at: http://europa.eu

EU PUBLICATIONS

You can download or order free and priced EU publications from EU Bookshop at: http://bookshop.europa.eu. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see http://europa.eu/contact)

EU LAW AND RELATED DOCUMENTS

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex at: http://eur-lex.europa.eu

OPEN DATA FROM THE EU

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

[Summary about 10 lines]

Studies and reports