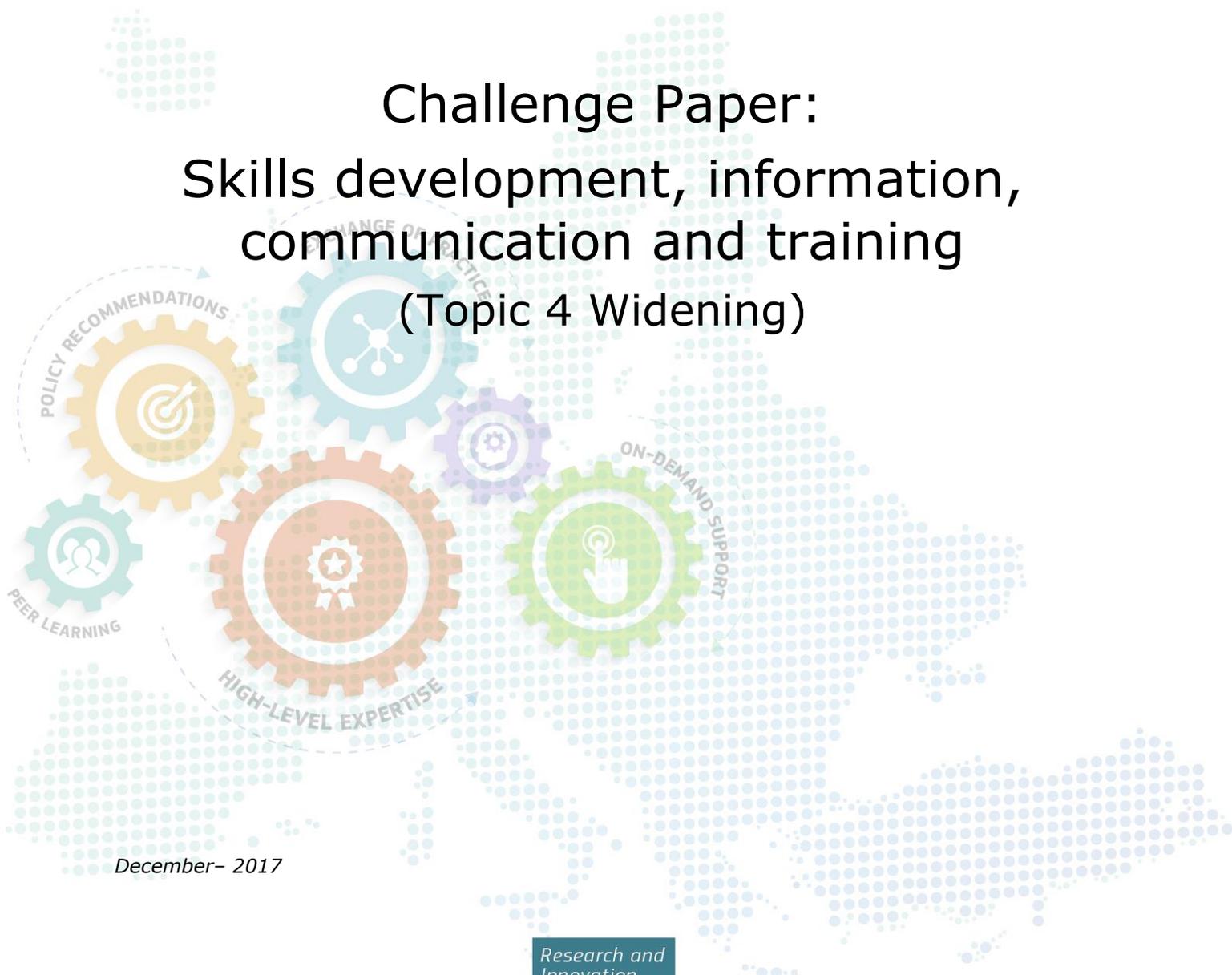


Mutual learning exercise (MLE) on national practices in widening participation and strengthening synergies

Challenge Paper:
Skills development, information,
communication and training
(Topic 4 Widening)



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MLE Widening participation and strengthening synergies: Challenge Paper: Skills development, information, communication and training (Topic 4 Widening)

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Mutual learning exercise on National practices in widening participation and strengthening synergies

Challenge Paper:
**Skills development, information,
communication and training**
(Topic 4 Widening)

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1 Introduction

Participating in the EU Framework Programme (FP) brings many potential benefits to the research actors involved and ultimately to the whole research system of a country:

- a) accessing complementary expertise or infrastructure not available domestically;
- b) getting additional funds for carrying out research that cannot be funded domestically;
- c) pooling forces to address research questions that require a critical mass of resources beyond what is available domestically;
- d) developing the skills and capacity of researchers to access external expertise and cooperate across borders;
- e) for companies, monitoring new S&T developments and accessing new knowledge and technologies that can lead to product or process innovation; and
- f) improving the visibility and reputation of domestic research on the international scene. Low participation rates, especially, but not only, for 'Widening' countries, mean missed opportunities to capture such a wide range of benefits.

The High Level Expert Group on the Ex-post evaluation of FP7 found that *"some of most important reasons for the comparably lower share and lower success rates of the EU-13 organisations are information and language barriers; lack of professional contacts and research networks; lack of leading Universities and Research organisations leaders in proposal matters; limited understanding of FP7; weak training in preparing successful proposals; insufficient motivation to participate in FP7; lack of practice in project management; little experience in cross-country cooperation; generally low focus on R&D in policy and in business; few options for exploitation of research results at the national level."*

Two overarching determinants of the intensity of a country's participation in FP can be singled out: on the positive side, the quality, relevance and levels¹ of endowment of domestic research; on the negative side, the (often much) lower success rates in FP compared to national/regional programmes. Besides these factors, there are important entry barriers into the FP of another nature: the difficulty of accessing relevant information on FP, and the lack of skills to participate. In other words, there is a difference between excellence in research and innovation as such and excellence in designing, acquiring and implementing research projects within the FP. There is a need to pay attention to the latter to break a vicious circle of low participation-low experience-low success in FP. Solutions cover strategies, incentives, schemes and mechanisms to increase both the demand for FP participation and success rates.

The focus of this paper is on solutions, to be developed at a national level, to address those barriers to entry into the FP that relate to information shortage and skills deficits.

The paper serves as a background document for the January 2018 workshop organised under the EU Policy Support Facility Mutual Learning Exercise (MLE) devoted to widening participation to FP and enhancing synergies between FP and ESIF. The focus of this paper was identified as a priority issue when the MLE was designed by the participating countries. During the workshop that will be held on this topic, representatives from

¹ High levels (and easier accessibility) of national public funding of R&D can also, the other way around, generate the unwanted effect of decreasing the attractiveness of FP for domestic researchers. A similar effect may exist in situations where ESIF funds dedicated to R&D are widely accessible.

Member States (MS) and Associated Countries (AC) will present and share their good practices aiming at solving informational and skills barriers to participation in FP.

The scope of the “Skills development, information, communication and training” topic is detailed in section 2. An overview of the landscape of existing practices under the topic is presented in section 3. Lessons learned from evidence on existing practice are exposed in section 4. The final 5th section identifies main challenges that should be addressed in the MLE exercise and proposes issues to be debated at the workshop.

2 Scope

2.1 Definition of the topic

The “Skills development, information, communication and training” topic focuses on all means and instruments implemented by national authorities with the aim of better equipping the national research community with information and skills to participate in the FP. The ultimate goal is to get more research actors involved and to increase their chances to submit and become involved in successful proposals. The target group covers both researchers in the public sector (academia, public research centres) and in the private sector (SMEs in particular).

In the scoping and kick-off workshops, participants to this MLE mentioned issues that they want to consider under this topic. As a result, the topic is defined along five dimensions:

- 1) **Information, advice and guidance:** potential participants to FP face difficulties in getting the right information, at the right time, on existing opportunities in the FP that are relevant to them, as well as on the EU R&I policy context of the area of the call for proposals. An ‘FP watch’ function is a demanding exercise, in particular when the interests of potential participants span a broad range of programmes, and for SMEs that are not well equipped to undertake such strategic work. When potential participants are aware of opportunities, a further need arises to obtain technical information on many issues, including eligibility criteria, financial rules, evaluation criteria, etc. While those elements are all available in a codified form, unexperienced participants often require help in interpreting the rules, understanding them properly and linking them to their internal rules and practices. Also, participants need to be enabled to understand call topics as part of the wider R&I policy context of the FP activity. Composing consortia that include relevant partners is another tricky issue for those would-be applicants that are not yet well integrated into existing networks. All the difficulties mentioned above are further compounded for small organisations (in particular SMEs), and for those lacking internal resources to deal with them. These are present also in countries with high success rates in FP participation. Thus, potential participants need not only support to find information but also advice and guidance if they are to interpret and use the information to develop high quality proposals.

National authorities are aware of the above barriers and have implemented support activities to reduce the costs of acquiring and exploiting relevant information for FP participation. Providing information is the first level of support; the second level involves delivering advice; and the third level necessitates in-depth support in the form of (tailored) guidance. These solutions have to take into account the differences in target groups, the main distinction being between researchers in public research organisations (PROs/HEIs) on the one hand, and research actors in the private sector companies (in particular SMEs) on the other hand.

- 2) **National strategic positioning in FP:** closely linked to the previous strand, another relevant issue is the national capability to influence the design of FP’s work programmes and to know how these documents evolve during the definition process. This is a key element for early positioning and, if possible, for including some relevant topics at the national, regional or institutional level. Alignment strategies can also bring benefits from the perspective of developing human capital, thanks to synergies achieved between EU and national R&D programmes. While the very issue of alignment of national strategies with EU priorities goes beyond the scope of the present topic (and has been dealt with in another MLE), the development of effective institutional strategies for increasing the involvement of national research communities in the FP is an important pre-condition for raising the attractiveness of FP to domestic actors. These strategies ensure that

the impact of the specific measures aimed at breaking informational and skills barriers towards the FP is maximised.

- 3) **Skills development and training for research managers:** both existing and would-be FP participants face challenges in getting people with the necessary skills to design proposals and implement projects funded by the FP. Unexperienced actors' staff face shortages of both skills and experience. This barrier is higher when developing skills and capacities for entering into multinational research projects is not a priority in PROs/HEIs: in this case, researchers are left to themselves and have to learn all the rules and find time within their work to enter into European partnerships. This skills shortage problem is particularly acute in those SMEs for which research is not a primary activity.

Remedies to this problem are primarily developed within organisations themselves. In PROs/HEIs, this often takes place in departments such as legal units and technology transfer offices (TTOs). Some companies also have established dedicated functions or departments to ensure the internal availability of such skills. The focus here is on actions to support skills development and the training of research managers supported by national level authorities. Such actions take place on the domestic scene, but also on an international basis, involving training or exchanges between research managers on a transnational basis.

- 4) **Incentives:** to alleviate entry barriers into FP, national authorities have developed financial incentives to cover the costs involved in developing research project proposals involving transnational partnerships. This concerns both actors in the public and private research sectors. These incentives are developed firstly on the premise that actors, and in particular those that are not yet experienced in FP participation, face sunk costs to prepare their proposals; and secondly on the premise that the low average success rate of proposals in FP acts as a deterrent to engage into such endeavours. The costs include in-house time needed for working out the details of proposals, as well as travel costs to meet partners and develop the partnerships behind the proposals.

Another issue, of particular relevance for PROs/HEIs, relates to the difficulty of getting co-funding for those awarded FP projects, which do not fund costs on a 100% basis. This can act as a deterrent to considering participation in FP projects. As a response, national authorities have developed systems that provide financial rewards for researchers or organisations that are beneficiaries of FP funds (or even for those involved in projects that are not funded but are evaluated positively).

- 5) **External Communication:** the information barrier with respect to FP access works both ways: it is also difficult for national actors to become visible on the European scene and be invited to join proposals. Even in less R&D-intensive countries, there are many centres of excellence that have the capacity to act as good partners in research consortia, but which suffer from a lack of visibility and a limited history of participation in such endeavours: this is an obstacle to their participation. For SMEs, this is a big barrier unless they are well integrated into global value chains and used to working with larger companies that are themselves FP participants.

While becoming known outside national borders is chiefly the responsibility and result of actors' own initiatives, possibilities for joint action are also being taken by national authorities, or by groups of PROs and HEIs if they agree on joint strategies, or by public-private partnerships such as competitiveness poles. The aim of such actions is to ensure, on a collective basis, the external promotion of domestic fields of excellence and their actors. This type of activity also falls under the present topic as they contribute to the surmounting of information barriers as seen from the outside.

2.2 Complementarity with other topics covered by this MLE

The challenge of enhancing participation to FP will not be met through the provision of solutions to information and skills deficits only: these are necessary, but by far not sufficient conditions. Other significant conditions will be addressed in other 'widening' topics covered in this MLE:

- **Topic 1: mobility of researchers:** brain circulation is a good way to help national institutions to enter into, and maintain, their presence in EU partnerships. Mobile researchers can contribute to the information function by connecting their original home institutions with foreign institutions in a targeted mode, i.e. enhancing people-to-people links in domains of joint interest.
- **Topic 2: improving science – industry relationships and cooperation:** this is a precondition for preparing national agents for FP participation, which often require that research actors from the public and private sectors are also closely cooperating on a national scale. Such cooperation broadens the possibility of national actors entering into the European networks to which their national partners belong. In particular, it has proven difficult to involve SMEs in FP projects: promoting connections between SMEs and HEIs/PROs may be a good way to stimulate the engagement of the former in FP.
- **Topic 3: improving networking at EU level:** the phenomenon of 'closed' networks makes it difficult for newcomers to enter into partnerships for FP projects. The provision of information, incentives and guidance from support agencies alone will not solve this problem: national research actors need to tap into the opportunities offered by existing trans-European networks, such as e.g. ERA-Nets or COST networks, as stepping stones to FP participation.

The range of discussions under the theme of synergistic use of Structural Funds and FP funds (Topics 5, 6 and 7 of this MLE), at strategic and operational levels, is complementary to the present topic. For example, Structural Funds are used to support information and skills development initiatives such as the ones considered in the next sections of this report; and smart specialisation strategies adopted within the framework of these Funds provide a frame to focus internal and external communication around specific national strengths.

3 Landscape

3.1 Information, advice and guidance

National Contact Points (NCPs), established in all MS and AC, play a key role in promoting participation to FP through their roles as providers of information and assistance to potential applicants and project beneficiaries. They are funded by national authorities and implemented under various architectures and modes of operation in every country. The NCPs differ in terms of²:

- *Degree of centralisation/decentralisation*: at one extreme, France, Finland and Ireland have highly decentralised NCP systems, with many thematic NCP coordinators and a large number of organisations involved. At the other extreme, centralised NCP systems are found in the Czech Republic (where the Technology Centre of the Czech Academy of Science - Department National Information Centre for EU Research – NICER - takes the leading role and acts as a one-stop-shop); the Netherlands (where the EG Liaison office takes the central role); or Portugal (where the NCP functions are located in a single organisation, Fundação para a Ciência e a Tecnologia -FCT). In other countries, the NCP system is hybrid. The system in Belgium, with 5 NCP organisations, reflects the federal nature of the country in that each region and community has its own NCP. Austria has both a central NCP office (the Department for European and International Programmes [EIP] at the Austrian Research Promotion Agency) and 5 regional NCP 'contact points'. Denmark also combines a central function with its EuroCenter located at the Ministry of STI and 5 regional NCPs. Switzerland follows a different hybrid pattern with a central NCP structure, Euresearch, which coordinates a network of 15 members acting as regional NCPs and located at universities. The system in Turkey is centralised and affiliated to TÜBITAK, but because of the size of the country there are also more than 100 'information multipliers' all over Turkey, who mostly work at universities and technology transfer offices.
- *Size in terms of staff*: Switzerland's NCPs have 18 FTE centrally and 20 FTE in regions; France 34 FTE; the Netherlands 29 FTE; Turkey 23 FTE; Portugal 20 FTE; the Czech Republic 14 FTE; Denmark 14 FTE; Sweden 12 FTE; Finland 4 FTE centrally and 8 FTE in organisations; and Slovenia 21 individuals. In many cases, individuals work part-time on NCP missions, and hence the number of individuals acting as staff in NCPs is usually much larger than the FTE number.
- *Degree of professionalism*: related to the part-time/full-time distinction is the issue of professionalism. Some NCP staff are highly specialised and very knowledgeable about FP issues, while others only conduct their FP-related activities as side activities, sometimes leading to a lack of resources to invest in acquiring a deep understanding of the possibilities and modes of operation of the various elements of the FP.
- *Activities*: the Commission has defined a minimum set of activities for NCPs: 1) Informing and raising awareness about FP; 2) Assisting and advising clients; and 3) Signposting and cooperating with other networks such as EEN whenever necessary. The range of services delivered in practice under these three themes varies quite a lot. In particular, some NCPs are more reactive while others adopt more pro-active missions, such as acting as consortium facilitators and undertaking pro-active partner searches. The task of targeting audiences is also implemented with different levels of intensity. Some NCPs focus on the widespread transmission of information to broad audiences while others focus on

² Part of these data are extracted from NCP Academy: *NCP Systems – benchmarking on micro and macro level & gathering future needs*. http://www.ncpacademy.eu/wp-content/uploads/2017/08/20170531-NCP-Academy-Helsinki-Experience-Report_FINAL_sep17.pdf

the provision of customised services to smaller, targeted audiences. The extent and depth of assistance during the proposal drafting stage is another differentiating factor: some NCPs limit their intervention to a quick check of project ideas while others provide in-depth mentoring and coaching to potential EU project partners or even training to (potential) EU project managers.

- *Target groups*: the NCP's information, advice and guidance services are tailored to two broad target groups: PROs/HEIs on the one hand, and companies, mostly SMEs, on the other hand. The balance between these two groups varies, and depends on the existence of other services dedicated to these groups in the national setting.

In addition to the NCPs, the landscape of advisory and information services includes **initiatives managed by PROs/HEIs themselves and by SME support bodies**. While they can be seen as grassroots initiatives, they also fall under the scope of this MLE due to the fact that they often benefit from public funding in the form of programmes or grants (sometimes funded by ESIF) to implement these missions.

University technology transfer offices or R&D liaison units play a (sometimes crucial) role in informing and raising awareness of university researchers with respect to international cooperation possibilities. In some countries, such as Sweden, FP support for university researchers is mainly available on a university basis rather than through NCPs. These university offices offer their services mostly on a free basis, although there are exceptions. Some do a great deal to alleviate the burden on researchers involved in FP projects, taking on administrative and financial management tasks. Through their participation in international networks such as the LERU, staff at these units get access to knowledge and potential partners to support their job. Some of these offices have developed a wide range of support activities:

- ERIO³ – the European Research & Innovation Office of the University College of London has a staff of 17 people and its services include: FP funding information and advice (including workshops); proposal support services; project management and finance; project costings; contract negotiations. ERIO receives 1% of the FP funds received by the university.
- The Danish Central Support Offices (CSOs) in universities offer support along the whole project proposal cycle. This includes: advice on ideas for research proposals (screening); review of draft proposals; dedicated assistance with drafting the management, administrative and financial elements of the proposals; and compliance checking. In addition, CSOs offer guidance material as well as training sessions.

Business Innovation Centres (BICs) are at the frontline to diffuse information and provide guidance to SMEs, their main target group. Stimuli to participate in FP can be given through their usual innovation support activities or through dedicated activities:

- An example is that of BIC Asturias⁴, which promoted the creation of a commercial pilot 'R+TD Unit', and developed a structured and effective methodology to position Asturian companies as partners in R&D projects financed by the FP.

Finally, information and advice for participation in FP is also provided by **European networks** operating at EU level:

- One example is provided by the European Regions Research and Innovation Network (ERRIN). In 2017, ERRIN is organising an entire week of Horizon 2020

³ <http://www.ucl.ac.uk/research-services/euro-funding>

⁴ <http://www.ceei.es/pgceei.asp?pg=95>

project development workshops at multiple venues in Brussels, involving over 200 participants and more than 50 FP project ideas.

3.2 National strategic positioning in FP

All MS, as well as most AC, have developed strategies to increase the involvement of national research communities in the FP. These incorporate: the adoption of overall national goals with respect to FP participation; the allocation of complementary tasks to various Ministries and institutions; the definition of targeted policy mixes; and the organisation of exchanges of information and the creation of synergies between key national actors concerned with FP participation.

- In **Spain**, there has been a continuous effort by successive Spanish governments to obtain a positive return from the Spanish contribution to the EU FP budget ([see description of this case in annex](#)). This high-level political will is translated into a set of Key Performance Indicators (KPI) embedded in the national R&D and innovation plans and also at an institutional level. In 2007, the Spanish government launched Euroingenio, a plan designed to increase Spanish involvement in FP and international research. The challenge was to get an economic return from FP7 equivalent to Spain's economic weight in the EU25 (in 2007 the Spanish GDP represented 8.4% of the EU25). The economic target was to increase Spain's participation from the 6.5% achieved in FP6 to 7% in 2008 and 8% in 2010 within EU27 (considering only funds allocated to Member States). Another target was to increase the Project Coordination Rate (number of projects coordinated by Spanish entities) to 6% in 2008 and 7% in 2010. The plan included elements that aimed to:
 - Include all stakeholders: business, universities, research groups, innovation agencies, etc.
 - Support the creation of offices for international projects.
 - Establish structural measures to provide a way for Spanish R&D actors to participate in a different fashion with an international long-term approach (e.g. by professionalising the management of international projects).
 - Introduce for the first time the concept of 'funding for results': financial aid was made conditional to, on the one hand, the excellence of an Action Plan for participation in FP7, and on the other hand, the compliance with some indicators established in that Action Plan.
- **Norway** has developed an overarching strategy to maximise its participation in FP. The strategy for FP7 included the following responsibilities:
 - The Norwegian Ministry for Education and Research and the Research Council Norway are responsible for facilitating the development of objectives and strategies for FP7 participation among HEIs;
 - The Research Council Norway and Innovation Norway is responsible for strengthening the coordination of their information and counselling services;
 - The Research Council Norway and Innovation Norway are responsible for implementing activities to enhance FP7 participants' capabilities in terms of project management, proposal writing, etc.;
 - The Norwegian Ministry for Education and Research is responsible for adapting and strengthening programmes to co-fund FP7 proposal writing and project implementation.

- **Denmark** has established a range of complementary measures to enhance Danish participation to FP:
 - Strengthening of the EuroCenter (NCP) within the Ministry of Science, Technology and Innovation;
 - Direct financial incentives to universities based on FP participation;
 - Financial incentives for SMEs and researchers in the public sector;
 - Reinforcement of support offices at universities;
 - Improving recognition and reward for FP participation within the university system.
- The **Austrian** Research and Promotion Agency offers comprehensive information and assistance services on FP and is responsible for the dissemination of information as well as assistance for researchers from academia and industry about FP in Austria. One of the important activities of the Agency is the organisation of strategic talks to explore the potential of universities, research organisations and private firms to participate in FP and discuss strategies that might increase overall national participation in FP.

An important element in terms of national strategic positioning in FP concerns **the role of universities**. First, national universities can play an instrumental role in providing inputs for national authorities in work programme negotiations with the EC. Second, the extent to which national universities are engaged in transnational research partnerships, possibly formalised in Conventions or Memoranda of Understanding at the level of university boards, faculties, or broad research groups, can help to better position national research communities in FP. The development of structural research partnership agreements can take various forms: establishment of joint transnational institutes that can be physical or virtual institutes; establishment of overseas offices of universities; joint research projects and of course mobility schemes (covered under another topic of this MLE). When such initiatives are in place, they form a good base on which informational support services can build.

- The **Baltic Sea Region University Network** (BSRUN)⁵: 27 universities in the region are committed to develop a mutually beneficial and equal partnership by strengthening collaboration in university governance, management and administration. The aim of the network is to ensure the implementation of the full potential of the region in science, research and education, as well as further strengthen its position as a renowned European hub of innovation.
- The partnership between 5 northernmost **Swedish, Finnish and Norwegian** universities under the leadership of Luleå University of Technology (RECOLL), provides a good platform to better position the Northern part of Scandinavia in the FP ([see description of this case in annex](#)).

3.3 Skills development and training for research managers

A **training programme for NCP managers** exists: the **NCP Academy**⁶. It aims at enhancing the performance of NCPs by bringing together Horizon 2020 NCP Coordinators and Legal and Financial NCPs and implementing training on cross-cutting issues for National Contact Points while addressing quality standards and good practice. Conclusions drawn from the action of the NCP Academy point towards the reduction of ineligible proposals and an increase in quality of proposals.

⁵ <http://bsrun.org>

⁶ <http://www.ncpacademy.eu/>

Some **NCPs** also include formal training activities in the scope of their services:

- The Agenzia per la Promozione della Ricerca Europea (APRE)⁷ in **Italy** provides training for a) researchers and other potential beneficiaries of European funds (including webinars on how best to approach European calls and write project proposals); b) other NCPs. APRE has developed a number of NCP handbooks, distributed at the European level and beyond.
- The NCP network in **Ireland** is coordinated by Enterprise Ireland, which organises mutual learning events, training and exchanges of good practices between all the organisations that are part of the network in order to ensure professionalisation and the continuous learning of research administrators.

National experiments pursue the aim of formalising the training process through specific 'specialisation degrees' (even expanding them to master degrees):

- The **Spanish** 'Specialist on international R&D' programmes (part of EUROINGENIO) pursue the objective of building capacity for research managers and advisors. Beyond FP, *stricto sensu*, the goal is also to be able to identify opportunities in EUREKA, ESA, INTERREG, etc., where participants can also have other opportunities depending on the type of activity or proposal.

Learning networks for research administrators are active in providing support and guidance, based on good practices, at national or international levels:

- The **COST BESTPRAC Targeted Network**⁸ is a network of officers in administrative, finance and legal services in universities, research organisations and related entities supporting researchers involved in developing international (in particular European-funded) research projects, with the aim of exchanging experiences and sharing and developing best practices, encouraging knowledge sharing, and promoting knowledge transfer and increased efficiency. It organises meetings, training schools, summer schools, workshops and workplace exchange to train those officers in a variety of matters related to the management of internationally-funded research projects. Good practice guides have been produced based on the mutual learning activities.
- **EARMA, the European Association of Research Managers and Administrators**⁹ dedicates its activities to the lifelong learning and professionalisation of those administrators in charge of research management. It organises conferences, workshops, exchanges of experience sessions, training courses, and mentoring activities. It also offers small grants (e.g. travel grants, mobility grants for short term study visits, and grants for activities such as conferences). Similar associations also exist at a national level. One example is the Danish Association for Research Managers and Administrators (DARMA).
- **The Informal group of RTD Liaison Offices (IGLO)**,¹⁰ is an informal association of Brussels-based non-profit R&D Liaison Offices. The aim of IGLO is to facilitate and enhance the interaction, information exchange and co-operation between Members of IGLO, their national research systems and European institutions on issues related to EU RTD, in particular, the Framework Programme. It notably provides training sessions on practical issues related to the Framework Programme, such as proposal preparation, financial management, contractual issues, IPR, etc.

⁷ <http://www.apre.it/>

⁸ <http://www.bestprac.eu/en/home/>

⁹ <http://www.earma.org/>

¹⁰ <http://www.iglortd.org/>

3.4 Incentives

National incentives for fostering participation in FP are popular and usually take the form of **small scale subsidies for FP project preparation** (grants for exploring project feasibility and validation of project ideas, grants to seek advice from specialised consultants) and/or travel costs for transnational exchanges. Depending on the schemes, they target either HEIs/PROs or companies, or are open to both types of research actor.

Examples are:

- **France:** 30k € grants are available to coordinators to prepare a consortium and a proposal; Trampoline ERC grants can be used to improve a failed application.
- **Denmark:** one programme provides grants for proposal preparation – 10k € for project coordinators and 7k € for project partners. The budget of this programme is 3M € per year. The success rate of proposals supported by these grants is 30% compared to 15% for those without support.
- **Hungary:** provides travel grants to help set up research consortia.
- **Poland:** ‘Grants for grants for SMEs’ are offered to SMEs to support the cost of preparation and submission of applications to an international innovation programme (including FP). A maximum of 18.75k € is available to potential coordinators and 8.75k € for potential partners. The programme is funded by the Ministry of Science and Higher Education and co-funded by Structural Funds.
- **Norway:** Support for FP proposal preparation is provided by Research Council Norway (RCN) within its PES scheme. A dedicated yearly budget (average 4.89m €)¹¹ covers up to 50% of eligible costs. Grants vary in relation to role, type of project, presence of Norwegian actors etc. For a large-scale project, the amount available can rise to 42.8k €.
- **Ireland:** Enterprise Ireland provides grants for FP project preparation to academics acting as project leaders (12.5k €) and to domestic companies, as well as providing travel grants to applicants. The Inward Investment Agency supports the costs of project preparation for multinational companies.
- Region of Murcia in **Spain**, through its Plan ‘Europe-SME’, offers an annual award to the best project idea not yet submitted by a company. This provides free assistance from a private consultant to help the company to write the proposal for an EU call.

Many countries offer financial **incentives within national R&D funding programmes**¹² that support FP participation. They take four principal forms: 1) the evaluation criteria for project proposals place a bonus on an international cooperation dimension; 2) a monetary incentive is awarded for projects meeting international cooperation criteria; 3) funding lines are open for projects that have been rated highly but not funded by FP; and 4) specific programmes offer top-up schemes to reward the acquisition of FP money. Examples of the latter two types are:

- **Spain** supports non-funded but highly rated ERC proposals with national money. The same approach is under study for an instrument that supports SMEs.
- **Sweden** supports SMEs which got the Seal of Excellence but were not funded under H2020 to use this Seal in national funding applications.

¹¹ <https://www.forskningsradet.no/en/Funding/PES2020/1253991614799>

¹² Financial incentives also do exist at the level of universities or PROs, e.g. mechanisms for internal funds allocation which favour researchers or research groups which have acquired FP projects.

- The **Hungarian** BONUS-HU Grant provides supplementary funding for HEIs/PROs, non-profit organisations and SMEs that have successfully competed for collaborative research projects in the FP.
- The **Danish** REWARD programme (DKK 65m/year) provides top-up funding to universities that is distributed according to their success in acquiring FP funds.

At the **level of universities**, incentives are also provided to university researchers. These take the form of: inclusion of FP participation-related criteria – often distinguishing between participation and leadership – in internal reward schemes (via enhanced remuneration or improved career paths); and small-scale funding for FP proposal preparation, typically in the form of support to cover travel costs.

3.5 External Communication

Information Portals on the Web are used both to diffuse information on FP (tailored to the country's needs) and to publicise national research capacities to the outside world.

- The ERA Portal **Austria**¹³ is a knowledge-sharing platform providing information on EU-related research policy and its implementation in Austria and in Europe. It supports decision-making by providing strategic intelligence. In addition, ERA Portal Austria serves as a promotion platform for Austrian initiatives on the European scene.
- In the **Turkish** NCP website hosted by TÜBİTAK, each thematic and horizontal area has its own page, which includes important related news, provides information on Turkish-funded projects and, additionally, leads to sub-pages that cover partner searches, call information and various other topics. There is also a dedicated page with information on national support and award programmes.

Well-organised knowledge bases are useful support tools for research managers and intermediaries in charge of informing and advising research actors, and thus contribute to the above training and skills function.

Some countries use **liaison offices in Brussels** to play different roles, supporting the various dimensions of this topic. Generally speaking, they can play an effective role in supporting FP participation when they actively engage in discussions with representatives from other countries to create links with potential project partners and also highlight key assets in the country (or region) on the European scene. Some of these offices also support national participants with information and advice, or through the provision of meeting facilities for project coordinators and participants. Some deploy also training actions for research managers (see above).

- The Region of Murcia in **Spain**¹⁴ has a scheme that funds project leaders from regional companies, research institutions or intermediaries to spend one month in the Brussels liaison office to receive customised training and assistance to prepare project proposals.

Finally, specialised national R&D-active organisations such as **competitiveness poles**¹⁵, which gather actors from public and private research spheres around a dedicated theme, have the potential to play an active role in promoting the research assets of a country on the European and international scene. Supporting their members in the development of projects and the acquisition of funds from the FP, via their representation and brokerage roles in EU circles, is often part of their mission.

¹³ <https://era.gv.at/>

¹⁴ http://www.greenavoid.eu/media/uploads/nova_magazine_march_2014.pdf

¹⁵ The role of innovation-oriented public-private partnerships in supporting FP participation will be dealt with under Topic 2 of this MLE, “Encourage science-business cooperation”.

4 Lessons

4.1 Lessons related to information, advice and guidance services

Lessons for information services

A general challenge for information services lies in the **visibility and take-up of these services, especially by companies**. The issue translates into practical questions about ways to stimulate appetites and publicise offers in a more pro-active fashion.

- The 2010 evaluation¹⁶ of **Danish** participation in FP found that the Central Support Offices at universities were very effective: the information and guidance needs of university researchers were well met by the CSOs. However, the evaluation also pointed towards a rather low level of take up of the CSO services on offer: this suggested that CSOs found it difficult to broaden their reach. The same evaluation found that Danish SMEs were less-well served by the national FP support system than university researchers, as the former target group had proved more difficult to reach.
- The EU **MIRIS** project¹⁷ (Mobilising Institutional Reforms in Research and Innovation Systems) set out to encourage better exploitation of European research and innovation programmes and greater participation in the European Research Area by EU-13 countries. It did this by setting up a process of analysis, dialogue and mutual learning among key concerned stakeholders, namely research, innovation and institutional actors. The project identified “*a reactive rather than pro-active attitude*” as one of the four main barriers to EU-13 participation in FP.

Concerning the need for information and support services to become more pro-active, experience suggests two directions that could be explored:

- A **broadening of the scope** for information, advice and guidance, moving from a focus on open FP calls to participation in the internal calls of JTIs or Flagships, to mention just two examples.
- An **extension of the role of university TTOs** to better incorporate the ‘promotion’ stage. Usually, TTOs support researchers when they have been funded (i.e. during the implementation) or during the negotiation phase. Many of them fail to support researchers pro-actively during the promotion and preparation of proposals because these activities frequently require a different type of staff profile.

Lessons for NCPs

The diversity in models adopted, as well as the variation in maturity and experience of NCPs across Europe, provides a good pool of experience for mutual learning exchanges.

One NCP network that has been mentioned as an example of good practice is the **Austrian NCP network**¹⁸. An evaluation of 4 regional NCPs in Austria was conducted in 2013¹⁹. These display considerable heterogeneity (e.g. in terms of types of customers

¹⁶ Danish Agency for Science, Technology and Innovation (2010), *Evaluation of Danish Participation in the 6th and 7th Framework Programmes*, DASTI Research: Analysis and Evaluation 2/2010, Copenhagen.

¹⁷ www.mirris.eu (see final conference report)

¹⁸ See e.g. this reference: «*An example of a highly successful model from which others might learn is the Austrian NCP network*», p.8 in Commission analysis of September 2011, at the request of the Polish Presidency: “Analysis of low participation in FP7”.

¹⁹ Good, B. and A. Radauer (2013), *Zwischenevaluierung der vom BMWF beauftragten Regionalen Kontaktstellen (RKS)*, Technopolis.

targeted – companies versus researchers in PROs and universities; and in terms of depth of service). In addition to traditional NCP functions, they also have strategic tasks, such as providing strategy advice and strategic input to local governments. Overall, the NCPs were rated as effective in terms of meeting the goals assigned to them, primarily because they took an holistic approach to service delivery. Key findings from this evaluation are:

- Key success factors:
 - The client-centred approach rather than one of “selling” (FP) programmes;
 - The presence of committed and well-trained advisors/staff;
 - The regional character of the service delivery.
- Problems:
 - The treatment of the European dimension needed to be deepened and the target group further defined in order to reach those actors that have the right profile to participate in the EU programmes.

Another important issue arises with respect to the **relationship between NCPs and university transfer offices**. The value-added of NCPs depends on the main features or specialisation profiles of PROs and HEIs. The background of NCPs and their relationship with the public system is another factor to be taken into account. When universities have implemented their own information and advisory structures internally, the relevance of external structures decreases and the issue of good synergies between the various structures becomes prominent.

- In the case of the **Swiss NCP**²⁰, a problem of potential conflict of interest was identified, since universities were members of the NCP network: it was difficult for these to serve their own university researchers as well as external actors, in particular SMEs.
- In the **Netherlands**, closer interaction between NCPs and university support offices is taking place alongside efforts to introduce a clearer division of labour, with the latter taking on more administrative tasks, while national NCPs takes on ‘strategic intelligence’ tasks, providing information (e.g. maps of FP participation performance by university department) to senior management in universities and research centres that could feed into strategy development.

An important issue for NCPs is the **question of targeting clients**: there is a dilemma between focusing on the most advanced participants (with a view to raising the number of successful proposals) or on those that are less advanced and need more support (with the aim of producing learning effects, thus maximising behavioural additionality).

- The **Irish and Swiss NCP** strategies, have taken opposite views on this question, the former targeting more advanced applicants and the latter less advanced ones.
- **Ireland** has developed a successful approach to target enterprises, with a view to raising their FP participation (see description of this case in annex). Enterprise Ireland (EI) has responsibility for co-ordinating the promotion of FPs. Through its staff of over 200 Development Advisers, it works directly with companies in Ireland to support their development and growth and to win export sales in global markets. Only a very small minority of EI staff are directly involved in promoting FPs, but the organisation seeks to ensure that there is a high level of awareness amongst all its Development Advisors of the role and opportunities provided by FPs. The Development Advisors, using a Technology Audit process to set an agenda for overall company development, are aware of the potential role that FP

²⁰ Arnold, E., P. Boekholt, B. Good, A. Radauer, J. Stroyan, B. Tiefenthaler, N. Vermeulen (2010) *Evaluation of Austrian Support Structures for FP 7 & Eureka and Impact Analysis of EU Research Initiatives on the Austrian Research & Innovation System*, Technopolis.

could play in developing the research capacity and international orientation and networking of their client companies. The Advisers make use of the National Technology Audit Programme, which offers financial support to the companies to find their way into an FP project consortium. Using the Technology Audit as a basis for identifying whether a company has an appropriate 'fit' for an FP project provides a very solid base for proceeding into a resource intensive and highly competitive Call process.

Another issue is to secure NCP's **effectiveness in opening access to international networks** for national researcher performers:

- A new NCP system has been established in **Flanders** following requests by national research performers to improve NCP coordination while ensuring 'open access' to the FP. Another avenue for improvement concerned NCP participation in NCP networks or NCP-related ERA-nets. A lot of interesting information circulates at an early stage early inside these networks; hence the openness of the FP might be improved by the speedy circulation of information from these networks to local levels. For the moment, the Flemish NCPs want to focus initially on the 're-engineering' of the services offered to potential applicants, but eventually entering as a late-comer to these networks might become a problem (as they are currently set up as project consortia that have to write and submit a proposal – which implies that the Flemish NCP office has to be invited to join such a consortium). This situation echoes the 'closed clubs' complaint by the 'widening countries'.

In 2017, the **NCP Academy** carried out an extensive survey and thorough statistical analysis of NCP systems, services, activities and indicators. The conclusions of the exercise were that no direct correlation could be found between how much effort NCPs put into their performance and the success of their country in the Framework Programme²¹. The NCP Academy has nevertheless identified **challenges for NCP structures**. These include:

- The need to search for more synergies and reduce duplications between NCP networks within different Member States (see 2016 Recommendations²²).
- The need to adapt the NCP structure to the country context. A main issue discussed in the NCP Academy is the comparative virtue of centralised NCP systems (which favour visibility, accessibility, pooling of resources, smooth communication and information channels, better opportunities for standardisation of practices, better possibilities for exchange of good practices, experiences and knowledge) versus decentralised systems (which favour closeness to beneficiaries, wider reach and territorial coverage, richness of the network with different actors and various NCP practices – innovative approaches). Discussions showed that the strength of each model are the weaknesses of the other and vice-versa.

²¹ NCP Systems – benchmarking on micro and macro level & gathering future needs http://www.ncpacademy.eu/wp-content/uploads/2017/08/20170531-NCP-Academy-Helsinki-Experience-Report_FINAL_sep17.pdf

²² NCP Academy Experience report, 6 June 2016, Copenhagen. http://www.ncpacademy.eu/wp-content/uploads/2016/09/07062016_ME_Impact_ExperienceReport.pdf

4.2 Lessons related to national strategic positioning in FP

An evaluation of the **Norwegian** strategy for FP participation²³ indicates that it has an important symbolic value, emphasising the importance of the Norwegian presence in the international research arena. Besides, according to several HEI and institute management representatives, national strategies influence the actions and prioritisation of research-performing institutions in the public sector. And the fact that internationalisation is integral to the strategies of research institutions has a positive influence on FP participation rates. On the other hand, such national strategies are not do not have a commensurate influence on the activities of the private sector.

A 2010 evaluation²⁴ of **Denmark's** strategy to enhance FP participation found that a lack of prioritisation of FP participation in the past by national authorities was one explanation for the relatively low participation of the country. This evaluation also noted that Denmark deploys a very comprehensive range of mechanisms to ensure the relevance of the FP for national actors: "*provision of inputs to national representatives on the FP programme committees; the establishment of Reference Groups in seven FP7 priority areas to strengthen national consultation on draft work programmes and to advise on ways to enhance Danish involvement; participation in EU-level conferences, workshops and other network activities; participation in European Technology Platforms, Joint Technology Initiatives, Article 169 actions and other forums that are helping to set future FP research trajectories and priorities; participation on FP Advisory Groups; and range of 'lobbying' activities aimed at influencing Commission officials responsible for FP planning*". However, despite all these actions, the evaluation found shortcomings and provided recommendations for improvement. Some of them concern the greater involvement of the research community itself in EU-level activities and networks.

A review²⁵ of studies of national support structures for FP participation came to the following conclusion: the interaction and exchange of information between those national actors – policymakers who represent countries in programme committees, other representative bodies and the NCPs who provide information to the research community – is seen as sub-optimal in many countries. In Ireland, programme delegates (Ireland's representatives on FP committees) also provide (more strategic) support to prospective participants; for some programmes, the NCP person also takes the role of programme delegate.

4.3 Lessons related to skills development and training for research managers

There is not much evidence available on the challenges faced and results gained by organisations or schemes delivering training to research managers. Such activity usually involves learning-by-doing and results in tacit knowledge. This tacit knowledge can, in theory, be transferred through various types of exchange of experience or lifelong learning activities, but there is a need to know more about the effectiveness of these types of initiative.

²³ Åström, T., T. Jansson, G. Melin, A. Håkansson, P. Boekholt and E. Arnold (2012), *On motives for participation in the Framework Programme*, report for the Norwegian Ministry for Education and Research, Technopolis Group.

²⁴ Danish Agency for Science, Technology and Innovation (2010), *Evaluation of Danish Participation in the 6th and 7th Framework Programmes*, DASTI Research: Analysis and Evaluation 2/2010, Copenhagen.

²⁵ Åström, T., T. Jansson, G. Melin, A. Håkansson, P. Boekholt and E. Arnold (2012), *On motives for participation in the Framework Programme*, report for the Norwegian Ministry for Education and Research, Technopolis Group.

4.4 Lessons related to incentives

Evaluation exercises have shed some light on the functioning of incentives for FP participation. These evaluations do not provide a straightforward (or a generalisable) picture concerning their relevance or effectiveness, for two reasons. First, their impact depends a lot on country conditions and, especially, the level of maturity of the research community with respect to FP participation. Second, there is no linear relationship between these incentives and the quality and quantity of FP participation at national level. Nevertheless, some interesting insights are given by these evaluations.

- An evaluation of the **Norwegian** support measures for participation in FP7 was carried out in 2013²⁶. The conclusions are overtly positive in terms of the relevance and effectiveness of these types of incentive:
 - The portfolio of measures to support participation in FP appears to be comprehensive and, from an international perspective, it stands out in terms of its breadth and generosity. As stated by the evaluators “*it is probably Europe’s most comprehensive and generous*”.
 - The project preparation subsidy scheme (PES) and a topping-up scheme for recipients of FP7 funds for cooperative research were said to have led to positive results in terms of additional proposals, more competitive proposals and output additionality. These schemes also had significant impacts in terms of competence development, expanded networks and behavioural additionality (ability to write competitive proposals and propensity to submit additional proposals). In particular, PES corresponds to a real need, since the measure resulted in both additional proposals and more competitive proposals, as well as to an increase in the number of Norwegian coordinators. The legitimacy aspect and the symbolic value of PES were also significant for research institutes. In contrast, the topping-up of Marie Curie and ERC grants led to less impressive though still significant results and impacts.
 - The project preparation subsidy scheme (PES) is significantly more important for small and medium-sized enterprises than for HEIs and research institutes. PES support offers legitimacy to work on a proposal and can make it justifiable from a commercial perspective. For large companies, the significance of PES support is probably limited to its symbolic value.

The evaluation²⁷ of **Danish** FP7 participation praised the combination of financial support measures available to support FP participation. However, it also indicated that the schemes were not sufficiently known by potential beneficiaries and that their reach was insufficient.

In contrast, the 2010 evaluation²⁸ of **Austrian** financial grants for FP preparation was very negative and recommended their discontinuation on the ground that their additionality was too meagre (a lot of free-riding was evident).

The **lack of additionality** associated with subsidy schemes for FP participation is a well-known problem. This raises the question of the relevance of a possible response to this problem: focusing (or even limiting) the support to entities that are coordinating

²⁶ Åström, T., A. Håkansson, G. Melin, P. Stern, P. Boekholt and E. Arnold (2013), *Impact evaluation of the Research Council of Norway’s support measures to increase participation in EU-funded research*, Technopolis Group.

²⁷ Danish Agency for Science, Technology and Innovation (2010), *Evaluation of Danish Participation in the 6th and 7th Framework Programmes*, DASTI Research: Analysis and Evaluation 2/2010, Copenhagen.

²⁸ Arnold, E., P. Boekholt, B. Good, A. Radauer, J. Stroyan, B. Tiefenthaler, N. Vermeulen (2010) *Evaluation of Austrian Support Structures for FP 7 & Eureka and Impact Analysis of EU Research Initiatives on the Austrian Research & Innovation System*, Technopolis.

proposals (rather than acting only as participants). Such a measure should be aligned with the political and strategic goal of increasing the coordination rate of funded proposals.

4.5 *Lessons related to External Communication*

A lot of activities deployed, intentionally or not, by a wide variety of institutions (research funding agencies, governmental authorities, Brussels-based research liaison offices, individual R&D liaison offices of universities, NCPs, national delegates to FP Committees, and of course by national R&D actors) result in external promotion of the research strengths of a country. Participating in FP activities (and other international networking and joint activities) is probably the best way to ensure that these capacities are visible on the international scene. There is thus a cumulative process which nurtures this external visibility and the question here is how to kick off or support such a virtuous process when it is initially weak. The more formal activities, such as dedicated portals or mapping exercises of national strengths, are only a very small visible part of potentially fruitful 'external promotion' activities.

5 Challenges

5.1 General challenges for information services

Q1: How can information support services contribute to the more pro-active behaviour of would-be FP participants?

Q2: How can information support services better target their audiences to reach more would-be FP participants?

Q3: How could SMEs be reached more easily and effectively?

Q4: Is there scope for making access to some services mandatory in some contexts?

Q5: How can the effectiveness of information services be monitored and assessed?

Q6: What should be the scope of these services? What kind of EU activities should they cover?

5.2 Challenges for NCPs

Q1: Under what conditions do centralised NCP models work better than decentralised models?

Q2: What approaches can be taken to define the target groups of NCPs and to ensure the right balance between customers with different needs: advanced versus less advanced research actors; experienced versus newcomers?

Q3: What are the specific approaches that work with the SME target group?

Q4: What would taking a client-centred approach involve?

Q5: How could good synergies be ensured within a NCP network?

Q6: How could good synergies be ensured between NCPs and other support organisations, in particular university R&D liaison offices?

Q7: What is the optimal combination of tasks for NCPs? Should a partner search function be included in the services? Should project management be part of the NCP portfolio or is this crowding out private sector consultant activity?

Q8: What position should be taken by NCPs with respect to the use of private consultants to support FP participation?

Q9: How can one ensure that NCP staff are well-embedded in relevant EU networks?

Q10: What are effective communication channels? How can the visibility of NCPs be best ensured? How should those strategies be implemented vis-à-vis HEIs/PROs and companies respectively?

5.3 Challenges for developing national strategies to FP participation

Q1: How could general strategies be set up to maximise opportunities for FP participation and make this an effective political priority? What are the best conditions to mobilise key institutional actors for this purpose?

Q2: How can national and regional strategies for FP reach the private sector?

Q3: What use could be made of the work of programme delegates on a national basis, and how could they be better connected in the national support system?

Q4: What are the options for undertaking 'strategic talks on FP' on a national basis?

Q5: What can national governments do to support international strategic partnerships between universities?

5.4 Challenges for Skills development and Training for research managers

Q1: What processes and tools are being, or could be, used to monitor and assess the effectiveness of training activities for research managers?

Q2: How could the problem of high staff turnover and loss of institutional memory in support organisations be mitigated?

Q3: What are the possible options to promote attractive career opportunities for research managers?

Q4: What is the ideal combination between training opportunities provided at international level (administrators' networks) and at national level?

Q5: Is it possible to adapt training and skills development actions to the SMEs target group?

5.5 Challenges for Incentives

Q1: How could the value-added of funding for project preparation be ensured (while avoiding a situation where the money pays for projects that would have been developed anyway)?

Q2: What is a good balance between financial incentives for FP participation granted ex ante (for preparation of proposals) versus ex post (when projects are successful and funded by FP)?

Q3: Should financial incentives for FP participation be conditional on success or not?

Q4: How can complementarity between schemes established at national level and at university level be ensured (e.g. funding travel costs for FP proposals preparation)? What is the optimal channel to deliver such incentives?

Q5: How could awareness of existing support schemes be increased?

Q6: How could criteria linked to FP participation in the programmes and delivery mechanisms of national funding agencies be incorporated?

5.6 Challenges for External Communication

Q1: What could possibly be the role of university R&D offices in the external promotion of national research strengths, beyond their own university's promotion?

Q2: How could a useful mapping of national R&D strengths be created, especially one which would support both external visibility and internal partnering needs? Where should such mapping appear and how could it be used?

Q3: What is a good mix of national-level strategies to promote national research capacities on the international scene?

Q4: What role could NCPs play in raising the visibility of the national research base and its specific strengths on the European scene?

Q5: What are the most effective communication media that could be used to promote research excellence abroad?

6 ANNEX: examples of practices of skills development, information, communication and training in view of widening FP participation

6.1 Ireland - encouraging more industry involvement in FP

Bearing in mind that Ireland has been active in Framework Programmes (FPs) or its precursors, such as ESPRIT and SPRINT, since the early 80s and 90s respectively, the approach to targeting potential participants (specifically industry) has of course evolved over the years. Perhaps a look at the approach from 10 years ago (FP6 –FP7) might be considered relevant for the EU-13.

In its various historical permutations (NBST, IIRS, Eolas, Forbairt) and currently Enterprise Ireland (EI), the national agency responsible for the promotion of science, technology development, innovation (and internationalisation) has also had responsibility for the co-ordination of the promotion of FPs.

EI (“where innovation means business”), through its staff of over 200 Development Advisers, works directly with companies in Ireland to support their development and growth and, to win export sales in global markets. Only a very small minority of EI staff are directly involved in the work of promoting FPs but the organisation seeks to ensure that there is a high level of awareness amongst all its’ Development Advisers of the role and opportunities provided by FPs.

In the FP6-FP7 period regular workshops were organised, between those staff directly involved in FP promotion (often Programme Committee members) and those EI staff not involved, to ensure that the policy rationale, the strategic direction and the actual and forthcoming FP Calls were an integral part of the Development Advisers portfolio of support tools for his client companies.

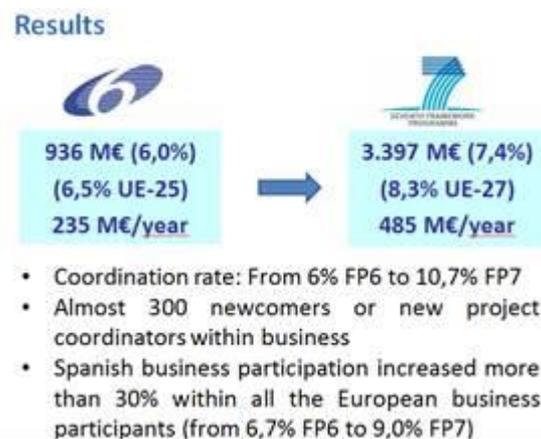
Concretely, in the frame of the (ERDF-funded) National Technology Audit Programme, which in Phase 1, provided eligible companies with a thorough analysis of their business, production and innovation processes there was a specific part devoted to how the companies might become more research active or research-ready, whichever was more appropriate to their stage of development (and ambition). Sometimes this involved an initial ‘technology problem-solution’ relationship with a third-level institution; sometimes it involved the hiring of a Post-Doc to deepen the research capability of the company; sometimes it was guidance for a research project proposal to EI itself and sometimes, it was supporting the company to find its way into an FP project consortium. To encourage the company to take any of the above steps there was financial support available as part of Technology Audit Phase 2.

Using the Technology Audit as a basis for identifying whether a company had an appropriate ‘fit’ for a FP project provided a very solid base for proceeding into a resource intensive and highly competitive Call process. But also key here was that the EI Development Advisers, using the Technology Audit process to set an agenda for overall company development, were aware of the potential role that FP could play in developing the research capacity and international orientation and networking of their client companies.

6.2 The Spanish EUROINGENIO programme

At the beginning of 2007 the Spanish Government launched EUROINGENIO 2010²⁹, a Government commitment for FP7 and international R&D. The challenge was to get an economic return from FP7 equivalent to Spain's economic weight in the EU25 (in 2007 the Spanish GDP represented 8.4% of the EU25). Therefore the economic target was to increase Spain's participation from 6.5% achieved in FP6 to 7% in 2008 and 8% in 2010 within EU27 (here only the funds allocated to Member States were taken into consideration). Another goal was the to increase the Project Coordination Rate (number of projects coordinated by Spanish entities) to 6% in 2008 and 7% in 2010.

The results of the Plan were excellent since the objectives in terms of return and leadership were exceeded by far. The national RTD and Innovation System got 3,397M€ in that period of time. This meant, in absolute terms, a 728M€ increase over what was obtained in FP6, and 236M€ over Euroingenio's own objectives.



EUROINGENIO included the following four programmes:

- **EUROCIENCIA:** promoted by the Ministry of Science and Innovation, which finances the creation of internal management structures within the Universities and Public Research Bodies which draw up strategic plans for participation in the EU Research and Development Framework Programme and which assist researchers to present FP projects.
- **EUROSALUD:** this programme finances hospitals to cover ordinary medical care by professionals participating in a FP programme, thereby enabling them to dedicate more time to research projects.
- **TECNOEUROPA:** this programme offers financial and management grants for creating international innovation units.
- **INNOEUROPA:** the purpose of this programme is to promote the participation of Spanish companies (mainly SMEs) in consortiums of the 7th Framework Programme, promoting the setting up of new companies.

Important features of EUROINGENIO were the following:

- Including into the plan all stakeholders: business, universities, research groups and innovation, innovation agencies, etc. Supporting the creation of offices of international projects.

²⁹http://www.idi.mineco.gob.es/porta/site/MICINN/menuitem.8ce192e94ba842bea3bc811001432ea0/?vgnextoid=f221714a6eb70210VgnVCM1000001034e20aRCRD&vgnnextchannel=7141f1f53c82d210VgnVCM1000001d04140aRCRD&lang_chosen=en

- Establishing structural measures to provide a way to participate differently (professionalizing the management of international projects) with an International long-term approach
- Introducing for the first time the concept of “funding for results”: financial aid was made conditional, on the one hand, on the excellence of an Action Plan for participation in FP7, and on the other hand, on compliance with some indicators established in that Action Plan. That is, if 100% of the targets were not met, the total aid was not received. This approach, already in force, was implemented with RTOs. To encourage the participation of companies, the financing of the selected entities (consultancy firms, RTOs, universities, associations, etc.) followed a similar approach. A fixed payment based on the excellence of the Action Plan, and payments for results (subsidy percentages) of companies, mainly newcomers. Currently (H2020), in this case Spain only considers payments for result as a percentage (typically 10% within certain limits).

The plan terminated with FP7 but some measures/actions were maintained, with lower budget, for H2020.

6.3 Sweden, Finland, Norway: Partnership between northernmost universities in view of strengthening FP participation: the RECOLL project (Interreg)³⁰

Luleå University of Technology (LTU³¹), located near the polar circle, runs a number of projects building capacity for increased participation in collaborative research projects. LTU has a long tradition of working with the EU structural funds in collaborative projects together with the stakeholders in the region. Particularly relevant to the theme of this paper is the following project:

- The RECOLL project funded by Interreg Nord in the previous program period (2007-2013): the project connected researchers at the five northernmost universities in Sweden, Norway and Finland for future collaborative proposals for H2020 and the structural funds. The main event was the partnering conference where researchers and stakeholders could meet.

³⁰ <https://www.keep.eu/keep/project-ext/11072/RE-COLL?ss=9362daff096189b7a27a709925b61a3&espon=>

³¹ www.ltu.se/?l=en

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The paper serves as a background document for a workshop organised under the Mutual Learning Exercise (MLE) devoted to widening participation to FP and enhancing synergies between FP and ESIF. The focus of this paper is on solutions, to be developed at national level, to address those barriers to entry into the FP which relate to information shortage and skills deficits. It provides a landscape of existing initiatives, and identifies key challenges to be discussed with respect to practices in five areas: 1) Information, advice and guidance to potential participants to FP, with a specific interest in the NCP system; 2) Strategies for national positioning in FP; 3) Skills development and training for research managers; 4) Incentives in the form of small scale funding for project preparation and reward for researchers or organisations that are beneficiaries of FP funds; and 5) External promotion of national assets and opportunities for FP cooperation.

Studies and reports