



Horizon 2020 Commission Expert Group for the evaluation of the Horizon 2020 Policy Support Facility

Final Report
(Report-only version)



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Horizon 2020 Commission Expert Group for the evaluation of the Horizon 2020 Policy Support Facility

Final Report

(Report-only version without annexes)

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Note: This is the report-only version of the Expert Group's report and does not include the associated annexes. The full version including the annexes is available in the Horizon 2020 Policy Support Facility Library on the Research and Innovation Observatory website: <https://rio.jrc.ec.europa.eu/en/library>

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FOREWORD FROM THE CHAIR

In past decades national and European research and development (R&D) policies were often perceived simply as a matter of allocating resources. This view has since shifted to embrace a more complex set of components: the need for ambitious institutional reforms (heavy and long-term), the value of linking R&D and innovation to other (interconnected) policy actions, the emergence of cross-disciplinary research topics (difficult to manage), the introduction of financial and non-financial incentives, and the (re)design of the regulatory framework. The evaluation panel assumes that the need to operate within this multi-dimensional setting will be one of the main challenges for research and innovation policy-making over the coming years. We are convinced that the Policy Support Facility (PSF) can play a major role, not only as an analytical tool but also as an enabler of dialogue on the most appropriate strategies and actions – dialogue within European Union (EU) Member States and countries associated to Horizon 2020 (Associated Countries), amongst those countries, and between countries and the European Commission.

This multi-dimensional setting means all players will have to raise their capacity to develop and implement policy reform agendas. This is precisely the playing field on which PSF operates. Our empirical evidence shows that in the first three years of its existence its specific character (bottom-up, demand-orientated, voluntary in nature, practical in focus) has created high added value in particular for less R&D and innovation intensive Member States and Associated Countries and their national stakeholders as well as for the EU as a whole. But PSF is also important for the more R&D and innovation intensive Member States, who are already the majority participants in Mutual Learning Exercises and increasingly users of the other services. This broad profile and the facilitating role of the European Commission are key ingredients of the success of PSF.

Developing an ambitious policy reform agenda needs a deep understanding of the national R&D and innovation system under consideration, a worldwide perspective on different systems and approaches, a practical focus, and a diverse panel of outstanding and committed experts. With this in mind our panel looked carefully at the whole process associated with PSF services, from identifying the future work programme through to following up on specific reports. We focused in particular on identifying success factors and any necessary improvements required to the mechanics of PSF.

At the most basic level, the value of PSF depends on the implementation of its outcomes: developing a reform agenda is one story, implementing it is another. National commitments and European incentives to implement have to be fundamentally reconsidered, because implementation is the weakest dimension we found. The panel therefore makes proposals on how implementation can be improved within PSF exercises, but also flags the need for special efforts by the European Commission to overcome its own internal frictions.

One underlying assumption of PSF (and also of the Semester and the proposed Reform Delivery Tool) is that the EU is dependent on the co-evolution of the reform agendas of its Member States. This raises the question whether this co-evolution is primarily driven by an EU-wide, European-Research-Area (ERA) inspired mainstream model or by a diversity of country-specific development paths. I am personally convinced of the latter and hence of the need for Member States and Associated Countries to have sufficient room for manoeuvre. A key element of the European added value of PSF lies in its enabling Member States and Associated Countries to develop a long-term vision that works for their own R&D and innovation systems as well as identifying short-term policy reform actions.

As Chairman I have to thank to all the members of the panel:

- Jacqueline Grech: Senior Executive for Strategy and Policy at the Malta Council for Science and Technology and Malta's representative on the European Research Area & Innovation Committee. She has recently been responsible for developing Malta's Smart Specialisation Strategy and for Malta's role in PSF activity.
- Begoña Sánchez: Senior Business Development Manager at Tecnalia (Basque Country, Spain), with a strong theoretical background in economics, business, research, innovation and policy evaluation, together with extensive practical experience as a senior policy adviser on research, innovation and structural fund projects.
- David Wilson (rapporteur): former Head of European Programmes and Engagement in the UK Department for Business, Energy & Industrial Strategy, with responsibility for the UK's involvement in Horizon 2020, COST, Eureka and Erasmus+. He was also co-chair of the European Research Area & Innovation Committee (ERAC) from 2015 to 2017.

- Petra Žagar: Undersecretary in the Science Directorate of the Ministry of Education, Science and Sport in Slovenia. She is a member of the High Level Group for Joint Programming (GPC). She led the drafting of the national ERA Roadmap for Slovenia and was involved in the PSF Mutual Learning Exercise on alignment and interoperability of national research programmes.

The panel was a team with complementary competences and worked together in a professional and constructive way. It was a pleasure chairing the inspiring discussions we had.

Finally, I want to thank Diana Senczyszn, Marta Truco Calbet and Román Arjona Gracia from the European Commission for their practical support, and all survey respondents and interview subjects for their time and insight, including the representatives of the Member States, the Commission, experts involved in PSF services, and senior representatives of external organisations.

Frieder Meyer-Krahmer¹ (Chair of the Expert Group)

1 Professor Dr Frieder Meyer-Krahmer was former Director of the Fraunhofer-Institute for Systems and Innovation Research (FhG-ISI), and former State Secretary of the German Federal Ministry for Education and Research (BMBF). He has extensive academic, political and practical experience of evaluation and impact assessment, particularly in the area of European and national R&D and innovation policy.

EXECUTIVE SUMMARY

The Horizon 2020 Policy Support Facility (PSF) was established in 2015 to support European Union (EU) Member States and countries associated to Horizon 2020 (Associated Countries) in raising the quality and impact of their research and development (R&D) and innovation systems. This report evaluates the appropriateness and effectiveness of the PSF and provides recommendations on further improvement of its services to Member States and Associated Countries.

In summary, overall perceptions of PSF are positive and participants feel it adds significant value at EU and national level, though there are points that require attention. Our specific findings against the criteria set for this review are summarised below.

Relevance and appropriateness of the PSF in the context of present and future European R&D and innovation policy

PSF remains relevant and appropriate for present European R&D and innovation policy. There is still much work to be done in this area and the need for a service like PSF will continue at least for the period of the next EU Framework Programme for R&D and Innovation (Horizon Europe).

Our evidence affirms that advice from independent experts and mutual learning help policy-makers understand their own R&D and innovation systems and develop a more outward looking perspective. We also found that there was a genuine need from countries for this type of support, and that this need will continue, covering a mix of fundamental and more fine-grained analysis, as countries require. The objectives of building the European Research Area (ERA) and raising the quality and efficiency of R&D and innovation performance mean that there is a clear rationale for action at EU level on this issue.

Coherence with other policy support instruments

PSF has a distinct identity compared to instruments provided by other organisations and is complementary to them. The OECD and World Bank instruments have different methodologies and purpose, with the OECD operating at a whole-system level and the World Bank being more economic and financial in focus. PSF is more topic and challenge driven, customer-orientated, flexible and geared towards policy practice. Additionally, there is no obvious equivalent of Mutual Learning Exercises in comparator instruments.

PSF also has a clear and distinctive role within the suite of EU instruments supporting economic and structural reforms. In principle PSF is mutually reinforcing with the European Semester, the Structural Reforms Support Programme and the proposed Reform Delivery Tool, and the European Commission's intention is to strengthen these links. As things presently stand, however, the links are not effective enough and more could be done by the Commission and Member States to ensure PSF recommendations are better linked to these wider processes. There is also scope for PSF to be discussed more widely with all six of the ERA-related groups (see glossary).

In principle PSF also fits well with other EU policy support tools. In practice it is not always easy enough to access the right funding instruments due to a lack of comprehensive information on the full range of available support and a (related) lack of coordination of input across different Directorates-General of the European Commission. While there has been progress in making it easier to combine support from different types of instrument, there is still work to overcome the administrative and institutional barriers that remain. The required support is not always financial in nature: the state aid and regulatory framework may also be relevant in specific cases.

Efficiency of the PSF – scheme design and structure

The design and structure of PSF as it currently stands are well conceived, and the request from stakeholders is to build on its strengths rather than undertake any radical change in direction. A key success factor is that priorities are set in a bottom-up manner, with the needs of customers being the primary determinant of PSF activity and the European Commission in a facilitating role. There is, however, scope for an analytical overview to inform decisions on priorities, to ensure the process is sighted on emerging R&D and innovation trends and that it is learning from the information available in past PSF work. Innovation and human capital issues have been part of PSF work to date but their profile could be further raised. The recommendations set out three areas in which the current PSF services could be supplemented.

Efficiency of the PSF – execution

The general consensus is that the execution of PSF works well and it is seen as producing good quality outputs (though there is still scope to make reports shorter, punchier and more accessible

to non-specialists). There are, however, some frustrations with some aspects and a number of suggestions for improvement are identified in the evidence.

The most important issues that need to be addressed concern the beginning and the end of the process. The issues for the beginning of the process include greater clarity on scope at the outset of specific exercises and clearer understanding by participants of what the process will involve. The issues about the end of the process include a need for more emphasis on the implementation of PSF results, openness to a more extended timeframe for implementation where required, more focused dissemination and communication of PSF activity, and the identification of systematic ways of measuring impact. Comments also flagged a desire for more flexibility in the format of meetings and a more user-friendly PSF Knowledge Centre website.

Effectiveness and impact

PSF in its present form is only three years old and it is therefore too early to assess the impact of the reforms initiated as a result, particularly where reforms have required a longer timescale. It is, however, seen as a valuable programme that delivers good quality results, and the evidence suggests it is moving the agenda in the right direction. While it is a good instrument for developing policy reform proposals, it needs to embrace the implementation dimension in order to realise its full potential.

PSF also appears to be delivering genuine EU added value. The collaborative nature of the work has supported the development of the ERA, as well as producing outputs that have raised the overall capacity of European R&D and innovation. The process of enabling countries to help each other and build wider and deeper networks of mutual support self-evidently goes beyond what could be achieved at national level alone, and is therefore in itself a significant element of EU added value.

In the light of these findings, we make the following recommendations:

An upgraded role for PSF to drive reforms

1. PSF should contribute not only by enabling Member States and Associated Countries to strengthen the quality and efficiency of their R&D and innovation systems but should also be better used to encourage more systematic and extended dialogue among Member States and Associated Countries and between them and the European Commission on meaningful reform agendas.
2. If a country needs support from the EU to implement the outcomes of a PSF activity, the European Commission should prepare a package of policy measures to facilitate the country's access to relevant instruments and information across Directorates-General.

Extending the design specification of PSF

3. PSF needs an extended time frame since ambitious policy reforms and institutional change within R&I systems require a long-term trajectory for implementation.
4. Allow greater flexibility in the process to accommodate a wider range of policy needs such as novel policy topics, capacity building and exploiting the knowledge gained by the PSF.
5. PSF requires a framework for follow up to support implementation, to capture the policy changes resulting from its outcomes and to enable monitoring of the resulting impact.

Improving the mechanics of PSF

6. Make the pre-phase of all PSF activities more rigorous to ensure clarity on ownership, scope, the target audience for the work and the follow-up that will be required
7. Ensure that the execution of the PSF actively builds in the success factors we have identified.
8. Put more effort into dissemination and communication of PSF activity in a user-friendly way, both to ensure they have more impact in the countries involved and to raise the visibility of PSF and in particular of the Knowledge Centre as a definitive source of expertise on policy reform.
9. More needs to be done to raise the profile and wider visibility of PSF and to give it a clear brand identity.

CHAPTER 1 – INTRODUCTION

1.1. Purpose, objectives and scope of the evaluation

The Horizon 2020 Policy Support Facility (PSF) was established in 2015 to support Member States of the European Union (EU) and countries associated to Horizon 2020 (Associated Countries) in raising the quality and impact of their research and development (R&D) and innovation systems. As three years have now elapsed, this expert group has been established to evaluate the appropriateness and effectiveness of the PSF and provide recommendations on further improvement of its services to Member States and Associated Countries.

Our full terms of reference are attached at Annex A, but in summary our objectives are:

- to conduct a consolidated assessment of the PSF as implemented to date: interpreting results (outputs and impact) and developing lessons learned (for PSF management and design);
- to provide an outlook on the future of the PSF, including proposals for improvements and recommendations on design and implementation.

For our purpose and scope, we have been asked to consider a number of questions in the following areas:

- assess the relevance and appropriateness of the PSF in the context of present and future European R&D and innovation policy;
- assess the efficiency of the PSF;
- assess the coherence and compare the use of PSF services with other relevant policy support instruments aimed at supporting R&D and innovation policies in Member States and Associated Countries;
- assess the effectiveness of PSF services and their contribution to EU policy objectives, including Horizon 2020 objectives;
- assess the EU added value of the instrument.

1.2. Methodology used for the evaluation

Our Group consists of five independent members: three external experts without prior involvement in PSF activities and two representatives of national administrations. The European Commission (EC) provided logistical support for our work as well as specific data and information requested by us.

As well as considering relevant documentation, we circulated two questionnaires respectively to policy makers in participating countries and to experts involved in previous PSF activities (external, from other countries and from the European Commission). The survey was sent to 318 people and we had 75 responses: the questions and the results are set out in detail in Annex E. We also conducted a series of individual and panel interviews: 27 people with direct experience of PSF, those able to compare with other instruments, and representatives of international organisations. The key points from the survey and interviews are presented in anonymised form in our evidence summary at Annex D, organised against the criteria for our review.

There are three points to note about the survey and interview evidence. Firstly, the responses to the survey questions (with a few exceptions) are very positive about most aspects of PSF. We have therefore looked at the free-text comments and at the interview responses for insight into potential bottlenecks and areas that require adjustment. Secondly, we observe that the external experts are generally more critical than participant countries. This is helpful given those experts' wider perspective on evaluation in the R&D and innovation space. And thirdly, the summary of free-text and interview comments reflects the full spectrum of views expressed, including those which differ from the conclusions we reach in our findings.

The other fundamental inputs to our work were the summary reports of the two seminars held on Peer Review and Specific Support (referred to below as "the December 2017 seminar") and on Mutual Learning Exercises ("the September 2018 seminar").² The participants at the seminars

2 Nauwelaers (2017a) and European Commission (2019) respectively

included representatives of national authorities and the European Commission, high-level experts working with PSF, representatives of European countries that benefitted from PSF support, and international organisations involved in reviews of national research and innovation systems. We have drawn heavily on both summary reports in reaching our conclusions.

Additionally, we considered the specific experience of Malta and Slovenia as participants respectively in Specific Support and Mutual Learning Exercises. Their experience is cited at a number of points in the report and their case studies are attached in full at Annex F.

All of these inputs were immensely valuable. It is, however, important to emphasise that this report represents our own opinions on the matters we were asked to address.

In this report, the panel uses R&D in the sense defined by the Organisation for Economic Cooperation and Development (OECD) Frascati Manual, namely 'creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge.'³ The definition of innovation is less settled, but the panel follows a system-of-innovation approach in line with the OECD Oslo Manual, looking at the market introduction of new products, services and business models alongside technology transfer, start-ups and entrepreneurship, human capital, education, regulation, procurement and infrastructures.^{4 5}

1.3. Structure of the report

The remainder of this report comprises three chapters: an overview of the PSF (Chapter 2), our findings (Chapter 3) and our recommendations (Chapter 4).

In Chapter 3 we work through each of the criteria against which we were asked to evaluate the PSF. Chapter 3 also identifies specific findings for the main services making up PSF. At the end of the chapter we summarise the strengths and weaknesses of PSF together with key success factors (as specifically required by our terms of reference).

There are two versions of this report: a full version including all of the associated annexes, and a report-only version without the annexes. Both versions are available in the Horizon 2020 Policy Support Facility Library on the Research and Innovation Observatory website.⁶

3 OECD 2015

4 OECD 2018

5 The European Commission frequently uses the term "research and innovation" (R&I) as a convenient way to refer to the spectrum of R&D and innovation defined in the OECD Frascati and Oslo Manuals. R&I is not itself a formally defined term in either manual.

6 <https://rio.jrc.ec.europa.eu/en/library> (viewed on 7 March 2019)

CHAPTER 2 – OVERVIEW OF THE POLICY SUPPORT FACILITY

2.1. What the Policy Support Facility is

The Horizon 2020 Policy Support Facility (PSF) has its origins in earlier work based on the open method of coordination (OMC).⁷ Within CREST (the predecessor of the European Research Area and Innovation Committee, ERAC), several reports were produced by expert groups on national policy mixes and on specific R&D and innovation challenges.

Following the European Commission 2014 Communication *Research and innovation as sources of renewed growth*, the PSF was established in March 2015.⁸ Its aim is to provide quick and efficient advice to Member States and countries associated to Horizon 2020 (Associated Countries) on the design, implementation and evaluation of reforms to improve the quality and impact of their research and development (R&D) and innovation systems, investments and policies. At its launch, the Commission emphasised the role of policy reform in kickstarting renewed growth and job-creation.⁹

PSF provides tailor-made support at the request of Member States and Associated Countries. The activities can be either topic-specific or country-specific and are provided in the form of four different services:

- **Peer Review (PR)** of an individual national R&D and innovation system carried out by panels of leading experts and policy practitioners from other Member States and Associated Countries;
- **Specific Support (SS)** to an individual country wishing to address targeted policy issues, again carried out by experts and policy practitioners;
- **Mutual Learning Exercises (MLE)**, where groups of countries wishing to explore R&I topics of mutual interest undertake a structured exchange of good practice supported by external expertise;
- **the PSF Knowledge Centre (KC)**, a website making available all the outputs of the PSF together with R&D and innovation monitoring and analysis undertaken as part of the European Semester.¹⁰

Early PSF activities were managed directly by the European Commission. Since 2016, a Framework Contract has been in place for an external contractor to provide analytical and administrative support (including the identification and management of external expertise). The Commission retains responsibility for the overall coordination and direction of PSF activities, and prepares the work programme in consultation with ERAC.

The process for PSF activities responds to requests from Member States and Associated Countries, normally channelled through an annual call in ERAC for expressions of interest. The process involves: a preparatory state of clarifying purpose, scope and timing; the identification of a panel of experts and peers (for Peer Review and Specific Support); preparation of background documentation and analysis; deliberation and country visits; the drafting of a final report; and the publication and dissemination of that report. This process is summarised in Figure 1 below:

7 For more information on the OMC, see: https://eur-lex.europa.eu/summary/glossary/open_method_coordination.html (viewed on 7 March 2019)

8 European Commission 2014

9 <http://ec.europa.eu/research/index.cfm?pg=newsalert&year=2015&na=na-030315> (viewed on 7 March 2019)

10 <https://ec.europa.eu/h2020-policy-support-facility> (viewed on 7 March 2019)

Figure 1 : PSF Process
Source: European Commission



2.2. Approach and positioning

PSF carries forward the OMC principle of using external analysis to help countries identify and execute the reforms that will be most helpful to them, under the oversight of the European Commission. PSF has continued and developed the CREST model of basing the work on analysis and advice from peers and external experts.¹¹

In line with this heritage, there are four elements generally seen as PSF's defining characteristics, namely that it is:

- **bottom-up and voluntary:** countries volunteer to participate in order to address the issues that are most critical for them;
- **flexible and agile:** the PSF can address narrow as well as broad topics and aims to do so in a quick and responsive manner;
- **practical and challenge-driven:** PSF focuses on real world problems and aims to identify practical solutions;
- **collegiate and trustworthy:** Member States and Associated Countries support each other by acting as experts for Peer Review and Specific Support activities and by working together on Mutual Learning Exercises.

PSF is part of a wider EU policy framework summarised at the December 2017 seminar as 3Rs: **reforms** (towards better research quality and the European Research Area, ERA); **regulations** (better framework conditions for R&D and innovation); and **resources** (investments).¹² In the context of this study, the reforms category includes the relationship between PSF and the European Semester (see Glossary). The PSF and the European Semester are intended to cross-fertilise each other: PSF should provide inputs for the R&D and innovation chapters of the Semester country reports, while the Semester should spark PSF action.¹³ Institutional and financial support for reform is available via the Structural Reform Support Programme created in 2015 (SRSP, see Glossary). The European Commission has also proposed a new Reform Delivery Tool to provide additional financial support for reform in the next long-term budget period (2021-27). The

11 See Nauwelaers 2017b para 1.1.1 for a summary of the history with further references.

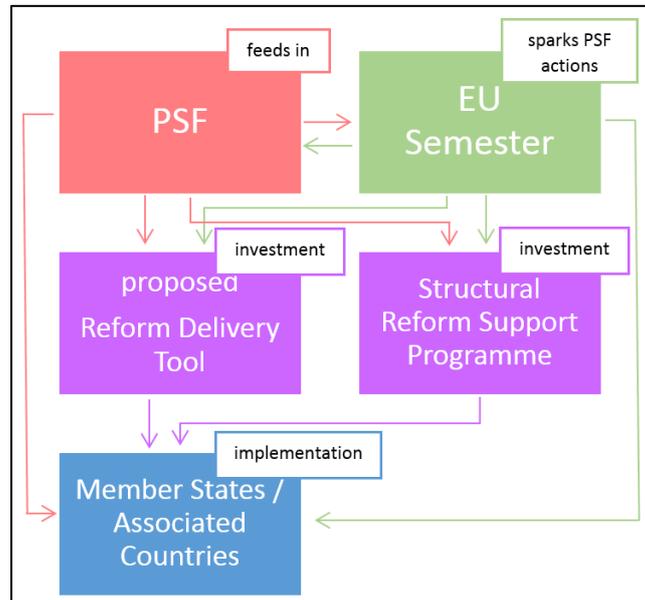
12 Nauwelaers 2017a, p4

13 Nauwelaers 2017a, p.4

Semester, the SRSP and the proposed Reform Delivery Tool are all intended to support economic and structural reform across the board and not specifically in the area of R&D and innovation. The key relationships are summarised in Figure 2 below.

Figure 2: Range of potential relationships between PSF and other EU reform instruments

Source: Petra Žagar



The resources category includes access to key EU funding programmes. These include the EU R&D and innovation programmes (Horizon 2020 and its *Spreading Excellence* actions), European Structural and Investment Funds (ESIF, for Smart Specialisation or regional R&D and innovation issues) and InvestEU (for commercialisation of research, digitisation of industry or the scaling up of innovative companies).¹⁴ Access to the full range of support is key to reaching PSF goals as the implementation of PSF recommendations can require action in fields far beyond R&D and innovation. The December 2017 seminar also endorsed the principle of reinforcing wider synergies with education and other European Commission activities to help PSF reach its ambitious goals.¹⁵

2.3. Comparison with other tools

There are other tools which provide for policy support and international learning in R&D and innovation, of which the best known are the reviews undertaken by the Organisation for Economic Cooperation and Development (OECD) and the World Bank.

OECD Reviews of Innovation Policy provide comprehensive assessments of R&D and innovation systems and make concrete policy recommendations to improve innovation performance. It usually works at a whole-system level and takes a wider and more comprehensive approach than PSF's focus on specific dimensions (though the OECD does occasionally provide policy advice on specific topics). Whilst OECD reviews may provide advice on elements of policy, they are not themselves policy instruments with specific policy objectives of their own.¹⁶ OECD reviews are a charged service.

The World Bank provides different types of reviews. Economic Reviews disseminate research on quantitative development policy analysis, with an emphasis on policy relevance and the operational aspects of economics.¹⁷ Public Expenditure Reviews are demand driven reviews of the effectiveness of public finances and may also focus on a particular sector.¹⁸ The reviews undertaken by the World Bank use different tools and include a focus on building capacities. World Bank reviews are also a charged service.

14 See Glossary for information on these instruments

15 Nauwelaers 2017a, p4

16 <http://www.oecd.org/sti/inno/oecd-reviews-of-innovation-policy.htm> (viewed on 7 March 2019)

17 <https://elibrary.worldbank.org/loi/wber> (viewed on 7 March 2019)

18 <http://boost.worldbank.org/tools-resources/public-expenditure-review> (viewed on 7 March 2019)

2.4 Work undertaken to date – basic data

Since its launch in 2015, 30 PSF activities have been undertaken to the time of writing and there is a forward programme of work to the end of Horizon 2020. All 28 Member States and nine Associated Countries have taken part in at least one type of PSF activity. These data are summarised by participating country in Figure 3 below:

Figure 3: Participation and R&I intensity, January 2019

Sources: participation - European Commission; R&I intensity – (1) FR 2016; CH, AM, GE, MD, UA, TN 2015; (2) Eurostat and World Bank

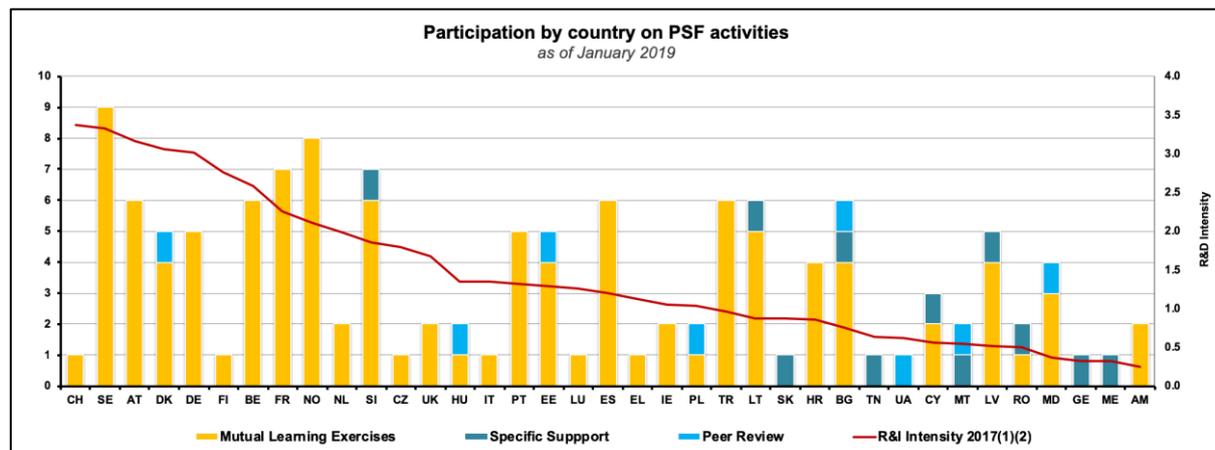


Table 1 below shows the volume of activity in Peer Review, Specific Support and Mutual Learning Exercises for each year of PSF's operation.

Table 1: New PSF activities (by year of initiation of activity)

Source: European Commission

Service	2015	2016	2017	2018	Total
Peer Review	3	2	1	3	9 ¹⁹
Specific Support	1	5	2	2	10 ²⁰
MLEs	1	5	4	1	11 ²¹

A more detailed graphical representation of which countries have participated in which specific activities is included at Annex G, and up-to-date information on activities is available from the PSF Knowledge Centre.²² The Knowledge Centre also includes a more detailed description of the PSF.

Table 2 below summarises the cost, duration and number of panel members involved for Peer Review, Specific Support and Mutual Learning Exercises over the lifetime of PSF.

¹⁹ Denmark, Estonia, Malta, Poland, Ukraine, Hungary (pre-Peer Review and Peer Review), Moldova and Bulgaria – see <https://rio.jrc.ec.europa.eu/en/policy-support-facility/peer-reviews> (viewed on 7 March 2019)

²⁰ Bulgaria, Latvia, Lithuania, Malta, Montenegro, Romania, Slovakia, Slovenia, Tunisia and Georgia – see <https://rio.jrc.ec.europa.eu/en/policy-support-facility/peer-reviews> (viewed on 7 March 2019)

²¹ Topics on which MLE have been organised are: Alignment and Interoperability of National Research Programmes; Ex-post Evaluation of Business R&I Grant Schemes; Evaluation of Complex PPP Programmes in STI; Measures to Stimulate Business Research and Innovation; Performance-based Funding of Public Research Organisations; Administration and Monitoring of R&D Tax Incentives; Innovation-related Public Procurement Open Science - Altimetrics and Rewards; Evaluation of Business R&D Grant Schemes; National Practices in Widening Participation and Strengthening Synergies and Research Integrity. More details at <https://rio.jrc.ec.europa.eu/en/policy-support-facility/mutual-learning> (viewed on 7 March 2019).

²² <https://ec.europa.eu/h2020-policy-support-facility> (viewed on 7 March 2019)

Table 2: Cost, duration and panel involvement
Source: European Commission

	Peer Review	Specific Support	MLE
Average costs total Commission	€280,000	€190,000	€315,000
Average duration (months)	12	12	12
Average number of panel members and country representatives			
External experts	4	4	4
Peers	3	Usually 0; 2-3 in a few cases	-
Country representatives	Host country	Host country	12

CHAPTER 3 – FINDINGS

In this chapter we assess the evidence against the criteria in our terms of reference (Annex A). We have, however, slightly modified the presentation of these criteria in that we have split efficiency into two (whether the Policy Support Facility (PSF) is well designed in principle, and how it is executed in practice) and we have subsumed European Union (EU) added value into the broader heading of effectiveness and impact rather than treating it as a separate criterion. At the end of the chapter we summarise the strengths, weaknesses and success factors that emerge from our analysis.

The evidence on which our findings are based is set out in detail in Annexes D, E and F (for the surveys, interviews and case studies) and in the reports of the stakeholder seminars on Peer Review, Specific Support and Mutual Learning Exercises noted in section 1.2.²³ The structure of Annex D maps directly onto that of this chapter: where this chapter refers to survey or interview evidence, those who wish more detail on the evidence underpinning our findings on a particular point can find it in the corresponding section of Annex D.

As noted above, our findings represent our own judgements rather than the consensus in the evidence, though the latter was always instructive and helpful. In general, all sources strongly supported retaining PSF. We noted, however, that external experts were more critical than country representatives of some specific aspects, particularly for Mutual Learning Exercises.

The following sections set out our findings against our evaluation criteria, as noted above.

23 Nauwelaers 2017a and European Commission 2018

3.1 Relevance and appropriateness of the PSF in the context of present and future European R&D and innovation policy

Section 3.1 summary

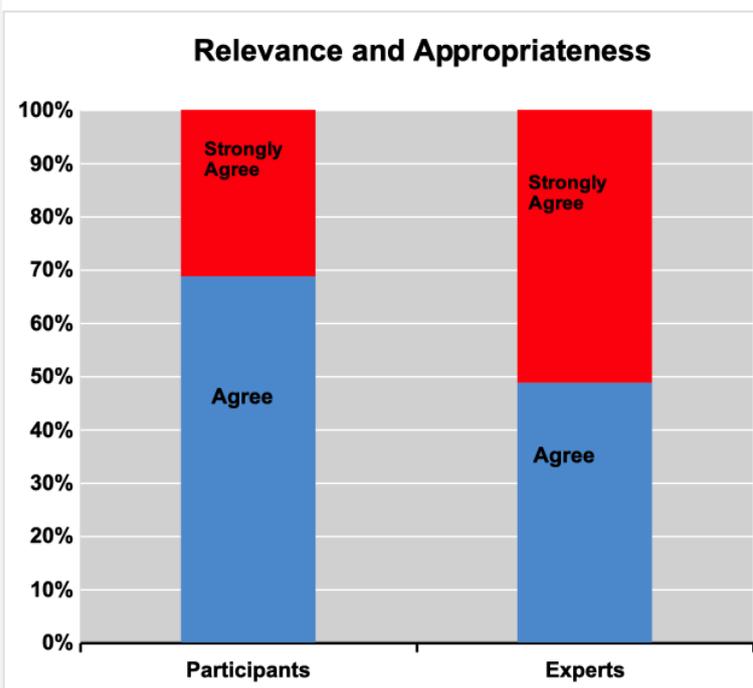
Our overall finding is that PSF remains relevant and appropriate for present European R&D and innovation policy. There is still much work to be done in this area and the need for a service like PSF will continue at least for the period of the next EU Framework Programme for Research and innovation (Horizon Europe).

Note on figure

In Figure 4, note the strongly positive nature of the responses overall and the particularly positive responses from experts.

Source: Survey results for responses to question: *Given changes in the economic, societal and policy context, the PSF ... is still relevant and in line with R&I policy challenges* (See Annex E(a), Q7.2 and Annex E(b) Q4.2)

Figure 4: Relevance and appropriateness of PSF



3.1.1 Does PSF-type activity make sense in this policy area?

The December 2017 seminar on Peer Review and Specific Support noted that investments in research and development (R&D) and innovation are much more impactful if accompanied by reforms that increase the quality and efficiency of national R&D and innovation investments, systems and public policy.²⁴ There was a consensus in our evidence on the value of countries seeking advice from external experts and undertaking mutual learning to help them make these reforms: no-one challenged the principle of this type of activity.

As well as enabling reforms, our survey evidence specifically highlighted the point that advice from independent experts and mutual learning help policy-makers understand their own system and develop a more outward looking perspective. The survey responses also highlighted the fact that individual countries' R&D and innovation systems are complex and distinct, but, provided the process and its users recognise and take account of those differences, there is much to learn.

3.1.2 Has it to date filled a genuine need in the policy landscape?

The 2016 European Research Area (ERA) Progress Report found that there were still notable disparities in the performance of countries' R&D and innovation systems.²⁵ Our survey and interview responses concurred with this analysis, with responses strongly confirming that there were issues to address and demand for help in addressing them. "PSF addresses real questions and the countries are looking for real reforms", as one of our interviewees put it.

There is a very strong consensus amongst survey respondents that PSF answers the challenges it was meant to address, and respondents also agreed that PSF enables learning that would not otherwise take place. The positive comments on PSF's distinctive mix of strategic and practical perspectives support the view that there is a need for this type of intervention. We conclude that the activities covered by PSF have indeed filled a genuine need.

24 Neuwelaers 2017a, p.4

25 European Commission 2017, p.11

3.1.3 Is this need likely to continue over the period of Horizon Europe?

There is a strong consensus from the seminars and from survey and interview evidence that there is still work to be done to develop a culture of mutual learning and structural reform, including raising R&D and innovation capacity. In Figure 4 above, participant countries and external experts agree or strongly agree that PSF is still relevant and in line with R&D and innovation policy challenges. One interviewee commented that even though a lot of countries have now been through a system-level review (through PSF or otherwise), there are still a lot of big sub-systems that need attention. Responses from countries indicate that there is still strong demand from potential customers to continue this work.

External survey and interview responses suggested a need for a service that is more flexible and tailorable in responding to socio-economic developments and the needs of countries and topics. We do not see any specific obstacles in PSF's ability to do this, and suspect the comments reflect the fact that PSF has necessarily had to look at the most obvious topics in its early years.

We asked interviewees whether the nature of the work to be done might be different in the Horizon Europe period, and specifically whether there might be a shift to a more focused and fine-grained type of analysis from the more fundamental system-level analysis that had been prominent in PSF's early years. There were different views, but a clear majority felt that both were still likely to be needed. Even more felt that it was a mistake to have any sort of *a priori* view of this question: PSF is a demand-led programme where countries' needs should determine what it does.

On these questions of tailorability and fundamental versus fine-grained analysis, we reaffirm the principle of PSF being demand-led. In both cases, however, there may be an issue about how the work programme is defined in practice (see section 3.3.2).

3.1.4 Is there a rationale for action at EU level?

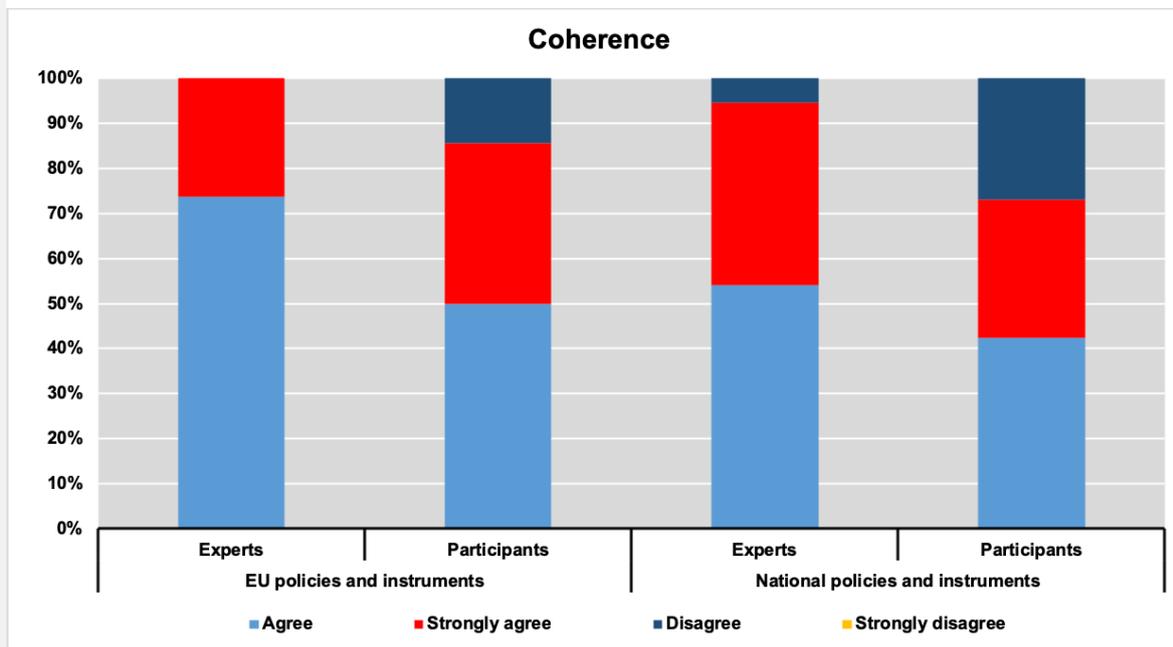
There are current EU policies and instruments to build the ERA and to raise the quality and efficiency of R&D and innovation performance. Both of these are work in progress. Survey responses were almost unanimous that PSF adds value to what an individual country could achieve in this area by itself. This was also reflected in survey comments. One respondent highlighted the fact that PSF can work with other EU instruments as an additional element of EU added value, and another that PSF supports interaction with Associated Countries and neighbourhood countries.

More broadly, one area where PSF can make a significant contribution to European added value is by supporting the co-evolution of the reform agendas of Member States and Associated Countries. Member States and Associated Countries are wary of the European Commission appearing to tread on their national prerogatives on R&D and innovation. PSF is, however, unusual in that it encourages dialogue between Member States, not just bilateral discussion with the Commission. We note that a start has been made on encouraging this sort of strategic multilateral discussion.²⁶ This is good, but there is scope to make more systematic use of PSF processes and findings in developing meaningful reform agendas.

²⁶ The Salzburg meeting of ERAC in September 2018, for example, had strategic debates on the PSF reports on performance-based research funding and on R&D tax incentives. See the summary of the meeting by the Austrian Presidency at <https://era.gv.at/object/news/4300> (viewed on 7 March 2019).

3.2 Coherence with other policy support instruments

Figure 5: PSF synergies with EU and national policies



Section 3.2 summary

PSF has a distinct identity compared to similar instruments provided by other organisations and is complementary to them. It also has a clear and distinctive role within the suite of EU instruments. In principle PSF fits well with other EU instruments and policies, but more needs to be done to pull PSF recommendations through into the EU's instruments to support economic and structural reforms, and to ensure better access to relevant funding streams where required.

Note on figure

In Figure 5, note that survey responses are positive, but slightly more so for PSF's fit with EU policies and instruments than for its' fit with national policies and instruments. Country participants show slightly more disagreement.

Source: Survey results for responses to questions: PSF activities are able to identify/exploit synergies with other EU policies and instruments; and PSF activities are able to identify/exploit synergies with other national policies and instruments. (See Annex E(a) Q6 2-3 and Annex E(b) Q3 2-3)

3.2.1 If there is a genuine need and a rationale for EU-level action, does meeting the need require PSF as a separate instrument?

There is still much to be done to raise the quality and efficiency of R&D and innovation systems in Member States and Associated Countries, and demand from countries for external help in tackling these challenges. It is also clear that this demand will continue at least for the period of Horizon Europe.

As section 2.3 notes, the OECD and World Bank also have peer review instruments that can cover R&D and innovation issues for countries, and the question arises whether they could meet the need. Our interviews, both with policy makers and with experts, strongly suggested that they could not. The OECD and the World Bank instruments cover at least part of the same ground but have a different methodology and purpose. The OECD operates at a whole-system level, and the various World Bank instruments are more economic and financial in focus. Both of these provide a good framework to understand R&D and innovation systems from those particular perspectives, but they are large-scale in nature and they apply a specific analytical framework.

PSF on the other hand is more topic and challenge driven, customer-orientated, flexible and geared towards policy practice.²⁷ (Unlike the OECD and World Bank it is free to users, an aspect which is clearly valued by countries.) As one of our external interviewees also observed, there is no obvious equivalent of Mutual Learning Exercises in the comparator instruments – a point that was also made at the September seminar.²⁸ The view that countries use the different instruments for different purposes (and should do this) was held equally strongly by participant countries and by external experts.²⁹

Some comments suggested that there were some areas of overlap and ambiguity, but in the sense that these were operational problems to solve in practice rather than fundamental duplication of purpose or method.

We therefore conclude from the survey and interview evidence that PSF is complementary to the instruments provided by other organisations, provided it retains and builds on its distinctive features and focuses on the issues where its approach will be most fruitful.

3.2.2 If so, does PSF fit well in the wider framework of EU policy and the European Semester?

The links between PSF and the European Semester, the Structural Reform Support Programme (SSRP) and the proposed Reform Delivery Tool are described in section 2.2. Our survey and interview evidence endorses the view noted there that the Semester and PSF should be mutually reinforcing (with an important proviso). The perception of participant countries and (even more strongly) external experts is, however, that the links are not currently effective enough. The comments are not specific on where the problems lie, but the sense is that PSF is not sufficiently impactful or visible in the wider Semester process, and that this is inhibiting access to EU technical and financial support for reforms.

The proviso is that the European Semester is often associated with a top-down audit approach, and there were many comments that closer links with the Semester should not be at the expense of PSF's voluntary and bottom-up character. See section 3.4.4 for more detail.

It is worth noting in that context that the European Semester is not the sole route for securing EU support for reform, as many issues identified by PSF recommendations are not sufficiently substantial to merit inclusion in the Semester (which covers economic and structural reform across the board). For more significant issues, however, the Semester is a key mechanism for obtaining support, and it is important that relevant PSF conclusions are systematically fed in and picked up.

The SRSP is also highly relevant to PSF as its purpose is to provide tailor-made support for institutional, administrative and growth-enhancing reforms, covering the entire process from preparation and design to implementation of the reforms. It needs a higher profile in the PSF context, as we observe that it was not much mentioned by our survey respondents and interviewees.

As noted in section 2.2, the Commission has announced its intention to strengthen the support for reforms through a proposed Reform Delivery Tool. This is a promising development, but much will clearly hang on implementation. It will be important for the Commission to develop the ideas in consultation with Member States, not least to provide reassurance that the revised arrangements do not threaten the voluntary nature of PSF.

There have been positive moves to engage the European Research Area and Innovation Committee (ERAC), not just on the work programme for PSF but also on the outputs. This is part of the work on co-evolution of reform agendas (see section 3.1.4). We note, however, that survey respondents and interviewees thought that the programme and its outputs were not systematically discussed with the broader set of ERA-related groups (see Glossary).

Our overall conclusion, therefore, is that in principle PSF sits well in the wider EU policy framework. As well as being a natural source of strategic input to the ERA-related groups, PSF is well placed to draw on the range of EU tools that provide support for countries implementing structural reforms, notably the European Semester, the SRSP and the proposed Reform Delivery Tool. More needs to be done in practice, however, to raise awareness of the possibilities, strengthen the necessary coordinating links and pull relevant PSF recommendations through into these broader instruments. Addressing this will require active work by countries as well as by the European Commission.

27 Nauwelaers 2017a, p.4-5, 13

28 European Commission 2019, p.12

29 In addition to Annex D, see also Nauwelaers 2017a, p.8

3.2.3 Does PSF work well with other policy support tools?

It is common ground in the December 2017 and September 2018 seminars and in our survey and interview responses that PSF should work well with other EU policy support tools, and that this is the right goal. PSF is a national-level instrument but if, for example, a particular set of PSF findings require a country to take action at a regional level, it is clearly desirable that it should be able to draw seamlessly on European Structural and Investment Funds (ESIF) support for such activities.

The key EU funding programmes to which PSF needs to link are described in section 2.2: Horizon 2020 (including its *Spreading Excellence* actions), the European Structural and Investment Funds and InvestEU. Our external interviewees made the point that the aim is not a super-coordinated grand design, but that there are clear links and that the various tools can work together when they need to.

Views differ on how well the arrangements currently work. The sense of our evidence is that access to *Spreading Excellence* and ESIF funding in particular is not always easy. Reasons cited for difficulties in accessing support include a lack of comprehensive information on the full range of funding support available and the (related) lack of coordination of input across different Directorates-General of the Commission.

Additionally, the specific sources of funding are often difficult to combine in a single package. The European Commission has committed to improving this situation and has modified the relevant regulations to encourage it,³⁰ but there remain institutional barriers (notably different timing rules for different funds, state aid rules and administrative burdens), which should be addressed as part of the process of agreeing the next Multi-Annual Financial Framework.

Links with education and training initiatives were also cited by our interviewees and discussed in more detail at the December 2017 seminar.³¹

Not all policy support is in the form of finance or technical advice. The wider EU context, notably state aid and the regulatory framework in general, also plays a part, and in particular circumstances may influence the successful roll-out of a PSF recommendation.³² Innovation Deals are one possible model that could be deployed. These help identify how an EU rule or regulation might be inhibiting the development of a specific technology area like e-mobility or recycling, and they also feed into possible solutions.³³ The outcomes of previous Innovation Deals also have the potential to be helpful to PSF implementation. Innovation Deals do not cover R&D.

In summary there is no evidence of obvious gaps in the support tools that can work alongside PSF, but that better information and smoother interaction are required. See also section 3.4.4.

30 European Commission 2016a

31 Nauwelaers 2017a, p.4

32 Regulation is one of the 3Rs that the European Commission identified as part of the context for PSF – see Nauwelaers 2017a p.4

33 Innovation Deals are voluntary co-operation agreements between the EU, innovators, and national, regional and local authorities around a specific technology area to gain an in-depth understanding of how an EU rule or regulation works in practice. See https://ec.europa.eu/info/research-and-innovation/law-and-regulations/innovation-friendly-legislation/identifying-barriers_en (viewed on 7 March 2019), which includes links to the Dutch Green Deal scheme that inspired it.

3.3 Efficiency of the PSF – scheme design and structure

Section 3.3 summary

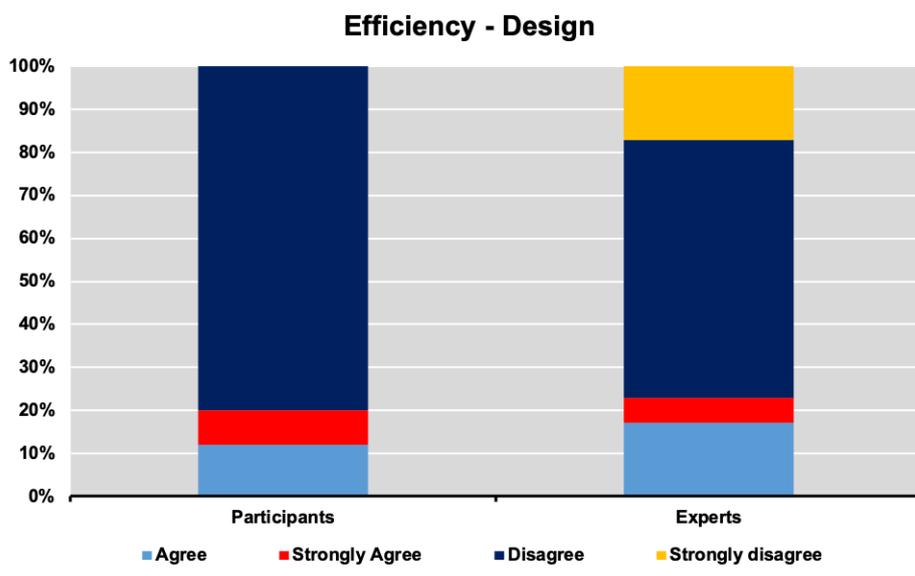
The design and structure of PSF as it currently stands is well conceived. It is, however, incomplete and there are specific elements which could be added. It also needs a more structured approach to setting priorities and to be more consistently open to practice outside Europe.

Note on figure

In Figure 6, note that most response (75-80%) disagree that a significant change is required in the design and structure. Experts are a shade behind country participants, but have more responses strongly disagreeing there is a need for change

Source: Survey results for responses to question: A significant change of PSF design, methodologies or tools is needed. (See Annex E(a) Q.7.5 and E(b) Q.4.5)

Figure 6: Need for change in PSF design or structure



3.3.1 Is the PSF well designed for its purpose?

The high-level message from the free-text comments and interview responses is that stakeholders think PSF is fundamentally sound in its design and should build on its strengths rather than undertake any radical change in direction. Comments also emphasised the need to ensure that PSF's methods match what countries need as the technological environment continues to evolve.

This may seem a surprising conclusion. The figure above shows that a reasonable number of participant countries and external experts agreed or strongly agreed that a significant change of PSF design, methodologies or tools is required (though is also notable that nearly 20% of external experts strongly *disagreed* with this view). The free-text comments and interview responses related to this question suggest, however, that the concerns relate to matters of execution rather than design and are accordingly picked up under that criterion (section 3.4.2).

There are issues about other specific aspects of the PSF's design, which are picked up by the subsequent questions under this criterion. These are matters of adapting the current design and building on strengths rather than making significant change. The December 2017 seminar also supported the view that evolution rather than revolution was required for PSF.³⁴

3.3.2 Are the procedures for establishing specific PSF activities effective?

The survey evidence and seminar reports indicate that there is plenty of demand for PSF, and the forward work-programme is well-filled. Comments overwhelmingly take the view that demand and the needs of customers should continue to be the primary determinant of PSF activity.³⁵ There was no appetite for top-down determination of priorities, but there was interest in a more informed approach to bottom-up decisions. In particular, we see merit in comments suggesting an analytical overview to inform decisions on priorities, identifying emerging R&D and innovation themes as well as messages from the rich store of information available in previous PSF work. We also note that

34 Nauwelaers 2017a, p.13

35 See also the emphasis on PSF's voluntary character at Nauwelaers 2017a, p.13

countries considering potential areas for PSF activity largely look at gaps in their R&D and innovation performance and can overlook the broader range of issues set out in their ERA priorities.

We note strong views in the interview evidence that innovation and human capital issues are not sufficiently prominent in PSF activities. This was expressed with particular force by our external interviewees, who were expressly comparing PSF to other evaluative instruments in the R&D and innovation area. In looking at the list of topics covered to date, there are certainly innovation elements that can be discerned, but we note that these are closer to the 'D' element of R&D than to closer-to-market innovation. Both innovation and human capital are areas where the analytical overview noted above should help countries consider the full range of options for PSF work.

A number of comments suggested that the ERA-related groups should be more involved in setting priorities. Under the coherence criterion above, we have endorsed the idea of working more closely with the full range of ERA-related groups (section 3.2.2), and this should certainly include the issue of priority-setting.

Concerns were raised in the survey responses and in interviews that Peer Review and Specific Support work to date has largely been concentrated in less R&D and innovation intensive countries. This pattern was to be expected in the early years of PSF, and we do not see a problem with PSF focusing where it can do most good. There is a countervailing issue that Mutual Learning Exercise activities are more concentrated amongst more R&D and innovation intensive countries, and again that is not surprising. As PSF develops, these imbalances are likely to even themselves out.

There also seem to be concerns that topics for Mutual Learning Exercises are sometimes too broad, fishing in busy pools, insufficiently clear until a late stage, and inefficiently communicated to the right range of people in administrations. (See also section 3.6.2.)

A number of comments stressed the importance, when setting priorities, of ensuring that countries volunteering for Peer Review and Specific Support fully understand the commitment required to participate in the process and implement its outcomes. (See also section 3.4.2).

3.3.3 Do the separate activities (Peer Review, Specific Support, Mutual Learning Exercises & Knowledge Centre) cover the right ground?

The majority of responses thought that the different activities were properly distinct. Where there were reservations, this seemed to reflect how some exercises were carried out in practice rather than inherent design flaws. As with the previous question, there was also a sense that the instruments were recent and should not be altered too much while they were settling down.

Aside from comments, it also seems to us that the distinction between the activities that currently constitute the PSF is logical and fits the issues they were designed to address. The two types of service - help to one country (in broader or more specific form) and countries working together on policy issues of mutual interest - are not difficult to conceptualise or describe. Countries that have used both Peer Review and Specific Support do not see the distinction between the broader and more specific type of support as being problematic.

While countries clearly like what the current services do, their comments suggest that there are areas of demand which are not currently being met and where the services offered by PSF could be extended. The gaps are in the following areas:

- **a process to allow countries to compare approaches to novel issues.** The methodology of Mutual Learning Exercises works best for established issues where countries have differing levels of prior experience or have hitherto taken very different approaches. The September 2018 seminar highlighted the fact that a lighter and more responsive service is needed where the topic is new and everyone is trying to establish a way forward.³⁶
- **a group Specific Support activity based on analysing the material to date** and identifying small groups of two-to-three countries with similar issues. As noted elsewhere (sections 3.3.2 & 3.6.3), there is already a substantial body of PSF findings, and this is one of the areas where it could be exploited more systematically.
- **a scheme to build administrative capacity to implement and embed reforms in countries.** The September 2018 seminar had a presentation from DG EAC (Education,

36 European Commission 2019, p.9 under policy experimentation

Youth, Sport and Culture) about a mutual learning programme which they operate.³⁷ It includes a component of training for officials to build capacity to implement the reforms identified elsewhere in the programme. While this sort of service will be time-limited in nature, there is currently demand and we suspect that similar demand could well exist in the area of R&D and innovation. Any such scheme should focus on developing durable administrative capacity-building over the longer term (both to implement the specific reforms arising from the PSF and to develop broader capacity in strategic policy design).

3.3.4 Does it reflect the right balance of ownership between the EU as a whole (including the Commission's role) and Member States?

An important principle of PSF is that activity is driven by the countries involved, supported by independent panels and with the European Commission acting in a facilitating role. Survey responses covered a wide range of views, with many reporting a good balance but a number being sceptical that the balance with the Commission was right. This range was also reflected in the free-text comments and interview responses.

Where problems were flagged, they seemed to concern specific experience with a specific project, not the general design of PSF. We also heard evidence that, while most countries are committed and focused in their participation, there have been occasional exceptions where the European Commission may have needed to steer more than usual.

In any case, the main responsibility for maintaining the intended balance between countries and the European Commission lies with countries themselves, and in particular on their being clear on their own objectives for and expectations of PSF activities. In line with the bottom-up principle of PSF, countries are responsible for protecting their own interests in this process.

3.3.5 Do its design and structure reflect good practice?

Some of the ways in which PSF differs from other evaluation tools reflect its specific character and mission rather than a divergence from good practice (see sections 2.2 and 2.3). PSF is also a flexible instrument, and hence able in principle to keep up with evolving good practice.

Comments in our survey from external experts did, however, flag three areas where there were lessons from elsewhere that seemed to us to fit with the nature of PSF:

- **composition of the panel:** external experts flagged the importance of making sure that the composition of panels was keeping pace with the rapidly evolving and increasingly inter-disciplinary nature of R&D and innovation (see also section 3.4.1);
- **looking more systematically at experience outside the EU:** this happens at the moment, but the view of external experts was that this was not happening systematically enough, particularly in Mutual Learning Exercises;
- **making use in the early stages of the existing knowledge** from the OECD, the World Bank and similar sources such as think-tanks: experts felt that not enough use of pre-existing material was being made.

37 As part of the European agenda on Education & Training 2010 the European Commission established a number of Clusters to facilitate peer learning between Member States. Within these Clusters, peer learning activities are organized where representatives from Member States exchange examples of good policy practice and explore the implications of the EU's ambitions for new education policies. See https://ec.europa.eu/education/content/peer-counselling-new-element-et2020-toolbox-0_en and https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework_en (viewed on 7 March 2019).

3.4 Efficiency of the PSF – execution

Section 3.4 summary

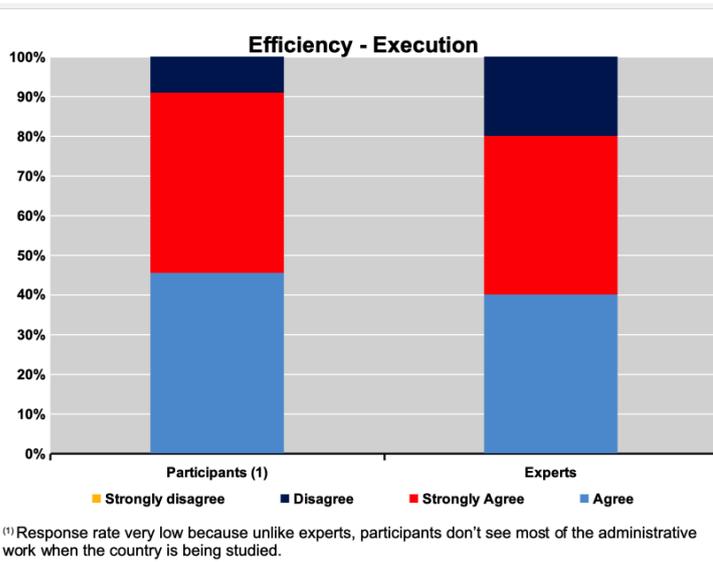
The consensus is that the execution of PSF works well. There are, however, some frustrations with some aspects and a number of suggestions for improvement are identified in the evidence. Set-up, dissemination, implementation and follow-up emerge clearly as the main weaknesses that need to be addressed.

Note on figure

In Figure 7, most responses agree that the PSF activity they were involved in went smoothly, though experts have slightly more reservations than country participants. The chart confirms our view that there are aspects of the process that can be improved, but in a context where most users are broadly content.

Source: Survey results for responses to question: The implementation of the activity was smooth. (See Annex E(a) A12 and Annex E(b) A12)

Figure 7: Smoothness of PSF execution



3.4.1 Does the PSF in practice assemble the right expertise?

The evidence clearly identifies the excellence and range of expertise covered by the panel as a key success factor for PSF. This was flagged at the December 2017 and September 2018 seminars, and emerged clearly from survey and interview comments.³⁸ Most survey responses on the effectiveness of chairs and rapporteurs are positive. There are some critical scores and comments, but the balance of evidence suggests that these were particular to the individuals involved in a specific exercise and do not represent a general problem with the selection of chair and rapporteur.

For external members of the panel more generally (since those include the chair and rapporteur), comments highlight the importance of practical and focused knowledge: academic and generalist knowledge has a role but should not dominate panels. The December 2017 seminar made the good point that it is helpful for the external experts for Peer Review and Specific Support to come both from a mix of countries, some similar to the one being studied and some different.³⁹

Another prominent theme is the importance of understanding the country in Peer Review and Specific Support exercises. We think this comment is more about the expertise and local insight the panel has access to rather than the composition of the panel itself, and pick this up further under the next question below (section 3.4.2).

There is some sensitivity with Member States and Associated Countries on the process by which panels are determined, as the chair selected by the European Commission and its contractor handles the selection of other experts and the rapporteur. This provides a major area of direct and indirect influence by the Commission on the process. It is therefore important that the Commission ensures Member States and Associated Countries are well briefed on how this process is carried out. Our interviewees flagged this as an area where current practice was insufficiently transparent.

38 Nauwelaers 2017a, p.5; European Commission 2019, p.10.

39 Nauwelaers 2017a, p.10

There were also comments on ensuring exercises are able to draw on the right expertise for their purpose. The European Commission has made efforts to extend the body of experts and maintain a broad range of expertise, but the evidence suggests this is still a work in progress and needs continued structured attention. Areas flagged in our survey and interviews include:

- having active processes in place to ensure that the panel of experts keeps up with the evolving state of R&D and innovation policy
- ensuring a better representation of experts with closer-to-market innovation expertise
- keeping under review the Commission rules limiting the number of repeat tours of duty for experts, given that not all fields have numerous experts able to undertake this type of work.

3.4.2 Which aspects of the processes associated with the various activities work well and less well, particularly for the countries being reviewed?

This question represents the largest area of evidence received, as it covers all aspects of the process as it is carried out in practice, from set-up through to the final report. It was also the main focus of the December 2017 and September 2018 seminars. We pick up the high-level themes here, but there are many helpful points and suggestions to improve the process included in the evidence reported in Annex D and we suggest careful reading of those when planning the procedural aspects of the future PSF.

The evidence identifies some good aspects of practice but also some issues that need to be addressed. The positive lessons are summarised in our list of success factors at the end of this chapter. Comments on Peer Review and Specific Support are generally positive. There seem to be more issues with Mutual Learning Exercises, particularly in the evidence from external experts. The issues are not fundamental in nature, but suggest that the model for Mutual Learning Exercises is still settling down.

There are three points common both to Peer Review / Specific Support and to Mutual Learning Exercises. One is the importance of **making the pre-phase more rigorous**, to ensure clarity on ownership on the part of countries subject to review or participating in an exercise, on the scope of the project, on who is the principal customer or target audience for the work, on what work is likely to be required to implement and follow up the project, on what successful implementation will look like, and on what indicators will be used to measure success. These steps are carried out in some cases but are not universal, and their absence leads to problems, later on if not immediately. The importance of the pre-phase was also emphasised at the December 2017 seminar,⁴⁰ and our Maltese case study in Annex F illustrates the role of commitment and clarity of ownership in the process.

The second common point is the role of **country visits** (either of the panel to the subject of Peer Review or Specific Support, or of a Mutual Learning Exercise group to a volunteer showcase country). There were differing views on the length of such visits, and some frustration from participants and experts that the time on country visits was not always used in the most flexible or effective manner. Our conclusion is that the visits do not need to be much longer or shorter, as long as there is more flexibility in the format in order to ensure that the panel gain the maximum insight into and understanding of the country being visited.⁴¹ A less rigid approach to meeting formats during country visits and a preparedness to divide the group to see more stakeholders were the main elements of flexibility requested.

The third common point is a need to ensure that **the methodologies for PSF services are up to date and visible**. Methodologies already exist for Peer Review, Specific Support and Mutual Learning Exercises. There are still some minor areas for improvement (see points in Annex D).⁴² The aim of a methodology would be partly to ensure panels do not re-invent the wheel, but also to reinforce the PSF brand identity and way of doing things.

Points relating to the specific services comprising PSF are discussed in section 3.6.

A number of comments from external experts on the process as a whole were critical of some aspects of the contractor's supporting role on handling experts' contracts and other logistical aspects. These are practical issues for the European Commission to sort out, and will need careful attention when drawing up the contractor's terms of reference for the successor programme.

40 Nauwelaers 2017a, p.9

41 See also additional points on country visits in European Commission 2019, p.10

42 There was an MLE specifically on revising the methodology for MLEs – see Luukkonen 2016

3.4.3 Does the PSF produce high-quality outputs?

There is a consistent view in the evidence that the main formal outputs of PSF activities are generally of good quality. Expert survey responses are positive, but their free-text comments bring out some more critical elements than participants do. The issues are about presentation rather than the quality of analysis or reasoning in the reports, which are highly rated. The external experts point to the need to make reports shorter, punchier and more understandable to non-specialists, with clear messages for policy makers clearly presented.

Comments also emphasise the need for recommendations to be practical, realistic and implementable, and one interviewee recommended dialogue with the country affected by PSF recommendations to make sure that the recommendations would work in practice. We agree with the principle that panels should ensure their recommendations can be implemented in a specific country context, as long as this does not mean that panels shy away from making radical and ambitious recommendations where necessary.

Mutual Learning Exercises result not only in reports but also in shared knowledge and strengthened networks amongst the participants. The value of these intangible outcomes was stressed in our survey and interview evidence as well as at the September 2018 seminar, and is also illustrated in our Slovenian case study (Annex F).⁴³ Indeed, there was demand for more conscious attention to ways in which such intangible outcomes might be better maintained and developed over time.

3.4.4 Does the follow-up activity work well?

This area is PSF's main current weakness. There is not enough emphasis on following up and monitoring the actual policy changes made as a result of a PSF activity over the appropriate timescale. We see five main issues.

The first is the fundamental observation that PSF is often **too short-term in focus**, whereas meaningful reform and institutional change often require a long-term trajectory. Reports can and do make recommendations that require a long timescale – an interviewee noted that the report on Bulgaria recommended a complete restructuring of the country's higher education system.⁴⁴ But there seems to be surprisingly little emphasis in PSF on what happens after a report is launched. We are aware that PSF has usually been more focused on influencing policy planning rather than on reform implementation. While we do not see PSF itself as an instrument of reform implementation, it needs to pay more attention to the ways in which its findings will be put into effect.

We have no problem with exercises looking for quick wins and medium-term change as well.⁴⁵ These are important for maintaining momentum, and in any case the timescale of the recommendations must match what is needed to make a difference for the country or issue in question. But there needs to be more structural recognition that some recommendations will take longer, and that there need to be appropriate ways of maintaining momentum and focus in such cases.

The second issue is the **launch and dissemination of reports**. Views from the evidence on dissemination are neutral to negative, and the impression is that the launch and dissemination of PSF reports can often be standardised in approach and underwhelming in impact. One of our interviewees made the essential point that an effective launch depends on clarity about who the audience is. That in turn links to the issue of what a country wants out of the exercise. Work on planning the dissemination therefore needs to start from the beginning of the project, as part of the pre-phase, and unambiguously linked to a country's objectives and target audience. See also the discussion on the pre-phase in section 3.4.2.

It was also clear from the evidence that launch events themselves need to be more impactful. We also noted demand from countries for a standard launch pack. This was particularly the case for Mutual Learning Exercises, where a number of countries are customers for the same activity and a standard pack would both save effort and ensure greater consistency of messages. We agree with these points, as long as both clearly derive from a clear vision of purpose and audience as described above. We also note that, as well as generating greater impact in the countries concerned, a more considered approach to launch and dissemination ought to support greater visibility for PSF itself.

43 European Commission 2019, p.11

44 Cowey et al. 2015, p.10

45 European Commission 2019, p.9

The third issue is **implementation of PSF recommendations**. There were strong views in survey responses and interviews that more needs to be done to create pressure on countries to implement recommendations, and there were some voices specifically calling for enforceable commitments and formal monitoring with sanctions. Implementation is also identified in the Maltese case study in Annex F as an area where more needs to be done. These views were balanced by warnings about the need to preserve PSF's voluntary character and the dangers of over-rigidly committing countries to specific targets in respect of a complex and constantly evolving system.

We agree on the importance of preserving the voluntary nature of PSF and on the dangers of making follow-up excessively rigid. On the other hand, there is clearly demand for a more structured approach to implementation and follow-up, with some obligation on a Member State or Associated Country to demonstrate at reasonable intervals what specific policy changes they have introduced as a result of the PSF process.

Section 2.2 described the links between PSF and reform tools such as the European Semester, the Structural Reform Support Programme and the proposed Reform Delivery Tool. It is important to get these links right, not least as they will be an important part of unlocking EU funding to support reform in many cases. But the Semester in particular is necessarily highly selective in what it can cover, and it tends to have an imperative tone. Given the voluntary nature of PSF, deploying the Semester in the implementation of PSF therefore needs to be a joint exercise between the European Commission and the country or countries concerned. While these EU reform support tools will be important components of PSF implementation in many cases, a comprehensive implementation plan (and the associated monitoring) will need to go wider than those specific instruments. Free-text survey and interview comments highlight ways in which follow-up could be done in a light-touch manner.

The fourth issue continues the theme of **support to countries in implementing PSF recommendations**. Not all countries will need EU support for PSF implementation, but where they do the evidence suggests the various instruments are not as easy to access or combine as they should be (see section 3.2.3 above). We therefore identify a need for active work by the European Commission to assemble packages of policy measures that can facilitate access to relevant instruments and information (funding and otherwise) across Directorates-General. Most of the funding programmes that would comprise a support package are competitive in nature, so the Member State or Associated Country in question would also need to be proactive in making the appropriate bids.

A support package may sometimes need to include state aid and regulatory elements, and the Innovation Deal model may be a helpful component in such cases (also section 3.2.3). Additionally, one of our interviewees suggested that the Commission could provide additional incentives for reform by increasing the EU co-financing rate for certain instruments where the activity was clearly linked to the implementation of PSF recommendations.

The fifth issue is that there is no **systematic way of measuring the policy changes** brought about by PSF or the impact those changes have had. There are no agreed indicators, either for specific studies or for PSF as a whole. In examining the evidence under the Effectiveness and Impact criterion below, we were able to ask representatives of countries about the value of the process to them but could not find comparative or cumulative data on the impact. That is not a large problem for this first review of PSF, as many of the impacts will not yet be apparent after so short a time, but it would be helpful to have a stronger analytical base for the next review. The identification of agreed indicators for follow-up and impact measurement needs to be incorporated in the standard methodology for PSF and considered explicitly during the pre-phase of each PSF activity (see also section 3.4.2).

In addition to these five major issues, two other observations from the survey and interview evidence are worth highlighting. One was the relatively low profile of PSF findings outside the immediate circle of those involved, including in key EU reports on the broader economic landscape. This relates to the branding issues noted in section 3.4.5. We also note that there is demand for more work to develop the administrative capacity to implement policy change in countries that need and want this support.

3.4.5 On all of these, does its execution reflect good practice for such activities?

In their comments, experts and interview subjects explicitly or implicitly compared PSF to good practice for international evaluative tools. Their observations reinforced a number of points made under other headings, and emphasised the importance of PSF maintaining its distinctive features of

flexibility and responsiveness. Nonetheless, some specific points emerged where they thought PSF could do better:

- **promoting itself**, and specifically remedying: a lack of clear and consistent branding, sub-optimal means of promotion, and a lack of strategy for communicating the benefits of the process outside the inner circle
- **avoiding too much EU jargon and mindset** in reports, to increase their influence in wider analytical circles
- **making use of the body of existing evidence** created to date – not just making it accessible (see section 3.6.3 below) but doing serious cross-cutting analysis of it (though the interviewees suggesting this recognised it would require serious investment).

3.5 Effectiveness and impact

Section 3.5 summary

It is too early to assess the impact of the reforms initiated as a result of PSF. It is, however, seen as a valuable programme that delivers good quality results. While it is a good instrument for developing policy reform proposals, it needs to embrace the implementation dimension in order to realise its full potential.

Note on figure

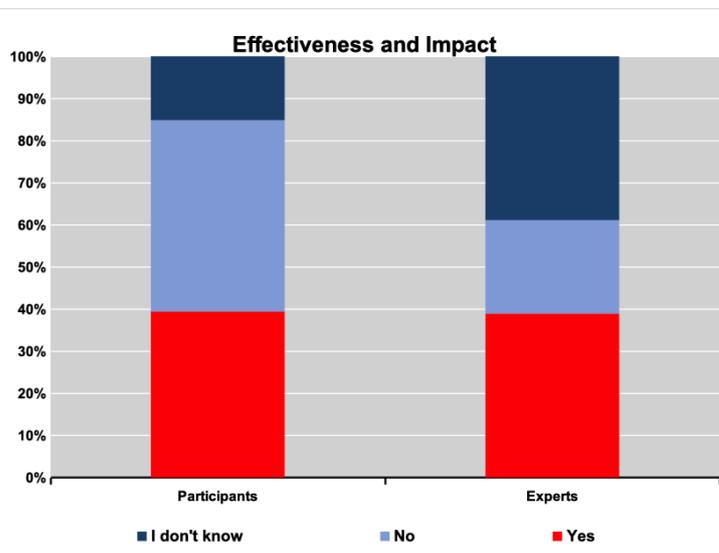
In Figure 8, note that number of yes responses is only 40%. This may reflect PSF's short lifetime to date, but it also reinforces our concern that there is not enough emphasis on implementation. Also note the 40% don't-know responses from experts (see below).

Source: Survey results for responses to questions:

Has the PSF already influenced/triggered a policy change at national level? e.g. launch/plans to launch new projects/legislation/policies; adapting existing policies/approaches etc. (See Annex E(a), Q3.1)

From your knowledge and experience, the PSF activity was impactful and the host country developed concrete legislation/strategies/activities as a result of the PSF, OR the host country intends to use PSF results to change/develop its national policies. (See Annex E(b), Q.A21)

Figure 8: Impact of PSF on country



3.5.1 Does the PSF lead to genuine and durable improvements in national and EU research and innovation systems?

PSF in its present form is only three years old and it is therefore too early to be able to assess how much reform it has facilitated and the impact of that reform. As we note on follow-up (section 3.4.4), some aspects of a meaningful reform agenda in any case require a longer-term timescale. In the same place we identified implementation and follow-up as an area that needs attention more generally. It is self-evident that PSF can only produce genuine and durable improvements if its recommendations are put into effect.

Whilst we cannot give a definitive answer on the impact of PSF, we can at least assess whether it is helping to move the agenda in the right direction. The survey responses from experts on this question were generally more positive, while participants were more sceptical. Free-text comments from participants were, however, substantially more positive than their survey responses. The reservations they express mainly concern the difficulty of implementing PSF findings if there is not a wider political commitment in the national administration. This reinforces our view that commitment of this nature is a key success factor for PSF.

One participant seemed to capture the balance of views in commenting that PSF was not miraculous or instantaneous but that its strong, independent and high-quality nature helped push or at least prompt changes at national level. We also noted an external expert's free-text

comment that PSF helped national policy-makers to understand their own national R&D and innovation system properly and to see it from an international, rather than an inward-looking, perspective.

It is worth noting in Figure 8 that in the survey a lot of experts said they did not know whether the country in question had made or intended to make meaningful changes as a result of PSF, which suggests that there may be a lack of communication with them on how reports are put into effect and what impact that has.

Interviewees echoed the range of views from the survey, broadly agreeing that PSF was doing the right things and making a difference in opening perspectives and creating networks. One interviewee stressed that genuine and durable improvements at national level depends on countries making actual policy changes as a result of PSF.

Overall, there is a strong message from those who have been part of a PSF activity that they found it helpful, and the general sense of the evidence is that PSF is helping to move the agenda in the right direction. We should note, however, that weaknesses in implementation will limit PSF's impact in the long term if they are not addressed.

3.5.2 Are PSF's achievements of a scale we might expect from this sort of scheme?

As with the previous question, it is hard to give a definitive answer to this question at an early stage in its life when many of its most important benefits may not yet have manifested themselves. The consensus in the survey and interview evidence is that PSF is overall doing a good job, but that it is not yet quite achieving its potential. It needs to address certain manageable issues, namely the points covered in sections 3.3 and 3.4, but there is no sense that there is a fundamental problem with PSF.

3.5.3 If there is a rationale for EU added value, is this delivered in practice?

PSF could not possibly close the gap in R&D and innovation performance between Member States or Associated Countries in its short life, but participants clearly see it has made a difference to them. The collaborative nature of the work has also in itself supported the aim and spirit of the ERA, as well as producing outputs that have raised the overall capacity of European R&D and innovation. It is worth noting that PSF works by enabling countries (with the support of experts and the European Commission) to help each other and build wider and deeper networks of mutual support. This self-evidently goes beyond what could be achieved at national level alone, and is therefore in itself a significant element of EU added value.

3.5.4 Is there sufficient synergy with wider EU and national objectives (both in terms of what it receives from other initiatives and what it contributes)?

As noted in sections 3.2.2 and 3.2.3, there is a strong sense that PSF is reasonably good at pointing to other instruments. PSF's relatively low profile, however, means its findings are not generally picked up by them. There is also a sense that it is not systematic enough in linking to remedies and support available in connection with other EU objectives – sometimes this works and sometimes it does not.

3.6 Findings on the specific services of PSF

The findings above are largely applicable across the range of PSF. There were some findings, however, which were particular to one of the specific services that comprise PSF. The two seminars and their reports and the two case studies from Malta and Slovenia in Annex F were especially helpful in preparing this section.

3.6.1 Peer Review / Specific Support

Commentary at the seminars and in our other evidence was positive about this service and clear that it was distinctive from the OECD and World Bank country review services in that it was challenge-driven, customer-orientated, flexible and geared towards policy practice.⁴⁶ These PSF services have to date principally been the domain of less R&D-intensive countries, because these services fit best their needs. Our impression is that Peer Review and Specific Support undersell their distinctive features and advantages.

There are a few issues that emerged with these services. It should be noted that the points below relate to a few specific areas of specific cases, and that most reviews were seen as a positive experience by all participants. Issues that were flagged systematically in survey comments and interviews were:

- The importance of countries understanding the need for a clear cross-government political commitment to a review and to implementing it – ‘focus and political commitment’ was the phrase used at the December 2017 seminar.⁴⁷ One of our interview subjects noted that a part of a government trying to impose a review on a reluctant agency (for example) would greatly reduce the chances of success.
- The value of giving countries subject to a review a comprehensive briefing on what they would need to do in order to facilitate the smooth running of the process and to get the most out of it. Other issues identified included standards of quality for the data and analysis a country will have to provide, and an ability to make available a fully representative range of stakeholders.
- Panels having the necessary expertise to understand the country, particularly if the local culture is distinctive or there may be language issues. Comments recognised that it would not normally be appropriate to have a representative of the country on the panel itself, but suggested other ways of ensuring the local context was fully understood, such as having a local consultative board.
- The composition of the panel. Comments suggested they should ideally combine members from countries of similar size or facing similar issues and members from countries with contrasting characteristics – to ensure insight into the local challenges but avoid closed-system thinking.⁴⁸
- The importance of ensuring that recommendations, particularly challenging ones, are robust against potential challenge on grounds of implementability. It is therefore essential that the panel goes through its findings with the local administration after the report is finalised.

The comments in section 3.4.4 about PSF implementation needing to work smoothly with other EU activity (including regional policy) and tools (including the European Semester and the proposed Reform Delivery Tool) were particularly flagged in the context of following up Peer Review and Specific Support activities.

3.6.2 Mutual Learning Exercises

In the R&D and innovation space there is nothing easily comparable with the Mutual Learning Exercise service in the scope and range of countries covered and in particular in its attractiveness for R&D-intensive countries. This may explain why, despite the fact that there were more critical comments on this service than on Peer Review, there was also a strong affirmation of the value of the Mutual Learning Exercise model, the benefits it had brought, and the scope to make it even more useful. Specific points raised in comments and interviews are summarised here.

46 Nauwelaers 2017a, pp.4 & 8

47 Nauwelaers 2017a, p.13

48 See also Nauwelaers 2017a, p.10

- The largest number of comments, particularly from external experts, was about the set-up and definitional phase. It was noted that some topic descriptions were too vague and some were too broad, and that it often took too long for clarity to emerge, all of which made it difficult for countries to know what they were signing up to. The voluntary nature of PSF means that the scope will always have to be agreed by the participating countries, but it was flagged at the September 2018 seminar that there is potential to involve experts in an appropriate way in this early phase in order to inform this process and ensure the terms of reference reflect the latest state of knowledge.⁴⁹
- Following on from that, there were comments that Mutual Learning Exercise topics tended to be quite broad, sometimes even putting together topics that were not intrinsically linked. There were requests for Mutual Learning Exercises to cover small topics as well as larger ones.
- People also commented that Mutual Learning Exercises should not tackle issues that were already under active consideration elsewhere, as expertise in Member States and Associated Countries was usually represented by a very small number of people who could end up too thinly spread to make an effective contribution.
- There were several comments on the importance of getting Member State and Associated Country representation right, and of ensuring that all participants were active in the work of the Mutual Learning Exercise. One suggestion was to extend the current process for signalling interest (known as a Concept Note) so countries clarified not just the issues they wished to address but also confirmed their willingness to participate fully. People were keen that, where possible, countries should commit to consistency of representation, otherwise the network-building benefits of Mutual Learning Exercises would be diluted. Similar points emerge from the Slovenian case study in Annex F.
- Comments suggested that potential topics for Mutual Learning Exercises were not always widely shared within administrations, with the result that the right people in countries with a genuine interest sometimes did not register their interest in time. It was also suggested that the relatively low profile of the Mutual Learning Exercise service outside a particular community did not help this situation.⁵⁰ All comments emphasised the importance of ensuring a wider range of national stakeholders was engaged.
- Some comments noted a tendency to overlook the potential for positive short-term policy proposals in Mutual Learning Exercise reports and to favour longer-term solutions, suggesting that a better balance of short-, medium- and longer-term recommendations would help to maintain momentum and political buy-in.⁵¹
- The need for a pack of standard dissemination material was flagged, particularly for Mutual Learning Exercises in particular as several countries were involved and a standard pack would not just avoid duplication of effort but ensure a greater consistency of branding and messaging. One commentator also made the suggestion that MOOC-style dissemination could be used for Mutual Learning Exercise outcomes.
- Many comments noted the value of Mutual Learning Exercises in helping to build and develop networks amongst countries, and this is also evident from the Slovenian case study in Annex F. Whilst it was seen as one of the principal intangible benefits of PSF, the sense was that this aspect was not currently much captured or evaluated, and this should change. The September seminar itself provided many useful examples. Some networks are reported as being more durable than others after Mutual Learning Exercises finish, and there were calls for more explicit attention to be given in the final stages of Mutual Learning Exercises to the issue of how to maximise the chances of retaining a thriving ongoing network.⁵²
- More generally, Mutual Learning Exercises were one of the areas there was a call for more experimentation in the methodology and ways of working.

The principle of MLE is of countries sharing experience of particular issues, and on most issues some countries will have more experience than others. It has, however, also been used to

49 European Commission 2019, p.9

50 See also European Commission 2019, p.11

51 See also European Commission 2019, p.9

52 See also European Commission 2019, p.11

consider approaches to novel and emerging policy issues (sometimes referred to as hot topics), where no country has much of a track record. Our view is that this latter type of instance needs a distinct service of its own (see section 3.3.3).

3.6.3 Knowledge Centre

Survey responses on the Knowledge Centre website suggested that people thought it contained useful and relevant information. Free-text and interview comments made the point that the nature of PSF work makes its online archive a potentially invaluable source of information on R&D and innovation systems across Europe. It is not, however, currently fulfilling this potential. It is not considered user-friendly, it has an undeservedly low profile compared to other sources such as Eurostat, and it is not seen as the basic reference source it should be. A number of suggestions were identified in comments and interviews, set out in the summary of evidence. Key suggestions made are as follows:

- making it easier to search and ask questions of the website by topic as well as by country (so countries can compare their performance in an area with that of other countries);
- using it to identify areas where several countries have similar issues they could usefully work on together;
- more generally analysing the rich information in the Knowledge Centre's archive to identify cross-cutting lessons;
- involving the ERA-related groups more systematically.

The relatively low profile of the Knowledge Centre reinforces our view that a more consistent approach is needed to branding and communication for PSF.

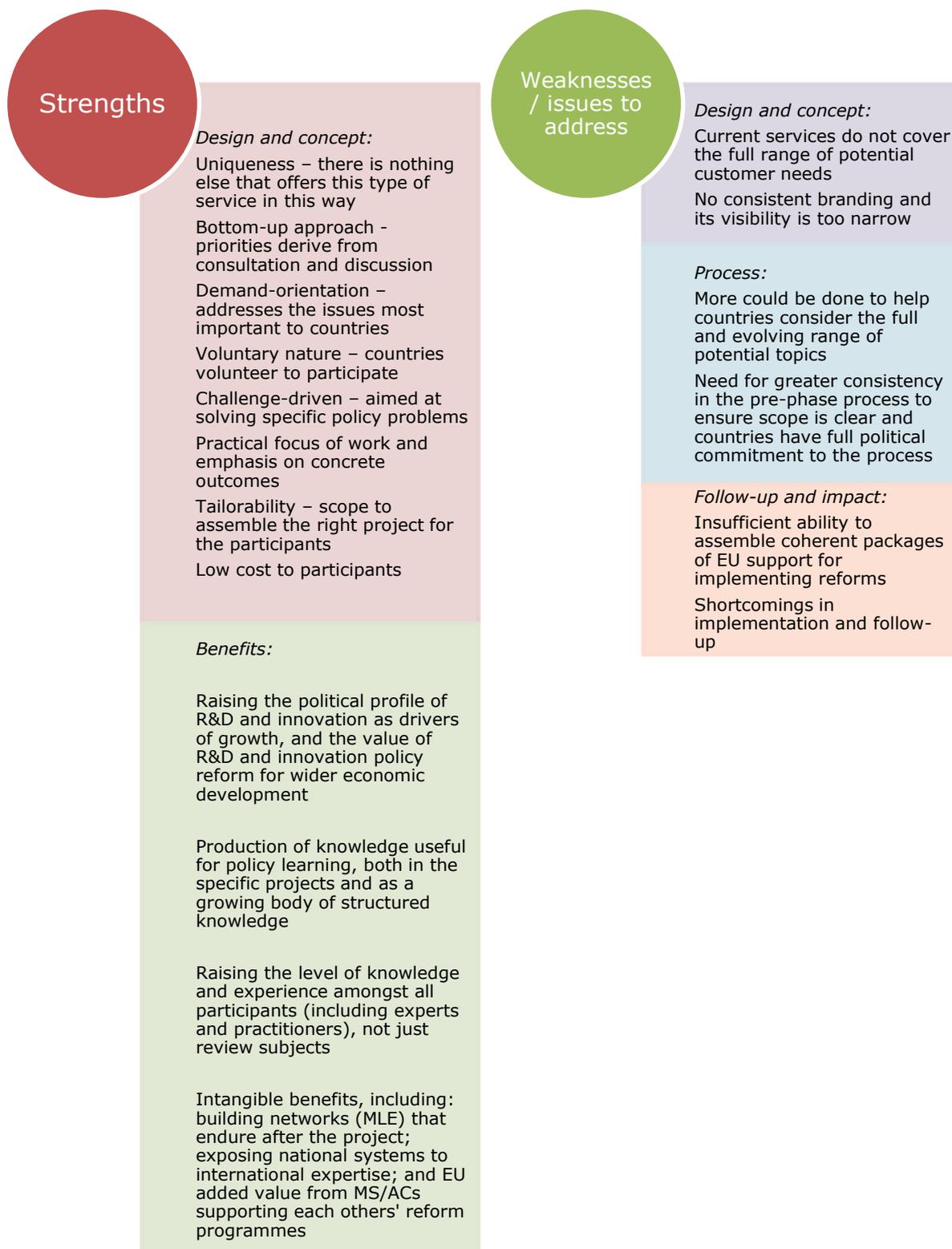
3.7 Summary of strengths and weaknesses of PSF

Our terms of reference specifically asked us to identify the key strengths and weaknesses of PSF. The table below summarises the points that emerge from the detailed evidence in the sections above.

The strengths of PSF are significant, both in the way it is designed and in the benefits it delivers. There are some weaknesses, but it is important to emphasise that these are areas where the design and execution could be improved and not fundamental flaws. Where people were critical, it was because they wanted PSF to deliver more and better.

Table 3: Strengths and weaknesses / issues to address

Source: Expert Group elaboration

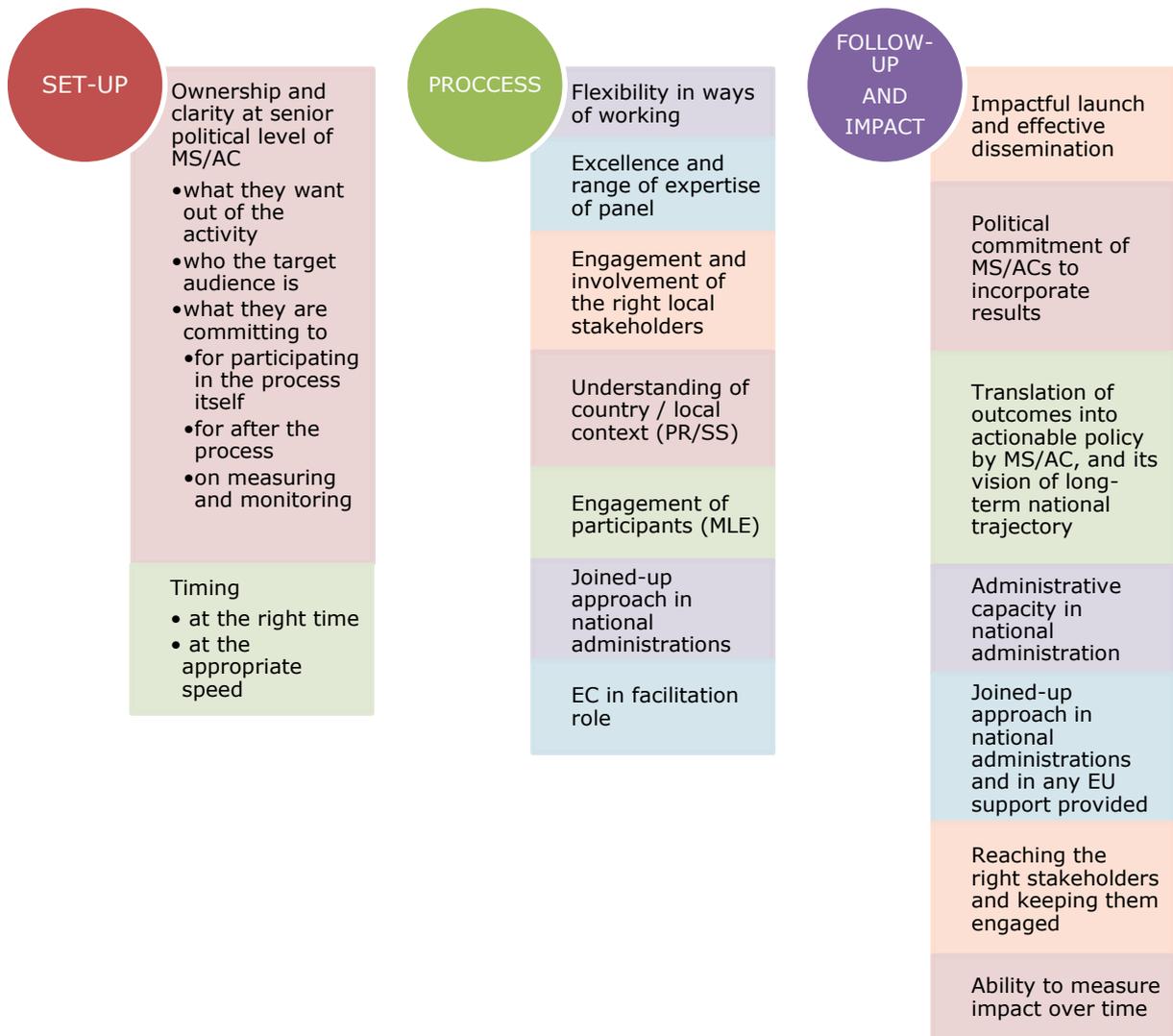


3.8 Summary of success factors for PSF

Our terms of reference also specifically asked us to identify key success factors for PSF. The table below summarises the factors which emerge from the detailed evidence above.

Table 4: Success factors for PSF

Source: Expert Group elaboration



CHAPTER 4 – RECOMMENDATIONS

An upgraded role for PSF to drive reforms

1. PSF should contribute not only by enabling Member States and Associated Countries to strengthen the quality and efficiency of their R&D and innovation systems but should also be better used to encourage more systematic and extended dialogue among Member States and Associated Countries and between them and the European Commission on **meaningful reform agendas**.

There is still substantial work remaining to raise the R&D and innovation performance of Member States and Associated Countries, so PSF should continue at least for the period of Horizon Europe. In so doing, it is important that it continues to be sensitive to the differences between R&D and innovation systems in different countries. There is also scope for PSF to enhance the profile of R&D and innovation issues within the wider processes of economic reform and performance improvement.

A key element of the European added value of PSF is its contribution to the co-evolution of the reform agendas of Member States and Associated Countries, and it is essential for the EU that this process works well. PSF has distinctive value here as it facilitates multi-lateral dialogue between Member States and Associated Countries, not just bilateral discussion with the European Commission. The potential for this range of dialogue is underexploited at the moment, and addressing this will require action by countries as well as by the Commission.

For multi-lateral discussions, we note the steps taken in the European Research Area and Innovation Committee (ERAC) to instigate strategic debate on particular PSF reports. This positive development should be extended. This could include discussion in the other ERA-related groups. Presidencies and Member States could also consider the scope for strategic debate in the Competitiveness Council from time to time. For bilateral discussions between countries and the Commission, PSF provides richer and more nuanced material on R&D and innovation topics than the material provided by the European Semester, and it should be used more extensively in that context.

2. If a country needs support from the EU to implement the outcomes of a PSF activity, the European Commission should prepare a **package of policy measures** to facilitate the country's access to relevant instruments and information across Directorates-General.

Ensuring effective implementation of PSF outcomes requires additional effort both from the European Commission and from Member States.

Not all countries will require EU support to implement the results of PSF activities, but when they do need such support it needs to be simple, comprehensive and holistic, going right across the European Commission's responsibilities and tearing down silos across Directorates-General. There are three types of support that need to be combined.

Firstly, the implementation of PSF needs to draw seamlessly on the full range of EU tools specifically designed to provide tailor-made support to countries implementing structural reforms, not just tools aimed at R&D and innovation systems but those supporting economic and structural reforms more generally. The latter group includes the European Semester (for high-level items), the Structural Reform Support Programme and the proposed Reform Delivery Tool.⁵³ Use of these instruments will require active work by the Commission and the Member State to ensure the necessary coordinating links are made and that relevant PSF recommendations are effectively pulled through into these broader instruments.

Secondly, there is scope to make better use of funding from other EU programmes to support the implementation of PSF outcomes. These programmes include the EU research and innovation programmes (Horizon 2020, and its *Spreading Excellence* actions), the European Structural and Investment Funds (ESIF, particularly when PSF recommendations address Smart Specialisation or regional R&D and innovation issues), and InvestEU (when they concern issues such as the commercialisation of research results, the digitisation of industry or the scaling up of innovative companies).⁵⁴ Most of these programmes are competitive in nature, so the Member State or Associated Country will need to make appropriate bids.

53 See Glossary for information on these instruments.

54 See Glossary for information on these instruments

There are several things the European Commission can do to facilitate and enhance access to this type of implementation support. One is the provision of clear, comprehensive and user-friendly information on the full range of relevant possibilities. The second is to incentivise reform by considering an increase in the EU co-financing rates for some of these programmes in cases which demonstrably concern the implementation of reforms recommended by PSF. And the third is to make these programmes easier to combine in practice. At present many have different rules, different co-financing rates and different state-aid regimes. The agreement of new legal instruments for the upcoming Multi-Annual Financial Framework is an ideal opportunity to resolve these administrative barriers.

Not all EU support is financial in nature. The third type of support the Commission can provide is therefore to help countries understand and better navigate the wider EU framework that sets the context for R&D and innovation. State aid and the regulatory framework are the most obvious elements of this, and in particular circumstances could be important to the successful roll-out of PSF recommendations. This principle is already reflected in the model of Innovation Deals.⁵⁵ The Commission should explore whether there is potential to extend the model beyond innovation to include R&D.

In summary, the Commission should be aiming to combine these different types of EU implementation support into a holistic and coherent package to support participants in implementing PSF recommendations. But Member States and Associated Countries are the ones who will need to make proactive and effective use of this package.

Extending the design specification of PSF

3. PSF needs an **extended time frame** since ambitious policy reforms and institutional change within R&D and innovation systems require a long-term trajectory for implementation.

There remain substantial issues to resolve within EU Member States at R&D and innovation system or major sub-system level, and some of this will require significant institutional reform. Change on this scale requires careful planning and sensitive preparation with multiple stakeholders. At the moment, PSF seems to be focused on making medium-term changes and reforms. Nevertheless, there are many instances where a longer implementation period is needed, typically five to ten years rather than two to three years. This longer timeframe is not just a matter of allowing more time but of planning a clear trajectory with appropriate review points and incentives to ensure momentum is maintained.

PSF projects should therefore not just consider what reform is required but look expressly at the timeframe that fits such reform. This is an area where there is much valuable Member State and Associated Country experience that can be shared.

There is also the important issue of maintaining momentum over a longer timeframe – see recommendation 5.

4. Allow **greater flexibility in the process** to accommodate a wider range of policy needs such as novel policy topics, capacity building and exploiting the knowledge gained by the PSF.

To maintain its relevance, PSF needs to take active steps to broaden the range of issues it can potentially address, including closer-to-market innovation, human capital and cross-cutting issues. As noted, this will also mean continuing efforts to broaden the range of expertise available to the service. It will also require more up-front work on the agenda for PSF activities, drawing on prior work and a study of what is happening elsewhere in order to develop a long-list of potential topics to inform Member States' bottom-up decisions. PSF should also begin to look more systematically outside the EU for good practice.

It is also important that the offer remains as open, flexible and adaptable as possible. The existing services of Peer Review, Specific Support and Mutual Learning Exercises should be retained, but they do not cover the full range of customer demand. We recommend adding: a quick and light-touch process to allow countries to compare approaches to issues that are novel to all countries; a Specific Support service for a small group of countries where previous PSF work has identified a set of similar issues; and a scheme to build administrative capacity to implement and embed reforms in countries that want this type of support (similar to that used in the Peer Learning Activity programme operated by DG EAC).

55 See Glossary for information.

5. PSF requires a framework for **follow up** to support implementation, to capture the policy changes resulting from its outcomes and to enable monitoring of the resulting impact.

While PSF is a voluntary process and should not enforce implementation where this is unwelcome, there needs to be a clearer and more rigorous framework to support and encourage countries in implementing the outcomes of PSF activities. This requires greater clarity on what successful implementation will look like, how it will be measured, and how the country will report back on what it has done. The principle should be “implement or explain”: countries are entitled to change their mind or to have better ideas, but they should be able to give a good account to their peers and to the European Commission of what they have done and why.

For MLE specifically, work should be done on how networks built up during MLE activities can be maintained and developed in future years.

More work also needs to be done on how to capture and measure both the tangible and intangible impacts of PSF activities, not least so that the impact of PSF as a whole can be evaluated in due course. The focus for tangible impacts needs to be on actual policy changes and what has happened as a result. The focus for intangible impacts needs to be on a significant and durable increase in Member State and Associated Country capacity to develop and implement effective strategies. Monitoring can be light-touch in nature, in line with the voluntary character of PSF.

Once a body of impact begins to emerge, this should be reported to the Council at intervals, with particular emphasis on identifying the benefits that emerge when countries stick to the longer-term reform trajectories recommended above. Punchy and purposeful reporting to the Council is also an important way of raising the profile of PSF. Presidencies, Member States and Associated Countries should additionally consider the scope for using this material to inform strategic debates.

Improving the mechanics of PSF

6. Make the **pre-phase** of all PSF activities more rigorous to ensure clarity on ownership, scope, the target audience for the work and the follow-up that will be required

For Peer Review and Specific Support, there needs to be more rigour in the pre-phase in order to ensure that countries are fully aware of what they have committed to and the demands that the process will place upon their administration. It is particularly important that they have detailed data and analysis available from the earliest stages, that they ensure senior policy-makers in their administration engage at key points throughout the process, and that the panel is able to engage with a wide range of stakeholders across the whole R&D and innovation system in the country.

To avoid mismatched expectations or mission-creep, the pre-phase should also ensure that the scope, aims and objectives are unambiguous and that timescales are realistic. It is particularly important that the target audience for the work is clearly identified from the start, as this will determine how the panel writes its report, how the report is launched and what sort of support materials are required. The process of planning for implementation and follow-up also needs to begin in the pre-phase – including clarity on how success will be measured.

For Mutual Learning Exercises, the same broad lessons need to be applied but adapted to a situation where several different countries are participating. Attention needs to be given to ensuring that the right people across a national administration are aware of upcoming MLE exercises and so able to reach a collective view on participation. A letter of commitment from participating countries should be required in order to ensure, in a similar way to Peer Review, that countries taking part are aware of their commitment to the process, to their fellow participants and to following up afterwards.

Particular attention needs to be paid to the scope and precise aims of Mutual Learning Exercises to ensure they are not too broad or too vague. Some form of expert input to the scope and terms of reference may be required to ensure the project is correctly defined and focused on the most up-to-date issues. Again, the issue of the target audience for the work needs to be addressed from the start, and planning of appropriate dissemination activity, support materials and follow-up initiated at this stage.

7. Ensure that the execution of the PSF actively builds in the **success factors** we have identified.

The underlying principle is for PSF to retain and build on the features that make it distinctive from other tools like those of the OECD and the World Bank, particularly its practical focus and the fact that its priorities and activity are driven by Member States and Associated Countries.

A key theme of the success factors is ensuring the right input from all the different participants. It is essential to maintain the excellence of panel expertise, and this needs to be expanded to include a wider range of current issues (most notably in closer-to-market innovation, in human capital and in cross-cutting topics). In the same spirit, participating countries need to ensure they are actively joining up within their administrations and enabling the panel to meet a wide range of stakeholders and obtain the fullest picture of what is happening nationally. The European Commission's role is to facilitate: experts and participant countries therefore need to be active and engaged and cannot delegate their responsibilities to the Commission.

The other key theme is flexibility and a willingness to experiment in ways of working, including in how the work is structured, in how information is gathered and presented, in the format of meetings and visits, and in the use of technology. Country visits in particular are roughly the right length, given the constraints on people's time, but should concentrate less on factual information (which can be provided in advance) and more on understanding the context and the perspectives of stakeholders – and should be more willing to try different formats.

The aim of all PSF activities must be recommendations that are capable of being put into effect in the specific country or context in which they have to be implemented. Implementability in this sense means that the recommendations are grounded in deep knowledge of the specific country context and what it needs to improve its quality and efficiency, and not that they represent the line of least resistance. Panels must be prepared to make radical and ambitious recommendations where necessary. For Peer Review and Specific Support, it is important that the panel looks to countries of a size or stage of R&D and innovation readiness that provides the most useful comparison, regardless of whether those countries are in Europe or not.

8. Put more effort into **dissemination and communication of PSF activity** in a user-friendly way, both to ensure they have more impact in the countries involved and to raise the visibility of PSF and in particular of the Knowledge Centre as a definitive source of expertise on policy reform.

The effectiveness of dissemination and communication needs to be stepped up significantly, and should match the circumstances and audience rather than the traditional one-size-fits-all launch for reports. As noted in our recommendations on the pre-phase, planning of dissemination and communication needs to start at the very beginning of the activity and be based on a clear view of the target audience and how best to reach them. For Mutual Learning Exercises, we recommend that standard launch packs are considered in order to ensure consistency in messaging and branding.

Additionally, the insight and analysis from previous PSF work should be made more accessible, particularly through the Knowledge Centre, which should become the definitive policy support tool for European countries. It should also be much better known outside the direct ERA and PSF community. All of this means making the website more user-friendly, the database more easily searchable (by topic as well as by country) and cross-cutting lessons able to be more easily extracted. The body of past work, properly analysed, should be able to inform future PSF priorities for individual countries or groups of countries.

9. More needs to be done to raise the **profile and wider visibility** of PSF and to give it a **clear brand identity**.

PSF has a good reputation but it is limited to a relatively narrow group of stakeholders. There are several elements to addressing this. The essential first step is to collect evidence of the impact of PSF (recommendation 5). That evidence then needs to be used more systematically in documentation, reports, Council debates and other public contexts. The European Commission also needs to ensure that PSF recommendations are picked up in broader economic and social reform exercises, where appropriate. The website needs to be redesigned as an authoritative source of information on policy reform. And a clear brand identity and positioning strategy should be developed for PSF to enable its products to be easily recognised.

NOTE ON ANNEXES

The annexes are not included in this version of the report but are available in the full version, which can be found in the Horizon 2020 Policy Support Facility Library on the Research and Innovation Observatory website.⁵⁶ The annexes in the full version are as follows:

- A Terms of reference for the evaluation
- B Abbreviations and glossary
- C Bibliography
- D Summary of survey and interview evidence
- E Results of survey
 - a. Participant countries
 - b. External experts
- F Case studies from Malta and Slovenia
- G Additional statistical and supporting material

⁵⁶ <https://rio.jrc.ec.europa.eu/en/library> (viewed on 7 March 2019)

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The Horizon 2020 Policy Support Facility (PSF) was established in 2015 to support European Union (EU) Member States and countries associated to Horizon 2020 in raising the quality and impact of their research and development (R&D) and innovation systems.

This report presents the findings of the Expert Group on the evaluation of the PSF. The Group has evaluated the appropriateness and effectiveness of the PSF since its launch in 2015 and makes nine detailed recommendations on further improvement of its services. The experts have found that PSF remains relevant and appropriate for European R&D and innovation policy. It has a distinct identity compared to other instruments provided by other organisations, and it has a clear and distinctive role within the suite of EU instruments supporting economic and structural reports, though more could be done to reinforce links and to improve access to support for implementation. The design and structure of PSF are well conceived, it is generally well executed and it produces good quality outputs, including important intangible benefits, though the set-up and the implementation phases require some improvement. It is too early to assess the impact of the reforms initiated as a result of PSF's work, but it is seen as a valuable programme that delivers good quality results and genuine added value at EU and national levels.

These recommendations and main findings will be taken into account in the design and implementation of the next generation of PSF which will start its operation within H2020 and will be fully implemented under the pillar "Strengthening the European Research Area" of Horizon Europe.

There are two versions of this report: a full version including all of the associated annexes, and a report-only version without the annexes. This is the report-only version.