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NOTE

From: ERAC Secretariat
To: ERAC delegations
Subject: Final report of the ERAC Ad-hoc Working Group on Partnerships on
"Criteria"

Delegations will find in annex the final report of the ERAC Ad-hoc Working Group on Partnerships on "Criteria", as approved by ERAC at its Plenary meeting on 17 May 2018.

**RECOMMENDATIONS ON THE CRITERIA FOR SELECTING, IMPLEMENTING,
MONITORING AND PHASING OUT OF R&I PARTNERSHIPS**

Final report by the ERAC Ad-hoc Working Group on Partnerships

Criteria for selecting, implementing, monitoring and phasing out of R&I partnerships

Conclusions from the ERAC ad-hoc Working Group for the ERAC plenary of 17 May 2018:

- The criteria currently applied for the selection of R&I partnerships are sufficiently detailed but were not able to ensure a better coherence and impact orientation among R&I partnerships and between R&I partnerships and Horizon 2020. The current system is rather oriented towards validation of a partnership instead of selection between possible partnerships. Criteria for the other stages of the R&I partnership life-cycle are often missing or not visible in a transparent manner;
- Today, intervention logics are defined at the level of the individual R&I partnership, which will not be sufficient in the future. There is a need to develop intervention logic(s) at the level of R&I partnerships in general, that define why a R&I partnership is needed and more likely to achieve higher impacts than FP action and/or national action alone. At the level of the different partnerships, a better identification of the most appropriate partnership approach¹ to achieve specific objectives and impacts is needed;
- There is a need for an objective and impact based criteria framework for R&I partnerships that enables the elaboration and use of these criteria along the life-cycle of R&I partnerships, with enough flexibility to meet the specific needs of the different R&I partnership approaches. The guiding principles established in the Council Conclusions from 1 December 2017 provide a good basis for this;
- The criteria framework developed by the GPC for the JPIs and the ESFRI monitoring framework have to be seen in their specific context and cannot be transferred as such. However, they contain important elements that can inform the elaboration of a life-cycle based criteria framework for R&I partnerships;

1 The term 'Partnership approaches' is used to describe the different instruments, labels and legal bases that are used to support partnerships

- The elaboration of KPIs should follow the guiding principles, objectives, impacts and life-cycle-based criteria framework and entail different but connected KPI categories, while limiting the reporting burden;
- The R&I partnership KPI framework should be integrated into the overall FP evaluation & monitoring framework, in particular for the EU funded R&I partnerships.

Recommendations from the Ad-hoc WG for the ERAC plenary in 17 May 2018:

1. ERAC calls on the Commission to elaborate, in close cooperation with Member States and Associated Countries, an objective and impact oriented life-cycle-based criteria framework for all R&I partnerships in view of making it fully operational before May 2019;
2. The criteria framework should be based on the guiding principles adopted by the Council and the related tentative definitions developed by the Working Group. They should form the basis of the work of the 'strategic coordinating process' and be applied to all partnership initiatives funded under the future FP, while being flexible enough to meet the specific needs of the different R&I partnerships. They should specifically take into account the following issues:
 - a) Selection:
 - justification of the R&I partnership: clearly quantified advantage of R&I partnership as compared to FP action and/or national action alone, additional efforts for creating or continuing an R&I partnership in relation to its approach, scale, scope and expected impacts at EU and national level;
 - overall coherence of the R&I partnership landscape and the relationship with agreed FP priorities and the realisation of ERA;
 - transparency and openness of the processes that lead to the elaboration of the SR(I)A of the R&I partnership and of the design of the initiative allowing to engage a wide array of competent stakeholders across Europe;

- *ex-ante* demonstration of the partners' commitments, additionality and directionality of the R&I partnership, e.g. by before/after landscape analysis (vision, expected outcomes and impacts of the R&I partnership);
- a clear life-cycle vision including the expected lifespan and the conditions for phasing out the FP funding identified from the outset.

b) Implementation:

- implementation of joint actions going beyond joint calls to ensure achievement of the desired higher impacts of the R&I partnership, including those related to regulatory or policy uptake;
- appropriate measures to ensure continuous openness and transparency during implementation, e.g. for the priority setting, for participation in projects submitted to calls for proposals, communication and outreach measures, clear open access/user strategy, etc.;
- options to ensure flexibility of implementation and regular adjustments responding to changing policy or market needs.

c) Monitoring:

- achievement of specific policy goals/ objectives, deliverables and KPIs allowing for a more systematic assessment of achievements, impacts and potential needs for corrective measures, including possible revision or termination of a R&I partnership funded from the FP in case KPIs are not met;
- coordination and joint activities with other relevant R&I initiatives ensuring coherence;
- additional activities beyond R&I calls to ensure impacts, openness and transparency of the R&I partnership;

- dedicated reporting on quantitative and qualitative leverage effects, including on financial and non-financial contributions, visibility and positioning in the international context, reduced R&I related risks of private sector investments, etc.

d) Phasing-Out:

- appropriate measures ensuring orderly phasing-out from the Framework Programme funding, according to the foreseen conditions and timeline, without prejudice of continued transnational funding by MS/AC or other EU programmes;
- assess the achieved impacts at EU and national level in relation to defined targets and KPIs as well as additional coordination and administration efforts;
- position any potential renewal of an R&I partnership in the overall R&I partnership landscape and its policy priorities;
- assess the most effective policy intervention mode for any future action.

3. ERAC strongly recommends that all R&I partnerships funded under the future FP should be subject to the agreed criteria framework and corresponding KPIs;
4. ERAC recommends that the monitoring of all R&I partnerships receiving funding from the Framework Programme should be included in the overall EU FPs monitoring and evaluation framework, including regular budgetary overview of EU contributions allocated to partnership initiatives. In view of optimal transparency and coherence, Member States and Associated Countries are invited to also include non FP-funded R&I partnerships of European relevance in the foreseen monitoring framework and the monitoring of ERA priority 2a, where relevant;
5. ERAC calls on the Member States and Associated Countries to continuously ensure the political relevance of their participation in R&I partnerships, e.g. by monitoring and evaluating their participation in EU R&I partnerships as part of their ERA Monitoring Mechanism related efforts;

6. ERAC calls on the Member States and Associated Countries to give the Commission access to relevant national and regional project data directly related to EU funded R&I partnerships involving additional public funding from national and/or regional sources, in an appropriate format specified by the Commission services, in order to integrate these data in their overall FP monitoring and evaluation framework (eCORDA and CORDIS);
7. ERAC calls on the Commission to ensure better access to projects funded by R&I partnerships, in particular Article 187 initiatives, and a more active and targeted dissemination, especially to Member States, Associated Countries and to the wider European industry and potential end-users.

ERAC Ad-hoc Working Group on Partnerships

Issue Paper

**Topic: Criteria for selecting, implementing, monitoring and phasing out
of R&I partnerships**

1. Introduction

The Council conclusions of 1 December 2017 call for the elaboration of revised/new criteria for the selection, implementation, monitoring and phasing-out of R&I partnerships, while also highlighting that EU co-funding should be limited 'only in areas in line with agreed FP priorities'. There are two main implications for this topic. First, criteria along the life-cycle of R&I partnerships should be elaborated and second, the core criterion for future EU co-funding is the relevance of the R&I partnership for FP priorities. In addition, the Council conclusions list a number of guiding principles, which should guide the elaboration of criteria along the life-cycle of R&I partnerships. Consequently, this issue paper provides a synthesis of the currently used criteria from different sources (EU-FPs, GPC, ESFRI, and nationally applied criteria), a proposal for definitions/explanations of the guiding principles and a refined approach for the elaboration of a life-cycle and impact/objective based criteria framework as well as for a corresponding KPI framework. It builds on several sources, including desk research carried out by the German delegation on ESFRI, inputs on national selection criteria from Austria, Denmark, Poland and Sweden, and input on JPI criteria from the Belgian delegation.

2. Criteria currently used for R&I partnerships

2.1 Criteria used for P2Ps and PPPs (with Union participation)

The rationale for supporting R&I partnerships evolved over the different FPs. While for FP6, the structuring effect and the contribution to the ERA were the key objectives, FP7 had a broader approach towards the knowledge economy² and a stronger focus on PPPs. FP7 also introduced a number of criteria for JTI and Article 185 initiatives (see hereafter). R&I partnerships were addressed in the 'cooperation' part of FP7. Horizon 2020 was much more detailed on R&I partnerships, in particular the Articles 25 and 26 of the regulation. In the Council decision on the specific programme, a dedicated chapter on partnering can be found.

The overview in the following two tables shows the criteria used across the different partnering approaches (with Union contribution). It demonstrates clearly that so far the criteria used were mainly on the selection part of the life-cycle of R&I partnerships, some criteria concern the implementation and the monitoring, there are no criteria for discontinuation of Union participation³, very few national criteria for participation, monitoring and/or discontinuation of participation in R&I partnerships.

2 Increasing investment in RDI up to the 3 % objective and improving its effectiveness is a top priority of the Lisbon strategy. Thus, the development of effective policies to leverage public and private research investments is a major concern of public authorities in light of the need to accelerate the transition towards a competitive knowledge-based economy. This calls for adaptability of research policies, the mobilisation of a broader range of instruments, coordination of efforts across national boundaries and the mobilisation of other policies to create better framework conditions for research.

3 As the EU co-funding to partnerships (except EIT-KICs and FET Flagships that have a life-span of 15 and 10 years, respectively) is limited to the respective MFF of the EU, there is in principle a natural phasing-out. However, the experience from the FP6 to FP7 and FP7 to Horizon 2020 transition showed that there are no clear substantive phasing-out criteria.

Table 1: P2P specific criteria (Horizon 2020)

	Article 185 initiatives	ERA-NET	EJP Cofund
General objectives for P2Ps	Recital (39): Greatest possible impact via closer synergies (including P2Ps), with international, national and regional programmes that support research and innovation. Optimise use of resources and avoid unnecessary duplication.		
Objectives per approach	Initiative specific (defined in basic act)	Instrument specific objectives (mostly GA WP)	Instrument specific objectives (GAWP)
Selection criteria (EU level)	Art.26: conditionality - Only if need for a Dedicated Implementation Structure (DIS), high level of commitment to integration; Identification based on objective, commitments, European Added Value (EAV), critical mass etc., and appropriateness of Article 185	<ul style="list-style-type: none"> ▪ Art.26 (EAV, prior indicative financial commitments); ▪ Evaluation criteria for submitted proposals 	<ul style="list-style-type: none"> ▪ Evaluation criteria for submitted proposals
Participation criteria (national level)	Few countries use clearly defined criteria to decide upon participation, mainly driven by relevance for national researcher community.		
Implementation	<ul style="list-style-type: none"> ▪ Mainly driven by fulfilment of contractual obligations, limited flexibility for scope of activities (call cycle driven); ▪ Little evidence of impact driven. 		
Monitoring	<ul style="list-style-type: none"> ▪ FP and initiative specific indicators and monitoring at initiative level (A185); ▪ FP indicators at Grant Agreement level (ERA-NET and EJP); ▪ First attempt to use common monitoring and IA frameworks at the different levels supported by ERA-LEARN; ▪ No evidence of P2P specific national monitoring. 		
Phasing out of EU participation	Not defined ⁴		
Discontinuation of national participation	Not defined		

4 Except by the end of the applicable contractual arrangements.

Table 2: PPP specific criteria (Horizon 2020)

	Article 187 initiatives	Contractual PPPs (cPPP)
General objectives for PPPs	Recital (40): greater impact: combining funds, contribute to Europe's wider competitiveness goals, leverage private investment and help tackle societal challenges. Partnerships with long-term commitment, balanced contributions, accountable for achievement of targets and aligned with the Union's strategic goals. Open, transparent, effective and efficient governance, opportunity for a wide range of stakeholders to become active in their specific areas.	
Objectives per approach	Initiative specific (defined in basic act)	Initiative specific (defined in contractual arrangement between partners)
Selection criteria (EU level)	Art.187: conditionality - only if scope of the objectives pursued and the scale of the resources required justify it, and if other forms of partnerships would not fulfil the objectives or would not generate the necessary leverage. Identification (for both Art.187 and cPPP) based on EAV, the scale of impact, long-term commitment, including a balanced contribution from all partners based on a shared vision and clearly defined objectives; the scale of the resources involved and leverage; a clear definition of roles and key performance indicators; complementarity with Horizon 2020 and alignment with EU Priorities.	
Participation criteria (national level)	There is only evidence of one country using criteria to decide upon participation in PPPs (programme (ECSEL) or in its governance).	
Implementation	<ul style="list-style-type: none"> ▪ Mainly driven by fulfilment of contractual obligations, limited flexibility for scope of activities (call cycle driven); ▪ Impact focussed on participating industry partners. 	
Monitoring	<ul style="list-style-type: none"> ▪ FP and initiative specific indicators and monitoring at initiative level; ▪ FP indicators at the level of the funded projects; ▪ No evidence of PPP specific national monitoring. 	
Phasing out of EU participation	Not defined ³	
Discontinuation of national participation	Not defined	

2.2 Criteria used for FET Flagships and EIT-KICs

Table 3: FET Flagships and EIT-KICs specific criteria (Horizon 2020)

	FET Flagships	EIT-KICs
Objectives per approach	Defined in H2020 regulation	Defined in H2020 regulation
Selection criteria (EU level)	FP criteria (excellence, impact, and implementation) apply. See for example the General Annexes WP 2018-20, pp 39.	Priority fields for new KICs are set in EIT SIA (based on proposal from EIT Governing Board). Evaluation Criteria are published in advance and build on the principles set in the EIT regulation. For 2018 the selection criteria for new KICs are: financial capacity, operational capacity, and technical evaluation (3 sub-criteria: strategy, operations and impact)
Participation criteria (national level)	No evidence of countries using clearly defined criteria	No evidence of countries using clearly defined criteria
Implementation	Implementation plan is part of the contractual agreement (FPA). Consortia need to submit every 2 years a new proposal for funding the implementation of the next phase of the Action Plan. The efficiency of the Flagship implementation model was evaluated in the H2020 IE expert report.	Results based funding from the EIT. KICs have to compete each year for the competitive funding, which is allocated on the basis of three criteria: past performance, future plans and progress towards financial sustainability. EIT principles for financing, monitoring and evaluating KIC activities.
Monitoring	Evaluation was conducted in 2017 jointly with the H2020 IE. There was no legal base for this evaluation. It measured the success of the HBP and Graphene FFs against the general objectives of the FF instrument and the specific objectives of HBP and Graphene. Evaluation criteria and questions are described in Terms of Reference.	H2020 regulation Article 32 lays down conditions and criteria. The indicators for assessing the performance of the EIT are in Annex I: 1. organisations from universities, business and research integrated in the KICs; 2. collaboration inside the knowledge triangle leading to the development of innovative products.
Phasing out of EU participation	Not defined	Financial sustainability is part of the legal requirement. EIT funding is available to a KIC for up to 15 years from its establishment.
Discontinuation of national participation	Not defined	Not defined

2.3 Criteria used for Joint Programming Initiatives (JPIs)

The GPC Implementation Group 3 has developed in 2016 a set of Minimum Conditions (MC) for JPIs to be used both for the assessment of possible new JPIs and existing JPIs. The IG3 subsequently created a framework (including minimum conditions and a procedure) to facilitate decision making by the GPC. It resulted in 49 different assessment criteria for new JPIs and 32 for existing JPIs. The criteria are meant as a consistent quality control framework (or guideline) according to which the JPIs governing boards (and national governments and ministries) can collect and organise information and perform an internal evaluation themselves of a JPI. They have not yet been translated into operational criteria. Currently, the criteria are being tested on the long-term strategy documents of all JPIs.

2.4 Criteria used by ESFRI

In 2016, ESFRI published its new roadmap, based on updated evaluation and selection procedures, identifying a number of pan-European RI from a variety of thematic areas that create a particular added value for the European Research Area. On the basis of an open call, the Strategic Working Groups of ESFRI evaluate the submitted **proposals for the roadmap along four dimensions**: Scientific excellence, pan-European relevance, socio-economic impact, e-Infrastructure needs. The **Implementation Group assesses the proposals along eight dimensions**: Stakeholder commitment, user strategy & access policy, preparatory work, planning, governance & management, human resources policy, finances and risks.

In May 2016 ESFRI got the mandate from the Competitiveness Council “...to closely monitor the implementation of ESFRI projects, to periodically assess the scientific status of ESFRI landmarks...”

Therefore, ESFRI developed the 'Public Roadmap 2018 Guide' (<http://www.esfri.eu/>) which has in its Annex “minimal key requirements along dimensions and life-cycle”. These requirements could be the basis not only for the evaluation of new proposals but also for the monitoring of projects and landmarks concerning the implementation.

3. Elements of intervention logic(s) for R&I partnerships

The choice of criteria along the life-cycle of R&I partnerships will depend on the underlying intervention logic(s). Currently, the intervention logic is defined at the level of the individual R&I partnership and not at the 'objective-level' (i.e. linked to instruments), so that one of the core findings of the Horizon 2020 related evaluations was the lack of coherence between R&I partnerships in specific thematic areas and between R&I partnerships and the FP. Consequently, there is a clear need to describe/define the intervention logic(s) on the general level (Why is a R&I partnership needed?) and the specific level (What kind of R&I partnership is needed?) before the detailed intervention logic on the level of the individual R&I partnership is defined.

4. Guiding principles for revised criteria

The Council conclusions of 1 December 2017 include a list of guiding principles for selecting, implementing, monitoring and phasing out R&I partnerships that should underpin the revised criteria. Based on the discussion from the first WG meeting, tentative definitions and explanations on these guiding principles are presented hereafter. They need to be sufficiently flexible to allow a differentiation for the different types of R&I Partnerships. These guiding principles follow the fundamental principles of the future Framework Programme as outlined in the Council conclusions: cooperation, excellence, impact and openness.

- a) **EU Added Value:** As part of the EU R&I ecosystem, partnerships must facilitate the creation and expansion of multinational research and innovation networks that bring together relevant and competent actors from across Europe, thus contributing to the realisation of the European Research Area. Union co-funding/investment in Partnerships will be limited to areas of high European added value and relevance for agreed European political priorities, including the further completion of the ERA and an optimal R&I cooperation in Europe. The EU added value needs in particular to be reflected in the outcome of the strategic programming process for the FP. They should clearly demonstrate delivery of results for the EU and its citizens, notably global challenges and competitiveness, which cannot be achieved by the Framework Programme alone⁵.
- b) **Transparency:** Partnerships should be transparent in the process of identification, selection and monitoring by the EU and MS, but also in the implementation and use of results beyond the partnerships themselves by involving broader stakeholders.
- c) **Openness:** R&I partnerships should demonstrate a high level of openness in programming and implementation and remove barriers to openness and participation with respect to the priority setting, taking into account the needs from all Member States and Associated Countries. R&I partnerships should facilitate the participation of new members in the implementation and with respect to international cooperation at programme and project level, aim at a broader stakeholder involvement and improve openness for dissemination of and access to results.

5 For further details on criteria of EU added value see EAV overview:
https://ec.europa.eu/research/iscp/pdf/publications/Final_European_Added_Value_inco_MainReport.pdf

- d) **Impact:** Impacts of R&I partnerships should address scientific, innovation/economic, societal and environmental impacts as well as international visibility. In addition, R&I partnerships should have clear structuring effects and provide visible alignment and directionality of public and/or private R&D investments (qualitative / quantitative leverage). As R&I partnerships might be associated with higher coordination and administrative burden and need usually more time for planning than EU action alone, the anticipated impacts should clearly outweigh these additional efforts.
- e) **Leverage effect:** The leverage effect of R&I partnerships has a quantitative and a qualitative dimension. The quantitative dimension describes the mobilised national and/or industrial resources that are invested in R&I partnerships and the corresponding leverage effect that the EU co-funding obtained (financial additionality). The quantitative leverage effect needs to be reported on the basis of a harmonised calculation methodology. The qualitative dimension describes issues such as harmonising programming standards, aligning policy priorities, etc. Especially in the case of PPPs, the 'directionality' of private R&D investments and the associated reduction of R&I related risks can also be seen as part of the qualitative leverage effect.
- f) **Long-term financial commitment of all the involved parties:** The financial commitment of Participating States and/or industry and other stakeholders is a pre-condition for considering the establishment of a R&I partnership. The commitment should be clear from the outset, and be ensured during the life-cycle of the R&I partnership including beyond Union support, where appropriate. The endured commitment over the life-cycle of the R&I partnership, including adequate human resources, is a core indicator for ensuring the political and/or industrial relevance of the R&I partnership. The potential combination of cash and in-kind contributions require appropriate and transparent calculation methodologies across the different R&I partnership approaches.

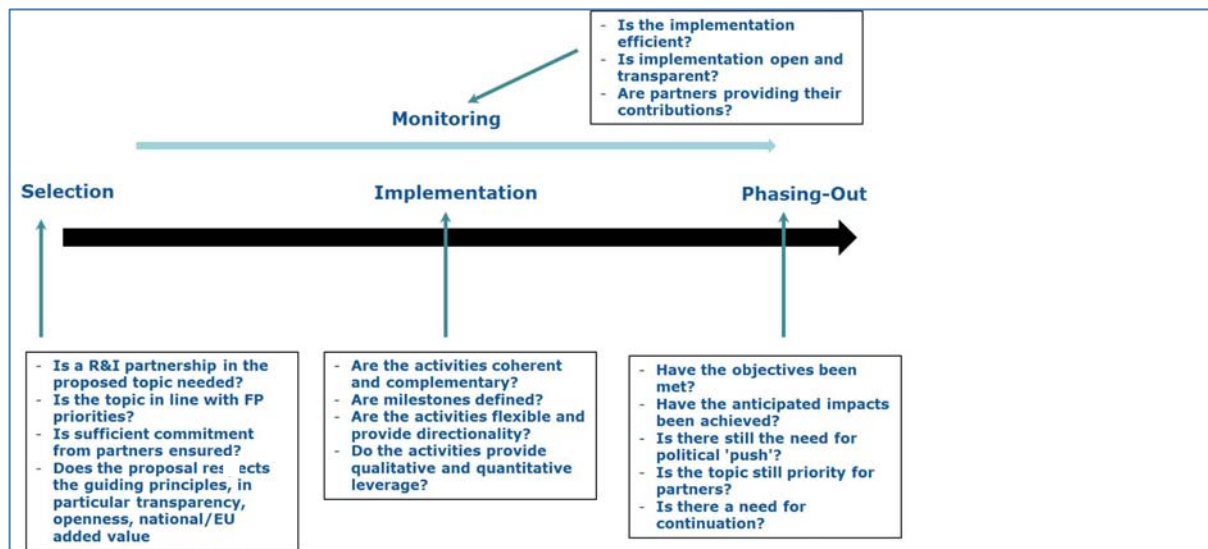
- g) **Flexibility:** R&I partnerships should demonstrate the flexibility to deploy a wider set of modalities and activities necessary to achieve their objectives, beyond the calls for proposals. Flexibility of implementation entails, in addition, the possibility to adapt regularly to changing market and/or policy needs.
- h) **Coherence:** R&I partnerships are designed and implemented in a way that ensures coherence/coordination between partnerships and Union priorities/FP activities, as well as with national R&I policy priorities and activities, both for those that focus on national support only and those that are co-funded from the Framework Programme. The national added value of participation in R&I partnerships must be regularly assessed at national level to ensure continued relevance.
- i) **Complementarity:** R&I partnerships should demonstrate complementarity with respect to objectives, impacts, partners and activities with EU action and national/sectorial action as part of the overall coherence of the R&I partnership landscape. Complementarity ensures added value and synergies between R&I initiatives while avoiding 'unnecessary duplication'.

5. Revised criteria – towards a life-cycle- and impact/objective-based criteria framework

The previous chapters showed that criteria are currently mostly limited to the 'selection' phase of R&I partnerships while the other life-cycle phases are hardly covered. In addition, it was shown that the criteria used were mainly instrument driven and defined at the level of the individual R&I partnership and not object and/or impact driven. Even the more detailed (selection) criteria of Horizon 2020 (Article 25 and 26) did not result in a more coherent R&I partnership landscape.

This chapter is based on the assumption that in order to achieve a more coherent and impact-oriented R&I partnership landscape, a **life-cycle- and impact/objective-based criteria framework** is needed that can be applied to all forms of current and future R&I partnerships. This criteria framework needs to respond to the requirements set by the Council, notably the life-cycle-approach and the guiding principles. In addition, the criteria framework needs to differentiate at the appropriate level between the different partnering approaches (P2Ps and PPPs), as eventually criteria for the different forms of R&I partnerships will be different.

Figure 1: Life-cycle overview of R&I partnerships with core requirements (questions)⁶



6 Prior to these questions, the societal, scientific and/or industrial need for that topic must be ensured

The figure presents typical questions across the life-cycle of a R&I partnership, based on the guiding principles defined by the Council. The guiding principles apply to all phases of the life-cycle and the questions represent certain criteria, such as the need for a R&I partnership (impacts cannot be achieved with another R&I policy approach), coherence with FP priorities, etc. At this level, no distinction between the different partnering approaches (PPP and P2P) is required.

Figure 2: Selection Criteria: General level (illustrative for 'selection' phase of life-cycle)

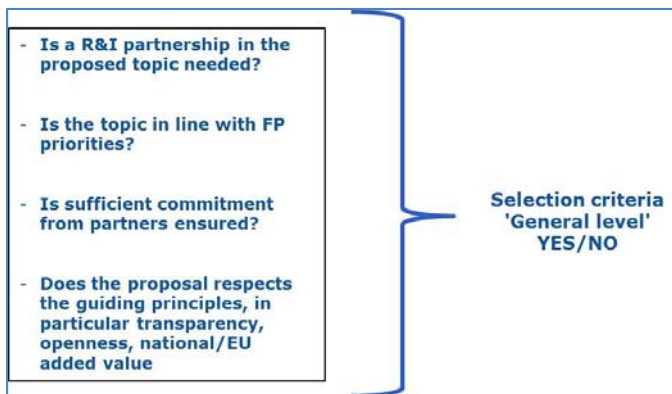


Figure 2 illustrates that certain criteria such as 'partner commitment' are on a general level a 'Go/no-Go criterion', i.e. without sufficient commitment, a R&I partnership cannot be effectively conceived. On the other hand, 'partner commitment' is a necessary but not sufficient pre-condition for an R&I partnership as further pre-conditions have to be met. Again, no distinction between the different partnering approaches (PPP and P2P) is needed.

*Figure 3: Selection Criteria: Specific level
(illustrative for two questions of the 'selection' phase of life-cycle)*

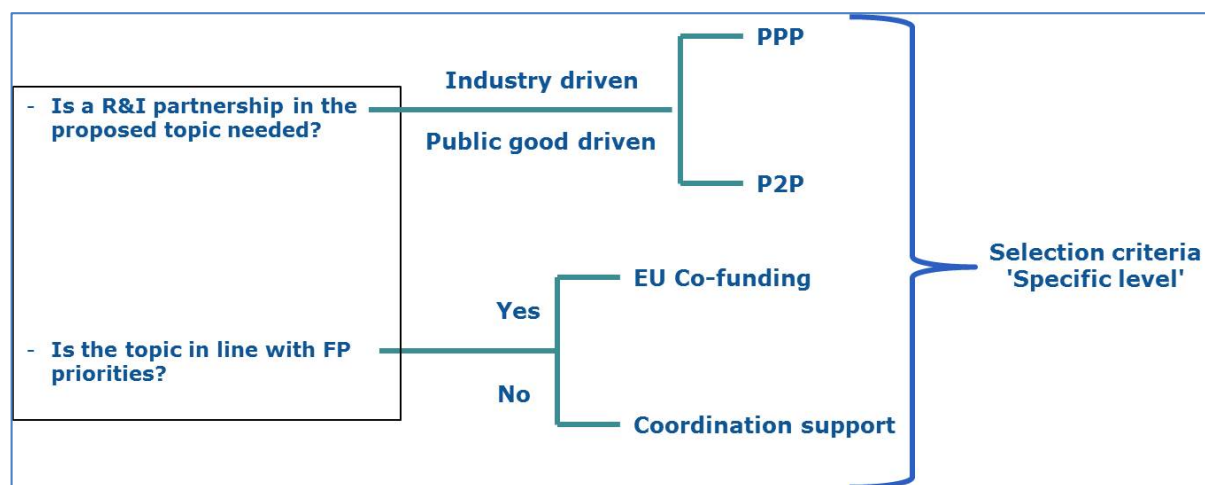


Figure 3 illustrates that more specific criteria are needed when the depth of analysis is increased. Here, a distinction - between the different partnering approaches and the distinction between EU providing co-funding for a partnership and the provision of support for the costs of coordination only - has been introduced.

Following the 'specific level', a third level needs to be considered, notably the 'instrument level'. As this is beyond the scope of this issue paper, it will not be detailed further.

In a nutshell, the elaboration of the objective/impact- and life-cycle-based criteria framework for R&I partnerships should address different, hierarchical criteria levels, from general criteria to specific and eventually implementation-mode (instrument) specific criteria.

For the purpose of the work of the ERAC ad hoc WG, it has been agreed during the 2nd meeting (16-17 January 2018), that the elaboration of criteria will be limited to the 'general level' and that the methodology will be to elaborate criteria based on the guiding principles, while the focus should be on the 'new' guiding principles and on the life-cycle stages beyond 'selection'.

The following section provides a first approximation of the criteria framework described earlier. It is structured along the main stages of the life-cycle, as described in the Council Conclusions:

Selection

The 'selection' stage has been the focus in the past with rather detailed criteria in the Horizon 2020 regulation. As the overall R&I partnership landscape did not become more coherent and rationalised than under FP7, one can argue that the criteria were either not fully applied or not sufficient. It seems that future 'selection' needs to take into account all guiding principles for revised criteria as described above and also put a greater emphasis on:

- justification of the R&I partnership: clearly quantified advantage of R&I partnership as compared to FP action and/or national action alone, additional efforts for creating or continuing an R&I partnership in relation to its approach, scale, scope and expected impacts at EU and national level;
- overall coherence of the R&I partnership landscape and the relationship with agreed future FP priorities and the realisation of ERA;
- transparency and openness of the processes that lead to the elaboration of the SR(I)A of the R&I partnership and of the design of the initiative allowing to engage a wide array of competent stakeholders across Europe;
- ex-ante demonstration of the partners' commitments, additionality and directionality of the R&I partnership, e.g. by before/after landscape analysis (vision, expected outcomes and impacts of the R&I partnership);
- a clear life-cycle vision including the expected lifespan and the conditions for phasing out the FP funding identified from the outset.

Implementation

As highlighted by the Horizon 2020 interim evaluation, the operational modalities of the active R&I partnerships mostly rely on the launching of joint calls. The funding of transnational R&D projects needs to ensure the impact orientation of the R&I partnership and the development of more systematic innovative solutions for societal challenges. Depending on the concrete objectives of the R&I partnership, a broader set of joint actions should be implemented by the R&I partnership. In addition, R&I partnerships have a greater risk than EU action alone with regards to openness, flexibility and transparency of their operations⁷. It seems that future 'implementation' criteria need to put a greater emphasis on:

- implementation of joint actions going beyond joint calls to ensure achievement of the desired higher impacts of the R&I partnership, including those related to regulatory or policy uptake;
- appropriate measures to ensure continuous openness and transparency during implementation, e.g. for the priority setting, for participation in projects submitted to calls for proposals, communication and outreach measures, clear open access/user strategy, etc.;
- options to ensure flexibility of implementation and regular adjustments responding to changing policy or market needs.

Monitoring

The monitoring of R&I partnerships currently takes place on the level of the individual initiative and on the very general Horizon 2020 level. The two Staff Working Documents on A185/A187 were the first ever general overviews on, at least, a group of R&I partnerships, but an overall monitoring and evaluation system is missing. Obviously, an effective monitoring system needs to be based on available information and data stemming from the individual R&I partnerships. Future 'monitoring' criteria need to put a greater emphasis on:

7 Some PPs have restricted calls to partners, e.g. Shift2Rail: up to 70% is allocated to members (<https://shift2rail.org/participate/call-for-proposals/>), and in Clean Sky 2: 40% of the budget is allocated to leaders (<http://www.cleansky.eu/sites/default/files/inline-files/CS-GB-2016-12-16%20Amended%20WP%20and%20Budget%202016-2017.pdf>)

- achievement of specific policy goals/ objectives, deliverables and KPIs allowing for a more systematic assessment of achievements, impacts and potential needs for corrective measures;
- coordination and joint activities with other relevant R&I initiatives ensuring coherence;
- additional activities beyond direct R&I to ensure impacts, openness and transparency of the R&I partnership;
- dedicated reporting on quantitative and qualitative leverage effects, including on financial and non-financial contributions, visibility and positioning in the international context, reduced R&I related risks of private sector investments, etc..

Phasing-Out

So far, no substantive criteria are available for the 'phasing-out' stage of the life-cycle of R&I partnerships. In principle, there are two reasons why a phasing out of R&I partnerships is required. First, the R&I partnership achieved its objectives and impacts and a renewed policy intervention by continuing the R&I partnership is not needed or another policy intervention mode (direct EU action alone, financial instruments, etc.) is considered more appropriate. Second, the R&I partnership did not deliver on its objectives and impacts or the policy priorities changed so that a continuation of the R&I partnership is no longer a policy priority. It seems that future 'phasing-out' criteria need to put a greater emphasis on:

- Appropriate measures ensuring orderly phasing-out from the Framework Programme funding, according to the foreseen conditions and timeline, without prejudice of continued transnational funding by Member States;
- assess the achieved impacts at EU and national level in relation to defined targets and KPIs as well as additional coordination and administration efforts;
- position any potential renewal of an R&I partnership in the overall R&I partnership landscape and its policy priorities;
- assess the most effective policy intervention mode for any future action.

For the future, the Council conclusions request clearly that (general) criteria for all phases of the life-cycle of a R&I partnership should be elaborated, based on the guiding principles. A corresponding analytical framework on the 'general' level in the following form (table 4) has informed the discussion of the working group, but would need further elaboration in a next step.

6. Performance Indicators

The precedent chapter presented a criteria framework, comprising three levels; general criteria, specific criteria and instrument-based criteria for all phases of the R&I partnership life-cycle. Corresponding performance indicators should be identified accordingly. Eventually, the criteria and corresponding performance indicators should be the basis for an overall monitoring system, based on a 'decision tree' approach, whereby performance indicators should be available that allow to decide on a direction within the decision tree, when a simple YES/NO reply is not sufficient. The following figure illustrates the underlying approach.

The following categories need to be addressed:

- a) Indicators to prove the need for R&I partnership in FP priority intervention area;
- b) Indicators to prove the need for PPP, P2P or other types of partnerships (e.g. FET Flagships, EIT-KICs);
- c) Indicators to translate objectives into the most appropriate intervention logic;
- d) Indicators to decide between 'pooling' and 'integrating';
- e) Individual indicators on the level of the R&I partnership.

Beside the need for the elaboration and monitoring of these KPIs for the overall steering of R&I partnerships, it seems obvious, that the monitoring and evaluation framework for R&I partnerships should be integrated in the overall FP(9) monitoring and evaluation framework. While this is already the case for most of the PPPs and the FFs, it is not the case for P2Ps or the EIT-KICs.

Table 4: Draft criteria framework based on the application of a life-cycle approach for R&I partnerships, to be further elaborated (general, specific and instrument-related criteria).

	Selection	Implementation	Monitoring	Phasing-Out
EU added value	<ul style="list-style-type: none"> clear definition of objectives and expected impacts in robust intervention logic proof that EU action alone is not able to achieve similar impacts 	<ul style="list-style-type: none"> vision, mission and identity fully defined critical mass and research capacity consolidated 	<ul style="list-style-type: none"> continuous follow-up on specific and operational objectives 	<ul style="list-style-type: none"> objectives achieved; self-sustainability achieved; no longer policy priority;
National added value	<ul style="list-style-type: none"> proof that isolated and non-coordinated national action is not able to achieve similar impacts 	<ul style="list-style-type: none"> clear positioning in national policy priorities; regular coordination with national R&I actions and joint actions, as appropriate 	<ul style="list-style-type: none"> coherence with national R&I policy priorities (e.g. national ERA action plan) 	<ul style="list-style-type: none"> anticipated impacts at national level achieved and embedded in institutional strategies (no more European policy intervention needed) impacts (additionality and directionality) no longer justify European –level policy intervention.
Transparency	<ul style="list-style-type: none"> elaboration of transparent processes for priority setting and objectives development 	<ul style="list-style-type: none"> processes are in place to ensure constant transparency of joint actions communication and outreach measures implemented 	<ul style="list-style-type: none"> all relevant stakeholders are aware of R&I partnership and have easy access to relevant information 	
Openness	<ul style="list-style-type: none"> agenda and priority setting open to all relevant stakeholders; participation in projects open to all stakeholders that fulfil appropriate conditions 	<ul style="list-style-type: none"> measures in place to regularly provide opportunities for new partners to get involved 	<ul style="list-style-type: none"> open access to results enable knowledge dissemination involvement of broader stakeholders 	

Impact	<ul style="list-style-type: none"> ▪ anticipated impacts described, incl. additionality and directionality ▪ scientific, economic (competitiveness, innovation) and social impacts (policy impacts and behavioural additionality); ▪ impacts on international visibility / leadership 	<ul style="list-style-type: none"> ▪ dissemination measures in place to ensure impact-orientation 	<ul style="list-style-type: none"> ▪ measures in place to follow-up on anticipated impacts 	
Leverage effects	<ul style="list-style-type: none"> ▪ analysis on scale and scope of the planned R&I partnership ▪ share of national and/or sector investment ▪ anticipated qualitative leverage effects 	<ul style="list-style-type: none"> ▪ specific joint actions towards quantitative leverage effects (i.e. joint calls) ▪ specific joint actions towards qualitative leverage effects (stakeholder and/or policy workshops, industry matching events) 	<ul style="list-style-type: none"> ▪ measures in place to follow-up on quantitative and qualitative leverage effects 	<ul style="list-style-type: none"> ▪ anticipated leverage effects achieved and embedded in institutional strategies (no policy intervention needed anymore) ▪ anticipated leverage effects not achieved and not likely to emerge;
Long term commitment	<ul style="list-style-type: none"> ▪ LoIs from partners available 	<ul style="list-style-type: none"> ▪ commitment ensured by legally binding document 	<ul style="list-style-type: none"> ▪ calculation of commitments (cash and in-kind) regularly executed 	
Flexibility	<ul style="list-style-type: none"> ▪ variety of instruments according to anticipated impacts 	<ul style="list-style-type: none"> ▪ broad range of joint actions deduced from policy objectives 	<ul style="list-style-type: none"> ▪ regular adjustments and feedback loops to ensure continuous relevance 	
Coherence	<ul style="list-style-type: none"> ▪ landscape analysis to ensure ex-ante coherence 	<ul style="list-style-type: none"> ▪ specific coordination processes in place to ensure overall landscape coherence 	<ul style="list-style-type: none"> ▪ regular joint activities with related initiatives ▪ regular coordination with FP WP through PCs 	<ul style="list-style-type: none"> ▪ shifting EU priorities undermine coherence with R&I partnership objectives
Complementarity	<ul style="list-style-type: none"> ▪ clear intervention logic as compared to EU action and/or national/sectorial action alone 		<ul style="list-style-type: none"> ▪ scanning measures in place to ensure continuous complementarity 	