

**EUROPEAN UNION**  
**EUROPEAN RESEARCH AREA  
AND INNOVATION COMMITTEE**  
**High Level Group for  
Joint Programming**

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**Secretariat**

**Brussels, 26 September 2014  
(OR. en)**

**ERAC-GPC 1308/1/14  
REV 1**

**NOTE**

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Subject: Final report of the GPC Working Group on Measuring JPIs Progress and Impact

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Delegations will find attached Final report of the GPC Working Group on Measuring JPIs Progress and Impact, as adopted by the GPC at its meeting of 18 September 2014.

**FINAL REPORT**

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## *Executive Summary*

This Working Group's (WG) mandate was to:

1. give suggestions for measuring the progress of JPIs (monitoring dimension)
2. give suggestions for assessing the impact of JPIs (ex-post evaluation dimension)
3. contribute elements for the Terms of reference of the JPI strategic evaluation foreseen by the Commission in the Horizon 2020 Work Programme for 2014-2015.

The group decided to build on the work on Evaluation of JPIs which was undertaken by the Coordination and Support Action (CSA) 'JPI to Co-Work' with the collaboration of nine of the 10 JPIs. It also recruited the CSA coordinator and experts involved in the CSA to validate the quality of its suggestions.

The group agreed with the intervention logic developed by the CSA and decided to express its suggestions in the format of a matrix giving for each of the 3x3 Evaluation dimensions defined by the CSA specific criteria and indicators, including possible sources of information.

The WG started with the 22 criteria and indicators proposed by the CSA. After reviewing additional material (such as the evaluation frameworks of several JPIs) and consulting all the JPIs, it decided to add 5 additional criteria numbered +7, +12, +17, +26 and +27 in the Matrix called 'The Canvas' given in Annex 1 to this report. This represents the WG output with respect to the evaluation and impact assessment of JPIs as asked in points 2 and 3 of the above mandate.

Following the desire for having a reduced set of monitoring indicators, expressed by the GPC for use in its Biennial Report 2012-2014, and by JPIs too for having common agreed indicators for estimating their progress, the WG focused its work on the development of a reduced set of indicators and criteria which would be both relevant and easier to use.

The 'Selfie' self-assessment questionnaire in Annex 2 gathers a first descriptive part and then eleven questions or data that have been sent to JPIs by the GPC as their contribution to the Biennial Report. These are taken up also in 'The Canvas' in yellow in Annex 1 and are the WG deliverable for monitoring JPIs.

When preparing these deliverables the WG addressed the following recommendations to the GPC:

1. The Self-assessment to be undertaken in summer 2014 and/or the evaluation foreseen in 2015 are not to undertake a ranking of JPIs, but to assess each JPI with respect to the Vision they presented to the GPC for their initial selection and with respect to the Council Conclusions which launched them.
2. It appears few JPIs have developed SMART<sup>1</sup> objectives for their impact on the major societal challenge they are addressing. The Commission in the communication of 2008 “Towards joint programming in research” insisted that the JPIs should endeavour finding such an objective
3. Measuring the societal impact of Research and Innovation actions takes time. The 'JPIs to Co-Work' CSA, additional experts consulted by the Working Group as well as the conclusions from the session on Evaluation of JPIs in the 2013 Presidency Conference on Joint Programming suggest a good 'proxy' (i.e. with a strong correlation with future societal impact) is the implication of key stakeholders in the definition and in the governance of the JPI. Measuring and demonstrating JPI's progress and impact is necessary to make JPP more attractive in Europe and at international level.

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<sup>1</sup> Specific, Measurable, Adequate/Achievable, Realistic/Relevant and Time-related (Peter Drucker, "Management Tasks, Responsibilities, Practices", Harper & Row, 1973)

## ***1. Working Group Members***

- Mr L. Antoniou – CY
- Mrs L. Michelet – FR – Rapporteur
- Mrs A. Markotic – HR
- Mrs A. Kiopa – LV (4/9/13 only)
- Ms Kiesenhofer- Widhalm –AT (19/5/14 only)
- Mr E. Stumbris – LT
- Mr G. Clarotti – Commission, Secretary
- Mrs K. Angell-Hansen (4/9/13 only) & B. Johne - JPI Oceans

In addition, several experts who contributed to the ‘JPI to Co-Work’ Coordination and Support Action (CSA) were involved in the preparation of the deliverables:

- Mr C. Segovia, Instituto Carlos III – ES, Coordinator of the CSA;
- Mr I. Schaedler (Director General of Austrian Federal Ministry of Transport, Innovation and Technology), Coordinator of JPI Urban Europe and initiator of the meeting between JPI Chairs. He delegated his reply to Mrs S. Meyer in his department.
- Mr W. Polt, Joanneum Research- AT, Chair of the Session on JPI Assessment in ‘JPI to Co-Work’;
- Mr G. Laumann, DLR Agency – DE, Partner in ‘JPI to Co-Work’;
- Mr K-H. Haegeman, JRC-IPTS, European Commission, Netwatch platform incl. EU JPI Data-base;
- Mr B. Mostert, Technopolis - NL, Proposer of possibilities for outsourcing evaluation of JPIs in the final meeting of ‘JPI to Co-Work’.

## ***2. The Working Group Mandate***

The GPC Synthesis Recommendations expect the group to: *“Suggest methods for reviewing JPIs and plan for a more thorough evaluation of JPIs after the start of Horizon 2020”*.

In its meeting of 5 December the group proposed the following mandate, which was confirmed by the GPC plenary meeting of 11 March 2014.

- To give suggestions for measuring the progress of JPIs (monitoring dimension)
- To give suggestions for assessing the impact of JPIs (ex-post evaluation dimension)
- To contribute elements for the Terms of reference of the JPI strategic evaluation foreseen by the Commission in the Horizon 2020 Work Programme for 2014-2015 :

*This strategic evaluation of Joint Programming, involving also Member States in a mutual learning exercise, to estimate the degree of coordination across the ERA in areas covered by Public-public partnerships, to evaluate the 10 on-going JPIs and to assess the alignment of national research programmes with respect to these JPIs.*

## ***3. Meetings and Working Methods***

The Group has decided in September 2013 to regularly meet after each GPC meeting, in the afternoons of 4<sup>th</sup> September 2013, 5<sup>th</sup> December 2013, 11 March 2014 and 19 May 2014. In between the meetings, the group communicated by E-Mail.

- 3.1 The group started by gathering the material already produced by each JPI and by the Commission, to propose suggestions to the GPC, to JPIs and to the Commission.
- 3.2 It followed activities of the ‘JPI to Co-Work’ Coordination and Support Action (CSA), in particular those related to the identification of common dimensions for the evaluation of JPIs. The Rapporteur and the Secretary participated in the final project meeting, in February 2014.
- 3.3 The group also followed activities of the group of JPI Chairs that met in December 2013, to contribute and analyse the work JPI Chairs proposed for *“Defining 5 to 7 common, key indicators, to follow the progress of JPIs”*.

- 3.4 Following the proposal of the GPC Chair for preparing the GPC Biennial Report (2012-2014), the group refocused its work on the preparation of a template for the Self-Evaluation by JPIs (the ‘Selfie’). This will be sent to JPIs in July 2014 so that they can report on their progress to the GPC – for inclusion in the Biennial Report.
- 3.5 For the preparation of the ‘Selfie’ and for the more complete ‘Canvas’ to be prepared for the fuller evaluation of JPIs, the group took advantage of the work undertaken by the CSA ‘JPI to Co-Work’, where 9 JPIs collaborated to prepare a template for their evaluation. In particular, the project co-ordinator, Mr Segovia, from Instituto Carlos III (ES), contributed a methodology and a table which were used by the group to prepare the above documents. He participated in the March and May meetings of the group. In addition, the group consulted five external experts who all contributed both to the Selfie and the ‘Canvas (See I. above).
- 3.6 The ‘Selfie’ and ‘Canvas’ were sent to all JPI coordinators for their comments, so as to ensure their understanding of the WG’s approach, their collaboration in defining the data and elements to report to the GPC as well as preparing themselves to contribute in the summer of 2014.
- 3.7 The Selfie was then circulated to the GPC chair and to the whole group to be eventually approved on 2<sup>nd</sup> July.

## 4. A template for the assessment of JPIs – the ‘Canvas’

### 4.1 JPIs to Co-Work Intervention Logic

Mr Segovia, co-ordinating 'JPI to Co-Work' presented in March to the WG the main outcome of the CSA in terms of best practices for Evaluating JPIs.

The WG agreed with the Intervention Logic defined by ‘JPI to Co-Work’. This stems from how Societal Challenges affect national programmes in Member States and from JPI Governance.

Three dimensions have been defined for a JPI:

- Governing Policy Making – Managed by the Management Board (MB)
- Research Performance – For which the Scientific Advisory Board (SAB) is the pilot
- The definition of societal needs – As defined and watched over by the Stakeholder Advisory Board (SHAB) or an equivalent body.

For each dimension, Criteria have been identified to review its Structure, Process and Outcomes:



#### The dimensions of JPIs for the Evaluation

	Governing policy making	Guiding research performance	Stakeholders involvement (responsiveness & innovation)
Structure	Societal challenge JPI's structures and procedures Existing € quantity & type	SAB SRA	SHAB
Process	Decision making Leadership External relations	Peer review Coordination of funding and agendas at EU level Mobility of researchers Plans for SRA Improving capacities	Input of SHAB Use of Open access IPR procedures for exploitation
Outcome	Satisfaction of MB, SAB, SHAB	Scientific productivity Products, tools, devices, policy options	Innovation in products, tools, procedures and policies



## 4.2 Possible Evaluation Criteria

Mr Segovia identified in his presentation 22 specific Criteria and Indicators to evaluate the 3x3 dimensions given above. Annex 1 presents them giving also the source of information for gathering these and related comments. It also includes five additional criteria/indicators resulting from the inclusion by the WG of elements taken by other documents it consulted such as the full Evaluation framework of JPIs (AMR, JPND, FACCE and Cultural Heritage). These are numbered +7, +12, +17, +26 and +27.

In particular, the group felt the need to communicate to the JPIs the need to define specific ‘outcome’ objectives for Responsiveness and Innovation / Involvement of Stakeholders which would relate to the specific objective of each JPI. As was requested in the original Commission Communication<sup>2</sup>, this should be “SMART”<sup>3</sup>. It appears few, if any at all, JPIs have defined such objectives and related Key Performance Indicator(s). This however might not be gathered through a simple self-assessment, but a baseline could be readied by each JPI for its evaluation in 2015.

The full Canvas is to be used as input to the Commission on how to evaluate JPIs. It summarizes all comments received and was finalised in the working session of 19 May. This was eventually reconciled with subsequent work undertaken to prepare the Selfie, with the eleven questions indicated in yellow in the matrix.

## ***5. A template for the self-assessment of JPIs – the ‘Selfie’***

### 5.1 Getting to the JPI ‘Selfie’

The CSA defined for each Criteria possible indicators and then sources of information. In its meetings since March 2014, the WG focused on the analysis of the indicators trying to identify the 7 to 10 which would be:

- Most relevant for the self-assessment and feasible by summer 2014
- Obtainable through a self-assessment by the JPI itself (i.e. not requiring external reviewers)

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<sup>2</sup> ‘Towards Joint Programming in Research’, COM(468) 15 July 2008

<sup>3</sup> Specific, Measurable, Adequate/Achievable, Realistic/Relevant and Time-related (Peter Drucker, "Management Tasks, Responsibilities, Practices", Harper & Row, 1973)

The overall Template was sent to the 'JPI to Co-Work' experts and comments were gathered in five categories:

- Proposals to adapt the template to make it more meaningful / effective;
- Take the opportunity for collective learning from the process;
- Also evaluate contribution by JPIs to reducing fragmentation and their policy processes;
- Analyse the contribution of JPIs, as Mini-ERAs, to the 6 dimensions of ERA;
- Need for a much deeper evaluation looking at the objectives of the Joint Programming process, not only of each JPI SR(I)A (Strategic Research (and Innovation) Agenda).

The first type of comments was included in the Template, in particular the need to add a fourth 'factual information' category describing the JPI with more factual information. The last three points were kept for the later Full Evaluation to be undertaken by the Commission. WG members agreed on the opportunity for collective learning on how JPIs function and assess their activities in different Research and Innovation areas.

A further iteration in early April allowed to define a first version of the 'Selfie' to be sent to JPIs for their feed-back, as it was dubbed to insist on the 'Quick and Easy' (and therefore necessarily not perfect) nature of the exercise to be undertaken by JPIs in summer 2014 to report to the GPC.

The table counted the 27 factual descriptors/indicators which relate to the JPI achievements, with the ones to be used for the self-assessment highlighted. Also, it was mentioned that data on Joint Calls, available at the Commission (through its yearly survey of Joint Calls undertaken by Public-public partnerships) should be included in the pre-filled template. JPIs were in this way informed of which criteria would be asked in 2014 and which would be expected in 2015 for the full evaluation of JPIs.

The original table highlighted five questions to be addressed to members of the Board and a sixth last question on Intellectual Property Rights (IPR) to be replied to by each JPI secretariat. It was proposed that each JPI would provide a statistical survey through a simple questionnaire to be compiled by the JPI secretariat with, for each of the 5 questions a 4 degree Likert scale of the type (i) I fully agree (ii) I agree partially (iii) I disagree partially (iv) I totally disagree.

Seven of the JPIs (Neurodegenerative diseases, ‘A Healthy Diet for a Healthy Life’, Cultural Heritage, ‘More Years Better Lives’, JPI Water, JPI Climate and JPI Urban Europe) replied to the survey, allowing the WG to prepare a further, third ‘draft-final’ version to be submitted for comments/final decision to the GPC in its meeting of 19 May.

The more general comments can be grouped in five categories:

1. The need to include a glossary of abbreviations and examples of answers to facilitate JPIs in replying. In particular the need to define ‘Joint Actions’ as different than Joint Calls was expressed and addressed using the definition proposed by 'JPI to Co-Work'<sup>4</sup>.
2. There are frequent misunderstandings of indicators and of their justification. One of the most important misunderstandings is taking the indicators as the evaluation itself. Thus interpreting the potential values of the indicator as implicit judgements<sup>5</sup>. This is certainly not the case.
3. Concern from some JPIs (rather in the first wave) that too little emphasis is put on outcome indicators and on how the JPI is impacting the major societal challenge it addresses. And by some ‘Second Wave’ JPIs that they cannot yet provide output indicators.

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<sup>4</sup> Joint Actions are “*Any action, apart from collaborative projects, that requires the coordination or the collaboration of actors from different countries. Coordination meaning that the joint action requires the interplay of separate actions in single countries that have a value by themselves, but produce an output that is greater than the sum of the outputs of the individual actions by virtue of the interplay. Collaboration meaning an action that is only possible with the intervention of actors from different countries together (actions of a single country would not produce a valuable output)*”.

*Example of coordination: synchronized calls, compatible national research projects databases, alignment of national agendas.*

*Example of collaboration: best possible peer review panels, some foresight exercises, funding of biggest projects, free circulation of researchers. Collaboration is required whenever the action is too big or too risky for a single country. For instance, opening of national funding to other EU countries’ researchers is not likely to happen unless all other countries open their programmes as well.*

<sup>5</sup> For instance, some JPIs appear to think that measuring joint calls or patents means that the GPC is implicitly suggesting that the more joint calls or the more patents, the better, irrespective of the context or the specific JPI.

4. Concern from JPIs that the indicators would be used to rank and file or compare JPIs.
5. On indicator 11.2, two JPIs were concerned that the indicator focuses only on the alignment of national programmes on the agreed SR(I)A and not on how much national priorities were taken into account by the overall SR(I)A.

### 5.2 Discussion with the GPC.

The group chose to address point 1 above by including footnotes in the Canvas and in the Selfie.

To address points 2 to 4, the group addressed the issue of usage of the Self-Evaluation and of the overall Evaluation of JPIs in the discussion with the GPC plenary of 19 May 2014. After which the ‘Selfie’ would be finalised by written procedure. Three questions were put forward to the GPC:

To prepare for this, three questions were put to the GPC for the debate in plenary:

1. Several JPIs are concerned that the self-assessment to be undertaken this summer to contribute to the GPC report, and/or the evaluation foreseen in 2015 will undertake a ranking of JPIs. The GPC should confirm that JPIs would be assessed with respect to the Vision they presented to the GPC for their recommendation to the Council and with respect to the Council Conclusions which launched them.

This was confirmed by the Chair when introducing the discussion and was not challenged by the GPC.

2. It appears few JPIs have developed SMART\* objectives for their impact on the major societal challenge they are addressing. The Commission in the communication of 2008 “Towards joint programming in research” insisted that the JPIs should endeavour finding such indicators, as was done later, for example, by the European Innovation Partnership on ‘Active and Healthy Ageing’, which aims at *‘increasing by 2 the average number of healthy life years in the European Union’*.

A baseline measurement could be envisaged by now. Does the GPC think such indicators would be appropriate? Should the GPC send a message to the JPIs asking them to put in place one or more impact indicator(s)? \* Specific, Measurable, Adequate/Achievable,

Realistic/Relevant and Time-related (Peter Drucker, "Management Tasks, Responsibilities, Practices", Harper & Row, 1973)

The debate in the GPC mentioned the caution needed when setting such SMART objectives (in particular the relevance of the AHA EIP was criticised), but others mentioned they were better than nothing and that JPIs should indeed be alerted to this need by the Selfie exercise.

3. Does the GPC agree that societal impact of Research and Innovation actions takes time to measure? The 'JPIs to Co-Work' Coordination and Support Action, additional experts consulted by the Working Group as well as the conclusions from the session on Evaluation of JPIs in the 2013 Presidency Conference on Joint Programming suggest a good 'proxy' (i.e. with a strong correlation with future societal impact) is the implication of key stakeholders in the definition and governance of the JPI. Does the GPC agree on using this as a key indicator for 'being on the right track' whilst waiting for results to be achieved and for outcome and impact to be measured?

This point was not taken up in the GPC, but it was much addressed in the debate on the Selfie, with two experts confirming that indeed, in absence of impact indicators, opinions by Stakeholders was a good proxy. However, they both agreed with the need to leave the sampling choice to JPIs, which is what was done for the Selfie. In the Canvas, a larger sampling will be possible and should be done in an unbiased way by the external evaluators.

### 5.3 The Final 'Selfie'

The group decided to include an additional 'cover page' (now Part 1) where the JPIs would describe themselves and their EU Added value, thus allowing to include their reply directly as an annex to the Biennial Report. This part will be where the contribution on ERA and on Framework Conditions, requested by the GPC, will feature.

Part 2 is a much reduced subset of the key questions in Vs.2 of the Selfie, focusing on their contribution to information on the JPI and ease of access. Selfie Vs.3 counted 8 sets of data and questions to be put to members of the board. This was as close as possible as the wish expressed by JPIs for 7 to 10 "key indicators". And should be possible to gather or check (2 indicators would already be pre-filled by the Commission) in the 45 days JPIs should have to work on them.

It was also proposed to prepare a ‘Mock reply’, based on an imaginary JPI to be sent to the JPIs together with the Selfie, so that they would get a feeling of the type of answers expected. This practice was used successfully to evaluate SME proposals, which were a novelty for the EU and for the SMEs in the ‘90s.

For the record, Vs.3 was sent to the GPC Chair, Mr Esposito, as planned and he replied asking for the document to be put in a Word format and for addressing three additional questions related to the Alignment issue, thus bringing the number of questions to eleven:

- Does the JPI governance structure ensure inclusion of people with decision making power at national level?
- Has the JPI the instruments to measure the amounts saved in national funding by reducing fragmentation in the relevant research field?
- Has the JPI the instruments to measure the amounts saved in national funding by reducing unnecessary duplications in the relevant research field?

Vs.4 was finalised on 28 May by the Rapporteur and the group secretary based on interaction with the GPC Chair. Following further interaction with the GPC Chair the Selfie was much amended, mainly for parts on governance and addition of the above questions. For this reason the Working Group was consulted again on a Vs.5 and on the ‘Mock-up’ completed Selfie. It was eventually decided to avoid using the ‘Mock-up’ as this could bias answers by JPIs.

The resulting version 6, slightly amended and much edited for layout, was circulated to the GPC on 16 June asking for replies or approval by 23<sup>rd</sup> June, so that the Selfie could be sent by end of June. Only one point was modified for the final version (7) which was adopted on 2<sup>nd</sup> July (see annex 2).

Structure of template for evaluating JPIs (Canvas Vs.2)				
Note: This sheet is the Working Group contribution to the terms of Reference of the Tender the Commission will launch in 2014 to evaluate JPIs in 2015.				
Note: 11 Questions (in Yellow) were asked to JPIs in the 2014 "Selfie". They should be updated in 2015.				
Note: Cells in Grey indicate ones most discussed by the Working Group or where difficulties for gathering data by contractors (indicated as Eval 2015) are expected				
0. FACTUAL INFORMATION	Descriptor	Indicator	Source of information/Operationalization	Comments /Indications for Contractors or Selfie Question
Participation	A. Representation in ERA A' Attraction factor out of ERA	A.1 Evolution of the number of EU MS which are also members of the JPI	JPI Statute	Indicate of the 28 MS, which ones are member of the JPI and when they joined
		A.2 Evolution of the number of Associated Countries which are also members of the JPI	JPI Statute	Indicate of the 13 Countries Associated to FP7 <sup>(1)</sup> , which ones are member of the JPI and when they joined
		A.3 Evolution of the total number of ERA countries (EU + Associated Countries) which are Associated to the JPI	JPI Statute	Indicate of the 28 MS+13 AC, which ones are linked to the JPI as Associates or Observers and when
		A.4 Evolution of the number of non-EU countries which are Member or Associated to the JPI	JPI Statute and other documents	Q1 - Name non-ERA countries (i.e. not MS nor Associated to FP7) which are Members or Linked (as Observer, Associated, ...) to the JPI
		A.5 Evolution of the number of non country organisations which are Member or Associated to the JPI (E.g. EU Commission, SCAR, Art.185 initiatives...)	JPI Statute	Name organisations which are not representing countries which are Members or Linked (as Observer, Associated, ...) to the JPI
B. Representation of resources (Requires mapping)		B.1 Share of overall ERA investment represented by JPI	Share of ERA GBAORD represented by countries involved in JPI (Eurostat)	Overall GBAORD of JPI Member countries at 31/12/2013, over total ERA GBAORD(2).
		B.2 Share of overall ERA investment in research relevant to the Challenge	Share of ERA GBAORD(2) by Countries in JPI (Mapping)	Q2 - Indicate the estimated total annual public investment by ERA countries which is related to the Societal Challenge addressed by the JPI (GBAORD) . Also give the estimated share of this total which is invested by countries which are Member of the JPI. This is to be compared to the estimation made in the JPI proposal to the GPC or in the Commission Recommendation to the Council
		B.3 Share of publications in the area (by researchers from participating countries)	Baseline measurement	Share of world publications. Available for Water JPI
Implementation	C. SRA (Strategic Research Agenda) or SRIA (SR & Innovation Agenda)	C. Existence, time to develop it, involvement of Research funders, Research Programme Owners, stakeholders and researchers beyond the SAB/SHAB	JPI Papers	
	D. Implementation Plan (s)	D. Existence, time to develop it, involvement of Research funders, Research Programme Owners, stakeholders and researchers beyond the SAB/SHAB	JPI Papers	
	E. Joint Actions(3)	E.1 Number & Type of Joint Actions (Knowledge Hubs, Networks, FLAs, Common use of infrastructure...)	JPI	Q3.1 Please list the Joint Actions <sup>(3)</sup> launched indicating their type, timing and number of participants (and budgets) involved.
		E.2 Budget mobilised by Joint Actions (typically institutional or in-kind resources)	Commission + JPI	Q3.1 Budget mobilised by Joint Actions at 31/12/2013
		E.3 Share of institutional resources in ERA mobilised by Joint Actions	Requires high quality Mapping by the JPI	Interaction between Contractor and JPI needed here
	F. Joint Calls	F.1 Number of Joint Calls	JPI Database / 'Commission survey	Q3.2 Number of Joint Calls at 31/12/2013
		F.2 Budget mobilised by Joint Calls	JPI Database / 'Commission survey	Q3.2 Budget mobilised by Joint Calls at 31/12/2013
		F.3 Share of call-based resources in ERA mobilised by Joint Calls	Requires high quality Mapping	For Eval 2015, compare to all calls or only to 'strategic', topic based ones?
		G.1 Number of submitted projects	JPI Database / 'Commission survey	Q3.2 Number of submitted projects at 31/12/2013
		G.2 Participants in submitted projects	JPI Database	Q3.2 Give number of participants (if possible also by country) in submitted projects at 31/12/2013
G. Participation by Researchers in Research Projects, ...and in Joint Actions	G.3 Selected projects	JPI Database / 'Commission survey	Q3.2 Selected projects at 31/12/2013	
	G.4 Participants in selected projects	JPI Database	Q3.2 Give number of participants (if possible also by country) in selected projects at 31/12/2013	
	G.5 Participation in Joint Actions	JPI Database / 'Commission survey	Q3.1 Give number of participants (if possible also by country) in joint actions at 31/12/2013	
Communication	H. Information, dissemination & communication	H.1 Number of events organised, type of participants	JPI	
		H.2 Total participation of researchers and stakeholders in events	JPI	
		H.3 Website (time to develop, unique visitors, referrals...)	JPI	

I. GOVERNANCE of RESEARCH POLICY	Criteria	Indicator	Source of information/Operationalization	Comments /Indications for Contractors or Selfie Question
Structure	1 Well defined societal challenge (FLA & societal challenge defined consulting SAH & SHAB)	1.1 Vision validated by previous Forward Looking Activities	1.1 Documents, IV (Interview) to MB	
		1.2 The input of SAB & SHAB was taken up in SR(I)A, Social & economic conditions have been described, Societal consequences of the SRA have been assessed	Questionnaire to MB(4), SAB <sup>(4)</sup> & SHAB <sup>(6)</sup> or other appropriate JPI governance board	This will have to be addressed through a questionnaire to the members of the JPI boards (Management, Scientific Advisory Board or SAB and the Stakeholders' Board or SHAB) Q4.1 Do you think your input was adequately taken up in the SR(I)A ? Likert scale 1 to 4 <sup>(6)</sup> Q4.2 Do you feel that social & economic conditions have been adequately described in the SR(I)A? - Likert 1 to 4 Q4.3 Do you feel that the SR(I)A has taken into account its potential impact on society? - Likert 1 to 4
		1.3 Policy makers have validated the SRA	1.3 Minutes of MB, IV to policy makers ?	
2. Governing structure involves relevant actors	2.1 JPI includes relevant countries to address the Challenge	2.1 JPI includes relevant countries to address the Challenge	Questionnaire to MB(4), SAB <sup>(4)</sup> & SHAB <sup>(6)</sup> or other appropriate JPI governance board	Do you think the countries involved in the JPI give it sufficient scale to address the Challenge?
		2.2 MB (relevant Programme Owners(7) and Programme Managers(8)), SAB (most adequate choice of researchers) and SHAB (adequate organisations) involve the relevant actors	Questionnaire to MB(4), SAB <sup>(4)</sup> & SHAB <sup>(6)</sup> or other appropriate JPI governance board	Q5 - Questionnaire to board members: Q5.1 Do you think the JPI governance structure insures inclusion of people with decision power at national level - Likert 1 to 4 Q5.2 Do you think the relevant Programme Owners <sup>(7)</sup> and Programme Managers <sup>(8)</sup> have been involved in the JPI governance? - Likert 1 to 4
3 Adequate funding quantity & type	3.1 Funding matches SRA needs	3.1 Funding matches SRA needs	3.1 Interview/data-bases	Is there enough information for mapping - Strategies/plans ? - Programmes ? - Mapping of projects ? - Mapping Institutional funding/Infrastructure ?
		3.2 Adequate coordination of funding sources and national/institutional agendas	3.2 Interview/data-bases	External reviewers required here
Process	4 Decision making is smooth and on time	4. MB, SAB and SHAB satisfied	4. Questionnaire to MB, SAB and SHAB (SM: or equivalent body)	Are you satisfied with procedures for taking decisions in the board you are part of ? [Are decisions taken according to Terms of Reference, are they Smooth, are they Timely...] - Likert 1 to 4
	5 Leadership is participative, open and builds mutual trust	5. MB, SAB and SHAB satisfied	5. Questionnaire to MB, SAB and SHAB (SM: or equivalent body), analyse Terms of Reference	Is the leadership style participative, open and building mutual trust ? Likert 1 to 4
	6 Adequate External relations with other initiatives	6. MB, SAB and SHAB satisfied with relations with H2020, with Research Infrastructures (ERICs), with other Partnerships...	6. Review of JPI documents & databases: <input type="checkbox"/> Vision paper <input type="checkbox"/> Minutes <input type="checkbox"/> Annual plans <input type="checkbox"/> JPI databases; + IV MB, IV SAB, IV SHAB	
+7 Adequate relations with non partner countries	+7 MB, SAB and SHAB satisfied with relations with other countries, in particular no EU ones	7. Participation of relevant ones, Documents, IV to MB, IV SAB, IV SHAB		
Outcome	8 High overall satisfaction of MB, SAB, SHAB	8. MB, SAB, SHAB high overall satisfaction	8. Questionnaire to MB, SAB and SHAB.	Are you satisfied, overall by the governance of the JPI (not necessarily in your Board) - Likert 1 to 4



<b>II. IMPLEMENTATION and ALIGNMENT</b>	<b>Criteria</b>	<b>Indicator</b>	<b>Source of information/Operationalization</b>	<b>Comments /Indications for Contractors or Selfie Question</b>
<b>Structure</b>	9 Adequate Vision and SRA	9. Input of scientists & stakeholders in the SRA was taken on-board	9. Documents, IV to SAB & SHAB	
	10 Adequate coordination of research activities by MB	10. SAB and SHAB + scientists are satisfied	10. Interview wider S&T community	
	11. Alignment	11.1 Awareness of priorities, programmes and projects supported by all participating countries	11.1 To be provided by JPI from JPI documents	Q6. Indicate countries in the JPI which : (1) already have national strategies/research agendas based on SRA JPI; (2) currently develop national strategies/research agendas based on SRA JPI; (3) discussing opportunities to develop such strategies/research agendas; (4) do not have plans to develop such strategies/research agendas
		11.2 Did this JPI develop and recommend to countries participating to the JPI mechanisms set-up to reduce fragmentation and unnecessary duplication in existing or new programmes	11.2 To be provided by JPI from JPI documents	Q6.5 Did this JPI develop and recommend to countries participating to the JPI mechanisms set-up to reduce fragmentation and unnecessary duplication in existing or new programmes
	+12 Inclusion of Regional dimension	+12 Are Structural (regional) funds and programmes considered	12. Awareness in mapping, IV to regional actors, to EC (DG RTD & REGIO)	Added by GPC Working group
<b>Process</b>		13.1 Satisfaction of researchers being evaluated/Observer	13.1 IV to proposers & observer, wider S&T community	Contractors to interview members of S&T community
	13 High quality of Peer review	13.2 Evaluation panels' assembly, clear tackling of conflicts of interest	13.2 Interview of panels, Observer report	Easy to access
		13.3 Effectiveness of the evaluation process (Cost, Time)	13.3 JPI governance data	Harder to collect
	14 High proportion of coordination, Knowledge gaps covered, Low unnecessary duplication...)	14 Has this JPI developed mechanisms to measure the share of the investment in the societal challenge of the countries participating to the JPI which is actually channelled through Joint Actions launched under the direct coordination of the JPI (including Institutional funding and joint calls)?	14 JPI Data-base/Info system - Mapping [See E + F Information above]	Q7. Has this JPI developed mechanisms to measure the share of the investment in the societal challenge of the countries participating to the JPI which is actually channelled through Joint Actions launched under the direct coordination of the JPI (including Institutional funding and joint calls)? If yes please provide the results
	15 Low unnecessary duplications, reduced fragmentation	15. One of the objectives of the Joint Programming process is to reduce unnecessary duplication amongst research programmes in the ERA and to reduce the fragmentation of ERA in several, purely national, eco-systems for Research and Innovation.	15. JPI Data-base/Info system - Mapping [See E + F Information above], Bibliometry ?	Q8.1 Do you feel that the JPI has the instruments to measure the gains in efficiency in national funding by reducing fragmentation in the relevant research field? Q8.2 Do you feel that the JPI has the instruments to measure the gains in efficiency in national funding by reducing unnecessary duplications in the relevant research field?
	16 High Mobility of researchers (of Policy makers ?)	16.1 N° of researchers exchanged (+ of policy makers ?)	16 JPI data-base on mobility	
		16.2 N° of Members adopting EURAXESS	16.2 N° of Members adopting EURAXESS	
	+17 Use of European infrastructures	+17 Sharing, usage of common infrastructures/Knowledge Hubs	17. JPI data-base	Added by GPC Working group
	18 High international collaboration for scientific productivity	18 N° of JPI collaborations, papers, patents / Total collaborations, papers, patents in ERA	18 Bibliometrics are key to identify impact, but also gaps/duplications	Most JPIs may not have data yet [BM] - Need for future snapshot Self-Assessments - Bibliometrics are key to identify impact, but also gaps/duplications
	19 High quality of collaboration for impact (Scientific Productivity)	19. Impact of JPI publications / National average impact	19 Bibliometrics, include all data from participating MS or only from JPI ?	
<b>Outcome</b>	20 High output of products, devices, procedures, incl. policy options	20 Products, tools, devices, procedures, policy options (as compared to previous)	20. JPI Data-base	For Eval 2015, complex to measure.

III. STAKEHOLDERS' INVOLVEMENT (Responsiveness & innovation)		Indicator	Source of information/Operationalization	Comments/Indications for Contractors or Selfie Question
Structure	21 Adequate interaction mechanisms MB – SHAB	21. SHAB high overall satisfaction on relations with MB and MSs in general	21. Surveys/IV with MB and IV MS policy makers	
	22 Input of SHAB is taken into account	22. SHAB high overall satisfaction on their views taken into account for SRA and Implementation Plan	22. Questionnaire or IV to SHAB (SM: or equivalent body)	Key indicator related to outcome (JP Conference session 2013) Q9 - Do you feel that the research defined in the SRA/Undertaken to date will address the Major Societal Challenge tackled by the JPI - Likert 1 to 4
Process		23.1 N° of Open access publications / total in JPI and total in ERA	23. JPI Data-Basis	This might be too early for using bibliometrics at this stage
	23 Data sharing / Use of Open access/Communication	23.2 Existence of a Policy for data sharing inside the JPI	23. Documents	Key for disseminating policy lessons
		23.3. Active engagement with stakeholder communities	23.3. Focused engagements beyond SAB/SHAB	Q10. Please list any additional steps (task forces, discussion fora, think-tanks, wikis) taken to enlarge the consultation and engagement of wider stakeholder groups beyond the SAB/SHAB.
	24 Adequate use of IPR procedures for exploitation	24. Are there common IPR procedures for the whole JPI, for some calls or actions...	24. JPI documents, Terms of Reference for joint calls	Q11. To the JPI respondent : Have common IPR procedures been defined (or where they pre-existing) for the whole JPI, for some calls or actions... (as in Energy Research Alliance which is working on common IPR rules for whole sectors such as Wind turbines...)
Outcome	25 High uptake of Innovative products, tools, procedures up-taken by industry, other economic sectors, public policies...	25. Nr of products, processes, patents, policy uptake...	25. JPI Data-basis	For Eval 2015, complex to measure.
	+26 Specific outcome wrt SRA and vision (e.g. Added Healthy life years for MYBL, Patients with resistant infections for AMR...)	+26 Specific outcome wrt SRA and vision (e.g. Added Healthy life years for MYBL, Patients with resistant infections for AMR, Cost and social impact of disease for JPND...)	26. JPI Data-basis (SMART objective should be in each SRA)	For Eval 2015, contractors to ask questions
	+27. There should also be a formal approach to stakeholder involvement, e. g. integrated in evaluation procedures.	+27. Reality of stakeholder engagement on the ground (e. g. evaluation criterion in the review and selection of projects, activities to ensure participation and co-design, etc.)	27. Questionnaire or IV to SHAB (SM: or equivalent body)	
(1) The following countries were associated to FP7: Albania, Bosnia & Herzegovina, Faroe Islands, FYROM, Iceland, Israel, Lichtenstein, Montenegro, Norway, Republic of Moldova, Serbia, Switzerland & Turkey				
(2) GBAORD are Global Budget Appropriations or Outlays on R&D (See Eurostat for definition)				
(3) Joint Actions are "Any action, apart from collaborative projects, that requires the coordination or the collaboration of actors from different countries. Coordination meaning that the joint action requires the interplay of separate actions in single countries that have a value by themselves, but produce an output that is greater than the sum of the outputs of the individual actions by virtue of the interplay. Collaboration meaning an action that is only possible with the intervention of actors from different countries together (actions of a single country would not produce a valuable output)".				
<b>Example of coordination:</b> synchronized calls, compatible national research projects databases, alignment of national agendas.				
<b>Example of collaboration:</b> best possible peer review panels, some foresight exercises, funding of biggest projects, free circulation of researchers. Collaboration is required whenever the action is too big or too risky for a single country. For instance, opening of national funding to other EU countries' researchers is not likely to happen unless all other countries open their programmes as well.				
(4) The SAB is the Scientific Advisory Board advising the Management Board on Science and Technology issues.				
(5) The SHAB is the Stakeholders' Advisory Board advising the Management Board on the views of and impacts on the main Stakeholders relevant to the Societal Challenge addressed by the JPI - In some JPIs, this is joined with the SAB.				
(6) The Likert scale to be used is the following: (1) Fully (2) Partially (3) Not much (4) Not at all.				
(7) Programme Owners are typically ministries or regional authorities defining research programmes.				
(8) Programme Managers are typically research councils or other research funding agencies managing research programmes independently or on behalf of the Programme Owners.				

**GPC Biennial Report 2014 – JPI Self-Assessment**

**Name of the JPI  
PART I - JPI description**

Please describe the JPI in your own words following the indications below

**Q1. The Challenge addressed**

- 1.1 Describe the Challenge(s) addressed and the common agreed vision.
- 1.2 Describe the original Strategic Research (and Innovation) Agenda [the SR(I)A] and its timetable.
- 1.3 Were any SMART<sup>6</sup> objectives defined by the JPI?
- 1.4 Did this JPI define any Indicator to assess its performance in relation to the objectives?
- 1.5 If yes, please list them

Pse use Time New Roman 11 fonts for your reply (200-300 words)

**Q2. The EU Added Value of this JPI**

Please specify in a few sentences the specific EU added value of this JPI over existing national and/or EU level actions.

- 2.1. Are there already concrete outcomes demonstrating the EU added value of this JPI?
- 2.2. If yes, please list them.
- 2.3. If not, are there expected concrete outcomes demonstrating the EU added value of this JPI? Which ones?

Pse use Time New Roman 11 fonts for your reply (200-300 words)

**Q3. The contribution to ERA (European Research Area) of this JPI**

Please give 1 to 3 concrete examples of how the JPI has or could contribute to the wider objectives of the European Research Area and its 5 priorities<sup>7</sup>.

Pse use Time New Roman 11 fonts for your reply

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<sup>6</sup> SMART Objectives are Specific, Measurable, Adequate/Achievable, Realistic/Relevant and Time-related (Peter Drucker, 1973)

<sup>7</sup> See ERA and its priorities: [http://ec.europa.eu/research/era/index\\_en.htm](http://ec.europa.eu/research/era/index_en.htm)

Q4. Usage of the Framework Conditions for Joint Programming

Describe if and how this JPI has been using the Framework Conditions for Joint Programming<sup>8</sup>.

Pse use Time New Roman 11 fonts for your reply

**4.1 Forward Looking Activities.**

**4.2 Peer review procedures.**

**4.3 Funding of Cross-Border research.**

**4.4 Optimum dissemination and use of research findings.**

**4.5 Protection, management and sharing of IPR.**

**4.6 Evaluation of Joint Programmes.**

Q5. Other relevant comments

Pse indicate who is the contact person responsible for preparing this report on behalf of the JPI and who can be contacted in case the GPC had any questions

Name:

E-mail address:

Telephone:

<sup>8</sup> See the Guidelines on Framework Conditions for Joint Programming:

[http://ec.europa.eu/research/era/docs/en/voluntary\\_guidelines.pdf](http://ec.europa.eu/research/era/docs/en/voluntary_guidelines.pdf)

## PART II – JPI data and indicators

### 2. JPI Factual Descriptors

Q1. Name third countries<sup>9</sup> which are Members or Linked (as Observer, Associated...) to the JPI.

Pse use Time New Roman 11 fonts for your reply

Q2. Indicate the estimated total annual public investment by ERA countries which is related to the Societal Challenge addressed by the JPI (GBAORD)<sup>10</sup>. Also give the estimated share of this total which is invested by countries which are Member of the JPI.

Pse use Time New Roman 11 fonts for your reply

Q3. List the Joint Actions<sup>11</sup> launched under the direct coordination of the JPI, indicating their type, timing and number of participants involved.

Q3.1. Indicate the budget mobilised by Joint Actions other than Joint Calls at 31/12/2013 and number of participants (if possible also by country) involved.

Pse use Time New Roman 11 fonts for your reply

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<sup>9</sup> Countries which are neither member of the EU or countries that were associated to FP7. The following countries were associated to FP7: Albania, Bosnia & Herzegovina, Faroe Islands, FYROM, Iceland, Israel, Lichtenstein, Montenegro, Norway, Republic of Moldova, Serbia, Switzerland & Turkey.

<sup>10</sup> GBAORD are Global Budget Appropriations or Outlays on R&D (See Eurostat for definition)

<sup>11</sup> Joint Actions are Joint Calls or “Any action, apart from collaborative projects, that requires the coordination or the collaboration of actors from different countries. Coordination meaning that the joint action requires the interplay of separate actions in single countries that have a value by themselves, but produces an output that is greater than the sum of the outputs of the individual actions by virtue of the interplay. Collaboration meaning an action that is only possible with the intervention of actors from different countries together (actions of a single country would not produce a valuable output)”.

**Example of coordination:** synchronized calls, compatible national research projects databases, alignment of national agendas.

**Example of collaboration:** best possible peer review panels, some foresight exercises, funding of biggest projects, free circulation of researchers. Collaboration is required whenever the action is too big or too risky for a single country. For instance, opening of national funding to other EU countries’ researchers is not likely to happen unless all other countries open their programmes as well.

Q3.2 Indicate the number of Joint Calls launched or foreseen and the budget they have or will each mobilise

Indicate how many projects were submitted and how many were selected under joint calls which closed before 31/12/2013. Give also the number of participants (if possible also by country) in submitted and selected projects at 31/12/2013.

<b>Topic</b>	<b>Num Countries</b>	<b>Public Fund M€</b>	<b>Submitted Proposals</b>	<b>Num Partners</b>	<b>Selected Projects</b>	<b>Num Partners</b>
1. Call on ...(Year)						
2. Call on ...(Year)						
3. Call on ...(Year)						
<b>TOTAL</b>						
Calls foreseen to be launched						
4. Joint Call Year	XX	XX M€				
5. Joint Call Year	XX	XX M€				
6. Joint Call Year	XX	XX M€				
7. Joint Call Year	XX	XX M€				
...						
Calls foreseen to be launched <b>TOTAL</b>						

### 3. JPI Governance of Research Policy

*These questions (in red) will have either to be answered by the Chair(s) of the relevant JPI Management board(s) or addressed through a short questionnaire to the members of the JPI boards (Management, Scientific Advisory Board or SAB and the Stakeholders' Board or SHAB<sup>12</sup> or equivalent bodies)*

Q4.1 Do you feel that your input was adequately taken up in the SR(I)A?

(1) Fully (2) Partially (3) Not much (4) Not at all

Q4.2 Do you feel that social & economic conditions have been adequately described in the SR(I)A?

(1) Fully (2) Partially (3) Not much (4) Not at all

Q4.3 Do you feel that the SR(I)A has taken into account its potential impact on society?

(1) Fully (2) Partially (3) Not much (4) Not at all

#### **Response form:**

Q4.1 Do you feel that the boards' input was adequately taken up in the SR(I)A?

(1) Fully xx % (2) Partially xx % (3) Not much xx % (4) Not at all xx %

Q4.2 Do you feel that social & economic conditions have been adequately described in the SR(I)A?

(1) Fully xx % (2) Partially xx % (3) Not much xx % (4) Not at all xx %

Q4.3 Do you feel that the SR(I)A has taken into account its potential impact on society?

(1) Fully xx % (2) Partially xx % (3) Not much xx % (4) Not at all xx %

Please provide any relevant comments:

Q5. One of the major challenges of the JPIs is the recruitment in its boards of the relevant stakeholders and decision takers

Q5.1 Do you think the JPI governance structure insures inclusion of people with decision making power at national level?

Q5.2 Do you think the relevant Programme Owners and Programme Managers<sup>13</sup> have been involved in the JPI governance?

<sup>12</sup> The SAB is the Scientific Advisory Board advising the Management Board on Science and Technology issues.

The SHAB is the Stakeholders' Advisory Board advising the Management Board on the views of and impacts on the main Stakeholders relevant to the Societal Challenge addressed by the JPI - In some JPIs, this is joined with the SAB.

<sup>13</sup> Programme Owners are typically ministries or regional authorities defining research programmes. Programme Managers are typically research councils or other research funding agencies managing research programmes independently or on behalf of the Programme Owners.

Q5.1 Do you think the JPI governance structure insures inclusion of people with decision making power at national level?

(1) Fully xx % (2) Partially xx % (3) Not much xx % (4) Not at all xx %

Q5.2 Do you think the relevant Programme Owners and Programme Managers have been involved in the JPI governance?

(1) Fully xx % (2) Partially xx % (3) Not much xx % (4) Not at all xx %

Please provide any relevant comments:

#### 4. Implementation Performance - Alignment

Q6. Please indicate countries participating to the JPI which:

**6.1 Already have national strategies, research agendas, programmes, priorities taking into account the JPI SR(I)A:**

**6.2 Are demonstrably in the process of developing national strategies, research agendas, programmes, priorities taking into account the JPI SR(I)A:**

**6.3 Are discussing opportunities to develop national strategies, research agendas, programmes, priorities taking into account the JPI SR(I)A:**

**6.4 Do not have plans to develop national strategies, research agendas, programmes, priorities taking into account the JPI SR(I)A:**

Pse feel free to mention below any relevant fact you would feel of interest to the GPC linked to the alignment of national programmes, priorities and activities to the SR(I)A of the JPI.

Q6.5 Did this JPI develop and recommend to countries participating to the JPI mechanisms set-up to reduce fragmentation and unnecessary duplication in existing or new programmes?

Q6.6. If yes, please give examples

Pse use Time New Roman 11 fonts for your reply



Q7. Has this JPI developed mechanisms to measure the share of the investment in the societal challenge of the countries participating to the JPI which is actually channelled through Joint Actions launched under the direct coordination of the JPI (including Institutional funding and joint calls)?

If possible you might also give its evolution over time since the launching of the JPI.

Q7.1. If yes, have these measurements already been done?

Q7.2. If yes, please provide results

Pse use Time New Roman 11 fonts for your reply

Q8. One of the objectives of the Joint Programming process is to reduce unnecessary duplication amongst research programmes in the ERA and to reduce the fragmentation of ERA in several, purely national, eco-systems for Research and Innovation.

Q8.1 Do you feel that the JPI has the instruments to measure the gains in efficiency in national funding by reducing fragmentation in the relevant research field?

Q8.2 Do you feel that the JPI has the instruments to measure the gains in efficiency in national funding by reducing unnecessary duplications in the relevant research field?

**8.1 Do you feel that the JPI has the instruments to measure the gains in efficiency in national funding by reducing fragmentation in the relevant research field?**

[Pse Cross replies that do not apply]

(1) Yes, completely (2) Yes, partly (3) Only partially (4) Not at all

**8.2 Do you feel that the JPI has the instruments to measure the gains in efficiency in national funding by reducing unnecessary duplications in the relevant research field?** [Pse cross replies that do not apply]

(1) Yes, completely (2) Yes, partly (3) Only partially (4) Not at all

Please provide any relevant comments:

## 5. Responsiveness and Innovation (or Involvement of Stakeholders)

*Questionnaire to be answered by the Chair(s) of the relevant JPI Management board(s) or addressed through a short questionnaire to the members of the JPI boards*

Q9. Do you feel that the research defined in the SR(I)A/Undertaken to date will address the Major Societal Challenge tackled by the JPI?

(1) Yes, completely xx% (2) Yes, partly xx% (3) Only partially xx% (4) Not at all xx%

Q10. List any additional steps (task forces, discussion fora, think-tanks, wikis...) taken to enlarge the consultation and engagement of wider stakeholder groups beyond the SAB/SHAB.

Pse use Time New Roman 11 fonts for your reply

Q11. Have common IPR procedures been defined (or where they pre-existing) for the whole JPI, for some calls or actions... (as in Energy Research Alliance which is working on common IPR rules for whole sectors such as Wind turbines...)?

Pse use Time New Roman 11 fonts for your reply

### Comments

Please feel free to add any point you feel would more completely describe the JPI, its governance, implementation, impact...

Pse use Time New Roman 11 fonts for your reply