EUROPEAN COMMISSION

European Partnerships under Horizon Europe: results of the structured consultation of Member States

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1 EXECUTIVE SUMMARY

1.1 Introduction

Horizon Europe will support European Partnerships to deliver on global challenges and industrial modernisation through concerted R&I effort with the Member States, private sector, foundations and other stakeholders.

In May 2019, the Commission launched a consultation of Member States on 44 possible candidates for European Partnerships as part of a strategic coordinating process to ensure their early involvement in the prioritisation and definition of objectives and scope. The Commission services identified these candidates for European Partnerships as part of the first Strategic Planning of Horizon Europe (2021-2024), taking into account the areas for possible institutionalised partnerships defined in the Regulation.

The feedback provided by 30 countries (all Member States, Iceland and Norway) has been analysed by the Commission services and summarised (overall and per partnership candidate) in this report. It will inform the discussion at the Shadow Strategic Programme Committee meeting on 27 June 2019 on critical / strategic issues identified. Furthermore, the results of the consultation will feed the Impact Assessment work for partnership candidates based on Article 185 or 187 TFEU, as well as the preparation of all partnerships.

This report presents the main findings of the results of the structured consultation of Member States on the proposed portfolio for European Partnerships. It identifies the key issues raised by Member States during the consultation and proposes a way forward to critical issues.

The initial draft report from June 2019 has been updated in December 2019 to reflect the discussions in the Shadow Strategic Configuration of the Horizon Europe Programme Committee between June and November, resulting in the confirmation to include the 44 European Partnerships identified by the Commission in the orientations towards the first strategic plan for Horizon Europe. It furthermore allowed the identification of four additional candidates for European Partnerships considered relevant for the first strategic planning of Horizon Europe. In addition, a potential EIT KIC that has been identified in the Strategic Innovation Agenda for the EIT that is under negotiation in the European Parliament and Council has been included in the consultation to collect initial feedback.

The process and consultation has been designed in close collaboration with Member States. It is important to consider that this exercise has taken place at early stages of preparations of the partnerships (i.e. before the Impact Assessment work and discussions with the partners). The feedback provided by countries on their possible involvement and contributions should, therefore, be considered as provisional and subject to further discussions.

1.2 Key takeaways

We can summarise the findings of the report in 6 main takeaways:

Overall positive feedback on the proposed portfolio, but thematic coverage could be improved
The results indicate a high level of satisfaction with the overall portfolio, the level of rationalisation achieved, and policy relevance. While delegations are in general satisfied with the thematic coverage, the feedback suggests the coverage could be improved in cluster 2 “Culture, creativity and inclusive society” and cluster 3 “Civil Security for Society“.

Large number (25) of additional priorities proposed for partnerships by delegations
Despite high satisfaction with the portfolio and candidates put forward by the Commission, countries put forward a high number of additional priorities to be considered as European Partnerships. A closer examination suggests that these additional proposals are motivated by very different reasons. Whilst some proposals are indeed trying to address gaps in the portfolio and reach a critical mass, then, others are driven by the wish to maintain existing networks, currently not reflected in the Commission proposal (e.g. those based on JPIs, ERA-NETs). In addition, some proposals reflect worries over some topics not being sufficiently covered in the existing proposals, but could be possibly well covered within the scope of existing partnerships, or by traditional calls under the Framework Programme.

Critical view on the high number and openness of Joint Undertakings
Country feedback suggests dissatisfaction with the high number of proposed Article 187 TFEU partnerships. Notably smaller as well as EU-13 countries raise concerns with regards to the potential insufficient transparency and openness of the partnership model. In the feedback, countries either directly support or ask to carefully analyse whether the objectives of this proposal could be reached with the co-programmed model.
For those partnerships that will be set up on the basis of Article 187, the country feedback stresses the need to ensure a clear shift towards openness in the governance, membership policy and allocation of funding of these partnerships. Notably, it is emphasised that the JU rules should not have any limitations or entry barriers to the participation of SMEs and other partners, including from academia.

Although the feedback suggests a general criticism, there are few concrete and broadly supported proposals, including to reduce the number of institutionalised partnerships mergers or by alternative implementation modes.

Lack of cross-modal perspective and systematic approach to mobility
The current proposal foresees 5 partnerships in the area of transport (for rail, air traffic management, aviation, connected and automated driving, zero-emission road transport), and 2 that in closely related technologies for radically reducing carbon emissions (hydrogen, batteries). Several delegations would wish to see a systemic approach to developing mobility and addressing related challenges (optimisation of overall traffic, sustainable mobility solutions for urbanisation), and do not support a mode-dependent view only. This suggests the need to discuss how to ensure greater cooperation between transport modes and cross-modal approaches in establishing partnerships in the area of mobility.

Partnership composition: the role of Member States in industry partnerships
The composition and types of partners is an important element for the success of a partnership, e.g. to ensure the right expertise and take-up of results. Ensuring broad involvement without overly complicating the governance of the partnership remains an important an important challenge in the design of future partnerships.

In the feedback, several Member States express their interest to join as a partner in partnerships that have traditionally been industry-led. However, individual comments suggest there are different views on what their involvement means in practice, with some countries expressing readiness to commit funding, while others support limiting their involvement to alignment of policies and exploiting synergies. This suggests the need to discuss further what the involvement of Member States means in practice (notably in terms of contributions, in the governance), and what would be possible scenarios/options in Horizon Europe. There is special interest in testing and deployment activities, in synergies with Cohesion Funds and CEF priorities and investments.

Although it is too early to determine the interest of industry/ businesses in the topics proposed for partnerships where the main partners are public authorities, their involvement in in public centric partnerships will also be an important question in the design and preparation of future proposals.

Some proposals are more mature than others
The analysis of feedback per partnership candidates suggests that some proposals are more mature, while others would need more time to determine the scope, objectives, partner composition and contribution and appropriate mode of implementation. This relates to in particular to partnerships with no predecessors and those where the main partners are public. It suggests that the proposals would need to be developed at different paces in order to achieve good quality, and thus, not all partnership proposals may be ready for implementation at the start of Horizon Europe.

1.3 The way forward

The Commission proposes the following recommendations for addressing critical issues identified above and improving the overall portfolio:

Issues to be assessed in the context of Impact Assessment for institutionalised partnerships
The impact assessment for institutionalised partnerships will carefully analyse for each individual case all policy options for the implementation (no partnership/regular calls, co-programmed, co-funded, based on Article 185 and/or Article 187 TFEU). In addition, it will analyse carefully the scope in relation to related partnerships. For the mobility part it will furthermore analyse how to develop cross-modal perspective and collaboration in transport without increasing the complexity of the structures (e.g. to define common objectives, indicators and activities, e.g. for deployment).

The role of Member States in industry partnerships
Commission services will organise meetings with country representatives for those industry driven partnerships where they have express strong interest to join as a partner and contribute in order to better understand what that would mean in practice (in terms of contributions, for the governance), and what would be possible scenarios/options. The outcome of the different discussions will be consolidated and presented to and discussed with the Shadow Strategic Configuration of the Horizon Europe Programme Committee in December.

A more open governance and funding model for Joint Undertakings
The Commission is fully committed to ensure that all future partnerships, including those implemented by Joint Undertakings, fully comply with the openness towards relevant partners and stakeholders in priority setting, implementation and participation in calls and other their activities. This will be reflected in the design of the partnerships and in the respective regulations for Article 185/187 initiatives.

The approach for additional partnerships proposed by delegations
The Commission proposed to limit the number of additional partnership candidates that will be included in the portfolio to a small number (3-5), and prioritise additional topics proposed, including identifying negative priorities if necessary.

The discussion in the Shadow Strategic Configuration of the Horizon Europe Programme Committee between June and November led to the identification of four additional candidates for European Partnerships relevant for the first strategic planning of Horizon Europe:

- One Health/Antimicrobial Resistance
- Sustainable, smart and inclusive Cities and Communities
- Zero-emission waterborne transport
- Geological services

Furthermore, a potential EIT KIC for Cultural and Creative Industries that has been identified in the Strategic Innovation Agenda for the EIT that is under negotiation in the European Parliament and Council has been included in the consultation to collect initial feedback from delegations.

On the priority Cultural Heritage, it was concluded that the Commission would work together with Member States to focus on preparing a sound proposal and narrative for a partnership approach in view of the second strategic planning cycle.

It is recalled that the part on “Strengthening the European Research Area (ERA)” of Horizon Europe would allow to support programme level collaboration between Member States and their R&I programmes, in particular support to Joint Programming Initiatives or ERA-NETs that are not covered by the portfolio of European partnerships.

Concerning priorities proposed in relation to the pilot actions for initially planned further FET Flagship initiatives under Horizon 2020, it is recalled that preparatory actions supported under the FET Flagships part of Horizon 2020 will feed the Strategic Planning process under Horizon Europe and inform the work on missions, co-funded/co-programmed partnerships and regular calls for proposals, once results are available.

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2 Introduction and overview

2.1 Background

Horizon Europe will support European Partnerships to deliver on global challenges encapsulated in the SDGs and industrial modernisation through concerted R&I effort with the Member States, private sector, foundations and other stakeholders. Partnerships as a policy approach provide mechanisms to link R&I closely to policy needs, develop close synergies with national and regional programmes, bring together a broad range of innovation actors to work towards a common goal, and turn research into socio-economic results. As such, they are concrete attempts to address global challenges by translating broad priorities into concrete roadmaps and activities.

European Partnerships are an important topic since:

- They represent a significant investment (approximately 25% of the Horizon Europe budget and up to half of the budget of Pillar II);
- They aim at delivering on concrete impact of R&I to society, climate and economy;
- The Commission and Member States are committed in delivering the new policy (in terms of rationalisation, delivery of impacts, greater involvement of all Member States, and setting exit strategies).

Horizon Europe introduces a more strategic and impact-driven approach to partnerships. It sets out common life-cycle criteria for all partnerships with the focus on the effectiveness in achieving agreed Union priorities, openness, coherence and synergies with other relevant Union initiatives (including missions). Also, it introduces a systemic process for selecting, implementing and monitoring for all partnerships, linking them with the Strategic Planning of Horizon Europe. This has resulted in a consolidated partnership portfolio of 44 candidates that have been proposed by the Commission services.

The countries participating in the Shadow Strategic configuration of the Programme Committee (Member States, Iceland, Lichtenstein and Norway) have been invited to provide detailed feedback on the portfolio of partnership candidates. They have received for each of the 44 candidates identified by the Commission Services detailed fiches describing the problem the partnership intends to address, objectives and expected impacts, partner composition and contributions, as well as possible implementation modes. The feedback from countries was based on a detailed questionnaire with open and closed questions, both on the overall portfolio and on each of the 44 candidates.

The information provided by countries has be analysed by the Commission services and summarised (overall and per partnership candidate) in this report to the Shadow Strategic Programme Committee, informing a discussion in the meeting on 27 June 2019 on critical issues identified. Furthermore the information will feed into the Impact Assessment for partnership candidates based on Article 185 or 187 TFEU, and the preparation of all partnerships.

This consultation is part of the strategic coordinating process for European Partnerships that will be launched under Horizon Europe, with the (Shadow) Strategic Programme Committee as the single entry point for the structured and early consultation of Member States, providing advice[1]. The objective is to ensure transparent and evidence-based selection of partnerships rationalising the landscape and maximising their impacts. It complements the strategic planning of Horizon Europe, ensuring a coherent overall approach.

[1] As stated in the Article 4a of the Specific Programme of Horizon Europe (PGA). For further information please see Council conclusions 15320/17, ERAC recommendations ERAC 1204/18, and Discussion paper by the Commission on "the strategic coordinating process for partnerships under Horizon Europe" (WK 14467/2018 INIT)

2.2 General observations

The findings of the consultation of Member States suggest the following general observations:

Satisfaction with the overall portfolio but thematic coverage can be improved
There is a high level of satisfaction with the overall portfolio, the level of rationalisation achieved, and policy relevance. While delegations are in general satisfied with the thematic coverage, the results indicate concerns with the absence of partnerships in the clusters "Culture, creativity and inclusive society" and "Civil Security for Society".

Large number (25) of additional priorities for partnerships proposed by delegations
Despite high satisfaction with the portfolio and candidates put forward by the Commission, countries put forward a high number of additional priorities to be considered as European Partnerships. A closer examination suggests that these additional proposals are motivated by very different reasons. Whilst some proposals are indeed trying to address gaps in the portfolio and reach a critical mass, then, others are driven by the wish to maintain existing networks, currently not reflected in the Commission proposal (e.g. those based on JPIs, ERA-NETs). In addition, some proposals reflect worries over some topics not being sufficiently covered in the existing proposals, but could be possibly well covered within the scope of existing partnerships, or by traditional calls under the Framework Programme.

Worries over the high number and lack of openness of Joint Undertakings
Country feedback suggests dissatisfaction with the high number of proposed Article 187 TFEU partnerships in the area for transport/mobility. Notably smaller and EU-13 countries raise concerns with regards to the lack of transparency and openness of the Joint Undertaking (JU) model. In the feedback, countries either express support to the use of a co-programmed model or request an in-depth analysis on whether the objectives of this proposal could be reached with a more flexible co-programmed model. For those partnerships that will be set up on the basis of Article 187, countries stress the need to ensure a clear shift towards openness in the governance, membership policy and allocation of funding of these partnerships.

Notably, it is emphasised that the JU rules should not have limitations or entry barriers to the participation of SMEs and other small partners, including from academia. Although the feedback suggests a general dissatisfaction with the current approach, there are few concrete and broadly supported proposals, including to reduce the number of institutionalised partnerships. At this stage, only three countries explicitly suggest a merger of 2ZERO and MOSART into a single co-programmed partnerships, and two countries propose the merger of the Partnerships on Clean Aviation and Integrated Air Traffic Management.

The role of Member States in industry partnerships needs to be clarified
In the feedback received, several Member States express their interest to join as a partner in partnerships that have traditionally been industry-led. However, individual comments suggest there are different views on what their involvement means in practice, with some countries expressing readiness to commit funding, while others support limiting their involvement to alignment of policies and exploiting synergies. This suggests the need to discuss further how to ensure the involvement of Member States (notably in terms of contributions, in the governance), and what would be possible scenarios/options.

In a related manner, several countries stress the need to ensure the active involvement of Member States in the preparation and programming of industry partnerships. Responses from EU-13 countries indicate that they have special interest in being more involved in industry partnerships in testing and deployment activities, in synergy with Cohesion Funds and CEF priorities and investments.

Some proposals are more mature than others
The analysis of feedback per partnership candidates suggests that some proposals are more mature, while others would need more time to determine the appropriate mode of implementation, scope etc. This relates to in particular to partnerships with no successors and those where the main partners are public. It suggests that the proposals would need to be developed at different paces in order to achieve good quality, and thus, not all partnership proposals may be ready for implementation at the start of Horizon Europe.

2.3 Key messages per partnership candidates and additional priorities proposed

2.3.1 Cluster Health

EU-Africa partnership on health security to tackle infectious diseases
While there is overall a broad support for the EU-Africa partnership on health security to tackle infectious diseases, the proposed change of scope and implementation mode triggers many delegations to provide additional suggestions on thematic and geographical and the composition of partners. The option of implementation as Article 185 initiative should not be discarded at this stage.

European Partnership - Innovative Health Initiative
There is overall strong endorsement of the Innovative Health Initiative, including the proposed implementation via the institutionalised partnership with the participation of several industry sectors. The high relevance in the national context is furthermore reflected by 17 countries clearly stating their interest in being involved in the partnership. This is a new element that needs to be further analysed and discussed in detail, together with country representatives and industry in order to identify the most appropriate way of ensuring adequate involvement.

European partnership for chemicals risk assessment
Countries strongly support the proposed European partnership for chemicals risk assessment. Since this is building on an existing initiative on Human Bio-monitoring, a number of issues need to be clarified in relation to the extended thematic scope. A further key issue is the definition of the partner composition and the need to clearly define the role of research organisation.

European partnership for pre-clinical/clinical health research
The key issue for the proposed European partnership for pre-clinical/clinical health research is the clear controversial view between delegations on the approach to practically merge a large number of initiatives under one umbrella partnerships, and allow to address multiple topics in a variable geometry. Many delegations welcome the approach, while others question it strongly. This is directly related to the additional proposals for stand-alone partnerships, e.g. on Neurodegenerative diseases or anti-microbial resistance.

European Partnership on Large-scale innovation and transformation of health systems in digital and ageing society
The proposal is building on a number of related existing initiatives. Key issues that have been identified that need further discussion and elaboration are for example the focus on implementation and upscaling of innovative solutions, more attention on clear and active prevention policies, accessibility and affordability. On partners and their contributions, the inclusion of regional authorities and regional actors, as well as the role of the research community and innovation owners has to be clearly defined, with mandatory and significant financial contributions from partners.

European Partnership on Personalised Medicine
Countries strongly support the proposed European Partnership on Personalised Medicine. Key issues that have been identified that need further discussion and elaboration relate mainly to the scope, suggesting e.g. to include systems medicine or prevention & nutrition, to secure cross border access to molecular diagnostic data linked to health data, to design new clinical trials to facilitate personalised medicine, and issues related to access to clinical data.

European Partnership on Rare Diseases
Countries strongly support a European Partnership on rare diseases. At this stage few critical issues have been identified, which is in line with the fact that the initiative is only planned for a later stage, and any renewal of the current Rare Diseases initiative would be subject to an assessment.

Additional priorities proposed
In the Cluster Health two priorities directly related to ongoing Joint Programming Initiatives have been proposed by a significant number of delegations. For the **Anti-Microbial Resistance (AMR)** the initial assessment of the Commissions services was that that the priorities could be covered by other proposed partnerships, with an adjustment of their scope. However, after further elaboration of the proposals and subsequent discussions in the Shadow Strategic Configuration of the Horizon Europe Programme Committee it was agreed to include the priority as a candidate for a European Partnerships.

The initial feedback on the topic of **Neurodegenerative diseases** was that it is currently not defined in the Strategic Orientations, since the overall approach is to not focus on specific disease fields. If Member States consider that they want to address this topic jointly with a continuation of the JPI, then there would be the possibility to apply for support via Coordination and Support actions under the ERA part of Horizon Europe. The proposals was further developed by Member States towards a broader priority of Brain Health, and on that basis it was concluded that the Commission services will proceed at a later stage with further discussions to take stock of ongoing activities, discuss the ambition and objectives, as well as priorities, programmes and other contributions at national level.

Concerning the topic **LifeTime** in relation to the pilot actions for initially planned further FET Flagship initiatives under Horizon 2020, it is recalled that preparatory actions supported under the FET Flagships part of Horizon 2020 will feed the Strategic Planning process under Horizon Europe and inform the work on missions, co-funded/co-programmed partnerships and regular calls for proposals, once results are available.

The other priorities proposed for the Cluster Health are considered to be covered either by already existing partnerships, or to be addressed by traditional calls (**health and care systems research and innovation, ageing**).

2.3.2 Culture, creativity and inclusive society

For the proposed partnership(s) in the area of **Social Sciences and Humanities**, with a reference to the ongoing partnerships HERA and NORFACE, it is recalled that that they are expected to apply for funding under the Work Programme 2020. This will allow them to carry out activities and organise calls until 2025. A new strategically and thematically focused Partnership would therefore only be needed for the second round of strategic planning.

However, the Commission proposes to include a placeholder for a possible partnerships on Social transformation (values, democracy, migration, etc.), with the scope and final decision on partnership approach being subject to further discussion with Member States.

Concerning the proposal on **Cultural Heritage and the Cultural and Creative Sectors**, with a frequent reference to the Joint Programming Initiative Cultural Heritage, it was concluded that the Commission would work together with Member States to focus on preparing a sound proposal and narrative for a partnership approach in view of the second strategic planning cycle.

Concerning the topic **Time Machine** in relation to the pilot actions for initially planned further FET Flagship initiatives under Horizon 2020, it is recalled that preparatory actions supported under the FET Flagships part of Horizon 2020 will feed the Strategic Planning process under Horizon Europe and inform the work on missions, co-funded/co-programmed partnerships and regular calls for proposals, once results are available.

2.3.3 Cluster Civil Security for Society

A topic referred to by many delegations was **Cybersecurity**, which is however addressed by the Cybersecurity Competence Centre (under negotiation). Further security aspects are part of the partnerships in other topics such as secure mobility, transport, rail, air traffic, digital security, etc. Security is a transversal aspect needed in most topics.

For the topic **Natural Disaster Risk Reduction** proposed by one delegation the Commissions considers that it is better addressed by traditional indirect actions under the Framework Programme.

2.3.4 Digital, Industry and Space

High Performance Computing
Delegations strongly support the proposed High Performance Computing partnership, with high relevance in the national context. This is furthermore reflected by the 23 countries clearly stating their interest to participate in the partnership. There is strong support for the selected implementation mode (Article 187 initiative), and delegations underline the importance of links and synergies with other EU programmes (Digital Europe Programme, Connecting Europe Facility).

Key Digital Technologies
Countries strongly support the proposed Key Digital Technologies partnership, with high relevance in the national context. Key issues raised by delegations include the careful assessment of the scope of partners and relevant stakeholders, the need to provide strong support to and impact on SMEs and the limitation of activities related to photonics to those that require a very strong integration with electronic devices. Synergies with other partnerships within and outside the cluster need to be ensured, and issues related to central management of all financial contributions need to be clarified.

Smart Networks and Services
Delegations strongly support the proposed Smart Networks and Services partnership, with high relevance in the national context. Numerous comments suggest to better clarify the role of Member States, related vertical sectors, as well as standardisation bodies. The proposed implementation mode remains to be further clarified, with several expressing a clear preference for co-programmed.

AI, data and robotics
There is strong support the proposed European Partnerships on AI, data and robotics, with almost all countries confirming the high relevance in the national context. The partnership is recognised by several delegations of a key strategic importance for the future competitiveness of the EU. A number of delegations stress the importance of developing a transparent, trustworthy and ethical by design AI.

Photonics Europe
Countries strongly support the proposed Photonics Europe partnership, with high relevance in the national context. Key issues identified by the delegations are the risk of dilution if certain activities linked to Photonics would be transferred to other partnerships.

Clean Steel – Low Carbon Steelmaking
There is strong support the proposed Clean Steel – Low Carbon Steelmaking partnership, with high relevance in the national context. One of the key issues identified for this partnership by several delegations are possible overlaps with the proposed Carbon Neutral and Circular Industry partnership. Half of the countries are at this stage undecided whether to participate in this partnership.

European Metrology
Delegations strongly support the proposed European Metrology partnership, with high relevance in the national context, and the vast majority interested to participate in the partnership. The use of Article 185 is fully supported. Openness and inclusive towards all Member States is considered key.

Made in Europe
Countries strongly support the proposed Made in Europe partnership, with high relevance in the national context. One of the issues identified by the delegations is the importance to provide an open and transparent access to this partnerships to all relevant stakeholders.

Carbon Neutral and Circular Industry
There is strong support the proposed Carbon Neutral and Circular Industry partnership, with high relevance in the national context. One of the key issues identified for this partnership by several delegations are possible overlaps with the proposed Clean Steel – Low Carbon Steelmaking partnership.

Global competitive space systems
Delegations strongly support the proposed Global competitive space systems partnership, with high relevance in the national context. The majority of the countries are at this stage undecided whether to participate in this partnership. Among the key issues identified by delegations is the need to be open and inclusive towards all countries and to strongly support SMEs. A clear role of the Member States / Associated Countries and of their Space Agencies is to be defined.

Additional priorities proposed
For the proposal to create a partnership between Member States on **Materials and Production**, facilitating the alignment of public funding and national priorities in areas of industrial policies, the Commission underlined in is initial feedback that the proposed partnerships with industry under cluster 4 already incorporate materials and production. Synergies between actions at national level and the individual partnerships with industry should be explored first. The proposals was further developed by Member States, and on that basis it was concluded that the Commission services will proceed at a later stage with further discussions to take stock of ongoing activities, discuss the ambition and objectives, as well as priorities, programmes and other contributions at national level.

2.3.5 Climate, energy and mobility

High number of proposed institutional partnerships in the area of transport/mobility, and lack of systemic approach
Country feedback suggests dissatisfaction with the high number of proposed Article 187 TFEU partnerships.

Notably smaller as well as EU-13 countries raise concerns with regards to the insufficient transparency and openness of the Joint Undertaking (JU) model. In the feedback, countries either directly support the use of a co-programmed model or ask to carefully analyse whether the objectives of this proposal could be reached with the co-programmed model. Those partnerships that will be set up on the basis of Article 187, the country feedback stresses the need to ensure a clear shift towards openness in the governance, membership policy and allocation of funding of these partnerships. Notably, it is emphasised that the JU rules should not have limitations or entry barriers to the participation of SMEs and other small partners, including from academia.

In a related manner, the feedback suggest several delegations would wish to see a systemic approach to developing mobility and addressing related challenges (optimisation of overall traffic through multimodal approach), and do not support a mode-dependent view only.

Although the feedback suggests a general dissatisfaction with the current approach, there are few concrete and broadly supported proposals, including to reduce the number of institutionalised partnerships. At this stage, a large number of delegations re-confirmed their call for the implementation of MOSART as co-programmed partnership, and 2 delegations suggest in addition to merge its priorities with the one of 2Zero into a single co-programmed partnership. Only a small number of countries propose the merger of the Partnerships on Clean Aviation and Integrated Air Traffic Management.

Transforming Europe's rail system
The partnership is assessed as relevant, and considered as an important topic with critical mass and support (60%) to be implemented as a European Partnership. Many delegations would like to see increased focus on deployment and piloting, and synergies with related policies, and investments at national and EU level, as well as suggest to adjust the scope of the proposed partnership by e.g. including alternative energy solutions (hydrogen, batteries), digitalisation of the existing system, and user-centred innovations.

Integrated Air Traffic Management
There is good agreement with the overall objectives, with some delegations proposing additional elements to strengthen the proposal – notably the research and innovation aspects. For smaller / EU-13 countries, better integration of aspects related to digitalisation, drones and small aircrafts into the EU ATM system would significantly increase the relevance of the partnership. Several countries highlight the need to elaborate on the involvement of Member States, in particular the national services responsible for regulating and controlling air traffic. Comments also suggest to broaden the partner composition with new categories of stakeholders.

Clean Aviation
Overall countries are supportive of the topic and the use of a partnership approach. There is general support to reinforce the ambition of achieving a carbon neutral aviation, but the key issue will be the exact scope of the partnership and the pathway in achieving this goal – e.g. some support focusing on technologies and deployment, while others reinforcing research at low TRLs. For smaller / EU-13

countries increased focus on short range transport solutions within urban and developing small / urban aircraft solutions would increase the relevance of the partnership.

Clean Hydrogen
Countries support the proposed partnership, and its objectives. Key issues raised by delegations and that may need further discussion include the need to ensure systems aspects and sectoral coupling for the use of hydrogen technologies, and agreeing on the areas for applications.

Built environment and construction
Countries consider the proposed partnership as highly relevant and support a partnership approach. The feedback suggests that many countries would support a broader scope and increased focus on systemic/ interdisciplinary aspects (including the inclusion of SSH aspects).

Towards zero-emission road transport (2ZERO)
Topic is perceived as highly relevant and a partnership approach is supported by the countries. However, there is little agreement (33%) that it would contribute to improving the coherence and synergies within the EU R&I landscape, which is notably due to perceived overlaps with the proposed Partnership on Mobility and Safety for Automated Road Transport, but also on Batteries.

Mobility and Safety for Automated Road Transport
The topic is perceived as relevant and the expected impacts are strongly supported (82%), including towards a partnership approach (61%) – although this somewhat lower than for other proposals in the cluster. However, country feedback reveals uncertainty that it would contribute to improving the coherence and synergies within the EU R&I landscape (32% (strongly) agree, 61% are neutral). Delegations make several suggestions to further develop the scope and objectives of the partnership (e.g. the modes of transport to be covered, inclusion of cross-cutting and systemic aspects, improving synergies and alignment, notably with initiatives in Cluster 4 (AI, 5G etc.), which need further discussion. Key issue to discuss is the mode of implementation, as 7 countries indicate their preference for another implementation mode then the one proposed, and 50% of respondents needing more information.

Batteries: Towards a competitive European industrial battery value chain
Countries strongly support the proposed European Partnership on Batteries, and find it very relevant in their national context. Good agreement with the objectives (notably focus on both, high and low TRL activities), with some additional suggestions for R&I, uses of battery technologies and applications. Also, country feedback stresses the need to ensure close cooperation with related partnerships, including on "Clean Hydrogen" and "Towards zero-emission road transport".

Clean Energy Transition
The partnership is perceived by countries as highly relevant and there is strong support for a partnership approach. The exact scope of the partnership needs further discussion, as replied suggest different expectations in terms of the exact scope and focus. There seems to be an emerging consensus on the use of a co-funded approach (48% are in favour), while half of the countries would need more information for informed decision.

Additional priorities proposed
Many delegations raised in their feedback the need to include the **maritime/waterborne sector** as an area for applications in the context of several partnerships: Hydrogen, Batteries, Mobility and Safety through Automated Road Transport, Towards zero-emission road transport, and Clean Energy Transition. This suggests that there is a need to discuss how to systematically and comprehensively address this maritime transport and renewable energy topics in the context of the proposed partnerships and more broadly in Cluster 5. This is directly related to the additional proposal for a stand-alone partnership on waterborne transport, **Smart and zero-emission waterborne transport.**

The initial assessment by the Commission services is that although the sector is explicitly mentioned in the orientation towards the strategic planning in cluster 5 and parts are potentially also covered by other partnerships (e.g. the Clean Hydrogen, and the Cluster 6 Oceans and seas partnership), there is an increasing attention on emissions from all types of shipping and digitalisation is expected to have a substantial impact. It was therefore agreed to include it as a partnership candidate on Z**ero-emission waterborne transport** in the list.

The proposal for **Sustainable and Livable Cities and Communities** is potentially relevant, due to the required involvement of various local, regional and national actors. The initial assessment from the Commission was that, various cities-related issues can be addressed through normal calls in the work programme or/and within the Clean Energy Transition partnership, while the related mission would also cover a significant part of the activities. In consequence the creation of a partnership on cities would risk to add one more element in a complicated landscape. The proposals was further developed by Member States and discussed in the Shadow Strategic Configuration of the Horizon Europe Programme Committee, with an agreement to include the priority as a candidate for a European Partnerships..

The priority for **Sustainable and Liveable Cities and Communities** is directly related to one of the mission areas, with the precise mission still to be defined. Creating in addition a partnership in a related area would only create inefficiencies. If, in addition, Member States consider that they want to jointly continue with the JPI Urban Europe, then their collaboration possibly contribution to the mission.

For the suggested priority **European Climate Change Science in support of the Paris Agreement** the Commission considers that is a priority that should be addressed with traditional calls under the Horizon Europe Work Programme to ensure broad participation and the direct accessibility of results informing policy making of the European Commission and Member States. If, in addition, Member States consider that they want further jointly with a continuation of the JPI, then there would be the possibility to apply for support via Coordination and Support actions under the ERA part of Horizon Europe.

The following topics proposed by one of very few delegations are potentially relevant, but would be covered by traditional calls under the Horizon Europe Work Programmes. They will be further analysed during the strategic planning of Horizon Europe, but the Commission considers that they are not relevant for implementation as a European Partnership:

- CO2 Capture, Utilisation and Storage (CCUS)
- Promoting Sustainable Mobility Service Systems
- Solar Energy

2.3.6 Cluster Food, Bioeconomy Natural Resources, Agriculture and Environment

Towards more sustainable farming: agro-ecology living labs and research infrastructures
For the “Towards more sustainable farming" partnership, there are calls to more prominently address issues such as climate change mitigation and adaptation as well as the need to reduce the use of pesticides and perform R&I to develop ecological pesticides and fertilisers. Delegations also ask to include a number of other sectors in the scope.

Animals and Health
For the "Animals and Health" partnership, several countries consider that the proposal should be based on the concept One Health (for animals and humans; including changing the name of the partnership, as well as the other sections of the proposal. Also, a number of delegations consider that the area of animal welfare should be included in the scope.

Environmental Observations for a sustainable EU agriculture
For the "Environmental Observations" partnership, delegations identify a need to broaden the scope to areas further than agriculture. It is suggested to broaden the scope of observations in particular but not exclusively environmental observations (shifting the focus to the Water-Energy-Food-Ecology nexus. In addition, countries suggest including additional objectives/applications and a clear link with the digital, industry and space cluster in general and specifically with the planned Space partnerships.

Rescuing Biodiversity to safeguard life on Earth
For the "Rescuing Biodiversity" partnership, a number of countries stressed the need for the partnership to be well connected to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, and suggested to build on the achievements of BiodivERsA. A sufficiently broad scope should ensure protection of forest and wetland biological diversity, development of agro-ecological methods, spatial landscape planning, ecosystem services, invasive species and eradication methods, biodiversity in different soil types for carbon sequestration, crops and livestock.

A climate neutral, sustainable and productive Blue Economy
For the "Blue Economy" partnership, delegations mention that the proposed partnership must be in line with the SDGs, the UN Ocean Decade for Ocean Science and member states obligations to achieve the good environmental status of waters. Delegations also suggest reinforcing aspects relevant to inland waters and including references to clean and smarter shipping. Synergies with other partnerships of the cluster are needed, and overall a stronger ambition to stimulate innovation for the Blue Economy is needed.

Safe and Sustainable Food System for People, Planet & Climate
For the "Safe and Sustainable Food System" partnership, a number of delegations have similar comments. These relate to the need to strengthen the system approach, by targeting all parts of the chains and food system, to consider the interactions between public health and ecological sustainability, and to include consumer-related research and behavioral insights. Several delegations stress that as the scientific communities in the four focus areas are quite heterogeneous, it is not advisable to combine these areas in one partnership (risk of difficulties to find alignment between countries).

Circular, Bio-based Europe
For the "Circular Bio-based Europe" partnership, delegations suggest e.g. to broaden the scope towards forestry, waste and marine bio-resources; to give more emphasis to local production of biomass and to create opportunities for the development of local small-scale technological solutions for rural regions and urban areas. The proposed use of Article 187 is supported by 26%, but also questioned by 26% of the responses, with 48% requiring more information.

Water4All: Water security for the planet
For the "Water4All" partnership, several countries suggest a need for "systems thinking", i.e. a holistic, multi-disciplinary view of the whole water cycle, including the interaction between coastal and inland waters, the eco-system and biodiversity aspects, climate change, biodiversity.

Additional priorities proposed
For the proposal for **Creating a Geological Service for Europe**, the Commission services consider that a partnership would not be the right instrument.

On the suggestion to include a possible successor to the **Partnerships for Research and Innovation in the Mediterranean (PRIMA)** the Commission recalls that the current Article 185 initiative will continue until 2024 to launch calls. It will undergo an interim and a final evaluation. Based on the results of the evaluation and on the strategic priorities for the second half of Horizon Europe, the Commission will consider its relevance for the second strategic R&I plan.

The proposed priority **Horizon-Biodiverse** would be a duplication of the dedicated partnership on Biodiversity.

The topics Forestry and Helping societies to achieve SDGs where proposed by one or few delegations. They are potentially relevant, but would be covered by traditional calls under the Horizon Europe Work Programmes, or, in the case of Forests and Forestry not be included in the list of candidates, but to be flagged as an important priority for calls for proposals in the context of work programmes and partnership candidates where forestry plays an important role (most notably “Circular bio-based Europe” and “Rescuing biodiversity to safeguard life on Earth”).

2.3.7 Other Pillars

Innovative SMEs

There is overall strong endorsement of the proposed partnership on Innovative SMEs and its objectives, with high number of countries expressing interest to join as a partner. Country feedback stresses the need to ensure clear positioning of the partnership in the national and EU R&I funding landscape. Key issue that has been identified is the possible implementation mode of the partnership – while the Commission takes note of the high support to continue implementing the partnership based on Article 185 TFEU, it also notes that all the concerns raised by the delegation (e.g. ensuring continuity, and support for secretariat) could also be endured through a co-programmed model. The final mode of implementation will be subject to a full impact assessment.

European Science Cloud (EOSC)

There is a strong support towards the objectives of the European Open Science Cloud, and a certain level of openness to implement it as a European Partnership. However, many delegations stress that more information and time is needed to make the final decision on how to implement EOSC and on their participation in the proposed partnership. Notably, delegations ask for clarification on the governance, funding and cost model, and set-up of the proposed partnership. Some delegations also stress the need to further discuss the involvement of the private sector and services for industrial purposes.

EIT Knowledge and Innovation Communities (KICs)

There is an overall endorsement of the topics / challenges that the eight KICs aim to tackle, with high relevance in national context. There is also an overall endorsement that a partnership approach is relevant for the KICs. Three key issues raise from the country feedback to the individual KICs:

1. **Critical view on the lack of openness and transparency of KICs**

A recurring feedback from countries across KICs was the need to ensure improved openness and transparency of the KICs. Unexpectedly, the lack of openness was not only highlighted by MS with low or no involvement in KICs (so-called EU-13), but also by countries considered as strong innovators. Several countries suggested that KICs should be permanently open to new members from academia or industry, others suggest to have additional calls to include partners from most European Countries. In a related manner, it was stressed that there should not be any entry barriers for bringing in new fully-fledged partners. Some countries stressed the need to put more efforts in engaging small and new Member States, including by creating EIT Hubs in these countries. Country feedback on MS role and involvement was ambiguous – with some MS expressing the wish to extend participation to public partners, whilst others were not supportive of having MS/AC as partners. Such an ambiguity might related to the particular nature of the KICs and the fact that KICs cannot have Member States among their members (as membership is focused on industry, research organisations and universities). The feedback also reflects that some KICs are perceived more closed than others, notably EIT Digital, EIT Food, and InnoEnergy. It was also suggested to expand the partners to the recently established EIT Manufacturing.

The feedback also reflects to some extent that those countries having national (public and private) stakeholders participating in a KIC consortia have generally more positive views ("high success rate compared to H2020) than those outside of KICs. To be discussed how to reconcile the place-based/ geographical logic of KICs with the strong wish to see a much more open and inclusive model to ensure a better geographical impact.

In addition, several delegations expressed there is a need for more transparency in how the KIC model as such operates and what activities are the KICs doing (e.g. what is the intervention of scaling up).

2. **Lack of coherence, complementarities and synergies between KICs as well as with other EU and national initiatives**

The country feedback stresses the need to ensure better cross-KICs collaboration, as well as links and complementarities with other relevant activities in Horizon Europe / Union programmes. Notably countries highlight the need to ensure that the objectives of the KICs are complementary to the clusters and objectives of Horizon Europe. This is considered the more relevant as the challenges tackled by KICs are quite broad and need more than just entrepreneurialism and products (including research, tackling ethical/legal issues etc.).

Increased collaboration and synergies were stressed in the following cases: **KIC Climate** and JPI Climate; **InnoEnergy** and SET implementation plans, as well as EU missions and flagship SUNRISE; **EIT Food** and SCAR Food System working group and the National Food Industry Federations (e.g

FIPA) and PRIMA; **EIT Manufacturing** and its links to partnerships and activities in Cluster 4; **EIT Health** and its links to partnerships and activities in Cluster 1; **EIT Urban Mobility** and its links to partnerships and activities in Cluster 5.

Countries highlight a need to avoid overlaps and clarify boundaries with other partnerships; notably in the context of Health KIC and other proposed partnerships for Health (IHI, ERA Health Research, Partnership on large-scale innovation and transformation of health, as well as between EIT Digital and Digital Innovation Hubs and Competence Centres. Also, the boundaries and complementarities between EIC and KIC activities need to be clarified, as currently there are seemingly too many overlaps.

3. There is a need to clarify the status (timeline, funding) of KICs in view of the next MFF

The feedback from countries reveals that countries need more information to assess their involvement and possible contributions to EIT KICs. Even if the role of the KICs and its positioning in Pillar 3 of Horizon Europe has been discussed and its relevance confirmed, this may largely stem from the fact that the proposal for EIT Regulation for Horizon Europe has not yet been adopted by the Commission and the negotiations has not yet started, and MFF is still open, meaning there is also no information whether and which new KICs will be established. Also, several countries asked for more information on the timelines and sustainability plans for the existing KICs. Finally, and related to the first point, it needs to be clarified how countries/ participants from countries can participate and contribute to existing KICs.

3 OVERALL FEEDBACK

3.1 Rationalisation, reform and policy relevance

The consultation opened with the question on **how appropriate is the overall portfolio of partnerships** is in "delivering clear impacts for the EU and its citizens, notably in view of delivering on global challenges and research and innovation objectives, securing EU competitiveness, sustainability and contributing to the strengthening of the European Research and Innovation Area and, where relevant, international commitments". Overall (Figure 1) there is a good agreement, with 24% considering the portfolio as very appropriate and 72% as somewhat appropriate.

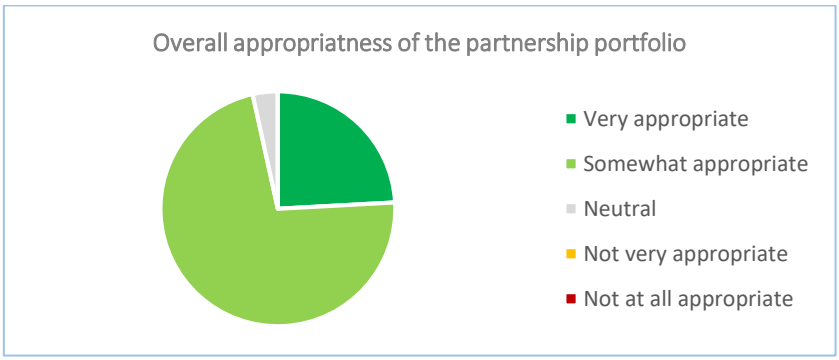

Figure 1: Overall appropriateness of the proposed partnerships portfolio

The picture slightly changes when asked how satisfied countries are with the **level of rationalisation and reform** achieved. This refers e.g. to the ambition of objectives or the composition of partners for European Partnerships proposed under Horizon Europe, in comparison to the partnership landscape under Horizon 2020. While overall 66% express overall satisfaction, 7% are not very satisfied with the level of rationalisation and reform achieved (Figure 2).

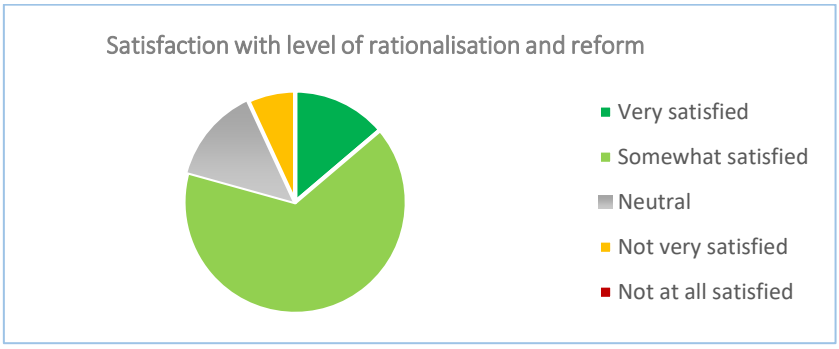

Figure 2: Overall satisfaction with level of rationalisation and reform of European Partnerships

The **policy relevance** is considered overall high, with almost equal assessment for the partnerships portfolio being very relevant or somehow relevant (Figure 3).

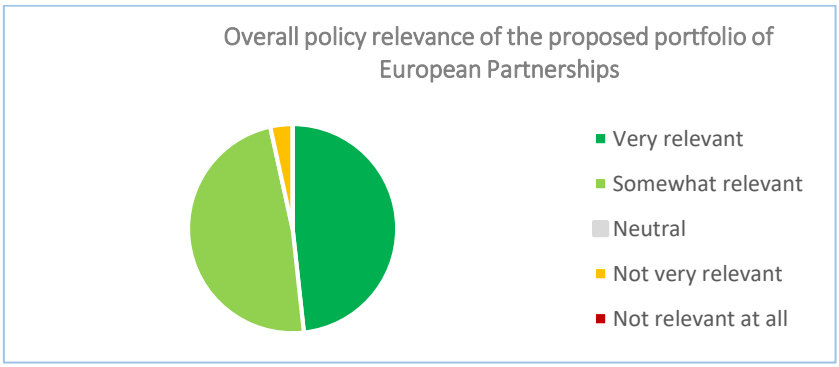

Figure 3: Overall policy relevance of the proposed portfolio of R&I partnerships for the national policies and priorities

3.2 Relevance of the priorities for European Partnerships

Countries were asked to assess if, based on the new policy approach and criteria for establishing European Partnerships, there are any priorities proposed to be addressed by a partnership where they would consider such an approach is not justified. While 31% of countries indicated they have identified such priorities that should rather be implemented by traditional calls, comments point only towards few candidates. They fall into two categories: proposals for merging topics, and those suggesting not addressing a topic at all with a partnership.

For the transport part of cluster 4 a number of delegations made the point of mergers between clean aviation and air traffic management, as well as for Mobility and Safety for Automated Road Transport and Zero Emission cars. One of the key issues identified for Clean Steel partnership are possible overlaps with the proposed Carbon Neutral and Circular Industry partnership. All other proposals are individual ones not suggested by other delegations, e.g. the merger of Personalized Medicine and Rare Diseases.

In addition, the feedback from countries on the relevance for using a partnership approach has been analysed across all 44 priorities and partnership candidates. On the question *"How relevant do you consider the use of a partnership approach in addressing this specific priority?*" the vast majority of replies are very relevant (71%) or somewhat relevant (17%), and only 4% not very relevant (Figure 12).

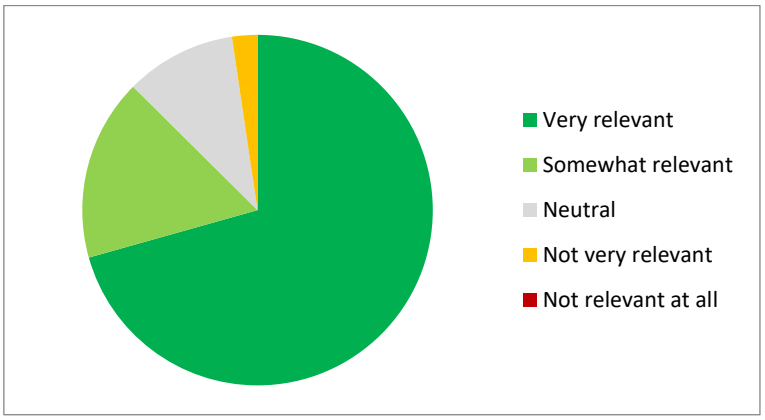

Figure 4: Overall agreement of countries with the relevance of a partnership approach for the 44 European Partnerships candidates proposed

There is furthermore not a single candidate where a country replied with "not relevant at all", and no candidate where more than 2 countries replied with "not very relevant".

3.3 Thematic coverage

The coverage of topics is perceived as mostly "somehow satisfying", 76%, while 7% of countries are very satisfied and 10% not very satisfied (Figure 4). Comments made by delegations under this question cover broader aspects than the thematic coverage only, but provide important elements for the overall discussion and the design of individual partnerships. Comments are mostly individual, only few points were made by many delegations.

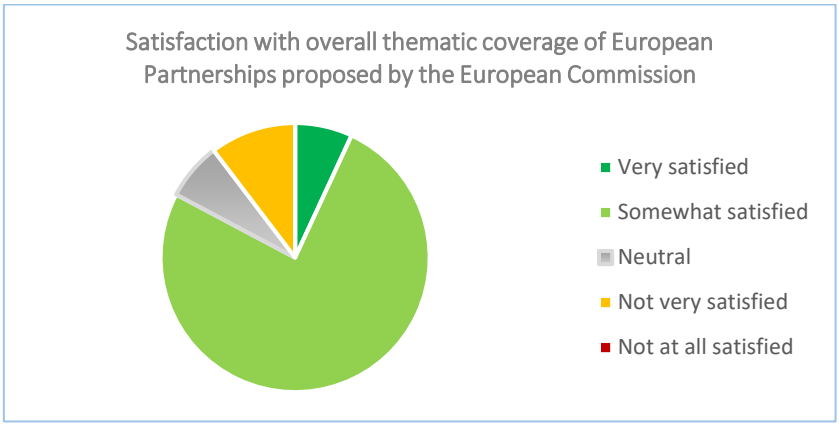

Figure 5: Satisfaction with the overall thematic coverage of the proposed partnership portfolio

Many delegations comment positively on the **overall coverage** and the clarity of the proposed portfolio, with an ambition that is well in line with the new policy approach, and an overall good thematic coverage. A point that is seen critically by many delegations is the absence of partnerships in cluster 2 and 3, and they comment in particular on the lack of partnerships on Social Sciences and Humanities. Their contribution is important to understand and meet societal challenges, also for job creation, welfare and policy making.

The attention paid to industrial research and innovation is appreciated, and delegations call for clearer opportunities for SMEs to participate. One delegation also remarks that fundamental research has not sufficiently been taken into account. Comments suggest that environmental and social aspects of societal transformation are under-represented, as are educational aspects and participatory approaches.

For the **portfolio of partnerships compared to Horizon 2020** some remark on the good balance of continuity with the past, building upon success stories, and innovation and adaptation to the new challenges, with in many cases clear renewals and reforms compared to current partnerships. Others point out that the proposed landscape rather shows a concentration (and not a reduction) of the partnerships. The number of co-funded partnerships has been reduced mainly due to mergers, and the partnerships with industry are all maintained and expanded, with the number of proposed Joint Undertakings increasing. A number of delegations are critical on the proliferation of Commission proposals for **Joint Undertakings with co-investments by Member States**. The relevance of partnerships aligning policy priorities of countries is underlined.

In relation to **co-funded partnerships** the streamlining of previous ERA-NETs is very welcome, as it would simplify the landscape and implementation. However, more efforts should be made to achieve real integration of previous programmes and not just continue them under one umbrella. A number of delegations call for clarifying the role of all **Joint Programming Initiatives** (JPIs) within the proposed landscape. The JPIs would typically host the policy and strategy discussion between countries. There is some general criticism on the discontinuation of well-functioning networks.

A number of delegations refer to the 6 **pilot actions for initially planned further FET Flagship initiatives** (Coordination and Support actions) under Horizon 2020 and suggest that their potential for the strategic planning of Horizon Europe should be analysed once their roadmaps are adopted.

Many delegations reiterate the need for future **partnerships to be open** and easy to find and engage with, rather than being a "closed club". This will also broaden their impact, allow greater synergies and contribute to lowering the innovation divide. They also request to clarify the process and **Member States involvement for the development of the Strategic Research and Innovation agendas** of each partnership.

Further aspects are a frequent call for effective coordination between Programme Committees and partnerships, a call for applying efficiently the flexible co-funding rates, the need for a good balance between collaborative projects funded through open calls and mainly industry-driven partnerships.

3.3.1 Cluster Health

The thematic coverage for the Health Cluster is perceived as satisfying, with 48% being somewhat satisfied and 28% very satisfied, while 10% of countries are not very satisfied (Figure 5).

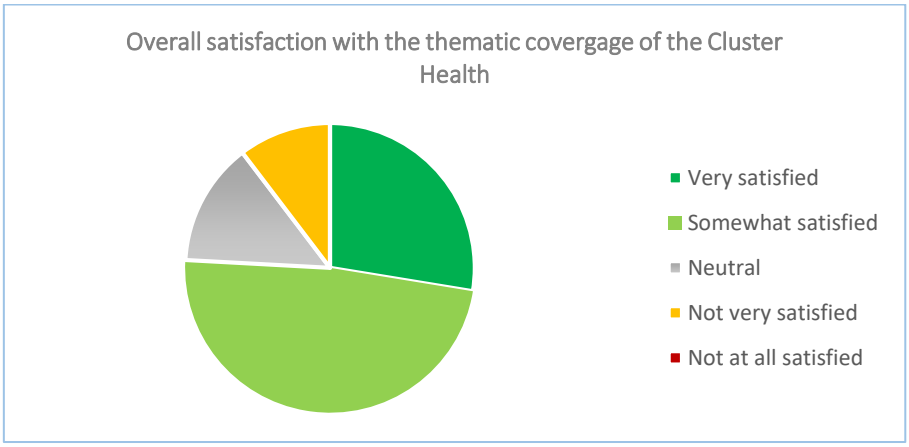

Figure 6: Satisfaction with the thematic coverage of the proposed partnership portfolio for the Health cluster

The main feedback is that overall the proposals receive broad support, with a strong portfolio of partnerships, with timely and potentially transformative character in many interesting well-defined priorities involving industry and academia. Only very few delegations question individual proposals, and a small number of additional priorities are proposed (see also chapter 0).

The main reason for criticism is related to the call for **dedicated partnerships in relation to two existing Joint Programming Initiatives** on Neurodegenerative Diseases[2] and Antimicrobial Resistance[3], supported by a large number of delegations. This also is linked to the proposed European partnership for pre-clinical/clinical health research, merging a large number of ERA-NETs and JPIs under one umbrella, and endorsed by many delegations, while some countries are very negative.

Delegations appreciate the **stronger role of the policy makers** that would guarantee a stronger link between EU and national policies and priorities. In relation to the **scope of partnership**, delegations remark on partial overlapping concerning digital solutions, as well as innovation in health (and) care, both addressed by a number of partnership candidates. The boundaries of each partnership should be more clearly defined. The inclusion of digitalization and e-health in most partnership is seen positively. Additional elements proposed are personalised heath care products and services, an increased focus on mental health, the call for an integrated approach for care and cure in all partnerships, or improving the quality of live and increase of self-sufficiency of elderly and generally people suffering a disease.

Some delegations identify the **lack of disease visibility** as a risk for the motivation of public society and European citizens to engage and support the Health Cluster and its partnerships, with "cancer" as a mission and "rare diseases" as the only specific disease fields. Priorities should not be addressed exclusively by partnership, there should be room for traditional calls to achieve the objectives. The trend to larger initiatives might not necessarily suit the engagement of smaller countries.

3.3.2 Cluster Culture, creativity and inclusive society

The cluster Culture, creativity and inclusive society is the most criticised one, with 48% of countries not being satisfied, and 27% satisfied (Figure 6).

The main criticism is that the Commission had not proposed any European Partnerships in this cluster. Delegations argue that Europe is faced with transformational challenges and has to mobilize and link all fields of expertise to formulate effective answers. It is necessary to understand the legal, ethical, social, educational, religious, historical, cultural and technological conditions of the challenges we face, to harness knowledge for future decisions, deliver social impacts and prevent undesirable consequences.

[2] Partnership to tackle the global challenge of the burdens of Neurodegenerative Diseases (ND)
[3] Joint Programming Initiative on Antimicrobial Resistance Virtual Research Institute (JPIAMR-VRI)

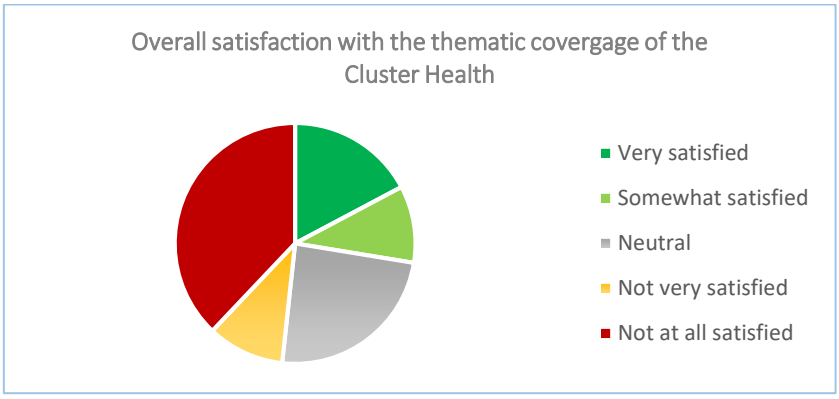

Figure 7: Satisfaction with the thematic coverage of the proposed partnership portfolio for the Culture, creativity and inclusive society cluster

The **two main priorities proposed** by a large number of delegations are:

Social Sciences and Humanities, with a reference to the ongoing partnerships HERA and NORFACE. However, one delegation made the point that these partnerships are covered until 2025, therefore the networks can build on their prior cooperation to explore options of further collaboration and enlargement. A new strategically and thematically focused Partnership would only be needed for the second round of strategic planning.

Cultural Heritage and the Cultural and Creative Sectors, with a frequent reference to the Joint Programming Initiative Cultural Heritage, and a number of references to the pilot action "Time Machine as part of the Coordination and support actions for initially planned further FET Flagship initiatives.

Further individual areas suggested are urban development, migration, ageing society, reversing inequalities, countering violent extremism and radicalisation, and achieving SDGs.

One delegation expressed that, within the spirit of rationalization that has been asked by the Council, regular calls for proposals can tackle the challenges and address the necessary resources with no need for partnerships in the Cluster Culture, Creativity and Inclusive Society.

For the proposed partnership(s) in the area of Social Sciences and Humanities, with a reference to the ongoing partnerships HERA and NORFACE, it is recalled that that they are expected to apply for funding under the Work Programme 2020. This will allow them to carry out activities and organise calls until 2025.

However, the Commission proposes to include a placeholder for a possible partnerships on Social transformation (values, democracy, migration, etc.), with the scope and final decision on partnership approach being subject to further discussion with Member States.

3.3.3 Cluster Civil Security for Society

For the Cluster Civil Security for Society 44% of countries are satisfied, around one third are neutral in their assessment, and 21% are not satisfied (Figure 7). Similar to the previous cluster Culture, creativity and inclusive society, the fundamental criticism is that the **Commission had not proposed any European partnerships in this cluster**. Research in this area examines and draws out issues around identity, ethics, human rights behaviours, transparency and governance – all vital in advancing knowledge and understanding of how citizens are protected.

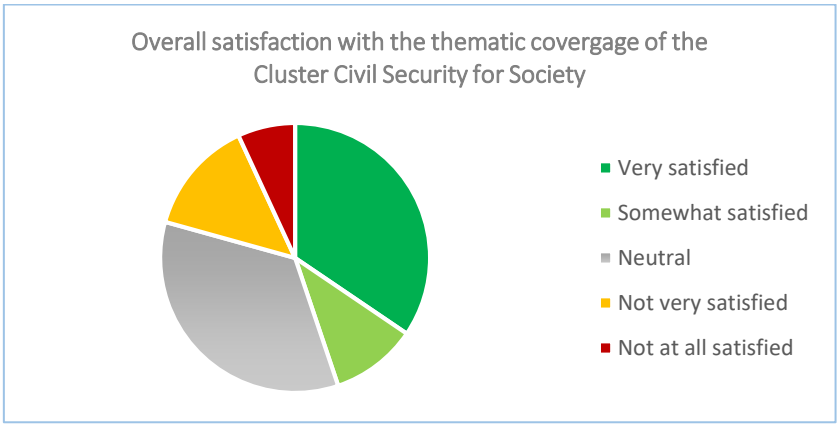

Figure 8: Satisfaction with the thematic coverage of the proposed partnership portfolio for the Cluster Civil Security for Society

The main topic referred to by many delegations as a priority that should be addressed by a partnership was **Cybersecurity**. However, some delegation made the point that Cybersecurity is covered by the Cybersecurity Competence Centre (under negotiation), and that furthermore security aspects are part of the partnerships in other topics such as secure mobility, transport, rail, air traffic, digital security, etc. Security is a transversal aspect needed in most topics. If it is sufficiently addressed as such, a partnership specifically about security aspects may indeed not be needed. Similar, one delegation expressed that, within the spirit of rationalization that has been asked by the Council, regular calls for proposals can tackle the challenges under this cluster.

One delegation referred specifically to the area of **natural disaster risk reduction** that should be considered with a dedicated EU Partnership. Disasters caused by natural hazards result in deaths and economic loss that serious impact on economic stability and growth of EU.

3.3.4 Cluster Digital, Industry and Space

The thematic coverage for the Cluster Digital, Industry and Space is perceived as satisfying, with 45% being somewhat satisfied and 34% very satisfied, while 10% are not very satisfied (Figure 8).

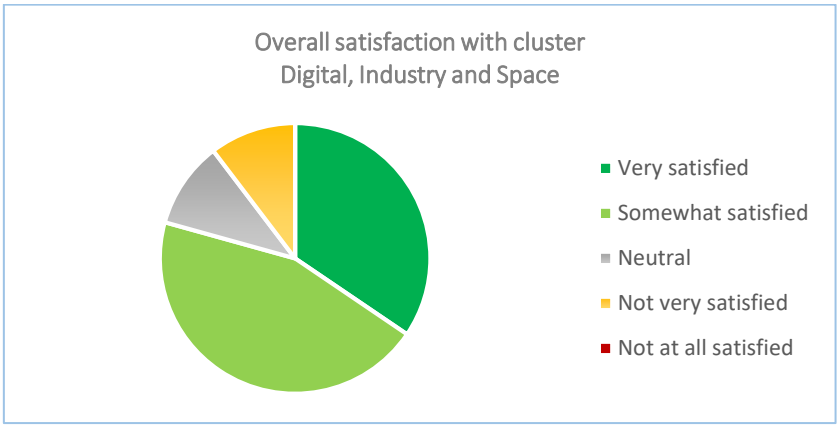

Figure 9: Satisfaction with the thematic coverage of the proposed partnership portfolio for the Digital, Industry and Space cluster

Many delegations underlined that the priorities addressed by the partnerships are **supporting main national priorities**, in particular ICT and Key Enabling Technologies, and often linked to smart specialisation strategies. The objectives are considered ambitious and the portfolio of partnerships cover the technologies of the future very well. There is a clear justification for specific activity in each topic. They each address relevant issues and aim for pertinent goals. However, some overlaps exist and, although necessary, there should be a strong articulation between the different Partnerships and initiatives from different programmes, such as, DEP, Space Program and EIT. The roles and links between the partnerships should be clarified, also cross-cluster connections. Some delegations are

critical on the number Commission proposals for **Joint Undertakings with co-investments by Member States**.

One delegation is concerned about the potential **high burden on budgets** in this cluster, and proposes to set a budget limit for the cluster in order to maintain a good balance between collaborative projects funded through open calls and mainly industry-driven partnerships. Others underline that pre-competitive collaboration and building ecosystems are crucial elements that need to be maintained.

A number of delegations do not support a dedicated **partnership on Clean Steel**, as its priorities can be covered by other, related partnerships for circular industries and hydrogen. For the proposals **Made in Europe and EIT Manufacturing** the distinctions in scope, objectives and target groups should be made clear, also in relation to the Industry 4.0 Strategy. One delegation is not in favour of **Global competitive space systems**, due to the lack of an essential role of national space agencies.

A general comment underlined that partnerships offer a clear path for synchronisation and communication of priorities. Industry, national funding agencies and the EC give feedback through their participation. They can empower industry and encourage R&I. They help to balance top-down and bottom-up opportunities. To create successful circular industries with low carbon footprint, they emphasise the importance of carbon capture and storage (CCS), not only CCU.

3.3.5 Cluster Climate, Energy and Mobility

The thematic coverage for the Cluster Digital, Industry and Space is perceived as rather satisfying, with 62% being somewhat satisfied and 10% very satisfied, while 7% each are not very satisfied or not satisfied at all (Figure 9).

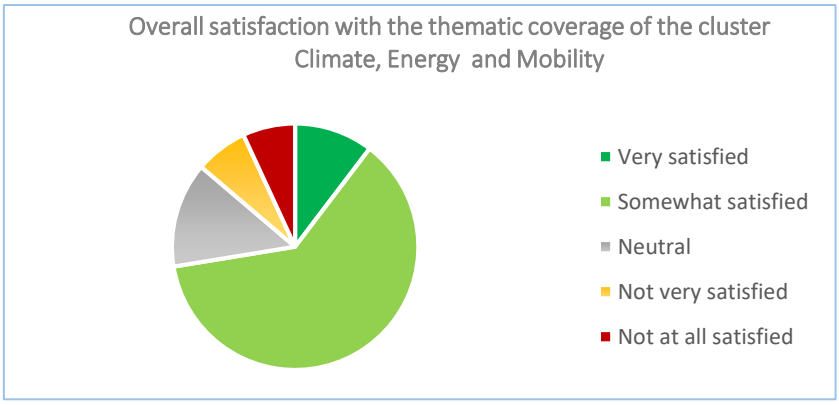

Figure 10: Satisfaction with the thematic coverage of the proposed partnership portfolio for the Climate, Energy and Mobility cluster

Many delegations comment on the **balance of topics and suggest a stronger focus on the environment and climate**, as well as energy topics. Mobility is considered too prominent and should be rationalised further. The area of transport in particular appears to have a disproportionate number of partnerships, which may result in an underinvestment for open calls in this area.

The high number of individual partnerships could jeopardise the ambitious targets to reach the climate neutrality for 2050. Emphasis should be placed on the need to **promote cross-sectorial solutions for decarbonization**. Cross-sector solutions, or solutions for coupling of different energy vectors will be difficult to implement if each partnership works in silos. Synergies will be difficult to implement since there is a risk that each initiative will defend its own interests. Openness and a clear path to membership for interested parties is essential for the industry partnerships to have true European Added Value.

A majority of countries support additional priorities to be implemented by partnerships, notably the following two:

Partnership on **European Climate Change Science** would the Paris Agreement, in recognition of the need for scientific understanding of climate change as basis to reduce vulnerability and enhance resilience. It would address in a structured and integrated manner key uncertainties regarding Earth

system sciences and model development as well as the effectiveness of policy interventions and societal response to climate change. It will address both structural and operational gaps.

Partnership on **Sustainable and Liveable Cities and Communities**, with a holistic approach to make a substantial contribution towards the urban dimension of the SDGs and the Urban Agenda of the EU. I would aim at creating an innovation eco-system for cities to drive urban transitions, create evidence with and for urban stakeholders to achieve urban-related SDGs and position European cities as role models for global sustainable development.

In addition, few delegations propose an additional partnership related to transport, for the waterborne sector, mainly with the argument that this is the only transport mode not covered by a partnership.

3.3.6 Cluster Food, Bioeconomy Natural Resources, Agriculture and Environment

The thematic coverage of the Cluster Food, Bioeconomy Natural Resources, Agriculture and Environment is perceived as satisfying, with 62% being somewhat satisfied and 24% very satisfied, while one country is not very satisfied (Figure 10). Delegations confirm that the cluster has an overall rational approach, supporting the transition to sustainable production systems on land and sea, while respecting planetary boundaries. Many express satisfaction with the proposals related on the Blue Economy, which should tackle also ecological aspects of marine ecosystems.

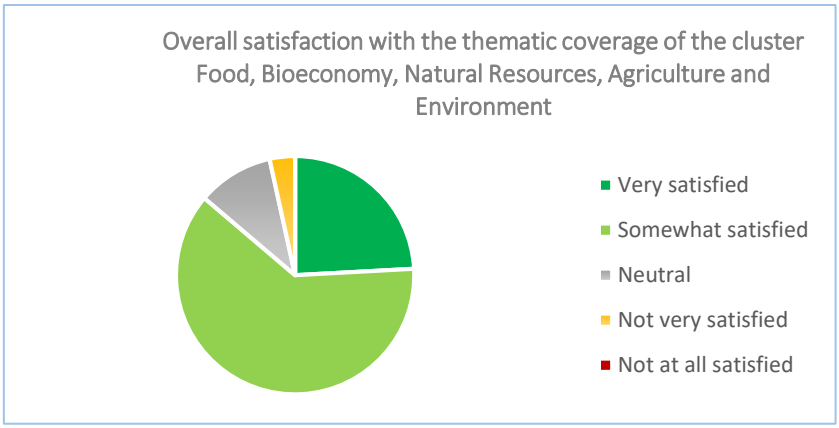

Figure 11: Satisfaction with the thematic coverage of the proposed partnership portfolio for the Food, Bioeconomy Natural Resources, Agriculture and Environment cluster

A large number of delegations express particular support for the Circular Bio-based Europe as a thematic priority, with many arguing in favour of the institutionalised form as being well justified. The creation of new bio-based value chains requires long-term commitment, but as many actors are still small, openness and flexibility are very important.

A number of delegations suggest to include a successor for the current PRIMA initiative (Partnerships for Research and Innovation in the Mediterranean Area, based on Article 185). Last calls will be launched in 2024, and in case of a positive assessment the preparation would need to start under the first phase of the strategic planning for Horizon Europe.

Furthermore, delegations suggest to better address forestry and the forest-based industry as a priority. Questions are also raised in relation to animal health, and zoonoses.

3.3.7 Thematic coverage of partnerships in other pillars of Horizon Europe

The feedback of countries on the thematic coverage of the partnerships in other pillars of Horizon Europe is very positive, with 41% being somewhat satisfied and 38% very satisfied (Figure 11).

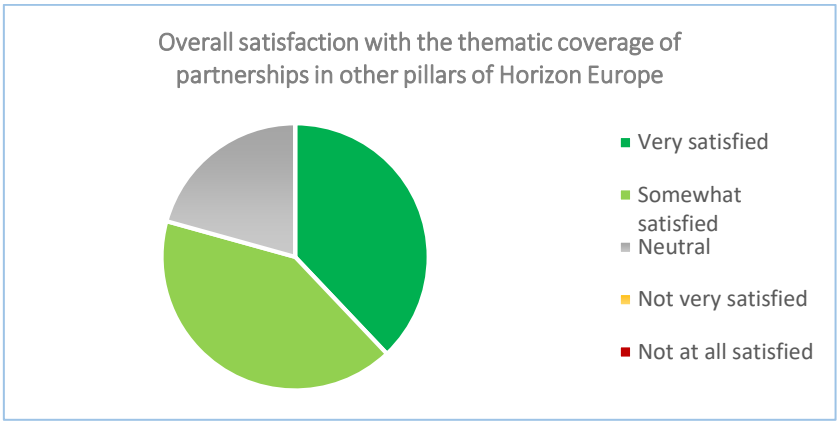

Figure 12: Satisfaction with the thematic coverage of the proposed partnership portfolio in other pillars of Horizon Europe

Delegations make only few comments, mainly supporting the proposed **European partnerships for Innovative SMEs** as a successor to Eurostars, as well as the European Open Science Cloud partnership, since this is of interest for all the disciplines and more national actions and collaboration are needed in this domain.

On the role of the EIT and its capacity to further support the EU innovation ecosystem, KICs should become much more open to all companies, regardless of their size and maturity and more flexible when integrating new partners into a consortium. KICs should also make themselves more visible and better known by the stakeholders. Furthermore, simplification of the functioning of both the EIT and its KICs should be pursued.

3.4 European Partnerships proposed for additional priorities

Proposals for additional priorities that should be addressed by a partnership approach have been proposed by 25 countries. A number of delegations proposed the same or similar priorities that have been summarised in the following table, resulting in a total of 25 additional topics proposed.

The Commission services have discussed within in each cluster and centrally in relation to the strategic planning the 25 topics proposed for additional partnerships. The have been assessed individually and collectively against the following criteria:

- Relevance of the proposed topic for the priorities of Horizon Europe and the orientation towards the Strategic Planning;
- Relevance of addressing the topic in a partnership approach;
- Relevance in relation to topics already covered by ongoing or planned partnerships;
- Compliance with the overall policy approach under Horizon Europe and related Council and ERAC conclusions.

The preliminary assessment by Commission Services is reflected in chapter 2.3 under the respective cluster.

No.	Priority and short description	Countries proposing	Cluster
1	**AntiMicrobial Resistance (AMR)** Decrease the burden of AMR, through the analysis of knowledge gaps, facilitating knowledge exchange across sectors and supporting the translation of research findings into evidence-based measures for societal impact. AMR is a global health challenge recognized by the WHO, the G8 science ministers and other international agencies. If no action is taken, annual human deaths due to AMR will be 10 million worldwide by 2050.	8 (NL, EE, UK, BE, DE, SE, FR, CZ)	1
2	**Neurodegenerative diseases** Neurodegenerative diseases are a European growing concern. If not halted, costs of care due to dementia and related conditions will at least double in the next 20 years. Research into prevention, cure, disease modifying treatments and efficient care is needed. In the past, the EC has built a strong basis for collaboration on this issue through the JPND and its related ERA-NETs	8 (NL, UK, NO, DE, FR, SK, CZ, SI)	1
3	**LifeTime** The proposed partnership initiative aims to transform our knowledge how genomes function within cells, and how cells form tissues and dynamically remodel their activities when they progress towards disease, thereby effecting a paradigm shift in biomedical sciences and a fundamental transformation of our understanding of life and the practice of medicine.	3 (AT, FR, LU)	1
4	**Health and Care Systems Research and Innovation** A partnership with health and care systems owners/organisers and research funders to boost research in policy, uptake and scale-up of innovations to accelerate transformation of national/regional health and care systems. Health and care systems in the EU are globally recognised for making quality care available to citizens, and are a key asset for economic strength in the EU. Healthcare is an important economic sector in Europe, employing 8.5% of the workforce, and counting for almost 10% of the GDP in the EU.	1 (LV)	1
5	**Ageing** Very important societal challenge across Europe. This partnership should include different areas of SSH and have a clear link with Health.	1 (HR)	1
6	**Partnerships in the cluster dedicated to society** There are several candidates for filling the white gap in terms of partnerships in the cluster Culture, Creativity and Inclusive Society, and their broader impact on multidisciplinary R&I in HE. Partnerships such as HERA, NORFACE and Cultural Heritage are effective in mobilising a wide network of researchers, users, national research agencies and other stakeholders.	8 (LU, NL, EE, MT, DE, DK, SK, PL)	2

7	**Time Machine** Develop the big data of the past, a huge distributed digital information system mapping the European social, cultural and geographical evolution. This large-scale digitisation and computing infrastructure will enable Europe to turn its long history, as well as its multilingualism and multiculturalism, into a living social and economic resource for co-creating a common future.	5 (AT, EE, IT, CZ, LU)	2
8	**European Cultural Heritage** Europe has a wealth of cultural heritage, advanced institutional, organisational and technological systems and is capable of demonstrating global leadership in cultural heritage protection and innovative use to support the growing contribution of cultural heritage to sustainable economic growth and societal wellbeing. The agenda for Culture refers to cultural heritage and its importance as drivers for jobs, economic growth, social fairness, active citizenship as well as a means to experience European identity in all its diversity.	11 (LU, NL, EE, UK, IT, BE, FR, SK, CY, CZ, HR)	2
9	**Tackling Modern Slavery** Modern slavery is a collective challenge across all Europe and globally requiring a Partnership for concerted approaches, shared learning, data and evidence and collaborative research actions to allow Member States and Associated Countries to maximize and exploit their research efforts, as well to develop research evidence and policies to underpin the human rights and inclusion of all Europe's citizens and global sustainable development.	1 (UK)	2
10	**Natural Disaster Risk Reduction (NDRR)** The suggested EU partnership on NDRR relies on the Sendai Framework paradigm of 'Building Back Better' (BBB) and aims at boosting community disaster preparedness, response and recovery speed. It should gather researchers with innovators, from the public and private sectors, with people responsible for their respective communities and with citizen, in order to collect ideas, prioritize needs, advance knowledge, propose innovative breakthrough solutions and promote their adoption, aiming at reducing disaster risk and mitigating the consequences of disasters, when they occur.	1 (IT)	2
11	**Migration and Integration** Migration and Integration are key issues in national and global governance today. As societies and countries become increasingly embedded in global social, economic and political exchanges and networks and as global inequalities and regional conflicts grow, migration and asylum are destined to increase in size and in political importance. There is a shared concern that existing migrant integration models need to be re-thought in order to face the challenges of marginalized and/or radicalized youth in the 21st century.	1 (CY)	2
12	**Materials and Production** It is proposed to supplement the current list of partnership candidates in cluster Digital, Industry and Space with an additional topic for a co-funded European Partnership to facilitate the alignment of public funding and national priorities in areas of industrial policies. This relates to the topics covered by the proposed partnerships, as well as underlying key enabling technologies, such as advanced materials. This will allow complementing the activities in the industrial partnerships, ensuring coherence between European and national policies and funding. Member States will be able to focus support and commitment of public funding on areas with the strongest impact.	4 (AT, CZ, LV, SI)	4
13	**Prosperity, Productivity and Growth** Productivity growth drives overall economic performance. To improve the EU's productivity and economic growth, we need to better understand how the development of new products and processes, management practices, industrial organisation and regulations influence firm-level, local and national economic performance. To understand how people innovate and how innovations are taken up we need to understand psychology and motivation, health and mental health, skills and education, the wider macroeconomic and financial context, policy and regulatory environments, labour markets and international trading relationships and obligations.	1 (UK)	4
14	**Secure Quantum based communication technologies**	1 (DE)	4

15	**Sustainable and Liveable Cities and Communities** Urban development is place-based and requires the involvement of various local, regional and national actors. Those actors can best be supported via their respective national political and administrative channels. A holistic approach, which is only possible in the context of a partnership dedicated to urban matters, can make a substantial contribution towards the urban dimension of the SDGs and the UAEU (Urban Agenda of the EU). The partnership, with the JPI Urban Europe at its core, shall create an innovation eco-system for cities to drive urban transitions, create evidence with and for urban stakeholders to achieve urban-related other SDGs and position European cities as role models for global sustainable development.	10 (AT, EE, IT, NO, BE, DE, SE, FR, CY, SI)	5
16	**European Climate Change Science in support of the Paris Agreement** The PA recognizes the need for scientific understanding of climate change as basis to reduce vulnerability and enhance resilience. This partnership would address in a structured and integrated manner key uncertainties regarding Earth system sciences and model development as well as the effectiveness of policy interventions and societal response to climate change.	7 (NO, BE, DE, IE, FR, CZ, SI)	5
17	**Smart and zero-emission waterborne transport** With a more crowded Europe we need to use our waterways to ensure more climate friendly transportation and not only focus on aviation, rail and road. The partnership will focus on impact-oriented research and demonstration of smart and clean technologies, while ensuring European competitiveness and safeguarding European maritime technology leadership.	6 (NL, IT, NO, FI, DE, ES)	5
18	**CO2 Capture, Utilisation and Storage (CCUS)** The Paris Agreement has an ambition of global warming well below 2 degrees Celcius, and broad deployment of CCUS is needed to achieve this. In many industrial cases, CCUS is the only viable option for sufficient CO2 emission reductions. The Commission's 2050 strategic long-term vision "A Clean Planet for All" recognises the role of CCUS as a necessary tool to achieve a climate neutral econonmy. In particular, there will be residual emissions from the energy- and emission intensive industries such as steel, cement and chemicals, even with the introduction of alternative measures to reduce fossil-energy consumption.	1 (NO)	5
19	**Promoting Sustainable Mobility Service Systems** Horizon Europe should support a systemic change of the transport sector into sustainable mobility service system by providing funding to RD that holistically tackles future challenges related to the transition. To properly address the challenges, we need fewer but more holistic calls as compared to Horizon 2020. Transport mode specific funding should be reduced accordingly.	1 (FI)	5
20	**Solar Energy** Recent IPCC (intergovernmental panel on climate change) reports point out the necessity to reduce carbon dioxide emissions to achieve negative emissions in the second half of the 21st century. Technologies allowing the transition to a low- and negative-emission society are not available yet and significant research and development efforts are crucially needed. Storing surplus electric energy efficiently and reliably remains one of top challenges. Storage processes converting electricity and solar energy into fuel and chemicals, much more efficient than biomass production, are highly desirable.	1 (CZ)	5
21	**Creating a Geological Service for Europe** A Geological Service for Europe would provide key advice to t he EU an all aspects of sustainable management of natural resources in the subsurface related questions and challenges in line with the EU objective to promote global action on climate change. See the short description attached. OR European Climate Change Science in support of the Paris Agreement"	7 (AT, NL, BE, MT, PL, CZ, SI)	6
22	**Successor to the Partnerships for Research and Innovation in the Mediterranean (PRIMA)**	4 (EL, MT, ES, CY)	6
23	**Horizon-Biodiverse** Safeguarding biodiversity as the foundation for the delivery of the Sustainable Development Goals	2 (SK, CZ)	6

24	**Forestry** The scope of the proposed partnership should be research and innovation on jointly supporting knowledge, policies and practices, and ensure a coherent sustainable and reinforced future for the forest-based sector. The goal is to reach a high level of resilience under climate change and other risks, to preserve biodiversity with its multiple ecosystem services, to be a key driver of the circular bioeconomy, and to integrate all these issues with their synergies and trade-offs, in favour of a sustainable approach through progressive or radical innovations.	4 (FI, SK, LV, SI)	6
25	**Helping societies to achieve SDGs** A genuine interdisciplinary partnership aimed at fostering the societal transformations necessary to effectively achieve the SDGs. Achieving by 2030 the 17 Sustainable Development Goals (SDGs) set by the United Nations require substantial transformations in our societies, such as fostering individual and collective behaviours in line with sustainable development; re-embedding markets that do not provide sustainable outcomes (or designing those missing markets that would help reaching more sustainable outcomes) and adapting institutions (including laws, regulations, policies) and organisations (private corporations, public entities, third sector).	3 (FR, LV, SI)	Cross-cluster

3.5 Conclusion of discussion on the additional priorities proposed for European Partnerships

The Shadow Strategic Configuration of the Horizon Europe Programme Committee discussed the proposals for additional priorities on the 27 June, 12 September and 24 October, with the following conclusions:

Four additional candidates for European Partnerships are considered being relevant for the first strategic planning of Horizon Europe:

- One Health/Antimicrobial Resistance
- Sustainable, smart and inclusive Cities and Communities
- Zero-emission waterborne transport
- Geological services

Furthermore, a potential EIT KIC for Cultural and Creative Industries that has been identified in the Strategic Innovation Agenda for the EIT that is under negotiation in the European Parliament and Council has been included in the consultation to collect initial feedback from delegations.

On the priority Cultural Heritage, it was concluded that the Commission would work together with Member States to focus on preparing a sound proposal and narrative for a partnership approach in view of the second strategic planning cycle.

Three proposed additional priorities will be further assessed and prepared in view of the next strategic planning exercise: Social transformations, Brain health, Materials and production. The Commission services will proceed at a later stage with further discussions to take stock of ongoing activities, discuss the ambition and objectives, as well as priorities, programmes and other contributions at national level.

The priority Forests and Forestry will not be included in the list of candidates, but to be flagged as an important priority for calls for proposals in the context of work programmes and partnership candidates where forestry plays an important role (most notably “Circular bio-based Europe” and “Rescuing biodiversity to safeguard life on Earth”).

4 FEEDBACK ON INDIVIDUAL PARTNERSHIP CANDIDATES

4.1 Health

4.1.1 EU-Africa partnership on health security to tackle infectious diseases

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm the relevance of the proposed EU-Africa partnership on health security to tackle infectious diseases, with 69% considering it relevant for national policies and priorities, and 70% for their research organisations, including universities. The proposed partnerships is considered less relevant for industry by most countries (46% relevant), see Figure 13.

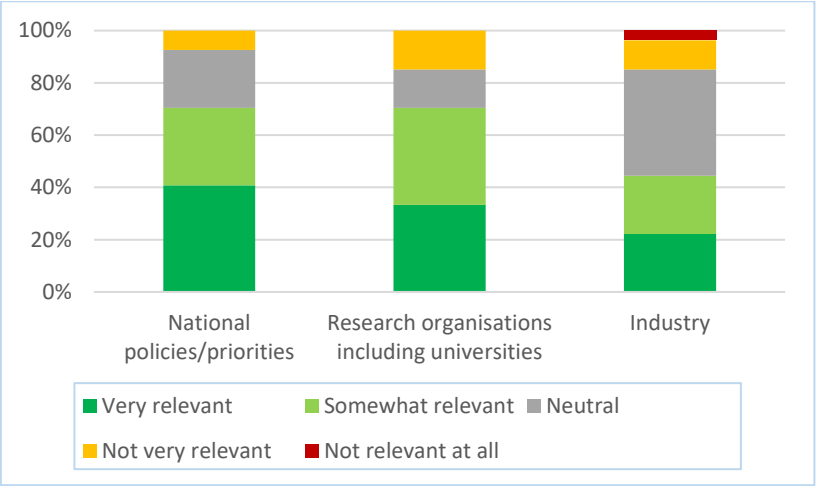

Figure 13: Relevance of the EU-Africa partnership on health security to tackle infectious diseases in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed EU-Africa Partnerships, 21 countries (70 %) report to have relevant elements in place. National R&I strategies or plans were identified most frequently (56%, BE, DE, EE, ES, HR, IT, LV, MT, PL, RO, SE, SI, UK, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (48%, DK, EE, ES, HR, LV, NL, PL, RO, SE, SI, UK, NO) and dedicated R&I funding programmes or instruments (44%, AT, DE, ES, FR, HR, LV, PL, RO, SE, UK, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. These are all individual comments, with very little common elements, e.g.[4]:

- The zoonotic origin of many tropical diseases should be strongly re-enforced and studies on vectors of tropical diseases included;
- Better definition of the role of AMR, also in relation to other partnerships candidates;
- Extension to investigating health behaviour. The fight against infectious diseases in Africa is more effective when it is approached systematically, not only from the clinical perspective;
- Increase the scope of infectious diseases covered, and geographical coverage (e.g. Latin America);
- Include major threats in terms of global burden such as diarrheal, respiratory diseases and meningitis as major causes of death for children under 5, or vector-borne diseases;
- Better alignment with policies in relation to sexual reproductive health and rights. Also, a clear gender analysis and approach;
- Increased efforts for engagement of more partners from the parts of Africa that have weak research culture (areas of greatest impact);
- Better involvement of countries that are not contributing with funding;

[4] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

The majority of Countries (52%) are at this stage undecided concerning their interest to participate, and 4 countries have expressed there is no national interest to participate (CY, CZ, HU, IS). At this stage 7 countries (DE, FR, IT, MT, SI, UK, NO express interest to join as a partner. National R&I programmes and governmental research organisations are identified are main potential partners or contributors. A number of countries express that their interest to participate would increase if their comments would be taken into account.

While most are undecided concerning their participation, many countries (74%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (84%) on the use of a partnership approach in addressing health security tackling infectious diseases. There is broad agreement (76%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and only to a small degree (36%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate good agreement with the proposed objectives at short, medium and long term (84%) and the expected scientific, economic and societal impacts at European level (88%), with the remaining ones remaining neutral. Slightly less (72%) consider the impacts relevant in the national context. There is good agreement (80%) with the envisaged duration of the proposed partnership, but strong request for exit strategies, given that the initiative has started in 2003.

Additional comments made by individual delegations reiterate points made previously under elements to be reinforced. On the scope there are diverging views, between those that want to maintain the proposed focus, and others that want to expand the geographical and thematic scope.

Views on partners, contributions and implementation

There is no clear view between countries on the type and composition of partners (Figure 14), yet few comments (e.g. doubts on the inclusion of industry or foundations) are made that further elaborate their assessment.

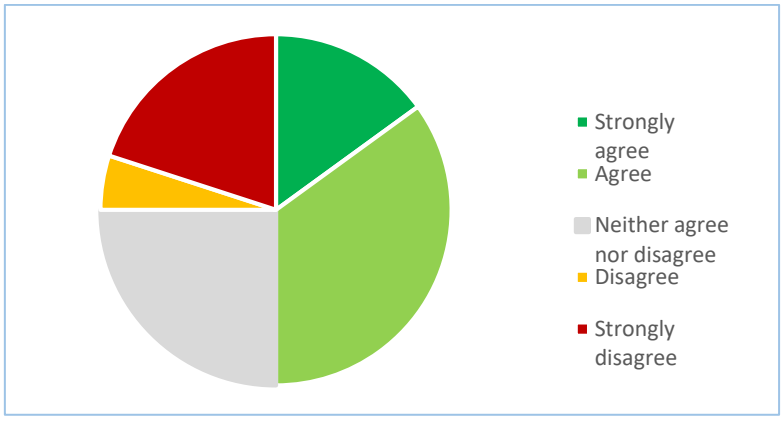

Figure 14: Agreement on the types and composition of partners for the EU-Africa partnership on health security

At this stage most countries (68%) would need more information on contributions and level of commitments expected from partners, while 24% agree with the proposal.

The proposed change of the implementation, from the use of Article 185 to the use of Article 187, and the establishment of a Joint Undertaking, is supported by around one third of countries (36%), while 24% disagree, with the rest expecting more details in order to be able to make an informed decision. Arguments made in relation to either implementation relate to the following:

- Article 185: Political aspects (role of the European Parliament), continuation of implementation that is considered well-working, future role of the UK (currently UK is the major contributing country in EDCTP2); positive experience with the current governance model
- Article 187: more possibilities for private and NGO partners and reduces liability issues for MS, need to be clear about role of industry (limitation to ad-hoc participation seems more acceptable), ensuring the programme is developed by the public domain, consideration to enhance the territorial scope beyond African countries.

4.1.2 Innovative Health Initiative

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm the relevance of the proposed Innovative Health Initiative, with 89% considering it very relevant and 7% somewhat relevant for national policies and priorities. Equally there is a very strong confirmation of the overall relevance for research organisations, including universities, as well as for industry (Figure 15).

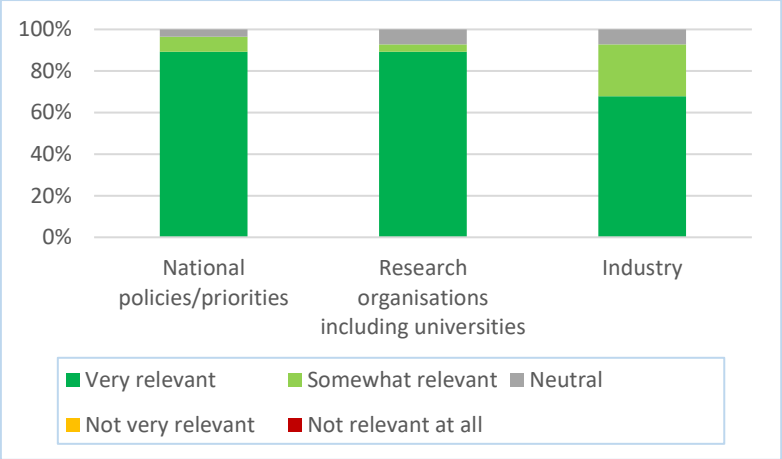

Figure 15: Relevance of the Innovative Health Initiative in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed Innovative Health Initiative, 28 countries (93 %) report to have relevant elements in place. National R&I strategies or plans were identified most frequently (89%, AT, BE, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, PL, PT, RO, SK, SI, UK, IS, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (79%, AT, BE, DK, EE, EL, ES, FI, FR, HR, HU, IE, LU, LV, MT, PL, PT, RO, SK, SI, UK, NO) and regional R&I and/or smart specialisation strategies (75%, AT, CY, DK, EE, ES, FR, HR, HU, IE, LU, LV, MT, PL, PT, RO, SK, SI, NO). Dedicated funding programmes exist in 57% of the countries.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. There is a general call for better SME participation, including more favourable IPR rules for them. Other comments address e.g.[5]:

- stronger role of national authorities in the governance to address the public health need and to allow for synergies with national programs;
- inclusion of health care providers;
- clear link to national health systems and an early dialogue with regulatory bodies;
- structured coordination with academia to support the translational process;
- reinforcement of the European digital industry with regard to global competitors;
- need to ensure that the agenda setting supports joint, converging industry collaboration;
- including research on vaccines, including method development for the quality control of vaccines, as well as the implementation of "green technology solutions" in the manufacturing of drugs;
- education and training of users, incentives for healthcare providers.

A majority of countries, 17, have expressed an interest to participate (BE, EE, ES, FR, HR, HU, IE, IT, LU, LV, MT, RO, SE, SK, SI, UK, NO), and only 3 countries have at this stage expressed there is no national interest to participate (AT, DE, PT).

Identified elements for their participation covers broadly existing or planned national R&I programmes, governmental research organisations, research infrastructures, as well as regional R&I and/or smart specialisation strategies (Figure 16). All countries expressed interest in having access to results produced in the context of the partnership.

[5] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

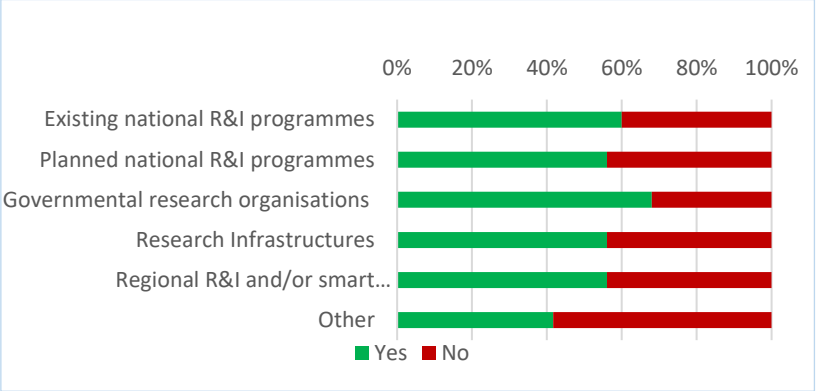

Figure 16: Possible participation and contribution to the Innovative Health Initiative, from the 17 countries that have expressed an interest to participate.

Feedback on objectives and impacts

Overall there is a strong agreement (82%) on the use of a partnership approach for innovative health issues. There is broad agreement (89%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and an important small degree (53%) that it would contribute to improving the coherence and synergies within the EU R&I landscape. No country expresses any disagreement.

Countries indicate good agreement with the proposed objectives at short, medium and long term (96% agree or strongly agree) and the expected scientific, economic and societal impacts at European level (93% agree or strongly agree), with the remaining ones remaining neutral. The vast majority of countries (85%) consider the impacts very relevant in the national context. There is good agreement (56%) with the envisaged duration of the proposed partnership, but an important share (22%) that consider the duration too long and request clear exit strategies.

Additional comments suggest a clearer articulation between the Innovative Health Initiative and other Partnerships, and the need to clarify the role of IT aspects. A request is made to better focus on the sustainability of healthcare systems and on health promotion and preventive interventions.

Views on partners, contributions and implementation

The majority (66%) agree on the type and composition of partners, and 15% disagree. Many comments support the shift towards other industrial sectors and would welcome better inclusion of health care providers. Most countries (65%) would need more information on contributions and level of commitments expected from partners, while 31% agree with the proposal. Individual comments relate to the following issues:

- The role of Member States in the agenda setting and governance should be strengthened;
- Ensure realistic commitments from industry, including meaningful financial contributions, with regards to the scale and budget of the initiative;
- Support industries in jointly addressing common and growing operational, regulatory and economic challenges;
- Ensure sufficient representation of health ICT companies and research organisations;
- Impact on promoting EU competitiveness should be at the forefront of the initiative, by limiting contributions from non-EU legal entities, or even limiting it to EU and Associated countries;
- Funding to industry in accepted projects should be possible, to allow for peer-to-peer collaborations between academia, RTOs and industry partners;
- Important to strengthen the role of healthcare providers in the agenda setting.

The proposed use of Article 187, and the establishment of a Joint Undertaking, is supported by around the majority (73%), while one country disagrees, with the rest expecting more details in order to be able to make an informed decision. One country would support a tripartite partnerships with Industry, Member States and the Union, while another country excludes any national co-funding. Furthermore the issue is raised how to ensure sufficient Member State and stake holder involvement in the agenda setting and set-up of the programme in order to achieve people centred healthcare.

4.1.3 European partnership for chemicals risk assessment

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm the relevance of the proposed European partnership for chemicals risk assessment, with 54% considering it very relevant and 35% somewhat relevant for national policies and priorities. Equally there is a good confirmation of the overall relevance for research organisations, including universities, and slightly less for industry (Figure 17).

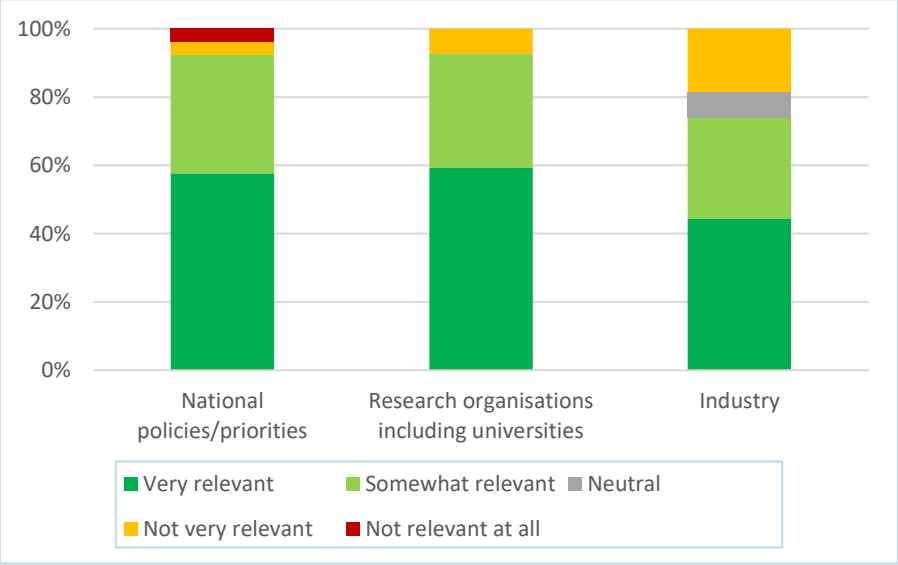

Figure 17: Relevance of the European partnership for chemicals risk assessment in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed European partnership for chemicals risk assessment, 21 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (70%, AT, BE, CZ, DK, EE, ES, FI, FR, HR, IT, LV, PL, PT, RO, SE, SI, UK, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (56%, AT, CZ, DK, EE, EL, ES, FR, HR, LV, PL, PT, RO, UK, NO). Regional R&I and/or smart specialisation strategies exist in 52%, and dedicated funding programmes in 41% of the countries that have relevant elements.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. Comments address e.g. the following aspects[6]:

- the importance of the interlinkages between disciplines such as Human Biomonitoring, Toxicology and Green Chemistry to foster innovative and intelligent substitution of chemicals of concern;
- suggestion to restructure into three scientific pillars (human biomonitoring platform, toxicological testing programme, research funding), with three overarching strands (management & administration, science-to-policy, national hubs);
- define building blocks and expected achievements in each of them to avoid duplication of efforts;
- target innovative aspects of risk assessments and the required technology development
- encourage exchange between risk assessors and risk managers, between toxicologists and epidemiologists, across the different policy fields;
- motivate and optimize the use of results of biomonitoring for improvement of the current EU-risk assessment system;
- ensure contribution of research organisations in order to strengthen European capacities in hazard and exposure assessment;

[6] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- support from funding agencies and related authorities would be needed to ensure open calls as relevant;
- the importance of cooperation across national borders as use of resources, better information flows and best practice sharing are of relevance to implement policies and regulatory systems;
- the importance of the participation of smaller countries so that they would be able to implement the results and enforce the laws and regulations on chemical exposures in their own countries.

While 44% of the countries are undecided at this stage, 11 have expressed an interest to participate (AT, BE CZ, EE, ES, FR, LV, MT, SE, SI, NO), and only 4 countries have at this stage expressed there is no national interest to participate (CY, ES, RO, IS).

Most frequently identified as possible elements for their participation are governmental research organisations (63%) and infrastructures (67%). 74% of countries expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (88%) on the use of a partnership approach in addressing chemical risk assessment. There is broad agreement (81%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to a smaller degree (58%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate good agreement with the proposed objectives at short, medium and long term (89% agree or strongly agree) and the expected scientific, economic and societal impacts at European level (85% agree or strongly agree), with the remaining ones remaining neutral. The vast majority of countries (92%) consider the impacts very relevant in the national context (Figure 18).

Around one third of the responses suggest that the proposed duration of the initiative is too short to achieve the objectives.

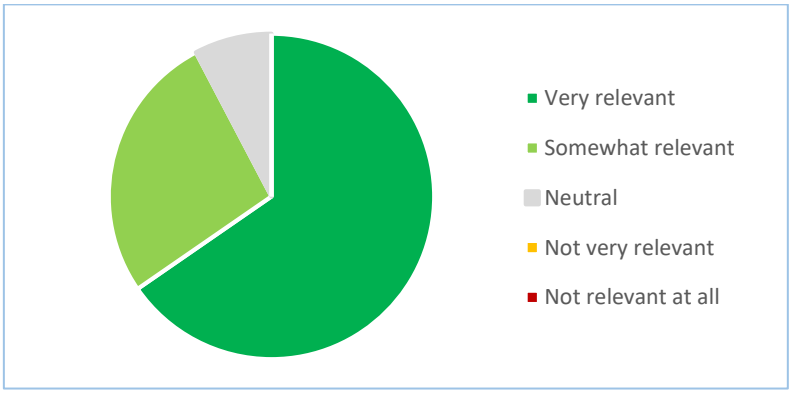

Figure 18: Feedback on the relevance of impacts at national level for a European partnership for chemicals risk assessment.

Individual comments made welcome that the partnerships would substantially increase the quality of the scientific basis within all areas of chemicals policy. It would enable policy to act with foresight, precaution and to develop tailor-made and targeted measures. Including academia and research infrastructures is considered crucial to carry it beyond the project duration. Linking to ESFRI and other Health cluster partnerships is beneficial. Additional elements could cover ecotoxicology and safety of engineered materials (e.g. bio/nano-implants), new waste materials from biorefineries (e.g. biopolymers), etc.

Views on partners, contributions and implementation

The majority of responses (78%) agree on the type and composition of partners, and 15% disagree. Many comments point towards the need to clearly define the scope in terms of types of organisations, and the role of research organisation.

At this stage, most countries (81%) would need more information on contributions and level of commitments expected from partners.

The proposed use of a co-funded partnerships is supported by 30%, while 56% would require additional information.

4.1.4 Pre-clinical/clinical health research

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm the relevance of the proposed European partnership for pre-clinical/clinical health research, with 67% considering it very relevant and 26% somewhat relevant for national policies and priorities. Equally there is a good confirmation of the overall relevance for research organisations, including universities, and slightly less for industry (Figure 19).

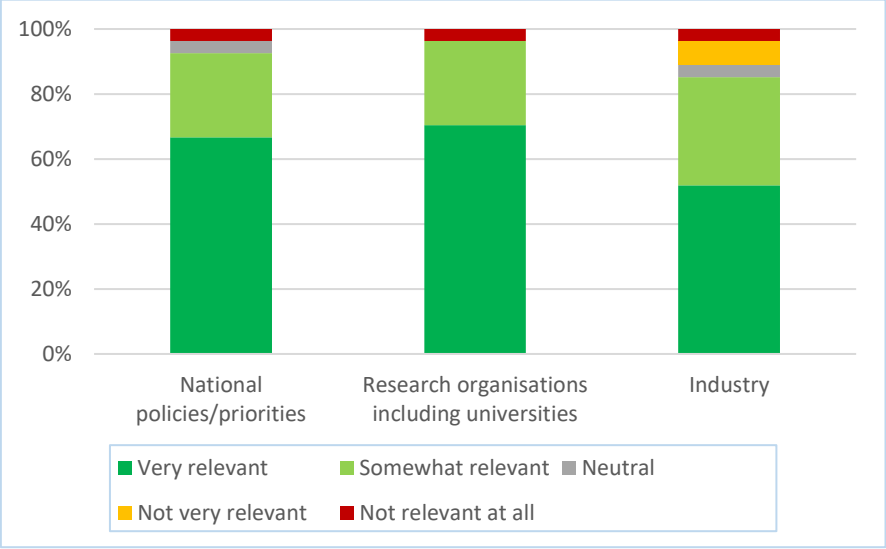

Figure 19: Relevance of the European Partnership for Pre-clinical/clinical health research in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed European partnership for pre-clinical and clinical health research, 26 countries report to have elements in support of such a partnerships in place. National R&I strategies or plans were identified most frequently (81%, AT, CZ, DE, EE, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, NL, PL, PT, RO, SE, SI, UK, IS, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (69%, AT, CZ, DK, EE, ES, FI, FR, HR, IE, LU, LV, NL, PL, PT, RO, SE, SI, UK, NO). Regional R&I and/or smart specialisation strategies exist in 59%, and dedicated funding programmes in 52% of the countries that have relevant elements.

Delegations have controversial views on the broad thematic coverage, that is appreciated by many and, in their views, would allow to cover also emerging topics of common interest, and only exclude certain areas of strategic interest. Others argue that it would be too big and too diverse, dilute impact of existing partnerships, while increasing the management burden.

While 37% of the countries are undecided at this stage, 17 have expressed an interest to participate (AT, BE, EE, ES, FI, FR, HU, IE, IT, LU, LV, MT, RO, SE FR, LV, MT, SE), and only 3 countries have at this stage expressed there is no national interest to participate (CY, DE, IS).

Most frequently identified as possible elements for their participation are existing (70%) or planned (61%) national R&I programmes, governmental research organisations (61%) and research infrastructures (74%). Almost all countries expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a good agreement (73%) on the use of a partnership approach, however, 12% do not agree with this.

Delegations agree largely (65% agree, but only 8% strongly) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens. Most (46%) remain

neutral on the question if it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate agreement with the proposed objectives at short, medium and long term, as well as the expected impacts, but the critical views expressed on other elements are also clearly visible on these points (Figure 20).

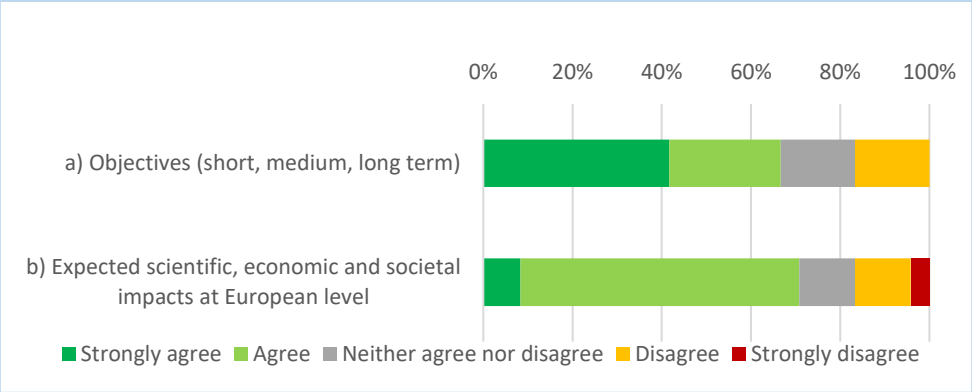

Figure 20: Level of agreement with objectives and expected impacts for the proposed European partnership for pre-clinical/clinical health research

The majority of countries consider the impacts very relevant (65%) or somehow relevant (12%) in the national context

Most respondents would require more information before assessing the duration of the initiative.

Individual comments made reiterate the views on the scope and coverage, the alternative positioning of some parts under personalised medicine, or as dedicated additional partnerships.

Views on partners, contributions and implementation

Slightly more than half of the responses (54%) agree on the type and composition of partners, and 21% disagree. At this stage, most countries (65%) would need more information on contributions and level of commitments expected from partners.

The proposed use of a co-funded partnerships is supported by 35%, while 50% would require additional information.

4.1.5 Large-scale innovation and transformation of health systems in digital and ageing society

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm strongly the relevance of the proposed European Partnership "Large-scale innovation and transformation of health systems in digital and ageing society", with 78% considering it very relevant and 19% somewhat relevant for national policies and priorities. Equally there is a very good confirmation of the overall relevance for research organisations, including universities (100% relevant), and only slightly less (92%) for industry (Figure 21).

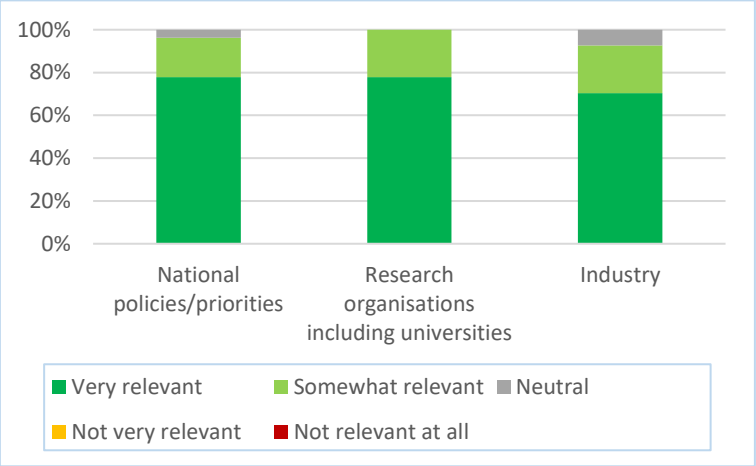

Figure 21: Relevance of the European Partnership on Large-scale innovation and transformation of health systems in digital and ageing society in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed European partnership on Large-scale innovation and transformation of health systems in digital and ageing society, 26 countries report to have elements in place. Regional R&I and/or smart specialisation strategies were identified most frequently (78%, AT, CY, CZ, DK, EL, ES, FI, HR, HU, IE, LU, LV, MT, NL, PL, PT, RO, SE, SI, UK, NO), followed by national R&I strategy and/or plans (70%, AT, CZ, DK, ES, FI, HR, IE, IT, LU, LV, MT, PL, PT, RO, SE, UK, IS, NO) and economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (70%, AT, CZ, DK, ES, FI, FR, HR, IE, LU, LV, MT, PL, PT, RO, SE, UK, IS, NO). Dedicated funding programmes have been identified by 52% of the countries that have relevant elements.

Several countries put specific weight on adjustment of health care systems to ageing, while others recommended to extend the partnership beyond older population. Though the scope of the partnership is wider and includes the entire population, the title of the partnership might be misleading. Some delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. Individual comments address e.g. the following aspects[7]:

- Need to reinforce "innovation" component, e.g. focus on the implementation and upscaling of innovative solutions, incl. digital interventions, organisational and social innovation, implementation of innovative service and policy solutions across different countries, increase the impact of biomedical research and health technological innovations, highlight the important role of industrial R&I in the new partnership, reinforce the adoption of innovative solutions, and strengthen the focus on end-user groups;
- Support to an interdisciplinary (incl. Social Sciences and Humanities), integrative and international approach to health services and systems research is essential to address the existing and emerging challenges faced by health systems; improve cross-border collaborative research, ensuring equity across regions, international comparisons of process and outcome measures, but also of policy;

[7] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- More attention on clear and active prevention policies, accessibility and affordability;
- Need to reinforce evidence for cost effectiveness of technologies. Inform private sector on unmet needs of the citizens to guide their product development/research.

While 44% of the countries are undecided at this stage, 17 have expressed an interest to participate (AT, BE, CY, EE, FI, IE, IT, LV, MT, PT, RO, SE, SI CZ, EE, ES, FR, LV, MT, SE, SI, NO), and only 1 country have at this stage expressed there is no national interest to participate (ES).

Most frequently identified as possible elements for their participation are governmental research organisations (70%) and research infrastructures (70%). Many delegations underline the strong interest from related Horizon 2020 partnerships (Article 185 AAL, EIP Active and Healthy Ageing, JPI More Years Better Lives) to participate.

85% of countries expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a very strong agreement (96%) on the use of a partnership approach in addressing large-scale innovation and transformation of health systems in digital and ageing society. There is broad agreement (88%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but only to a smaller degree (42%) that it would contribute to improving the coherence and synergies within the EU R&I landscape, while 46% remain neutral on this question.

Countries indicate good agreement with the proposed objectives at short, medium and long term (92% agree or strongly agree) and the expected scientific, economic and societal impacts at European level (88% agree or strongly agree). The vast majority of countries (73%) consider the impacts very relevant in the national context. Around one quarter of the responses consider the proposed duration of the initiative too long.

Several delegations made individual comments made in relation to the objectives suggest the following aspects:

- Include the innovation component (implementation/upscaling, policy changes, in different ecosystems) using co-design, focus on end users and innovation carriers; consider addressing the lack of operational platforms and the underuse of existing local/regional stakeholder eco-systems under the problem definition;
- Prioritize very relevant aspects in ageing, the influence of ageing and digital transformation, digitalization and digital transformations in health and care systems; clearer focus on impact for the ageing population;
- More explicit attention should be paid to staying healthy/primary prevention; the role of food/nutrition, occupational health;
- Focus on services research in addition to systems research; stronger links to other areas like social care and labour services (work inclusion);
- Better define boundaries and interactions between this partnership, the IHI and EIT-Health;
- Need to develop appropriate innovation & transformation objectives coupled with relevant impact indicators .

Views on partners, contributions and implementation

Half of the respondents agree on the type and composition of partners, and 34% are not decided. Comments suggest to clarify the role of the research community and innovation owners as either funding partners or grant receivers to avoid any conflict of interest. Innovation agencies and regional authorities could be included as additional funders next to R&D and health funders. Involvement of end-users and civil society needs to be ensured.

At this stage, most countries (62%) would need more information on contributions and level of commitments expected from partners. A number of delegations suggest that contributions from the research community and innovation owners have to be clearly defined. As partners, financial contributions need to be mandatory and significant. The AAL Programme has shown the significant time involvement of many national contact persons, which has neither been recorded nor been fixed.

The proposed use of a co-funded partnership is supported by 52% of the countries, while 2 countries suggest the use of a co-programmed approach. 41% would require additional information.

4.1.6 Personalised Medicine

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm strongly the relevance of the proposed European Partnership on Personalised Medicine, with 86% considering it very relevant and 11% somewhat relevant for national policies and priorities. Equally there is a very good confirmation of the overall relevance for research organisations, including universities (100% relevant), and only slightly less for industry (Figure 22).

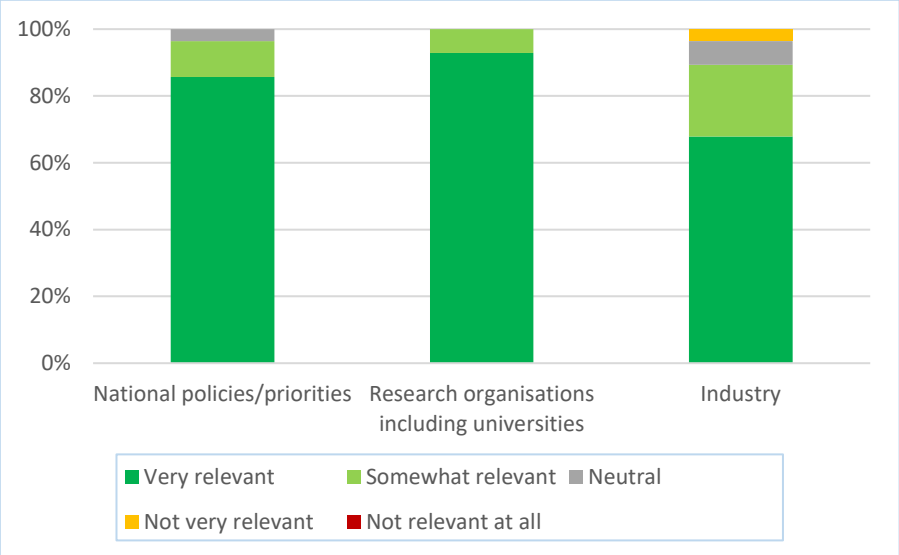

Figure 22: Relevance of the European Partnership on Personalised Medicine in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed European partnership on Personalised Medicine, 27 countries report to have relevant elements in place (AT, BE, CY, CZ, DE, DK, EE, EL, ES, FI, FR, H, HU, IE, IT, LU, LV, MT, NL, PL, PT, RO, SI, SK, UK. IS, NO.

Equally often identified (71%) were National R&I strategies or plans, national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation or Regional R&I and/or smart specialisation strategies.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. Comments address e.g. the following aspects[8]:

- links with the 1 Million Genome Initiative;
- include systems medicine as it is an important methodological approach for personalized medicine;
- include (personalised) prevention and nutrition;
- secure cross border access to diagnostic data linked to health data is at the core of the implementation of personalised medicine and prevention, reformation of the healthcare system, and continued understanding of rare diseases in Europe;
- provide evidence for the uptake of precision medicine solutions;
- new clinical trials design to facilitate personalised medicine;
- access to clinical data.

While 39% of the countries are undecided at this stage, the remaining 17 have expressed an interest to participate (AT, BE, CY, DE, EE, ES, HR, HU, IE, IT, LU, LV, MT, RO, SE, UL, NO).

The responses show that 67% of countries would participate with existing or planned national R&I programmes, 71% with governmental research organisations, and 63% with research infrastructures or regional R&I and/or smart specialisation strategies. 88% of countries expressed interest in having access to results produced in the context of the partnership.

[8] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Feedback on objectives and impacts

There is full agreement (100%) on the use of a partnership approach for personalised medicine, and broad agreement (89%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to a smaller degree (56%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate very good agreement with the proposed objectives at short, medium and long term (96% agree or strongly agree) and the expected scientific, economic and societal impacts at European level (92% agree or strongly agree). The vast majority of countries (96%) consider the impacts very relevant in the national context (Figure 23).

Around two third of the responses suggest that the proposed duration of the initiative is adequate.

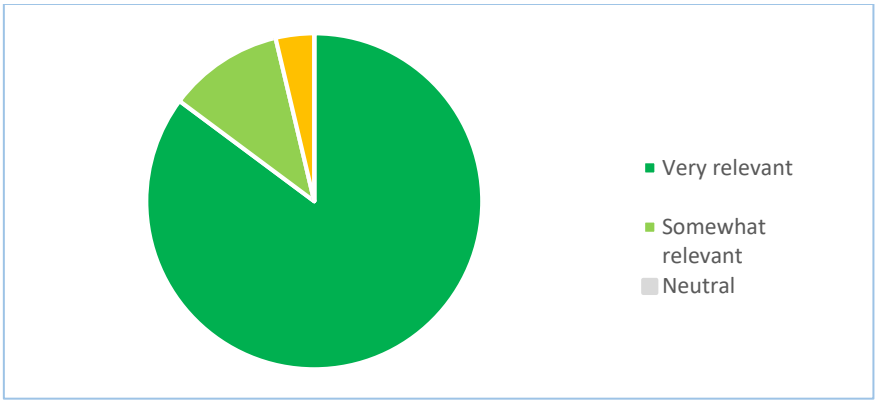

Figure 23: Feedback on the relevance of impacts at national level for a European partnership on personalised medicine.

Views on partners, contributions and implementation

The majority of responses (73%) agree on the type and composition of partners, and 14% disagree. A number of delegations underline the need to ensure a broad geographical coverage beyond the countries currently participating in related initiatives.

Many comments point towards the need to clearly define the scope in terms of types of organisations, and the role of research organisation.

At this stage, most countries (70%) would need more information on contributions and level of commitments expected from partners.

The proposed use of a co-funded partnerships is supported by 50%, while 39% would require additional information.

4.1.7 Rare Diseases

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm the relevance of the proposed European Partnership on Rare Diseases, with 67% considering it very relevant and 22% somewhat relevant for national policies and priorities. Equally there is a good confirmation of the overall relevance for research organisations, including universities (89% relevant), but significantly less for industry Figure 24).

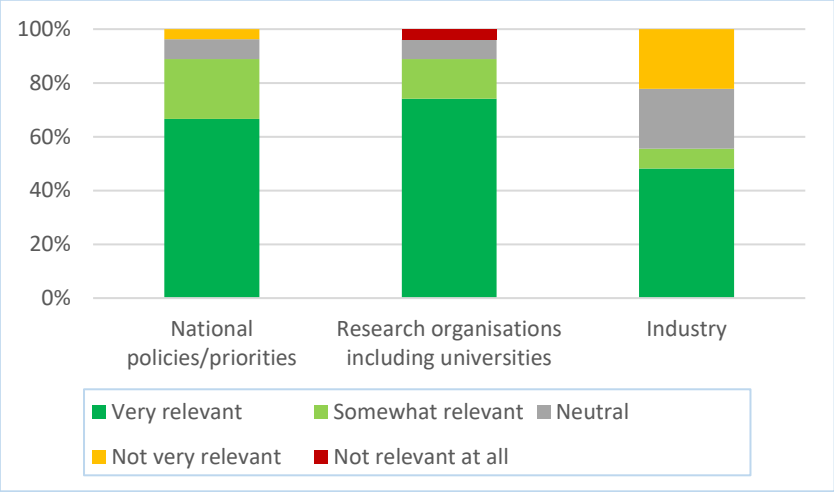

Figure 24: Relevance of the European Partnership on Rare Diseases in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed European Partnership on Rare Diseases, 25 countries (81 %) report to have elements in place in relation to the proposed rare diseases partnerships. National R&I strategies or plans were identified most frequently (70%, BE, CZ, DK, EE, ES, FR, FI, HR, EE, ES, HR, IE, IT, LU, LV, NL, PL, PT, RO, UK, IS, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (56%, AT, CZ, EE, ES, FR, FI, HR, EE, ES, HR, IE, LV, MT, NL, PL, PT, RO, UK,). Dedicated R&I funding programmes at national level have been identified by 52%.

Additional comments made are mostly confirming the positive view, relate to implementation issues of the current initiative and the need to ensure a good coherence with related partnerships.

17 countries (AT, BE, CY, CZ, DE, EE, ES, FI, FR, HU, IE, IT, LU, MT, RO, SE, UK) express their interest to participate, while 26% of the countries are undecided at this stage. 3 countries have at this stage expressed there is no national interest to participate (DK, LV, IS).

The responses show (Figure 25) that 42% of countries would participate with existing or planned national R&I programmes, 58% with governmental research organisations, and 62% with research infrastructures. 88% of countries expressed interest in having access to results produced in the context of the partnership.

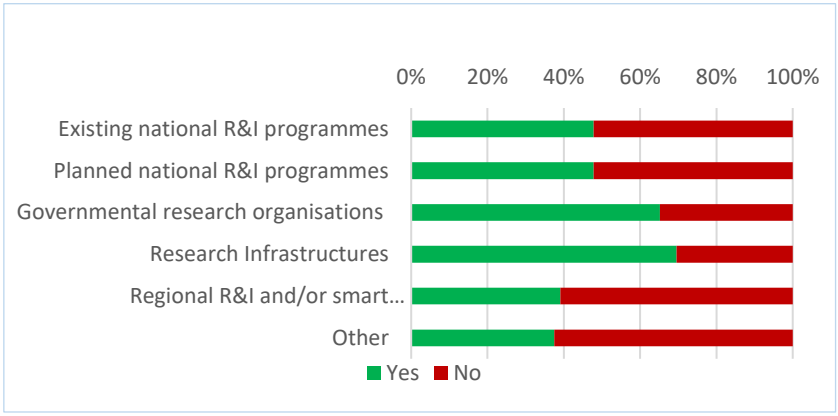

Figure 25: Possible participation and contribution to the European Partnerships on Rare Diseases from the 16 countries that have expressed an interest to participate.

Feedback on objectives and impacts

There is very good agreement (85% agree or strongly agree) on the use of a partnership approach for rare diseases, and broad agreement (77%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to a smaller degree (62%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate very good agreement with the proposed objectives at short, medium and long term (96% agree or strongly agree) and the expected scientific, economic and societal impacts at European level (84% agree or strongly agree). The vast majority of countries (96%) consider the impacts very relevant in the national context.

The majority (77%) of the responses suggest that the proposed duration of the initiative is adequate.

Views on partners, contributions and implementation

The majority of responses (72%) agree on the type and composition of partners, and 14% disagree.

At this stage, most countries (70%) would need more information on contributions and level of commitments expected from partners.

The proposed use of a co-funded partnerships is supported by 50%, while 39% would require additional information.

4.2 Digital, Industry and Space

4.2.1 High Performance Computing

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm strongly the relevance of the proposed European High Performance Computing (HPC) partnership, with 96% considering it relevant for national policies and priorities, and 96% for their research organisations, including universities. The proposed partnership is considered slightly less relevant for their industry by most countries, still overall 93% relevant, but significantly less reply with very relevant (Figure 26).

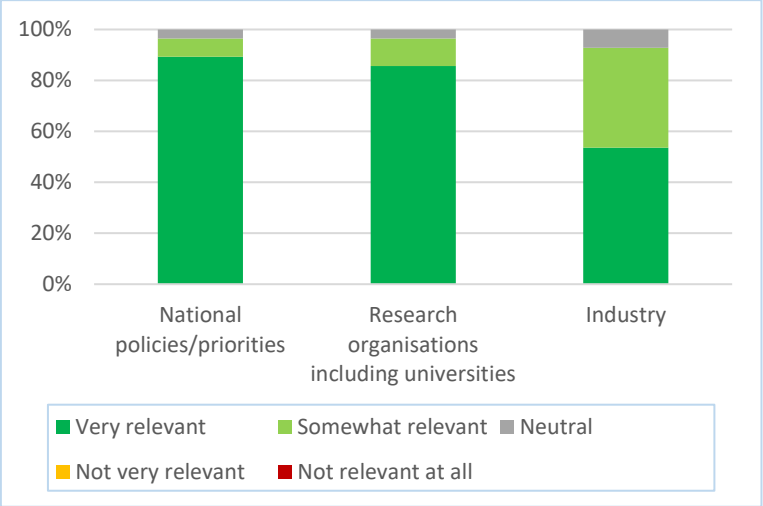

Figure 26: Relevance of the European High Performance Computing partnership in the national context

On the question of existing national / regional R&I strategies, plans and / or programmes in support of the proposed European High Performance Computing partnership, 26 countries (93%) report to have relevant elements in place. National R&I strategies or plans were identified most frequently (79%, AT, BE, CY, CZ, DK, EE, GR, ES, FI, FR, HR, HU, IE, IT, LU, LV, PL, PT, RO, SI, SK, NO), followed by dedicated R&I funding programmes or instruments (75%, AT, BE, CZ, DE, DK, GR, ES, FI, FR, HR, HU, IE, IT, LU, PL, PT, RO, SE, SI, SK, NO) and national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (70%, BE, CZ, DK, GR, ES, FI, FR, HR, HU, IE, LU, LV, PL, PT, SI, SK, NO).

Individual delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[9]:

- EuroHPC should primarily act as a service provider for the scientific community, for industry and society at large, addressing demonstrable computing needs;
- the national programmes / priorities and EuroHPC should be synchronized. Needs of users from academia should be taken into account, even if this is done via traditional calls under Horizon Europe, outside EuroHPC. The proposed partnership should have a global view on both aspects;
- it considered important that the support for further development of European supercomputer public infrastructure is maintained via traditional calls under Horizon Europe, outside EuroHPC;
- more emphasis on competence centre activities and how they will foster growth in new high added value industries;
- include the development of programming models, mathematical methods and algorithms. Furthermore, the application and software development for quantum computers is relevant for HPC and not currently mentioned;
- in terms of ambition, a full value chain of European HPC technologies should be aimed for;

[9] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- the Joint Undertaking should promote networking between possible HPC users (especially SMEs and start-ups);
- an effective communication campaign needs to be setup to inform the innovation ecosystem on the HPC available infrastructures and attract new users;
- international cooperation in this field will be of essence to achieve the objectives set to 2030.

The majority of countries (82%) are at this stage interested to participate, with only 4 countries undecided (CY, NL, UK, RO) and only IS excluding participation. Research infrastructures (92%) are identified as main potential partners or contributors. A number of countries state that their final decision to participate will be taken at a later stage.

Most countries (93%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (97%) on the use of a partnership approach in addressing this specific priority (Figure 27). There is broad agreement (89%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and (78%) agree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

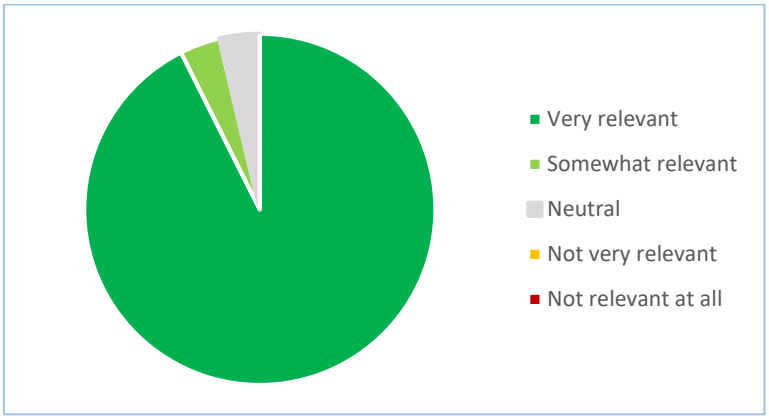

Figure 27: Relevance of a partnerships approach for High Performance Computing

Countries indicate good agreement with the proposed objectives at short, medium and long term (97%) and the expected scientific, economic and societal impacts at European level (96%), with the remaining ones being neutral. Slightly less (93%) consider the impacts relevant in the national context. There is good agreement (81%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced, while some countries mention again the importance of delivering a full value chain of European HPC technologies. Additional comments cover the following aspects:

- industry is expected to make substantial additional R&D efforts and investments;
- emphasis on the tight planned schedule, which is considered appropriate to reach the major objectives of the partnership;
- it is expected to take a long time to achieve the stated outcomes, especially towards the industry in less economically developed Member States;
- objectives and milestones need to be defined further, taking into account developments in Asia and other parts of the world, including feasibility assessment.

Views on partners, contributions and implementation

There is broad agreement (96%) between countries on the type and composition of partners, with some comments on the evolution of partners in time (e.g. industry to be more included later) as well as the importance of links and synergies with other EU programmes (Digital Europe Programme, Connecting Europe Facility) and other already running and foreseen partnerships.

At this stage most countries (59%) would need more information on contributions and level of commitments expected from partners, while 33% agree with the proposal.

Most countries (75%) agree with the proposed implementation mode as Article 187, with the rest expecting more details in order to be able to make an informed decision. Only one country proposes co-programmed as implementation mode.

4.2.2 Key Digital Technologies

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed Key Digital Technologies (KDT) partnership. 96% of member states consider it relevant for their national policies and priorities, as well as for their industry, research organisation and universities (Figure 28).

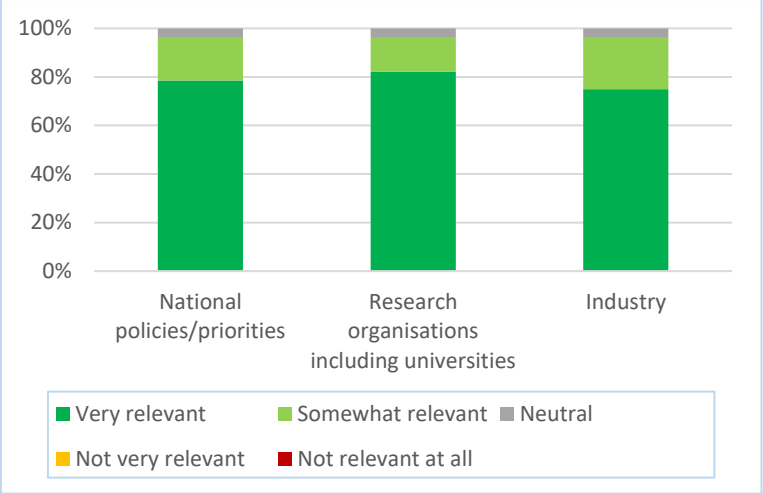

Figure 28: Relevance of the Key Digital Technologies partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Key Digital Technologies partnership, 27 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (82%, AT, CY, CZ, DE, DK, EE, ES, FI, FR, HR, HU, IE, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (81%, AT, BE, CZ, DK, EE, GR, ES, FI, FR, HR, HU, IE, IT, LV, PL, PT, RO, SE, SI, UK, NO) and regional R&I and/or smart specialisation strategies (75%, AT, BE, CY, CZ, DE, DK, GR, ES, FR, HR, HU, IE, LV, MT, PL, PT, RO, SE, SI, SK, UK).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[10]:

- Ensure high level of participation of impact on SMEs;
- Include relevance of KDT to the innovative high-tech products and services that are being increasingly introduced by EU start-ups;
- Clarify synergies and boundaries with related initiatives and partnerships (e.g. on AI, mobility, photonics, smart transportation and measurements, HPC, Cybersecurity, 5G and Made in Europe);
- Clarify the scope: whether the focus is digital systems and their manufacturing processes or the electronics sector, including end users;
- Consider extending the scope by including a broader range of key digital technologies and software;
- Ensure attractive conditions for the participation of academia and Research Technology Organisations.

The majority of countries (68%) are at this stage interested to participate, with 8 countries undecided (CY, DK, EE, EL, HR, LU, SI, UK) and only IS excluding participation. Existing national R&I programmes and governmental research organisations (both at 78%) are identified as main potential partners or contributors. A number of countries (CY, DK, PL) state that their final decision to participate will be taken at a later stage. Two delegations stress the importance of representation of Member States in the partnership.

Most countries (96%) expressed interest in having access to results produced in the context of the partnership.

[10] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Feedback on objectives and impacts

Overall there is a strong agreement (96%) on the use of a partnership approach in addressing this specific priority. There is broad agreement (82%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to lesser degree (59%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate good agreement with the proposed objectives at short, medium and long term (96%) and the expected scientific, economic and societal impacts at European level (96%), with the remaining ones being neutral. Slightly less (89%) consider the impacts relevant in the national context. There is also good agreement (74%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address the following aspects:

- Ensure strong expected impact also beyond automotive on the rapidly developing domain of various mobile unmanned and autonomous systems;
- Need to keep the partnership open and provide incentives to industry for trying new solutions, methods and technologies (instead of incrementally improved solutions);
- Important to allocate sufficient budget for embedded software and Innovation Actions;
- A number of delegation comment critical on the proposed integration of certain photonics activities, and request to limit this to those that require a very strong integration with electronic devices to avoid duplication;
- Need to ensure feasibility of the proposed blending of various funding streams.

Views on partners, contributions and implementation

There is broad agreement (88%) between countries on the type and composition of partners, with comments (DE, UK) on the need to adapt the governance to the new type of partners, and the need to include academic partners. Pilot projects with industries are important, and there is a need to focus budgets on calls that are relevant for national strategies.

At this stage most countries (59%) would need more information on contributions and level of commitments expected from partners, while 29% agree with the proposal. The feedback suggests that more clarity is needed on the central management of financial contributions, and its implications (e.g. to country's decision making ability). A number of countries are not convinced that the tri-partite funding model is ideal for this partnership. Some delegations consider that low TRL projects should be funded under Horizon Europe and should not require national funding as the scale of those projects does not justify the additional "red-tape" for national participants. Conversely, one country suggests the partnership should offer support to smaller, concretely focused projects in addition to larger, broad-based projects with many partners. It is important to set up a clearer methodology to calculate the contributions from industrial partners, both for the funded proposals and for the administrative costs.

The majority of countries (59%) agree with the proposed implementation mode as Article 187, with 41% expecting more details in order to be able to make an informed decision. Two delegations propose (with another one being supportive if it facilitates implementation) co-programmed as implementation mode. Two delegations propose to continue this partnership without Member State funding, while others underline that involvement of Member States is important.

4.2.3 Smart Networks and Services

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed Smart Networks and Services partnership. Almost all (96%, with more than 80% very relevant) underline its relevance for national policies and priorities, for their research organisations, including universities, as well as for industry (Figure 29).

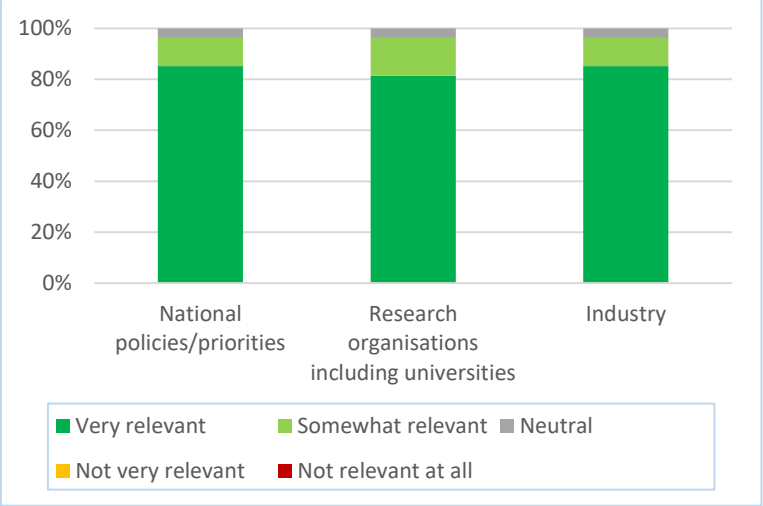

Figure 29: Relevance of the Smart Networks and Services partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Smart Networks and Services partnership, 25 countries report to have relevant elements in place. National economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation were identified most frequently (88%, AT, BE, CZ, DK, EE, GR, ES, FI, FR, HR, HU, IE, IT, LU, LV, NL, PL, PT, RO, SE, SI, UK, NO), followed by national R&I strategy and/or plan (67% AT, CY, CZ, ES, FI, FR, HR, IE, LU, LV, PL, PT, RO, SE, SI, UK, NO) and regional R&I and/or smart specialisation strategies (67%, AT, BE, CY, CZ, GR, FR, HR, HU, IE, LU, LV, MT, NL, PL, PT, RO, SE, SI).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[11]:

- Include aspects related to standardisation (and related bodies), since interoperability of the development of smart networks could be a technological barrier for smooth services deployment;
- Provide support to the satellite segment, the light fidelity (LiFi) technology and the cross-border aspects in the Smart Network and Services;
- Ensure links and alignment with relevant policies, initiatives and partnerships in the mobility domain;
- Ensure the strong involvement of national competences and strengths in the area of Smart Networks and Services;
- Ensure actions that enforce the cooperation with the relevant industries in the areas of Industry 4.0 and Automotive (Industrial Communications);
- Ensure that ethical issues are appropriately addressed;
- Include 5G-based rural connectivity solutions as an area of emphasis.

The majority of countries (52%) are at this stage interested to participate, with 12 countries undecided (BE, CY, CZ, DK, GR, HR, NL, PT, RO, SI, UK, NO) and only IS excluding participation. Governmental research organisations (78%) are identified as main potential partners or contributors. Some of countries (CY, DE, PL) state that their final decision to participate will be taken at a later stage. Some delegations stress the importance of the involvement of Member States in the partnership.

All countries expressed interest in having access to results produced in the context of the partnership.

[11] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Feedback on objectives and impacts

Overall there is agreement (88%) on the use of a partnership approach in addressing this specific priority. Most responses (81%) support that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to lesser degree (54%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate good agreement with the proposed objectives at short, medium and long term (96%) and the expected scientific, economic and societal impacts at European level (96%), with the remaining ones being neutral. 96% consider the impacts relevant in the national context. There is good agreement (77%) with the envisaged duration of the proposed partnership. Additional comments made by individual delegations, some of them fairly technical:

- Reinforce research on the new generation of networks and services;
- Consider how to include large-scale infrastructure deployment in the partnership;
- Important to create new value chains and ecosystems across sectors;
- Set more ambitious and SMART objectives;
- Ensure clear European added value in deployment efforts (e.g. 5G cross-border corridors);
- More focus on ethic-, legal and social issues;
- More focus on European technological sovereignty;

Views on partners, contributions and implementation

There is broad agreement (79%) between countries on the type and composition of partners. Member States should be included. Partners in the Area of Smart Farming ("Farming 4.0") might be necessary in order to cover more sectors connected to Smart Networks and Services. It is also important to include standardisation bodies, European and MS initiatives that can help coordinating the actions planned. Satellite operators should be included in this partnerships beyond just the 5G-IA and Networld2020. Early involvement of relevant stakeholders from verticals (such as mobility, energy, industry sectors) would strengthen the partnership.

At this stage the majority of countries (77%) would need more information on contributions and level of commitments expected from partners, while 12% agree with the proposal. 8% neither agree nor disagree and 4% of the surveyed countries disagree with the envisaged nature of contributions and level of commitments from partners. FR is not convinced that the tri-partite funding model is ideal for this partnership.

The majority of countries (58%) are expecting more details in order to be able to make an informed decision about the implementation mode. 27% of countries agree with the proposed implementation mode as Article 187, with 15% being against implementing the partnership based on Article 187 TFEU.

Several delegations propose to continue with the co-programmed implementation mode, while one is open to co-programmed implementation if it facilitates implementation. Synergies with CEF, Digital Europe and InvestEU do not to necessary require an institutionalised approach. Two delegations need more information to decide whether Article 187 is more suitable as an implementation mode than co-programmed. Several delegations do not see a need for Member State funding in the proposed partnership. Involvement of Member States is important.

4.2.4 AI, data and robotics

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed AI, data and robotics partnership. 96% consider it relevant for their research organisations, including universities, and 96% consider it relevant for national policies and priorities. The proposed partnership is considered relevant for their industry by 96% of the countries. (Figure 30)

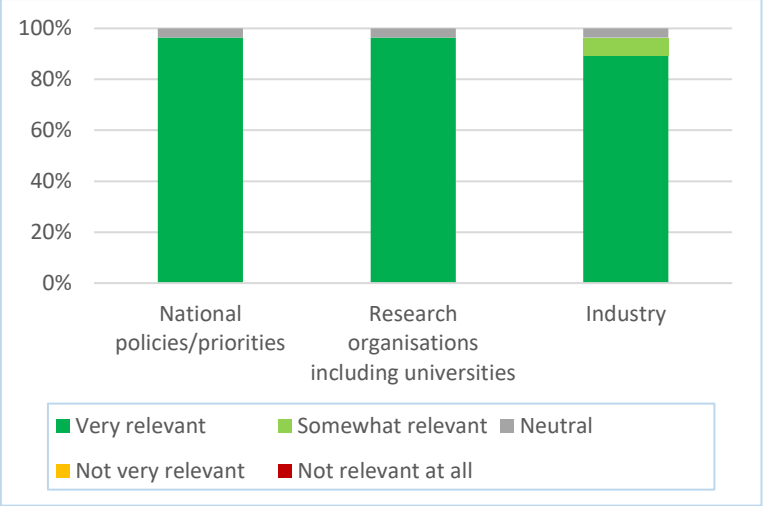

Figure 30: Relevance of the AI, data and robotics partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed AI, data and robotics partnership, 26 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (82%, AT, CY, CZ, DK, EE, ES, FI, FR, HR, HU, IE, IT, LU, LV, NL, PL, PT, RO, SE, SI, SK, UK, NO), with the same percentage as national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (82%, AT, BE, CZ, DK, EE, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, PL, PT, RO, SE, SI, UK, NO). Regional R&I and/or smart specialisation strategies (71%, AT, BE, CY, CZ, DK, GR, FR, HR, HU, IE, LU, LV, NL, PL, PT, RO, SE, SI, SK, UK) followed.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[12]:

- Ensure good coordination with actions at national level to identify challenges and define high level transnational priorities;
- Adapt the governance of the partnership to the quickly evolving field of Artificial Intelligence;
- Focus on a human centric AI approach (safe, ethical-by design AI, transparent, trustworthy);
- Consider societal and cultural factors;
- Include AI elements that will interact with the physical environment, such as driverless cars and drones;
- Ensure links to other initiatives (e.g. EU R&D Infrastructure for Advance Industrial Production);
- Topic is also relevant to the field of internal security.

The majority of countries (54%) are at this stage interested to participate, with 12 countries undecided (CY, CZ, DK, GR, HR, LU, PL, RO, SE, SI, UK, NO) and only IS excluding participation. Governmental research organisations (80%) are identified as main potential partners or contributors. Two countries (CY, DK) state that their final decision to participate will be taken at a later stage.

All countries expressed interest in having access to results produced in the context of the partnership.

[12] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Feedback on objectives and impacts

Overall there is a strong agreement (92%) on the use of a partnership approach in addressing this specific priority. There is broad agreement (85%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to lesser degree (48%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate good agreement with the proposed objectives at short, medium and long term (93%) and the expected scientific, economic and societal impacts at European level (96%). 96% consider the impacts relevant in the national context. There is good agreement (81%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address the following aspects:

- Emphasis on trusted AI and link between AI and robotics;
- Specify the proposed duration of partnership;
- Clarify the unique selling point of the partnership being partially publicly funded in the mostly privately funded international AI R&I field;
- Ensure links with relevant industries and sectors;
- Focus on applications in the energy field;
- Important to close the gap between EU and USA / China in terms of AI investments, engineering and dominant business ecosystems.

Views on partners, contributions and implementation

There is broad agreement (81%) between countries on the type and composition of partners. Academia, research organisations, relevant industry and Member States should be included. Roles of different stakeholders and links with other partnerships should be described in more detail.

At this stage most countries (74%) would need more information on contributions and level of commitments expected from partners, while 22% agree with the proposal. Three delegations would like to receive more information on what commitment is expected. Compelling reasons to persuade companies to share their data need to be further elaborated.

50% of countries expect more details in order to be able to make an informed decision, while 46% agree with the proposed implementation mode as co-programmed European Partnership.

4.2.5 Photonics Europe

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm strongly the relevance of the proposed Photonics Europe partnership, with 93% for their research organisations, including universities, and 77% considering it relevant for national policies and priorities. The proposed partnership is considered relevant by 77% of the countries for their industry. (Figure 31)

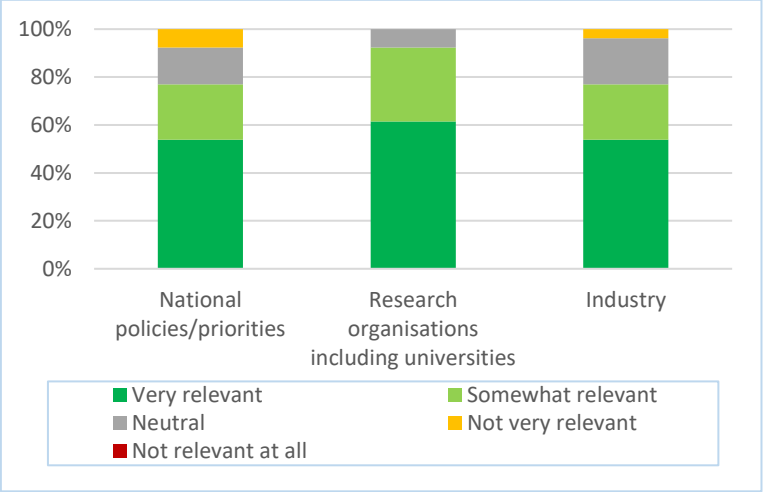

Figure 31: Relevance of the Photonics Europe partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Photonics Europe partnership, 25 countries report to have relevant elements in place. Regional R&I and/or smart specialisation strategies were identified most frequently (63%, AT, BE, CY, CZ, DE, GR, FI, FR, HR, HU, IE, LV, NL, PL, PT, RO, SE), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (62%, AT, BE, DE, DK, EE, ES, FI, FR, HR, IE, IT, LV, NL, PL, RO, UK) and national R&I strategy and/or plan (59%, AT, CY, CZ, DE, EE, ES, FI, FR, HR, IE, LV, NL, PL, RO, SI, UK).

Many delegations stress notably that for the success of the partnership all photonic domains (especially integrated photonics) should be included because micro integration of photonics will enable completely new applications in areas, such as life sciences, mobility, smart cities etc. Other aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities are e.g.[13]:

- Exploit existing infrastructure such as the Extreme Light Infrastructure Attosecond Light Pulse Source;
- Support EU wide collaboration at medium TRL level;
- Address talent shortages in the photonics industry;
- Ensure cooperation and synergies with Key Digital Technologies and Smart Networks and Services initiatives.

44% of countries are at this stage interested to participate, with 12 countries undecided (CY, CZ, DK, GR, HR, HU, LU, LV, PT, RO, SI, UK) while SE, IS and NO have expressed no national interest to participate. Research infrastructures (78%) are identified as main potential partners or contributors. Two countries (CY, PL) state that their final decision to participate will be taken at a later stage. The involvement of Member States in the partnership is emphasised, although one delegation also states that it does not support the idea of Member State financial contribution.

[13] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Most countries (93%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is agreement (80%) on the use of a partnership approach in addressing this specific priority. There is agreement (80%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and half of the countries neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape (Figure 32).

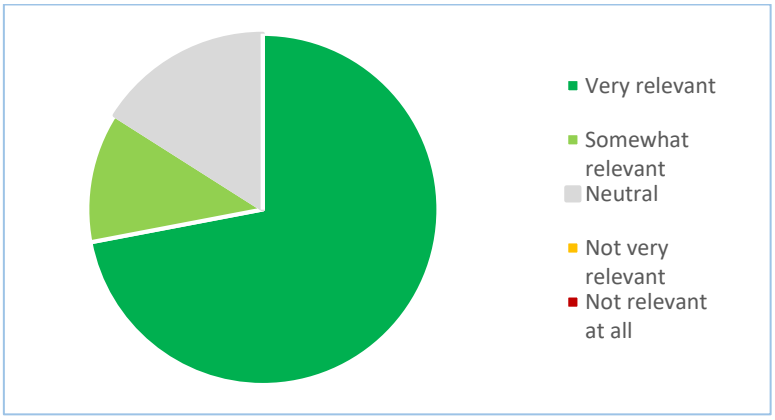

Figure 32: European Photonics Partnerships and relevance of its expected scientific, economic and societal impacts at national level

Countries indicate good agreement with the proposed objectives at short, medium and long term (92%) and the expected scientific, economic and societal impacts at European level (92%), with the remaining ones being neutral. Slightly less (84%) consider the impacts relevant in the national context. There is good agreement (84%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address reiterate points made under other aspects that could be reinforced in the proposal. In addition the following points are made:

- The duration should be linked to the timeframe to reach proposed goals;
- Adapted partner composition is needed at different Technology Readiness Levels;

Views on partners, contributions and implementation

There is agreement (67%) between countries on the type and composition of partners. Some delegations stress the need to include a broad range of stakeholders such as: Member States, end-users and civil society. Openness and transparency are key.

At this stage, most countries (67%) would need more information on contributions and level of commitments expected from partners.

Most countries (58%) agree with the proposed implementation mode (co-programmed) for Photonics Europe, while 38% have currently insufficient information to assess.

4.2.6 Clean Steel - Low Carbon Steelmaking

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed Clean Steal – Low Carbon Steelmaking partnership. 71% consider it relevant for national policies and priorities, and 70% consider it relevant for their research organisations, including universities. The proposed partnership is considered relevant for their industry by 65% of the countries (Figure 33).

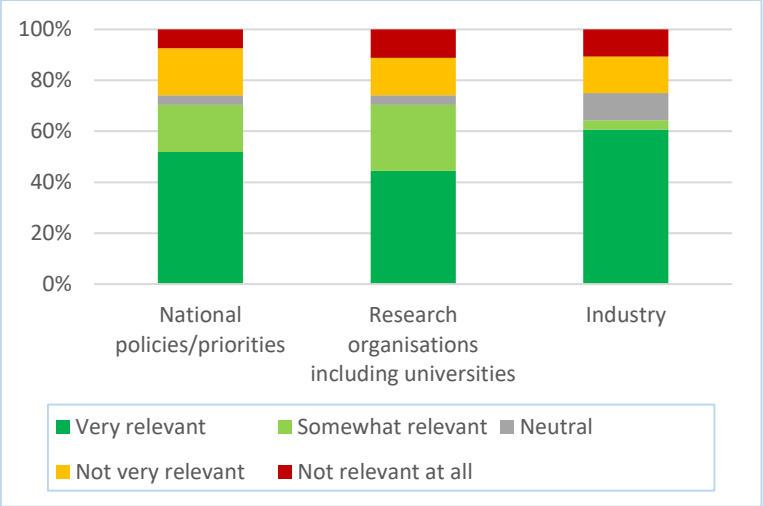

Figure 33: Relevance of the Clean Steal – Low Carbon Steelmaking partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Clean Steal – Low Carbon Steelmaking partnership, 19 countries report to have relevant elements in place. National economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation were identified most frequently (67%, AT, BE, CZ, DE, ES, FI, FR, HR, IT, LU, LV, NL, PL, RO, SE, SI, SK, UK), followed by regional R&I and/or smart specialisation strategies (54%, AT, CZ, GR, ES, FI, FR, HR, LU, LV, PL, RO, SE, SI, SK, UK) and national R&I strategies or plans (50%, AT, CZ, DE, ES, FI, FR, HR, LV, NL, PL, RO, SE, SK, UK).

A number of delegation call for addressing Circular Industries and Clean Steel in a single partnership, as is the case today in the existing partnership SPIRE where steel is included. The strength of SPIRE is perceived in the fact that the industry can focus on common challenges and find common solutions, which can then be used by many sectors. Many of the solutions for a climate neutral industry are common across sectors and would benefit from being addressed within one partnership.

Delegations identified further of aspects that could be reinforced in the proposal a partnership that would increase its relevance for national priorities, e.g.[14]:

- Encourage SME participation;
- Ensure synergies with other related partnerships (e.g. Clean Hydrogen);
- Ensure smooth technology transfer to other sectors;
- Integrate disruptive technologies, such as renewable sources of energy;
- Consider including carbon capture technologies;
- Consider investigating less CO_2 intensive corrosion protection measures;
- Improve energy and material efficiency of downstream processing of steel.

Half of the countries are at this stage undecided (CZ, GR, ES, HR, HU, IE, MT, NL, PL, RO, SE, SI, UK, NO), with 29% of the countries interested to participate and (CY, DK, EE, LV, PT, IS) excluding participation. Research Infrastructures (63%) are identified as main potential partners or contributors. Member State representation in the partnership is important.

Most countries (86%) expressed interest in having access to results produced in the context of the partnership.

[14] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Feedback on objectives and impacts

Overall there is agreement (65%) on the use of a partnership approach in addressing this specific priority. There is agreement (71%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens. However only 39% agree that it would contribute to improving the coherence and synergies within the EU R&I landscape (with 67% neither agree nor disagree).

Countries indicate agreement with the proposed objectives at short, medium and long term (73%) and the expected scientific, economic and societal impacts at European level (78%), with the remaining ones being neutral. Slightly less (72%) consider the impacts relevant in the national context. There is good agreement (77%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address the following aspects:

- Scientific impact should be better stated;
- Need to ensure transfer of knowledge between universities, research institutions and the general public and companies;
- Include information about expected duration;
- Focus on demonstration activities and links with industrial demonstration plants (e.g. ETS – Fund for Innovation);
- Net zero emissions and the possibility of electrification should be pursued;
- Ensure exploitation of outputs from SPIRE cPPP.

Views on partners, contributions and implementation

There is agreement (65%) between countries on the type and composition of partners. A number of delegations stress the need to include a broad range of stakeholders such as: Member States, relevant Research Technology Organisations, universities, SMEs and associations such as the European Steel Association.

At this stage most countries (56%) would need more information on contributions and level of commitments expected from partners, while 26% agree with the proposal. Some delegations mention the importance of the steel industry commitment in the partnership.

Half the countries expect more details in order to be able to make an informed decision, while 43% agree with the proposed Co-programmed implementation mode. The suitable implementation mode depends on the amount of commitment from the steel industry.

4.2.7 European Metrology

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed European Metrology partnership. 89% consider it relevant for their research organisations, including universities, and 86% consider it relevant for national policies and priorities. The proposed partnership is considered relevant for their industry by 89% of the countries. (Figure 34)

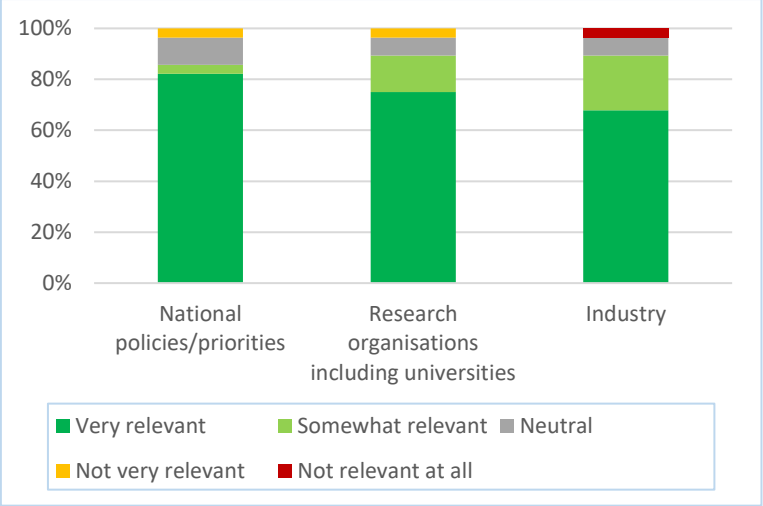

Figure 34: Relevance of the European Metrology partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Metrology partnership, 27 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (79%, AT, CY, CZ, DE, DK, EE, ES, FI, FR, HR, IE, IT, LV, NL, PL, PT, RO, SE, SI, UK, IS, NO), followed by national economic / sectoral strategy and/or plan with a strong emphasis on research and / or innovation (60%%, AT, BE, DE, DK, EE, ES, FI, FR, HR, LV, NL, RO, SE, SI, UK, NO) and dedicated R&I funding programme or instrument (47%, BE, CY, CZ, DE, DK, ES, FI, FR, RO, SI, UK).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[15]:

- A number of delegations stress the importance of EU leadership in Metrology for their economic growth, competitiveness and industry and as a key-enabler for innovation;
- Several delegations mention the need for continued strong support for end-users and stakeholders;
- Long-term goals should also include metrological solutions in response to present and anticipated needs associated to regulation;
- Increased focus on digitalisation developments and addressing smart specialisation needs would assist to bridge R&D activities with entrepreneurship and innovations;
- Need to ensure links with other partnerships such as Key Digital Technologies and Photonics Europe;

The majority of countries (61%) are at this stage interested to participate, with 10 countries undecided (DK, GR, HR, LU, LV, MT, RO, SE, SK, IS) and only CY excluding participation. Governmental research organisations (85%) are identified as main potential partners or contributors. (Figure 35)

[15] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

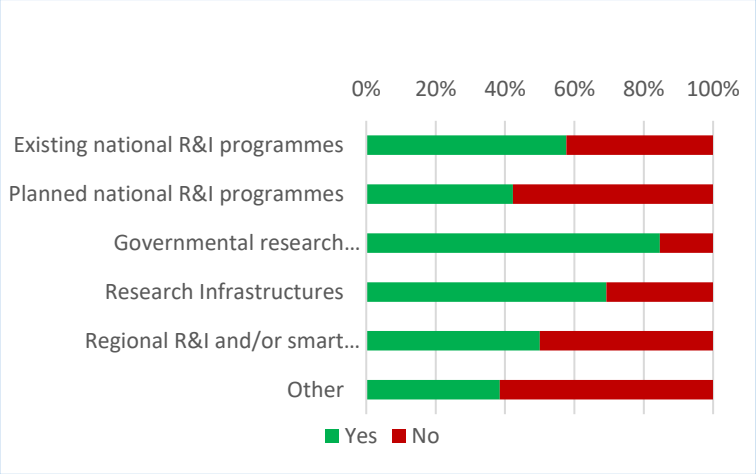

Figure 35: National interest to participate with the existing programmes in the field of Metrology

Most countries (96%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (96%) on the use of a partnership approach in addressing this specific priority. There is broad agreement (88%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to lesser degree (67%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

There is unanimous agreement with the proposed objectives at short, medium and long term and the expected scientific, economic and societal impacts at European level. 96% consider the impacts relevant in the national context. There is good agreement (96%) with the envisaged duration of the proposed partnership. The development of a sustainable, coordinated European metrology network is perceived as a significant step beyond the objectives of the predecessors. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional individual comments address the following aspects:

- Ensure inclusiveness towards all Member States and openness to other participants than National Metrology Institutes;
- Increase the transfer of results and impact to the economy;
- Specify the end date / phasing out;
- Need to broaden the objectives.

Views on partners, contributions and implementation

There is broad agreement (92%) between countries on the type and composition of partners. External partnership is welcome as long as the National Metrology Institutes remain the main drivers of projects. Industry and academia participation is supported.

At this stage most countries (67%) would need more information on contributions and level of commitments expected from partners, while 22% agree with the proposal. Contributions up to the current level are deemed acceptable. Networks should be open to international collaboration.

The majority of countries (63%) agree with the proposed implementation mode as Article 185, with 37% expecting more details in order to be able to make an informed decision. A number of delegations mention the well-functioning predecessors as good example to support the proposed implementation mode.

4.2.8 Made in Europe

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed Made in Europe partnership. 96% consider it relevant for national policies and priorities, and 93% consider it relevant for their research organisations. The proposed partnership is considered relevant for their industry by 93% of the countries. (Figure 36)

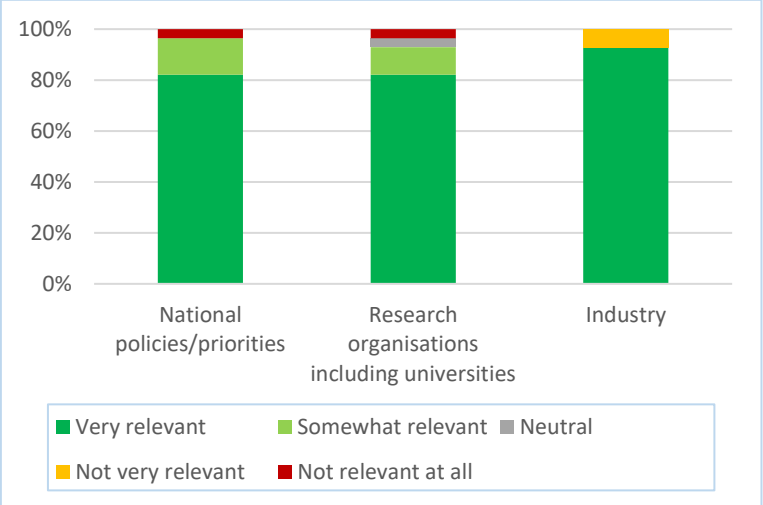

Figure 36: Relevance of the Made in Europe partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Made in Europe partnership, 27 countries report to have relevant elements in place. National economic / sectoral strategy and/or plan with a strong emphasis on research and / or innovation (85%, AT, BE, DK, EE, GR, ES, FI, FR, HR, HU, IE, IT, LU, LV, NL, PL, PT, RO, SE, SI, SK, UK, NO) were identified most frequently, followed by national R&I strategies or plans were identified most frequently (79%, AT, CY, CZ, DE, EE, ES, FR, HR, HU, IE, IT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK) at the same level with regional R&I and/or smart specialisation strategies (79%, AT, BE, CY, CZ, GR, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, PL, PT, RO, SE, SI, SK, UK).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[16]:

- Ensure and simplify the participation of SMEs;
- Address the design for recycling and re-manufacturing. Include human-centred design, development, and implementation of new technologies and support the creation of jobs;
- Ensure synergies with national / regional agents in the manufacturing innovation field, as well as with the existing Framework Programme projects;
- Include consumer-centric business models;
- Include circular Economy aspects;
- Focus on the supplier industry.

Half of the countries are at this stage interested to participate, with 11 countries undecided (CZ, DK, GR, HR, NL, PL, RO, SE, SI, UK, NO) and with (CY, DE, IS) excluding participation. Research infrastructures (80%) are identified as main potential partners or contributors.

All countries expressed interest in having access to results produced in the context of the partnership.

[16] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Feedback on objectives and impacts

There is unanimous agreement on the use of a partnership approach in addressing this specific priority. There is broad agreement (96%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens. However, 52% of the countries neither agree nor disagree (with 44% agreeing), that it would contribute to improving the coherence and synergies within the EU R&I landscape.

There is broad agreement (96%) between countries with the proposed objectives at short, medium and long term and the expected scientific, economic and societal impacts at European level (96%, with only 19% strongly agree). 96% consider the impacts relevant in the national context. There is good agreement (96%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address the following aspects:

- Objectives should include climate neutral industry;
- Scientific impact should be included;
- The establishment of cross-cluster connections should be clarified;
- Circular economy objective could be enlarged to Sustainability, including enhanced resource efficiency.

Views on partners, contributions and implementation

There is broad agreement (83%) between countries on the type and composition of partners. Some delegation stress the importance of openness and transparency. Priority for access to the partnership should be given to newcomers. Participation of industry (including manufacturing companies), and industry 4.0 partners should be encouraged. Public partners (particularly at national and regional level) should be included to improve the coherence of the initiative. Existing, relevant European Technology Platforms (ETPs) should be included in the partnership.

At this stage most countries (79%) would need more information on contributions and level of commitments expected from partners, while 25% agree with the proposal. Contributions from other partners than industry should be detailed. Industry participation should be kept at one third of the funded partners to ensure successful calls for proposals (in terms of number of proposal submitted).

The majority of countries (57%) agree with the proposed implementation mode as co-funded European Partnership, with 43% expecting more details in order to be able to make an informed decision.

4.2.9 Carbon Neutral and Circular Industry

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed Carbon Neutral and Circular Industry partnership. 96% consider it relevant for national policies and priorities, and 78% consider it relevant for their industry. The proposed partnership is considered relevant for their research organisations including universities by 74% of the countries (Figure 37).

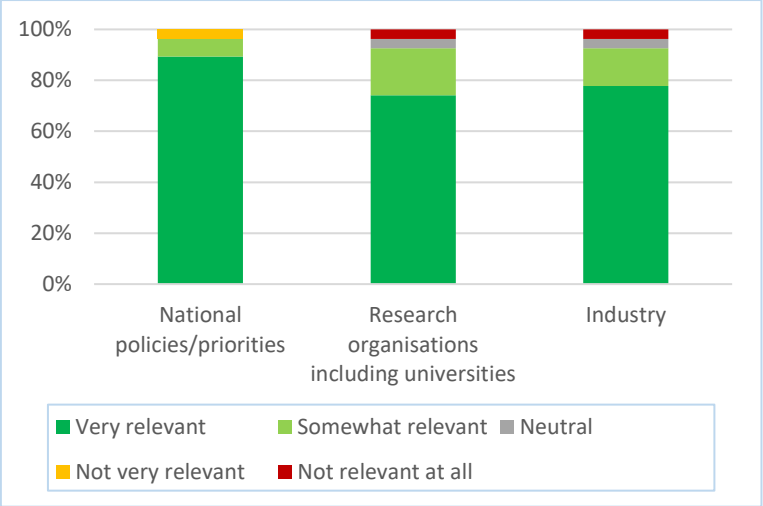

Figure 37: Relevance of the Carbon Neutral and Circular Industry partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Carbon Neutral and Circular Industry, 26 countries report to have relevant elements in place. National economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation were identified most frequently (81%, AT, BE, DE, DK, EE, ES, FI, FR, HR, IE, IT, LU, LV, NL, PL, PT, SE, SI, SK, UK, NO), followed by national R&I strategies or plans (79%, AT, CZ, DE, DK, EE, ES, FI, FR, HR, IE, LU, LV, NL, PL, PT, RO, SE, SI, SK, UK, IS, NO), and dedicated R&I funding programme or instrument (61%, AT, BE, DE, ES, FI, FR, HR, IE, LU, LV, PL, PT, RO, SE, SI, SK, UK).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[17]:

- Avoid overlaps with other proposed partnership (Clean Steel – Low Carbon Steelmaking);
- Merge the proposed Carbon Neutral and Circular Industry partnership with Made in Europe (supported by two delegations);
- Focus on sustainable and secure supply of raw materials;
- Include more ambitious performance targets and details on outcomes;
- Involvement of the consumer side (industrial and civil) should be envisaged;
- Integrate not only industry but also services;
- Extend the partnership to all energy intensive industries;
- Include academic sector (universities and research institutes);
- Ensure simple access for SMEs;
- Focus on increasing product durability and reliability;

57% of the countries are at this stage undecided (AT, CZ, DK, GR, HR, HU, IE, LV, NL, PL, RO, SE, SI, UK, IS, NO), with 39% of the countries interested to participate and CY excluding participation. Existing national R&I programmes, planned national R&I programmes and Regional R&I and/or smart specialisation strategies (all three categories with 63%) are identified as main potential partners or contributors. Co-creation during the setup phase of the partnership is key. More detail on the governance structure is needed. The possibility to use structural funds as national contribution should be explored.

[17] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Most countries (96%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is agreement (88%) on the use of a partnership approach in addressing this specific priority. There is agreement (89%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens. 59% agree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

There is unanimous agreement with the proposed objectives at short, medium and long term and the expected scientific, economic and societal impacts at European level (with less strongly agree, 15%). All countries consider the impacts relevant in the national context. There is good agreement (96%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address the following aspects:

- Consider outputs from and avoid duplication with other EU funded initiatives in the field (SUNRISE and Energy-X);
- Include climate neutral industry, as well as air and water pollution reduction to the objectives and expected impact;
- Support a long-term cooperation with mineral-rich countries and technologically advanced countries;
- Include net zero and negative emissions and the work on the possibility of electrification;
- Include more information on the private investments aspects.

Views on partners, contributions and implementation

There is broad agreement (88%) between countries on the type and composition of partners. Several delegations stress the need to include a broad range of stakeholders such as: academic sector (including universities) and relevant Research Technology Organisations. Member States and relevant associations (e.g. European Circular Economy Research Alliance) should be included. Openness and transparency are seen as being of key importance.

At this stage most countries (78%) would need more information on contributions and level of commitments expected from partners, while 15% agree with the proposal. More information is needed on the private investment aspects. Industry participation should be kept at one third of the funded partners to ensure successful calls for proposals (in terms of number of proposal submitted).

The majority of countries (64%) agree with the proposed co-programmed implementation mode, with the rest expecting more details in order to be able to make an informed decision.

4.2.10 Global competitive space systems

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed Global competitive space systems partnership. 89% consider it relevant for their national policies and priorities, and 85% consider it relevant for their research organisations, including universities. The proposed partnership is considered relevant for their industry by 85% of the countries. (Figure 38)

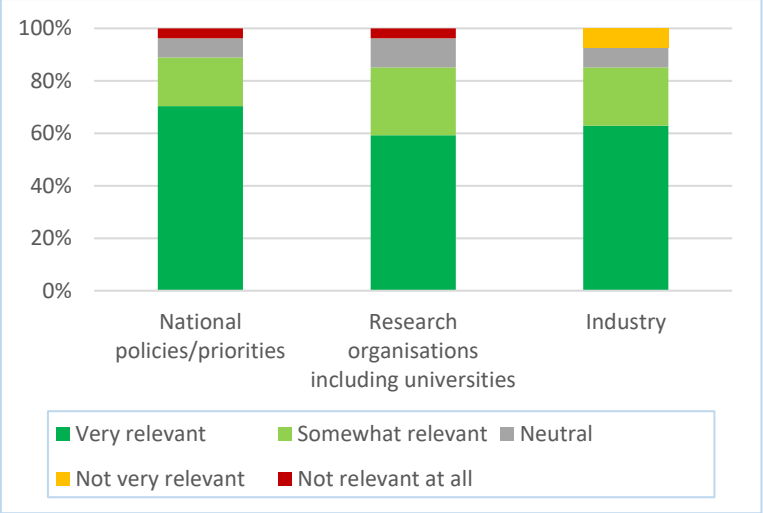

Figure 38: Relevance of the Global competitive space systems partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed Key Digital Technologies partnership, 26 countries report to have relevant elements in place. National economic / sectoral strategy and/or plan with a strong emphasis on research and / or innovation were identified most frequently (85%, AT, BE, CZ, DE, EE, GR, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, NL, PL, PT, RO, SE, UK, NO), followed by national R&I strategies or plans (78%, AT, CY, CZ, DE, DK, EE, ES, FI, FR, HR, IE, IT, LU, LV, NL, PL, PT, RO, SE, UK, NO) and dedicated R&I funding programme or instrument (70%, AT, BE, CZ, DE, EE, FI, FR, HR, IE, IT, LU, MT, NL, PL, RO, SE, SI, UK, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[18]:

- Ensure the involvement and equal access to the partnership for actors/ companies from all EU countries, including from small countries,
- Ensure high level of openness and inclusiveness in the development of the roadmaps, notably by clearly defining the core actors involved;
- Ensure high level of participation of SMEs
- Define the roles of the national space agencies and Member States in the partnership;
- Include the objective of maintaining independent access to space;
- Ensure the implementation of ambitious demonstration projects, and ensure access to venture capital;
- optimise coordination and avoid duplication with the activities of the European Space Agency (ESA), including by making use of roadmaps already established by ESA;
- Focus on small to micro launchers and satellites, and the development of low TRLs for disruptive or innovative ideas in these fields;
- Ensure cooperation and links with other parts of Horizon Europe, specifically Key Enabling Technologies and research infrastructures under pillar 1, and EIC under pillar 3;

67% of the countries are at this stage undecided (AT, BE, CY, CZ, DK, GR, ES, FI, HR, HU, IT, LU, LV, MT, NL, PL, SK, NO), with 30% of the countries interested to participate and IS excluding participation. Regional R&I and/or smart specialisation strategies (68%) are identified as main potential partners or contributors. A number of delegations stress the importance of national space

[18] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

agencies, especially for input to the road-mapping exercise. The possibility to use structural funds as national contribution should be explored. Ensure favourable co-funding conditions for SMEs to attract their participation. The call of interest to join the partnership could be announced on Funding & tender opportunities portal.

Most countries (96%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is agreement (69%) on the use of a partnership approach in addressing this specific priority. There is agreement (61%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and half of the countries agree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

There is broad agreement (84%) with the proposed objectives at short, medium and long term. There is agreement (66%) with the expected scientific, economic and societal impacts at European level. 81% consider the impacts relevant in the national context. There is agreement (65%) with the envisaged duration of the proposed partnership, with 35% considering there is insufficient information to assess this at the moment. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address the following aspects:

- A number of delegations state that more detailed objectives and impacts are needed;
- Expected impacts should also include any new technologies that help decrease the environmental impact of launch systems, or decrease the time to launch (TTL);
- Ensure that the R&D strategic and scientific needs of Member States are addressed;

Views on partners, contributions and implementation

There is agreement (78%) between countries on the type and composition of partners. A number of delegations note that the role of the Member States and Space agencies needs to be further elaborated. Two delegations express the need to pay particular attention to innovative SMEs in the field. The partnership should also try to attract partners from Member States without a space programme. Satellite operators should be included.

At this stage most countries (81%) would need more information on contributions and level of commitments expected from partners, while 12% agree with the proposal. Some delegations stress the importance of having the development of roadmaps led by the Commission and Space agencies. The roles of different types of partners need to be elaborated in more detail. What incentives will be used to ensure industry contributions?

Half the countries expect more details in order to be able to make an informed decision, while 46% agree with the proposed implementation mode as co-programmed European Partnership. Two delegations would prefer open calls under the Horizon Europe work programme to a partnership. There is a need to set-up governance in such a way that Member States, Space Agencies, but also the Small New Space companies could be involved.

4.3 Climate, energy and mobility

4.3.1 Transforming Europe's rail system

Relevance and positioning in a national context

The feedback from countries suggest that the proposed European Partnership for Transforming Europe's rail system is to a large extent relevant, with 64% considering it relevant for their national policies and priorities and for their research organisations, including universities, and slightly less (61%) consider it very relevant or somewhat relevant for their industry.

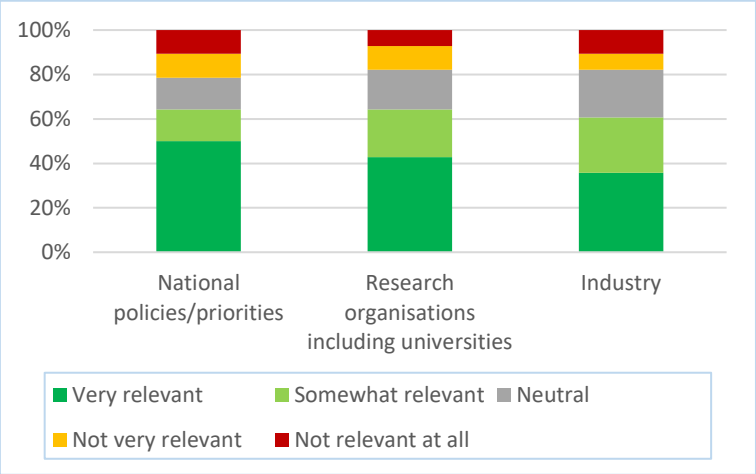

Figure 39: Relevance of the European Partnership for Transforming Europe's rail system in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed Partnership, 18 countries report to have relevant elements in place. National economic, sectoral strategies and/or plan with a strong emphasis on research and/or innovation (57%, AT, DE, ES, FR, HR, IT, LV, NL, PL, RO, SE, SI, SK, UK, NO) and R&I strategies or plans (54%, AR, CZ, DE, ES, FR, HR, IT, LV, NL, PL, RO, SE, SI, UK, NO) were identified most frequently. Countries reported to a lesser extent to having dedicated R&I funding programmes or instruments (32%, AT, CZ, DE, ES, HR, LUX, PL, SE, UK, NO) and regional R&I and/or smart specialisation strategies (25 %, ES, FR, HR, PL, RO, SE, SI). 5 countries (CZ, FR, HR, IE, SE) reported other policies/ programmes.

Delegations identified a number of aspects that could be reinforced in the proposal that would increase its relevance for national priorities.[19] Notably, countries from Central and Eastern Europe stress the need to focus more on deployment and piloting to transform the results of the partnership into real world solutions, and in this context also to ensure synergies with related policies, and investments at national and EU level (e.g. CEF, Cohesion Funds). Other comments suggest the need to adjust the scope of the proposed partnership and focus more on integrating alternative energy solutions (hydrogen, batteries), digitalisation of the existing system, robotisation for maintenance, ensuring a holistic approach to the railways system including infrastructure and maintenance, and developing user-centred innovations.

The majority of countries (57%) are undecided concerning their interest to participate as a partner. At this stage 8 countries (CZ, DE, ES, IT, NL, PL, SE, UK) express an interest to join as a partner, and 3 countries (CY, EE, IS) express there is no national interest to participate.

Most frequently identified possible elements for participation are existing national R&I programmes (39%), 32% with planned R&I programmes, followed by governmental research organisations (36%), research infrastructures (29%) and regional R&I and/or smart specialisation strategies (29%). The additional comments on the interest to join indicate that there is need to clarify the role of the public in this partnership, and expectation to ensure alignment with national policies, programmes and investments in rail system at early stage of preparing the partnership.

[19] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

The majority of the countries (86%) express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

There is good agreement (60%) on the use of partnership approach for Transforming Europe's Rail System, whilst quarter of respondents remain neutral. The majority of delegations (65%) agree that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to a lesser degree (43%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

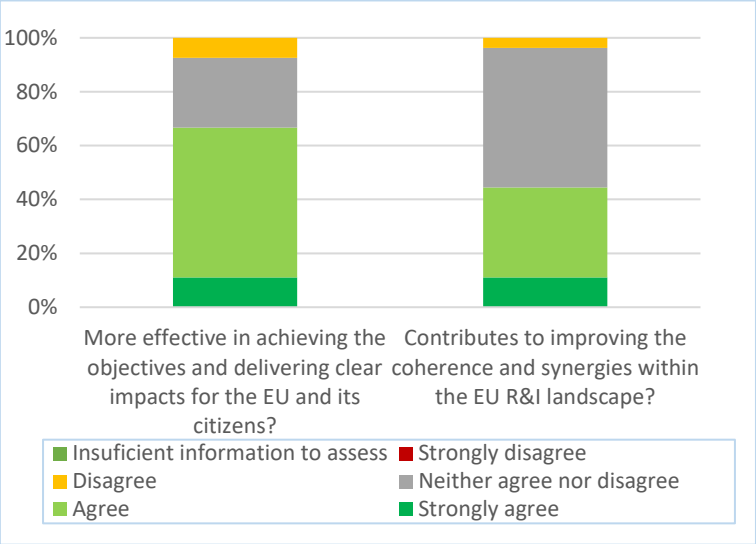

Figure 40: Agreement on arguments for a Partnership for Transforming Europe's rail system in delivering impacts, improving coherence and synergies

The feedback from countries indicate there is a good agreement with the proposed objectives at short, medium and long term, with 78% either agree or strongly agree, and the rest remaining neutral. 64% of countries consider the impacts very or somewhat relevant in the national context. The vast majority of responses (79%) suggest that the envisaged duration of the proposed partnership is adequate. Individual comments made by delegations highlight the relevance of the topic, in particular the need for system-wide R&I to overcome a fragmented sector. They also reiterate several points made previously under elements to be reinforced to increase relevance, notably to include clean propulsion solutions, and strengthen synergies with related EU and national programmes. In addition, it is suggested to broaden the scope by including aspects related to social geography (human displacements, multimodality, cross-border rail) and international transport (including high speed and intermodal solutions).

Views on partners, contributions and implementation

Slightly more than half (54%) of the responses agree on the type and composition of partners, whilst 25% remain neutral and 2 countries disagree. Additional comments suggest several countries wish to see an increased role of Member States, as well as openness towards new and smaller partners.

At this stage, most countries (64%) would need more information on the contributions and level of commitments expected from partners. Additional comments highlight the need to ensure synergies with Cohesion Funds and CEF for exploitation and uptake of innovation.

At this stage there is no clear agreement on the proposal to implement the proposed partnership based on the Article 187 TFEU - 46% of countries wish for more details to make an informed decision, 36% agree and 18% disagree. Individual comments made by delegations suggest dissatisfaction with the big number of Article 187 TFEU partnership proposals in the area of transport, with the insufficient transparency and openness of the Joint Undertaking (JU) model, as well as with the mode-specific approach in mobility. It is thus, suggested to analyse whether the objectives of this proposal could be reached with alternative implementation modes, notably the co-programmed model; if not, then countries wish to see a considerable reform in the set-up of the JU. The feedback stresses the need to allocate Union funding through open calls for proposals (subject to comitology).

4.3.2 Integrated Air Traffic Management

Relevance and positioning in a national context

Overall the feedback from countries confirm the relevance of the proposed European Partnership for Integrated Air Traffic Management, with 74% considering it very or somewhat relevant for their national policies and priorities, and for their industry, and slightly less (63%) considering it relevant for their research organisations, including universities.

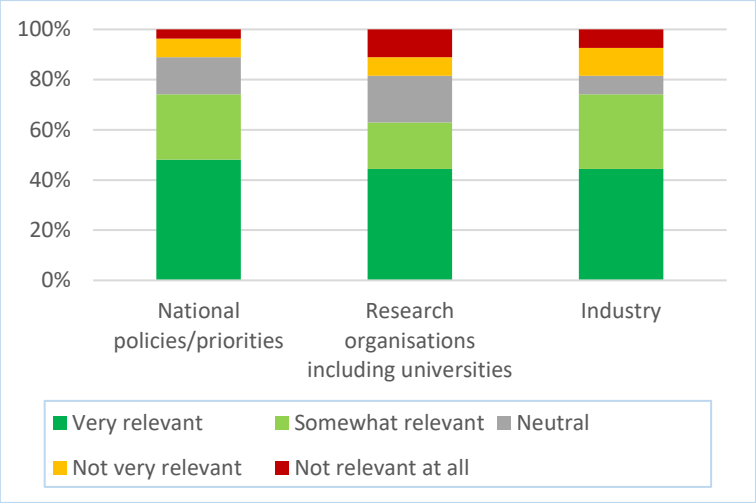

Figure 41: Relevance of the European Partnership for Integrated Air Traffic Management in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed Partnership, 17 countries report to have relevant elements in place. National R&I strategies or plans (52 %, AT, DE, ES, FR, HR, IE, IT, LV, NL, RO, SE, SI, NO) and national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (52 %, AT, ES, FI, FR, HR, HU, IE, IT, LV, NL, RO, SE, SI, NO) were identified most frequently. Countries reported to a lesser extent to having regional R&I and/or smart specialisation strategies (37 %, DE, ES, FR, HR, IE, IT, SE, SI, UK, NO), dedicated R&I funding programmes or instruments (30 %, DE, ES, FR, HR, IE, IT, RO, ES). 22% of countries (CZ, ES, HR, IE, SE, NO) reported other policies/ programmes, such as upcoming sectoral agenda, a national research innovation agenda, or R&I programmes focusing more broadly on disruptive technologies.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities.[20] Some delegations emphasised the need to more use of the results of the Airspace Architecture Study and the report of the Wise Persons Group on the Future of the Single European Sky that indicate a number of concrete recommendations aimed at optimising Europe's airspace organisation in such a way that can facilitate the uptake of new technologies, including research on the benefits, risks and effects of these proposals . Other individual comments make suggestions to further strengthen the following areas: reduction of departure/arrival delays, taxing and more efficient local traffic management , Human Performance, Safety Performance and Cybersecurity, short term challenges like airspace capacity, integrating drones, and ATM efficiency and aviation safety. In the additional comments some countries reiterated the relevance of the Partnership and overall agreement with the proposed objectives, whilst others express the need for a more integrated/ systemic approach (including by merging the proposed partnership with the one on Clean Aviation), a stronger focus on research activities and better involvement of Member States in the agenda setting.

The majority of countries (63%) are at this stage undecided concerning their interest to participate, as a partner. At this stage 8 countries (CZ, DE, ES, FR, CR, IE, IT, MT) express interest to join as a partner, and 4 (CY, EE, HU, IS) countries express no interest to participate.

[20] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

A small share of countries report as potential partners or contributors regional R&I and /or smart specialisation strategies (33%), governmental research organisations (33%), research infrastructures (30%), and existing or planned national R&I programmes (30% and 26% respectively). Additional comments highlight countries wish to further clarify national involvement and contributions in the proposed partnerships. While some respondents express readiness for aligning national funding initiatives and contributing to the Partnership, others prefer to limit national involvement to aligning policies and exploiting synergies (notably with Cohesion Funds), but without any further commitment of funding.

While most are undecided concerning their participation, almost all countries (93%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a good agreement (74%) on the use of a partnership approach in addressing challenges related to air traffic management. There is strong agreement (70%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to lesser degree that (56%) it would contribute to improving the coherence and synergies within the EU R&I landscape.

Member States indicate strong agreement with the proposed objectives at short, medium and long term (82%) and the expected scientific, economic and societal impacts at European level (82%), with the remaining ones remaining neutral. 71% of countries consider the impacts very or somewhat relevant in the national context. 70% of countries found the envisaged duration of the proposed partnership adequate, while 19% of countries need more information to assess this. Individual additional comments in relation to objectives highlight the following:

- The need to address more research and innovation agendas;
- The need to encourage deployment and implementation of new solutions;
- Support stronger links with other related partnership candidates, notably to promote connectivity across transport modes;
- More focus on accelerating digitalisation, integrating drones and small aircrafts into the EU ATM system, and security aspects (in addition to safety).

Views on partners, contributions and implementation

Majority of countries (62%) agree with the proposed type and composition of partners, and 26 % of respondents need more information for informed decision. In additional comments, several countries emphasised the need to move away from the current set up of the SESAR JU towards a model that facilitates the participation of smaller players and SMEs (e.g. in relation to the use of drones). Several countries highlight the need to elaborate on the involvement of Member States, in particular the national services responsible for regulating and controlling air traffic. Comments also suggest to broaden the partner composition with new categories of stakeholders, such as communication and data service providers or regions with smaller airports represented by private partners and research organizations. Individual feedback also suggests to increase the level of cooperation with the military air traffic and European Union Aviation Safety Agency (EASA) to speed up the process of technology, and to engage citizens and civil society (as changes to the ATM will have impacts on when people will travel).

At this stage, most countries (74%) would need more information on contributions and level of commitments expected from partners.

The proposed use of Article 187 implementation mode is supported by 41% of countries, while 48% would require additional information. Whilst several countries express the added value of having an institutionalised partnerships, many also stress the need to ensure high level of openness and transparency of the JU model (notably by ensuring open competitive calls, and removing entry barriers for the participation of smaller organisation). At the same time, there are also some delegations expressing support to implementing this priority with a co-programmed partnership, and some who suggest a merger with the Partnership on Clean Aviation.

4.3.3 Clean Aviation

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed European Partnership on Clean Aviation, with 78% considering it very or somewhat relevant for their national policies and priorities, and for their research organisations, including universities. 75% respondents found the proposed partnership relevant for their industry.

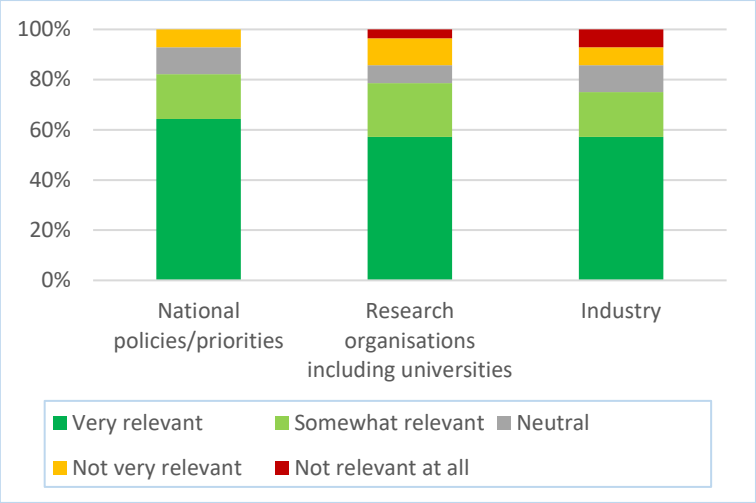

Figure 42: Relevance of the European Partnership on Clean Aviation in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed Partnership on Clean Aviation, 68% (19 out of 28) countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (54 %, AT, CZ, DE, ES, FR, HR, IT, LV, MT, NL, RO, SE, SL, SK, UK, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on research and/or innovation (50 %, AT, BE, ES, FR, HR, IT, LV, NL, RO, SE, SL, SK, UK, NO), regional R&I and/or smart specialisation strategies (50 %, BE, CZ, DE, ES, FR, HR, IT, LV, MT, NL, PT, RO, SE, SL), dedicated R&I funding programmes or instruments (39 %, AT, BE, DE, ES, FR, CR, LV, MT, SE, UK, NO). 36% of countries (CZ, DE, ES, HR, IE, LV, NL, SE, SK, NO, DE) reported other policies/ programmes, such as upcoming sectoral agenda, a national research and innovation agenda, or R&I programmes focusing more broadly on disruptive technologies.

The feedback from delegations on aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities[21] suggest support to the ambition of reducing the environmental footprint of aviation and achieving a carbon neutral aviation, but there seems to be a divergence of views on the scope of the partnership and the pathway in achieving this goal. For instance, some delegations express that the focus should be on the real world introduction of new technologies (i.e. the next generation of commercial aircraft), whilst others support reinforcing attention to aviation research in low technology readiness levels. Although there is no coherent view whether this research should take place inside or outside of the proposed Partnership. Other comments suggest to broaden the scope by focusing also on short range transport solutions within urban and developing small / urban aircraft solutions, and thereby ensure bigger involvement of smaller suppliers for the air industry, and to strengthen the impact narrative beyond environmental (e.g. by including safety needs, international competitiveness goals, quicker in-service introduction).

The majority of countries (57%) are undecided concerning their interest to participate. At this stage 8 countries (CZ, DE, ES, IE, IT, MT, RO, UK) express interest to join as a partner, and 4 (CY, EE, FR, IS) countries express no interest to participate. Governmental research organisations, research infrastructures, regional R&I and /or smart specialisation strategies and existing national R&I programmes are identified are main potential partners or contributors.

[21] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

While most are undecided concerning their participation, almost all countries (89%) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (82%) on the use of a partnership approach in addressing challenges related to EU aviation and the development and demonstration of aircraft technologies. There is broad agreement (71%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to lesser degree that (56%) it would contribute to improving the coherence and synergies within the EU R&I landscape.

Member States indicate good agreement with the proposed objectives at short, medium and long term (75%) and the expected scientific, economic and societal impacts at European level (75%), with the remaining ones remaining neutral. 71% of countries consider the impacts very or somewhat relevant in the national context. There is overall agreement with the envisaged duration of the proposed partnership with 82% of countries finding it adequate. Additional comments made by individual delegations reiterate several points made previously under elements to be reinforced. In addition, individual comments suggest to consider the full life-cycle of the aircraft by including the means of production and disposal, as well as to include under objectives innovative flight design, and redesign of the entire Aviation System. In terms of technologies, individual respondents highlighted the importance to cover also aeronautics advance manufacturing technologies and materials, and novel battery technologies. Other comments were related to avoiding duplications with other Partnerships (notably on Integrated Air Traffic Management and Hydrogen), and clarifying objectives (e.g. how the route to CO2 would be achieved).

Views on partners, contributions and implementation

The responses suggest that there is good agreement between countries (57%) on the type and composition of partners. In additional comments, several countries call for opening the proposed partnership to more industries involved in aeronautics, and ensuring broad participation of new and small players. There are some countries expressing support for a model with a core group of partners steering the Partnership, whilst ensuring appropriate involvement of participants from other sectors. Other responses highlighted the need to ensuring an inclusive and transparent governance of the Partnership, and better definition of the involvement of the public sector in the proposal.

The majority of countries (71%) found that there was insufficient information to assess the nature of contributions and level of commitment from the partners, notably on the introduction of financial contributions from industry. Additional comments made by delegations stress the need to strengthen the leverage effect of the partnership, but to limit financial contributions by industry to the administrative/ running costs. In a related manner, some countries emphasise the need to ensure that the financial contributions would not limit the participation of SMEs and other small partners, including from academia.

The proposed mode of implementation in the form of Article 187 TFEU is supported by 46% of countries, whilst 3 countries disagree. The rest replied that there is insufficient information to make an informed decision. Additional comments suggest to consider a co-programmed model for implementing the priority, to merge the proposed Partnership for Integrated Air Traffic Management, and to move away from mode-specific implementation in Mobility. Moreover, several delegations (notably from smaller countries) highlight the need to ensure transparency and openness of the Partnership, including the use of open competitive calls.

4.3.4 Clean Hydrogen

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed European Partnership on Clean Hydrogen, with 82% considering it very or somewhat relevant for their research organisations, including universities, 79% for their national policies and priorities, and 72% respondents found the proposed partnership as relevant for their industry.

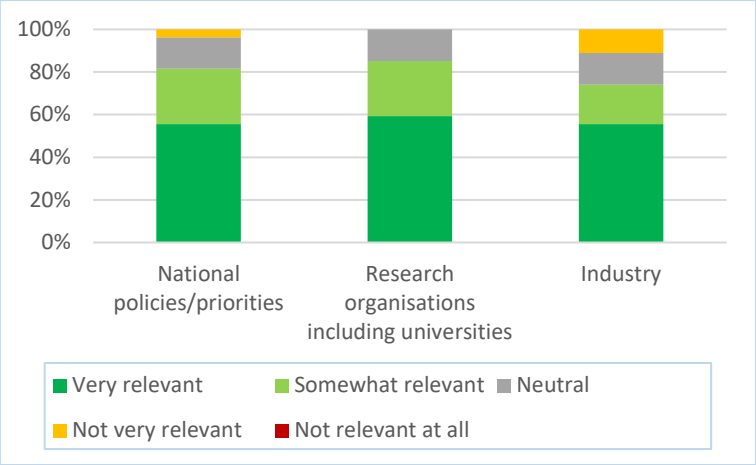

Figure 43: Relevance of the European Partnership for Clean Hydrogen in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed Partnership for Clean Hydrogen, 25 countries report to have relevant elements in place. National economic/ sectoral strategies and/or plans with a strong emphasis on research and innovation (54%, AT, CZ, DE, DK, EE, FR, HR, IT, LUC, LV, NL, SE, SI, SK, NO) and regional R&I and/or smart specialisation strategies (54%, AT, BE, DE, DK, EL, ES, FR, HR, NL, PL, PT, SE, SI, SK, UK) were identified most frequently, followed by national R&I strategies or plans (50 %, DE, DK, EE, FR, HR, LV, NL, PT, RO, SE, SI, SK, IS, NO), dedicated R&I funding programmes or instruments (46%, AT, DE, DK, ES, FR, HR, NL, RO, SE, SI, SK, UK, NO). 8 countries (FR, HR, HU, IE, NL, PT, SE, SK) reported other policies/ programmes, such as national / state support plans and cross-sectoral roadmaps.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for their national priorities[22]. Several delegations emphasise the need to ensure systems aspects and sectoral coupling, notably by developing demonstrators for the use of hydrogen technologies in energy, transport and industry. In a related manner, several countries express specific areas of interest for applications, e.g.: all types of road transport (not just heavy-duty transport), the maritime sector, small-scale hydrogen usage, transportation and storage. Comments also stress the need to ensure alignment with national activities, as well as the complementarity and synergies with other related partnerships/ initiatives/ programmes to cover the whole Hydrogen value chain. Other individual comments suggest to, e.g.:

- Include infrastructure for heavy-duty and FCEVs;
- Ensure R&I activities among the whole value chain;
- Extend the scope to the development of fuels with high energy density;
- Include hydrogen sensor as an important field of application;
- Assess the role of Carbon Capture & Storage as a means of achieving the scale required both for volume and cost;
- Include technologies for distribution of hydrogen through pipelines;
- Focus on near-zero carbon hydrogen production pathways.

Many countries (64%) are undecided concerning their interest to participate. At this stage 9 countries (BE, DE, EE, ES, FR, IT, MT, RO, NO) express interest to join as a partner, and only one country (CY) expresses there is no national interest to participate. Governmental research organisations

[22] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

(61%), research infrastructures (50%), and planned national R&I programmes (50%) are identified as potential partners or contributors most frequently.

While many are undecided concerning their participation, all countries show interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a good agreement (64% consider very and 11% somewhat relevant) on the use of a partnership approach in addressing energy transition through clean hydrogen technologies. There is broad agreement (71%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to a lesser degree (43%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate strong agreement both, with the proposed objectives at short, medium and long term, as well as with the expected scientific, economic and societal impacts at European level (79%). Slightly less (75%) consider the impacts relevant in the national context. 75% of countries find the envisaged duration of the proposed partnership adequate, although some delegations point out that there is insufficient information to assess the timeframe. In additional comments, delegations reiterate some of the points made under elements to be reinforced, notably on sector coupling and inclusion of all transport modes. Additional individual comments highlight the need to allow technology neutral solutions (in this context, one delegation suggest merger with 2ZERO), to consider international initiatives in the field, and to include H2 production from renewables through water electrolysis, water thermochemical splitting and biomass gasification, photochemical water splitting.

Views on partners, contributions and implementation

64% of the countries agree on the type and composition of partners, whilst 18% remain neutral and 7% disagree. In additional comments, several countries emphasise the need to ensure stronger involvement of Member States and local authorities in the partnership to guarantee alignment with national activities. Other comments stress the need to ensure a more balanced participation from other countries, stakeholders and actors compared to the current set-up of Fuel Cells and Hydrogen Joint Undertaking, notably by ensuring bigger involvement of smaller suppliers for the hydrogen industry.

At this stage majority of countries (79%) would need more information on contributions and level of commitments expected from partners.

61% of the countries need more information to assess the proposed mode of implementation based on Article 187 TFEU, while 8 countries are in favour and 3 against. In the additional comments, three countries favour explicitly implementation through a co-programmed model, and two countries stress the need for a comprehensive assessments whether a co-programmed or institutionalised model is more effective. One country supports implementation through competitive calls in Horizon Work Programmes.

4.3.5 Built environment and construction

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed European Partnership on People-centric sustainable built environment, with 96% considering it very or somewhat relevant for their national policies and priorities, 97% for their research organisations, including universities. 92% respondents found the proposed partnership as relevant for their industry.

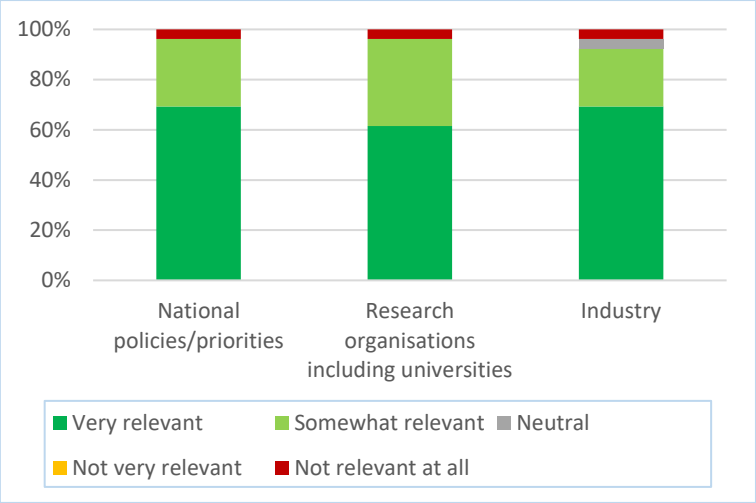

Figure 44: Relevance of the European Partnership on People-centric sustainable built environment in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the partnership on People-centric sustainable built environment, 24 countries report to have elements in support for such a partnership in place. National sectoral strategy and/or plan with a strong emphasis on R&I were identified most frequently (81%, AT, BE, CY, CZ, DK, EE, EL, ES, FI, FR, HR, IE, IT, LUX, LV, NL, PL, RO, SE, SI, NO), followed by national R&I strategies or (69 %, AT, CY, CZ, DK, EE, ES, FR, HR, IE, LV, MT, NL, PL, PT, RO, SE, SI, NO), regional R&I and/or smart specialisation strategies (58%, AT, BE, CY, CZ, EL, ES, FR, HR, IE, MT, PL, PT, RO, SE, SI), dedicated R&I funding programmes or instruments (46 %, AT, BE, CZ, ES, FR, HR, IE, MT, PL, RO, SE, SI). 10 countries reported other policies/ programmes, such as national action plans, favourable legal framework, cluster or construction projects that can act as testbeds.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities[23]. Overall the feedback suggests that many countries would support a broader scope and increased focus on systemic/ interdisciplinary aspects. Individual comments suggest reinforcing e.g. the following aspects:

- Include the role of architecture, engineering and design in building sustainable living environment and public space;
- Take into account renovation and adaptive reuse (given the relevance of existing environment as location factor, enhancing quality of life);
- Additional emphasis on ensuring the preservation of their cultural value for the longer term, ensuring that cultural buildings can be fit for purpose, relevant and effectively maintained and sustainable;
- Include the role of intelligent, human and environmental friendly wooden construction;
- Include non-toxic material cycles (which is a prerequisite for a circular economy);
- Enhance link with healthy urban living
- Include marketing and behavioural science expertise;
- More emphasis on new business models that promote renovation (e.g. third-party fund investors)

[23] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- More attention to international collaboration (e.g. in the context of Global Alliance for Building and Industry construction).

The majority of countries (69%) are undecided concerning their interest to participate. At this stage 8 countries (BE, ES, FR, IT, LUX, MT, NL, PT) express interest to join as a partner, and only one country (IS) expresses no national interest to participate. Existing national R&I programmes, governmental research organisations, and research infrastructures are identified as main potential partners or contributors most frequently (50%), followed by regional R&I and /or smart specialisation strategies and planned national R&I programmes (46%).

While most are undecided concerning their participation, all countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a good agreement (58% consider very and 23% somewhat relevant) on the use of a partnership approach in addressing built environment for sustainability and better living. There is also agreement (77%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to a lesser degree (39%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate good agreement with the proposed objectives at short, medium and long term (85%) and the expected scientific, economic and societal impacts at European level (81%). 84% of countries consider the impacts very or somewhat relevant in the national context. 85% of countries find the envisaged duration of the proposed partnership adequate. In additional comments, several delegations confirm the relevance of the objectives, but suggest some improvements, e.g. by clarifying the R&I aims.

Views on partners, contributions and implementation

69% of the countries agree on the type and composition of partners, while 19% need more information to decide. Additional comments made by delegations suggest to involve in the partnership the following partners/ stakeholders: Members States, regional authorities/ governments (especially if the focus will remain on cities and regions), end-users, social sciences and humanities (SSH) researchers and professionals, research organisations with a public service mission, and ETP Construction and E2B Association.

At this stage majority of countries (77%) would need more information on contributions and level of commitments expected from partners, notably on the expectations on the public sector's (financial) contribution.

Little over half of the countries (54%) find that there was insufficient information to assess the proposed co-programmed mode of implementation, while 12 countries are in favour.

4.3.6 Towards zero-emission road transport (2ZERO)

Relevance and positioning in a national context

Overall the results confirm strongly the relevance of the proposed European Partnership "Towards zero-emission road transport", with 89% considering it considering it very or somewhat relevant for their national policies and priorities, for their research organisations, including universities, and for their industry.

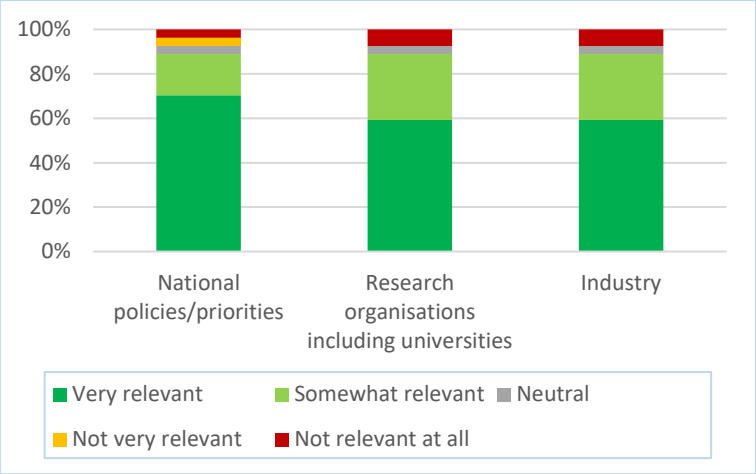

Figure 45: Relevance of the European Partnership "Towards zero-emission road transport" in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 23 countries report to have relevant elements in place. National R&I strategies or plans are identified most frequently (67%, AT, CZ, DE, EL, FI, FR, HR, LUX, LV, NL, PL, RO, SE, SI, UK, IS, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on R&I (63%, AT, CZ, DE, DK, FI, FR, HR, IT, LUX, LV, NL, PL, RO, SE, SI, UK, NO), regional R&I and/or smart specialisation strategies (48%, AT, CZ, EL, FR, HR, HU, LUX, PL, PT, RO, SE, SI, UK), dedicated R&I funding programmes or instruments (41 %, AT, CZ, DE, FI, HR, LUX, NL, PL, SE, UK, NO). 8 countries (CZ, ES, FR, HR, IE, LUX, PT, SE) reported other policies/ programmes, such as e.g. national public-private partnerships/ cluster in the area, broader national strategies (not R&I focused), and R&I programmes focusing more broadly on disruptive technologies.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[24]:

- Enlarged focus on all types of vehicles/modes and/or a stronger link to other modes of transport and sectors (e.g. research on energy carriers);
- Including also fuel cells vehicle as a kind of clean vehicle;
- The need to go beyond vehicle technology to encompass the decarbonisation of the entire transport system (e.g. linkage to fuel systems manufacture, storage and distribution);
- The need to ensure close cooperation with Partnerships on Clean Hydrogen and Batteries;
- Ensuring technology neutrality and openness towards different routes and technologies to solve the challenge;
- Strengthen interdisciplinarity by including material research, production and recycling technologies.

In other comments, some delegations highlight possible overlaps with Mobility and Safety for Automated Road Transport and Partnership on Batteries.

The majority of the countries (59%) are at this stage undecided concerning their interest to participate. Currently 8 countries (BE, CY, DE, ES, IE, IT, LUX, MT) express interest to join as a partner, and 3 countries (EE, FR, IS) express no national interest to participate. Most frequently identified possible elements for participation include existing national R&I programmes and governmental research

[24] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

organisations (37%), followed by planned national R&I programmes and research infrastructures (26%). In additional comments, several countries specify the nature of their possible contributions.

While many are undecided concerning their participation, all countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a good agreement (52% consider very and 26% somewhat relevant) on the use of a partnership approach in addressing mobility and safety through automated road transport. There is also agreement (67%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to a much lesser degree (33%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate strong agreement with the proposed objectives at short, medium and long term (78%) and the expected scientific, economic and societal impacts at European level (88%). 81% of countries consider the impacts very or somewhat relevant in the national context. 78% of countries find the envisaged duration of the proposed partnership adequate.

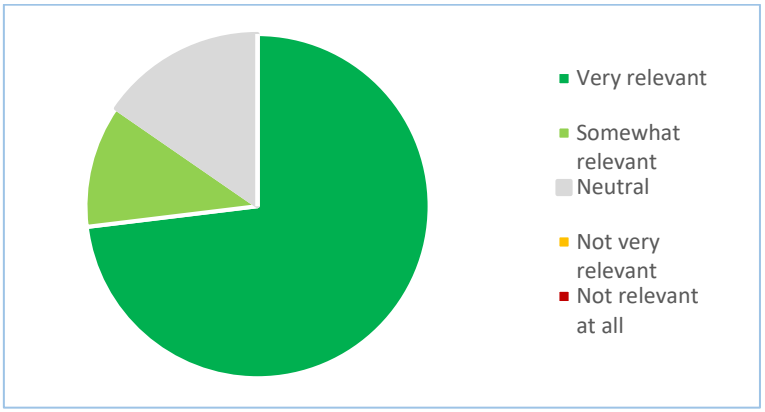

Figure 46: Relevance of expected scientific, economic and societal impacts for the national level - European Partnership "Towards zero-emission road transport"

In additional comments, delegations reiterate some points made under aspects to be reinforced. In addition, some countries highlight the need to clarify the ambition towards full electrification, to include need to include also FCEV Heavy Duty Vehicles, dynamic charging and the integration with infrastructure.

Views on partners, contributions and implementation

60% of the countries agree on the type and composition of partners, whilst 19% remain neutral and 11% disagree. In additional comments, countries emphasise the need to ensure good involvement of Member States in the development of the partnership and clarify the role of the public in the partnership. Also, delegations emphasise the need to ensure opened towards new member, including a transparent membership policy. Other comments suggest to involve more strongly end users (such as fleet owners), infrastructure managers (such as cities) and energy suppliers.

At this stage majority of countries (85%) would need more information on contributions and level of commitments expected from partners. 59% of the countries found that there was insufficient information to assess the proposed co-programmed mode of implementation, while 11 countries are in favour.

4.3.7 Mobility and Safety for Automated Road Transport

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed European Partnership on Mobility and Safety through Automated Road Transport, with 78% considering it considering it very or somewhat relevant for their research organisations, including universities, 75% for their national policies and priorities, and 72% respondents found the proposed partnership as relevant for their industry.

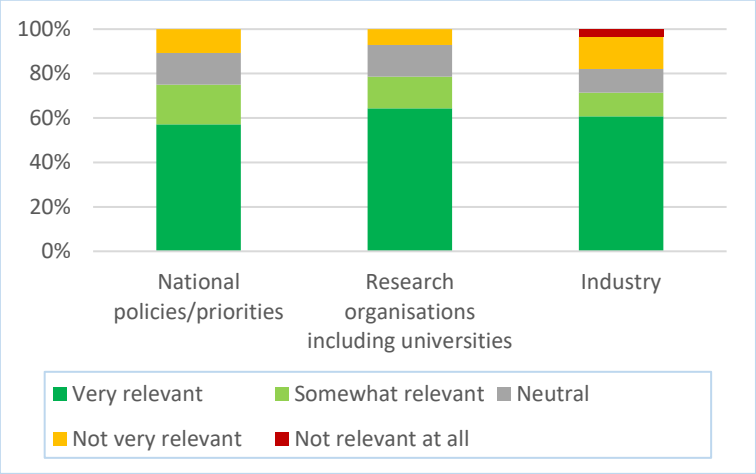

Figure 47: Relevance of the European Partnership on Mobility and Safety through Automated Road Transport in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed Partnership on Mobility and Safety through Automated Road Transport, 23 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (68 %, AT, CZ, DE, EE, FR, HR, HU, IE, IT, LUX, LV, NL, RO, SE, SI, SK, UK, IS, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on R&I (57%, AT, CZ, DE, EE, FR, HR, HU, IE, LU, LV, NL, RO, SE, SK, UK, NO), regional R&I and/or smart specialisation strategies (54 %, AT, BE, CZ, FR, HR, HU, IT, LUX, NL, PL, RO, SE, SI, SK, UK), dedicated R&I funding programmes or instruments (50 %, AT, CZ, DE, EE, FR, HR, HU, LUX, NL, PL, SE, SK, UK, NO). 11 countries (AT, CZ, EL, ES, FR, HR, HU, IE, LUX, RO, SE) report other policies/ programmes, such as upcoming sectoral agenda, e.g. dedicated national public-private partnerships/ cluster in the area of autonomous vehicles, test tracks/beds, and broader national strategies (not R&I focused).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[25]:

- Cover all modes of transport (including e.g. maritime and waterborne transport);
- Stronger emphasises on research and innovation (encompassing also research-oriented recommendations from STRIA Roadmap on Connected & Automated Transport);
- Increased focus on road safety and its validation;
- Include infrastructure aspects (digital and physical);
- Include cross-cutting issues, such as digitalisation, AI and ethics, smart mobility and cities, standardisation;
- Ensure synergies and alignment with related initiatives (e.g. 5G, CAM, AI, HPC) and EU funding programmes (e.g. CEF);
- Increased focus on transitional aspects, notably optimisation of the overall traffic;
- Adopt a regional/ place-based approach to facilitate developing, testing and validating real existing solutions/services and on business models in use-case oriented smaller platforms.

Half of the countries (50%) are undecided concerning their interest to participate. At this stage 11 countries (BE, CZ, EE, ES, HU, IE, IT, LUX, MT, PT, SK) express interest to join as a partner, and 3

[25] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

countries (CY, DE, IS) express there is no national interest to participate. Governmental research organisations (50%), regional R&I and /or smart specialisation strategies (39%) and existing national R&I programmes (39%) and research infrastructures (36%) are identified as potential partners or contributors most frequently. In additional comments, some countries specify the nature of their possible contributions, while others stress they need for more information to allow meaningful analysis of their participation.

While many are undecided concerning their participation, almost all countries (93%) express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a good agreement (50% consider very relevant and 25% relevant) on the use of partnership approach in addressing mobility and safety through automated road transport. 61% of countries think that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to a much lesser degree (33%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate good agreement with the proposed objectives at short, medium and long term (75%) and the expected scientific, economic and societal impacts at European level (82%). 79% of countries consider the impacts very or somewhat relevant in the national context. There is overall agreement with the envisaged duration of the proposed partnership with 71% of countries finding it adequate. In additional comments, some delegations are supportive of the proposed objectives, while others call for a change in focus, notably by ensuring a more holistic view of the transport system and its future technological, systemic and investment policy requirements, as well as increasing focus on user behaviour and user acceptance. Two countries express dissatisfaction with apparent overlaps with the proposed partnership "Towards zero-emission road transport" and ask to consider a merger. Other comments ask to clarify the relation with the C-ITS platform and CCAM Single Platform for road testing & pre-deployment.

Views on partners, contributions and implementation

A little over half (54%) of the countries agree on the type and composition of partners, whilst 18% remain neutral and 14% disagree. In additional comments, many delegations emphasise the need to involve Member States, notably national, and where relevant, regional road safety and vehicle reception authorities. Several countries also underline the need to ensure open membership policy, as well as active involvement of small players (including SMEs). Other comments highlight the need to involve academia and research organisations, as well as telecommunication sector among partners and stakeholders. At this stage most countries (79%) would need more information on contributions and level of commitments expected from partners. Majority of the countries (79%) found that there was insufficient information to assess the nature of contributions and level of commitment from the partners.

Half of the countries found that there was insufficient information to assess the proposed mode of implementation in the form of Article 187 TFEU, while 7 countries oppose this and 4 are in favour. Those opposing the proposed implementation form indicate the need to consider co-programmed as an alternative implementation to provide flexibility in a rapidly changing area and openness to include all relevant stakeholders. In additional comments, there are two countries who express being against a partnership at this stage – one country indicates a preference to implement the topic through regular calls under the Horizon Europe Work Programmes, and the other suggests too much uncertainty regarding implementation at this stage to form a partnership.

4.3.8 Batteries: Towards a competitive European industrial battery value chain

Relevance and positioning in a national context

Overall the results of the consultation confirm strongly the relevance of the proposed European Partnership on Batteries, with 68% considering it very and 32% somewhat relevant for their national policies and priorities, 93% relevant for their research organisations, including universities, and 82% as relevant for their industry.

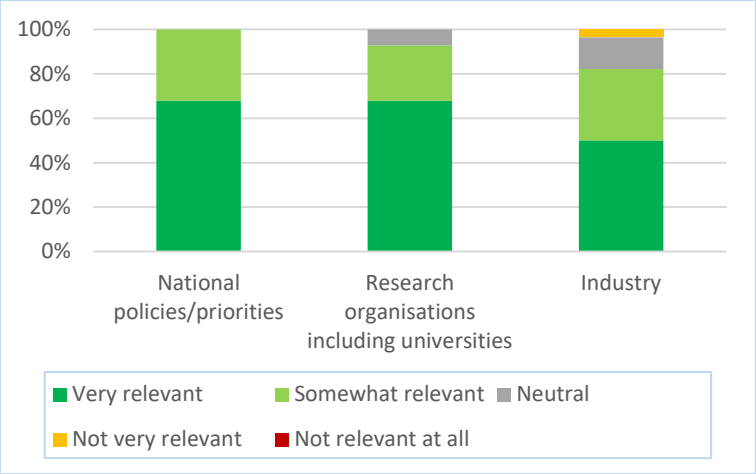

Figure 48: Relevance of European Partnership "Competitive European industrial battery value chain for stationary and mobile applications" in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 25 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (68%, AT, CZ, DE, EE, ES, FI, FR, HR, IT, LV, NL, PT, RO, SE, SI, SK, UK, IS, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on R&I (61%, AT, CZ, DE, DK, EE, ES, FI, FR, HR, IE, LV, NL, SE, SI, SK, UK, NO), regional R&I and/or smart specialisation strategies (50%, AT, BE, CY, CZ, EL, ES, FI, FR, HR, PT, SE, SI, SK, UK), dedicated R&I funding programmes or instruments (46%, AT, CZ, DE, ES, FI, FR, HR, R, SE, SI, SK, UK, NO). 9 countries (BE, CZ, ES, HR, HU, NL, PT, SE, UK) reported other policies/ programmes, such as broader national strategies (not R&I focused), upcoming national plans for energy and climate or participation in Strategic Forum for Important Projects of Common European Interest (IPCEI) on Batteries.

Several countries express the importance of a pan-European approach to advance battery research in Europe, and welcome the combination of high and low TRL activities in the proposal. Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[26]:

- Include maritime applications;
- Include research and development of new innovative materials for batteries, production and recycling technologies;
- Increase focus on new breakthrough R&I for energy storage outside the electrical battery domain, e.g. use of metal powders;
- Include the development of the whole (sustainable) value chain;
- Use of batteries for grid balancing;
- Inclusion of thermal batteries;
- Ensure close cooperation with proposed partnerships on "Clean Hydrogen" and "Towards zero-emission road transport".

Little over half of the countries (54%) are undecided concerning their interest to participate. At this stage, 9 countries (BE, DE, EE, ES, HR, IE, IT, MT, NO) express interest to join as a partner, and only one country (IS) express no national interest to participate. Governmental research organisations (50%), and existing national R&I programmes (56%) are identified as potential partners or

[26] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

contributors most frequently, followed by research infrastructures (50%) and planned national R&I programmes (46%). In additional comments, several delegations emphasise the need to clarify the role of the public in the partnership, notably in relation to the governance and funding model.

While many are undecided concerning their participation, all countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (61% consider very relevant and 25% relevant) on the use of a partnership approach to support establishing a competitive European battery value chain. There is strong agreement (82%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to a lesser degree (46%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate good agreement with the proposed objectives at short, medium and long term (75%) and the expected scientific, economic and societal impacts at European level (82%). Almost all countries (89%) consider the impacts very or somewhat relevant in the national context. There is overall agreement with the envisaged duration of the proposed partnership with 75% of countries finding it adequate. In additional comments, individual responses highlight some points that could be reinforced or clarified – e.g. better explaining the expected scientific impact, clarifying objectives (as the current text appears to some as undecisive), and mentioning of the successor of the M-era.net II (NMBP-41-2020) as an important partnership to build on.

Views on partners, contributions and implementation

Most of the countries (72%) agree on the type and composition of partners. Additional comments suggest there is a divergence of views between some countries on the types of partners – some call for the inclusion of Member States, while others think it should be limited to industry and research organisations. Several delegations emphasise the need to better involve academic partners to advance the future battery technologies. Many countries emphasise the need to ensure openness and transparency towards new and small partners, including from other sectors. In a related manner, some delegations stress it is important to ensure that new and upcoming technologies and their researchers can enter the partnership at any time.

At this stage most countries (79%) would need more information on contributions and level of commitments expected from partners.

The proposed use of a co-programmed approach is supported by 32% of the respondents, while 57% would require more information.

4.3.9 Clean Energy Transition

Relevance and positioning in a national context

Overall the results of the consultation confirm strongly the relevance of the proposed European Partnership on Clean Energy Transition, with 97% considering it very or somewhat relevant for their national policies and priorities, as well as for their research organisations, including universities, and 83% as relevant for their industry.

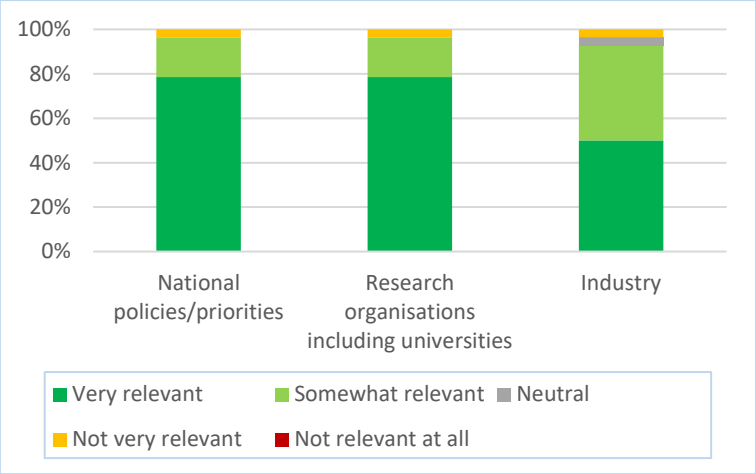

Figure 49: Relevance of the European Partnership on Clean Energy Transition in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 27 countries report to have relevant elements in place. National R&I strategies or plans (82%, AT, CY, CZ, DE, EE, ES, FI, FR, HR, IE, IT, LUX, LV, NL, PL, PT, RO, SE, SI, SK, UK, IS, NO) and national economic, sectoral strategy and/or plan with a strong emphasis on R&I were identified most frequently (82%, AT, CZ, DE, DK, EE, EL, ES, FI, FR, HR, IE, LUX, LV, NL, PL, PT, RO, SE, SI, SK, UK, IS, NO), followed by regional R&I and/or smart specialisation strategies (75%, AT, BE, CY, CZ, EE, EL, ES, FI, FR, HR, HU, IE, LUX, NL, PL, PT, RO, SE), dedicated R&I funding programmes or instruments (68%, AT, CZ, DE, EE, ES, FI, FR, HR, IE, LUX, LV, NL, PL, RO, SE, SI, SK, UK, NO). 10 countries (CZ, HR, HU, IE, LUX, NL, PT, RO, SE, SI) reported other policies/ programmes, such as national (investment) plans and roadmaps related to carbon neutrality, as well as urban reconstruction and smart city projects that could act as testbeds.

Feedback in relation to aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities[27] suggest divergence of views between countries in terms of the scope of the proposed partnership – while some support focusing on system integration and technologies, others favour a holistic system perspective to realise energy transition (e.g. by including non-technological aspects, smart and sustainable/livable cities and communities). Several delegations call for a clearer thematic focus / goal, the need to ensure better links with related partnerships, missions and initiatives (e.g. LIFE, SUNRISE (Solar Energy for Circular Economy) and Energy-X (Transformative Chemistry for a Sustainable Energy Future)), and to strengthen local and regional dimension. Other aspects mentioned by individual replies include:

- Integration of all energy conversion and storage technologies, integration of energy efficiency technologies, development of smart business processes and services;
- Inclusion of Maritime renewable energy topics;
- Allow focus on specific topics and work more in regional cooperation;
- Reinforce the health aspect (air quality, risks/safety issues);
- The flexibility of conventional energy sources and allowing them to cooperate with renewables.

Little over half of the countries (57%) are undecided concerning their interest to participate, some of whom express the need to receive more information on the governance and funding model of the partnership, and time to discuss nationally on possible interest to join. At this stage, 11 countries (AT,

[27] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

BE, CY, DE, EE, ES, IT, MT, NL, SE, NO) express interest to join as a partner, and only one country (DK) expresses no national interest to participate as a partner. Governmental research organisations (68%), existing national R&I programmes (64%) and regional R&I and/or smart specialisation strategies (64%) are identified as possible elements for participation most frequently, followed by research infrastructures (57%) and planned national R&I programmes (54%). In additional comments, several delegations emphasise the need to clarify the role of the public in the partnership, notably in relation to the governance and funding model.

While many are undecided concerning their participation, almost all countries (96%) express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (64% consider very relevant and 21% somewhat relevant) on the use of a partnership approach to support establishing a Partnership on Clean Energy Transition. There is strong agreement (78%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, but to a lesser degree (47%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (80%) and the expected scientific, economic and societal impacts at European level (86%). The majority of countries (89%) consider the impacts very or somewhat relevant in the national context. There is overall agreement with the envisaged duration of the proposed partnership with 86% of countries finding it adequate, and the rest needing more information for an informed decision. In additional comments, individual country responses highlight the need to specify the scope of the proposal, avoid administrative overhead, to focus on coordinating national programmes in areas that are not sufficiently covered and to finance differential and high-value cooperation projects and activities, and to consider solutions at different levels of maturity.

Views on partners, contributions and implementation

Most of the countries (75%) agree on the type and composition of partners, while 11% remain neutral. In additional comments, several delegations emphasise the need to better involve academic partners to advance the future battery technologies. Several countries highlight the need for better articulation of end-users (cities, municipalities and other public actors active in energy policies) in the partnership. Other individual country countries suggest to consider additional partners from WaterborneTP and JPI Oceans, ensure cross-over collaboration with bioenergy & Sm.En.Sys, ensure complementarities with the proposed Partnership on Smart Networks and Services, consider UE-Africa Partnership for Renewable Energy and Climate Change under the UE-Africa High Level Policy Dialogue on STI, enable research organizations with public service missions to contribute, and to ensure a bigger involvement of smaller suppliers for the renewable energy industry.

At this stage most countries (75%) would need more information on contributions and level of commitments expected from partners. In additional comments, one country emphasises the need to increase the private funding, including by ensuring a longer timescale.

The proposed use of a co-funded approach is supported by 48% of the respondents, while 50% would require more information. In the additional comments, several countries articulate support towards the co-funded model, while one country supports a co-funded partnership or regular calls under the Work Programmes. Other comments relate to the management of the partnership highlighting the need to ensure a slim governance model and call secretariat, as well as variable geometry for individual calls. Few countries highlight possible overlaps / synergies with the Partnership candidate on Clean Hydrogen.

4.4 Food, Bioeconomy, Natural Resources, Agriculture and Environment

4.4.1 Towards more sustainable farming: agro-ecology living labs and research infrastructures

Relevance and positioning in a national context

Overall, the results of the Member State consultation strongly confirm the relevance of the proposed "Towards more sustainable farming: agro-ecology living labs and research infrastructures" partnership, with 97 % considering it relevant for national policies and priorities, and 96 % for their research organisations, including universities. The proposed partnership is also considered relevant for their industry by most countries (75 % relevant).

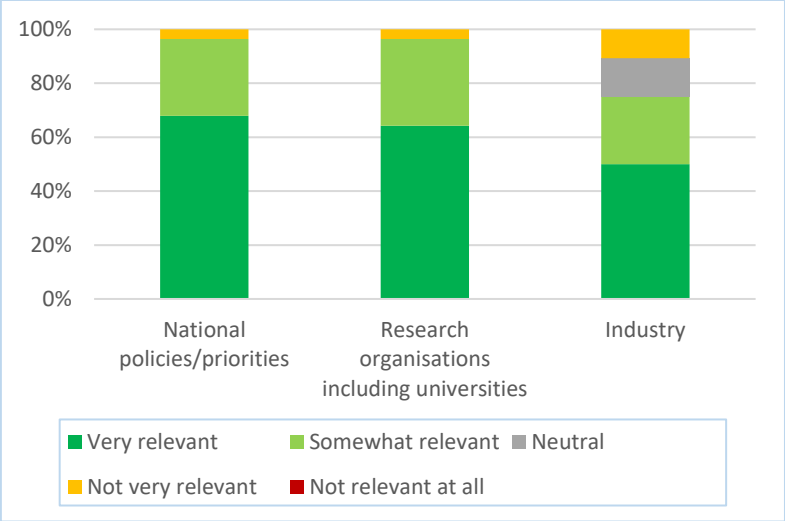

Figure 50: Relevance of the "Towards more sustainable farming" partnership in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed Sustainable farming Partnership, 25 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (59 % - CY, CZ, DE, DK, EE, FI, HR, IR, LV, NL, PT, RO, SE, SI, UK, NO), followed by national economic, sectoral strategies and/or plans with a strong emphasis on research and/or innovation (77% - AU, CZ, DK, EE, GR, ES, FI, FR, CR, HU, IR, IT, LV, NL, PT, RO, SE, SL, UK, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[28]:

- Mention the need to reduce the use of pesticides (consider the notion "transition pathways") and perform R&I to develop ecological pesticides as well as fertilisers;
- Consider including also other sectors; forestry and agro-forestry, livestock production, perennial crops and trees, greenhouse, local produce, landscape management and integration with ICT/precision farming/use of microbiota for nutrition;
- More emphasis on the R&I elements in the proposal (e.g. high level/technical research backing to the living labs); link with research infrastructures is not clear;
- Define agro-ecology *as "the study of ecological processes applied to agricultural production systems"*, in order to strengthen the sustainability aspects, and include all kinds of approaches.

In addition, individual replies were given from delegations to:

- Add the reduction of GHG emissions;
- Involve non-EU partners from the Mediterranean region;
- Establish a dense web of coordinated research efforts to make generalisations possible;
- Add transition pathways with costs/benefits for climate and environment;
- Under COP21, add R&I on measurements/practices in carbon sequestration in soil;

[28] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- Add social research to understand take-up of technical approaches and management methods;
- Add environmental/biodiversity impacts to the expected impacts.

At this stage, 13 countries already indicate their interest to join as a partner (DE, EE, ES, FR, HU, IR, IT, LV, MT, NL, SV, SI, NO). The high interest is notably due to an existing strong network (FACCE JPI). 15 countries are at this stage undecided, and only one country has excluded participation (IC). All kinds of research programmes (existing national R&I programmes, governmental research organisations, research infrastructures, regional R&I and smart specialisation strategies) have been identified as main potential partners or contributors (all these have interest rates above 70 %).

Almost all countries (96 %) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is very strong agreement (96 %) on the use of a partnership approach in moving towards more sustainable farming. There is also broad agreement (78 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens (19 % of delegations neither agree nor disagree on this question). Agreement is however considerably lower (45 %) on whether the partnership would contribute to improving the coherence and synergies within the EU R&I landscape (56 % of countries neither agree nor disagree with this).

Countries indicate very good agreement with the proposed objectives at short, medium and long term (93 %) and the expected scientific, economic and societal impacts at European level (93 %), with the remaining ones remaining neutral. Even more countries (96 %) consider the impacts relevant in their national context. There is good agreement (62 %) with the envisaged duration of the proposed partnership, although 31 % consider there is insufficient information to assess this. One delegation suggests to start already in 2021/2022. Additional comments made by individual delegations reiterate the points made previously under elements to be reinforced (notably on bio-pesticides, transition pathways and adding social research and environmental/biodiversity impacts).

Views on partners, contributions and implementation

There is strong agreement on the type and composition of partners (88 %). One delegation stresses the need to include partners from "the entire chain", i.e. supply chain, food chain, landscape management, financial sector.

At this stage most countries (74 %) would need more information on contributions and level of commitments expected from partners, while 19 % agree with the proposal.

There is clear support for the proposed co-funded implementation mode (41 % of countries), and only 4 % disagree, with the rest expecting more details in order to be able to make an informed decision, notably clarification of the specification of "co-funded partnership". Also, one country does not support co-funding, and would prefer open calls under the Work Programme (and states that if co-funding is maintained, this partnership should be integrated with the *"29. Environmental Observations"* partnership).

4.4.2 European Partnership on Animals and Health

Relevance and positioning in a national context

Overall, the results of the Member State consultation confirm the relevance of the proposed *"European Partnership on Animals and Health"* partnership, with 89 % considering it relevant for national policies and priorities, and 84 % for their research organisations, including universities. The proposed partnership is also considered relevant for their industry by most countries (73 % relevant).

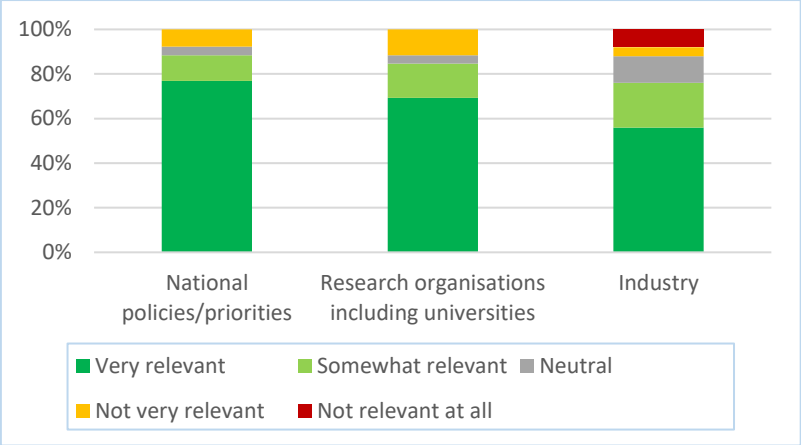

Figure 51: Relevance of the "European Partnership on Animals and Health" in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed Partnership on Animals and Health, 24 countries report to have relevant elements in place. National **economic, sectoral** strategies and/or plans with a strong emphasis on research and/or innovation were identified most frequently (76 % - CZ, DK, EE, GR, ES, FI, FR, HR, IR, IT, LV, NL, PO, PT, RO, SE, SL, UK, NO), closely followed by **national** R&I strategies or plans (70 % - BE, CZ, DK, ES, FI, FR, HR, IR, IT, LU, LV, NL, PO, PT, RO, SL, SK, UK, NO).

Delegations confirmed the importance of working together on animal health and AMR. However, they also identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[29]:

- The proposal should be based on the concept One Health [for animals and humans]; including changing the name of the partnership into *"European Partnership on Animal Health and One Health (zoonoses and AMR)"* as well as the other sections of the proposal;
- Animal welfare should be included;
- Add emerging microbiological hazards, exotic animal and human agents/vectors;
- The integrative aspects (capacity building, sharing, harmonising methodologies, sharing data bases etc.) between animal health, food, public health and environment are also needed.

In addition, individual replies were given from delegations:

- All routes of exposure for Antimicrobial resistance (AMR) in humans should be considered;
- Use of genomics is essential;
- The scope should be beyond Europe; need for international coordination among public organisations with reference tasks;
- Rename into *"Sustainable Livestock production"* and include research on consumer acceptance and GHG emissions in scope;
- Include the development of alternatives to Antimicrobials;
- Development of vaccines would profit from collaboration with pharma industry and regional Health Services;
- Infectious diseases should include those affecting companion animals and wildlife;
- Laboratory preparedness should be coordinated at the EU level;
- Use of novel technologies in pathogen prevention should be emphasised;

[29] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- Add the use of Eco-Health;
- Target also human infectious diseases;
- Add more on vaccinology and widen the scope beyond AMR;
- AMR is worthy of an additional partnership specifically dedicated to this topic;
- Include aquaculture/farmed fish.

At this stage, 13 countries already indicate their interest to join as a partner (BE, EE, ES, FR, IR, IT, LV, MT, NL, SV, SI, UK, NO). The high interest is notably due to an existing strong network (One Health EJP). 11 countries are at this stage undecided, and 3 countries have excluded participation (CY, LU, IS). All kinds of research programmes (existing national R&I programmes, governmental research organisations, research infrastructures, regional R&I and smart specialisation strategies) have been identified as main potential partners or contributors (all these have interest rates above 70 %).

Most countries (93 %) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is broad agreement on the use of a partnership approach for animals and health (81 % agree, out of which 69 % consider it very relevant). There is also broad agreement (80 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens (15 % of delegations neither agree nor disagree on this question). Agreement is however considerably lower (50 %) on whether the partnership would contribute to improving the coherence and synergies within the EU R&I landscape (50 % of countries neither agree nor disagree with this).

Countries indicate very good agreement with the proposed objectives at short, medium and long term (89 %) and the expected scientific, economic and societal impacts at European level (96 %), with the remaining ones remaining neutral. Most countries (88 %) also consider the impacts relevant in their national context. There is good agreement (64 %) with the envisaged duration of the proposed partnership, although 32 % consider there is insufficient information to assess this (one country requests more information on the timeframe for the ambitious objectives). One delegation suggests to start in 2022. Additional comments made by individual delegations reiterate the points made previously under elements to be reinforced (notably on OneHealth and AMR).

Views on partners, contributions and implementation

There is strong agreement on the type and composition of partners (88 %). Several delegations suggest considering including partners from outside EU. One delegation considers that institutes with a connection with their national government and that deal with reference tasks should be complementary partners, and suggests including the relevant research infrastructures.

At this stage almost all countries (88 %) would need more information on contributions and level of commitments expected from partners, while only 4 % agree with the proposal.

At this stage, there is some support for the proposed co-funded implementation mode (32 % of countries), whereas 12 % disagree, and 56 % expect more details in order to be able to make an informed decision. Alternative implementation modes suggested include co-programmed (without Member State co-funding) and open calls.

4.4.3 Environmental Observations for a sustainable EU agriculture

Relevance and positioning in a national context

Overall, the results of the Member State consultation confirm the relevance of the proposed *"Environmental Observations for a sustainable EU agriculture (Agriculture of data)"* partnership, with 89 % considering it relevant for national policies and priorities, and 89 % for their research organisations, including universities. The proposed partnership is also considered relevant for their industry by most countries (69 % relevant).

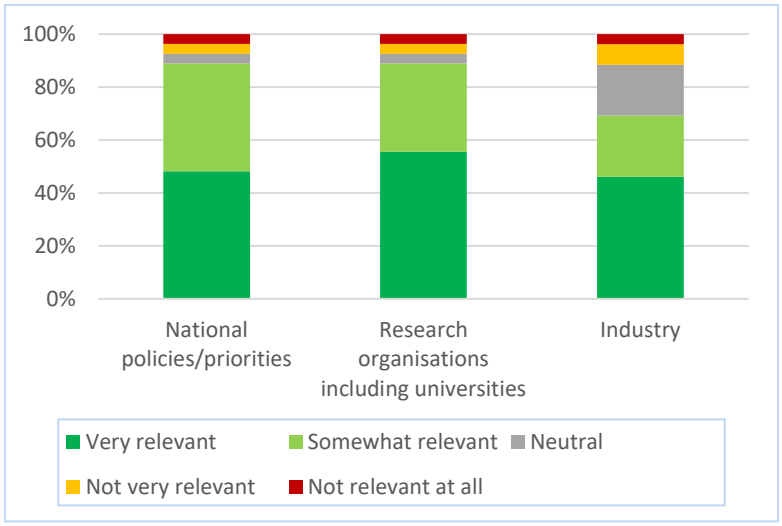

Figure 52: Relevance of the "Environmental Observations" partnership in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed Partnership on Animals and Health, 21 countries report to have relevant elements in place. National economic, sectoral strategies and/or plans with a strong emphasis on research and/or innovation were identified most frequently (67 % - AU, CZ, DE, EE, GR, ES, FI, FR, HR, IR, LU, NL, PO, PT, RO, SE, SL, UK), closely followed by national R&I strategies or plans (64 % - AU, CZ, DE, EE, GR, ES, FI, FR, HR, IR, LU, NL, PO, PT, RO, SE, SL, UK).

Delegations confirmed the importance of working together on earth surveillance to enable more efficient food production systems. However, they also identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, in particular the need to broaden the scope (i.e. further than agriculture):

- Cover all kinds of environmental observations (shifting the focus to the Water-Energy-Food-Ecology nexus):
- Include additional objectives/applications such as water resources management, ecosystems sustainability, biodiversity, climate hazards, air quality, sustainability of rural areas, forests, marine areas, coastal zones, aquaculture, risk assessment of alien invasive species, sustainable use of pesticides.

In addition, individual replies were given from delegations:

- One country suggests that this partnership be combined with the *"Safe and Sustainable Food Systems for People, Climate and Planet"* partnership;
- One delegation suggest to facilitate learning from existing goof practices of Member States (e.g. in the field of modelling EU data and turning it into actionable information);
- Develop interoperable data bases that are based on the Sustainable Development Goals relevant to the sustainability of rural areas;
- End users, private and public, should be proactively engaged, and there should be a broad spectrum of 'in situ' observations, including participatory approaches by field actors;
- A link with the digital, industry and space domain is needed, in order to support smart agri start-ups that develop specific digital services;
- The partnership should stimulate the sharing of environmental observation data;
- Interaction with other relevant partnerships should be addressed;
- The scope should be beyond Europe.

At this stage, 9 countries indicate their interest to join as a partner (EE, FR, IR, IT, LU, MT, NL, PT, SI). 17 countries are at this stage undecided, and 2 countries have excluded participation (IS, NO). The main potential partners or contributors identified are existing national R&I programmes, governmental research organisations and research infrastructures (all have interest rates above 60 %). In addition, participating with planned national R&I programmes and regional R&I and smart specialisation strategies show interest rates above 50 %.

Most countries (93 %) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is broad agreement on the use of a partnership approach for environmental observations (82 % agree, out of which 56 % consider it very important). There is also broad agreement (78 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens (22 % of delegations neither agree nor disagree on this question). Agreement is however considerably lower (48 %) on whether the partnership would contribute to improving the coherence and synergies within the EU R&I landscape (52 % of countries neither agree nor disagree with this statement).

Countries indicate very good agreement with the proposed objectives at short, medium and long term (82 %, out of which 41 % strongly agree) and the expected scientific, economic and societal impacts at European level (81 %), with the remaining ones remaining neutral. Most countries (82 %, out of which 56 % consider them very relevant) also consider the impacts relevant in their national context.

There is good agreement (60 %) with the envisaged duration of the proposed partnership, although 40% consider there is insufficient information to assess. Additional comments made by individual delegations reiterate the points made previously under elements to be reinforced.

Views on partners, contributions and implementation

There is agreement on the type and composition of partners (72 %). Two delegations argue for industry to participate. Two other delegations suggest to include partners from outside EU (from developed countries, Mediterranean and African countries). One delegation stresses that the proposal should better elaborate the boundaries between partners and recipients of funding (especially when considering including universities, research organisations and enterprises as partners in the co-fund).

At this stage many countries (81 %) would need more information on the contributions and level of commitments expected from partners, while only 11 % agree with the proposal.

At this stage, there is partial support for the proposed co-funded implementation mode (44 % of countries), whereas 56 % expect more details in order to be able to make an informed decision. One delegation prefers open calls under the Work Programme, or, if the co-funded mode is maintained, that this partnership is integrated with the *"Towards more sustainable farming: agro-ecology living labs and research infrastructures"* partnership.

4.4.4 Rescuing Biodiversity to safeguard life on Earth

Relevance and positioning in a national context

Overall, the results of the Member State consultation confirm the relevance of the proposed *"Rescuing Biodiversity to safeguard life on Earth"* partnership, with 96 % considering it relevant for national policies and priorities, and 93 % for their research organisations, including universities. The proposed partnership is also considered relevant for their industry by most countries (73 % relevant).

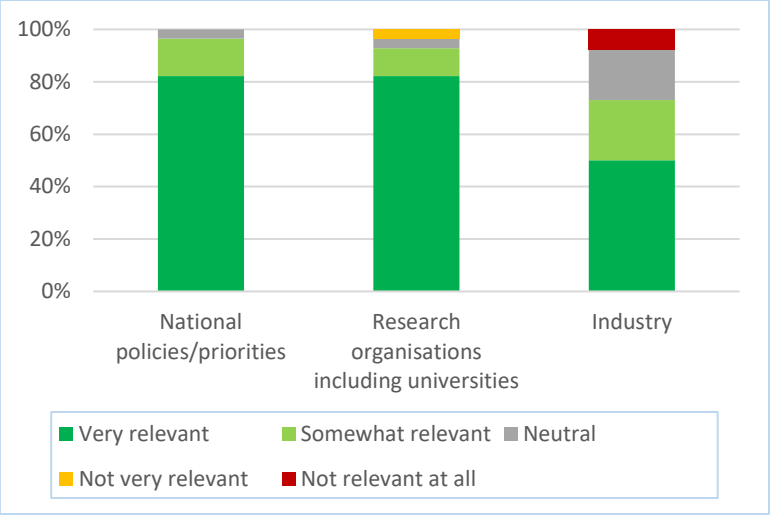

Figure 53: Relevance of the "Rescuing Biodiversity" partnership in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed Rescuing Biodiversity Partnership, 25 countries report to have relevant elements in place. The existence of national R&I strategies or plans (79 % - AU, BE, CZ, DE, DK, EE, ES, FI, FR, HR, IR, LV, NL, PO, PT, RO, SE, SL, SK, UK, IS, NO) is very similar to that of national economic, sectoral strategies and/or plans with a strong emphasis on research and/or innovation (78 % - AU, BE, CZ, DK, EE, EL, ES, FI, FR, HR, IR, IT, NL, PO, PT, RO, SE, SL, SK, UK, NO). The prevalence of regional R&I and/or smart specialisation strategies and dedicated R&I funding programmes/instruments was also high (75 % and 64 %, respectively).

Several delegations confirmed in a joint manner the importance of working together on biodiversity, considering the current state of emergency. They also stressed the need for the partnership to be well connected to IPBES, and suggested to build it up from the basis of BiodivERsA. In addition, they identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for individual national priorities, e.g.[30]:

- More emphasis on the Sustainable Development Goals and the study or their interaction with biodiversity;
- In addition to understanding and promoting the determinants of transformative change, include also research on the obstacles to this change;
- Link the state of biodiversity with social and economic affairs;
- Emphasise the following aspects: protection of forest and wetland biological diversity, development of agro-ecological methods, spatial landscape planning, ecosystem services, invasive species and eradication methods, biodiversity in different soil types for carbon sequestration, crops and livestock biodiversity;
- Need to link the European networks for genetic resources with the biodiversity networks.

[30] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

At this stage, 13 countries already indicate their interest to join as a partner (BE, CZ, DE, EE, FI, FR, IR, IT, MT, NL, RO, SE, SI). 13 countries are at this stage undecided, and 2 countries have excluded participation (CY, LU). All kinds of research programmes have been identified as strong potential partners or contributors, with governmental research organisations and research infrastructures having the highest interest rate (above 80 %) and existing/planned national R&I programmes as well as regional R&I and smart specialisation strategies showing rates above 70 %.

Most countries (96 %) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is strong agreement on the use of a partnership approach for rescuing biodiversity (89% agree, out of which 74 % consider it very relevant). There is also broad agreement (86 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens (11 % of delegations neither agree nor disagree on this question). Agreement is however lower (59 %) on whether the partnership would contribute to improving the coherence and synergies within the EU R&I landscape (41 % of countries neither agree nor disagree with this).

Countries indicate very good agreement with the proposed objectives at short, medium and long term (89 %) and the expected scientific, economic and societal impacts at European level (93 %), with the remaining ones remaining neutral. Most countries (92 %) also consider the impacts relevant in their national context. There is good agreement (76 %) with the envisaged duration of the proposed partnership, although 24 % consider there is insufficient information to assess this Additional comments made by individual delegations reiterate the points made previously under elements to be reinforced (notably on the state of emergency and the link to IPBES).

Views on partners, contributions and implementation

There is strong agreement on the type and composition of partners (89 %). Four delegations consider that stakeholders should include practitioners, boundary organisations and environmental organisations, including NGOs. In addition, individual delegations comment on the partner structure:

- Research funders and research organisations should be included as partners;
- Encourage the participation of private enterprises in the calls (e.g. on nature-based solutions, ecosystem services);
- Ensure a strong link should be established with the following partnerships /initiatives: “Towards more sustainable farming”, PRIMA, EU-Africa HLPD, BIOEAST;
- Include relevant research infrastructures;

At this stage a majority of countries (81 %) would need more information on contributions and level of commitments expected from partners, while only 15 % agree with the proposal.

At this stage, there is partial support for the proposed co-funded implementation mode (48 % of countries), whereas 4 % disagree, and 48 % expect more details in order to be able to make an informed decision. Alternative implementation modes suggested by individual delegations include open competitive calls and a co-programmed partnership.

4.4.5 A climate neutral, sustainable and productive Blue Economy

Relevance and positioning in a national context

The results of the Member State consultation confirm strongly the overall relevance of the proposed *A climate neutral, sustainable and productive Blue Economy* partnership. 88% it relevant for their research organisations, and 84% consider it relevant for their national policies/priorities. The proposed partnership is considered relevant for their industry by 84% of the countries (Figure 54)

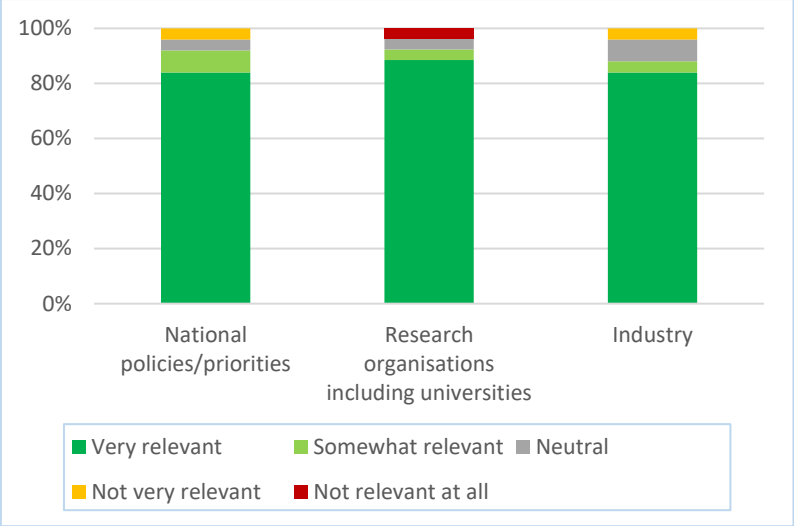

Figure 54: Relevance of the " Blue Economy" partnership in the national context

On the question of existing national/regional R&I strategies, plans and / or programmes in support of the proposed *A climate neutral, sustainable and productive Blue Economy* partnership, 25 countries report to have relevant elements in place. National R&I strategy and/or plan (85%, AT, BE, CZ, DE, DK, EE, GR, ES, FI, FR, HR, IE, IT, LV, NL, PL, PT, RO, SE, SI, UK, IS, NO) were identified most frequently, followed by national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (81%, AT, BE, CZ, DK, EE, GR, ES, FI, FR, HR, IE, IT, NL, PL, PT, RO, SE, SI, UK, IS, NO) and regional R&I and/or smart specialisation strategies (78%, AT, BE, CY, CZ, DK, EE, GR, ES, FR, HR, IE, IT, MT, NL, PL, PT, RO, SE, SI, UK, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[31]:

- The proposed partnership should be in line with the Sustainable Development Goals, the UN Ocean Decade for Ocean Science and member states obligations to achieve the good environmental status of marine waters and coastal waters;
- Take into account individualities of the regional seas;
- Include clean and smarter shipping;
- Reinforce aspects relevant to inland waters;
- Give attention to the primary sector needs (fisheries and aquaculture) and the processing industry;
- Encourage synergies with space programmes (e.g. Copernicus) and other partnerships of the cluster;
- Include a stronger ambition to stimulate innovation for the Blue Economy, and in particular innovation and development of new technologies for aquaculture;
- Address the entire innovation chain by including both, applied research as well as basic research;
- Include ecosystem and the biodiversity aspects in the oceans;
- Prioritise common European / international problems and opportunities;
- Include/ reinforce innovation and development of new technologies for aquaculture.

52% of the countries are at this stage interested to participate, with 11 countries undecided (AT, CY, CZ, DK, GR, FI, LV, NL, PL, UK, NO) and with (HU, LU) excluding participation. Existing national

[31] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

R&I programmes, along with planned national R&I programmes, research infrastructures and regional R&I and/or smart specialisation strategies (all four categories at 78%) are identified as main potential partners or contributors. A number of delegations expressed their interest, however their final decision to join will be taken at a later stage.

96% of countries expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

There is strong (92%) agreement on the use of a partnership approach in addressing this specific priority. There is broad agreement (92%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens. Less (65%) of the countries agree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

There is broad agreement (92%) between countries with the proposed objectives at short, medium and long term and the expected scientific, economic and societal impacts at European level (96%, with only 23% strongly agree). 92% consider the impacts relevant in the national context. There is good agreement (80%) with the envisaged duration of the proposed partnership. Some additional comments made by individual delegations reiterate points made previously under elements to be reinforced. Additional comments address the following aspects:

- Include non-economic sectors, i.e. science based solutions for societal issues;
- Consider pollution of the seas from land;
- Start date should be earlier than 2023;
- Scientific level must be raised significantly to deliver the suggested impact on both present and future blue value chains and management;
- Revisit the use of the terminology "borderless domain", given the statements on sovereign states in the framework of the United Nations Convention on the Laws of the Sea;
- Include links with food security.

Views on partners, contributions and implementation

There is broad agreement (92%) between countries on the type and composition of partners. Three delegations mention the potential of JPI Oceans to be involved in this proposed partnership. Measures should be taken to ensure a more balanced participation from all countries, stakeholders and actors. Sector related industry associations or innovation clusters should be included as partners. Two delegations suggest including research infrastructures and relevant governmental research institutes. Inclusion of relevant authorities as partners with in-kind contributions would be welcome. More partners from the maritime field should be included.

At this stage most countries (92%) would need more information on contributions and level of commitments expected from partners, while 8% agree with the proposal.

The majority of countries (65%) expect more details in order to be able to make an informed decision to decide on the implementation mode, with 31% agreeing with the implementation mode as either co-programmed or co-funded European Partnership. Four delegations consider co-programmed as the most appropriate implementation mode and two delegations support co-founded as implementation mode. Furthermore, two delegations could support either of the two implementation modes.

4.4.6 Safe and Sustainable Food System for People, Planet & Climate

Relevance and positioning in a national context

Overall, the results of the Member State consultation confirm the relevance of the proposed *"Safe and Sustainable Food System for People, Planet & Climate"* partnership, with 96 % considering it relevant for national policies and priorities, and (equally) 96 % for their research organisations, including universities (the "Very relevant" shares within both categories are 82 %). The proposed partnership is also considered relevant for their industry by most countries (82 % relevant).

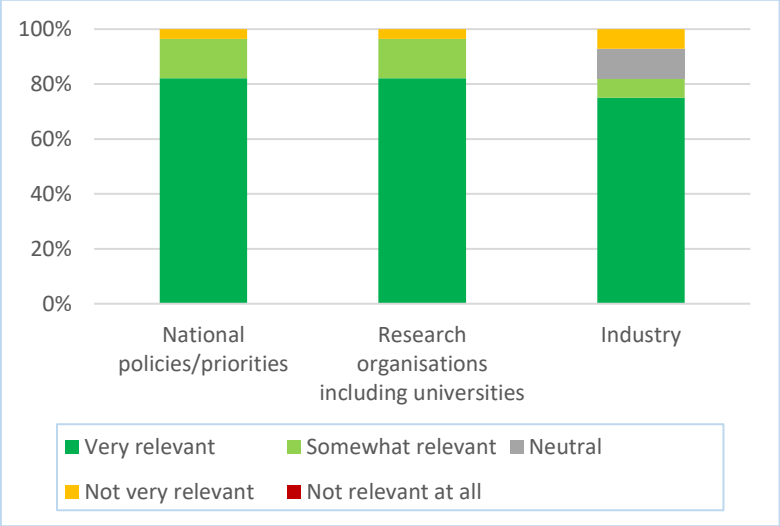

Figure 55: Relevance of the "Safe and Sustainable Food System" partnership in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed Partnership on a Safe and Sustainable Food System, 26 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (81 % - AU, CZ, DE DK, EE, ES, FI, FR, HR, IR, IT, LV, MT, NL, PO, PT, RO, SE, SL, UK, IS, NO), closely followed by national economic, sectoral strategies and/or plans with a strong emphasis on research and/or innovation (77% - CZ, DK, EE, EL, ES, FI, FR, HR, IR, IT, LV, NL, PO, PT, RO, SE, SL, UK, IS, NO). Regional R&I and/or smart specialisation strategies are also frequent (81 %).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[32]:

- Strengthen the system approach, by targeting all parts of the chains and system that lie behind and are needed for a real transformation of our food system (production, processing, distribution sectors);
- Essential to the food system approach is the interaction between public health, ecological sustainability and the robustness of food production and consumption;
- Extend the partnership to include consumer-related research and behavioural insights to understand what drives/influences behaviour of people, organisations and systems;
- Boost R&I on inclusive food systems (set up an environment that supports healthy dietary choices for everybody, and reduce inequalities between groups in access to healthy food).

In addition, individual replies were given from delegations:

- Consider links into productivity as well as growing the economy and climate change agendas. Digital elements need to be enhanced, and need for a focus on disruptive technologies;
- Add the following areas to the scope: sustainable agriculture, foodstuffs for particular nutritional uses, food from insects, regulation of food authenticity, food fraud;
- The links and complementarities between the 4 focus areas should be further clarified;

[32] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- Remove the area "Food related waste", as it overlaps with the Partnership *"Circular bio-based Europe"*;
- Remove the area "Microbiome" and include its aspects in the three other focus areas;
- Additional sub-theme "Sustainable Livestock Production in Food Systems", and animal production should be considered part of the circular economy to improve sustainability;
- Need for more information on the underlying research base (would help to attract funders);
- Need to include DG ENV and the retail/industry sectors who can influence food waste;
- Involve actors beyond Europe, such as Africa, Latin America and the Caribbean.

At this stage, 13 countries already indicate their interest to join as a partner (BE, CY, DE, ES, FI, FR, IR, IT, LV, NL, RO, SV, SI). The high interest is notably due to two existing strong networks, one of which has developed visions for the three last focus areas. One country expresses readiness to contribute 3 million EUR per year to the partnership. 14 countries are at this stage undecided, and one country has excluded participation (LU). All kinds of research programmes (existing national R&I programmes, governmental research organisations, research infrastructures, regional R&I and smart specialisation strategies) have been identified as main potential partners or contributors (all these have interest rates above 70 %, with governmental research organisations at 84 %).

All countries expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is very strong agreement on the use of a partnership approach for food systems (92 % agree, out of which 81 % consider it very relevant). There is also very strong agreement (89 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens. Agreement is however considerably lower (52 %) on whether the partnership would contribute to improving the coherence and synergies within the EU R&I landscape (44 % of countries neither agree nor disagree with this).

Countries indicate very good agreement with the proposed objectives at short, medium and long term (89 %, out of which 59 % strongly agree) and with the expected scientific, economic and societal impacts at European level (89 %), with the remaining ones remaining neutral. Practically all countries (97 %) also consider the impacts relevant in their national context. There is also good agreement (73%) with the envisaged duration of the proposed partnership, although 27 % consider that there is insufficient information to assess this. One delegation recommends to start already in 2021.

Views on partners, contributions and implementation

There is strong agreement on the type and composition of partners (92 %). Nevertheless, several delegations stress that as the scientific communities in the four focus areas are quite heterogeneous, it is not advisable to combine these areas in one partnership (risk of difficulties to find alignment between countries). Also, one delegation points to the need for the partnership to look beyond Europe to reflect global trends. In addition, individual delegations advise to establish links with the partnerships *"Towards more sustainable farming"* (no. 27), *"Animals and Health"* (no. 28), and *"Circular bio-based Europe"* (no. 33).

At this stage almost all countries (81 %) would need more information on contributions and level of commitments expected from partners, while only 19 % agree with the proposal.

At this stage, there is some support (30 % of countries) for the proposed implementation mode (cofounded if sufficient funding, otherwise co-programmed), whereas 7 % disagree, and 63 % expect more details. The implementation modes suggested in the comments are co-funded (5 mentions), co-programmed (4 mentions) and institutionalised (1 mention).

4.4.7 Circular bio-based Europe: sustainable innovation for new local value from waste and biomass

Relevance and positioning in a national context

Overall the results of the Member State consultation confirm strongly the high relevance of the proposed European partnership for a Circular bio-based Europe, with 82% considering it very relevant and 18% somewhat relevant for national policies and priorities. Equally there is a very good confirmation of the overall relevance for research organisations, including universities (79% very relevant), and for industry (71% very relevant), see Figure 17.

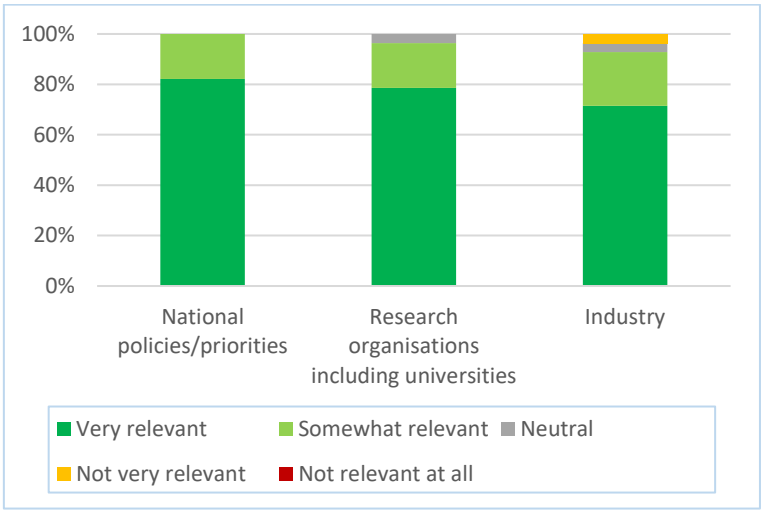

Figure 56: Relevance of the European partnership for a Circular bio-based Europe in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed European partnership for chemicals risk assessment, 27 countries report to have elements in place. National R&I strategies or plans were identified most frequently (79%, AT, CY, CZ, DE, DK, EE, ES, FI, FR, HR, IE, IT, LV, MT, NL, PL, PT, RO, SE, UK, IS, NO), equally national economic, sectoral strategies and/or plans with a strong emphasis on research and/or innovation (79%, AT, CZ, DE, DK, EE, EL, ES, FI, FR, HR, IE, IT, LU, LV, NL, PL, PT, RO, SE, SI, UK, NO). Regional R&I and/or smart specialisation strategies exist in 75%, and dedicated funding programmes in 57% of the countries that have relevant elements in place.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. Comments address e.g. the following aspects[33]:

- Broadening the scope towards forestry or marine bio-resources;
- More emphasis could be given to local production of bio-mass mass and valorisation of bio-waste;
- Opportunities for the development of local small scale technological solutions for rural regions and urban areas;
- Include innovation with biodegradable and recyclable alternatives to fossil-fuel plastics and packaging;
- Integrate the need of diversification of biomass and the related soil allocation issue ;
- Address growth in rural and coastal areas, rich in natural resources, as well as clusters that can benefit from industrial symbiosis.

While 43% of the countries are undecided at this stage, 15 have expressed an interest to participate (BE, DE, ES, FI, FR, CR, HU, IE, IT, MT, NL, RO, SE, SK, SI), and only one country has at this stage expressed that there is no national interest to participate (IS).

As Circular Bio-based Europe has been proposed as a co-programmed or Article 187 partnership (which are normally not open to MS as members of the partnership itself), most frequently identified

[33] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

as possible elements for their participation are governmental research organisations (68%) and infrastructures (68%). 96% of countries expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (96%) on the use of a partnership approach in for a Circular bio-based Europe. There is broad agreement (83%) that the partnership is more effective than traditional calls in achieving the objectives and delivering clear impacts for the EU and its citizens, and to a smaller degree (56%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

Countries indicate good agreement with the proposed objectives at short, medium and long term (85% agree or strongly agree) and the expected scientific, economic and societal impacts at European level (96% agree or strongly agree), with the remaining ones remaining neutral. The vast majority of countries (96%) consider the impacts very relevant in the national context (Figure 18).

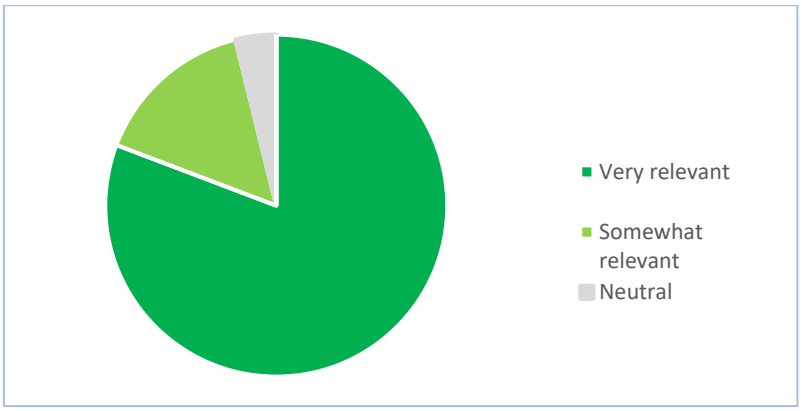

Figure 57: Feedback on the relevance of impacts at national level for a European partnership for a Circular bio-based Europe.

The vast majority of responses (85%) consider that the proposed duration of the initiative is adequate.

A number of delegations suggest the inclusion of forest-based industry and forest-based products. Individual comments relate to the point that more attention is needed to the social and economic transformation as a result of the Circular Bio-based Europe partnership, such as employment rate or other identified indicators. Expected impacts should include increased productivity, job growth and carbon reduction. A concern for one delegation is that the extension towards rural, local value chains might jeopardise industries' interest and involvement.

Views on partners, contributions and implementation

The majority of responses (92%) agree on the type and composition of partners, and only one country disagrees.

At this stage, most countries (81%) would need more information on contributions and level of commitments expected from partners.

The proposed use of Article 187 is supported by 26%, but also questioned by 26% of the responses, with 48% requiring more information.

4.4.8 Water4All: Water security for the planet

Relevance and positioning in a national context

Overall, the results of the Member State consultation strongly confirm the relevance of the proposed *"Water4All"* partnership, with 97 % considering it relevant for national policies and priorities, and 100 % for their research organisations, including universities. The proposed partnership is also considered relevant for their industry by most countries (83 % relevant).

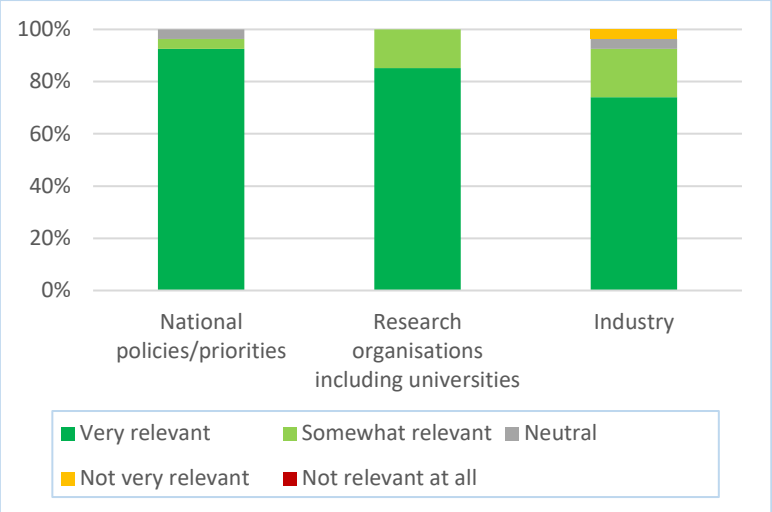

Figure 58: Relevance of the "Water4All" partnership in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed Partnership on Water4All, 93 % (25 out of 27) countries (not BE, LU) report to have something in place. **National** R&I strategies or plans were identified most frequently (81 % - AU, CZ, DE, DK, EE, ES, FI, FR, HR, IR, IT, LV, MT, NL, PO, PT, RO, SE, SI, UK, IS, NO), closely followed by national **economic, sectoral** strategies and/or plans with a strong emphasis on research and/or innovation (77 % - AU, CZ, DK, EE, EL, ES, FI, FR, HR, HU, IR, LV, NL, PO, PT, RO, SE, SI, UK, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[34]:

- Need for "systems thinking", i.e. a holistic, multi-disciplinary view of the whole water cycle, including the interaction between coastal and inland waters, the eco-system and biodiversity aspects, climate change, biodiversity.

In addition, individual replies were given from delegations:

- Need to add references to Sustainable Development Goal no. 6 and the DCI;
- Add to scope the effectiveness of water use, water quality, creation of public awareness, geo-hazards (role of water in earth slides), overland flow in an urban context, hydropower and seasonal aspects, recovery of materials/water/energy from wastewater;
- Expected impacts with stronger emphasis on improving livelihoods and reducing global water crises and causes of migration;
- The topic is very relevant, although it might be too encompassing (both in scope and envisaged stakeholders);
- More emphasis on flood-related hazards and river basin management and how to manage multiple objectives;
- New initiatives such as digitisation of the water system and modelling at scales may be relevant;
- Facilitate the participation of the private sector in calls.

[34] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

At this stage, 11 countries already indicate their interest to join as a partner (BE, CY, CZ, FR, IR, IT, MT, NL, PT, SE, SI). The high interest is notably due to an existing strong network (Water JPI). 16 countries are at this stage undecided. All kinds of research programmes (existing national R&I programmes, governmental research organisations, research infrastructures, regional R&I and smart specialisation strategies) have been identified as main potential partners or contributors (all have interest rates above 70 %).

All countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is broad agreement on the use of a partnership approach for water issues (96 % agree, out of which 81 % consider it very relevant). There is also broad agreement (84 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens (16 % of delegations neither agree nor disagree on this question, or consider there is insufficient information to assess). Agreement is however considerably lower (57 %) on whether the partnership would contribute to improving the coherence and synergies within the EU R&I landscape (38 % of countries neither agree nor disagree with this).

Countries indicate very good agreement with the proposed objectives at short, medium and long term (89 %) and the expected scientific, economic and societal impacts at European level (92 %), with the remaining ones remaining neutral. Most countries (88 %) also consider the impacts relevant in their national context. One country considers the objectives lacking in scientific focus.

There is good agreement (73 %) with the envisaged duration of the proposed partnership, although 27% consider there is insufficient information. One delegation suggests to start in 2021/2022.

Views on partners, contributions and implementation

There is full agreement on the type and composition of partners (100 %). Two delegations suggest to include civil organisations which are focussed on public engagement and involvement. Two further countries recommend to include partners from outside EU. One delegation considers that to keep all partners aboard, a variable geometry and a wide range of instruments are needed

At this stage almost all countries (88 %) would need more information on the contributions and level of commitment expected from partners, while only 4 % agree with the proposal.

At this stage, there is some support (38 % of countries) for the proposed implementation mode (co-funded), whereas 12 % disagree, and 50 % expect more details in order to be able to make an informed decision. Nevertheless, the implementation modes suggested in the comments are firstly co-programmed (5 mentions) and only secondly co-funded (3 mentions).

4.5 Other Pillars

4.5.1 Innovative SMEs

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed European Partnership on Innovative SMEs, with 89% considering it very and 11% somewhat relevant for their national policies and priorities, and 89% for their research organisations, including universities. All countries that provided feedback find the proposal relevant for their industry.

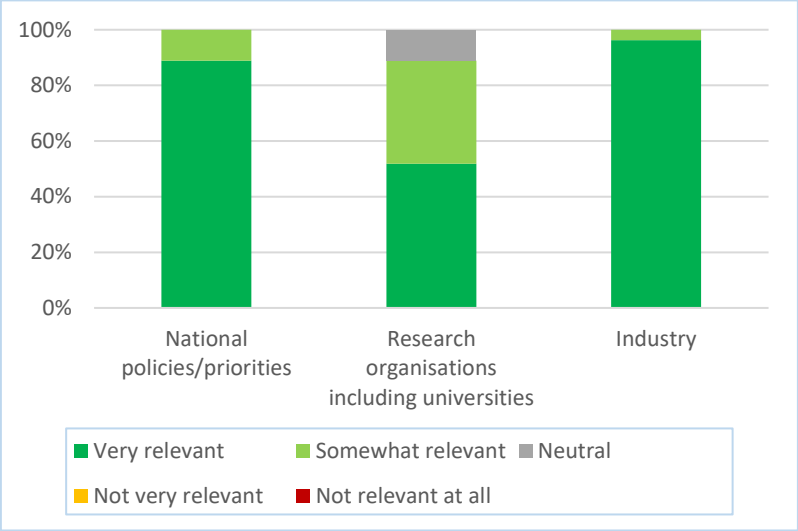

Figure 59: Relevance of the European Partnership on Innovative SMEs in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 28 countries report to have something in place. Dedicated R&I funding programmes or instruments are identified most frequently (96%, AT, BE, CY, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IE, LUX, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK, NO), followed by national R&I strategies or plans (81%, AT, CY, CZ, DE, EE, ES, FI, FR, HR, HU, IE, LUX, LV, MT, NL, PL, PT, SI, SK, UK, IS, NO), national economic, sectoral strategy and/or plan with a strong emphasis on R&I (74%, CY, CZ, EE, EL, ES, FI, FR, HR, HU, IE, IT, LUX, LV, NL, PL, PT, SI, SK, UK, NO), regional R&I and/or smart specialisation strategies (74%, BE, CY, EE, EL, FI, FR, HR, HU, LUX, LV, MT, NL, PL, PT, RO, SI, SK, UK, NO). 4 countries (HR, NL, PL, UK) report other policies/ programmes, such as e.g. projects directly financed by the industry or Eureka joint strategy.

Under the aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities[35], delegations reiterate some aspects already present in the proposal e.g.: clear positioning of the proposed partnership in the EU and national R&I funding landscape, including clearer link with national and regional schemes, increasing focus on internationalisation and scaling up, increasing the target group to all innovative SMEs, and in this context facilitating participation of newcomers, and to broaden the support given to innovative SMEs.

The majority of countries (89%, AT, BE, CY, CZ, DE, DK, EE, ES, FI, FR, HR, HU, IE, IT, LUX, MT, NL, PT, RO, SE, SI, SK, UK, NO) express interest to join as a partner, and 4 countries (EL, LV, PL, IS) have not yet decided. Existing national R&I programmes (70%) are identified as potential partners or contributors most frequently, followed by planned national R&I programmes (59%), and regional R&I and /or smart specialisation strategies (52%). In additional comments, several delegations clarify the types of contributions (including from Structural Funds), and reiterate the importance of the programme in supporting innovative SMEs form a national point of view. One delegation stresses it needs more information on the envisaged governance and funding model to decide on whether to join or not.

[35] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

All countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (74% consider very relevant and 15% somewhat relevant) on the use of a partnership approach in support of innovative SMEs. There is strong agreement (92%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and to a lesser degree (74%) that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (97%) and the expected scientific, economic and societal impacts at European level (92%). Almost all countries (93%) consider the impacts very or somewhat relevant in the national context. There is overall agreement with the envisaged duration of the proposed partnership with 96% of countries finding it adequate. In additional comments, some delegations emphasise the need to have more clarity on the timeframe of the proposed partnership (both start and duration) and one delegation raises concerns over too many similar activities and programs within Horizon Europe in the area.

Views on partners, contributions and implementation

Most countries (86%) agree on the type and composition of partners. In additional comments, individual delegations highlight the good track record of Eureka/ Eurostars in bringing together national funding bodies and coordinating calls, and welcome the broadening the target group

At this stage 48% of the countries agree with the proposed contributions and level of commitments expected from partners, while 44% would need more information to assess this. In additional comments, individual replies highlight the need to ensure significant advance over the commitments reached for its predecessor Eurostars-2, to consider Cohesion Funds as national contributions, and to worries over the possible requirement (in case of Article 185) for the central management of financial contributions.

The proposed use of a co-funded or Article 185 TFEU approach is supported by 52% of the respondents, while 30% would need more information. In the additional comments, 14 countries indicate preference towards implementation the partnership based on Article 185 TFEU. Several countries stress they do not support a real common pot, but ask for further information on the “central management” of financial funds. Some countries express openness towards an appropriate central financial management if this excludes trans-border funding. Only one delegation expresses that both types of models for implementation are suitable for them, while another stresses the need to consider the results of the interim evaluation of Eurostars-2.

4.5.2 European Open Science Cloud

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed European Partnership on European Science Cloud, with 79% considering it very and 18% somewhat relevant for their national policies and priorities, and 71% for their industry. All respondents consider the proposed partnership as relevant for their research organisations, including universities.

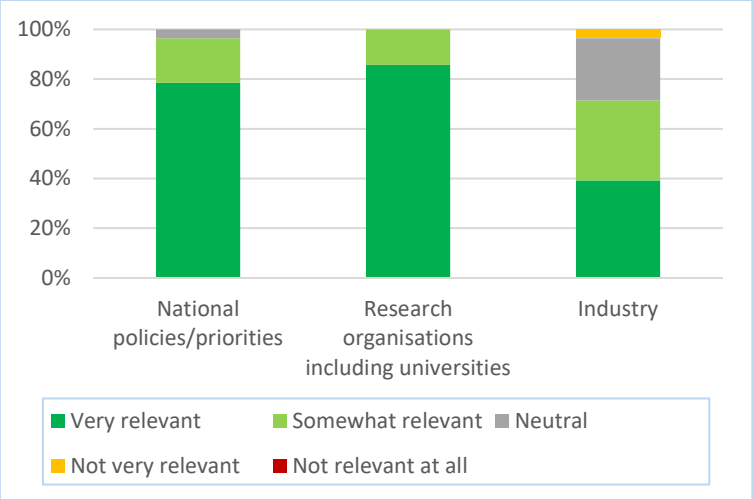

Figure 60: Relevance of the European Partnership on European Science Cloud in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 25 countries report to have something in place. National R&I strategies or plans are identified most frequently (71%, BE, CZ, DE, DK, EE, ES, FI, FR, HR, IE, IT, MT, PL, PT, RO, SI, SK, UK, IS, NO), followed by national economic, sectoral strategy and/or plan with a strong emphasis on R&I (54%, CZ, DK, EE, ES, FI, HR, HU, IE, NL, PL, PT, RO, SK, UK, NO), regional R&I and/or smart specialisation strategies (54%, BE, DE, EE, EL, ES, FI, HR, HU, IE, IT, PL, RO, SI, SK, UK), and dedicated R&I funding programme or instrument (46%, BE, DE, EE, ES, FI, HR, IE, PL, PT, RO, SK, UK, NO). 10 countries (AT, BE, ES, HR, HU, LUX, NL, RO, SK, UK) report other policies/ programmes, such as e.g. open innovation strategy, institutional or discipline related initiatives, research data alliance/ associations, and National Research and Innovation Infrastructure Roadmap.

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[36]:

- Emphasis on the consolidation of the landscape of European research infrastructures by facilitating and ensuring interoperability with similar initiatives being developed in other regions;
- Develop the partnership in such a way that accounts for the different progress of Member States in developing open data infrastructures;
- Include information and data (visual, textual, audio, etc.) from cultural organisations, such as museums, libraries etc.;
- Include competitiveness and data quality as main objectives.
- Other comments made by delegations stress the need for more information with regards to the governance and funding/ cost model of the proposed partnership to make an informed decision, and to clarify the following aspects:
- How it builds on national strategies and approaches, as well as European approaches, such as those from ESFRI;
- How it helps integrate the data ecosystem, fill gaps and enable interdisciplinarity?

[36] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- How it will make interoperability possible and workable?
- Whether the programme is to advance policy towards European Science Cloud or whether actual infrastructures need to be constructed?

Moreover, one country stresses the need to have better information on the funding engagements for data infrastructures and EOSC preparations in different countries.

The majority of countries (64%, BE, CZ, DE, EE, EL, FI, HR, HU, IE, IT, LV, MT, NL, PT, SE, SI, UK, NO) express interest to join as a partner, while 36% (AT, CY, DK, ES, FR, LUX, PL, RO, SK, IS) have not yet decided. Research infrastructures (79%) are identified as possible elements for participation most frequently, followed by governmental research organisations (71%), planned national R&I programmes (57%), existing national R&I programmes (50%), and regional R&I and /or smart specialisation strategies (50%).

In additional comments, several delegations emphasise that a final decision about joining the future partnership will depend on the final proposition of operational, cost and governance model for EOSC.

All countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (64% consider very relevant and 14% somewhat relevant) on the use of a partnership approach in support of innovative SMEs. There is strong agreement (78%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and that it would contribute to improving the coherence and synergies within the EU R&I landscape (77%).

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (90%) and the expected scientific, economic and societal impacts at European level (85%). Almost all countries (93%) consider the impacts very or somewhat relevant in the national context. 57% of the countries find the envisaged duration of the proposed partnership adequate, and 29% would require more information to assess this. In additional comments, several delegations express their support towards the objectives of the EOSC, but the feedback also suggests that more information is needed to fully assess whether a European Partnership is the right approach. Other individual comments stress the need to discuss the use of EOSC infrastructure and services for industrial purposes.

Views on partners, contributions and implementation

Many countries (64%) agree on the type and composition of partners, while 18% would need more information.

In additional comments, some countries stress the need to involve public partners – Member States, research funders, research organisations and research infrastructures. Individual comments suggest to involve also higher education to train skilled data stewards, define more clearly therole of the Commission in the partnership, and the need to further discuss the involvement of private partners (SMEs).

At this stage most counties (82%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that most countries (79%) would need more information to assess the proposed mode of implementation (either co-funded or co-programmed). Additional comments suggest a slight preference towards a co-programmed model (with 4 countries in favour), but many delegations stress that it is too early to decide and both options should be kept open.

4.5.3 EIT Climate-KIC

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the EIT Climate-KIC, with 89% considering it relevant for their national policies and priorities, and 85% for their industry. 92% of respondents consider the proposed partnership as relevant for their research organisations, including universities. *(Figure 2)*

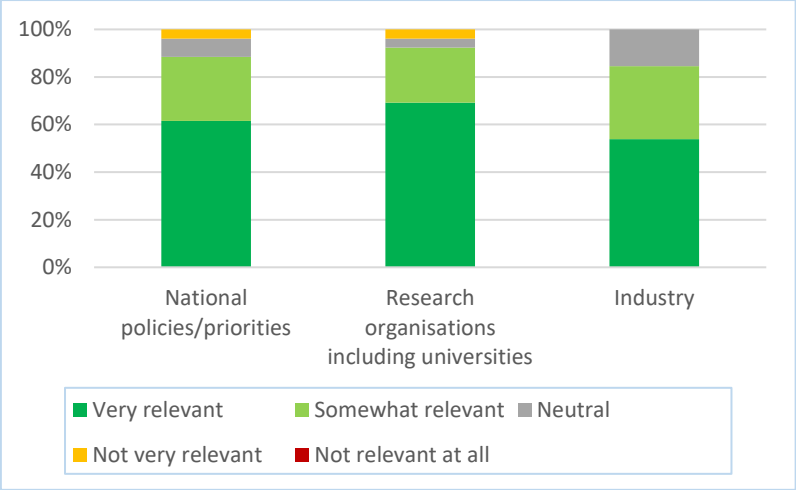

Figure 61: Relevance of the EIT Climate-KIC in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 27 countries report to have something in place. National economic, sectoral strategy and/or plan with a strong emphasis on R&I are identified most frequently (85%, AT, BE, DK, EE, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK, NO), followed by, regional R&I and/or smart specialisation strategies (81%, AT, BE, CY, CZ, ES, FI, FR, HR, IE, LU, LV, NL, PL, PT, RO, SI, SK, UK, NO) and national R&I strategies and/or plans (78%, AT, CY, CZ, DK, ES, FI, FR, HR, IE, LU, LV, NL, PL, PT, RO, SE, SI, SK, UK, IS, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. Individual comments address e.g. the following aspects[37]:

- Including the impact of climate change on environment degradation and biodiversity loss;
- Including climate-resilient agriculture, and rural regions
- Increasing research dimension;
- Focus on the scale, thematic range and focus on system transformation to enable and accelerate multisector innovation as well as joint initiatives between KTI actors across Europe and national or regional authorities.
- Include legal and regulatory aspects of the fight against climate change seem to be missing. Legal sciences should be integrated.
- Allow the partnership to **work on several time-scales simultaneously**, from the very short term (to be able to accelerate experimentation and feedback to public authorities, for instance, or to modify activities in real time according to the results observed) to the long term (where the time to transform complex systems and to observe the effects of the transformation demands consistency of strategy and action over five years or more).

In additional comments, some countries reiterate the importance of the topic (innovation to mitigate climate change) to their national priorities, and the importance to ensure cooperation with the relevant R&I partnerships (e.g. JPIs)

The majority of countries are undecided (65%, AT, BE, DK, EE, ES, FI, HU, LU, LV, NL, PT, SE, SI, SK, UK, IS, NO) to join as a partner, while 31% (CY, CZ, FR, HR, IE, IT, MT, PL) agree to join. Research infrastructures (83%) and governmental research organisations (83%) are identified as

[37] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

possible elements for participation most frequently, followed regional R&I and /or smart specialisation strategies (78%), existing national R&I programmes (74%) and planned national R&I programmes (70%). In additional comments, several countries specify the types of contributions, e.g. plans of cities and regions to address climate change, research infrastructures, related research programmes etc.

96% of the countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (85% consider very relevant and 8% somewhat relevant) on the use of a partnership approach. There is strong agreement (89%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, 65% neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (88%) and the expected scientific, economic and societal impacts at European level (80%). The majority of countries (87%) consider the impacts very or somewhat relevant in the national context. 88% of the countries find the envisaged duration of the proposed partnership adequate.

Views on partners, contributions and implementation

There is broad agreement (88%) on the type and composition of partners. Several countries stress the need to ensure greater openness of the KIC, and the need to remove entry barriers for new potential partners.

At this stage most counties (81%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that most countries (68%) would need more information to assess the mode of implementation.

4.5.4 EIT InnoEnergy

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the EIT InnoEnergy, with 93% considering it relevant for their national policies and priorities, and 89% for their industry. 97% of respondents consider the proposed partnership as relevant for their research organisations, including universities (Figure 62).

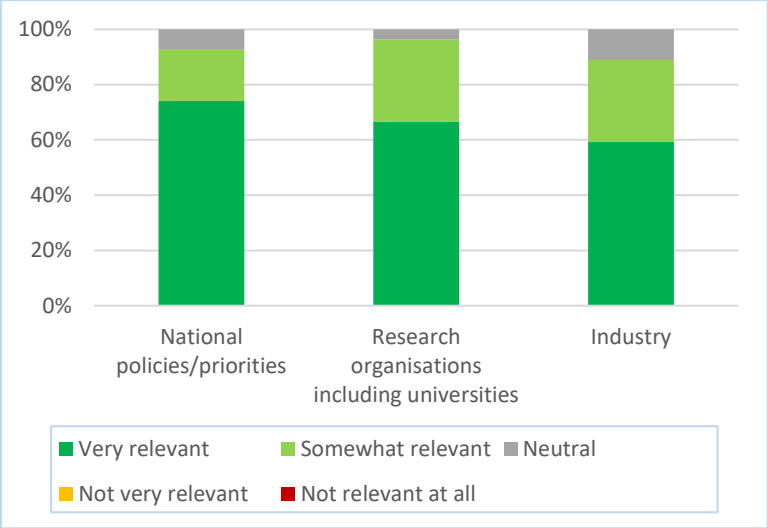

Figure 62: Relevance of the EIT InnoEnergy in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 27 countries report to have something in place. National R&I strategies and/or plans are identified most frequently (85%, AT, CY, CZ, DE, EE, ES, FI, FR, HR, IE, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK, IS, NO), followed by national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (81%, AT, DE, DK, EE, ES, FI, FR, HR, HU, IE, IT, LU, LV, NL, PL, PT, RO, SI, SK, UK, NO) and regional R&I and/or smart specialisation strategies (78%, AT, BE, CY, CZ, DE, ES, FI, FR, HR, HU, IE, LU, LV, MT, NL, PL, PT, RO, SI, SK, UK).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[38]:

- Increasing links with the SET implementation plans and clarifying links with the flagship SUNRISE;
- Clarify the value offering of the KIC to universities (to understand possibilities for possible collaboration);
- Initiating and guiding start-ups should be utilized more intensively in the future
- Including legal and regulatory aspects of the fight against climate change, and integrating legal sciences;
- Better openness and inclusiveness, more administrative simplification for the KIC partners and flexibility.

In additional comments, some countries reiterate the importance of the topic (e.g. decarbonisation of the economy) to their national priorities and the important role of innovation and training to tackle this. Several countries say there is too little information available to assess relevance. Two countries emphasises the importance to ensure the involvement of the whole European society to ensure proper market uptake.

[38] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

The majority of countries are undecided (77%, AT, BE, CY, CZ, DE, DK, ES, FI, HR, HU, LU, LV, NL, PL, RO, SE, SI, SK, UK, IS) to join as a partner, while 23% (EE, FR, IE, IT, MT, NO) agree to join.

Regional R&I and /or smart specialisation strategies (84%) are identified as possible elements for participation most frequently, followed by research infrastructures and governmental research organisations (both at 79%) and existing national R&I programmes (72%).

96% of the countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (65% consider very relevant and 19% somewhat relevant) on the use of a partnership approach. There is broad agreement (77%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, 58% neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (92%) and the expected scientific, economic and societal impacts at European level (88%). The majority of countries (88%) consider the impacts very or somewhat relevant in the national context. 83% of the countries find the envisaged duration of the proposed partnership adequate.

Views on partners, contributions and implementation

There is broad agreement (83%) on the type and composition of partners.

At this stage most counties (85%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that most countries (76%) would need more information to assess the mode of implementation.

4.5.5 EIT Digital

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed EIT Digital, with 89% considering it relevant for their national policies and priorities, and 96% for their industry. 96% of respondents consider the proposed partnership as relevant for their research organisations, including universities. (*Figure 63*)

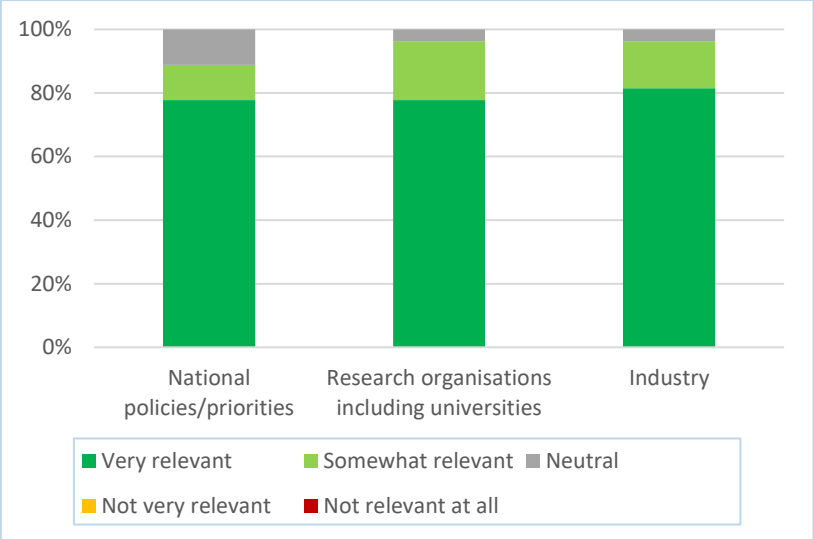

Figure 63: Relevance of the EIT Digital in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 27 countries report to have something in place. National R&I strategies and/or plans are identified most frequently (85%, AT, CY, CZ, DE, EE, ES, FI, FR, HR, HU, IE, LU, LV, MT, NL, PL, PT, RO, SI, SK, UK, IS, NO), followed by, national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (81%, AT, CZ, DE, DK, EE, ES, FI, FR, HR, HU, IE, IT, LU, LV, MT, PL, PT, RO, SI, SK,NO) and regional R&I and/or smart specialisation strategies (81%, AT, BE, CY, CZ, DE, EE, ES, FI, FR, HR, HU, IE, LU, LV, MT, NL, PL, PT, RO, SI, SK).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. Individual comments address e.g. the following issues[39]:

- Including **digital aspects of scientific content and cultural heritage**;
- Greater involvement of all Member States, notably by linking better national start-up ecosystems in support of digital transformation;
- Strengthening links between education and training and innovation activities;
- Include issues around data access and ethical/legal issues around personal and protected data, in particular from connected devices;
- Increase linkages and prevent overlap with other partnerships and digital related R&I activities;
- Improve openness and inclusiveness.

In additional comments, several countries stress the importance of the topic to their national priorities and specify national strategies relevant in the context of EIT Digital. Also, it the need to avoid overlaps with Digital Innovation Hubs and Competence Centres is emphasised.

The majority of countries are undecided (73%, AT, BE, CY, CZ, DE, DK, ES, FI, HR, HU, IE, LV, RO, SE, SI, SK, UK, IS, NO) to join as a partner, while 27% (EE, FR, IT, LU, MT, NL, PL) agree to join.

[39] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

Regional R&I and /or smart specialisation strategies (96%) are identified as possible elements for participation most frequently, followed by existing national R&I programmes (80%) and research infrastructures and governmental research organisations (both categories at 79%).

96% of the countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (72% consider very relevant and 8% somewhat relevant) on the use of a partnership approach. There is broad agreement (81%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, 62% neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (92%) and the expected scientific, economic and societal impacts at European level (88%). The majority of countries (84%) consider the impacts very or somewhat relevant in the national context. 88% of the countries find the envisaged duration of the proposed partnership adequate.

In additional comments, one country stresses that addressing Digital Wellbeing may require a broader focus than entrepreneurialism and products. Understanding how it can be addressed needs to consider the broad social structures within which these products seek to embed themselves, and whether these are effective mechanisms (e.g. is regulation required etc.).

Views on partners, contributions and implementation

There is broad agreement (83%) on the type and composition of partners. In additional comments countries stress that more information is needed on the activities to assess the type and composition of partners. Others clarify their possible participants and contributions.

At this stage most counties (85%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that most countries (76%) would need more information to assess the mode of implementation.

4.5.6 EIT Health

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed EIT Health, with 96% considering it relevant for their national policies and priorities, and 93% for their industry. Countries unanimously consider the proposed partnership as relevant for their research organisations, including universities. (*Figure 64*)

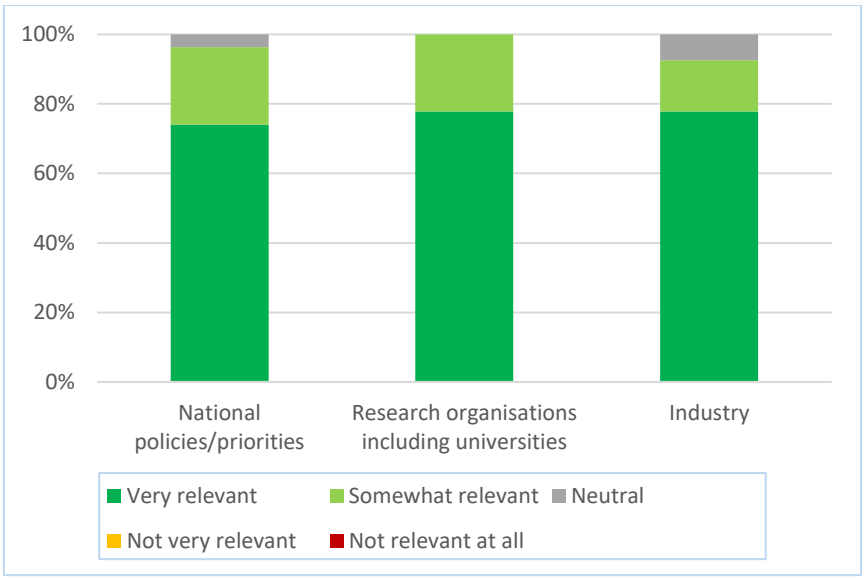

Figure 64: Relevance of the EIT Health in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 27 countries report to have something in place. National R&I strategies and/or plans are identified most frequently (89%, AT, CY, CZ, DE, DK, EE, ES, FI, FR, HR, IE, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK, IS, NO), followed by, national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (81%, AT, CZ, DE, DK, EE, ES, FI, FR, HR, IE, IT, LU, LV, NL, PL, PT, RO, SI, SK, UK, NO) and regional R&I and/or smart specialisation strategies (81%, AT, BE, CY, CZ, DE, ES, FI, FR, HR, HU, IE, LU, LV, MT, NL, PL, PT, RO, SI, SK, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities.[40] Individual comments suggest strengthening the following aspects:

- Provide more knowledge on scaling up interventions;
- Increase linkages and prevent overlap with other partnerships;
- Include the interoperability of health data across all national borders;
- Include behavioural economics/psychology and a better understanding of the effects of comorbidity on care demand/use;
- Supporting cooperation between business and academia, and strengthening cooperation between sectors;
- Openness, attracting more partners and better embeddedness in regions;
- Apply the FAIR data principles.

In other comments, some delegations participating as a partner in the activities of the KIC highlight the added value of the EIT Health to their national ecosystem, notably in facilitating networking and giving access to information, world class R&I actors and businesses from pharma, diagnostics and med tech fields.

[40] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

The majority of countries are undecided (73%, AT, BE, CY, CZ, DE, DK, ES, FI, HR, HU, IE, LU, NL, RO, SE, SI, SK, UK, NO) to join as a partner, while 27% (EE, FR, IT, LV, MT, PL, IS) agree to join.

Regional R&I and /or smart specialisation strategies (87%) are identified as possible elements for participation most frequently, followed by governmental research organisations (82%), existing national R&I programmes (74%), research infrastructures (73%) and planned national R&I programmes (64%).

All countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (71% consider very relevant and 17% somewhat relevant) on the use of a partnership approach. There is broad agreement (84%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, 72% neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (92%) and the expected scientific, economic and societal impacts at European level (88%). The majority of countries (95%) consider the impacts very or somewhat relevant in the national context. 96% of the countries find the envisaged duration of the proposed partnership adequate.

Additional comments from countries emphasise the need to avoid overlaps with other partnerships in the Health Cluster of Horizon Europe (e.g. partnership on large-scale innovation and transformation of health systems, Innovative Health Initiative). It is therefore suggested to clarify the boundaries and specific aspects of each partnership. EIT Health added value is particularly seen in terms of facilitating the take-up of results from R&I projects funded in the context of Horizon Europe and promoting patient acceptability. One delegation suggests closer links with social sciences and humanities and with the cluster on Culture, creativity and inclusive society in relation the objective "allowing the elderly to be able to live independently, providing personal independence and freedom at home".

Views on partners, contributions and implementation

There is broad agreement (91%) on the type and composition of partners. Additional comments suggest to ensuring greater involvement of all Member States, notably in activities supporting innovations and start-ups and market uptake.

At this stage most counties (81%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that most countries (71%) would need more information to assess the mode of implementation.

4.5.7 EIT Food

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed EIT Food, with 96% considering it relevant for their national policies and priorities, and 89% for their industry. 96% of the countries consider the proposed partnership as relevant for their research organisations, including universities. (*Figure 65*)

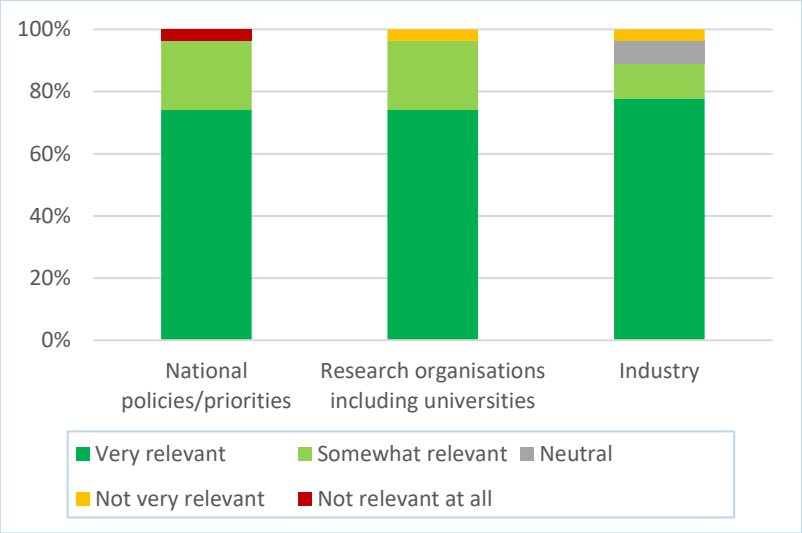

Figure 65: Relevance of the EIT Food in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 25 countries report to have something in place. National R&I strategies and/or plans are identified most frequently (81%, AT, CY, CZ, DE, DK, EE, ES, FI, FR, HR, HU, IE, LV, NL, PL, PT, RO, SI, SK, IS, NO), followed by national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (80%, AT, CZ, DE, DK, EE, ES, FI, FR, HR, IE, IT, LV, NL, PL, PT, RO, SI, SK, NO) and regional R&I and/or smart specialisation strategies (73%, AT, BE, CY, CZ, DE, ES, FI, FR, HR, HU, IE, LV, NL, PL, PT, RO, SI, SK, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities. Individual comments address e.g. the following aspects[41]:

- Include impact of zoological pests, on biodiversity, etc. beyond Europe;
- Include the waste sector and the packaging sector in the context of reduction and more sustainable packaging of food;
- Include synergies with the SCAR Food System working group, the National Food Industry Federations (e.g. FIPA) and with the Partnership on Research and Innovation in the Mediterranean Area (PRIMA);
- Openness, widening and attracting more partners and better embeddedness in regions.

In additional comments, some countries reiterate the importance of the topic (e.g. transformation of the food system by integrating education, innovation, business creation and consumer engagement activities, to foster the production and consumption of safe and healthy food, and promoting sustainable practices in agriculture, aquaculture, and fisheries) to their national priorities, and the importance to ensure complementarities and synergies with other related Horizon Europe activities.

The majority of countries are undecided (77%, AT, BE, CY, CZ, DE, DK, ES, FI, FR, HR, HU, IE, LV, PL, RO, SE, SI, SK, UK, NO) to join as a partner, while 19% (EE, IT, MT, NL, IS) agree to join.

Regional R&I and /or smart specialisation strategies (83%) are identified as possible elements for participation most frequently, followed by governmental research organisations (82%), research

[41] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

infrastructures (77%), existing national R&I programmes (73%), and planned national R&I programmes (68%).

96% of countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (76% consider very relevant and 12% somewhat relevant) on the use of a partnership approach. There is broad agreement (89%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, 69% neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (88%) and the expected scientific, economic and societal impacts at European level (88%). The majority of countries (87%) consider the impacts very or somewhat relevant in the national context. 88% of the countries find the envisaged duration of the proposed partnership adequate.

Individual comments made in relation to the objectives and coherence suggest to improve links with the activities in the Health cluster of Horizon Europe.

Views on partners, contributions and implementation

There is broad agreement (88%) on the type and composition of partners. Additional comments suggest to broaden the EIT Food consortium to include more partners across Europe, as well as to encourage participation of Central and Eastern European partners.

At this stage most counties (81%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that most countries (69%) would need more information to assess the mode of implementation, while the rest agree.

4.5.8 EIT Manufacturing

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed EIT Manufacturing, with 85% considering it relevant for their national policies and priorities, and 89% for their industry. 93% of the countries consider the proposed partnership as relevant for their research organisations, including universities. (*Figure 66*)

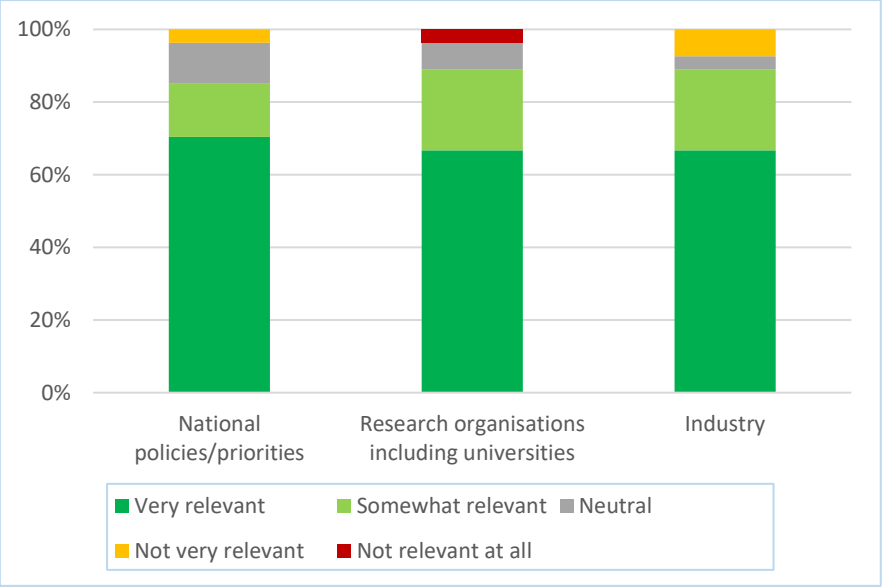

Figure 66: Relevance of the EIT Manufacturing in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 25 countries report to have something in place. National R&I strategies and/or plans are identified most frequently (70%, AT, CZ, DE, EE, ES, FI, FR, HR, HU, IE, LV, MT, NL, PL, PT, RO, SI, SK, IS, UK), followed by national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (69%, AT, DE, EE, ES, FI, FR, HR, HU, IE, IT, LV, NL, PL, PT, RO, SI, SK, UK) and regional R&I and/or smart specialisation strategies (67%, AT, BE, CY, CZ, ES, FI, FR, HR, HU, LU, LV, MT, PL, PT, RO, SI, SK, UK).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[42]:

- Include agriculture, horticulture and food as related areas. E.g. robotisation and automation of food production is a societal relevant area and NL has dedicated initiatives in this area.
- Ensure stronger integration of industry and science sectors;
- More focus on linking with existing ecosystems and technologies;
- Enhance networking at European scale in the aspects of socially sustainable production and products and greener and cleaner manufacturing;
- Modernisation of the manufacturing capabilities

In additional comments, delegations specify dedicated national initiatives, roadmaps and programmes that are relevant in the context of the KIC Manufacturing. Some countries highlight the importance of topics covered by the KIC (e.g. digitalisation, customer-driven manufacturing and environmentally sustainable manufacturing). Individual comments also express agreement with some objectives, e.g. the emphasis on reducing fragmentation to help boost manufacturing upskilling, innovation, digitalisation, and sustainability, and a coordinated approach to providing SME-friendly business support to drive competitiveness and sustainability.

[42] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

The majority of countries are undecided (69%, AT, BE, CZ, DK, ES, FI, FR, HR, HU, IE, LU, LV, NL, PL, RO, SE, SI, NO) to join as a partner, while 19% (EE, IT, MT, SK, UK) express interest to join.

Regional R&I and /or smart specialisation strategies (70%) are identified as possible elements for participation most frequently, followed by governmental research organisations and research infrastructures (both categories at 68%), existing national R&I programmes (65%), and planned national R&I programmes (59%).

89% of countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (64% consider very relevant and 20% somewhat relevant) on the use of a partnership approach. There is broad agreement (81%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, half of the countries neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (84%) and the expected scientific, economic and societal impacts at European level (83%). The majority of countries (87%) consider the impacts very or somewhat relevant in the national context. 84% of the countries find the envisaged duration of the proposed partnership adequate. Individual comments made in relation to the objectives suggest to

- Include the expected scientific impact;
- Make the rationale on the focus on ecosystems more explicit;
- Address the uptake of existing technologies, as these can push innovation e.g. through testing, demonstration, and prototype facilities;
- Ensure closer links with related partnerships in Horizon Europe.

Views on partners, contributions and implementation

There is broad agreement (82%) on the type and composition of partners. Individual comments suggest to ensure openness for new partners to join the partnership to take into account the recent developments in the Manufacturing sector.

The majority of counties (65%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that the majority of countries (58%) would need more information to assess the mode of implementation.

4.5.9 EIT Raw Materials

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed EIT Raw Materials, with 85% considering it relevant for their national policies and priorities, and 81% for their industry. 85% of the countries consider the proposed partnership as relevant for their research organisations, including universities. (*Figure 67*)

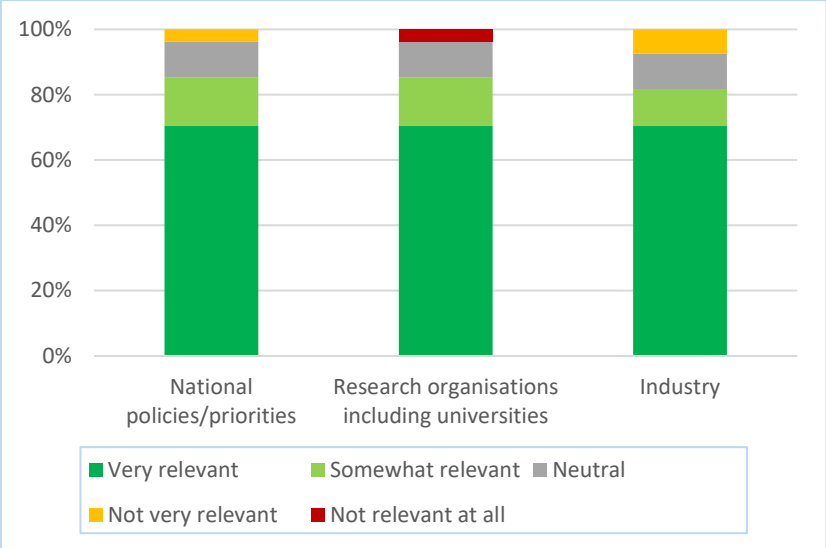

Figure 67: Relevance of the EIT Raw Materials in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 26 countries report to have something in place. National economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation are identified most frequently (76%, AT, CZ, DE, DK, EE, ES, FI, FR, HR, IE, IT, LU, LV, NL, PT, RO, SE, SI, SK, NO), followed by national R&I strategy and/or plan (69%, CZ, DE, EE, ES, FI, FR, HR, IE, LU, LV, NL, PL, PT, RO, SI, SK, NO) and regional R&I and/or smart specialisation strategies (65%, BE, CY, CZ, DE, EE, ES, FI, FR, HR, LU, LV, NL, PL, RO, SE, SI, SK).

Delegations identified few aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[43]:

- Recognize the strategic importance of a **sustainable and responsible sourcing of primary and secondary resources**, including critical raw materials, for the manufacturing EU industry.
- Include diversification of the raw materials sources: invest in domestic extraction, considering the mineral reserves (e.g. historical mines) in Member States;
- Invest in supply from secondary resources (e.g. from mineral based wastes), and support a long-term cooperation with mineral-rich countries and technologically advanced countries;
- Openness, widening and attracting more partners and better embeddedness in regions;
- More focus on linking with existing ecosystems and technologies.

The majority of countries are undecided (64%, AT, CZ, DE, DK, ES, FI, HU, IE, LU, LV, PL, RO, SI, SK, UK, NO) to join as a partner, while 28% (BE, EE, FR, HR, IT, NL, SE) agree to join.

Regional R&I and /or smart specialisation strategies and governmental research organisations (both categories with 74%) are identified as possible elements for participation most frequently, followed by research infrastructures and existing national R&I programmes (both categories at 70%). In additional comments, some delegations specify the types of contributions (e.g. specific research programs on sustainability of mining activities).

[43] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

89% of countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (64% consider very relevant and 20% somewhat relevant) on the use of a partnership approach. There is broad agreement (81%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, 65% of the countries neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (80%) and the expected scientific, economic and societal impacts at European level (97%). The majority of countries (83%) consider the impacts very or somewhat relevant in the national context. 83% of the countries find the envisaged duration of the proposed partnership adequate.

Additional comments by individual delegations welcome the search for alternatives to lower the impact on local populations and environmental conditions.

Views on partners, contributions and implementation

There is broad agreement (83%) on the type and composition of partners. Individual comments suggest to ensure the openness of the KIC to new partners.

The majority of counties (77%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that the majority of countries (72%) would need more information to assess the mode of implementation.

4.5.10 EIT Urban Mobility

Relevance and positioning in a national context

Overall the results of the consultation confirm the relevance of the proposed EIT Urban Mobility, with 89% considering it relevant for their national policies and priorities, and 86% for their industry. 89% of the countries consider the proposed partnership as relevant for their research organisations, including universities (*Figure 68*).

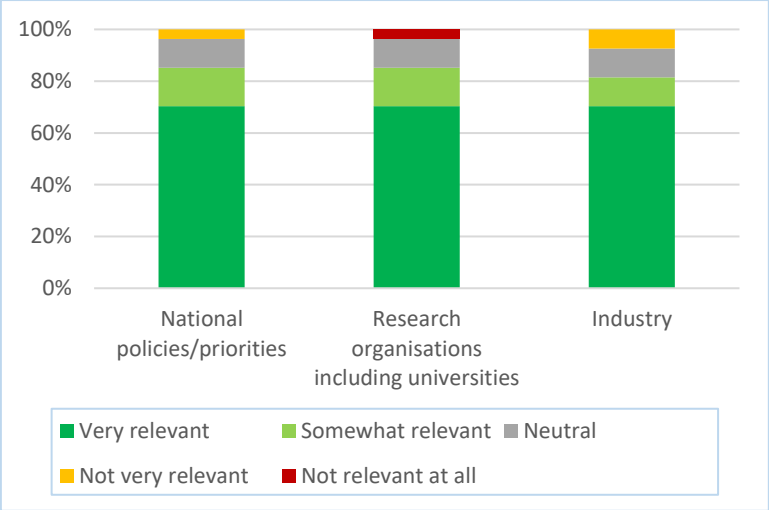

Figure 68: Relevance of the EIT Urban Mobility in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 25 countries report to have something in place. National R&I strategy and/or plans are identified most frequently (70%, AT, CZ, DE, EE, ES, FI, FR, HR, IE, LV, MT, NL, PL, PT, RO, SI, SK, UK), followed by national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (69%, AT, DK, EE, ES, FI, FR, HR, HU, IE, IT, LV, NL, PL, PT, RO, SI, SK, UK) and regional R&I and/or smart specialisation strategies are identified most frequently (67%, AT, BE, CY, CZ, DE, ES, FI, FR, HR, HU, IE, LU, LV, NL, PL, PT, RO, SE, SI, SK, UK).

Delegations identified few aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[44]:

- Include exchange of experience between individuals and cooperation of domestic industry with EU companies;
- Expand the focus beyond business and industry to include policy and public administration, given the roles that these users have in planning and delivering urban mobility;
- Openness, widening and attracting more partners and better embeddedness in regions;
- Dimension of digital smart networks and services should be included.

Other individual comments welcome the inclusion of eco-efficient and safe urban transport as a means to improve air quality and reduce noise.

The majority of countries are undecided (85%, AT, BE, CY, CZ, DE, DK, ES, FI, FR, HR, HU, IE, LU, LV, NL, PL, RO, SE, SI, SK, UK, NO) to join as a partner, while 12% (EE, IT, MT) agree to join.

Regional R&I and /or smart specialisation strategies (82%) are identified as possible elements for participation most frequently, followed by research infrastructures (73%), governmental research organisations (68%), followed by and existing and planned national R&I programmes (both categories at 64%).

[44] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

96% of countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall there is a strong agreement (60% consider very relevant and 16% somewhat relevant) on the use of a partnership approach. There is agreement (73%) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, however, 65% of the countries neither agree nor disagree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (88%) and the expected scientific, economic and societal impacts at European level (84%). The majority of countries (83%) consider the impacts very or somewhat relevant in the national context. 84% of the countries find the envisaged duration of the proposed partnership adequate.

Individual comments made in relation to the objectives suggest to ensure better links with the cluster on Digital, Industry and Space.

Views on partners, contributions and implementation

There is broad agreement (79%) on the type and composition of partners. Additional comments by delegations suggest to ensure the participation of citizens and civil society to ensure bottom-up engagement, as well as extend the participation to public authorities.

The majority of counties (73%) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that the majority of countries (64%) would need more information to assess the mode of implementation.

4.6 Additional partnership candidates identified as outcome of the discussion with Member States

4.6.1 One Health AMR

Relevance and positioning in a national context

Overall, the results of the Member State consultation strongly confirm the relevance of the proposed "One Health AMR" partnership, with 96 % considering it relevant for national policies and priorities, and the same figure (96 %) for their research organisations, including universities. The proposed partnership is also considered relevant for their industry by most countries (91 % relevant).

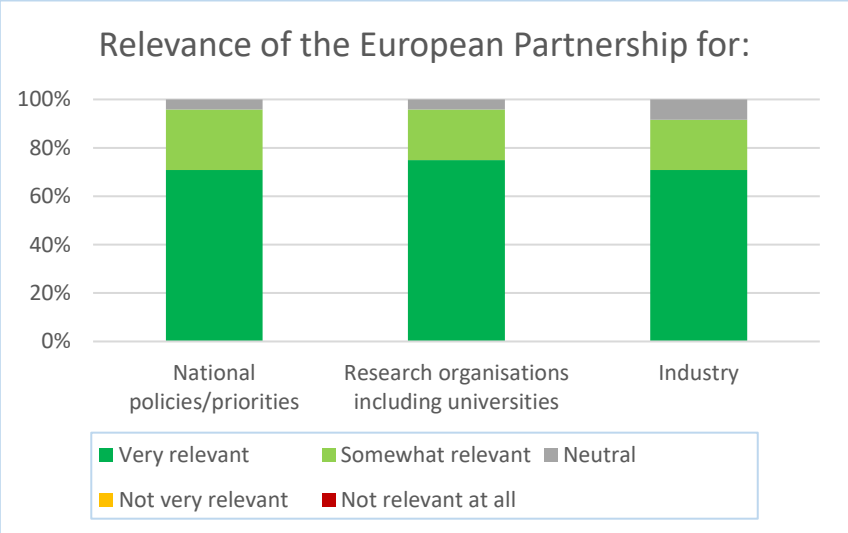

Figure 69: Relevance of the "One Health AMR" partnership in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed One Health AMR Partnership, 25 countries report to have relevant elements in place. National R&I strategies or plans were identified most frequently (76 % - AU, BE, CY, CZ, DE, ES, FR, HR, IR, IT, LU, MT, NL, PO, PT, SE, SK, UK, NO), followed by national economic, sectoral strategies and/or plans with a strong emphasis on research and/or innovation (72 % - AU, BE, CZ, DK, EE, ES, FI, FR, HR, IR, LU, MT, NL, PO, SE, UK, IC, NO).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership that would increase its relevance for national priorities, e.g.[45]:

- It is very important to align this partnership strongly with the EU Strategy in AMR and establish a clear path for a coordinated effort with all the initiatives in the area (partnerships, alliances, contribution to global initiatives, etc.). Such efforts should contribute to a more coherent approach;
- Close cooperation and knowledge sharing with member countries in JPIAMR and with other funding schemes, such as funders of LMIC countries and other partnerships. It would be a waste to dismantle the existing networks;
- JPIAMR has developed a One Health AMR Strategic Research and Innovation Agenda and an implementation roadmap until 2024 that could serve as a starting point for a strategic foundation for a Partnership;
- Efforts should be taken to create synergies with other Partnerships in the Health cluster;
- The OH/AMR proposal should be linked to the outcomes of the EU Joint Action on AMR and healthcare-associated infections (JAMRAI);
- Areas such as stewardship, affordable access could also be mentioned;
- Prevention should be included in the objectives, in addition to therapies, diagnostics and intervention.

[45] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

In addition, individual replies were given from delegations:

- As a separation between activities on human or animal pathogens, zoonotic bacteria and indicator organisms (e.g. lab detection, characterisation, epidemiology/surveillance, risk assessment, intervention) is mostly artificial, a duplication of activities between the proposed partnerships Animal & Health and OH/AMR should be avoided (several delegations state this point);
- Merging the 2 proposed partnerships Animal Health and One Health AMR would be preferable for a holistic, "one health" approach.

At this stage, 11 countries already indicate their interest to join as a partner (BE, CZ, DE, FR, HR, IR, LU, NL, SE, UK, NO). 12 countries are at this stage undecided, and no country has excluded participation. All kinds of research programmes (existing national R&I programmes, governmental research organisations, research infrastructures, regional R&I and smart specialisation strategies) have been identified as main potential partners or contributors (all these have interest rates above 75 %), with a particularly high interest rate (above 90 %) for governmental research organisations and research infrastructures.

Almost all countries (96 %) expressed interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is very strong agreement (85 %) on the use of a partnership approach in moving towards better management of AMR. There is also broad agreement (77 %) that a partnership would be more effective in achieving the objectives and delivering clear impacts for the EU and its citizens (18 % of delegations neither agree nor disagree on this question). Agreement is still high (69 %) on whether the partnership would contribute to improving the coherence and synergies within the EU R&I landscape (22 % of countries neither agree nor disagree with this).

Countries indicate very good agreement with the proposed objectives at short, medium and long term (91 %) and the expected scientific, economic and societal impacts at European level (91 %), with the remaining ones remaining neutral. The same share of countries (91 %) consider the impacts relevant in their national context. One delegation suggests to elaborate further the expected impacts.

There is good agreement (64 %) with the envisaged duration of the proposed partnership, although 31% of countries consider there is insufficient information to assess this. One delegation suggests to start the partnership in 2022, with a duration above 5 years.

One delegation brings forward a need to work at the policy level to provide solutions to difficult questions such as payment models. It also stresses the need to involve clinical practitioners, industry, policymakers and relevant national agencies to move things towards achieving the objectives, as well as social scientists, since the behaviour of the population is central.

Views on partners, contributions and implementation

There is fair agreement on the type and composition of partners (64 %). One delegation stresses that in its view, the inclusion of academia, RPOs and infrastructures with strong expertise and capacity in AMR research, that at the same time are potential beneficiaries of a co-funded partnership scheme, does not make sense; nor does having industry on board make sense, given its potential overlapping with the Innovative partnership initiative (Art. 187). Another delegation considers that more room should be allowed to involve the regulatory side/policy making, as the current phrasing seems to focus on funders. This partnership should not be a "call for projects" box only. Finally, two countries stress that Third countries should be able to be part of the Partnership, as this challenge can only be addressed through global coordination.

At this stage, the vast majority of countries (92 %) would need more information on contributions and level of commitments expected from partners, while 8 % agree with the proposal.

There is clear support for the proposed co-funded implementation mode (52 % of countries), and only 4 % disagree, while the rest need more details in order to be able to make an informed decision.

4.6.2 Geological Services

Relevance and positioning in a national context

Overall, the results of the consultation strongly confirm the relevance of the proposed Geological Service for Europe partnership, with 95 % of countries considering it relevant for their national policies and priorities, and 100% consider the proposed partnership as relevant for their research organisations, including universities. For industry, the figure is a bit lower (79 %) (*Figure 68*)

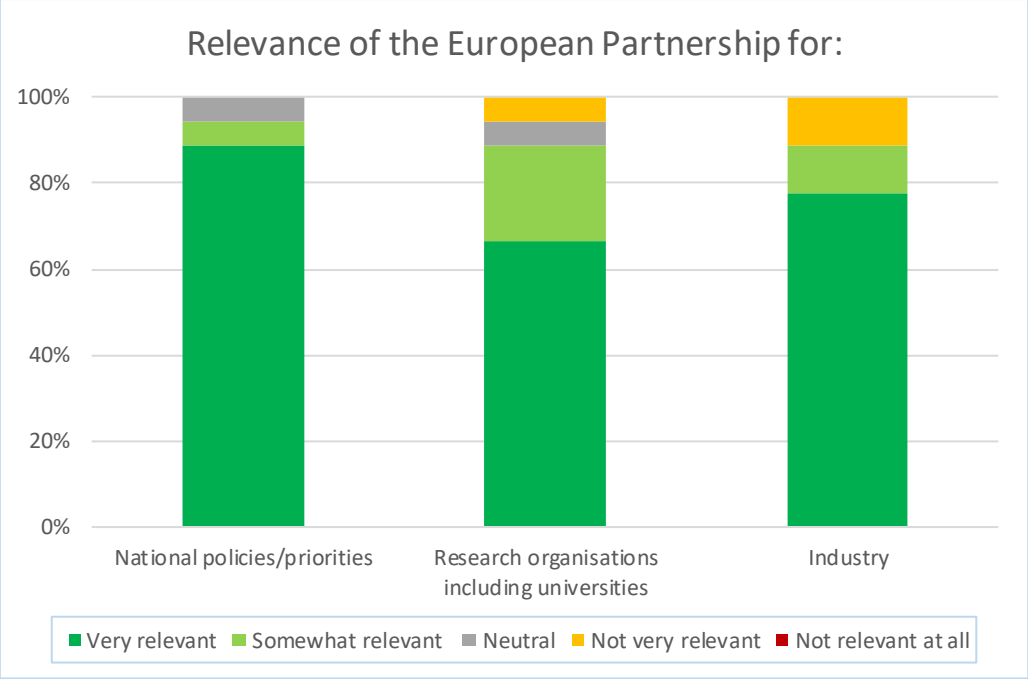

Figure 70: Relevance of the Geological Service for Europe in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 16 countries report to have something in place. National economic/sectoral strategies and/or plans with a strong emphasis on research and/or innovation are identified most frequently (84 %, AT, CZ, DK, ES, FI, FR, HR, IT, MT, NL, PL, PT, SE, UK) , followed by national R&I strategies and/or plans (69 %, AT, BE, CZ, ES, FR, MT, NL, PL, PT, SE, UK) and dedicated R&I funding programmes or instruments (61 %, AT, CZ, ES, FR, HR, IT, NL, SE, UK).

Delegations identified few aspects that could be reinforced in the proposal for this partnership to increase its relevance for national priorities, e.g.[46]:

- Include State Environmental Policy and Policy to Prevent Drought Impact in CR as well as R&D efforts on the impact of climate change;
- The relevance of defining the European added value. All major economic actors (USA, China, India, Brazil, Canada, Australia…) can effectively plan their access to raw materials through a homogeneous knowledge framework and data systems. This is not the case for the EU. A common European approach is a key factor for an adequate raw material supply policy;
- The focus of the partnership should range from the sustainable supply of mineral raw materials to closed loops of raw materials in the circular economy. The three main goals of the EU´s Raw Material Initiative (2008) are still valid;
- Moreover, strong emphasis should also be put on sustainable groundwater management, geo data applications and battery minerals;
- The problem in geological science is often the lack of integration and standardisation of data collection, methods and storage. It is this lack of standardisation that the partnership should focus on addressing (at an international level, not just European), rather than aiming to support the creation of a new Geological Service;

[46] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- Providing evidence-based data to support policy making and regulation is crucial.

Other individual comments welcome the ensuing strengthening of the relevant national programmes for climate and energy, the effects of mining and Cultural heritage/cultural landscape.

The majority of countries agree to join as a partner (75 %, AT, BE, CY, CZ, EL, ES, HR, IT, MT, NL, PL, PT), while 20 % (DK, FI, FR, SE) are undecided.

Governmental research organisations (87 %) are identified as possible elements for participation most frequently, followed by research infrastructures (80 %) and existing and planned national R&I programmes as well as other instruments (all three categories at 67 %).

95 % of countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is a strong agreement (74 % consider very relevant and 21 % somewhat relevant) on the use of a partnership approach. There is agreement (90 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and 84 % of the countries agree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicates strong agreement with the proposed objectives at short, medium and long term (94 %) and the expected scientific, economic and societal impacts at European level (95 %). The majority of countries (89 %) also consider the impacts very or somewhat relevant in the national context. 68 % of the countries find the envisaged duration of the proposed partnership adequate (with 21 % considering that they lack sufficient information to assess).

Individual comments made in relation to the objectives suggest that the partnership is also geopolitically important - knowledge of Europe's minerals and other natural resources will likely become increasingly important, especially with regard to innovation-critical materials such as rare earth metals, etc. Some delegations believe the EP-GSE consortium will negotiate for a minimum of 6 years. In view of the objectives as well as the task to realise a future outside of the framework programmes, this would be justified.

Views on partners, contributions and implementation

There is agreement (70 %) on the type and composition of partners. Additional comments by one delegation suggest that the following partners are necessary to include: Raw materials sector, Mining industry, Land Use and Regional Planning Sector, Soil and Water Protection Policy, Environmental/Nature Protection, Public and Private Agriculture Sector, Natural Hazard and Risk Management 'Sector', e.g. Insurances. Another delegation considers that the partnership should be open for all relevant Geoscience institutions close to Geological Surveys (Academia, Knowledge institutions).

The majority of counties (74 %) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that the majority of countries (63 %) agree with the proposed co-funded implementation mode. The remaining countries (32 %) would need more information to assess this. Also, one country is in favour of the institutionalised mode.

4.6.3 Zero-Emission Waterborne Transport

Relevance and positioning in a national context

Overall, the results of the consultation strongly confirm the relevance of the proposed Zero-emission waterborne transport, with 95 % considering it relevant for their national policies and priorities, and 89 % for their research organisations, including universities. Furthermore, 89 % of the countries consider the proposed partnership as relevant for their industry (*Figure 71*).

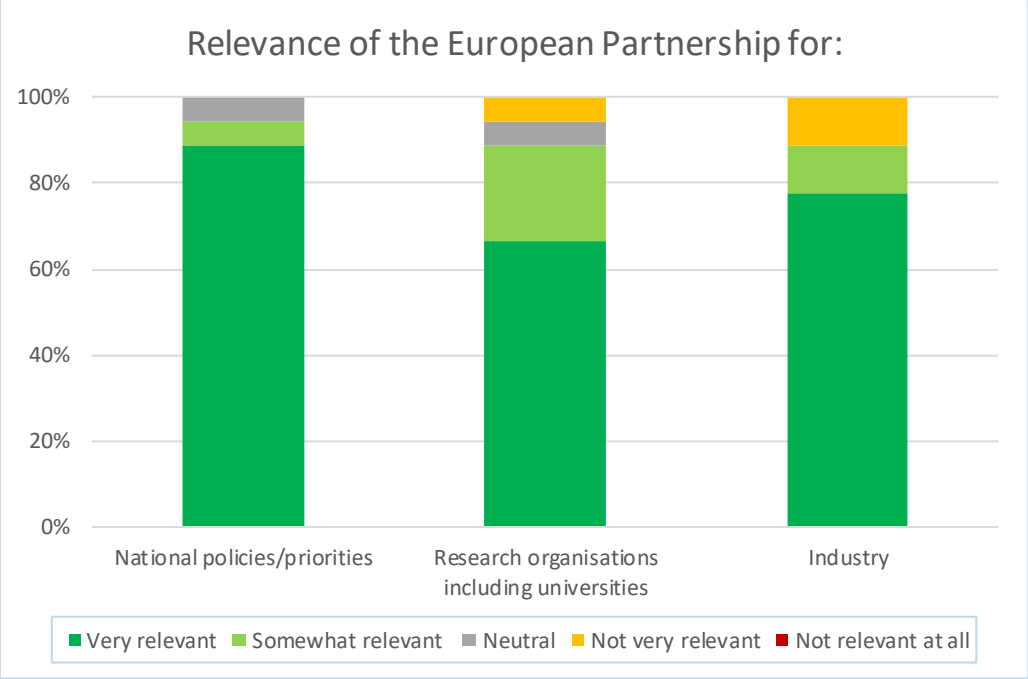

Figure 71: Relevance of the Zero-emission waterborne transport in the national context

On the question of existing national/regional R&I strategies, plans and/or programmes in support of the proposed partnership, 18 countries report to have something in place. National economic/sectoral strategies and/or plans with a strong emphasis on research and/or innovation are identified most frequently (71 %, CZ, DK, EE, ES, FI, FR, HR, MT, NL, PL, SE, UK), followed by national R&I strategy and/or plans (65 %, CY, CZ, DE, EE, ES, FR, MT, NL, PL, PT, SE, UK) and regional R&I and/or smart specialisation strategies (56 %, CY, DE, EE, ES, FR, HR, IT, MT, NL, PL, SE).

Delegations identified a number of aspects that could be reinforced in the proposal for this partnership to increase its relevance for national priorities, e.g.[47]:

- Several delegations suggest to clearly and explicitly include in the scope of the partnership inland waterway transport, its specific requirements and the related waterway infrastructure;
- Cover all relevant sectors and regions for a sustainable development of the maritime sector, including its intermodality with other parts of the mobility system;
- Increased attention on the use of future key enabling technologies such as AI and IOT, in order to help decrease the emissions of CO2 by the waterborne industry;
- The partnership should give an adequate importance to the role waterborne transport has in connecting Europe's peripheral and outermost maritime regions;
- There should be a stronger emphasis on ship design and energy savings, as well as system analysis of policy instruments. Also consider solutions already brought forward, like sustainable alternative fuels;
- Today we cannot forecast all the technical advancements for emission reduction (novel battery types, fuels, etc). To have the largest impact, we need to combine different alternatives. One way to reduce emissions relates to structural weight, but this is also closely related to safety of structures. Under the umbrella of zero emission transportation, the safety

[47] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

of novel lightweight structures need to be evaluated, as the failure mechanisms for these will be different;
- A life cycle perspective from production to usage has to be applied to fuels in order to avoid GHG emissions;
- There is currently no mention of skills development for future maritime staffing or addressing safety of operations. Need stronger focus on smart shipping technologies (mentioned in the proposal) for increasing efficiency and bringing wider benefits.

Other individual comments welcome the initiative, in particular the R&I community and the shipping industry. One delegation stresses that it is clear that the zero emission goal will imply a technical revolution for maritime transport. Another delegation welcomes the opportunity for Europe's waterborne sector to play a leading role in the transition.

The majority of countries agree to join as a partner (63 %, BE, CY, DE, EE, ES, HR, IT, MT, NL, PT, SE, UK), while 32 % (CZ, DK, FI, FR, IE, PL) are undecided.

Regional R&I and/or smart specialisation strategies (67 %) are identified as possible elements for participation most frequently, followed by governmental research organisations, research infrastructures and planned national R&I programmes (all three categories at 62 %), followed by existing national R&I programmes (54 %).

95 % of countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is a strong agreement (83 % consider very relevant and 6 % somewhat relevant) on the use of a partnership approach. There is also strong agreement (89 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and 72 % of the countries agree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicates very strong agreement with the proposed objectives at short, medium and long term (94 %) and with the expected scientific, economic and societal impacts at European level (89 %). Furthermore, the vast majority of countries (89 %) consider the impacts very or somewhat relevant in their national context. 65 % of the countries find the envisaged duration of the proposed partnership adequate, with the rest lacking sufficient information to be able to assess this.

Individual comments made in relation to the objectives suggest to widen the scope to also address other environmental impacts from waterborne transport such as underwater noise, chemicals etc. It was also suggested to state more clearly that "zero emission" covers both airborne emissions and waterborne emissions.

One delegation points out the risk that the objectives and impacts may be too narrow, as just focusing on zero-emission ships will not deal with the wider waterborne sector issues in ports and the blue growth needed to decarbonise maritime transport. Another delegation considers that the currently proposed objectives are too general.

Views on partners, contributions and implementation

There is some agreement (47 %) on the type and composition of partners. Most remaining countries neither agree not disagree, or lack sufficient information to assess. One delegation underlines the risk that the "membership" model for the partnership may create barriers to SMEs and research centres from getting involved and competing for the calls that are developed. Another delegation suggests to involve providers of logistic services as potential partners.

The majority of counties (78 %) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that the majority of countries (63 %) agree with the proposed co-programmed implementation mode, whereas 33 % would need more information to assess this aspect.

4.6.4 Sustainable, Smart and Inclusive Cities and Communities

Relevance and positioning in a national context

Overall the results of the consultation strongly confirm the relevance of the proposed Sustainable, Smart and Inclusive Cities and Communities partnership, with 100 % considering it relevant for their national policies and priorities, and 95 % for their industry. 95 % of the countries consider the proposed partnership as relevant for their research organisations, including universities (*Figure 72Figure 68*).

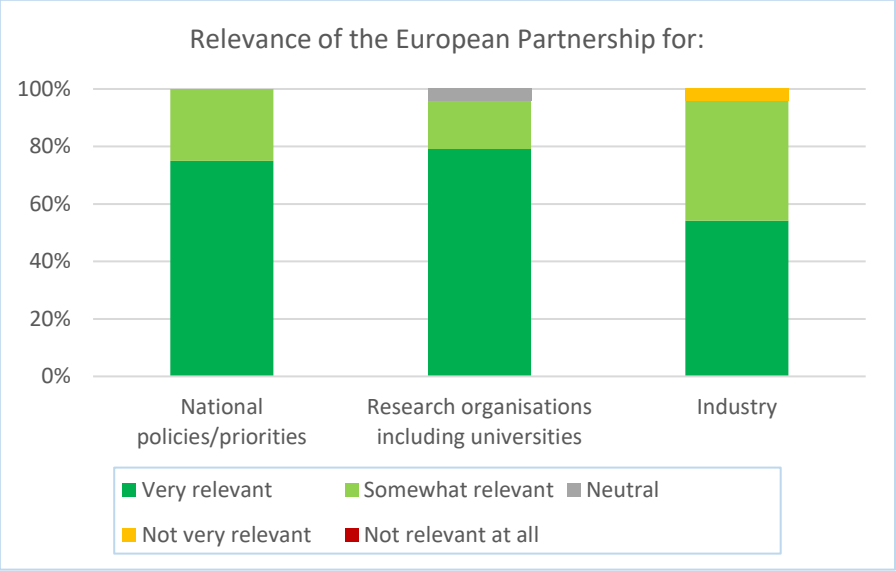

Figure 72: Relevance of the Sustainable, Smart and Inclusive Cities in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 23 countries report to have something in place. National R&I strategies and/or plans are identified most frequently (86 %, AU, BE, CY, CZ, DE, DK, EE, ES, HR, IR, LU, MT, NL, PO, PT, SE, SK, UK, NO), followed by national economic / sectoral strategy and/or plan with a strong emphasis on research and/or innovation (77 %, AU, BE, CZ, DE, EE, ES, FI, FR, HR, IR, LU, MT, NL, PO, SE, SK, UK, NO) and regional R&I and/or smart specialisation strategies (73%, AT, BE, CY, CZ, DE, EE, ES, FI, FR, HU, IE, MT, NL, PT, SE, UK, NO).

Delegations identified a few aspects that could be reinforced in the proposal for this partnership to increase its relevance for national priorities, e.g.[48]:

- Reinforce the aspects of urban issues related to human and ecological health and the well-being of city dwellers;
- Include a focus on social science and humanities on the implications of smart cities ("There are opportunities for SSH to drive activities and for strong, truly interdisciplinary research to take place"), and also on the ethics/politics of technology and citizen involvement;
- Highlight climate challenges related to cities. Several cities are frontrunners in this area. Make a reference to the SET Plan, specifically the Positive Energy Neighbourhoods/District. Connecting sectors are important, e.g. the links between mobility, energy use and production;
- Stress the design and arts as well as the use of cultural heritage to sustain city development;
- Stress AI products and services as well as the internet of things;
- Ensure that this partnership will involve cities of different sizes, in order to guarantee that the solutions developed can be applied to specific contexts;
- The risk of fragmentation is a concern - there are many other instruments on this topic. There is a need to address the exact fit for this partnership more clearly (this point was made by several delegations);
- Specify the measures beyond joint calls (since the latter are considered not efficient);
- Assess the management costs needed for all co-funded partnership proposals;
- Stress the importance of rural areas.

[48] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

The majority of countries are interested in joining as a partner (54 %, AT, BE, CY, DE, EE, FR, HR, HU, IE, MT, SE, UK, NO), while 46 % (CZ, DK, EL, ES, FI, LU, NL, PO, PT, SK, IC) are undecided as to whether to join.

Governmental research organisations (90 %) are identified as a possible element for participation most frequently, followed by research infrastructures (85 %), regional R&I and/or smart specialisation strategies (81%) and planned and existing national R&I programmes (at 80 % and 70 %, respectively).

All countries express an interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is a strong agreement (76 % consider very relevant and 10 % somewhat relevant) on the use of a partnership approach. There is strong agreement (86 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and 70 % of countries also consider that it would contribute to improving the coherence and synergies within the EU R&I landscape (however, 26 % of the countries neither agree nor disagree on this latter aspect).

The feedback from countries indicate strong agreement with the proposed objectives at short, medium and long term (91 %) and the expected scientific, economic and societal impacts at the European level (91 %). The majority of countries (also 91 %) consider the impacts very or somewhat relevant in their national context. Finally, 59 % of the countries find the envisaged duration of the proposed partnership adequate (32 % consider there is insufficient information to assess this aspect).

Individual comments made in relation to the objectives suggest to also address socio-economic inequalities and peri-urban aspects should be in this partnership. Furthermore, one delegation considers that the overlap with the respective mission area is also obvious. Therefore, the partnership could serve as a supporting instrument for the latter and support the development of synergies with ESIF.

Views on partners, contributions and implementation

There is broad agreement (80 %) on the type and composition of partners. Additional comments by delegations suggest ensuring the participation of urban stakeholders as partners, as well as encompassing the 'quadruple helix', i.e. including academia, industry, government and citizens. Another delegation comments that a broad participation from public and private members is required if the expected impacts are to be reached. Finally, one delegation stresses that although a wide partnership is necessary for the implementation, at the same time the partnership must be manageable and capable of acting. A solid governance model and clear criteria for selection is important.

The majority of counties (70 %) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that a slight majority of countries (55 %) agree with the proposed co-funded mode of implementation, but also that most of the remaining countries (41 %) would still need more information to assess this aspect.

4.6.5 EIT-KIC Cultural and Creative Industries

Relevance and positioning in a national context

Overall, the results of the consultation confirm the relevance of the proposed KIC on Cultural and creative industries, with 91 % considering it relevant for their national policies and priorities, and 87% for their industry. 83 % of the countries consider the proposed partnership as relevant for their research organisations, including universities (*Figure 73*).

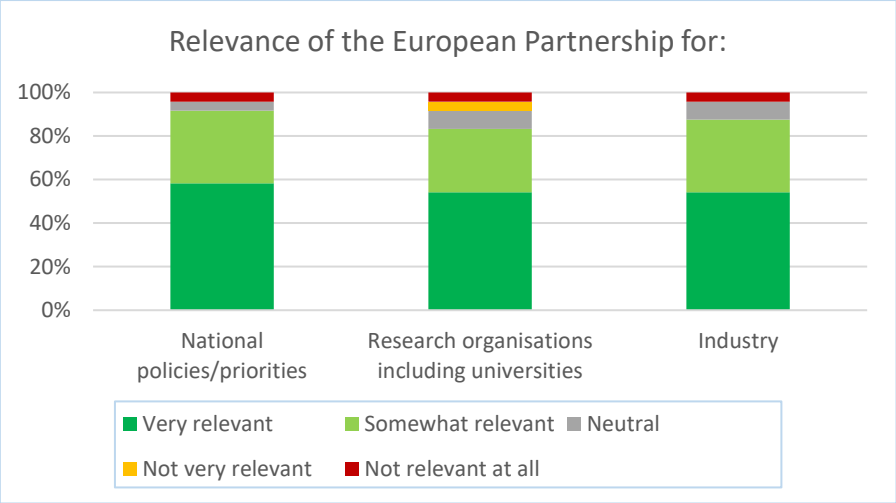

Figure 73: Relevance of the KIC on Cultural and creative industries in the national context

On the question of existing national/regional R&I strategies, plans and/ or programmes in support of the proposed partnership, 21 countries report to have something in place. Regional R&I and/or smart specialisation strategies are identified most frequently (70 %, AT, BE, CY, CZ, EE, EL, ES, FI, FR, HU, IE, NL, PL, PT, SE, UK), followed by national R&I strategy and/or plans (61 %, AT, CY, CZ, EE, FI, FR, HR, IE, LU, NL, PL, PT, SK, UK), national economic/sectoral strategy and/or plan with a strong emphasis on research and/or innovation (also 61 %, AT, EE, ES, FI, FR, HR, HU, LU, NL, PL, SK, UK, IC, NO) and dedicated R&I funding programme/instrument (57 %, BE, CY, EE, EL, FI, FR, HR, LU, NL, PL, SE, UK, NO).

Delegations identified few aspects that could be reinforced in the proposal for this partnership to increase its relevance for national priorities, e.g.[49]:

- Extend the focus to include the SSH component (societal science and humanities);
- Include the role of Cultural heritage research and Heritage Sciences, where the economic niche and the innovation potential for Europe are more relevant;
- Enlarge objectives to include heritage as accommodating incubators and creative firms (clusters), and creative industries as a location factor enhancing quality of place, attractiveness and competitiveness of areas;
- Broaden objectives: next to driving innovation in other sectors, cultural and creative industries are crucial in the design/acceptance of solutions to major societal challenges (including energy transition, climate change, cohesion);
- Include in the scope aspects of how culture and creative industries can enhance political participation, social dialogue and civic engagement, gender equality, enhance transparency, accountability and legitimacy, improve trust in democratic institutions, safeguard pluralism and reinforce liberties;
- Include digital next to (in)tangible cultural heritage and consider adding digitisation of business models and consumer behaviour;
- Tackle the challenging new legal issues of IP rights, licencing and new organisational forms of cultural/creative production in the digital era;
- Many sectors of creative, cultural and artistic production are dominated by micro, small/medium scale organizations/enterprises. They are often highly precarious areas of work. New innovative ways of supporting these organisations should be found;

[49] Comments on scope and content have to be assessed in the context of the overall priority setting to ensure coherence.

- The importance of cross-disciplinary/fusion of skills, including the humanities, arts and design and digital/technological, and of networking/clustering between cultural heritage and arts organisations and digital businesses could be emphasised more, and the case for added value of European collaboration strengthened;
- No clear way to connect the Partnership with existing research mechanisms is described in the proposal. If research is not designed from the beginning in collaboration with the different actors in the domain (JPI CH...), a market uptake of research results will be highly ineffective;
- The KIC concept should be changed in order to deliver sufficiently on the objectives and expected impact. Furthermore, the administrative procedures related to KICs need to be simplified in order to be less resource demanding and allow for a more inclusive approach, especially in the proposal phase.

A slight majority of countries agree to join as a partner (48 %, AT, BE, EE, HU, IE, LU, NL, PL, SE, UK, NO), while 43 % are undecided (CY, CZ, EL, ES, FI, HR, MT, PT, SK, IC).

Governmental research organisations, research infrastructures and regional R&I and/or smart specialisation strategies (all three categories at 70%) are identified as possible elements for participation most frequently, followed by planned and existing national R&I programmes (55 % and 45 %, respectively).

87% of countries express interest in having access to results produced in the context of the partnership.

Feedback on objectives and impacts

Overall, there is a strong agreement (45 % consider very relevant and 23 % somewhat relevant) on the use of a partnership approach. There is some agreement (64 %) that the partnership is more effective in achieving the objectives and delivering clear impacts for the EU and its citizens, and 52 % of the countries agree that it would contribute to improving the coherence and synergies within the EU R&I landscape.

The feedback from countries indicate agreement with the proposed objectives at short, medium and long term (65 %) and the expected scientific, economic and societal impacts at European level (73 %). The majority of countries (65 %) consider the impacts very or somewhat relevant in the national context. Only 36 % of the countries find the envisaged duration of the proposed partnership adequate (50 % consider they have insufficient information to assess this).

Individual comments made in relation to the objectives suggest that a more clear indication of the core focus around which to centre the partnership would be beneficial - the current drafting seems very broad and to have numerous ambitions.

Another delegation stresses that it is difficult to see how the commodification of European Culture and Cultural heritage can bring important and sustainable benefits to society, unless it is associated with sufficient research and involves all actors in the area, from the general public to research and innovation/valorisation.

Views on partners, contributions and implementation

A majority of countries (57 %) neither agree nor disagree on the type and composition of partners, or consider that they have insufficient information to assess this. Additional comments by delegations suggest to include more research partners and deepen the involvement of the research community, as well as to define the method for involving the "other actors" mentioned in the proposal.

One delegation points out the importance of addressing the specific challenges of SMEs to participating fully in the KIC. Another delegation considers that further consideration needs to be given to how to engage in an agile way with large numbers of SMEs, and the ways in which research-SME collaboration can be supported efficiently.

The vast majority of counties (91 %) would need more time and information to assess the contributions and level of commitments expected from partners.

The responses suggest that a slight majority of countries (45 %) would also need more information to assess the mode of implementation. Nevertheless, 41 % of countries are in agreement with the proposed KIC mode.

5 ANNEXES

5.1 Questionnaire for the structured consultation

Section 1: Overall feedback	
Country:	
Contact at national level for the structured consultation:	▪ first name, last name ▪ Organisation & function ▪ e-mail
1. How appropriate is the overall portfolio of proposed partnerships in delivering clear impacts for the EU and its citizens, notably in view of delivering on global challenges and research and innovation objectives, securing EU competitiveness, sustainability and contributing to the strengthening of the European Research and Innovation Area and, where relevant, international commitments.	
Overall	Very appropriate ; Somewhat appropriate ; Neutral ; Not very appropriate ; Not at all appropriate
2. Feedback on the rationalisation and reform proposed for European Partnerships under Horizon Europe (as compared to the landscape of existing partnerships under Horizon 2020), in general and per cluster	
How satisfied are you with the level of rationalisation and reform (in terms of ambition of objectives, composition of partners etc.) of European Partnerships proposed under Horizon Europe, in comparison to the partnership landscape under Horizon 2020?	
Overall	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
How do you assess the overall policy relevance of the proposed portfolio of R&I partnerships for the national policies and priorities?	Very relevant ; Somewhat relevant ; Neutral ; Not very relevant ; not relevant at all
3. Feedback on the overall relevance of topics in the proposed partnership portfolio	
How satisfied are you with the overall thematic coverage of the proposed partnership portfolio?	
Overall	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative	[free text, max 500 characters]
a) Cluster Health	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative for the cluster	[free text, max 500 characters]
b) Cluster Culture, creativity and inclusive society	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative for the cluster	[free text, max 500 characters]
c) Cluster Civil Security for Society	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative for the cluster	[free text, max 500 characters]
d) Cluster Digital, Industry and Space	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative	[free text, max 500 characters]

for the cluster	
e) Cluster Climate, Energy and Mobility	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative for the cluster	[free text, max 500 characters]
f) Cluster Climate, Energy and Mobility	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative for the cluster	[free text, max 500 characters]
g) Other pillars of Horizon Europe (Open Science, Open Innovation)	Very satisfied ; Somewhat satisfied ; Neutral ; Not very satisfied ; Not at all Satisfied
Please provide comments on the aspects that you see as particularly positive or negative for the cluster	[free text, max 500 characters]
Based on the new policy approach and criteria for establishing European Partnerships, are there any proposed Partnerships which you consider are not justified to be launched as such?	Yes ; No
If yes: please specify which, and provide an explanation:	[free text, max 2000 characters]
Based on the new policy approach and its selection criteria, are there additional priorities for which you propose that a European Partnership approach could be considered?	Yes ; No
If yes: Please provide a short description of the scope, the possible objectives and their relevance for Horizon Europe expected impacts, any pre-existing collaboration and the current state of play, the rationale for using a European partnership approach and the type of partners you would consider necessary (private and/or public sector partners) Maximum of 5 proposals	[free text, max 2000 characters, possibility to submit an additional document]
	[free text, max 2000 characters, possibility to submit an additional document]
	[free text, max 2000 characters, possibility to submit an additional document]
	[free text, max 2000 characters, possibility to submit an additional document]
	[free text, max 2000 characters, possibility to submit an additional document]

Section 2: Feedback on individual candidates for European Partnerships	
Partnership candidate:	
Country:	
1. Contact at national level for any follow-up, including possible participation in preparatory meetings (in case participation of Member States would be envisaged)	
a) Research Ministry	▪ first name, last name ▪ Organisation & function ▪ e-mail
b) Sectorial ministry	▪ first name, last name ▪ Organisation & function ▪ e-mail
c) Additional contact (e.g. funding agency)	▪ first name, last name ▪ Organisation & function ▪ e-mail
2. Relevance of the European Partnership Please rate the relevance of the proposed European Partnership for	
a) Your national policies and priorities	Very relevant ; moderately relevant ; slightly relevant ; not relevant ; no opinion
b) Your research organisations including universities at national level	Very relevant ; moderately relevant ; slightly relevant ; not relevant ; no opinion
c) Your industry	Very relevant ; moderately relevant ; slightly relevant ; not relevant ; no opinion
d) What national/regional R&I strategies, plans and; or programmes exist, if any, in support of the given area?	☐ National R&I strategy and/or plan ☐ National economic ; sectoral strategy and/or plan with a strong emphasis on research and/or innovation ☐ Dedicated R&I funding programme or instrument ☐ Regional R&I and/or smart specialisation strategies ☐ Other, please specify: ….
Are there aspects that could be reinforced in the proposal for this partnership that would increase its relevance for your national priorities?	[free text, max 500 characters]
Additional comments on the relevance of the partnership	[free text, max 500 characters]
3. Interest to join as a partner and contribute to the European Partnership with national programmes or other resources	
Is there a national interest to participate as a partner in and contribute to this European Partnership?	Yes ; No ; undecided
If yes: please specify with:	☐ Existing national R&I programmes ☐ Planned national R&I programmes ☐ Governmental research organisations ☐ Research Infrastructures ☐ Regional R&I and/or smart specialisation strategies ☐ Others: ……
Additional comments on the interest to join	☐ [free text, max 500 characters]
Do you have in interest in having access to information on the partnership and its results, both at initiative and project level?	Yes ; No ; undecided
4. Feedback on the appropriateness of using a European Partnership to address this Horizon Europe priority area	
How relevant do you consider the use of a partnership approach in addressing this specific priority?	Very relevant ; moderately relevant ; slightly relevant ; not relevant ; no opinion

To what extent do you agree with the assessment that that the European Partnership is more effective in achieving the related objectives of the Programme through involvement and commitment of partners, in particular in delivering clear impacts for the EU and its citizens?	Strongly Agree ; Agree ; Neither Agree Nor Disagree ; Disagree ; Strongly Disagree ; insufficient information to assess
To what extent do you agree that the European Partnership would contribute to improving coherence and synergies within the EU R&I landscape?	Strongly Agree ; Agree ; Neither Agree Nor Disagree ; Disagree ; Strongly Disagree ; insufficient information to assess
5. Feedback on the proposed objectives, expected impacts and related expected duration of the partnership Please rate your agreement with the proposed:	
a) Objectives (short, medium, long term)	Strongly Agree ; Agree ; Neither Agree Nor Disagree ; Disagree ; Strongly Disagree
b) Expected scientific, economic and societal impacts at European level	Strongly Agree ; Agree ; Neither Agree Nor Disagree ; Disagree ; Strongly Disagree
c) Relevance of expected scientific, economic and societal impacts for your national level European level	Very relevant ; moderately relevant ; slightly relevant ; not relevant ; no opinion
d) Expected duration of the partnership	Far too long; too long; adequate; too short; far too short; insufficient information to assess
Please provide additional comments. In case of disagreement please specify what aspects, if any, could be reinforced to motivate your participation in the proposed partnerships as regards the objectives, expected impacts and related timeframe.	[free text, max 500 characters]
6. Feedback on type and composition of partners	
To what extent do you agree with the proposed type and composition of potential partners?	Strongly Agree ; Agree ; Neither Agree Nor Disagree ; Disagree ; Strongly Disagree ; insufficient information to assess
In case of disagreement: please specify: [the reply should address type of partners that contribute to the partnership, not the ones that potentially apply to its calls. Examples: private partners (industry, SMEs, specific sectors), public partners (Member States, research funders or research organisations with a public service missions), foundations]	Types of partners that are proposed that you do not consider appropriate, and types of partners you consider necessary to include [free text, max 500 characters]
7. Feedback on envisaged contributions and level of commitments from partners	
To what extent do you agree with the envisaged nature of contributions and level of commitments from partners? (please note that the exact contributions and commitments can only be defined at a later stage)	Strongly Agree ; Agree ; Neither Agree Nor Disagree ; Disagree ; Strongly Disagree ; insufficient information to assess
In case of disagreement: please specify:	Contributions and commitments that you do not consider appropriate, and contributions and commitments you consider necessary to include in addition [free text, max 500 characters]
8. Feedback on the proposed form of implementation mode	
Do you agree with the proposed implementation mode (co-funded; co-programmed; institutionalised European Partnership)?	Yes ; No; insufficient information to assess
If no: please specify which implementation mode you would consider more appropriate and why	[free text, max 500 characters]

5.2 List of candidates for European Partnerships proposed by the European Commission

Preliminary list of candidates for European Partnerships in Pillar II, III and cross-pillar, and short description of what the partnership stands and aims for		Currently envisaged implementation mode(s)	Predecessors	Composition of partners	Relevance for clusters/ pillars
Health	**1. EU-Africa Global Health Partnership** Increase health security in sub-Saharan Africa and Europe, by accelerating the clinical development of effective, safe, accessible, suitable and affordable health technologies as well as health systems interventions for infectious diseases in partnership with Africa and international funders.	Article 185 or Article 187 or Co-programmed or co-funded	EDCTP2 (Art.185)	MS/AC and 3rd countries (i.e. sub-Saharan African countries) Foundations/industry on an ad-hoc basis	Cl.1
	2. Innovative Health Initiative A collaborative platform bringing the pharmaceuticals, diagnostics, medical devices, imaging and digital sectors together for precompetitive R&I in areas of unmet public health need, to accelerate the development and uptake of people-centred health care innovations.	Article 187 or Co-programmed	IMI2 (Art.187)	Industry, other organisations on an ad hoc basis	Cl.1
	3. European partnership for chemicals risk assessment Bring together the European risk assessment and regulatory agencies to implement a joint research agenda, to ensure their capacity to deal with persistent or emerging challenges. It will promote the uptake of new methods, tools, technologies and information in chemical hazard identification and risk assessment and as part of this, sustain the development and use of human biomonitoring capacities in Europe.	Co-funded	Human Bio-monitoring and a number of other actions	MS/AC, National agencies, tbd the role of the corresponding EU agencies	Cl.1, 4, 6
	4. Pre-clinical/clinical health research The partnerships aims for establishing and implementing a strategic research agenda and joint funding strategy between major European public funders in health research.	Co-funded	Around 10 previous and current ERA-NET actions	MS / AC / 3rd countries	Cl.1, 6
	5. Large-scale innovation and transformation of health systems in a digital and ageing society Improving health and care models in an ageing, data-driven and digital society, shifting to holistic health promotion and person-centred care approaches through health policy and health systems research.	Co-funded	AAL2 (Art.185), JPI 'More Years, Better Lives' and others	MS / AC Civil Society organisations	Cl.1
	6. Personalised Medicine To align national research strategies, promote excellence, reinforce the competitiveness of European players in Personalised Medicine and enhance the European collaboration with non-EU countries	Co-funded	ERA-PerMed and actions in support of ICPerMed	MS / AC	Cl.1
	7. Rare Diseases To improve the integration, the effectiveness, the production and the social impact of research on rare diseases through the development, demonstration and promotion of Europe/ world-wide production, sharing and exploitation of research and clinical data, materials, processes, knowledge and know-hows.	Co-funded	EJP Rare diseases (until 2023)	MS/AC /3rd countries, civil society organisations, EU research infrastructures	Cl.1

Digital, Industry and Space	**8. High Performance Computing** The EuroHPC Joint Undertaking has as its mission to establish an integrated world-class supercomputing & data infrastructure and support a highly competitive and innovative HPC and Big Data ecosystem.	Article 187 or Co-programmed	EuroHPC (Article 187)	Industry and MS/AC	Cl.4
	9.Key Digital Technologies Maintain the European Electronics Components and Systems industry at the technological forefront and contribute to boosting the EU's competitiveness, including that of its industries by providing essential components and software as well as the related manufacturing infrastructure in Europe and national strategies.	Article 187 or Co-programmed	ECSEL (Article 187), part of Photonics cPPP	Industry and MS/AC (research funders)	Cl.1, 2,4,5
	10. Smart Networks and Services Enabling the infrastructure basis in terms of key technologies and deployment for Next-Generation Internet services used by citizens and for "smart" services required by vertical sectors such as transport, energy, manufacturing, health and media.	Article 187 or Co-programmed	cPPP 5G	Industry and academia in the field of connectivity	Cl.1, 4,5
	11. AI, data and robotics The partnership on AI will help structuring the European AI community, develop a strategic research agenda and federate efforts around a topic that holds great potential to benefit our society and economy	Co-programmed	cPPPs on Big Data and robotics	Industry, academia, end-users, and civil society	Cl.3
	12. Photonics Europe Photonics is one of the key drivers for tomorrow´s digital markets and the development of the digital European society as a whole. Photons will replace electrons in many of our most important technologies and digital products.	Co-programmed	cPPP Photonics21	Industry	Cl.1, 2,4,5, 6
	13. Clean Steel - Low Carbon Steelmaking The partnership on clean steel will provide a EU critical mass to ensure and in particular to upscale breakthrough technology, facilitate joint vision development, agenda setting and synergies of EU different funds. It will also contribute to the evolution to a programming approach in R&I in the energy intensive industry.	Co-programmed	Fuel cell and Hydrogen (Article 187) cPPP Spire	Industry	Cl.4, 5
	14. European Metrology Accelerating the global lead in metrology research that Europe currently holds, and creating sustainable metrology networks for highly competitive and emerging metrology areas, while incorporating a wide range of stakeholders.	Article 185 or co-funded	EMPIR (Article 185)	MS/AC (National Metrology Institutes)	Cl.1, 2,4,5, 6
	15. Made in Europe Towards a competitive discrete manufacturing industry with a world-leading reduction of the environmental footprint whilst guaranteeing the highest level of well-being for workers, consumers and society.	Co-programmed	cPPPs Factories of the Future, part of Robotics and Photonics	Industry	Cl.1, 5,6
	16. Carbon Neutral and Circular Industry Transforming European process industries to make them carbon neutral by 2050, to turn them into circular industries together with material and recycling industries, and to enhance their technological leadership at global level and international competitiveness.	Co-programmed	cPPP SPIRE	Industry CSO/NGOs	Cl.4, 5, 6
	17. Global competitive space systems Perform fast and structured advances on selected innovative critical space systems R&I roadmaps such as for example reusability, in orbit demonstration, assembly and manufacturing, so as to acquire global industrial leadership	Co-programmed	n.a.	Industry MS/AC	Cl.4

Climate, energy and mobility	**18. Transforming Europe's rail system** Define, design and implement the full spectrum of rail research and innovation activities, from fundamental research to large-scale demos, to trigger a major transformation of the railway system as the backbone of an integrated and sustainable mobility in Europe, maximising socio-economic benefits	Article 187 or Co-programmed	Shift to Rail (Article 187)	Industry, Railway Operators and Infrastructure Managers	Cl.5
	19. Integrated Air Traffic Management Enhance the performance of the Union's air traffic management system as technological pillar of the Single European Sky (SES) and more broadly of the air transport sector as a whole.	Article 187 or Co-programmed	SESAR (Article 187)	Industry, Eurocontrol	Cl.4, 5
	20. Clean Aviation To accelerate and amplify the impact of the European aviation research and innovation on Energy Union, Mobility Package, renewed industrial policy strategy and EU GHG and air pollution emissions, including for the 2050 horizon and noise regulations, tackling energy and climate-change challenges, European industry competiveness, "first mover advantage" on international markets, as well as a sustainable mobility for society.	Article 187 or Co-programmed	Clean Sky 2 (Article 187)	Industry	Cl.4, 5
	21. Clean Hydrogen Accelerating the market entry of nearly-zero GHG-emission hydrogen-based technologies across energy, transport & industrial end-users, covering the full value chain for competitive hydrogen and fuel cells technologies, ensuring pole position for Europe to realise the potential of hydrogen technologies at scale.	Article 187 or Co-programmed	Fuel Cell and Hydrogen (Article 187)	Industry	Cl.4, 5
	22. Built environment and construction Generate the necessary technology and socio-economic breakthroughs for an improved built environment to support the achievement of EU 2050 decarbonisation goals and the transition to clean energy and circular economy, while improving quality of living, health and wellbeing for people, ensuring a high degree of mobility and creating competitive ecosystems for business.	Co-programmed	Energy-efficient Buildings cPPP	Industry	Cl.4, 5
	23. Towards zero-emission road transport (2ZERO) Accelerating the transformation of the road transport system into zero-emission mobility through world-class European R&I and industrial system, with a competitive new generation of light weight, energy efficient and affordable vehicles and support measures to facilitate their rapid deployment	Co-programmed	European Green vehicle initiative (cPPP)	Industry	Cl.4, 5
	24. Mobility and Safety for Automated Road Transport Long-term framework to the strategic planning of research and pre-deployment programmes for connected and automated driving on roads at EU and national levels in a systemic approach (vehicle, interactions, infrastructure, technical and non-technical enablers and societal impact)	Article 187 or Co-programmed	related: 5G, Big Data, ECSEL, S2R, SESAR, batteries, 2ZERO	Industry	Cl.4, 5
	25. Batteries: Towards a competitive European industrial battery value chain Development of a world-class European R&I system on batteries, bringing together activities to develop a coherent strategic programme, in cooperation with industrial players and research community, making a substantial contribution to fulfilling the Paris Agreement, and enhance the competitiveness of current and emerging European industries along the battery value chain.	Co-programmed	n.a.	Industry	Cl.4, 5
	26. Clean Energy Transition Respond to the call for decarbonisation in medium- and long-term in a holistic way, synthesizing all fragmented actions to allow for greater integration of relevant research & innovation areas and provide greater impact.	Co-funded	Around 10 existing ERA-NET Cofund actions	MS/AC (RFOs and RPOs)	Cl.5

Food, Bio-economy, Natural Resources, Agriculture and Environment	**27. Accelerating farming systems transition: agro-ecology living labs&research infrastructures** The partnership will enable to grasp short to long-term agroecological processes at landscape level and accelerate the transition towards sustainable climate and environment-friendly farming practices by boosting place-based innovation in a co-creative environment accelerating the adoption of innovation by farmers and other actors.	Co-funded	n.a.	MS/AC (RFOs/regional authorities)	Cl.1, 5,6
	28. Animal health: Fighting infectious diseases The partnership aims to bring sustainable and innovative solutions to tackle infectious animal diseases, including those transmitted between animals and humans (zoonoses) and to contribute to the fight against anti-microbial resistance, implementing the One Health concept. It will support sustainable animal production, reduce trade barriers, and protect consumers.	Co-programmed, Co-funded	A small number of current ERA-NETs	Either MS/AC or Industry, and regulatory agencies	Cl.1, 6
	29. Environmental Observations for a sustainable EU agriculture The objective of the initiative is to support the delivery of a sustainable CAP by improving agricultural practices and farm profitability and using the possibilities the current digital/data technics in the field. New services and applications will be developed for EU's farming sector enabling more efficient, environmentally friendly and profitable production systems.	Co-funded	EuroGEOSS	MS/AC (research funders, national/regional authorities)	Cl.4, 6
	30. Rescuing biodiversity to safeguard life on Earth Halting biodiversity loss, maintaining and restoring natural capital is essential for the transition towards sustainability, climate neutrality and for respecting the planetary boundaries. The partnership aims to deploy solutions to stop the ongoing mass extinction of species caused by human activity by upscaling, aligning and integrating European R&I efforts and investment, guiding actions to protect, restore and sustainably manage ecosystems and natural capital.	Co-funded	ERA-NET Biodiversity, EKLIPSE, ESMERALDA	MS/AC (RFOs, national/regional authorities)	Cl.1, 2,5,6
	31. A climate neutral, sustainable and productive Blue Economy The objective is to sustainably unlock, demonstrate and harvest the full potential of Europe's Oceans and Seas through a well-structured, sustained and simplified joint effort in this borderless domain with the aim to support the transition to a strong, climate neutral and sustainable blue economy by 2050.	Co-programmed or Co-funded	BONUS, MARTERA, JPI Oceans, BlueBio	MS/AC (research funders, national/regional authorities), EU Agencies	Cl.1, 24,5, 6
	32. Safe and Sustainable Food System for People, Planet & Climate Fixing our food system is central to the transition to a 'Sustainable Europe by 2030', and key to meeting the IPCC climate targets and operating within key planetary boundaries. This partnership will deploy FOOD 2030 and deliver the Food Safety System of the future, ensuring consumer trust, safety, quality and traceability; (and) Sustainable Food Systems, providing alternative proteins sources, dietary shifts, the halving of food waste, and exploit the potential of microbiomes for sustainable and healthy food systems.	Co-programmed or Co-funded	FACCE Surplus, ICT Agri2, Core-Organic, ERA GAS, SUSAN, ERA HDL, SusFood2	MS/AC (research funders, national/regional authorities), EU Agencies	Cl.6
	33. Circular bio-based Europe: Sustainable, inclusive and circular bio-based solutions Sustainable and climate-neutral solutions accelerating the transition to a healthy planet, where renewable products and nutrients will be produced from biomass and waste instead of non-renewable fossil and mineral resources. This creates awareness, capacities and appropriate structures extending beyond industry partners, mobilising producers of biological resources and end-users.	Art.187 or Co-programmed	BBI JU	Industry	Cl.4, 5, 6
	34. Water4All: Water security for the planet Secure all water demands in terms of quality and quantity, protect both economic and natural systems, as well as people from water-related hazards. Support the transition to a healthy planet and to ensure a resilient Energy Union, EU climate neutral policy and respect of planetary boundaries.	Co-programmed or Co-funded	Water JPI	MS/AC (research funders, national/regional authorities)	Cl.1, 2,4,5, 6

Partnership candidates: Other Pillars	**35. Innovative SMEs** The initiative aims support to transnational market-oriented research projects initiated and driven by innovative SMEs. Innovative SMEs shall take the lead and exploit commercially the project results, thus improving their competitive position. Research organisations, universities, other SMEs, large companies and others actors of the innovation chain can also participate.	Art.185 or co-funded	Eurostars-2	MS/AC (SMEs)	Pillar III
	36. European Science Cloud (EOSC) The EOSC 2.0 partnership is aimed at facilitating the EOSC implementation activities in its second phase. After 2020 the EOSC will become more stakeholder-driven, with a permanent governance structure in place, and would benefit from a co-programmed financing mechanism.	Co-programmed or co-funded	n.a	MS/AC, Academia	Cross - Pillar
	37. EIT Climate-KIC EIT Climate-KIC is a network of universities, businesses and research organisations delivering solutions mitigate or adapt to climate change and accelerate the deployment of new solutions to market.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.5
	38. EIT InnoEnergy It aims at building a sustainable, long-lasting operational framework among the knowledge triangle actors in the energy sector, with the goal of fostering the generation of new talents, the emergence and deployment of new innovative solutions and the creation and development of companies.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.5
	39. EIT Digital EIT Digital's mission is to drive digital innovation and develop entrepreneurial talent in order to enhance both economic growth and quality of life across Europe.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.4
	40. EIT Health EIT Health is a network of universities, businesses and research organisations delivering solutions to enable European citizens to live longer, healthier lives by promoting innovation.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.1
	41. EIT Food EIT Food is a network of universities, businesses and research organisations delivering solutions to develop a highly skilled food sector. EIT Food collaborates with consumers to provide products, services and new technologies, which deliver a healthier lifestyle for all European citizens.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.5
	42. EIT Manufacturing EIT Manufacturing will be a network of universities, businesses and research organisations delivering solutions to transform today's industrial forms of production towards more knowledge intensive, sustainable, low-emission, trans-sectoral manufacturing and processing technologies, to realise innovative products, processes and services.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.4
	43. EIT Raw materials EIT RawMaterials is a network of universities, businesses and research organisations delivering solutions to boost competitiveness, growth and attractiveness of the European raw materials sector via radical innovation, new educational approaches and guided entrepreneurship.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.4
	44. EIT Urban Mobility EIT Urban Mobility will be a network of universities, businesses and research organisations delivering solutions to develop a greener, more inclusive, safer and smarter urban transport system.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl.5

5.3 List of additional partnership candidates identified as outcome of the discussion with Member States

Additional partnership candidates identified as outcome of the discussion with Member States	**One Health AMR** The partnership aims to bring together the many aspects of antimicrobial resistance (AMR) to overcome the fragmentation of the AMR research landscape, and integrate the various different research fields (addressing human and animal health, food safety and environment). It will contribute to the EU One health action plan against AMR.	Co-funded	ERA-NET EXEDRA, JPI AMR, One Health EJP	MS/AC	Cl.1, 4, 6
	Geological Service for Europe Further integrate national services to provide key advice and data services to the EU on sustainable subsurface management, integrating geo-resources and environmental conditions across all relevant economic and societal clusters, supported by a world leading subsurface information platform. A coordinated approach to geoscientific research and innovation will help improve pan-European harmonisation, standardisation, knowledge sharing and cutting-edge developments in 3D and 4D modelling and geological mapping.	Co-funded	GeoERA ERA-NET	MS/AC	Cl.3, 4, 5, 6
	Zero-emission waterborne transport To radically transform inland and maritime waterborne transport, develop knowledge, technologies and demonstrate solutions that will enable zero-emission shipping for all ship types and services. It will contribute to further reinforcing Europe's global leadership in green shipping technologies. This will create a foundation for shipping to underpin a carbon neutral future with the demonstration of deployable zero-emission solutions suitable for all main ship types and services by 2030.	Co-programmed	n.a.	Industry	Cl. 4, 5
	Sustainable, Smart and Inclusive Cities and Communities It drives research and innovation on urban transitions and provides scientific evidence for urban actors on sustainable urban development with a cross-sectoral, inter- and transdisciplinary approach, implemented through activities beyond joint calls.	Co-programmed, Co-funded	JPI Urban Europe	MS/AC	Cl .3, 4, 5
	KIC Cultural and Creative Industries It aims at improving the competitiveness and the innovation capabilities in the cultural and creative industries by fostering the generation of talents, supporting emergence and deployment of innovative solutions, accelerating innovative companies developing solutions in the domain.	EIT-KIC	n.a	MS/AC, Industry, Academia	Pillar III Cl. 2