Joint\textsuperscript{1} contribution to the public consultation on Interregional Innovation Investments (I\textsuperscript{3})

The signatories strongly supports the Interregional Innovation Investments Instrument and welcomes the agreement from the Council to create this new tool under the ERDF, while regretting the downsizing of its budget to 500 millions € (compared to the nearly 1 billion as initially proposed by the EC). Indeed, we think that, even with its limited budget, this instrument has the potential to unleash the innovation potential available in European regions, supporting the recovery of the European Union as a whole through a coordinated approach for investments in the development of interregional value chains across the EU. It can play a key role in shortening and strengthening supply chains and building the complete value chains that are crucial to strengthen the EU industry, secure innovation capacity, and create a strong basis for future business while also encouraging the progress towards a strategic sovereignty in Europe. Collaboration will be essential in the recovery, and in developing resilient industrial value chains in Europe.

In our view, it should support the creation of interregional public-private innovation partnerships able to strengthen our industrial ecosystems and key value chains, thus paving the way for follow up financing by private players. Guided by the Smart Specialisation principles, it will allow enhanced efficiency and avoid duplication. This instrument, which will be developed under EU cohesion policy, is fully aligned with EU strategic orientations for sustainable and inclusive growth and competitiveness; as such, it should play a key role in the new EU Industrial Strategy, notably as a basis for enabling smart synergies among EU, national and regional instruments and funding. Particularly hit by the crisis, SMEs need a strong focus, and specific support to enable them to play their full role in the recovery, in innovative EU value chains and in scaling-up innovation in Europe.

Building on our experience of interregional collaboration, and in particular the experience gained by Vanguard Initiative’s (VI) 5 pilot projects, we want to put forward the following contribution concerning the questions of the consultation.

\textsuperscript{1} Vanguard Initiative: \url{https://www.s3vanguardininitiative.eu/}
Assembly of European Regions: \url{https://aer.eu/}
European Association of Research and Technology Associations: \url{https://www.earto.eu/}
European Network of Living Labs: \url{https://enoll.org/}
European Association of Development Agencies: \url{http://www.eurada.org/}
Eurotech Universities: \url{https://eurotech-universities.eu/}
Conference of Peripheral and Maritime Regions: \url{https://cpmr.org/}

30 September 2020
1. **What thematic areas would you like the I3 to focus on?**

The I3 should be instrumental in implementing the EU industrial strategy, and focus on key areas for industrial transition, with the digital and green investments as priorities. The I3 should play a key role in shortening and strengthening supply chains and creating the complete value chains that are crucial to strengthen the EU industry, secure innovation capacity and create a strong basis for future business.

It offers the much-sought opportunity to contribute to the recovery of the EU economy in an inclusive way. In that perspective, it should open up opportunities from bottom-up interregional collaboration in connection with initiatives at EU level to develop EU strategic value chains. Synergies between EU instruments and regional funding will be a key element for consideration.

2. **How can the new instrument best unlock interregional innovation investments?**

Regarding the criteria to be used to prioritise the areas of investment, we think that I3 should focus on areas where a strong market potential exists related to the deployment of new technologies (KET) in several value chains, but where an investment failure persists between piloting and full market uptake. Indeed, our evidence suggests that a persistent systemic failure remains at the piloting and demonstration stage of new technologies (e.g. KETs), especially when innovation is the result of the integration of complementary regional specialisations creating innovative value chains. We, therefore, think that the existence of cross-regional collaboration – considered on the level of a full portfolio of investment projects – and cross-sectoral spill-overs should be important criteria.

Regarding the specific proposal to take the involvement of less-developed regions as a criteria to prioritise areas of investment, we would rather advocate developing an intervention framework allowing an inclusive approach, where all regions can participate and find complementarities based on their own strength and assets, in line with smart specialisation principles. This should be, however, actively be supported by the specific strand on developing capacities and exploring potentialities with the objective of enhancing further innovative value chains across EU.

In some strategic technology and industrial areas, SMEs cannot currently count on excellent and open pan-European piloting infrastructures, those areas should be prioritised to unleash our SMEs potential. In the context of the recovery, we need a strong focus on SMEs, which should be supported in their efforts towards further innovations and investments, often hindered by specific barriers. Potential for SMEs involvement should therefore be taken into account and promoted.

Beyond selecting areas for intervention, **criteria for selecting projects** also need consideration.

The I3 should support the creation of mature interregional public-private innovation partnerships that emerge from European industrial innovation ecosystems, based on the Regional Smart Specialisation (RIS3) principles.

In order to guarantee this interregional nature and achieving European added value, I3 should require that the projects submitted within a portfolio have the formal endorsement of the Regional governments of the territories involved in a given consortium/partnership. This endorsement will ensure the coherence of the project with the S3/RIS strategies of those given regions, but it may also entail a commitment to contribute financially to the co-financing of the project, once selected. This will guarantee the alignment of the project’s objective and outputs with the S3 and also commitment to the project.

In order to unlock effective investments for innovation, another relevant aspect is the nature and composition of the partnership/consortium: while the Regional endorsement and commitment is paramount, on the other side a public-private composition of the partnership should be required to support value chain development properly. Private companies, SMEs in particular, industries, clusters or similar innovation intermediaries with excellent industrial and investment expertise, research organisations and technological infrastructures should constitute the relevant partners of the consortium, which could also
include financial partners. The mentioned partners should be recognised as full beneficiaries of the funding coming from I3, signatories of the grant agreement and be engaged in specific, defined, objective-driven core activities reported in the project. Studies, consultancies and minor specific services might be subcontracted or assigned to other actors, but the core activities should be carried out by the public and the private partners of the consortium. In order to reach the final goal of technology deployment, and in line with the objectives and activities of the portfolio of investment projects and the I3 programme, the I3 supported projects should be industry focused and actively involve SMEs and companies.

In addition, as mentioned, our evidence suggests that operating I3 via the support for a portfolio of (investment) projects would be a proper option to meet the objectives of the instrument and, more in the particular act on a number of challenges faced by SMEs:

- For reasons of confidentiality and the difficulty to have companies – involved in close-to-market activities laying the foundations of their own future and profits – engage in inter-company collaboration, the interregional aspect of a single project may be formed by one leading company and various facility centres/technology suppliers providing requested (demonstration) services, but will not always as such involve directly, e.g. other companies. The ‘interregional investment’ dimension is, therefore, to be assessed at the level of the portfolio of projects and not as such at the level of individual (smaller scale or product/application-specific) projects. The portfolio approach can help in joining individual companies’ investment in open infrastructures, where they would individually not invest. In the end of such product/application-specific project (phase 2, industrial uptake), an investment in e.g. a new machine, a new equipment or a new (pilot) production line may follow, in the single region of the leading company involved. At the level of a portfolio of projects, however, this would mean real investments in a strategic VC/in a strategic emerging field in all regions involved at the level of portfolio of project. Nevertheless, individual projects already involving a clear interregional dimension and multiple partners, notably projects requiring major investments, should be considered as a portfolio.

- Any collaborative project, also the ones involving only one leading company, involves a significant coordination cost. From an investment perspective, coordination is a pure cost, which affects the innovation budget of a company. Generating and building promising and complex cases involves a heavy coordination cost, which needs to be funded, but which diminishes relatively if related projects are handled by the same portfolio coordinator. Portfolios allow realising economies of scale.

- The platform function of a portfolio:
  - defragmentation of emerging and existing elements of a value chain is tackled by addressing information asymmetry.
  - success reached within single projects can be influenced by activities more natural to be taken up on the level of the portfolio, like addressing transversal bottlenecks within the value chain, such as certification/standardisation, skills and funding.

- Critical mass is reached, which next to pure volume also leads to diversity, spill-over effects, easier access to more testing facilities and more users of these facilities, diversification of (financial) risks for financial partners.

3. **Preferred type of support (Grants, Loans, Equity)**

On the one hand, industrial companies very often do not have all the necessary equipment and competences to carry out further prototyping activities, validation tests, certification procedures, cost-comparisons or other post-prototyping activities needed before full production and market launch. These activities usually fall under the so-called ‘non-recurrent costs’ and are part of the ‘valley of death’.

On the other hand, very few regions have all demonstration capabilities on their ground to carry out the full spectrum of post-prototyping activities in a specific technology domain.

I3 must help in providing industrial companies, notably SMEs, easier and more affordable access to networked facilities for piloting and demonstration of new products and services. The final goal is to reduce
costs, lower technology uncertainty and to speed up market uptake of new technologies for more advanced industrial production systems and for the establishment of new value chains.

Regarding those aspects, we must underline that unleashing investment and building investment readiness of companies require to consider the full investment needs panorama, from building and developing infrastructures, through collaboration support for demonstration activities and then to the market deployment funding needs. The I3 must fill the gap where the right funding support tools do not exist, while being able to mobilise synergies with other sources of funding.

Based on the funding model developed by VI and the experience of RTOs, we argue that grants are the needed type of support to further developing interregional collaboration for innovation investment.

On the basis of 5 years of experience, the Vanguard Initiative has developed a “3 layers funding model” for open demonstration infrastructures and the company activities making use of them and resulting afterwards, summarising the financing needs for such projects. While the overall size of the investment can differ strongly between open facilities according to their technology focus, three types of costs (and funding needs) can be distinguished:

- **“Layer 1 Costs”**: initial costs for the set-up of (new or upgraded) demonstration infrastructure;
- **“Layer 2 Costs”**: operating costs for the project-based and company-driven demonstration activities;
- **“Layer 3 Costs”**: costs related to the industrial replication and upscale/production, once the demonstration activities have been successful (validated, certified).

A financial gap remains to be closed for these ‘industry commons’ to become effective and to deliver growth and jobs. **Layers 2 & 3 cannot be functioning if the layer 1 is not financially secured first.** The dead-lock is created by the non-profitable part of the infrastructure and can be resolved via the availability of subsidies i.e. via a specific public investment mechanism. This financial gap occurs while setting up the shared facilities and while tackling the first operating costs.

Once this funding gap is secured, industrial demonstration activities can take place. If these are successful, companies can then subsequently upscale their production, generate revenues in the marketplace and hence generate growth and jobs.

Therefore, grants represent an essential requisite in order to generate the investment project flow that will later need other forms of support (equity, loans). Indeed, we do see, in the current landscape, a variety of existing tools for equity and loan support that can be mobilised (layer 3), where the support for layer 1 and 2 is missing. **Considering the inherent complexity of such interregional projects, clear incentives are needed to gain early involvement of companies, alongside with clear and simple processes.**

The funding should, however, be conditioned to an effective engagement of companies and partners to participate and co-invest in the development of the projects. They could, for example, bring in-kind contribution to the creation of the enabling environments, providing some of the equipment to be integrated and technical expertise needed (Layer 1); engage to pay fees for the use of demonstration infrastructures (operational costs); sustain costs of experts for running the demonstration activities or cost of personnel needed to translate companies needs into demonstration activities (Layer 2).

The Vanguard Initiative continues to advocate for a structural solution for the above strongly, but taking into account the relatively low I3 budget, we think it should focus on layer 2 and “learn & connect” kind of activities, as layer 1 involves more significant investment. It should therefore be matched with proper funding solutions for layer 1, notably through regional funding and possible top-ups from Horizon Europe. The same goes for layer 3 funding involving equity and loans, that is indeed needed, but should then be provided by other instruments. Some phasing can there be embedded in the system, with grants provided by I3 for demonstration activities (complemented by private funding), and public support via loans and equity for industrial uptake in a second phase, but with another instrument.

In addition, to implement the portfolio approach suggested above, we think that each portfolio of (investment) projects will need proper professional management, the cost of which needs to be funded by grants. We think that the funding model should be attractive for innovation stakeholders, remain flexible and
simple I order to allow the participation of all relevant stakeholders as well as to allow to fit the specific needs of each partnership, taking into account the targeted value chain, technology, maturity; etc... So, the instrument should remain flexible regarding the kind of beneficiaries and forms of partnerships (e.g. through cluster or other intermediaries delivering cascade funding or through consortia of companies, RTOs,... different kind of recipients should be allowed as well as direct funding to consortia), the kind of activities to be funded, but define some key aspects to take into consideration : link to S3 priorities, capacity to generate a flow of projects, be driven by industry needs and ensure proper industry co-investment / leverage on private funding, openness (e.g., regarding entry possibilities during implementation for new investment projects), benefit for SMEs,....

4. Where are the potential complementarities with other EU instruments and actions?

As exposed above, I3 alone will not be enough to achieve the ambition. Synergies between EU, national, regional and private funding for financing industry-led innovation projects are needed to cover the full investment need spectrum, but also to support further exploitation and cross fertilisation. In a context of pressure on the public finances, smart specialisation principles could guide coordination of efforts for enhanced efficiency and avoiding duplication.

In that perspective, the I3 could be a strong catalyst for co-investment and synergies between EU programmes supporting the development of strategic industrial value chains through interregional collaboration. It should facilitate the establishment of interregional pilot infrastructures, promote industry-led projects and leverage private investments in new technologies.

The potential of an ambitious EU cluster policy should also be fully exploited to drive the development of EU value chains and efforts in the relocation of production. It should aim at developing European world-class clusters connecting regional clusters, networks and innovation ecosystems. Building on bottom-up, collaborative and multi-disciplinary approaches, clusters constitute a powerful lever for achieving critical mass in Europe.

While the programmes that will be implemented under the next MFF contain several novelties that could contribute to a more substantial alignment between innovation roadmaps for co-investment in European priority areas and an enhanced support landscape for interregional collaboration projects, coherence and effective modalities for enabling concrete synergies are still missing. We are therefore asking for the development of an integrated and concrete approach for funding and supporting interregional collaboration networks, with the objective of an appropriate coverage of layers 1 to 3 funding needs, and from the learn & connect to the commercialise phases of our approach.

Among the proposals that could be part of this system, the following would form a coherent framework for EU action around EU value chains:

- The I3, which could address layer 2 funding needs, but should however be matched with funding solutions for layer 1, notably through regional funding and possible top-ups from Horizon Europe, and for layer 3 (Invest EU, EIC);
- The pillar II of Horizon Europe addressing European partnerships and demonstration facilities, which could potentially cover layer 1 funding, but with remaining challenges for addressing synergies with interregional projects and matching regional funds;
- The pillar III of Horizon Europe, helping the further development of EU innovation ecosystems, that is still largely to be defined regarding its concrete content, could provide an umbrella for such a coordinated approach between EU funding under Horizon Europe and regional funding for layer 1 costs, in combination with I3;
- Joint Cluster Initiatives (under the Single Market Programme): could cover layer 2 costs notably through vouchers schemes, learn-connect and demonstrate phases;
- The EIC under Horizon Europe and InvestEU to finance investment in companies (in layer 3) having a stronger basis as result of successful demonstration activities;
- Interreg: transnational / cross-border strands, allowing investment in layer 1 but with limited geographical scope. A revamped Interreg Europe programme could also be reshaped to contribute to this general dynamic and enhance its impact significantly in terms of sharing knowledge and transfer of expertise. It could contribute to learn & connect phase and policy developments for matching smart specialisation strategies with a clear aim for a long term policy collaboration in a given value chain. It could also constitute as such a strong shadow/mirror support project for approved I3 portfolios, including the development of new and improved regional policies for the demonstration phase and interregional collaboration. In this sense, funding overlaps on the capacity building should be avoided between the second strand of I3 and Interreg Europe.

- ERDF: layer 1 investment at the regional level, but with implementing difficulties when it comes to interregional projects, and different budget capacities among regions. Clarifications are needed on flexibility mechanisms and state aid issues;

- Digital Europe Programme: co-financing DIH infrastructures and operations as set forth in the EDIH approach could be extended to other topics with a clear European added value, while the collaborative approach needs to be improved. This could serve as an example to develop further activities under Horizon Europe. This kind of approach can help covering layer 1 and 2 needs, but the way to combine and build up synergies with regional funds is to be improved.

- TS3P and associated services: the way forward with TS3P is still to be defined. This kind of tool is needed to fuel a European pipeline of collaborative projects, on a bottom-up basis. The set of support services around those platforms is to be defined.

Stronger functional connections should also be established between interregional networks (VI, TS3Ps) and other EU initiatives such as IPCEI value chains, Horizon Europe partnerships, cluster collaboration projects across Regions. This would enable explicit synergies between support and advisory mechanisms, funding schemes at EU level and with regional funding. It should also help in connecting top-down with bottom-up approaches and enable the implementation of outward looking smart specialisation strategies.

5. How complementarities with other EU instruments and programmes can be encouraged?

In the view of the signatories, any of the options on synergies between EU initiatives and national/regional funds proposed by the Commission would need two basic features to succeed: clear, streamlined and simple procedures, along with adequate incentives.

Among the proposals in the questionnaire, joint calls seem the most convenient option when it comes to synergies between directly managed funds. This would be the most straightforward option in terms of simplicity from the point of view of the beneficiaries.

When it comes to synergies between EU programmes and shared managed funds (ESIF), they would certainly have a considerable positive impact, such as increasing the limited budget available for collaborative investments in the European programmes (Interregional Innovation Investments and European Territorial Cooperation, Digital Europe, Horizon Europe). Nevertheless, many are the difficulties for the implementation of synergies and many barriers are still to be removed. Each fund or set of funds have their regulation and their specific rules on management and state aid.

With no legal certainty and no simple and clear procedures, it will be difficult for these synergies between funds to happen.

With reference to the combination of ESIF and centrally managed funds, it is worth to mention, as an example, the lack of details and clarifications on how to ring fence the regional contribution in case of transfer according to the related CPR provision. In fact, it is not well explained how to ensure that the regional

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3. indicating upfront the component of the I3 investment that the regional/national authority will support with mainstream programmes or with national funding;
- dedicated ERDF resources used to top up (ex post) I3 awarded investment projects;
- transferring funding from ERDF mainstream programmes to I3;
contribution will “return” to its territory, thus addressing local beneficiaries of that region which agrees to allocate regional funds to complement EU innovation programmes (I3 for example).

Also, adequate incentives would encourage Regions to allocate funds to European projects, apart from the obvious benefit of internationalising the innovation activity of the Region. An example of incentive would be a higher co-financing rate for European interregional projects than the co-financing rate corresponding to the purely regional projects. Further guidance, and a clear support framework for supporting the Regions in elaborating the international dimension of their S3 would also be valuable to facilitate the process.

On the other hand, we call for the opportunity to apply the Seal of Excellence (SoE) model to other centrally managed programmes on top of Horizon Europe. In particular, to European programmes which include the same disposals following the reasoning behind the SoE for Horizon Europe and which are based on an independent evaluation. This is the case for I3, as well as the COSME part of the Single Market Programme (and notably inter-cluster collaboration projects which includes voucher schemes for SMEs) as well as the Digital Europe Programme.

In any case, we consider that the Seal of Excellence disposal should apply to I3 and benefit from a State aid exemption (revised GBER) for the same reasoning applicable to the currently existing SoE.

Moreover, we request proposed GBER exemptions to apply to possible combinations between national/regional funds (including under ESIF) and I3 for co-financing EU-supported projects approved through an independent selection procedure at EU level. Being in a collaborative and interregional setting, we think that those kinds of projects could have an important impact on EU competitiveness, would be beneficial for SMEs, while having limited negative effects on competition within the internal market.

An important key element for enabling effective synergies are the State aid rules, that should be reviewed to give more focus on collaborative projects and co-investment approaches, with a view to drastically facilitate them. The Vanguard Initiative, jointly with EARTO has recently published a contribution to the public consultation the GBER³, which touch on some possible solutions. The European Framework for State Aid should also be reassessed to further stimulate innovation, especially concerning pilot and demonstration projects, go-to-the-market phases and deployment of Key Enabling Technologies (KET). The rules should enable collaborative approaches across borders, notably through cross-cluster collaboration, or by facilitating participation in European Partnerships. Beyond the IPCEI scheme, there is ample justification for focusing more on SMEs. We notably suggest to the Commission to consider a new exemption dedicated to facilitating the support by Member States to inter-cluster collaboration projects, for example through the implementation of interregional innovation vouchers schemes.

6. What are the main market failures that the instrument should address to facilitate investment by mature main market failures partnerships?

Beyond the rating mentioned in the questionnaire, we want to underline that is rather a combination of market failures that make those projects complicated.

Our evidence suggests that a persistent market failure remains at the piloting and demonstration stage of new technologies, especially when innovation is the result of the integration of complementary regional specialisations. The aim should be to provide industrial companies, notably SMEs, easier access to networked facilities for piloting and demonstration of new products and services. The final goal is to reduce costs, lower technology uncertainty and to speed up market uptake of new technologies.

As experienced by the Vanguard Initiative pilot projects, and the thematic S3 partnerships, and on the basis of analysis of many signatories’ members being part of these pilots and partnerships, there is an urgent need to further developing new funding mixes and financial tools that allow joint investments in open innovation-based projects across borders, with a facilitated access to expertise and services for European SMEs. At this moment, there is no suitable instrument in inter-regional, pan-European setting to support the

very much needed investments in innovation infrastructure/‘industry commons’. We also face a lack of openness of existing schemes for bottom-up projects based on interregional collaboration and a lack of adequate interregional schemes for SMEs. The lack of matching with current funding possibilities is a major constraint. Finding a better match is a collective responsibility (regional + national + EU authorities).

7. **What are the main barriers that the instrument should address to encourage the integration and development of value chains in less developed regions?**

We consider that the I3 would be an important tool to build the capacity of innovation ecosystems and actors within less developed regions, enabling stronger visibility and potential connections with value chain partners across Europe. The need to strengthen innovation takes on additional importance in less developed regions as part of the solution to challenges such as low productivity. The type of collaborative activity envisaged through the I3 (and which of course we have seen demonstrated in Vanguard Initiative pilot activities) would enable innovation ecosystem actors in these regions to become more visible and “greater than the sum of their parts” – by having the ability to connect resources and expertise across regional and Member States borders. As said above, we advocate to develop an intervention framework allowing an inclusive approach, were all regions can participate and find complementarities based on their own strength, following smart specialisation principles, with a specific focus on capacity building in those regions, and proper synergies with other tools tackling those issues. We also see that this instrument would enhance directionality and add value to other interventions and investments – EU, national and regional - delivered at the regional level. Value chains are not confined by the borders of the EU and we therefore believe that this instrument should be designed to allow the possibility of third country participation.

8. **Governance**

I3 has been inspired, bottom up, by the strong will of EU Regions to collaborate despite the obstacles and barriers to interregional collaborative innovation arising from the fragmentation of the Internal market. In consequence, **active and broad involvement of the regional stakeholders in the design and governance bodies of I3 will be needed in order to ensure a fruitful implementation and effective territorial deployment.** The governance setting must allow a broad involvement of regional stakeholders with experience of EU wide collaboration, including representatives of authorities in charge of innovation at regional level, and also allow to tackle efficiently the synergies issues. At the same time, independent and qualified experts should carry out projects’ evaluation according to common criteria. We are asking for a simple and transparent implementation system, based on published work programmes, regular calls for proposals and streamlined procedures.

During evaluation, company related investments have to be considered on their effect on the whole company. Taking into account the nature and sensitivity of the (business plan/model) information to be provided, the signatories proposes to integrate a phased approach in the provision of company information.

The signatories remains committed to further contribute and get involved to achieve strong results in the implementation of I3.
This contribution is supported by:

S3 Partnerships:

☑ Efficient and Sustainable Manufacturing
☑ New Nano-Enabled Products
☑ Advanced Manufacturing for Energy Applications
☑ High Performance Production through 3D Printing
☑ Interregional Cooperation on Innovative Use of Non-Food Biomass
☑ Artificial Intelligence and Human Machine Interface

☑ Photonics
☑ Smart Regional Investments in Textile Innovation
☑ Sport
☑ Personalised Medicine
☑ High Tech Farming
☑ Smart Sensors 4 Agri-Food
☑ Advanced Materials for Batteries
☑ Marine Renewable Energy