


POSITION PAPER

Strengthening the European Innovation Ecosystem via the enhanced involvement of Science Parks and other Areas of Innovation in the relevant EU strategies, policies and programmes

1. Horizon Europe, the EIC initiative and IASP

The European Division of the International Association of Science Parks and Areas of Innovation (IASP) wishes to express its appreciation for the ambitious **European Innovation Ecosystem** concept, within the EU's *Horizon Europe*, and in particular for the European Innovation Council's initiative "Enhanced EIC pilot". The goals of this initiative —*To support top-class innovators, startups, small companies and researchers with bright ideas that are radically different from existing products, services or business models, are highly risky and have the potential to scale up internationally*— closely reflect the work that our members do on a daily basis. This initiative is timely and necessary, and aims at kickstarting the task of transforming a huge European potential into action and results.

The **European Innovation Ecosystem** is an opportunity to align the work of many different agents.



As a large and experienced global network of innovation actors and stakeholders, IASP would like to emphasise the importance of the networking component of the EIC pilot.

The agile access of our European innovators to international technology and business value chains, as well as to specialised investment sources and channels, is a *sine qua non* condition. Enhancing the networking aspects within the EIC pilot should also aim at capitalizing on the vast experience of ongoing EU initiatives as well as of other professional associations and networks.

This position paper seeks to:

- Update national and EU policy makers on the progress and developments of STPs and AOIs (Science/Technology Parks and Areas of Innovation).
- Suggest ways of deepening the ongoing involvement of European STPs and AOIs in EU programmes and actions, with particular emphasis on the *Enhanced EIC pilot* initiative and

on other innovation policy Units of the European Commission programming for the period 2021-2027.

- Highlight STP/AOI involvement in the current growth of the European Region Ecosystems and relevant EU initiatives.
- Enhance the contributions of its members and associates to the design of European strategies, policies and programmes, especially those related to major European priorities such as: The Green Deal, Industrial Transition, R&D and Innovation, and Cohesion.

2. STPs and AOIs today in Europe: role and relevance

IASP, with its headquarters in Spain and branch office in China, is a global association founded in 1984 and gathers over 350 members in 73 countries. Our worldwide network hosts and serves around 115,000 strongly innovation-based firms, which are operating in our member STPs and AOIs.

The 210 members of the European Division of IASP account for around 45,000 companies, plus a sizeable number of research organisations, technological institutes and business incubators and accelerators located in our members' premises or strongly connected to them.

To the IASP members in Europe, we need to add other parks and similar projects that are not formally a part of our network, but with which we maintain frequent links and contacts. All these nodes (IASP members and otherwise) add up to a total industry of over 450 STPs and AOIs in Europe, which in turn host over 80,000 firms:


A formidable potential of innovation that needs to be mobilised in a common and coordinated effort along the lines of *Horizon Europe* and the *Enhanced EIC pilot*.

As well as STPs, new models of Areas of Innovation have emerged with force over the last few years. Many of these AOIs are also members of IASP.

On top of the increasing number of individual STPs and AOIs, many national associations are also part of the larger IASP network, and IASP is the world coordinator of WAINOVA, an informal network of 27 national and regional STP associations, which significantly multiply the reach of our network.

STPs/AOIs in Europe are increasingly recognised as:

- An important part of local innovation ecosystems
- Working extensively with knowledge-based SMEs and startups
- Valuable contributors to foreign direct investment by high tech companies
- Recognised poles for talent attraction and drivers for open innovation (IASP has a guide on how to organise Open Innovation Markets Places at the disposal of its members).




Most STPs and AOIs are deeply embedded in innovation ecosystems, and are recognised central elements.

The importance of the continuously evolving STPs/AOIs (4th generation) is highlighted through the benefits they offer to businesses and communities in Europe, as they:

- Serve as effective tools to spur urban revitalisation.
- Become leaders in sustainable design. Use of renewables, minimizing environmental impact, promoting green/energy innovations and serving as a showcase of regional green innovations.
- Embrace global focus, support the internationalisation of startups, and serve micro multinationals and transcontinental entrepreneurship. STPs place increasing emphasis on international partnerships with other STPs, improving the way they meet the soft-landing needs of their resident companies.
- Facilitate brain exchange and circulation within their resident companies - locally, regionally and beyond.
- Provide experimental labs for proof of concept and quick market entry, speeding the long commercialisation periods needed and following the evolution of today's quick disruptive / converging technologies at a fast pace.
- Support leveraging assets of non-University R&D departments of industry.
- Encourage a circular multidisciplinary approach in the research domain, and support adaptation to the rapid pace of technological development. The 4th generation replaces the linear model of technology commercialisation, and facilitates loops and links between research and business, helping all sides achieve fast-evolving innovation that does not allow for lengthy evaluation, rest processes, or a traditional R&D approach.
- The new STP/AOI model is based on mixed use spaces for academia and businesses, and by an increasing proximity to cities, urban spaces and communities. Multiple stakeholders for niche areas are encouraged, as STPs place value on groups of

competitive partners, suppliers and customers, connecting them to help innovation happen. Professional and full time STP/AOI management is critical for success in this demanding and complex task.




In terms of talent creation/attraction, STPs and AOIs are experts at creating and managing communities and facilitating social capital by getting people to meet and start mutual projects.

Of particular importance is the role IASP members can play in the Smart Specialisation strategy, and also in the development of new products that will be conceived and brought to society as a result of sectoral intersections.

3. The role of IASP and its members in bringing the innovation community together, and the evolution of STPs and AOIs as innovation ecosystems and stakeholders

Many large STPs and AOIs have grown to become innovation ecosystems themselves, while smaller ones play a critical role in regional innovation ecosystems and are often the spark that ignites them. They act as powerful tools for economic development and the consolidation of the knowledge economy at regional level. STPs play a pivotal role in the development of regional clusters of SMEs and research institutions, offering their know-how in technology transfer and coordination of partners from research all the way to market.

STPs and AOIs have created innovation ecosystems which include the main agents of the quadruple helix: business, government, university and society.



Science parks and Areas of Innovation have built a network of contacts that accelerate connections and bring a series of advantages for the companies and entities they host. One click is now all it takes to give a startup the opportunity to scale up, internationalise or find a partner for an international project.

STPs and AOIs have become embedded in the regional economy and innovation infrastructures, just like airports and highways are basic platforms of regional transport systems. **They have proved to be resilient in times of crisis** by housing and supporting dynamic innovative companies, contributing significantly to sustainability of existing jobs as well as the creation of new highly skilled jobs, and the significant local and regional economic impact which that entails.

The interaction between quadruple helix partners and STPs and AOIs has brought about social, spatial, urban and economic changes, which can be summarised as follows:

- AOIs and 4th generation STPs link spaces and functions, drive urban transformation and support the creation of digital districts - a phenomenon of increasing importance in urban planning.
- Universities and research centres reconsider their position in the physical space and innovation value creation, and tend to move multidisciplinary or applied research facilities close or inside STPs and AOIs.
- Talent is attracted by ecosystems that have sustainability and smart environment embedded in their planning and operation, as well as by a stimulating environment within and outside of STPs and AOIs, offering attractive urban facilities.
- Many STPs and AOIs have become role models for sustainability, demonstrating their commitment to today's ethical, social and environmental challenges, within an ongoing paradigm shift whereby innovation as a process is increasingly applied to social development and to solve social challenges.
- They act as open/living labs for the development of emerging technologies in sectors including smart cities, autonomous and e-mobility, IoT, and blockchain.
- They contribute to urban regeneration by transforming brownfield/degraded urban areas into innovation ecosystems, and became testbeds for new urban systems and technologies.
- They support the internationalisation of local productive systems by supporting local startups and SMEs to internationalise. They do this by navigating through the network of STPs /AOIs within Europe and at intercontinental level - "starting local going global" by offering access to a network of 350 STPs/AOIs and 115,000 innovation-based firms worldwide.
- As both international and local stakeholders, STPs help to advance EU, international and global goals with local actions (SDGs-Sustainability, Green Deal, etc).
- In the design of its spaces and strategies, STPs/AOIs maintain their focus on people, and play an increasingly active role in community building.

The future success of innovation ecosystems will be measured increasingly on the ability of main actors like STPs and AOIs to connect and manage talent, partnerships, and clusters, and to practice innovation processes.

4. Current involvement of STPs and AOIs in EU policies and programmes and regional smart specialisation strategies: a growing multidimensional partnership

European STPs and AOIs contribute significantly to the implementation of European policies and programmes, and especially in Regional Smart Specialisation Strategies. Their involvement grew notably in the current programming period 2014-2020, mostly bottom up rather than having been recognised at a central planning level as a major stakeholder, which is a proof of the added value they offer.

STPs and AOIs are recognised as a common instrument for 3S in JRC Policy Brief No 08/2014 and numerous AOIs and STPs are active in HORIZON 2020.


A large number of IASP members participate in HORIZON 2020 projects throughout Europe and in almost all its pillars, including Innovation actions, Industries of the Future, Leadership in enabling industries, Health actions, Open Science Cloud, Novel Innovation Communication Technologies, Marie Skłodowska Curie, Governance for the future. They have a variety of roles depending on the scope and nature of the project, from project leader, partner, user of results, etc.

Within Structural Fund programmes, STPs and AOIs are actively engaged in many Competitiveness and Regional Operational Programmes and in activities related to Smart Specialisation Strategies. Within the transnational Interreg Programmes, STPs and AOIs contribute to the development of macro-regional platforms of innovation and research, such as in the cases of the Baltic, Danube and Adriatic Ionian Macro-regions, or sectorally, such as in the health sector at North West Europe (Boost4Health).

STPs and AOIs are already involved in national and regional *Industry 4.0* EU initiatives and implementing strategies relating to the demands of industrial transformation and digitalisation, as well as in projects related to UN and EU sustainability targets.

Considering their strong links with universities, the type of companies they host and the startups they nurture, STPs and AOIs can be particularly active in stimulating their associates to work on solutions to social goals such as:

- COVID-19 challenge: health, digitalisation, smart cities, the way people and companies work and interact.
- Climate: smart cities, open and Living labs for innovation testing.
- Sustainable development goals: disruptive technology testbeds.




It's important to highlight that STPs and AOIs have substantial experience in mobilising their networks to be mission-driven and coordinating efforts to directly address challenges that require a quick response.

5. Potential involvement of STPs and AOIs in current planning and future implementation of EU strategy policies and programmes

On the basis of the added value that they can offer, STPs and AOIs make a strategic selection of the European policies and programmes they want to get involved in, either by advancing proposals via consortia of their own or by joining already established ones.

Cohesion Policy and Regional Development 2021-2027

Policy Objectives 1 and 2.



The way that AOIs and innovation districts are impacting cities leads the way in sustainable urban regeneration, creating new talent and innovation hubs, attracting investment and becoming platforms for socioeconomic innovation. Also the protection of the environment is something that STPs have had as one of their main priorities since their inception.

Invest EU




The new generation of STPs and AOIs/innovation districts are already showcasing examples of smart PPP and financial engineering.

Horizon Europe

The IASP European Division recognises the utmost importance of this initiative and is committed to stimulating the greatest possible involvement of companies located in European parks and other areas of innovation.

It is important to highlight that there is already ongoing strategic cooperation between IASP and Europe's Joint Research Centre (JRC) for promoting the STP instrument in certain Macro-regions and neighbouring countries, as well as for drafting a strategic document on the engagement of PPP models in the development of STPs and AOIs.




IASP members will continue to participate in activities under the different pillars of *Horizon Europe*, while IASP as an association envisages engagement in co-programmed European partnerships that will be developed in the future between

the Commission and other partners from the public and private sectors to deliver on global challenges and industrial modernisation.

European Green Deal and Just Transition Fund

The European Green Deal is a roadmap for making the EU economy sustainable by turning climate and environmental challenges into opportunities.



Many European STPs and AOIs have a strong focus in Environmental and Climate related technologies. They could contribute know-how and form partnerships with regions that need to change their economic model as they withdraw from intensive carbon related activities.

Projects of Common European Interest: Strategic value chains for a future-ready EU Industry


STPs and AOIs in Europe are home to a significant number of innovative world-class companies active in the majority of the 6 domains selected by the Strategic Forum for PCIs proposed on 17 February 2019.

Especially in regions in states where there are no strong coordinating mechanisms for promoting national engagement in international cooperative R&I, where there are public and private poles of excellence in the respective domains, [IASP and its network could undertake a systematic mobilisation role.](#)

European Defence Industrial Development Programme

For the first time in its history, Europe has developed a strategy and programme to coordinate efforts of member states, with European industry and research focused on the development of European defence products and minimising dependence on third-country technologies.

Most of the Defence technologies are based on basic technologies engaged in other European initiatives such as AI, Robotics, Advanced Materials, Microelectronics, Cybersecurity, Systems integration, etc.



[IASP can undertake the role of disseminating, mobilizing, and promoting engagement, similar to that proposed for the case of European Strategic Value Chains.](#)

Role of STPs and AOIs: Proposed Actions

The landscape of Innovation Ecosystems in Europe and related European policies presents, of course, other features and challenges in addition to the ones mentioned in this document, and other complementary associations, organisations and agents will point them out and make suggestions. From an IASP perspective, it is crucial to tackle the challenges and opportunities mentioned here, which could be summarised and formulated as a dual Action Plan for the IASP European Division and its members:

1. European STPs and AOIs are a large, consolidated reality, and constitute a significant part of the European landscape of Innovation Ecosystems. As such they will be stimulated to continue and further increase their participation in the different programmes and actions to be launched or enhanced by the EC, and to utilise their know-how in all aspects of innovation value creation chains, from innovative urban ecosystem development to mobilising partners in specific advanced technologies.
2. Strengthen the involvement of our European ecosystems in the National and Regional Smart Specialisation Strategies as well as the relevant Cohesion Programme Objectives, and implement specific actions to secure the connections between STPs, AOIs and also the various clusters that are linked to the deployment of the Smart Specialisation Strategies.
3. It is key that as many of these European innovation ecosystems as possible have a smooth and efficient way to know about each other and to establish frequent contact between the professionals who run them. There is an evident eagerness to have good networking mechanisms, as at this stage exchanging ideas, experiences and lessons learned is of an extremely high value for them. They realise that they need to dramatically shorten their learning curve in this business. To this end, integrating the new emerging innovation ecosystems is crucial, forming a network that can provide channels to communicate the 'who is who' knowledge and a proven capacity to organise networking activities of various sorts. *IASP and its related National Associations already have a long record of acting as dynamic connectors amongst the various innovation agents they represent, and could be used in future schemes that might be developed under the auspices of the EC.*
4. The role of our associations in supporting the European Commission as partners for the planning and implementation of several policies and programmes: Networks and Associations like the European Division of IASP can contribute knowledge and proximity to the technology centres, innovators and markets, as they are already existing networks with a huge amount of accumulated knowledge and the capacity for implementation.
5. Our networks (IASP European Division and its related National Associations) can support Europe-wide implementation of the different Policies and Programmes mentioned above with regard to the 2021-2027 priorities, as well as specific actions that have already been

launched, such as the private blockchain network or the digital training platform already operating in Spain, developing specific tools to support the growth of scale-ups, as they do in Sweden, or holding Open Innovation and innovation-based B2B forums that IASP has begun to organise during international conferences, just to mention a few recent examples.

6. The IASP European Division could work together with Commission services to compile a comprehensive list/map of all the Innovation Ecosystems existing in Europe or those that are being created: we know that there are more projects than we currently have identified. In fact, there are a number of projects whose creators are not yet aware that they could be considered innovation ecosystems at all.

The IASP European Division and its associated national associations are in a very strong position to contribute to the implementation of any or all of the above suggestions. IASP would like to collaborate closely with the European Innovation Council and its Innovation Ecosystems Unit in these endeavours, and we are ready to mobilise our vast network in support of their initiatives.

Many IASP members design, launch or participate in collaborative projects that are very close in scope to the EC initiatives mentioned in this paper, for example:

- Collaborating to prepare technology and innovation-based startups for the market and investments, and linking startups to international corporations. (Partners in Estonia, Lithuania, Poland, Spain and Denmark) - *H2020 "Scale-up Champions" programme*.
- Launching a 30M€ private-public investment fund, strategically investing in University R&D projects that have commercialization potential. Establishment of the fund brings together deep-tech VCs. (Partners in Sweden, Denmark, Finland, Estonia, UK and USA) - *"Deep-tech Investment FUND" programme*.
- Scouting and accelerating startups around specific priorities in health fields, with a focus on need rather than a specific technology, and creating a growing network of startups, investors, experts, coaches and medium to large companies to exploit technologies in the growth and scale up process. The approach is conceived to support health-related companies but it can be scaled up at territorial/ecosystem level and applied to other sectors. (Italy) - *"Zcube Open Accelerator" programme*.
- Supporting the internationalization of entrepreneurs and startups. STPs and AOIs pave the way for companies to contact international innovation ecosystems to carry out soft-landing activities. (Participants in Belgium, Italy, Portugal, Spain, Brazil, Canada, China and Colombia) - *"Enterprise Eurolodging" programme*.

- Many STPs have actively collaborated with their regional governments in the design and implementation of intelligent specialisation strategies (RIS 3).
- Many STPs and AOIs have actively promoted the role of Digital Innovation Hubs (DIH) and joined this initiative.

These are just a few examples to illustrate the dynamics existing within European Science Parks and Areas of Innovation, and which have a key common denominator: they promote activities based on connecting people, enhancing talent, creating networks and providing them with adequate spaces to grow.

The IASP European Division and its associated National Associations are committed to actively supporting the EC and EIC plans to enhance our common innovation potential

ABOUT THE INTERNATIONAL ASSOCIATION OF SCIENCE PARKS AND AREAS OF INNOVATION

IASP is the leading association of innovation ecosystems worldwide. Our mission is to be the global network for science parks, innovation districts and other areas of innovation, driving growth, internationalisation and effectiveness for our members, increasing their visibility and multiplying their global connections. An independent non-profit NGO, IASP is managed by experts in science and technology parks and areas of innovation.

Our global nature is our greatest asset and trademark, but for practical purposes we also have seven regional divisions to support members at a more local level and undertake projects with a stronger regional focus. The European Division is the oldest and biggest of these regional divisions that make up our membership-based network.

For further information about IASP, please visit www.iasp.ws.

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