

Brussels, 17 February 2021 (OR. en)

6258/21

Interinstitutional File: 2019/0151(COD)

> **RECH 65 COMPET 108 EDUC 53 CODEC 223**

OUTCOME OF PROCEEDINGS

From:	General Secretariat of the Council		
To:	Delegations		
No. Cion doc.:	11227/19+ADD1		
Subject:	Proposal for a DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the Strategic Innovation Agenda of the European Institute of Innovation and Technology (EIT) 2021-2027: Boosting the Innovation Talent and Capacity of Europe		
	- Outcome of proceedings: final compromise text		

Delegations will find in the Annex the text endorsed by the Permanent Representatives Committee on 17 February 2021 on the above mentioned proposal.

6258/21 IT/nj EN ECOMP.3.B.

1

Proposal for a

DECISION (EU) 2021/... OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of ...

on the Strategic Innovation Agenda of the European Institute of **Innovation and Technology (EIT) 2021-2027:**

Boosting the Innovation Talent and Capacity of Europe

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 173(3) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee¹,

Acting in accordance with the ordinary legislative procedure²,

decision of the Council of

6258/21 **ANNEX** ECOMP.3.B. 2

OJ C 47, 11.2.2020, p. 69.

Position of the European Parliament of ... (not yet published in the Official Journal) and

Whereas:

- (1) Regulation (EU) [add number of new Regulation], and in particular Article 4 thereof, provides for the adoption of a Strategic Innovation Agenda ('SIA').
- The SIA should define the priority fields and the strategy for the European Institute of Innovation and Technology ('EIT') for the seven-year period concerned, in coherence with Horizon Europe, establish its key actions and include an assessment of its social, economic and environmental impact and its capacity to generate best innovation added value. The SIA should take into account the results of the monitoring and evaluation of the EIT.
- (3) The SIA should take into account the strategic planning of Horizon Europe and should establish and foster appropriate synergies and complementarities between EIT activities and other relevant Union, national and regional initiatives, instruments and programmes and should ensure consistency with EU priorities and commitments, including those related to the European Green Deal, the European Recovery Plan, the European data, digital, SME and industrial strategies and achieving Europe's strategic autonomy while preserving an open economy.
- (3a) The SIA should additionally include an estimate of financial needs and sources for the future activities of the EIT. It should also include an indicative financial plan covering the period of the respective MFF.

- (3b) In order to ensure the continuity of the EIT's activities as well as of the KICs' activities in compliance with the relevant provisions of the Horizon Europe Framework Programme Regulation, it is necessary to provide for the application of this Decision from the beginning of the 2021 financial year and for this Decision to enter into force as a matter of urgency on the day of its publication in the *Official Journal of the European Union*.
- (3c) Decision No 1312/2013/EU of the European Parliament and of the Council³ should be repealed,

HAVE ADOPTED THIS DECISION:

Article 1

The Strategic Innovation Agenda of the European Institute of Innovation and Technology for the period from 2021 to 2027 (the 'SIA') as set out in the Annex is hereby adopted.

Article 2

The SIA shall be implemented in accordance with Regulation (EU) .../2021 [EIT Regulation (2019/0151(COD)].

Article 2a

Decision No 1312/2013/EU is repealed with effect from 1 January 2021.

6258/21 IT/nj 4
ANNEX ECOMP.3.B. EN

Decision No 1312/2013/EU European Parliament and of the Council of 11 December 2013 on the Strategic Innovation Agenda of the European Institute of Innovation and Technology (EIT): the contribution of the EIT to a more innovative Europe (OJ L 347, 20.12.2013, p. 892).

Article 3

This Decision shall enter into force on the day of its publication in the *Official Journal of the European Union*.

It shall apply from J January 2021.

Done at ...,

For the European Parliament For the Council
The President The President

г .	1 1		of				. 4
ี (ล	n	le.	ΩT	CO	ทา	ren	บรรา

1.		Introduction	8
	1.1.	. Background	10
	1.2.	Key challenges	mark not defined.
	1.3.	Positioning in Horizon Europe	mark not defined.
2.		Raising the bar: the EIT strategy in 2021-2027	25
	2.1.	Specific objectives of the EIT	27
3.		Boosting the Innovation Talent and Capacity of Europe: Key actions	28
	3.1.	Support to existing KICs	30
	3.2.	. Increasing the regional impact of KICs	33
	3.3.	. Launch of new KICs	38
	3.4.	. Supporting the entrepreneurial and innovation capacity of higher educati	on41
	3.5.	EIT cross-cutting activities	46
		3.5.1.Communication	46
		3.5.2. Identify and share good practices with stakeholders	49
		3.5.3. International cooperation and global outreach activities	51
	3.6.	. Making it work: Mode of operation	52
		3.6.1. KIC operational model 53	
		3.6.2. KIC funding model	57
		3.6.3. Reducing the administrative burden	61
		3.6.4. EIT relation with KICs after the termination of the partnership agree	ement 62
	3.7.	Synergies and complementarities with other programmes	65

⁴ Page numbers to be updated during the legal-linguistic revision.

3a.	Tackling the crisis resulting from the outbreak of COVID-19	71
4.	Resources	73
4.	.1. Budget needs	73
4.	.2. Impact (monitoring and evaluation)	75
	4.2.1. Reporting and	
Mon	nitoring76	
	4.2.2. Evaluation, interim review and comprehensive assessment	83
5.	Annex 1A	88
6.	Annex 1B	89
6a.	Annex 1B.a.	101

1. Introduction

This Strategic Innovation Agenda (SIA) sets out the priority fields and strategy of the European Institute of Innovation and Technology (EIT) for the period 2021-2027. It defines its objectives, key actions, mode of operation, expected results and impact and an estimate of the resources needed. The SIA ensures the necessary coherence of the EIT with the [Horizon Europe proposal], which is the Union framework programme for research and innovation for the period 2021-2027.

The SIA 2021-2027 is informed by the impact assessment carried out by the European Commission. It takes into account the draft SIA from the EIT Governing Board submitted to the European Commission on 20 December 2017, in accordance with the ... [EIT Regulation (2019/0151/COD)]⁵. It also reflects the new [Horizon Europe proposal] of the European Commission of June 2018 and, in particular, the key role of the EIT as part of the [Open Innovation] Pillar (Pillar III), and its contribution to addressing global and societal challenges, including established targets and commitments for climate objectives and the United Nations Sustainable Development Goals (SDGs), and European industrial competitiveness (Pillar II) and to excellent science (Pillar I). The SIA builds on the lessons learnt over the last years of operation of the EIT and the results of a wide consultation process with key stakeholders.

The SIA takes into account the Strategic Planning of Horizon Europe to ensure coherence with the Framework Programme activities, as well as synergies with other relevant Union programmes and consistency with Union's priorities and commitments, including those related to the European Green Deal, the European Recovery Plan, the European data, digital, SME and industrial strategies and achieving Union's strategic autonomy while preserving an open economy. Furthermore, it contributes to tackling global and societal challenges, including the SDGs by following the principles of the Paris Agreement, and achieving a net-zero GHG economy by 2050 at the latest. It also aims at increasing complementarity and synergies between the EIT activities and national and regional funding programmes and priorities.

_

Regulation (EC) No 294/2008 of the European Parliament and of the Council of 11 March 2008 establishing the European Institute of Innovation and Technology (OJ L 97, 9.4.2008, p. 1). Amended by Regulation (EU) No 1292/2013 of the European Parliament and of the Council of 11 December 2013 (OJ L 347, 11.12.2013, p. 174).

1.1. Background

The EIT was established in 2008 in order to contribute to sustainable economic growth and competitiveness by reinforcing the innovation capacity of the Member States and the European Union. It pioneered the integration of higher education, research and innovation (knowledge triangle) together with a strong emphasis on entrepreneurial talent, business creation and innovation skills.

Since its set up, the EIT has established itself gradually as a unique instrument addressing societal challenges through the integration of the knowledge triangle. The EIT operates mainly through Knowledge and Innovation Communities (KICs), which are large-scale European partnerships, as referred to in Horizon Europe, between higher education and training institutions, business and research organisations and other stakeholders in the innovation process. There are currently eight KICs that operate in the following areas: climate change, digital transformation, energy, food, health, raw materials, urban mobility and added-value manufacturing.

Each KIC has so far been organised around five to ten co-location centres (CLCs) which are intended to act as geographical hubs that also provide a physical space for local interaction within the innovation ecosystem and for the practical integration of the knowledge triangle. They are organised and structured according to their respective national and regional innovation context and build on a pan-European network of existing labs, offices or campuses of a KIC partner.

The KICs aim to run portfolios of knowledge triangle activities through:

(a) education and training activities with strong entrepreneurship components to train the next generation of talents, including the design and implementation of programmes, in particular at master and doctoral level, awarded the EIT Label, which is a quality seal awarded by the EIT to a KIC's educational programme which complies with specific quality criteria related, inter alia, to entrepreneurial education and innovative 'learning-by-doing' curricula. The EIT's education agenda is key for developing highly entrepreneurial and skilled innovators, hence the importance of programmes and activities aiming to develop entrepreneurship and digital skills, to re-skill and up-skill human resources in a lifelong learning perspective;

- (b) activities supporting research and innovation to develop innovative and sustainable products, processes, technologies services and non-technological solutions that address a specific business opportunity or social objective;
- (c) business creation and support activities, such as accelerator schemes to help entrepreneurs translate their ideas into successful ventures and speed up the growth and development process.

The focus on global and societal challenges through the integration of the knowledge triangle, integrating higher education activities in the innovation value chain, is a distinctive feature of the EIT compared to other innovation instruments.

The EIT approach helps build resilience, increase sustainability and contributes to both incremental and disruptive innovations to happen, to effectively address market failures and help transform industries and support the creation of start-ups, spin-offs and small and medium-sized enterprises (SMEs). It enables the creation of long-term business strategies for addressing global challenges and helps creating the framework conditions that are essential for a well-functioning innovation ecosystem to grow and innovation to thrive. The EIT has also set the objective for the KICs to become financially sustainable, which is a unique feature that aims at business and result oriented innovation instrument. In this context, KICs have to develop and implement revenue-creating strategies in order to maintain their innovation ecosystem and the knowledge triangle activities beyond the period covered by the grant agreements.

The EIT thus offers a dynamic platform for launching, scaling up, monitioring and supporting KICs with strong network effects and positive spill-overs. The first wave of KICs (EIT Digital, EIT Climate-KIC and EIT InnoEnergy), launched in 2009, is established and mature and after 2024 their partnership agreements shall be terminated, in line with the maximum grant duration. A second and third generation of KICs (EIT Health and EIT Raw Materials (2014), EIT Food (2016)) is maturing. EIT Urban Mobility and EIT Manufacturing, the two KICs designated in December 2018, started their operations in 2019.

By 2019, there were more than 600 businesses, 250 HEIs, 200 research organisations, and more than 50 civil society organisations and authorities participating in the eight EIT KICs.

Against the backdrop of persisting regional disparities in innovation performance in Europe, the EIT launched a Regional Innovation Scheme (RIS) in 2014 to widen its regional outreach to modest and moderate innovator countries. Through the RIS, the EIT has expanded its activities across Europe and offers opportunities for countries (and regions in those countries) with modest and moderate innovation performance as defined by the European Innovation Scoreboard (EIS) to engage in knowledge triangle activities as part of a KIC community.

The EIT has been able to stay agile and to develop the governance principles and rules for the successful management of its KICs under the overall umbrella of Horizon 2020, in accordance with ... [EIT Regulation (2019/0151/COD)]. Its operational independence has allowed it to test and effectively implement a number of novelties in the management of its beneficiaries such as a competitive funding mechanism, financial sustainability targets and specific key performance indicators.

1.2. Key challenges

During the past decade, the pace of innovation has accelerated dramatically. Innovation is reshaping economic sectors, disrupting existing businesses and creating unprecedented opportunities. With a shifting global economic order and international competition on the rise, the Union needs inter alia to involve all talents, increase the participation of women and foster a swift transfer of the results of R&I activities to the market and society, with the aim of increasing innovation capacity across the Union. Co-design, collaboration and co-creation across disciplines and between education, business and research have never been as important as they are today in contributing to address global challenges related to climate change, biodiversity loss and unsustainable use of natural resources, digital and social transformation, demographic shifts, the future of healthcare and food.

First, the spread of COVID-19 has had a major impact on our economies and societies, disrupting economic activities, affecting health systems, jobs and well-being. In order to address the crisis, a combination of short-term and forward-looking measures is required in order to provide immediate support to the economies and their actors, while ensuring the necessary conditions for the recovery to take place.

It is therefore important to identify and tackle crisis-related challenges, including access to finance, in order to rebuild trust and confidence among all actors as well as support the development and implementation of solutions to ease the impact of the crisis for the society. At the same time, programs supporting innovation, business creation and upgrade, entrepreneurial and innovation skills are key to put our economies on the right track and propel a swift recovery.

Stronger innovation ecosystems have proved to respond more quickly and resolutely to crises. In order to accelerate the recovery and be able to tackle future emergencies, investments in improving coordination capacities within innovation ecosystems are essential to increase their resilience and their responsiveness to deliver promptly the needed solutions.

In the medium and long term, all KICs need to adapt to the impacts of the shock and ensure agility and flexibility in order to find and pursue new opportunities. Thanks to their "place-based" approach, through their co-location centres and RIS hubs across Europe, KICs contribute to strengthening local innovation ecosystems, inter alia by fostering closer interactions between the actors of the knowledge triangle and by favouring better coordinated relations with financial and public institutions, as well as citizens.

Second, today's societies and economies are increasingly driven by the skills and abilities of people and organisations to turn ideas into novel products, processes, services, businesses and societal models. Innovation, entrepreneurial culture, market uptake of innovative solutions and increased investments in education and RDI will make all the difference if the Union wants to succeed in its transition towards a competitive, digital, climate-neutral and inclusive society. There is a strong need to further boost collaboration between disciplines and interdisciplinary learning as well as the innovation capacity of higher education institutions across the Union. The EIT is in a unique position to deliver on this in the Horizon Europe framework.

Third, physical proximity is one of the key enabling factors for innovation. Initiatives aiming to develop innovation networks and providing services that support the creation, sharing and transfer of knowledge, play a key role in fostering the interactions between business, academia, research organisations, governments and individuals. Still, research and innovation performances across the EU, as reflected in the annual European Innovation Scoreboard, vary considerably. It is of crucial importance that innovation is inclusive and rooted in the local territories with a particular attention to the increased involvement of SMEs and third-sector organisations. EIT activities are well suited to contribute to strengthening local innovation ecosystems with a strong European dimension and provide new models for a sustainable economy. The EIT and the KICs activities have yet to become increasingly linked to regional and Smart Specialisation Strategies.

Finally, vibrant innovation ecosystems require a mix of knowledge, investment, infrastructure and talent. Framework conditions for cooperation between European research, education and innovation along with strong synergies need to be in place to ensure proper and efficient investment of scarce resources and to leverage other sources of funding aimed at financial sustainability. Strengthening the knowledge triangle integration through KICs, including through the involvement of new partners in other sectors, countries and regions is a proven way to foster an environment conducive to innovation and is a guiding objective for the EIT.

1.3. Positioning in Horizon Europe

With the [Horizon Europe proposal] for a new Framework Programme for research and innovation for the period 2021-2027, the European Commission made a firm commitment to raise further Europe's innovation potential in order to be able to respond to the challenges of the future. The EIT's distinctive role in fostering innovation by bringing together business, education, research, public authorities and civil society is reinforced by its positioning in the [Innovative Europe Pillar] of the [Horizon Europe proposal]. The [Horizon Europe proposal] reflects the growing ambition of the EU on innovation and the necessity to deliver on it.

The Horizon Europe Strategic Planning process aims at ensuring coherence between the EIT activities and the rest of Horizon Europe. The EIT shall contribute to the strategic coordinating process for European Partnerships. The EIT shall continue to work closely with other implementing bodies under the Innovative Europe Pillar of Horizon Europe and use best efforts to contribute to a "one-stop-shop for innovation".

The EIT shall continue to strengthen innovation ecosystems that help to tackle global challenges, by fostering the integration of the knowledge triangle in the thematic areas of activity of the KICs.

Strong synergies, including through co-operation at governance level, between the implementing bodies of the Innovative Europe Pillar of Horizon Europe are required. The EIT and the EIC will run complementary activities aiming to streamline the support provided to innovative companies, including business acceleration services and trainings.

The EIC may help start-ups supported by KICs with a high growth potential to rapidly scale-up. In particular, the most innovative KICs'-backed ventures may benefit from a simplified and thereby faster access to EIC actions, in particular to the support offered by the EIC Accelerator and/or by the financial support offered by InvestEU instruments. Furthermore, the EIT will facilitate the access of EIC beneficiaries to KICs' innovation ecosystems and relevant actors of the knowledge triangle. In this way EIC beneficiaries can become actively involved in KICs' activities and benefit from KICs' services.

The EIT will ensure coherence with the European innovation ecosystems strand of Horizon Europe. In particular, the EIT will take an active part in the activities of the EIC Forum and will establish links between the EIT Community and relevant activities supporting innovation ecosystems in order to avoid duplication and ensure coherence and complementarity of actions.

The EIT will also ensure stronger synergies with programmes and initiatives in the Excellent Science Pillar, to accelerate the transfer of knowledge resulting from blue sky research into concrete applications benefiting the society. In particular, with regard to the Marie-Skłodowska-Curie Actions (MSCA) and the ERC, the EIT will collaborate on the development of innovation and entrepreneurial skills of MSCA fellows and ERC grantees at all stages of their career. That collaboration shall remain voluntary and shall not increase the administrative burden for the beneficiaries.

The EIT will contribute to the [Global Challenges and European Industrial Competitiveness] Pillar and complement relevant activities to tackle global and societal challenges and foster the sustainable growth and competitiveness of the Union on a global scale. In particular, through its KICs, the EIT will seek to contribute to and ensure stronger synergies with relevant missions and thematic clusters and other European Partnerships e.g. by supporting demand-side measures and providing exploitation services to boost technology transfer and accelerate the commercialisation of results achieved.

Opportunities for synergies will be also explored between the Widening participation and strengthening the European Research Area part of Horizon Europe, including the teaming and twinning activities and the outreach activities supported by the EIT. In particular, target entities of the Horizon Europe Widening participation and strengthening the European Research Area part will be able to leverage on EIT expertise and support as well as for EIT outreach activities.

2. Raising the bar: the EIT Strategy in 2021-2027

During the period 2021-2027, the EIT shall continue to support the KICs in order to strengthen the innovation ecosystems that help to tackle global and societal challenges, in full complementarity with the rest of Horizon Europe and other Union programmes. It shall do so by fostering the integration of education, research and business, thereby creating environments conducive to innovation, and by promoting and supporting a new generation of entrepreneurs, contributing also to closing the entrepreneurial gender gap and stimulating the creation of innovative companies, with special attention to SMEs, in close synergy and complementarity with the EIC.

Special attention shall also be paid to gender balance and gender-sensitive approaches, especially in areas where women are still under represented such as ICT, Science, Technology, Engineering and Mathematics. In doing so, based on the overarching areas of intervention defined in the [Horizon Europe proposal], the EIT shall in particular:

- (1) Strengthen sustainable innovation ecosystems across Europe;
- (2) Foster innovation and entrepreneurial skills in a lifelong learning perspective, including increasing capacities of higher education institutions across Europe;
- (3) Create new solutions to address global and societal challenges;
- (4) Ensure synergies and value added within Horizon Europe.

2.1. Specific objectives of the EIT

In line with the identified challenges that the EIT is facing and in order to contribute to the above overarching objectives defined for the EIT in the [Horizon Europe proposal], the specific objectives of the EIT for the period of 2021-2027 are to:

- (a) Increase the openness, impact and transparency of KICs and knowledge triangle integration across the Union;
- (b) Increase the entrepreneurial and innovation capacity of the higher education sector across Europe by promoting and supporting institutional change in higher education institutions (HEIs) and their integration in innovation ecosystems;
- (c) Increase the regional and local outreach of the EIT and its KICs in particular by including a wider range of stakeholders in order to address disparities in innovation capacity and to enhance knowledge and innovation diffusion across the Union.

By delivering on these objectives, the EIT will thus contribute to the overall achievement of Horizon Europe scientific, economic/technological and societal impacts.

The EIT should, where relevant, respond to the COVID-19 and potential future crises with the necessary flexibility by integrating relevant initiatives in its strategy in order to contribute to protecting the innovation ecosystems and to help EIT stakeholders prepare for the economic recovery.

3. Boosting the Innovation Talent and Capacity of Europe: Key Actions

The EIT strategy for 2021-2027 shall focus on actions where the EIT will add value at the EU level and contribute to achieving the objectives of Horizon Europe. First, the EIT shall continue to support the innovation capacity and ecosystems across the Union through the KICs, their further development, openness to new partners, enhanced transparency, compliance with good governance principles and expansion. Secondly, building on its experience with the knowledge triangle integration, the EIT shall steer the support and development of the entrepreneurial and innovation capacity in the higher education sector implemented through the KICs. Finally, through more effective cross-cutting measures, the EIT shall make all necessary efforts to ensure that its visibility and impact at the EU level increases. In addition, the EIT shall also improve its operations in order to increase its effectiveness, efficiency and impact, including in areas such as guiding the KICs towards financial sustainability, the openness, outreach, transparency, quality and sustainability of its own activities and of the activities of the KICs, higher involvement of SMEs and start-ups and gender balance.

3.1. Support to existing KICs

The EIT shall strengthen innovation ecosystems by continuing to support existing KICs in addressing global challenges through the integration of the knowledge triangle at EU, Member States, regional and local levels. In order to implement this task, a large share of the EIT budget is to be dedicated to support KICs, and the EIT shall further strengthen its platform for launching, growing and monitoring of KICs.

The EIT shall ensure that KICs continue to pursue financial sustainability in order to achieve financial independence from the EIT grant at the latest after 15 years through leveraging public and private investment, while keeping focus on integration of knowledge triangle activities.

The EIT shall ensure that KICs develop and implement a strategy to create interfaces, collaboration and synergies with relevant European Partnerships, missions and the EIC as well as other relevant Union and international initiatives and programmes. Beyond financial support, based on lessons learned, the EIT shall provide strategic supervision and guidance to KICs. Based on the indicators listed inter alia in Annex V to Regulation [xxx] establishing Horizon Europe, the EIT shall monitor and analyse the performance, the leverage investments and the different qualitative and quantitative impacts.

The EIT should make best efforts to streamline the terminology related to the structure of each KIC, with the purpose of further simplifying, clarifying and enhancing recognisability of the EIT.

The EIT shall define areas of and promote stronger cross-KIC collaboration on topics of strategic and policy relevance. The EIT shall strengthen coordination between KICs in areas of common interest, in particular, by fostering exchanges of experiences and good practices between KICs and collaboration between them (cross-KIC activities) on both thematic and horizontal topics. Cross-KIC activities have highest potential where several KICs already address common EU policy priorities where no dedicated KICs exist. Bringing together the different KICs communities in dedicated joint actions of mutual benefit has high potential for synergies and interdisciplinary benefits. The EIT shall encourage such activities and take an active part in defining the content and structure of the cross-KIC activities. It shall monitor the implementation of cross-KIC activities as well as the results achieved, with the aim of making those activities an integral part of the KICs' multi-annual strategies. EIT shall also facilitate the establishment of cross-KICs shared services aimed at jointly handling operational tasks common for all KICs.

3.2. Increasing the regional impact of KICs

The EIT shall further increase its regional impact through an enhanced openness and inclusive approach of the KICs towards a wide range of potential partners and stakeholders, a strengthened dissemination and exploitation of results and a better articulated regional strategy of KICs. Each KIC will be required to develop and implement a regional strategy as an integral part of their business plans aiming to strengthen the relationship with national, regional and local innovation actors, including SMEs. Where relevant, KICs should demonstrate links with Smart Specialisation Strategies and with the activities of thematic platforms and interregional initiatives, including with the Managing Authorities of ESI Funds. The EIT shall continuously monitor the implementation of those strategies including the leverage effect on the ESI Funds.

A "place-based" innovation approach is to be integrated within the KIC's multi-annual strategy and business plan and build on KIC's CLCs (and RIS hubs), thus leveraging on their role as gateway for accessing a KIC community and interacting with the co-located partners, as well as with other local innovation actors.

The EIT shall also monitor how CLCs and RIS hubs operate and how they integrate in the local innovation ecosystems.

The EIT shall ensure that EIT RIS activities shall be used to attract and facilitate integration of potential new partners that add value to the KICs, thus extending EIT's pan-European coverage, and are fully integrated in KICs' multi-annual strategies. The EIT Regional Innovation Scheme, steered by the EIT and implemented by KICs, has been so far run on a voluntary basis. From 2021 on, the EIT RIS activities shall become mandatory and an integral part of the KIC'multi-annual strategy. The EIT shall ensure that RIS activities are used as a bridge towards relevant Research and Innovation Smart Specialisation Strategies.

In addition, KICs shall enhance such integration also through the establishment of RIS Hubs. A RIS hub shall be established following a thorough needs analysis and an open call. It shall be part of the structure of the KIC and serves as focal point for the KIC's activities. It aims at mobilising and involving local knowledge triangle actors in the KIC's activities, establishing synergies at local level, identifying funding and collaboration opportunities and promoting their active integration in ecosystems. In accordance with the KIC expansion strategy, RIS Hubs could pave the way to the establishment of a CLC in the targeted region.

The EIT shall continue to provide guidance and support to KICs in the preparation and implementation of multi-annual EIT RIS strategies. EIT RIS activities shall continue to support the innovation capacity of countries (and regions in those countries) that have modest and moderate innovation performances according to the European Innovation Scoreboard, as well as the Outermost Regions, in order to foster their integration in the KICs' communities. Countries and regions eligible for EIT RIS activities ('RIS countries and regions') are those countries and the regions in those countries identified as either "moderate" or "modest" innovator in at least one of the three European Innovation Scoreboard (EIS) annual reports issued in 2018, 2019 and 2020 for the period 2021-2024 and those identified as either "moderate" or "modest" innovator in at least one of the three EIS annual reports issued in 2021, 2022 and 2023 for the period 2025-2027, as well as Outermost Regions as defined in Article 349 TFEU.

The EIT budget devoted to implementing EIT RIS activities shall be at least 10% and maximum 15% of the overall EIT funding for existing and new KICs, thereby increasing the number of KIC partners from targeted regions. Activities supported through the RIS shall aim to:

- contribute to improving the innovation capacities of the regional and local ecosystems
 across the Union, via capacity building activities and closer interactions between the local
 innovation actors (e. g. clusters, networks, public authorities, HEIs, research organisations,
 VET institutions, SMEs) and their activities;
- support the objective of attracting new partners in KICs and link local innovation ecosystems to pan-European innovation ecosystems;
- leverage additional private and public funding, with particular attention to ESI Funds.

3.3. Launch of new KICs

In order to contribute to addressing new and emerging global challenges, the EIT shall launch open and transparent calls to create new KICs in priority fields selected among thematic areas of strategic importance and based on criteria assessing, among other aspects, their relevance to the Union policy priorities with regard to addressing global and societal challenges, and their potential and added value to be addressed through the EIT model. The launch of new KICs shall take into account the Strategic Planning of Horizon Europe and the budget allocated to the EIT in 2021-2027. The relevant selection criteria for European Partnerships defined in Annex III of the [Horizon Europe Regulation] shall be included in the KIC Call for proposals and shall be assessed during the evaluation.

The list of priority fields for future KICs is set out in Annex 1A to this SIA.

Based on a proposal from the EIT Governing Board and an analysis thereof, a first KIC in the field of Cultural and Creative Sectors and Industries (CCSI) is proposed to be launched as soon as possible in 2022 or 2023 with a call for proposals to be published if feasible in 2021. This priority field has the strongest complementarity with the eight KICs that have already been launched by the EIT, as well as with the potential priority areas for other European Partnerships to be lauif fnched in the framework of Horizon Europe. A factsheet summarizing the challenges of the CCSI field and the expected impact of the future KIC is included in Annex 1B to this SIA.

A second KIC in the field of Water, Marine and Maritime Sectors and Ecosystems is proposed to be launched in 2026, with a call for proposals to be published in 2025. The Commission, with the assistance of independent experts, shall carry out an ex-ante analysis to evaluate the relevance of the field of Water, Marine and Maritime Sectors and Ecosystems by 2024. If the analysis has a negative result, the Commission may submit a proposal for an amendment to Annex 1A and Annex 1B, taking into account the contribution of the EIT Governing Board and the strategic planning process of Horizon Europe. A factsheet summarizing the challenges of the Water, Marine and Maritime field and the expected impact of the future KIC is included in Annex 1B.a to this SIA.

Other new KICs could be selected if additional budget to that of the EIT becomes available and will take into account the contribution of the EIT Governing Board, the Strategic Planning process of Horizon Europe and the criteria set for the selection of European Partnerships, in particular openness, transparency, EU added value, contribution to the SDGs, coherence and synergies.

3.4. Supporting the entrepreneurial and innovation capacity of higher education

In cooperation with the Commission, and with inputs from the KICs, the EIT shall design and launch a pilot initiative to support the development of innovation and entrepreneurial capacity in higher education, which will be implemented through the KICs, starting in 2021. Through the knowledge triangle integration model, the EIT is bridging the persistent gap between higher education, research and innovation. In particular, the EIT and its KICs are key tools for the development of human capital through their distinctive focus on innovation and entrepreneurial education. However, the impact of the EIT shall be further extended beyond the KICs' partners.

Higher education institutions across Europe need to be innovative and entrepreneurial in their approach to education, research, and engagement with businesses and the broader local and regional innovation ecosystem, including civil society, public institutions and third-sector organisations, in the most inclusive and gender balanced way. This can be achieved through a clear strategy, a methodological framework and commitment of resources.

Activities shall be implemented through open and transparent calls for proposals, which will aim to increase the innovation capacity in higher education, targeting mainly HEIs that are not KIC partners in innovation value chains and ecosystems across the Union. The activities shall address primarily capacity development of higher education institutions including, inter alia: the exchange and implementation of best practices in knowledge triangle integration (including organisational learning, training for upskilling and reskilling, coaching and mentoring); the development of action plans on how to address identified needs in areas such as innovation management, start-up creation and development, technology transfer including IPR management, sustainability and climate neutrality by design, people and organisational management, integration of gender approaches in innovation and engagement with (local) stakeholders and civil society; and the implementation of innovation capacity development action plans and their follow-up. These activities shall also involve other actors of the knowledge triangle (e.g. VET organisations, RTOs, SMEs and start-ups) and shall complement the intervention of the EIT on education as core part of the Knowledge Triangle Integration activities of KICs. The EIT shall promote stronger cross-KIC collaboration within this initiative. The eligibility criteria to be included in the calls shall ensure that the majority of funding will go to HEIs from outside of the KICs. The aim is that the impact of the EIT reaches beyond the KICs and contribute to the EIT's core mission of boosting sustainable economic growth and competitiveness by reinforcing the innovation capacity of Member States. This is in line with the Horizon Europe goals of fostering entrepreneurial and innovation skills in a lifelong learning perspective, including increasing the capacities of HEIs across Europe.

The EIT support shall also build on policy initiatives such as the HEInnovate⁶ and RIIA⁷ frameworks that have proven their value in a number of HEIs and Member States across the EU. The EIT shall design the support activities in close collaboration with inputs from the KICs and the Commission ensuring full coherence and complementarity with relevant activities within Horizon Europe, Erasmus and other programmes. The specific details of the implementation and delivery mechanism process shall be further developed and fine-tuned in the first three years and will be subject to monitoring and evaluation during this pilot phase. The evaluation of the pilot phase shall be conducted by external experts and the results shall be communicated to the Member States' Representatives Group and the European Parliament. Based on the results of this evaluation, the Governing Board shall decide whether the pilot initiative should be continued and scaled up or discontinued.

The Governing Board of the EIT shall steer and supervise the implementation and monitoring of the activities of the KICs. Particular attention shall be paid to ensuring: an open and inclusive approach to attract HEIs beyond the KICs' partners aiming at wide geographical coverage; an inter-disciplinary and inter-sectoral approach; a broader participation of women in sectors where they are underrepresented; and a link with the EIT RIS, relevant thematic platforms and Smart Specialisation Strategies, and the Policy Support Facility when appropriate.

HEInnovate is a policy framework developed by the European Commission and the OECD. HEInnovate offers HEIs a methodology to identify innovation capacity areas for further edvelopment and to shape relevant strategies and actions in order to achieve the desired impact. HEInnovate is based on sound methodological evidence with eight capacity development areas: Leadership and Governance; Digital Transformation; Organisational Capacity; Entrepreneurial Teaching and Learning; Preparing and Supporting Entrepreneurs; Knowledge Exchange; Internationalisation; and Measuring Impact. OECD has published a number of HEInnovate-based country reports, see OECD Skills Studies series at https://www.oecd-ilibrary.org/education/

The Regional Innovation Impact Assessment framework (RIIA) was developed by the European Commission as a first step in guiding assessments of the innovation impact of universities through the elaboration of metrics based case studies. Assessing the innovation impact, e.g. through the RIIA framework, could potentially be tied to innovation performance based funding instruments at the regional, national or EU level.

The EIT shall strengthen and widen the scope of the EIT Label beyond the KICs to include the HEIs participating in the action. With the involvement of actors from across the knowledge triangle, the EIT shall strive to link its support to developing innovation capacity in higher education to the EIT Label, which is awarded currently to the KICs' education programmes.

The EIT shall also extend the EIT Label to lifelong learning activities, e.g. mentoring, vocational training, skilling and re-skilling programmes, MOOCs, involving and reaching out to a wider target group of students, adult learners and institutions (including VET institutions) beyond the KICs. The application of the Label beyond the EIT community is expected to have a more structuring effect at all levels (individual, programme and institution).

The EIT shall also monitor the award and expansion of the EIT Label to KICs' education and training programmes and explore a more effective quality assurance mechanism, including external recognition and accreditation for the EIT Label.

To ensure the success of this action, the EIT shall provide specific guidance, expertise and coaching to participating HEIs. For this action, the EIT shall target HEIs from across Europe but will pay special attention to HEIs from countries (and regions in those countries) that are moderate and modest innovators and other low performing regions that wish to develop their innovation capacities, strengthen their innovation footprint and Smart Specialisation Strategies.

3.5. EIT cross-cutting activities

3.5.1. Communication and dissemination

The EIT and the KICs shall strive to improve and reinforce their communication and visibility, and apply an improved branding strategy towards their main stakeholders in all Member States and beyond, in line with the Horizon Europe communication approach. With a growing number of KICs and new initiatives supporting the innovation and entrepreneurial capacity of HEIs, the EIT shall boost its efforts to increase the recognition of Union support as a quality brand for innovation. This brand management and improved communication is crucial especially towards citizens and regional and national authorities, as the innovations coming out of the EIT contribute to demonstrating the concrete impact of Union investments through the Union Framework programme for research and inovation.

The EIT shall strive to increase the use of existing EU information networks and provide coordination to their activities in order to ensure better advice and guidance to potential EIT KICs partners. This should include support to the national and regional authorities in identifying the necessary synergies with the multi-annual strategies of the KICs. In order to ensure wider dissemination and better understanding of the opportunities offered by the EIT, the EIT will reinforce guidance and assistance on aspects related to participation in EIT KICs across Europe by buildingon existing networks of information and structures across Europe, in particular the National Contact Points of Horizon Europe.

In order to ensure that a large stakeholder community across the knowledge triangle at EU, national, regional and local levels is aware of all EIT (and KICs) calls and funded projects, they will appear also in the European Funding and Tender Opportunities Portal, under Horizon Europe.

The EIT shall organise regular meetings of the Member States' Representatives Group as well as Commission related services, at least twice a year, to ensure an appropriate communication and flow of information with Member States and at EU level. The Council and the European Parliament shall be kept duly informed of the performance, achievements and activities of the EIT and KICs. In addition, the Member States' Representatives Group shall give advice to the EIT on strategically important issues. The Member States' Representatives Group, together with the EIT, shall also ensure appropriate support to liaise and promote synergies about EIT-supported activities with national or regional programmes and initiatives, and share information about the potential national and/or regional co-financing of those activities.

The EIT shall further increase the visibility of its action towards citizens and its community of stakeholders through the Stakeholder Forum, the EIT Awards and the EIT Alumni. The aim is to promote the interactions with European actors of the knowledge triangle and recognise the most promising entrepreneurs and innovators in Europe.

The EIT shall continue to steer and provide strategic guidance to the EIT Alumni Community⁸ (in collaboration with the EIT Alumni Board) to maximise its entrepreneurial and societal impact and the continuous involvement of its members in EIT-supported activities. In the course of 2021-2027 the Community will continue growing and will also include the alumni taking part to the actions supporting the innovation capacities of HEIs.

-

The EIT Alumni Community brings together entrepreneurs and change agents who have participated in an education or entrepreneurship programme delivered by a KIC. The Community represents a network of over 5000 members.

3.5.2. Identify and share good practices with stakeholders

The EIT shall identify, codify, and effectively share learnings and good practices emerging from EIT-funded activities and engage with EU Member State authorities at both national and regional level, with the Commission and the European Parliament, in particular with its Science and Technology Panel (STOA), establishing a structured dialogue and coordinating efforts, in order to identify, share and disseminate good practices and learnings. The KICs and the projects supporting innovation and entrepreneurial capacity of HEI are expected to be a valuable source of evidence and experimental learning for policy-makers in the field of research, innovation and education, as well as in different thematic domains.

So far, the good practices and learnings stemming from the KICs have not been sufficiently pooled, codified and disseminated effectively. The EIT shall further develop its role as an innovation institute able to detect, analyse, codify, share and ensure the take-up of innovative practices, learnings and results from the EIT-funded activities (education and training, support to research and innovation, support to entrepreneurship) on a broader scale. This activity shall build on the links and synergies with the other initiatives within the Horizon Europe, in particular the European Innovation Council, the Missions and the European Partnerships.

3.5.3. International cooperation and global outreach activities

The EIT shall develop broad lines of international cooperation of the EIT and the KICs under the supervision of the EIT Governing Board, in compliance with the Horizon Europe approach to international cooperation and other relevant EU policies, and in consultation with the respective Commission services. Within the scope of the EIT Regulation, the EIT will seek greater impact of its activities through international cooperation and shall coordinate international EIT-funded activities by the KICs. Its focus shall be to align closely with relevant policy objectives of the European Union as well as its research and innovation priorities and ensuring European added value. When a physical presence of the EIT Commmunity in a third country is deemed necessary to increase the impact and deliver more efficiently on its objectives, the EIT should ensure coordination of the intervention, and incentivise joint KICs efforts.

In its international cooperation and global outreach activities, the EIT, in consultation with the Commission, shall focus on effective tackling of global challenges, contributing to relevant international initiatives and the Sustainable Development Goals, ensuring access to talent and enhanced supply and demand of innovative solutions. The EIT should monitor closely these activities and ensure that they comply with the Horizon Europe approach to international cooperation and other relevant EU policies.

3.6. Making it work: Mode of operation

This section includes a number of measures that aim to adapt and improve the current functioning of the EIT and the KICs. An effective, empowered and strategic EIT Governing Board shall monitor the implementation of those measures at the EIT level, and shall provide the necessary incentives and control, including through the performance-based funding allocation process, to ensure that the KICs implement them.

3.6.1. KIC operational model

The EIT shall ensure that the implementation of the KICs is in full compliance with the respective requirements stemming from the Horizon Europe regulation, including ensuring the transition of existing eight KICs towards delivery of the new implementation criteria of Horizon Europe for European Partnerships. Therefore the EIT shall provide strengthened operational guidance to KICs and continuously monitor the KICs' performance to ensure compliance with sound management, good governance, monitoring and evaluation principles, set in the EIT regulation, as well as the principles and criteria set out for European Partnerships in the Horizon Europe regulation and alignment with the requirements stemming from Horizon Europe priorities and indicators in order to maximise their performance and impact, based on a long-term collaboration strategy between the EIT and the KICs. Appropriate corrective measures shall be taken in case KIC underperforms, delivers inadequate results, fails to achieve the expected impact or lack European added value.

The EIT shall make sure that the measures ensuring continuous openness of the KICs to new members as well as transparency during implementation will be improved notably by adopting and applying transparent, clear and consistent accession and exit criteria for new members that add value to the partnerships, as well as other provisions like transparent procedures for preparation of their business plans and by systemically monitoring KICs' activities. KICs shall also run their activities in a fully transparent way, including through open calls for identifying and selecting their projects, partners and other activities and shall remain open and dynamic partnerships that new partners across the Union, including an increasing share of SMEs and start-ups, that add value to the partnership, can join on the basis of excellence and innovation relevance. In order to limit the concentration of funding and ensure that KICs activities benefit from a wide network of partners, the procedure for the preparation of the Business Plan (including the identification of priorities, the selection of activities and the allocation of funds) and related funding decisions shall be made more transparent and inclusive. The KICs' multiannual strategies shall address the expansion of the partnership, including the establishment of new co-location centres for which the Governing Board shall allocate an adequate budget. When deciding on the funding, the Governing Board shall take into account the progress towards the targets indicated in the multiannual strategies, inter alia, the number of co-location centres. KICs shall make broader use of competitive funding mechanisms and increase the openness of calls, in particular for projects that are open to third parties. All these measures will increase the number of participating entities involved in KICs' activities. Finally, KICs shall report on the involvement of new partners in their regular reporting as one of the elements of their performance-based funding.

As KICs operate across the entire value chain of innovation, they shall ensure an appropriate and continuous balance between the three sides of the knowledge triangle (education, research and innovation) and related activities in their Business Plan portfolio. The EIT shall monitor KICs operations to ensure that they are implemented through a lean, efficient and cost-effective structure that keeps administrative, management and overhead costs to a minimum. The EIT shall ensure that KICs will achieve their expected impacts through a broad range of activities, identified in the KICs' Business Plans, which effectively support the fulfilment of their objectives, including their potential impact on innovation ecosystems at local, regional, national and EU levels.

Commitments from each KIC's partner throughout the contractual duration of the initiative shall be ensured by regularly monitoring the actual partner's contributions against the original commitments. EIT shall ensure that KICs have a risk management system in place for cases where some partners are not able to meet their original commitments. In pursuing the financial sustainability of their activities, the KICs should look for a wide range of revenue and investment sources. In this endeavour, KICs should ensure that the conditions of access to the partnership remains attractive to a wide range of potential partners. Membership and tuition fees should not constitute a barrier for the participation of relevant partners in a KIC, in particular SMEs, start-ups and students.

3.6.2. KIC funding model

Through a lean and simplified funding model, the EIT is expected to enhance the impact of KICs and contribution of KICs towards reaching the objectives of the EIT and the Horizon Europe Programme as well as incentivise commitment from KICs partners. In order to increase the added value of its support, the EIT shall adapt its funding model. The EIT should make best efforts to facilitate a smooth transition from the current period to the next MFF period, in particular for the ongoing activities. There are four main areas where the EIT shall implement improvements. Firstly, the EIT shall gradually decrease funding rate for KIC added value activities in order to increase the levels of private and public investments other than revenues from their partners. The adaptation of the funding model is expected to facilitate the KICs in the transition towards financial sustainability. It is expected to incentivise them to decrease gradually during the duration of the partnership agreements the share of EIT funding in their Business Plan while increasing the level of co-investment from non-EIT sources. Decreasing EIT funding rates for KIC added value activities shall be applicable across phases of the entire KICs' life cycle (start-up, ramp-up, maturity, exit from the EIT grant) as presented below.

	Start-up	Ramp-up	Maturity	Exit from EIT grant
Years	1 – 4	5 – 7	8 – 11	12 - 15
EIT Co- funding rate	Up to 100%	Up to 80%	Up to 70%	Up to 50% at year 12, decreasing by 10% per annum

Figure 4: EIT co-funding rates 2021-2027

Some KICs' activities, due to their specific nature, might need extra incentives to be performed. To this aim, the EIT Governing Board might decide to apply more favourable funding conditions for cross-KIC activities, RIS activities and the new action supporting the entrepreunerial and innovation capacity of the higher education sector.

Secondly, the EIT shall ensure that the grant allocation process will follow a performance-based funding model. The use of multiannual grants shall be increased to the extent possible. The EIT funding shall be directly tied to progress made in the areas defined in Articles 10 and 11(2) of the EIT Regulation and to the KICs' objectives as laid out in their business plans, and could be reduced, modified or discontinued in case of lack of results. The EIT shall, inter alia, provide stronger incentives to KICs to strive for new partners as well as take corrective measures in particular based on their individual performance in order to ensure the highest level of impact.

Thirdly, the EIT shall apply strict rules for reinforcing the assessment mechanism prior to the expiry of the first 7 years initial period of KIC's operations in accordance with Articles 10 and 11 of the EIT regulation. This assessment to be undertaken with the help of external and independent experts shall be in line with the best international practice, in line with the monitoring and evaluation criteria set out for European Partnerships in the Horizon Europe regulation. It shall take place before the expiry of the initial seven years period. As a result of the assessment, a decision shall be made by the Governing Board to either continue the financial contribution to a KIC, to modify or to discontinue it (thus not extending the partnership agreement with that KIC) and reallocate the resources to better performing activities. The Governing Board shall seek opinion from the Member States Representatives Group prior to taking that decision.

3.6.3. Reducing the administrative burden

The EIT shall intensify its efforts towards simplification in order to reduce administrative burden⁹ of the KICs, allowing the implementation of their Business Plans and multi-annual strategies in an agile and efficient way. This may include the use of lump sum or unit costs for relevant KIC activities. Moreover, in order to provide a better planning of the resources, in particular of innovation activities, as well as facilitate stronger commitment and long-term investment from participating partners in KICs activities, the EIT will sign multi-annual grant agreements with KICs, when appropriate including provisions for performance-based funding, under the respective partnership agreements. These multi-annual grant agreements should not exceed 3 years.

3.6.4. EIT relation with KICs after the termination of the partnership agreement

The EIT shall develop the general principles for the relation with KICs after the termination of the Partnership Agreement in line with Horizon Europe framework for European Partnerships. Based on an in-depth independent study, by the end of 2023, the EIT shall define, in close cooperation with the Commission, the overall framework for its relations with the KICs whose Partnership Agreement is terminated or expired in the course of the 2021-2027 programming period. The indepth independent study shall include an assessment of the KIC's efforts to achieve financial sustainability, generated revenues and KIC's financial outlook and shall identify those activities, if any, that might be at risk of continuation due to the lack of resources. Subject to a positive outcome of a final review, the EIT may conclude a "Memorandum of Co-operation" (MoC) with a KIC, aiming to maintain active cooperation with it after the termination of the partnership agreement.

In particular, the annual reporting on KIC complementary activities would be discontinued, as recommended by the Court of Auditors in its Special Report of 2016 (Recommendation 1, p. 51).

The Memorandum of Cooperation shall include, inter alia:

- (a) Rights and obligations linked to the continuation of the knowledge triangle activities as well as maintenance of the KIC's ecosystem and network;
- (b) Conditions for the use of the EIT brand and participation in EIT Awards and in other initiatives organised by the EIT;
- (c) Conditions for the participation in higher education and training activities including the use of the EIT Label for education & training programmes and relations with the EIT Alumni Community;
- (d) Conditions for participation in EIT competitive calls for some specific activities, including cross-KIC activities and shared services;
- (e) Conditions for additional support from the EIT for transnational coordination activities among the CLCs with a high EU added value.

Taking into account the results of the in-depth independent study, the Governing Board shall define the duration and content structure of the MoC, including the specific activities of the KICs that can be supported under letter (a) to (e). KICs shall be entitled to participate to the EIT activities according to the conditions set in the MoC, including the participation to competitive calls.

3.7. Synergies and complementarities with other programmes

Building on its broad scope of action and distinctive role as an integral part of Horizon Europe, the EIT is well placed to create synergies and provide complementarities, while avoiding duplications, with other EU programmes or instruments, including by reinforcing its support to KICs in their planning and implementing activities. The list below offers concrete examples where the EIT is expected to contribute to synergies in the mid to long term beyond Horizon Europe.

Erasmus

- Erasmus and EIT will establish synergies between their respective communities.

 Cooperation is to be geared towards ensuring access for Erasmus students participating in KIC partner higher education institutions to KICs' summer schools or other relevant training activities (for instance, on entrepreneurship and innovation management) and establishing contacts with the KICs' alumni network.
- Cooperation activities may also include delivery of training by EIT/KICs to academic staff (coming from all Higher Education Institutions, beyond the KICs) for curricula integrating entrepreneurship and innovation, as well as testing, adoption and scaling-up of innovative practices developed within Erasmus networks (like the Knowledge Alliances between higher education institutions and businesses) by KICs and vice versa.
- Synergies are to be ensured, where possible, with the European Universities initiative that could help mainstream EIT's educational activities to reach a systemic impact.

Digital Europe Programme (DEP)

- The KICs, in particular their co-location centres, will collaborate with the European Digital Innovation Hubs to support the digital transformation of the industry and public sector organisations.
- Feasibilities will be explored to use infrastructures and capacities developed within the DEP (e.g. data resources and libraries of artificial intelligence algorithms; high performance computing competence centres in Member States) by the KICs in education & training, as well as for testing and demonstration purposes in innovation projects.

Cohesion Policy Funds (in particular European Regional and Development Fund and European Social Fund)

- EIT KICs, through their co-location centres and RIS entities, shall promote regional and cross-regional cooperation between the knowledge triangle actors (education, research, business) and managing authorities, in synergy with interregional cooperation and investments along value chains in related smart specialization priorities areas, and the work of the thematic smart specialisation platforms. Such cooperation with managing authorities may lead to including KICs activities in the operational programmes. The EIT shall also explore contributing to the skills development initiatives under the Cohesion Policy Funds through exchange of best practices.
- The EIT shall promote the collaboration between relevant KICs and the Smart Specialisation Platforms, in order to facilitate synergies between EIT resources, Cohesion Policy Funds and other European, national and/or regional programmes. The aim is to reach a broader representation of EIT activities across the Union, to strengthen links with Smart Specialisation Strategies and to better use the RIS to leverage ESI funds in EIT and KICs activities.

InvestEU

- EIT KICs shall seek the collaboration of the InvestEU Advisory Hub to provide technical support and assistance to KICs'-backed ventures for the preparation, development, and implementation of projects.
- EIT KICs shall strive to contribute to feed the InvestEU Portal in order to bring investors and financial intermediaries closer to KICs'-backed ventures, in close collaboration with Commission services and in synergy with the EIC.

Creative Europe

• The new Creative Europe Programme will among others be relevant for the activities of a future KIC on CCSI. Strong synergies and complementarities are to be developed with the programme in areas such as creative skills, jobs and business models.

Single Market Programme (COSME)

• KICs shall seek cooperation with the Enterprise Europe Network (EEN) and its Sector Groups to facilitate business-to-business cooperation, technology transfer and innovation partnerships for entrepreneurs wishing to develop their activities across the EU and beyond. EEN organisations will promote EIT KICs activities among their SME clients. The EIT shall explore cooperation on the mobility programmes for new entrepreneurs to improve their entrepreneurial skills.

3a. Tackling the crisis resulting from the outbreak of COVID-19

Major social, economic, environmental and technological changes deriving from the outbreak of COVID-19 will require the collaboration of all Union institutions, bodies, offices and agencies and the EIT should contribute to the innovation efforts that are needed in order to provide a coherent response to the crisis.

The EIT will ensure that the KICs support and promote the delivery of innovative solutions in different fields of action, in accordance with the priorities of the Union's recovery plan, the European Green Deal, the Union Industrial Strategy and the UN Sustainable Development Goals, thus contributing to the recovery of Europe's societies and economy and strengthen their sustainability and resilience.

In particular, the EIT should ensure that the KICs are able to operate with the necessary flexibility to adapt to the challenges arising from the COVID-19, as well as to new and unexpected challenges and priorities. Under the supervision and control of the EIT, KICs could create "fit-for-purpose" measures to support and increase the resilience of their ecosystems, i.e. their partners and beneficiaries and beyond their existing communities. Specific attention should be paid to actions aiming to increase the resilience of microenterprises, SMEs and start-ups, but also of students, researchers, entrepreneurs and employees who have been hit hard by the crisis.

KICs are also invited to exploit the synergies with other Union's initiatives and partnerships with a view to supporting the strengthening of Europe's innovation ecosystems.

In adapting to the new situation, KICs could make use of innovative collaborative tools, instruments, information and support services to ensure a sound collaboration and interaction within their communities.

The EIT, in synergy with other programmes and agencies, may propose initiatives based on the integration of the knowledge triangle aiming to support innovation ecosystems in the EU. With this aim, EIT might also promote new cross-KIC activities to tackle challenges arising from the COVID-19 crisis.

4. Resources

4.1. Budget needs

The EIT's budget needs in the period 2021-2027 are EUR 2965 million and are based on three main components: 1) the expenditure for the existing eight KICs (reflecting that for three of them the partnership agreements will come to an end by 2024) and the launch of two new KICs (in 2022 or 2023 and 2026); 2) EIT administrative expenditure; and 3) the expenditure for preparation, monitoring, control, audit, evaluation and other activities and expenditures necessary for managing and implementing the activities of the EIT, as well as evaluating the achievement of its objectives in accordance to Art. 9.4 of the Horizon Europe Framework Regulation.

Around EUR 2854 million (96 % of the total EIT budget) is envisaged to fund existing and new KICs of which:

- (a) at least 10% and maximum 15% shall be dedicated for the Regional Innovation Scheme;
- (b) maximum 7% shall be dedicated to cross-KIC activities, including the support to KICs for which the partnership agreement is expired or terminated;
- (c) maximum 3% shall be dedicated to a new pilot initiative of 3 years aiming at developing the entrepreneurial and innovation capacities of higher education sector.

Through the introduction of a gradually decreasing EIT funding rate, the KICs are expected to mobilise a further EUR 1500 million of other public and private sources. The budget for the launch of two new KICs (to be launched as soon as possible in 2022 or 2023 and 2026, respectively) will be around EUR 300 million. Should additional budget to that of the EIT become available, the EIT could also launch additional KICs.

The EIT will continue to be a lean and dynamic organisation. The costs of EIT administrative expenditure, covering necessary staff, administrative, infrastructure and operational expenses, will increase but on average not exceed 3% of the EIT budget. Part of the administrative expenditure is covered by Hungary through provision of office space free of charge until the end of 2029. Besides, a major effort shall be made to decrease the KICs' administrative costs which, in any case, shall be kept to a reasonable minimum.

4.2. Impact (monitoring and evaluation)

The measurement of EIT's impact is expected to be continuously improved over the next programming period taking into account the lessons learnt and the experiences gained so far and the need to streamline its practices with those of Horizon Europe. The EIT shall apply an evaluation, reporting and monitoring framework in accordance with Articles 10, 11 and 19 of the EIT Regulation ensuring coherence with the overall approach taken for Horizon Europe while catering for flexibility. In particular, feedback loops between the Commission, EIT and KICs shall be improved in order to address the objectives in a consistent, coherent and efficient manner.

4.2.1. Reporting and Monitoring

The EIT shall improve its current monitoring systems and introduce a reporting and monitoring framework including key performance indicators, aligned with the Key Impact Pathways of the [Horizon Europe programme]. The reporting and monitoring of the KICs operational performance. including their administrative expenditure and their results will be a primary task of the EIT and shall be implemented in cooperation with Horizon Europe common corporate services. The reporting and monitoring system for KICs shall be built into the overall Horizon Europe monitoring system, in particular by implementing common data models including data collection stored in Horizon Europe common database. The Commission shall take part in the co-design of all relevant impact and monitoring indicators and tools developed or applied by the EIT in order to ensure coherence with the overall Horizon Europe monitoring system, including the key impact pathways, the criteria framework for European Partnerships and the Strategic Planning Process. Continuous monitoring, as well as interim review and assessment procedures, including for establishing a sound set of quantitative and qualitative indicators and their related baseline and targets, shall be established by a decision of the Governing Board. Furthermore, EIT shall take into account the deployment of the Innovation Radar methodology in Horizon Europe, and shall explore how Innovation Radar could be leveraged by the KICs for enhancement of its monitoring activities.

The results of such monitoring shall feed into the KICs multi-annual business planning processes and determine the allocation of the EIT's performance-based funding of the KICs' activities and the preparation of the partnership agreements and grant agreements with the KICs as beneficiaries. Furthermore, the results of the monitoring of the KICs is expected to feed into the strategic coordinating process for the European Partnerships.

The EIT activities, including those managed through KICs, are expected to have

- (1) technological/economic/innovation impact by influencing the creation and growth of companies, as well as the creation of new innovative solutions to address global challenges, creating direct and indirect jobs and mobilising additional public and private investments;
- (2) scientific and educational impact by, strengthening human capital in research and innovation, enhancing innovative and entrepreneurial skills both at individual and organisational levels and fostering the creation and diffusion of knowledge and innovation openly within society;
- (3) societal impact, including the impact derived by the delivery of systematic solutions within and beyond the EIT community, also through cross-KIC activities, by addressing EU policy priorities in the fields of climate change (e.g. mitigation, adaptation and resilience), energy, raw materials, health, added value manufacturing, digital, urban mobility, food, culture and creativity, or water through innovative solutions, engagement with citizens and end-users and by strengthening the uptake of innovative solutions in these areas in society.

The EIT shall ensure the development of the specific societal indicators in the KICs areas of activity and its regular monitoring in line with Horizon Europe framework for societal impact.

The impacts referred to in the third paragraph shall be measured inter alia according to the indicators set out in Annex V to Regulation [xxx] establishing Horizon Europe.

Additional indicators, including societal impact indicators in the KICs areas of activity, shall be developed by the EIT together with the Commission in line with the development of the Horizon Europe programme indicator framework and shall reflect the overall approach for European Partnerships to contribute to scientific, economic and societal impact. Overall the alignment of the impact indicators with Horizon Europe aims at monitoring the progress towards the set objectives over time. This is expected ensure a comparative evidence-base on results and impacts generated by KICs vis-à-vis the rest of the programme. In addition, the EIT shall ensure that the monitoring system would capture progress in relation to activities specific to the KIC model, such as knowledge triangle integration and entrepreneurial skills. For example, the indicators on EIT education-related activities (including those supporting the capacities of HEIs) shall monitor human capital skill acquisition (short term), career (medium term) and working conditions (long term), HEIs engagement and capacity improvement (short term) or HEIs role and performance in local innovation ecosystems (medium and long term).

The continuous monitoring of KICs shall be performed in an efficient way and address, inter alia, the following aspects:

- Progress towards financial sustainability in particular leveraging new sources of investments
- Progress towards pan-European coverage and openness, transparency of governance
- Effectiveness in business acceleration (i.a. high-growth ventures created and supported)
- KIC's administrative and management costs
- Operations of CLCs and RIS hubs and entities and their integration in the local innovation ecosystems
- the implementation of education and training activities, including the extended use of the EIT Label.

The table below provides the non-exhaustive list of key performance indicators and their targets that is expected to be monitored by the EIT in 2021-2027. These indicators provide the main input and output orientations for monitoring the achievement of EIT's key objectives for the period 2021-2027 such as fostering innovation and entrepreneurship through better education, increasing its local and regional impact and openness towards potential partners and stakeholders, ensuring balance between revenues and costs, establishment of new co-location centres and bringing new innovative solutions to global challenges to market.

EIT Management Indicators	Target 2023 (baseline 2020)	Target 2027 (baseline 2020)
No. of entities/organisations participating in EIT and KIC activities	20 % increase	50 % increase
No. of innovations (products and services) launched on the market	1.500	4.000
Higher Education Institutions involved in EIT and KIC activities	300, out of which 100 from the new action on education	750, out of which 450 from new action on education
No. of students involved in EIT and KICs education activities	10.000	30.000
No. of start-ups supported	300	700
KICs' co-funding	700 MEUR	1500 MEUR
No. of entities/organisations participating in EIT and KIC activities from regions outside the KICs' CLC regions	50 % increase	100 % increase

In order to improve transparency and openness, the EIT shall ensure that the project data it collects through its internal monitoring system, including the results from KICs, is fully accessible and integrated in the overall data management system of Horizon Europe programme. The EIT shall ensure that detailed information arising from its monitoring and evaluation process are made available timely and are accessible in the common e-database Horizon Europe implementation. In addition, the EIT will ensure dedicated reporting on quantitative and qualitative impacts, including on committed and actually provided financial contributions.

4.2.2. Evaluation, interim review and comprehensive assessment

The periodic evaluations of the EIT activities, including those managed through KICs, shall be carried out by the Commission in line with the provisions of the EIT Regulation and Horizon Europe Regulation.

In accordance with Article 19 of the Regulation [xxx] on the EIT, the interim evaluation shall assess, inter alia, the result and impacts of the action supporting the innovation and entrepreneurial capacities of HEIs, the effectiveness of the KICs' financial sustainability strategies, the impact of the RIS and the collaboration between the EIT and the implementing bodies under Pillar III of Horizon Europe. In that respect, the EIT evaluations shall notably assess the effectiveness, efficiency, relevance, coherence and EU added value of the EIT activities, including through its KICs. They shall be based on independent external evaluations and shall feed into the Commission programme evaluations provided for in Horizon Europe also in view of a systemic assessment of the 'Innovative Europe' Pillar of Horizon Europe, in particular with respect to the "one-stop shop" for innovation.

Each KIC shall be subject to a comprehensive assessment by the EIT with support of external experts before the end of the 7th year of the Partnership Agreement, as well as to a final review before its end in case of extension. On the basis of the first assessment, the Govening Board shall decide on whether to extend the Partnership Agreement beyond the first 7 years, while the final review shall be used as a basis to negotiate the possible MoC. In these evaluations, in line with Article 11, paragraph 2, of the EIT Regulation, the EIT Governing Board shall take into account in particular the monitoring criteria set out for the European Partnerships in the Horizon Europe regulation, the achievement of KIC's objectives, and its coordination with other relevant research and innovation initiatives, the achieved level of financial sustainability, KIC's capacity to ensure openness to new members, transparency in its governance and its achievement in attracting new members, within the limits of the Union financial contribution referred to in Article 20 of the EIT Regulation, the EU added value and relevance with regard to the objectives of the EIT.

In addition, in line with Article 11, paragraph 1a, of the EIT Regulation, the EIT, under the supervision of the Governing Board, shall prepare interim reviews of the KICs performance and activities covering their first three years of the partnership agreement (i.e. the KICs' start-up phase) and, if it is the case, the three years following its extension (i.e. the maturity phase). Those reviews shall be based on the continuous monitoring performed by the EIT; they shall help the EIT Governing Board to get early indications on KICs' performance with respect to their strategy and targets, as well as the compliance to EIT Governing Board indications.

In line with Article 11, paragraph 3, of the EIT Regulation, in the event that the continuous monitoring, interim reviews or the comprehensive assessments of a KIC show inadequate progress in areas referred to in Article 10 or lack of European added value, the Governing Board shall take appropriate corrective measures. The corrective measures may take the form of reduction, modification or withdrawal of the EIT financial contribution, as well as binding recommendations related to KICs' activities or suggestions for adaptations of its delivery and operational models.

The results of these interim reviews and evaluations shall be made publicly available, communicated to the Member States' Representatives Group and reported to the strategic coordinating process for European Partnerships. The European Parliament shall also be duly informed.

5. Annex 1A

Priority fields for launching new Knowledge and Innovation Communities.

- 1. Cultural and Creative Sectors and Industries
- 1a. Water, Marine and Maritime Sectors and Ecosystems

6. Annex 1B

FACTSHEET ON THE KNOWLEDGE AND INNOVATION COMMUNITY "CULTURAL AND CREATIVE SECTORS AND INDUSTRIES"

The Challenge

Cultural and Creative Sectors and Industries (CCSI)¹⁰ can bring a horizontal solution to an array of rising challenges, which are of a permanent nature, and can be addressed through education, research and innovation activities. These challenges can be grouped into four pillars: 1) Europeans' creativity, cultural and linguistic diversity; 2) European identity and cohesion; 3) European employment, economic resilience, and smart growth; and 4) Europe as a global actor.

10

¹⁰ The Cultural and Creative Sectors and Industries relate to all sectors and industries whose activities are based on cultural values, cultural diversity and individual and/or collective artistic and other creative expressions, whether those activities are market or non-market oriented, whatever the type of structure that carries them out, and irrespective of how that structure is financed. Those activities include the development of skills and talent with the potential to generate innovation, the creation of wealth and jobs through the production of social and economic value, including from intellectual property management. They relate also to the development, the production, the creation, the dissemination and the preservation of goods and services which embody cultural, artistic or other creative expressions, as well as related functions such as education and management. The cultural and creative sectors include inter alia architecture, archives, arts, libraries and museums, artistic crafts, audio and visual (including film, television, software, video games, multimedia and recorded music), tangible and intangible cultural heritage, design, creativity-driven high-end industries and fashion, festivals, music, literature, performing arts (including theatre and dance), books and publishing (newspapers and magazines), radio and visual arts, and advertising.

Europeans' creativity and cultural diversity depends on resilient and robust cultural and creative sectors and industries. However those sectors are facing a number of challenges as a result of the increased competition from global players and the digital shift.

- Producers, creators, distributors, broadcasters, cinema theatres and all types of cultural
 organisations and businesses need to innovate in order to attract and expand new
 audiences and to develop new processes, services, contents and practices that provide
 societal value.
- The shortage of entrepreneurship and cross-cutting skills in cultural and creative sectors¹¹ concerns both emerging sub-sectors as well as very mature ones that undergo a profound digital transformation. These skills are needed for innovation and crucial in light of labour market changes that the sector is facing.
- Cultural heritage is an undisputed expression of cultural identity, an important public good and a source of innovation, providing good return on investment and significant economic revenues, but its potential is still largely untapped. Being a catalyst for sustainable heritage-led regeneration and an essential stimulus to education and lifelong learning, fostering cooperation and social cohesion, it can vastly benefit from the CCSI KIC.

_

Cultural and creative studies in European universities are mostly focused on the "creative part" and their graduates are not always ready to enter the modern labour market as they lack cross-sectoral (entrepreneurial, digital, financial management) skills. With regards to HEIs, the EU is trailing behind the USA in Communication & Media studies (while EU universities are performing better in more traditional disciplines such as Art & Design or Performing arts).

Societal challenges related to the European identity and cohesion can generally be described in terms of lack of 'bridges' connecting different parts of the society including different territories. They include issues related to social exclusion, the need to build closer intercultural links, protect linguistic diversity, including minority languages, and develop a sense of common belonging based on our cultural diversity and common heritage that could be addressed through more inclusive and accessible community participation, innovations in design, architecture and the use of public spaces, as well as culture-led societal innovation. In particular:

- There is limited cooperation between researchers and between research and industry, public and third sector organisations as well as insufficient coordination and unnecessary duplication of R&D efforts, sharing of methods, results, and best practices.
- The level of integration of creative clusters and innovation hubs is insufficient.
- A significant share of regional smart specialization priorities in Europe refer to culture under different angles (e.g. cultural heritage, creative industries, arts, etc.). Given the important role of culture and creativity for the economic and social development of cities and regions and their ability to further help address disparity issues across Europe, the potential of this KIC is high.

Current challenges related to European employment, economic resilience, and smart growth, include socio-economic issues such as tackling unemployment (especially youth unemployment), improve skills and working environments and facing global competition.

• There is a high market concentration: - around 50% of the total turnover and added value is generated in Germany, United Kingdom, and France.

- European industries are strongly impacted by globalisation, digitisation and technological innovation. These developments have changed the way artists produce and distribute their works and relate to their audiences. They are changing the traditional business models of the cultural and creative industries, and they have fundamentally shifted consumers' expectations and behaviour. In addition, the increasing power of non-European content production companies, has had a massive impact on the traditional value chain.
- Creative, cultural and artistic productions often face the challenge of monetarizing their
 output and products, therefore creating highly precarized areas of work. New innovative
 ways of supporting micro, small and medium scale creative and cultural organizations and
 enterprises should be found.

Finally, the role of Europe as a global actor includes the need to enhance the dissemination of the European cultural content. Europe needs to remain competitive in the global digital race for creation of new technologies (e.g. AI, IoT, blockchain) for which cultural and creative sectors and industries are important generators of content, products and services. Moreover, on a global scale, cultural and creative sectors and industries (e.g. design, architecture, etc.) contribute actively to the sustainable development and drive green innovation, while cultural content (literature, film and the arts) can, in addition to its self-standing value, raise awareness of ecological problems and inform public opinion.

Relevance and Impact

An EIT KIC on CCSI – with its holistic and integrated approach - will help address all challenges defined above. By covering nearly all sectors of our lives, society and economy, such KIC will be highly relevant in terms of economic and societal impact, unlocking strategic opportunities for economic, technological as well as social innovation. It will also be instrumental allowing higher education institutions in arts to play a more active role in developing hybrid competences and an entrepreneurial mindset that better meets industry needs.

Culture-based and creativity-driven innovations boost European competitiveness either directly by creating new enterprises and jobs or indirectly by creating cross-sector benefits to the wider economy, improving quality of life and increasing the attractiveness of Europe. Cultural and creative sectors (e.g. cultural heritage and arts) are increasingly seen as new sources of smart, sustainable and inclusive growth and jobs. Those sectors are employing already more than 12 million people in the Union, which amounts to more than 7,5% of all EU people in employment. Cultural heritage is a key component of the cultural and creative sectors and a major contributor to the attractiveness of Europe's regions, cities, towns and rural areas. It is a driver for private sector investments, for talent attraction, for footloose business generation and for direct and indirect job creation

The contribution of culture and creativity to innovation is increasingly driven by non-technological factors such as creativity, design and new organisational processes or business models. In particular, the sectors with distinct value chains (i.e. music, arts, design, fashion, audio-visual, video games, architecture ...) have a strong innovation capacity in economic terms and are able to drive innovation in other sectors of the economy.

Culture and participation in cultural activities has a direct impact on the well-being of citizens and social inclusion. CCI enhance societal values of identity, democracy and community participation. Culture has a great potential to reinforce a European sense of belonging, where diversity represents an asset. This is of fundamental importance to enable resilience, social access, society cohesion, anti-radicalisation and gender equality, and to tackle Europe's political uncertainties and need of unity.

An EIT KIC on CCSI will empower network opportunities, collaboration, co-creation and know-how transfer between education, research, business, public and third sector organisations, within the cultural and creative sectors and with other sectors of the society and the economy. It will catalyse bottom up and top down initiatives at regional, national and EU levels. It will develop the necessary framework conditions for the creation and scale up of new ventures in innovative ecosystems. It will provide researchers and students in many disciplines (including arts, humanities, business, social sciences and applied hard sciences) and entrepreneurs of the cultural and creative industries and other sectors with the knowledge and skills necessary to deliver innovative solutions and to turn them into new cultural, societal and business opportunities. It will allow further cross-fertilisation with other economic and industrial sectors, acting as an accelerator for innovation.

Synergies and Complementarities with existing initiatives

A KIC in on CCSI would be complementary to number of other Union initiatives, as well as such at the level of Member States. The main synergies expected at EU level are presented below.

A KIC about the cultural and creative sectors and industries is expected to establish strong synergies with relevant policy initiatives under the Horizon Europe Programme, and in particular under Pillar II with the cluster [Culture, Creativity and Inclusive Society] and its areas of intervention on Cultural Heritage and Democracy. A future KIC could also provide valuable horizontal inputs across various activities to be carried out in the cluster [Digital, Industry and Space], in particular as regards the manufacturing technologies in which the need to develop new products rely heavily on cultural and creative sectors and industries. Furthermore, it could efficiently complement other parts of the Horizon Europe Programme, the intervention of the existing EIT Digital and the actions foreseen under other EU programmes such as InvestEU, Erasmus, Creative Europe, Digital Europe or the Cohesion Policy Funds.

The new Creative Europe Programme will be highly relevant for the activities of this KIC. The Programme elects strands and special calls reflecting some of the already mentioned challenges facing the sector (e.g. creatives' skills and employment, business models, etc.) and strong synergies and complementarities should be developed. Under the InvestEU, and in the context of limited access to finance for the cultural and creative sectors, synergies could be expected with the Cultural and Creative Sector Guarantee Facility, a financial mechanism to help scale up cultural and creative projects by providing insurance to financial intermediaries.

The Smart Specialisation Strategy (S3) platform on Industrial Modernisation has identified a number of R&I strategies that focus on the cultural and creative sectors and industries and explore new linkages between local assets, potential markets and societal challenges through the involvement of a large set of entrepreneurial actors. In particular, the promotion of new partnerships between research organisations, enterprises and public authorities is a major concern of S3 strategies, calling for the set-up of new collaborative platforms.

Conclusion

An EIT KIC on CCSI is most suited to address the major economic and societal challenges outlined above. Creativity is a key driver of innovation and a KIC on cultural and creative sectors and industries has the capacity to unleash the potential of artistic, culture-based creativity and to help strengthen Europe's competitiveness, sustainability, prosperity and smart growth.

6a. Annex 1B.a.

Factsheet on Water, Marine and Maritime Sectors and Ecosystems Factsheet on the Knowledge and Innovation Community "Water, Marine and Maritime Sectors and Ecosystems"

This document presents an overview of the domain of 'Water, Marine and Maritime Sectors and Ecosystems' at time of preparation of the Strategic Innovation Agenda 2021-2027 of the EIT. The Commission will perform an analysis prior to the launch of a new KIC in this domain to reflect evolutions in the scientific, technological and socio-economic trends, ensure full alignment with the Strategic Planning process of Horizon Europe, the criteria set for European Partnerships in Horizon Europe regulation Annex 3, and coherence with existing initiatives at European, national and regional level, including European Partnerships and missions.

I. The challenge

Seas, oceans and inland waters play a central role in human life, health and wellbeing, in the provision of food, critical ecosystem services, renewable energy and other resources, as well as in climate-related dynamics and in the preservation of biodiversity. During the last century, the overuse and mismanagement of natural resources has placed a great pressure on freshwater and marine ecosystems. Therefore, there is a challenge to create a sustainable and circular blue economy, that develops within ecological limits and that is based on the reliable availability of an acceptable quantity and quality of water as well as on healthy and functioning freshwater and marine ecosystems. This encompasses mainly 1) Water scarcity, drought and floods, 2) Marine and freshwater ecosystem degradation, and 3) Circular and sustainable blue economy.

Water scarcity, drought and floods. Continued climate change and over-extraction of fresh water are increasing the severity and frequency of water scarcity and droughts. Without innovative methods and technologies to gather, predict, prepare and disseminate information and solutions about waterbody safety, potential threats, and mitigation of risks, the EU is exposed to severe economic and social harm. Water scarcity accompanies the pressure on land driven by the need to increase biomass production, carbon sequestration and wilderness to achieve decarbonisation and biodiversity targets. The Commission's impact assessment for increasing the ambition of the EU's 2030 climate targets¹² indicates that shifting protein production to non-fed aquaculture and to integrated multi-trophic aquaculture and aquaponics, could relieve pressure on land and freshwater.

Marine and freshwater ecosystem degradation. Coastal, marine and freshwater ecosystems are subject to pressure from direct human activity and accelerating climate change. Damage by this includes biodiversity loss, depletion of fish stocks, damage to the sea floor, including from the use of harmful gears such as bottom-contacting fishing gear, obstruction of rivers, eutrophication pollution, and accumulation of marine litter including a high level of fishing gear and microplastics dispersed in oceans. Poor ecological health not only compromises biodiversity targets but also harms those communities and businesses that depend on clean water and healthy ecosystems. The global market for goods and services for measuring and mitigating this degradation is growing and it is highly competitive. Innovation that can enhance, restore and recover our marine, coastal and freshwater capital and innovation into sustainable fishing gear and methods will be key for the competitiveness of EU companies and to support jobs and growth across EU countries.

12 SWD/2020/160.

Circular and sustainable blue economy. The circular economy path will not only safeguard human health and resource efficiency, but also become an engine of sustainable growth. The planned unprecedented growth in offshore wind energy and other innovative ocean energy technologies, which should not undermine environmental protection, offer opportunities both for enhancement of biodiversity (artificial reefs, oyster beds, etc.) and for new activities that make use of the space and renewable electricity such as aquaculture and hydrogen electrolysis. Non-fed aquaculture can recycle the excess nutrients that would otherwise cause eutrophication. New targets for emissions reduction and renewable fuel in maritime transport will require innovation in propulsion and logistics. Reuse of wastewater can prevent shortages that may be exacerbated by a changing climate.

II. Relevance and Impact

An EIT KIC on Water, Marine and Maritime sectors and ecosystems (KIC WMM) – with its holistic and integrated approach - will help address all challenges outlined above. This theme has a relatively strong knowledge base as well as high market potential. European researchers have produced more research papers on water science and technology in the past fifteen years than researchers from any other country. Moreover, the EU is one of the leaders, alongside China and USA, in maritime economy. According to the most recent figures from 2018, the established sectors of the Blue Economy employed over five million people in the Union, and generated €750 billion of turnover and €218 billion of gross value added¹³. However, it exists a clear fragmentation of efforts and disconnections between education, research and innovation activities. For example, less than 20% of R&D organisations in water sciences have an effective cooperation with industries or enterprises.

In: The blue economy report 2020, p. VII.

Newly emerging innovation sectors (such as biotechnologies and offshore energy production) open new market opportunities for new technologies and new business and highly skilled jobs. That and the technological transition of the more traditional marine-related sectors would require transdisciplinary approaches and new types of education across disciplines boundaries. In particular, academic programmes tend to be rather broad, whereas the sub-sectors would require quite specific knowledge and skills. Additionally, curricula in areas such as engineering, urban design, architecture, and similar do not sufficiently cover issues related to ecology, marine engineering, and management of water.

Establishing a KIC in WMM can truly contribute to strengthening innovation ecosystems and stimulating cooperation across the knowledge triangle, in order to accelerate the uptake of new technologies and approaches and boost the development of more sustainable products and methods, especially as far as fishing gear is concerned. The establishment of a pan-European multidisciplinary community of knowledge triangle partners would help to promote the Blue Economy vision and boost world-wide competitiveness of European marine and maritime science and technology. It would help bring to the market, innovative projects of blue science and technology that would provide solutions to urgent practical challenges of sustainability and contribute to "Ecosystem-based Blue Economy" not only at a European but also at a global scale. Such KIC would lead to better management of human interactions with water-marine ecosystems directly contributing to a sustainable blue economy that develops within ecological limits, especially by ensuring the sustainable management of marine ecosystems.

III. Synergies and complementarities with existing initiatives

The KIC WMM will not only establish the strongest possible synergies with relevant Union policy initiatives as well as within the Horizon Europe programme, but it will also interact on an international level with relevant UN initiatives and SDG actions (in particular SDG 6 "Clean Water and Sanitation", SDG 11 "Sustainable Cities and Communities", SDG 13 "Climate Action" and SDG 14 "Life below Water").

In terms of Union policy initiatives, the KIC WMM will be aligned with the priorities defined in the Water Framework Directive, the Marine Strategy Framework Directive, the Maritime Spatial Planning Directive, the Common Fisheries Policy, the EU integrated Maritime Policy and international commitments. It will also contribute to priorities outlined in the communication on the European Green Deal¹⁴, in particular the "Farm to Fork Strategy", the "Zero pollution action plan for air, water and soil", the "initiatives to increase and better manage the capacity of inland waterways" and the Union's Biodiversity Strategy.

Some regional Smart Specialisation Strategies (S3) have identified a number of R&I strategies that focus on marine and aquatic industries and explore new links between local assets, potential markets and societal challenges through the involvement of a large set of entrepreneurial actors.

As far as the subparts of the Horizon Europe programme are concerned, strong complementarities should be ensured, and duplications should be avoided, in particular with:

- The candidate mission on "a healthy ocean, seas, and waters";
- Horizon Europe relevant partnerships, in particular the ones on "a climate-neutral, sustainable
 and productive Blue Economy", "Rescuing biodiversity to safeguard life on Earth",
 "Water4All", "Clean energy transition", "Driving urban transition", "Food systems" and
 "Research and Innovation in the Mediterranean Area" (Horizon 2020);
- All clusters of pillar II;
- Research infrastructures:
- The EIC, the EIB and BlueInvest for the uptake of promising innovations.

_

 $^{^{14} \}qquad https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf$

IV. Conclusion

The KIC WMM is best suited to addressing the major economic, environmental and societal challenges outlined above. This KIC is needed, in particular, to strengthen the innovation ecosystems throughout Europe tackling the water-related challenges, train the next generation of innovators and entrepreneurs, find and support innovative solutions for these challenges.

The KIC WMM will:

- Reduce the fragmentation of the water, maritime and marine sectors' innovation landscape by
 fostering the creation of innovation ecosystems that will connect actors and networks across
 sectors and disciplines at local, regional, national and EU levels.
- Promote an integrated and multidisciplinary approach through collaboration among higher education institutions, research organisations, innovative companies, public and third sector organisations in the blue economy sectors in order to deliver on the objectives of the Union on green and digital transitions;
- Connect actors and networks across sectors and disciplines at local, regional, national and Union levels, in particular, identifying the relevant R&I smart specialisation strategies (RIS3) and further regional strategies which include blue economy sectors;
- Train and develop the next generation of innovators and entrepreneurs in the blue economy sectors by equipping them with the necessary entrepreneurial and technological skills needed for sustainable and competitive development.
- Contribute to the development of the appropriate framework conditions to transform ideas into new technological developments and social innovation, and to their market deployment in view of improving the quality of life and benefitting Union citizens;
- Synergise with the other existing Union partnerships, Horizon Europe missions, the EIC the
 EIB and BlueInvest to scale-up innovations, allow other sectors to prosper in a sustainable
 manner and increase the market deployment and societal acceptance of innovative solutions.
- Strengthen the Union's position as a global actor in ocean science, inland waters management, and ecosystem protection and restoration.