

EUSBSR EU STRATEGY FOR THE BALTIC SEA REGION

EUSBSR Policy Area Innovation

Esa Kokkonen Director, The Baltic Institute of Finland Policy Area Coordinator, EUSBSR PA INNO





EUSBSR Policy Area Innovation: New Action Plan 2021-



Added value:

Policy Area Innovation (PA INNO)

- promotes a globally competitive position within innovation for sustainable economic growth in the BSR, and provides a strong platform for an enhanced macroregional collaborative ecosystem for innovation, research, SMEs and digitalization.
- enables shared learning through knowledge-transfer activities
- creates and strengthens networks across the Baltic Sea region
- aligns resources and regulations e.g. through co-ordination of funding sources
- facilitates the joining up of forces in common programs and investments and in the development of solutions for common challenges; and
- enhances BSR's profile, visibility and attractiveness as a partner of choice for international innovation cooperation within and beyond the BSR.

EUSBSR Policy Area Innovation: New Action Plan 2021-

EU or other policy framework

PA Innovation is related to the following EU- regional - and international strategic frameworks:

- European Strategic Cluster Partnerships (COSME)
- Smart Specialisation Strategy
- Digitising European Industry, in particular the support to Digital Innovation Hubs that can support SMEs with their digital transformation
- Activities to support cultural and creative industries
- Digital Single Market
- EU Blue Bioeconomy Roadmap and Bioeconomy Strategy
- Policy goals of Horizon Europe
- A new Circular Economy Action Plan for a Cleaner and More Competitive Europe

The innovation AP is to be linked to the Green Deal, support for R&I being a cross-cutting element of the pact. It will also be directly linked to certain texts of the Green Deal: the new industrial strategy, the new circular economy action plan, the farm-to-fork strategy

EUSBSR Policy Area Innovation: New Action Plan 2021-

Key PA achievement so far

- PA INNO has helped versatile BSR innovation cooperation to evolve into strategic and complementary actions with stronger impact and more scalable results.
- PA INNO has helped versatile Baltic Sea region innovation cooperation to evolve into strategic and complementary actions with stronger impact and more scalable results. Altogether, 27 PA INNO flagships have been implemented during the EU programme period 2014-2021.
- PA INNO flagships such as BSR Stars, SUBMARINER Network, ScanBalt, Baltic Science Link and BSR Digi co-lab have produced numerous interesting and highly relevant results and new solutions in the fields such as research collaboration, health, blue growth, and circular and digital economy. PA INNO has supported the flagships in the project development, promotion, dissemination and scaling-up of their results, in policy learning and dialogue, and facilitated the development of the flagships' follow-up/new project initiatives.
- PA INNO experiences and results on transnational S3 are providing strong evidence and basis for the next wave of S3 in the next EU programming period.
 - Related to this, a network of ERDF Managing Authorities (MA Network) has been established to develop proposals on transnational S3 collaboration, embedding EUSBSR to ERDF. Pilot projects on clean technologies and digital transformation have been created under the MA Network.
 - results of various (regions-lead) PA INNO flagships on S3 are now being scaled up in connection with BSR S3 Ecosystem project



EUSBSR Policy Area Innovation: Coordinators

PA INNO is managed and coordinated in close cooperation of the three PACs:

The Baltic Institute of Finland – main coordinator ESA KOKKONEN <u>esa.kokkonen@tampere.fi</u> +358 50 516 9111

Estonian Ministry of Economic Affairs and CommunicationsREET REISMAAKRISTI ARUKÜLAReet.Reismaa@mkm.eekristi.arukyla@mkm.ee

Polish Ministry of Science and Higher Education ZUZANNA KOZŁOWSKA <u>zuzanna.kozlowska@mein.gov.pl</u>







EUSBSR Policy Area Innovation: Steering Group

- PA INNO SG consists of representatives of the national or regional governments of EUSBSR Member States. SG members come from key ministries or authorities in the relevant field.
- In PA INNO SG, representatives of non-EU neighbouring countries are invited as members (Norway, Iceland)
- PA INNO has prioritised Smart Specialisation to secure that innovation measures are designed to better meet the local and subregional level need of actions. Therefore, also subregional/local level will be represented in the SG (one subregional/local level SG member)
- A representative of the European Commission's Directorate-General for Regional and Urban Policy (DG Regio) participates in SG meetings as a strategic advisor.



EUSBSR Policy Area Innovation: Focused topics

Action 1: Challenge-driven innovation

Macroregional challenge-driven innovation policies and actions aiming at fostering disruptive, breakthrough and market-shaping innovations to respond to the 21st century social, environmental, and economic grand challenges in the BSR (e.g. climate change, resource efficiency, demographic change, pandemics, rapid urbanization, healthy living and aging, clean energy, inclusive societies, sustainable food and feed production and various environmental challenges of the Baltic Sea).

Potential topics

- Sector/S3 priority-specific S3/4 initiatives (e.g. on blue growth, circular economy/industrial symbiosis, health, industry 4.0, smart cities, low carbon energy) having the potential to solve BSR challenges, to generate new business, and to encourage the development of BSR value chains
- Promotion of stronger BSR value/supply chains that would be able to respond to future undesired external disruptions
- Methods and tools for the facilitation of the systemic change needed for green transition and sustainable and inclusive growth
- Initiatives on public procurement for innovation (challenge-based procurement)

Action 2: Digital innovation and transformation

Digital transformation is a societal change in BSR. Emerging digital technologies such as AI, VR/AR, blockchain, robotics and Internet of Things (IoT) are key tools to tackle societal challenges, facilitate new businesses, innovations, services and more sustainable, usable and vital living environments and infrastructures, and develop BSR innovation (e.g. smart city initiatives) and startup ecosystems.

Potential topics

- Real-Time Economy; Development of common standards for interoperable public and private solutions
- Joint development and implementation of Digital Innovation Hubs (DIHs)
- Digital, data-driven solutions for sustainable business and growth in BSR (promoting the twin transition in BSR), e.g. Digital transformation of (blue) bioeconomy /circular economy in BSR



EUSBSR Policy Area Innovation: Focused topics

Action 3: Co-creative innovation

Ecosystems and platforms are emerging as key frameworks for economic and innovation activity also in BSR. Transnational platforms and change agents are needed to connect Baltic Sea region innovation ecosystems and having access to public, research and business groups, to engage them in the collaborative process of co-creation to bridge the existing knowledge, skills and market access gaps for SMEs. Efficient transnational linkages and matching of end users, innovative firms and research partners for team co-creation, and access to other resources such as knowledge and prototyping is a critical success factor for co-creation scale up and growth. Transnational linkages allow organisations to tap into a larger base of ideas and technology, find complementary expertise and pool competencies in order to overcome barriers, such as lack of management resources.

Potential topics

Co-creation as a horizontal theme / overarching approach to all EUSBSR PA INNO actions, it can be applied in any topic/project

- To scale up the use of co-creation among BSR SMEs through improving their capabilities and absorptive capacities to efficiently turn market demand driven ideas into innovations
- To connect innovation ecosystems across BSR through developing and piloting systematic models and practices to engage BSR SMEs, researchers, test facilities and end users in co-creation activities
- To facilitate the understanding and change of mindset among policy-makers and SMEs to scale up practical co-creation activities in BSR and
- To promote transnational cooperation and SMEs access to RDI infra, and transnational exchange and joint development between Innovation Infrastructure Organisations and incubators.



EUSBSR PA INNO topics on Greener Europe (2021-2027)

- Industrial symbiosis (IS), i.e. the transition move towards a circular economy by helping industries and businesses cooperate in the exchange of natural resources and production infrastructures
- Circular bioeconomy (CBE) the circular economy is not complete without the bioeconomy and vice versa. The huge volumes of organic side and waste streams from agriculture, forestry, fishery, food and feed and organic process waste can only be integrated in the circular economy through bioeconomy processes, while the bioeconomy will hugely profit from increased circularity.
- Blue economy: sustainable use of the Baltic Sea resources, carefully combining ecosystem services and protection of the unique environment by realising blue bioeconomy concepts
- Digital transformation of, for example, IS, CBE and blue growth in BSR; including the establishment of more efficient and effective data and information generation and provision based on new ICT solutions

The above topics, as examples, present game changing opportunities for BSR regions – underlined by the recent policy developments at the EU level – the adoption of the European Green Deal, new Circular Economy Action Plan For a cleaner and more competitive Europe, EU Blue Bioeconomy Roadmap and Bioeconomy Strategy, the adoption of an EU Industrial Strategy, Digital Single Market, as well as a high priority of Greener Europe topics in BSR S3s

EUSBSR Policy Area Innovation: Potential project topics in EU 2021-2027

- Sector/S3 priority-specific S3/4 initiatives (e.g. on blue growth, circular economy/industrial symbiosis, health, industry 4.0, smart cities, low carbon energy) having the potential to solve BSR challenges, to generate new business, and to encourage the development of BSR value chains
- Promotion of stronger BSR value/supply chains that would be able to respond to future undesired external disruptions
- Methods and tools for the facilitation of the systemic change needed for green transition and sustainable and inclusive growth, and transformation of business models
- Initiatives on public procurement for innovation (challenge-based procurement)
- Real-Time Economy; Development of common standards for interoperable public and private solutions (e.g. on smart green mobility and harmonising of mobility systems)
- Joint development and implementation of Digital Innovation Hubs (DIHs) (e.g. to promote data-driven solutions and business models for sustainable industry)
- Digital, data-driven solutions for sustainable business and growth in BSR (promoting the twin transition in BSR, e.g. digital transformation of bio and circular economy in BSR)



Project support by PA Innovation (1/2)

- New areas, topics and projects of innovation cooperation are identified and supported in line with the EUSBSR/PA INNO action plan, relevant EU 2021-2027 programme priorities, and EU's Green Deal, Digital Compass with their ambitious goals on the twin digital and green transition
- Furthermore, especially in 2022, the focus of project support is on post-COVID recovery, and on the impact of Ukraine war, and strengthening of resilience and ability of BSR to respond to future undesired external disruptions
- Hastened by the crises, BSR need to adopt stronger and more interregional green and digital dimension, and to effectively support the required transformational change in regional economic structures (e.g. ref. energy)
- Project support activities include stakeholder engagement, matchmaking, co-creation, guidance and support for project developers and active involvement in and contribution to relevant European networks, events and policy dialogue (especially in the framework of relevant EU financing programmes and calls)



Project support by PA Innovation (2/2)

- Cooperation with other PAs/PACs and cross-MRS cooperation is an important element of project support, as the goal is to broaden PA INNO actions' funding base towards EU programmes such as Horizon Europe, Digital Europe and I3, with also European-wide and cross-MRS partnerships, as well as to promote cross-sectoral initiatives e.g. related to the twin transition
- Themes and topics of new projects to be promoted are based on the three PA INNO Actions from the EUSBSR action plan: Challenge-driven innovation, Digital innovation and transformation, and Co-creative innovation
- The focus is on engaging new BSR innovation stakeholders to PA INNO activities, but also former PA INNO flagships and networks, and their fresh results and recommendations, are utilised, and development of related new project ideas and initiatives supported



PA Innovation support during the IBSR project implementation

- The EUSBSR PA INNO can contribute to the dissemination of project results in EUSBSR and BSR networks and to other EU macro-regional strategies, as well as through policy dialogue with and support from the PA INNO steering group.
- PA INNO is also happy to contribute to the project events, and to exploring of synergies and exchange opportunities between a project and other related BSR/EUSBSR projects and projects under other EU macro-regional strategies.



EUSBSR Policy Area Innovation in the IBSR first call

PA Innovation as the main connected policy area in 10 approved core projects:

- BSR Food Coalition: Baltic Municipality's Food Coalition (Action 1)
- We make transition!: Towards sustainable and resilient societies through empowered civil society and collaborative innovation (*Action1*)
- Distance LAB remote service hub for SME's and public sector (Action 3)
- BSI_4Women: The Baltic Sea Initiative for the Development of Business Activity of Refugee Women (Action 1)
- Liveability Designing public services for resilient neighbourhoods (Action 1)
- PPI4Cities: Supporting BSR cities to implement public procurement of innovation while providing practical tools created using AI technologies and gamification methods (*Action 1*)
- SusTool: Sustainability Reporting Tool (Action 2)
- TETRAS: Technology transfEr for Thriving Recirculating Aquaculture Systems in the Baltic Sea Region (Action 1)
- BALTIPLAST: Baltic Approaches to Handling Plastic Pollution under a Circular Economy Context (Action 1)
- Circular Spaces: Circular Economy makerspaces (Action 1)



- In 2014-2021, EUSBSR PA INNO has prioritised Smart Specialisation to secure that innovation measures are designed to better meet the local and subregional level need of actions
- The same regional/S3 focus continues in EU 2021-2027, and is relevant in all three priority innovation actions/themes of the new EUSBSR Action Plan (2021): Challenge-driven innovation; Digital Innovation and transformation; Co-creative innovation
- Supported by EUSBSR PA INNO, BSR sub-regions have been actively developing their S3 in line with the EU Green Deal and with increasing focus on interregional cooperation
- Various EUSBSR S3 projects have facilitated the building of long-term strategic innovation cooperation and partnerships that can eventually lead to joint investments, as well as provided insights and tools for regions to develop their smart specialization strategies for sustainability (S4), with a strong focus on inclusive sustainability, green and digital transition
- Regions have an important role in strengthening the commitment of all actors in BSR innovation ecosystems, including the business sector, to move forward with selected strategic direction with interregional cooperation





EUSBSR PA INNO and smart specialisation (BSR S3 Ecosystem) (2/3)

- The flagship EUSBSR PA INNO platform project on S3, 'BSR S3 Ecosystem' (Interreg Baltic Sea Region, 2018-2022) was aligning various EUSBSR S3 initiatives to better steer investments across BSR
- The platform was build on the experiences of Interreg BSR funded EUSBSR S3 projects LARS, BSR Stars S3, Smartup BSR and GoSmart BSR/ GoSmart&Excel BSR, as well as S34 Growth, BIOREGIO, ClusterFy and TraCS3, funded by Interreg Europe
- The key outputs from the project included a first-stage value chain mapping exercise across key territories of the macro-region in the area of Circular Bioeconomy; an associated guidance report to support BSR actors in undertaking value chain analysis; a good practice evidence report highlighting strengths and challenges in S3 interregional collaboration and regional approaches to the 'Entrepreneurial Discovery Process'
- Experiences and results of BSR S3 Ecosystem platform project, offer valuable tools and guidance for the effective and coordinated utilisation of EU 2021-2027 opportunities in BSR sub-regions, including utilisation of the new EU instrument for interregional innovation investments (I3)
- Recommendations and results of BSR S3 Ecosystem project, materialized as
 - 'BSR Innovation Hub', as a source of strategic advice and support for the macro-region's innovation community, which also
 constitute a basis for the EUSBSR PA INNO's S3 agenda and actions from 2022 onwards, and as
 - related BSR S3 Ecosystem based consortia/proposal selected to take part in the Partnership for Regional Innovation (PRI)
 Pilot Action co-sponsored by the EC's Joint Research Centre and the EU Committee of the Regions





EUSBSR PA INNO and smart specialisation (The BSR S3 Ecosystem Innovation Hub: a test-case in building the EU's Innovation Valleys?) (3/3)

- The European Commission's July 2022 Communication on the New Innovation Agenda contains five Flagship actions to upgrade the EU's innovation performance, in the context of significant global challenges. One of these Flagships is dedicated to strengthening European Innovation Ecosystems by creating regional innovation valleys
- The learning and evidence from the BSR S3 Ecosystem project and the core objectives the BSR Partnership for Regional Innovation (PRI) pilot aim to facilitate the EUSBSR/MRS contribution the EU's new Innovation Valley architecture
 - Exploring how S3 can be better aligned to SDG and Green Deal objectives, providing new tools and upgrading capacity
 across BSR territories to realise these objectives
- Upgraded support and cooperation infrastructures are needed, including strategic connections to wider EU 'pathways' and 'valleys', to join up efforts across EU value chains linked to twin transitions
- Cross macro-regional cooperation (linked to S3 alignment) is very important opportunity and policy framework in this







New PA INNO initiative, 'Collaborative BSR Decarbonization' (1/4)

- One of the key actions of PA is to support developing Grand Challenge innovation projects. The leadership of the EU in the climate crisis, including the Green Deal, Fit for 55 package and the climate missions (Adaptation to Climate Change and Climate Neutral and Smart Cities) provide an excellent framework on a transnational level for addressing climate related challenges
- The climate issues are strongly embedded in the national strategies of all key actors across the region. Decarbonization ambitions have been set locally and nationally as well as within firms
- From the perspective of EUSBSR the approach to address the climate crisis has been primarily from marine environment (Save the Sea), but also from the perspective of distinct substance areas PA's Bioeconomy, Transport, Energy, Nutri, Spatial Planning; with clearly defined sustainability actions defined
 - However, integrative approaches to systemic cross-sectoral innovations, specifically on city level, are yet missing on strategy level
- The EU ambition regarding international city or regional collaboration is moving towards even stronger collaboration constellations. In addition to the EU Cities Mission, this also supported by the new EU innovation agenda aiming for a network of collaborating regional innovation valleys
- This new direction of EU innovation policy must be strongly included in EUSBSR strategy implementation



New PA INNO initiative, 'Collaborative BSR Decarbonization' (2/4)

- The ambition for PA INNO must be to define relevant value-adding focus areas for city-region level BSRcollaboration. Leading cities, regions, and companies should collaborate in innovation ecosystems, with high ambitions and mission-type of approach
- Within BSR there are enough of climate and cultural similarities between cities, regions, and countries, which offers BSR a unique opportunity to become a role model for decarbonization
- Topics that should be addressed as part of the mission must emphasize new forms of integration of complementary city and company capabilities:
 - city block district-level urban planning and communal design
 - electrification of mobility and its impact on city energy infrastructure
 - fostering communities to undertake circular economy initiatives
 - integrating sustainability and resilience regionally
 - making climate neutral solutions that are more suitable for the less affluent world



- The "Collaborative BSR Decarbonization" mission (working title, to be refined) could entail e.g., the following collaborative aspects:
 - Supporting and leveraging leading cities and regions already in EU missions, regarding issues that they feel natural for BSRlevel, city-company collaboration
 - Strong company/ecosystems dialogue and leading public sector support for design and value-added activities
 - Connecting with national ministries and innovation agencies around decarbonization, to work on strengthening impact of international mission-related collaboration
 - Working with universities and students, to access new ideas and insights into challenges
 - Connecting to relevant projects and programs funded through other sources (e.g., IBSR ist call) or other similar networks
 - Connecting the initiative to key individuals from BSR that are involved in developing and implementing EU climate missions (for instance mission board members) and new initiatives supporting interregional collaboration, including Regional Innovation Valleys and PRI)
 - Promoting to and collaborating with other EU macro-regions



New PA INNO initiative, 'Collaborative BSR Decarbonization' (4/4)

- ...As well as the following action related aspects:
 - Defining activities and ecosystems with a mission approach; through evolving co-creation
 - Recruiting leading actors that could support co-creation and implementing the focus area
 - Identifying relevant concepts and activities to gain added value from the transnational context
 - Discovering and awareness building of leading capabilities for the BSR-specific mission
 - Supporting project proposal development to BSR (Interreg) to drive concrete work on missions and EU programs/partnerships (HE, I3, Driving Urban Transitions, Missions), identifying complementarities and added value with these instruments.



Policy Area Coordinators



The Baltic Institute of Finland – main coordinator ESA KOKKONEN esa.kokkonen@tampere.fi

Estonian Ministry of Economic Affairs and Communications KRISTI ARUKÜLA <u>kristi.arukyla@mkm.ee</u> REET REISMAA <u>Reet.Reismaa@mkm.ee</u>

Polish Ministry of Education and Science ZUZANNA KOZŁOWSKA zuzanna.kozlowska@mein.gov.pl

Interreg Baltic Sea Region



Co-funded by the European Union