Interreg CENTRAL EUROPE Programme

Application Manual – Annex I:

Programme specific objectives

Priority axis 1 – *Cooperating on innovation to make CENTRAL EUROPE more competitive*

SO 1.1	To improve sustainable linkages among actors of the innovation systems for strengthening regional innovation capacity in central Europe

Challenges

Central Europe faces crucial disparities concerning regional innovation. "Islands of innovation", located around agglomerations or in western intermediate areas, have been established with well performing innovation systems characterised by strong links between its actors. However, several, mostly rural and peripheral regions/areas are characterised by a low level of R&D and weak linkages resulting in insufficient technology transfer and problems to access R&D-results and financing of innovation, especially for SMEs. This challenge is even intensified by the recent financial and economic crisis which requires structural changes. The dynamism of regions and their connections through networks are opportunities in the frame of the globalisation process (Territorial Agenda 2020).

Since innovation and technology development are the result of a complex set of relationships among actors in the innovation system, stronger links within and between regions as well as a critical mass of innovative actors are required (e.g. in a triple or quadruple helix context) for improving innovation capacity. This shall notably further enhance knowledge and technology transfer between key players of the innovation systems and will consequently contribute to innovation-driven growth at regional level and reduce disparities.

In this context, an innovation system is to be understood as "*the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies*" (cf. Freeman, 1987). Actors of the innovation system include stakeholders from the research and business sectors, policy makers and public authorities.

Expected results

Transnational cooperation will help to strengthen regional innovation capacities, thereby contributing to regional smart specialisation strategies, through better and more sustainable linkages among actors of the innovation systems.

This shall be achieved through transnational and internationalised regional networks and clusters fostering technology transfer and the development and implementation of new services supporting innovation in businesses. Increased cooperation between actors of the innovation systems, especially between business and research, will improve access to research results for enterprises, notably SMEs, thus stimulating further investment in innovation. Furthermore, the link between research and public administration will be strengthened (e.g. by setting up specific mechanisms and promoting public procurement of innovation) which could positively contribute to both economic and social innovation transfer.

The main result envisaged can be summarised as: "*Increased and more sustainable linkages of actors in the innovation systems achieved through transnational cooperation strengthening the innovation capacity within central European regions*".

SO 1.1	To improve sustainable linkages among actors of the innovation systems for strengthening regional innovation capacity in central Europe

Supported actions

The supported actions will contribute to strengthening the regional innovation capacity of central Europe through connecting different actors of the innovation systems within and across different regions and sectors.

The supported actions shall make use of transnational cooperation for knowledge transfer and the implementation of pilot and demonstration actions for creating better linkages among actors in the innovation systems as precondition for innovation. Transnational and internationalised regional networks and clusters fostering technology transfer can contribute to improving the regional innovation capacity, developing joint internationalisation strategies, engaging in cross-sector approaches and specialising in new industrial niches along the dynamic value chains. Enhanced knowledge transfers between research institutions, businesses (in particular SMEs), the education sector as well as the public sector will enable better access to research results for enterprises and consequently stimulate further investment in the application of innovation, enhancing the competitiveness of regions. If relevant, actions should identify and make use of synergies with the Enterprise Europe Network (EEN). The establishment of links with financing institutions will ease the access of enterprises to the financing of innovation. Due to the role of the public sector in stimulating innovation processes on the respective territories (e.g. through reduction of administrative barriers, innovation procurement etc.) its close cooperation with the private and the research sector is essential.

All the supported actions have to clearly contribute to improving linkages among actors in the innovation systems, thereby strengthening the innovation capacity within the central European regions.

Examples of actions supported within SO 1.1 are:

- Establishing and further strengthening transnational innovation networks and clusters, also supporting their internationalisation
- Enhancing the transfer of R&D-results from research institutions to the business sector (in particular SMEs) leading to new services and products
- Building transnational links for improving existing and developing new services which support innovation in businesses
- Strengthening links between the public sector, finance institutions as well as the business sector (in particular SMEs) to design and test new structures and services that facilitate the access to financing of innovation
- Increasing cooperation between research, the public and private sectors to stimulate innovation and entrepreneurship (e.g. reduction of administrative barriers of innovation, public procurement of innovative products and services, social innovation, etc.)

SO 1.2	To improve skills and entrepreneurial competences for advancing economic and social innovation in central European regions
Challenges	Small and medium-sized entreprises (SMEs) are the major employers in central Europe. In many regions, especially peripheral ones, SMEs face a shortage of skilled labour force in relation to requirements posed by technological progress and economic innovation. Furthermore, demographic change is affecting the labour market throughout central Europe. This is particularly evident in regions with shrinking populations and related brain drain effects (peripheral and rural areas) thus deteriorating their competitiveness (Territorial Agenda 2020). Peripheral regions/areas are to be understood as marginalised or badly accessible territories offering poor job opportunities and suffering from out-migration. The ratio "number of SMEs/1,000 inhabitants" is strongly diverging within central Europe. This reflects disparities in the regional attitude to entrepreneurship (ÖIR et al, 2012), understood as the "mind-set and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organisation". In order to mitigate these disparities there is the need for improving technological competences and management skills of employees of the public and private sector, especially in SMEs as well as entrepreneurs. This should be done through integration into wider local and regional strategies (cf. European Commission, 2012j).
Expected results	By stimulating mutual exchange and learning, transnational cooperation will help to increase skills of employees and entrepreneurs for applying novel technologies and methods. This will enable enterprises (especially SMEs) to develop and implement innovative products, services and/or processes contributing to the respective regional smart specialisation strategies. Innovative learning systems, jointly developed at transnational level, can contribute to the targeted improvement of skills thus increasing regional competitiveness especially in regions facing social challenges. Joint approaches developed transnationally will further support entrepreneurship by building technological and managerial competences as well as promoting entrepreneurial mind sets and initiatives. Next to merely economically driven innovation the improvement of skills and the fostering of entrepreneurship should contribute to advancing social innovation. Social innovations are to be understood as new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations (cf. Murray et. al, 2010). This will allow for meeting social needs and will further improve the capacities of regions to manage new challenges such as those deriving from demographic and climate change, migration and brain drain. The main result envisaged can be summarised as: "*Improved capacities of the public and private sector for skills development of employees and entrepreneurial competences achieved through transnational cooperation driving economic and social innovation in central European regions*".

SO 1.2	To improve skills and entrepreneurial competences for advancing economic and social innovation in central European regions

Supported actions

The supported actions will contribute to advancing economic and social innovation in central Europe, where there is a favourable innovation climate in several regions while at the same time many peripheral regions/areas are lagging behind and/or are facing (social) challenges in terms of missing or not sufficiently qualified labour force.

The supported actions shall target at transnational level the improvement of knowledge and skills of employees and entrepreneurs (especially in SMEs) fostering the development and implementation of innovative products, services or processes for advancing economic and social innovation contributing to smart specialisation strategies of the respective regions. Furthermore, actions are expected to build a stronger culture of entrepreneurship and to enhance entrepreneurial mind sets, skills and attitudes. Innovative methods of learning can contribute to strengthening competences in the application of innovative technologies, methods and management. Beyond merely economically driven innovation, actions should also contribute to advancing social innovation thereby considering specific challenges deriving from climate change and demographic change such as brain drain, shrinking regions as well as linked to social segregation. In the area of health innovative actions such as defined in the frame of the European Innovation Partnership on Active and Healthy Ageing could be supported. Furthermore, attention should be given to sustainable development principles (such as eco-innovation, low-carbon measures, etc.).

All supported actions have to clearly contribute to improved skills and competences of employees and entrepreneurs driving economic and social innovation in central European regions.

Examples of actions supported within SO 1.2 are:

- Increasing skills of employees in the business sector (particularly SMEs) regarding novel technologies (e.g. eco-innovation, low-carbon technologies, ICT, key enabling technologies, etc.), innovative products, services or processes and social innovation contributing to regional smart specialisation strategies
- Developing and implementing strategies and tools to improve creativity and entrepreneurial mind-sets building on different business cultures and on all levels of education
- Developing and implementing strategies and tools for improving technological and managerial competences for entrepreneurship for economic and social innovation (e.g. healthcare and social inclusion of minorities, disabled persons, elderly, etc.)
- Adapting, developing, and testing innovative learning systems for increasing skills and entrepreneurial competences considering demographic change challenges (e.g. ageing society, youth unemployment, shrinking regions facing skills shortages, etc.)

Priority axis 1	
Main target groups	Individuals and/or organisations positively affected by the activities and results of an operation, though not necessarily being directly involved in the operation, are: enterprises (with a specific focus on SMEs) and their employees, entrepreneurs, cluster organisations, the public sector, intermediaries, private and public research institutions, R&D facilities, centres of R&D excellence. Additionally all public and private actors dealing with social and economic innovation as well as all population groups which are affected by the issue
Beneficiaries[1]	All legal personalities that can contribute to increasing economic and social innovation and entrepreneurial capacity. They comprise amongst others: local, regional and national public authorities, regional development agencies, chambers of commerce, enterprises (including SMEs), cluster organisations, universities, associations, technology transfer institutions, research institutions, centres of R&D excellence, NGOs, innovation agencies, business incubators, cluster management bodies, financing institutions, education and training organisations as well as social partners and labour-market institutions.
Specific territories targeted	The supported actions can be implemented throughout the whole programme cooperation area: Emphasis shall be put on regions having deficiencies in their innovation system (e.g. peripheral and structurally weak regions/areas, regions facing industrial decline etc.) or having a shortage of skills and entrepreneurship (e.g. shrinking regions) for which their connection to and learning from more advanced regions will be targeted. Simultaneously, regions with a higher innovation performance will be further strengthened through internationalisation opening up for new development opportunities, intensifying of the entrepreneurial attitude and improving technological and managerial skills. Actions will thereby need to consider the specific territorial characteristics of the respective targeted areas.

[1] project partners benefitting from programme funds and implementing activities within the project

Priority axis 2 – *Cooperating on low-carbon strategies in CENTRAL EUROPE*

SO 2.1	To develop and implement solutions for increasing energy efficiency and renewable energy usage in public infrastructures
Challenges	Most central European regions show high energy consumption and a low degree of energy efficiency of buildings and infrastructure which are the main contributors to greenhouse gas emissions. The efficient use of energy can make an important contribution to achieving a low-carbon economy and combating climate change. It will also contribute to decreasing central Europe`s energy import dependence and will in many cases imply positive effects on air quality. Increasing energy efficiency and renewable energy usage in public infrastructure (i.e. infrastructure owned by the public and/or for public use, including public buildings) is a priority given the large potential for fossil fuel energy savings as well as for spreading approaches to other sectors thus having a multiplying effect. Despite some central European regions being quite advanced in terms of energy saving technologies, there is the need for increasing the overall capacity of the public sector for implementing measures to reduce CO_2 emissions of public infrastructure. In particular, public infrastructure owners and operators often lack the necessary expertise (i.e. methods and technologies) for reducing energy consumption and/or replacing the consumption of fossil fuels with renewable energy sources.
Expected results	Transnational cooperation will help to reduce know-how disparities and increase capacities of the public sector and related entities for improving the energy efficiency of public infrastructures and ultimately reducing their energy consumption and CO2 emissions. This shall be achieved through strengthening competences as well as developing and implementing strategies, management approaches and financing schemes which will serve as seedbed for achieving higher energy efficiency. This will consequently leverage further investment such as the renovation of public buildings and the upgrading of the energy efficiency level of public infrastructure. Furthermore the usage of renewable energy in public infrastructures will be fostered through identifying potentials, testing innovative solutions and preparing follow-up investments. The main result envisaged can be summarised as: "*Improved capacities of the public sector and related entities for increased energy efficiency and renewable energy use in public infrastructures in central Europe achieved through transnational cooperation*".

SO 2.1	To develop and implement solutions for increasing energy efficiency and renewable energy usage in public infrastructures

Supported actions

The supported actions shall contribute to strengthening capacities of the public sector for improving energy efficiency and increasing the use of renewable energy in public infrastructure including buildings. In the programme context, improving capacities is understood primarily as creating an enabling environment through improving the policy, legal and institutional frameworks as well as through developing human resources and strengthening managerial systems.

Actions shall be based on transnational cooperation in order to build competences, accomplish strategies and management approaches for improving energy efficiency in public infrastructures. Further, actions shall be linked to testing and implementing solutions in terms of novel energy saving technologies as well as to increasing renewable energy shares in consumption. Innovative energy services, incentives and financing schemes will contribute to facilitating the implementation of energy efficiency measures. These actions will contribute to leveraging further investments such as the upgrading of the energy efficiency level of public infrastructure and the increased usage of renewable energy. All supported actions have to clearly contribute to improving capacities for increased energy efficiency and renewable energy use in public infrastructures and buildings, thereby reducing the carbon footprint.

Examples of actions supported within SO 2.1 are:

- Developing, testing and implementing policies, strategies and solutions to improve the energy efficiency in public infrastructures including buildings as well as to increase the use of renewable energies
- Developing and testing innovative management approaches to increase regional capacities for improving the energy performance in public infrastructure including buildings (e.g. energy managers)
- Developing and implementing solutions for the application of novel energy saving technologies that will increase the energy efficiency in public infrastructures including buildings
- Harmonising concepts, standards and certification systems at transnational level to improve the energy performance in public infrastructure including buildings
- Strengthening the capacity of the public sector to develop and implement innovative energy services, incentives and financing schemes (e.g. energy performance contracting, PPP models, etc.)

SO 2.2	To improve territorially based low-carbon energy planning strategies and policies supporting climate change mitigation
Challenges	Central Europe has significant potentials with regard to renewable resources. However, the degree of exploitation of those resources varies largely: while the use of renewable energy is still low in several central European regions, some others show higher rates of exploitation. Despite the fact that in some regions considerable experience about renewable energy production already exists, the development and implementation of local and regional energy strategies and action plans is still at a low level. Energy challenges are thereby threatening regional competitiveness (cf. Territorial Agenda 2020). Consequently, there is the need to improve capacities for territorially-based energy planning in central Europe. Enhanced cooperation will enable coordinated local and regional approaches to formulating and planning low-carbon energy strategies, which is key to the uptake of renewable energy measures.
Expected results	Transnational cooperation shall help building new knowledge as well as exchanging existing knowledge and experiences between and within regions concerning the planning, financing and implementing of concrete actions to deliver sustainable energy measures. It aims to improve the capacity of the public sector and related entities, as a key starting point for mobilising investment for low-carbon measures at territorial level. Transnational cooperation will thereby contribute to triggering activities especially in regions with a lower usage of their renewable energy potentials. Furthermore, it will support the linking of approaches between the demand and supply sides, taking into account the quality and capacity of energy distribution grids. This shall be achieved through strengthening the knowledge and planning capacity of the public sector and related entities that facilitate the transition towards 'Sustainable Energy Regions'. The programme will support them in the development and implementation of innovative local and regional energy planning strategies leading to an enhanced use of endogenous renewable energy potentials in a balanced way and to a reduction of CO_2 emissions. This will in many cases also imply positive effects on air quality. The main result envisaged can be summarised as: "*Improved capacities of the public sector and related entities for territorially based low-carbon energy planning and policies in central European regions achieved through transnational cooperation*".

SO 2.2	To improve territorially based low-carbon energy planning strategies and policies supporting climate change mitigation

Supported actions

The supported actions shall contribute to strengthening capacities of the public sector and related entities dealing with territorial energy planning targeting the reduction of CO_2 emissions. In the programme context, improving capacities is understood primarily as creating an enabling environment through improving policy, legal and institutional frameworks as well as through developing human resources and strengthening managerial systems. Transnational cooperation can bring added value through facilitating the exchange between territories further strengthening regions with highly advanced planning capacities and improving capacities of those lagging behind. Further, it will contribute to bringing together various stakeholders in energy planning in order to coordinate approaches.

This will enable them to develop integrated local and/or regional strategies and plans for a better use of endogenous renewable energy potentials and for improving regional energy performances. Actions supported shall combine demand and supply sides and focus on strategies, policies, tools and new solutions for the exploitation of renewable energy resources as well as for increased energy efficiency.

The implementation of pilot actions and exchanges of good practices will stimulate and trigger investment towards low-carbon development. Coordinated strategies for improved interconnections of energy networks will enable a better integration of renewable energy sources into the existing distribution networks and consequently open the opportunity for an increased production and use of renewable energy.

All the supported actions will clearly contribute to the improvement of capacity of the public sector and related entities for an increased and balanced use of endogenous renewable energy potentials and for an enhanced energy performance in central European regions. Moreover, they will contribute to the improvement of territorially based energy planning strategies and policies supporting climate change mitigation. It is to be emphasized that the programme will not support actions and/or pilot investments having a negative effect on the environment (e.g. hydropower plants affecting the ecological status of water bodies, emissions of biomass installations etc.).

Examples of actions supported within SO 2.2 are:

– Developing and implementing integrated territorial strategies and plans to increase the use of endogenous renewable energy potentials and to improve regional energy performance

– Designing and testing concepts and tools for the exploitation of endogenous renewable energy resources

– Developing and implementing territorial strategies to improve the energy management in both the public and the private sector (especially in SMEs)

– Developing demand-focused strategies and policies to reduce energy consumption (e.g. smart metering, distribution of smart consumer applications, etc.)

– Developing and testing solutions for improved interconnections and coordination of energy networks targeting the integration and use of renewable energy sources

SO 2.3	To improve capacities for mobility planning in functional urban areas to lower CO_2 emissions

Challenges

In central Europe, as in the rest of Europe, transport is the second largest energy consuming sector and the fastest growing in terms of energy use. Its strong reliance on fossil fuels means high greenhouse gas emissions driving climate change as well as lowering air quality (e.g. nitric oxides emissions, particular matter and ozone). Due to the existing urbanisation tendencies these developments challenge especially central Europe`s cities, where transport demand is constantly increasing and negative externalities are most evident.

For addressing these issues and achieving the overall goal of reducing CO2 emissions there is a need to improve the energy efficiency of urban transport. However, due to the importance of interactions between cities and their hinterlands (e.g. commuters) urban mobility challenges are to be considered at the level of functional urban areas (FUA). According to the OECD, European Commission and Eurostat (OECD, 2012), a functional urban area is defined, as a functional economic unit characterised by densely inhabited "urban cores" and "hinterlands", whose labour market is highly integrated with the cores.

A high potential for the reduction of greenhouse gas emissions and air pollution lies within the public transport sector. However, capacities of the public sector and related entities for low-carbon mobility planning at the level of FUAs are unevenly spread across central Europe and need to be improved through better governance and integrated approaches to planning. This calls for a closer vertical and horizontal coordination and integration of mobility planning and solutions between urban cores and their hinterlands.

Expected results

Transnational cooperation can help increasing planning capacities of the public sector and related entities for low-carbon mobility by bringing together fore-riders with territories lagging behind, thus enhancing low-carbon mobility in central European functional urban areas and reducing air pollution, thereby contributing to the objectives of the EU Clean Air Policy Package (2013). This will allow for the development and implementation of integrated mobility concepts, the setting up of coordinated management structures and the deployment of innovative technologies. The promotion of innovative low-carbon mobility solutions at transnational level will support authorities in their efforts towards the goal of sustainable mobility.

The main result envisaged can be summarised as: "*Improved capacities of the public sector and related entities for low-carbon mobility planning in central Europe's functional urban areas achieved through transnational cooperation*".

SO 2.3	To improve capacities for mobility planning in functional urban areas to lower CO_2 emissions

Supported actions

The supported actions shall contribute to strengthening capacities of the public sector and related entities dealing with mobility planning in functional urban areas targeting the reduction of CO_2 emissions. In the programme context, improving capacities is understood primarily as creating an enabling environment through improving policy, legal and institutional frameworks as well as through developing human resources and strengthening managerial systems. Transnational cooperation can bring added value through facilitating the exchange between territories further strengthening regions with highly advanced planning capacities and improving capacities of those lagging behind. Further, it will contribute to bringing together various stakeholders in mobility planning in order to coordinate approaches fostering the reduction of CO_2 emissions in functional urban areas.

This will be achieved by the exchange of knowledge and the development of integrated mobility concepts and action plans considering interactions between “urban cores” and their “hinterlands”. In this respect also the setting up of governance systems facilitating this integration will be supported. Furthermore, actions are linked to fostering smart low-carbon mobility in functional urban areas through new services and products such as multimodal services. Practical tools and concepts (including financing models) can assist the policy level in their efforts towards the goal of sustainable mobility. Those approaches should consider governance aspects including horizontal and vertical coordination of stakeholders and policies at the level of functional urban areas.

The supported actions are clearly contributing to the improvement of capacities of the public sector and related entities for mobility planning and consequently to the reduction of CO_2 emissions in functional urban areas.

Examples of actions supported within SO 2.3 are:

– Developing and implementing integrated mobility concepts, action plans and services for reducing CO_2 emissions

– Setting up and/or adapting governance systems as a basis for integrated low-carbon mobility in functional urban areas

– Developing and testing concepts and strategies (including innovative financing and investment models) to facilitate the introduction of novel low-carbon technologies in the public transport sector in functional urban areas

– Developing and implementing services and products fostering smart low-carbon mobility in functional urban areas (e.g. multimodal services, etc.)

Priority axis 2	
Main target groups	Individuals and/or organisations positively affected by the activities and results of operations, though not necessarily being directly involved in the operation, with different approaches to stimulate the uptake of solutions for improved energy efficiency, renewable energy use as well as low-carbon mobility. They include both public and private actors, such as energy and public transport operators, policy makers and planners, energy distributers, infrastructure providers and other local and regional energy actors as well as enterprises including SMEs. Target groups include all population groups which are benefitting from an improved regional and local energy performance as well as users of improved low-carbon public transport systems in functional urban areas which are affected by the issue.
Beneficiaries[2]	All legal personalities that can contribute to improved energy and low-carbon mobility planning. They comprise among others local, regional and national public authorities, regional development agencies, energy operators, energy management institutions, enterprises including SMEs, public transport operators, associations, innovation agencies, NGOs, financing institutions, education and training organisations as well as universities and research institutes.
Specific territories targeted	The supported actions can be implemented throughout the cooperation area. Emphasis will be put on territories having deficiencies in low-carbon energy planning as well as in functional urban areas with high CO_2 emissions resulting from the transport sector, for which an exchange and learning from more advanced regions will be most beneficial. Simultaneously, territories which already show an advanced status of low-carbon energy planning and public transport will be further strengthened as consequence of improving their implementation capacities (e.g. novel low-carbon technologies, investment preparation etc.). All actions will thereby need to consider the specific territorial characteristics of the respective targeted areas.

[2] project partners benefitting from programme funds and implementing activities within the project

Priority axis 3 – *Cooperating on natural and cultural resources for sustainable growth in CENTRAL EUROPE*

SO 3.1	To improve integrated environmental management capacities for the protection and sustainable use of natural heritage and resources
Challenges	Central Europe has a very rich natural heritage including important eco-systems and abundant biodiversity. This heritage and related natural resources are highly valuable and need to be preserved, protected and if necessary ecologically restored. At the same time natural heritage is an important location factor and the use of its assets can serve as a driver for economic development. As a consequence, natural heritage and resources (including water, soil, fauna and flora) are subject to numerous pressures and usage conflicts, e.g. between environmental protection and industry, agriculture, transport, urbanisation or tourism. Further pressure arises from the increasing risk of natural hazards linked to the effects of climate change. The loss of biodiversity, the vulnerability of natural heritage and landscapes as well as the effects of climate change have a strong impact at territorial level (cf. Territorial Agenda 2020). The complexity of these challenges requires integrated approaches based on sustainable long-term strategic visions linking different policies, sectors and administrative levels. Integrated environmental management thereby means a comprehensive approach to natural resource planning and management that encompasses ecological, social, and economic objectives (such as river basin management plans, air quality etc.). It considers interrelations among different elements and incorporates concepts of carrying capacity, resilience and sustainability. The capacities for such integrated environmental approaches are, however, not yet sufficiently established in the public sector and in related entities dealing with the protection and sustainable use of natural resources. This is notably shown by the large number of usage conflicts and pressures on natural heritage and resources in many central European regions.
Expected results	Transnational cooperation will allow for improving the capacities of those actors by supporting the development and implementation of integrated environmental strategies and tools as well as the joint testing of pilot solutions. This will facilitate a larger uptake of the integrated environmental concept into the public and private sector such as the application of innovative technologies and introducing resource efficient solutions. The main result envisaged can be summarised as: "*Improved integrated environmental management capacities of the public sector and related entities for the protection and sustainable use of natural heritage and resources in central Europe achieved through transnational cooperation*".

SO 3.1	To improve integrated environmental management capacities for the protection and sustainable use of natural heritage and resources

Supported actions

The supported actions shall increase capacities of the public sector and related entities to preserve, manage and use natural heritage and resources (including water, soil, fauna and flora). The application of an integrated approach is a key factor to ensure sustainable development and to avoid usage conflicts. In the programme context, improving capacities is understood primarily as creating an enabling environment by improving policy, legal and institutional frameworks as well as through developing human resources and strengthening managerial systems.

Transnational cooperation will add value by building new knowledge and by fostering the exchange of knowledge and experience among regions, in particular addressing stakeholders dealing with the protection and management of natural heritage and resources. Transnational coordination can also be essential for ensuring coherent and effective solutions and policies. This includes the capitalising on location factors as the high-value of eco-systems in an integrated and sustainable way, promoting a sustainable regional development. Furthermore, the focus on integrated environmental management approaches and strategies shall contribute to reducing current and avoiding future usage conflicts as well as to ecological restoration of degraded ecosystems (e.g. river basin management, air quality etc.). Resource efficiency is thereby another key aspect to be considered as a guiding principle. In order to facilitate its application, both in the public and private sectors, innovative tools and technologies shall be developed and tested. Joint and harmonised tools and concepts will be applied for risk prevention and management (considering natural risks and risks linked to human activities) responding also to challenges of negative climate change impacts in order to allow for effective and coherent solutions.

All the supported actions have to clearly contribute to improving integrated environmental management capacities and to fostering the protection and sustainable use of natural heritage and resources in central Europe.

Examples of actions supported within specific objective 3.1 are:

- Developing and implementing integrated strategies and tools for the sustainable management of protected or environmentally highly valuable areas (e.g. biodiversity, landscapes, eco-systems, etc.)
- Developing and implementing integrated strategies and tools to sustainably use natural resources for regional development, thus avoiding potential use conflicts (e.g. with tourism, transport, industry, agriculture, energy, etc.)
- Developing and testing the application of innovative technologies and tools that facilitate effective integrated environmental management (e.g. remediation technologies, monitoring tools etc.)
- Developing and testing applications to improve the efficient management of natural resources in public institutions and enterprises (e.g. reduction of natural resource consumption, closed loop systems)
- Harmonising environmental management concepts and tools on the transnational level for risk prevention and management (e.g. flood risk management plans) and to reduce negative climate change impacts on the environment and human life (e.g. adaptation measures)

SO 3.2	To improve capacities for the sustainable use of cultural heritage and resources
Challenges	Central Europe has a great diversity of cultural heritage and resources in terms of historical sites, documentary heritage (e.g. archives and library collections), artefacts, traditions, cultural landscapes as well as traditional skills and knowledge. This heritage and its related resources represent important location factors, strongly contributing to the attractiveness of central Europe's territory. The protection and valorisation of cultural heritage and resources represent a powerful potential for economic growth (including cultural and creative industries), generating value and thereby directly benefiting citizens. The cultural richness is, however, often not well valorised or even threatened, and related potentials are not sufficiently used due to a lack of funding and investment, insufficient management and preservation skills as well as a lack of coordination. Furthermore, external pressures due to usage conflicts, unsustainable approaches (e.g. mass tourism) and also linked to climate change are negatively impacting central Europe's cultural heritage with adverse effects on the competitiveness of regions (cf. Territorial Agenda 2020). There is thus the need for facilitating a good balance between the preservation of cultural heritage and sustainable long-term socio-economic development of regions in order to strengthen their attractiveness and competitiveness. Emphasis needs to be given to managing conflicting usage interests and to capitalising the potential of cultural heritage assets for economic, social and cultural activities.
Expected results	Transnational cooperation will help improving capacities of the public and private sector dealing with the protection and sustainable use of cultural heritage and resources by supporting integrated approaches. This will allow for coordinating the preservation and management of cultural heritage and resources with sustainable growth. The development and implementation of strategies and policies for valorising cultural heritage and exploiting potentials of cultural and creative industries will trigger economic opportunities and employment at regional level. The main result envisaged can be summarised as: "*Improved capacities of the public and private sector for the sustainable use of cultural heritage and resources in central Europe achieved through transnational cooperation*".

SO 3.2	To improve capacities for the sustainable use of cultural heritage and resources

Supported actions

The supported actions shall build on transnational cooperation and target the improvement of capacities of the public and private sector working in the field of cultural heritage in order to accomplish a more sustainable use and valorisation of those assets. The application of an integrated approach is a key factor to ensure sustainable development and to avoid usage conflicts. In the programme context, improving capacities is understood primarily as creating an enabling environment by improving policy, legal and institutional frameworks as well as through developing human resources and strengthening managerial systems.

Transnational cooperation will add value by building new knowledge and by fostering the exchange of knowledge and experience among regions, in particular addressing stakeholders dealing with the protection and management of cultural heritage and resources as well as their management and valorisation. Transnational coordination can also be essential for ensuring coherent and effective solutions and policies.

Actions are linked to setting up concepts, strategies and coordinated approaches aiming at an improved protection, management and sustainable use of cultural heritage and resources. Investment shall be prepared and business plans elaborated increasing the awareness on the value of cultural resources and fostering cultural and creative entrepreneurship, including creative industries. Overall, this improved capacity shall allow for better protection of cultural heritage and related resources going hand in hand with an enhanced exploitation of existing potentials (e.g. in the growing sectors of cultural tourism, cultural and creative industries etc.), thus supporting sustainable economic development and employment.

All supported actions have to clearly contribute to improving capacities for the sustainable use of cultural heritage and resources, thereby fostering their preservation as well as their economic valorisation.

Examples of actions supported within specific objective 3.2 are:

– Developing and implementing strategies and policies for valorising cultural heritage and resources and/or the potentials of cultural and creative industries
– Developing and implementing integrated territorial development strategies and concepts that build on cultural heritage to foster sustainable economic growth and employment (e.g. in the tourism sector)
– Developing and testing innovative management tools for the preservation and sustainable use of cultural heritage and resources (e.g. ICT applications)
– Establishing and strengthening transnational cooperation among relevant actors to foster the sustainable use and the promotion of cultural heritage sites in central Europe

SO 3.3	To improve environmental management of functional urban areas to make them more liveable places
Challenges	Central Europe includes many regions in which urbanisation processes cause land use conflicts and generate urban environmental challenges. Although scale and intensity of problems vary, a common set of issues can be identified, including increased soil sealing, poor air and water quality, high levels of ambient noise, generation of large volumes of waste and waste water, vulnerability to climate change, as well as urban sprawl with its social implications. Due to these developments the quality of life (and health) of citizens varies strongly in different central Europe cities (cf. Mercer, 2013). They also have an impact on the environment and economic performance of cities. These challenges call for integrated environmental management of urban areas, which considers environmental impacts of all activities within the entire functional area of a city (cf. European Commission, 2006a). Therefore, integrated environmental management is addressing functional urban areas based on functional characteristics going beyond administrative boundaries of cities. According to the OECD, European Commission and Eurostat (cf. OECD, 2012), a functional urban area is a functional economic unit characterised by densely inhabited "urban cores" and "hinterlands" whose labour market is highly integrated with the cores. Capacities of the public sector and related entities for integrated environmental management ensuring compliance with environmental policies, engaging with the relevant stakeholders and integrating environmental considerations into economic decisions are, however, not yet sufficiently established in many central European cities. This calls for a closer vertical and horizontal coordination and integration of environmental management measures considering urban cores and their hinterlands.
Expected results	Transnational cooperation will help to increase those capacities by supporting the development and implementation of integrated environmental management to improve the environmental performance (such as air quality, water management, flood risks etc.) of functional urban areas. Enhanced governance will contribute to better planning, management and decision making thereby reducing usage conflicts and negative externalities on the environment. The development and implementation of strategies and tools as well as the joint testing of pilot applications (e.g. for site rehabilitation) will trigger investments for improving the quality of the urban environment. The main result envisaged can be summarised as: "*Improved integrated environmental management capacities of the public sector and related entities in central Europe's functional urban areas achieved through transnational cooperation for making them more liveable places*".

SO 3.3	To improve environmental management of functional urban areas to make them more liveable places

Supported actions

The supported actions will contribute to improving capacities of the public sector and related entities within the urban context for enhancing integrated environmental management in functional urban areas. In the programme context, improving capacities is understood primarily as creating an enabling environment by improving policy, legal and institutional frameworks as well as through developing human resources and strengthening managerial systems.

The supported actions shall build on transnational cooperation in order to connect different actors within and across different functional urban areas. The aim is to build knowledge and competences and to accomplish strategies and integrated management systems that are able to tackle urban environmental problems (such as climate change, water management, flood risk management etc.) and deal with natural and man-made risks related to both core areas and their hinterlands. Integrated approaches shall include cross-sectoral and multi-governance aspects considering also social implications. The development and testing of innovative solutions and tools (including financing models) as well as pilot actions may further support the implementation of measures and investments for improving the quality of the urban environment and consequently the quality of life for urban residents.

All the supported actions will clearly contribute to improving environmental management capacities in the public sector and related entities in central Europe's functional urban areas, thereby making them more liveable places.

Examples of joint actions supported within specific objective 3.3 are:

- Developing and implementing strategies and tools (including innovative financing and investment models) to manage and improve environmental quality (air, water, waste, soil, climate) as well as to tackle natural and man-made risks in functional urban areas
- Strengthening the capacity for environmental planning and management (e.g. participatory planning mechanisms and decision-making processes) at the level of functional urban areas
- Developing and implementing integrated strategies, policies and tools to reduce land-use conflicts in functional urban areas (e.g. urban sprawl, shrinkage and fragmentation also in the view of social implications)
- Developing and implementing integrated strategies and pilot applications for the rehabilitation and reactivation of brownfield sites
- Developing concepts and implementing environmental pilot applications to support the development towards smart cities (e.g. ICT applications, environmental technologies)

Priority axis 3	
Main target groups	Individuals and/or organisations positively affected by the activities and results of operations, though not necessarily being directly involved in the operation. They include both the public and private sector, such as policy makers and planners and organisations dealing with the protection, management and valorisation of natural and/or cultural heritage and resources, owners and users of natural and/or cultural heritage sites as well as other organisations influencing the development of functional urban areas. Target groups include all population groups which are benefitting from the improved management of natural and cultural heritage and resources as well as improved urban environmental management.
Beneficiaries[3]	All legal personalities that can contribute to an improved management and sustainable use of natural and cultural heritage and resources and to improved environmental management of functional urban areas. They comprise among others local, regional and national public authorities, regional development agencies, enterprises (in particular SMEs within the cultural and creative industry as well as the environmental sector), environmental facilities and infrastructure operators and owners, associations, regional innovation agencies, special interest groups, NGOs, financing institutions, education and training organisations as well as universities and research institutes.
Specific territories targeted	The supported actions can be implemented throughout the cooperation area. Emphasis will thereby be put on regions with high value natural and cultural heritage sites or resources to be protected or valorised or with areas facing significant pressures and usage conflicts as well as on functional urban areas having deficiencies in integrated environmental management for which an exchange and learning from more advanced regions will be most beneficial. Simultaneously, territories which already show an advanced status of integrated environment and/or cultural management will be further strengthened as a consequence of improving their implementation capacities (e.g. improved international connection of sites, novel technologies, novel rehabilitation methods, smart city approaches, investment preparation etc.). All actions will thereby need to consider the specific territorial characteristics of the respective targeted areas.

[3] project partners benefitting from programme funds and implementing activities within the project

Priority axis 4 – *Cooperating on transport to better connect CENTRAL EUROPE*

SO 4.1	To improve planning and coordination of regional passenger transport systems for better connections to national and European transport networks
Challenges	The central Europe area shows weak local, regional and transnational accessibility especially outside of agglomerations and in its eastern parts. Transport systems mostly lack integration between modes of transport. Many peripheral regions, characterised by a low accessibility and few major centres of urbanisation, are facing a low quality of public transport and are not sufficiently linked to TEN-T corridors and transport nodes. Indeed, while some regions have well developed mobility planning systems, in others relevant knowledge and capacity is missing. With respect to the development and implementation of integrated passenger transport systems and multimodality, central European regions show large disparities and transnational coordination is lacking.
Expected results	Transnational cooperation aims to reduce existing disparities of knowledge as well as to increase the planning and implementation capacity in the field of integrated passenger transport systems where better regional and transnational coordination between stakeholders is considered a key factor. Transnational cooperation can strengthen connections to TEN-T corridors and to primary, secondary and tertiary transport nodes of the TEN-T network (as defined according to "The New Trans-European Transport Network Policy Planning and implementation issues", SEC (2011) 101 final), in particular for peripheral regions. A specific focus will be put on public transport at regional level as the sustainability of those connections is considered to be an underlying principle. Strategies, tools and pilot applications will contribute to setting up improved connections to the TEN-T network and transport nodes. Furthermore, within the transnational context the development of coordinated concepts for smart regional mobility and services is foreseen, fostering improved service standards and interoperability. Particular attention will be put on mobility services in the public interest. The main result envisaged can be summarised as: "*Improved and coordinated planning capacities of the public sector and related entities for regional passenger transport systems in central Europe linked to national and European transport networks achieved through transnational cooperation*".

SO 4.1	To improve planning and coordination of regional passenger transport systems for better connections to national and European transport networks

Supported actions

The supported actions shall build on transnational cooperation in order to accomplish improved capacities of the public sector and related entities for coordinated planning of regional passenger transport systems within and between central Europe regions. Actions will particularly target the needs of peripheral regions with respect to linkages to the TEN-T network and transport nodes.

In the programme context, improving capacities is understood primarily as creating an enabling environment by improving policy, legal and institutional frameworks as well as through developing human resources and strengthening managerial systems. This will be achieved by creating knowledge or exchanging on existing knowledge, developing and implementing strategies, tools and pilot applications for improving regional transport, which are expected to trigger investments in the field. Considering the principle of sustainable development, emphasis shall be put on public transport at regional level and resilience of transport systems. Actions linked to the development of coordinated concepts for smart regional mobility and services (also considering mobility services in the public interest) will foster improved service standards and interoperability.

All the supported actions have to clearly contribute to improving the planning and coordination of regional passenger transport systems in central Europe, thus strengthening the link to national and European transport networks. Multimodal transfer points will be also promoted and developed to streamline the movement of people and to make the passenger transport more sustainable (environmentally-friendly) contributing also to climate change mitigation. It is to be emphasized that the programme will not support actions and/or pilot investments having a negative effect on the environment (e.g. in case of inland navigation the requirements of the EU Water Framework Directive have to be respected).

Examples of actions supported within specific objective 4.1 are:

– Developing and implementing strategies (including innovative financing and investment models) to link sustainable passenger transport in particular in peripheral areas to the TEN-T network as well as to the primary, secondary and tertiary transport nodes

– Developing and implementing coordinated strategies, tools and pilot applications to improve regional public transport systems for passengers in particular across borders (e.g. commuter connections, interoperability, etc.)

– Developing concepts and testing pilot applications for smart regional mobility (e.g. multimodal ticketing, ICT tools, routes on demand, etc.)

– Developing coordinated concepts, standards and tools for improved mobility services in the public interest (e.g. for disadvantaged groups, for shrinking regions, etc.)

SO 4.2	To improve coordination among freight transport stakeholders for increasing multimodal environmentally-friendly freight solutions
Challenges	The economic development of industrialised areas is closely linked to efficient multimodal exchange of goods at interregional and international level. The central Europe area shows regional disparities in multimodal accessibility which constrains the competitiveness of several regions. Beside the need for optimisation of individual modes of transport (i.e. making them more environmentally-friendly, safe and energy efficient), their combination in multi-modal freight transport chains is required for a sustainable transport system. There is a lack of shared standards and procedures and, more generally, of a harmonised framework. Deficiencies in terms of coordination among freight transport stakeholders can be observed, which represents a barrier to more streamlined, flexible and sustainable multimodal freight transport.
Expected results	Transnational cooperation aims to improve coordination among existing services, provided by different modes of transport, creating intermodal systems of existing transport facilities, overcoming discontinuity across borders and the lack of infrastructure. Coordinated strategies, concepts and management tools will contribute to improving the multimodality of environmentally-friendly freight transport (e.g. rail, river or sea transport). Multi-modal platforms will be promoted and developed as a potential for consolidating and optimising freight flows. This will enhance the efficiency, reliability and quality of greener freight transport modes and services, thus contributing also to trade facilitation. Such a coordinated approach will pave the way for designing future infrastructure in a sustainable manner and a more effective transportation of goods to and across central European regions. The main result envisaged can be summarised as: "*Improved coordination among freight transport stakeholders for increasing multimodal environmentally-friendly freight solutions in central Europe achieved through transnational cooperation*".

SO 4.2	To improve coordination among freight transport stakeholders for increasing multimodal environmentally-friendly freight solutions

Supported actions

The supported actions shall build on transnational cooperation in order to improve coordination and cooperation between freight transport actors as well as enhance capacities in multimodal logistics management. This will be achieved through the development and implementation of coordinated strategies, concepts and tools also in terms of harmonised standards and procedures for strengthening multimodality and the environmental sustainability of freight transport. Actions are further contributing to the improvement and testing of freight transport services and logistics planning, including pilot applications which are supposed to trigger investments in the field. If relevant, actions should link to the TEN-T core network corridor and the rail freight corridor initiatives in order to create positive synergies.

All supported actions will clearly contribute to improving coordination among freight transport stakeholders, thereby increasing multimodal environmentally-friendly freight solutions which are also further fostering climate change mitigation in central Europe.

Examples of actions supported within specific objective 4.2 are:

– Developing and implementing coordinated strategies (including innovative financing and investment models) for strengthening the multimodality of environmentally-friendly freight transport systems (e.g. rail, river, or sea transport)

– Developing and implementing coordination and collaboration mechanisms between multimodal freight transport actors

– Developing and implementing coordinated concepts, management tools and services aimed at increasing the share of environmentally friendly logistics through optimised freight transport chains (e.g. multimodal transnational freight transport flows)

– Developing and testing coordinated strategies and concepts for “greening” the last mile of freight transport (e.g. logistics planning)

Priority axis 4	
Main target groups	Individuals and/or organisations positively affected by the activities and results of operations, though not necessarily being directly involved in the operation. They include public and private actors, such as institutions responsible for planning and managing regional transport networks, public transport operators, providers and operators of freight transport and logistics services, commercial customers of freight transport systems, institutions planning and managing freight transport, infrastructure providers and other local or regional (freight) transport actors, additionally all population groups which can benefit from improved regional passenger transport services (e.g. commuters, tourists, etc.) and freight transport.
Beneficiaries[4]	All legal personalities that can contribute to improved regional passenger and freight transport. They comprise among others local, regional and national public authorities, regional development agencies, enterprises, public transport operators including operators of multimodal logistics hub, infrastructure providers, regional transport associations, regional innovation agencies, NGOs, financing institutions, education and training organisations as well as universities and research institutes.
Specific territories targeted	The supported actions can be implemented throughout the cooperation area. Emphasis will be put on peripheral areas showing weak links to TEN-T corridors and transport nodes and areas showing deficiencies in terms of multimodal accessibility for freight transport, which can profit from the exchange with - and learn from - more advanced regions. Simultaneously, regions which already show an advanced degree of connectivity to the TEN-T network and/or an advanced status of multimodal freight transport will be further strengthened as consequence of improving their implementation capacities (e.g. ICT tools, smart regional mobility services, logistic concepts, investment preparation, etc.). All actions will thereby need to consider the specific territorial characteristics of the respective targeted areas.

[4] project partners benefitting from programme funds and implementing activities within the project