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# COMMON BALKAN CLUSTER STRATEGY

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NOEMA Ltd.

noema noema.org  
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## **I. Introduction**

This document presents the Common Balkan Cluster Strategy, which sets priorities and actions for the development of network between clusters in the border region Bulgaria-Serbia.

The Balkan Cluster is a cluster development platform targeting clusters and support organizations in the wider border region Bulgaria-Serbia, including Sofia.

This strategy aims to set medium-term operational objectives and actions for the development of the Balkan Cluster platform. The strategic horizon of the Strategy is 3 years covering period July2016 to July 2019.

This Strategy is based on the following documents elaborated with the support of external consultants contracted by the Serbian partner - Cluster House within the framework of the project N°2007CB16IPO006-2011-2-167:

- Cluster needs assessment;
- CBC Serbia-Bulgaria Cluster Development Strategy: mainly SWOT analysis, objectives and recommendations.

The Strategy utilizes also the findings of the cluster mapping and survey on cluster development in the target regions.

The above stated documents are used for the development of the current Strategy but to avoid overlap they are not reproduced in this document.

The strategy is elaborated in consultations and involvement of relevant stakeholders, including clusters and business support organizations from targeted sectors, research and educational institutions and business representatives.

## **II. Strategic Framework**

The strategy priorities and actions reflect the objectives and instruments of the cluster development policies in EU, which are linked to the new EU industrial policy priorities. The EU policy for support of cluster development has been undergoing substantial developments in the recent years. The EU support for clusters has been focused on the following facilities:

- Information and analysis of the EU clusters development and cluster policies in EU member states, which is provided by the European Cluster Observatory;
- Support for building the capacity of the EU clusters, which is provided by the Cluster excellence programme;
- Support for internationalisation of the activities of the EU clusters, which is a facility which targets development of cooperation between EU clusters for the development of EU and internationalisation to third countries' markets.
- Support of clusters in the emerging industries, defined as a priority of the EU Industrial policy.

This Strategy is also framed by the objectives and priority axes of the INTERREG IPA Cross-border Cooperation Programme Bulgaria – Serbia 2014-2020. The Programme aims to strengthen the Bulgaria–Serbia cross-border cooperation capacity in the field of nature protection and sustainable tourism, leading to enhancement of European territorial cohesion.

The Strategy also reflects Bulgarian and Serbian national cluster development policies.

### **III. Objectives and medium-term priorities for Balkan Cluster Development**

#### **III.1 Positioning and main objectives of co-operation**

The clusters in the border region are at a different stage of development and the national strategies for cluster development provide different priorities and support programmes. The stakeholder analysis shows that in the Bulgarian side of the region there is a strong network of clusters and business networks led by the Bulgarian Association of Business clusters, industrial associations and chambers. The Bulgarian cluster development support organisations have capacity to provide services for the clusters development, including training and consultancy. The Bulgarian clusters received significant support in the past and will have access to development support under European Structural and Investment Funds in the programming period 2014-2020.

In the Serbian part of the border region, the cluster development services and support policies are less developed. The development needs include increased funding for cluster development and modernisation of legal framework, improved cluster resources and improved services for knowledge transfer and human resource development. The Cluster House which is a major stakeholder in the Serbian cluster policy development will continue its support to clusters in the Serbian part of the region.

Therefore, the Balkan Cluster platform will position its activities mainly in the domain of the development of common cluster actions focused on the cross-border region development. It will specifically target priorities for the development of the Bulgaria – Serbia border region as set in the INTERREG IPA Cross-border Cooperation Programme Bulgaria – Serbia 2014-2020, which is the main planning document for the target area.

In all activities, the Balkan Cluster network will be guided by the:

- socio-economic characteristics, development objectives and challenges of the target border regions;
- level of development and readiness for cooperation of the clusters and business networks in the cross-border region.

The main priorities for action in the next three years are as follows:

1. Support of cross-border cluster cooperation in the priority areas of the CBC Programme Bulgaria - Serbia2014, mainly sustainable tourism, youth, environment:
2. Creation of conditions for knowledge transfer in the areas of cluster development with emphasis on clusters in the selected priority sectors.

The activities Balkan Cluster will target the following results:

- Creation of new business opportunities in the border region;
- Improved business competitiveness.

through

- Improvement of existing products and services based on co-operation of clusters;
- Creating new services and products based on inter-sector cooperation between clusters;
- Improvement of businesses services.

Based on the core cluster identities (sector specialization – territorial concentration – competitive and cooperative companies relations) the activities of the Balkan Cluster will be developed along with the following principles:

- to be strongly demand driven (with special emphasis on agro-food chain sustainable tourism and green economy);
- to focus on cross-cutting issues (co-production with knowledge based institutions, international networking, gender prompted innovation);
- to upgrade the cluster managers skills to match these new challenges.

### **III.2 Priorities for the Balkan Cluster Network development**

Based on the identified needs and priorities in the target region, the Balkan Cluster Network concentrate on **four** priority areas:

#### **1. Promotion of inter-sectoral cooperation of clusters in the cross-border region focused on sustainable tourism development**

This priority aims encouraging cross-sectoral cooperation for innovation and value chain development which contribute to the socio-economic development of the cross-border region. The tourism industry is selected due to the fact that it requires a close collaboration between related industries and supporting clusters.

The Balkan Cluster platform will target creation and establishment of cross-sectoral cluster cooperation targeting:

- Improvement of existing products and services based on co-operation of clusters; the novelty of the products has to be evident to customers (loyalty programmes, green labels, environmentally sustainable accommodation and similar are innovations in products that may be targeted);
- Creating new services and products based on inter-sector cooperation between clusters;
- Process and management innovations, by redesign of the entire production line;
- Institutional innovations and improvement of wider businesses environment, including regional promotion agencies.

The border region needs assessment and cluster capacity assessment identified that the highest readiness for cross-sectoral cluster cooperation exists in the area of sustainable tourism. The specific priority areas are as follows:

- ◆ *adding value to tourism products or development of new services* through integration of the production of quality food and beverages; production of herbs and honey as an input for production of cosmetics products or souvenirs;
- ◆ *creating integrated products* offering tourist, host and transportation services for the provision of comfort and recreation, including visits of natural, cultural-historical and religious landmarks in the region;
- ◆ *improvement of existing products* in rural, eco-tourism, mountain tourism, and thematic tourism - related to cultural and historical heritage; adventure and research tourism, etc.;
- ◆ development of *local brands*, if required for the strengthening of the tourism product.

The successful implementation of these activities will require cross-sectoral co-operation of clusters active in the following sectors: *agro-food, tourism, creative industries, ICT, transport and logistics, management consultants, human resource development*. Examples of successful approaches are given in Annex 2. The targeted clusters have been identified during the implementation of the Balkan Cluster Project and the networking activities have started.

On the Bulgarian side of the border there is a well developed network of clusters in tourism development including dental, health and accessible tourism, ICT, management consultants and transport. There is gap in clusters targeting agro-food sector. Therefore, the network envisages involvement of Bulgarian business associations active in agriculture and food industry, such as farmers associations and sector specific associations in food industry. In the Serbian part, there are emerging or developed clusters in wellness, traditional crafts, creative industries and ICT. The Serbian clusters are more focused on territorial development and their experience and networks will be widely exploited.

The Balkan cluster network will support actions for:

1. Building sustainable partnerships between existing clusters or cluster initiatives in the Bulgarian-Serbian cross-border region (instead of creation of new clusters);
2. Inclusion of clusters in territorial partnerships for rural and/or urban areas development;
3. Promoting the elaboration and implementation of pilot projects, involving assessment of results.

In the sustainable tourism value chain there are various combinations of cluster initiatives that are prioritised by stakeholders, requiring cooperation of clusters in:

- Alternative tourism and creative industries;
- Agro-food industry with tourism industry;
- Wellness and health tourism clusters.

## **2. Encourage transfer of knowledge and involvement of clusters in co-operation for agri-food value chain development**

This action is given a priority due to the fact that the main part of the border region is situated in the rural areas. In addition, the agri-food sector will receive substantial support for investments through European Fund for Agriculture and Rural Development in Bulgaria and IPA in Serbia. The farmers and processing industry will be supported for investments in physical assets targeting modernisation and competitiveness improvement. The agricultural sectors on both sides of the border are dominated by small size farms, which are threatened by the increasing international competition and fast growth of large-scale agriculture. The co-operation between farmers is weak due to lack of traditions and appropriate forms.

The accumulated international experience reveals that development of the value chain business networks is a valuable opportunity for the improving agricultural competitiveness and linking farmers to the market. In addition, the development of the agri-food value chain networks may benefit from increasing demand for regional food. There is a clear trend to increasing demand, especially of Bulgarian customers, for food products produced in the border region. Regional brands are useful in expanding local markets and regional cross-border collaboration. In addition, the well developed agri-food business networks can be useful for the development of tourism, along the so called food and drink heritage trails. However, under this priority, tourism is a supplementary benefit of actions targeting agri-food value chain modernisation (see Annex 2, case 5).

The Balkan Cluster Platform will facilitate the development of agri-food value chain networks, through:

- Building awareness on benefits of agricultural value chain development;
- Identifying and developing closer links between relevant value chain actors;
- Promotion of cross-border and interregional agreements on agricultural and food industry development;
- Supporting project generation;
- Promotion of production of regional agricultural produce of certified quality and origin in order to adapt to new market conditions and consumer demand;
- Search and communicating information on funding opportunities.

There are also opportunities for joint investments in the agro-food industry value chain focused on the increasing competitiveness. The co-operation may focus on support for investments utilising resources provided for rural development by the EU funded rural development programmes in Bulgaria and Serbia. This line of co-operation has been prioritised by the stakeholders and will be supported by the Balkan cluster platform in the medium-term.



### **3. Encourage clusters cooperation in community led local development partnerships**

The needs assessment identified that there is a valuable opportunity to encourage spreading of knowledge on community led local development approaches that are highlighted as a priority under the European Structural and Investment Funds in the new programming period. This way the Triple Helix effect (business – academia – public authorities) can evolve into a Quadruple Helix (including civil society). Also there is a capacity to connect different factors of the production process, embedding to clusters development key enabling actors and knowledge-intensive business services at transnational level by:

- bringing together all relevant players (local authorities, business, non-governmental sector);
- development of social innovations based on user-driven approach, developed in cooperation with the NGO sector;
- applying entrepreneurial discovery process;
- territorial marketing.

The strong social capital is vital for the development of new or improved tourism products, which links this priority to priority 1.

### **4. Improve access to training and consultancy on cluster management**

This area of cooperation is prioritized by the local stakeholders, and the Balkan Cluster will support:

- Improving the access to training for cluster managers: using the resources and best practices, developed within the European Secretariat for Cluster Analysis;
- Promotion and development of specialised programmes in higher education/or specialized courses on cluster management;
- Exchange of good practices between Bulgarian and Serbian cluster on human resource development.

A priority will be given to raising awareness of the need for inclusion of cluster management in the curricular of the universities or colleges. The focus will be on the promotion of the curricular developed by the Cluster Excellence Management Training programme of European Foundation for Cluster Excellence.

## **VI. Balkan Cluster Priority actions**

This section specifies priorities for actions in the next 3 years (June 2016-June 2019). It is based on the analysis of needs and priorities and strategic planning sessions implemented during the course of implementation of the second phase of the Balkan Cluster Project.

The specific actions planned in the medium term focus on:

- Identifying common problems and areas for cluster cooperation in favour of the socio-economic development of the cross-border region;
- Support of cross-cluster networking and project definition;
- Promotion of good practices in cross-cluster cooperation for sustainable tourism, agri-food value chain development and rural innovation, with emphasis on effective methodologies and management modes;
- Development of specialised services.

### **Action 1: Review and communicate information on good practices**

In recent years, there is an abundant information resource on good practices, including databases and guidelines created by the various projects and support structures in the EU. Thus, for example the INTERACT KEEP data base (<http://www.keep.eu>) contains information on nearly 1 500 projects on cross-border and transnational cooperation in the area of clustering and economic co-operation. There are also a number of specialized reports focused on the analysis of innovative approaches for territorial cooperation, which incorporate clusters development. The effective use of the accumulated knowledge requires targeted review of the databases and other information sources, selection and communication relevant ones in an appropriate and user friendly form.

This activity will be leaded by FED, which has an extensive experience in the evaluation, including good practice identification. In the first year of strategy implementation the research of relevant good practice will focus on following topics:

- Cluster networks for agri-food chain development;
- Cluster networks focused on social innovation;
- Cluster networks for participatory rural and regional development.

The results of this action will include presentation of the good practices, the results achieved and assessment of their applicability to the Bulgaria-Serbia cross-border region. The identified practices will be promoted via Balkan Cluster Internet portal.

### **Action 2: Identify and support synergies between CBC Projects**

The review of implemented cross-border and transnational co-operation projects targeting Bulgarian-Serbia border region reveals that there are plenty of synergies, which, if exploited, can enhance impact of the projects, revitalize networks and bring benefits to the target region. Therefore, one of the planned actions is to review the implemented projects through desk research and interviews with partners and to identify and promote opportunities for cooperation targeting:

- Enhance of existing networks;
- Innovation or improvement of created products and services trough involvement of new stakeholders;

- Adding new products.

This activity will be also led by FED, since it is within its core area of expertise. The promotion activities will include active association and chambers in the border region.

### **Action 3: Support networking events for elaboration of cross-cluster co-operation projects**

The networking events will target development of projects and/or actions for support of cluster co-operation in a specific value chain. The survey of clusters in the border region revealed that the clusters are at a quite different stage of development and their capacity to co-operate varies. Therefore, in the organisation of networking events the cluster development stage / needs will be taken into account. Some of the events will have a more general focus on communicating of cooperation opportunities targeting also improvement of cluster management and promotion of new approaches and methods for development of cross-cluster networks, while others will directly target on initiation of co-operation projects.

Each networking event will be preceded by a collection of information on experiences, demands and expectations of the clusters and business network members. The cluster managers of mature clusters, will be encouraged to participate in networks development to utilise their experience, knowledge and leadership skills as well as to attract less experienced clusters. The networking events will be also used for identifying needs for capacity building, including training and advice.

### **Action 4: Collect and disseminate information on value chain approach for agri-food sector development**

A special line of activities will focus on collection and dissemination of information on value chain approach and its distinctive features in terms of both in the scope used in analysing an industry, and in the tangible and non-tangible considerations used in designing and implementing interventions. Various elements of the value chain approach will be promoted:

- Focus on markets needs and value chain analysis methods;
- Value chain governance and recognition of the importance of relationships;
- Methods for facilitating changes in firm behaviour and transforming relationships;
- Empowering of the private sector.

The collected information will be promoted through Balkan Cluster Internet Portal and during networking events. The case studies for the application of value chain approach for environment close to border region specificity will be identified and promoted.

### **Action 5: Support transfer of knowledge on territorial development using community led development approaches**

As stated in the previous section community led local development is an identified opportunity both for boosting socio-economic development of the border region and for

increasing cooperation capacity of the border region clusters. The approach is a powerful tool for identifying opportunities and setting partnerships. The Balkan Cluster will support inclusion of clusters in community led partnerships. Through community led local development new regional clusters may emerge or already existing partnership could be further developed. The strong Sofia based cluster will be attracted for provision of expertise or mentoring of the territorial partnerships. The Balkan Cluster priority actions will include establishment of contacts between local action groups in the border region. This activity will be a priority due to the fact that Rural Development Networks in both countries are not yet set or fully functioning.

#### **Action 6: Development of specialised services for clusters in the region**

The Cluster House will lead activities focused on development of specialised services. It has already extensive experience and reputation in the development and provision of services on cluster development. It has an advantage of have a developed service packages and network resources. The Cluster House model fosters collaboration through networks, meetings, advisory services, inter-business networks, matchmaking events, and training sessions. The model covers business support for clusters. SMEs - start ups and existing companies, which includes business information, consulting, training, communication, B2B C2C matchmaking and promotion and resulted with the following key outputs.

Successful cluster initiatives need also to build the capacity of facilitators, business leaders, public authorities, university leaders and public policy makers. The capacity building activities will be leaded by the Cluster house, which has developed training programmes, customized to the context of the cross-border economies, where a few large companies and a multitude of SMEs dominate the economy. The Balkan Cluster support services will continue to be structured around the following areas:

- EU Cluster Models training and advice provides the basic skills, tools and understanding needed to initiate new cluster development initiatives and to improve eco system of the existing clusters. It is targeted staff at economic development departments in local government, cluster managers / facilitators / agents, business leaders, business membership organizations, and university representatives.
- The CBC Cluster Network Development workshop, which is a service specifically targeting cluster managers, with an ambition to take cluster development to the next level – transnational clusters collaboration. It provides professional skills in networking, membership recruitment, innovation, internationalization and strategic management, designing and implementing effective strategies for cross-clusters cooperation.

The services will be incorporated in other activities focused on specific cross-sectoral business networks development.

The scope of services will be general or specialised. The general services will support activities intended for all cluster management organisations, even for those without any active involvement in the new networks development. The specialised services will focus on the needs of a smaller group of cluster management organisations of a particular sector involved in co-operation projects.

With regard to the scope and content of support services, the following four components will be provided: a) Public relations and marketing, in general or only for specific clusters b) Provision of training for specific aspects of cluster management organisations or for improving the level of professionalisation of cluster management organisations; c) Internal (among the cluster management organisations being part of a cluster programme) and external (between cluster management organisations not being part of a cluster programme, domestic and international) networking; d) Managerial and technical support, coaching, and consulting for cluster managers or cluster management organisations included in the supported networks.

The experience has shown that providing specific or very specific direct support/coaching to cluster management organisations requires specialised knowledge and professional expertise. To be effective it has to be implemented in a very professional as well as in a tailor-made way, according to the individual needs of a given cluster network. This support is extremely valuable and the Balkan Cluster platform will support development of specific tailor-made support services through attraction of experts from the cluster community and universities in the region.

### **Action 7: Supporting regional cooperation projects**

Development of regional cooperation projects stemming from existing industry-based clusters and potentially from businesses and institutions, which, even if not part of a cluster, are important for border region development. The cooperation initiatives at the regional level are usually very targeted, thematically-driven and flexible in their composition, but can be a starting point for the formation of a new and permanent regional cluster networks. The Balkan Cluster will support formulation of regional cooperation projects through supporting regional clusters networks as well as through network of the clusters in all Balkan countries. The Cluster house is the driving force behind the network of clusters in the Balkan clusters and will continue its efforts to support co-operation of experts in cluster managers in the region. Through the network of clusters will have an opportunity to exchange experience and business opportunities as well as to promote the region.

### **Action 8: Integration of cluster management in the university curricular**

This action envisages encouragement of educational institutions for introduction in their curricula of training programmes for cluster managers. The Balkan Cluster Platform will promote the curriculum developed by the Cluster excellence management training programme of European Foundation for Cluster Excellence (see Annex 1). During the

Balkan Cluster Project implementation universities were contacted and involved in project activities to create interest and awareness on the needs for development and introduction of cluster management in the educational curricular.

The future activities will include meetings and discussion of the capacity to design and deliver special training programmes on cluster management. The activity will be carried out both by FED and Cluster house. The university departments will also be supported to establishing links with EU training institutions experienced in cluster management training.

### **Action 9: Identifying and promoting funding opportunities**

The FED has extensive experience in EU programmes management and knowledge on EU funding programmes. It will be used to identify and promote EU programmes, which are appropriate for funding cluster initiatives, including:

- National EU funded programmes, which open opportunities for translational projects or integrated cooperation projects that are funded from national funds;
- Cross-border, translational and trans regional projects;
- EU level programmes.

**Annex 1. Cluster Excellence Management Training programme of European Foundation for Cluster Excellence**

<b>Module</b>	<b>Knowledge area</b>	<b>Concepts and/or techniques</b>
Module 1	Location theory	Industrial Districts, Clusters, Innovation Systems
Module 2	Cluster Initiative Screening	Statistical Cluster Mapping, Cluster Initiative Selection (Industry Analysis and Segmentation, Value Chain and System)
Module 3	Industry Analysis and Segmentation	Industry Analysis (5 Forces), Strategic Segmentation
Module 4	Value Chain Analysis	Value Chain, Local Value System, Global Value System
Module 5	Benchmarking and Internationalization of SMEs	Advanced Buyer Purchase Criteria, Key Success Factors, Value Chain Activity Benchmarking
Module 6	Change Management	Individual Behavioral Change, Group Change, Communication Strategies, Presentation Skills, Creativity and Traditional Industries
Module 7	Cluster Organization Management Organizational structures	Non-profit Organizational Management, Pattern Identification, Governance Models
Module 8	Project Management for Clusters Project Planning	Project Monitoring, Project Evaluation, Resource Efficiency in Clusters, Key Enabling Technologies
Module 9	Continuous Policy Input Policy Review	Policy Review, Diamond Analysis, National and Supranational Competitive Framework
Module 10	Cluster Policy Evaluation	Cluster Management Evaluation, Cluster Policy Monitoring, Impact Analysis
Module 11	Innovation Management & Assessment (with IMP <sup>3</sup> rove Academy)	Innovation Strategy, Innovation Organization and Culture, Innovation Life-cycle Management, Innovation Enabling Factors

## **Annex 2 Cases of cluster and industry cooperation**

### *Case 1: Large Scale Innovative and Mobile European Services Culture Tourism in Rural Areas*

Project links tourist sites along the Limes in European countries, through

- ◆ development and implementation innovative mobile services along the route which support information brokering, travel mobility and additional services for visitors as well as local people,
- ◆ to support new businesses along the route via these services.

Project integrates Cultural Heritage, Tourism and Mobile services industries and includes among partners from Bulgaria and Serbia.

Roman limes is the only European cultural heritage which binds together 10 European countries: From the North-West in the UK to the South East in Bulgaria it is a unique monument for many regions and, in part, already a designated UNESCO world heritage. Through the LIMES project, this former fortification of the Roman Empire will get an excellent opportunity to become a beacon of future cultural tourism. In fact, only a small part of the limes is accessible at the moment: the limes runs through rural regions which are not fully developed for tourism. While the European limes countries, which are the UK, the Netherlands, Germany, Slovakia, Hungary, Croatia, Serbia, Romania and Bulgaria, have numerous museums, historic routes, archaeological sites and hidden places of interest along the Limes, these single places are not yet linked. Linking them through common mobile services offers an outstanding chance to raise the profile of, and bring more visitors to this unique heritage and, at the same time, to support the economic development of the rural areas it runs through by supporting new business and job creation.

LIMES activities:

Development of mobile service applications: existing mobile applications will be examined and further developed to create mobile services for accessing, experiencing and imagining the Roman limes, providing information on tourist facilities and events in the ten European regions and featuring infotainment with text, video, virtual reconstructions and augmented reality and other useful services.

Promotion and signposting activities: the partners will develop, test and apply a common marketing strategy for the new mobile services in tourist structures and cultural heritage institutions in three areas in Germany, Bulgaria and Austria and promote the business potential of these mobile services.

Devising guidelines and inter-European connected services: the mobile services will not only be adapted to the limes regions in Germany, Austria and Bulgaria, but the activities will also cover the other seven countries along the Roman limes thereby creating a “virtual path” for all European limes regions connected through similar mobile services.

Project includes representatives of cultural institutions in the seven other countries that are part of the Roman limes (UK, Slovakia, Croatia, Romania, the Netherlands, Hungary and Serbia).

In Germany, the Rhineland-Palatinate Ministry of Economy, departments of creative industries and tourism support the project together with the Romantischer Rhein Tourismus GmbH – Romantic Rhine Tourism Agency, and in Austria the RÖMERLAND Carnuntum



regional development organisation. In the Bulgarian municipality of Ruse, the Regional Museum of History, the Chamber of Commerce and Industry and the Business Support Centre for SMEs are closely associated with the project which is also supported by Bulgarian Ministry of Culture.

The project contributes to the valorisation of sustainable tourism in all European countries along the Roman limes and support the mobility in rural areas through the development of innovative mobile services. The project will focus on developing mobile services and creating new, innovative value chains. Three countries (Germany, Austria and Bulgaria) will take the lead and include the other seven limes countries through their existing partnerships. Transfer activities will play an important role in order to make mobile services for the tourism sector available in all countries.

It is expected to address 70.000 people interested in cultural tourism in the three partner countries as well as 20.000 local actors (as users of the mobile services and as ambassadors of their regions). Other beneficiaries will be companies, specifically innovative start-ups, and regional developers. At least 15 new companies will be supported in the framework of the project and around 10 regional agencies will directly benefit from the project outcomes. Additionally, the project targets 650.000 € to be invested by the tourism sector in the regions along the limes.

**<http://limes.per-rlp.de/?lang=en>**

**<http://danubelimesbrand.org/>**

#### *Case 2: THINKTUR- Spanish Technology Platform of Tourism*

The Tourism Technology Platform THINKTUR is a group of all sector technological agents involved in adding to the tourism sector value chain, which are strategically or tactically important for their contribution to the objectives of competitiveness, economic growth and employment.

It is the grouping of all actors, technicians, scientists and industry interested in applying technology to strategically important tourism sector's contribution to the goals of competitiveness, economic growth, sustainability and employment.

The ultimate goal of the platform is to contribute to sustainable growth of tourism, through creation a network of strategic alliances and intellectual institutions concerning R + D + i Spanish; defining the strategy and developing the Strategic Research Agenda; generation of projects and transfer to the market; promotion of training activities and training sector; encouragement of the participation of tourism enterprises in R + D + i, collaboration with Public Administrations and advising on main lines and technological research priorities relevant to tourism; and contribution to the internationalization of Spanish tourism sector favouring a greater presence in the European environment.

An initiative promoted by ITH (Hotel Technology Institute) under CEHAT (Spanish Hotels Confederation) and AETIC (Association of Electronics, Information Technologies and Telecommunications of Spain), to which Polibienestar and Segittur join since 2009.

THINKTUR pursues the association of all the significant actors of the Spanish tourism sector (hotels, tour operators, wholesalers, travel agencies, airlines, ground transportation, destinations, etc.) ICT companies, sustainability and efficiency related businesses, accessibility, transport, specialised technology companies in areas directly and indirectly related to tourism, technological centres, business associations, research organisations and universities. The aim of this collaboration is to prioritise research and technology above everything, in order to contribute to the sector development in the medium and long term. It also serves to coordinate and return on R & D investments, both at public and private level.

<http://www.thinktur.org/thinktur-in-english/>

### *Case 3 Cross-Border Green Care Cluster Ylitornio – Övertorneå*

Green Care is a new concept in tourism with aims to increase physical and mental well-being through nature-based products and services. Three key features of Green Care are sustainability, well-being and authenticity. Green Care is an approach used to strengthen the quality of life by increased physical or mental health and well-being, due to nature based well-being products and services similar to Green Tourism products, which are created to strengthen the connection to the environment and to magnify physical and mental well-being.

Nature is the first of the three key segments of Green Care, it is used to increase and strengthen the results of therapeutic and rehabilitation processes. It is not necessary to actually be in nature instead nature elements can be brought to the participants to e.g. hospitals or saunas. Additionally, to experience nature for increased results of the rehabilitation process and lastly, the network that the process is experienced with, it ought to be the strongest segment and link all three segments together in Green Care businesses. All three segments ought to be adapted into Green Care Tourism products to strengthen the Green Care aspect of the product and the authenticity as well.

Increased well-being is incorporated by both observation of nature and activities in nature. Relaxed environments, peaceful landscapes, healing gardens and other green experiences, similar are good examples.

Authenticity is a real, genuine experience not a tangible product or a 'state of mind' and the significance of authenticity increases among consumers since we live in an experience economy. Manufactured products are substituted by genuine experiences since consumers desire original, real experiences instead of fake and copied offers. In other words, the competitive advantage for businesses in the experience economy is the authenticity of their products, services and experiences. Supplies include raw material created by earth such as mined minerals, animals and vegetables. Authentic supplies are considered to be organic and local products. In addition, the popularity of authentic tourism destinations increases in the experience economy such as developing countries. People travel to developing countries for own transformations due to their personal contribution in the process of creating a better world.

The definition of cross-border tourism is based on two categories. Attraction of the border, when the main purpose to visit a destination is the actual movement to cross a border. However, the border is considered as competitive advantage compared to other destination with similar activities.

*Case 4: MedAdventure: Developing a cross-border cluster for sustainable tourism of adventure.*

The goal of the project is to promote a sustainable and harmonious cooperation in the Mediterranean Basin by dealing with common challenges in the tourism of adventure and outdoors sector and creating synergies to enhance the territories involved. The project's objectives are: (1) Promote the socio-economic development and enhancement the Mediterranean Sea Basin countries through the transfer of knowledge and technology in the tourism of adventure and outdoors as a key sector for the cooperation area involved. (2) Strengthen a cross-border cluster in the sustainable tourism capable of adopting viable and long-term economic policies that respect the socio-cultural authenticity of communities, the conservation of the building and living cultural heritage and of traditional values of the participating countries. (2) Implement pilot initiatives of region-wide actions and standards aiming to increase the competitiveness of the Mediterranean destination improving the endowment of skills required in the tourism of adventure and outdoors. The specific objectives are: (1) Create the Mediterranean Centre for Tourism of Adventure and Outdoors (MCTAO). (2) Develop and pilot a cross-border programme based on ICTs and blended method, with training institutions in both side of the Mediterranean for low-skilled people that currently work in the tourism sector of adventure and outdoors. The active participation of young people is promoted. (3) Create a quality seal amongst SMEs working on tourism of adventure and outdoors in both side of the Mediterranean, certifying that they respects the socio-cultural authenticity of communities, the living cultural heritage, the environment and the traditional values of the participating countries.

*Case 5: Carpathian Culinary Heritage Network*

The aim of the network is to conserve and popularize the role and range of the different traditional Carpathian food products and cuisines as a catalyst for sustainable regional development and preservation of local cultural heritage. The network aims:

1. To unify the efforts and potential of local traditional food and tourism related stakeholders throughout the Carpathian Regions to promote the widely diverse styles and products, whilst assisting to build capacity, networks and sustainable supply chains between the various producers and the public in order to meet the challenges and requirements of present day needs in the food and tourism industries;
2. To raise the local awareness and appreciation of the potential of the Carpathian culinary heritage whilst identifying the links between traditions and the local environment. The local producers having inherited tradition and know how, together

with other local stakeholders must be motivated to engage in a value creation and preservation process.

3. To develop new business opportunities and support small-scale businesses (traditional small scale food producers, green accommodation, traditional catering facilities in rural areas) operating in traditional food and gastronomy sectors in the Carpathian regions of Romania, Hungary, Ukraine and Slovakia by building strong links and networks with the tourism sector and promoting Carpathian traditional culinary heritage and culture to a national and international clientele:
4. To reinforce the cultural identity of the target regions as Carpathian tourist destinations and promote each regions identity through culinary tourism.

*Case 6: Cross-border co-operation of local action groups for value chain development*

The transnational cooperation project supported the development of mountain farming - one of the objectives of the lead partner's local development strategy. Prompted by common issues, agriculture and food sector actors from a mountainous border area engaged themselves in networking, collective action, the identification of synergies and the pooling of resources. New cooperation projects and cross-border synergies evolved.

The Local Action Groups supported the partnership between 'Mission Agro-Alimentaire des Pyrénées' (MAFF) and 'Instituto Técnico y Gestión Ganadero' (ITG-G) with the common objective to identify new opportunities of economic cooperation. Pooling their resources and undertaking collective action, the project partners' specific objective was development of joint approaches to the promotion and marketing of agri-food products and quality services.

Cooperation schemes, for the beneficiaries of the two territories covered by the project, i.e. the Development Association of the Basque Pig Industry, the cooperatives of Azkorria and Baztandarra, the community of towns of Soule, breeders as customers of the Mauleon slaughterhouse and breeders of Montana de Navarra.

The LAGs supported the partnership between 'Mission Agro-Alimentaire des Pyrénées' (MAFF) and 'Instituto Técnico y Gestión Ganadero' (ITG-G) with the common objective to identify new opportunities of economic cooperation. Pooling their resources and undertaking collective action, the project partners' specific objective was the development of joint approaches to the promotion and marketing of agri-food products and quality services.

Main project activities included:

- (1) Cross-border consolidation of Basque pig supply chains, creating a legal entity under Spanish law & linking it with an existing French association to integrate development strategies.
- (2) Supporting cheese processing companies in difficulty, identifying/exploiting synergies to develop business & professionalize management.

(3) Add local value to raise farmers' business/income, training & exchange to develop direct sales of meat, improving slaughterhouse volumes, processing tools/premises.

*Case 7: WELLFOOD*

WELLFOOD is a project funded by the Adriatic IPA Cross-Border Cooperation Programme and realized in collaboration with partners Italy, Slovenia, Bosnia-Herzegovina, Serbia (Regional Chamber of Commerce of Uzice), Greece and Albania).

WELLFOOD aims at strengthening the innovative capabilities of the agri-food sector, both through knowledge exchange between Adriatic Countries, and the creation of the ADRIFOOD CLUSTER, a network of researchers, technicians, enterprises, producers, consumers to share know-how and develop new ideas about food quality and safety. <http://www.wellfoodproject.eu/>

The project developed wellbeing itineraries and mobile food traceability application.

*Case 8: Food traceability methodology for increase of marketing of agricultural food products*

Food traceability is increasingly important for consumers today. People now want to know where their meat, fruit & vegetables and dairy come from. They also ask for values: specific origin like mountain farming, high animal welfare standards, fair prices for local farmers, etc. A study published in Information & Management found that for some shoppers just having the information available is enough to influence a purchase. "Simply making this kind of traceability information available for food products will encourage more purchases of those products, and at a higher price, even if the buyer never uses that information.

The *OriginTrail* group therefore felt challenged to find a solution which would both be a marketing tool for local food producers - providing them with an effective way to differentiate themselves based on the origin of their main ingredient - and an information tool for consumers so that they can find out more about what they are buying.

The OriginTrail smartphone app was launched in 2014. It is the result of a collaboration between a number of food processors, a farmers' cooperative and a web developer from Slovenia. It is a web and mobile solution bringing transparency to food value chains. Consumers can scan a product label and find out where the beef they want to buy was produced or if the apples they fancy have a Protected Geographical Indication. Žiga Drev says "OriginTrail presents an important step forward for local food producers. They go beyond simply stating the country of primary production, instead they unveil the entire path of the product's origin on a particular farm."

It also has a system where consumers can give their feedback on a particular product to the farmer, meaning that there is direct interaction between the shopper and the producer.

The farmers that supply milk, meat or vegetables have been very positive about OriginTrail giving consumers an ability to see where the ingredients in end products come from. The farmers

confident that the transparency the system provides will result in consumer confidence and shopping preference for their products.

At the moment, OriginTrail enables consumers to trace products from 3 food companies back to more than 1200 local farmers from Slovenia (meat, dairy and vegetables). They are currently working with a further food company and 2 farmers' cooperatives with around 400 farmers. For 2016, the group is looking into expanding the digital solution to other EU countries.

*Other Mobile food traceability applications* are helping eaters, producers, advocates, and activists lead less wasteful and more environmentally sustainable, healthy, and delicious lives. Examples are as follows:

1. Locavore (Hevva Corp.)

Locavore helps consumers find out what local foods are in season, and locate the closest farmers markets that provide them. The app has tons of information on individual producers in a user's area, and provides seasonal recipes to best use fresh, local ingredients.

2. HarvestMark Traceability (YottaMark, Inc.)

The HarvestMark Traceability app allows its users to trace their fresh food back to the farm that it came from, by scanning any fruit or vegetable with the HarvestMark logo on it and pulling up the item's information on the app. It also provides instant updates on any food recalls affecting HarvestMark produce.

3. Find Fruit

For fruit that's as fresh as possible, forego the supermarket and use the Find Fruit app to locate fruit trees growing in public spaces. Users can also search fruit trees in their area according to seasonality, type, and proximity.

4. Farmstand (Mostly Brothers)

Use the Farmstand app to search for community farmers markets in the United States, Canada, the United Kingdom, Australia, and New Zealand. Users can also connect with other farmers marketgoers in their area.

5. Food Community (Nommunity.com)

With the Food Community app, consumers can search and discover local vegan, vegetarian, kosher, gluten-free, locally-grown, and organic restaurants. They can also connect and collaborate with a community of people with the same dietary choices.

6. Seasons (What Is It Production Ltd.)

The Seasons app helps eaters follow the natural growing seasons of fruits and vegetables in their region. They can also search a database of fruits, vegetables, herbs, and nuts for descriptions, information on seasonality, and photos.

7. NRDC Eat Local (Smart Tools)

The Eat Local app helps locate nearby farmers markets, and provides seasonal recipes for the ingredients found there. Users can also submit and edit information for their local and favorite farmers markets in the Eat Local database.

8. *GoPure (Puur Buy, Inc.) [FREE]*

Search local restaurants with the GoPure app to find out about their sustainable practices and the quality of their food. Users can also suggest restaurants, add information, and get the inside scoop on sustainable foods at their favorite establishments.

9. *Clean Plates – Healthy Restaurants (Clean Plates)*

Search or browse the Clean Plates app database to find restaurants offering vegan, vegetarian, gluten-free and organic dining options. Professional reviews offer insight and suggestions for different dining experiences.

10. *Wild Edibles (WinterRoot LLC) [US\$7.99]*

The Wild Edibles app helps to identify and provide information about the uses of wild edible plants. The app offers harvesting methods, preparation instructions and recipes, and medicinal information for foraged plants, as well as a botanical glossary for reference.

<http://www.wellfoodproject.eu/>

*Case 9: Food Valley, Netherlands*

The agriculture and food sector is an important part of the Dutch economy, delivering 10 per cent of GNP, providing an income for 600,000 people and accounting for 20 per cent of exports. WageningenFoodValley is one of the world's largest concentrations of food and process design firms with around 10,000 employees. Food & Nutrition is one of eight high-tech programmes in the Netherlands and food science is one of five focus areas at FoodValley. The others are life science, health, nutrition and agriculture.

The Netherlands aims to improve the competitive strength of the sector by accelerating and simplifying innovation processes through its Food & Nutrition Delta (FND) programme. This consists of two phases – the scientific Top Institute Food & Nutrition (TIFN) and FND Phase 2.

Top Institute Food & Nutrition focuses on fundamental, pre-competitive research with leading companies as partners. These partnerships will soon involve seven of the top 10 international companies. Research findings are shared - one partner can take out a patent to be licensed by the others. Results are anticipated within 5-10 years on the basis of industry relevance and scientific excellence. Partners initially contributed €0.5m per annum to take part; from 2011, there will be a focus on themes with partners contributing €150k per theme per annum.

TIFN is a continuation of the Wageningen Centre for Food Science, a successful collaboration between government and business. The initiative received €60m from government (the Ministry for Economic Affairs), €30m from industry and €30m from knowledge providers over four years. Governmental funding is now to reduce to 33 per cent with industry taking up the balance. TIFN has 15 employees including its back office.

The process is seen by partners to provide critical mass with €4m - €5m worth of programmes operating over 4 years, 50 per cent of which are funded by governmental bodies.

Involvement allows partners to multiply the research assets invested in projects and deliver greater returns than they would achieve individually.

Food & Nutrition Delta (Phase 2) aims to make the Netherlands the leading food and nutrition region in Europe. This second phase deals with the application and commercialisation of research, mainly concerning SMEs. It only funds Dutch companies (or companies with an impact on the Dutch economy) but knowledge partners can be located outside the Netherlands. Results are expected within 1- 4 years as they are driven by business opportunities. Industry focuses on implementation of research and expects results within 1 year.

FND received €63.5m from the government between 2006 and 2010, comprising 40 per cent of the total. The Secretariat (the CEO and the secretary) was entirely funded by the Ministry in the first year; this is now down to 60 per cent with the balance to come from within the industry and relevant partners. Six industry specialist brokers are funded by the Ministry as well as back office services.

*Case 10: InTra-Net - Innovation in Transnational Networks (2011 - 2013)*

**Purpose:** To strengthen the innovation collaboration between clusters in Southern Denmark and Northern Germany.

The project addresses the need to link well developed cluster networks in the border region in order to exploit the potential of collaboration for boosting growth in the region.

**Target group:** Cluster facilitators in Southern Denmark and Northern Germany and cluster companies from the INTERREG 4A area.

**Project activities aim** to create a foundation for higher innovation and growth in the border region through different network and training events for Danish and German cluster facilitators, businesses and research facilities through:

Creating a platform for information and knowledge exchange in clusters in the Danish/German border region.

Identifying good practice examples of cross-European cluster collaboration.

Organising network and training activities for Danish and German cluster facilitators.

Organising Master Classes for Danish and German cluster companies with themes within Open Innovation and joint business development in business networks.

Organising cross-European matching events for cluster companies and knowledge institutions.

The relevant results: The network events implemented through the project generated 16 new project ideas, which prove the great potential of innovation and growth in the border region. Examples of project ideas are development of alternative energy sources. Another example was cooperation of German food cluster KNE and Stålcetrum, which is the Danish cluster for food processing equipment.