FINAL DOCUMENT

Cross Border Strategy for Innovation and Competitiveness

Recommendations

July 2012

1. The Strategic context

Notwithstanding the fact that Slovenia has become an EU member since May 2004, the entrepreneurial and innovation systems in Slovenia and Italy - still suffer from what we may call a syndrome of “Separate Growth”.

“Separate Growth” occurs, for example, when entrepreneurs and institutions in Friuli Venezia Giulia/Veneto/Emilia Romagna, or in Slovenia respectively, normally do not think in the first place to look just across the frontier, a few kilometers away, to find partners and resources needed to grow their business. As a consequence companies do not profit from the advantage of geographical proximity to fully develop their growth potential.

By collaborating it is possible to accomplish more. iCON during its implementation has demonstrated this it is possible to bring together important minds, skills and resources and make available to the small entrepreneurs to help them innovate and grow. New radical solutions come when people come together and collaborate. New ways of doing business are found - old cultural and historic hurdles are easily overcome.

The workshops process that has been conducted can be summarized in the following steps:

- Meet together,
- Learn together
- **Work together**
- Grow together

“Workshops” are where iCON partners have met and worked together to identify, prepare and structure practical pilot actions – hence the term “ACTION WORKSHOP”. Workshops have also helped create a spirit of strong and continuous collaboration among Participants / Partners’ Institutions from both sides of the border.
The present strategic document is the result of these workshops and intends to provide a roadmap to strengthen the results achieved so far.

The active interaction of the participants allows to **share knowledge, to spark creativity, to activate wide networks of relationships, to bring on board key entrepreneurs and opinion makers** which will allow to transform into reality the many collaboration opportunities which will be identified.

The goal of the strategy is as follows:

> **"To provide the basis to <u>create a shared vision of what can be done</u> and to <u>identify actionable flagship projects</u> to <u>validate</u> new forms of high-level cross-border co-operation in the area of the innovation and joint competitiveness".**

It is important to continue the collaboration that has been carried out during the workshops, through our **personal engagement**, working collaboratively, helping the organizations of the stakeholders to think "cross-border" in each initiative. In this way the strategy can really mobilize a critical mass of stakeholders and generate a significant impact.

- The strategy aims to continue the workshop process in order to allow **to identify a series of steps which are actionable**, **and which can be implemented through the personal engagement of the participants, and our organizations. iCON Partners are in fact key SME support agencies that can accelerate** and greater cross-border innovation and competitiveness development.

"**Flagship Pilot Projects**" are "high visibility/high impact" initiatives that will demonstrate that **high-level cross-border co-operation is feasible and very fruitful. By disseminating the result of Flagship Projects the strategy will allow to inspire others to undertake other initiatives. This will lead to a self-sustaining, self - amplifying wave of change that will have significant impact.**

The "Action Workshops" are a qualitative bottom up approach which is complementary to systematic, in depth quantitative analysis that will be carried out by economists engaged by the iCON project. Extensive document and literature search, company database analysis, economic modeling etc (which are being carried out within other work packages of the iCON project) is essential to design a long-term " top down" cross-border cooperation strategy.

The outline strategy will thus allow to design and propose ambitious initiatives, policies leading to actionable future "EuroRegional" legislation that will work because it will be based upon field-validated assumptions and tests.

1.1. Strategic Vision for innovation and competitiveness

The strategy is intended to contribute to build a Growing, Vital Community Without Borders - helping entrepreneurs and SMEs succeed in the cross border area succeed through high-level joint collaboration and innovation.

By working together, iCON Partners will become the “Keystone[1]” of a stronger business ecosystem[2] encompassing both Slovenia and Italy.

By selecting **specific priority sectors**, through the Workshops, iCON Partners will aim to increase ecosystem productivity by:

- simplifying the complex task of **connecting network participants to one another** or by **making the creation of new products and services more efficient**.
- **provide a reliable point of reference** that helps participants respond to new and uncertain conditions.
- consistently **incorporate technological innovations**
- encourage **ecosystem niche creation by offering opportunities for collaborative entrepreneurship**.

1.2. Mission of the Flagship Projects

A number of flagship projects have been selected by the participants in order to help them become more innovative and thus to bring about the following advantages to participating entrepreneurs and SMEs:

- increased sales
- reduced costs
- Improved access to financial resources for investments.

1.3.Strategic values

Key strategic values to be adopted include:

- **“Personal Commitment”**
- **“Think Young”** – systematically involve young people in economic development process,

[1] M. Iansiti and R. Levien “Strategy as Ecology – The Keystone Advantage “, Harvard University Press 2004

[2] A **business ecosystem consists** of all the companies, organizations or groups of people that directly or indirectly affect the company. Good examples include suppliers, distributors, financiers, technology providers, regulatory agencies, complementary product manufacturers, outsourcing companies, competitors and even customers.

- “**Green Economy**” – exploit the demand for environmentally sustainable products and services
- “**Value Creation**” – only self sustainable initiatives attracting private resources and private investment can be successfully implemented.

2. The Main Strategy Elements

The strategy provides a framework that will identify and structure common initiatives to improve SMEs collaboration in the following areas:

- **innovation,**
- **competitiveness**

Strategy making it is their continuous and ongoing process, which main elements include the following :

- **Identify priority sectors (flagship projects candidates)**
- **Identify resources of excellence to be brought on board as well as best practices to be utilised and amplified within the flagship projects**

These elements are closely intertwined and not separated. The strategic emphasis is still activate a common work which will generating time a series of structured flagship projects to be implemented by mobilizing additional private and public resources.

2.1 Support to innovation in the cross-border area

It is appropriate to first **clarify some important concepts about innovation**. **Innovation** traditionally has been thought of in terms of research and development and expressed in terms such as the size of the investment in research, or of the number of students and the skills which they acquired.

In the economy of the past,

- making available such resources was enough to "automatically" create new products and new services.
- innovation was essentially carried out by larger firms - corporations were vertically integrated and large enough to possess all the necessary skills that where are required.
- ideas in the lab landed to market only after completion of lengthy phases (first prototype, industrialization and market testing).

In today's global market economies, this is no longer the case. Innovation is a must also for smaller firms which otherwise expose themselves to pure cost-based competition from cheaper Asian companies. There are myriads of inventions and scientific discoveries available, but innovation only takes place when research successfully intersects the market and creates value for customers. Innovation implies new business models and new business processes.

The strategy to support cross-border SMEs to innovate has the following objectives:

- **Develop and validate new products are being developed with Lead Users / Lead Customers**. Lead users are users of a product that currently experience needs still unknown to the public and who also benefit greatly if they obtain a solution to these needs. By bringing together ideas coming SMEs and initial Customers, the concepts are immediately validated through a strongly iterative (trial and error) process, whereby close collaboration is essential.
- **Identify Partners for Collaborative Entrepreneurship / Open Innovation[3] initiatives**. Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology. The central idea behind open innovation is that in a world of widely distributed knowledge, companies cannot afford to rely entirely on their own research, but should instead buy or license processes or inventions (i.e. patents) from other companies. In addition, internal inventions not being used in a firm's business should be taken outside the company (e.g., through licensing, joint ventures, spin-offs)
- **Access to Risk Capital**. A number of equity providers have been set up in the cross – border area. Several of them specifically target early stage highly innovative companies
- **Strengthening the Innovation Ecosystem. The iCON partners have the possibility to improve the, through networking and collaboration, identify and launch new high level collaboration initiatives between Universities, research centres, financial organizations, etc.** In particular, the strategic process can help identify adequate policies, education programmes, material and immaterial infrastructure which are conducive to the faster development of new products, new processes, and new services.

This requires also the presence of “Keystone” intermediary organisations that effectively help entrepreneurs to identify and mobilize the necessary private and public resources.

2.2 Support to competitiveness through innovation and entrepreneurship.

In the old economy, where manufacturing was dominant in the economic structure, entrepreneurship was essentially linked to crafts. The typical way to start as an

[3] Chesbrough, H.W. (2003). Open Innovation: The new imperative for creating and profiting from technology.

entrepreneur was to learn a manufacturing skill, and entrepreneurs were typically persons with medium to low educational levels. In this older scenario, regional competitiveness but was essentially determined by the presence of large labour-intensive companies.

In the new global economy, regional competitiveness was essentially determined by the strengths and robustness of the entrepreneurial spirit. Regional competitiveness is therefore determined by the presence of an Ecosystem which elements include the training, support organisations, policies, fiscal and government bureaucracy, and so on that allow fast enterprise creation and fast growth. To achieve this, SMEs must possess the capacity to organize work, marketing and finance internationally.

The key strategic elements that the iCON partners and other cross the regional stakeholders need to concentrate upon include the following :

- **Set up clustering projects**. Within targeted specific sectors, SME clustering seeks to improve business performance through facilitating networking and the instilling of collaborative attitudes among firms and with support organisations. The cluster approach thus tries to make firms more aware of how, through working together and working with regional agencies, they can improve business performance, and contribute to regional development.
- **Access to skilled human resources**,
- **Access to high quality external service providers**
- **Access to financial resources – including public incentives** - that are made available in ways that are as straightforward and as fast as possible. Financial resources must also be integrated to a rigorous planning process which allows to assess the risk of new ventures.
- **Access to proper physical infrastructure** - in the form of incubators or enterprise zones -were new companies can start at a minimum cost while gaining maximum visibility on the market.

2.3 Support to competitiveness through SME internationalization

In the past, several SMEs were essentially focused on national markets; most companies started just on local markets. This is no longer a true; high added value companies (including agricultural and food manufacturing SMEs) are required to have a strongly international vision envisaging global markets.

INFORMEST, a key iCON Partner offers important services that help SMEs to internationalize. Additional international networking services are available at other iCON Partners, as well as at private specialized service companies. The geographical scope of these service is the EU, but also extends to the rest of the world, including namely China, India, the Russian Federation, Brazil, etc..

The it is key to support SMEs to internationalize by helping to:

- **participate to EU projects on entrepreneurship and innovation**
- **analyze international markets**
- **identify local partners**
- **access to soft-landing infrastructure service**
- **participate to foreign exhibitions**
- **access to export-promotion and joint-venture financing instruments**

Another important internationalization aspect is the **attraction of Foreign Direct Investment**[4].

By adding the respective points of strengths and specificities of Slovenia and Italy, and promoting itself as an area "without borders", the cross border area can become more attractive towards medium and larger international corporations.

It is recommended to support FDI attraction by undertaking initiatives such as :

- prepare a joint FDI marketing strategy **identifying specific sectors** where FDI is very active (i.e. logistics, tourism, biotechnology, nanotechnology, telecommunications, etc.);
- combine factors of attractiveness (e.g. human resources, existing base of SME suppliers, logistics and industrial infrastructure, cost of energy, public incentives)
- undertake joint specific actions (participation to FDI events, etc.).

[4] see also "Recommendations for a joint cross-border international marketing strategy"

3 Choosing Priority Cooperation Opportunity Sectors

During the first "ACTION Workshop" on Entrepreneurship and Innovation" (Koper Dec. 9, 2010), an interactive "Idea generation" phase has taken place involving all participants. The common work has allowed to identify 76 ideas for clustering projects where participants consider that cross-border cooperation appears to be particularly interesting. The attractiveness for cooperation **is based upon the qualitative judgment** of the workshop participants / representatives based upon their direct contacts with leading companies, presence of lead users. The list of the Cooperation Opportunity Ideas is provided in Appendix.

"Cooperation Opportunity Sectors" relate to important and growing markets that can be tapped by SMEs (local, but also external to the region as well as FDI-Foreign Direct Investors) utilizing existing and potential regional resources and strengths. Such Opportunities for cross – border cooperation, currently underdeveloped, have been preliminarily considered to have high foreseeable economic relevance when considering the Slovenian and Italian cross-border area as a whole.

3.1 Ideas and priorities identified during the workshop

Immediately after the idea generation phase, ideas were PRELIMINARILY grouped into the following 15 "clusters" (in brackets the number of sub-sectors is indicated):

1. GREEN HOMES (9)
2. AUTOMOTIVE & AVIONICS (12)
3. METAL INDUSTRY & NEW MATERIALS (7)
4. GAMING TECHNOLOGY (0)
5. PROCESS AUTOMATION (4)
6. ICT, TELECOM & PROFESS ELECTRONICS (8)
7. LOGISTICS – PORTS & TRANSPORT (14)
8. RURAL TOURISM (16)
9. MEDICAL SERVICES & EQUIPMENT (6)
10. SPORT & LEISURE EQUIPMENT (5)
11. NAUTICS + Yachting (Tech+Services) (9)
12. WOOD + FURNITURE (9)
13. BIG SCIENCE (ie. Suppliers to Synchrotron) (3)
14. PRINTING (2)
15. WATER TREATMENT (1)

After voting the following 6 clusters were selected as priorities for follow up actions:

I. RURAL TOURISM AND BIO – AGRO FOOD

II. LOGISTICS – PORTS & TRANSPORT
III. AUTOMOTIVE & AVIONICS
IV. GREEN HOMES / GREEN ECONOMY
V. NAUTICS + Yachting (Tech+Services)
VI. WOOD + FURNITURE
VII. METAL INDUSTRY & NEW MATERIALS

3.2 Final selection of priorities

The final selection of the "Cooperation Opportunity Areas" will result from an additional in-depth analysis and discussion aiming to assess the viability of "Flagship Pilot Projects" ("high visibility/high impact" initiatives that will demonstrate high-level cross-border co-operation).

Selection criteria to be taken into consideration **may** include the following:

- sector indicated as strategic at the EU level;
- presence of a strong "regional ecosystem" (e.g. Universities, research centres, service organizations, financial supports, etc.)
- personal contact with leading entrepreneurs who can be expected to be actively committed in the flagship project
- size and growth of other potential market
- potential for outstanding value and performance of the flagship project
- availability of public funding for pilot actions
- possibility to mobilise private investors

have been identified should now be prioritized and examined in depth in order to identify leading companies and leading users, leading "clusters" where cross-border cooperation can be activated or accelerated with relative ease. A key activity to foster cooperation will be the "Cooperation Events" that will be organized under iCON.

On the basis of identified clusters a list of potential areas of cooperation is going to be made, results are going to be validated using a statistical tool.

4 Strategy Components and Steps

In order to proceed to the next level of Action, the following steps will be undertaken, **for each of the retained sectors:**

1. **Make a list of the Stakeholders to be activated**. Following the definition of "Business Ecosystem", stakeholders to be identified include all the companies, organizations or groups of people that directly or indirectly affect the chosen sector; include:

    - Lead Users and customers
    - Directly Involved SMEs
    - Indirectly involved SMEs (suppliers, distributors, competitors, outsourcing and complementary product/service manufacturers)
    - Providers of specialized services (e.g. marketing, legal, EU programmes, etc.)
    - providers of technology and R&D,
    - Providers of finance: credit, public incentives, equity
    - education and training institutions, University departments
    - involved Agencies: regulatory and networking agencies, Government and Regional Development Agencies, Chamber of Commerce, Chamber of Crafts

2 **Identify a preliminary SWOT matrix for each of the candidate sectors, identifying also hypothesis of possible initiatives (see preliminary examples)**

3 **Identify and interview specific "best practices" available in the Cross Border Area.** Having available a "best practice" means that iCON can build upon the existing experience and available team and motivation in order to amplify and extend existing results. The presentation of some of the sectoral "best practices" will be carried out during the "Action Workshop No.2". The following aspects can be preliminarily assessed through interviews with key personnel involved in "Best Practices":

    (a) need assessment;
    (b) availability of internal technical skills and other resources – and possibility to use them in the demonstration project;
    (c) availability of financial resources to fund the demonstration project;
    (d) networking with similar users and partners,
    (e) education issues,
    (f) access to international markets.

4 **Make available “in-**depth” data, as provided through the research carried out in order to set up the iCON KMS – Knowledge Management System and structure the Flagship Project.

5 **Assess the interest of additional potential Partner Institutions** to be involved in the Flagship Project by organizing dedicated Events and personal interviews.

4.1 CANDIDATE SECTOR: “GREEN HOMES” - Eco-BUILDING HOUSING RENOVATION

<table>
<tr><th colspan="2">SWOT Innovation & Eco innovation</th></tr>
<tr><td>strengths</td><td>weaknesses</td></tr>
<tr><td>The Construction Sector is particularly relevant in the region with several small companies / crafts offering construction, architectural and engineering services covering all needs from design to installation to servicing.
Several SMEs are engaged in the production of systems and components for the building industry, including heating, ventilation and insulation.
Banks offer subsidized credit-lines to both private home-owners and SMEs for energy saving investments (e.g. PV systems, heat pumps, etc.)</td><td>The current market crisis is affecting this sector in particular. Urgent new market opportunities should be identified.
The general public, although sensitive to environmental protection, still is not investing in home renovation for energy efficiency
Services for Energy Certification of buildings are not regionally available.</td></tr>
<tr><td>opportunities</td><td>threats</td></tr>
<tr><td>set up an internal – external process to systematically involve external SMEs to develop eco-innovation solutions, especially that related to resource efficiency.
Launch a joint project with Lead Users (e.g. Municipalities, Chambers of Commerce, etc.) to demonstrate ADVANCED SOLUTIONS and savings in building operation. SMEs having successfully proven innovations working with Lead Users can then proceed to sell the same solutions onto wider markets.</td><td>Without urgent action, the building and construction sector may generate significant unemployment in the short term</td></tr>
</table>

• Adapt the current Guarantee Schemes available in the region to facilitate investments in new equipment by SMEs offering eco-innovative renovation services • Increase the use of ICT in energy effiecient and "intelligent" buildings / Warehouses. • Develop a 'life-cycle' perspective to eco-innovation encompassing novel or significantly improved solutions introduced at any stage of the product or service life ('from cradle to grave') in all sectors	
NEEDS/ INTERVENTIONS NECESSITIES	
.1 Awareness raising and demonstration measures for Eco-Building renovation measures introduced jointly by public and private sector to demonstrate economic viability of eco-investments in housing .2 launch an eco-innovation programme for URBAN ECO-INNOVATION – Including promotion, training, financial packages, certification, etc.	

Appendix

Ideas for possible project initiatives / clusters retained during the workshop held in Koper on Dec. 9, 2010.

1. RURAL TOURISM AND BIO – AGRO FOOD

1. TOURIMS Centri in via Opicina – San Giacomo – possibility to transfer the practice to KP
2. Common promotion of larger areas: Opicina, Sezana, Gorizia – Nova Gorica
3. Thermal Cluster
4. RURAL TOURISM Sirk – Subida, Planota Okusi Vipavske Doline – Kras 1000 Okusov
5. Vinski hrami, Osmice, Traditional events between St Martin day and Christmas
6. Green Tourism: Soca – Isonzo, Kras – Carso, Brda – Collio, Debeli Rtic, Coast, Strunjan
7. Bike + Canal Ship

8. Parenzana
9. Farm Tourism
10. Common promotion of larger areas: Opicina, Sezana, Gorizia – Nova Gorica
11. biological treatments to substitute chemicals in agriculture
12. Typical Agricultural Products (wine, fruit, cheese, vegetables, meat, fish)
13. Bio Products linked to tourism Brda – Collio, Kras – Carso
14. Ice Cream industry (Veneto)
15. Wine Olive Oil producers Agrofood sector
16. Trieste coffee cluster
17. Tourism events, Wine & food festivals, adrenalin sport events, music events
18. Prosecco (Wine cluster) Okusi Krasa -- Sapori del Carso
19. Bio Food : Fructal , Mlinotest Bimed, Inconi ? Pandoro BAULI
20. Ham Distretto San Daniele – Kraski prsut

2. LOGISITICS PORTS AND TRANSPORT

21. PORT OF KOPER, GATIS- CO ? HARPHA SEA KOPER, GARMIN, MAGELLAN,
22. INTELLIGENT, AUTOMATED WAREHOUSES LUKA KOPER
23. LOGISTICS AS TRANSVERSAL SECTOR FOR ALL MANUFACTURING
24. Improvement of energy efficiency for all infrastructures
25. Integrated logistics among ports of Northern Adriatic beginning with Trieste, KP
26. Logistics, Transports, Services, Warehouses
27. Ports as Lead Users

3. AUTOMOTIVE AND AVIONICS

28. Solar Panels for aeronautics Applications – METEOR – Drones
29. Automated vehicles (without drivers) Harpha Sea, Robotina, Pick & Place doo
30. Spin-offs and spill-overs from aeronautics – distretto meccanica di precisione (Padova) – Equipment for Agriculture
31. Ultra-light aeroplanes (Pipistrel) Renewable Energies

4. **GREEN ECONOMY**

32. RENEWAble energy, Solar Lens Panels HIDRIA, BISOL
33. THERMAL SOLAR
34. EOLIC SYSTEMS SEAWAY
35. RIGASSIFICATORE ?
36. SOLAR PANELS ROBOTINA BISOL
37. DOMOTICS CLUSTER – ELECTROLUX
38. BIO BUILDINGS – GREEN HOMES GO. ENV. ENERGY AGENCY TREVISO, APE AGENZIA ENERGIA FVG, AGEMONT
39. UTILITIES AS LEAD USERS
40. EFFICIENT HEATING OF HOMES & Buildings
41. Innovation in serramenti
42. New Synthetic Tissues for covering floors (AQUAFIL) deposit of nylon recycle In Ajdovscina LEAD USER
43. ENERGY management (Robotina)
44. Involvement of regional public bodies as customers (rules on public procurement)
45. Eco building cluster
46. Municipalities as Lead Users

5. **SHIPBUILDING AND YACHT MANUFACTURING**

47. Naval Cluster – Ditenave Fincantieri Garmin Navigator
48. Shipbuilding, nautics Sails production internal furniture – good opportunity for the whole eligible area (Supreme (IZ) – sails production)
49. Nautical furniture and wood

6. **WOOD FURINTURE**

50. Wood Furniture (chairs- Manzano, Pordenone) + Design Office
51. Furniture Gonzaga, Damles Excel, Duka, Lipa
52. Distretto Montagnana Cerea Del Mobile
53. Forest Industry

7. METAL INDUSTRY & NEW MATERIALS

54. Light metal working workshops enoop, metal design, vzmeti bacar, skrl, ROBOTICS, Lama Dekani, Lipro, “Meccatronica” cluster

55. Knives and Blades (district of Maniago)

8. SPORTS AND LEASURE EQUIPMENT

56. Need of events to support creation of cross border itineraries

57. Fireworks cluster Rovigo

58. Textile and Fashion

9. BIOMEDICAL CLUSTER

59. BIO Health center

60. Bio Medicine (BIA Separations) Bio Health Center (LYDDA WEAR) Handicap Wear

61. Medical Equipment, Health Equipment Health Robotics, Mathitec,

62. Ital TBS Services and Software for Healthcare

63. BIOTECH – Biaseparations (high-tech SME Ajdovscina)

64. Private Public Partnerships SLO Hospitals (CB ?)

65. Facility Management services

10. TELECOM AND PROFESSIONAL ELECTRONICS INSTRUMENTATION

66. TELECOM MODULES (NEON SEVEN, DAI TELECOM, ENTEOS, ONDA COMMUNICATIONS (PN)

67. PROFESSIONAL ELECTRONICS AMARO Electronics nanocomputers Well trained young people, large markets

68. Process automation (goap, Systec) – increase may generate improvements in competitiveness quality and cost savings – lean manufacturing.

69. Big Science Instrumentation Labs, KYMA, Sincrotrone, Institut Josef Stefan, Kemiski Institut, NIB

70. ADVANCED INTERNET SERVICES – MIX – BROADBAND INTERNET

71. LED Lightening

72. Gaming technologies HIT spin-offs and Know- How Elektroncek?, Gold Club

73. 3D TV and multimedia VDA MULTIMEDIA PN

11. PRINTING

74. Leading Slovenian companies: Sedmak, Trio, SKRLU (14)

12. WATER TREATMENT AND LAND RECLAMATION

75. Leading Slovenian companies: Kraski Zidar, Avames (member of Primorski Tech Park)

76. Lead Users: EZIT and Torviscosa Chemical Site as LEAD USERS