Final Peer Review Report

PROVINCE OF BOLOGNA
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Executive Summary</strong></td>
</tr>
<tr>
<td><strong>Summary</strong></td>
</tr>
<tr>
<td><strong>Section 0 – Introduction</strong></td>
</tr>
<tr>
<td>(a) Short introduction to the SMART Europe Project</td>
</tr>
<tr>
<td>(b) Short introduction to the Peer Review methodology</td>
</tr>
<tr>
<td><strong>Section 1: Overview</strong></td>
</tr>
<tr>
<td>(a) Short description of the Host Region, general overview, economic profile</td>
</tr>
<tr>
<td>(b) Description of Peer Review focus (why it was chosen, specific questions and expected outputs of the Host Region)</td>
</tr>
<tr>
<td><strong>Section 2: Regional Strategy</strong></td>
</tr>
<tr>
<td>(a) Key Findings</td>
</tr>
<tr>
<td>(b) Recommendations</td>
</tr>
<tr>
<td><strong>Section 3: Education and Human Resources</strong></td>
</tr>
<tr>
<td>(a) Key Findings</td>
</tr>
<tr>
<td>(b) Recommendations</td>
</tr>
<tr>
<td><strong>Section 4: Innovative Environment</strong></td>
</tr>
<tr>
<td>(a) Key Findings</td>
</tr>
<tr>
<td>(b) Recommendations</td>
</tr>
<tr>
<td><strong>Section 5: Partnership</strong></td>
</tr>
<tr>
<td>(a) Key Findings</td>
</tr>
<tr>
<td>(b) Recommendations</td>
</tr>
<tr>
<td><strong>Section 6: Sustainability of the jobs created by the innovative sectors</strong></td>
</tr>
<tr>
<td>(a) Key Findings</td>
</tr>
<tr>
<td>(b) Recommendations</td>
</tr>
<tr>
<td><strong>Section 7: Conclusions</strong></td>
</tr>
</tbody>
</table>
Executive Summary

Our Smart Europe partners from the Baltic Institute of Finland in Tampere, from the Patras Science Park in Greece and from the nearby Veneto (Veneto Region and Veneto Innovazione) came to investigate on our territory the good practices related to the creation of new innovative and creative enterprises. During the Peer Week Review our peers have looked for the "anchors of innovation" that had potentials to become practices to be transferred and shared at European level, impacting businesses and local public policies with the overall objective to increase jobs. During the visit, the peers have had the chance to meet and discuss with representatives of public and private institutions, incubators, initiatives supporting startups, trade unions and business owners of innovative and creative companies who have distinguished themselves in the local business environment or who have gained recognitions and awards.

As the SWOT analysis showed, the peers have had the opportunity to see how our area is plugged into a fertile context for the development of creativity and the environment itself is good for the presence of famous International brands, strong manufacturing industry, good quality of products, and ability potentials to combine the traditional industry with new innovative tools. In addition to this, it has been also highlighted that there is a strong entrepreneurial attitude and culture as well as a strong and famous University: it is precisely among these two factors that emerges a weakness, the potential of our environment is still untapped.

Following the visit, as the weak points are concerned, the gap between competences offered and requested, the heavy bureaucratic attitude and the overlapping of tasks among Organizations, the lack of openness and interactions between different sectors (SMEs and University), the lack of ICT and managerial skills in SMEs and public sector and especially the difficulty in transforming creativity into businesses have clearly emerged. In addition to these, there are also threats deriving from the inability to follow the technological evolution, the unemployment rates in young people, who bring innovative ideas, and a common characteristic to all Europe is the uncertainty of the global economic situation.

However it must be said that it was very much appreciated the coordination of the innovative initiatives among all stakeholders interviewed during the Peer Week as well as the strong existing networks and partnerships. To create a favourable environment for the development of creativity are definitely relevant all elements deriving from the University including the creation of research spin-off, of dedicated structures and of open innovation methods that support the flow of people (such as the Sala Borsa). It should further exploit the theme of creativity as an engine for innovation and, consequently, for the creation of new jobs, even trying to focus on the different kind of business needs, differentiating competences and training. Our peers have also noted, what is at a very heart of
our provincial administrators: the power of the brand Bologna. This confirmed the usefulness of efforts carried out so far to achieve this result.

In conclusion, the results of the Peer Week and the developments of recent times can lead us to think that we are on the right track to think about both a potential follow-up of this project and also to plan strategies and policies for the development of this area. Our environment is presently facing a deep evolution phase and never as in this specific moment the creative and innovative enterprises are a field in which it is worth investing.

Summary

The Peer Review Week in Bologna revealed many findings that advocate for the existence of a dynamic creative and innovative environment with many powerful institutions and firms, networks and partnerships, entrepreneurial attitude and multilevel coordinated actions for boosting job-creation.

However, the lack of openness, multi-sectoral and multi-disciplinary cooperation, the inability to transform creativity into business, the gap between competences offered and requested and the old roots and attitudes of this environment emerged as weaknesses. These realities in addition to several warnings stemming from the global uncertain economic environment, with most important that of increased young unemployment, threaten the great potential of the Region that was found in the education, research and societal impact of the University, in the creative sector as a field for boosting innovation, in the physical infrastructure as a centre of hosting open innovation methods, in the dynamic branding of Bologna.

To manage this situation several recommendations were made based on the findings and peers experience of relative good practices from their regions. In the direction of regional strategy the Region should reorganize its resources and overlapping tasks and create a systemic view of the innovative environment, specify and differentiate strategy for the creative sectors, make and visualize a regional operational model, measure the innovation system by using foresight tools and indicators.

Policy regarding education and human resources issues should be oriented to the empowerment of knowledge and technology transfer mechanisms, to support business emerging from university as well as ICT, managerial and entrepreneurial education and lifelong learning programs.

Innovative environment has to follow a new paradigm towards
openness and access to global knowledge sourcing; organization and visualization of the territorial innovative and creative ecosystem, encouragement of interaction and experimentation, seeking of international opportunities, use of human and technological resources to support new business in industry and the creative sectors are only some recommendations for creating a more effective and competitive innovative environment.

In this environment, the recommended policy is to support partnerships overcoming old attitudes, to exploit the potential of informal networks and to adopt a modern open culture of interaction and cooperation.

Finally, in order to gain sustainability of the jobs created, regional policy is recommended to be focused on the development of flexible mechanisms, able to hold stakeholders together in case of a sudden structural change, as well as on Bologna branding loyalty met mainly in the creative sector, on offer of updated knowledge, skills training and investing on emerging sectors.

Section 0: Introduction

(a) Short introduction to the SMART Europe Project

SMART Europe is based on the concept that smart and targeted regional policies and interventions can be designed to boost the employment directly in the regional innovation-based sectors. With this aim, a consortium of 13 partners, representing 11 EU regions, will exchange policies and instruments for identifying and supporting the main regional economic actors that can generate job opportunities in the innovation based sectors of their economy.

SMART Europe will support decision makers to improve their strategies with the aim of incorporating the creation of employment as an additional key feature of their activities.
(b) Short introduction to the Peer Review methodology

SMART Europe Peer Review Methodology helps regions to improve their policies in boosting employment in the sector of their “innovation anchor”.

The SMART Europe Peer Review Methodology is an adaptation of the peer review methodology of the Assembly of European Regions (AER), developed directly to use it during the SMART Europe project, when assessing different regions’ innovation anchors. The methodology standardizes the relevant aspects that need to be measured, in order to enable experts with different background, to assess the regional situation in an objective way. By this, they will be able to give appropriate recommendations on the field of innovation-based job creation in the host region.

The other important advantage of peer reviews is the selection of experts, who are practitioners in the field of the assessment, which means that the recommendations given by them after the review will be practical and realistic.
Section 1: Overview

(a) Short description of the Host Region, general overview, economic profile.

Bologna is a crossroad of people and ideas. One million people, 88,000 firms, 373,000 employees (1 firm every 10 people) are hosted to metropolitan Bologna while the Region of Emilia-Romagna has population of 4.5 million people (meaning 4 employees to every firm).

It has a dynamic creative and innovative environment hosting many SMEs in cultural and creative sectors as well as in innovative sectors. Many international firms are established in the Region and R&D investments are made by them as well as by the famous University of Bologna, research institutions (three research centres and three incubators, six clusters) and SMEs in a lower degree.

The responsibility for employment and economic development and support of SMEs is on the Province and Region respectively. The number of innovation-based companies created is 6,264 (in 2011) and the jobs created 8,000. Funding comes partly from national resources, but several initiatives such as Business Angels Network, Progetti d’impresa and subsidies from the Chamber of Commerce also support job-creation.

The regional economic environment is characterised by a high GDP per
capita (34.778 €) that is over the national average (around 26.000 €) showing a relative stability overtime. Economic activity in the region falls mainly into the service sector (72%) and the industrial sector (26,8%) that employ workforce respectively.

Unemployment rate is very low (4,7%) compared to the national rate (8,4%) and considering the global economic situation. The overall economic status of the Region is high. However unemployment in young people (18-37) reaches 30,3% and this is a major problem.

(b) Description of Peer Review focus (why it was chosen, specific questions and expected outputs of the Host Region)

The Peer Review focus was on “New Innovative and Creative SMEs”. The specific focus was chosen as it corresponds perfectly to the dynamic environment of the Region as well as to the problem of creation of new jobs, in particular given the high tax rate and the general economic situation.

Pushing companies to innovative high margin sectors could ensure job-creation but this is difficult because of the industrial structure and not sufficient cooperation between industry and research. On the other hand traditional sector is a major asset for the Region and the focus is to innovate in that rather than creating new one. In this framework the recommendation of specific policies for boosting job creation in innovation-based and creative sectors is presented to the Host Region.

Key findings and recommendations of the Peer Review Team refer to regional strategy, education and human resources, the innovative environment, partnership and sustainability of innovation-based jobs and are presented hereby.

Section 2: Regional Strategy

(a) Key Findings

• The strength of the region is in its strong traditions. This can also turn against itself as a stubborn and old-fashioned structures and bureaucracy, and as a lack of dynamism. The strong traditional and entrepreneurial attitude needs to be a modernised and taken to the international markets.

• It seemed as if the strategy was more only on paper and it had not been put into action and practical tasks. Systematic data collection and foresight activities behind the strategy seemed to be missing.

• Implementation plan and monitoring system should be part of the strategy.
• Information and data availability was delivered but more was needed in order to gain a fuller picture. Towards this direction, Digital Agenda is a promising initiative which promotes the availability and openness of data to regional stakeholders.

• Despite many public and private organizations and associations aiming at supporting and boosting innovation and employment, it has been observed that the linkages necessary for the implementation of a regional strategy are lacking. More specifically the following observations sketch an outline of problematic interrelationships between organizations in the region:
  o lack of cross-sectoral approach, especially in traditional sectors and University;
  o organisations dealing with the support to innovation don’t interact among themselves and their tasks are overlapping; and
  o in general, heavy bureaucracy hampers the real exploitation of the offered possibilities and doesn’t permit to implement an integrated strategy.

• The existing strategic ideas seemed to be lacking bold and experimenting interaction in cross-disciplinary environment. The strategy itself should support and enable cross-disciplinary cooperation.

• The area of Bologna – thanks to its peculiar historical tradition and mindset – has a strong entrepreneurial attitude and continually seeks to create a favourable environment for enterprises creation and development. The typical Emilia-Romagna’s style of entrepreneurship – small sizes, hard work, strong links between entrepreneurs, preventive agreements to orientate in business – created an entrepreneurial “culture medium”, that is a shared pre-disposition in the local culture on which citizens and entrepreneurs can naturally rely. Therefore, the young and new entrepreneurs follow a virtuous improvisation in their start-upping, exploiting all the chances they find themselves. Regional strategy should support SMEs to build new business models which enable them to find their place in the global value chains. In the framework of industrial research strategy the region has supported the SMEs in finding investments and employing graduates from technical universities and research centres. The experimentation was good and, resulted in 500 young researchers being employed after the trial period.

• Emilia-Romagna Region has also an overall strategy defined as “Regional Territorial Plan”, focused on R&D and innovation in the welfare field. In the current period, the focus is in the innovative production chains, specifically in: 1) creative enterprises; 2) green economy; 3) innovation in the health system.
The branding of Bologna has not been utilised to its full potential. For example creativity is a specificity of the Bologna area. There is substantial traditional heritage including rich industrial history and lot of new creative potential linked to new areas like media and ICT sectors. University of Bologna has great potential to take part in the branding, based on the history of the last decades (development of an “underground – avant-garde” culture) and the presence (as first in Italy) of the DAMS faculty (e.g. 80000 students and “Discipline delle Arti, della Musica e dello Spettacolo”).

(b) Recommendations

Define the regional innovation policy to cater for the region specific assets and opportunities. There are many differences between regions in their industrial structure, R&D and technology provision, policy initiatives, business service provision, governance structures and the institutional framework. Many of these features provide unique assets that can be capitalised on.

Data is critical in every business. Think about it actively! The changes in operational global business environment are fast. Develop relevant foresight tools. The need to be aware of what happens in areas linked to the regional businesses increases. Monitor the outperformance of your regional innovation system and the knowledge based development of the region constantly by a reliable set of indicators.

Enterprises are competing by the business models, regions are competing by the operations models. How things are done in the region, is a clear competitiveness factor. There must be a common vision approved by all stakeholders and methods to communicate it. What is the “Bologna way” to support new business creation and to accelerate their growth? How do the regional innovation system as a whole, public sector, private sector and the university together act to organise their resources to provide intelligible and well-defined business support services. How do the region share resources and knowledge available? Visualization enables understanding massive amount of information and complex systems.

The efficiency of regional innovation system depends of local capability to organize local resources (knowledge, people, technologies) and competences by the most efficient way. Define the regional innovation system, key actors and their roles and develop it as a system. Analyse, interpret analysis, find out where are gaps and fill them. Take all counter partners like universities to work with.

University is the key element in the regional innovation system in creating human capital, new knowledge, skilled workforce and new enterprises. Strengthen
the efforts towards the employment of students and researchers from University – create a clear and known business pattern at regional level in alternative to the traditional PhD and post-graduate courses. Make this alternative more attractive to graduated students.

Organisations and individuals need to be encouraged to reduce heavy bureaucracy and be awarded for finding new creative ways to support openness and cooperation between organisations. Innovations are created where the information and talent flow are the greatest.

Give voice to entrepreneurs and their associations. Take them into discussions about regional innovation strategy, its implementation and monitoring of results.

If the region decides to make creative industries a focus point of the regional specialisation in the future, they should learn from experiences in this field from other regions. Consider carefully if creative industries could be an innovation anchor in the region in the future?

The regional strategy should overcome the financial barriers in every phase of the innovative activities in the region, from research to business start-ups, their growth and their access to global market. A good example towards this direction is Veneto’s Best Practices, in particular M31 Italia Srl (http://www.m31.com.en), that highlight the use of several integrated financial tools with the requirement for the Managing Bodies to add an equal amount of private funds to the public provision.

The regional authority should have as their strategic priority a fruitful cooperation between public and private sectors. The European Commission encourages public sector players to use innovations in the public procurement. This policy is the core of demand and user driven innovation activities in the regions. This requires a lot of new ways of thinking and development of working methods in public sector organisations. This policy targets towards new lead markets and improving employment and regional welfare.

Section 3: Education and Human Resources

(a) Key Findings

- Inefficient utilisation of new knowledge and academic expertise within the education system to support growth, new business model development and internationalisation of existing companies. The level of ambition in the local companies regarding the needs in the international market seems to be low. Awareness rising is needed.
University is one of the main players in Bologna. The University has all the resources to support the creation of new enterprises, for example in university spin-offs. At the same time, however, the university itself seems to be less proactive to the needs of potential new entrepreneurs and highly educated workforce coming from its degree courses. There is no evident technology transfer policy or innovation policy to be seen at the university. The university technological transfer offices don’t work as they should and the basic support the university has given until now was the provisions of labs and a partial help in the work related to patents.

The University should fulfil the gap between the traditional academic sphere and the implementation of the subjects that are taught. For example, there aren’t courses of marketing in the traditional scientific curricula, only after.

There is a gap between competences offered and requested in companies, especially ICT, language and managerial skills in SMEs and public sector.

In an attempt to get closer to market needs there are signs of cooperation between University and big companies of the region for the design of a new academic course (Industrial Design). However, business-oriented training is reactive and indirect, offered by Aster (the consortium of universities and other entities), Spinner or Alma Mater Foundation.

There is not a clear strategy for lifelong learning that is critical in a changing environment. There is a lack of coordination and overlapping of adult training programmes between stakeholders.

**(b) Recommendations**

The policy recommendations may be summarized to four main goals:

1) **Empowerment of knowledge and technology transfer mechanisms**

Firms need to execute more and more research and development to build new business models in order to take their part in the global value chains. University could provide help with this.

   o Increasing global competition requires more and more intensive cooperation practices between private sector and academic world. Especially SMEs need more active cooperation with the university in knowledge development as well as in updating education and studies focused on competence needs. University should make visible its technology transfer activities and highlight this in its strategy.
Could university and public sector together have a role in promoting the adoption of new technology in the region?

2) **Support for business emerging from university research and students**

- Need for comprehensive spin-off acceleration services to the university to secure a fast start and growing business has been identified. This should be visualised as a process.

3) **Develop strategies for entrepreneurship education**

- Entrepreneurial attitude and long tradition of entrepreneurship already exist in the region. This is something very valuable to make good use of also in the future. This should be supported by all methods. Create cooperation practices with university to upgrade the knowledge base of local firms.

- Increase the ICT, language and managerial skills of local SMEs and public sector. Create intermediary practices that enable local small firms to connect with global economy and create more business and growth opportunities.

4) **Do foresight activities together with educational institutions, employment, authorities and companies on future competence need of the employees.**

Based on the knowledge promote vocational training and other lifelong learning programmes directed to employees of the companies and public sector. Link them with their performance. Maybe the old saying “you cannot teach an old dog new tricks” is not valid for this case.

### Section 4: Innovative Environment

**(a) Key Findings**

- There are networks and partnership, coordinated innovation initiatives and programmes but no user driven and open innovation tools used or activities done. Nothing forces the regional players to cross boarders of sectors and different knowledge, and organise multidisciplinary processes in which diverse problems are solved by combining different knowledge by unusual way.

- There is a strong famous university and its potential (education, research and societal impact) which eventually could be used more efficiently in
order to solve today’s important societal problems and thus create new business in the surrounding society.

- There is no systematic way of supporting spin-offs emerging from university.

- Strong entrepreneurial attitude and culture and hardworking disposition remain in the region, but companies are old fashioned and not adapting new business models in order to take their position in the new global division of work. They are not able to follow the new paradigm.

- The region is famous for its international brands (Ducati, Lamborghini, Segafredo etc) but the territory is mainly characterised by SMEs. How do the SMEs in the region update their knowledge base and secure the ability to produce product and services which links them to the ecosystem of the regional large companies?

- Inability to follow technological evolution can lead to backwardness. Ability to utilise modern ICT technology and internet based systems can significantly increase the volume of the regional economy.

- There are numbers of entrepreneurs and companies but the level of ambition to enter into foreign markets seems low.

- Existence of a favourable environment for creative industries. One of the specificity of the Bologna’s area is the cultural and creative sector. In the last years, the institutions and organizations have intended these specificities also as economic ones. There is, however, difficulty in transforming creativity into business.

- The concept of “culture” is not that simple: it could mean “traditional heritage” (very strong in the territory) as well as “high-culture”, “avant-garde” and in Bologna “underground” (the 70s). Moreover – given the past university history of the city – Bologna’s underground has almost become another type of “traditional heritage” – and it’s now a fundamental part of the “City Brand”.

- Culture, in the sense of avant-garde, is however difficult to support, because one of the most common traits of it is the “alternative” if not “opposition” to the mainstream culture, including the institutional level. The sector – apart from being unstable by nature – is risky and some key professionals could refuse what they consider “being embedded”.

- The support to “creativity” (a more neutral term) can’t do without a constant dialogue with the realities involved – and in this last period the institutions and associations of Bologna have moved in this direction. At the same time, a strategy is being built up, but with the problems mentioned above. Creativity can be “hubbed”?

- The most important strengths of the “creative environment” in Bologna are: 1) the “mood” of the city, which is also at the base of the brand; 2) the
entrepreneurial attitude of the area is linked with the first point – to be creative generally means to have more ideas; 3) the BAM initiative is somehow an experimental form of intermediation – it’s an enterprise working for the public authorities but dealing with the cultural professionals or potential professionals in the area. In other words, BAM speaks the same language of the creative community and imports the content to the institutional level; 4) the city is well prepared and sensitive to the creative context – which is still considered among the most important aspects of the city by the citizens themselves; 5) unofficial networking – the creative professionals are able to find new ways to carry out their activities without an assured support and are really able to form “spontaneous” networks in the civil society.

• The most critical weaknesses of the “creative environment” are:

  1) rather widespread inability to link the creative environment to a business model;

  2) lack of disposition for compromise – the compromise might be in contrast with the content of their activities (“underground” and “anti-mainstream” philosophy, at least in many cases);

  3) at the opposite end, the “embedding” by the public institutions might hamper the specificity if not the freedom of the creative professionals, erasing the motive of interest (even economic) of their work;

  4) unofficial networking – although it’s a resource (see the previous point), the unofficial networking has a clear limit in the possibility of competing with the public-supported ones and is far from being stable – this resulting in job insecurity or the condemnation to remain in the niche market, if not impossibility to work at all.

• Creativity is shown also in technical-scientific fields (cases of Phenbiox and Spreaker). Many times, it’s the kind creativity of “aiming high” when little support is provided by the University (a “constitutional” support– facilities and resources) or with an important initial support but an “autonomous” follow-up. One of the aims is to make the support and incubation initiatives be known in advance on the efforts made to build one’s own business.

• University of Bologna is definitely a good environment, but it seems to be passive. Some of its resources can be utilized by future entrepreneurs but mainly the initiative is started by the latter, rarely by the “institutional” University itself. AlmaCube is an exception, but it is too much linked to funding (see Demola in Tampere, Finland http://tampere.demola.fi/about where the “matchmaking arena” goes on almost without use of money).
**Recommendations**

Innovation paradigm is changing, and as a consequence the prevailing modes and contents of work as well as innovation procedures and qualities of innovation environments are also changing. Business models are re-engineered by pressure of new global division of work and changes in value chains. User driven innovations, open innovations, cooperation platforms which are based on social media and new internet based tools are features of the new paradigm. The role of global knowledge sourcing (universities, companies, research centres) and an efficient information infrastructure is emphasized. However the technology’s new role will be more important as an enabler.

The policy recommendations, with respect to fostering a more ‘friendly’ entrepreneurial environment, may be summarized into four main goals:

1) Organize local resources and competences by the most efficient way, define the territorial innovation ecosystem, key players and their roles and develop it as a system by analysing data/indicators.

Define gaps and fill them and take all stakeholders to make the system work. Visualize the innovation ecosystem. Strengthen understanding on the system’s mutual dependences and its nature of network. The basic idea in the innovation ecosystem is the repeatability and scalability in business creation. Your task is to build trust and equality.

- Upgrade incubators to start-up accelerators – Note that different sectors need different kind of sparring and coaching. Monitor the performance of the start up accelerators.
- Special focus needed for spin-off creation in the university. Define the process for spin-off creation. Show the spin-offs the right way to operate.
- Use physical infrastructure planning and other open innovation methods to support the flow of people, ideas, knowledge and talent. Give a change for random collisions. People have to go where the knowledge flow is greatest. Companies’ lives should be in a constant learning curve. Innovations will then happen better and faster.

2) Encourage innovation attitude and open-mindedness

- Encourage interaction between different sectors, cross disciplinary experimentations and risk taking – How to do things differently? There is always a better way!
- Use coordinated innovation initiatives and programmes, but cross old structures in everything you do.
Find informal networks and talented individuals and support them to take initiative to start movements.

3) **Find new ways to support industry and creativity**

- Connect local SMEs with global economy by new communication skills and new working methods based on the internet.
- Combine traditional industrial sector to new business models adapted to the new innovation paradigm. Lot of research and development is needed to build new business models. It should become a regular part of every company’s strategy. This is even more important in the future when everything possible will be digitalised.
- University is the biggest new knowledge creation institution in Bologna region. Science is international from its character. Use the potential of the university to create new business in the region. In the Bologna area university seems still to be more or less out of the local business and enterprises. Identify the most potential research and educational areas of the university and facilitate the interaction with the surrounding society and business environment.

4) **Seek international opportunities**

- There is an opportunity to invest more in the foreign market but the ambition to go into foreign markets seems low. More attention needs to be put into seeking international opportunities in foreign value chains, finding one’s value proposition for clients and competitive advantage, and through these to find one’s position in the international value chain and network.

The policy recommendations with respect to creating a favourable Environment for Creative Industries may be summarised in the following:

1) **Decide what kind of “culture” has to be supported:**

- Traditional heritage culture (local history, habits, touristic heritage…); it means overall innovation in the field of touristic services, events and forms of organization.
- New creative entrepreneurship in the cultural sector (artistic and handicraft professionals etc); one of the most specific brands of Bologna – support the innovative products of the creative professionals of the Bologna’s Area.
- Scientific and technical culture and creativity (scientific and technical university innovative spin-offs, hi-tech start ups); the trend at European level – stimulate a relevant entrepreneurial and business side-effect starting from the academic and research competences in scientific fields.
The three fields which support innovation from the creative point of view can’t follow the same “rules”.

The first one is “turned to the past” and doesn’t imply so much the creation of new products but a different way to organize and disseminate the historical brand of Bologna – organizational, communication and service activities.

The second one has problems with the rules, as said above – how to support something that has in its freedom and self-regulation the core of its genuineness?

The third one implies the enhancement and strengthening of the many initiatives dealing – in a sense considered often “full” – with hi-tech innovation, incubation, spin-offing, start-upping, hub creation and with the relation with universities and research centres at public, private and public-private level.

2) In the field of cultural creativity, institutions and organizations should:

- Double the efforts in terms of budget about creativity for a limited period of time, in order to test the chances to match the interest of the professionals of the field and – second step – to select the professionals that they can support or those that accept to be supported. If the feedback is positive, it means that it is possible to overcome the resistance of the cultural context of the area.

- Use precise economic parameters. The results have to be positive – as it has already been shown in the last period, even if still at a small scale – in order to go on with this kind of policy – in other terms, this support “from above” must create new jobs, new production chains, a more stable framework and money.

3) Even if it’s not possible to regulate all the different forms of such a various innovative cultural landscape, this framework will be able to draw the line between the creative sphere that accepts the official support and the creative sphere that refuses it. The institutions and organizations have to deal only with the former.

4) Permit a very high degree of creative freedom in order to avoid the typical official vs. unofficial, mainstream vs. alternative, institutional – anarchist (in the broader sense) contrapositions. Bologna lives both on official and unofficial culture to the same extent and with two “audiences” of the same relevance; supporting only the first one would be counterintuitive and uneconomic. It’s better to avoid as much as possible the binding of the support or funding to content-related observations, reserving them only for situations in which it would be impossible not to do so.

As regards innovative cultural products, the first criterion has to be “quality”, that is the same criterion that leads the other innovative sectors and experiences.
5) *Intermediation entities* (i.e. BAM) can play a critical role in this framework – not a compromise, but rather a middle-ground in which the different realities can be provided for a chance to pursue their goal with the possibility of talk to a prepared interlocutor both in terms of “business” and “content”.

The role of such entities must be definitely enhanced. It will be impossible anyway to regulate this field through and through. That’s the reason why the word “framework” and not “strategy” has been used here – the middle-ground must be a common ground – for those who accept it. But regulating too strictly would restore again the same problem: the defection of a lot of local resources.

Juxtaposing the case of Veneto (and specifically, M31 Italia S.R.L.), one of the main business incubators in the region, starts from a very similar contextual base compared to the Bologna situation i.e. difficulty of the entrepreneurial system to shift from a old “family style” of entrepreneurship to a more advanced, open and innovative one; prevalence of SMEs in the entrepreneurial sector; general entrepreneurial attitude; predominance of the manufacture in the industrial system; good quality of University and research, but lack of links to the entrepreneurial-business world.

However, a specificity of M31 and many incubators in Veneto – a specificity which differentiates it from the Bologna experience – is the priority given to new technologies, ICT and generally the scientific-technological sector. Creativity – despite the cultural allure of the Veneto region, in particular Venice, where however more importance is given to the touristic sector – is less indexed than in Bologna and the strategy follows the scientific-technical culture. So, even if the premises and the strategy are basically very similar, the focus is partially different.

Section 5: Partnership

(a) Key Findings

- There are strong existing partnerships, but structures are stiff and dynamism is missing. Bureaucracy in administration is heavy (e.g. in patents).
- Overlapping of tasks between different organizations is evident. The roles of different organisations in the regional innovation ecosystem are not clear.
- Lack of openness and interaction between different sectors and organisations. They have old traditions, they follow old paths, and interdisciplinary experimentations are missing.
- There is a need to increase innovativeness in the public sector.
• Overestimation of formal planning and importance of finance. There seems to be too much emphasis given on paper plans and assumption that you can only create new ways of working if there is new funding available.

• Existence of “divas” (well-established large firms), which are difficult to cooperate/network with.

• Single initiative directed to creative enterprises (IncrediBOL). There is the aim to network with other initiatives to promote creativity and support cultural and creative local industries.

• Lack of interaction between creative companies.

(b) Recommendations

There seems to be lack of openness, lack of interaction between different sectors, and different organizations. Organisations follow old paths. It is advisable to try to give up old traditions and encourage interaction and cross disciplinary experimentations. Push people from different faculties of the university, firms and public sector to work together. This is important especially at the start of the innovation process.

Increase innovativeness in public sector activities, in service design, and in public procurement. Open innovation processes in public sector are recommended. Try to solve the issue of how to take citizens and local enterprises to the processes in finding solutions to societal challenges. Make the private-public partnership a strategic priority and use competences to support the innovation anchors and boost job-creation in innovative and creative SMEs. For example open public data gives a lot of possibilities to create more public-private cooperation and business opportunities.

Facilitate the interaction and flow of creative ideas and entrepreneurs of the creative sectors by providing spaces and organizing events of creative communication. Organize the dynamism of this interaction by promoting the establishment of partnerships in creative sectors that could support the creation of more innovative ideas. See good examples of innovative business development programmes carried out in other regions or city areas like Creative Tampere programme 2006 – 2011 (http://www.luovatampere.fi/arkisto/).

Exploit unofficial networks taking place in innovative and creative sectors based on user-driven initiatives, cooperation platforms and social media networks (the new paradigm in innovative environment). Their structure and dynamics can be institutionalized to existing partnerships along with a continuous flow of innovation and creativity.

When times are financially tough and there is no funding available, you need to organise the existing resources in a new way to make progress and come up with good results. Development and innovative ideas are not only connected to funding. This is where you need open-minded individuals who are able to try new
ways of cooperation and are able to take risks. It is possible to create successfully working concepts by re-organising existing resources.

Section 6: Sustainability of the jobs created by the innovative sectors

(a) Key Findings

• Unemployment rate among young people is challenging.

• Existence of a regional initiative to prevent migration, which however has not shown clear results yet.

• The branding of Bologna seemed to somewhat be only done halfway. If the idea is to do the branding through the creative sector, it needs to be done comprehensively together with numerous stakeholders, including university.

• The branding of Bologna seems to attract entrepreneurs who want to enter into the creative sector establishing a kind of loyalty and awareness of the value this branding gives to creative firms. The creative sector needs to be able to use innovative ways of thinking and doing to be able to develop and create new jobs as well as maintain them.

• The innovative and creative environment of Bologna (and the physical as well) offers the potential of keeping young entrepreneurs in the region.

(b) Recommendations

Build a model for public and private sector players (municipalities, province, region, ministries, state, EU, university and other educational institutions, companies, etc.) to organise themselves together to get hold of a potential sudden structural change situation (large scale termination, bankruptcy).

This kind of overall approach could then be repeatable and scalable in any similar situation in the future also in other sectors. Creative regional partnership makes it possible to quickly react to the emerging structural change situations. In their totality operations may include organised meetings between redundant and other companies, training and education organized in order to fast renew professional skills and knowledge of redundant, and activities to facilitate new business development, changes of generations, attracting inward investments, etc.

It would be very fruitful for the region to make a pilot project and try to visualize the whole system around one real or potential case.
For example the City of Tampere in Finland has some examples in the past of reacting to structural changes: the basic metal industry was renewed and transformed into automotive industry without losing the whole industry of the region, and also the structural change in the IT sector (mainly reductions at Nokia) have been utilized without losing the capacity of highly skilled people in the region. The Triple helix (public/private/University) in Tampere region has been able to change the latest structural changes into a positive diversity of regional economics.

Similarly, in the past, Patras Science Park (http://psp.org.gr/index.php?lang=en) in Greece managed to exploit a dynamic situation created when a high-tech multinational company exited the country. Many spin-offs were created by former employees and Patras Science Park supported and hosted them contributing this way in the sustainability of innovation-based jobs in the region. These companies are at the moment in the core of regional innovation effort creating a good paradigm for other start-ups on how to sustain and evolve in the region.

Develop mechanisms for monitoring the flow of the entrepreneurial effort, the creation of new and the shutdown of existing companies, to control and optimize a fast compensation of the loss.

Education needs to be close to the market demand, meaning fast renewal of knowledge and skill base in updating and further training (adult training).

Work on with the possibilities arising from emerging sectors in the future like green energy.

Focus on development activities on local assets. SMEs are anchors of economic activities.

In the creative sectors, take advantage of the loyalty of creative firms and their relationship with the branding of Bologna by establishing a large scale business development programme or initiative for creative industries in terms of increasing funds and providing other benefits (e.g. space, networking).

If the region can offer actively working innovations platforms (like Demola in Tampere, Finland http://tampere.demola.fi/about) for students already during their studies and this way employ them or encourage them to start their own businesses, it would make a great addition to what the university can offer. This way the students get experience in solving problems in real business life.
Section 7: Conclusions

During the peer review week the team of external experts from Finland, Veneto Region and Greece, have gained valuable insights of the regional innovation system in Emilia-Romagna.

It has been collectively decided – and also it was a request from the host Region – to give emphasis into five (5) interdependent themes that constitute the cornerstones of successfully creating jobs in innovative and creative SMEs.

Strengths and weaknesses of the Emilia-Romagna innovation system were identified in a multi-dimensional analysis and have been summarized in the context of a SWOT analysis. Further below the main findings and the proposed recommendations are summarized:

Regional Strategy: The findings from both the material provided before the visit and the information obtained during the peer review are the following: (i) too many public and private organizations have overlapping activities in respect of innovation and entrepreneurial activity, (ii) even though there are many organizations in this field, no linkages exist between the triple helix components, (iii) there is a lack of monitoring and evaluation of current activities in this field and (iv) the Province of Bologna wishes to add in its strategy mix the support of creativity and creative industries but this issue remains vague. Recommendations are made aligned and specifically: (i) reduce the number of responsible institutions for innovation and entrepreneurship, (ii) develop linkages between the triple helix components, (iii) monitor and evaluate through the use of statistics implemented policies in the area of innovation and entrepreneurship and promote those that are effective and redirect resources from the ineffective ones, and (iv) set straight the strategic orientation of the region with respect to support for creative industries.

Educational and human resources: The main finding and recommendation at the same time is that the University itself needs to change and reset its position and role in the region. The great potential of the famous University seems to remain unexploited. In addition there is lack of ICT and managerial skills, as well as lack of clearly coordinated strategy for lifelong learning.

Regional innovative environment: As far as the innovative environment is concerned, Bologna is characterized by strong networking, informal partnerships and coordinated initiatives, and good potentials because of the University. Nevertheless, a lack of interdisciplinary
initiatives, ICT and managerial skills in SMEs and the public sectors, experimentations, and openness seems to be the main problem that regional innovative environment faces. With respect to the creative sector, Bologna seems to have all the necessary ingredients with strong traditions as well as long and rich historical background, in order to develop entrepreneurial dynamics and entrepreneurial culture. However, it seems difficult to transform creativity into business. The importance of innovative and creative sectors is acknowledged by different authorities but not the differentiated competences and training that are needed in different sectors. Recommendations with respect to fostering a more ‘friendly’ entrepreneurial environment, may be summarized into four main goals: (i) Organize local resources and competences by the most efficient way, define the territorial innovation ecosystem, key players and their roles and develop it as a system by analysing data/indicators; (ii) Encourage innovation attitude and open-mindedness; (ii) Find new ways to support industry and creativity; (iv) Seek international opportunities. The most important recommendation for creation of a favorable environment for creative industries was that regional authorities need to decide what kind of “culture” has to be supported.

- **Partnerships among stakeholders::** Overall linkages, both at the company and the sectoral level, exist but innovative firms face problems associated with their external environment as well as other problems deriving either from the strategic orientation (i.e. overlapping of tasks) or from the formalities and bureaucratic attitude of institutions.

- **Sustainability of jobs::** Key finding in this field is the power of local environment in maintaining jobs in the innovative and creative sectors, but there is a lack of well coordinated initiatives to prevent migration. Recommendations for improvement are two-fold: (i) Build a model for public and private sector players to organise themselves together to get hold of a potential sudden structural change situation (large scale termination, bankruptcy) and (ii) monitor at a regular basis firm demographics in order to gain a pre-emptive capability of policy intervention.

Having identified the internal and external forces that influence positively or not the innovative terrain and by making our recommendations for boosting regional job-creation, we can close this report by that Bologna can have a thought for the future through exploiting the already existing strengths in a more open and smart perspective on regional policy.