InCompass
Study Visit Patras
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Contents

1 Introduction

An incubator is a type of business support infrastructure that assists new, usually young promising entrepreneurs for a limited period of time to grow from the birth of an idea for an innovative product to a starting business that can stand on its own feet. Most incubators of start-ups in creative industries are public and non-profit organizations. Therefore, it is often taken for granted that they are strongly supported financially by national, regional or local authorities. Besides, it is very common that these authorities provide physical infrastructure (buildings, land) for their establishment. In the past few years since the start of the global financial turmoil and economic slowdown, these business support institutions face growing difficulties for public funding due to austerity policies.

It cannot be taken for granted that public funding of creative incubators will be re-established in the way and to the extent as before the current austerity policies, irrespective of any recovery of public finance. Therefore, the EU-subsidized project InCompass (in full: Financially Sustainable Creative Incubator Units) aims to support the financial sustainability of creative incubator units by developing innovative methods to move away from a financial dependence on public funding. To that aim, it will undertake a program of transnational research and analysis of existing and emerging innovative financial practices by means of study visits to incubators in several partner cities in InCompass. The experiences and conclusions of each visit will be reported to Regional Implementation Groups in all cities and regions that are official partner in the project.

In the next chapter, this report discusses the definition of an incubator and the variety of incubators that can be observed, as well as a possible working definition. Chapter 3 then presents some background information on the main themes of InCompass. These themes are subdivided into three Work Groups. The Chapters 4 and 5 are dedicated to a short characterization of Patras and the Region of Western Greece as the urban and policy context in which the visited incubators are situated, as well as a characterization of these incubators as such. The main part of the report is constituted by the Chapters 6, 7 and 8, each one presenting how the incubators earn income by means that fit in each of the three Work Groups. The report concludes with some final remarks, including a table that overviews the findings from the Chapters 5 to 8 and some indications of opportunities and threats that in the near future could affect financial sustainability.

As few literature references are included, it should be mentioned that Chapter 4 has been written by the team from the Region of Western Greece on the basis of their local expert knowledge. Chapters 5 to 8 are based on the presentations given during the study visit, as well as on notes and sound recordings made during the visit. The remaining chapters present a concise overview of the main findings, the remarks of the external validators, and the results of the thematic seminar.

2 What is an incubator

So far the definition of an incubator used in the project has been rather open and flexible. In general an incubator is considered a breeding place for starting entrepreneurs, and is assumed to consist of three elements:

- a building, access to inexpensive work spaces;
- networks, a community of incubatees as well as external relations;
- support services, for instance mentoring, training, courses, access to affordable loans, accounting and administrative support.

Literature provides more strict definitions. Bergek and Norrman (2008:20) define an incubator in terms of its function as a concept that "… is often used as an overall denomination for organisations that constitute or create a supportive environment that is conductive to the 'hatching' and development of new firms".[1] Likewise, Qian *et al*. (2011:79) define incubation as "… a business support process that accelerates the successful development of start-up and fledging companies by providing entrepreneurs with an array of targeted resources and services".[2] These services include primary services such as shared facilities, administrative services and professional services, including entrepreneurial support as well as networking.[3]

The functional definition of Bergek and Norrman allows for a considerable variety of incubators, many of which are indeed observed during the study visits of InCompass. In the study visit report on Milan we therefore suggested to adopt this as the working definition for the InCompass project. Many of the incubators observed are of the 'ideal type', providing work spaces, networking facilities and entrepreneurial support (e.g. Creative Factory, MINC, Incubadora/Tagus Park). Nonetheless, during the previous study visits several venues have been visited that, within the context of the project, have been considered incubators, but that lack one of the above elements (e.g. Hub Milano, Company Care). This lacking element is not always the same; in general it may be any of these elements.

On the one hand, an incubator may not provide primary services, in particular office space. Qian *et al*. define this as a virtual incubator - or in terms of Bergek and Norrman, we might say an incubator that provides a virtual (i.e. non-physical) supportive environment. Company Care for a large part meets this description, although it also offers work spaces to a small number of its members. On the other hand, some incubators provide office space but no additional support other than e.g. a shared reception desk and share catering and ICT services. These are in fact shared or managed work spaces rather than incubators, although the distinction is not always clearly made (cf. Montgomery, 2007).[4] The LX Factory in Lisbon is an example of this. This type of incubator was not observed in the Patras region.

Furthermore, an important factor is whether an incubator focuses exclusively on start-ups, or on a combination of start-ups and more established firms. Several incubators, such as Media Evolution City and MINC in Malmö, or Corallia in Patras, focus on both groups. In the case an incubator does not focus (anymore) on start-ups, the question is justified whether we should actually speak of an incubator.

[1] Bergek, A. and C. Norrman (2008): Incubator best practice: a framework. Technovation, 28(1-2), pp. 20-28, http://dx.doi.org/10.1016/j.technovation.2007.07.008.
[2] Qian, H., K.E. Haynes and J.D. Riggle (2011): Incubation push or business pull? Investigating the geography of U.S. business incubators. Economic Development Quarterly, 25(1), pp. 79-90, http://dx.doi.org/10.1177/0891242410383275.
[3] Wiggins and Gibson, in: Qian et al. (2011:79).
[4] Montgomery, J. (2007): Creative industry business incubators and managed workspaces: a review of best practice. Planning, Practice & Research, 22(4), pp. 601-617, http://dx.doi.org/10.1080/02697450701770126.

3 Themes of the project

3.1 Introduction

Self-sustainable financial independence of creative incubators from government support depends on their continuous profitability. Taking into account their particular output − trained entrepreneurs in the creative industries and new companies that survived infancy − they invest primarily in programs to coach starting (young) entrepreneurs and to facilitate the growth of their businesses. Fees for obtained services and facilities and the rent of working spaces are the sources of income of creative incubators that first come in mind. However, these payments are in most cases a rather limited and insecure contribution to financing of the incubator. In addition, they also leave potential sources of earnings out of consideration. In order to diversify and extend their sources of income, incubators may also direct to a variety of opportunities to generate income from sources outside the incubator.

InCompass recognizes quite a broad spectrum of possible strategies to generate income that also involves external actors and partners. These strategies are grouped together as commercial contextualisation, social contextualization, and tiers of support, networks and partnerships. For each theme, a Work Group that is composed of partners in InCompass is responsible to collect data during the study visits and model the data as input for the Study Visit Report. Below, the three Work Groups (WGs) are specified into some detail, mainly by means of a few examples of possible ways of earning money that fit into their label. As some of these example show, the three types of income-generating strategies may to some extent overlap in practice.

3.2 Commercial contextualisation (WG1)

The aim of WG1 is to identify commercial ways for creative incubators to become more financially self-sustainable. These are first and foremost the above mentioned fees for services (e.g. workshops, master classes), facilities (from broadband internet to kitchen), and spaces (e.g. working spaces, rehearsal or meeting rooms) by start-ups that participate in the incubation programs. Economies of scale can be achieved by shared use of services, facilities and spaces by these incubatees.

In addition to these fees, there are other commercial ways to earn money. On the one hand, income may be generated from the building and the organisation of the incubator, for instance by

- making use of spaces for developing other activities (e.g. hotel, catering, conference tourism) on own account;
- renting out facilities and unused spaces in the incubator to commercial parties for activities that have little business with the incubation process but are attracted by the building;
- supplying specialised services (e.g. consultancy services) to external companies.
- charging fees to featured supplier companies

Regarding fees and rents, it is recommendable to keep them low for starting companies in an infant stage and increase these gradually with their survival and growth, i.e. with their increasing financial capacity. A well-considered selection of entries to the incubation program lays a favourable foundation for such successful entrepreneurs.

Income might also be generated from ‘alumni’, successful start-ups that have grown and left the incubator. This may be achieved by giving the incubator a share in the start-ups it supports. This model − maybe less known in Europe − stimulates the implementation of strict selection criteria for start-ups that apply for support, since the success of start-ups is directly linked to the future income of the incubator.

3.3 Social contextualization (WG2)

Social activity as labelled in the title of this WG includes mediation activities that connect incubatees both to each other and to partners and actors in the outside world. The main aims of these connections are stimulation of informal learning by exchanging new knowledge, information and best practices, and networking activities that may result in forms of co-creation. This entails stimulating networking between incubatees within the incubator, and between incubatees and potential partners or associates outside the incubator. The internal networks can be built up for example by

- organising social meetings in the incubator (e.g. 'Friday afternoon' and 'eat & meet' get-togethers);
- creating places in the incubator which encourage spontaneous encounters between incubatees.

In addition, networking may also go beyond the incubator itself. This may include

- opening up the incubator, physically and socially, towards the surrounding urban area to discover and possibly advance resident creative talent and creative activities;
- testing creative concepts and products in the surrounding district as a learning stage in concept and product development (open lab). If fees are received for this, social and commercial contextualisation may overlap.

By and large, social contextualization contributes to successful progress of start-up companies in the incubator rather than to a sound financial position of the incubator as an enterprise in itself. Still, the more successful incubatees are, the higher their financial capacity to contribute to covering the expenses of the incubator to provide and maintain services, facilities and spaces.

3.4 Tiers of support, networks and partnerships (WG3)

The topics of interest for WG3 include all sorts of more or less planned and organized forms of support, networks and partnerships, in particular with partners from outside the incubators. These partners can represent a diversity of firms and institutions, including industrial companies, consultancy agencies, banks and insurance companies, and education and knowledge institutes. The contribution of tiers of support to a solid financial position of incubators can be both direct and indirect, i.e. through contributing to the successes of incubatees. These include for instance:

- subsidies and sponsoring, the latter for instance in exchange for exposure as privileged partner on the website or the wall of the incubator;
- contribution to incubation programs by means of tutoring, lecturing and coaching of incubatees in both management and entrepreneurial skills and product development.

Usually, tiers of support, networks and partnerships involve mutual benefits: public and semi-public institutions and private companies enter into such arrangements with incubators in exchange for some types of contributions to their own objectives.

4 Local context

4.1 The Region of Western Greece

The Region of Western Greece (RWG) is located at the north-western part of Peloponnese and the western part of Central Greece (Sterea Ellada). It includes the Prefectures of Achaia, Etoloakarnania and Ileia. It covers 11,350 square kilometres, and it has a population of around 740,000 habitants (7% of the total population in Greece, 2001). The capital of the region is the city of Patras (Πάτρα).

The primary sector is a significant source of employment and commercial activity, but remains uncompetitive due to high costs, low quality products and weaknesses in the field of distribution and merchandising. Manufacturing activity is mainly concentrated in the sectors of food and beverages, clothing, the wood-cork industry, metal products, and construction. The service sector gives an important contribution to the region's GDP. Western Greece is an essential transport hub, characterised by an intense development of international sea transport and trade. The prospects for developing tourism are also favourable. The GDP per capita was, however, only 61% of the EU average in 2009, against 87% for Greece and 115% for Athens.

In 2009 the region produced about 4.6% of the total GDP of the country: 9,500 million out of a total of 200,600 million euros; to put these figures in perspective it has to be noted that almost half of the national GDP is generated in the Athens region. Of the regional GDP, 7% is produced in the primary sector, 12% in the secondary, and 81% in the tertiary sector (including construction). For Greece as a whole this is 3%, 11% and 86% respectively. In terms of employment, 21.5% of jobs in Western Greece are in agriculture, 20.8% in manufacturing and 60.4% in services. In the long run, one observes a shift of the regional economy to the tertiary sector.

Among the strongest points of the RWG are its higher education and research organizations, which have shown important Research and Technology Development (RTD) activities. On various occasions, these have led to successful efforts in manufacturing products and providing services of high quality technology. In addition, Western Greece presents a medium to satisfactory percentage of innovative enterprises. It is important to mention that the RWG achieves a strikingly high percentage in innovative enterprises with regard to services (58.4%). The VIPE (Industrial Zone) Patras and the NAVIPE (Marine and Industrial Zone) of Astakos can constitute cores for further growth of manufacturing activities of the RWG with the essential completion of their infrastructures.

The Region of Western Greece is the third region in Greece regarding RTD spending, after Attica (Athens region) and Crete. This makes it a medium-modest innovator in terms of the Regional Innovation Scorecard (2011). However, the concept of innovation does not generate the expected effects, bearing in mind the infrastructure developed and the amount of money spent on research and innovation in the region. Moreover, Western Greece is one of the important regions of the country in spending on research and innovation as a percentage of GDP, but still lags behind the EU 27. According to the latest available data, the Region of Western Greece spends just 0.68% or € 66.23 million of regional GDP, a percentage which is higher than the national average which is 0.6% or € 1,15 billion when the EU average (EU 27) is 1.82% (Eurostat 2005). This performance is well below the target of Europe 2020 spending on research and innovation (3% of GDP), as well as that of Greece 2020 (2% of GDP).

Western Greece is one of the regions with the highest number of researchers and employees in research and innovation sectors, although as a percentage of total labour force and total employment the number is a bit below the national, and significantly below the EU average. Two thirds of the research activity in Western Greece is conducted by higher education institutions: € 43.5

million from € 66.23 million, or 73.11% (Eurostat, 2005), while the corresponding ratio at the country level is about half (Eurostat, 2007), indicative of the low participation of enterprises. The business sector of the region is responsible for only 29% of the research activity (€ 12.06 million from € 66.23 million, or 18.21%), while the average in the EU 27 exceeds 64%.

Innovation is further stimulated by the Regional Innovation Pole of Western Greece, a union of 47 organizations from the private and public sector (including 30 SMEs), which was created in 2006 and aims to develop, promote and exploit innovation in the Region of Western Greece. It aims in particular to organize and strengthen the ties between research and technological institutions on the one hand, and regional enterprises on the other. It focuses on three thematic sectors: technologies of informatics and communications, safety and technologies of foods, and environmental management and protection. These are constituted as individual research-driven clusters, and the Environmental Management and Protection area includes the water management and water/wastewater treatment sector. These areas constitute the competitive advantage of the Western Greece Region in innovation and business activities.

4.2 The city of Patras

The city of Patras, with a population of 213.984 people (2011) people, is the capital of the Peloponnese region of Western Greece and the Prefecture of Achaia. It is Greece's third largest urban area, located in northern Peloponnese, 215 km west of Athens.

Figure 1: Outskirts of Patras near the Science Park, with the Rio–Antirrio bridge to mainland Greece in the background

In line with the economy of Greece, international sea transportation and commerce are important elements of the economy of the Achaia prefecture. Transportation accounts for 7.2% of gross value added, recognizing the importance of Patras as an important gateway to the markets of the European Union. Activities in agriculture and manufacturing remain of significant importance, although these sectors have declined significantly over the last decades.

The Municipality of Patras is one of the major actors in local economic development. The Municipality along with its partner organizations are directly and indirectly influencing the local economy. One of the most important direct activities of the Municipality is the development of the Small Industry and Handicraft Park, where more than 100 businesses have been established. In addition, several public buildings have been assigned to local businesses, for which a public- private-partnership model has been applied. An example is the Veso Mare complex that includes eight cinema halls, a bowling centre and several bars and restaurants.

The Municipality of Patras is also the main organization managing the licenses and taxes for local retailers and businesses, and consequently has a major impact on the development of these businesses. Activities that play a significant, but more indirect role in the development of the local economy are the involvement of the Municipality in the organization of large-scale events such as a part of the Olympic Games of 2004, the Cultural Capital of Europe 2006 and the World Rhythmic Gymnastics Championship 2007, as well as the annual Summer Festival and the famous Carnival of Patras. The latter attracts hundreds of thousands of visitors. Finally, the Municipality supports organizations such as the Patras Social Enterprise, involved in the support of unemployed people in poor areas of the city, the linkage of unemployed or young people to local businesses, and the support of disadvantaged groups.

4.3 Economic structure of Patras

The primary sector, while having the lowest gross value added in the Prefecture of Achaia, remains important as it provides 20% of total employment, and contributes 11.6% of Gross National Product for the Prefecture. Fishery is important in Achaia. The professional fishing fleet is comprised of 243 vessels for medium and coastal fishing, which are active in the Gulf of Patras, the Gulf of Corinth and the Ionion Sea. Fish, from the local fishing ships or imported from other Greek regions, Europe of non-EU countries, is sold and distributed at the fish-pier of Patras. Here, more than 3,000 tonnes of fish are distributed annually. Agriculture in the coastal area and in Western Achaia is well developed due to the good fertility of the soil, but mainly because of favourable climatic conditions. These enable the production of many agricultural products with export possibilities, e.g. olive oil, wine, citrus and other fruits, and spring potato.

Manufacturing is particularly developed in Achaia, especially in and around Patras. Despite significant de-industrialization, the secondary sector in the Prefecture of Achaia remains the third largest in Greece. It mainly produces food and beverages, textile, clothing, non-metal minerals and machinery and equipment. In addition, the construction sector is a significant industry, accounting for 8.7% of gross value added. Within the Prefecture of Achaia, 17.4% of manufacturing businesses are in sectors that have been developing dynamically during the last 5 years, while 40% are in sectors that are in recession at the national level. As a consequence, the majority of the manufacturing industries in Achaia operate in sectors with little or no current growth potential.

In line with the economy of Greece, international sea transportation and commerce are important elements of the economy of Achaia, recognizing the importance of Patras as an important gateway to the markets of the European Union. In parallel with these sectors, Patras shows a great development in the sectors of health services, education, research and development, as well as in producer services. Nevertheless, analysis of GNP per capita indicates that Western Greece is lagging behind, both on a national and European level.

The Prefecture of Achaia has good potential for the further development of research and technology services and the provision of innovative services to local SMEs, particularly in sectors linked to the University of Patras, the Technological Educational Institute (TEI) of Patras, the Patras InnoHub and

the Patras Science Park. There are also important research centres and institutes such as the Business Innovation Centre of Western Greece and the Computer Technology Institute, which generate knowledge and innovation from which local businesses benefit, particularly in the high-value adding technologies sector.

4.4 The role of the universities in Patras

The city of Patras is an important scientific centre, in particular in the field of technical education. Local universities and research institutes attract more than 30,000 students from other regions in Greece and abroad, who study and live in Patras. The University of Patras offers an exciting and dynamic learning and research environment that provides its students with a range of high level studies. The University consists of four Schools: Natural Sciences, Engineering, Health Sciences and Humanities & Social Sciences. In addition, a School of Economics and Business Administration is currently being established.

The second university in Patras is the Hellenic Open University, the 19th Greek State University. It is the only university that provides distance education in both undergraduate and postgraduate levels via the development and utilization of appropriate learning materials and teaching methods. The university aims to promote scientific research, and to develop distance learning technology and methodology.

The Technological Educational Institute (TEI) of Patras was established in 1972 as a Vocational Technical Education Centre (KATE). In 1983, it became an independent and self-governed institute. Whereas the universities focus on theoretical background and basic research, TEI focuses on the assimilation and application of scientific research and technology. The TEI of Patras is a State Institute. It is a self-governed body, subject to public law and financed from public funds. Operating alongside the two Universities and Technological Educational Institute are research institutes for Academic Computer Technology, Chemical Engineering and High Temperature Chemical Processes and the Industrial Systems Institute.

The presence of these institutions means there is a lot of potential to generate research and technology that can be applied in production processes, and that is responsive to social needs. This is particularly true for specialized sectors such as energy and primary production. Nevertheless, according to data on expenditures for the transition to a knowledge economy and the number of registered patents, the level of innovation in the social and economic sectors is lagging behind when compared to the European average. The average expenditure for research and innovation corresponds to approximately 0.92% of GNP for the Region of Western Greece, while patents granted per million people are 6.1 for Greece, 2.4 for the Region of Western Greece and 109 for the EU 27.[5]

[5] Eurostat, Community Innovation Survey (2012), EE 27 (2011) and EL and WRG (2009).

5 The incubators

5.1 Patras Science Park

Patras Science Park S.A., Stadiou Str. GR-265 04 Rio-Patras, Greece
http://www.psp.org.gr

The Patras Science Park (PSP) is an incubator for start-ups in 'new technology', linked to the University of Patras. It was inspired by Sophia Antipolis near Nice in France.[6] The PSP was established between 1989 and 1992 by the Foundation for Research and Technology Hellas (FORTH/ICE-HT), but the main building of the PSP was completed only in 1998. In 2001 the PSP became a Public Limited Company owned by the Greek state. Nevertheless, a shift of ownership to the regional government of Western Greece is being discussed at the moment.

Figure 2: Location of the incubators and other venues visited (© OpenStreetMap contributors)*

* The Innovation and Technology Transfer Office was not visited, but was presented as a part of the visit to the Innovation Hub.

The PSP aims to support and establish relations with

- small innovative firms at their start-up phase;
- firms with significant technological and scientific background which could exploit research and technology results discovered in academic or research centre labs (spin-offs) or large multinational companies (spin-out);
- business development units;
- cluster initiatives;
- multinational companies or their affiliates with long tradition and focus on innovation, research and technological development.

[6] See http://www.sophia-antipolis.org/.

Today, the PSP accommodates 15 to 20 firms with over 120 employees. Most of them are inventors, adaptors and users of new technologies. The park has a 100% occupation rate. Start-ups are supported in the sectors ICT, pharmaceuticals, renewable or new energy technology, and chemical engineering. These come from Western Greece, but also from Athens and abroad (Germany, US). The PSP and the firms in it participate in over 25 RTD projects, as well as a number of EU co-funded projects.

The strategic target of the PSP is to establish an Innovative Business Area in the Region of West Greece, which will be a development and guidance tool to facilitate new economic, productive and business activities in order to increase innovative economic activity.

Figure 3: Patras Science Park main building (source: presentation at the Patras Science Park)

5.2 Corallia/Patras Innovation Hub

E.O. Kastritsiou 4, 26504 Rio-Patras, Achaia, Greece
http://www.corallia.org/en/services/patras-innovation-hub-innohub.html.

Corallia – the Hellenic Technology Clusters Initiative – is a public entity, aiming at boosting competitiveness, entrepreneurship and innovation. It focuses on knowledge-intensive and exports-oriented technology segments in which Greece has the capacity to build a sustainable innovation ecosystem and can attain a worldwide competitive advantage. Corallia aims to accelerate start-ups and provide services ensuring fast growth and internationalisation of the companies involved. Corallia focuses on four main pillars – cluster facilitation, innovation centre operator, a Youth Entrepreneurship Acceleration Programme (YEAP) and Pan-European Initiatives.. Presently, Corallia operates two innovation centres. One is the Patras Innovation Hub (InnoHub), located on the outskirts of Patras; the other is the InnoCentre in Athens. The Patras Innovation Hub designed and initiated by Corallia was initiated in 2011, and is a Public Private Partnership, co-funded by a local business, the European Regional Development Fund and National Funds.

A serious threat for regions such as Western Greece is an on-going and large scale brain drain due to the severe economic crisis. Therefore it is necessary to offer potential start-ups as an alternative, and an international environment and incentives so they may remain in the region. This is the more urgent in the perspective of the current economic downturn, which in this sense might be considered

to some extent as a blessing in disguise. The aim of Corallia is to create an 'innovative ecosystem' that utilizes clustering (microelectronics) as a tool for regional development and sustainability in order to be competitive worldwide ('develop regionally, compete globally'). This ecosystem includes a healthy mix of start-ups, SMEs, international design centres (i.e. Citrix, Samsung), academia, research institutes and regional and central government agencies.. The driving force behind this high tech innovation ecosystem is that it is essential to value the system and support synergies and complementarity rather than individuals, and for this a spirit of teamwork is needed, which is often lacking.

Corallia structures its objectives and actions according to the following strategic aspects:

- competitiveness through the development of co-operation between competitive companies ('co-opetition');
- critical mass and geographical hyper-concentration in the specific high-tech sectors;
- protection of intellectual property rights and patent submission;
- network with, and ease repatriation of, human capital;
- economies of scale and economies of scope;
- sustainable growth based on the principles of corporate social responsibility.

The focus of Corallia is on the development of clusters, rather than individual start-up firms. These clusters are developed in stages, based on regular go-no-go decisions, corresponding to increasing investments:

- stage 0: preparation study and mapping of the thematic area;
- stage 1: implementation of a pilot programme;
- stage 2: wide-scale deployment for the attainment of a viable competitive advantage and critical mass in the selected thematic area.

In the Patras region, Corallia supports three clusters, all of which are in the ICT sector: nano electronics, space technology and gaming technologies (Table 1). The gaming technologies cluster (Innovative Gaming Technologies and Creative Content cluster, or in short gi-Cluster) is most successful, particularly considering the fact that it is also the youngest. It is located partly in Patras, but for the largest part in Athens. The cluster is a recently formed innovation cluster in Greece, which displays a state-of-the-art technology edge coupled with an extrovert, global-reaching entrepreneurial spirit. In contrast to the other two clusters, the cluster was created initially by a large Greek company. Currently, the gaming technology cluster has already achieved a critical mass, including large businesses, SMEs and academic and research institutions. Moreover, the in-depth, national-wide sector mapping that has been performed indicates a substantial pool of talent and activities in this field (both in industry as well as in academia and research). Thus, there is significant growth potential in the near future and substantial development prospects for this sector in Greece. This is even more so as the games cluster is particularly interesting for young people, who can create a start-up and participate with almost no initial investment.

Table 1: Clusters developed by Corallia

cluster	nano/microelectro-based systems and applications	space technologies and applications	gaming technologies and creative content
members	130	22	23
initiation	2004	2009	2011
turnover	> €5.7 billion	>€100 million	> €1.1 billion
exports	> €162 million	> €20 million	> €900 million
employment	> 5,000	> 600	> 5,000

The InnoHub is designed to accelerate the successful development of innovative companies in Western Greece through an array of business support resources and one-stop-shop services, developed and orchestrated by Corallia. The InnoHub is a modern office building that contains 2,400 m^2 of office space. The focus is on start-up and early-stage companies; however, small and medium sized companies may also find here a cost-effective place to setup their branch offices to get access to Western Greece markets and Patras' pool of talent. The InnoHub accommodates 7 companies, 3 of which are well-established and internationally recognized companies (Samsung, Citrix, Analogies) and 4 high-tech start-ups. Two interesting examples of incubatees that became globally active are

- Nanoradio, which became in June 2012 Samsung Nanoradio Design Centre (SNDC) after the acquisition of Nanoradio by Samsung Electronics;
- Bytemobile, a leading provider of data and video optimization solutions for mobile network operators, which formed a new Service Provider Platforms team within the Citrix Cloud Networking product group.

Figure 4: Patras Innovation Hub

5.3 Carnival Lab of Patras

Municipal Public Benefit Company - Karnavali Patras, 50 Akti Dymeon Str., Ladopuolos Building, Patras (offices)
http://www.carnivalpatras.gr/en/the-workshop.html.

The Carnival Lab of Patras is responsible for constructing the artistic wagons (floats) for the Patras Carnival Parade, which is the most famous carnival in Greece with a history of 160 years. As such, the Lab is one of the cornerstones of the local carnival tradition and constitutes a kind of 'signature mark' for the Region of Western Greece and the city of Patras. The Lab itself dates from the 1950s and is owned by the Municipality of Patras. Before that, the construction of carnival wagons was based on private initiatives. The Lab is not an actual incubator aiming for the support of start-up firms. Nevertheless, it is an interesting case because it is experiencing a transition period (mainly due to the financial crisis) which forces it to seek external financial resources and differentiate its production.

On the whole the carnival industry in Patras may be characterized as a kind of cluster, depending for about 50% on non-profit activities. The Lab consists of a group of public servants and freelancers who cooperate in order to produce the wagons for the parade. Besides these, The Lab also produces earthenware, small sculptures, street decorations and stage props, and hosts workshops and courses for children and students. Over 7,000 of them visit the Lab yearly, as well as 3,000 other visitors. The Carnival Lab workshop and offices employ 8 temporary and 2 permanent staff members respectively, but in peak season 30 to 50 temporary workers are recruited. The workshop has a surface of 2,000 m^2 and is surrounded by sheds which amount to an additional 2,000 m^2.

Figure 5: The workshop of the Carnival Lab of Patras

The Patras Carnival itself is organized by the municipality, while the participants are all private individuals and firms. As much as 45,000 people participate in the carnival parades officially. The Patras Carnival is somewhat of a landmark of the city. It is the biggest event in terms of culture and tourism, attracting hundreds of thousands of visitors every year. It is estimated that a total budget of 20 million euros is spent in every carnival by visitors and another two million euros by the organizers. It generates 5 million euros in additional tax revenues per year. Nevertheless, at the moment the carnival is quite expensive for the municipality of Patras, a situation which cannot be sustained due to the economic problems the municipality currently faces. Moreover, in addition of the regular costs of exploitation, investments are required to modernize the outdated technical infrastructure. For many years now the costumes, carnival constructions and floats are developed with similar materials and methods, with little innovation.

The aim of the Lab is to grow from a 100% subsidised existence to financial independence, and some important steps in this direction have been made. Financial sustainability is also considered a way to

achieve more freedom for the management, with less involvement of the Municipality. Nevertheless, it is a long-term, incremental process.

5.4 Innovation and Technology Transfer Office

University of Patras, University Campus, 26 504, Rio Patra, Greece
http://itto.upatras.gr/

The Innovation and Technology Transfer Office was introduced during the visit to Corallia (it is located quite close to the InnoHub), but is not exclusive to any of the visited incubators. Rather, it is an organization sponsored by the University of Patras Research Committee, and was established 5 years ago. It aims to establish links between research and industry and, in the longer term, to establish a Regional Centre for Innovation and Technology Transfer. Like the Carnival Lab, the ITTO is not an incubator, but includes some elements that are relevant for InCompass. Therefore it is described here, although only concisely.

Table 2: Overview of incubators in Patras

	Patras Science Park	Corallia/InnoHub	Carnival Lab of Patras	Innovation and Technology Transfer Office
SERVICES				
office spaces and shared facilities	yes	yes	n.a.	n.a.
networking (e.g. meetings)	mostly informal	yes	hosting of cultural events, workshops	yes
entrepreneurial support (e.g. training, courses)	yes	yes	n.a.	raising awareness and entrepreneurial culture
FOCUS				
focus on start-ups or existing firms	both	both, cluster-wise	n.a.	potential start-ups: students and university staff
specialism	ICT, pharmaceuticals, renewable energy tech, chemical tech	nano electronics, space tech, gaming tech	decorations, earthenware, stage props	general
KEY FIGURES				
surface (m^2)	-	2,400	workshop 2,000, sheds 2,000	n.a.
current no. of incubatees	15-20	3 (and 3 established firms)	n.a.	n.a.
no. of incubatees since start	-	-	n.a.	n.a.

-: no data, n.a.: not applicable.

Current activities of the ITTO focus on

- Research Directory: a directory of research units, their research infrastructure and key researchers with their research profiles and interests, research networks, service laboratories, spin-offs and patents;

- Field Mapping and Networking: identifying regional partners such as local government, entrepreneurs' associations, chambers of commerce and industry, mapping of industrial partners to active research groups, identifying areas of technology with high demand and their key requirements, identifying and collaborating with other regional, national and international technology transfer institutions;
- Funding and networking opportunities for technology transfer: presentation of and linking to funding calls and opportunities, dissemination of calls, and supporting funding bids preparation;
- Innovation support: supporting the exploitation of research results, technology transfer and IPR management, supporting and advising on patents applications, spin-off creation, laboratories certification, seeking partners for funding and commercial exploitation of research results, providing consultancy for innovation, technology transfer and business creation;
- Dissemination of research results: supporting the dissemination of technological services and exploitation of research results, networking with technology transfer organizations at national and European level, intensifying relations between researchers of the University of Patras and industrial partners, disseminating information on ethical issues in research;
- Business opportunities and needs: screening and contacting industrial partners per sector of activity, assisting R&D departments for improvement and creation of new products, assisting with the identification of research problems and needs and the implementation of research ideas, organizing technology transfer seminars, asking successful entrepreneurs to act as legal advisors and mentors to young students, assisting in the search for industrial partners.

6 Commercial contextualisation (WG1)

6.1 Patras Science Park

At present the Patras Science Park is 100% owned by the Greek government. Founding members such as FORTH do not contribute. Financial key figures of the Patras Science Park (Table 3) point at a development towards financial sustainability. In 2010 total income covered only half of the expenditure, whereas in 2011 the point of break-even was reached and in 2012 a small profit was booked. This development is due in part to an increase of income between 2010 and 2011 (but not the year afterwards), but for the most part it is the result of reduced expenditure. These figures only cover three years, and it has to be seen yet to which extent they are crisis-proof. Nevertheless, the development over this brief period is impressive.

Expenses in all budget lines were reduced, staff costs as much as 50%. Meanwhile, income from rents and services provided steadily declined (Figure 6). However, these services consist mainly of the provision of electricity, water supply, cleaning of the premises, etc. to hosted companies. Income from business development services amounts only to 5-10% of the total revenues from the services. The decrease of income from rents and services was more than compensated for by a quite spectacular growth of income from projects. Rents comprised 41.5% in 2010, 27.3% in 2011 and 26.8% in 2012 of the total revenues, whereas projects generated 8.7% of revenues in 2010, 43.4% in 2011 and 51.9% in 2012. It is not entirely clear whether part of this consists of a ‘cosmetic’ shift between budget lines (e.g. from ‘staff’ to ‘staff in projects’), but it is clear that the overall financial situation of the PSP has significantly improved. Accordingly, total debt was reduced by 30% over this period.

Table 3: Financial key figures of the Patras Science Park (x €1,000)

Price Index 100 = Rents 2010	2010	2011	2012
		Revenues	
Rents	100	85	83
Services	113	86	56
Projects	21	135	161
Other	7	5	10
Income Total	241	311	310
		Expenses	
Personnel	46	23	23
Projects	215	128	157
Taxes annual Interest Payments	38	21	24
Accruals + Provisions	32	39	19
Others	137	100	81
Expenses Total	468	311	304
Net Annual Profit	-227	0	6
Accumulated Surplus(deficit) 06-09	-206	-438	-414
Total Surplus (deficit)	-438	-434	-408
Deficit Payoff	0	21	111
Equity	0	0	0

Some good practices could be identified in the operation of the PSP.

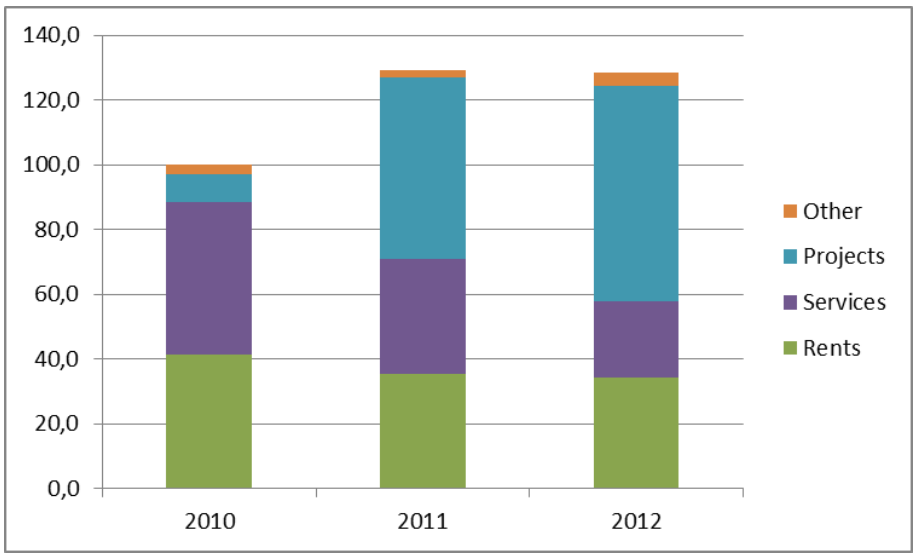
Flexibility in rental terms

The average of occupancy of the premises of the PSP amounts to 95-100%. One of the competitive advantages of the PSP versus other commercial rentals in the city is flexibility in the duration of rental contracts. The PSP does not require long-term commitment from their tenants in terms of rental contract duration. Companies can terminate the contract on short notice. In contrast, the standard rental period for commercial real estate in the city is 12 years, which is hardly acceptable for the clients (particularly start-ups) in the current unpredictable and unstable economic situation in local and international markets.

Funding from EU, national and regional funds

The decision of the management of the PSP to pay more attention to the possibilities of external funds for implementation of various projects proved to be successful. Income from these funds is higher than income from rent in 2012, whereas it was only one fifth in 2010 (Figure 6). Attraction of European, national or regional funds has a twofold benefit. On the one hand it increases the financial security of the PSP. On the other hand, it improves the competencies of the internal staff of the PSP, as the funds usually are received to implement various business, innovation or technology development projects. Generally speaking, the project funded add value to the PSP itself as well as to incubatee companies via workshops, trainings, consultancy etc.

Figure 6: Revenues of the Patras Science Park (2010 = 100)



Some examples of current and past projects in which the PSP participates are

- Regions 4 Green Growth, focusing on the question of how regions can contribute to an increase of investments in sustainable energy (INTERREG IVC);
- Smart Europe, focusing on smart and targeted regional policies boost employment in innovation-based sectors (INTERREG IVC);
- Ecomark, focusing on green marketing tools that will be disseminated and promoted to industrial parks and industrial areas (INTERREG MED).

More information on these and other projects can be found on the website of the Patras Science Park: http://www.psp.org.gr/index.php?option=com_content&task=blogsection&id=10&Itemid=47.

6.2 Corallia/Patras Innovation Hub

At the moment Corallia is funded by the government and EU structural funds (ESF, ERDF etc.) and the InnoHub as a project has no objective to make a profit. EU funding so far has been over 30 million euros. Supported entrepreneurs pay only a rent fee. All other services including mentoring, training, networking and access to meeting rooms and other infrastructure is free of charge. This model is not sustainable in the longer term, and Corallia aims to move to a different business model in about 3 to 5 years. They are discussing this with other clusters, such as Clusterland in Linz (Austria). However, so far there does not seem to be a single best model. Corallia does not favour a completely private model because it values the involvement of the government, which creates a bond and a commitment with the region. Furthermore, the introduction of fees might be a problem for some start-ups. A solution could be to differentiate the fees according to the possibilities of start-ups. Equity participation in start-ups, by offering a set of professional services free of charge is seriously being taken into account for the near future.

The InnoHub received subsidies for the construction of the physical work spaces, but in addition rents of hosted firms are subsidized as well. Some more revenues may be found here, in particular when firms in the InnoHub prove to be successful and to develop fast. One of the possibilities, besides raising fees, as mentioned above, might be for Corallia to take a share in the start-ups firms, possibly in cooperation with venture capital firms. The latter are already involved in the incubation process as they provided service to hosted companies.

The co-location of companies has quite concrete benefits. It strengthens value chains and the production ecosystem, stimulates commercial partnerships between individual entrepreneurs and promotes joint research and development activities. Development of clustering activities creates conditions for the organization of commercially beneficial events such as workshops, conferences and training courses. Finally, the cluster approach may help to attract clients for the hosted companies, as 'the sum is more than the parts'.

6.3 Carnival Lab of Patras

In order to achieve financial sustainability, the Carnival Lab formulated a business plan which suggests many additional activities or initiatives that may generate income:

- a multi-purpose carnival information centre, hosting events and exhibitions connected to the Carnival of Patras;
- hosting educational school trips for students from all over Greece;
- selling souvenirs, made in the Lab;
- organisation of cultural events;
- submitting and implementing cultural programmes co-funded by EU subsidies;
- the design of a catalogue of products for carnival and other events, which can be produced in the Lab and sold to other municipalities;
- introduction of discount card for culture, sports, catering etc., the 'Patras Carnival Card';
- establishing a network of certified sponsors;
- producing mugs, plates, glassware, decorations etc. for restaurants, bars and cafes;
- operating year-round rather than just before the carnival;
- establishing of a back office for marketing, sale, promotion and sponsorship.

Figure 7: Display of mugs, statuettes and other items produced at the Carnival Lab and sold as souvenirs

The above lists seems to include a mixture of more or less viable ideas, which are developed in a more or less incremental way. The idea to apply for EU co-funding in fact means a replacement of local by EU subsidies, rather than financial sustainability. Many of the other ideas aim to capitalize

the good reputation and the goodwill of the carnival in Patras. Sponsorship is often in kind and has remained quite high even since the start of the economic crisis, which may be considered an indication of the involvement of both private individuals and firms in Patras. The idea is to use the strong carnival 'brand' to establish a network of certified sponsors, who get a sign on their door, are listed in a carnival sponsor guide etc. The idea behind Carnival Card is that it would be a promotional product for tourists and local citizens as a discount card for entries to local museums, attraction point of interest, at restaurants and other commercial venues. It could be issued by ether the Municipality or the Lab itself. Part of the revenues would go to the Lab to support the production of the carnival products.

In 2013 the Lab will be able to generate about 25% of its income independent from public subsidies. The irony, however, is that by enabling the carnival the Lab generates considerable income for the city in taxes, sales and tourism, but the revenues accrue to the public government and firms rather than to the Lab itself. From this perspective, the challenge is not so much to make a profit, but to re-route a small part of the generated revenues to the Lab.

7 Social contextualisation (WG2)

7.1 Patras Science Park

The Patras Science Park is characterized as an 'ecosystem' which is autonomous, but at the same time integrated with the University of Patras (see also Section 8.1). There is a very close social connection with the scientific community, which is quite strong in Patras both as a share of the population and as a part of the productive base of the region. The University of Patras is a flagship for the economic and social life of the region and the PSP is an extension of it, trying lately to establish and expand its social and financial connection to the region. The relation with the university also influences the 'social contextualisation' of the incubator.

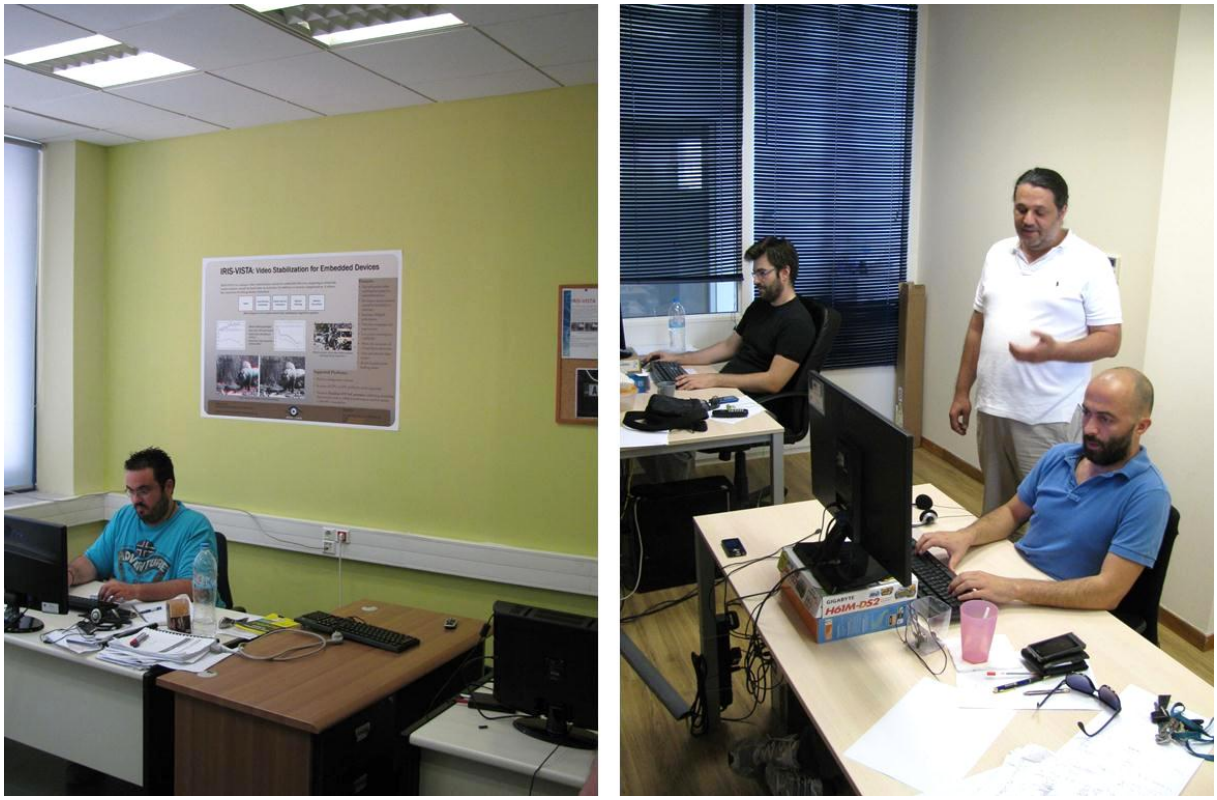
Informal cooperation and contact
The companies in the Patras Science Park have continuous informal mutual interaction. There is a high level of collateral work and, as the background of incubatees is similar, they exchange ideas and share their vision during this daily interaction. This daily contact takes place at the common spaces – especially around the cafeteria – but also at their offices, as there is a friendly atmosphere, resulting from their past studies at the University of Patras. Generally there is a nice working environment and work spaces supporting the collaboration between the incubatees.

Social connection to the local community
The social aspects of the Patras Science Park are twofold. On the one hand, the PSP is a core element of Patras University, strong enough to attract graduates from other cities to return to Patras and remain there. On the other hand, because the PSP remains a part of the 'cell' of Patras University, it preserves the strong internal social relation of its members, but less social relations to the local community.

In view of this strong focus on the University of Patras, as well as the high-tech focus of the start-ups of the Patras Science Park, there is only little interaction with the local community, beyond the broader scientific community. The role of the regional authorities is rather limited in the social support of incubators, while incubatees seem to ignore or underestimate the relevance of a possible cooperation. In addition, the internal organization of social meetings and the openness to the local community/region are developed rather poorly at the PSP.

In short, while the Patras Science Park seems to strengthen the 'brand name' of scientific dynamics in Patras (including the university and technological institutes such as FORTH) with significant social aspects – although most of these are only indirect – there is a weak social connection with the wider local and regional community. We observe the involvement of a quadruple helix model connecting industry, research, academia and society, but more efforts should be made to fully involve the latter. There is a need for the start-ups to show the local and regional community and visitors what are their capacities and activities and what are their contributions to the region (i.e. new jobs, financial stability, etc.).

Figure 8: Starting ICT firms at the Patras Science Park



7.2 Corallia/Patras Innovation Hub

A number of good practices could be identified with regard to social contextualisation:

Career Day – Open Days
Career Days are organised in the InnoHub, in order to help young people recognise their career prospects, have vocational rehabilitation and stay informed about the job market progress. Open Days are a way of informal communication and contact between companies and the outside environment (for instance entrepreneurs). Also, they provide an opportunity for the regional community to learn about the role of incubatees in the cluster and to better understand the projects and ideas of Corallia. There is a dedicated exhibition area near the entrance of the InnoHub where products made by the hosted companies are on display (Figure 9). It entails 15 stands and touch screens, which can be configured on demand for any promotional need.

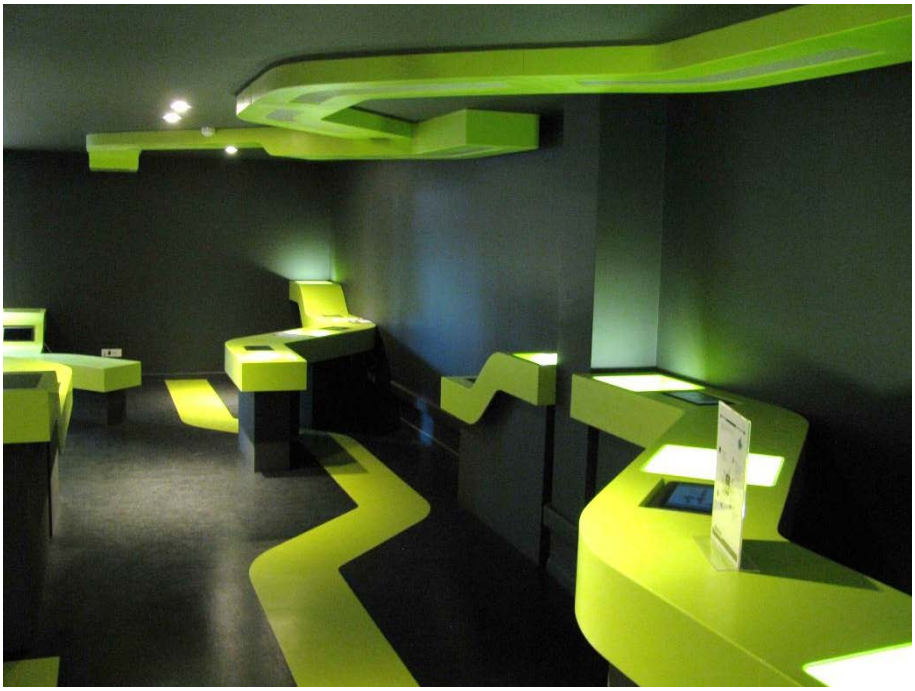
Retain or repatriate talented students
Corallia promotes innovation and research, fields which are attractive for young people. The last decade, high-tech scientists try to engage young students in order to promote innovation in the

entrepreneurship. If talented students know there is an opportunity in their country or region to work in the field of their studies, they are less likely to go abroad. Corallia demonstrates that such opportunities exist. More in particular, it has strong ties to the Greek community in the US and Europe, which makes it possible to attract talent and to benefit from international knowledge transfer and experience.

Meeting place to share ideas
Companies participating in one of Corallia's clusters have the opportunity to exchange their ideas and knowledge, thus creating an informal network. Moreover, students can gain state-of-the-art knowledge and develop an entrepreneurial attitude by working in an innovative environment. Common areas inside the InnoHub are an important factor for this, as they stimulate incubatees to feel comfortable and thus, presumably, be more productive. Of great importance is the Café d'Innovation (Innovation Cafe), where entrepreneurs can meet, socialize and exchange ideas.

Developing a cluster rather than separate firms makes a larger contribution to regional economy
The debt crisis and austerity measures in Greece have created an unfriendly environment for investments. The clusters initiative of Corallia shows that there are investment opportunities and success stories to be found in the Greek high-tech sector. The geographical concentration of companies in a specific field can help to encourage and focus macroeconomic policies, in order to sustain industrial growth inside the region and develop a sustainable competitive advantage. From this regional perspective it seems more effective than stimulating separate firms.

Figure 9: Exhibition area - display of hosted companies' products in the InnoHub



7.3 Carnival Lab of Patras

We might say the Carnival Lab is all about social contextualisation, in the sense that interaction with the local and regional environment is essential for its functioning. This is quite different from most incubators observed so far, whether in Patras or elsewhere. Therefore, although the Lab is not an actual incubator, a brief description of its' social relations seems appropriate here, especially as this

social capital is the basis for many of the ideas for raising revenues that have been mentioned in Section 6.3.

Participation of citizens is massive in all phases of the Carnival of Patras. This involves all groups of citizens, ranging from young students to carnival artists and specialized technicians, resulting in a highly multicultural event that lasts for at least two months every year. The Carnival of Patras is an inseparable part of the local community; it is mainly a huge social network all over the city, and the Carnival Lab is its core. Citizens regard carnival as a tradition which they have to ensure for many reasons (financial, social and cultural). Financially the carnival network consists of several close-knit clusters which trace and cooperate with each other. One of the main aspects of this social cluster is the notion of social learning which passes to the inhabitants as part of the local tradition and vice versa. Culturally, the carnival is considered a basic element of the Patras cultural heritage.

Social impact
The social impact of the carnival on the local society is significant. The social dimension of the carnival defines the cultural identity of the city. The Carnival Lab uses the human and the artistic resources of the city to transform the creative potential into a project with a large exposure in the city and beyond. The human and artistic resources of the city gather around the Carnival Lab every year, either in a professional relationship or on a volunteer basis. The aim is to innovate the Labs' activities and products on a yearly basis, and in this context the local community is a testing area for new ideas. Through this procedure, there is a broad and continuing contact with the firms and the inhabitants of the city, which in many ways support the Carnival Lab. This varies from sponsoring, subscription through the Carnival Card, promotion, advertising, voluntary work, participating in the network of Carnival supporters, and participation in the Carnival itself.

Cultural impact
The cultural dimension of the carnival is clearly visible by the artistic expression of inhabitants and visitors. The Carnival Lab is the centre of these artistic activities and presents several forms of carnival art. It is also the starting point for several cultural events that are organized as peripheral and at the same time inseparable parts of the carnival period. These vary from street festivals to formal events and contribute through the years in shaping the cultural identity of Patras. The creation of a Carnival Museum - which already has a temporary space in the centre of Patras - is a main objective of the Carnival Lab. The Lab is also the main supplier to cities surrounding Patras of artistic productions for carnival and several other cultural events. Wider participation is obtained also by means of an extensive program of dissemination among schools and the establishment of the Carnival of Kids in the week before the closing date of the Carnival. In this way Carnival renews its dynamic through the years.

Financial impact
The financial means generated from all of the above social activities are enormous and vital for the city and the region, being estimated at 20 million Euros for the carnival period. The above value is about the total of financial exchanges taking place at the carnival period. Several plans are being developed to establish some formal ways of financing the Carnival Lab, for a large part based on the goodwill and social capital described here.

7.4 Innovation and Technology Transfer Office

The Innovation and Technology Transfer Office organizes network events which, as such, are not aimed at start-ups, but at researchers. The objective of these 'targeted open' meetings is the presentation of research results and technologies that are considered relevant to a specific sector, or a range of stakeholders from that sector. Meetings are organised by ITTO in cooperation with the

Chamber of Commerce of Achaia, and are advertised widely among relevant stakeholders. The focus seems to be on establishing partnerships between researchers and existing businesses, but the meetings may be relevant as well for researchers who consider starting a business.

A second event is the Patras IQ fair which was organized in 2012. Over 100 researchers of the University of Patras presented their results and plans to stakeholders from energy and environment, nanotechnology and materials, health, geology, food, chemistry, biotechnology, manufacturing and construction, computer science, transports, electronics and telecommunications and space technology. There are plans to make Patras IQ a periodic event.

Finally, the Research Directory built by ITTO may be considered a virtual networking (or matching) tool. It consists of a portal that provides access to the research capital of the University of Patras. So far, however, use of the directory is low while the effort required to maintain it is high. Alternative solutions are considered to harvest research portals (research, academia, etc.) and/or use a Current Research Information System (CRIS) system.

On the whole, potential start-ups (particularly university spin-offs) may benefit from these networking events, but the benefits most likely are 'collateral' rather than the primary objective of the events.

8 Tiers of support, networks and partnerships (WG3)

8.1 Patras Science Park

The Patras Science Park provides a number of services to incubatees:

- administrative and financial support (registry, accounting, conference and meeting rooms, legal advice, intellectual property rights services, building machinery and equipment);
- design and management of cooperative development projects among industry and academic institutions;
- preparation of business plans, market and competitor analysis;
- networking and access to the scientific and research staff of the university and the neighboured research centres;
- exploitation of the network of the international association of science parks (IASP);
- networking with public organizations, chambers and financial institutes.

A strong point of the Patras Science Park is its strong link to local universities. It acts as a hub between the university, research institutes and new technology-based firms. It is located close to the University of Patras, CTI and FORTH. Cooperation with the University of Patras in particular is close in terms of knowledge and technology transfer, but it is not a simple partnership established on a formal basis. Rather, the Patras Science Park functions as an ecosystem highly integrated within the University of Patras, while at the same time it is an extension of the university, but working autonomous.

This complex relation to the university is important for both companies which are located in the PSP and for the park's managerial team, which can access the competencies of the university and provide them to incubatee companies. It provides and maintains a high level of synergy among start-ups, SMEs and large companies with the university. The result is a favourable environment for – mostly – young entrepreneurs to start their business. There are two aspects to this, however. On the one hand, incubatees can be more flexible and innovative in transforming and adapting their business

models and offering new services or products to meet their customers' fluctuating expectations, as they benefit from their close relationship with the source of knowledge. On the other hand, this close relationship may limit their business dynamic by ignoring some crucial aspects of social, financial and marketing matters affecting their business as a whole.

8.2 Corallia/Patras Innovation Hub

The support programme of Corallia is formulated partly on the basis of feedback from the cluster managers of the clusters involved (rather than of individual start-ups). In addition to office facilities and networking events incubatees may receive for instance training and assistance for attracting funding (Figure 10). A particular element of the support programme is the Youth Entrepreneurship Acceleration Programme (YEAP). This aims at young entrepreneurs and potential start-ups and consist of the organisation of educational trips for students to universities in the US, boot camps and networking events. Moreover, Corallia is active in the field of education, trying to match the curriculums of school and universities to the needs of industry, and to include modules about entrepreneurship.

Strong support from the Region of Western Greece, links with universities and a huge number of corporate cluster members show that there is industry potential for growth in the sectors selected by Corallia. In this regard the Regional Innovation Committee, a board of advisors representing the triple helix partners, may be considered a good practice.

Figure 10: Services provided to incubatees and hosted companies in the InnoHub

8.3 Carnival Lab of Patras

Support to start-up firms is not applicable in the case of the Carnival Lab, as it is not an incubator. Partnerships, however, are important to the Lab. Many ties exist to the local community (see Section 7.3). It is part of the strategy of the Lab to transform these into more formal and durable partnerships, particularly with regard to sponsoring. Until recently, the Patras Carnival Lab was

mainly paid for by the Municipality of Patras. However, this year local shop owners who contributed financially have become 'official endorsers' of the carnival. In return for their contribution they get publicity in the carnival period, which becomes most important when the carnival reaches its 'peak' during the last three days.

8.4 Innovation and Technology Transfer Office

Training in business practices for students and researchers of the University of Patras is the main activity of the Innovation & Entrepreneurship Unit (IEU) of the Careers Office. This is funded by EU structural funds, whereas the Innovation and Technology Transfer Office itself is funded from the Special Account for Research Grants of the University of Patras. ITTO as such is mainly supportive to researchers, rather than to business start-ups. Nevertheless, some of its activities may be useful for starting entrepreneurs who want to use the university's expertise, or for students and researcher who are considering a business start-up. The effect is not so much in concrete events or activities, however, as in the general fostering of an entrepreneurial culture at the university and raising awareness of existing opportunities.

The ITTO itself is associated to a number of partnerships, such as the League of European Research Universities, ProTon Europe (European Knowledge Transfer Association) and a wide range of local and regional partners.

9 Overview

Table 4 presents an overview of the main practices observed in Patras. As a whole, creative industries are not a priority sector in Patras and Western Greece. Rather, the focus is on ICT and high-tech, and at least at the moment creative industries receive little attention and support unless they are connected to high-tech activities. This becomes clear from the regional knowledge infrastructure, and is reflected in the focus of the incubators Patras Science Park and Corallia/InnoHub. Both have a focus on high-tech sectors, and strong ties to universities and research institutes which also are involved particularly in high-tech research. The latter is especially true for the Patras Science Park, but to some extent it applies to Corallia as well.

In terms of financial sustainability, the Patras Science Park shows a striking shift from 'regular' sources of income of an incubator, such as rents and fees, to project-based funding from various sources. This seems a quite successful development. On the other hand, more revenues might be generated from service provided to incubatees, the fees for which now seem largely limited to the standard utilities.

A striking aspect of Corallia and its branch at the InnoHub is its focus on the support, and indeed active development, of clusters rather than individual firms. This has not been observed in other study visits so far, and it seems one step ahead of regular incubation, even incubation focused on a particular sector, because in this case the incubator itself selects and initiates the development of a specific sector. It is plausible that this approach strengthens the contribution of the incubator to regional economic developments. Indeed it aims to counteract the brain drain by repatriating talented Greek scientist from abroad. At the moment Corallia is fully subsidized and there are no fees for incubatees, other than rental fees. This is likely to change in the future, however, but plans concerning this are still in a preliminary stage.

Table 4: Overview of main findings

	commercial contextualisation	social contextualisation	tiers of support, partnerships
Patras Science Park	▪ flexibility in rental terms ▪ attract project funding from EU, national and regional funds	▪ special relationship with university generates synergy ▪ common spaces for informal interaction	▪ strong partnerships with university and research institutions
Corallia/Patras Innovation Hub	▪ focus on clusters may attract clients - sum is more than the parts	▪ open days for external firms, potential start-ups and local community ▪ common spaces for informal interaction ▪ display of hosted companies' products in an exhibition area ▪ strong connection to regional economy by focus on clusters rather than individual firms ▪ focus on retaining talent in the region	▪ organisation of educational trips and events for potential start-ups via Youth Entrepreneurship Acceleration Programme ▪ influencing of educational curricula to include modules on entrepreneurship
Carnival Lab of Patras	▪ sale of Carnival Card to tourists and inhabitants ▪ sale of souvenirs ▪ hosting of school trips ▪ hosting and organisation of events and exhibitions ▪ expand market to other municipalities and private parties (restaurants etc.)	▪ large good will and support and participation by local community may mitigate financial constraints ▪ financial stimulus for local economy by taxes, tourism etc. which may potentially flow back to Carnival Lab	▪ use large local support and reputation to establish structural partnerships with sponsors
Innovation and Technology Transfer Office		▪ networking events to link research and industrial partners, may raise awareness and stimulate spin-offs	

In contrast, financial sustainability is indeed a very important issue for the Carnival Lab. While this is not an incubator, it has some aspects that are relevant for InCompass. It focuses on creativity and culture, rather than high-tech. Moreover, it aims to shift from 100% public subsidies to full financial sustainability. Finally, it shows the potential of social contextualization, particularly regarding external social relations, which is relatively underdeveloped in many incubators observed so far. Indeed, it plans to achieve its financial goals by a wide range of activities, many of which are based on its strong presence and goodwill in the local and regional community. Financial sustainability is also considered a way to achieve more freedom for the management, with less involvement of the Municipality - which might even be a condition for the success of the plan. While its eventual success is still uncertain, its approach includes some ideas that may inspire other cases.

Finally, the Innovation and Technology Transfer Office mainly has a mediating function to connect research and business. One way this connection may be established - although most likely not the most important one - is by researchers that start their own company. Nevertheless, ITTO has a role in

raising awareness among potential start-ups. Financial sustainability does not seems much of an issue in this case.

10 Validators' remarks

10.1 Introduction

The study visit report has been validated by three experts:

- Mr. Demetris Papailiou (Mi-cluster manager at Corallia/Patras Innovation Hub);
- Mr. Leo van Loon (director of European Creative Business Network/managing partner of PopVox, Rotterdam);
- Dr. Annet Jantien Smit (researcher/owner at DENKBEELD Spatial Research and Consulting, Groningen).

As far as the validators' comments were corrections or annotations to the text they have been included in the previous chapters. This is the case for all remarks by Mr. Papailiou. The remaining comments are presented in this chapter. When necessary, comments have been edited by Arie Romein and Jan Jacob Trip.

10.2 Leo van Loon (European Creative Business Network/PopVox)

Most of the comments by Leo van Loon concerned small remarks or corrections to the text, which have been included in the previous sections.

One particular remark mentioned here concerns the Carnival Lab. In this case full financial sustainability seems impossible, but also unnecessary given the millions of turnover the Carnival generates. A good route would be to strike a multi-annual deal with the City of Patras on receiving a part of the generated income of the city, its tourism industry and other sectors affected.

10.3 Annet Jantien Smit (DENKBEELD)

Comment on how the information on the visited incubators is presented

For the reader, it is somewhat confusing to get information on the 4 visited incubators in 4 different chapters, namely the descriptive information in Chapter 5, and then the evaluation of the innovative financial practices of each of these incubators in Chapter 6, 7, and 8. In my opinion it would be more useful for readers to paint a picture of an incubator and its innovative financial practices in 1 separate section. Then, the reader can relate an incubator's aims and goals to the specific economic sectors it caters to, and how it earns money in the three different contextualizations.

[Response: there is definitely something to say for both a structure according to working groups and one according to cases. The current structure is based on the outline of the project, which was based initially on separate reports per working group, and will be maintained for the sake of continuity - JJT/AR].

Comment on the innovative financial practices of the visited incubators and their applicability in other contexts

Patras Science Park - the Patras Science Park (PSP) seems to function quite successful if we look at the occupancy rate of 95-100% (Section 5.1 and Section 6.1). As for its innovative financial practices, I would consider the following also to be possible ways of earning money for incubators targeting creative firms:

- flexibility in rental terms;
- attract project funding from EU, national and regional funds (although it remains to be seen how long such funds will continue to exist in the current financial crisis);
- common spaces for informal interaction.

More importantly, the PSP seems to function as an ecosystem as it acts as a hub between the university, research institutes and new technology-based firms. In part, this ecosystem is strengthened by the location of the PSP close to the University of Patras, CTI and FORTH. Second, because companies in the PSP cooperate with the University of Patras by transferring knowledge and technology.

Creative incubators elsewhere may as well nurture a creative ecosystem. While incubators for creative firms in general do not usually have strong relations in terms of knowledge or technology exchange, co-location of creative incubators and universities may help to make this happen, especially if there are also shared events for both creative and tech companies.

However, for a creative incubator to financially profit from such a function of nurturing an ecosystem needs a financial business model that is able to obtain financing directly from the stakeholders of the ecosystem as a whole - in case of the PSP, these stakeholders are described as the start-ups, SMEs, large companies and the university (Section 8.1). From the table on the financial key figures of the PSP (Section 6.1), however, it is not clear whether the PSP is able to valorise its function of nurturing the ecosystem in Patras.

Corallia/Patras Innovation Hub - the latter remark about the PSP also seems valid for Corallia: Corallia seems to nurture the innovative ecosystem, especially as it focuses on a cluster instead of on individual firms. However, Corallia does not directly reap the financial benefits from this function in the ecosystem. For this reason, one could consider it defendable that Corallia is completely funded by government and other funds.

Several innovative financial practices of Corallia could be applied elsewhere as well:

- the possibility to introduce fees and rents as well as involving Venture Capitalists (VCs) to take share in the start-up firms (both mentioned in Section 6.2) is interesting for creative incubators elsewhere, although VCs taking share in creative firms is less common than for tech sector firms;
- attract project funding from EU, national and regional funds (although it remains to be seen how long such funds will continue to exist in the current financial crisis.);
- organizing career days and open days (while not practiced in this incubator, such activities could ask for a small entrance fee);
- common areas and the Innovation café for the incubates (while not practiced in this incubator, such activities could ask for a small entrance fee).

Carnival Lab of Patras - as mentioned in the report, the Carnival Lab of Patras is not a real incubator. Its current and intended (in the future) financial practices are for instance the selling of a Carnival Card and souvenirs to tourists and inhabitants, and hosting school trips, events and exhibitions. I consider these not applicable as a new way of earning money for creative incubators elsewhere.

Innovation and Technology Transfer Office - the Innovation and Technology Transfer Office provides training in business practices for students and researchers of the University, and organizes networking events to link research and industrial partners, which may raise awareness and stimulate spin-offs (Section 8.4). While it does aim to support researchers rather than start-ups, start-ups may be the product of such activities. However, the ITTO does not seem to valorise these activities as it is funded otherwise.

Still, organizing these 'targeted open meetings', IQ Fairs, and training students and researchers is valuable for the start-up community of Patras. As in the case of the PSP and Corallia, this begs the question of how to valorise the function of nurturing the ecosystem in Patras for an incubator.

Several innovative financial practices of ITTO could be applied elsewhere as well (while not practiced in this incubator, such activities could ask for a small entrance fee):

- targeted open meetings;
- IQ Fairs;
- training students and researchers.

Concluding remarks & recommendations

As an overall recommendation for the InCompass Project, I would encourage to evaluate two questions:

1. Is one of the visited incubators in the InCompass Project able to valorise its function of nurturing the regional or urban creative or tech ecosystem, and if so, by which financial practices? This function seems to be a valuable asset of many of the visited incubators in Patras, Beja and Lisbon. However, these incubators seem not to benefit financially from their broader value for the regions of Patras, Beja and Lisbon. I would consider it a true innovative financial practice if a creative incubator could financially capitalize on its function of supporting a creative ecosystem.
2. Are incubators being funded in part by shareholders more successful than incubators funded by government and EU funds? Funding by shareholders means that 'smart money' is involved in the funding. 'Smart money' is money from investors with know-how on entrepreneurship and innovation. Would such know-how lead to more successful incubators? Of course, the metrics of success have to be defined; and an incubators' success will depend on its context, but still, I consider this an interesting question to pursue.

11 Thematic seminar

11.1 Introduction

The Thematic Seminars (TSs) on the reports of the study visit to Patras (Greece) and Beja/Lisbon (Portugal) were combined and held in Avilés (Spain) in November 2013. The good practices observed during these two visits that were brought up and discussed during the TSs were - as has become customary in the course of InCompass project – summarized and presented by the WG leaders at the end of the seminar. The pictures of the flip charts of their presentations show that practices from both study visits were mixed up during the group discussions. For that reason, we decided to prepare one report of the Avilés TSs to append to both Study Visit Reports.

11.2 General remarks

In addition to observations and comments regarding practices observed in the visited cases, it was commented during the TSs that decisions by a local or regional government to curtail or even to end financial support to incubators should always be dealt with in the broader perspective of 'return on investment'. And this not only concerns direct financial return, but also returns in the perspective of meeting broader (objectives of) urban or regional development policies.

Quite often, incubators charge higher rents to firms in a more advanced stage that have started to create revenue than to genuine start-ups who still have to elaborate their idea into a marketable product. Hence, in a sense the former can be considered subsidizers of the latter within the context of the incubator. This implies that a well-considered balance of early stage pre-revenue tenants and end of stage revenue generating tenants should be an important strategic issue in the revenue model of the incubator. Main question that raise, then, are whether there is some kind of ideal balance, and how large the rent difference between tenants in different stages of revenue generating should be?

The three cases visited in Portugal are highly different types of incubator or incubator-like initiatives. CIMBAL is a research lab, Incubadora is an incubator that can only be understood well within the broader context of the science park Tagus Park, while CoWorkLisboa is what its name says; a co-working space and not an incubator in the full sense. Actually co-working spaces can be distinguished from incubators by their respective, and contradictory, inclusive and exclusive strategies. [7] This does not alter the fact however, that CoWorkLisboa reveals interesting good practices for genuine incubators, although most in particularly for those that resemble CoWorkLisboa, i.e. private ownership (no public funding), small size and low rents.

It was not mentioned during the discussion, but the conclusion that the visited incubators were highly different also goes for the visit to Patras. The intellectual challenge now is how to put these very different cases together in order to draw general practical lessons.

11.3 Commercial contextualization (WG1)

Figure 1 (next page) shows the overview by the WG leader. This overview does not include very obvious practices of commercial contextualisation – like income from rents and fees, or from a small overdue on services provided by utility companies - that we already saw in most or all earlier visits. It presents a selection of a few less familiar, relatively new practices from the group discussions.

1. *Revenue generating business model from very beginning*

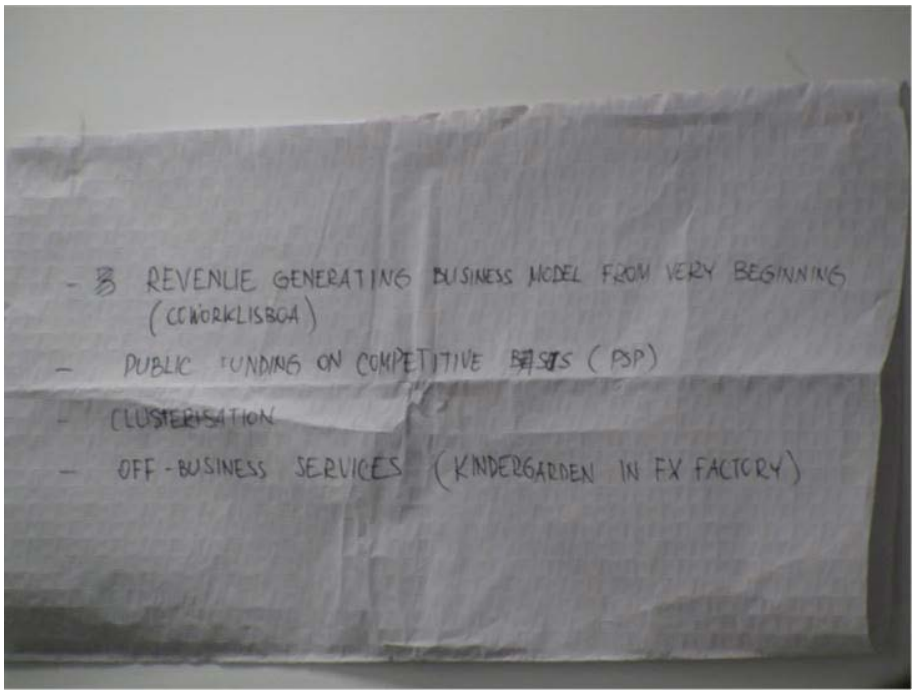
In the current period of downturn and austerity policies, public ownership or dependence on public funding make an incubator vulnerable. A private business model is less vulnerable, if only because there is less to cut directly and suddenly by policy measures. It was commented during the TSs that private incubators are therefore in a relatively better position than public peers to secure a revenue generating approach or strategy from the very beginning as a crucial condition for success of incubator.

This practice was observed in CoWorkLisboa. Three features distinguish this case from most other ones that we visited: it is small, it is cheap, and it has been fully private from the very start: it has not received any public funding so far. Besides, it is flexible in the sense that it does not face specific development objectives to meet: a feature that it has in common with most co-working spaces. Due

[7] De Bokx, P., 2013. What's in a name? The difference and similarities in start-up programmes. The Business Incubator 2(1), pp. 14-18).

to these features, it is less vulnerable for austerity policy. On the other hand however, its business model is vulnerable for any rent increase by LX Factory. The typical tenant of workspace in CoWorkLisboa lacks the financial resources to be able to afford even limited rent increases, as was illustrated by the popularity of the opportunity to pay in-kind rather than in cash at its start. Up to now, LX Factory keeps the rent low because CoWorkLisboa is too small to be very significant for the Factory's revenue model and has the sympathy of its management. So, for now the business model of CoWorkLisboa depends on the availability of cheap space in LX factory but it is highly likely that the answer to the question if CoWorkLisboa is still viable in case LX Factory would raise the rent is in the negative, even in case of a limited increase.

Figure 11: Flip chart of Working Group 1



2. Public funding on competitive basis (Patras Scinece Park)

This issue refers to a noticeable practice by Patras Science Park to bring in 'other' (European) public funding. There is, however, one impediment for the contribution of funding obtained from EU programmes to further financial sustainability: the disallowance to use that money for investing in commercially profitable initiatives.

3. Clustering

CIMBAL carries out applied research for, and in cooperation with companies in the surrounding rural area. As such, it operates as a sort of nucleus of an networked innovative business cluster in the regional economy. However, the InCompass partners from Hungary and Bulgaria reported about difficulties of developing incubators in peripheral areas – like Beja. In their countries, it appears difficult to trace incubatees with the demanded basic qualifications and skills to advance into entrepreneurs who produce marketable innovative products due to low levels of education of the population in these areas.

4. Off-business services (e.g. Kindergarten in CoWorkLisboa / LX Factory)

Although still only an intention of the management of CoWorkLisboa, the idea to found a kindergarten in or quite near to its premise received much attention in the Thematic Seminar. It may

operate as a direct commercial source of income by charging working parents who leave their children in the care of the kindergarten. More rewarding however, is its possible indirect contribution to the success rate of incubatees - in particular mothers among them - by enabling them to combine work and care of little children with a minimum loss of time.

In addition to these four practices, the opportunity offered by CoWorkLisboa to starting entrepreneurs with very little investment capital available to pay rent during the first few months in-kind is a very interesting exemplary practice for similar cases. To correct assessment of this practice, it should be taken into account however, that CoWorkLisboa was a starting business itself at that time. Although one may wonder whether this practice can be continued once its space is fully equipped, furnitured and decorated, it is thinkable to extend it with providing services to its occupants: the broader concept of co-creation model as a window of opportunity for growth and development of CoWorkLisboa.

This element of the co-creation model saves on costs – quite likely, it is cheaper than services by commercial consultants - rather than generating income. As such, it is a type of possible commercial contribution to financial sustainability of incubators that we have not seen yet in the InCompass project. It may, however, work best in cases of small incubators and of medium-tech rather than specialized high-tech services. Moreover, continuation of qualities of services provision by the same co-worker(s) is not guaranteed.

“In general, the more sophisticated the services provided to incubatees are, the more overhead can be generated by charging these incubatees: chemical laboratory equipment vis-à-vis just electricity and running water”. This was a conclusion of a discussion about the revenue model of Patras Science Park, but it is not clear how much this Park earns from such services.

11.4 Social contextualization (WG2)

The overview presented by the leader of WG2 is considerably more comprehensive than the one of WG1 (see Figure 3). Not all practices in this overview were further elucidated during the presentation, as can be seen below.

1. *Ingenious use of social media*

At the time of the initiative to establish CoWorkLisboa as a co-work environment there were a few different locations available. Due to little competition by likewise initiatives, many people were interested in its establishment as would-be tenants of working space. They could vote by means of a social medium – a facebook forum – which location they preferred. Less ingenious is the use of social media by CoWorkLisboa to announce events.

2. *Common places like cafés enables people from ‘inside’ and ‘outside’ to meet.*

One example is the lunch café in the space rented by CoWorkLisboa that is also frequented by other tenants of LX Factory .

3. *Similarities of Tagus Park and Patras Science Park*

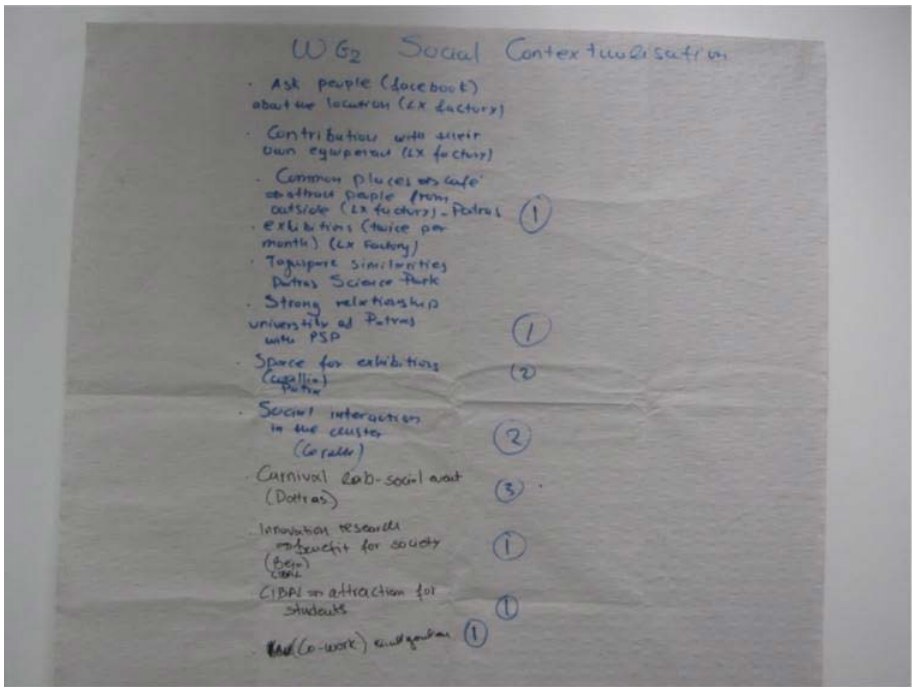
The embeddedness of Incubadora in Tagus Park is an mutual advantage where it comes to the opportunities for interchanges of talent and companies. Incubators that are located and embedded in larger science parks, including some funding by both firms and institutions in the park – Patras Science Park is another example - the park is also subsidizers of the incubator.

4. *Strong relationships of Patras Science Park with the University of Patras*

5. *Space for exhibitions in Coralia Patras*

6. *Social interactions in the cluster (Coralia)*

Figure 12: Flip chart of Working Group 2



7. *Carnival Lab - social event in Patras*

The 'deep' embeddedness of the carnival of Patras in the local community of the city creates opportunities for local fundraising by means of sponsoring and donations. For companies, it may fit in their PR policy and in their corporate social responsibility programme to become associated with the most popular carnival in Greece. Nevertheless: what is in it for a sponsor? One suggestion for (indirect) benefits for sponsoring by the circle of tourism-related businesses is strengthening the promotion of the carnival for cultural tourism, and embed it in a broader programme of this type of tourism, incl. activities in traditional handicrafts like Carnival Lab. There are two difficulties that stand in the way of this idea: the carnival is linked to Greek orthodox Eastern in wintertime (January – March) and the current capacity of tourist accommodation in the region will be a bottleneck for further growth of carnival audience. And the main issue remains what is there to earn from cultural tourism by Carnival Lab?

8. *Retaining and attracting students.*

CIMBAL offers employment to highly trained researchers, first and foremost graduates of the Polytechnic. Hence, those who find a job in the lab can stay 'at home' and don't have to leave the region and go to bigger cities, in particular Lisbon. This is a particularly relevant interpretation of social context in 'centralized countries' like Portugal or Hungary with a high level of concentration of innovative economic activities in capital cities. In the case of Beja, this impact can be considered a contribution to 'stemming brain drain from a city in decline'. A similar practice was found in Incubadora in the sense of attempts to attract talented Portugese students who left the country for, for instance, the USA.

Finally, a 'bad practice' regarding WG2 that was observed by the Hungarian partner and endorsed by the Slovakian one, is the failure of open innovation in the sense of sharing thoughts, ideas and

progress among incubatees or coworkers. The central topic is both a lack of trust – "my ideas might be 'stolen', not in the last place by big companies that have 'ears' in the venue" – and (misplaced) self-confidence – "I know what I am doing, I don't need help, and I don't care about others". The people who reason in these ways are not interested in becoming incubatee if they 'only' receive advice and support: By "what's in it for me?" they mean "how much money is in it for me". In high-tech sectors, IP rights is usually an effective instrument against 'theft of ideas and proto-types', but that is much less effective – if existing at all - in cultural and creative industries. In these industries, trust is crucial. What kind of provisions or tools can be deployed to increase mutual trust?

11.5 Tiers of support, networks and partnerships (WG3)

The overview of WG3 is as comprehensive as the one of WG2 (see Figure 5). Not all practices in this overview were further elucidated during the presentation, as can be seen below.

1. *Motivate private sector to invest in creative industries.*

In general, it is difficult to interest the private sector in investing in 'hard core' creative firms. The stakeholders in Tagus Park – businesses in the Park, financial institutions, utility companies and the like - are a good example, although it should be taken into account that these stakeholders cooperate with the public local government and knowledge institutions.

2. *Focus support by local and regional government policies (public sector) on young entrepreneurs and micro companies.*

The need for this tier of support is urgent for instance in the Patras area because of the significant decrease of the survival rate in companies in this segment of young and small ones from 40 - 50% before the crisis to a current 15-20%. Governments should recognize however that different cities and regions may require different support models. In the light of the current trend of public austerity policies, there is a pressing need to find new, preferably nonfinancial ways of public support. For instance easing regulations for social enterprises etc.

3. Provide infrastructure specially for particular sectors of creative industries

For start-ups to benefit from shared (costs of) use of 'infrastructure' – meaning services, facilities but also professional equipment -, a supply of dedicated infrastructure for specific branches is important.

4. Promote spill-overs between creative industries and other sectors.

Growth of the size of creative industries in their own right in urban and regional economies has some 'natural ceiling'. The major opportunity for growth and expansion beyond this ceiling lays in cooperation and even integration with 'traditional' sectors.

5. *Organisation of a one stop shop for setting up new companies.*

A fine example of such a shop to avoid unnecessary red tape was found in Corallia, Patras

6. *Study trips for start-ups to key regions*

A fine example is Corallia that organizes such trips that give start-ups the opportunity for learning from other cases in 'successful' regions, e.g. Silicon Valley.

7. *Work together with other incubators to provide full range of services: cooperation and competition.*

8. *Create alumni networks of ex-incubatees of incuabtors.*

The benefits of such networks for incubators can be both in kind (mentorships etc.) and in cash (investments in promising new companies).

9. *Provide services to 'post-incubatees' at a market rate to generate income for self-sustainability.*

10. *Market making: Motivate business sectors to use creative services.*

11. *Create regional networks of cooperation.*

CIMBAL and Corallia are good examples for incubators of the benefit of working not just on the level of the incubator itself but also on the level of a regional cluster.

12. *Carry out research on needs of clusters or regions to identify niche opportunities for start-ups in local or regional economies or clusters.*

The main research question is "what is missing in this cluster?" and interventions in the profile of incubators – which branches, activities etc. should it support – can be inferred from the answer to that question.

13. *Create an environment that motivates university professors to invest in student's or graduates' start-ups.*

Focus on getting trust by incubatees vis-à-vis one another.

Figure 13: Flip chart of Working Group 3