



*Innovative Entrepreneurship for Increased Employability,  
New Business Creation and Economic Growth*

*2015-1-TR01-KA202-022685*

# **COMPARATIVE REPORT ON INNOVATIVE ENTREPRENEURSHIP**

*Based on National Field Research Results  
from Turkey, UK, Greece, Spain and Romania*

Prepared by: MAKRO – P0

Authors: Dođan İncesulu & İpek İncesulu & Merve Göl Barut

Date: 02/05/2016

## TABLE OF CONTENTS

1. INTRODUCTION.....	3
1.1. About INNOGROW .....	3
1.2. About O1 – ‘Competence Profile of an Innovative Entrepreneur’.....	4
1.3. Entrepreneurship Ecosystem in Partner Countries.....	5
2. RESEARCH METHODOLOGY .....	6
3. INNOVATIVE SMES AND START-UPS.....	7
3.1. Profile of Companies.....	7
3.2. Innovation in Companies.....	7
4. INNOVATIVE ENTREPRENEURIAL AND INTRAPRENEURIAL CHARACTERISTICS .	8
4.1. Innovative Entrepreneurial Characteristics .....	8
Education Background .....	8
Prior Work Experience and Story of Company Establishment .....	8
Traits .....	9
Motives.....	9
4.2. Innovative Intrapreneurial Characteristics .....	10
Education Background .....	10
Prior Work Experience and Story of Joining the Company.....	10
Traits .....	10
Motives.....	11
5. INNOVATIVE ENTREPRENEURSHIP AND INTRAPRENEURSHIP COMPETENCES	11
5.1. Innovative Entrepreneurship Competences.....	11
5.2. Innovative Intrapreneurship Competences .....	12
5.3. Desired Features of eLearning/mLearning to be designed for the Competence Development of Entrepreneurs and Intrapreneurs .....	15
6. ANECDOTES FROM INTERVIEWS.....	16
6.1. Direct Quotations from Turkey .....	16
6.2. Direct Quotations from UK .....	16
6.3. Direct Quotations from Greece.....	17
6.4. Direct Quotations from Spain .....	17
6.5. Direct Quotations from Romania .....	17
7. CONCLUSIONS .....	17
ANNEXES .....	19
ANNEX 1 – Questionnaire for SMEs and Start-ups, for Entrepreneurs. ....	19
ANNEX 2 – Questionnaire for SMEs and Start-ups, for Intrapreneurs.....	21

ANNEX 3 – Questionnaire for Business Incubators and Public-Private Agencies .....23

# 1. INTRODUCTION

## 1.1. About INNOGROW

INNOGROW – ‘Innovative Entrepreneurship for Increased Employability, New Business Creation and Economic Growth’ is an Erasmus+ Strategic Partnership Project with an implementation period of 2 years between September 2015 and 2016. The main theme of the project intersects the “innovation” and “entrepreneurship” as the main terms of our age. These are the keys to employment for unemployed young individuals and start-ups/SMEs’ competitiveness.

So the purpose of INNOGROW is designed for increasing employability levels of and new business creation by young unemployed individuals (including NEETs) and higher education students as well as developing initiative taking of key SME staff by the use of an innovative ‘learning path’ method which includes; self-assessment tool, self-learning materials on innovative entrepreneurship/intrapreneurship (such as; creative thinking, problem solving, risk taking, team work, innovation management and etc.) and also business idea development tool in one integrated and mobile assisted eLearning software, all to be supported/strengthened by tutors and classroom trainings. The general aim is then to bring a new and learner-centred pedagogical approach to entrepreneurship training by use of the most appropriate transnational expertise in this field.

### Target Groups of the Project:

- Young unemployed individuals (including NEETs) who wish to increase their employability levels and establish new innovative businesses
- Higher education students who wish to increase their employability levels and establish new innovative businesses
- SMEs’ key staff who have influence in decision making processes and wish to increase their capacity to take more initiatives in their current jobs

### Intellectual Outputs of the Project:

1. *Competence Profile of an Innovative Entrepreneur*: A set of qualifications, their definitions and contexts, which an innovative entrepreneur/intrapreneur should possess in order to compete in EU labour market and today’s economic conditions.
2. *Self-Assessment Tool for Innovative Entrepreneurship*: An on-line user-friendly tool for assessing the capacity of learner on Innovative Entrepreneurship based on a benchmarking process, in all the contemporary entrepreneurship skills predefined under the first output, such as: creative thinking, problem solving, risk taking, time management, team building and etc.
3. *Innovative Entrepreneurship eLearning Modules*: Training modules which will develop the skills and qualifications designated in first and second outputs.
4. *Business Idea Development Tool*: An online and interactive software of “Business Model Canvas” which will be used mainly for helping the learners to discover the validity and feasibility of their new business plans and/or areas for improvement in their current organisations (depending on the target group they belong).

5. *Web-based Mobile Software for Self-Assessment, Training and Business Idea Development*: Multi-functional web software (mobile supported – Web App) which includes three main add-ons (pieces of software which enhances software and cannot be run independently): Self-Assessment Tool, eLearning Modules and Business Idea Development Tool. The web-based mobile software (web app) is designed as suitable for flexible use whenever and wherever on either computers or mobile devices with an internet connection.

**Partners:**

P0 - MAKRO Management Development Consulting Ltd., Turkey (Applicant)

P1 - Kingston University Business School, UK

P2 - KINNO Consultants Ltd., Greece

P3 - Knowledge Innovation Market S.L., Spain

P4 - The National Council of Small and Medium Sized Private Enterprises in Romania, Romania

P5 - Gaziantep Technology Development Zone, Turkey

## 1.2. About O1 – ‘Competence Profile of an Innovative Entrepreneur’

This output can be shortly defined as a set of qualifications, with definitions and contexts, which an innovative entrepreneur/intrapreneur should possess in order to compete in EU labour market and today’s economy. The output development requires 3 key activities:

**A1) In-depth interviews with innovative SMEs and start-ups:** Interviews to be conducted with SMEs in each partner country with their *innovative entrepreneurs* (someone who take risks by starting an innovative company with the goal of providing a good or service and sees the company as a whole) and *innovative intrapreneurs* (someone within an innovative company that takes risks in an effort to solve a given problem that will contribute to increase the competitiveness of the company) in order to identify the key characteristics/competences of today’s innovative entrepreneurs and intrapreneurs.

**A2) Development of national reports by partners:** The individual national reports developed by partners based on the field research conducted in Turkey, UK, Greece, Spain and Romania.

**A3) Consolidation of national reports and developing the ‘Competence Profile of an Innovative Entrepreneur’:** Development of the report which combines and summarizes the overall research results in partner countries and development of the profile which represent the common characteristics and competences of today’s innovative entrepreneur.

P3 - Knowledge Innovation Market (KIM) is the leader of the output and responsible for the guidance of partners on how to conduct the in-depth interviews. P0 – MAKRO is also playing a key part in the development of the overall output in terms of compiling the national report and development of competence profile. All partners are equally responsible for conducting in-depth interviews in their countries and development of national reports.

### 1.3. Entrepreneurship Ecosystem in Partner Countries

It would be enlightening to have a look at the recent entrepreneurship structure in partner countries before elaborating the field research results.

The main and common resource for the entrepreneurship in all European countries is the Global Entrepreneurship Monitor (GEM)<sup>1</sup> which is the world's foremost study of entrepreneurship. The following indicators have been drafted from the most recent data available at GEM reports for each partner country.

#### Key Indicators of Entrepreneurial Activities

1. *Total early stage entrepreneurial activity (TEA)*: Represents the individuals in the process of starting a venture and those running a new business less than 3,5 years old as a percentage of adult population (18-64 years old). The average rate in European Union economies is 7,8%. Looking at the recent TEA rates in partner countries, Turkey has the highest rate among the all partner countries with 12,2% while Romania has the second highest rate with 11,3%, UK follows with 8,6%, Greece and Spain has the same and lowest rate of 5.5%. The entrepreneurial activity in all countries have negatively affected by the recent economic recession in Europe, however the rate in Greece has been in a continuous decrease as a result of the deep and prolonged economic recession in the country.
2. *Established business ownership*: Represents the percentage of adult population who are currently an owner-manager of an established business. The average rate in European countries is 6,7%. Among the partner countries, this rate is highest in Greece with 12,6% and Turkey follows with 8,7%. Romania has a rate of 7,6%, Spain has 8% and UK has 6% established business ownership rate.
3. *Perceived Opportunities*: Reflects the percentage of individuals who believe there is occasion to start a venture in the next six months in their immediate environment. The average rate of perceived opportunities in European Union is 34,8%. Among the partner countries, Turkey has the highest rate with 40%, UK follows with 37%, Romania has 32%, Spain has 23% and Greece has 14% perceived opportunities rate.
4. *Perceived Capabilities*: Reflects the percentage of individuals who believe they have the required skills, knowledge and experience to start a new venture. The average rate of perceived capabilities in European Union is 42,3%. Turkey again has the highest rate among partner countries with 49%, Spain and Romania have the same and second highest rate with 48%, Greece has 46% and UK has 38% perceived capabilities rate.
5. *Entrepreneurial intention*: defined by the percentage of individuals who expect to start a business within the next three years (those who already entrepreneurially active are excluded from this measure). The average rate among European Union countries is 12,1%. Among the partner countries, Romania far highest rate with 32%, Turkey has 14,7%, Greece has 9%, UK has 8,5% and Spain has 7,1% entrepreneurial intention rates.
6. *Fear of failure*: The percentage of individuals who have fear of failure which only applies to those who perceive opportunities when it comes to starting own venture. The average fear of failure rate among European Union countries is 40,7%. Turkey

---

<sup>1</sup> <http://www.gemconsortium.org/country-profiles> (last visit on 28.04.2016)

has the lowest rate among the partner countries with 30%, this followed by Spain with 38%. Romania has 41%, UK has 43% and Greece has 49% fear of failure rates.

In overall, majority of the partner countries have a good climate for entrepreneurship with rates similar to or over the average of EU in terms of the main indicators which represent entrepreneurial activities in GEM.

Shortly about the recent profile of the early stage entrepreneurs in partner countries; the typical early stage entrepreneurs in these countries are generally male, aged between 25-44 years, educated with a university degree and from high income groups. They are likely to be motivated by opportunity, rather than necessity.

## 2. RESEARCH METHODOLOGY

The overall period of conducting in-depth interviews with SMEs, start-ups and incubator/accelerator organisations took about two months in all partner countries. The partners first used the random recruitment method while establishing contact and inviting the target groups to the interviews. However, since this method was not successful in almost all countries, because of the reluctance for devoting the necessary time for interviews, partners used their established contacts which helped them complete the interviews without significant deviation in the initial time plan.

The means of first communication with the interviewees, who are the entrepreneurs and intrapreneurs in SMEs and start-ups and representatives in incubator/accelerator organisations, were e-mail and phone calls. When recruited, the interviews mostly conducted via Skype video calls and phone calls, a lower number of interviews have been conducted face-to-face. In Turkey, all interviews (except one) have been conducted face-to face by the visits organised in the premises of organisations.

The partnership conducted **a total of 150 interviews** and individual number of interviews conducted in each partner country was 30. The initial design of research suggested conducting interviews with 1 entrepreneur and 2 intrapreneurs in 9 SMEs, 1 entrepreneur and 1 intrapreneur in 1 start-up, 1 representative from incubator/accelerator organisation in each partner country. This initial target achieved in partner countries, except in UK and Romania. It was challenging to get approval for more than one interview in most of the companies in UK and Romania, hence more number of SMEs and start-ups have been involved in order to complete 30 interviews.

The distribution of all interviews according to target groups is as follows:

- **68 interviews with entrepreneurs in 87 companies** (SMEs and start-ups, and one public-private organisation in UK)
- **77 interviews with intrapreneurs in 87 companies** (the same SMEs and start-ups)
- **5 interviews with representatives of 5 incubator/accelerator organisations**

The questionnaires used during the interviews of three groups above are provided in Annex 1, 2 and 3.

## 3. INNOVATIVE SMES AND START-UPS

### 3.1. Profile of Companies

As specified in the research guidelines, all companies involved in the research are innovative regardless of their field of activities. However, in general, the companies are active in the sectors which can be regarded as the innovative sectors of our age. Majority of companies are active in **ICT, electronics and advanced technologies (nano-biotechnology and composites)**. In some of the countries (UK, Spain and Romania) the sectors are more diverse, and ranges from **e-commerce, management consultancy, advertisement, marketing, event, entertainment, financial services, security, energy and green technologies, telecommunications, water management, medical, waste management, pharma, transportation, construction, automotive, clothing design, music production, training centres, tourism, real estate and cleaning services.**

The companies interviewed are relatively young; **40% of companies established between 2010 - 2016, followed by the 31% established between 2000 - 2010.** Only 17% established between 1990 - 2000, and 11% established between 1970 - 1990.

**More than half of the companies (52%) are micro in size with number of employees between 1-9. %33 are small with 10-49 employees and 16% are medium companies with 50-249 employees.**

Summary profile of the companies represent that an unintentional concentration on micro and new born companies happened in all partner countries. This can be well explained with that the innovativeness is more observable and prevalent in micro size start-ups as they need to start with the mission of innovation in order to survive and become sustainable.

### 3.2. Innovation in Companies

In order to measure the perception regarding innovativeness, we asked the participants whether they believe that their companies are innovative or not. **Almost all participants answered self-assuredly as the companies are fully innovative in their respective field.** They justified their opinions as the companies are good at:

- New technological product development
- Market application of new products
- Innovative business model, R&D and know-how specialization
- Innovation management

What is more special with these companies' innovativeness is that they generally consider **continuous learning as an organisational culture is the key for sustainable and innovative development.**

Although all companies devote similar effort for innovation, several participants do not believe that their company is not fully innovative yet because of some reasons such as;

- The product development is connected with customer needs or could not be achieved without customer support
- Operating in traditional business fashion, being have to deal with traditional sales procedures which sometimes hinder innovation

The participants in Turkey, who believe that their companies are not fully innovative, also regard that financial support mechanisms in Turkey dictate some regulations/bureaucracy for innovation projects and these sometimes result in underachievement of desired innovation. This is a general problem in Turkey as a significant part of start-ups is being established with the innovation projects supported with public funds.

In terms of R&D and innovation projects, the companies generally started with **developing innovative technologies**. However, the projects in later phases become more **customization of existing innovative technology according to the specific needs of customers**. The application of the existing technology to new markets is also the case in Spain.

The funding of R&D and innovation projects in partner countries varies, but when looking at the total, **while the half of companies receive external funding, the other half funds the projects internally**. While the majority of companies in Greece and Spain receive external funding, in Turkey half of them receive funding, in UK and Romania the projects are mostly funded internally. The use of national funding schemes is more common in Spain and Turkey, but the companies in Greece and UK mainly receive funding from EU framework programmes.

As majority of companies are micro and small sized, there are no special R&D and innovation departments and **the innovation projects are commonly led by CEO-entrepreneurs and driven by the innovation teams** built in the companies. In medium sized companies, which are in majority in Spain, the projects are led by the managers of innovation, R&D or technology. However, in almost all cases, **a team based approach to innovation projects** has been observed.

## 4. INNOVATIVE ENTREPRENEURIAL AND INTRAPRENEURIAL CHARACTERISTICS

### 4.1. Innovative Entrepreneurial Characteristics

#### *Education Background*

**All interviewed entrepreneurs (except a couple in UK) have strong education backgrounds minimum at graduate level.** The concentration in education fields vary in partner countries. While in Turkey, Greece and Spain almost all entrepreneurs educated in technical-scientific fields, in UK and Romania education in business related fields (business administration and economics). The entrepreneurs with technical education background are generally graduated from engineering departments (computer, mechanical, chemical, industrial, physics, etc.) which are related to companies' field of activities.

**Majority of the entrepreneurs also have post graduate degrees, mostly at MSc level and rarely at PhD level,** in the same or complementary fields of graduate.

#### *Prior Work Experience and Story of Company Establishment*

**All interviewed entrepreneurs have work experience prior to setting up a company, mostly between 5-10 years.** Most of them have worked in R&D related fields in private

sector. Prior work experience plays a key role in starting own ventures as the previous jobs helped them use their theoretical expertise in practice by putting upon gained specific know-how in their space and they also became aware of the nature of business operations.

In all cases, **the entrepreneurs do not have previous experience in company set up and management**. In some of the countries (Greece and Spain), the entrepreneurs generally set up their own business **upon a perceived opportunity or need in the market**. However, in Turkey, the interviewed entrepreneurs are mostly necessity based (started self-employment for necessity reasons, such as; could not be satisfied with the working conditions and salary as young, promising and qualified individual).

**Most of the entrepreneurs received external funding for the company establishment which is based upon an innovative project.** In Turkey, UK and Spain, the primary source of finance is national support programmes. In most cases in Greece, the funding came from EU programmes. Lastly, business angel investors are common among the companies in UK.

### *Traits*

During the interviews, it has been observed that entrepreneurs have some common traits regardless of their backgrounds and environments. The common entrepreneurial traits in all countries are listed below in sequential order:

- The entrepreneurs are **determined** and **persistent**; they do not give up easily and try as many times as they can in order to reach their goals.
- They tend to be **passionate** for success.
- They are **curious** and **adventurous**, like to go beyond the usual things with a clear vision by **taking risks**.
- They are **proactive** in taking initiatives.
- They are **energetic** and constantly **in action**, looking for new opportunities in the market.
- They have a **holistic view** over the company and are good at **cooperative work** and **listening to others**.
- They are **excellent learners**; they learn by doing, they learn from errors, observations and other people.

### *Motives*

The major motives of all entrepreneurs, regardless of the country they operate, are **materializing new ideas/developing new technologies**, which satisfy needs in the market, and being **financially independent** but making more money than paid jobs. In some of the cases, it has been observed that, entrepreneurs also have a motive to work in an environment where **continuous learning** and **self-development is possible**.

In most of the countries, different patterns observed related to the entrepreneurial motives. The motives, apart from the common ones above, are found to be linked to educational background and prior work experience in Greece and Spain. According to this, **researchers**, who decide to take the entrepreneurial path, have an **internal hunger** that drives them to see their **research to continue** and to take it a step further from the limited academic environment into some real life applications. These entrepreneurs believe in the **value of their research** and they want to commercialize it. On the other hand, non-researchers are

motivated by the **joy of materializing new ideas** and by **ceasing an opportunity** that they saw in a market.

In Turkey and Romania, while the major motive of **making more money and also having more flexible working environment is more common for necessity based entrepreneurs**; materializing new ideas which corresponds to new opportunities in the market is more common for opportunity based entrepreneurs.

## 4.2. Innovative Intrapreneurial Characteristics

### *Education Background*

Similar to entrepreneurs, **all interviewed intrapreneurs (except 3 participants in Romania) have strong education backgrounds minimum at graduate level**. However, unlike the entrepreneurs' concentration in technical-scientific education fields in some countries, intrapreneurs' education fields vary in all countries. While **half of the participants completed studies in similar engineering fields, the other half completed business and economics studies**.

The post-graduate education is common among the intrapreneurs, but not as much as entrepreneurs, **mostly at MSc level and rarely at PhD level**. Although the intrapreneurs also represent a significant level of education, **entrepreneurs tend to be more educated than intrapreneurs**.

### *Prior Work Experience and Story of Joining the Company*

**Majority of intrapreneurs have work experience prior to joining the current company mostly between 5-10 years**. They have been working in similar sectors and in the positions related to their fields of studies. They are still holding positions related to education backgrounds and prior experiences, but at higher levels. Their level of contribution in business operations and most importantly innovative development tend to be higher in their current jobs by the help of business know-how gained in prior work experiences.

**In most of the cases, the prior work experiences also play important role in joining the current company**. Some of them have old dated relationships with the founder entrepreneur from previous experiences and in some cases (in Spain) they have started in the current companies by getting training grants as the first step and then received promotion within the company.

### *Traits*

The intrapreneurs generally have similar traits with entrepreneurs, however vary in each country. The common traits altogether can be regarded as **complementary to entrepreneurial traits**. The common intrapreneurial traits in each country are listed below in sequential order:

- The intrapreneurs are **curious, adventurous, non-conformist**, and they **like challenges and enjoy discovering new things**.
- They are also **determined and persistent**, like entrepreneurs, **motivated to provide new solutions** by going beyond their daily responsibilities.

- They are **ambitious for success** and like to be **updated** with new technological developments, trends, new market applications etc.
- They tend to be **flexible, adapt to different situations easily** and **manage uncertainty**.
- They are **good team players**, they share knowledge and cooperate well with others.

### *Motives*

The common motives of intrapreneurs in all countries, which direct them to contribute to innovative development of companies, are similar. They feel **the satisfaction of creating and testing new things/technologies in an environment where they are free to learn on a continuous base and explore new ideas**. The intrapreneurs in Greece, also express that they are satisfied by building a bridge between research and application, to be able to continue research and transform it into creative solutions.

## 5. INNOVATIVE ENTREPRENEURSHIP AND INTRAPRENEURSHIP COMPETENCES

### 5.1. Innovative Entrepreneurship Competences

A general tendency among the entrepreneurs in all countries suggests that **entrepreneurship is more like an attitude** and thus **not something that is trainable**. There are **many parameters** affecting this process, such as; **character, environment, culture, etc.** However, there are **some common competences** that are developed in a **continuous process which include not only formal and non-formal education but professional experience and observations**. That is why they consider that their prior experiences have more impact on their overall development than formal education.

In all countries, most of the entrepreneurs interviewed believe that they have developed their competences through **a combination of education and work experience**. They mostly rely on the observations and learning by doing in their business engagement within specific fields/sectors.

In UK and Greece, few entrepreneurs had professional trainings related to their field of operation in order to maintain their technical knowledge. In terms of soft entrepreneurship and business skills, in Spain and Romania, the entrepreneurs commonly obtained them through MBA and business related courses, and entrepreneurship programs, which comprises topics like marketing, finance, operations, communication, etc. The number of entrepreneurs who attended these kinds of trainings is very few in Turkey.

A significant number of entrepreneurs in Greece took part in business accelerator programmes which created a very positive impact on them for developing their competences.

Majority of entrepreneurs in Greece also stresses that apart from the organized training or education on a certain subject, being exposed to multidiscipline environments was very important factor that helped them develop their competences.

The common competences of entrepreneurs in all countries, which have been developed through this continuous process of training, are listed below in sequential order:

- **Sound technical and technological know-how in their fields**
- **Thinking out of the box**, having a global vision of things
- **Analytical thinking**
- **Problem solving**
- **Communication** (it is difficult to communicate entrepreneurial ideas in a way that is very clear to a number of different audiences and not just communicate the idea but also to communicate the value that the idea creates)

Although these are expressed as common competences that are not considered to be trained from scratch, the entrepreneurs have been asked about the importance of other competences that are trainable and key for both entrepreneurs and intrapreneurs to contribute innovative business growth. Their and intrapreneurs' opinions about these competences are compiled and elaborated below in Table 1.

Majority of entrepreneurs in all countries (over 80% in Turkey, UK and Greece, but less than 50% in Spain and Romania) believe that **they work with innovative intrapreneurs** who take active role in innovative development of companies. The intrapreneurs distinguish from regular staff with some special characteristics they have due to their positions in the company and thus create difference. They mostly **complement entrepreneurs** with various competences, such as; **having excellent scientific know-how in the field, systematic and disciplined work habit and being open to and adapt changes easily.**

The entrepreneurs believe that the traits and competences of entrepreneur and intrapreneurs **altogether play important role in the entire innovative development and operations of the company.**

## 5.2. Innovative Intrapreneurship Competences

The interviews in all countries revealed that there are **similarities between the competences of an entrepreneur and that of an intrapreneur.** However, due to intrapreneurs' position within the company, they are more likely to have **less assertive competences than entrepreneurs.** One participant from UK, provided a simple and clear explanation of two groups; **“Entrepreneur is external while intrapreneur is internal”** which can be well interpreted as while entrepreneurs ‘think out of the box’, intrapreneurs ‘think inside the box’.

Similar to the entrepreneurs, in all countries, most of the intrapreneurs interviewed believe that they have developed their competences through a **combination of education and work experience.** Few number of intrapreneurs received professional training in order to develop their workplace competences.

Some common competences of intrapreneurs in all countries, which are similar but mostly complementary to those of entrepreneurs, are listed below:

- Intrapreneurs also have sound **technical and technological know-how in the field.**
- They tend to be **updated** with needs and trends in the market.
- They are **good at collaborating, working in teams and contributing company initiatives.**
- They understand the **boundaries of what they do.**
- They have an **analytical mind-set** and a **holistic approach to problems.**

- They are **good at adapting changes easily**.

Intrapreneurs also believe that the individual traits and competences of both entrepreneurs and intrapreneurs in their company **altogether have a significant impact on the innovative development of the company**. Similar to entrepreneurs, they consider some competences can be improved, but some of them dependent on the character and other elements which may have impact on the overall development of both entrepreneurs and intrapreneurs.

During interviews, the researchers have proposed some competences, which are proved to be trainable and could be special to both entrepreneurs and intrapreneurs for them to contribute innovative development of their companies. Both groups evaluated these competences by scaling according to the perceived importance and expressing what each competence means them. The table below represents the ranking of trainable innovative entrepreneurship and intrapreneurship competences that are perceived as important by both groups and compiled definitions they created.

**Table 1. Ranking of the Competences with Brief Definitions**

<b>Ranking</b>	<b>Competence</b>	<b>Definition</b>
<b>1</b>	<b>Creative Thinking</b>	A process of thinking which results in new ideas to be turned into new products/services or new solutions to existing or prospective problems and complex issues. Can be defined as 'thinking out of the box'.
<b>2</b>	<b>Problem Solving</b>	Ability to find the best solution for a specific problem or bottleneck which works fast. Should be proactive.
<b>3</b>	<b>Leadership, Motivation, Team Management</b>	Ability to lead and empower a team towards a common mission, by revealing the creative potential which helps getting effective results. Creating 'synergy'.
<b>4</b>	<b>Business Model Generation</b>	A defined system of business operation, mostly a new product, which helps determining the parameters from developing to selling new product. The way of capturing value and the way it is monetized.
<b>5</b>	<b>Innovation Management</b>	Managing the entire process of generation new innovation ideas, turning these ideas into new products/services and bringing innovation to market. Includes control over IPR.
<b>6</b>	<b>Agile Management</b>	A fast, interactive and value-driven approach to management. Helps fast moving in changing business environment and complex situations.
<b>7</b>	<b>Strategic Planning</b>	A result oriented effort which includes the process of defining the direction of the company, setting priorities and goals to get in this direction and taking action when it is time.
<b>8</b>	<b>Risk Management</b>	The systematic analysis of risks which may arise between different operations in a company, taking necessary measures and continuous monitoring.
<b>9</b>	<b>Rapid Experimentation</b>	Fast testing and development of proof of concept of a product, in order to remove blurry vision about the product.

### 5.3. Desired Features of eLearning/mLearning to be designed for the Competence Development of Entrepreneurs and Intrapreneurs

The interviewees in all countries, both entrepreneurs and intrapreneurs, expressed their expectations regarding an eLearning/mLearning Platform to be designed for competence development of innovative intrapreneurs and potential innovative entrepreneurs. The desired features can be grouped as; type of materials, functionality and contents and listed below under these headings.

#### **Type of materials:**

- Practical exercises
- Video plugins, social links, location extension
- The information should be provided in a format with easy comprehension
- Webinars
- Case studies
- Game based learning materials
- Easy to understand (contents)

#### **Functionality:**

- Including a test to evaluate/measure the entrepreneurship skills, according to the data collected, providing a personalized 'training roadmap'.
- Interactivity; allow knowledge sharing and knowledge combining between different users
- Have an attractive design and be user friendly
- Working in real time
- Create real environments and different scenarios
- Allow comments and reviews
- Allow creating personal profile pages
- The contents should not be static, but be updated regularly

#### **Contents:**

- Presentation and public speaking skills
- Up to date information about the recent developments and trends in innovative sectors in the world
- How to raise funds, sources of finance (in partner countries)
- R&D, IP protection, patent management, funding instruments.
- Finance and accounting
- General marketing techniques
- Social media promotion
- Resource and time management

## 6. ANECDOTES FROM INTERVIEWS

During the interviews, the interviewees expressed some interesting sentences that are useful for enlightening the issues regarding innovative entrepreneurship and intrapreneurship. As these expressions could not be used as direct inputs in the sections above, they are grouped for each country and listed below.

### 6.1. Direct Quotations from Turkey

- *Representative from incubator organisation* – “Contrary to popular myth, in general leadership is not a competence for only one person it is mostly shared. A team of leaders or one person should have the following characteristics to be called as ‘leader’:
  1. Continuity
  2. Consistency
  3. Depth (know – how in the field)
  4. Skills
  5. Diversity (if leadership is shared by two or more people)
  6. Coordination”
- “I do not believe that the senior students are the potential entrepreneurs. They need to gain professional experience first and then take their first steps in entrepreneurship. Otherwise, their initiatives cannot be sustainable.”
- “The skill of continuous learning and learning from the right resources is very important for entrepreneurs and intrapreneurs, especially in ICT sector.”
- “Strategic management and risk management can hinder innovation, if they are too prioritised. They are important, yes, should stay in the background of R&D and innovation activities.”

### 6.2. Direct Quotations from UK

- “Check DENNIS STAUFFER INNOVATOR MINDSET who developed an instrument that has predictive capabilities of entrepreneurial success and the instrument was a project he had been developed for almost 20 years. The Kauffman foundation funded some of his studies so it would be nice to check it out.”
- “Being innovative means to be open to change and not just open to change but proactively seeking change so it is always asking the question of what is next, what can we do better, what can we do differently and not just for the sake of doing it differently but to create more value than it’s currently created.”
- “Innovation is about designing original solution that will meet a particular market.”
- “Entrepreneurship is about bridging a gap. Entrepreneur is external while intrapreneur is internal”.

### 6.3. Direct Quotations from Greece

- “The company is a fertile field which is ready to be cultivated.”
- “In order to focus on innovation you must know that ‘everything else is solved’.”
- “I sometimes see myself as a hustler.”
- “Phycology is very important trying to find different motives for different characters.”

### 6.4. Direct Quotations from Spain

- “Entrepreneur/intrapreneur are mainly innate, are people of action.”
- “Entrepreneurs are non-conformist people.”
- “Entrepreneurs are learners.”
- “People of action, open-minded, adaptable.”
- “Intrapreneurs ideate new solutions out of the ordinary.”
- “The CEO is the bandleader.”
- “Associate with people that complement you.”
- “Learning by doing.”
- “To develop entrepreneurs, it is important to create the adequate environment, providing the tools that enable them to create.”
- “What defines and entrepreneurs is doing, not listening.”

### 6.5. Direct Quotations from Romania

- “Leadership is the key to innovation.”
- “It is important to understand the vision of each client.”
- “Thinking outside the box should be a rule in each firm.”
- “There shouldn’t be any fear of launching an innovative product.”
- “Teaching yourself is very important for any entrepreneur.”
- “Action is what defines an entrepreneur.”

## 7. CONCLUSIONS

The interviews with entrepreneurs, intrapreneurs and incubator organisations revealed important results which will be direct input for all key outputs in INNOGROW to be developed throughout the project lifetime.

Firstly, the traits, motives and competences of entrepreneurs and intrapreneurs will be key input for the development of ‘Competence Profile of an Innovative Entrepreneur’ and also ‘Self-assessment Tool for Innovative Entrepreneurship’. Secondly, the identified trainable competences will main resource for the partnership to determine the main titles of eLearning materials which will be developed by the partnership.

As for training materials, it has been decided by partnership that 5 main module titles should be selected among the competences scaled by the interviewees. According the average scaling, the **5 training titles**, important for the competence development of innovative intrapreneurs and potential innovative entrepreneurs, revealed as; **creative thinking, problem solving, leadership-motivation-team management, business model generation and innovation management**. Although these should be selected as the main training titles, the partnership has discussed and decided that two of the highly scaled titles

**(business model generation and agile management) should be included in the curricula.** Because;

- Agile management is too specific title (mostly appeals to ICT sector) to be taught to a target group which comprises the entrepreneurs and intrapreneurs from all sectors.
- Business model generation is already being taught to target group while they use the 'Business Idea Generation Tool' to be inserted in the eLearning/mLearning software (O4) with necessary guidance and examples.

Hence, the new list of training titles has been determined by taking into consideration the titles highly scaled after these titles and includes the following:

- **Creative Thinking**
- **Problem Solving**
- **Leadership, Motivation and Team Management**
- **Innovation Management**
- **Strategic Planning**

The desired features of the eLearnig/mLearning software above, which are indicated by the interviewees, will definitely be taken into consideration by the partnership while developing the software and its contents.

## ANNEXES

### ANNEX 1 – Questionnaire for SMEs and Start-ups.

#### Entrepreneur profile:

<b>Company name</b>	
<b>Name &amp; surname of the interviewee</b>	
<b>Position</b>	
<b>Date of the interview</b>	
<b>Type of interview</b>	<i>(face-to-face, on-line, phone)</i>
<b>Name of the interviewer</b>	

#### #1 General

1. Describe the company.
2. Do you consider the company as an innovative firm? Why? In which innovation fields does it stand out?
3. What innovation projects have been carried out lately? Who promoted these projects? Who led these projects?

#### #2 Entrepreneurship Characteristics and Competences

4. Can you shortly mention about your education background, prior work experience and how you set up this company?
5. Do you consider you are an 'innovative entrepreneur'? Why?
6. What motives made you become an entrepreneur and lead to innovative growth of your business?
7. What traits you think you have which distinguish you from others?
8. What competences you think you provide?
9. How did you develop these competences? On which topics have you been trained?
10. Do you consider you manage 'innovative intrapreneurs' in your company? Which are the competences that facilitate you to identify them?
11. Which company areas do you consider have been improved through the identified competences and traits of entrepreneurs and intrapreneurs in the company?
12. Do you consider that entrepreneurs, intrapreneurs and other employees and company owners could improve competences regarding innovation and

entrepreneurship? What relevant competences for innovative businesses do you consider should be improved or gained? Can you prioritize them?

13. Please, rate the following topics from 0 to 5 (0 less important to increase innovative businesses growth, 5 most important to increase innovative businesses growth)

Scale	Competences	How would you define the competences you rated 1 to 5 with a couple of words?
0 1 2 3 4 5	Innovation management	
0 1 2 3 4 5	Rapid experimentation	
0 1 2 3 4 5	Business model generation	
0 1 2 3 4 5	Strategic planning	
0 1 2 3 4 5	Agile management	
0 1 2 3 4 5	Creative thinking	
0 1 2 3 4 5	Leadership, motivation and team management	
0 1 2 3 4 5	Risk management	
0 1 2 3 4 5	Problem solving	

14. Imagine you have an eLearning tool to improve yours' and your employees' competences regarding innovative entrepreneurship, what kind of features do you consider the tool should have?

## ANNEX 2 – Questionnaire for SMEs and Start-ups.

### *Intrapreneur profile:*

<b>Company name</b>	
<b>Name &amp; surname of the interviewee</b>	
<b>Position</b>	
<b>Date of the interview</b>	
<b>Type of interview</b>	<i>(face-to-face, on-line, phone)</i>
<b>Name of the interviewer</b>	

### #1 General

1. Describe the company.
2. Do you consider the company as an innovative firm? Why? In which innovation fields does it stand out?
3. What innovation projects have been carried out lately? Who promoted these projects? Who led these projects? Which of them do you lead?

### #2 Intrapreneurship Characteristics and Competences

4. Can you shortly mention about your education background, prior work experience and how you started to work in this company?
5. Do you consider you are an 'innovative intrapreneur'? Why?
6. What motives made you become an intrapreneur and lead to contribute to innovative growth of this business?
7. What traits you think you have which distinguish you from others?
8. What competences you think you provide?
9. How did you develop these competences? On which topics have you been trained?
10. Do you consider you work with entrepreneurs and intrapreneurs? Which are the competences that facilitate you to identify them?
11. Which company areas do you consider have been improved through the identified competences and traits of entrepreneurs and intrapreneurs in the company?
12. Do you consider that entrepreneurs, intrapreneurs and other employees and company owners could improve competences regarding innovation and

entrepreneurship? What relevant competences for innovative businesses do you consider should be improved or gained? Can you prioritize them?

13. Please, rate the following topics from 0 to 5 (0 less important to increase innovative businesses growth, 5 most important to increase innovative businesses growth)

Scale	Competences	How would you define the competences you rated 1 to 5 with a couple of words?
0 1 2 3 4 5	Innovation management	
0 1 2 3 4 5	Rapid experimentation	
0 1 2 3 4 5	Business model generation	
0 1 2 3 4 5	Strategic planning	
0 1 2 3 4 5	Agile management	
0 1 2 3 4 5	Creative thinking	
0 1 2 3 4 5	Leadership, motivation and team management	
0 1 2 3 4 5	Risk management	
0 1 2 3 4 5	Problem solving	

14. Imagine you have an eLearning tool to improve your competences regarding innovative entrepreneurship, what kind of features do you consider the tool should have?

## ANNEX 3 – Questionnaire for Business Incubators and Public-Private Agencies

<b>Entity name</b>	
<b>Name &amp; surname of the interviewee</b>	
<b>Position</b>	
<b>Date of the interview</b>	
<b>Type of interview</b>	<i>(face-to-face, on-line, phone)</i>
<b>Name of the interviewer</b>	

### #1 General

1. Describe your entity and your activity.
2. Do you consider that the business initiatives you incubate or companies you work with are innovative firms? Why? In which innovation fields do they stand out?
3. Who leads the business initiatives/innovative companies?

### #2 Entrepreneurship competences

4. What are the competences of these leaders?
5. Do you consider they are 'innovative entrepreneurs'? Why?
6. Do you think innovation and entrepreneurship competences could be trained? How?
7. Which topics are more important for them for growing innovative business?
8. Do you offer trainings on this fields? To whom (people in general or potential entrepreneurs)?
9. How do you provide the trainings? How do you find the profiles you need to participate in the trainings?
10. Please, rate the following topics from 0 to 5 (0 less important to increase innovative businesses growth, 5 most important to increase innovative businesses growth)

Scale	Competences	How would you define the competences you rated 1 to 5 with a couple of words?
0 1 2 3 4 5	Innovation management	
0 1 2 3 4 5	Rapid experimentation	
0 1 2 3 4 5	Business model generation	
0 1 2 3 4 5	Strategic planning	
0 1 2 3 4 5	Agile management	
0 1 2 3 4 5	Creative thinking	
0 1 2 3 4 5	Leadership, motivation and team management	
0 1 2 3 4 5	Risk management	
0 1 2 3 4 5	Problem solving	