



# FIERE Combined Survey Report

## 2015



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## Executive Summary

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The aim of the FIERE skill needs analysis survey was to gain a level of understanding of the entrepreneurial skills and behaviours of employees from public, private, community & enterprise and voluntary sectors. In total, across the FIERE consortium partners 450 respondents from 223 organisations were surveyed, with the public sector registering the highest at 39%, followed by the private sector at 38% and the community & enterprise sector at 14% and finally a small sample of voluntary organisations. Samples of the main findings include;

- Overall there was a very high level of education attainment among respondents with 61% in Greece and 60% of the Irish sample holding a post-graduate qualification.
- Across all FIERE partners and sectors the value and benefit of an entrepreneurial skills training programme was valued very highly; Bulgaria (94%), Greece (98%), Iceland (85%), Ireland (94%), Portugal (98%) and Sicily (94%).
- Accreditation was also of high importance but it was felt that a lack of accreditation would not dilute the value and impact of a skills training programme to organisations.
- Iceland had no representation from the 20-30 age groups, where Bulgaria had 36%, Sicily had 29%, and Greece had 21% and 4% from Ireland.
- The preferred chosen method of programme delivery was workshop based learning (especially for Sicilian and Irish partners) and blended learning (for Iceland, Bulgaria and Greek partners).
- In the case of Bulgaria, 65%, and in Ireland, 60% of respondents had past entrepreneurial experience while in Greece the 63% majority indicated that they had some entrepreneurial experience.
- In the case of Iceland there was a high level of entrepreneurial activity across all sectors especially in the public sector, where 56% of females and 40% of males had started their own business.
- In Portugal 64% of respondents had not engaged in any form of entrepreneurial activity.
- Empowerment of employees was strong across all sectors and genders for Ireland, Bulgaria, Iceland and Greece; this was not the case for Portugal and Sicily.
- Resourcefulness, resilience and analytical thinking were the most common skills cited as important for the organisation, the individual employee and as important skills to be trained in.

The FIERE skills needs analyses survey will support the development of an entrepreneurial skills training programme which will be delivered in each FIERE partner country during 2015. Each FIERE partner conducted the survey in their region and produced a detailed individual country report which is available on the FIERE website<sup>1</sup>. The objective of this report is to provide a combined overview of the data collected and to summarise the findings.

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<sup>1</sup> <http://www.fiireproject.eu/>

## Introduction

The FIERE (Furthering Innovative Entrepreneurial Regions of Europe) project aims to support organisations' employees to behave more entrepreneurially and innovatively within their work environment. Innovative entrepreneurship is a new paradigm; it lies at the intersection of entrepreneurship and innovation as it recognises the necessity of teaching innovation, entrepreneurship and creativity skills to the public, private, community & enterprise and voluntary sector workforce. Furthermore, the FIERE partnership aims to design and implement a training programme in each FIERE partner region to support employees by increasing their potential, capacity and capability to behave entrepreneurially and innovatively.

The FIERE partnership recognises that existing innovation, entrepreneurship and creativity training provided to regionally-based organisations has been in a piecemeal and ad-hoc manner and that there has been a lack of appropriate adult education supports. The objective of the Skills Needs Analysis Survey is to determine across the FIERE partner regions the skills required by employees and their organisations in order for employees to behave more entrepreneurially within their organisations. Furthermore, the survey will also explore the level of encouragement employees have in decision making processes within their organisations and the support they have to seek out new opportunities. The survey will support and guide the development of an entrepreneurial, innovative and creativity skills training programme which will raise the skills and capabilities of employees in organisations to tackle challenges in employment, economic development, climate change, energy and food security, health and the ageing population.

The FIERE partnership includes 7 partner organisations from Bulgaria, Greece, Iceland, Ireland, Portugal and Sicily. Ireland is represented by Tipperary County Council which is a local government authority and Waterford Institute of Technology (WIT) which is a Higher Education Institute (HEI); CESIE from Sicily which is a not-for-profit independent NGO; the Institute of Post Graduate Studies from the University of National and World Economy in Bulgaria; Allweb Solutions from Greece which is leading IT company; the Associação Commerical e Industrial de Barcelos which is the commercial and industrial association of Barcelos (ACIB), Portugal; and Einurd ehf which is a consultancy company located in Iceland.

This report addresses a number of key themes including demographics, entrepreneurial background, skills needs analysis and the value and benefit of accreditation of a skills training programme. The demographics section provides an overview of the responses divided by sector type, number of respondents, gender, business activity, job roles, and longevity of employment. The entrepreneurial background section addresses past entrepreneurial activity of the employee, and the level of entrepreneurial behaviour within the respondents' organisations. The skills needs analysis section focuses on the skills required by the respondents' organisation and the skills the respondents consider valuable for their role. The last section addresses the programme accreditation and whether such training would be beneficial to the respondents and their respective organisations, as well as the preferred method of delivery.

This report represents the combined survey findings from the FIERE partner regions and provides an overall review of the findings of the survey. All individual regional FIERE survey reports are available in full on the FIERE website<sup>2</sup>.

## 1. Demographics

Within the context of the FIERE project the public sector, voluntary sector, community & enterprise and the private sector were the selected organisation types surveyed. Individuals from these four key sectors were requested to take part in the survey as they are the target audience for the FIERE training programme.

In total, across the FIERE consortium partners, 450 respondents from 223 organisations were surveyed, with the public sector registering the highest number of respondents at 39%, followed by the private sector at 38% and the community & enterprise sector at 14% and finally a small sample of voluntary organisations (9%). Table 1 illustrates for all partner regions the number of and type of organisation surveyed within each region.

*Table 1 Type and number of organisations surveyed*

Type of organisation	Bulgaria	Greece	Iceland	Ireland	Portugal	Sicily	Total number of organisations
Public sector	6	9	21	15	35	2	88
Voluntary sector	5	1	4	1	3	5	19
Community & Enterprise	2	-	9	7	7	6	31
Private Sector	21	9	7	8	26	14	85
<b>Total Number of organisations</b>	<b>34</b>	<b>19</b>	<b>41</b>	<b>31</b>	<b>71</b>	<b>27</b>	<b>223</b>

Table 2 illustrates the sample size for each region and addresses the sector type and the ratio between males and females.

*Table 2 Number of respondents surveyed per region, sector and gender type*

Type of organisation	Bulgaria		Greece		Iceland		Ireland		Portugal		Sicily		Total Number of Males & Female Respondents F/M
	F	M	F	M	F	M	F	M	F	M	F	M	
Gender													
Public sector	6	3	17	12	12	9	14	16	85	43	1	3	135/86 (221)
Voluntary sector	3	4	0	0	3	1	1	0	0	8	3	3	10/16 (26)
Community & Enterprise	2	0	0	0	6	3	4	4	4	8	4	9	20/24 (44)
Private Sector	21	11	10	9	5	2	6	5	24	37	17	12	83/76 (159)
Number of F/M	32	18	27	21	26	15	25	25	113	96	25	27	248/202 (450)
<b>Total Number of Respondents per Country</b>	<b>50</b>		<b>49</b>		<b>41</b>		<b>50</b>		<b>209</b>		<b>52</b>		<b>450</b>

(F- Females; M-Males)

<sup>2</sup> <http://www.fiereproject.eu/>

The following section presents the demographics for each of the six partner regions addressing, gender, business activity, age, job roles, and levels of education and longevity of employment.

### **1.1 Demographics: Bulgaria**

The Southwest region of Bulgaria was the focus area of the survey and in total 50 respondents replied from 34 different organisations, including 18 males and 32 females of which 64% were represented by the private sector, 18% from the public sector, 14% from the voluntary sector and 4% from the community & enterprise sector. For Bulgaria an identifiable trend from respondents surveyed is that employees in the public sector tend to hold their position for a longer period of time, for public sector workers this is about 15 year's irrespective of gender. In public and private sector organisations the majority of the male respondents are senior executives (65% and 73% respectively), while a predominant part of the female respondents hold operative roles (60% in the private sector and 83% in the public sector). For voluntary organisations, the majority of male and female respondents are mid-level managers (50% of males and 67% of females) or senior executives (25% of males and 33% of females); while for community & enterprise organisations all respondents are senior executives.

The average age of respondents employed in public sector organisations is the highest (67% are in the age group 51-60 years of age) compared to other types of organisations. This may be related to the longevity of employment in such type of organisations. On the other hand, all respondents in voluntary organisations were in the 21-30 age range, which, according to the partner from Bulgaria, "is a sector that can support younger employees to gain work experience as there is no or little cost associated with this form of employment". Community & enterprise sector was represented by only two females, one between 30-40 years old and one between 40-50 years old. Most respondents from the private sector were between 30-40 years of age (37%).

With respect to their educational background, all of the respondents hold at least a secondary level of education, with 78% of males and 75% of females holding a third level of education. Of the respondents 14% hold a PhD and interestingly there is no respondent holding a postgraduate qualification such as a Master's or post-graduate diploma.

#### **Key findings from Bulgaria**

- The average age of respondents employed in public sector organisations is high compared to other types of organisations as the public sector tends to have a high longevity of employment.
- All respondents in voluntary organisations were in the 21-30 age range.
- With respect to educational background, 76% of all respondents hold at least a degree level of education.

### **1.2 Demographics: Greece**

In total 49 respondents from 19 organisations were surveyed in Greece. There were no community & enterprise or voluntary sector respondents represented in the survey. The main sectors involved in the survey were the public sector at 59%, the private sector at 41% and represented mostly by Chambers of Commerce and professional associations. Most of the respondents were between 30-50 years old (43%), with a relatively younger level of



respondents working in the public sector. Overall, regardless of sector, 62% of respondents have been employed in their current role for 1 or 2 years and 38% for over 10 years. Respondents' educational level is relatively high, with 61% holding a post graduate qualification (for example a Masters or post graduate diploma) and 25% of them holding PhDs.

### **Key findings from Greece**

- The main sectors involved in the survey were the public sector at 59%, the private sector at 41%. There were no respondents from the voluntary or community & enterprise sectors.
- 62% of respondents have been in their current role for 1 or 2 years and 38% for more than 10 years.
- Respondents' educational levels are relatively high, with 61% holding a post graduate degree and 25% of them holding PhDs.

### **1.3 Demographics: Iceland**

There were a total of 41 respondents out of 167 that replied to the survey. The survey was sent to 3 employees of each organisation. Iceland is composed of 8 regions, each having their own municipalities (local authorities), which are directly linked to associations responsible for lifelong learning, innovation and development as well as culture and tourism.

The public sector represented 50% of the Icelandic sample with respondents coming from municipalities, regional associations and development and cultural associations. The longevity of employment is higher among females, where 8 out of 11 females work for more than five years and 45% work for more than 6 years in their current position. All public sector respondents are either managing directors or have middle management positions. The voluntary sector was 10% of the sample and represented groups teaching "mother languages" to immigrants and business cluster type organisations. All voluntary respondents are managing directors and working approximately 3 years within their current role. All 3 females are working under three years and hold managing director or chairman positions in their organisations. Community & enterprises was 23% of the sample and included lifelong learning centres and a labour union. All males are aged 50 or more, one is an executive director and three are middle managers and all are working for more than ten years within their organisation. Half of females are managing directors and the other half are middle managers. The Other – private sector category had 17% of the sample and was represented by members of a "Women in Business – Network" ([www.fka.is](http://www.fka.is)) who are all self-employed and two from the banking sector.

From the total number of respondents, 40% are between 40-50 years old and 26% between 30-40 years old. Of the majority of females, 46% are between 40 and 50 years old and 31% of females are between 30 to 40 years old however there were no respondents between 20-30 years. Most of the respondents hold a university degree (45%) and those with a tertiary degree are specialised in teaching or accounting. There are no males holding BS/BA degree, while there are 46% of females holding that title. Yet, there is only one female and one male, both from the voluntary sector, who obtained PhD degree. Interestingly, the majority of females in the public sector have not finished their masters.

## Key findings from Iceland

- The public sector represented 50% of the sample 40% are between 40-50 years old.
- The longevity of employment is higher among females, where 8 out of 11 female's work for more than five years and 45% work for more than 6 years in their current position.
- Of the respondents 45% hold a university degree and those with a tertiary degree are specialised in teaching or accounting.
- The majority of males and females hold senior executive positions or managing directors.

### 1.4 Demographics: Ireland

The majority of surveyed respondents were from the public sector at 60%, followed by private sector organisations at 22%, community & enterprise groups at 16% and voluntary organisation at 2%. The overall number of respondents was equally represented by females (25) and males (25).

The individuals that were surveyed within Ireland represented a variety of different professional roles across the different sector types. The public sector (16 males, 14 females) was mostly represented by HEI (Higher Education Institute) employees including Heads of Departments, teachers and researchers as well as government entities such as local and regional authorities, culture and entertainment (e.g. museum curators and sport clubs) and the agricultural sector. The majority of males were senior executives (56%), and held senior management positions compared to the females who held more administrative roles. In terms of longevity of employment within their current job role, females respectively worked longer within their roles than males (42% of males working 5-10 years and 63% of females working 5-10 years in their roles) in the public, private and the community sector. The voluntary sector was represented only by one female being the CEO of the organisation for more than 13 years. Community & enterprise is represented by business support organisations, enterprises, and education support organisations. In the community & enterprise sector 75% of males are employed in their role for more than 10 years, while 75% of females are employed for less than five years. Furthermore, the roles among females and males in the community & enterprise sector was equally distributed, with 50% holding administrative roles and 50% holding management roles.

The majority of respondents are between 40-50 years of age (46%) from which most of them are males. The female population is relatively younger than males across public, private and community & enterprise organisations.

Overall, the education attainment among respondents is relatively high with 58% of respondents holding a post graduate level qualification, of which 60% were from the public sector. The second highest educational attainment was degree level (22% respondents), of which 45% were female and solely from the public sector. However, there are more males with a higher level of education attainment, where 68% males hold a post graduate degree and 16% hold a Ph.D. degree. There is a high level of education within the private sector where 73% hold a post graduate qualification and one respondent with a Ph.D. degree.

## **Key findings from Ireland**

- The majority of surveyed respondents were from the public sector at 60%, followed by private sector organisations at 22%, community & enterprise groups at 16% and voluntary organisations at 2%.
- The overall number of respondents was equally represented by females (25) and males (25).
- Within their current job role females respectively worked longer within their roles than males (in public, private and community & enterprise organisations).
- The overall education level of respondents was high at 60% holding a post graduate qualification.
- There were more senior management positions among males and more administrative positions among females.

## **1.5 Demographics: Portugal**

From the FIERE survey conducted in Portugal there were 209 respondents, 61% were from the public sector, 4% were from the voluntary sector, 6% were from the community & enterprise sector and 29% were from private organisations.

An interesting trend observed is that longevity of employment is much higher among females than males with 45% of females working between 5 to 10 years and 26% females working for more than 10 years. The majority of males in the public sector (79%) work in their organisations for 5 years or less whereas females tended to stay in the role longer. The voluntary sector was represented by 8 males holding CEO positions in their organisations for more than 10 years. Interestingly, the community & enterprise sector was mainly represented by clergymen and included four female social workers. The Church in Portugal has a strong influence on community activities and is often involved in the activity of many social groups.

The private sector is represented mostly by Chamber of Commerce organisations and includes 37 males and 24 females. Majority of males are in CEO positions (62%) or administrative workers (32%), where females are employed as accountants (46%) or administrative/secretary roles (42%).

The majority of males are between 30-40 years old (30%) and 29% between 50-60 years old. Among females, the most representative age category was 30-40 years old (48%) and 20% were between 20-30 years old. There were only five males and five females who were over 60 years old (4% of females, 5% of males).

The majority of respondents have a university level education (47%), however more females (60%) than males (40%) hold postgraduate degrees and only five females obtained a PhD qualification, while there were no males holding such qualification. On the other side, there are more females who hold a tertiary degree (28%) compared to males (15%).

## **Key findings from Portugal**

- High level of respondents from the public sector at 61%.
- An interesting trend observed is that longevity of employment is much higher among females than males with 45% of females working between 5 to 10 years and 26% females working for more than 10 years.

- The majority of males are between 30-40 years old (30%) and 29% between 50-60 years old. Among females, the most representative age category was 30-40 years old (48%) and 20% were between 20-30 years old).
- The majority of respondents have a university level education (47%).

### **1.6 Demographics: Sicily**

In the context of the survey respondents from Sicily, both genders were distributed equally across all types of organisations surveyed, as well as across the level and job roles within the organisations represented. Contrary to the general trend at least in Italy, this sees fewer women in higher positions compared to men. However, this could be due to the fact that most of the organisations surveyed are private sector organisations, and, in particular, not-for-profit entities where many women are involved in such type of organisations are in higher based positions. Also, most of the respondents (both male and female) had been working in their organisations (and in their roles) for less than three years. This is probably due to the age of the respondents (see Sicily full country report) but also due to the nature of the not-for-profit organisations surveyed which usually attracts younger employees. In terms of education attainment the majority of respondents hold a university degree.

Overall, there were 52 respondents from 27 different organisations. The majority of respondents were from the private sector at 55%, the community & enterprise sector at 23%, voluntary sector at 11% and the public sector at 7%. The surveyed population was relatively young with the majority working within their role less than three years which was similar among both females and males. The age category was represented by 28% between 20-30 years old and 51% between 30-40 years old. Across all genders 49% of the respondents hold a university degree which is equally distributed between both females and males and 34% hold a postgraduate qualification. There is a relatively a small number of respondents holding a PhD degree.

### **Key findings from Sicily**

- Most of the respondents (both male and female) had been working in their organisations (and in their roles) for less than three years.
- Most of the organisations surveyed are private sector organisations, and, in particular, not-for-profit entities and many women involved in this type of organisations are in higher based positions.
- The not-for-profit sector usually attracts younger employees.
- In terms of education attainment 49% of respondents hold at least a university degree.

## **2. Entrepreneurial Background**

The second key theme of the survey was based on entrepreneurial background and investigated the level of past entrepreneurial behaviour of the survey respondents, for example if they ever started their own business in the past or if they had experience of establishing a club or society. This section also explored the freedom and encouragement employees had to pursue opportunities in their areas of work and if respondents ever initiated or improved services, processes or procedures.

## **2.1 Entrepreneurial Background: Bulgaria**

Overall, more males than females were engaged in setting up their own business or organisation, however more females set up their own business in the past (31% of females compared to 27% males). However, 65% of males stated that they were involved in entrepreneurial activity at some stage and 50% of females claimed that they had never engaged in setting up their own organisation or any interest or voluntary group. When it comes to improvements at work the predominant respondents (54%) both females and males, claim that they initiated better services (27% of males, 25% of females) and processes (27% of males, 28% of females) within their organisation.

According to the surveyed respondents, 90% of males and 75% of females are generally empowered and encouraged to look for new opportunities in their work. However, there is a tendency that females from public and private sectors are less encouraged to explore new opportunities and do not take part in the decision making process as much as their male counterparts. This holds the true for 50% of females from the public sector and 29% of females from the private sector.

### **Key findings from Bulgaria**

- More males than females were engaged with setting up their own business or organisation; however more females started a business, club or society in the past (32% of females compared to 27% of males).
- 65% of males were involved in past entrepreneurial activity and 50% of females claimed that they have not engaged in setting up their own organisation or any interest or voluntary group.
- For improvements at work the majority of respondents (54%) claim that they initiated better services (28% of males, 25% of females) and processes (28% of males, 28% of females). The most improvements were observed in the private sector (64%).

## **2.2 Entrepreneurial Background: Greece**

The majority of respondents (63%) indicated that they have some past entrepreneurial background having been involved in setting up a business or interest group or a club. There were only 23% of males and 50% of females who did not have past entrepreneurial experience. The majority of females and males, especially from the public and private sector have set up their own business or club before. For example, there were 67% of males and 23% of females in the public sector who have set up their own business in the past. However, the frequency of entrepreneurial experience is higher in private sector organisations than in public sector organisation. The majority of respondents have improved services (86% of males, 67% of females) and procedures (64% of males, 63% of females), especially in the public sector, where majority of males (92%) and females (71%) have improved services in their organisation.

Overall 61% (73% males, 56% females) of respondents claim that that their organisation encourages them to look for new opportunities. Furthermore, a slightly lower percentage but nevertheless a high consensus (57%) indicated that their organisation empowers them to make their own decisions. However, there is a high number of females from the public

sector (47%) and males from the private sector (66%), who are not empowered in the decision making process within their respective organisations.

### **Key findings from Greece**

- The majority of respondents (63%) indicated that they have some past entrepreneurial experience and the majority of females and males, especially from the public and private sector have set up their own business or a club in the past.
- The majority of respondents have improved services and procedures especially in the public sector, where 45% of female and 50% of males improved services.
- Overall (61%) of respondents claim that their organisation encourages them to look for new opportunities. However, there is high number of females from the public sector (8 out of 27) and males from the private sector (6 out of 9), who are not empowered in the decision making process within their respective organisations.

### **2.3 Entrepreneurial Background: Iceland**

There was quite a high level of entrepreneurial activity across all sectors (63 different associations or organisations out of 41 respondents), especially in the public sector, where 56% of females and 40% of males have started their own business, club, society or voluntary group in the past. Overall, 50 % of respondents from the public sector had started a business, club, society or voluntary group, and in the private sector more females than males had started a business, club, society or voluntary group in the past.

In their current organisation, males mostly improved goals (87%) of which 54% were from the public sector, and more females have improved services (73%), especially females in the public (58%) and community & enterprise (100% of females) sector. Overall most females have improved services (73%), whereas males have initiated more goal improvements (86% of males) however females have improved more processes, services and products than males. It is interesting that 50% of respondents are entrepreneurs themselves or have been before; therefore they hold some entrepreneurial knowledge and experience that could be useful for the purposes of the training programme.

The majority of the organisations were considered open minded by employees and that employees are pro-actively engaged in the decisions and life of their organisations. The data from the survey indicated that public sector employees are highly encouraged to look for new opportunities (78% males, 75% females) and empowered ( 100% males, 75% females) in the decision making process. Most respondents agreed (68%) that creativity is a required skill at work; however 27% of females, especially from voluntary (66%) and community & enterprise sectors (50%) did not share that opinion.

### **Key findings from Iceland**

- A high level of entrepreneurial activity across all sectors especially in the public sector, where 56% of females and 40% of males have started their own business. In the private sector all females had started a business, club, society or voluntary group in the past compared to 50% of males.

- In their current organisations 87% of males mostly improved goals in the public sector, while females have mostly contributed to services (73% of females). Overall, females have improved more goals, processes, services and products than males.
- The majority of organisations were considered open minded by employees and that employees are pro-actively engaged in the decisions and life of their organisations. The data from the survey indicated that public sector employees are highly encouraged to look for opportunities.

## **2.4 Entrepreneurial Background: Ireland**

The majority of respondents (60%) indicated that they had some past entrepreneurial background, where males, especially from the public sector, were more involved in entrepreneurial activity than females. Less than half (40%) of the respondents have not engaged in any entrepreneurial activity in the past. A significant number of respondents had started a business, club, society or voluntary group in the past (36%), of which half were females and half males. The frequency of entrepreneurial background is the highest in the public sector, mostly among males with 20 different initiatives undertaken, and females with 15 initiatives undertaken.

Data compiled from the survey supports the concept that males (72%) tend to behave more entrepreneurial than females as a high proportion of the males surveyed had some entrepreneurial experience. However, half of the respondents who started a business, club, society or voluntary group in the past were females. Furthermore, the fact that nearly half of respondents were not engaged in any entrepreneurial activity perhaps illustrates the need for further training of personnel within all these sectors, regardless of gender.

Overall, the main areas focused on across all organisations were services (82%) and goals (80%) and the least focused area was products (44%). The majority of males have improved goals (92% of males) in their organisation, whereas females mostly contributed to service areas (76%). Public sector respondents noted the highest improvements in the area of processes and services. However, the majority of males within the public sector have improved processes (88%), whereas females initiated and improved more procedures (93%).

When analysing the level of the entrepreneurial behaviour among different sectors, it appears that most of the respondents have autonomy within their organisation and are empowered in decision making processes. The survey results indicate that the private and voluntary sector respondents have more freedom and greater empowerment from their organisation to think and behave entrepreneurially in comparison to public sector employees. There is still a tendency in the public sector not to encourage employees to look for new opportunities at work, especially among males (19% of males), or empower their employees in the decision making process (19% of males, 29% of females).

### **Key findings from Ireland**

- The majority of respondents (60%) indicated that they had some past entrepreneurial background.

- Data compiled from the survey supports the concept that males (72%) tend to behave more entrepreneurial than females as a high proportion of the males surveyed had some entrepreneurial experience.
- Half of the respondents who started a business, club, society or voluntary group in the past were female.
- Nearly half of respondents were not engaged in any entrepreneurial activity (40% of respondents).
- The survey results indicate that private and voluntary sector respondents have more freedom and greater empowerment from their organisation to think and behave entrepreneurially.

## **2.5 Entrepreneurial Background: Portugal**

The majority of respondents have not engaged in any form of entrepreneurial activity in the past (51% of males, 74% of females). Overall, there are twice as many males who had started a business, club, society or voluntary group in the past (32%) than females (15%), however only 25% of females across all sectors were previously engaged in entrepreneurial activity before.

Overall, the majority of females have improved mostly goals (33%) and services (18%) within their organisations, and males also improved goals (38%) and processes (28%). Generally, the majority of females in the public sector have improved goals (28%) and processes (22%) while males contributed towards goals (32%) and services (25%). In turn, the private organisations males have improved mainly goals (43%) and processes (22%), while females where focused on goals (50%) and products (33%).

In analysing the level of entrepreneurial behaviour a deviation can be observed in the public sector (among females) and private sector (among males), where a significant number of females (23%) and males (35%) are not empowered in the decision making process or encouraged to look for opportunities. The majority of respondents agreed that it is important to be creative at work, except in the case of males from the private sector (23%) who think that creativity is not an important skill for employees.

### **Key findings from Portugal**

- The majority of respondents have not engaged in any form of entrepreneurial activity before (51% males, 74% females). However, there are twice as many males than females who started a business, club, society or voluntary group in the past (accordingly 32% males, 15% females).
- Overall, the majority of females and males have improved mostly goals (35%) and services (20%) within their organisations, especially in the public sector where majority of respondents have improved goals (30% of all respondents).
- In the public and private sector a significant number of females (23% from public sector) and males (35% from private sector) are not empowered in the decision making process or encouraged to look for new opportunities.



## **2.6 Entrepreneurial Background: Sicily**

The majority of respondents were previously involved in the establishment of a business, club, society or voluntary group with males being more engaged in entrepreneurial initiatives than females. The most entrepreneurial activity was observed among the private sector with 56% (100% males, 65% of females) of males mainly involved with ownership of a business.

Both genders across all organisations were more focused on improving services (55%) and goals (29%) of their organisations than the other aspects of their work. Especially in the private sector where the majority of males have improved services (55%) and goals (52%) and similarly females have improved goals (56%) and services (56%).

The extent to which an organisation is entrepreneurial depends on the organisation's ability to empower employees to be more creative at work. However, the landscape of the public sector in Sicily is still highly formalised and scrutinized, and findings from the survey indicate that public sector employees (especially among males, 75%) are generally not empowered to make their own decisions or look for opportunities.

### **Key findings from Sicily**

- The majority of respondents were previously involved in setting up a business, club, society or voluntary group, with males being more engaged in entrepreneurial activities than females.
- Both genders across all organisations were more focused on improving services (55%) and goals (29%) of their organisations.
- There is little or no empowerment for employees to make their own decision or look for new opportunities, especially among males from the public sector (100%).

### 3. Skills Needs Analysis

The skills needs analysis section focuses on the skills required by the respondents' organisation and the skills the respondents consider valuable for their role, as well as skills considered by respondents as important to be included in the training programme.

#### 3.1 Skill Needs Analysis: Bulgaria

The detailed review of the skills need analysis is displayed in table 3 below.

Table 3. Bulgaria Skills Needs Analysis

Bulgaria					
Overall findings	Skills Required by Respondents' Organisation	List of skills Important for Respondents to Perform their Role	Important skills for Respondents' Organisation	Skills Respondents to be Trained In	Key Findings
<b>Private sector</b>	Decision Maker (90%) Analytical Thinking (90%) Resourcefulness (87%)	Resilience (97%) Resourcefulness (94%) Creativity (94%)	Self-efficacy (72%) Problem Solving (72%) Project Management (60%)	Self-efficacy (75%) Problem Solving (69%) Analytical Thinking (63%)	Being a leader or a manager is not a required skill for 83% of females in the private sector.
<b>Public sector</b>	Analytical Thinking (89%) Decisiveness (89%)	Resourcefulness (78%) Resilience (78%)	Analytical Thinking (56%) Creativity & Innovation (56%) Self-efficacy (56%)	(Males) Leadership and Project Management (67%) (Females) Analytical Thinking (100%) Problem Solving Project Management (83%)	All males chose all the skills as important except leadership (33%).  Being a leader or a manager is not a required skill for 76% of females in the public sector.
<b>Community &amp; Enterprise Sector</b>	All Skills	All Skills	Project Management (100%)	Project Management (100%) Persistence (50%) Pro-activeness (50%)	Very small respondent rate (two females overall); choice of skills equally distributed
<b>Voluntary Sector</b>	All Skills	Evenly Distributed	Persistence (86%) Project Management (86%) Leadership (71%)	Project Management (100%) Resourcefulness (86%) Self-efficacy (86%) Leadership (86%)	Evenly Distributed
<b>Overall</b>	All skills were rated above 65% Males: Resourcefulness (94%) A Decision Maker (94%) Females: Resilient (94%) Analytical (94%)	Males: Resourcefulness (94%), Resilience and Result Driven (89%)  Females: Analytical (97%), Resilient (94%)	All skills ranked as "very important" with 17% of males who ranked as neutral being pro-active and analytical thinking. 22% of female's leadership as a neutral skill.	22% males, critical thinking, the most neutral skill. 22% females overall and 83% of females from public sector leadership was of little importance skill to be trained in.	56% of females thought that leadership is not an important skill for their role.  Most of the skills overall were very important.

#### Key findings from Bulgaria

- In assessing the level of the skills required by their organisations, the majority of respondents rated all skills above 65%, with exception of female respondents who agreed that being a manager or being a leader were of less importance and not required by their organisation to perform their role.
- There were differences across gender in terms of skills required by organisations, where males rated resourcefulness (94%), being resilient and results driven (89%) the highest, while females rated resilience and analytical thinking (94%).

- In the public sector, leadership was more important for males (100%) whereas females rated that skill as ‘neutral’ and of ‘little importance’ (80%), and project management was quite important for both genders. Voluntary sector males chose project management and resourcefulness (100%) as the two the most important skills.
- In skills important for employee training, critical thinking was the most neutral skill for both genders (33% males, 16% females), however females indicated that leadership was overall the least important skill to be trained in (overall 22% females).

### 3.2 Skills Needs Analysis: Greece

The detailed review of the skills needs analysis is displayed in table 4 below.

Table 4. Greece Skills Needs Analysis

Greece					
Overall findings	Skills Required by Respondents’ Organisation	List of skills Important for Respondents to Perform their Role	Important skills for Respondents’ Organisation	Skills Respondents to be Trained In	Key Findings
<b>Overall</b>	Being resilient 65% Being Result Driven 65% Being Analytical 63%  Being a leader at 18% was ranked the least important.	Being analytical 67% Being Proactive 67% A Decision Maker 63% Decisive 63%  Being a leader at 24% was ranked the least important.	Problem solving 96% Being Proactive and Goal seeking 88% With the exception of Leadership (49%) all the skills were valued as “very important”	Problem solving 100% Persistence 94% Project Management 94% Goal seeking 92%  Skill not important: Leadership (49%)	Overall, Leadership or Being a Leader and Self- efficacy skills were not considered by respondents as important skills required by their organisation or important for role performance. Problem solving was important skill for both respondent’s organisation and for employees to be trained in

#### Key findings for Greece:

- Among the skills required by respondents’ organisations, analytical thinking and pro-activeness (67%) were highly valued and the least ranked were being a leader (24%) as well as self-confidence and resourcefulness (47%).
- More than 90% of respondents indicated problem solving (100%), persistence (94%) project management (94%) and goal seeking (92%) as the most important skills to be trained in.
- For role performance the two most important skills were analytical thinking and pro-activeness (67%) and being a leader (24%) and self-confidence were not considered important skills.
- The most important skill for all respondents to be trained in was problem solving (100%).

### 3.3 Skills Needs Analysis: Iceland

The detailed review of the skills needs analysis is displayed in table 5 below.

Table 5. Iceland Skills Needs Analysis

Iceland					
Overall findings	Skills Required by Respondents' Organisation	List of skills Important for Respondents to Perform their Role	Important skills for Respondents' Organisation	Skills Respondents to be Trained In	Key Findings
<b>Private sector</b>	Females: Resourcefulness 100% Pro-Activeness 100% Decisive 100% Creativity 100% Males valued seven of all the skills as very important and six as not important*	All the females chose all skills as very important; Males: Resourcefulness, Self-confident, Pro-Activeness, Decisive, Result Driven, A manager A decision maker (All valued at 100%)	All skills were valued equally by both genders except 50% of males who indicated that Creativity and Leadership are more neutral skills	All skills valued equally except 20% of females and 50% of males who thought that Creativity is not important skill and Leadership is neutral skill; 50% of males also indicated that Being Resilient is not important skill	Overall most of the skills were important for females than males.  Leadership and Creativity /Innovativeness were ranked as more neutral skills.
<b>Public sector</b>	Both genders: Resilience 86% Resourcefulness 76% A Decision Maker 76% are the most important skills;  Analytical thinking not important for 50% of females; Result Driven and Creativity not important for 44% of males	Females: Being a Manager 83% Pro-activeness 83% Result Driven was not important skill for 50% of females;  Males rated all the skills very important, except of Being A Manager (33% not important) and A Leader (22%)	All males and females either respond important or very important to all the listed skills except Creativity being neutral to 18% females.	Most of the listed skills rated as very important (100% of males), except 18% of females who indicated that Analytical Thinking is neutral skill Males: Pro-activeness (60%) Females: Self-efficacy (45%) Goals seeking (45%)	Creativity seems to be of less importance skill among males.
<b>Community &amp; Enterprise Sector</b>	A decision Maker (100%) Passionate about work (100%) Pro-activeness (100%) Resilience (100%) 33% females indicated that Leadership is the least required skill;	All the Females chose all the skills as very important, while males chose: A manager 100% A Decision maker 100% Passionate About work Pro-Activeness 100%	Most of the skills were rated as very important with exception of Leadership where 33% respondents value that skill as neutral	The most important skills: Pro-Activeness and Project Management (100%). The most neutral were: (females) Leadership, 33% Resilience, 66% (males) Analytical Thinking, 66%	Leadership was not considered as very important skill especially among female group, while Pro-activeness was the most preferred skill;
<b>Voluntary Sector</b>	One male chose top three skills: Creativity/Innovativeness, A Leader (All 100%) Resourcefulness Females Being Passionate about work (100%)	One male chose only one skill of all 13 skills Being A Leader (100%).  Females indicate that Passionate About Work (100%) was the most important skill of all;	All males and females indicated that most skills are very important with exception of one male (100%) who chose Leadership and Critical Thinking as being not important at all.	All listed skills were very important for all males with exception of female group who chose: Leadership 66% of females neutral and not important; Result Driven and Critical Thinking, not important for 33% of females;	Most of the respondents indicated that Leadership and Critical Thinking were not essential skills either from the organisation or to be included in the training programme;
<b>Overall</b>	Resourcefulness 83% Resilient 78% A decision Maker 78%	Pro- Activeness 90% A Decision Maker 88% Resourcefulness 85% Passionate about work 85%	Pro-Activeness 100% Result Driven 100% Project Management 100% Resourcefulness 100%	Pro-Activeness 100% Project Management 100% Resourcefulness 97,5 % Result Driven 97,5%	

- In terms of skills required by the organisation, public sector respondents are required to be resourceful (89% males, 67% females) and resilient (89% males, 84% females), in the private sector 80% of females rated being a leader as the most important skill.
- Females from public, voluntary and community & enterprise sectors felt leadership and critical thinking are not important skills for their organisation.

### 3.4 Skills Needs Analysis: Ireland

The detailed review of the skills needs analysis is displayed in table 6 below.

Table 6. Ireland Skills Needs Analysis

Ireland					
Overall findings	Skills Required by Respondents' Organisation	List of skills Important for Respondents to Perform their Role	Important skills for Respondents' Organisation	Skills Respondents to be Trained In	Key Findings
<b>Private sector</b>	Resourcefulness (100%) Analytical (100%)	Resourcefulness (100%) Decisiveness (100%) Result driven (100%) Passionate about Work (100%)	Males: Project Management (82%) Resourcefulness (73%) Females: Analytical (82%)	Persistence & Project Management (73%) Problem Solving, Creativity and Innovation (64%)	80% of males think leadership is an important skill compared to 33% of females.
<b>Public sector</b>	Resourcefulness (90%) Analytical (80%) Self- Confidence (77%) (Males) Resourcefulness (94%) (Females) Analytical (93%)	Analytical (93%) Resourcefulness (90%) Creative/ Innovative (87%)	Resourcefulness (53%) Project management (50%) Problem Solving & Pro-activeness (43%)	Pro-Activity (50%) Project Management (50%) Resourcefulness (43%)	Overall Resourcefulness was a very important skill for organisations as well as for employees in performing their role; Leadership and Self-efficacy was ranked as the most neutral skills.
<b>Community&amp; Enterprise Sector</b>	Resourcefulness (100%) Resilience (100%) Pro-activeness (100%)	Resourcefulness (100%) Passionate about Work (100%)	Problem Solving (62%) Self- Efficacy and being Pro-Activeness (50%)	Persistence and Pro-activeness (63%) for both gender; Self-Efficiency more important for males (75%), and Creativity/ Innovation for females (50%)	Overall Leadership and analytical thinking weren't important skills to be trained in for both genders.
<b>Voluntary Sector</b>	All skills listed as very important except Passionate about work	All Skills important	All Skills important	Self-Efficiency (100%) Pro-activeness (100%) Goal Seeking (100%) Analytical (100%) Leadership (100%) Project Management (100%)	The choice of skills is more related to personality traits (i.e. self-efficacy, and analytical thinking.
<b>Overall</b>	Resourcefulness (90%) Self-confident (80%) Resilient (74%)	Resourcefulness (94%) Analytical (90%) Creativity/Innovativeness (84%)	Project Management (58%) Resourcefulness (56%) Problem Solving and Pro-activeness (52%)	Pro-Activeness (54%) Project Management (56%)	Leadership and self-efficacy are not considered important skills to be trained in (20% females and 21% males). Creativity/innovativeness and critical thinking were the least important for organisations

#### Key findings from Ireland

- The majority of respondents appreciated most of the listed skills and nearly all were marked as important or very important.
- Both females and males from public organisations agreed that resourcefulness is the most important skill required by their organisation. However, males indicated that being confident and open minded is vital (81%), as opposed to females who solely agreed that being analytical is more important (93%).
- Overall, there was consensus among all respondents (both females and males) that the following skills were the most valued; project management (58%); employee resourcefulness (56%), problem solving (52%) and being proactive (52%).

- The top two very important skills for employees to be trained in were proactivity (54%) and project management (52%) as both females and males considered that those skills should be included in the training programme.

### 3.5 Skills Needs Analysis: Portugal

The detailed review of the skills needs analysis is displayed in table 7 below.

Table 7. Portugal Skills Needs Analysis

Portugal					
Overall findings	Skills Required by Respondents' Organisation	List of skills Important for Respondents to Perform their Role	Important skills for Respondents' Organisation	Skills Respondents to be Trained In	Key Findings
<b>Private sector</b>	Resourcefulness (97%) Pro-Activeness (91%) Passionate for Work& Resilient (91%)	Females: Pro-activeness (96%) A Decision Maker (100%)  Males: all skills valued quite high (approx. 86%) except being manager (27%)not important	Leadership (56%), Problem Solving (54%), Project Management & Resourcefulness (54%)	Problem Solving (59%), Leadership (59%), Resourcefulness (59%)	Problem solving seems to be an important skill for private sector organisations and leadership is more important skill for males in that sector to be trained in.
<b>Public sector</b>	Females: Resilience (99%) Open-Mindedness (95%) Pro-Activeness & Leadership (89%) Male: Creativity & Innovativeness (100%) Decisiveness (95%)	Females: Resourcefulness (94%) Resilient (94%) Self- confident (94%) Proactivity (94%)  Males: Self-confident (95%) Result-driven (95%)	Males: Pro-Activeness (26%), Self-Efficacy (15%) and Goal Seeking (15%)  Females: Goal Seeking (34%), Self-Efficacy, Creativity and Resourcefulness (33%)	Males: Pro-activeness (60%) and Leadership (42%)  Females: Self- Efficacy (45%), Goal Seeking (45%)	Analytical thinking is not an important skill for females (25%) to be trained in
<b>Community &amp; Enterprise Sector</b>	Males: Resourcefulness (100%), Creativity and Innovativeness (87%), Leadership (87%).  Females: Resourcefulness (100%)	Females: Passionate about work (100%) Not important: Self-confident (100%) Males: Creativity and Innovativeness (87, 5%) Result Driven (87, 5%)	Females: All skills very important except creativity and innovativeness (25% neutral), critical thinking (25%, neutral). Males: all skills except creativity and innovation (The least valued skills).	All skills evenly distributed among gender	17% thought that Creativity and Innovation and Critical Thinking as being a neutral skill to be trained in.
<b>Voluntary Sector</b>	Resourcefulness (100%) Creativity and Innovation (87%) Leadership (87%)	Males: A Leader (100%) A manager (100%) A Decision Maker (100%) *No female respondents	All Skills important	All Skills important	
<b>Overall</b>	Resilience (86%) Resourcefulness (91%) Pro-Activeness (82%)	Females: Pro-activeness (94%) Creativity and innovativeness (93%) Males: Result-driven (91%) Creativity and innovativeness (88%)	Males: Pro-Activeness (56%), Self-Efficacy (46%), Goal- Seeking (46%) Females: Leadership (46%), Resourcefulness & Self-Efficacy (48%)	Pro-active (52%), Leadership (49%) Self-Efficacy (48%)	Males (59%) being proactive was very important skill and for females (49%)self-efficacy was very important as skills to be trained in.

#### Key findings from Portugal:

- Overall the most important skills for respondents' organisations were resourcefulness (91%) and resilience (86%).
- The skills required by the organisation vary across the sector and gender (i.e. for public sector females, the most required skills was resilience (99%) while for males it was creativity and innovativeness (100%).

- The skills important for role performance vary across the sector: in public sector organisations self-confidence (94%) was the most important skill for both genders; in the voluntary sector being a leader and a manager were valued the highest (100%); in the private sector, being a decision maker (92%) was important for both female and males; while in the community & enterprise sector creativity and Innovation (87.5%) and being results driven (87%) were of importance.
- The most important skills to be trained in were different for males and females. Overall, males chose skills like pro-activeness (52%) and leadership (49%), while females chose self-efficacy (49%), goal seeking (47%) and also leadership (46%).

### 3.6 Skills Needs Analysis: Sicily

The detailed review of the skills needs analysis is displayed in table 8 below.

Table 8. Sicily Skills Needs Analysis

Sicily					
Overall findings	Skills Required by Respondents' Organisation	List of skills Important for Respondents to Perform their Role	Important skills for Respondents' Organisation	Skills Respondents to be Trained In	Key Findings
<b>Private sector</b>	Males: Resilience (100%), Resourcefulness (92%) and Result Driven (83) Females: Resilience (53%), Pro- Activeness 53%) and Creativity and Innovation (53%)	Passionate about Work (72%), Resilience (69%), Decision Making (62%),	Females: all skills expect analytical thinking and leadership  Males: all skills except perseverance and analytical thinking	Creativity and Innovation	Leadership was not an important skill respondents should be trained in and persistence was not considered important by males.
<b>Public sector</b>	All skills were important except ( for females) for leadership and manger – no male data	Females – all skills except leadership and management	Males: Analytic Thinking, Problem Solving, Creativity and Innovation.  Female: All except project management, leadership and resourcefulness.	Males: Leadership, Resourcefulness, Goal Seeking, and Problem Solving.  Females: Creativity and Innovation, Goal Seeking and Problem Solving	Females: project management, resourcefulness and leadership were not important skills for respondent organisations.
<b>Community &amp; Enterprise Sector</b>	Result driven (69%), resilient and passionate about work and pro- activeness (69%)	Pro-activeness (69%), Passionate about Work (62%)	Females: All skills valued equally Males: All except critical thinking and leadership	All skill expect leadership ( not important for males) and Analytical Thinking ( not important for females	Among males being a leader and a manger were not skills required for role performance.
<b>Voluntary Sector</b>	Males: Resilience (33%), Pro-activeness (33%) Result-Driven (33%) Females: Resourcefulness Resilience Pro-active Decision Making Passionate about work (All 100%)	Females : Pro-activeness (100%) Passionate about work (100%)  Males: Resilience (33%), Decisiveness (33%) Result Driven (33%)	Females: All skills Males: Only leadership is not important.	Females: All skills important.  Males: all skills important expect Analytical Thinking and Leadership	Pro-activeness and Passionate at work were the two most important skills within this sector.
<b>Overall</b>	Resilience (64%) Passionate About work (57%) Results Driven (57%)	Passionate about Work (64%), Resilience (60%), Pro-Activeness (57%)	Innovation and Creativity, Resourcefulness, (not stats provided)	All expect Critical Thinking, Analytical Thinking and Leadership.	Being a manger and a leader were not considered as an important skill required by respondent's organisation.

## **Key findings from Sicily**

- Consistently across all sectors for both females and males most of the listed skills were considered as very important. Overall, being a leader or being a manager was not considered an important skill for the respondents' organisations.
- In the private sector, persistence and leadership were not considered as important skills, whereas the most important skill to be included in the training programme was innovativeness and creativity. In turn, in the community & enterprise sector all the skills were marked as very important, except being analytical and being a leader.
- Being a leader or being a manager were not seen as necessary skills for role performance among the female sample, however 50% of males from the private sector indicated they need to be a leader in their roles.

## **4. Benefit & Accreditation**

Section 4 addresses the perception of respondents in terms of the benefits of an entrepreneurial skills training programme for their organisation, the value of accreditation and the preferred mode of delivery of a skills training programme.

### **4.1 Benefit & Accreditation: Bulgaria**

Nearly all females and males agreed (94%) that such training would benefit their organisation. Overall, 25% males and females thought that even if such training is not accredited by an academic institution, it would still benefit their organisation. Furthermore, 75% of the respondents were of the opinion that the training course being approved by an educational institution would ensure high quality and delivery of training.

Of the respondents surveyed 68% from all sectors chose blended learning (mix of workshop and on-line learning) as the most preferred mode of delivery. The workshops were favoured by 24% of males and 15% of females, while on-line training delivery was favoured by 28% of females and 19% of males.

### **Key findings from Bulgaria**

- Nearly all females and males agreed upon the fact that such training would benefit their organisation.
- Overall even if such training is not accredited by academic institution, it would still benefit respondent's organisation.
- 68% of respondents from all sectors chose blended learning (mix of workshop and on-line learning) as the most preferred mode of delivery.

### **4.2 Benefit & Accreditation: Greece**

Nearly all respondents (98%) indicated that such training programmes would benefit their respective organisations. The vast majority of respondents (88%) believe that accreditation should be associated with an educational institution to ensure prestige and a high quality learning environment. There were only 22% of males from the private sector and 18% of females from the public sector who did not see accreditation as necessary.



Blended learning was the most preferred method of delivery of an entrepreneurial training programme (43%), followed by organised workshops (35%) and on line learning was the least preferred option by all respondents (2%).

### **Key findings from Greece**

- The majority of respondents of public and private sector organisations agreed that a training programme would benefit their organisation (98%).
- The majority of respondents also indicated that accreditation of training programme would be beneficial (88%) and would improve overall quality of the programme.
- 43% of the sample selected blended learning as the preferred mode of programme delivery.

### **4.3 Benefit & Accreditation: Iceland**

The majority of respondents believe that training would benefit their organisations (58%) and more than half (56%) of the respondents think that accreditation is of high importance. However, female respondents set higher priority on accreditation. Overall, there was high percentage of respondents, both male (60%) and female (38%) who thought that such accreditation is not necessary.

The most popular training delivery method among respondents was blended learning (46% of all respondents) especially among females from the public sector (67%); followed by workshops and face to face (17%) teaching, as well as 22% of males in total from the public sector chose on-line learning.

### **Key findings from Iceland**

- More than a half of respondents (58%) consider that entrepreneurial skills training programme would benefit their organisation and that accreditation is important, however this was more important for females.
- Blended learning was the most popular choice of programme delivery at 46%, especially among females from the public sector (67%).

### **4.4 Benefit & Accreditation: Ireland**

The majority of males and females agreed that training could be beneficial for their organisation (78%). However, more males were sceptical about benefits derived from such training programmes and more females than males had doubts whether such training programmes require accreditation.

In terms of the importance of the programme being accredited the vast majority (80%) regardless of gender or organisation type felt that the training should be accredited. Only 19% of males from the public sector and 33% of females from the private sector did not consider that the training programme required accreditation.

The majority of respondents, respectively more females than males, would prefer workshops (70%) as the method of delivery, along with blended learning (36%) and face to face lectures. However there was more approval from females towards on-line programmes than from males.

## **Key findings Ireland**

- Males from public sector suggested that encouragement of employees is more important than accreditation.
- 94% agreed training would be beneficial for their organisation and 80% felt the training should be accredited.
- 70% preferred workshops as the mode of delivery.

### **4.5 Benefit & Accreditation: Portugal**

Both male and female respondents indicated that an entrepreneurial training programme would be beneficial and profitable for their respective organisations. Moreover, both genders believe that accreditation from academic institutions is important; however 29% of females from the public sector were sceptical whether such training programmes needed to be supported by educational organisations.

Overall the majority of respondents (78% males and 89% females) elected workshops as the most effective way of programme delivery. There were only 9% of males from the public sector in total who preferred on-line learning and only 22% of males from the public sector who selected blended learning as the preferred mode of delivery.

## **Key findings from Sicily**

- Strong support that entrepreneurial skills training programme would benefit respondents' organisations and accreditation is important.
- High percentage of respondents elected workshops as the preferred mode of programme delivery.

### **4.6 Benefit & Accreditation: Sicily**

The survey helped to understand that training in entrepreneurial skills is valued by the majority of Sicilian respondents (92%) and could be beneficial in their respective organisations; however attention needs to be focused on public sector employees who are significantly hindered in their creativity and entrepreneurial behaviour at work. Interestingly, there were more doubts among respondents (private sector and voluntary) whether such training programmes should be approved by educational institutions (39%). Furthermore, there was consensus that workshops (45%) and blended learning (32%) were considered as the most desired ways of learning.

## **Key findings from Sicily**

- Attention needs to be focused on public sector employees as they are significantly hindered in their creativity and entrepreneurial behaviour at work.
- Workshops (45%) and blended learning (32%) were considered as the most desired ways of learning.
- Training should include specific field training and non-formal learning activities as part of the experience, as well as simulations, case studies and mentoring learning actions.

## 5. Discussion

The objective of the FIERE skills needs analysis survey was to survey private, public, community & enterprise and voluntary sector staff in order to determine the skills they required to behave more entrepreneurially, innovatively and creatively, but also what skills they thought their organisation required them to be trained in. Also one of the vital elements was to understand the level of freedom, support and empowerment employees had in their organisations' decision making processes and the freedom they had to seek out new opportunities.

An individual who inherently thinks and behaves in an entrepreneurially and creative manner will have a tendency to behave entrepreneurially and creatively within their workplace. Furthermore, it was important to understand the level of entrepreneurial spirit in the sample of respondents, as across the sample there was a strong indication that many of the respondents had past entrepreneurial experience. In the case of Bulgaria, 65%, and in Ireland, 60% had past experience. While in Greece the vast majority indicated that they had some entrepreneurial experience. In the case of Iceland there was a high level of entrepreneurial activity across all sectors especially in the public sector, where 56% of females and 40% of males had started their own business. However, for Portugal the majority of respondents had not engaged in any form of entrepreneurial activity in the past. With 5 out of the 6 FIERE countries surveyed showing strong levels of entrepreneurial spirit this suggests that an entrepreneurial skills training programme would be well received and valued. Furthermore, the high level of educational attainment across the sample indicates that such a programme could be administered at a high pedagogical level as 61% of the Greek sample and 60% of the Irish sample held a post-graduate qualification. In Bulgaria 76% held at a tertiary level of education, 49% in Sicily, 47% in Portugal and 45% in Iceland.

The value of accreditation was also identified as of high importance across all partner countries and sector types, however in Iceland, female respondents in particular felt accreditation was important. However, there was still the belief that such a training programme would still be beneficial even if it was not accredited. There was also strong support across all respondents that accreditation from a recognised institution would ensure quality and impact of learning. In terms of the mode of delivery, workshops ranked high in Sicily and in Ireland (70%), blending learning in Bulgaria (68%), Greece (43%) and Iceland. The choice of blended learning may be determined by the fact that many respondents are located in more rural areas, therefore travel costs and time efficiency may reflect such choices. Supportive comments from respondents in Sicily also noted that any training should include specific field training and non-formal learning activities as part of the experience, as well as case studies and mentoring learning actions. Moreover, encouragement of employees is more important than accreditation, and that it is vital to make the distinction between training programmes and education programmes, as education is what is often learned and forgotten and training is more practical-based learning.

In terms of the ability and freedom to behave entrepreneurial and to seek out opportunities, the respondents from Ireland and in particular from the private and voluntary sector felt they had a high level of freedom and empowerment from their respective organisations in comparison to those from the public sector. The majority of respondents

from the Icelandic sample considered their organisations as open minded and that as employees, they could pro-actively engage in the decision processes within their organisations. Data from the survey indicated that public sector employees are highly encouraged to look for opportunities. Similarly in Greece, 61% of respondents claim that their organisation encourages them to look for new opportunities while for Portugal, especially in the public and private sector employees, regardless of gender they are not empowered in the decision-making process or encouraged to look for opportunities. In Sicily, it was also reported that employees had little or no empowerment to make their own decisions or look for new opportunities. Therefore, for individuals who engage in the FIERE training programme there will be a difference in terms of their ability to utilise the skills training they receive, specifically for Portugal and Sicily.

Both Bulgaria and Sicily had a younger age group of respondents in comparison to the other FIERE partner countries. In Bulgaria this is due to the fact that young people can accumulate the necessary working experience needed to successfully integrate into the labour market and in Sicily the not-for-profit sector tends to attract younger employees. This was supported by the fact that most respondents had only been working in their current organisation for less than three years. However in Greece, 62% were only in their current positions for 1 to 2 years. In terms of role longevity in Ireland, males respectively worked longer within their roles than females however in Iceland longevity of employment is higher among females, where 45% work for more than 6 years in their current position. In Portugal longevity of employment is much higher among females than males with 45% females working between 5 to 10 years and 26% females working for more than 10 years compared to 9% of males working between 5-10 years.

In terms of the ability and opportunity for survey respondents to improve, establish or modify procedures, goals and services within their organisations, for the Bulgarian sample 54% had a greater impact and improvement on services and process. In the case of Sicily, regardless of gender or organisation type; the greatest areas of improvement were services (55%) and goals (29%). With particular reference to the public sector, for Portugal the areas of improvement were goals and services. For Greece the areas of focus were services and procedures. For Iceland with respect to the public sector, males mostly improved goals while more females improved services. To explore further the area of services and goals the FIERE training programme could investigate the different challenges faced by personnel in improving and establishing services and goals in comparison to products and procedures. Furthermore, another point to consider is to what extent do the role and position of individuals and the organisation type affect the ability of personnel to instigate change or improvements?

## **5.1 Skills Discussion**

This skills analysis section investigated the skills required by survey respondent organisations, the skills important for employees' role performance, the skills important for the respondents' organisations, and the skills that should be included in the training programmes.

### **Skills Needs Analysis: Bulgaria**

There were differences across genders in terms of skills required by respondent organisations, where males rated resourcefulness (94%), being resilient and result driven (89%) the highest, while females rated resilience and analytical thinking (94%).

With respect to skills for role performance there were also differences in skill preferences across genders. Males rated resourcefulness (94%), results driven and resilience (89%) as the highest. In turn, females indicated that being analytical (97%) and resilient (94%) were the essential skills. The most neutral skills for role performance for females was being a leader (56%) and being a manager (44%) and for males analytical thinking (67%) and open mindedness (57%) were considered important.

In terms of skills important for the organisation, self-efficacy and problem solving were the most important for private sector males and females (54% of males, 80% females); the most neutral skills in the public sector among females were pro-activeness (50%) and leadership (83%). In the voluntary sector analytical thinking (66% females, 50% males) was deemed important. In the private sector female respondents solely agreed that leadership was of little importance (29%) for their organisation.

An important skill for employees to be trained in was critical thinking. However, females indicated that leadership was of little importance (overall 22% females). Interestingly, in the public sector, leadership was more important for males (67%) to be included in the training programme whereas females rated it as of 'little importance' (80%). In the voluntary and community & enterprise sector project management (100%) was the highest rated skill for both genders; in the private sector problem solving (68%) and self-efficacy (65%) were indicated by both genders as the most important skill to be trained in.

### **Skills Needs Analysis: Greece**

Among the skills required by the respondents' organisations, the most important skills were being analytical and pro-activeness (67%) and at the bottom of the ranking were being a leader (24%), self-confidence and resourcefulness (47%). In terms of skills being essential for their role performance, the majority of respondents agreed that being analytical (68%), being decision maker (63%), and being decisive (53%) were the most important skills.

The lowest ranked skills in terms of importance for organisations and for role performance were self-confidence (31%), being a leader (18%), and being open-minded (31%). More than 90% of respondents indicated that the top four skills which are most important to be trained in, were problem solving (100%) which obtained the highest rated skill followed by persistence (94%), project management (94%), and goal seeking (92%).

In terms of Greece all skills except being a leader were rated very high, 49% of respondents agreed that leadership was not essential skill to be included in the training programme and only 24% of respondents indicated that leadership is required to perform their job role.

### **Skills Needs Analysis: Iceland**

In the skills required by the public sector organisations resourcefulness (89% males, 67% females) and resilience (89% males, 84% females) were ranked the highest; 80% of females indicated that their organisation required them to be a leader; and 100% of females in the voluntary sector noted that their work required them to be passionate about work. There is

strong tendency especially among females from the public, voluntary, and community & enterprise sectors that leadership and critical thinking are not important for their organisation or need to be included in the training programme.

Overall, it seems that pro-activeness, project management and being results driven (100%) are important skills for respondents' organisations. In the community & enterprise sector 34% of females thought that being resilient and leadership were the least importance skill, with exception of the voluntary sector, where leadership was one of the most required skills in their organisation and also important for their role performance.

### **Skills Needs Analysis: Ireland**

Overall, resourcefulness (94%) and analytical thinking (90%) were the most required skills by respondents' organisations. Both females and males from public organisations agreed that resourcefulness is the most important skill required by their organisation and important for their role performance. However, males from the public sector indicated that being confident and open minded is more important for their organisation (81%), as opposed to females who agreed that being analytical is more important (93%).

In terms of the most important skills for respondents' organisations, all respondents selected project management (58%) and resourcefulness (56%). However, the majority of males thought that the most important skills were problem solving (70%) and pro-activeness (56%); whereas females suggested project management (68%) and resourcefulness (68%) as being important for them.

Pro-activeness (54%) and project management (53%) were considered as skills that should be included in the training programme. Moreover, leadership and self-efficacy were not considered by respondents from public sector as essential skills to be included in the training programme (leadership valued as neutral by 21% of males and 25% of females). Also 29% of males from the public sector indicated that self-efficacy is the most neutral skill and was seen as not essential to be included in the training programme. Moreover, private respondents (80%) and community and enterprise respondents (63%) also shared the opinion that persistence is an important skill to be trained in.

### **Skills Needs Analysis: Portugal**

Overall the most important skills for respondents' organisation were resourcefulness (91%) and resilience (86%). However, females indicated that their organisation required them to be resilient (98%); males to be more creative/innovative (100%) and decisive (93%). Males from voluntary and community & enterprise sectors indicated that their organisations required them to be a leader (88%). In the private sector males were required to be more open minded (100%) whereas females were required to be more passionate about work and resourceful (100%).

Overall, the most important skills for organisations varied across gender and sector. However, most of the females chose resourcefulness (48%) and self-efficacy (48%), while males indicated that pro-activeness (56%), and self-efficacy (46%), were skills of primary importance for their organisation. Interestingly leadership was a much more important skill for the organisation among females from public sector (42%) than among males (25%). Leadership was also ranked as very important skill for organisations by males from the private sector (52%).

In terms of skills important to be trained in, overall females rated self-efficacy (49%) and resourcefulness (48%), while males indicated that pro-activeness (54%) and leadership (54%) were the most preferred skills to be trained in. The most neutral skill for females was analytical thinking (19%). Public sector females indicated that self-efficacy and goal seeking are the most important skill to be trained in (45%), while males in that sector stated clearly that pro-activeness (58%) is the more important.

### **Skills Need Analysis: Sicily**

Consistently for both females and males most of the listed skills are considered as very important to be trained in, with the exception of critical thinking, analytical thinking and leadership. Overall, being a leader or being a manager is not considered important for the organisation or an essential skill to be trained in. In the private sector, persistence and leadership were not considered as important skills, whereas the most important skill to be included in the training was innovativeness/ creativity. In turn, in the community & enterprise sector all skills were marked as very important, except being analytical and being a leader.

For role performance most respondents stated the skills required are being passionate about work (64%) and resilience (60%). However, females stated they need to be more open minded and creative, while males stated that they need to be decisive in their roles. Being a leader or being a manager was not seen as necessary skills for role performance. However 50% of males from the private sector indicated they needed to be a leader in their roles.

According to all respondents innovativeness/creativity and resourcefulness were considered to be the most important skills for their respective organisation. In the voluntary and private sectors the most required skills by the organisation were resourcefulness, resilience and being passionate about work.

### **Conclusions**

The aim of the FIERE skills needs analysis survey was to gain a level of understanding about the entrepreneurial skills, behaviours and ability of employees from public, private, community & enterprise and voluntary sectors. Furthermore, understanding individual employee skills requirements, their organisations' skills requirements and the skills required for their current roles would enable the FIERE partners to develop a training programme to increase the capacity and capability of individual employees to behave, think and act more entrepreneurially. It is also important to take into consideration in the designing and implementation of a skills training programme particular regional, gender and sectoral nuances that may impact the effectiveness of the programme delivery. The next stage for the FIERE partners will be to utilise the data and information derived from this survey and incorporate them into the design of the skills training programme which will be delivered in each partner country during 2015.